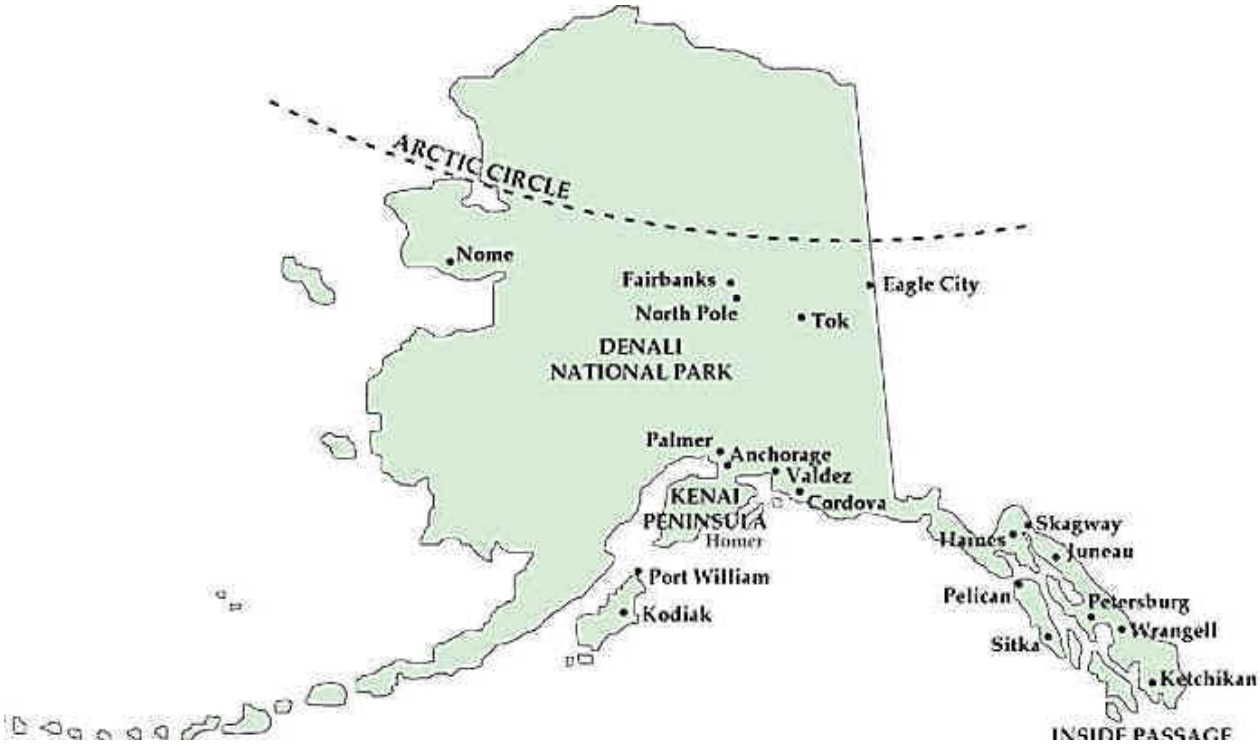
ALASKA

ITS/CVO BUSINESS PLAN

AK-ITSCVO-BP-1.0.0



USING ADVANCED TECHNOLOGY TO ENHANCE PUBLIC SAFETY AND IMPROVE GOVERNMENT AND INDUSTRY EFFICIENCY

JANUARY 2010

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

Page

LIST OF FIGURES

Page

LIST OF TABLES

Page

Executive Summary

The State of Alaska is engaged in deploying Intelligent Transportation Systems / Commercial Vehicle Operations (ITS/CVO) technology in its transportation network. Private industry is currently participating in various business applications that are technologically driven for efficiency.

ITS/CVO Business Plan Working Group members and lead agency representatives are partnering with private sector business leaders to apply ITS technology to government and industry operations while complying with the guidelines outlined in the ITS/CVO architecture.

The ITS/CVO program is an important component in Alaska's current and future planning and development efforts and the Department of Transportation and Public Facilities is taking a leadership role by:

- Directing federal, state, private, human and financial resources toward ITS/CVO functions allowing for active participation and decision making by the Executive Committee, that includes industry and labor participants from the private sector.
- Directing and focusing on state and federal options for improving safety assurance, electronic credentialing, electronic screening and carrier operations including compliance review and roadside commercial vehicle operations for safety, simplicity, and savings (Commercial Vehicle Information Systems and Network (CVISN) Model Deployment).
- Bridging intermodal barriers using ITS technological applications stimulated through the creation of public-private sector partnerships.

As a matter of policy ITS/CVO technological applications will, where possible, be implemented as public/private "partnerships." Using these agreements, the state will pursue improved safety strategies, increased carrier involvement, and facilitate intermodal applications to enhance future successes. All of Alaska will benefit with appropriate system enhancements and applications. The State of Alaska's unique role as builder/owner/manager of all significant surface highways, several hundred airports and harbors, the Alaska Railroad, and a marine highway system create unique technological opportunities. Alaska is the only state where the marine highway is part of the National Highway System.

Labor, industry and government enthusiastically support the current ITS/CVO program. The state's willingness to stimulate "partnering" relationships, and encourage private sector investment into ITS/CVO is exemplified by the broad representation and involvement on our multimodal ITS/CVO Business Plan Working Group.

Alaska's CVO regulatory and enforcement responsibilities span the following areas:

- Intrastate registrations
- Commercial Drivers Licensing
- HAZMAT Transportation Response
- HAZMAT Enforcement
- International Border Crossings
- Oversize/Overweight Permits
- Safety Compliance Reviews
- Truck Size & Weight Regulation
- Driver/Vehicle Safety Regulation

This ITS/CVO Business Plan provides tactical guidance, a management plan, technical standards for enabling systems interoperability, identification of funding opportunities, outreach education, information sharing, administrative enforcement, and evaluation of the cost benefit to accomplish the goals and objectives. The overall objectives of the plan are intended to preserve the infrastructure, improve safety, share information, provide for public-private partnerships, bring multimodal connections, and join in international-interstate cooperation.

The Department of Transportation and Public Facilities (DOT&PF) is the lead agency for the State of Alaska in ITS and ITS/CVO programs. The Division of Statewide Planning leads the ITS program, and the CVO activities are directed by the Division of Measurement Standards & Commercial Vehicle Enforcement (MSCVE), as delegated by the DOT&PF Commissioner. To further guide internal State DOT&PF activities in ITS, the Commissioner has directed the creation of an oversight committee to coordinate all internal issues. A number of other departments throughout the State of Alaska contribute to the ITS/CVO programs and projects. The program administrator will propose business partnering relationships with the private sector in implementation of the business plan. Development of the 1999 Business Plan was funded by a federal grant, and facilitated the overall deployment of an ITS systems architecture and technologies to provide connectivity with the efficiencies and economies it brings.

The projects in this plan are included because government and industry partners believe they will enhance motor carrier safety in the state or will improve government and industry productivity or both. As project planning proceeds in greater detail, the anticipated cost and benefits will be estimated more accurately based on experience in other states and local factors that affect design, deployment, and operating costs. In some cases, feasibility studies or pilot projects are proposed to determine the practicality, economic feasibility, and effectiveness of certain approaches to ITS/CVO deployment in Alaska. This document should serve as a "living" manuscript through which ITS project ideas and plans continue to be documented and tracked. Projects from the 1999 Alaska ITS/CVO Business Plan that are no longer current have been listed in Appendix B for historical tracking. Table 1 lists Alaska's current proposed ITS/CVO projects by national ITS/CVO program area.

Table 1. Alaska's priority ITS/CVO projects

Safety Assurance	
SA 4	**Indoor Inspection Facility at Border Weigh Station**
Credentials Administration	
Electronic Screening	
ES 1	**Fixed Electronic Screening Sites**
Carrier Operations	

Table 2 shows the estimated cost and phasing of each of the proposed ITS/CVO deployment projects over the life of the project. Some of the projects listed are underway and funded through federal or state programs other than CVISN deployment funds. Alaska's continued investment in these projects supports its matching contributions for federal funding.

Table 2. Estimated Cost and Phasing for Proposed ITS/CVO Deployment Projects

($000s)

Project	*FFY10*	*FFY11*	*FFY12*	*FFY13*	*FFY14*	*Total*
SA 4	**2,000**	**---**	**---**	**---**	**---**	**2,000**
ES 1[#]	**1,380**	**1,000**	**1,000**	**1,000**	**1,000**	**5,380**
Total	**3,382**	**1,000**	**1,000**	**1,000**	**1,000**	**7,380**

[#] Indicates projects included in current funding plans.

1. Introduction

Alaska's ITS/CVO Business Plan is designed to achieve the following: guide agencies and organizations with commercial vehicle responsibilities in the State of Alaska in deploying and using intelligent transportation system technologies and methods to improve highway safety, increase transport productivity, and streamline administrative processes for state agencies and carriers. This plan was originally developed under the Federal Highway Administration (FHWA)-sponsored Commercial Vehicle Information Systems and Networks (CVISN) Mainstreaming program, and updated under the Federal Motor Carrier Safety Administration (FMCSA)-sponsored Expanded CVISN program. The plan was developed through an interagency, public, and private collaborative process and takes into account the views and needs of state and municipal agencies and labor and industry partners.

Recognizing Alaska's unique multimodal transportation challenges, the State of Alaska has incorporated some of ITS/CVO technologies into its comprehensive Statewide Transportation Improvement Plan (STIP)[1]. This plan is developed annually to provide long-range strategic direction for public transportation investment over the next six years. The plan calls for a transportation system that is safe, convenient, and efficient which promotes economic prosperity and livability. The plan identifies state, national and international economic, social, and national defense transportation issues. The Alaska Railroad Corporation is owned by the State of Alaska and overseen by a seven-member Board of Directors appointed by the Governor of Alaska. The Department of Transportation is responsible for several hundred airports, ports and harbors, a marine highway system, and the dominant portion of the surface highway system in the state. Due to the State's wide-ranging responsibilities and close cooperation with local governments, Alaska's Business Plan treats the entire state as one large, diverse regional unit.

Continuing to extend ITS/CVO technologies and applications in a cost-effective manner will result in improved efficiencies in government and improved productivity in private sector operations. The ability to demonstrate increased efficiencies in intermodal freight tracking and transfer systems in Alaska will stimulate private sector investments necessary to realize the full potential of this ITS/CVO initiative. Deployment of ITS/CVO technology in Alaska will continue improvements to the delivery system of people and goods over our integrated multimodal statewide transportation system.

The state has committed to progressively deploy ITS/CVO in the implementation of CVISN Capabilities through the use of federal and state matching funds. The U.S. Department of Transportation, Federal Motor Carrier Safety Administration and other federal funding programs provide the base funding with state and private sector match. The State has hired a full-time Project Manager and a Systems Architect dedicated to the CVISN project. Core CVISN Compliance was achieved in a very short amount of time relative to other states, and Alaska is now pursuing projects under its Expanded

[1] ADOT&PF, *Statewide Transportation Improvement Plan 2010-2013*, http://www.dot.state.ak.us/stwdplng/cip_stip/index.shtml

CVISN program which is documented in its Expanded CVISN Program Plan/Top-Level Design[2].

2. Overview of the Business Planning Process

Alaska's business planning process reflects the needed guidance provided by the Federal Highway Administration Office of Motor Carriers *Guidelines for State ITS/CVO Business Plan*[3]. The Commissioner of Transportation and Public Facilities appointed an Executive Committee to represent and guide the process to develop the State's original 1999 ITS/CVO Business Plan[4]. This ITS/CVO Executive Committee, comprised of city, state agency executives, transportation, labor, industry, military, and the public, provided strategic guidance during the planning process, and adopted the 1999 ITS/CVO Business Plan. The Executive Committee appointed the ITS/CVO Technical Committee to provide technical support for the Executive Committee. Over time, these committees merged to form a single state Working Group to support revisions to the ITS/CVO Business Plan. Committee members are shown in Table 3.

Table 3. Alaska ITS/CVO Business Plan Working Group

Member	*Title*	*Agency or Organization*
Dan Breeden	Director	Alaska DOT&PF, MSCVE
Rex Young	Chief, CVE	Alaska DOT&PF, MSCVE
Laura Edwards	Transportation Planner / ITS/CVO Administrator	Alaska DOT&PF, MSCVE
Ulf Petersen	Planner	Alaska DOT&PF, MSCVE
Aves Thompson	President	Alaska Trucking Association
Carl Springer	Motor Vehicle Registrar	Dept of Administration, DMV
Rick Richter	Data Processing Manager	Dept of Administration, DMV
Art Reed	Anch. Terminal Manager	Sourdough Express
John Ohle	General Manager	SeaLand Services, Inc.
Lisa Marquiss	Reg. Compliance Director	Carlile Enterprises, Inc.
Teresa Brewer	AMATS Coordinator	Municipality of Anchorage
Steve Silverstein	Vice President	Alaska Railroad Corporation
Mike Ronchetti	President	Interviti
Tracey Lewellyn	Division Administrator	FMCSA, Alaska
Elaine Presler	Administrative Assistant	Alaska DOT&PF, MSCVE
Steve Ribuffo	Deputy Port Director	Port of Anchorage

[2] State of Alaska, Expanded CVISN Program Plan and Top-Level Design, AK-ECVISN-PPTLD-1.0.0, January 2010.
[3] Federal Highway Administration, *Guidelines for State ITS/CVO Business Plan*, February 1997, http://www.itsdocs.fhwa.dot.gov/JPODOCS/REPTS_TE/3043.pdf
[4] Alaska Department of Transportation and Public Facilities, *Alaska ITS/CVO Business Plan*, March 1999

Member	*Title*	*Agency or Organization*
Mike Pannone	ITS/CVO Systems Architect	Alaska DOT&PF, MSCVE
MaryAnn Dierckman	Statewide WIM Manager	Alaska DOT&PF, Statewide Program Development
Katherine Peterson	MCSAP Manager/Trooper	Dept of Public Safety, Alaska State Troopers
Tammy Duncan	ITS/CVO PM for Alaska	Southwest Research Institute

During a series of meetings, the Working Group used the strategic guidance established by the Executive Committee to identify opportunities for ITS deployment in support of commercial vehicle operations in the state, originally during development of the 1999 Alaska ITS/CVO Business Plan, and again in 2009 in preparation for development of this document. They developed numerous ideas for projects to address the state's issues and opportunities and then used that list of ideas to develop potential projects that address issues in the four national ITS/CVO program areas of Safety Assurance, Credentials Administration, Electronic Screening and Carrier Operations.

2.1 Introduction to the State of Alaska

2.1.1 Physical and Demographic Characteristics

The magnitude of the multimodal transportation challenge for Alaska is defined by the size of the state and the distribution of its population. With 656,425 square miles of land area, Alaska is the U.S.'s largest state, over twice the size of Texas and one-fifth the size of the lower 48 states (see Figure 1). Alaska has 6,640 miles of coastline and, including islands, has 33,904 miles of shoreline. It runs 1,400 miles North to South; 2,700 miles wide East to West.

Figure 1. Alaska inset over "Lower 48"

The 3.5 million acres of the Alaska State Park System constitute the largest park system in the United States. The Tongass National Forest is the largest national forest in the United States. It covers almost the whole of Southeast Alaska. Seventeen of the 20 highest peaks in the U.S. are located in Alaska. Mt. McKinley, located in Alaska's interior, is the highest point in North America, at 20,320 feet above sea level (see Figure 2).

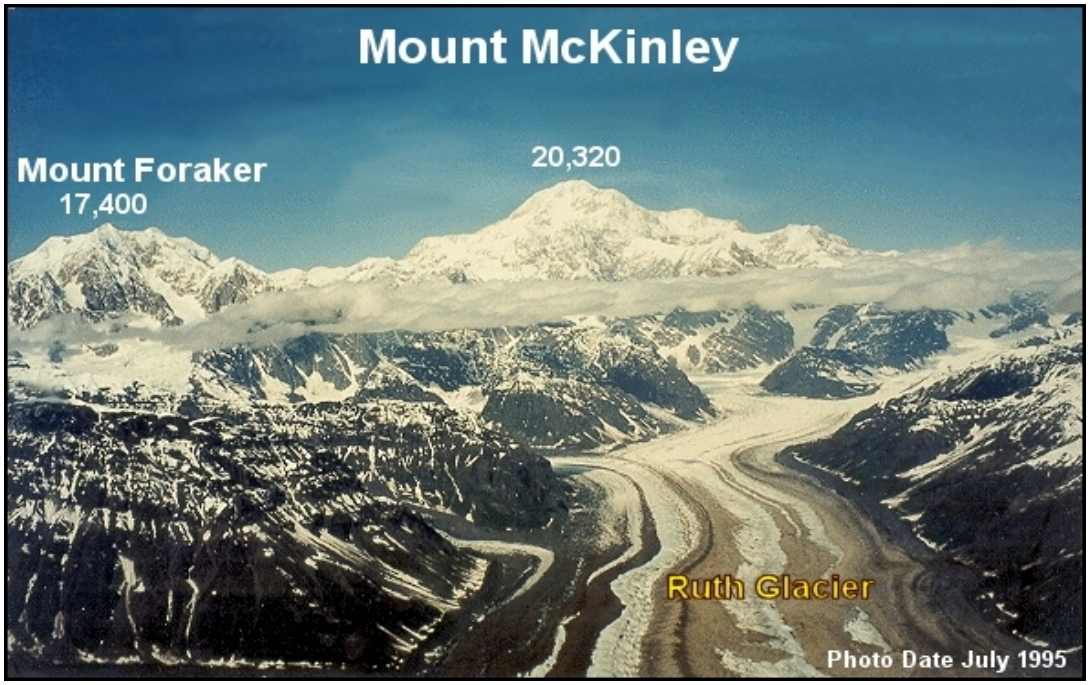


Photo Courtesy of Alaska FAA

Figure 2. Mt. McKinley (Denali)

Alaska's US Census Estimated population for 2008 was 686,293, which is about one person per square mile (1.05). By comparison, New York has 358 people per mile. Alaska's population continues to be on an upward trend compared to other states (see Figure 3).

Note: Alaska has experienced more population growth than California and New York.

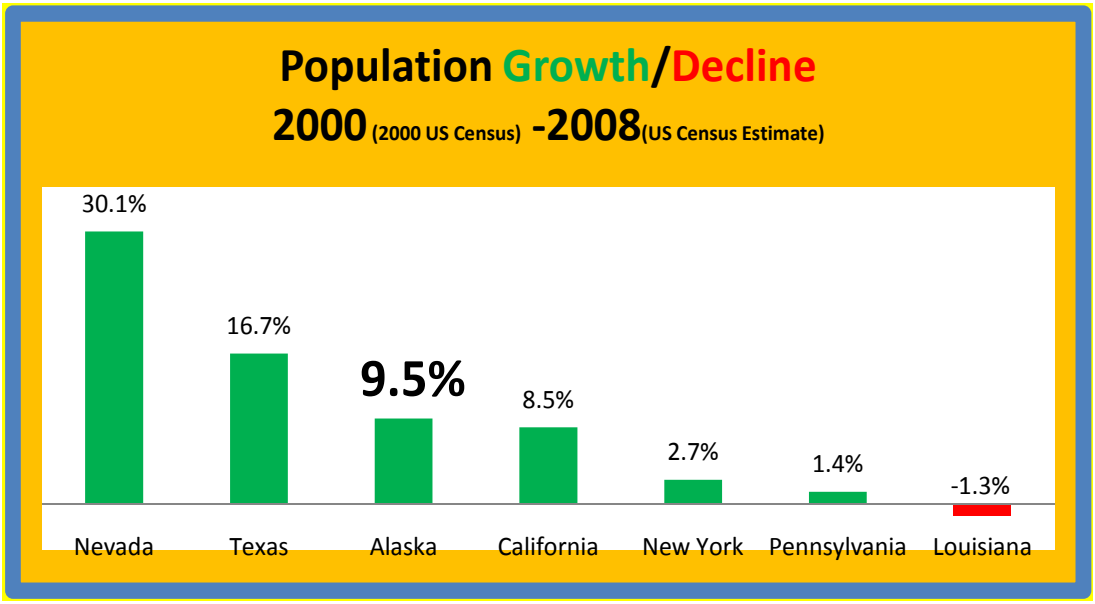


Figure 3. Population Growth/Decline (2000-2008)

At a population of nearly 280,000 in 2008, approximately 40% of the state's residents live in Anchorage, and 80% of Alaska's total population lives in its 10 largest communities. Figure 4 shows how Alaska's population distributes among its largest communities.

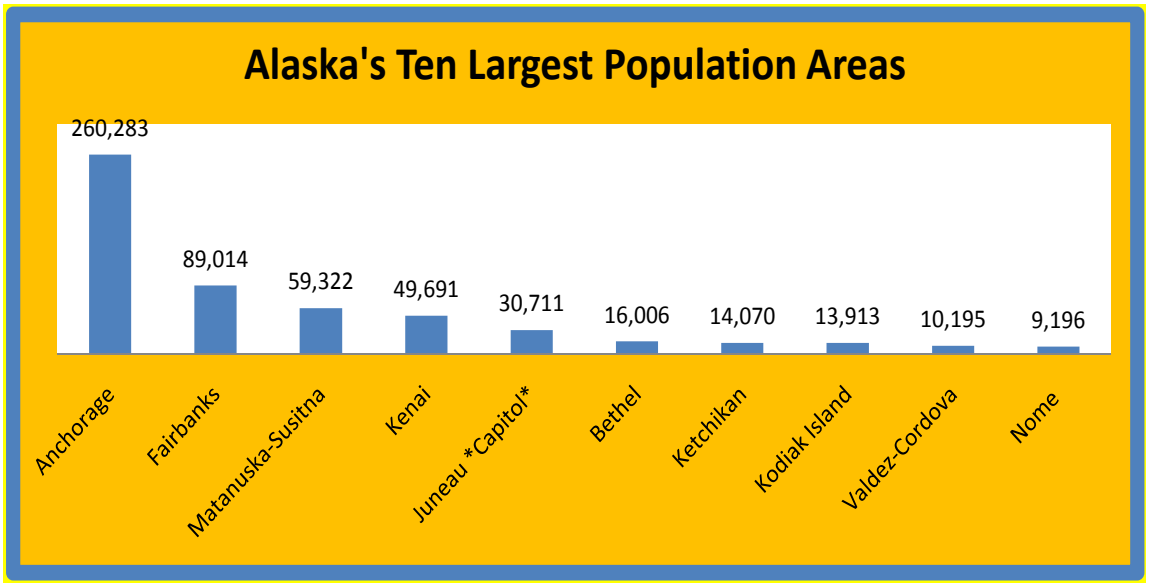


Figure 4. Alaska's Ten Largest Population Areas

2.1.2 Transportation in Alaska

The Southeast Region of Alaska is dependent upon the Marine Highway System and air transportation. The Extreme North Slope Region depends primarily on air transportation for passenger travel. Heavy commodities are shipped via the Dalton Highway, which is a 500 mile gravel surface industrial haul road link to the North Slope. Western Alaska, bordered by the Bering Sea, is serviced primarily by air and seasonal marine transportation only. The Aleutian chain consists of numerous islands and is serviced exclusively by air and sea and stretches 1,400 miles from the population center of Anchorage. The South-central railbelt area is the center of commerce and is served by all four modes of transportation. Because of this diverse transportation infrastructure, Alaska's Department of Transportation is responsible for:

- Over 5,000 miles of state maintained land highways
- Over 300 land and water aviation facilities (260 are maintained by the state)
- Numerous harbor facilities
- A marine ferry system serving both foot passengers and vehicles
- A state-operated passenger and freight rail system
- International border crossing on United States-Canada border

Air, rail, road, sea, and even dog sled play an important role in developing Alaska's uniquely multimodal transportation system. Commerce, national security and basic survival depend on transportation.

Air – In 2008, Anchorage International Airport (AIA) was ranked #2 in the United States for total weight of air freight landed. The Alaska Aerospace Corporation has developed a space port facility for launching low-earth-orbit satellites on Kodiak Island. Alaska has reached these milestones through coordinated efforts of industry, labor, and government.

Railroad – The Alaska Railroad, purchased from the U.S. Government by the State of Alaska in 1985, is owned and operated by the Alaska Railroad Corporation, a wholly owned instrumentality of the State of Alaska. The Railroad was built in 1914, and expanded in 1940-43 during WWII by drilling two tunnels through the Chugach Mountains to allow rail access from the port of Whittier, a military fuel depot necessary to the war effort. The tunnel has since been converted to a road/rail tunnel allowing 24-hour limited access for vehicular traffic. The Railroad runs from Seward to Fairbanks, through Anchorage, for a total of 467 rail miles. Additional track to Palmer and Healy coal mines as well as yard and industrial tracks complete a system totaling 651 miles of track. The Alaska Railroad transported more than 514,000 passengers and handled 5.8 million tons of freight in 2008. The Alaska Railroad has continued to upgrade and enhance its system though an aggressive track rehabilitation program and installation of a modern system of signals and advanced train control technology. In 2010 plans to implement the nation's first positive train control system through a vital overlay system will be completed.

Highways- Alaska's total national highway system (NHS) mileage is a significant share of the nation's total. Of approximately 158,000 miles of NHS routes in the United States, Alaska's total of 2,147 miles represents 3.1 NHS route miles per 1,000 population (see Figure 5). The U.S. average is much less at 0.6 miles per 1,000 population.

National Highway System (NHS) Centerline Miles
(Does not include ramps, wyes, or proposed roads)

Southeast Region	109	
Central Region	574	
Northern Region	1,462	
Statewide SubTotal:		**2,145**
Borough, City, and Other Local Agency, Federal Agency		
Southeast Region	1	
Central Region	0	
Northern Region	1	
Statewide SubTotal:		**2**
Total NHS Miles:		**2,147**

Alaska Highway System (AHS) Centerline Miles
(Does not include ramps, wyes, or proposed roads)

Southeast Region	173	
Central Region	239	
Northern Region	1,057	
Statewide SubTotal:		**1,469**
Borough, City, and Other Local Agency, Federal Agency		
Southeast Region	6	
Central Region	34	
Northern Region	11	
Statewide SubTotal:		**51**
Total AHS Miles:		**1,520**

Community Transportation Program (CTP) Centerline Miles
(Public Road Miles Not NHS or AHS)
(Does not include ramps, wyes, or proposed roads)

Southeast Region	214	
Central Region	880	
Northern Region	898	
Statewide SubTotal:		**1,992**
AK DNR, Borough, City, Other Local Agency, and Federal Agency		
Southeast Region	1480 (Fed Miles: 934)	
Central Region	4493 (Fed Miles: 855)	
C g 93 Northern Region	2809 (Fed Miles: 891)	
Statewide SubTotal:		**8,782**
	(Fed Miles: 2680)	
Total CTP Miles:		**10,774**

Total Alaska Centerline Miles NHS, AHS, CTP: 14,441

Figure 5. 2007 Alaska Mileage Chart

Only 33.8% of Alaska's 14,441 miles of roads are paved whereas 91% of roads are paved in other states. The low road density (1 mile per 42 square miles of land area) contributes to heavy traffic on main roads. Given that the roads are distributed over a vast area (over 656,000 sq. mi.), maintenance, enforcement, and travel present ever increasing financial obstacles.

Marine Highway - Alaska's Marine Highway Ferry System (AMHS) is unique among the 50 states, operating eleven long haul vessels along the south-central coast of the state, the eastern Aleutian islands and the Inside Passage of Alaska and British Columbia, Canada. Most of these vessels are built for multiple-day voyages due to the large distances between ports. AMHS's 3,500 miles (5,600 km) of routes go as far south as Bellingham, Washington in the contiguous United States and as far west as Unalaska/Dutch Harbor, with a total of 32 terminals throughout Alaska, British Columbia, and Washington. The AMHS carries over 350,000 passengers and 100,000 vehicles every year and is very popular with summer tourists. AMHS is operated by the State of Alaska and is a part of the NHS system. It is also provides a form of transportation for vehicles traveling between Alaska and the contiguous United States without going through Canada.

The Alaska Marine Highway System is a rare example (in the USA) of a shipping line offering regularly scheduled service for the primary purpose of transportation rather than of leisure or entertainment.

Ports –The Port of Anchorage (POA) plays a significant role in Alaska's transportation system. 90% of the goods for 80% of the state population enter Alaska here. All the jet fuel for Elmendorf AFB, 80% of the jet fuel for Ted Stevens International Airport, and all of the fuel supplies that go to 140 interior villages move through the port prior to any of these locations. Every Alaskan community north of Cordova (i.e., all of Alaska excluding the panhandle) gets its support for goods that come through POA; from there the goods are disseminated via air, rail, and road. POA is one of 19 national strategic ports – all military equipment that comes from and goes to military bases in Alaska moves through POA. 4 of 5 military bases (all except Ft. Greely) are connected to POA by rail.

Snowmobiles -- Aviation provides the primary transportation access for many rural, road-less, and arctic communities. However, during the cold winter months, the interior's frozen lakes and rivers take on an important role as roadways between villages. Using snow machines and haul sleds, villagers are able to transport goods from the larger villages to the smaller ones and conduct subsistence activities.

The physical environment has always posed significant challenges to transportation as illustrated by the wide range of environmental and climatic conditions ranging from Arctic Circle permafrost to rain forests and wetlands.

ITS/CVO takes on new meaning, challenge, and opportunity in Alaska's dynamic multimodal environment.

2.2 Commercial Vehicle Operations in Alaska

2.2.1 The CVO Population

Commercial vehicles (motor carriers and motor coach companies) operate as part of the state's integrated intermodal transportation system (rail, marine highway, intermodal containers, air transport). The dominant flow of cargo is outbound from Anchorage to other parts of the state with secondary flows to/from other major seaports. The number of time-sensitive shipments is increasing due to growth in retail markets and the need to move perishable products to and from locations throughout the state (e.g., produce, fresh seafood).

2008 Department of Motor Vehicle statistics reveal Alaska has 11,506 large trucks and 3,092 buses registered. These large trucks are owned/operated by over 1,500 state-based intrastate commercial carriers. Motor coaches play a vital role in Alaska's tourist economy and are particularly active from May through September.

2.2.2 CVO Regulation and Enforcement Functions and Responsibilities

The State of Alaska, Department of Transportation & Public Facilities (ADOT&PF), Division of Measurement Standards / Commercial Vehicle Enforcement (MSCVE) is responsible for all commercial motor vehicle size and weight enforcement. The Divisions' focus has been to expand the Motor Carrier Safety Assistance Program (MCSAP) into a statewide program for safe freight transportation. In order to keep the statewide enforcement community up-to-date on commercial motor vehicle guidelines and regulations, MSCVE offers training to police departments so their officers can develop familiarity with and understanding of these guidelines and regulations. Training at MSCVE headquarters in Anchorage is conducted as well as many CVO outreach and alliance programs.

Table 4 describes the state agencies with responsibility for various CVO regulatory and enforcement functions.

Table 4. CVO regulatory and enforcement functions and responsibilities

Function	*Agency*
Fuel Use Tax Administration	n/a
Intrastate Regulations	DOT&PF / MSCVE
Oversize/Overweight Permits	DOT&PF / MSCVE
Commercial Driver Licensing	DOA, DMV
HAZMAT Endorsements	DOT&PF/MSCVE; DPS/AST
HAZMAT Transportation Response	DPS/AST, DEC, FHWA, DNR, EPA
HAZMAT Enforcement	DOT&PF / MSCVE, FMCSA
Port of Entry Operations	DOT&PF / MSCVE
International Borders	DOT&PF / MSCVE
Size/Weight Enforcement	DOT&PF / MSCVE

Function	***Agency***
Roadside Inspection	DOT&PF / MSCVE, DPS, AST, FMCSA
Safety Compliance Reviews	DOT&PF / MSCVE, FMCSA

Shaded boxes in Figure 6 are agencies that have primary day-to-day CVO regulatory and enforcement responsibilities.

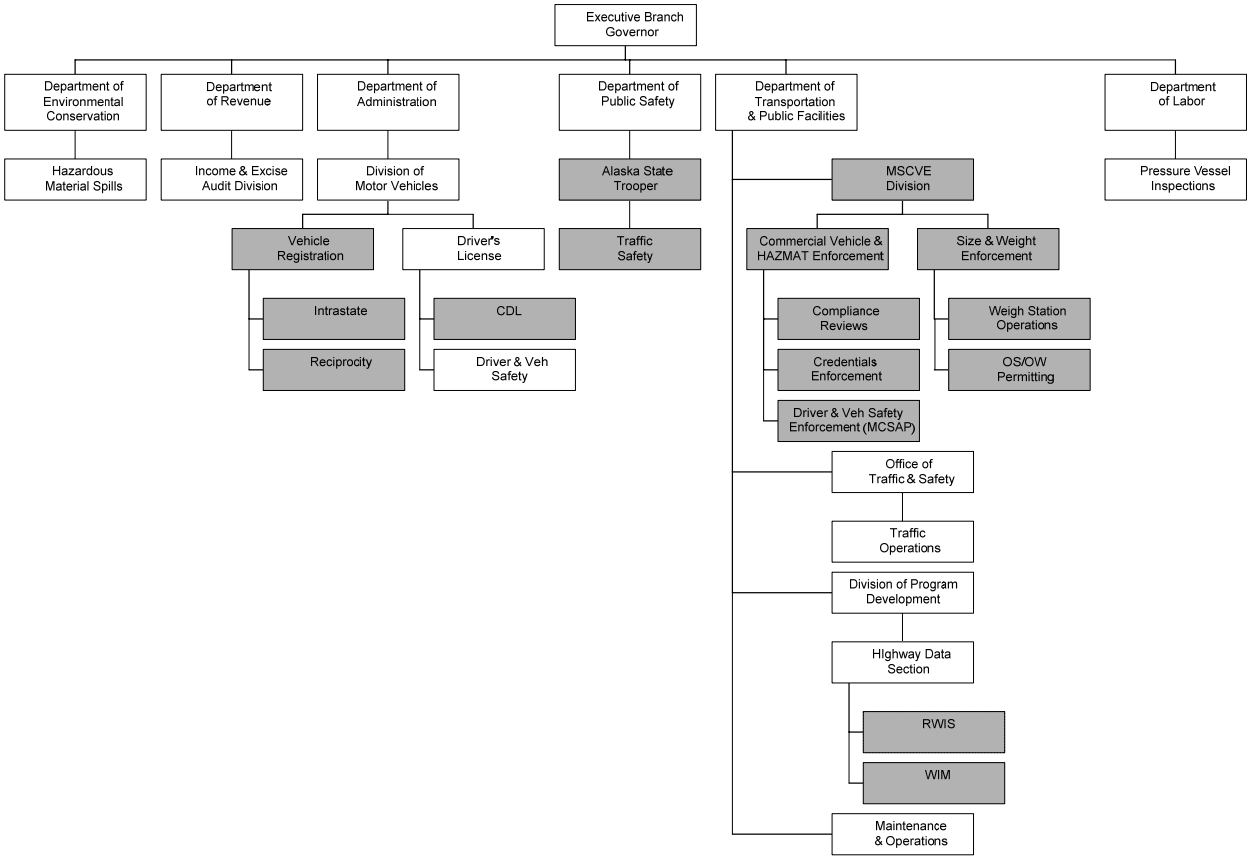


Figure 6. Alaska state agencies with CVO responsibilities.

Because of the more extensive involvement of the DOT's MSCVE Division the DOA's Division of Motor Vehicles, and the Department of Public Safety's (DPS) Alaska State Troopers in Alaska ITS/CVO, their responsibilities and activities are described in further detail below.

2.2.2.1 Division of Measurement Standards & Commercial Vehicle Enforcement

This Department of Transportation and Public Facilities division is a regulatory enforcement agency that regulates truck size, weight and safety, as well as weighing and measuring devices used in trade. The division also functions as a coordinating center for Commercial Motor Vehicles (CMV) and ITS/CVO activities for the state.

The Division enforces the size, weight and safety laws concerning vehicles covered under the Alaska Administrative Code and the Federal Motor Carriers Safety Regulations, Part 382 - 399. In addition, reporting and enforcement of mandatory

insurance coverage for commercial vehicle financial responsibility for surface motor and air carrier is completed through the division.

Vehicles with non-divisible loads exceeding statutory dimensions or weight limits are required to have a special permit prior to operation on Alaska highways. The Permit Section of MSCVE, consisting of five permit employees (at this time), issued more than 27,000 permits in 2008.

The Size & Weight Section and Commercial Vehicle Inspection Unit have been combined with personnel cross-trained to increase the efficiencies and effectiveness of a highly skilled work force. MSCVE includes one CVE Chief, one Statewide Supervisor, 3 area supervisors and 30 inspectors. In FY 2008, 10,494 inspections were completed on large trucks and busses.

Commercial vehicle/driver safety and enforcement are priorities in Alaska. As lead commercial vehicle safety agency, MSCVE administers the State commercial vehicle safety program and the MCSAP funds that Alaska receives from FHWA. Commercial vehicle safety inspections are conducted by individuals who are trained and certified by the Commercial Vehicle Safety Alliance (CVSA). These CVSA-certified inspectors include MSCVE inspectors, Alaska State Troopers, and various local Police Departments. Because of Alaska's expansive land area and remote locations, MSCVE offers training to local law enforcement officers so they may conduct motor carrier safety inspections.

2.2.2.2 The Division of Motor Vehicles

The Department of Administration, Division of Motor Vehicles (DMV), is responsible for issuing vehicle titles and registrations, examining and licensing drivers, administering driver control programs, and maintaining records for these functions. All commercial vehicles based in Alaska must be titled and registered before commercial operation begins. There is an exception to the registration requirement in areas not connected to the highway system and having an average daily traffic count of less than 500. All drivers of commercial vehicles must have an appropriate commercial driver license (CDL) issued by DMV.

DMV has 15 field offices operated by state employees, 17 commission agent offices, and 40 business partners located throughout the state. Each of these offices may register and title commercial vehicles and each office, with the exception of the business partners, may issue CDL's. There is no requirement to have these functions performed at a central office. At all state offices, commission agents and business partners issue titles, registrations, license plates, and driver licenses across the counter.

Vehicles in Alaska are normally registered on a biennial cycle, but commercial vehicles may be registered on an annual cycle at the owner's option. All commercial vehicle power units are charged registration fees based on the unladen weight of the vehicle. Commercial trailers are charged a one-time registration fee and issued a permanent registration. The fees are not based on the use of the vehicle and there is no distinction between intrastate or interstate carriers or between common, contract or other types of carriers for registration purposes. In certain locations DMV collects a Municipal Tax at

the time of registration which is returned to the local government in lieu of personal property taxes.

The CDL program is based on the standard FHWA regulations. The only difference is that in locations not connected to the state highway system, CDL's are issued without a road test and are restricted to driving only in these locations. The road system in these areas is limited and it is not possible to give a valid road test for commercial vehicles.

All fees collected by DMV are deposited into the state General Fund and are not allowed to be dedicated for any specific purpose. DMV collects over $62,000,000 annually for vehicle and driver transactions.

DMV has limited enforcement authority in that it may suspend or revoke driver licenses and registrations for various reasons permitted by law.

2.2.2.3 Alaska State Troopers (AST)

In addition to their normal traffic enforcement and public safety responsibilities, Alaska State Troopers support Alaska's commercial vehicle safety effort by performing commercial vehicle safety inspections. AST also works with DOT to collect and transmit crash data electronically through the Traffic and Criminal Software (TraCS) program, and is currently working with DOT to update the instruction manual for the statewide crash form (12-200) to ensure the accuracy of the data being collected.

2.2.3 CVO Processes and Multi-State Agreements

2.2.3.1 CVO Registration Process

The Division of Motor Vehicles (DMV) within the Department of Administration has responsibility for registering all vehicles in the state. DMV operates 30 public service offices located in most major population areas of the state. The vehicles are registered individually and there is no fleet identifier on the vehicle record other than the owner name.

Initial registration must be done at one of these offices by presenting the previous title or the Manufacturer's Certificate of Origin (MCO). Many of the larger commercial vehicles must also present proof of payment of the Internal Revenue Service (IRS) Heavy Vehicle Use Tax (HVUT) at initial registration and at each renewal. In all state offices, title, registration, and plates are issued immediately across the counter. In smaller locations where commission agents operate DMV offices, only the plates are issued and the title and registration are mailed to the owner after data entry is completed.

Registration is required when the vehicle is operated on a roadway and the vehicle must be registered in a commercial category when the commercial use first begins. In certain areas of the state that are not connected to the land or marine highway system and that have an average daily traffic count of less than 500, vehicles are not required to be registered. If registration is required, the registration certificate or a legible photocopy of the original must be carried in the vehicle and must be presented to a law enforcement officer when requested.

The normal registration period is two years and expirations are staggered throughout the year. Commercial vehicles may opt for a one-year registration at the owner's request.

Third-Party Business Partners. DMV has business partners that are authorized to renew registrations or, in the case of new vehicle dealers, are authorized to issue titles, registrations, and license plates. These partners are connected directly to the DMV data system and operate much the same as a DMV office. The majority of the renewal stations are municipal emission inspection stations, where the customer can have the vehicle inspected and the registration renewed in one stop. Through an Internet connection to the DMV mainframe, the Alaska Trucking Association is a central agent that allows it members to renew registrations without requiring a trip to a DMV office.

Internet or Phone Renewal. DMV also allows vehicle renewal by Internet or by phone using a credit card for payment. These systems are available 24 hours a day so normal registration renewals can be done at any time. New registration forms and validation decals are mailed within days. Commercial vehicle owners may use this if there are no changes. This system only calculates for the normal two-year registration. If the owner opts for the the one-year registration then some other method of registration renewal must be used. Also, if additional documents such as proof of payment of the HVUT are required for renewal, then this system cannot be used.

Unladen Weight vs. Gross Weight. Alaska commercial vehicle registration categories are based on the vehicle's unladen weight rather than the gross weight that most other states use. There is no practical reason for one system over the other. Alaska DMV is not opposed to changing, however there would be a cost to do so, as well as extra time and confusion during the change-over period. To make this change and incur this cost there would have to be some valid reasons for doing so and DMV would have to have the support from various industry groups.

Permanent Trailer Registration. House Bill (HB) 404 passed in the 1998 legislative session and one of the changes in this bill was to eliminate annual or biennial trailer registrations. The power unit still must be properly registered in the appropriate category; however, only a one-time $10 plate fee is now required for a trailer, and it is valid for the life of the trailer. To ensure that there would be no overall loss of revenue to the state, the registration fees for the power units were increased to compensate for the loss of revenue from the trailers.

Non-Resident Commercial Trip Permits. Commercial vehicles that are not registered in Alaska are required to obtain a temporary registration. In the past there was a very low fee for this temporary permit. Since there was very little enforcement on this, once the vehicle got into the state it could continue to operate and compete with Alaska-registered vehicles while paying a much lower fee. HB404 corrected this situation by raising the fee for a nonresident power unit to $350 for a 30-day temporary registration effective on July 1, 1998. This put the fees on a par with the fees paid by Alaskan vehicles. The proceeds from these fees may be used by the legislature to fund 24-hour operation of the Tok scale house.

2.2.3.2 Alaska Participation in Multi-State Agreements

Dual Registration. Alaska allows commercial vehicles that operate in more than one jurisdiction to be registered in Alaska (in addition to the other jurisdictions) via dual registration. A common example is a Canadian-owned vehicle that operates regularly

between Alaska and Canada; with dual registration, this vehicle may display more than one valid plate and have more than one valid registration certificate.

International Registration Plan (IRP). Alaska was a member of the IRP at one time but withdrew from the plan in 1975. The mechanics of participating in the plan at that time were very cumbersome. Alaska is a terminal state with very limited mileage compared to the extensive mileage in other states. Since the revenue derived was based on the percentage of total annual miles operated in any one state, the income for Alaska was negligible. Alaska was processing thousands of registrations for less than a dollar in fees because companies would list 100 or 50 Alaska miles out of 100,000 driven annually just on the off chance that the vehicle would go to Alaska.

The original ISTEA legislation required all states except Alaska and Hawaii to become members of IRP and provided grants for implementation. Since all states and most of the Canadian provinces would join IRP, Alaska felt it would be in the state's best interest to participate. Alaska made a request to FHWA to receive a grant for implementation the same as the other states but that request was denied because Alaska was not required by ISTEA to become an IRP member.

There is a large start-up cost mainly for software to calculate prorated registration fees. Alaska did not have funding for this and made no move to join IRP. There were concerns that perhaps there was a valid reason for joining IRP for promoting uniformity among the states so the National Governor's Association (NGA) issued a contract for an economic feasibility study to evaluate the benefit of Alaska joining IRP. This study was completed in November 1998 and the benefit was not justified.

International Fuel Tax Agreement (IFTA). There is an international agreement for payment of fuel taxes that allows interstate vehicles to operate in multiple states without obtaining special permits or shopping for the lowest fuel tax rates during cross country travel. IFTA works much the same way that IRP does in that a fee to each state based on the percentage of total annual miles operated per vehicle in any one state. In Alaska all fuel taxes are collected at the pump rather than a separate tax filing, so there has been no reason to participate in IFTA.

Unified Carrier Registration (UCR). UCR is a federally-mandated program requiring commercial motor vehicle carriers, brokers, freight-forwarders, and leasing companies operating in interstate or international commerce to register their business with a participating state, and pay an annual fee based on the size of their fleets. Alaska participates in UCR and allows online registration via the Indiana UCR portal.

Performance and Registration Information Systems Management (PRISM). PRISM is a cooperative Federal-State safety program developed to reduce commercial vehicle accidents. It utilizes the commercial vehicle registration process of the States to improve motor carrier safety by:

- determining the safety fitness of the motor carrier prior to issuing license plates; and
- motivating the carrier to improve its safety performance either through an improvement process or the application of registration sanctions.

The PRISM program encompasses and integrates registration and enforcement processes to identify motor carriers and hold them responsible for the safety of their operations. The performance of unsafe carriers is improved through a comprehensive system of identification, education, data gathering, safety monitoring and treatment. The registration process ensures that no vehicle is plated without identifying the carrier responsible for safety. A unique USDOT number is used to identify all carriers engaged in interstate commerce. Unsafe carriers with safety ratings exceeding the bounds of the established safety threshold are placed into the federal Motor Carrier Safety Improvement Process (MCSIP) program, and are more closely scrutinized by law enforcement through on-site reviews and at the roadside. Registration sanctions and increased inspections provide incentives for unsafe motor carriers to improve their safety performance. Most states utilize their IRP systems as the framework for PRISM; Alaska does not participate in IRP, but incorporates PRISM functionality into its commercial vehicle registration process. PRISM deployment in Alaska began in November 2008, and as of June 2009, its status is level green.

2.2.3.3 Size/Weight Enforcement and Oversize/Overweight Permitting

Alaska's size/weight enforcement program differs from many states in that Alaska does not have a single gross vehicle weight limit. Instead, Alaska limits loads based on the overall dimensions of the vehicle and spacing of and the distribution of weight over load bearing axles. Because of severe weather conditions that affect pavement performance, Alaska's maximum axle weights vary from season to season. At present, highway engineers restrict axle weights to lower limits during the freeze/thaw cycles that occur in spring and fall. Lacking real-time data, these restrictions must be applied conservatively to minimize the possibility of damage to highways and related infrastructure. During these restricted periods, heavy haul operations cannot take place, resulting in scheduling difficulties for motor carriers and delays to industries that depend on the heavy equipment (e.g., oil field operations) to sustain production activities.

Additionally, different routes are restricted to different overall lengths due to maneuverability and vehicle clearance restrictions. Figure 7 shows vehicle restrictions for the key routes between Anchorage and Fairbanks (left map) and between Fairbanks and the North Slope (right map). The restrictions are applied based on the overall length of the vehicle.

Motor carriers can purchase oversize/overweight permits for non-divisible loads at a permit office in Anchorage, faxing the permit application to the DOT. Currently over 90% of permits applied for are issued by fax. The permit is faxed to the motor carrier so that the entire transaction occurs without delaying the carrier or requiring the carrier to appear at a permitting location.

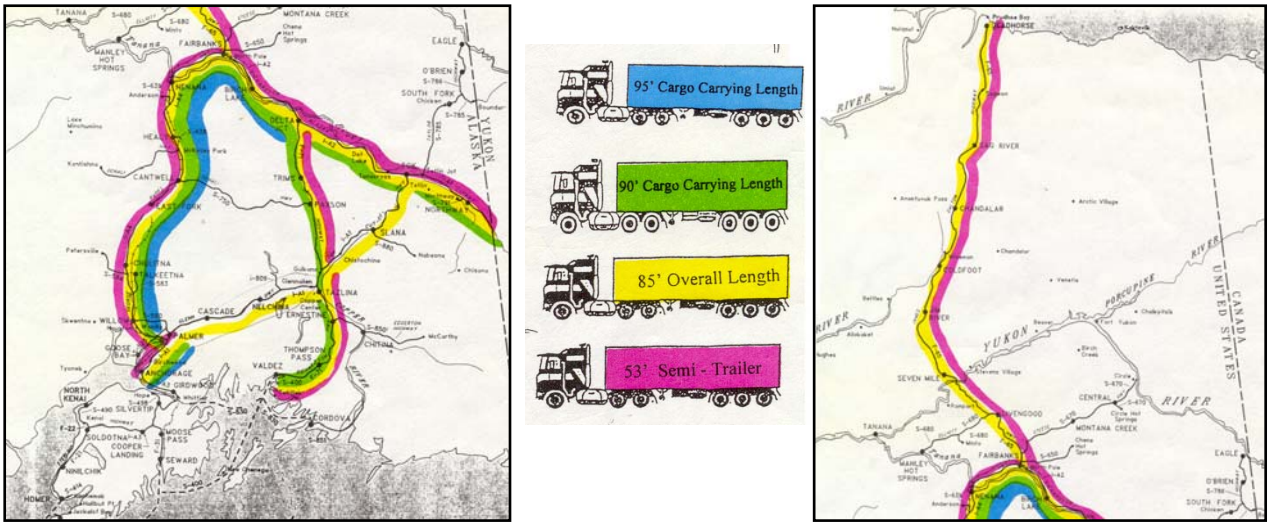


Figure 7. Route restrictions as a function of vehicle length

2.3 Economic and Political Considerations

Alaska is a leader in the development and use of a truly intermodal transportation system in partnership with private sector demands. As a resource state, Alaska exports raw materials of significant weight and size while importing manufactured products. Alaska's private and public sectors economic viability revolves around the multimodal transportation system. Alaska's economy is built around natural resources and tourism as indicated by the following facts:

- Alaska's oil industry includes North America's largest oil field at Prudhoe Bay and moves 796,289 barrels of oil per day.
- The natural gas industry moves 8,831 million cubic feet per day.
- Alaska's seafood processing and fishing industries are among the State's largest private industry employers. Most of America's salmon, crab, halibut, and herring come from Alaska.
- Hard rock minerals are one of Alaska's most important undeveloped natural resources. These minerals include coal, gold, silver, and copper.
- In 2007 Alaska attracted over 1.88 million visitors.

The economic history of the state has been a boom and bust cycle that has moderated as the economy matures. From the gold rush era to the mid-eighties, sectors of the economy were subject to wild fluctuations. While always a natural resource state, the oil and gas industry, in recent decades, has been a major steadying force in the economy. State government spending has played an important role in carrying stabilization into areas not directly impacted by the oil and gas industry.

Oil produced in Alaska represents 25% of the U.S. oil supply and oil taxes provide more than 80% of state general fund revenues. As expected, the fluctuation in the oil supply around the world directly impacts the price of crude oil from Alaska and the income to the state. Fund reserves from oil revenues have made possible absorption of minor income fluctuation. A substantial down turn in the price of oil in late 2008, continuing

into 2009, has caused a cash flow crisis for the state and the oil industry to layoff a portion of their work force. Reduced state revenues have caused the government to consider alternative funding sources.

In 2007 the median household income for Alaska was $66,831, which is well above the US average of $52,673[5]. The 2007 estimated population of Alaska was 681,111[6] and the per capita gross domestic product was $44,853[7]. In 2007 Alaskan annual vehicle miles traveled (VMT) was 5.153 (billion)[8] or 7,566 miles per capita. The average (years 2002-2006) commercial motor vehicles traveled was about 354 million miles or 6.8 percent of total VMT[9].

Prior to the down turn in the price of oil the University of Alaska, Anchorage, Institute of Social and Economic Research (ISER) projected economic and demographic growth through the year 2020. They estimated a range of potential growth (high, medium, and low). A short summary of the medium case projections are presented here, based on assumptions about future levels of natural resource production and other variables that seem most likely today. This analysis divides the state into three geographic areas: Southcentral & Interior, Southeast, and Western-Arctic.

- **Total employment,** including both wage jobs and self employment, is projected to grow just over one percent annually between 1996 and 2020, more slowly in the next few years and somewhat faster in the subsequent years. This is slower growth than in recent decades, and results from maturation of the economy, maturation of the petroleum industry, and the fiscal constraints on state and local governments. Growth will continue in spite of a continued decline in oil production.
- **Real (adjusted for inflation) personal income** will grow about 1.6% annually between now and 2020. Income will grow faster than employment mainly because of growth in non-wage income (pensions and dividend/interest/rent income).
- **Population** will likely grow around 1.5% annually over the next 25 years. An estimate of Alaska's population in 2020 will most likely be 40 percent larger than it is today. Migration and natural increase (births minus deaths) will insure that population growth at least keeps pace with employment growth. Population growth is expected to be faster than employment. That is because the population over 65 will grow rapidly and the working-age population will be, on average, older; as people age a declining percentage choose to work.
- The **Southcentral-Interior** area will grow faster than the Southeast, and growth will be slowest in the Western-Arctic. Between now and 2020, population is projected to grow 1.5% annually in the Southcentral-Interior, 1.4% in the

[5] Semega, Jessica, Median Household Income for States: 2007 and 2008 American Community Surveys, US Census Bureau, September 2009.
[6] http://www.census.gov/popest/states/NST-ann-est.html
[7] http://www.bea.gov/regional/gsp/action.cfm
[8] http://www.dot.state.ak.us/stwdplng/highwaydata/docs/StatewideVMT08.pdf
[9] http://www.fmcsa.dot.gov/documents/safety-security/RSIC-crash-data-0803.pdf

Southeast, and 1% in the Western-Arctic. In all areas, population will grow faster than employment.

- In **Southeast Alaska,** little growth is projected for fishing, logging and state government, which have been the historical mainstays of the regional economy. However, tourism is a growing part of the regional economy. Increased mining will also fuel economic growth.
- The **Western-Arctic** area is the least economically developed area in the state and will remain so for the foreseeable future. Commercial fishing and processing employment in the southern areas is expected to stay at about current levels. Petroleum development and mining activity will provide continuing employment in the northern areas. Most new jobs in the coming years will be in the support or government sectors, but growth will be slow, because of the budget constraints state and local governments face.
- **Growth in employment and in personal income will be about the same in urban and rural areas—**an annual average of around 1.2% for employment and 1.6% for personal income. This may seem surprising at first glance, but while support and infrastructure jobs are concentrated in urban areas, oil industry and mining jobs tend to be in rural areas. Tourists visit both urban and rural areas. Also, urban and rural are defined by census area – which means that regional centers like Nome and Dillingham are considered rural, as is the Mat-Su Borough just north of Anchorage.
- **Rural areas statewide will see slightly faster population growth than urban areas** (1.6% annually, compared with 1.4%) however much of the difference can be traced to growth in the Mat-Su Borough – which although it borders on Anchorage is classified as rural. Differences in rural and urban growth within the three areas are mostly due to how the entire census areas are classified rather than to actual urban/rural differences.
- **The political organization** of the state is structured around regional governments, designated boroughs and local government classified as cities (three classes). To a degree in smaller remote villages, tribal native entities provide varying degrees of governance. A large part of Alaska lands have no regional or local governments.

This modest economic projection reinforces the need for state government to become more efficient and to help the state's industrial base become more productive and more competitive in global markets. Given these economic projections and the general trend toward smaller government, Alaska state agencies are likely to remain at current staff levels or decrease. Alaska is fortunate to have political leadership that has the vision to encourage innovation and embrace change. Alaska benefits from a strong senior national congressional delegation with leadership positions on key committees. Senior agency leadership shows willingness to eliminate or update obsolete or unnecessary CVO laws and administrative rules that impede government and industry efficiency. Alaska is unusual in the close relationships between its political leaders and their various constituencies, including the general public and the private sector. In fact, many Alaskans know their political leaders personally and keep them well informed of the needs of Alaska's residents and industrial base.

3. Strategic Overview

3.1 Mission Statement

Alaska's ITS/CVO mission statement describes what the state hopes to accomplish through programs, projects, activities and resources it manages. In Alaska, industry and government are committed to work together toward common objectives, requiring cooperation and collaboration across agencies and organizations as well as public and private sector partners.

In 1999 the ITS/CVO Executive Committee, comprised of representatives from industry, local, state and federal agencies, developed the Alaska ITS/CVO Mission Statement. This mission statement remains unchanged and has guided the Working Group as they identified, and continue to identify, critical elements to be addressed in the ITS/CVO Business Plan.

Alaska's ITS/CVO Mission Statement is to maximize transportation safety and the productivity of carriers and government through appropriate technologies and cooperation from agencies, industry, and the public to allow commercial vehicles safe and free movement throughout North America.

3.2 Guiding Principles

Guiding principles provide the ground rules for developing projects and plans that enable the Alaska ITS/CVO mission to be accomplished. Current and future projects have been and will continue to be tested against these principles before being included in Alaska's ITS/CVO Business Plan. In 1999 the Executive Committee reviewed principles established by national groups and other states and then formulated ITS/CVO guiding principles for Alaska by modifying and augmenting these to make them specific to state and local community needs. The guiding principles adopted by the Executive Committee remain for this 2009 update and are as follows:

Guiding Principle 1. Provide for public transportation safety by accepting primary responsibility for the infrastructure found necessary to promote economic development through minimal regulation.

Guiding Principle 2. Identify, integrate, and stimulate application of ITS technologies in all areas of transportation.

Guiding Principle 3. Actively promote policy to seek public-private partnering relationships stimulating ever-increasing private-sector investment and involvement in the ITS/CVO program.

G*uiding Principle 4*. Develop and administer policies seeking to minimize complexity and cost, while providing the most efficient interface possible to industry and the general public.

Guiding Principle 5. Implement appropriate ITS/CVO technology changes to ensure a balance of organizational structure to achieve efficiency and effectiveness for multi-modal motor carriers, drivers, governments and other CVO stakeholders.

Guiding Principle 6. Focus roadside operations on eliminating unsafe and illegal carriers, drivers and vehicles, without reducing the productivity and efficiency of safe and legal drivers.

Guiding Principle 7. Evaluate new technology applications against regulatory choices that incorporate low technology and non-technology options to ensure that applications are cost effective for both government and industry.

Guiding Principle 8. Ensure data exchange systems integrity and prevent unauthorized access.

Guiding Principle 9. Align technology applications with appropriate standards (state, national, international) after feasibility has been demonstrated.

Guiding Principle 10. Establish systems allowing properly-equipped vehicles to operate with paperless credentials.

Guiding Principle 11. Implement a performance-based evaluation system for all carriers based on best available information and common criteria.

Guiding Principle 12. Conduct inspections and audits in a manner that will provide incentives for carriers and users to improve poor performance.

Guiding Principle 13. Implement compatible policies, architecture and inter-operable systems in all jurisdictions.

Guiding Principle 14. Improve and/or maintain CVO practices to ensure safety for carriers and the public.

Guiding Principle 15. Reduce time spent conducting redundant processes, and increase the amount of time spent verifying safe and legal operations.

Guiding Principle 16. Reduce costs for the state and transportation industry.

These Guiding Principles are also consistent with the State's long-range transportation policy plan[10], particularly with respect to the policies related to System Development, system Preservation, System Management and Operations, and Safety.

3.3 Goals and Objectives

Alaska's ITS/CVO Goals & Objectives are based on important issues identified by the Alaska ITS/CVO Executive Committee. The goals are organized around the national ITS/CVO program areas as applied to Alaska, and support State performance measures[11] related to commercial vehicle safety and protection of the public infrastructure. Additional performance measures related specifically to these goals may be identified in the future. Goals are listed below within the national ITS/CVO program areas along with related objectives and relevant performance measures.

[10] Let's Get Moving 2030, Alaska Statewide Long-Range Transportation Policy Plan, ADOT&PF, February 2008, http://www.dot.state.ak.us/stwdplng/areaplans/lrtpp/SWLRTPHome.shtml.
[11] ADOT&PF MSCVE Performance Measures, http://www.gov.state.ak.us/omb/results/view_details.php?p=166

3.3.1 Safety Assurance

Goal: Improve safety by targeting enforcement on high-risk carriers, drivers, and equipment.

Related Objectives:

1. Increase the education and information opportunities.
2. Focus enforcement resources on higher risk operators.
3. Reduce the frequency and duration of stops for carriers.

Achievement of this goal will be reflected in MSCVE Performance Measure A[12], which measures the reduction of fatalities and injuries from crashes involving CMVs.

3.3.2 Credentials Administration

Goal: Improve the ease, satisfaction, and automation of obtaining credentials.

Related Objectives:

1. Increase the education and information opportunities.
2. Improve private use of electronic registrations.
3. Utilize electronic registrations to focus enforcement on high risk operators.

3.3.3 Electronic Screening

Goal: Increase the use of Electronic Screening throughout the State of Alaska to increase the efficiency of enforcement operations and the movement of commercial vehicles.

Related Objectives:

1. Identify carriers, drivers and vehicles operating unsafely or illegally.
2. Reduce the frequency and duration of stops for safe and legal carriers.
3. Prioritize transportation improvements that meet the needs of commercial vehicles as well as other modes.
4. Prioritize areas that would most benefit from Electronic Screening.
5. Assist the state in the identification of key maintenance challenges.
6. Enhance the efficiency and effectiveness of regulatory agencies such as the weigh station program through improved technology, measuring, and tracking systems.
7. Promote improvements in commercial vehicle transportation hubs and connections.
8. Improve the monitoring and documentation of oversize/overweight vehicle impacts on the infrastructure.

Achievement of this goal will be reflected in MSCVE Performance Measure B, which measures the percentage of CMV compliant with weight restrictions.

[12] State of Alaska, MSCVE Performance, http://www.gov.state.ak.us/omb/results/view_details.php?p=166

3.3.4 Carrier Operations

Goal: Enhance the linkages between all modes (truck, water, air & rail) for the efficient movement of freight.

Related Objectives:

1. Improve the connection and flow of commercial vehicle operations between modes.
2. Improve the connection and flow of truck traffic into and out of the Port of Anchorage.
3. Support technical efforts in the analysis of goods and services movement problem areas.
4. Identify and improve major freight distribution routes.
5. Work with Freight Advisory committees and planning groups to promote projects that will identify and improve areas that adversely affect freight mobility.

3.4 Issues and Opportunities

Over the years, Alaska's key motor carrier regulatory and enforcement agencies have participated in regional organizations and programs that provide the state continued benefits of guidance and beneficial programs. The forums identify barriers and establish processes for resolving conflicts between agencies for the user benefits. They provide the work place to establish joint management and related operational agreements. Interoperability requires establishment of standard criteria for technical and operational activities including carrier enrollment, and "by-pass" criteria focused on safety and efficiency. Participation in regional forums provides information about funding, outreach, administrative enforcement, international border crossings, and operational issues. Sharing intermodal information allows ITS/CVO activities to build on existing and evolving technologies thereby increasing efficiencies, effectiveness, and economies of scale.

The backdrop of Alaska's history establishes the foundation for future decisions. In 1984 the Alaska Transportation Commission, which previously issued credentials for operating authority, was abolished, and Alaska became an open state with no set tariffs and no requirement for operating authority. This same situation exists today in that no operating authority is required. To operate today, a vehicle must be properly registered, must have insurance, and must be properly identified with the business name, a USDOT number, the associated TIN number, and an MCS-150 form that has been updated within a year of the date of registration.

3.4.1 Safety Assurance

Safety Enforcement Operations. In the past, weigh station configurations consisted of primarily of older static scales with only a visual or verbal signal by the inspector to the driver to indicate clearance or hold for inspection. The inspector had virtually no information about the vehicle unless he required the driver to pull in and bring credentials into the station for review. Additionally, the inspector did not have access to information about the safety history of the vehicle or driver. Today, inspectors at all weigh stations have access to electronic data which provides information needed to

ensure the carrier is safe and responsible, including information regarding vehicle and driver safety histories. Additionally, all weigh stations have electronic signals to indicate to the driver either clearance or hold for inspection. Electronic screening at the WIM in front of the outbound Glenn Highway weigh station allows inspectors to pre-screen carriers for both weight compliance and safety records.

The stations continue to operate on limited schedules due to the number of inspectors available to staff the stations. Only the Tok and Fox weigh stations are open 24 hours a day, with the remaining stations open on average 50% of the time. However, station openings are not routine or published. So while station closures give operators of potentially unsafe vehicles the opportunity to schedule trips at hours when they believe stations will not be operating, the likelihood that they will take a chance that the station is closed has decreased since 1999. The probability that some carriers will operate in an illegal or unsafe manner still exists but is substantially lower. Additionally, the unique nature of the Alaska Marine Highway System creates a need to ensure that an efficient method is developed for determining size dimensions and weight of vehicles and containers being loaded on the ferries to assure safe operation of this portion of the National Highway System.

Number and Location of Inspection Facilities. Alaska currently operates a total of seven weigh stations throughout the state, with an eighth weigh station planned. Six of these eight weigh stations are located near the two largest population centers, Anchorage and Fairbanks. Generally, the number of certified officers available to staff these sites ranges between 26 and 33. In order to compensate for the small number of officers, the state initiated a program to train local law enforcement officers to conduct vehicle inspections. This allows roving inspection teams to supplement their numbers when conducting safety inspection operations in remote areas of the state. This program continues to grow and has significantly helped the monitoring of commercial vehicles, especially in remote locations where travel is time consuming and costly.

Roadway Inspection Facilities. Commercial vehicle safety inspections are conducted at both weigh stations and the roadside throughout the state. Due to extreme weather conditions faced throughout much of the year, especially in the northern region, inspections, particularly Level-1 inspections, have been limited. However, within the next year, enclosed inspection buildings with inspection pits will be built at the Tok and Richardson Weigh stations, increasing the number of inspections that can be conducted. Additionally, a Mobile Inspection system has recently been deployed, allowing inspections in more remote locations to be conducted over an extended period of time.

3.4.2 Credentials Administration

Accessibility of Data. Currently, two state agencies are responsible for maintaining different types of data on commercial vehicles. The DMV maintains vehicle registration records and driver credentials; DOT collects and manages safety inspection data and issues oversize/overweight permits. At weigh stations and the roadside, DOT safety inspectors validate vehicle and driver credentials as part of a CVSA Level 1 inspection. Current electronic data, centrally located and accessible to authorized users, allows state agencies to share data with each other to enhance efficiency and effectiveness

with respect to credentials processing and roadside safety enforcement. Alaska has implemented a Commercial Vehicle Information Exchange Window (CVIEW) database for sharing such data within the state and with other states via federal systems (such as the Safety and Fitness Electronic Records [SAFER] system), and will continue to augment its functionality as deemed appropriate for improved operations.

Online Programs. DOT has implemented online access to forms and information for permitting and other CVO related processes, including online applications for oversize/overweight permits, online Unified Carrier Registration and information, and information related to PRISM. DOT will continue to expand online resources to offer additional information, online forms, and applications regarding commercial vehicle operations to motor carriers and the traveling public as new technologies are deployed.

Port of Entry. There is a need to provide permitting and credentialing capabilities at seaports and border crossing locations to facilitate the entry of vehicles and cargo into Alaska.

3.4.3 Electronic Screening

Staffing of Current Weigh Stations. With limited size/weight and safety enforcement staffing, Alaska roadside activities need to focus on high risk carriers, vehicles, and drivers. At present, with the exception of the outbound Glenn Highway weigh station, when weigh stations are open, all commercial vehicles must enter the weigh station and cross the scales. Once Electronic screening is deployed to more weigh stations, Alaska can increase the effectiveness of its size/weight and safety enforcement activities by focusing its limited staff resources on the highest risk carriers, vehicles, and drivers and providing means for safe and legal vehicles to legally by-pass open weigh stations.

Weigh Station Access. Several of Alaska's weigh stations are located on one side of the highway. Trucks enter weigh stations by making a left turn across oncoming traffic into the station. They cross the scales and then exit the station by crossing one or more lanes of traffic to proceed on their trip. This maneuver increases the potential for crashes resulting from failure to yield to oncoming traffic or rear end collisions with trucks turning left.

Number and Locations of Weigh Stations. With only eight active weigh stations, it is very difficult to monitor activities and provide services all over the state. Since an expansion in the number of state personnel is not expected, alternative methods for expanding the area covered by inspectors, such as mobile and virtual inspection capabilities, are being considered. While the state does have a plan to increase the number of weigh stations, a mobile inspection station has been deployed and plans are being made to deploy virtual and remotely-operated weigh stations.

WIM Operations. Weigh-in-motion (WIM) devices have been deployed at key locations throughout the State, with plans to deploy more. Data obtained from WIM can be useful for both transportation and enforcement planning. The Division of Program Development, Highway Data Section, provides truck weight data and number of overweight trucks by site to MSCVE, which supplements the weigh station data and supports secondary weight enforcement according to FHWA reporting requirements. MSCVE will incorporate the Alaska WIM deployment plan, as well as deployment plans

for other roadside technology, into its plans for Virtual Weigh Station (VWS) deployment to maximize resources as efficiently and effectively as possible.

AVI Technology. Automatic Vehicle Identification (AVI) technologies, such as transponder readers, license plate readers (LPR) using optical character recognition (OCR), and USDOT readers using OCR are being used by states to increase the number of commercial vehicles that can be identified electronically. This in turn enables these vehicles to be screened electronically to determine whether or not they should be targeted for further inspection.

Infrastructure Concerns. Congested or limited access points to major transportation nodes, extreme weather conditions, and the lack of specific weight restrictions on Alaskan highways (trucks are restricted based on axle weight rather than gross vehicle weight) creates a situation where the highway infrastructure is a critical concern for state agencies. Alaska already has initiated programs to monitor road temperatures to assist state agencies in determining when to start and stop route restrictions in order to preserve infrastructure.

Electronic Data. DOT safety inspectors validate vehicle and driver credentials as part of a CVSA Level 1 inspection but must rely on information provided by the carrier and driver. Inspectors need, and have been provided, electronic access to current vehicle and driver credentials as they conduct inspections at weigh stations or on the roadside. Availability of this data at the roadside also enables electronic screening so that commercial vehicles operating within safe and legal parameters may continue down the roadway without pulling over unnecessarily for inspections. Providing additional safety and credentials data to the roadside over time will improve these operations.

3.4.4 Carrier Operations

Remoteness of Area and Distances Traveled. Alaska's size and economic base require trucks to travel great distances in remote parts of the state. In many areas of Alaska, services are widely separated and access to communications is limited. Commercial vehicle drivers generally carry cellular telephones or other communications technologies. Alaska now has satellite coverage over most areas to provide real-time location monitoring of commercial vehicles as well as emergency communications. While it is unknown how many drivers carry satellite phones, at least three major carriers have On-board Global Positioning System (GPS) devices on their trucks. It is expected that the use of GPS devices to track locations of commercial vehicles will expand as this technology becomes more and more cost efficient.

Turnouts. Many roadways are narrow and restrictive with regard to passing capabilities. It would be beneficial to carriers and the traveling public if safety turnouts were developed at prime locations to allow drivers to pull over to let other vehicles pass safety.

Route Planning and Scheduling. Because of the long distances and uncertain road conditions, motor carriers need accurate and timely information about the current and forecasted weather and road conditions at the time a trip commences. They need to know about road restrictions or closures (e.g., weight restrictions during the freeze/thaw

cycles), potential construction detours or delays, accidents or incidents that affect travel, and weather-related road conditions (icing, snow, rain, etc.).

Electronic Commercial Vehicle Registration. Commercial motor carriers must currently show paper receipts to Alaskan authorities as proof of Heavy Vehicle Use Tax (HVUT) payment to complete the registration process. Alaska does not collect these taxes on behalf of the IRS. If the IRS develops a procedure to allow electronic HVUT tax payment verification, it would be beneficial to adapt Alaska's vehicle registration system to accommodate commercial vehicles.

Electronic Permitting. Oversize/Overweight (OS/OW) permits are issued based upon approval of a travel route. Ideally, this process would be fully automated with the use of Geographical Information Systems (GIS) for automated route generation. In the interim, repeat routes (that have been approved in the past) could be approved automatically as long as relevant road conditions remain static along these routes. Development of a GIS component for automated route generation is underway and expected to be in place by March, 2010.

Alaska Pipeline. The Alaska Gasline Inducement Act (AGIA) was passed into law by the State of Alaska in May 2007, to expedite the construction of a pipeline to transport Alaskan natural gas resources to market. AGIA offers certain incentives to gas producers and pipeline companies in exchange for specific commitments that will provide significant benefit to the State. TransCanada was selected by the State in August 2008 as the exclusive recipient of the AGIA license. The Alaska Pipeline will stretch approximately 1,700 miles from the North Slope of Alaska at Prudhoe Bay through the Yukon and northeastern British Columbia to the BC/Alberta border near Boundary Lake. Construction is expected to begin in April 2016, and complete in September 2018. In the intervening years, data must be gathered to anticipate and plan for infrastructure improvements to accommodate the increase in freight movement along the gas pipeline; work is currently underway to develop an addendum to FHWA's Clarus program Concept of Operations[13] in support of this effort. Additionally, planning for appropriate enforcement efforts to ensure safety of the motoring public while maintaining efficient freight mobility is required.

[13] FHWA Clarus Program Concept of Operations,
http://www.ops.fhwa.dot.gov/weather/resources/publications/clarustrb06/index.htm

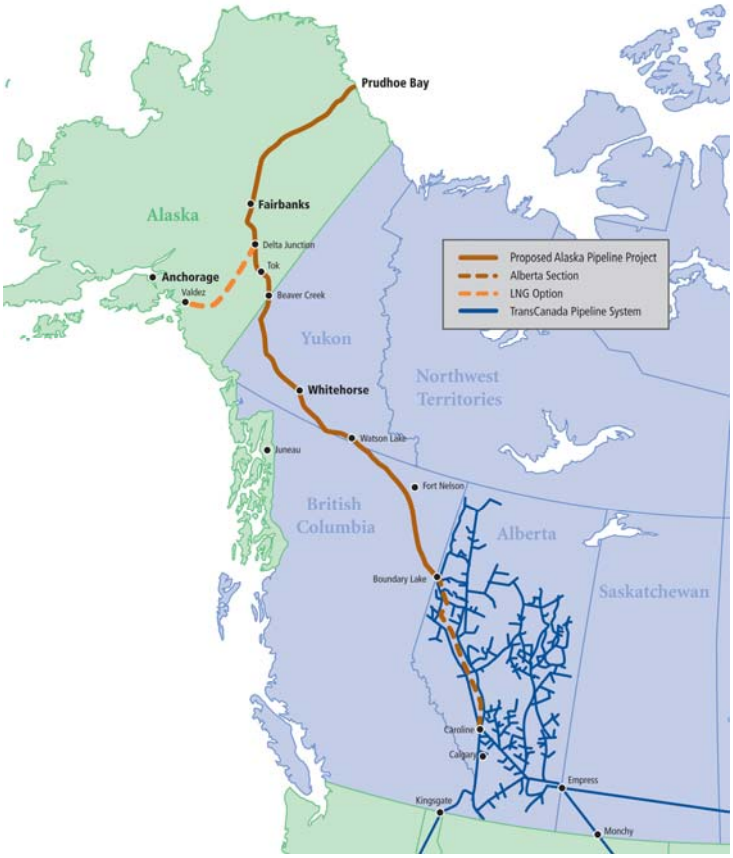


Figure 8. Alaska Gas Pipeline Map[14]

[14] From TransCanada website: http://www.transcanada.com/company/alaska_pipeline_project.html. Permission for use obtained from TransCanada on 5/5/2009.

4. Program Summary

4.1 Business Plan Structure

This business plan process is designed to respond to identified needs and opportunities. The plan will be updated on an annual basis to reflect changing needs, priorities, opportunities, accomplishments, and resources. The ITS/CVO Business Plan Working Group provides guidance and inspiration into partnerships between the private and public sectors to implement the strategies noted in the plan.

4.2 ITS/CVO Solutions

In 2000, ADOT&PF launched the Intelligent Transportation Systems program – known as the Iways program, which contains the Alaska Iways Architecture (AKIA)[15]. The AKIA conforms to the broader National ITS Architecture[16], which is used as a framework for the design, development and implementation of Intelligent Transportation System technologies. Under the AKIA, the ADOT&PF is attempting to develop an integrated, statewide Iways effort. The AKIA serves to coordinate and integrate existing and future Iways projects so that they function as a technologically compatible, complementary system. Commercial Vehicle Operations ITS projects are contained in a separate ITS/CVO architecture, which is a primary component of the Alaska Iways Architecture.

Each of the needs listed in the previous section requires innovative solutions that use technology to increase motor carrier safety and improve administrative processes. The ITS/CVO working group developed a number of solution ideas to address needs and take advantage of opportunities afforded by advanced technology. Table 5 shows how these ideas relate to the specific needs identified during the planning process.

[15] ADOT&PF, *Alaska Iways Architecture*, http://www.dot.state.ak.us/iways/architecture.shtml
[16] Iteris, *National ITS Architecture v6.1*, 3/30/2009, www.iteris.com/itsarch

Table 5. ITS/CVO solutions to Alaska's CVO needs

Need/Opportunity	*Solution Ideas*
Access to safety information at roadside	• Laptop Implementation with Aspen • Access to SAFER • Laptop Computers with Cellular Modems
Access to credential information at weigh station and roadside	• Communications Hardware Upgrade • Size, Weight & Safety Enforcement PC • Electronic Applications & Issuance of Permits • Database Computer • Electronic Records & Storage & Retrieval • Marine Highway Load Measurement
Antiquated/inadequate weigh station equipment and unsafe access/egress to weigh station	• Weighing System Upgrade • Weigh In Motion (WIM) System • AVI Transponder Systems • Indoor Inspection Facility
Need for real-time access to road/weather data	• Road & Weather Information System (RWIS) • Highway Closure and Restriction System (HCRS) • 511 Travel Information System[17] (primary source for travel information)
Infrastructure preservation	• Temperature Data Program (TDP) • Automated Traffic Recorder (ATR)
Public Safety	• Lifelink • GPS Locater Systems
Need for mobile & remote enforcement	• Tacport • Remote Unmanned Weigh Station Operation • Portable Enforcement Unit
Seamless, multi-modal freight movement	• Payload Intermodal Freight Tracking and Transfer System Study (Anchorage and Fairbanks)
Multi-modal, multi-agency, bi-national coordination	• Inter-modal Port Facilities • Border / Multi-use Facility
Administrative efficiency for government and industry	• On-line Licensing & Registration • Electronic Payment for Permits • Fax on Demand Upgrade
Need to train on use of new systems	• Training – Enforcement Officers • Training – Industry Personnel

These solution ideas are interrelated and cut across all four areas in the national ITS/CVO program. Alaska's ITS/CVO Working Group reviewed these solution ideas and used them as the basis for developing specific projects for Alaska's ITS/CVO Business Plan. Table 6 lists the two top priority projects that emerged from the review of CVO needs and solution ideas. These projects are organized into the national ITS/CVO program areas: Safety Assurance, Credentials Administration, Electronic Screening and Carrier Operations, and will be implemented in accordance with this

[17] 511 Travel Information System can be found at www.511.alaska.gov

Alaska ITS/CVO Business Plan, the National ITS Architecture, and the Alaska Iways Architecture. Projects completed under the 1999 ITS/CVO Business Plan have been moved to Appendix B.

Table 6. Alaska's priority ITS/CVO projects

Safety Assurance	
SA 4	Indoor Inspection Facility at Border Weigh Station
Credentials Administration	
Electronic Screening	
ES 1	Fixed Electronic Screening Sites
Carrier Operations	

Detailed Project Descriptions follow for each of the projects listed above.

4.3 Detailed Project Descriptions

4.3.1 Safety Assurance

Day-to-day operations of MSCVE are incorporating the use of federal and state SAFER/CVIEW data, and updates to Alaska's CVIEW are ongoing. Laptop computers with the federally-sponsored ASPEN inspection system have been deployed to field inspectors, and are equipped with cellular modem capabilities to facilitate the electronic transfer and retrieval of safety and other pertinent data at both roadside and fixed inspection locations. In most areas of Alaska, real time communication occurs. Weighing system upgrades at three weigh stations (Sterling, Tok, and Richardson) will be completed by 2011. Upgrades will include a dedicated PC at each station to provide for simultaneous size, weight, and safety enforcement. Upgrades to the Tok and Richardson weigh stations will also include an inspection barn to facilitate inspections during winter months.

Only one safety assurance project is identified at this time:

SA 4 Indoor Inspection Facility at Border Weigh Station

Project Number	**SA 4**
Project Title	Indoor Inspection Facility at Border Weigh Station
Project Description	Expand indoor weigh station/inspection facility at Alaska-Canada border location.
Goals & Objectives	Equip an indoor inspection facility at border to support year-round driver / vehicle safety inspections. Increasing the volume and integrity of safety inspections will improve homeland security and general public safety.
Desired	Increased volume and integrity of safety inspections of vehicles crossing

Project Number	**SA 4**
Outcome	Alaska-Canada border. Improved homeland security and general public safety. Year-round inspection coverage.
Project Location	Tok (existing facility at/near Alaska-Canada border)
Technical Approach	Identify required systems and equipment. Plan to include Vehicle and Cargo Inspection System (VACIS) system.
Organization & Management	Lead Agency – ADOT&PF; Operations will be responsibility of the Division of Measurement Standards & Commercial Vehicle Enforcement.
Schedules and Milestones	tbd – construction in 2010
Funding Approach	Stimulus
Estimated Cost	$2 Million
Status	Future

4.3.2 Credentials Administration

Projects related to commercial vehicle registrations and licensing upgrades have been considered and pursued in the past to help improve credentials administration processes. As of the time of this writing, there are no additional projects specifically related to credentials administration in the near future; however, these projects will be incorporated into this plan as they are identified.

4.3.3 Electronic Screening Projects

The projects described below represent the level of commitment to electronic screening by the state and to the development of multimodal solutions to challenges in Alaska's transportation systems. The following electronic screening project has been identified:

ES 1 Fixed Electronic Screening Sites

Project Number	**ES 1**
Project Title	Fixed Electronic Screening Sites
Project Description	Construct or upgrade additional fixed electronic screening sites with WIM systems based on hydraulic load cells and bending plates installed in 100-meter concrete pavement sections.
Goals & Objectives	Provide capability to identify, weigh, and check operating credentials of vehicles as they move past weigh facilities at main line speeds in order to select appropriate vehicles for more complete inspections.

Project Number	**ES 1**			
Desired Outcome	Assist the enforcement agency to focus limited resources on non-compliant carriers. Reduce costs for carriers in compliance with the laws. Increase safety by increasing the number of safe commercial vehicles on the highway. Achieve an adequate level of weight enforcement to meet Federal standards. Provide data to the Alaska Pavement Management System. Provide for weighing and sorting capabilities; for identifiers, transponders, and other main line communication capabilities for credentialing; weather reporting, safety, and driver information to be added later. Provide training for personnel who will operate facilities.			
Project Location	Anchorage A-C Couplet Bridge	Complete	Fox @ W/S	Existing
	Tudor/Muldoon Road	Existing	Chulitna	Existing
	Glenn Hwy N. of Palmer	Existing	Richardson O/B @ W/S	New
	Glenn Hwy O/B W/S	Complete	Tok @ W/S	New
	Seward Hwy @ Potter W/S	Complete	Soldotna	Existing
	Minnesota Drive	Existing	Homer Spit	Existing
	New Seward Highway	Existing	Kenai Spur	Existing
	Haines Highway	tbd	Klondike Highway	tbd
	Parks Highway south of Ester	tbd		
Technical Approach	Accept client (DOT&PF / MSCVE) input. Install current state of the art electronics and software. DOT&PF complete construction and replacements. Train appropriate personnel.			
Organization & Management	DOT&PF will replace and manage the installation of this equipment. Agency partners DMV, Department of Administration.			
Schedules and Milestones	1 Site 1999, 2 Separate & 2 Embedded Sites 2000, 4 Separate sites 2001, 2 Separate & 2 Embedded sites 2002.			
Funding Approach	Federal grants and state matching funds.			
Estimated Cost	$9.8 Million for 14 screening sites (estimated $700k per site)			
Status	Fixed Electronic Screening sites at Glenn Hwy NB and SB (No WIM), New Seward Highway, Port Of Anchorage.			
Recommend	Continue to add more electronic screening sites, tbd			

4.3.4 Carrier Operations

Projects related to mainstreaming structures, facilities, equipment, programs, and processes at Alaskan border facilities; and applying current technology to freight tracking and transfer systems have been considered and pursued in the past to help improve carrier operations. As of the time of this writing, there are no additional projects specifically related to carrier operations in the near future; however, these projects will be incorporated into this plan as they are identified.

5. Organizational and Management Approach

5.1 Lead Agencies

The Department of Transportation and Public Facilities is the lead agency for the State of Alaska in ITS and ITS/CVO programs. The Division of Program Development leads the ITS program and the CVO activities are directed by the Division of Measurement Standards & Commercial Vehicle Enforcement. A number of other departments throughout the State of Alaska contribute to the ITS/CVO programs and projects.

5.2 Management Approach

Development of the 1999 Business Plan was funded by a federal grant, and facilitated the overall deployment of an ITS systems architecture and technologies to provide connectivity with the efficiencies and economies it brings. The Commissioner of DOT&PF has delegated responsibility, assigned staff, and directed the management of ITS/CVO through DOT&PF / MSCVE. The program administrator will propose business partnering relationships with the private sector in implementation of the business plan.

5.3 Outreach

Alaska's motor carrier and motor coach industry is key to successful implementation of this ITS/CVO plan. Alaska's state agencies already work closely with their industry partners as evidenced by industry participation in freight mobility committees, ITS/CVO training courses and the ITS/CVO business planning process. MSCVE makes frequent presentations to industry associations and will continue to keep its partners informed of progress in implementing this ITS/CVO plan. Motor carrier representatives participate in FMCSA and FHWA webinars with MSCVE, and partner with MSCVE in workshops.

5.4 Scheduling and Milestones

An ITS/CVO Administrator position was created and filled; this resource also serves as the CVISN (Commercial Vehicle Information Systems and Network) project manager. A System Architect position was also created to meet requirements for participation in the TEA-21 ITS Deployment Program.[18]. The projected deployment schedule for proposed projects is provided in Table 7. This schedule is contingent on funding availability from both federal and state sources and will be adjusted based on the timing of funding.

Table 7. Proposed schedule for ITS/CVO deployment projects

Project	*FFY10*	*FFY11*	*FFY12*	*FFY13*	*FFY14*
SA 4					
ES 1#					

Indicates planned deployment

# Indicates project already underway at some locations

[18]Federal Transit Administration, Notification of Participation in the TEA-21 ITS Deployment, FHWA Deputy Administrator, FTA Deputy Administrator, December, 29, 1998. Attachment 1 CVISN requirements to hire two individuals CVISN and provides $350,000 for their support.

5.5 Costs, Funding, and Return on Investments

Each project proposed in this plan is included because government and industry partners believe it will enhance motor carrier safety in the state or will improve government and industry productivity or both. As project planning proceeds in greater detail, the anticipated cost and benefits will be estimated more accurately based on experience in other states and local factors that affect design, deployment, and operating costs. In some cases, feasibility studies or pilot projects are proposed to determine the practicality, economic feasibility, and effectiveness of certain approaches to ITS/CVO deployment in Alaska.

The focus of this document is for future projects, and information related to return on investment (ROI) for these projects will only be available after they have been completed for some period of time. For these projects, ROI will be definable, but will not necessarily be monetary. It is expected to be seen in improved safety ratings, but not necessarily cost efficiency. For example, deployment of mobile enforcement units has led to a decreased number of violations in remote areas. This should eventually lead to a decrease in out-of-service violations, and ultimately crashes.

Table 8 shows the estimated cost of each of the proposed ITS/CVO deployment project over the life of the project. Some of the projects listed are underway and funded through federal or state programs other than CVISN deployment funds. Projects marked with asterisks (*) are not fully funded and are the highest priority projects for CVISN deployment funding among those listed. Alaska's matching fund support to ITS/CVO deployment will come from its continued investment in the ITS/CVO projects listed in Table 8.

Table 8. Estimated Cost and Phasing for Proposed ITS/CVO Deployment Projects

($000s)

Project	*FFY10*	*FFY11*	*FFY12*	*FFY13*	*FFY14*	*Total*
SA 4	**2,000**	**---**	**---**	**---**	**---**	**2,000**
ES 1[#]	**1,380**	**1,000**	**1,000**	**1,000**	**1,000**	**5,380**
Total	**3,382**	**1,000**	**1,000**	**1,000**	**1,000**	**7,380**

[#] Indicates project included in current funding plans

6. Contact Names

Laura Edwards
ITS/CVO Administrator
DOT&PF / MSCVE
907-365-1215 Phone
907-365-1220 FAX
E-mail: Laura.Edwards@alaska.gov

Jill Sullivan
ITS Coordinator
DOT&PF / Statewide Planning
907-465-8592 Phone
907-465-6984 FAX
E-mail: Jill.Sullivan@alaska.gov

APPENDIX A
ACRONYMS

ACRONYMS

ACRONYM	DEFINITION
AGIA	Alaska Gasline Inducement Act
AKIA	Alaska Iways Architecture
AIA	Anchorage International Airport
AK	Alaska
AHS	Alaska Highway System
AMHS	Alaska's Marine Highway Ferry System
AST	Alaska State Troopers
ATR	Automated Traffic Recorder
AVI	Automatic Vehicle Identification
BC	British Columbia
CDL	Commercial Driver License
CMV	Commercial Motor Vehicle
CTP	Community Transportation Program
CVIEW	Commercial Vehicle Information Exchange Window
CVISN	Commercial Vehicle Information System and Networks
CVO	Commercial Vehicle Operations
CVSA	Commercial Vehicle Safety Alliance
DEC	Department of Environmental Conservation
DMV	Division of Motor Vehicles
DNR	Department of Natural Resources
DOA	Department of Administration
DOT	Department of Transportation
DOT&PF	Department of Transportation and Public Facilities
DPS	Department of Public Safety
EPA	Environmental Protection Agency
FMCSA	Federal Motor Carrier Safety Administration

ACRONYM	DEFINITION
FHWA	Federal Highway Administration
FTP	File Transfer Protocol
FY	Fiscal Year
GPS	Global Positioning System
HAZMAT	Hazardous Materials
HB	House Bill
HCRS	Highway Closure and Restriction System
HVUT	Heavy Vehicle Use Tax
IFTA	International Fuel Tax Agreement
IRP	International Registration Plan
IRS	Internal Revenue Service
ISER	Institute of Social and Economic Research
ITS	Intelligent Transportation Systems
LPR	License Plate Readers
MCO	Manufacturer's Certificate of Origin
MCSAP	Motor Carrier Safety Assistance Program
MSCVE	Measurement Standards & Commercial Vehicle Enforcement Division of ADOT&PF
NHS	National Highway System
OCR	Optical Character Recognition
OMC	Office of Motor Carriers
OS/OW	Oversize/Overweight
POA	Port of Anchorage
PRISM	Performance and Registration Information System Management
RWIS	Road & Weather Information System
SAFER	Safety and Fitness Electronic Records
STIP	Statewide Transportation Improvement Plan
TDP	Temperature Data Program

ACRONYM	DEFINITION
TIN	Taxpayer Identification Number
TraCS	Traffic and Criminal software
UCR	Unified Carrier Registration
USDOT	United States Department of Transportation
VACIS	Vehicle and Cargo Inspection System (gamma-ray imaging system made by SAIC)
VMT	Vehicle Miles Traveled
WIM	Weigh-In-Motion

APPENDIX B
CLOSED ALASKA PRIORITY ITS/CVO PROJECTS

CLOSED ALASKA PRIORITY ITS/CVO PROJECTS

Projects shown here were listed in the 1999 Alaska ITS/CVO Business Plan and have since been completed or discontinued.

Safety Assurance		
SA 1	Fixed and Mobile Access to Roadside Safety Information	complete
SA 2	Equipment for an Indoor Commercial Vehicle Inspection Facility	cancelled
SA 3	Marine Highway Vehicle Loading System	cancelled
Credentials Administration		
CA 1	Credentials Data Integration and Access System	complete
CA 2	Electronic Application, Approval, & Issuance of Permits	complete/ongoing
CA 3	Port of Entry One-Stop-Shopping	cancelled
Electronic Screening		
ES 2	Portable Enforcement Units	complete
ES 3	Temperature Data Program (TDP)	complete
ES 4	Remote Unattended Weigh Station Operation	cancelled
Carrier Operations		
CO 1	Payload (multi-modal freight tagging and tracking) Study Project	 complete cancelled
CO 2	Highway Closure and Restriction System (HCRS)	complete

More detail for these projects is provided on the following pages.

SA 1 Fixed and Mobile Access to Roadside Safety Information

Project Number	**SA 1**
Project Title	Fixed and Mobile Access to Roadside Safety Information
Project Description	Provide laptop computers to all inspection personnel to facilitate reporting through the use of Aspen software, access to SAFER data for interstate carriers, and access to the planned state data warehouse for credential and permitting information in the state systems.
Goals & Objectives	Achieve electronic data collection, harmonize data entry through usage of the ASPEN software, reduce redundant data entry and facilitate electronic data transfer and exchange with other states and other entities. Provide access to national safety information from the SAFER system. Provide access to state maintained credentials and permitting data and information. Provide training to all personnel who will be using the systems.
Desired Outcome	All inspectors will be assigned laptop machines with remote data upload, down load and replication capabilities using cellular modems.
Project Location	Fixed and mobile inspection sites
Technical Approach	Analyze local working and data collection conditions, identify appropriate equipment/laptops, procure laptops, outfit laptops with ASPEN and other appropriate software, and train users, deploy equipment with users and begin electronic data capture and transmission.
Organization & Management	Lead Agency - MSCVE/CVO Supporting Agencies – FHWA, OMC, DMV, DPS, DOT, local enforcement agencies
Schedules and Milestones	Identify and purchase laptops by or before March 30, 1999. Configure laptops for field use and install software by or before June 30, 1999. Deploy laptops and train users by or before August 30, 1999. Begin full-scale statewide electronic data capture and replication by or before October 30, 1999.
Funding Approach	MCSAP Technology grant; SOA GF soft match.
Estimated Cost	$250,000
Status	Completed. New officers are issued equipment routinely.

SA 2 Indoor Commercial Vehicle Inspection Facility

Project Number	**SA 2**
Project Title	Equipment for an Indoor Commercial Vehicle Inspection Facility
Project Description	Provide equipment for existing indoor commercial vehicle inspection facility to support year around driver / vehicle safety inspections. Critical to the ability to conduct a thorough safety inspection in the state due to the amount of time inspectors are subjected to below freezing temperatures.
Goals & Objectives	Equip an indoor inspection facility to support year-round driver / vehicle safety inspections to increase the volume and integrity of safety inspections, thereby improving public safety.
Desired Outcome	At the present time, full scale driver / vehicle safety inspections in the state are limited to the spring and summer months because of weather conditions and the non-availability of an inside facility for such use. The heated indoor facility will offer additional safety protection to the motoring public of Alaska by allowing inspectors to provide year around inspection coverage and increase the percentage of drivers and vehicles being inspected.
Location	Glenn Outbound Weigh Station at Mile 11 of the Glenn Highway, Richardson InBound Weigh Station located at Mile 358 of Richardson Highway, the Tok Weigh Station located at Mile 1308 Alaskan Highway and the Sterling Weigh Station on the Sterling Highway.
Technical Approach	Identify availability of land, procedure for purchasing land, identify size of facility needed and required equipment.
Organization & Management Approach	The Division of Measurement Standards & Commercial Vehicle Enforcement will be responsible for the operation of the facility and the Department of Transportation and Public Facilities will be responsible for design and overseeing the construction.
Schedules and Milestones	The facility is in the planning stage with a projected completion date of summer 1999. Design during 2000. Completion date for the construction is 2001.
Funding Approach	Federal Highway Administration funding and State match funds.
Estimated Cost	$200,000
Status	Cancelled. Current planned indoor inspection facilities do not need specific equipment.

SA 3 Marine Highway Vehicle Loading System

Project Number	**SA 3**
Project Title	Marine Highway Vehicle Loading System
Project Description	Automated system to measure vehicle size (dimensions) and weight for positioning on ferries.
Goals & Objectives	To safely and efficiently operate new high-speed, displacement hull ferries, crews must be able to correctly position loads (vehicles and containers) based on size, weight, origin, and destination.
Desired Outcome	Be able to quickly determine the specifics of individual vehicles (loads) and where to position them on the ferries.
Project Location	Marine Highway System, both onboard and on shore.
Technical Approach	Install shore-side scanning/sensor systems to determine vehicle (load) characteristics. Reservation system will determine fees and where to place loads on the ferry.
Organization & Management	Lead Agency – DOT&PF, SE REGION AMHS (Alaska Marine Highway System)
Schedules and Milestones	Design and test pilot system Deploy to approximately 20 ports from Seattle to Southeast, Southcentral, and Southwest Alaska, to the Aleutian port of Unalaska.
Funding Approach	STIP (AMHS is part of the National Highway System)
Estimated Cost	$2.5 million
Status	Cancelled due to lack of interest

CA 1 Credentials Data Integration and Access System (CDIAS)

Project Number	**CA 1**
Project Title	Credentials Data Integration and Access System (CDIAS)
Project Description	Setup central CVO data warehouse that contains, or allows access to, all state-maintained information about vehicle credentials and permitting, information on driver credentials, and information on carrier safety records.
Goals & Objectives	Meet federal requirements for ITS/CVO national architecture database; make sure Alaska ITS/CVO database meets ITS/CVO database architecture standards for harmonious and successful data exchanges. Update communications hardware in order to provide access to information from all inspection sites across the state.
Desired Outcome	Provide near real-time access to all information available concerning a carrier, driver, or vehicle. Provides seamless link between DMV and DOT records, and allows authorized personnel to access that information from either fixed or mobile locations.
Project Location	Computer server will be located at MSCVE Headquarters, Anchorage, Alaska.
Technical Approach	Identify best database technology and communications hardware, procure and install database. Configure according to ITS/CVO national architecture standards. Train MSCVE personnel on database administration and maintenance.
Organization & Management	Lead Agency - MSCVE/CVO Supporting Agencies - FHWA, OMC, DOT
Schedules and Milestones	Identify best database and communications hardware products by or before September 30,1999. Install and configure to ITS/CVO standards by or before December 30,1999. Train MSCVE personnel by or before December 30, 1999.
Funding Approach	SOA GF, Grants, ITS/CVO, MCSAP
Estimated Cost	$1,500,000
Status	Completed; refinements/enhancements ongoing

CA 2 Electronic Application, Approval, & Issuance of Permits

Project Number	**CA 2**
Project Title	Electronic Application, Approval, & Issuance of Permits
Project Description	Electronic Application and Issuance of Oversize and Overweight Permits
Goals & Objectives	Enable electronic commerce and enable carriers and public to self apply for specific permits, obtain state approval of the request, and receive the permit. Will tie in with current system recently implemented that provides for electronic payment of fees for permits.
Desired Outcome	Enhanced enforcement, increased public and commercial safety, enhanced carrier operation, and minimization of commercial carrier interruption. Increase permitting effectiveness and efficiency, and reduce long term operational costs.
Project Location	Anchorage and then statewide
Technical Approach	Identify permits appropriate for electronic application and issuance. Identify or develop electronic system to accommodate the same. Identify necessary hardware. Install the hardware, software, and initiate project.
Organization & Management	Lead Agency - MSCVE/CVO Supporting Agencies – other ITS/CVO states using electronic permitting
Schedules and Milestones	Project begun 1997. Identify permits appropriate for this process by or before September 30, 1999. Identify necessary hardware and software by or before September 30, 1999. Identify electronic system to accommodate application and delivery of these permits by or before December 30, 1999. Install or develop identified system by or before March 30, 2000.
Funding Approach	SOA GF. MSCAP, ITS/CVO, Grants
Estimated Cost	$1 million
Status	Completed. Refinements/enhancements ongoing.

CA 3 Port of Entry One-Stop-Shopping

Project Number	**CA 3**
Project Title	Port of Entry One-Stop-Shopping
Project Description	To improve the safe and legal movement of people and goods into/or across the United States via the Alaska-Canada border.
Goals & Objectives	To provide state of the art electronic credentialing, Customs clearances, container tracking procedures and systems at ports of entry throughout the state. Design and operate a one-stop-shopping facility at ports of entry to accommodate weigh station operations, driver and vehicle safety inspections, U.S. Customs, Alaska State Troopers, fire protection activities, The Division of Tourism, and the Division of Motor Vehicles.
Desired Outcome	Simplify overall port of entry processing and reduce expenses for all associated parties. Create seamless border between Alaska and Canada, and reduce delay of commercial vehicle operation. Provide a one-stop facility for Customs in processing of people leaving and entering the state by motor vehicle, the tourism visitor center addressing the needs of tourists visiting the state, and the Department of Motor Vehicle in processing out-of-state registration. Provide the Alaska State Troopers with local facilities for police operations, dispatch services, and emergency response; and house fire protection personnel and equipment. The Division will have heated inside facilities to support year round driver/vehicle safety inspections along with a weighing system to ensure size and weight regulatory compliance.
Project Location	Selected Alaska ports of entry
Technical Approach	Conduct a feasibility study, coordinate government enforcement efforts, identify needs of each organization, identify desired location and provide overall study of design.
Organization & Management	Lead agency: MSCVE; partner with DOT&PF, Canadian officials, U.S. Customs, Alaska State Troopers, Department of Motor Vehicles, Division of Tourism and Fire Support agencies. Representatives from each organization will be responsible for providing supervision of their programs and joint management of the facility. The primary responsibility for the facility will rest with MSCVE.
Schedules and Milestones	A facility on the Canadian border is in the initial planning stage with a feasibility study beginning in the summer of 2000. Coordinate governmental enforcement efforts involving all agencies identified. Enter into design stage in 2000. Develop management plan in 2001 and initiate a joint operations agreement in 2001. Bidding stage in 2001, construction and completion in 2003. All depending on availability of funding.
Funding Approach	Federal Highway Administration funding and State match funds.
Estimated Cost	$200,000 for initial feasibility study
Status	Incomplete due to insufficient participation. State of Alaska no longer pursuing.

ES 2 Portable Enforcement Units

Project Number	**ES 2**
Project Title	Portable Enforcement Units
Project Description	Portable Enforcement Units (now called Mobile Inspection Units) designed to provide a mobile inspection and/or port of entry platform utilized throughout the state.
Goals & Objectives	Improve highway safety by providing a mobile inspection platform that can be utilized throughout the State highway system. The system could also operate as a mobile port of entry for remote locations.
Desired Outcome	Allow inspections and portable scale operations anywhere needed within the State. Establish safer trucks throughout the State.
Project Location	Statewide along the highway system and harbors or airports.
Technical Approach	Purchase vehicle and related equipment. Train personnel in the use of the vehicle.
Organization & Management	MSCVE, the Lead Agency, would be responsible for the purchase, maintenance, and deployment of the units.
Schedules and Milestones	Conduct preliminary study to assess needs for types of vehicles and equipment needed. Advertise bid for the purchase of the vehicles. Equip and field test. Actual deployment of the vehicles for field use.
Funding Approach	ITS/CVO MCSAP State General Funds Yearly cost approximately $6,000.00 per vehicle
Estimated Cost	$200,000 for a vehicle that can be lived in for extended periods of time. Daily-use vehicles would be less expensive.
Status	Completed. Portable enforcement unit deployed.

ES 3 Temperature Data Program (TDP)

Project Number	**ES 3**
Project Title	Temperature Data Program (TDP)
Project Description	This project includes thermister readings at 3- and 6- inch intervals to a depth of 72 inches beneath the bottom of the pavement, together with surface pavement temperature and ambient air temperature. The information is used to determine the locations and depth of frozen material under roads built over unstable soils.
Goals & Objectives	Gather as a part of RWIS (Roadway Information System); upgrade the expansion of the ongoing temperature data program to determine subsurface conditions for imposition of weight restrictions by installation of collection equipment.
Desired Outcome	Preserve highway infrastructure with temperature data-driven weight restrictions. Minimize duration or eliminate imposition of highway weight restrictions.
Project Location	Expand on the 30 TDP sites strategically located to report weather impacts, with most on rural highways.
Technical Approach	Identify specific data gathering equipment. Purchase and install TDP equipment. In many sites the TDP's will operate using solar panel powering batteries and cell phones for communications.
Organization & Management	Lead Agency: DOT&PF, Central Region, Highway Data Section will administer the installation and operational aspects of this program. Other Agencies: FHWA, ITS/CVO.
Schedules and Milestones	Installation scheduled for the 1999 construction season.
Funding Approach	Federal grant and state capital money
Estimated Cost	$800,000
Status	Completed. Deployed at existing permanent traffic recorder sites (PRS, 40-45 sites) and at road weather system sites (RWS, 20-25 sites). Data is fed to FTP data collection site at Juneau and is web-accessible (http://www.dot.state.ak.us/iways/roadweather/forms/IndexForm.html).

ES 4 Remote Unattended Weigh Station Operation

Project Number	**ES 4**
Project Title	Remote Unattended Weigh Station Operation
Project Description	Equip remote unattended weigh stations.
Goals & Objectives	Facilitate remote unattended Weigh Station operation. Expand and enhance size, weight, and safety capabilities.
Desired Outcome	Enhanced statewide truck size, weight and safety program capabilities through technological enhancements.
Project Location	Valdez weigh station identified as first pilot
Technical Approach	Identify necessary primary and secondary equipment necessary as well as hardware and software. Install the same. The success of this project relies upon the successful statewide communications hardware upgrade.
Organization & Management	Lead Agency – MSCVE/CVO Supporting Agencies – FHWA, OMC, DOT, DOA, and various other third party participants.
Schedules and Milestones	Identify necessary components by or before June 30, 1999. Procure the same by or before September 30, 1999. Install components by or before January 30, 2000. Test and Initiate remote operations in Valdez by or before May 30, 2000.
Funding Approach	SOA GF, MCSAP, ITSCVO, Grants
Estimated Cost	$150,000
Status	Cancelled due to insufficient enforcement resources.

CO 1 PAYLOAD Intermodal Freight Tracking And Transfer System

Project Number	**CO 1**
Project Title	PAYLOAD
Project Description	A project to develop and deploy an intelligent, intermodal freight tracking and transfer technology (FT3) system in Alaska.
Goals & Objectives	The project will act as a laboratory to design, develop and deploy fully functional FT3 systems on a limited scale, in a cost-effective manner, yet with all the elements of a full-size system
Desired Outcome	A seamless, intermodal freight tracking and transfer system that embodies the critical elements of a nationwide system.
Project Location	Statewide with international implications
Technical Approach	Develop FT3 physical infrastructure, operating practices and business processing in a fully intermodal, real-world setting. Develop new forms of public/private partnerships to serve as models for national FT3 deployments. Build proof-of-concept FT3 systems under rigorous field conditions.
Organization & Management Approach	DOT&PF in conjunction with a number of private sector companies will manage segments, modules, of the program. Private industry will be able to monitor the operation of the intelligent transportation system easily, inexpensively and continuously to determine the location, route, condition, and arrival time of components, assemblies and finished products. FT3 systems will truly enable the manufacturing process to extend beyond the factory walls, where physically separated components produced by different companies are brought together as needed in a single, unified assembly system.
Schedules and Milestones	Gain approval from funding source. Identify partnering interests Develop new forms of Public/Private Partnerships (P3s) to serve as models for national FT3 deployments Build 'proof of concept' FT3 systems under rigorous field conditions.
Funding Approach	The Department has requested discretionary (grant) funding for PAYLOAD from the USDOT under both the National Corridor Planning and Development (NCPD) program and the Coordinated Border Infrastructure (CBI) program.
Estimated Cost	$5.8 million
Status	This study was completed. Rest of project cancelled.

CO 2 Highway Closure and Restriction System (HCRS)

Project Number	**CO 2**
Project Title	Highway Closure and Restriction System (HCRS)
Project Description	A data collection and distribution center that provides information to the traveling public.
Goals & Objectives	Highway closure and restriction data collection and distribution for transportation and public safety personnel to enter real time highway closure and restriction information into a central system and then provide that information to the traveling public.
Desired Outcome	Provide information DOT management decisions on highway closure and restrictions to increase public safety. Provide information to general users facilitate for effective decision making if highway closure or restrictions have been imposed.
Project Location	Statewide sites which are determined to have heavier traffic, remote locations, and dangerous highway
Technical Approach	Determine the appropriate computer equipment and software. Insure computer-dissemination closure and restrictions to traveler information venues such as: voice remote access system (accessible to the public through a toll free number), kiosks, and an Internet web site.
Organization & Management	DOT&PF will replace and manage the installation of these sensors
Schedules and Milestones	Most of the installations are scheduled for 1999.
Funding Approach	STIP funded with State and Federal Highway money
Estimated Cost	$250,000
Status	Completed. Evolved into CARS/511 which is in the process of being updated. Will be dropping out of CARS pooled fund and selecting new vendor to supply 511 services as described in New Generation 511 Concept of Operations[19].

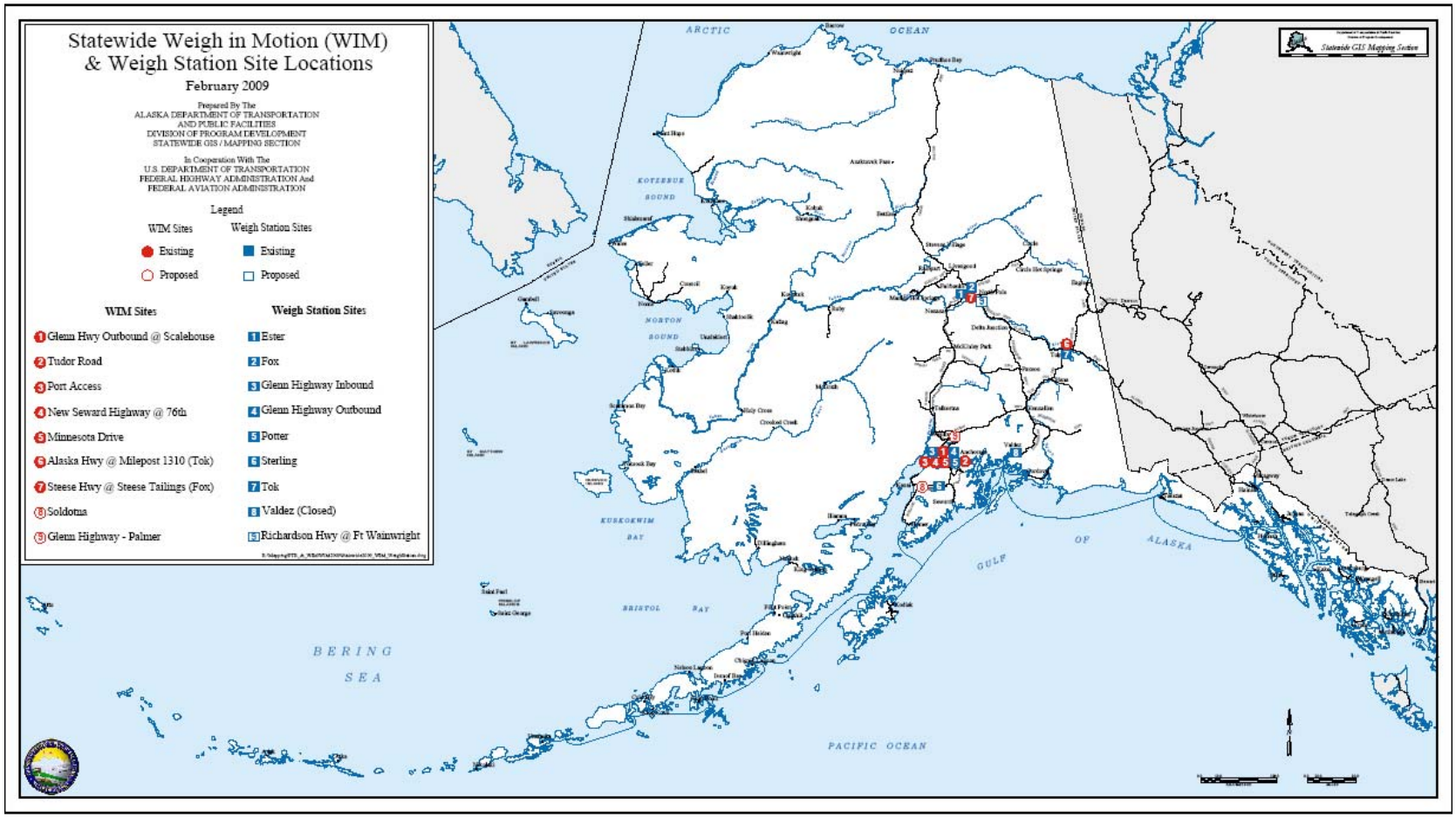
[19] New Generation 511 (Phone and Web) Concept of Operations v2.3, ADOT&PF, March 31, 2009

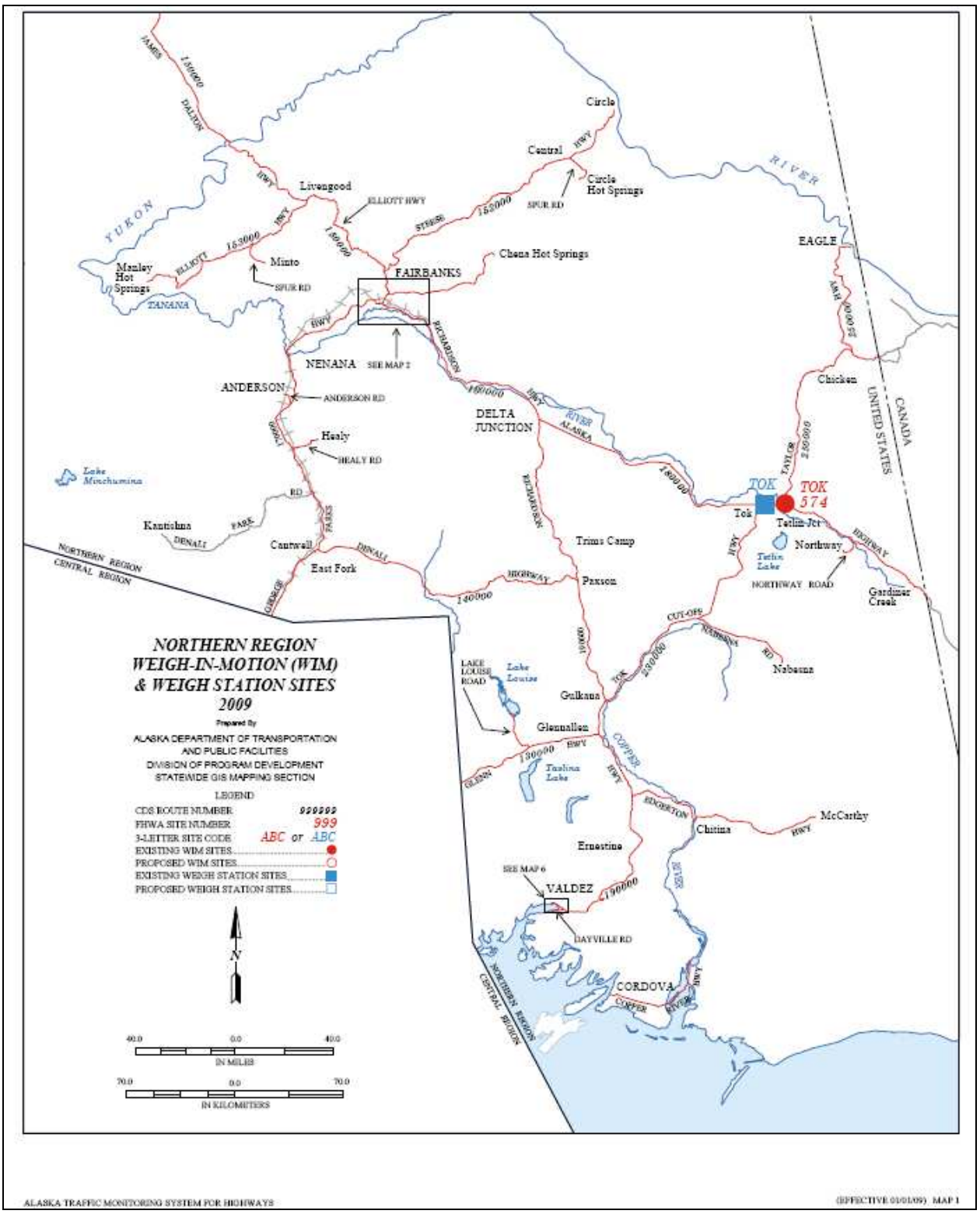
APPENDIX C
ALASKA WIM AND WEIGH STATION MAPS

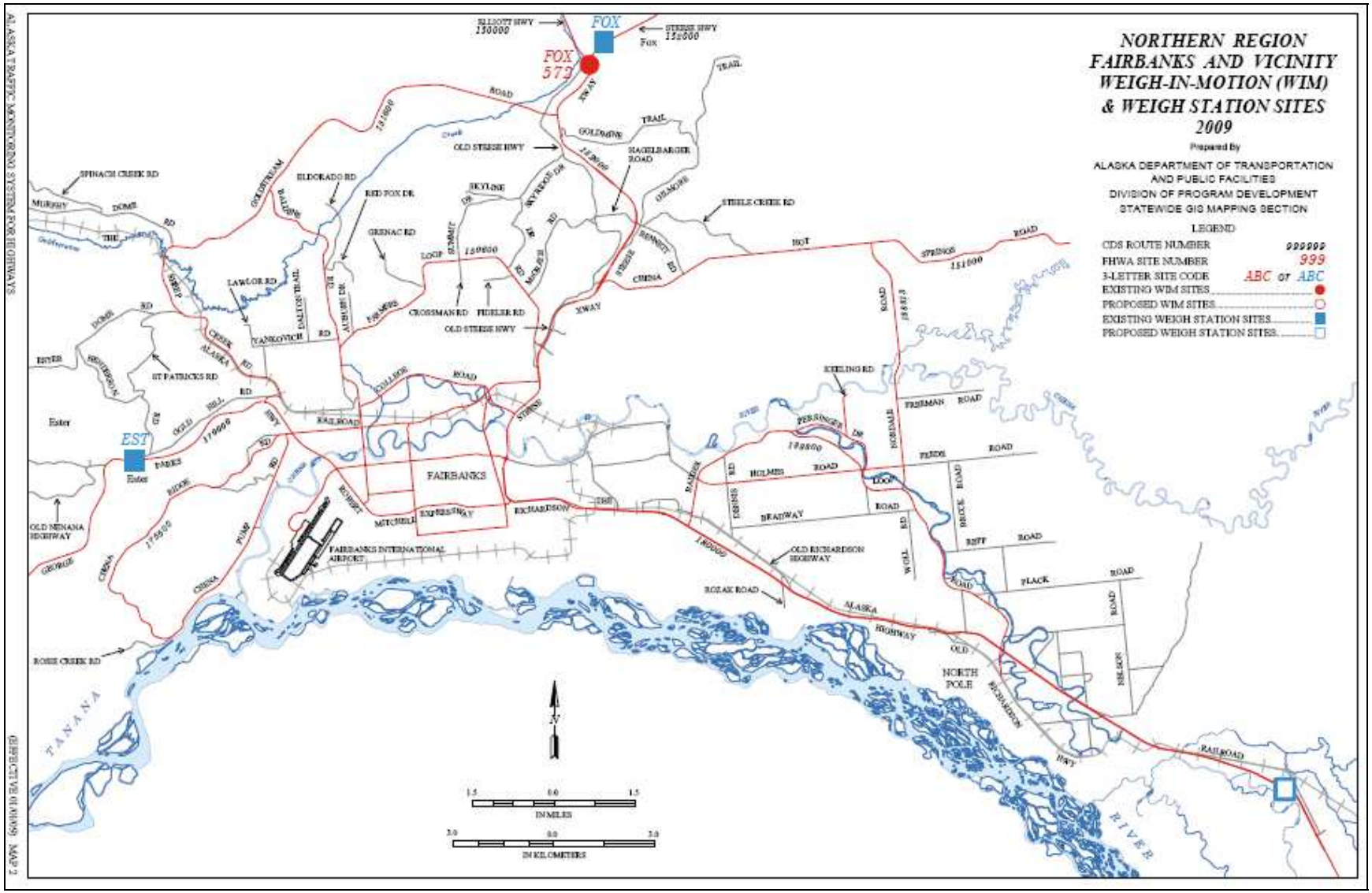
ALASKA WIM AND WEIGH STATION MAPS

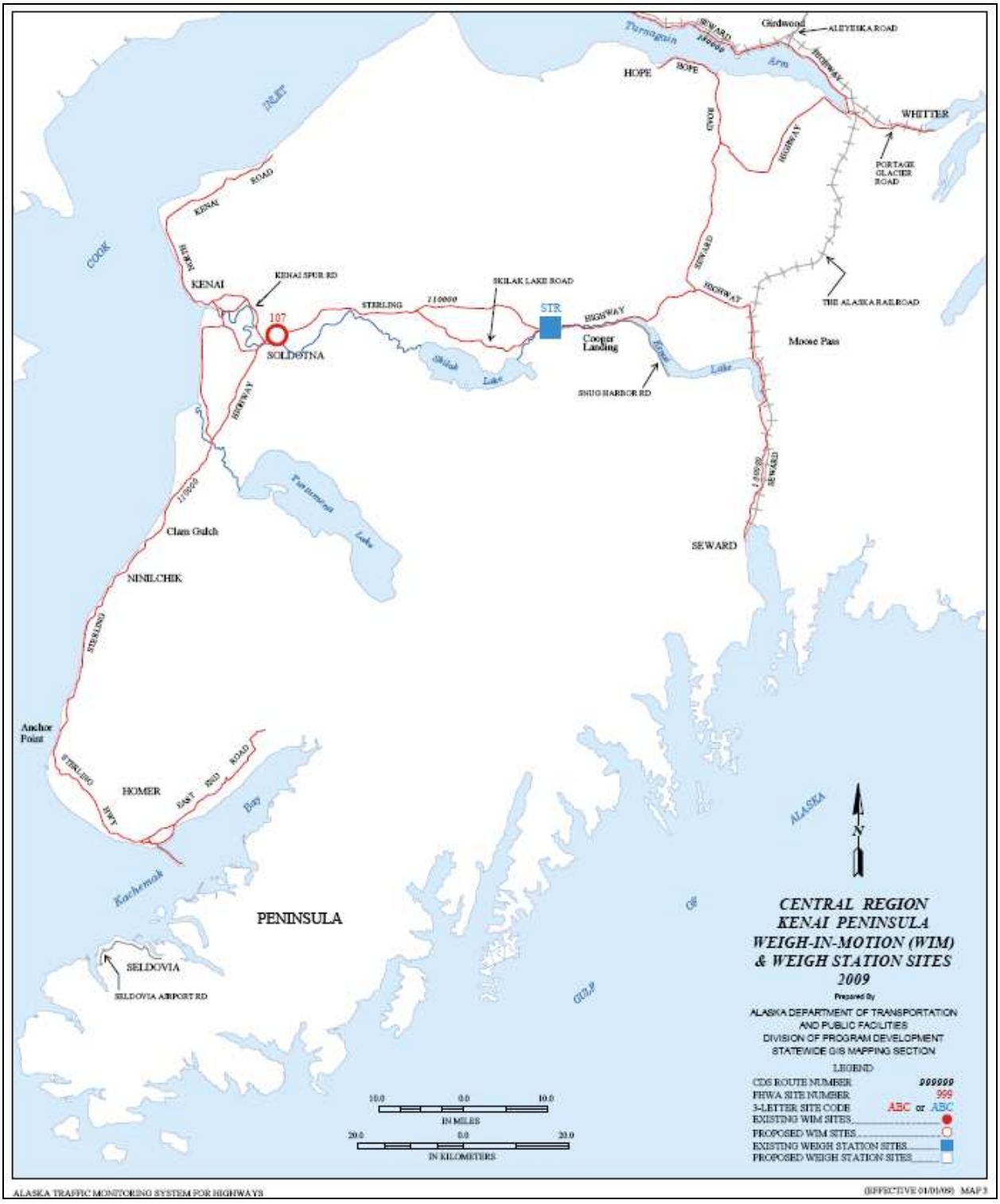
Maps extracted from Division of Program Development document ***WIM Direction Draft for MSCVE***[20].

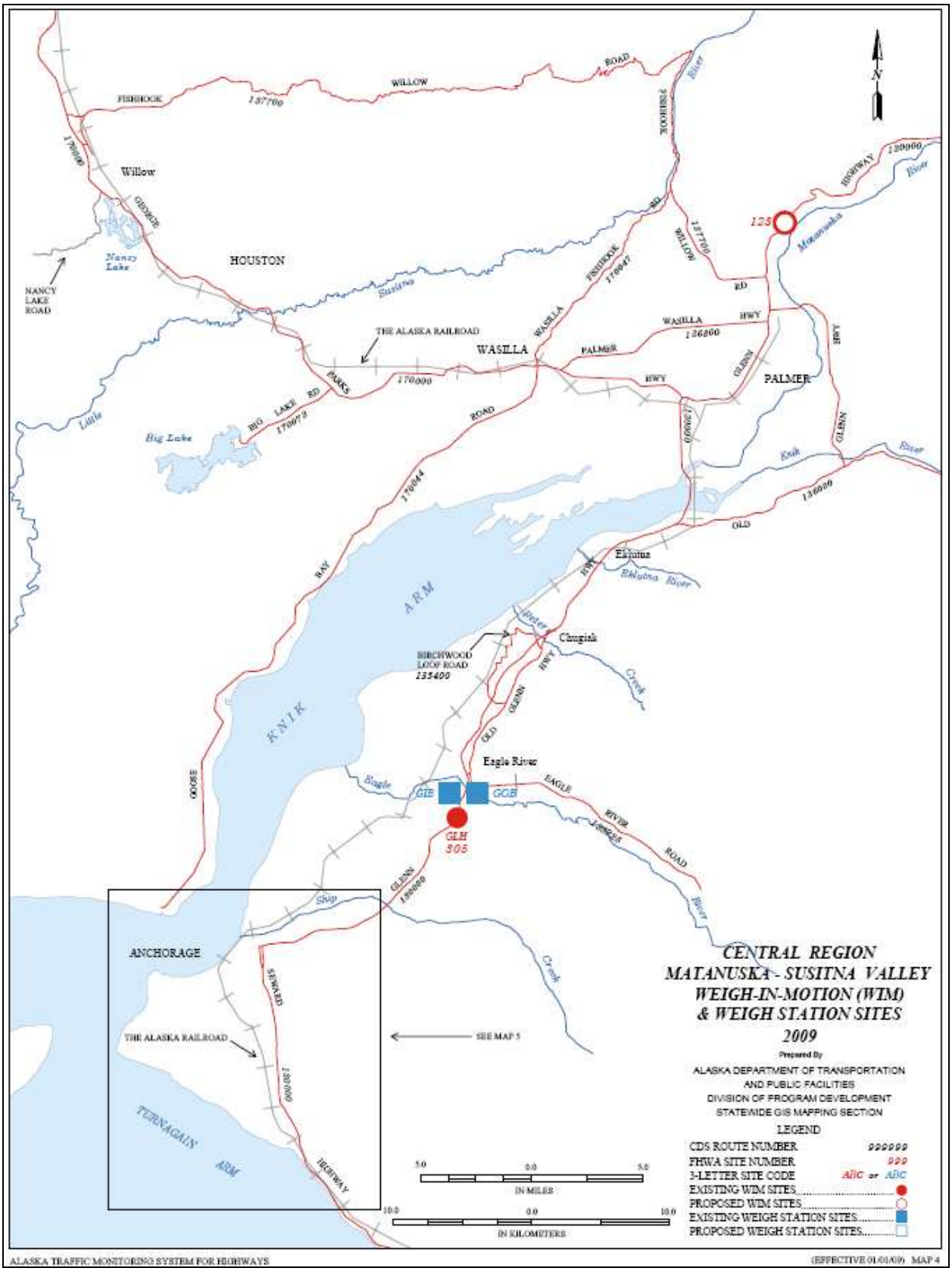
[20] Division of Program Development, ***WIM Direction Draft for MSCVE*** (*WIM Direction with att 7-28 final.pdf*), 7/28/2009

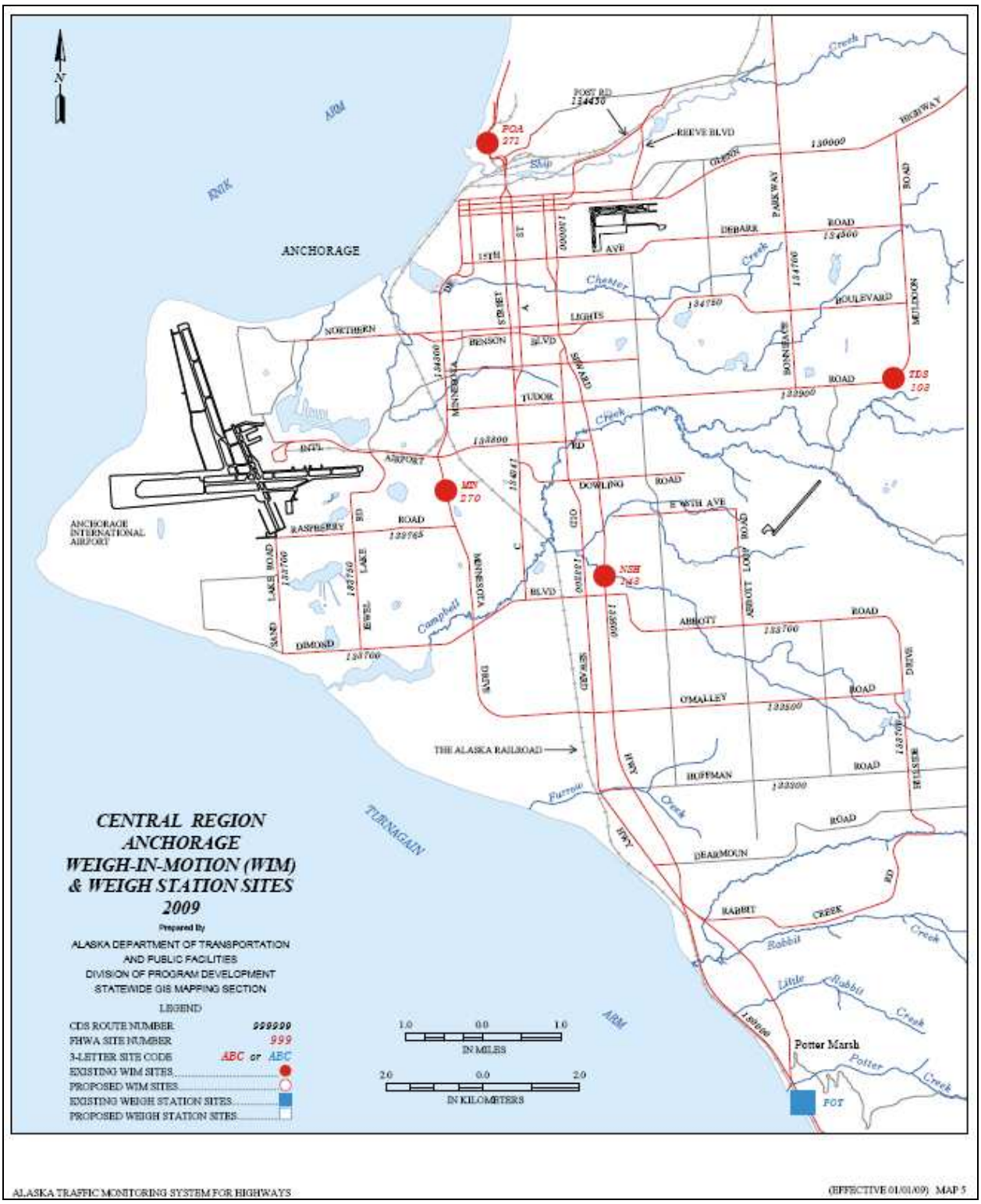

Statewide Weigh in Motion (WIM)
& Weigh Station Site Locations
February 2009
Prepared By The
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF PROGRAM DEVELOPMENT
STATEWIDE GIS / MAPPING SECTION
In Cooperation With The
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION And
FEDERAL AVIATION ADMINISTRATION
Legend
WIM Sites
Existing
Proposed
Weigh Station Sites
Existing
Proposed
WIM Sites
1 Glenn Hwy Outbound @ Scalehouse
2 Tudor Road
3 Port Access
4 New Seward Highway @ 76th
5 Minnesota Drive
6 Alaska Hwy @ Milepost 1310 (Tok)
7 Steese Hwy @ Steese Tailings (Fox)
8 Soldotna
9 Glenn Highway - Palmer
Weigh Station Sites
1 Ester
2 Fox
3 Glenn Highway Inbound
4 Glenn Highway Outbound
5 Potter
6 Sterling
7 Tok
8 Valdez (Closed)
9 Richardson Hwy @ Ft Wainwright
ARCTIC OCEAN
KOTZEBUE SOUND
NORTON SOUND
KUSKOKWIM BAY
BRISTOL BAY
BERING SEA
GULF OF ALASKA
PACIFIC OCEAN
Statewide GIS Mapping Section

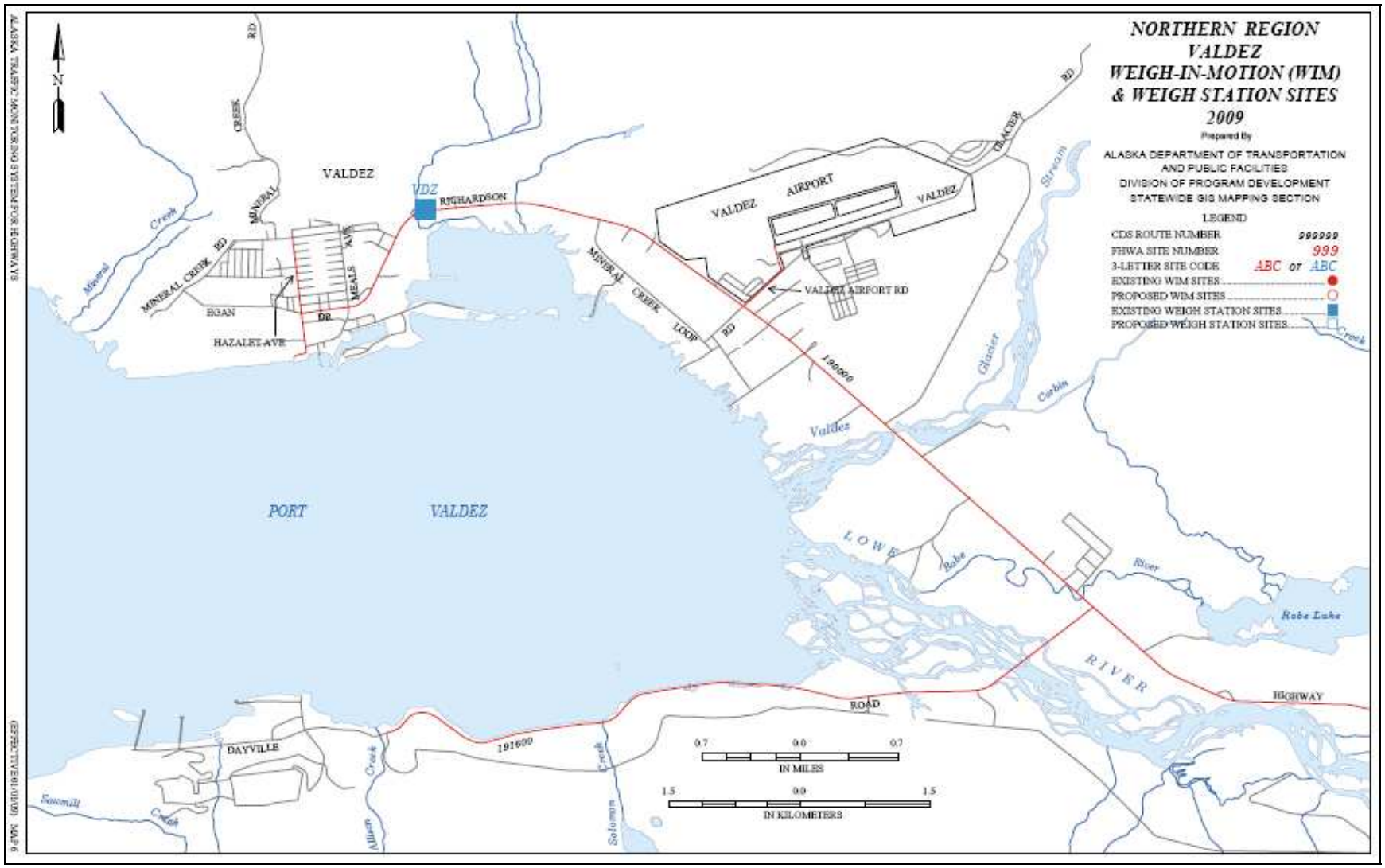

NORTHERN REGION
WEIGH-IN-MOTION (WIM)
& WEIGH STATION SITES
2009
Prepared By
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF PROGRAM DEVELOPMENT
STATEWIDE GIS MAPPING SECTION
LEGEND
CDS ROUTE NUMBER 999999
FHWA SITE NUMBER 999
3-LETTER SITE CODE ABC or ABC
EXISTING WIM SITES
PROPOSED WIM SITES
EXISTING WEIGH STATION SITES
PROPOSED WEIGH STATION SITES
N
IN MILES
IN KILOMETERS
Circle
Central
Circle Hot Springs
Livengood
Manley Hot Springs
Minto
FAIRBANKS
Chena Hot Springs
EAGLE
NENANA
SEE MAP 2
ANDERSON
DELTA JUNCTION
Healy
Lake Minchumina
Kantishna
Cantwell
East Fork
Trims Camp
Paxson
TOK
Tok
Tetlin Jct
Northway
Tetlin Lake
NORTHWAY ROAD
Gardiner Creek
Nabesna
Gulkana
Glennallen
Lake Louise
Tazlina Lake
Chitina
McCarthy
Ernestine
VALDEZ
SEE MAP 6
CORDOVA
Chicken
CANADA
UNITED STATES
ALASKA TRAFFIC MONITORING SYSTEM FOR HIGHWAYS
(EFFECTIVE 01/01/09) MAP 1

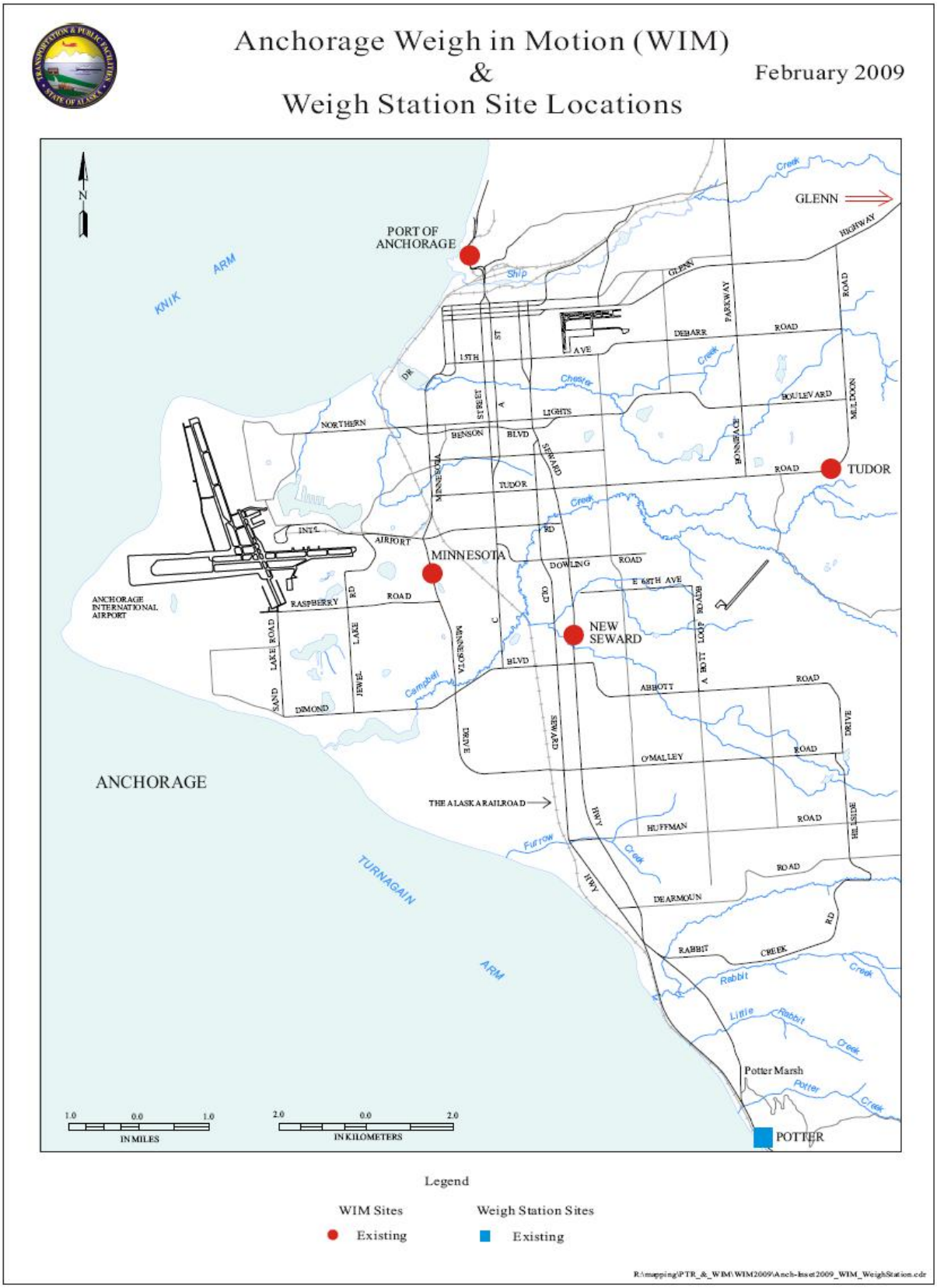

NORTHERN REGION
FAIRBANKS AND VICINITY
WEIGH-IN-MOTION (WIM)
& WEIGH STATION SITES
2009
Prepared By
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF PROGRAM DEVELOPMENT
STATEWIDE GIS MAPPING SECTION
LEGEND
CDS ROUTE NUMBER 999999
FHWA SITE NUMBER 999
3-LETTER SITE CODE ABC or ABC
EXISTING WIM SITES
PROPOSED WIM SITES
EXISTING WEIGH STATION SITES
PROPOSED WEIGH STATION SITES
FOX
EST
FAIRBANKS
Ester
FAIRBANKS INTERNATIONAL AIRPORT
NORTH POLE
TANANA
RIVER
ALASKA HIGHWAY
ELLIOTT HWY
STEESE HWY
OLD STEESE HWY
OLD RICHARDSON HIGHWAY
OLD MINNANA HIGHWAY
ROSIE CREEK RD
IN MILES
IN KILOMETERS
ALASKA TRAFFIC MONITORING SYSTEM FOR HIGHWAYS
MAP 2


Girdwood
ALYESKA ROAD
SEWARD
HIGHWAY
HOPE
WHITTER
PORTAGE GLACIER ROAD
INLET
COOK
KENAI
KENAI SPUR RD
SKILAK LAKE ROAD
STERLING
SOLDOTNA
107
STR
Cooper Landing
Moose Pass
THE ALASKA RAILROAD
SNUG HARBOR RD
Skilak Lake
Kenai Lake
Tustumena Lake
Clam Gulch
NINILCHIK
SEWARD
Anchor Point
HOMER
EAST END ROAD
Kachemak Bay
PENINSULA
SELDOVIA
SELDOVIA AIRPORT RD
ALASKA
GULF
CENTRAL REGION
KENAI PENINSULA
WEIGH-IN-MOTION (WIM)
& WEIGH STATION SITES
2009
Prepared By
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF PROGRAM DEVELOPMENT
STATEWIDE GIS MAPPING SECTION
LEGEND
CDS ROUTE NUMBER ddddd
FHWA SITE NUMBER 999
3-LETTER SITE CODE ABC or ABC
EXISTING WIM SITES
PROPOSED WIM SITES
EXISTING WEIGH STATION SITES
PROPOSED WEIGH STATION SITES
10.0 0.0 10.0
IN MILES
20.0 0.0 20.0
IN KILOMETERS
ALASKA TRAFFIC MONITORING SYSTEM FOR HIGHWAYS
(EFFECTIVE 01/01/09) MAP 3


CENTRAL REGION
MATANUSKA - SUSITNA VALLEY
WEIGH-IN-MOTION (WIM)
& WEIGH STATION SITES
2009
Prepared By
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF PROGRAM DEVELOPMENT
STATEWIDE GIS MAPPING SECTION
LEGEND
CDS ROUTE NUMBER ######
FHWA SITE NUMBER ###
3-LETTER SITE CODE AJC or AJC
EXISTING WIM SITES
PROPOSED WIM SITES
EXISTING WEIGH STATION SITES
PROPOSED WEIGH STATION SITES
IN MILES
IN KILOMETERS
SEE MAP 5
ANCHORAGE
HOUSTON
Willow
WASILLA
PALMER
Eagle River
Chugiak
Eklutna
THE ALASKA RAILROAD
GLH
905
GIE
GOE
ALASKA TRAFFIC MONITORING SYSTEM FOR HIGHWAYS
(EFFECTIVE 01/01/09) MAP 4


N
ANCHORAGE
ANCHORAGE INTERNATIONAL AIRPORT
THE ALASKA RAILROAD
TURNAGAIN ARM
Potter Marsh
POA 271
MTV 270
NSH 268
TDS 108
POT
CENTRAL REGION
ANCHORAGE
WEIGH-IN-MOTION (WIM)
& WEIGH STATION SITES
2009
Prepared By
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF PROGRAM DEVELOPMENT
STATEWIDE GIS MAPPING SECTION
LEGEND
CDS ROUTE NUMBER 999999
FHWA SITE NUMBER 999
3-LETTER SITE CODE ABC or ABC
EXISTING WIM SITES
PROPOSED WIM SITES
EXISTING WEIGH STATION SITES
PROPOSED WEIGH STATION SITES
1.0 0.0 1.0
IN MILES
2.0 0.0 2.0
IN KILOMETERS
ALASKA TRAFFIC MONITORING SYSTEM FOR HIGHWAYS
(EFFECTIVE 01/01/09) MAP 5


NORTHERN REGION
VALDEZ
WEIGH-IN-MOTION (WIM)
& WEIGH STATION SITES
2009
Prepared By
ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF PROGRAM DEVELOPMENT
STATEWIDE GIS MAPPING SECTION
LEGEND
CDS ROUTE NUMBER 999999
FHWA SITE NUMBER 999
3-LETTER SITE CODE ABC or ABC
EXISTING WIM SITES
PROPOSED WIM SITES
EXISTING WEIGH STATION SITES
PROPOSED WEIGH STATION SITES
VALDEZ
VDZ
RICHARDSON
MINERAL CREEK RD
HAZALET AVE
VALDEZ AIRPORT
VALDEZ AIRPORT RD
MINERAL CREEK LOOP RD
GLACIER RD
PORT VALDEZ
Valdez
Glacier Stream
Cabin Creek
LOWE River
Robe Lake
RIVER
HIGHWAY
ROAD
DAYVILLE
Allison Creek
Solomon Creek
Sawmill Creek
191600
190900
0.7 0.0 0.7
IN MILES
1.5 0.0 1.5
IN KILOMETERS


Anchorage Weigh in Motion (WIM)
&
Weigh Station Site Locations
February 2009
N
PORT OF ANCHORAGE
GLENN HIGHWAY
TUDOR
MINNESOTA
NEW SEWARD
ANCHORAGE
ANCHORAGE INTERNATIONAL AIRPORT
THE ALASKA RAILROAD
TURNAGAIN ARM
KNIK ARM
Potter Marsh
POTTER
IN MILES
IN KILOMETERS
Legend
WIM Sites
Existing
Weigh Station Sites
Existing