

## Susitna-Watana Hydroelectric Project Document ARLIS Uniform Cover Page

<b>Title:</b>  Transportation resources study, Study plan Section 15.7 : Initial study report		<b>SuWa 207</b>
<b>Author(s) – Personal:</b>		
<b>Author(s) – Corporate:</b>  Prepared by DOWL-HKM		
<b>AEA-identified category, if specified:</b> Draft initial study report		
<b>AEA-identified series, if specified:</b>		
<b>Series (ARLIS-assigned report number):</b> Susitna-Watana Hydroelectric Project document number 207		<b>Existing numbers on document:</b>
<b>Published by:</b> [Anchorage : Alaska Energy Authority, 2014]		<b>Date published:</b> February 2014
<b>Published for:</b> Alaska Energy Authority		<b>Date or date range of report:</b>
<b>Volume and/or Part numbers:</b> Study plan Section 15.7		<b>Final or Draft status, as indicated:</b> Draft
<b>Document type:</b>		<b>Pagination:</b> 158 p. in various pagings
<b>Related work(s):</b>		<b>Pages added/changed by ARLIS:</b>
<b>Notes:</b>		

All reports in the Susitna-Watana Hydroelectric Project Document series include an ARLIS-produced cover page and an ARLIS-assigned number for uniformity and citability. All reports are posted online at <http://www.arlis.org/resources/susitna-watana/>



**Susitna-Watana Hydroelectric Project  
(FERC No. 14241)**

**Transportation Resources Study  
Study Plan Section 15.7**

**Initial Study Report**

Prepared for

Alaska Energy Authority



Prepared by

DOWL-HKM

February 2014 Draft

## TABLE OF CONTENTS

<b>Executive Summary .....</b>	<b>vi</b>
<b>1. Introduction.....</b>	<b>1</b>
<b>2. Study Objectives .....</b>	<b>1</b>
<b>3. Study Area.....</b>	<b>2</b>
<b>4. Methods and Variances in 2013.....</b>	<b>2</b>
4.1. Collect and Review Data.....	2
4.1.1. Variances.....	2
4.2. Inventory Assets and Conduct Any Field Studies .....	2
4.2.1. Variances.....	2
4.3. Document Existing Conditions .....	3
4.3.1. Variances.....	3
4.4. Forecast Future Conditions .....	4
4.4.1. Variances.....	4
4.5. Evaluate Effects .....	4
<b>5. Results.....</b>	<b>5</b>
5.1. Collect and Review Data.....	5
5.2. Inventory Assets and Field Studies.....	5
5.3. Existing Conditions.....	6
5.3.1. Roadways.....	6
5.3.2. Aviation.....	9
5.3.3. Railroad.....	10
5.3.4. Ports .....	12
5.3.5. Susitna River Transportation .....	14
5.3.6. Easements .....	14
5.4. Future Conditions.....	15
5.4.1. Roadways.....	15
5.4.2. Aviation.....	19
5.4.3. Railroad.....	21
5.4.4. Port.....	23
<b>6. Discussion .....</b>	<b>25</b>

<b>7. Completing the Study .....</b>	<b>25</b>
<b>8. Literature Cited .....</b>	<b>25</b>
<b>9. Figures .....</b>	<b>27</b>

## APPENDICES

Appendix A: Bibliography

Appendix B: Asset Inventory

Appendix C: Highway Data for Future Traffic, Funded Projects, and Planned Projects

Appendix D: Aviation Data for Future Operations, Funded Projects and Planned Projects

Appendix E: Rail Data for Future Traffic, Funded Projects, and Planned Projects

Appendix F: Port Data for Future Operations, Funded Projects and Planned Projects

Appendix G: Interview Summaries

Appendix H: Commercial Vehicle Size, Weight & Permit Regulations (17 AAC 25)

Appendix I: Municipality of Anchorage Truck Routes

Appendix J: Alaska Department of Transportation and Public Facilities Seasonal Weight Restrictions

**List of Figures**

Figure 5.3-1. Weight and Lane Restricted Denali Highway Bridges .....	28
Figure 5.3-2. Study Area RS 2477 and 17(b) Easements .....	29

## LIST OF ACRONYMS, ABBREVIATIONS, AND DEFINITIONS

Abbreviation	Definition
AAC	Alaska Administrative Code
AADT	Annual Average Daily Traffic
ADF&G	Alaska Department of Fish and Game
ADNR	Alaska Department of Natural Resources
ADOT&PF	Alaska Department of Transportation and Public Facilities
AEA	Alaska Energy Authority
AIAS	Alaska International Airport System
ALP	airport layout plan
AMATS	Anchorage Metropolitan Area Transportation Solutions
AMP	Airport Master Plan
ANCSA	Alaska Native Claims Settlement Act
ARFF	Aircraft Rescue and Firefighting
ARRC	Alaska Railroad Corporation
BLM	DOI, Bureau of Land Management
CFR	Code of Federal Regulations
FAA	Federal Aviation Administration
FERC	Federal Energy Regulatory Commission
FIA	Fairbanks International Airport
FMATS	Fairbanks Metropolitan Area Transportation System
FTA	Federal Transit Administration
FFY	federal fiscal year
FY	State fiscal year
GA	General Aviation
ILP	Integrated Licensing Process
ISR	Initial Study Report
KGB	Knik-Goose Bay
LCV	Long Combination Vehicles
LOS	Level of Service
L RTP	Long Range Transportation Plan
MOA	Municipality of Anchorage
MTP	Metropolitan Transportation Plan
MP	milepost
MSB	Matanuska-Susitna Borough

Abbreviation	Definition
NEPA	National Environmental Policy Act
OCSP	Open Cell Sheet Pile
O&M	operations and maintenance
PIEP	Port Intermodal Expansion Project
POA	Port of Anchorage
Project	Susitna-Watana Hydroelectric Project No. 14241
PTC	Positive Train Control
RR	Railroad milepost
RS	Revised Statute
RSP	Revised Study Plan
RV	Recreational vehicle
SPD	study plan determination
STIP	Statewide Improvement Program
Studies	Recreation Resources, River Recreation Flow and Access, and Subsistence Resources Studies
TDM	travel demand model
TIP	Transportation Improvement Program
TSAIA	Ted Stevens Anchorage International Airport

## EXECUTIVE SUMMARY

Transportation Resources Study 15.7	
Purpose	The objective of the transportation study is to document existing transportation facilities, including their condition and level of use, and to identify potential Project-related impacts on the transportation system.
Status	Two of the three major study components identified below are complete. Existing conditions have been documented; an asset inventory is complete. Future conditions have been forecasted for each mode, without the effects of Project-related impacts. Evaluating Project-related impacts to the transportation system will be completed during the next study season.
Study Components	The study is comprised of three major components. The first component is an analysis of existing conditions for the transportation system, including road, aviation, rail, port, and river travel. The second component is the forecasting of future transportation system conditions without the construction of the Project. The third component is an evaluation of Project-related activities on the future transportation system.
2013 Variances	<p>The ports of Seward and Whittier were added to the study area, as were the associated rail lines. This is a variance from RSP Section 15.7.3.</p> <p>Bridge data integration was limited to bridges whose current structural or functional condition is determined to have a potential adverse impact on Project-related travel. This is a variance from RSP Section 15.7.4.2.</p> <p>River travel data was not captured through agency and individual interviews in 2013, but will be completed during the next season. This is a variance from the schedule in RSP Table 15.7-6.</p> <p>Forecasts were documented for existing transportation facilities but not for proposed Project facilities. Forecasts for existing facilities were documented from existing traffic demand models and published aviation data. This is a variance from RSP Section 15.7.4.4.</p> <p>Potential effects on transportation systems and river use from implementation of the Project will be evaluated during the next study season. This is a variance from the schedule in RSP Table 15.7-6.</p>
Steps to Complete the Study	As explained in the cover letter to this draft ISR, AEA's plan for completing this study will be included in the final ISR filed with FERC on June 3, 2014.



Transportation Resources Study 15.7	
Highlighted Results and Achievements	<ul style="list-style-type: none"><li>• The asset inventory was completed.</li><li>• Existing conditions for transportation resources were documented.</li><li>• Future conditions without the Project were documented based on existing available information.</li></ul>

## 1. INTRODUCTION

On December 14, 2012, Alaska Energy Authority (AEA) filed with the Federal Energy Regulatory Commission (FERC or Commission) its Revised Study Plan (RSP) for the Susitna-Watana Hydroelectric Project No. 14241 (Project), which included 58 individual study plans (AEA 2012). Section 15.7 of the RSP described the Transportation Resources Study. This study focuses on assessing the current transportation conditions in the study area and evaluating potential Project demands relative to current capacity limits and safety requirements for road, railroad, aviation, port, and river traffic. RSP 15.7 provided goals, objectives, and proposed methods for data collection regarding transportation resources.

On February 1, 2013, FERC staff issued its study plan determination (February 1 SPD) for 44 of the 58 studies, approving 31 studies as filed and 13 with modifications. RSP Section 15.7 was one of the 31 studies approved with no modifications.

Following the first study season, FERC's regulations for the Integrated Licensing Process (ILP) require AEA to "prepare and file with the Commission an initial study report describing its overall progress in implementing the study plan and schedule and the data collected, including an explanation of any variance from the study plan and schedule." (18 CFR 5.15(c)(1)) This Initial Study Report on the Transportation Resources Study has been prepared in accordance with FERC's ILP regulations and details AEA's status in implementing the study, as set forth in the FERC-approved RSP (referred to herein as the "Study Plan").

## 2. STUDY OBJECTIVES

The study objectives are established in RSP Section 15.7.1.1.

The Transportation Resources Study will assess current transportation conditions in the study area and evaluate potential Project demands relative to current capacity limits and safety requirements for road, railroad, aviation, port, and river traffic. The study will assess the short-term (construction) and long-term (operational) direct and indirect impacts of the Project, as well as of the cumulative impacts of the Project. The transportation effects of the Project (With-Project) will be compared to a Without-Project scenario.

The AEA Project team will use information from this study to identify and coordinate needed transportation infrastructure improvements with the Alaska Department of Transportation & Public Facilities (ADOT&PF), Alaska Railroad Corporation (ARRC), the Matanuska-Susitna Borough (MSB), the Denali Borough, and others. This report will also provide valuable information for the multidisciplinary analysis of the Project required under the National Environmental Policy Act (NEPA).

### **3. STUDY AREA**

As established in RSP Section 15.7.3, the study area for the Transportation Resources Study extends north from Anchorage to Fairbanks and east to the Susitna River to cover all relevant traffic sources, traffic nodes (points where travelers or shippers may select different routes), and destinations for each mode of transportation. The primary sources and destinations of Project-related road and railroad traffic will be the Project site, the Port of Anchorage, Port MacKenzie, and local material sources. The majority of the aviation traffic will originate in populated areas at primary and smaller general aviation airports.

### **4. METHODS AND VARIANCES IN 2013**

The methods used for this study consisted of the five steps described below.

#### **4.1. Collect and Review Data**

During the 2013 study season, AEA implemented the methods for the collection and review of data as set forth in RSP Section 15.7.4.1, with no variances.

The transportation study team developed a bibliography of existing documents, including recent transportation reports from AEA (Appendix A), and evaluated the relevance of each document to the overall study. AEA also compiled information regarding transportation planning projects, design projects, and any scheduled construction projects for those transportation facilities in the asset inventory (Appendix B).

##### **4.1.1. Variances**

There are no variances to the data collection and review section of this study.

#### **4.2. Inventory Assets and Conduct Any Field Studies**

During the 2013 study season, AEA implemented the methods for inventorying assets and conducting field studies as set forth in RSP Section 15.7.4.2, with the exception of variances explained below in Section 4.2.1.

AEA developed a transportation asset inventory for the Project area focused on roads, railroads, bridges, ports, air infrastructure, easements, traffic levels, capacities, and crash and accident statistics (Appendix B). Information on use of the river for winter transportation is being gathered from the River Recreation Flow and Access Study (Study 12.7), Subsistence Resources Study (Study 14.5), and Social Conditions and Public Goods and Services Study (Study 15.6).

##### **4.2.1. Variances**

The Ports of Seward and Whittier and the associated rail infrastructure were added to the study area and included in the asset inventory due to their existing capabilities and their status as year-round, ice-free ports. Both ports are owned by ARRC, which has plans to construct significant upgrades to the Port of Seward within the next several years.

The RSP contemplated including data on bridges in the inventory (RSP Section 15.7.4.2). However, it was determined by the study team that this data was only relevant if a bridge's current structural or functional condition was determined to have a potential adverse impact on Project-related travel. Because bridge infrastructure is a subcategory of the roadway mode of transportation, bridge deficiencies were identified during data collection activities for documenting existing and future roadway conditions and did not require separate analysis.

The study proposed documenting existing river transportation in 2013. River travel data collection is not complete. The study team is reviewing data collected under the River Recreation Flow and Access Study (Study 12.7), the Subsistence Resources Study (Study 14.5), and the Social Conditions and Public Goods and Services Study (Study 15.6). Information from these studies will inform interviews during the next study season. Completion of this portion of the study during the next study season will meet the study objectives.

### **4.3. Document Existing Conditions**

During the 2013 study season, AEA implemented the methods for documenting existing conditions as set forth in RSP Section 15.7.4.3, with the exception of variances explained below in Section 4.3.1.

Existing transportation infrastructure and traffic levels have been documented to establish baseline conditions for roads, railroads, ports, and air infrastructure (Appendix B). Much of this information was gathered from existing sources and supplemental data was collected through interviews. No additional data collection is needed to establish baseline conditions for roadways, aviation, railroad, port, or easements. River data documentation is discussed in Section 4.3.1.

Surveys conducted by the River Recreation Flow and Access Study (Study 12.7) and the Subsistence Resources Study (Study 14.5) included questions on river travel and access to sites within the study area.

Completed interviews are documented in Appendix G.

#### **4.3.1. Variances**

The Ports of Seward and Whittier and the associated rail infrastructure were added to the study area and included in the existing conditions documentation due to their existing capabilities and their status as year-round, ice-free ports. Both ports are owned by ARRC, which has plans to construct significant upgrades to the Port of Seward within the next several years.

Documentation of existing conditions for river transportation was to occur in 2013. Interviews pertaining to river travel were not conducted specifically for the Transportation Resources Study for the documentation of current conditions and forecasting future conditions in 2013. Data was captured through the collection efforts for the Recreation Resources, River Recreation Flow and Access, and Subsistence Resources Studies (Studies 12.5, 12.7 and 14.5) and literature review. Once these studies are completed, a data gap analysis can be performed to determine what river travel data still needs to be collected. Efforts to fill these data gaps and document existing river

transportation uses will occur in the next study season. This will allow the study to meet its objectives.

#### **4.4. Forecast Future Conditions**

During the 2013 study season, AEA implemented the methods for forecasting future conditions as set forth in RSP Section 15.7.4.4, with the exception of variances explained below in Section 4.4.1.

Future traffic forecasts have been documented. These forecasts addressed the following issues:

- Existing roads
- Railroad loading and unloading facilities
- Airport facilities
- Scheduled facility improvements, such as improvements proposed for the Denali Highway

Roadway traffic forecasts were documented based on existing traffic demand models where they were available and by projecting demand based on historic traffic level trends for some facilities not included in any traffic demand models. Aviation forecasts were documented based on existing aviation forecasts in master plans and other documents. Rail and port forecasts were developed based on interviews with rail and port staff.

##### **4.4.1. Variances**

AEA did not complete the forecast of future conditions in 2013 (RSP Section 15.7.4.4). Specifically, AEA did not complete the forecasts of Project-related construction and operations traffic, including the proposed transportation/transmission corridors, other facilities to support fueling maintenance, and operations, possible staging areas, and temporary improvements for construction. The Study Plan contemplates the use of the Trip Generation to forecast future roadway traffic levels. However, the Trip Generation (ITE 2008.) manual does not have information for hydroelectric dam construction and operations. As provided in the Study Plan (RSP Sections 15.7.7, 15.7.11), the study will develop forecasts based on information provided by the Project engineering and feasibility studies, such as construction employment and timing, workforce locations, and construction material scheduling and transportation information. Because these other studies were ongoing in 2013, the forecast of future conditions contemplated in the Study Plan were deferred pending the completion of these other studies.

#### **4.5. Evaluate Effects**

In 2013, AEA did not implement the methods described in the Study Plan related to the evaluation effects and no work was completed for this study component (RSP Section 15.7.4.4). While this is a variance from the approved Study Plan, AEA will meet the study objectives by completing this work in the next study season.

## 5. RESULTS

### 5.1. Collect and Review Data

AEA compiled numerous documents identifying current conditions on transportation facilities within the study area. A bibliography of documents used to compile existing information is included in Appendix A. These documents include, but are not limited to, planning studies, fact sheets, traffic reports, layout plans, and master plans written by various public agencies. Coordination with agencies having jurisdiction over transportation facilities and adjacent lands began early and has been ongoing.

### 5.2. Inventory Assets and Field Studies

An asset inventory was completed for all modes of transportation included in this study with the exception of river transportation. This asset inventory is in Appendix B and an outline of included data for each mode is presented below. Data from the asset inventory was then used in conjunction with additional data identified in Appendix A to determine existing transportation facility conditions within the study area. Due to the qualitative nature of available river travel along the Susitna River, tables were not included for river travel in Appendix B. However, information on current conditions is included below in Section 5.3.5.

- Roadways (14 assets inventoried)
  - Ownership, length, Annual Average Daily Traffic (AADT), functional classification, Level of Service (LOS), maintenance costs, crash data
- Aviation (11 assets inventoried)
  - Air miles from project site, owner, average daily operations, maintenance costs, runway name/type, runway dimensions, lighting, services availability, crash data, design aircraft
- Railroad (9 assets inventoried)
  - Current average arrivals/departures per day for freight in summer and winter, current average arrivals/departures per day for passenger service in summer and winter
- Port (4 assets inventoried)
  - Ownership, annual vessel calls, acreage, dock/facilities, draft depth, primary commodities, maintenance costs, ice conditions
- Easements (32 assets inventoried)
  - Revised Statute (RS) 2477 (14 assets inventoried)
    - Number, trail name, length, primary access location
  - 17(b) (18 assets inventoried)

- Number, width, length, region, quadrant, allowable uses, managing agency, primary access

### 5.3. Existing Conditions

The results of the Existing Conditions analysis appear below.

#### 5.3.1. Roadways

Data on existing highway conditions, including AADT and length, were obtained through the use of electronic databases such as the ADOT&PF Highway DataPort and available reports and plans, such as the Regional Annual Traffic Volume Reports, the MSB Long Range Transportation Plan (LRTP), and the Anchorage Metropolitan Area Transportation Solutions (AMATS) Metropolitan Transportation Plan (MTP). Data requests were also fulfilled by ADOT&PF staff.

Roadway data for existing conditions are presented in Appendix B, as identified in Section 5.2 of this report. Additional data are presented in this Section 5.3.1, to include characteristics such as seasonal travel variations, Safety Corridor designations, and variations in AADT by highway segment. The existing conditions data for roadway travel have met the needs of the study in determining a baseline scenario.

Unless otherwise noted, the legal vehicle size and weight listed in 17 Alaska Administrative Code (AAC) 25.012—.013 (Appendix H) is permitted on each roadway. Information on weight restrictions, including seasonal weight restrictions, can be found in Appendices J and K.

##### 5.3.1.1. Denali Highway, Milepost (MP) 78 to 133

The Denali Highway is a rural two-lane, roadway owned and maintained by ADOT&PF. It is north of the Susitna River and south of Fairbanks, and extends from Paxson on the Richardson Highway to Cantwell on the Parks Highway, totaling 135 miles in length. Approximately 110 miles are unpaved; pavement extends east from the Parks Highway for three miles and west from the Richardson Highway for 21 miles. The highway passes through the Denali, Matanuska-Susitna, and Unorganized Boroughs. The highway is open to vehicle traffic from mid-May to mid-October each year, with the exception of the 3 miles nearest Cantwell, which is open year-round to allow access to residential areas. Winter travel along the highway is exclusively by snowmobile and dogsled. Accommodations and services are minimal along the corridor, with the highway primarily serving as access to recreation and subsistence areas.

The roadway experiences a low AADT and maintains a reasonably free flow of traffic (Appendix B). Capacity for heavy truck traffic is limited on this highway by weight restrictions imposed on the Brushkana Creek Bridge (MP 104). Currently, truck traffic is limited to a maximum weight of 9 tons per axle. Additionally, traffic is limited to one-way on the Seattle Creek Bridge (MP 110) due to deficient pilings. See Figure 5.3-1.

ADOT&PF spent approximately \$286,000 to maintain the Denali Highway MP 78 to 133 in State Fiscal Year (FY) 13.

#### 5.3.1.2. *Parks Highway, MP 35 to 356*

Owned and maintained by ADOT&PF, the Parks Highway extends 323 miles from the Glenn Highway, 35 miles north of Anchorage, to Fairbanks. The route traverses the Matanuska-Susitna, Denali, Fairbanks North Star, and Unorganized Boroughs. This paved, predominantly two-lane highway is part of the Eisenhower Interstate Highway System and is the most direct highway route connecting Anchorage and Fairbanks. Daily levels of traffic vary significantly by highway segment, as does traffic flow (Appendix B), with highest traffic volumes and increased congestion occurring in the vicinity of Wasilla.

MP 44.5 to 53, between Wasilla and Houston, is a Designated Safety Corridor, with special focus on congestion mitigation and a reduction in crash rates (note this designation does not impose restrictions on freight vehicles).

Combination trucks with multiple trailers and/or extended length trailers, called Long Combination Vehicles (LCV), are permitted along the Parks Highway. Allowable lengths are outlined in 17 AAC 25.014 (Appendix H).

ADOT&PF spent approximately \$8.1 million for the maintenance of the Parks Highway in FY13.

#### 5.3.1.3. *Glenn Highway, MP 0 to 35*

The Glenn Highway is an Eisenhower Interstate System Highway that extends from Anchorage to Glennallen, ending at its junction with the Richardson Highway at MP 189. The MP 0 to 35 segment within the study area consists of three paved through lanes of traffic in each direction. The highway is owned and maintained by ADOT&PF and is recognized as a major freight distribution route that connects Anchorage with other Alaskan communities on the road system, Canada and the Lower 48. Total daily traffic volumes vary significantly by highway segment and are highest in Anchorage and surrounding areas. Traffic flow is characterized by stable flows (see Appendix B) in Anchorage, though heavy congestion is experienced by commuters traveling into Anchorage during the AM peak hours and by commuters traveling out of Anchorage during the PM peak hours, resulting in potential delays during these periods.

LCV truck traffic is permitted on the Glenn Highway within the study area. Allowable lengths are outlined in 17 AAC 25.014 (Appendix H).

ADOT&PF spent approximately \$2.4 million in maintenance for MP 0 to 35 of the Glenn Highway in FY13.

#### 5.3.1.4. *MSB Roads Accessing Port MacKenzie*

Point MacKenzie Road and Knik-Goose Bay (KGB) Road are located within the MSB and are both primarily two-lane, paved roadways. Point MacKenzie and KGB Roads together are the only designated truck route accessing Port MacKenzie. Point MacKenzie Road is 20 miles long and is owned and maintained by the MSB. It begins at KGB Road and ends near Port MacKenzie. The current AADT is low, consisting primarily of heavy truck traffic associated with Port MacKenzie, traffic associated with the Point MacKenzie Correctional Farm and Goose



Creek Correctional Center, and traffic accessing homes, farms, and hunting and fishing sites. KGB Road is 19 miles long, beginning at the Parks Highway in Wasilla and ending at the Goose Bay Airstrip. This road is owned and maintained by ADOT&PF and was designated as a Safety Corridor in 2009. The facility is nearing capacity and frequently experiences delays.

ADOT&PF's maintenance costs for KGB Road totaled approximately \$466,000 in FY13. MSB costs for maintaining Port MacKenzie Road were approximately \$105,000 in FY13.

#### **5.3.1.5. *Burma, Big Lake and Vine Roads***

Burma, Big Lake, and Vine Roads are located within the MSB southwest of Wasilla. Burma and Big Lake Roads provide alternate access from the Parks Highway to Port MacKenzie, avoiding Wasilla traffic and the KGB Road Safety Corridor. Vine Road connects the Parks Highway to MP 6 of KGB Road. Big Lake Road is owned and maintained by ADOT&PF and Burma Road is owned and maintained by MSB. ADOT&PF owns and maintains Vine Road from KGB Road to Hollywood Road. From Hollywood Road to the Parks Highway, ownership and maintenance responsibility belong to the MSB.

Burma Road is a narrow unpaved road serving local traffic, providing access to residential and recreational destinations, and has a low AADT. Big Lake and Vine Roads, both of which are two-lane, paved roads, experience increased levels of traffic, moving higher numbers of residents from their homes to business centers such as Wasilla and Anchorage. These low to moderate AADTs allow for a reasonably free flow of traffic through the area.

In FY13, ADOT&PF spent approximately \$215,000 to maintain Big Lake and Vine Roads. MSB spent \$56,000 to maintain Burma and Vine Roads.

#### **5.3.1.6. *Municipality of Anchorage (MOA) Roads Accessing the Port of Anchorage (POA)***

Truck routes accessing the POA include A and C Streets, and 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> Avenues within the MOA. Each is a paved, one-way roadway within the study area; generally with two to three lanes. ADOT&PF owns A Street and sections of C Street, and 5<sup>th</sup> and 6<sup>th</sup> Avenues. MOA owns 3<sup>rd</sup> and 4<sup>th</sup> Avenues and sections of C Street, and 5<sup>th</sup> and 6<sup>th</sup> Avenues. Both agencies work cooperatively to maintain these roadways through maintenance agreements. AADTs and delay times increase on each roadway as it approaches the Glenn Highway and the Ingra and Gambell Street intersections, which access the Seward Highway.

Truck traffic is limited to defined roadway segments, as identified in the MOA's Downtown Truck Routes and Double Load Maps (Appendix I). The MOA imposes seasonal weight restrictions on MOA-owned roads in addition to the seasonal weight restrictions imposed by ADOT&PF on State-owned roads (Appendix J).

ADOT&PF spent approximately \$260,000 maintaining these area roads in FY13. MOA spending on these roads in FY13 is not available.

### 5.3.2. Aviation

This section discusses both the international and General Aviation (GA) airports within the study area. Aviation data was collected primarily by using airport master plans and airport layout plans (ALPs). Information for airports without master plans and/or updated ALPs was provided via phone by ADOT&PF regional staff.

Aviation data is presented in Appendix B (see Section 5.2). Data relating to weight restrictions, ARFF services, and annual enplanements for international airports can be found in Sections 5.3.2.1 through 5.3.2.3. No additional data is needed to determine baseline conditions.

#### 5.3.2.1. *Ted Stevens Anchorage International Airport*

TSAIA is located 124 air miles south of the Project site in Anchorage. It is the largest and busiest airport in Alaska and ranks second in the United States for landed weight of cargo aircraft. It is part of the Alaska International Airport System (AIAS) and is owned and operated by ADOT&PF. TSAIA is the closest airport to the Project site able to accommodate larger aircraft that could fly to the Project site, such as the Boeing 737 and the Lockheed C-130. TSAIA is the only airport in Alaska with a functioning intermodal connection to the Alaska Railroad, though the rail connection is used exclusively for passenger service.

TSAIA offers state-of-the-art landing systems and terminal facilities, and three asphalt runways. Aircraft Rescue and Firefighting (ARFF) services and air traffic control services are provided and all other aviation services are available, including fueling and aircraft maintenance. In 2012, TSAIA deplaned 17 million tons of cargo, had over 2.25 million enplanements, and had 275,000 aircraft operations equating to approximately 753 operations per day.

TSAIA could accommodate all aircraft required to support the Project. Though exceptions can be made, it is important to note that TSAIA has some limited weight restrictions for various aircraft gear configurations.

The ADOT&PF currently spends \$57 million dollars per year on operations and maintenance (O&M) at TSAIA.

#### 5.3.2.2. *Fairbanks International Airport*

Fairbanks International Airport (FIA) is located in Fairbanks, 140 air miles north of the Project site. It is Alaska's second busiest airport and is also part of the AIAS, under ownership of ADOT&PF. FIA serves as a weather diversion airport for TSAIA and is a primary hub for tourism and air service to rural communities in northern Alaska.

FAI is capable of accommodating large aircraft such as the Boeing 737 and Lockheed C-130, offers comparable services to TSAIA, and has two asphalt runways, a gravel runway, and a water lane. On average, FIA serves 332 aircraft operations daily.

Like TSAIA, this airport could accommodate all aircraft required to support the Project. FIA also imposes weight restrictions based on aircraft gear configurations, though exceptions can be made.

FY13 operations and maintenance costs for FIA were \$14.4 million.

### **5.3.2.3. General Aviation Airports**

Nine GA airports within the study area may be impacted by, or play a role in, the development of the Project.

- Lake Hood Seaplane Base & Lake Hood Strip Airport
- Merrill Field
- Wasilla Airport
- Palmer Airport
- Willow Airport and Willow Seaplane Base
- Talkeetna Airport
- Nenana Municipal Airport
- Healy River Airport
- Summit Airport

Availability of services varies among these airports. Five of the nine GA airports are owned and operated by ADOT&PF, with the additional four owned and maintained by local governments. Table B.5 in Appendix B summarizes characteristics such as ownership, average daily operations, and available facilities and services for these airports. Accident reports are summarized for all airports within the study area in Table B.6 (Appendix B). Though the above airports cannot accommodate large aircraft carrying heavy freight, their proximity to the Project site makes them candidates for potential participation in Project-related emergency and support services (including helicopter operations) and for access during construction and operations.

Within the vicinity of the Project site air traffic control is minimal and GA traffic should be considered when planning and executing operations near the Project site.

### **5.3.3. Railroad**

The majority of existing conditions data for ARRC was provided through interviews with ARRC staff and ARRC fact sheets made available to the public via the ARRC website. A comprehensive list of the resources can be found in Appendix A.

Railroad data is presented in Appendix B. Though there are nine rail locations included in the asset inventory and baseline scenario, operations data were not provided for five locations. Cantwell, Chulitna, and Gold Creek are not regularly scheduled stops along any of ARRC's routes, Curry Quarry does not serve passengers and is used only to provide riprap material for ARRC projects, and the Port MacKenzie rail extension is not yet complete. No additional railroad data is needed to determine baseline conditions.

The Alaska Railroad Corporation (ARRC) is a full-service freight and passenger railroad linking Southcentral ports and Railbelt communities to urban areas such as Anchorage and Fairbanks. The main line track, running from Seward to Fairbanks, parallels the Seward and Parks Highway along much of its 470-mile long corridor.

ARRC can provide transport of large freight, including Project-related construction materials. System-wide, the railroad is operating at 30-50% capacity and has sufficient capacity for additional operations. Table B.8 (Appendix B) identifies average daily arrivals and departures for summer and winter between 2007 and 2013 for Anchorage, Fairbanks, Seward, and Whittier.

ARRC spent approximately \$120 million for system-wide O&M in FY13.

#### **5.3.3.1. Anchorage**

The Anchorage Rail Yard is located in downtown Anchorage, adjacent to the POA. It is the primary hub between the port facilities in Anchorage, Whittier, and Seward, and the northern terminus in Fairbanks, and is used for passenger operations, staging freight, classifying and sorting railcars, and providing maintenance for the fleet. Freight service remains consistent throughout the year, while passenger service is reduced in the winter months (see Appendix B).

The current length of the Anchorage Rail Yard results in occasional inefficiencies in receiving and sorting railcars and the lack of adequate heated storage requires that a high number of cars remain exposed to the elements while plugged into an electrical power source outdoors. Additionally, congestion mitigation measures are needed to address the roadway intersection at Whitney Road and C Street. Delays are often experienced at this intersection due to high volumes of heavy truck traffic exiting POA and the close proximity of three at-grade railroad crossings.

#### **5.3.3.2. Curry Quarry**

Curry Quarry is located near the abandoned Curry Townsite 22 air miles northeast of Talkeetna at ARRC MP 248. It is only accessible by rail and by boat via the Talkeetna River. Developed to provide a cost-effective source of ballast and rip-rap, Curry Quarry is expected to have a 50- to 100-year life. A 1.5-mile access road used by heavy trucks to shuttle material from the quarry connects the quarry to the newly constructed loop track installed by ARRC in 2007. An existing air strip at the site has been integrated into the laydown, loadout, and process area and is no longer a functioning air strip.

#### **5.3.3.3. Gold Creek, Chulitna, and Cantwell**

Gold Creek, Chulitna, and Cantwell, at ARRC MPs 263, 274, and 319, are currently whistlestops on ARRC's mainline passenger service schedules. The Gold Creek and Chulitna whistlestops are not accessible by road and are most often used by those accessing remote recreation properties. The Cantwell location is also used for recreation purposes, but is connected to the Parks Highway via Cantwell Road. Gold Creek and Chulitna have a single siding and lack terminal facilities similar to those in Anchorage, Fairbanks, Whittier, and Seward. Cantwell has two small ramps and a single small structure. Schedules for these stops are determined by arrival and departure schedules in Anchorage and Fairbanks in both summer and winter.

#### **5.3.3.4. Fairbanks**

The Fairbanks Rail Yard is located northwest of downtown Fairbanks and serves as the primary hub between Anchorage and Eielson Air Force Base via the Eielson Branch Line, which extends

29.4 miles beyond the Fairbanks Rail Yard. Like Anchorage, Fairbanks is used for passenger operations, staging freight, classifying and sorting railcars, and providing maintenance for the fleet. Freight service remains consistent throughout the year, while passenger service is reduced in the winter months (Appendix B).

Operations staff has indicated that a longer rail yard would increase operational efficiency and that increased clearances at grade-separated crossings would facilitate the movement of oversized loads moving through Fairbanks. Replacing existing at-grade crossings with grade-separated crossings would reduce roadway traffic congestion.

#### **5.3.3.5. Seward**

Located on the Kenai Peninsula, Seward is the southern terminus of ARRC's main line. ARRC owns the commercial port facilities in Seward, including the rail infrastructure and the Seward Coal Loading Facility. Passenger service to Seward is offered from May to September, accounting for 75 percent of Seward's arrivals/departures during the summer months; freight operations continue year-round (Appendix B). Annually, 600 tons of low-sulfur, high-grade coal is sent by rail from the Usibelli Coal Mine in Healy to Seward for shipment to foreign markets. Barged building and industrial materials are sent north on the railroad.

#### **5.3.3.6. Whittier**

Whittier is located on the northeast shore of the Kenai Peninsula on Passage Canal, approximately 60 road miles southeast of Anchorage. The commercial port facility and rail line are owned and operated by ARRC. Rail service to Whittier includes both passenger and freight service in the summer months and is limited to freight service in the winter months. As identified in Table B.8 (Appendix B), Whittier averages four freight arrivals/departures each day year-round, making it the second busiest rail yard in Alaska in terms of freight.

A limiting factor in moving freight from Whittier is the Anton Anderson Memorial Tunnel. This tunnel is the longest combined vehicle-railroad tunnel in North America. As such, through movement of train traffic is limited by the tunnel's dimensions and by the vehicle schedule for the tunnel. Additionally, the presence of at-grade crossings on main thoroughfares in Whittier creates conflict with vehicular traffic.

#### **5.3.4. Ports**

Interviews with ARRC provided information for the ports of Seward and Whittier. This information was supplemented by interviews with City of Seward and City of Whittier staff and the Seward Terminal Reserve Dock Facilities Master Plan. Interviews were also conducted with POA and Port MacKenzie staff and master plans were reviewed for both of these facilities.

In addition to the port data presented in Appendix B, information is provided below on characteristics such as vessel accommodation capabilities, geographic location, and current capacity issues.

#### **5.3.4.1. Port MacKenzie**

Port MacKenzie is the northern-most deep-draft port in America and the closest deep-draft port to Alaska's Interior. It is located across Knik Arm from the MOA and is owned and operated by the MSB at an annual cost of approximately \$750,000. As it has only recently been developed and has limited existing infrastructure, the number of annual vessel calls has been less than ten.

Port MacKenzie has 7,621 acres of uplands available for commercial and industrial development and includes a ferry dock, a barge dock, and a deep-water dock that can accommodate some of the largest ships in the world, including Panamax and Capesize vessels. Port MacKenzie primarily serves as a bulk commodities port, with shipments consisting of wood chips, saw logs, coal, sand/gravel, cement, and scrap metal. Recent infrastructure improvements have increased the Port's capabilities, allowing for the transloading of vehicles, heavy equipment, mobile/modular buildings, and containerized loads in addition to bulk commodities.

The number and variety of shipments are expected to increase when the Port MacKenzie Rail Extension project is complete (see Section 5.3.3.3 of this report).

#### **5.3.4.2. Port of Anchorage**

POA is adjacent to downtown Anchorage and is owned and operated by MOA. As the busiest port in the state, POA experiences approximately 450 vessel calls each year, with four million tons of goods and materials moving through the Port annually. Additionally, the Port has been identified by the U.S. Department of Defense as a Nationally Strategic Seaport.

POA encompasses 220 acres, including three cargo terminals, one dry berth, two petroleum terminals, one small craft floating dock, three regional pipelines, and two ARRC rail spurs. Commodities that move through the Port include petroleum products, bulk cement, containerized consumer goods, and non-containerized vehicles, including recreational vehicles (RVs), military vehicles, and construction equipment. Recently, POA has been receiving occasional cruise ship traffic.

In 2012 O&M costs for POA were approximately \$7.8 million. The Port's aging infrastructure is in need of repair and major upgrades have been underway for the last several years.

#### **5.3.4.3. Port of Seward**

The Port of Seward is approximately 125 road miles south of Anchorage on Resurrection Bay near Seward's Small Boat Harbor. The port facilities in Seward sit on 328 acres and include a coal loading facility and dock, a passenger dock, terminal, a freight dock and supporting uplands, and the Seward Yard and operating tracks. The port is owned and operated by ARRC. Seward is used to import and export goods and serves the tourism industry. Cargo containers and vehicles such as busses and RVs arrive year-round, as do cargo shipments bound for the North Slope oil fields. Coal is Seward's primary export. Seward serves a significant number of cruise ships; receiving about 56 per summer.

Seward is currently running at maximum freight dock capacity, with loaded vessels often circling Resurrection Bay while waiting for dock space. (See section 5.3.4.3 for a discussion on ARRC's

port expansion efforts.) The freight revenue at the Seward Dock has increased 142% since 2008, with the facility serving over 40 customers. This port remains ice-free year-round and serves as the back-up port for the POA when winter ice prevents passage through Cook Inlet.

#### **5.3.4.4. Port of Whittier**

The Whittier port facility is owned and operated by ARRC. It encompasses approximately 291 acres, and includes ARRC's barge dock, an additional dock referred to as the Army Dock (jointly owned by ARRC and the City of Whittier), the Alaska Marine Highway System dock and terminal facilities, and a private cruise ship dock. Primarily serving as an import port for railcars, container traffic, and break-bulk goods, Whittier experiences approximately 90 vessel calls per year; primarily barge traffic. These vessels most often carry oil field supplies, machinery, bulk goods such as insulation, lumber, pipe, chemical products such as liquefied petroleum gas, and drilling mud.

Whittier is running at 50% capacity within the current operating mode and remains ice-free year-round.

### **5.3.5. Susitna River Transportation**

The Susitna River is a 313-mile river in Southcentral Alaska that originates at the Susitna Glacier and empties into Cook Inlet 24 miles west of Anchorage. Access to the river via road and rail is limited, with only two vehicle bridges and one railroad bridge crossing. Highway crossings are located at MP 104 of the Parks Highway and MP 79 of the Denali Highway. The railroad bridge crosses the river at ARRC MP 264. Several communities are located adjacent to the river, including Willow and Talkeetna, as are a number of private lodges, cabins, and other recreational sites. Further discussion of recreation facilities can be found in the Recreation Resources Study (Study 12.5).

Travel along the river is generally for the purposes of gaining access to adjacent properties, recreating and participating in subsistence activities. Thus, common activities along the corridor are related to hunting, fishing, mining, sightseeing, and wildlife viewing. The primary modes of travel during the winter months are snowmobile, skis, and dog sled. During the ice-free summer months between May and October, primary modes include small motor boat, kayak, canoe, and raft. For additional information on recreation activities, see the River Recreation Flow and Access Study (Study 12.7). Additional information on access for subsistence activities is included in the Subsistence Study (Study 14.5).

Several additional interviews are needed to complete the Future Conditions Report and ongoing coordination with other studies will be necessary in the next study season.

### **5.3.6. Easements**

RS 2477 routes were identified using Alaska Department of Natural Resources (ADNR) geospatial data. ADNR fact sheets provided additional information such as the language found in the Mining Law of 1866 and the rules for using RS 2477 rights-of-ways and the Recreation Resources Study (Study 12.5) identified route characteristics such as length and primary access.

Datasets compiled for the Recreation Resources Study (Study 12.5) were used in identifying the locations and characteristics of 17(b) easements, including width and allowable uses. Figure 5.3-2 shows the location of the RS 2477 and 17(b) easements within the study area.

#### **5.3.6.1. RS 2477 Easements**

Revised Statute (RS) 2477, of the Mining Law of 1866, provides states access across federal land that is not currently reserved for public use. Though the law was repealed in 1976, pre-existing rights were not removed and today there are fourteen RS 2477 easements within the study area that provide access across federally managed lands. These fourteen easements, managed predominantly by the State of Alaska, are identified in Appendix B.

#### **5.3.6.2. 17(b) Easements**

The Alaska Native Claims Settlement Act (ANCSA) provided for easements for access to public lands across lands conveyed to Alaska Native Corporations. These easements are described as 17(b) easements, based on the provisions for them in ANCSA. The 17(b) easements in the Project area range from 25- to 60-foot easements and are managed by the Bureau of Land Management (BLM). These easements are used by the public for a multitude of activities, including fishing, snow machining, and camping. The twelve existing 17(b) easements in the study area are listed in Appendix B, Table B.12.

### **5.4. Future Conditions**

Funded and planned infrastructure improvements are identified to allow the Project team and regulatory agencies to determine if additional improvements would be needed to meet or mitigate for, transportation demands related to the Project. Data for projected operations, currently funded projects, and planned projects, by mode (except river travel), can be found in Appendices C through F. Projects presented in these appendices are limited to those projects affecting capacity and safety, and those allowing for potential development in the future, such as the acquisition of land adjacent to airports.

Projects discussed in Section 5.4 and the associated appendices are often funded and planned through partnerships between multiple agencies. Completion of a project is contingent upon the availability of funds and agency resources. Thus, construction of a project currently planned or in development cannot be guaranteed until construction funding has been obligated. Similarly, identification of a project in a planning document in no way guarantees eventual project development.

#### **5.4.1. Roadways**

Future operations values for highways were determined using one of two methodologies: 1) determining a growth rate based on historic traffic count data or 2) interpolating data using existing traffic models. With little exception, highway facilities within the study area are expected to see at least minimal increases in AADT.



Funded projects found in Appendix C were gathered from multiple data sources, including the Statewide Improvement Program (STIP), the State of Alaska Capital and Operating Budgets, the AMATS Transportation Improvement Program (TIP), and the spending plans for the MSB.

The list of planned (unfunded) highway projects included in Appendix C was compiled using several planning documents, including, but not limited to, the AMATS MTP and the MSB LRTP.

#### **5.4.1.1. Denali Highway, MP 78 to 133**

Currently, there is one funded capital improvement project along the Denali Highway within the study area. This project will reconstruct the Seattle Creek Bridge at MP 110, eliminating the need for the posted one-lane restriction. The Brushkana Creek Bridge at MP 104 will maintain the posted weight restrictions until such a time that money is made available to rehabilitate or replace the structure. There are no planned, unfunded projects for the Denali Highway within the study area.

Growth rates extrapolated from historic traffic count data indicate that annual average daily traffic is decreasing along the Denali Highway within the study area (see Appendix C).

#### **5.4.1.2. Parks Highway, MP 35 to 356**

Nine Parks Highway construction projects have been or are anticipated to be funded by FHWA within the next several years. Three projects will address safety and capacity issues between Lucas Road and Big Lake Road by adding additional through lanes, auxiliary lanes, illumination, and enhancing pedestrian facilities.

The Parks Highway between MP 163 and 188 will be rehabilitated or reconstructed, to include the replacement of several bridges, the realignment of approximately three miles of road, and construction of a roadway base better able to accommodate heavy truck traffic.

Numerous passing lanes will be installed between the vicinity of Little Coal Creek (MP 163) and Nenana (MP 305) to accommodate increased truck traffic and improve safety throughout the corridor. This project has been broken into two phases based on funding, but both are anticipated to begin construction in 2014.

The at-grade railroad crossing located in Broad Pass (MP 194) will be removed in 2014 and replaced with a highway overpass after the realignment of approximately one mile of the Parks Highway. In addition, the Middle Fork Bridge will be replaced.

The Riley Creek Bridge at the entrance to Denali National Park (MP 238) will be replaced and will include the construction of auxiliary lanes for turning vehicles and enhanced non-motorized facilities to detract pedestrians and bicyclist from interacting with vehicular traffic.

The Parks Highway will be rehabilitated between Healy (MP 252) and the vicinity of Rock Creek Road (MP 263). Similar to the MP 163 to MP 188 projects, this project will construct a roadway base better able to accommodate heavy truck traffic. It will also construct passing lanes in select locations.

Three planned projects can be found in the MSB LRTP, each of which is to increase capacity and mobility.

Traffic forecasts for the Parks Highway in Appendix C (Table C.1) have been divided into three sections based on the extent of existing travel demand models (TDM). The first section is the segment of highway within the MSB's TDM, the second is the segment contained within the Fairbanks Metropolitan Area Transportation System (FMATS) TDM, and the third segment is the portion between MSB and FMATS that is not represented in a TDM.

Traffic volumes along the Parks Highway from the FMATS boundary to the intersection with the Richardson Highway are projected by FMATS to triple to approximately 34,000 by 2030, while the section of the Parks Highway not represented in a TDM has a much lower expected AADT; 2,513 by 2030 (Appendix C, Table C.1).

#### **5.4.1.3. *Glenn Highway, MP 0 to 35***

There are three funded projects on the Glenn Highway. The Glenn Highway Continuous Lighting project specifically addresses the safety concern arising from the lack of adequate illumination along the highway between Eklutna and the Matanuska River.

The Hiland to Artillery Capacity Improvements project will upgrade the Glenn Highway to increase capacity, which may include the construction of additional lanes, widened bridges, and reserved space for future HOV lanes.

The Glenn Highway/Muldoon Road Interchange Reconstruction project will reconstruct the interchange to current standards, allowing for larger truck loads to travel the Glenn Highway without needing to detour around the overpass.

The Anchorage Metropolitan Area Transportation Solutions (AMATS) Metropolitan Transportation Plan (MTP) plans to construct a partial interchange at Farm Avenue within the next decade.

Traffic levels along the Glenn Highway between Anchorage and the Parks Highway junction are expected to steadily increase over the next two decades (Appendix C, Table C.1).

#### **5.4.1.4. *MSB Roads Accessing Port MacKenzie***

Two large-scale projects are currently funded for Knik-Goose Bay Road. In addition, several million dollars in Safety Corridor Improvements funding is available to augment these and other projects along the roadway.

The Knik-Goose Bay Road Reconstruction: Centaur Avenue to Vine Road project will widen this segment of KGB Road to a four-lane divided roadway, will construct bicycle/pedestrian facilities, and will include safety engineering strategies to reduce crashes. Because of high construction costs, this project is likely to be phased.

The Knik-Goose Bay Road Reconstruction: Vine Road to Settlers Bay project will also reconstruct KGB Road to a four-lane divided facility and include bicycle/pedestrian facilities.

Turn pockets, access control, lighting, and other engineering solutions to address safety will be incorporated.

The Safety Corridor Improvements project is State-funded and may be used on several KGB Road projects, including those mentioned above.

One project is under construction on Point MacKenzie Road. As a carryover from a 2013 paving project, the remaining 0.2 miles of Point MacKenzie Road entering Port MacKenzie will be paved in 2014.

The MSB LRTP identifies segments of both KGB and Point MacKenzie Roads that are in need of reconstruction and that are not addressed in the projects listed above.

#### **5.4.1.5. *Burma, Big Lake, and Vine Roads***

State funding has been appropriated for the South Big Lake Road Realignment project, which will construct two and a half miles of new roadway between the intersection of Susitna Parkway and Burma Road, and the intersection of South Big Lake Road and Jade Lane. This facility will increase both safety and mobility in the Big Lake area.

The Vine Road and Pathway Upgrade project has been funded through design and environmental work through the sale of bonds. This project will widen and rehabilitate Vine Road from the Parks Highway to Hollywood Boulevard and will add a multi-use pathway adjacent to the roadway.

The MSB LRTP identifies three future reconstruction projects as needed. The Big Lake Road Reconstruction project would reconstruct Big Lake Road between North Shore Drive and the Parks Highway to create a 4-lane facility and the Burma Road Reconstruction project would reconstruct Burma Road between Big Lake Road and Point MacKenzie Road. In the FY09 Capital Budget, \$5,000,000 in State general funds was appropriated to a Burma Road Upgrade project, but these funds were reappropriated to the South Big Lake Road Realignment project in FY13.

The third reconstruction project identified in the MSB LRTP is the reconstruction of Vine Road from the Parks Highway to KGB Road. The needs identified through this project are being partially addressed in the Vine Road and Pathway Upgrade project identified above.

#### **5.4.1.6. *MOA Roads Accessing the Port of Anchorage***

Though several projects addressing safety and/or capacity will occur on facilities directly adjacent to the roadways identified in Section 3, none are funded or planned on these facilities. However, several studies and plans for Anchorage/AMATS may be completed in the near future, such as the AMATS MTP and a freight mobility study, that provide suggestions for projects on A and C Streets, and 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> Avenues.

Projections derived from the current MOA travel demand model indicate an increase in traffic volumes on each of these routes (Appendix C, Table C.1).

### 5.4.2. Aviation

Future operations values for airports within the study area were determined based on growth rates identified in the airports' master plans. It is anticipated that daily operations will increase between now and 2030 with the exception of two airports, Healy River and Summit.

Funded aviation projects were identified using the Airport Improvement Program (AIP), airport spending plans, and the State of Alaska Capital and Operating Budgets, while planned projects were identified in the airports' master planning documents.

#### 5.4.2.1. *Ted Stevens Anchorage International Airport*

A number of projects will occur at TSAIA over the next several years, addressing safety, capacity, and operations. Three of these projects relate specifically to the upgrade and/or replacement of fire training and rescue facilities, including the structure fire training facility, the aircraft firefighting training facility, and the fire rescue building at the former Kulis Air National Guard Base.

TSAIA plans to construct several large-scale capital projects under an Airfield Pavement Reconstruction and Maintenance program. The FFY14 and FFY15 funding will rehabilitate Runway 7L/25R, one of two east-west runways at TSAIA. The project will remove worn asphalt, replace unsuitable subgrade soils, rehabilitate the storm drainage system, replace runway lighting, and repave, stripe, and sign the runway.

The FFY16 Airfield Pavement Reconstruction and Maintenance funds will rehabilitate Taxiways T and R. Worn asphalt and other appurtenances will be replaced on the taxiway parallel to the north-south runway and on one of taxiways that are perpendicular to the north-south runway.

In FFY18, Airfield Pavement Reconstruction and Maintenance funds will rehabilitate Taxiway F and will rehabilitate and widen Runway 15/33. Rehabilitation activities similar to those previously mentioned will occur on the taxiway running perpendicularly to Runway 7R, which provides access to the South Air Park, and TSAIA's only north-south, and longest, runway. TSAIA has not finalized scoping details for the project(s) associated with the FY17 Airfield Pavement Reconstruction and Maintenance funding.

In FFY15, TSAIA will widen the safety areas and object free areas on each side of Taxiways Y and K in order to meet aircraft standards for large aircraft (Design Group VI; see Appendix B); Taxiway Y from Taxiway K to Taxiway S, and Taxiway K from Taxiway J to Taxiway C.

In FFY18 TSAIA will, contingent upon funding, rehabilitate the east/west parallel taxiway, Taxiway K. TSAIA also intends to construct an access road to the South Air Park.

TSAIA's Airport Master Plan (AMP) is currently being updated and is expected to be complete by mid-2014, at which time an updated set of planned projects will be available. No planned project data for TSAIA is presented in Table D.3 in Appendix D.

Based on the TSAIA Master Plan forecasts, TSAIA is expected to exceed 280,000 annual operations by 2030.

#### 5.4.2.2. *Fairbanks International Airport*

There are two large capital projects relating to safety and security that will be constructed within the next two to three years at FIA. In addition, several other small projects will be funded through ongoing programs such as the State funded equipment program, annual improvements program, and facility improvements, renovations, and upgrades program.

The Fairbanks International ARFF Facility Upgrades project will construct new buildings for de-icing and sand storage and add two new vehicle bays to the existing ARFF facilities. This will improve efficiencies in providing traction on the runways during the winter months.

The Fairbanks International Security Upgrades project will upgrade the airport's security systems.

The Fairbanks International Master Plan is being updated at this time; a final plan is scheduled to be complete July 2014. This plan will contain an updated list of identified airport needs. For this reason, Table D.3 in Appendix D does not contain planned projects for FIA.

Annual operations are expected to steadily increase at FIA, reaching just over 156,000 by 2030. As part of the TSAIA Master Plan Update, potential incentive programs are being considered, to encourage international cargo carriers using TSAIA to shift operations to FIA.

#### 5.4.2.3. *General Aviation Airports*

Projects will be occurring at four of the nine GA airports within the study area; Lake Hood, Merrill Field, Palmer Airport, and Wasilla Airport. Rehabilitation and other various improvements will be made at Merrill Field and Palmer, to include upgrades to Palmer's cargo apron and other cargo areas. Wasilla Airport is anticipating constructing a sea plane base, a new airport access road, and installing security fencing along the perimeter of the airport. Lake Hood will acquire additional acreage and address associated access control. No projects exist in any current Federal Aviation Administration (FAA) funding plans for Nenana Municipal, Summit, Healy River, Willow, and Talkeetna Airports.

An extensive list of planned projects for Nenana, Palmer, Talkeetna, and Willow/Willow Sea Plane Base Airports are presented in Table D.3 in Appendix D. Lake Hood, Merrill Field, and Wasilla Airport are all currently updating their AMPs. Planned data is currently not shown in Appendix D for these airports. One planned project for Healy River can be found in Appendix D. It was identified as a planned project by ADOT&PF, but is not found in any current planning documents.

Seven GA airports within the study area will likely experience an increase in operations over the next two decades and are listed here, in order from greatest to least number of operations: Merrill Field, Talkeetna Airport, Lake Hood, Willow Airport/Sea Plane Base, Palmer Airport, Wasilla Airport, and Nenana Municipal Airport. Annual operations are forecasted to decrease slightly at Healy River and Summit Airports.

### **5.4.3. Railroad**

Future operations values for Anchorage, Fairbanks, Seward, and Whittier were provided by ARRC.

Funded and planned projects were identified in ARRC's Program of Projects, Capital Budget, and Economic Stimulus Package document. Interviews were also conducted with ARRC staff.

ARRC has several funded and planned projects aimed at improving safety and operations along their mainline track.

Though ARRC began its move toward the use of advanced technology to mitigate the negative impacts of human error through the development of its Collision Avoidance System, the implementation of what is now nationally referred to as Positive Train Control (PTC) has been mandated by the federal government, through the Rail Safety Improvement Act of 2008. This legislation provides a date by which PTC is to be implemented; December 31, 2015. However, because this mandate is unfunded, ARRC's approximately \$100 million effort to implement PTC is likely to be complete in 2018.

A track realignment design project near Railroad (RR) MP 415 has been funded through the Federal Transit Administration (FTA). Construction of this project would realign approximately three miles of track and relocate an access road and nearby spur, eliminating one at-grade rail crossing.

Rehabilitation of approximately 100 miles of track between Anchorage and Seward will be funded in phases each year based on availability of FTA formula funds and ARRC internal funding. Additionally, ARRC has plans to install 8,000-foot sidings along the mainline at twenty-mile intervals as train traffic increases in the future.

Two substantial track realignments have also been planned in Nenana and Wasilla.

ADOT&PF is currently working with ARRC to update the Alaska State Rail Plan. The plan is scheduled to be complete mid-2014 and will provide direction for planning projects in the future.

Information on the projects discussed in this section can be found in Appendix E.

#### **5.4.3.1. Anchorage**

Upgrades to the Anchorage Yard, which has not been reconstructed since the 1950s, have been designed and will be constructed when increased train traffic warrants such construction. Also unfunded, ARRC would like to construct an integrated Intermodal Transportation Center in the Ship Creek Basin.

It is anticipated that the Anchorage Yard will experience a total of 34 daily train arrivals/departures in the summer months and 26 daily arrivals/departures in the winter months by 2030.

#### 5.4.3.2. *Fairbanks*

Like the Anchorage Yard, the Fairbanks Yard was last reconstructed in the 1950s. Improvements to this yard have also been designed and will be implemented when significant increases in rail traffic materialize.

ARRC has estimated that operations at the Fairbanks Yard will remain fairly consistent with current daily arrivals/departures; experiencing six daily rail arrivals/departures—up from four in 2013—in the summer months and two—down from three in 2013—in the winter months.

#### 5.4.3.3. *Port MacKenzie*

The Port MacKenzie Rail Extension is expected to be complete by 2017. This 32-mile rail extension will connect the new track loop at Port MacKenzie with the mainline track near Houston, reducing the distance between the Interior and tidewater by approximately 26.5 miles.

Because this rail spur is not complete and train traffic at Port MacKenzie will be influenced by fluctuating natural resource markets, no estimates are available at this time for daily operations at Port MacKenzie.

#### 5.4.3.4. *Curry Quarry*

No projects are scheduled to enhance the existing facilities at Curry Quarry and ARRC is intending to continue using Curry Quarry exclusively for ARRC-related material needs.

There is no scheduled passenger service to Curry Quarry, nor is their freight service beyond the extraction of material for use by ARRC. Therefore, no operations data has been provided for Curry Quarry.

#### 5.4.3.5. *Gold Creek, Chulitna, and Cantwell*

ARRC has no funded or planned upgrades at Gold Creek, Chulitna, or Cantwell. Additionally, no operations data has been provided for these locations, as they are not scheduled stops; ARRC will continue to provide whistlestop service.

#### 5.4.3.6. *Seward*

ARRC has recently applied for a TIGER grant to fund Phase I of the Seward Dock Expansion project. The scope of this project includes rehabilitating the support tracks and extending the tracks and associated utilities to the expanded dock facility (see Appendix F). Should ARRC receive this discretionary funding, the project would begin in April 2014 and would be complete in September 2016, with the rehabilitation of the existing rail infrastructure likely occurring after October 2014.

Summer and winter operations in Seward are projected to almost double by 2030, with seven and two daily arrivals/departures, respectively.

#### **5.4.3.7. Whittier**

Contingent upon availability of funds, ARRC is planning to rebuild the Marginal Wharf facility that was demolished in 2008. Should the Whittier Wharf Replacement and Staging Areas project be constructed, it would include the construction of a new 6,000-foot arrival/departure rail track. At this time there is no funding and no tentative project schedule.

Whittier is expected to see an increase of two winter daily train arrivals/departures between 2013 and 2030; to total six daily. Summer daily arrivals/departures will increase more significantly; from seven to twelve.

#### **5.4.4. Port**

Growth rates to determine annual vessel call projections were provided by POA and ARRC for Whittier. Based on past vessel call trends, it was determined that a predictable growth rate did not exist for ARRC's Seward facility; no data is presented. Port MacKenzie provided annual vessel call projections to the project team.

Information on funded port projects was collected from various documents such as the State of Alaska Capital and Operating Budgets and the ARRC Program of Projects. Planned projects were found in documents such as ARRC's Seward Terminal Reserve Dock Facilities Master Plan.

In addition to identifying relevant print resources, interviews were conducted with Port MacKenzie, POA, ARRC, City of Seward, and City of Whittier staff.

##### **5.4.4.1. Port MacKenzie**

Several funded projects impacting operations at Port MacKenzie are currently being designed and constructed, with several others planned for the future. The Port MacKenzie Rail Extension project is being completed in eight segments; four segments are currently under construction. Assuming continued State funding, this project will be complete in 2017. In addition to the rail extension, Port MacKenzie is designing a large-scale cathodic protection project, of which approximately half will be constructed in 2014. Also funded is the pavement of .2 miles of Point MacKenzie Road within the Port District.

The Port MacKenzie Master Plan identifies several planned improvements, including a connection between the rail loop and tidewater, a second deep draft dock with fill expansion, natural gas facilities, and petroleum processing and storage.

The MSB estimates that Port MacKenzie may see a marked increase in annual vessel calls by 2030; from 14 in 2015 to 100 in 2030. These numbers are highly dependent on the completion of the Port MacKenzie Rail Extension project, the construction of an additional deep draft dock, and the development of natural resource extraction operations within the vicinity of the railbelt.



#### 5.4.4.2. *Port of Anchorage*

POA's Port Intermodal Expansion Project (PIEP) will expand, restructure, and improve the port, adding 1,700 lineal feet of dock space and upgrading 135 acres of land to accommodate upland activities. Design and construction activities have been funded to date by the State of Alaska, multiple federal agencies, and POA. Construction of the project commenced in 2008, but complications related to the design and/or construction of Open Cell Sheet Pile (OCS) stalled the project and prompted a reevaluation of project alternatives.

Currently, the MOA is involved in litigation related to the project. A new preferred alternative has not been definitively selected and a date for project completion is unknown.

The POA Wharf Pile Enhancements project, funded by the port, will provide upgrades to the existing wharf pilings as necessary to control erosion.

Based on recent trends, POA anticipates approximately 615 annual vessel calls by 2030, a two percent annual increase.

#### 5.4.4.3. *Port of Seward*

At this time, there are no funded capital improvement projects at the Port of Seward. However, ARRC applied for a TIGER discretionary grant in June 2013 to aid in funding the Seward East Dock Expansion (Phase I of the Seward Dock Expansion), which would include widening the existing freight dock by 120 feet and lengthening it by 400 feet, and constructing/relocating the jetty. If funding is awarded, the East Dock Expansion will be completed by 2016 and will allow Seward to accommodate Panamax vessels.

Phase II of the Seward Dock Expansion involves dredging the basin adjacent to the East Dock and filling uplands to accommodate operations and support needs. Phase III of this expansion would extend Port Avenue, develop additional uplands parcels, and improve intermodal operating areas.

Based on available vessel call data for recent years, no reasonable growth rate has been determined by ARRC for future annual vessel calls for the Port of Seward.

#### 5.4.4.4. *Port of Whittier*

Similar to the Port of Seward, the Port of Whittier does not have any funded capital projects. However, should funding become available, the Whittier Wharf Replacement and Staging Areas project would be able to move from the design phase into construction within six to twelve months. This project would replace the 1,000-foot Marginal Wharf that was demolished in 2008 and would construct new rail track, as identified in Section 5.3.3.7.

Whittier is expecting a one percent annual increase in annual vessel calls; totaling 109 by 2030.

## 6. DISCUSSION

The primary goals and objectives of the Transportation Resources Study, as identified in RSP Section 15.7.1.1, are to assess current transportation conditions in the study area, evaluate Project demands on the transportation system within the study area, and compare these effects to a Without Project scenario. Based on the work completed to date, the Transportation Resources Study has completed over one third of its goals and objectives.

Existing conditions for road, rail, air transportation, and ports have been documented. Data collection on river travel is only partially complete and will be updated with data from the River Recreation Flow and Access (Study 12.7) and Subsistence Resources Study (Study 14.5). Once data from these studies is reviewed and incorporated, additional interviews will be conducted to fill river use data gaps and complete documentation of the existing river transportation conditions.

Future forecast operations for most modes have been documented based on existing published data and interviews with knowledgeable individuals. These forecasts do not specifically include potential future traffic generation from Project construction and operation. Evaluation of Project-generated traffic by mode and potential effects on existing and proposed transportation facilities will be completed during the next study season. Gathered transportation data will be used in the further development of other studies, such as the Social Conditions and Public Goods and Services Study (Study 15.6) and Air Quality Study (Study 15.9) and will be incorporated to such studies during the second study season.

Information from related studies is being reviewed and will be incorporated into the Updated Study Report. Information from the Social Conditions and Public Good and Services Study (Study 15.6) will assist in determination of other reasonably foreseeable projects that may impact transportation resources both with and without the Project. Information from the Instream Flow (Study 8.5) and the Ice Processes Study (Study 7.6) will be used to inform assessment of Project effects on river transportation. Information from the design engineering studies will inform Project traffic generation and allow for further evaluation of Project effects on transportation system and identification of potential mitigation needed to address effects.

## 7. COMPLETING THE STUDY

[As explained in the cover letter to this draft Initial Study Report (ISR), AEA's plan for completing this study will be included in the final ISR filed with FERC on June 3, 2014.]

## 8. LITERATURE CITED

Information on the extensive list of literature used in the development of this study, but that is not cited within the document text, can be found in Appendix A.

AEA (Alaska Energy Authority). 2012. Revised Study Plan: Susitna-Watana Hydroelectric Project FERC Project No. 14241. December 2012. Prepared for the Federal Energy Regulatory Commission by the Alaska Energy Authority, Anchorage, Alaska. <http://www.susitna-watanahydro.org/study-plan>.

Institute of Transportation Engineers (ITE). 2008. Trip Generation, 8th edition: An ITE Informational Report. ITE. Washington, D.C.

## 9. FIGURES

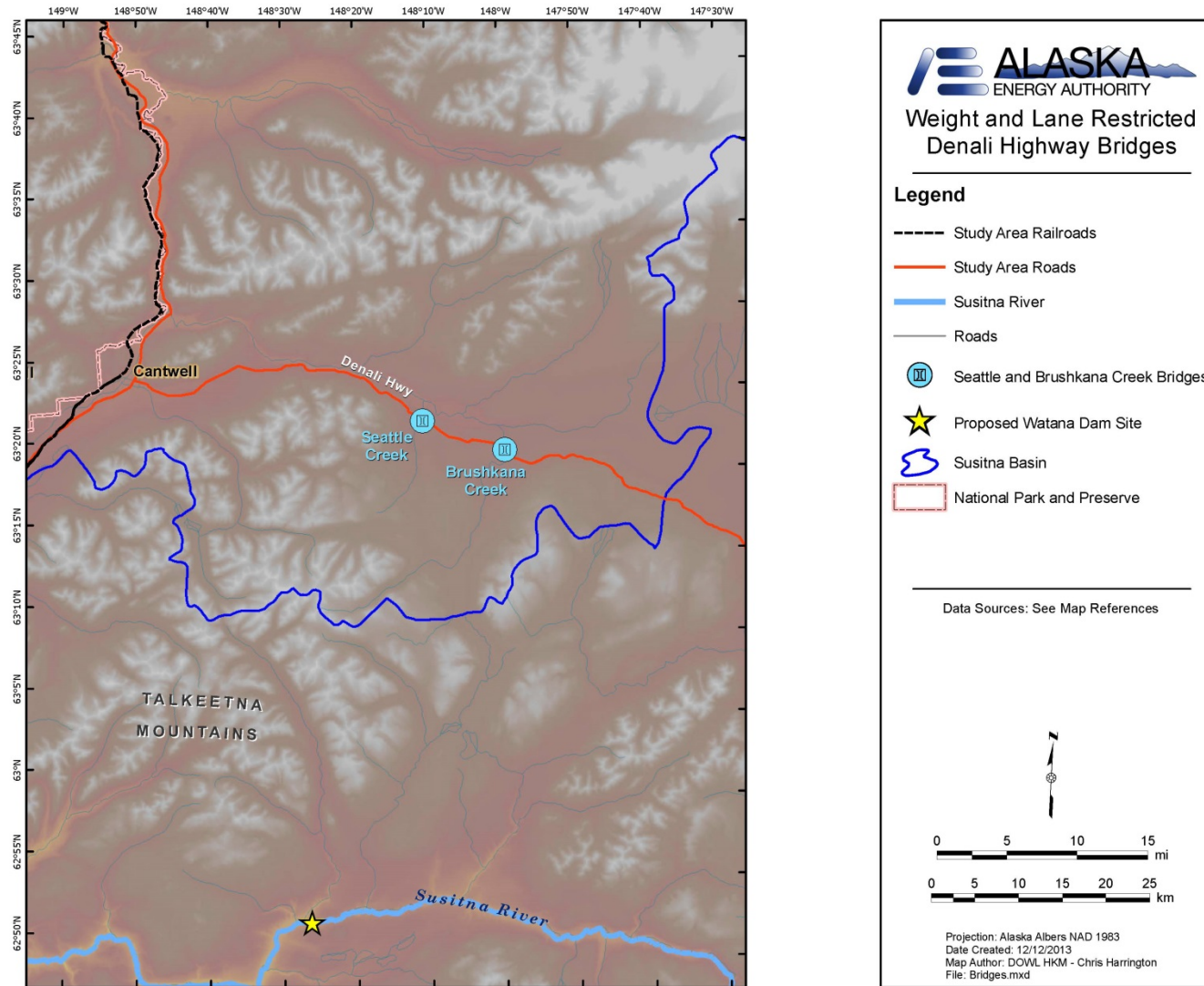


Figure 5.3-1. Weight and Lane Restricted Denali Highway Bridges

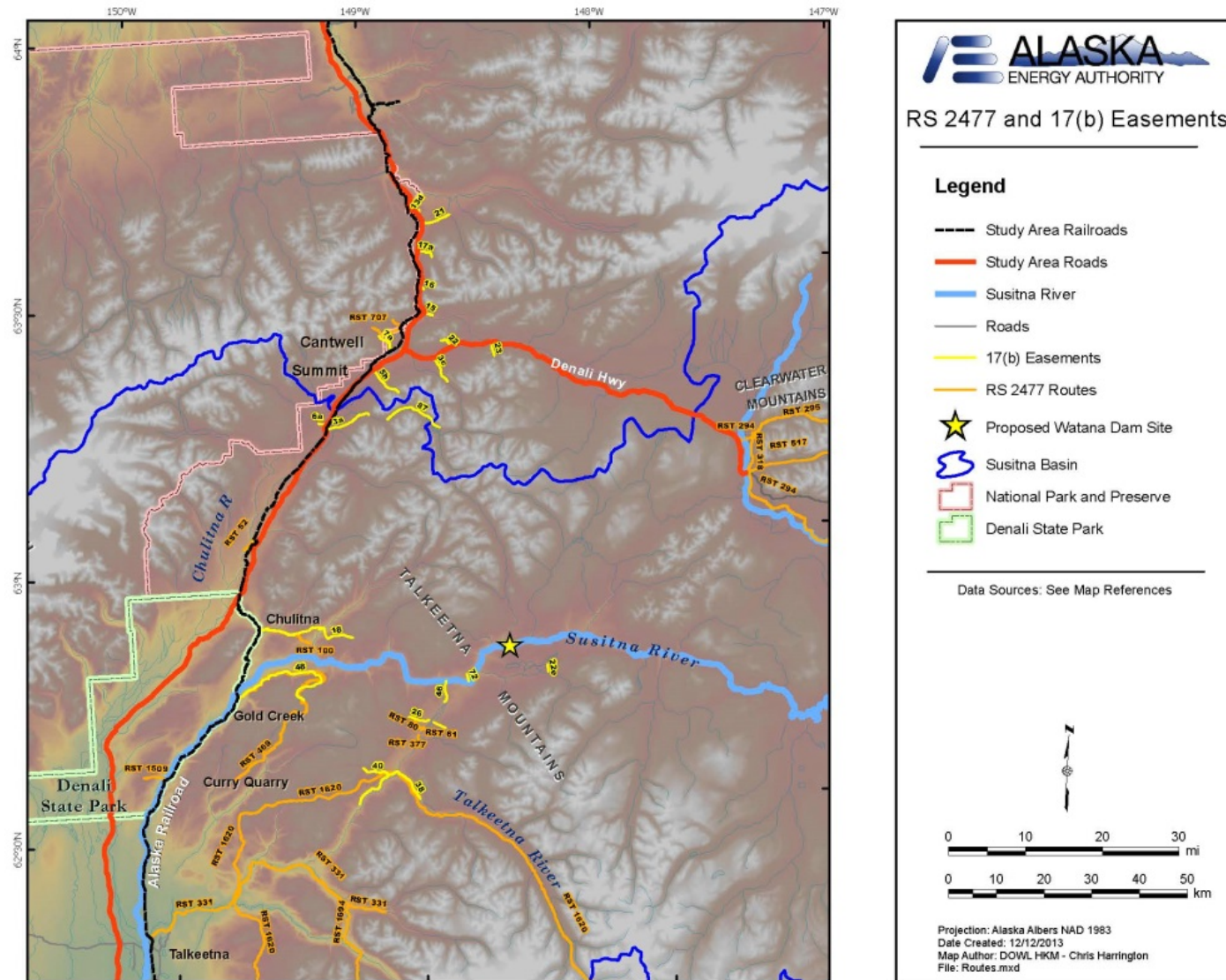


Figure 5.3-2. Study Area RS 2477 and 17(b) Easements

## APPENDIX A: BIBLIOGRAPHY

- ADNR (Alaska Department of Natural Resources) 2013. RS 2477 Rights-of-Way Fact Sheet. Available online at <http://dnr.alaska.gov/mlw/factsht/rs2477.pdf>.
- ADNR. 2010. Susitna-Matanuska Area Plan. Anchorage, Alaska. Also available online at [http://dnr.alaska.gov/mlw/planning/areaplans/sumat/pdf/smap\\_2011\\_complete.pdf](http://dnr.alaska.gov/mlw/planning/areaplans/sumat/pdf/smap_2011_complete.pdf).
- ADNR and ADF&G (Alaska Department of Fish and Game). 1991. Susitna Basin Recreation Rivers Management Plan. Anchorage, Alaska. Also available online at [http://dnr.alaska.gov/mlw/planning/mgtplans/susitna/pdf/Susitna\\_Basin\\_Recreational\\_Rivers\\_Management\\_Plan.pdf](http://dnr.alaska.gov/mlw/planning/mgtplans/susitna/pdf/Susitna_Basin_Recreational_Rivers_Management_Plan.pdf).
- ADOT&PF (Alaska Department of Transportation and Public Facilities). 2013 (in progress). Alaska Statewide Rail Plan. Juneau, Alaska. Available online at [http://dot.alaska.gov/railplan/docs\\_links.shtml](http://dot.alaska.gov/railplan/docs_links.shtml).
- ADOT&PF. 2013. Central Region Annual Traffic Volume Report 2010-2012. Anchorage, Alaska. Also available online at [http://www.dot.state.ak.us/stwdplng/mapping/trafficmaps/trafficdata\\_reports\\_cen/2012\\_ATVR.pdf](http://www.dot.state.ak.us/stwdplng/mapping/trafficmaps/trafficdata_reports_cen/2012_ATVR.pdf).
- ADOT&PF. 2013. Chapter 25 Operations, Wheeled Vehicles: Commercial Vehicle Size, Weight & Permit Regulations. Anchorage, Alaska. Also available online at <http://dot.alaska.gov/mscve/assets/webdocs/17AAC25.pdf>.
- ADOT&PF. 2013. Fairbanks International Airport, Airport Layout Plan. Fairbanks, Alaska. Also available online at [http://www.faa.gov/airports/alaskan/airports\\_resources/?section=alp](http://www.faa.gov/airports/alaskan/airports_resources/?section=alp).
- ADOT&PF. 2013. Lake Hood Seaplane Base, Airport Layout Plan. Anchorage, Alaska. Also available online at [http://www.faa.gov/airports/alaskan/airports\\_resources/?section=alp](http://www.faa.gov/airports/alaskan/airports_resources/?section=alp).
- ADOT&PF. 2013. Northern Region Annual Traffic Volume Report 2010-2012. Fairbanks, Alaska. Also available online at [http://www.dot.alaska.gov/stwdplng/transdata/traffic/nor\\_reports/NRVolumeReport\\_2010\\_2012.pdf](http://www.dot.alaska.gov/stwdplng/transdata/traffic/nor_reports/NRVolumeReport_2010_2012.pdf).
- ADOT&PF. 2013. Statewide Transportation Improvement Program Amendment 7. Juneau, Alaska. Also available online at <http://www.dot.state.ak.us/stwdplng/cip/stip/assets/STIP.pdf>.
- ADOT&PF. 2013. Ted Stevens Anchorage International Airport, Airport Layout Plan. Anchorage, Alaska. Also available online at [http://www.faa.gov/airports/alaskan/airports\\_resources/?section=alp](http://www.faa.gov/airports/alaskan/airports_resources/?section=alp).
- ADOT&PF. 2013. Willow Airport, Airport Layout Plan. Anchorage, Alaska. Also available online at [http://www.faa.gov/airports/alaskan/airports\\_resources/?section=alp](http://www.faa.gov/airports/alaskan/airports_resources/?section=alp).
- ADOT&PF. 2012. Watana Transportation Access Analysis (Draft). Fairbanks, Alaska.
- ADOT&PF. 2011. Alaska Aviation System Plan. Anchorage, Alaska. Also available online at [http://www.alaskaasp.com/media/998/aasp\\_final\\_report.pdf](http://www.alaskaasp.com/media/998/aasp_final_report.pdf).



- ADOT&PF. 2010. Interior Alaska Transportation Plan. Fairbanks, Alaska. Also available online at [http://www.dot.state.ak.us/stwdplng/areaplans/area\\_regional/assets/iatp/full-iatp.pdf](http://www.dot.state.ak.us/stwdplng/areaplans/area_regional/assets/iatp/full-iatp.pdf).
- ADOT&PF. 2008. The George Parks Highway Scenic Byway Corridor Partnership Plan. Juneau, Alaska. Also available online at <http://dnr.alaska.gov/parks/interp/pdf/georgeparkshwy/scenicbyway.pdf>.
- ADOT&PF. 2008. Parks Highway Visioning Document. Anchorage, Alaska. Also available online at <http://parkshighway44-52.info/documents/ParksHwyVisioning.pdf>.
- ADOT&PF. 2006. Lake Hood and ANC General Aviation Master Plan. Anchorage, Alaska. Also available online at <http://www.dot.state.ak.us/anc/business/generalAviation/GAMasterPlan/8-06MasterPlan.pdf>.
- ADOT&PF. No date. Weight Restriction Information Bulletin. Juneau, Alaska. Also available online at [http://www.dot.state.ak.us/mscve/permits/forms/Weight\\_Restriction\\_Bulletin.pdf](http://www.dot.state.ak.us/mscve/permits/forms/Weight_Restriction_Bulletin.pdf).
- AEA (Alaska Energy Authority). 2013. Draft Recreation Resources Study. Anchorage, Alaska.
- AEA. 2013. Review of Communities and Subsistence Use Areas in the Susitna River Watershed (Draft). Anchorage, Alaska.
- AEA. 2012. Revised Study Plan: Susitna-Watana Hydroelectric Project FERC Project No. 14241. December 2012. Prepared for the Federal Energy Regulatory Commission by the Alaska Energy Authority. Anchorage, Alaska.
- AEA. 2011. Pre-Application Document: Susitna-Watana Hydroelectric Project FERC Project No. 14241. Anchorage, Alaska. Also available online at [http://www.susitnawatanahydro.org/wp-content/uploads/2012/05/Susitna\\_Watana\\_PADExecutiveSummary\\_TOC\\_Lists.pdf](http://www.susitnawatanahydro.org/wp-content/uploads/2012/05/Susitna_Watana_PADExecutiveSummary_TOC_Lists.pdf).
- AEA. 2011. Susitna-Watana Hydroelectric Project, Socioeconomic, Recreation, Air Quality and Transportation Data Gap Analysis (Draft). Anchorage, Alaska. Also available online at <http://www.susitna-watanahydro.org/wp-content/uploads/2012/05/SusitnaWatanaSocioeconomicetc082511.pdf>.
- AEA. 2010. Railbelt Large Hydro Evaluation Preliminary Decision Document. Anchorage, Alaska. Also available at <ftp://ftp.aidea.org/RailbeltLargeHydro/112310FinalWLetter.pdf>.
- AEA. 2008. Railbelt Electrical Grid Authority Study. Anchorage, Alaska. Also available online at [http://www.akenergyauthority.org/REGAFiles/9-12-08\\_AlaskaRailbeltREGAStudy\\_MasterFinalReport.pdf](http://www.akenergyauthority.org/REGAFiles/9-12-08_AlaskaRailbeltREGAStudy_MasterFinalReport.pdf).

- AMATS (Anchorage Metropolitan Area Transportation Solutions). 2013. 2011-2014 Transportation Improvement Program Administrative Modification 6. Anchorage, Alaska. Also available online at <http://www.muni.org/Departments/OCPD/Planning/AMATS/AMATS%20TIP%20Docs/PC%20FINAL%206-27-13%20TIP%20Admin%20Mod%206.pdf>.
- AMATS. 2012. 2035 Metropolitan Transportation Plan. Anchorage, Alaska. Also available online at <http://www.muni.org/Departments/OCPD/Planning/AMATS/Pages/2035MTP.aspx>.
- ARRC (Alaska Railroad Corporation). 2013. Alaska Railroad 2013 Program of Projects Summary. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_05\\_10\\_POP\\_Summary\\_FS\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_05_10_POP_Summary_FS_PROJ.pdf).
- ARRC. 2013. 2013 Alaska Railroad Corporation Report to the State. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/corp/2012\\_12\\_01\\_Report\\_to\\_State\\_CORP.pdf](http://alaskarailroad.com/Portals/6/pdf/corp/2012_12_01_Report_to_State_CORP.pdf).
- ARRC. 2013. Port MacKenzie Rail Extension Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_08\\_06\\_PMRE\\_FactSheet\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_08_06_PMRE_FactSheet_PROJ.pdf).
- ARRC. 2013. Positive Train Control Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_06\\_03\\_PTC\\_FS\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_06_03_PTC_FS_PROJ.pdf).
- ARRC. 2013. Realign Track & Move Crossing at MP 415.5 Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_08\\_01\\_MP415\\_Realign\\_Crossing\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_08_01_MP415_Realign_Crossing_PROJ.pdf).
- ARRC. 2013. Seward East Dock Expansion & Security Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_06\\_04\\_Swd\\_East\\_Doc\\_FS\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_06_04_Swd_East_Doc_FS_PROJ.pdf).
- ARRC. 2013. Seward East Dock Expansion TIGER Discretionary Grant Application. Anchorage, Alaska.
- ARRC. 2013. Seward Loading Facility. Anchorage, Alaska. Also available online at [https://www.alaskarailroad.com/Portals/6/pdf/projects/2013\\_05\\_31\\_Swd\\_Loading\\_Facility\\_FS\\_PROJ.pdf](https://www.alaskarailroad.com/Portals/6/pdf/projects/2013_05_31_Swd_Loading_Facility_FS_PROJ.pdf).
- ARRC. 2013. Seward Terminal Reserve Dock Facilities Master Plan. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_06\\_03\\_Swd\\_Master\\_Plan\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_06_03_Swd_Master_Plan_PROJ.pdf).
- ARRC. 2013. South Wasilla Rail Line Relocation Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_08\\_01\\_SWTR\\_FactSheet\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_08_01_SWTR_FactSheet_PROJ.pdf).

- ARRC. 2013. Track Rehabilitation Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2013\\_04\\_23\\_Track\\_Rehabilitation\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2013_04_23_Track_Rehabilitation_PROJ.pdf).
- ARRC. 2012. Commuter Opportunities Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2012\\_07\\_31\\_Commuter\\_Opty\\_FS\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2012_07_31_Commuter_Opty_FS_PROJ.pdf).
- ARRC. 2011. Nenana Rail Line Relocation Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2012\\_01\\_04\\_Nenana\\_Rail\\_Realign\\_FS\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2012_01_04_Nenana_Rail_Realign_FS_PROJ.pdf).
- ARRC. 2011. Whittier Infrastructure and Master Planning Fact Sheet. Anchorage, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2012\\_01\\_04\\_Whittier\\_Master\\_Plan\\_FS\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2012_01_04_Whittier_Master_Plan_FS_PROJ.pdf).
- ARRC. 2008. Curry Quarry Development. Anchorage, Alaska. Also available online at <http://www.akrr.com/pdf/2009%20Curry%20Quarry.pdf>.
- BLM (Bureau of Land Management), NPS (National Park Service), USFS (US Forest Service) and USFWS (US Fish and Wildlife Service). 2011. The Alaska Federal Lands Long-Range Transportation Plan. Anchorage, Alaska. Also available online at [www.nps.gov/transportation/front\\_pdfs/Project\\_AK-LRTP.pdf](http://www.nps.gov/transportation/front_pdfs/Project_AK-LRTP.pdf).
- BLM. 2008. Alaska Denali Highway Points of Interest. Anchorage, Alaska. Also available online at [www.blm.gov/ak/st/en/fo/gdo/denali\\_highway\\_points.html](http://www.blm.gov/ak/st/en/fo/gdo/denali_highway_points.html).
- BLM. 2006. East Alaska Proposed Resource Management Plan and Final EIS. Glennallen, Alaska. Also available online at [http://www.blm.gov/ak/st/en/prog/planning/east\\_alaska\\_plan/east\\_frmpl.html](http://www.blm.gov/ak/st/en/prog/planning/east_alaska_plan/east_frmpl.html).
- BLM. 2006. Ring of Fire Proposed Resource Management Plan and Final EIS. Anchorage, Alaska. Also available online at [http://www.blm.gov/ak/st/en/prog/planning/ring\\_of\\_fire\\_plan/ring\\_of\\_fire\\_proposed.html](http://www.blm.gov/ak/st/en/prog/planning/ring_of_fire_plan/ring_of_fire_proposed.html).
- Carr, Bruce. 2013. Personal Interview, Alaska Railroad Corporation. 11/14/13.
- Carr, Bruce. 2013. Personal Interview, Alaska Railroad Corporation. 08/09/13.
- DCCED (Department of Commerce, Community, and Economic Development). 2011. Big Game Guides and Transporters. Anchorage, Alaska.
- FMATS (Fairbanks Metropolitan Area Transportation System). 2013. 2012-2015 Transportation Improvement Program Amendment #5. Fairbanks, Alaska. Also available online at <http://fmats.us/wp-content/uploads/2012/10/FMATS-2012-2015-TIP-amendment-5-approved.pdf>.

- FMATS. 2010. Fairbanks Metro 2035: “A Plan to Keep YOU Moving”. Fairbanks, Alaska. Also available online at <http://fmats.us/wp-content/uploads/2012/08/FMATS-MTP-7.21.10-approved.pdf>.
- KABATA (Knik Arm Bridge and Toll Authority). 2005. Memorandum on the Economic and Demographic Impacts of a Knik Arm Bridge. Anchorage, Alaska. Also available online at [http://www.iser.uaa.alaska.edu/Publications/Knik\\_Report\\_Sept05.pdf](http://www.iser.uaa.alaska.edu/Publications/Knik_Report_Sept05.pdf).
- Kubitz, Jim, Tom Brooks, Dale Wade, and Jon Garner. 2013. ARRC Seward Master Plan. Presentation given at the City Council meeting, March 5, 2013, Seward, Alaska.
- Metz, Ph.D., Paul. 2007. Economic Analysis of Rail Link: Port MacKenzie to Willow, Alaska. Fairbanks, Alaska. Also available online at [http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCwQFjAA&url=http%3A%2F%2Fwww.matsugov.us%2Fdocman%2Fdoc\\_download%2F1636-metz-final-economic-analysis-of-rail-link-portmac.pdf&ei=cDSgUs3KAYioigKRz4CQBg&usg=AFQjCNFhyidC3CHuDJs81egtdH0oG3EYQ&sig2=QbrIdpO68t\\_xVc7b\\_aDpimg&bvm=bv.57155469,d.cGE](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCwQFjAA&url=http%3A%2F%2Fwww.matsugov.us%2Fdocman%2Fdoc_download%2F1636-metz-final-economic-analysis-of-rail-link-portmac.pdf&ei=cDSgUs3KAYioigKRz4CQBg&usg=AFQjCNFhyidC3CHuDJs81egtdH0oG3EYQ&sig2=QbrIdpO68t_xVc7b_aDpimg&bvm=bv.57155469,d.cGE).
- MOA (Municipality of Anchorage). 2013. Draft Capital Plan.
- MOA (Municipality of Anchorage). 2013 (in progress). Merrill Field Airport Master Plan Update and Noise Study. Available online at <http://www.merrillfieldmasterplan.com/Documents.html>.
- MOA. 2013. Port of Anchorage Report to the Legislature, Q3. Also available online at [http://www.portofalaska.com/images/documents/Legislative\\_Reports/poa%20piep%20sfy%202013%20third%20quarter%20report.pdf](http://www.portofalaska.com/images/documents/Legislative_Reports/poa%20piep%20sfy%202013%20third%20quarter%20report.pdf).
- MOA. 2013. Ten-Year Annual Dock Tonnage 2003-2012. Anchorage, Alaska. Also available online at [http://www.portofalaska.com/images/documents/Audited\\_Financials/2012\\_10-year%20tonnage.pdf](http://www.portofalaska.com/images/documents/Audited_Financials/2012_10-year%20tonnage.pdf).
- MOA. 2012. Merrill Field, Airport Layout Plan. Anchorage, Alaska. Also available online at [http://www.faa.gov/airports/alaskan/airports\\_resources/?section=alp](http://www.faa.gov/airports/alaskan/airports_resources/?section=alp).
- MOA. 2000. Approved Routes for Reasonable Access Within the Municipality of Anchorage Double Loads. Anchorage, Alaska. Also available online at <http://www.muni.org/Departments/works/traffic/Documents/Doubles%20Route.pdf>.
- MOA. 2000. Downtown Truck Routes. Anchorage, Alaska. Also available online at <http://www.muni.org/Departments/works/traffic/Documents/Downtown%20Truck%20Routes.pdf>.
- MOA. 1999. Port of Anchorage Master Plan. Anchorage, Alaska. Also available online at <http://www.muni.org/Departments/port/Pages/MasterPlan.aspx>.

- MSB (Matanuska-Susitna Borough). 2013 (in progress). Mat-Su Long-Range Transportation Plan. Wasilla, Alaska.
- MSB. 2013. Port MacKenzie website. Accessed 11/25/13. <http://www.portmackenzie.com>.
- MSB. 2012. Port MacKenzie Master Plan. Wasilla, Alaska. Also available online at [http://knikbridgefacts.org/wp-content/uploads/2012/03/Port-Mackenzie-Master-Plan-Update\\_FINAL.pdf](http://knikbridgefacts.org/wp-content/uploads/2012/03/Port-Mackenzie-Master-Plan-Update_FINAL.pdf).
- MSB. 2009. Mat-Su Borough Long-Range Transportation Plan. Wasilla, Alaska. Also available online at [http://www.crweng.com/assets/images/uploads/projectsites/MSB\\_JUNE\\_07\\_LRTP1\\_small.pdf](http://www.crweng.com/assets/images/uploads/projectsites/MSB_JUNE_07_LRTP1_small.pdf).
- MSB. 2009. Mat-Su Regional Aviation System Plan. Wasilla, Alaska.
- MSB. 2005. Matanuska-Susitna Borough Comprehensive Development Plan. Wasilla, Alaska. Also available online at [http://www.matsugov.us/docman/doc\\_view/2076](http://www.matsugov.us/docman/doc_view/2076).
- MSB. 1999. Talkeetna Comprehensive Plan. Wasilla, Alaska. Also available online at [http://alaskarailroad.com/Portals/6/pdf/projects/2010\\_04\\_15\\_1999\\_Mat\\_Su\\_Talkeetna\\_Comp\\_Plan\\_PROJ.pdf](http://alaskarailroad.com/Portals/6/pdf/projects/2010_04_15_1999_Mat_Su_Talkeetna_Comp_Plan_PROJ.pdf).
- OMB (Alaska Office of Management & Budget). OMB website. Accessed 12/4/13. <http://omb.alaska.gov/>.
- City of Palmer. 2011. Palmer Municipal Airport, Airport Layout Plan. Palmer, Alaska. Also available online at [http://www.faa.gov/airports/alaskan/airports\\_resources/?section=alp](http://www.faa.gov/airports/alaskan/airports_resources/?section=alp).
- City of Palmer. 2009. Palmer Municipal Airport Master Plan Update. Palmer, Alaska. Also available online at <http://www.cityofpalmer.org/vertical/sites/%7BCEEE28AE-9003-4337-8BE2-A1961FF16E3D%7D/uploads/%7BE2415175-9DBD-414C-94B7-52C7B76F66CA%7D.PDF>.
- City of Seward. 2012. Alaskan-izing the Fleet. Seward, Alaska. Also available online at <http://www.cityofseward.us/DocumentCenter/View/1550>.
- TSAIA (Ted Stevens Anchorage International Airport). 2013 (in progress). Ted Stevens Anchorage International Airport Master Plan. Available online at <http://www.ancmasterplan.com/>.
- TSAIA. 2009. Ted Stevens Anchorage International Airport 2008 Master Plan Study Report (Draft). Anchorage, Alaska. Also available online at <http://www.dot.state.ak.us/anc/business/planning/ANCMaster08.pdf>.
- VanDongen, Marc. 2013. Personal Interview, Port MacKenzie. 11/19/13.
- VanDongen, Marc. 2013. Personal Interview, Port MacKenzie. 08/08/13.

City of Wasilla. 2010. Wasilla Airport Master Plan Update 2010. Wasilla, Alaska.

City of Wasilla. 2009. Wasilla Municipal Airport, Airport Layout Plan. Wasilla, Alaska. Also available online at [http://www.faa.gov/airports/alaskan/airports\\_resources/?section=alp](http://www.faa.gov/airports/alaskan/airports_resources/?section=alp).

Wilson, Richard. 2013. Personal Interview, Port of Anchorage. 11/12/13.

Wilson, Richard. 2013. Telephone Interview, Port of Anchorage. 08/23/13.

## APPENDIX B: ASSET INVENTORY

## ASSET INVENTORY

An Asset Inventory was completed to include the following modes of transportation within the study area: roadway, aviation, railroad, and port. The tables below summarize information such as ownership/maintenance, capacity, annual operations, and maintenance costs. More explanation on each of the column headings is included after each table. Because of the qualitative nature of the data collected for river travel, a table is not provided. However, the findings are summarized in text.

### Roadway

Table B.1. Roadway Inventory

Ownership	Length (mi)	AADT	Functional Classification	Level of Service <sup>1</sup>	Maintenance Costs	Fatal Crashes
A Street—134342 <sup>2</sup>						
ADOT&PF	2.630	7,700	Urban Other Principal Arterial	4	\$17,264	0
Big Lake Road—170073						
ADOT&PF	9.073	3,500	0.000-4.081 Rural Minor Arterial 4.081-5.376 Rural Major Collector 5.376-9.073 Rural Minor Collector	B	\$198,536	0
Burma Road—170083						
MSB	8.520	160	Rural Local Road	B	\$41,748	0
C Street—134341						
ADOT&PF	7.737	12,000	0.000-7.737 Urban Other Principal Arterial	C	5	0
MOA	.55		7.737-8.287 Urban Minor Arterial		5	0
Denali Highway—140000						
ADOT&PF	134.558	80	Rural Major Collector	B	\$286,000	0
Glenn Highway—135000						
ADOT&PF	180.115	58,000	0.000-21.758 Urban Interstate 21.758-180.115 Rural Interstate	C	\$2,416,960	3
Knik Goose Bay Road—170044						
ADOT&PF	19.886	11,000	0.000-5.730 Urban Other Principal Arterial 5.730-10.175 Rural Other Principal Arterial 10.175-17.266 Rural Major Collector 17.266-19.886 Rural Local Road	D	\$466,128	1
Parks Highway—170000						
ADOT&PF	323.688	12,000	0.000-11.282 Urban Interstate 11.282-314.182 Rural Interstate 314.182-323.688 Urban Interstate	B	\$8,122,832	11
Point MacKenzie Road—170080						
MSB	21.211	360	Rural Major Collector	B	\$104,804	0



Ownership	Length (mi)	AADT	Functional Classification	Level of Service <sup>1</sup>	Maintenance Costs	Fatal Crashes
Vine Road—160101						
ADOT&PF	0.526	3,500	Rural Minor Arterial	B	\$17,264	0
MSB	2.867				\$14,166	0
3 <sup>rd</sup> Avenue—134410						
MOA	2.340	8,500	0.000-1.740 Urban Minor Arterial 1.740-2.340 Urban Minor Collector	C	\$60,424	0
4 <sup>th</sup> Avenue—134450						
MOA	1.493	5,800	0.000-0.023 Urban Local Road 0.023-0.693 Urban Minor Collector 0.693-1.493 Urban Minor Arterial	C	\$34,528	0
5 <sup>th</sup> Avenue—134440						
ADOT&PF	2.578 <sup>3</sup>	25,000	0.000-1.486 Urban Interstate 1.486-2.032 Urban Other Principal Arterial 2.032-2.578 Urban Minor Arterial	C	\$112,216	0
MOA	0.135		2.578-2.713 Urban Local Road			0
6 <sup>th</sup> Avenue—134600						
ADOT&PF	1.522 <sup>3</sup>	13,000	0.000-0.033 Urban Local Road 0.033-0.718 Urban Minor Arterial 0.718-1.129 Urban Other Principal Arterial 1.129-1.522 Urban Interstate	C	\$34,528	0
MOA	.033		1.522-1.555 Urban Interstate			0

## Notes:

- 1 LOS can vary greatly between segments for some roadways. The LOS presented is the predominant LOS for the roadway within the study area.
- 2 This Coordinated Data System (CDS) number is the unique identifying number assigned to each roadway route by ADOT&PF. It is used for several things, including linking databases and the Highway Analysis System (HAS).
- 3 Maintained by MOA.
- 4 Level of service cannot be determined through standard methods identified in the Highway Capacity Manual 2000, based on AADT data.
- 5 Awaiting data.

**Ownership**—This column identifies the agency or municipal entity with ownership of the facility.

**Length**—This column identifies the length of the roadway in miles. For roadways owned by multiple entities, the length of the roadway segment within a given jurisdiction is shown.

**AADT**—The AADT is the Annual Average Daily Traffic. This is the estimated number of vehicles traveling over a given road segment during a 24-hour day.

**Functional Classification**—This is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. The three functional systems used to classify Alaska's roadways are identified in Table A.2.

**Level of Service**—This is a measure of system performance based on vehicle throughput and delay. Level of Service criteria varies based on the characteristics of the facility (i.e. freeways versus signalized intersections). Descriptions of the Level of Service categories are identified in Table A.3.

**Maintenance Costs**—This column reflects costs associated with maintenance and operations activities, such as plowing snow, brush cutting, patching, striping, and sealing.

**Fatal Crashes**—This column identifies the number of fatal crashes that occurred on the roadway segment within the study area between 2011 and 2012.

**Table B.2. Functional Classification Descriptions**

Functional System	Services Provided
Arterial	Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.
Collector	Provides a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.
Local	Consists of all roads not defined as arterials or collectors; primarily provides access to land with little or no through movement.

**Functional System**—The functional system is the broad-level grouping for roadway classification. Within each functional system are sets of modifiers used to specifically identify a roadway's use. The modifiers relating to the study area are major/minor, urban/rural, and other principal. FHWA provides guidance on the functional classification of interstate highways independently of other roadway systems. In the study area, the interstate highways are classified as either urban or rural interstates.

**Services Provided**—This describes the type of service that is to expected based on a roadway's functional system.

**Table B.3. Level of Service Descriptions**

Level of Service (LOS)	Traffic Flow
LOS A	Free Flow—Low volumes are experienced and speeds are controlled by the speed limit.
LOS B	Reasonably Free Flow—Speeds are beginning to be restricted by traffic conditions.
LOS C	Stable Flow—Most drivers are restricted in freedom to select their own speed.
LOS D	Approaching Unstable Flow—Drivers have little freedom to maneuver.
LOS E	Unstable Flow—Drivers may experience short stoppages.
LOS F	Breakdown Flow—Stoppages and slow speeds occur.

**Level of Service (LOS)**—This is a measure of system performance based on vehicle throughput and delay. Level of Service criteria varies based on the characteristics of the facility (i.e. freeways versus signalized intersections).

**Traffic Flow**—This is a description of how traffic characteristically moves on a roadway based on LOS.

Table B.4. Crash History

Years	Major Injuries	Minor Injuries	Total Injuries	Fatalities
<b>A Street—134342</b>				
2006 through 2010	10	157	167	1
2000 through 2005	18	250	268	2
<b>Big Lake Road—170073</b>				
2006 through 2010	8	52	60	3
2000 through 2005	14	76	90	2
<b>Burma Road—170083</b>				
2006 through 2010	0	0	0	0
2000 through 2005	0	3	3	0
<b>C Street—134341</b>				
2006 through 2010	17	276	293	1
2000 through 2005	27	437	464	2
<b>Denali Highway—140000</b>				
2006 through 2010	1	1	2	0
2000 through 2005	0	1	1	0
<b>Glenn Highway—135000</b>				
2006 through 2010	108	872	980	13
2000 through 2005	182	1339	1521	32
<b>Knik-Goose Bay Road—170044</b>				
2006 through 2010	16	224	240	2
2000 through 2005	46	211	257	10
<b>Parks Highway—170000</b>				
2006 through 2010	162	940	1102	41
2000 through 2005	235	1514	1749	56
<b>Point MacKenzie Road—170080</b>				
2006 through 2010	1	2	3	0
2000 through 2005	2	5	7	2
<b>Vine Road—160101</b>				
2006 through 2010	2	21	23	1
2000 through 2005	7	32	39	0

Years	Major Injuries	Minor Injuries	Total Injuries	Fatalities
<b>3<sup>rd</sup> Avenue—134410</b>				
2006 through 2010	2	99	101	1
2000 through 2005	8	143	151	0
<b>4<sup>th</sup> Avenue—134450</b>				
2006 through 2010	3	63	66	1
2000 through 2005	5	58	63	1
<b>5<sup>th</sup> Avenue—134440</b>				
2006 through 2010	11	230	241	1
2000 through 2005	28	398	426	3
<b>6<sup>th</sup> Avenue—134600</b>				
2006 through 2010	9	60	69	1
2000 through 2005	10	119	129	0

**Years**—The most recent decade of available data has been divided into two groups; 2000 through 2005 and 2006 through 2010.

**Major Injuries**—These are injuries that...

**Minor Injuries**—These are injuries that...

**Total Injuries**—This column is the sum of the Major and Minor Injuries columns.

## Aviation

Table B.5. International Airport Inventory

Air Miles from Project Site	Owner	Average Daily Operations	Annual O&M Costs	Runway Name Runway Type	Runway Dimensions	Runway Lighting	Air Traffic Control	Aircraft Maintenance	Fueling²	Reported Accidents
Ted Stevens Anchorage International Airport—ANC¹							X	X	A	X
124	ADOT&PF	742	\$57,000,000	7R/25L Asphalt	12,400' x 200'	X				
				7L/25R Asphalt	10,600' x 150'	X				
				15/33 Asphalt	11,584' x 150'	X				
Fairbanks International Airport—FAI							X	X	A	X
140	ADOT&PF	332	\$14,420,000	2L/20R Asphalt	11,800' x 150'	X				
				2C/20C Asphalt	6,501' x 100'	X				
				2S/20S Gravel	2,900' x 75'					
				2W/20W Water	5,400' x 100'					

Notes:

1 This is the Location Identification Code assigned by the International Air Transport Association.

2 A = Jet A and 100LL available, B = 100LL available, C = No fuel available.

**Air Miles from Project Site**—The column indicates the number of air miles from the airport to the Project site.

**Ownership**—This column identifies the agency or municipal entity with ownership of the facility.

**Average Daily Operations**—This is the estimated maximum number of aircraft takeoffs and landings in one year, divided by 365.

**Annual O&M Costs**—This column reflects costs associated with maintenance and operations activities, such as plowing snow, deicing, patching, painting, and sealing.

**(Runway Name) Runway Type**—The numbers in runway names are based on compass headings, while the letters are based on location in relation to other runways. (This lettering applies at airports with multiple runways.) Runway type refers to the material that the runway is made of.

**Runway Dimensions**—This is the length of the runway by the width of the runway in feet.

**Runway Lighting**—This indicates whether or not an individual runway is equipped with lighting.

**Air Traffic Control**—This column indicates whether or not there are ground-based controllers available to direct aircraft operations.

**Aircraft Maintenance**—This indicates the availability of facilities and personnel to perform aircraft maintenance.

**Fueling**—This indicates which airports offer which types of aircraft fuel.

**Reported Accidents**—This column identifies airports with accidents reported to the National Transportation Safety Board (NTSB). These reported accidents are summarized in Table A.6.

Table B.6. General Aviation Inventory

Air Miles from Project Site	Owner	Average Daily Operations	Annual O&M Costs	Runway Name Runway Type	Runway Dimensions	Runway Lighting	Air Traffic Control	Aircraft Maintenance	Fueling <sup>2</sup>	Reported Accidents
Lake Hood Seaplane Base & Lake Hood Strip Airport—LHD <sup>1</sup>							X	X	A	X
122	ADOT&PF	274	3	E/W Water	4,540' x 188'	X				
				N/S Water	1,930' x 200'					
				NW/SE Water	1,370' x 150'					
				14/32 Gravel	2,200' x 75'	X				

Air Miles from Project Site	Owner	Average Daily Operations	Annual O&M Costs	Runway Name Runway Type	Runway Dimensions	Runway Lighting	Air Traffic Control	Aircraft Maintenance	Fueling <sup>2</sup>	Reported Accidents
Merrill Field—MRI							X	X	A	X
119	MOA	321	\$1,500,000	7/25 Asphalt	4,000' x 100'					
				16/34 Asphalt	2,640' x 75'	X				
				5/23 Gravel	2,000' x 60'					
Wasilla Airport—IYS								X	A	X
92	City of Wasilla	136	\$140,000	3/21 Asphalt	3,700' x 75'	X				
				3S/21S Gravel	1,690' x 60'					
Palmer Municipal Airport—PAQ								X	A	X
87	City of Palmer	36 <sup>4</sup>	\$200,000	16/34 Asphalt	6,009 x 100'	X				
				9/27 Asphalt <sup>5</sup>	3,617' x 75'	X				
				16G/34G Gravel	1,560' x 60'					
Willow Airport and Willow Seaplane Base—UUO/2X2								X	B	X
88	ADOT&PF	43	\$54,000	13/31 Gravel	4,400' x 75'	X				
		3		Water	3,600' x 400'					
Talkeetna Airport—TKA									A <sup>6</sup>	X
60	ADOT&PF	82	\$78,000	18/36 Asphalt	3,500' x 75'	X				
				H1 Gravel Helipad	480' x 85'					
Nenana Municipal Airport—ENN									A	X
120	City of Nenana	16	\$100,000	4L/22R Asphalt	4,600' x 100'	X				
				4R/22L Turf	2,520' x 60'	X				
				4W/22W Water	3,601 x 100'					
Healy River Airport—HRR									C	X
74	ADOT&PF	4	\$23,000	7/25 Asphalt	2,912' x 60'	X				
Summit Airport—UMM									C	
40	ADOT&PF	Unavailable	\$24,000	13/31 Gravel	3,840' x 80'					

## Notes:

- 1 This is the Location Identification Code assigned by the International Air Transport Association.
- 2 A = Jet A and 100LL available, B = 100LL available, C = No fuel available.
- 3 Annual O&M costs for LHD are included in the annual O&M costs for ANC.
- 4 Last available published data is from 2006.
- 5 Runway closed to aircraft over 12,500 pounds.
- 6 Jet A is available off-site by request.

**Air Miles from Project Site**—The column indicates the number of air miles from the airport to the Project site.

**Ownership**—This column identifies the agency or municipal entity with ownership of the facility.

**Average Daily Operations**—This is the estimated maximum number of aircraft takeoffs and landings in one year, divided by 365.

**Annual O&M Costs**—This column reflects costs associated with maintenance and operations activities, such as plowing snow, deicing, patching, painting, and sealing.

**(Runway Name) Runway Type**—The numbers in runway names are based on compass headings, while the letters are based on location in relation to other runways. (This lettering applies at airports with multiple runways.) Runway type refers to the material that the runway is made of.

**Runway Dimensions**—This is the length of the runway by the width of the runway in feet.

**Runway Lighting**—This indicates whether or not an individual runway is equipped with lighting.

**Air Traffic Control**—This column indicates whether or not there are ground-based controllers available to direct aircraft operations.

**Aircraft Maintenance**—This indicates the availability of facilities and personnel to perform aircraft maintenance.

**Fueling**—This indicates which airports offer which types of aircraft fuel.

**Reported Accidents**—This column identifies airports with accidents reported to the National Transportation Safety Board (NTSB). These reported accidents are summarized in Table A.6.

**Table B.7 Accidents in the NTSB Database**

Airport	Date	Type of Aircraft	Type of Accident	Notes
ANC	4/4/2008	SA 227-AC	No Injuries	Hard landing caused damage to wings and fuselage.
	7/29/2008	SAAB 340B	No Injuries	Engine failure on takeoff due to failure of the stage 1 gas generator rotor blades due to high-cycle fatigue.
	3/4/2010	747-400	No Injuries	Aircraft experienced a tail strike during takeoff.
ENN	5/16/2009	Maule M-4-220C	No Injuries	Pilot's failure to maintain directional control while landing, resulting in a ground loop.
	5/16/2009	Cessna 170B	No Injuries	Pilot's failure to maintain control while taxiing for takeoff and failure to provide adequate airspeed after takeoff, resulting in a stall.

Airport	Date	Type of Aircraft	Type of Accident	Notes
FAI	4/28/2010	Piper PA-22-150	No Injuries	Pilot's failure to maintain directional control during takeoff.
	7/29/2010	Bellanca 8GCBC	No Injuries	Pilot's failure to maintain directional control after encountering a crosswind during landing and collided with an aircraft.
	1/25/2012	PZL-Swidnik SW-4	No Injuries	A test flight crew conducting a hydraulics system shutdown simulation failed to maintain control of the helicopter and struck the runway.
HRR	3/13/2009	Helio H-295	No Injuries	Pilot's delay in initiating a climb while he was packing snow with the airplane's skis in preparation for landing, resulting in collision with a bush.
IYS	5/27/2011	Cessna 170A	No Injuries	Pilot's loss of directional control during landing, resulting in a runway excursion.
LHD	7/17/2009	Cessna 172L	No Injuries	Pilot taxied onto roadway and struck a sign with wing while sun was in his eyes.
	8/8/2009	Taylorcraft BC12-D	Injury	Pilot was hit by prop after starting it.
	8/25/2009	Cessna 170B	Injury	Pilot failed to properly latch engine access cowling and stalled upon return to the airport.
	3/17/2010	Cessna 170B	No Injuries	Right main landing gear broke causing wing to impact ground during taxi.
	9/24/2010	Cessna 180C	No Injuries	Gust of wind caused loss of control and impact with water.
	2/20/2012	Cessna 182A	No Injuries	Pilot inadvertently landed on Lake Hood and deep snow caused the plane to nose over.
MRI	4/23/2008	Aeronca 15AC	No Injuries	Pilot's excessive braking combined with excessive taxi speed caused the airplane to nose over.
	5/7/2008	Piper PA-18	No Injuries	Pilot's inadequate compensation for a crosswind caused an inadvertent ground loop.
	7/30/2008	Cessna 172RF	No Injuries	Pilot's inadequate recovery from a bounced landing caused the aircraft to veer and strike a parked aircraft.
	10/1/2008	Cessna U206C	Fatal	Loss of engine power during takeoff and the pilot's decision to make an abrupt steep turn resulted in a stall and loss of control.
	7/28/2009	Piper PA-14	No Injuries	Incorrect installation of a seat's forward track stop caused the pilot to lose directional control during takeoff.
PAQ	11/9/2007	Cessna 150	Injury	Flight instructor's inadequate supervision of the student and his delayed go around during night conditions resulted in damage to wings, fuselage and empennage.
TKA	5/14/2009	Piper PA-22-150	No Injuries	Pilot's failure to maintain directional control during landing resulted in a ground loop and damage to the aircraft.
	8/12/2009	Cessna 150H	No Injuries	Pilot's failure to maintain directional control during landing resulted in a ground loop and damage to the aircraft.
UWO	4/6/2007	Cessna 150	No Injuries	Student pilot's failure to maintain directional control while taxiing resulted in contact with a snow berm and nosing down.
	12/31/2009	Piper PA-18	Injury	Pilot's failure to ensure the airplane's fuel selector valve was on before takeoff and the decision to attempt a low altitude turn to return to the runway resulted in a stall and loss of control.



Airport	Date	Type of Aircraft	Type of Accident	Notes
2X2	9/2/2012	Taylorcraft Aviation Corp F21	Injury	Aircraft impacted the water during takeoff causing serious injuries.

**Airport**—This column indicates the airport at which the associated accident(s) occurred using the 3-digit IATA LID Code.

**Date**—This column indicates the date that the accident occurred.

**Type of Aircraft**—This is the make and model of the aircraft involved in the accident.

**Type of Accident**—Types of accidents are categorized as being no injury, injury, or fatal accidents.

**Notes**—These are accident notes reported to the NTSB.

**Table B.8. Design Aircraft by Airport**

Airport	Design Group	Example Aircraft
ANC	D-V	Boeing 747
ENN	B-III	Dash 8
FAI	D-V	Boeing 747
HRR	A-I	Beechcraft C 99
IYS	B-II	Beechcraft 1900
LHD	A-I	Beechcraft C 99
MRI	B-II	Beechcraft 1900
PAQ	B-III	Dash 8
TKA	B-II	Beechcraft 1900
UUO	B-II	Beechcraft 1900

**Airport**—This column identifies the airport by the 3-digit IATA LID Code.

**Design Group**—This column is a combination of the Aircraft Approach Category (AAC), represented by the letter, and the Airplane Design Group (ADG), represented by the Roman numeral. These two designations dictate the speed at which an aircraft may approach and the dimensions of the aircraft that may land at a given facility.

**Example Aircraft**—This column provides an example of an aircraft that is compatible with the associated airport.

## Railroad

Table B.9. Current Average Arrivals/Departures per Day

Year	Summer			Winter		
	Freight	Passenger	Total	Freight	Passenger	Total
<b>Anchorage<sup>1</sup></b>						
2013	5	3	8	4	1	5
2012	6	3	9	5	1	6
2011	6	3	9	5	1	6
2010	6	3	9	5	1	6
2009	6	2	8	4	1	5
2008	7	2	9	5	1	6
2007	8	2	10	5	1	6
<b>Fairbanks</b>						
2013	3	1	4	3	0 <sup>2</sup>	3
2012	3	1	4	3	3	3
2011	3	1	4	3	0	3
2010	3	1	4	3	0	3
2009	3	1	4	3	0	3
2008	3	1	4	3	0	3
2007	3	1	4	3	0	3
<b>Seward</b>						
2013	1	3	4	1	0	1
2012	1	2	3	1	0	1
2011	1	2	3	1	0	1
2010	1	2	3	1	0	1
2009	1	2	3	1	0	1
2008	1	2	3	1	0	1
2007	1	1	2	1	0	1
<b>Whittier</b>						
2013	4	3	7	4	0	4
2012	4	3	7	4	0	4
2011	4	3	7	4	0	4
2010	4	3	7	4	0	4
2009	4	2	6	4	0	4
2008	3	2	5	3	0	3
2007	3	2	5	3	0	3
<b>Totals</b>	<b>98</b>	<b>57</b>	<b>155</b>	<b>87</b>	<b>7</b>	<b>94</b>

Notes:

- 1 Daily arrivals/departures are not included for Cantwell, Chulitna, Curry Quarry, Gold Creek, and Port MacKenzie are not currently scheduled stops and do not have arrival/departure operations associated with them.
- 2 The Fairbanks winter passenger train operates two days each month.

**Year**—This indicates the calendar year.

**Summer**—ARRC's summer schedule is in effect from May 15 – September 15 each year.

**Winter**—ARRC's winter schedule is in effect from September 15 – May 15 each year.

**Passenger**—This column describes the number of daily arrivals/departures for ARRC's passenger trains.

**Freight**—This column describes the number of daily arrivals/departures for ARRC's freight trains.

**Total**—This column shows the sum of daily arrivals/departures for passenger and freight trains.

## Port

Table B.10. Port Inventory

Ownership	Annual Vessel Calls	Acreage	Docks/Facilities	Draft Depth (ft)	Primary Commodities	Maintenance Costs	Ice Free
<b>Port of Anchorage</b>							
MOA	450	220	Cargo dock (3) Dry berth Petroleum terminal (2) Small craft floating dock Pipeline (3) Rail spur (2)	35	Petroleum, Shoreside Petroleum, Dockside Containerized Goods Cement, Bulk Dry	\$12,541,000	No
<b>Port MacKenzie</b>							
MSB	6	8,940	Barge Dock Freight Dock Ferry dock	60	Wood Chips Saw Logs Cement Sand/Gravel Coal Scrap Metal	\$750,000	No
<b>Port of Seward</b>							
ARRC	224	328	Coal loading facility and dock Freight dock Cruise ship dock and terminal Rail	24	Coal Containers	<sup>1</sup>	Yes
<b>Port of Whittier</b>							
ARRC	90	291	Barge Dock Freight Dock Cruise ship dock and terminal Rail AMHS dock and terminal	60	Containerized Goods Machinery Lumber Pipes Chemical used for North Slope operations	<sup>1</sup>	Yes

Note:

<sup>1</sup> Data not provided.

**Ownership**—This column identifies the agency or municipal entity with ownership of the facility.

**Annual Vessel Calls**—This is the number of ships that have docked at the port's facilities in a given year. The data presented is from 2012.

**Acreage**—This is the number of upland acres encompassed by the port facility.

**Docks/Facilities**—This column indicates the types and numbers of each dock, as well as other pertinent infrastructure.

**Draft Depth**—This is the depth at Mean Lower Low Water (MLLW). Draft depth dictates the size of the vessel and/or size of the load that may be docked at a given port.

**Primary Commodities**—This column identifies the most commonly imported/exported goods at each port.

**Maintenance Costs**—This column reflects costs associated with maintenance and operations activities, such as repairs to asphalt, cranes, and pilings.

## Easements

Table B.11. Existing RS 2477 Easements

Number <sup>1</sup>	Trail Name	Length (mi)	Primary Access
RST 52	Chulitna Trail	3.0	Honolulu Station, AKRR, MP 287
RST 80	Murder Lake North to Ridgeline Trail	2.0	Murder Lake
RST 100	Indian River-Portage Creek Trail	8.0	Chulitna Station, AKRR MP 274
RST 294	Gulkana-Denali Winter Trail	119.22	Denali Highway, MP 94
RST 318	Paxson-Denali Trail (Valdez Creek)	40.0	Denali Highway, MP 94
RST 331	Talkeetna-Iron Creek Trail	40.68	Town of Talkeetna
RST 377	Stephan-Daneka Lake Trail	2.0	Stephan Lake
RST 469	McWilliams-Gold Creek Trail	36.0	Gold Creek, AKRR MP 263
RST 517	Windy Creek Access Road	16.0	Denali Highway, MP 78
RST 625	Cantwell Small Tracts Road (Lover's Lane)	1.25	Junction of Parks Highway and Denali Highway
RST 1509	Curry Landing Strip-Lookout Tower	2.81	AKRR, MP 248.3, Curry Station
RST 1620	Talkeetna River Trail	102.42	Intersection with RST 311
RST 1691	Herning Trail-Question Creek	50.0	Little Susitna River North of Palmer
RST 1694	Iron Creek-North Fork Kashwitna River Trail	25.0	Intersection with Talkeetna-Iron Creek RST 311

Note:

1 Table obtained from Recreation Resources Study (Study 12.5).

**Number**—This is the identifying number of the route.

**Trail Name**—This is the accepted titling nomenclature.

**Length**—This is the length of the RS 2477 easement.

**Primary Access**—This is the point most commonly used to access the easement.

**Table B.12. Existing 17(b) Easements**

Number <sup>1</sup>	Width (ft)	Length (mi)	Region	Quadrant(s)	Allowable Uses	Managing Agency	Primary Access
3a	25	6.27	Ahtna	Healy B-5	Multi-use; vehicles must be less than 3,000 lbs.	BLM, General public	Parks Highway, MP 195
3c	25	3.75	Ahtna	Healy B-4	Multi-use; vehicles must be less than 3,000 lbs.	BLM, General public	Denali Highway, MP 131
5h	U	4.63	Ahtna	Healy B-4	Multi-use	AK Div. of Lands, General public	Parks Highway, MP 206
6b	50	1.11	Ahtna	Healy B-5	Multi-use; trucks/ cars prohibited	BLM, General public	Parks Highway, MP 196
7a	25	2.68	Ahtna	Healy B-4	Multi-use; vehicles must be less than 3,000 lbs.	BLM, AK Div. of Lands, General public	Cantwell
18	50	14.82	CIRI	Talkeetna Mountains D-5, D-6	Multi-use; trucks/ cars prohibited	AK Div. of Lands, ADF&G, General public	Alaska Railroad, Chulitna
26	50	2.81	CIRI	Talkeetna Mountains C-4	Multi-use; trucks/ cars prohibited	ADF&G, General public	Stephan Lake
28	25	1.73	CIRI	Talkeetna Mountains C-4	Multi-use; vehicles must be less than 3,000 lbs.	ADF&G	Stephan Lake
46	25	2.84	CIRI	Talkeetna Mountains C-4, D-4	Multi-use; vehicles must be less than 3,000 lbs.	BLM, AK Div. of Lands	Stephan Lake
48	50	18.71	CIRI	Talkeetna Mountains D-5, D-6	Multi-use; trucks/ cars prohibited	General public	Alaska Railroad, Gold Creek
87	25	8.27	Ahtna	Healy B-4	Multi-use; vehicles must be less than 3,000 lbs.	AK Div. of Lands	Parks Highway, MP 195
100	60	0.11	Ahtna	Healy A-5	Multi-use; trucks/ cars allowed	BLM-State	Parks Highway, MP 192

Note:

1 Table obtained from Recreation Resources Study (Study 12.5).

**Number**—This is the identifying number of the route.

**Width**—This is the width of the easement. The length directly affects the types of allowable uses in a given easement.

**Length**—This is the width of the easement.

**Region**—This column identifies the ANCSA Regional Corporation associated with the geographic location of the easement.

**Quadrant(s)**—These are the names of the USGS quadrangle maps that identify the location of these 17(b) easements.

**Allowable Uses**—This column identifies the established, allowable uses of the easements, which is guided by the easement's width.

**Managing Agency**—This is the agency or agencies that provide administrative oversight and management of the easement.

**Status**—This column identifies whether or not the 17(b) easement has been recorded and is recognized as a legal easement.

**Primary Access**—This is the point most commonly used to access the easement.

**Table B.13. Proposed 17(b) Easements**

Number <sup>1</sup>	Width (ft)	Length (mi)	Region	Quadrant(s)	Allowable Uses	Managing Agency	Primary Access
22	25	1.88	Ahtna	Healy B-4	Multi-use; vehicles must be less than 3,000 lbs.	AK Div. of Lands	Denali Highway, MP 127
22e	25	0.99	CIRI	Talkeetna Mountains D-3	Multi-use; vehicles must be less than 3,000 lbs.	ADF&G	Fog Lakes
23	25	1.91	Ahtna	Healy B-4	Multi-use; vehicles must be less than 3,000 lbs.	AK Div. of Lands	Denali Highway, MP 122.4
38	25	12.01	CIRI	Talkeetna Mountains C-4, C-5	Multi-use; vehicles must be less than 3,000 lbs.	AK Div. of Lands, ADF&G	Talkeetna River, North and south of Prairie Creek
40	25	3.76	CIRI	Talkeetna Mountains C-5	Multi-use; vehicles must be less than 3,000 lbs.	AK Div. of Lands	Talkeetna River at Cache Creek
72	25	1.00	CIRI	Talkeetna Mountains D-4	Multi-use; vehicles must be less than 3,000 lbs.	BLM, ADF&G	Susitna River, northeast of Stephan Lake

Note:

1 Table obtained from Recreation Resources Study (Study 12.5).

## APPENDIX C: HIGHWAY DATA FOR FUTURE TRAFFIC, FUNDED PROJECTS, AND PLANNED PROJECTS

Tables presenting future traffic growth projections, currently funded highway projects, and planned highway projects are included in this appendix. More explanation on each of the column headings is included after each table.

**Table C.1. Future Traffic Growth Projections**

Facility <sup>1</sup>	CDS Number	2015 AADT	2020 AADT	2025 AADT	2030 AADT
A Street	134342	9,896	10,667	11,498	12,394
Big Lake Road	170073	4,572	4,928	5,312	5,726
Burma Road	170083	146	157	169	182
C Street	134341	17,176	18,514	19,956	21,510
Denali Highway <sup>1</sup>	140000	109	96	85	75
Glenn Highway	135000	44,210	47,653	51,364	55,364
Knik-Goose Bay Road	170044	12,366	13,329	14,367	15,486
Parks Highway—Glenn Highway to Talkeetna Spur Road	170000	3	3	3	3
Parks Highway—Talkeetna Spur Road to FMATS boundary	170000	2,007	2,163	2,331	2,513
Parks Highway—FMATS <sup>2</sup>	170000	14,610	19,376	25,638	33,922
Point MacKenzie Road	170080	465	501	540	582
Vine Road	160101	4,837	5,214	5,620	6,058
3rd Avenue	134410	7,697	8,296	8,942	9,638
4th Avenue	134450	5,228	5,635	6,074	6,547
5th Avenue	134440	26,812	28,900	31,151	33,577
6th Avenue	134600	17,136	18,471	19,910	21,461

Notes:

- 1 Unless otherwise noted, projected AADTs for these facilities were determined using a growth rate based on historic traffic count data.
- 2 This data was interpolated/extrapolated from the current FMATS TransCAD model.
- 3 Awaiting data.

**Facility**—The facility is the identified roadway.

**CDS Number**—The Coordinated Data System (CDS) number is the unique identifying number assigned to each roadway route by ADOT&PF. It is used for several things, including linking databases and the Highway Analysis System (HAS).

**2015 to 2030 AADT**—These columns indicate the estimated annual average daily traffic for each respective facility in 2015, 2020, 2025, and 2030.



Table C.2. Funded Highway Projects

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>Denali Highway Seattle Creek Bridge Replacement</b>				
FY15	2016	GO Bond	\$5,000,000	Replace the Seattle Creek Bridge at MP 110 of the Denali Highway.
<b>Glenn Highway Continuous Lighting MP 27-31</b>				
FFY14	2014	STIP	\$8,285,000	Install luminaires along both sides of the Glenn Highway. Fog lighting installed on the Knik River Bridge and two Matanuska River bridges. Hightowers placed at the Old Glenn Highway Interchange.
<b>Glenn Highway: Hiland to Artillery Capacity Improvements</b>				
FY13	2014	GO Bond (SB 268)	\$35,000,000	Upgrade the Glenn Highway between Hiland Road and Artillery Road to increase capacity. This may include additional lanes, widened bridges, and reserved space for future HOV lanes.
<b>Glenn Highway/Muldoon Road Interchange Reconstruction</b>				
FY13	2015	GO Bond (SB 268)	\$15,000,000	Replace existing bridge and upgrade interchange.
<b>Knik-Goose Bay Road Reconstruction: Centaur Avenue to Vine Road</b>				
TBD	2018	STIP	\$100,000,000	Project consists of widening the Knik-Goose Bay Road to a divided 4 lane facility from Centaur Avenue (near the Parks Highway) to Vine Road, a distance of 6.44 miles. Scope includes separated bike/ped facilities, appropriate safety engineering strategies such as rumble strips and reducing/combining access points that are determined to be most effective at reducing crashes along the road. Project can be constructed in multiple phases to fit funding.
<b>Knik-Goose Bay Road Reconstruction: Vine Road to Settlers Bay</b>				
FY13	2016	GO Bond (SB 268)	\$24,400,000	Reconstruct 1.8 miles of Knik-Goose Bay Road, to include a four-lane divided facility, turn pockets, access control, traffic signals, lighting, pedestrian improvements, and other engineering solutions to increase safety and level of service.
<b>Knik-Goose Bay Road Safety Corridor Improvements</b>				
FY13	TBD	GF (SB 160)	\$10,000,000	Funding may be used on several possible projects, including Fairview Loop Realignment & Signalization at Knik-Goose Bay Road, Knik-Goose Bay Road Reconstruction—Centaur Avenue to Vine Road, and Knik-Goose Bay Road/Fern Street Traffic Signal and Intersection Improvements. Construction year will depend on which project funds are expended on.
<b>Parks Highway MP 43.5 to 44.5 Reconstruction</b>				
FFY14	2014	STIP	\$14,500,000	Improve capacity of Parks Highway by extending westward the existing five lanes from Lucas Road to Church Road, installing illumination, and improving the existing pedestrian pathway.

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>Parks Highway MP 44.5 to 48.8 Reconstruction</b>				
FFY14-15	2014	STIP	\$68,320,000	Upgrade the existing two-lane road to a four-lane divided highway with at-grade intersections spaced every half mile. Existing frontage roads will be improved and the existing pedestrian pathway reconstructed and/or relocated along the length of the project. Project will provide full length illumination and will reconstruct a bridge (#1922) parallel to the existing bridge at the Alaska Railroad crossing.
<b>Parks Highway MP 48.8 to 52.3 Reconstruction</b>				
FFY17	2017	STIP	\$52,800,000	Upgrade the existing two-lane road to a four-lane divided highway with at-grade intersections spaced every half mile.
<b>Parks Highway MP 163-183 Rehabilitation</b>				
FFY16	2016	STIP	\$56,500,000	Rehabilitate the Parks Hwy between MP 163 and 183 to accommodate heavy truck loads associated with the construction of a natural gas pipeline.
<b>Parks Highway MP 163-305 Passing Lanes</b>				
FFY13-14	2014	STIP	\$60,500,000	Construct passing lanes at approximately 6 locations between MP 163 and 305 along the Parks Highway to improve safety and accommodate increased truck traffic associated with the construction of a natural gas pipeline.
<b>Parks Highway MP 183-188 Reconstruction</b>				
FFY16	2016	STIP	\$40,000,000	Reconstruct the Parks Highway between MP 183-188 and replace the East Fork Chulitna River Bridge #0260.
<b>Parks Highway MP 194 Broad Pass Railroad Overcrossing</b>				
FFY13	2014	STIP	\$25,500,000	Reconstruct approximately 1 mile of the Parks Highway at its intersection with the Alaska Railroad at MP 194. Work includes construction of a highway overpass over the Alaska Railroad. The project will require construction of a new bridge crossing of the Middle Fork of the Chulitna River and grade raises.
<b>Parks Highway Riley Creek Bridge Replacement and Access Improvements</b>				
FFY14	2014	STIP	\$15,000,000	Replace the Riley Creek Bridge #0695 located on the Parks Highway MP 237. Construct auxiliary lane(s) for Denali National Park entrance at MP 237, a parking area accessible to Riley Creek, and bicycle and pedestrian facilities crossing Riley Creek.
<b>Parks Highway MP 252-263 Rehabilitation</b>				
FFY13	2014	STIP	\$31,200,000	Reconstruct the Parks Hwy between MP 239 and 263 to improve overall safety and to support the construction of a natural gas pipeline. This project will also construct passing and turn lanes where applicable.

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>South Big Lake Road Realignment</b>				
FY13	2013	GF (SB160)	\$12,200,000	Construct 2.5 miles of new roadway between the intersection of Susitna Parkway and Burma Road and South Big Lake Road and Jade Lane to increase safety and mobility in the Big Lake area.

Notes:

1 FY denotes State fiscal year. FFY denotes federal fiscal year.

2 Calendar year.

**Obligation Year**—This refers to the state or federal fiscal year in which funding was, or will be, made available for use by the project.

**Construction Year**—This refers to the calendar year in which construction activities will begin.

**Funding Source**—This column identifies the state or federal appropriations and program funding being utilized to pay for construction of the project.

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.

**Table C.3. Planned Highway Projects**

Project Name	Reference Document	Planning Horizon	Cost	Scope
Big Lake Road Reconstruction	Mat-Su Borough LRTP	2025	-- <sup>1</sup>	Reconstruct Big Lake Road from Northshore Drive to the Parks Highway to create a 4-lane facility.
Burma Road Reconstruction	Mat-Su Borough LRTP	Baseline	--	Reconstruct Burma Road between Big Lake Road and Point MacKenzie Road.
Glenn Highway Farm Avenue Partial Interchange	AMATS MTP	2023		Construct a partial interchange at Glenn Highway/Farm Avenue.
Knik-Goose Bay Road Reconstruction	Mat-Su Borough LRTP	2015	--	Reconstruct Knik-Goose Bay Road from Settler's Bay growth area to the junction of the Palmer Wasilla Highway to create a 4-lane facility.
Knik-Goose Bay Road/Point MacKenzie Road Reconstruction	Mat-Su Borough LRTP	2025	--	--
Parks Highway	Mat-Su Borough LRTP	2015	--	Reconstruct the Parks Highway between Seward Meridian Parkway and Lucille Street to create a 6-lane facility.
Parks Highway Reconstruction	Mat-Su Borough LRTP	2025	--	Reconstruct the Parks Highway between Lucille Street and Crusey Street to create a 6-lane facility.

Project Name	Reference Document	Planning Horizon	Cost	Scope
Parks Highway Rehabilitation	Mat-Su Borough LRTP	2025	--	Upgrade the Parks Highway Freeway section west of Seward Meridian Road to Crusey Street to an Expressway.
Vine Road	Mat-Su Borough LRTP	2025	--	Reconstruct Vine Road from the Parks Highway to Knik-Goose Bay Road, upgrading to a minor arterial facility.

Notes:

1 “--” indicates that data for a given cell was not provided in the reference document.

**Project Name**—This column identifies the title of the planned project.

**Reference Document**—This is the planning document that identifies the project as a need.

**Planning Horizon**—This is the year in which the project

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.

## APPENDIX D: AVIATION DATA FOR FUTURE OPERATIONS, FUNDED PROJECTS, AND PLANNED PROJECTS

Tables presenting projected future annual operations, currently funded aviation projects, and planned aviation projects are included in this appendix. More explanation on each of the column headings is included after each table.

**Table D.1 Projected Future Annual Operations**

<b>Airport<sup>1</sup></b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
ANC	224,997	242,275	261,738	281,942
FAI	130,123	136,248	145,486	156,128
LHD	62,649	65,460	71,142	78,348
MRI	131,661	136,877	142,299	147,936
IYS	35,164	41,242	47,340	55,415
PAQ	51,660	58,892	67,136	76,535
UUO/2X2	51,882	59,345	67,997	78,049
TKA	44,600	54,000	65,500	80,100
ENN	4,300	4,700	5,200	5,700
HRR	947	952	941	930
UMM	794	798	789	779

Note:

1 Projected annual operations were determined using growth rates identified in each airport's master plan.

**Airport**—This identifies the airport facility by the Location Identification Code assigned by the International Air Transport Association. See Table B.5 for more information.

**2015-2030**—These are the years that projected annual operations are provided for.

**Table D.2. Funded Aviation Projects**

<b>Obligation Year<sup>1</sup></b>	<b>Construction Year<sup>2</sup></b>	<b>Funding Source</b>	<b>Cost</b>	<b>Scope</b>
<b>Anchorage International Aircraft Firefighting Training Facility Replacement<sup>3</sup></b>				
FY15	--	AIP	\$2,800,000	Replace the current fire training pit to comply with AC 150/5220-17b, meet environmental standards and improve safety. This will include removal of existing apparatus and failed containment, and installation of a propane-fueled training simulator.
<b>Anchorage International Airfield Pavement Reconstruction and Maintenance</b>				
FY14-15	2014-2015	AIP	\$35,000,000	Remove existing asphalt surface of Runway 7L and replace unsuitable subgrade soils, rehabilitate the storm drain system, replace runway lighting, re-pave, stripe, and sign.
<b>Anchorage International Airfield Pavement Reconstruction and Maintenance</b>				
FY16	2016	AIP	--	Reconstruct Concourse B hardstands: gates B1, B3 and B5; Taxiway T and R rehabilitation.
<b>Anchorage International Airfield Pavement Reconstruction and Maintenance</b>				
FY17	--	AIP	--	--

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>Anchorage International Airfield Pavement Reconstruction and Maintenance</b>				
FY18	2018	AIP	--	Rehabilitate Taxiway F and rehabilitate and widen Runway 15/33.
<b>Anchorage International East/West Parallel Taxiway</b>				
FY18	--	--	--	--
<b>Anchorage International Kulis Building 42 Fire Rescue Building Upgrades</b>				
FY15	--	AIDEA	--	--
<b>Anchorage International South Airpark Access Road Construction</b>				
FY18	--	--	--	--
<b>Anchorage International Structure Fire Training Facility</b>				
FY14	--	AIP	\$425,000	Replace the current Structure Fire Training facility to comply with industry standards. This will include removal of existing connex mock-ups and installation of a pre-fabricated two-story training simulator.
<b>Anchorage International Taxiway K Safety Widening</b>				
FY15	--	AIP	\$5,200,000	Widen the safety areas and object free areas on each side of Taxiway K, from Taxiway J to Taxiway C, to meet Design Group VI aircraft standards.
<b>Anchorage International Taxiway Y Safety Widening</b>				
FY15	--	AIP	\$5,200,000	Widen the safety areas and object free areas on each side of Taxiway Y, from Taxiway K to Taxiway S, to meet Design Group VI aircraft standards.
<b>Fairbanks International ARFF Facility Upgrades</b>				
FY14	2014	AIP	\$11,200,000	Relocate an existing non-heated pole-storage building and biffy dump to allow for and to construct a new sand storage and de-icing storage building.
<b>Fairbanks International Security Upgrades</b>				
FY15	2015	AIP	\$4,000,000	This project will upgrades the security system at Fairbanks International.
<b>Lake Hood A &amp; B Apron Rehabilitation</b>				
FY15	-- <sup>3</sup>	--	--	--
<b>Lake Hood A &amp; B Temporary Parking</b>				
FY14	--	--	--	--
<b>Lake Hood Bank Stabilization</b>				
FY17-18	--	AIP	\$263,200	Stabilize the lake bank of Lake Hood and Spenard in areas experiencing erosion and, in select areas, reclaim some of the land are lost due to erosion. Funds will also be used to purchase privately-owned property around Lake Hood and Lake Spenard.
<b>Lake Hood Land Acquisition &amp; Access Control</b>				
FFY14	--	AIP	\$1,050,000	--

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>Merrill Field Airport Improvements</b>				
>FFY14	--	AIP	\$4,900,000	--
<b>Palmer Airport Improvements</b>				
>FFY13	--	AIP	\$225,000	Runway rehabilitation of Runway 16/34.
<b>Palmer Cargo Rehabilitation</b>				
>FFY14	--	AIP	\$14,000,000	Rehabilitation of the cargo apron and other cargo areas.
<b>Wasilla Airport Access Road</b>				
FY08-14	2014	GF—SB 53 (FY08) SB 221 (FY09) SB 46 (FY12) SB 18 (FY14)	\$7,100,000	Construct a new two-lane paved access road from S. Mack Drive approximately .9 miles to the airport to improve access and emergency response time.
<b>Wasilla Airport Fencing</b>				
>FFY13	--	AIP	\$300,000	Install airport security fencing around the perimeter of the Wasilla Airport.
<b>Wasilla Sea Plane Base</b>				
>FFY14	--	AIP	\$1,800,000	Construct a sea plane base at the Wasilla Airport.

## Notes:

1 FY denotes State fiscal year. FFY denotes federal fiscal year.

2 Calendar year.

3 “--” indicates that data was not available.

**Obligation Year**—This refers to the state or federal fiscal year in which funding was, or will be, made available for use by the project.

**Construction Year**—This refers to the calendar year in which construction activities will begin.

**Funding Source**—This column identifies the state or federal appropriations and program funding being utilized to pay for construction of the project.

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.



**Table D.3. Planned Aviation Projects**

Project Name	Reference Document	Planning Horizon	Cost	Scope
Healy River Airport Lighting Improvements	1	--2	\$1,700,000	Project will replace the existing lighting system.
Nenana Phase I Airfield Improvements	Airport Master Plan	FY14	\$4,160,000	Reconstruct runway and relocate threshold to meet safety area regulations, replace navigational aids, reconstruct runway lighting, taxiway lighting, and reconstruct beacon tower and its foundation. Remove all tree obstructions to Runways 03/21 and 03C/21C. Overlay Taxiways A & B and apron, repair settlement areas, reconstruct settlement areas, and reconstruct Taxiway C and parallel service road.
Nenana Phase II Airfield Improvements	Airport Master Plan	FY21	\$2,100,000	Construct a 400 runway extension for 3L/21L to the south, relocate navigational aids construct a new Snow Removal Equipment Storage Building, construct a gravel apron on 03C/21C
Palmer Helipad	Airport Master Plan	FY14	\$96,000	Construction of a helipad on the old taxiway directly in from of the FSS. This helipad should be sized to accommodate an H-60 size helicopter.
Palmer Shelter Hangars on Apron	Airport Master Plan	FY14	\$1,722,000	Construction of a number of inexpensive, open shelter hangars on the existing Apron A just north of the FSS. The initial number of hangars built will depend on the level of interest from local pilots, but is anticipated that at least two ten-unit hangars should be built. Additional hangars will be needed.
Palmer Preparation of Large Commercial Lease Lots	Airport Master Plan	FY14	\$7,364,000	Prepare the large lease lots along the south side of RW 9 by removal of peat and placement fill.
Palmer Expansion of Large Aircraft Apron	Airport Master Plan	FY14	\$4,942,000	Expansion of the large aircraft apron on the south side of the airport. The apron would be expanded 800 feet to the north of the existing apron to allow future development of nearby lease lots.
Palmer Gravel Taxiway	Airport Master Plan	FY14	\$202,000	Construction of a short connector taxiway between the midpoint of RW 16G-34G and TW A.
Palmer Aviation Campground	Airport Master Plan	FY14	\$383,000	Development of a basic campground for aircraft on land acquired as a buffer against residential development on the west side of the airport. This project would include construction of a gravel taxiway and removal of some trees.
Palmer Seasonal Ski Strip	Airport Master Plan	FY14	\$18,000	This project would develop a seasonal ski strip on the east side of the end of RW 34, allowing for a dedicated parking area and strip for ski aircraft without affecting snow removal efforts on the remainder of the airport.
Palmer General Aviation Lease Lots in Norwest Corner of Airport	Airport Master Plan	FY19	\$11,324,000	Development of additional general aviation lease lots on land to be acquired at the northwest corner of the airport. Development would include lease lots, apron expansion, access roads, and a tree buffer to the west. Project would require relocating a portion of Airport Road and installing utilities.

Project Name	Reference Document	Planning Horizon	Cost	Scope
Palmer Apron Expansion	Airport Master Plan	FY19	\$2,976,000	Expansion of Apron A to the south of the FSS to TW J. This apron expansion would replace tie-down spaces lost to hangar construction on the existing Apron A. This apron would also potential provide a tie-down area for ski planes that need access to the nearby gravel runway.
Palmer Parallel Taxiway	Airport Master Plan	FY19	\$3,157,000	Construction of a partial parallel taxiway along the south side of RW 9-27 from the end of RW 9 to TW A. This taxiway would provide access to lease lots along the south side of the runway.
Palmer Acquisition of Buffer Property	Airport Master Plan	FY19	\$6,950,000	Acquisition of land directly adjacent to the south and northeast of the airport to ensure compatible land use and to ensure space for long term airport growth.
Palmer Extension of Gulkana Street	Airport Master Plan	FY29	\$3,029,000	Extend Gulkana Street south to Cope Industrial Way.
Talkeetna Commercial Apron Phase I	Airport Master Plan	--	\$464,000	Development of approximately 13,300 square meters of apron in south
Talkeetna Large Lease Lots	Airport Master Plan	--	\$172,000	Development of lease lots on South Apron, 5 each
Talkeetna Property Acquisition	Airport Master Plan	--	\$13,000	Acquire portion of L11, B2, Denali Subdivision
Talkeetna Access Road	Airport Master Plan	--	\$151,000	Construct an access road from Second Ave. to M&O site
Talkeetna Transient Apron Phase I	Airport Master Plan	--	\$523,000	Develop approximately 4,200 square meters of apron
Talkeetna Floodplain Mitigation	Airport Master Plan	--	\$3,700,000	--
Talkeetna General Aviation Auto Parking	Airport Master Plan	--	\$61,000	Construct auto parking lot for general aviation patrons
Talkeetna Abandoned Landfill Remediation	Airport Master Plan	--	\$2,200,000	--
Talkeetna Large Lease Lots	Airport Master Plan	--	\$160,000	Development of lease lots on south apron, 3 each
Talkeetna Transient Apron Phase II	Airport Master Plan	--	\$250,000	Development of approximately 9,000 square meters of apron
Talkeetna Commercial Apron Phase II	Airport Master Plan	--	\$120,000	Development of approximately 4,500 square meters of apron in south
Talkeetna Large Lease Lots	Airport Master Plan	--	\$30,000	Development of lease lots on south apron, 2 each
Talkeetna Small Lease Lots	Airport Master Plan	--	\$15,000	Development of lease lots on south apron, 3 each
Talkeetna CCP with Taxiway	Airport Master Plan	--	\$130,000	--
Talkeetna GA/Commercial/Ski Plane Apron	Airport Master Plan	--	\$720,000	Development of an apron to the north

Project Name	Reference Document	Planning Horizon	Cost	Scope
Talkeetna Small Lease Lots	Airport Master Plan	--	\$90,000	Development of lease lots on north apron, 4 each
Talkeetna Secondary Access Road	Airport Master Plan	--	\$1,400,000	--
Willow Runway and Apron Expansion	<sup>2</sup>	--	\$3,800,000	Project will provide fencing for the perimeter of the upland airport, barrier fencing behind the floatplane leaseholds, completion of a new GA apron with 100 tie downs; rehabilitation and extension of the existing access road with vehicle parking for the apron; taxiway and runway surface repairs; construction of two new taxiways; tree clearing; and a new lighted segmented circle.
Willow Expanded Tie Down, Road Access, and Taxiway connection near Runway 31	Airport Master Plan	FY18	\$3,373,000	Develop general aviation tie down area for based and transient aircraft on the south end of the airport where tie downs would be closer to services at the town center. Extend access road to new tie down area. Construct a 90 degree taxiway connection to end of Runway 31. Provide paved taxiway or run-up pad to reduce dust. Acquire railroad spur land to facilitate railroad spur removal.
Willow Taxiway, Road and Lease Lot Expansion near Runway 13	Airport Master Plan	FY18	\$9,572,000	Extend road and taxiway access to lease area on the northwest part of the airport. Widen road to allow parallel public parking. Extend taxiway connection to Runway 13. Pave taxiway.
Willow Road and Helipad Construction	Airport Master Plan	FY23	\$428,000	--
Willow Automated Weather Observation System (AWOS)	Airport Master Plan	FY23	\$1,568,000	Install AWOS and secondary access to each end of airport.
Willow NE Airport Lease Lot and Tie Down Expansion	Airport Master Plan	FY33	\$13,966,000	Expand taxiway and road access to the northeast part of the airport to facilitate lease lot development.
Willow SW Airport Tie Down Expansion	Airport Master Plan	FY33	\$6,892,000	Expand tie-downs near the southwest part of the airport.
Willow Gravel/Ski Strip Construction	Airport Master Plan	FY33	\$2,370,000	Construct gravel/ski strip to facilitate future paving of the main runway, if needed.
Willow Aircraft Highway Crossing Improvements	Airport Master Plan	FY18	\$215,000	Complete signage and flashing light system to warn drivers of aircraft being trailered across the Parks Highway.
Willow Haven Senior Center Access	Airport Master Plan	FY18	\$226,000	Construct new access to remove Senior Center vehicle traffic routed through airport property and Willow Lake Access Road, where floatplanes are being trailered across the highway.
Willow Boat Purchase and Buoy Replacement	Airport Master Plan	FY18	\$113,000	Purchase a boat for lake maintenance and water rescue. Replace lake buoys that mark lake operating areas.

Notes:

1 Data provided by ADOT&amp;PF region, not a reference document.

2 "--" indicates that data for a given cell was not provided in the reference document.

**Project Name**—This column identifies the title of the planned project.

**Reference Document**—This is the planning document that identifies the project as a need.

**Planning Horizon**—This is the year in which the project

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.

## APPENDIX E: RAIL DATA FOR FUTURE OPERATIONS, FUNDED PROJECTS, AND PLANNED PROJECTS

Tables presenting projected future annual daily operations, currently funded rail projects, and planned rail projects are included in this appendix. More explanation on each of the column headings is included after each table.

**Table E.1. Projected Future Annual Daily Operations**

Year	Summer			Winter		
	Freight	Passenger	Total	Freight	Passenger	Total
<b>Anchorage<sup>1</sup></b>						
2015	8	8	16	10	2	12
2020	10	16	26	9	8	17
2025	12	18	30	10	12	22
2030	14	20	34	10	16	26
<b>Fairbanks</b>						
2015	3	2	5	3	0	3
2020	2	2	4	2	0	2
2025	2	4	6	2	0	2
2030	2	4	6	2	0	2
<b>Seward</b>						
2015	2	4	6	1	0	1
2020	2	4	6	1	0	1
2025	3	4	7	2	0	2
2030	3	4	7	2	0	2
<b>Whittier</b>						
2015	6	4	10	6	0	6
2020	6	4	10	6	0	6
2025	8	4	12	6	0	6
2030	8	4	12	6	0	6
<b>Totals</b>	<b>91</b>	<b>106</b>	<b>197</b>	<b>78</b>	<b>38</b>	<b>116</b>

Note:

- 1 Estimated future daily arrivals/departures are not included for Cantwell, Chulitna, Curry Quarry, Gold Creek, and Port MacKenzie. These locations are not currently scheduled stops and do not have projected operations associated with them.

**Year**—This indicates the calendar year.

**Summer**—ARRC's summer schedule is in effect from May 15 – September 15 each year.

**Winter**—ARRC's winter schedule is in effect from September 15 – May 15 each year.

**Freight**—This column describes the number of daily arrivals/departures for ARRC's freight trains.

**Passenger**—This column describes the number of daily arrivals/departures for ARRC's passenger trains.

**Total**—This column shows the sum of daily arrivals/departures for passenger and freight trains.

Table E.2. Funded Rail Projects

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>Collision Avoidance System</b>				
FY99-FY17	<sup>3</sup>	FTA FRA ARRC GF (SB 18)	\$153,640,000	Institute Positive Train Control (PTC), to include hardware and software applications that ensure track integrity, monitor switches, and instrumentation detectors for high load, avalanche, and hot wheels conditions. On-track vehicles will also be integrated into this system.
<b>MP 415 Crossing Relocation and Track Realignment</b>				
FFY12	2013	FTA	\$1,643,000	Realign approximately three miles of track near RR MP 415, and relocate FAA Access Road and a nearby spur, eliminating one at-grade crossing.
<b>Port MacKenzie Rail Extension</b>				
FY08-FY13	2012-2018	GF—SB 53 (FY08), SB 221 (FY09), SB 230 (FY11), SB 46 (FY12), SB 160 (FY13) GO Bond (SB 286)	\$300,000,000 <sup>4</sup>	Construct a spur connected Port MacKenzie to ARRC's mainline track near Houston; to be constructed in eight segments.

Notes:

- 1 FY denotes State fiscal year. FFY denotes federal fiscal year.
- 2 Calendar year.
- 3 Project is ongoing and is expected to be complete in 2018.
- 4 Funding sources listed have provided \$171 million in project funds.

**Obligation Year**—This refers to the state or federal fiscal year in which funding was, or will be, made available for use by the project.

**Construction Year**—This refers to the calendar year in which construction activities will begin.

**Funding Source**—This column identifies the state or federal appropriations and program funding being utilized to pay for construction of the project.

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.

**Table E.3. Planned Rail Projects**

<b>Project Name</b>	<b>Reference Document</b>	<b>Planning Horizon</b>	<b>Cost</b>	<b>Scope</b>
Anchorage Intermodal Transportation Facility	ARRC Economic Stimulus Package Document	-- <sup>1</sup>	\$50,000,000	Construct an integrated Intermodal Transportation Center and associated improvements, including pedestrian amenities, transit infrastructure, parking and track modifications, in the Ship Creek basin in lower downtown Anchorage.
South Wasilla Rail Line Relocation	ARRC Economic Stimulus Package Document	--	\$40,000,000	Realign four miles of mainline track; to include a new bridge over Wasilla Creek, new embankments and underpasses, two new grade-separated crossings, the removal of five at-grade crossings, and the realignment of Old Matanuska Road.
Nenana Rail Line Relocation	ARRC Economic Stimulus Package Document	--	\$30,000,000	Substantially realign the mainline track in Nenana; to include a new embankment, a new bridge over the Parks Highway, and two culvert underpasses.
Anchorage to Seward Track Rehabilitation	ARRC Economic Stimulus Package Document	--	\$100,000,000	Rehabilitate 100 miles of track; to include 140-pound continuous welded rail, new wooden ties, concrete ties on curves, and ballast resurfacing.

Note:

1 -- indicates that data for a given cell was not provided in the reference document.

**Project Name**—This column identifies the title of the planned project.

**Reference Document**—This is the planning document that identifies the project as a need.

**Planning Horizon**—This is the year in which the project

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.



## APPENDIX F: PORT DATA FOR FUTURE OPERATIONS, FUNDED PROJECTS, AND PLANNED PROJECTS

Tables presenting projected future annual vessel calls, currently funded port projects, and planned port projects are included in this appendix. More explanation on each of the column headings is included after each table.

**Table F.1. Projected Future Annual Vessel Calls**

Port	2015	2020	2025	2030
Port of Anchorage	459	506	557	615
Port MacKenzie	14	46	100	100
Port of Seward	Data Unavailable <sup>1</sup>			
Port of Whittier	92	97	102	109

Note:

<sup>1</sup> Based on available vessel call data for recent years, no reasonable growth rate has been determined by ARRC for future annual vessel calls for the Port of Seward.

**Port**—This column shows the name of each port.

**2015-2030**—These are the years that projected annual vessel calls are provided for.

**Table F.2. Funded Port Projects**

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>Point MacKenzie Road Pavement</b>				
FFY14	2014	FHWA	\$1,500,000	Pave .2 miles of Point MacKenzie Road, entering Port MacKenzie.
<b>Port of Anchorage Port Intermodal Expansion</b>				
FY02-FY14	-- <sup>3</sup>	GF—SB 47 (FY02), SB 29 (FY04), SB 283 (FY06), SB 53 (FY08), SB 221 (FY09), SB 75 (FY10), SB 230 (FY11), SB 46 (FY12), SB 160 (FY13) GO Bond (SB 286) POA	\$300,087,562 <sup>4</sup>	Expand, restructure, and improve the Port of Anchorage; to include the addition of 1,700 lineal feet of dock space, and upgrade of 135 acres of land to accommodate industrial development activities. Upon completion the Port will have 7 functioning ships berths and 2 public barge berths.
<b>Port of Anchorage Port Intermodal Expansion<sup>5</sup></b>				
FFY02-FFY12	--	FHWA DoD	\$138,676,634 <sup>4</sup>	See above.
<b>Port of Anchorage Wharf Pile Enhancements</b>				
FY14-FY19	2014-2019	Port of Anchorage	\$3,000,000	Provide upgrades to existing wharf pilings as necessary to control corrosion.
<b>Port MacKenzie Cathodic Protection</b>				
FY14	2014	GF (SB 18)	\$2,500,000	Begin installing 57 pipe pile sleeves, 14 fender pile sleeves, and in Impress Current Anode System to protect the galvanized pile coating.

Obligation Year <sup>1</sup>	Construction Year <sup>2</sup>	Funding Source	Cost	Scope
<b>Port MacKenzie Rail Extension</b>				
FY08-FY13	2012-2018	GF—SB 53 (FY08), SB 221 (FY09), SB 230 (FY11), SB 46 (FY12), SB 160 (FY13) GO Bond (SB 286)	\$300,000,000 <sup>6</sup>	Construct a spur connected Port MacKenzie to ARRC's mainline track near Houston; to be constructed in six segments.

Notes:

- 1 FY denotes State fiscal year. FFY denotes federal fiscal year.
- 2 Calendar year.
- 3 A sheet pile system was installed in 2012 that is not suitable for the wet barge and deep draft berths. A new concept design study is underway and an alternative has not yet been selected.
- 4 This dollar amount represents the funds obligated to date, not overall estimated cost.
- 5 This project is part of the above-mentioned project; representing the federal dollars spent to date in project development.
- 6 Funding sources listed have provided \$171 million in project funds.

**Obligation Year**—This refers to the state or federal fiscal year in which funding was, or will be, made available for use by the project.

**Construction Year**—This refers to the calendar year in which construction activities will begin.

**Funding Source**—This column identifies the state or federal appropriations and program funding being utilized to pay for construction of the project.

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.

**Table F.3. Planned Port Projects**

Project Name	Reference Document	Planning Horizon	Cost	Scope
Port of Anchorage Port Intermodal Expansion <sup>1</sup>	MOA Capital Plan	FY17	-- <sup>2</sup>	Expand, restructure, and improve the Port of Anchorage; to include the addition of 1,700 lineal feet of dock space, and upgrade of 135 acres of land to accommodate industrial development activities. Upon completion the Port will have 7 functioning ships berths and 2 public barge berths.
Port MacKenzie Deep Draft Dock #2 and Fill Expansion	Port MacKenzie Master Plan, Interview with Port Director	FY20	\$80,000,000	Complete 21.5 acres of fill expansion and construct trestles and an additional deep draft dock to accommodate increased vessel traffic.
Port MacKenzie Natural Gas Facilities	Port MacKenzie Master Plan	--	--	Construct natural gas facilities, including liquids processing, petrochemical, refinery, power plant, LNG plant, and other value added gas processing facilities, as needed to support developing industry.

Project Name	Reference Document	Planning Horizon	Cost	Scope
Port MacKenzie Petroleum Processing and Storage	Port MacKenzie Master Plan	--	--	Construct petroleum storage and processing facility, including a pipeline connection to Anchorage.
Port MacKenzie Pile Sleeve Protection	Interview with Port Director	FY14	\$3,000,000	Continue installing 57 pipe pile sleeves, 14 fender pile sleeves, and in Impress Current Anode System to protect the galvanized pile coating.
Port MacKenzie Rail and Vessel Loading and Unloading Facility	Port MacKenzie Master Plan	--	--	Construct link between new rail loop to Port MacKenzie and docking facilities.
Seward (East) Dock Expansion Phase I	Seward Terminal Reserve Dock Facilities Master Plan	--	\$25,000,000	Widen the existing freight dock by 120 feet and extend it by approximately 400 feet to accommodate Panamax size and large cruise vessels. Construct/relocate jetty and remove existing sediment groin, and rehabilitate support tracks and extend tracks and utility service to expanded dock.
Seward Dock Expansion Phase II	Seward Terminal Reserve Dock Facilities Master Plan	--	\$46,000,000	Dredge basin on the east side of the freight dock and fill uplands to accommodate freight customer uplands operations and support needs.
Seward Dock Expansion Phase III	Seward Terminal Reserve Dock Facilities Master Plan	--	\$12,000,000	Extend Port Avenue to connect with Airport Avenue; including utilities, security measures and other appurtenances. Lease and develop upland parcels to accommodate customer operations and support needs, and improve intermodal operating areas.
Whittier Wharf Replacement and Staging Areas	ARRC Economic Stimulus Package Document	--	\$60,000,000	Replace 1,000-foot long Marginal Wharf that was demolished in 2008, and construct a new 6,000-foot long arrival/departure rail track.

Notes:

- 1 Design for this project is funded. Construction currently is not.
- 2 "--" indicates that data for a given cell was not provided in the reference document.

**Project Name**—This column identifies the title of the planned project.

**Reference Document**—This is the planning document that identifies the project as a need.

**Planning Horizon**—This is the year in which the project

**Cost**—This is the cost of the construction phase of the project and does not include expenditures for design, right-of-way acquisition, or utility-related activities.

**Scope**—The scope is the statement identifying the intended outcome of the project.

## APPENDIX G: INTERVIEWS



AEA Team Member		Other Party	
Name:	<i>Sara Mason</i>	Name:	<i>Marc VanDongen</i>
Organization:	<i>DOWL HKM</i>	Organization:	<i>Port MacKenzie</i>
Study Area:	<i>Transportation</i>	Phone Number:	<i>(907) 746-7414</i>
Date:	<i>August 8, 2013</i>	Time:	<i>10 a.m.</i>
Meeting held by: <input checked="" type="checkbox"/> AEA Team <input type="checkbox"/> Other Party			

**Others at meeting:** None.

**Subject:** Port MacKenzie Operations, M&O, Capacity, Capacity Issues, and Safety

**Discussion:**

Operations

- 1) What type of freight does Port MacKenzie move?

Marc stated that the primary function of the port was to ship bulk commodities such as cement wood chips. But, the port has also shipped other break-bulk goods destined for various locations throughout the state.

- 2) Are you expecting new commodities to be coming through the port in the future?

Marc brought up Port MacKenzie's Master Plan and discussed, at length, the analysis that went into the elements of this plan. Experts identified opportunities for developing many natural resources including coal, timber, limestone, copper, lead, and zinc. Other products/services were also identified; oil and gas field modules, pipeline logistics, and natural gas processing.

- 3) Do you have any annual projections for future annual tonnage?

Projections by tonnage are hard to forecast at this point since many of the potential markets served have not yet developed mines in the area. But, the Port MacKenzie Master Plan indicates quantities, by commodity, that may be extracted during the life of the operation.

M&O Costs

- 1) What are the port's annual maintenance costs?

Marc said that the cost of maintaining the port is approximately \$750,000 annually at this point in time and that he expected this number to largely remain the same until the rail line is completed to the port.

- 2) How do you expect M&O costs to increase over time?

After this connection is complete, operations and maintenance costs will increase, but at the point the port will be generating more than enough revenue to cover those costs and the M&O costs will no longer be funded through MSB GF dollars.



Capacity

- 1) How many ships move through the port monthly?

Last year the port had less than 10 vessel calls. But, the port is capable of serving some of the largest class vessels in the world, including Panamax and Capesize vessels. Once the rail extension to the port is complete, it is believe that the number of annual vessel calls will increase dramatically.

- 2) Do you have any plans to improve or expand facilities?

Marc said that Port MacKenzie does have plans to make improvements such as sheet pile protection. The port is also installing a five million gallon tank farm and is planning on adding a second deep draft dock in the next eight to ten years. The port is in the process of working on a permit for this dock addition. A rail connection between the uplands and the dock at the port is also being planned.

Capacity Issues

- 1) Are there current capacity issues at the port?

Marc said that there are no capacity issues at the port.

- 2) Do you expect any capacity issues in the next several years?

Marc stated that he doesn't foresee their being capacity issues, particularly with the construction of an additional deep draft dock. He did mention that if enough trains are moving to and from the port, additional sidings along the mainline track may be beneficial at some point in the future.

Safety

- 1) Have any incidents occurred in recent years at Port MacKenzie?

Marc explained that no accidents have occurred at Port MacKenzie, including no breakage of tie downs. The port requires an extra ten lines and one to two extra tugs when ice is flowing. Marc said that the port requires an English-speaking navigator to be on board the vessel from Homer to the port to ensure that communication is effective. Port MacKenzie takes safety very seriously and is proud of its safety record.

**Action Item:**

None.



AEA Team Member		Other Party	
Name:	<i>Sara Mason</i>	Name:	<i>Bruce Carr</i>
Organization:	<i>DOWL HKM</i>	Organization:	<i>Alaska Railroad Corporation</i>
Study Area:	<i>Transportation</i>	Phone Number:	<i>(907) 265-2468</i>
Date:	<i>August 22, 2013</i>	Time:	<i>11 a.m.</i>
Meeting held by: <input checked="" type="checkbox"/> AEA Team <input type="checkbox"/> Other Party			

**Others at meeting:** None.

**Subject:** ARRC Maintenance and Capacity

**Discussion:**

- 1) On average, what are ARRC's annual O&M costs and how are these costs expected to increase in the next 20 years?

Sara and Bruce discussed the inherent risk in using average values to determine future costs. Bruce explained the impacts of significant cost increases in recent years; to include the rising costs of employee health care, wages, and fuel. M&O costs for the railroad in 2013 are estimated to be approximately \$120 million, up \$15 million from 3 years ago.

In estimating future costs, Bruce suggested calculating a minimum 3% increase for the first five years, a 4% increase for the next five, and then 5% for the next ten years. As the economy continues to rebound and an increase in costs worldwide will drive domestic inflation up.

- 2) Will the Port MacKenzie and Northern Rail Extensions (NRE) add significant O&M cost?

Bruce indicated that ARRC does not anticipate significant M&O impact from the two projects during the initial years. Subsequent traffic increases on the Port Mac extension will cause additional costs but revenue will also be generated to offset those costs. The NRE M&O costs will be restricted to bridge maintenance until such time as the structure is connected to ARRC's mainline.

- 3) What is the railroad's current capacity?

Bruce said that at one point in time, it was estimated the Alaska Railroad could operate north of 50 trains a day. In some instances certain operating practices such as "fleeting" trains unidirectionally could result in eighty or ninety trains a day. Bruce emphasized that these are theoretical numbers and that they assume perfect operating conditions and practices, which are rarely achieved.

The railroad is currently significantly underutilized. Passenger capacity is currently only limited by how many passenger cars are in the fleet.

Freight capacity is probably at 30% utilization. There is an inherent conflict between freight and passenger trains, however, considering that passenger trains generally operate during the





day and freight trains can operate at night, these conflicts can be minimized in the current operating model.

- 4) Are there currently any capacity issues? (A need for additional sidings or yard expansions?)

The Fairbanks and Anchorage yards are older yards (designed and rebuilt in the 50's). Improvements have been designed but at the present, there is no need to implement until we are sure the congestion is going to increase.

ARRC has plans to implement, when necessary, passing sidings of 8,000 feet, about every twenty miles or thereabouts. The train traffic has yet to materialize that would dictate this construction. Generally, train departures at the Anchorage, Fairbanks, Seward and Whittier terminals are adjusted to reduce delays of trains sitting in sidings.

- 5) Do you expect that there will be any capacity issues in the future? If so, what are some of the proposed remedies?

Because the railroad is currently under-utilized, additional business, especially freight, can be handled on current trains.

If need be, capacity increases can be handled in a number of different ways and can be phased as necessary. Fleet and infrastructure improvements such as additional railcars, additional locomotives, power switches, adding additional cars to existing trains, adding additional trains, more sidings, and increasing yard capacity are some of the more obvious ways to improve capacity. Changing schedules increasing train speeds, running trains closer together, and fleeting trains are operational practices which also can be implemented.

**Action Item:**

None.



AEA Team Member		Other Party	
Name:	<i>Sara Mason</i>	Name:	<i>Rich Wilson</i>
Organization:	<i>DOWL HKM</i>	Organization:	<i>Port of Anchorage</i>
Study Area:	<i>Transportation</i>	Phone Number:	<i>(907) 343-6201</i>
Date:	<i>August 23, 2013</i>	Time:	<i>9:00 a.m.</i>
Meeting held by: <input checked="" type="checkbox"/> AEA Team <input type="checkbox"/> Other Party			

**Others at meeting:** None.

**Subject:** Port of Anchorage Operations, M&O, Capacity, Capacity Issues, and Safety

**Discussion:**

Operations Data

- 1) What type of freight does POA move?

Rich stated that POA moves several types of freight, to include (but not limited to): vans/flats/containers, cement, iron/steel, vehicles, and petroleum. Some large break-bulk comes through, as well as the occasional cruise ships. POA has been designated a Nationally Strategic Seaport by the Department of Defense, so military operations also occur here.

- 2) Are you expecting that any new commodities will be coming through the port in the future?

Rich said that POA just recently started working on an updated business plan. Upon its completion, the port should have a better idea about the potential for new commodities.

- 3) Do you have any annual projections for future annual tonnage, by commodity?

Rich again mentioned the business plan.

M&O Costs

- 1) What are your current M&O costs, not including dredging (USACE)? Where does this funding come from?

Rich said that all M&O costs can be found on POA's website at [www.portofalaska.com](http://www.portofalaska.com) and with OMB. Generally, M&O costs are covered through revenue generated by the port. Dredging of the small boat harbor occurs once a year and costs for this have been fairly reasonable and consistent.

- 2) How do you expect M&O costs to increase over time?

Rich said that, generally, the trend has been 2-3% per year, but that this number will need to be tweaked based on specific issues that arise.

- 3) What are the costs for dredging? And how often does dredging occur?



Rich said that DOWL HKM should seek this information directly from USACE, but did say that dredging shouldn't need to occur more frequently in the future.

#### Capacity

- 1) How many ships move through the port weekly/monthly?

Rich explained that currently, 4-5 ships per week docked at POA; four container ships and sometimes one other ship. Fuel ships (17 last year) come in occasionally and stay docked for 24-48 hours. Occasionally, ships will dock and remain for ten days or more. Barge traffic is present during the non-ice months.

- 2) Can you tell me about the port expansion project?

Rich mentioned that there was a lot of data on the POA's website.

- 3) Do you have any other projects planned to expand/enhance facilities?

See website.

- 4) Once these projects are completed, how many ships per week/month will be able to move through the port?

See above.

- 5) When will your updated master plan be complete?

Rich said he was not sure.

#### Capacity Issues

- 1) Are there current capacity issues at the port?

Rich stated that POA and DOT should work together to address truck traffic issues leaving the port. There are several choke points and areas of high congestion with train crossings and narrow driving lanes.

- 2) Do you expect capacity issues in 5, 10, 20 or 30 years?

Rich reiterated that most of the capacity issues are related to road and rail. He mentioned that the municipality is currently preparing to move forward with a freight mobility study, so hopefully that might be a step toward alleviating the congestion issues that exist around the port.

#### Easements

- 1) Are there any undeveloped easements on or adjacent to POA land?

Rich said that KABATA had a floating easement at one point, but that it has since been



defined and made stationary. The easement travels along the base of the cliff line and will occupy a sizeable swath of leasable property for non-port use.

Safety

- 1) Have any accidents occurred in recent years at POA?

Rich directed DOWL HKM to OMB and MOA's website. He said that POA has a dedicated safety officer and that the port takes safety very seriously.

**Action Item:**

None.



AEA Team Member		Other Party	
Name:	<i>Sara Mason</i>	Name:	<i>Jim Hunt</i>
Organization:	<i>DOWL HKM</i>	Organization:	<i>City of Seward</i>
Study Area:	<i>Transportation</i>	Phone Number:	<i>(907)</i>
Date:	<i>September 2, 2013</i>	Time:	<i>8:00 a.m.</i>
Meeting held by: <input checked="" type="checkbox"/> AEA Team <input type="checkbox"/> Other Party			

**Others at meeting:** None.

**Subject:** Port of Seward Operations, M&O, Capacity, Capacity Issues, and Safety

**Discussion:**

Operations

- 1) Does Seward primarily serve to import goods or export goods?

Jim indicated that Seward serves both. Equipment, materials, and other goods bound for the North Slope and many rural communities enter the state in Seward. But, Seward also exports all of the coal extracted from the Usibelli Cola Mine in Healy.

- 2) Are any new commodities expected to move through Seward in the future?

Jim said that ore shipments were anticipated in the future and that because Seward remains ice-free year around, there are opportunities for other goods to also move through Seward, as Seward is the back-up port for POA when winter ice prevents passage in Cook Inlet.

- 3) Do you expect overall operations to increase, decrease, or remain consistent between now and 2030?

Jim stated that Seward was expecting steady and continued import and export growth over the next several decades. He directed DOWL HKM to ARRC's Seward Master Plan. In addition to planned growth at ARRC's facilities, he also mentioned a state-funded project to redevelop the Seward Marine Industrial Center (SMIC) to serve fisheries, Homeland Security, offshore gas and oil exploration, barge traffic, and associated uplands development.

Capacity

- 1) How are the facilities in Seward currently being operated in terms of capacity?

Jim shared that Seward is running at maximum freight dock capacity and often there are vessels that circle Resurrection Bay waiting for dock space to open up. He said that ARRC has applied for a TIGER grant to begin facility upgrades as identified in their Seward Master Plan. The rail terminal also serves cruise ships; over 50 each summer. So, coal ships and cruise ships can often be found in close proximity of one another.



Capacity Issues

- 1) Do you currently have any issues with capacity or freight movement (including truck routes to the facility)?

Jim again referred to ARRC's Seward Master Plan, indicating that ARRC would like to perform road construction near the port that would redirect much of the commercial traffic away from areas where pedestrians/tourists typically travel.

- 2) Do you anticipate any capacity issues arising within the next 20 years?

Jim said that the city's electric and water/sewer infrastructure can handle the development proposed by ARRC and that a lack of expansion will stifle the growing economy.

Safety

- 1) Have there been any accidents at the port facility in the recent past?

Jim said that last year a man fell to his death at the small boat harbor while loading wet seine nets, but that no such incidents had occurred at ARRC's facilities at the port.

- 2) Are there any safety concerns at the port (environmental, hazards to employees/users)?

Jim indicated that there were none at this time. Natural disasters are always on their minds and Seward is one of the most prepared communities in Alaska. Seward is safety-conscious and coal dust is highly regulated and controlled. Seward's harbor is only the second in the state to become certified as an "Alaskan Clean Harbor."

**Action Item:**

None.



AEA Team Member		Other Party	
Name:	<i>Sara Mason</i>	Name:	<i>Bruce Carr</i>
Organization:	<i>DOWL HKM</i>	Organization:	<i>Alaska Railroad Corporation</i>
Study Area:	<i>Transportation</i>	Phone Number:	<i>(907) 265-2468</i>
Date:	<i>September 26, 2013</i>	Time:	<i>11:45 a.m.</i>
Meeting held by: <input checked="" type="checkbox"/> AEA Team <input type="checkbox"/> Other Party			

**Others at meeting:** None.

**Subject:** Port of Whittier Operations, M&O, Capacity, Capacity Issues, and Safety

**Discussion:**

Operations

- 1) Does Whittier primarily serve to import goods, or export goods?
  - a. Whittier is mainly an import port for railcars, container traffic, and break-bulk of goods from Seattle and Prince Rupert, Canada.
  - b. Whittier does export small amounts of scrap steel, hazardous waste, etc.
- 2) What kind of vessels does the port service?
  - a. At this point in time, barge traffic.
- 3) How many vessel calls per year?
  - a. 90.
- 4) What types of commodities are typically found on freight barges bound for Whittier? Leaving Whittier?
  - a. Imported goods are oil field supplies, machinery, bulk goods such as insulation, lumber, pipe, chemical products such as LPG, drilling mud, other chemicals for use on the North Slope.
- 5) Are any new commodities expected to be moved through Whittier in the future?
  - a. There is always that possibility but ARRC is not aware of any new commodities, with the possible exception of LNG.
- 6) Do you expect overall operations to increase, decrease, or remain consistent between now and 2030?
  - a. ARRC anticipates a 1% increase per year in traffic without a natural gas pipeline, a surge if a pipeline is built of 4 – 10%, then a return to a 1% increase per year.



7) Is Whittier an ice-free port?

- a. Whittier and Seward are ice-free ports.

Capacity

1) How many acres is the port site (i.e. uplands, tidelands)?

- a. Approximately 291 acres.
- b. ARRC is acquiring a bit more land for upland development in anticipation of improving break-bulk service support.

2) What infrastructures exists there (i.e. barge dock, ferry dock, loading facilities)?

- a. ARRC owns a barge dock and has joint ownership with the City of Whittier to another dock aka Army Dock.
- b. The AMHS has their own facility on ARRC leased property.
- c. There is a private cruise ship dock also on ARRC property.

3) What is the draft depth at MLLW?

- a. Army Dock: ~24 feet.
- b. Ferry : ~60 feet.
- c. Marginal Wharf (where dock used to be): ~24 feet.

4) How are the facilities in Whittier currently being operated, in terms of capacity?

- a. 50% capacity with current operating mode, could be substantially improved with better coordination and access to Whittier Tunnel (joint road/rail tunnel operated by ADOT&PF).

Capacity Issues

1) Do you currently have any issues with capacity or freight movement (including truck routes to the facility)?

- a. There is only one road in and out of Whittier and must operate through the joint road/rail tunnel. This is the limiting factor on free through movements of train traffic.
- b. An additional tunnel should be planned in the next twenty years to provide for a dedicated road tunnel and rail tunnel.
- c. The main road through Whittier should be grade-separated to alleviate traffic issues with increased train traffic and train lengths.

2) Do you anticipate any capacity issues arising within the next 20 years?

- a. ARRC believes the Whittier Tunnel will present capacity issues at some point in time.
- b. Increased train lengths will be required to move additional freight, which will cause issues with road traffic in Whittier.





3) Do you have any capital improvement projects planned for the port facility?

- a. The Marginal Wharf, a thousand foot dock face, will be re-built in the next twenty years.

Safety

1) Have there been any accidents at the port facility in the recent past?

- a. There have been occasional accidents due to weather, and other issues. However, there have been no major incidents for several years.

2) Are there any safety concerns at the port (environmental, hazards to employees/users)?

- a. Train operations, barge services, loading and unloading goods are all inherently unsafe. ARRC and its partners and customers strive to have zero incidents. This is not always possible.

**Action Item:**

None.



AEA Team Member		Other Party	
Name:	<i>Adison Smith</i>	Name:	<i>Rich Wilson</i>
Organization:	<i>DOWL HKM</i>	Organization:	<i>Port of Anchorage</i>
Study Area:	<i>Transportation</i>	Phone Number:	<i>(907) 343-6201</i>
Date:	<i>November 12, 2013</i>	Time:	<i>3:00pm</i>
Meeting held by: <input checked="" type="checkbox"/> AEA Team <input type="checkbox"/> Other Party			

**Others at meeting:** None.

**Subject:** Port of Anchorage, Future Conditions

**Discussion:**

Projected Annual Vessel Calls

4) How many annual vessel calls does the POA have?

Rich stated that the POA experiences an average of 450 annual vessel calls.

5) How many annual vessel calls are anticipated in 2015, 2020, 2025, and 2030?

Rich stated that the POA is working on updating the business plan which will include forecasted data such as future demand and supply of commodities. The business plan is scheduled to be released in November, 2013.

Based on Alaska's average population growth rate and the demand for goods, the POA anticipates a 2-3% increase in population resulting in 459, 506, 557 and 615 in annual vessel calls for 2015, 2020, 2025, and 2030.

Upcoming Projects

1) Can you discuss upcoming POA planned projects?

Rich referred me to the POA's Capital Plan and stated that although the plan still needs to be approved by the city, the projects listed are the POA's high priority needs, up-to 2019. The projects listed include the Port Expansion, Port Security, and Wharf Pile Enhancements. Funding for these projects still need to be approved by the mayor and assembly.

The POA does not know project details for the future Port Expansion project at this time. Rich referred me to the March 6-7 Mayor and Assembly Briefings Presentation which includes the concept design study for the expansion project, an overview of the three concept plans, cost and selection criteria for the concept plans, and attributes of the recommended option.

Rich explained that the POA currently has an RFP on the streets for Project Management Services for the Port Expansion project. Once a firm is selected the POA will know more about the Port Expansion project cost and schedule.

**Action Item:** None.



AEA Team Member		Other Party	
Name:	Adison Smith	Name:	Marc VanDongen
Organization:	DOWL HKM	Organization:	Port MacKenzie
Study Area:	Transportation	Phone Number:	(907) 764-7414
Date:	November 19, 2013	Time:	2:00pm
Meeting held by: <input checked="" type="checkbox"/> AEA Team <input type="checkbox"/> Other Party			

**Others at meeting:** None.

**Subject:** Port MacKenzie, Future Conditions

**Discussion:**

Projected Annual Vessel Calls

6) How many annual vessel calls does Port Mackenzie have?

Marc stated that Port MacKenzie experiences an average of 14 annual vessel calls.

7) How many annual vessel calls are anticipated in 2015, 2020, 2025, and 2030?

Marc stated that Port MacKenzie is working to complete a rail connection from the Port to the existing rail belt. Upon completion, there will be a new demand for shipping natural resources. The exported demand amount is anticipated to be approximately three million tons a year. As a result, a dock expansion including a deep draft dock and a barge landing will be required to meet the demand. The dock expansion will allow for an additional 33 vessel calls every five years (one ship per week), up-to 2025.

Marc stated that until the rail connection and the dock expansion projects are complete, the annual vessel calls will remain at 14.

Upcoming Projects

1) Can you discuss upcoming projects for Port MacKenzie?

Marc discussed the following upcoming projects:

- Rail Extension – The project includes 32 miles of rail with a one mile loop at the Port. The project is broken out into six segments; four out of the six segments are complete. The total cost for the project is estimated at approximately \$171.5 million. The Port has received \$171 million from the State of Alaska since 2008, and still needs \$101.5 million to complete the project. Port MacKenzie is planning to request the funding needed to complete the project from the State of Alaska over the next three years. Marc anticipates the project will be completed in 2017.
- Cathodic Protection – This project will help control the corrosion of the existing piles. Marc stated that funding for this project (\$2,250,000) is secured, and that the project will be completed in 2014.



- Pile Sleeve Protection – This project will help control the corrosion of the existing piles. Marc stated that design funding for this project (\$250,000) is secured, and that the Port will request construction funding from the State of Alaska in 2014.
- Point MacKenzie Road Paving – Marc stated that the Point MacKenzie road project is complete with the exception of paving the last two miles approaching Don Young Road. The funding for this portion of the project (\$1.5-2 million) is secured. The project will go out to bid during the spring of 2014, and completed summer of 2014. .
- Deep Draft Dock #2 Preliminary Engineering– Marc stated that Port MacKenzie is currently working on preliminary drawings for the dock expansion project. The Port is using their own funds to cover preliminary design costs. Additional funding for the design completion/construction will be requested from the State of Alaska once the rail project is completed in 2017.

2) What is Port MacKenzie's niche?

Marc stated that Port MacKenzies niche is exporting natural resources. Marc explained that Port MacKenzie is doing different things than the Port of Anchorage (POA). The POA is importing containers with freight, whereas Port MacKenzie is exporting natural resources.

3) Why use Port MacKenzie vs. Port of Anchorage or Seward?

Marc stated that companies want to use Port MacKenzie over other Ports because it includes:

1. 14 square miles of uplands available to lease for storage
2. 60-feet of water at low tide - annual dredging is not required – low maintenance costs
3. A deep draft dock with plans to expand
4. Commercially owned property; there are no residential properties surrounding the Port

**Action Item:**

Obtain a copy of the business plan.

## APPENDIX H: COMMERCIAL VEHICLE SIZE, WEIGHT & PERMIT REGULATIONS (17 AAC 25)



## **Chapter 25 Operations, Wheeled Vehicles**

### **Commercial Vehicle Size, Weight & Permit Regulations**

#### **Comprehensive**

Includes New Regulations Effective April 12, 2013

The Alaska Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement provides a reproduction of the regulations of 17 AAC 25 as a public courtesy. The Division cannot guarantee the absolute accuracy of this reproduction of 17 AAC 25. For the official published version of the regulations, please consult the Alaska Administrative Code (AAC, Register 190).

Department of Transportation and Public Facilities  
Division of Measurement Standards  
& Commercial Vehicle Enforcement  
Suite 2, Building M  
11900 Industry Way  
Anchorage, Alaska 99515  
Phone: 907-365-1210  
Fax: 907-365-1220

This publication was released by the State of Alaska, Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, produced at a cost of \$4.15 per copy, for the primary purpose of informing the public of the changes to the Commercial Vehicle Size, Weight and Permit Regulations.

## Chapter 25 Operations, Wheeled Vehicles

### Article

1. Commercial Motor Vehicles: Size and Weight. (17 AAC 25.010 - 17 AAC 25.110)
2. Commercial Motor Vehicles: Safety and Hazardous Materials. (17 AAC 25.200 - 17 AAC 25.250)
3. Oversize and Overweight Vehicles. (17 AAC 25.300 - 17 AAC 25.380)
4. Waivers. (17 AAC 25.800)
5. General Provisions. (17 AAC 25.900)

---

### Article 1 Motor Vehicles: Size and Weight

### Section

10. (Repealed).
11. Prohibited vehicles and loads.
12. Legal vehicle size.
13. Legal vehicle weight.
14. Allowable long combination vehicle length on certain routes.
15. Specialized equipment.
16. (Repealed).
17. Supplemental axles.
20. (Repealed).
30. (Repealed).
32. (Repealed).
35. (Repealed).
40. (Repealed).
50. (Repealed).
60. (Repealed).
62. (Repealed).
63. (Repealed).
65. (Repealed).
70. (Repealed).
80. (Repealed).
90. (Repealed).
100. Road closures and restrictions.



- 105. (Repealed).
- 106. (Repealed).
- 107. (Repealed).
- 108. (Repealed).
- 109. (Repealed).
- 110. (Repealed).
- 119. Definitions for 17 AAC 25.011 - 17 AAC 25.119.

## 17 AAC 25.010. Prohibited Vehicles and Loads

Repealed.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; am 3/22/81, Register 77; am 11/16/83, Register 88; am 9/1/84, Register 91; repealed 8/13/95, Register 135

## 17 AAC 25.011. Prohibited Vehicles and Loads

Except under a permit issued under this chapter, or a traffic control plan approved, as part of a construction contract, by the department within the limits of a highway construction project, a vehicle, including load, that exceeds the size or weight limitations set out in this chapter, 17 AAC 28, or 17 AAC 35 may not be driven or moved upon the state highway system. A vehicle that is owned by the state and operated by a department employee acting within the scope of departmental employment is not subject to the provisions of this chapter.

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160; am 12/31/2006, Register 180

Authority: AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

## 17 AAC 25.012. Legal Vehicle Size

- (a) The width of a vehicle, including load, may not exceed 102 inches. Equipment may extend no more than three inches beyond the 102-inch width limitation on each side of the vehicle if the equipment is attached to the vehicle. However, the following items are not subject to the maximum width requirements of this subsection:

- (1) rear view mirrors;
  - (2) turn signal lamps;
  - (3) handholds for entry into or egress from the cab;
  - (4) splash and spray suppressant devices;
  - (5) load-induced tire bulge;
  - (6) recreational vehicle awnings in the retracted position;
  - (7) manufacturer-installed appurtenances, including alternating-current (AC) power outlets and exhaust fans.
- (b) A vehicle, including load, may not exceed a height of 15 feet, except that a vehicle operating between the Fox Weigh Station and Prudhoe Bay on the Dalton and Elliott Highways may have a height, including load, of 17 feet.
- (c) The following maximum lengths may not be exceeded on National Highway System (NHS) routes listed in the department's publication entitled *State of Alaska, National Highway System Maps*, dated April 2006, and adopted by reference:
- (1) the length of a power vehicle may not exceed 45 feet;
  - (2) repealed 12/31/2006;
  - (3) the cargo-carrying length of a trailer may not exceed 53 feet;
  - (4) the overall length of a combination of vehicles, consisting of a truck and one cargo-carrying vehicle or a truck tractor and two cargo-carrying vehicles, may not exceed 75 feet; however, a combination of a truck tractor and one cargo-carrying vehicle is not subject to an overall length limit;
  - (5) long combination vehicles (LCVs) may not exceed the maximum lengths set out in 17 AAC 25.014;
  - (6) a load or equipment may not overhang or extend more than:
    - (A) three feet beyond the front bumper of the vehicle; or
    - (B) four feet beyond the rear of the vehicle.

- (d) The following maximum lengths may not be exceeded on the state highway system, other than routes described in (c) of this section:
  - (1) the length of a power vehicle may not exceed 45 feet;
  - (2) the cargo-carrying length of a semitrailer or trailer may not exceed 53 feet;
  - (3) the overall length of a combination of vehicles, consisting of a truck and one cargo-carrying vehicle or a truck tractor and one or two cargo-carrying vehicles, may not exceed 75 feet;
  - (4) a load or equipment may not overhang or extend more than:
    - (A) three feet beyond the front bumper of the vehicle; or
    - (B) four feet beyond the rear of the vehicle.
- (e) Semitrailers in combination on all routes may not exceed 53 feet in length and combinations may not have more than two cargo-carrying vehicles in the combination.
- (f) Vehicles within the limitations set out in (c) of this section may move to and from routes specified in (c) of this section to access or return from terminals or facilities for fuel, servicing, delivering or receiving cargo, or food and rest for the vehicle operator. A vehicle must use the most direct interconnecting truck route wherever possible when moving to or from the specified routes. Vehicle movement off the state highway system is subject to local ordinance. A vehicle moving to or from specified routes may not travel further than a five-mile distance from these routes, except if using roads identified in 17 AAC 25.014(f)(1) - (7).

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160; am 11/16/2004, Register 172; am 12/31/2006, Register 180; am 4/09/2009, Register 190; am 12/30/2010, Register 196

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

**Editor's note:** A copy of the publication entitled *State of Alaska, National Highway System Maps*, adopted by reference in 17 AAC 25.012, is available for inspection at the offices of the Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, Huffman Business Park, Suite 2, Building M, 11900 Industry Way, Anchorage, AK 99515-3512. A copy may also be obtained at [http://www.dot.state.ak.us/stwdplng/mapping/dataproducts/NHS\\_MapSet2006final.pdf](http://www.dot.state.ak.us/stwdplng/mapping/dataproducts/NHS_MapSet2006final.pdf).

## 17 AAC 25.013. Legal Vehicle Weight

- (a) Except as provided in 17 AAC 25.335, the weight of a vehicle or combination of vehicles, including load and equipment, operated or moved on the state highway system may not exceed a limit set out in this section. If more than one weight limit applies, the most restrictive limitation will be used to determine the maximum allowable weight, as follows:
- (1) the weight on a tire may not exceed 600 pounds per linear inch of tire width based upon the tire manufacturer's rating of nominal tire width;
  - (2) repealed 04/12/2013
  - (3) repealed 04/12/2013
  - (4) except as provided in (5) of this subsection, for a vehicle or combination of vehicles, including load and equipment, the weight on axles or axle groups may not exceed, and the distance between axles may not be less than, the following:

	<b>Weight (Pounds)</b>	<b>Distance</b>
Single Axle	20,000	8'1" Minimum spacing*
2-Axle Group	38,000	3'6" Minimum spacing
3-Axle Group	42,000	3'6" Minimum spacing
4-Axle Group	50,000	3'6" Minimum spacing

\* Any axle spaced less than 8 feet and 1 inch from any other axle, measured between the centers of the nearest axles, is considered as part of an axle group. In multi-axle groups, all axles must carry at least 6,000 pounds if the axle group weight is more than 50 percent of the legal group weight. Lift axles or variable suspension axles are allowed in the drive axle group of the power vehicle, but may not be used for calculation of legal allowable vehicle gross weight.

- (5) if the combination is a truck-tractor and single semitrailer combination where the length of the semitrailer is 48 feet or more, the weight on a three-axle group on the semitrailer may not exceed, and the distance between the axles may not be less than the following:

<b>Weight (pounds)</b>	<b>Distance</b>
------------------------	-----------------

42,000	3'6" minimum spacing
43,500	5' minimum spacing
45,000	6' minimum spacing

(6) the maximum gross vehicle weight for a vehicle or vehicle combination may not exceed that weight determined from the following formulas:

(A) maximum gross vehicle weight for a vehicle with lift axles in the drive axle group may not be greater than the weight determined under the following formula:

$$W = 500 \left[ \frac{LN}{N - 1} + 12N + 36 \right]$$

Where:

W = the maximum gross vehicle weight to the nearest 500 pounds;

L = the distance in whole feet, measured between the centers of the extreme axles for the vehicle or the vehicle combination; a measurement including a fractional portion of a foot is stated as the next higher whole number; and

N = the number of axles on the vehicle or vehicle combination and does not include lift axles in the drive axle group of a power vehicle;

(B) the maximum gross vehicle weight for a vehicle with no lift axles in the drive axle groups may not be greater than the weight determined under the following formula:

$$W = 500 \left[ \frac{LN}{N - 1} + 12N + 36 \right] + 3,000$$

Where:

W = the maximum gross vehicle weight to the nearest 500 pounds;

L = the distance in whole feet, measured between the centers of extreme axles for the vehicle or vehicle combination; a measurement including a fractional portion of a foot is stated as the next higher whole number; and

N = the number of axles on the vehicle or vehicle combination.

- (b) In a combination of a power vehicle and two or more cargo-carrying vehicles consisting of trailers or semitrailers, the heavier cargo-carrying vehicle must be placed immediately behind the power vehicle when one cargo-carrying vehicle is more than 5,000 pounds heavier than any other cargo-carrying vehicle in the combination. The weight of the power vehicle and the first cargo-carrying vehicle in a combination with two or more cargo-carrying vehicles may not exceed the weight allowable in this section for a power vehicle and single cargo-carrying vehicle with the same axle configuration and of equal length, calculated without regard to the weight of the following cargo-carrying vehicles in the combination.
- (c) The weight carried by individual axle groups before or after pintle hooks or other connecting devices in vehicle combinations may not exceed the standards for axle group weights set out in this section.
- (d) Between October 1 and March 31, shifting of legal axle weights set out in (a)(2) of this section is allowed for one, two, and three drive axle groupings on power vehicles traveling on the Steese, Elliott, Dalton, and Richardson Highways between North Pole and Prudhoe Bay, or between North Pole and MP 30 of the Steese Highway. The shifted weight on these drive axle groupings may not exceed 2,000 pounds per axle. The legal allowable gross weight on a vehicle or combination of vehicles may not exceed the maximum weight as determined by methods set out in this section. An overweight permit is not required for shifting additional weight to the drive axle group during the period defined. Traction weight shifting is not allowed for a power vehicle traveling under an overweight permit. Vehicle combinations operating with traction-weight shifting on the power vehicle will be allowed reasonable right of access to and from the Steese, Elliott, and Dalton Highways, when traveling between Fairbanks and Prudhoe Bay, to reach or return from terminals and facilities for food, fuel, and rest, if the vehicle uses the most direct truck route whenever possible and moves no farther than five miles from the most direct route between North Pole and Fox. All movement within organized municipalities and boroughs is subject to local ordinances in addition to the requirements of this chapter.
- (e) Except when an emergency requires immediate action, if the department determines that a highway may be damaged by a vehicle's weight, weight restrictions may be imposed after appropriate notice has been given to the public. When weight restrictions are imposed, they will be stated as a percentage of the legal allowable axle weights and applied to the maximum axle loading specified in this section. The weight on steering axles may not be restricted below 100 percent of the legal allowable axle weight. Unless approved by the department, a permit issued under 17 AAC 25.320 allowing overweight vehicles does not satisfy the requirements of this chapter in order to travel on weight-restricted highways during the period when weight restrictions are imposed.

- (f) For purposes of this section, "pounds per inch of tire width" is determined by dividing the sum of the tire width in inches for tires mounted on an axle group into the weight carried on that axle group in pounds.
- (g) A vehicle subject to the provisions of this section that uses an auxiliary power unit or an idle reduction technology unit in order to promote reduction of fuel use and emissions because of engine idling, may be allowed up to an additional 400 pounds total in power unit axle weights, gross vehicle weights, or bridge formula weight limits. Certification of the weight of the auxiliary power unit must be available to law enforcement officers if the vehicle is found in violation of applicable weight laws. The additional weight allowed may not exceed 400 pounds or the weight certified, whichever is less. To be eligible for this exception, the operator of the vehicle must be able to prove by
  - (1) written certification, the weight of the auxiliary power unit or idle reduction technology unit; and
  - (2) demonstration or certification, that the auxiliary power unit or idle reduction technology unit is fully functional at all times.

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160; am 12/31/2006, Register 180; am 4/9/2009, Register 190; am 12/30/2010, Register 196; am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

## 17 AAC 25.014. Allowable Long Combination Vehicle Length on Certain Routes

- (a) A long combination vehicle (LCV) with a cargo-carrying length that does not exceed 95 feet, measured from the front of the first cargo-carrying vehicle to the rear of the last cargo-carrying vehicle or load, including the connecting device, may operate upon the routes listed below, if individual trailers or semi-trailers in an LCV do not exceed 48 feet in cargo-carrying length, and if overall length does not exceed 120 feet:
  - (1) the Sterling, Seward and Glenn Highways, Alaska Route 1 (AK-1), from Homer to the junction with the Palmer-Wasilla Highway in Palmer;
  - (2) the Tok Cutoff, AK-1, from the junction with the Richardson Highway, Alaska Route 4 (AK-4), in Gakona Junction to the junction with the Alaska Highway, Alaska Route 2 (AK-2), in Tok;

- (3) the Alaska Highway, AK-2, from the Canadian border to the junction with the Richardson Highway, AK-4, in Delta Junction;
  - (4) the Seward, Glenn, and Parks Highways, AK-1 and Alaska Route 3 (AK-3), from the Potter Weigh Station in Anchorage to the junction with the Parks Highway, AK-3, to the junction with the Richardson Highway, AK-2, in Fairbanks via the Mitchell Expressway; for purposes of this paragraph, the lead trailer in a truck tractor, two-trailer LCV may have a cargo carrying length of 53 feet, if the total cargo carrying length, including the connecting device, does not exceed 95 feet and if overall length does not exceed 120 feet;
  - (5) the Richardson Highway, AK-4 and AK-2, from the Alaska Marine Highway System ferry terminal in Valdez to the junction with the Mitchell Expressway, AK-3, in Fairbanks;
  - (6) the Seward Highway, Alaska Route 9 (AK-9), from the junction with the Sterling Highway, AK-1, to Seward.
  - (7) the Kenai Spur Highway, from the junction with the Sterling Highway, AK-1, to Nikishka Dock.
- (b) A long combination vehicle, consisting of a truck and one cargo-carrying vehicle whose overall length does not exceed 90 feet may operate upon the:
- (1) Seward and Glenn Highways, AK-1, from the Potter Weigh Station in Anchorage to the junction with the Palmer-Wasilla Highway in Palmer;
  - (2) Parks Highway, AK-3, from the junction with the Glenn Highway, AK-1, to the junction with the Richardson Highway, AK-2, in Fairbanks via the Mitchell Expressway; and
  - (3) Richardson and Alaska Highways, AK-2, from the junction with Gaffney Road in Fairbanks to Milepost 1412 of the Alaska Highway, near Delta Junction.
- (c) A long combination vehicle, consisting of a truck and one cargo-carrying vehicle, a truck-tractor and one cargo-carrying vehicle, or a truck-tractor and two cargo-carrying vehicles, whose overall length does not exceed 95 feet may operate upon the:
- (1) Haines Highway, Alaska Route 7 (AK-7), from the Alaska Marine Highway System ferry terminal in Haines to the Canadian border;



- (2) Glenn Highway, AK-1, from the junction with the Palmer-Wasilla Highway in Palmer to the junction with the Richardson Highway, AK-4, in Glennallen;
  - (3) North Slope Haul Road between Fairbanks and Prudhoe Bay, consisting of the:
    - (A) Richardson Highway, Steese Expressway, and Elliot Highway, AK-2, from the junction with the Mitchell Expressway, AK-3, in Fairbanks to the junction with the Dalton Highway, Alaska Route 11 (AK-11); and
    - (B) Dalton Highway, AK-11, from the junction with the Elliot Highway, AK-2, to Prudhoe Bay; and
  - 4) Klondike Highway, Alaska Route 98 (AK-98), from the Alaska Marine Highway System ferry terminal in Skagway to the Canadian border.
- (d) A long combination vehicle configured in a truck-tractor and a triple cargo-carrying vehicle combination may operate only on the Glenn and Parks Highways, AK-1 and AK-3, between Anchorage and Fairbanks during the period from May 1 through September 30 of each year by permit issued under this chapter, with notice provided by the applicant to municipalities along the route, if:
- (1) each combination, including load, does not exceed 120 feet in overall length;
  - (2) each individual vehicle in the combination does not exceed 28.5 feet in length;
  - (3) the power vehicle engine power rating is not less than 400 horsepower; and
  - (4) except on the steering axle, each axle has four mounted tires or wide-base single tires.
- (e) During movements, a long combination vehicle must:
- (1) stop operations during inclement weather conditions; and
  - (2) display an "oversize" or "long load" sign at the rear of the vehicle combination.
- (f) A vehicle that meets the requirements of this section may move to or from routes specified in (a) - (d) of this section to access or return from terminals or facilities

for fuel, servicing, delivering or receiving cargo, or food and rest for the vehicle's operator. A vehicle must use the most direct interconnecting truck route wherever possible when moving to or from the specified routes. Vehicle movement off the state highway system is subject to local ordinance. A vehicle moving to or from specified routes may not travel further than a five-mile distance from these routes, except if using the following roads:

- (1) Johnson Road, from where it intersects the Richardson Highway, AK-2 near Salcha;
  - (2) Kalifornsky Beach Road;
  - (3) Bridge Access Road, connecting Kalifornsky Beach Road and the Kenai Spur Road;
  - (4) Dayville Road;
  - (5) the Steese Highway, Alaska Route 6 (AK-6), from the junction with the Elliot Highway, AK-2, in Fox to Milepost 30;
  - (6) the Palmer-Wasilla Highway extension, from the intersection with the Parks Highway, AK-3, to the intersection with Knik-Goose Bay Road;
  - (7) Knik-Goose Bay Road, from the intersection with the Palmer-Wasilla Highway extension to the intersection with Point MacKenzie Road;
  - (8) Point MacKenzie Road, from the intersection with Knik-Goose Bay Road to the intersection with South Don Young Road;
  - (9) South Don Young Road, from the intersection with Point MacKenzie Road to Port MacKenzie;
  - (10) a road other than one listed in (1) - (9) of this subsection, if the department determines that the:
    - (A) road will accommodate the necessary movement;
    - (B) necessity for the use will exist for more than 30 days; and
    - (C) frequency of the transits makes the issuance of overlength vehicle permits under this chapter impractical.
- (g) A vehicle authorized to operate under this section must operate with its headlights illuminated at all times.

- (h) Except as provided in this section, a long combination vehicle may not operate on any route on the state highway system without a permit issued by the department.

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160; am 11/16/2004, Register 172; am 12/31/2006, Register 180; am 4/9/2009, Register 190; am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

## 17 AAC 25.015. Specialized Equipment

- (a) A rotating drum transit mix concrete truck with a booster axle or a lift axle or both may operate on the state highway system for the movement of specialty manufactured products or other loads if the gross weight of the vehicle and the axle weights are not greater than the standards set out in 17 AAC 25.013. Weight adjustment controls for the booster axle and the lift axle must be located outside the driver's compartment and not within reach of the driver while the truck is in motion. The up-and-down position control that controls the booster axle and the lift axle must be a single control, and may be located in the cab of the vehicle. The lift axle must be in the down position and engaged to carry a minimum of 6,000 pounds to be counted as a tridem axle group.
- (b) A saddlemount combination with an overall length not exceeding 97 feet may operate on the state highway system and may include one full mount in the combination. The saddlemount combination must be in compliance with 23 C.F.R. 658.13, revised as of April 1, 2007 and adopted by reference.
- (c) An automobile carrier may operate on the state highway system under the requirements of 23 C.F.R. 658.13, revised as of April 1, 2009 and adopted by reference.
- (d) A boat transporter may operate on the state highway system under the requirements of 23 C.F.R. 658.13, revised as of April 1, 2009 and adopted by reference.
- (e) A dry bulk tank products hauler may be used for the movement of products on the state highway system. Weight shifting may occur, if the legal gross weight of the vehicle is not exceeded and the weight shifted does not exceed 2,000 pounds per axle.
- (f) A jeep may be used if authorized in a permit issued under 17 AAC 25.320.

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160; am 12/31/2006, Register 180; am 4/9/2009, Register 190; am 12/30/2010, Register 196

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

## 17 AAC 25.016. Authorized Experimental Uses

Repealed.

History: Eff. 8/13/95, Register 135; repealed 10/7/2001, Register 160

## 17 AAC 25.017. Supplemental Axles

- (a) Unless a vehicle is authorized to use supplemental axles under a permit issued under 17 AAC 25.320, supplemental axles may be used on vehicles operating on the state highway system only as provided in this section. Supplemental axles must have a manufacturer's rating equal to the weight being carried on the axle, but no less than 10,000 pounds on the axle.
- (b) Supplemental axles may only be used on trailers and rotating drum transit mix concrete trucks for legal gross vehicle weight calculations. The weight adjustment controls for supplemental axles must be located outside the driver's compartment and not within reach of the driver while the vehicle is in motion. A rotating drum transit mix concrete truck with a lift axle must comply with 17 AAC 25.015(a). The up-and-down position controls for liftable belly axles may be located in the driver's compartment on bulk tank delivery vehicles, but these controls may only be activated when entering or exiting delivery terminals, including service stations. Adjustable air ride suspension systems may be used, if the tires are not lifted off the roadway.
- (c) Repealed 10/7/2001.
- (d) Belly axles may be used on trailers and semitrailers operating on the state highway system. A belly axle on vehicles first placed into service in this state after June 30, 1990 must be self-steering. The department will use the vehicle registration required by AS 28.10 as evidence of the date that the vehicle or trailer was placed in service in this state.
- (e) Repealed 10/7/2001.

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

**Editor's note:** The definition of "supplemental axle", formerly set out in 17 AAC 25.017(e), has been relocated to 17 AAC 25.900.

## 17 AAC 25.020. Width of Vehicles

Repealed.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; am 3/22/81, Register 77; am 6/19/81, Register 78; am 9/1/84, Register 91; repealed 8/13/95, Register 135

## 17 AAC 25.030. Height and Length of Vehicles and Loads

Repealed.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; am 11/16/83, Register 88; am 9/1/84, Register 91; am 1/18/86, Register 97; am 9/19/86, Register 99; am 4/11/90, Register 114; am 7/13/91, Register 119; am 4/27/92, Register 122; am 8/23/92, Register 123; am 12/29/93, Register 128; repealed 8/13/95, Register 135

## 17 AAC 25.032. Weight Distribution Combination Vehicles

Repealed.

History: Eff. 7/11/90, Register 115; repealed 8/13/95, Register 135

## 17 AAC 25.035. Reasonable Access

Repealed.

History: Eff. 9/1/84, Register 91; am 4/11/90, Register 114; am 7/3/91, Register 119; repealed 8/13/95, Register 135

## 17 AAC 25.040. Confinement of Loads

Repealed.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; repealed 8/13/95, Register 135

## 17 AAC 25.050. Trailers and Towed Vehicles

Repealed.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; repealed 10/7/2001, Register 160

## 17 AAC 25.060. Allowable Gross Weights

Repealed.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; am 9/3/74, Register 51; am 11/19/84, Register 92; am 1/18/86, Register 97; am 9/10/86, Register 100; am 4/28/87, Register 102; am 11/29/87, Register 104; am 4/11/90, Register 114; am 7/11/90, Register 115; repealed 8/13/95, Register 135

## 17 AAC 25.062. Lift Axles

Repealed 11/29/87.

## 17 AAC 25.063. Supplemental Axles

Repealed.

History: Eff. 11/29/87, Register 104; am 12/4/89, Register 112; am 4/11/90, Register 114; am 7/11/90, Register 115; repealed 8/13/95, Register 135

## 17 AAC 25.065. Specialty Vehicles

Repealed.

History: Eff. 1/18/86, Register 97; am 11/29/87, Register 104; am 7/11/90, Register 115; am 7/3/91, Register 119; repealed 8/13/95, Register 135

## 17 AAC 25.070. Enforcement

Repealed 11/16/83.

## 17 AAC 25.080. Permits for Excess Size and Weight

Repealed 3/22/81.

## 17 AAC 25.090. Requirements for Permits

Repealed 11/16/83.

## 17 AAC 25.100. Road Closures and Restrictions

- (a) The Department of Transportation and Public Facilities may prohibit the operation of vehicles upon any highway or may impose restrictions on any aspect of vehicle operation on any highway whenever the highway, in the judgment of the commissioner, may be seriously damaged or destroyed by such operation or whenever it is deemed necessary by the commissioner in the interests of safety to the traveling public. The restrictions shall be effective after due notice has been given to the public except in an emergency requiring immediate action.
- (b) Except for steering axles, whenever weight restrictions imposed by the commissioner or the commissioner's representative are stated as a percentage of legal allowable weights, the percentage shall be applied to the maximum allowable axle loading of 17 AAC 25.013(a)(3) – (5).
- (c) Repealed 8/13/95.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; am 9/3/74, Register 51; am 8/13/95, Register 135; am 12/30/2010, Register 196

**Authority:** AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 19.10.100, AS 44.42.020, AS 44.42.030

**Editor's note:** As of Register 77, the reference to the Department of Highways has been corrected to refer to the Department of Transportation and Public Facilities.

## 17 AAC 25.105. Specially Designated Highways

Repealed.

History: Eff. 9/1/84, Register 91; am 4/11/90, Register 114; repealed 8/13/95, Register 135

## 17 AAC 25.106. Experimental Uses of the State Highway System

Repealed.

History: Eff. 7/11/90, Register 115; repealed 8/13/95, Register 135

## 17 AAC 25.107. Overlength Permits on Certain Routes

Repealed.

History: Eff. 1/18/86, Register 97; am 4/11/90, Register 114; repealed 8/13/95, Register 135

## 17 AAC 25.108. Operating Requirements for Three Cargo-Carrying Units

Repealed.

History: Eff. 4/27/92, Register 122; am 8/23/92, Register 123; repealed 8/13/95, Register 135



## 17 AAC 25.109. Operating Requirements and Specially Designated Routes for Articulated Buses

Repealed.

History: Eff. 7/3/91, Register 119; repealed 12/29/93, Register 128

## 17 AAC 25.110. Definitions

Repealed.

History: Eff. 6/25/69, Register 30; am 9/3/72, Register 43; am 6/19/81, Register 78; am 11/16/83, Register 88; am 9/1/84, Register 91; am 1/18/86, Register 97; am 11/29/87, Register 104; am 7/31/91, Register 119; am 4/27/92, Register 122; am 8/23/92, Register 123; repealed 8/13/95, Register 135

## 17 AAC 25.119. Definitions for 17 AAC 25.011 - 17 AAC 25.119

In 17 AAC 25.011 - 17 AAC 25.119, unless the context requires otherwise, "equipment" means air conditioning units, heating or cooling units, air compressors, winches, bumpers, flexible fender extensions, bolsters, log bunks, binder chains, clearance lights, rub rails, rock guards, mud flaps, pin pockets, door handles, steps, tire chain hangers, backup lights, forks or fork lifting devices, front mounted animal control devices, hydraulic lift gates, headache racks, or mechanical fastening devices.

History: Eff. 11/16/2004, Register 172

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

---

## Article 2 Commercial Motor Vehicles: Safety and Hazardous Materials

## Section

- 200. Transportation of hazardous materials, hazardous substances, or hazardous waste.
- 210. Safe operation of commercial motor vehicles.
- 220. Hours of service.
- 230. Commercial motor vehicle inspections.
- 240. Unsafe or defectively equipped commercial motor vehicles.
- 250. Definitions for 17 AAC 25.200 - 17 AAC 25.250.

### 17 AAC 25.200. Transportation of Hazardous Materials, Hazardous Substances, or Hazardous Waste

- (a) A person driving a commercial motor vehicle, or a company whose business involves the operation of a commercial motor vehicle, upon a highway or vehicular way or area, shall comply with the transportation of hazardous materials, hazardous substances, or hazardous waste regulations adopted by the United States Department of Transportation and contained in the following provisions, as revised as of October 1, 2011 and adopted by reference, except as otherwise provided in (b) of this section:
  - (1) 49 C.F.R. 105.5 (Definitions for 49 C.F.R. Parts 105 - 110);
  - (2) 49 C.F.R. Part 107 (Hazardous Materials Program Procedures);
  - (3) 49 C.F.R. Part 171 (General Information, Regulations, and Definitions);
  - (4) 49 C.F.R. Part 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements);
  - (5) 49 C.F.R. Part 173 (Shippers--General Requirements for Shipments and Packaging);
  - (6) 49 C.F.R. Part 177 (Carriage by Public Highway);
  - (7) 49 C.F.R. Part 178 (Specifications for Packagings);

- (8) 49 C.F.R. Part 180 (Continuing Qualification and Maintenance of Packagings).
- (b) The federal regulations in 49 C.F.R. that are adopted by reference in (a) of this section are revised as follows:
  - (1) repealed 04/12/2013
  - (2) repealed 04/12/2013
  - (3) repealed 12/31/2006;
  - (4) repealed 12/31/2006;
  - (5) repealed 04/12/2013
  - (6) 49 C.F.R. 171.15(a) is revised to specify that the required notice shall also be given to the division;
  - (7) 49 C.F.R. 171.16(b) is revised to specify that the required notice shall also be given to the division;
  - (8) repealed 04/12/2013
  - (9) repealed 04/12/2013
- (c) A person who intends to transport a hazardous material by motor vehicle containing explosives in Class 1, Divisions 1.1, 1.2, 1.3, as defined in 49 C.F.R. 173.50 and 173.53, on a highway or vehicular way or area shall notify the division of the intent to transport the material at least 24 hours in advance of transporting the material. Carriers operating under 49 C.F.R. 385.403 must notify the division of the exact date and the approximate time that the material will be transported, the exact route by which the material will be transported, the class and quantity of the material to be transported, and the telephone number of the person who is responsible for the transportation of the material. Hazardous materials listed in Table 1 of 49 C.F.R. 172.504 must be transported on the date and by the route identified in the notice required under this subsection. Notwithstanding 17 AAC 25.800, the division may waive the 24-hour notice requirement.
- (d) If the division concludes, after reviewing a notice of intent to transport under (c) of this section, that the planned transportation of a hazardous material listed in Table 1 of 49 C.F.R. 172.504 presents a danger to the public health, safety, or welfare, the division shall either deny permission to transport the material or require the material to be transported on an alternative date or by an alternative

route. A person may not transport a hazardous material listed in Table 1 of 49 C.F.R. 172.504, if the division denies permission to transport. If the division designates an alternative date or route under this subsection, hazardous materials listed in Table 1 of 49 C.F.R. 172.504 must be transported on the date and by the route designated by the division.

- (e) A motor carrier shall immediately contact the department if at any time the motor carrier suspects the motor carrier's shipment of a hazardous material listed in 49 C.F.R. 385.403 is lost, stolen, or otherwise unaccounted for.

History: Eff. 11/16/2004, Register 172; am 12/31/2006, Register 180; am 4/9/2009, Register 190; am 12/30/2010, Register 196; am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 19.10.310, AS 19.10.340, AS 19.10.370, AS 19.10.399

**Editor's note:** The address and telephone number for giving the notice required under 17 AAC 25.200(b)(6) - (7), (c), or (e) is State of Alaska, Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, 11900 Industry Way, Building M, Anchorage, AK 99515-3567; telephone: (907) 365-1210.

## 17 AAC 25.210. Safe Operation of Commercial Motor Vehicles

- (a) A person driving a commercial motor vehicle, or a company whose business involves the operation of a commercial motor vehicle, upon a highway or vehicular way or area, shall comply with the regulations relating to the management, maintenance, operation, or driving of commercial motor vehicles, adopted by the United States Department of Transportation and contained in the following provisions, as revised as of October 1, 2011 and adopted by reference, except as otherwise provided in (b) of this section:
  - (1) 49 C.F.R. Part 381 (Waivers, Exemptions, and Pilot Programs);
  - (2) 49 C.F.R. Part 385 (Safety Fitness Procedures);
  - (3) 49 C.F.R. Part 387 (Minimum Levels of Financial Responsibility for Motor Carriers);
  - (4) 49 C.F.R. Part 390 (Federal Motor Carrier Safety Regulations; General);
  - (5) 49 C.F.R. Part 391 (Qualifications of Drivers and Longer Combination Vehicle (LCV) Driver Instructors);
  - (6) 49 C.F.R. Part 392 (Driving of Commercial Motor Vehicles);

- (7) 49 C.F.R. Part 393 (Parts and Accessories Necessary for Safe Operation);
  - (8) 49 C.F.R. Part 396 (Inspection, Repair, and Maintenance);
  - (9) 49 C.F.R. Part 397 (Transportation of Hazardous Materials; Driving and Parking Rules);
  - (10) 49 C.F.R. Part 399 (Employee Safety and Health Standards).
- (b) The federal regulations in 49 C.F.R. that are adopted by reference in (a) of this section are revised as follows:
- (1) the lead-in language of 49 C.F.R. 387.9 is revised to read: "Intrastate carriers that operate only in this state and that engage in intrastate carriage only shall meet the minimum levels of financial responsibility set out in AS 19.10.300, except that an intrastate carrier described in item (2) from the following schedule of limits shall meet the minimum level of financial responsibility set out in that schedule:";
  - (2) repealed 04/12/2013
  - (3) repealed 04/12/2013
  - (4) repealed 04/12/2013
  - (5) repealed 04/12/2013
  - (6) repealed 04/12/2013
  - (7) repealed 04/12/2013
  - (8) 49 C.F.R. 393.3 is revised to read: "Nothing contained in 49 C.F.R. Parts 350 – 399 or another provision of law prohibits the use of additional equipment and accessories that are not inconsistent with or prohibited by 49 C.F.R. Parts 350 - 399 or another provision of law, unless the equipment and accessories decrease the safety of operation of the motor vehicle on which they are used.";
  - (9) 49 C.F.R. 393.60(e) is revised to read: "Antennas, transponders, and similar devices may be mounted more than 152 mm (6 inches) below the upper edge of the windshield. These devices must be located outside the area swept by the windshield wipers, and outside the driver's sight lines to the road and highway signs and signals.";
  - (10) in 49 C.F.R. 393.90, for buses engaged in intrastate commerce, "the Federal Motor Carrier Safety Administration's regulations" is revised to read "state regulations";

- (11) 49 C.F.R. 396.9(a) is revised to read: "An enforcement officer may enter upon and perform inspections of motor carriers' vehicles in operation.";
- (12) 49 C.F.R. 396.9(b) is revised to read: "The *Driver/Vehicle Inspection Report* form or another division-approved form shall be used to record the results of a motor vehicle inspection conducted by an enforcement officer.";
- (13) repealed 04/12/2013
- (14) repealed 04/12/2013
- (15) repealed 04/12/2013
- (c) An enforcement officer may request a person driving a commercial motor vehicle that is subject to 49 C.F.R. 387.9, adopted by reference in (a) of this section as revised in (b)(1) of this section, to provide proof of financial responsibility. If the person driving the commercial motor vehicle fails to provide proof of financial responsibility, the enforcement officer may order that movement of a vehicle be stopped under 17 AAC 25.350.
- (d) A motor carrier that conducts operations in intrastate commerce, and only in intrastate commerce, shall file a motor carrier identification report (Form MCS-150) with the FMCSA and receive an intrastate USDOT identification before the motor carrier begins operations. On each self-propelled commercial motor vehicle, as defined in 49 C.F.R. 390.5, adopted by reference in (a) of this section, the motor carrier shall display the identification number, along with the additional information required by 49 C.F.R. 390.21, adopted by reference in (a) of this section.
- (e) For a motor carrier that previously filed a motor carrier identification report required under (d) of this section, the motor carrier shall file an updated motor carrier identification report (Form MCS-150) with the FMCSA every 12 months.
- (f) Only the legal name or a single trade name of the motor carrier may be used on a motor carrier identification report required under (d) or (e) of this section.
- (g) A motor carrier required under (d) or (e) of this section to file a motor carrier identification report shall file that report with the FMCSA electronically, or with the division's commercial vehicle customer service center in person, by facsimile transmission, or by mail.
- (h) For purposes of (d) and (e) of this section, actual receipt occurs if the division's commercial vehicle customer service center receives a complete motor carrier identification report, on the required form (Form MCS-150-AK), during the

center's regular hours of operation. If the date on which the report is due falls on a Saturday, Sunday, or state holiday, the report may be filed the next working day.

- (i) An enforcement officer may issue a citation for a violation under AS 45.75.380(a)(12) to a motor carrier that fails to file a motor carrier identification report required under (d) or (e) of this section or furnishes misleading information or makes false statements on that report.
- (j) A person operating a commercial motor vehicle is exempt from the requirements of this section while engaged in intrastate commerce if the person
  - (1) holds a valid commercial fishing license issued under AS 16.05.480, sport fishing operator license issued under AS 16.40.260, sport fishing guide license issued under AS 16.40.270, or permit issued under AS 16.43.140;
  - (2) is operating the vehicle on any roadway in the state, other than a roadway within the Municipality of Anchorage or the City of Fairbanks;
  - (3) is operating the motor vehicle as part of the person's commercial fishing operations;
  - (4) is operating a motor vehicle for which the gross vehicle weight, gross vehicle weight rating, gross combined weight, or gross combined weight rating does not equal or exceed 26,001 pounds; and
  - (5) is not transporting hazardous materials for which a placard is required under 49 C.F.R. Part 172, adopted by reference in 17 AAC 25.200(a), or operating a vehicle designed or used to transport 16 or more individuals, including the driver.

History: Eff. 11/16/2004, Register 172; am 12/31/2006, Register 180; am 4/9/2009, Register 190; am 12/30/2010, Register 196; am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 19.10.310, AS 19.10.340, AS 19.10.370

**Editor's note:** The address for filing, in person or by mail, a motor carrier identification report required under 17 AAC 25.210(d) - (h) is State of Alaska, Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, Commercial Vehicle Customer Service Center, 11900 Industry Way, Building M, Anchorage, AK 99515. The facsimile number for filing a motor carrier identification report is (866) 345-2641, toll-free for filers within the state, 365-1221 for filers within the Anchorage area, or (907) 365-1221 for filers outside the state. The Internet site for electronic filing with the FMCSA is [www.fmcsa.dot.gov](http://www.fmcsa.dot.gov). The motor carrier identification report form (MCS-150) is available from the Commercial Vehicle Customer Service Center at that address, or can be requested by calling (800) 478-7636 toll-free for callers within the state, 365-1200 for callers within the Anchorage area, or (907) 365-1200 for callers outside the state. The form may also be down-loaded from

[www.fmcsa.dot.gov](http://www.fmcsa.dot.gov), and is also available on the Department of Transportation and Public Facilities website, at <http://www.dot.state.ak.us/mscve>.

## 17 AAC 25.220. Hours of Service

- (a) A person driving a commercial motor vehicle, or a company whose business involves the operation of a commercial motor vehicle, upon a highway or vehicular way or area, shall comply with the regulations relating to the management, operation, or driving of commercial motor vehicles, adopted by the United States Department of Transportation and contained in the following provisions of 49 C.F.R. Part 395 (hours of service of drivers), as revised as of October 1, 2011 and adopted by reference, except as provided in (b) of this section:
  - (1) 49 C.F.R. 395.1 (Scope of Rules in This Part);
  - (2) 49 C.F.R. 395.2 (Definitions);
  - (3) 49 C.F.R. 395.8 (Driver's Record of Duty Status);
  - (4) 49 C.F.R. 395.13 (Drivers Declared Out of Service);
  - (5) 49 C.F.R. 395.15 (Automatic On-board Recording Devices).
- (b) The federal regulations in 49 C.F.R. that are adopted by reference in (a) of this section are revised as follows:
  - (1) repealed 04/12/2013
  - (2) 49 C.F.R. 395.13(a) is revised to read: "An enforcement officer may declare a driver out of service and notify the motor carrier of the declaration, upon finding at the time and place of examination that the driver has violated the out of service criteria set out in 49 C.F.R. 395.13(b).";
  - (3) 49 C.F.R. 395.13(c)(2) is revised to read: "A motor carrier shall complete the carrier certification portion of *State of Alaska Commercial Vehicle Enforcement Driver/Vehicle Inspection Report* form and deliver the copy of the form either personally or by mail to the division within 15 working days following the date of examination. If the motor carrier mails the form, delivery is considered made on the day it is postmarked.";
  - (4) repealed 04/12/2013



- (c) A person operating a commercial motor vehicle is exempt from the requirements of this section while engaged in intrastate commerce if the person
- (1) holds a valid commercial fishing license issued under AS 16.05.480, sport fishing operator license issued under AS 16.40.260, sport fishing guide license issued under AS 16.40.270, or permit issued under AS 16.43.140;
  - (2) is operating the vehicle on any roadway in the state, other than a roadway within the Municipality of Anchorage or the City of Fairbanks;
  - (3) is operating the motor vehicle as part of the person's commercial fishing operations;
  - (4) is operating a motor vehicle for which the gross vehicle weight, gross vehicle weight rating, gross combined weight, or gross combined weight rating does not equal or exceed 26,001 pounds; and
  - (5) is not transporting hazardous materials for which a placard is required under 49 C.F.R. Part 172, adopted by reference in 17 AAC 25.200(a), or operating a vehicle designed or used to transport 16 or more individuals, including the driver.

History: Eff. 11/16/2004, Register 172; am 12/31/2006, Register 180; am 4/9/2009, Register 190; am 12/30/2010, Register 196, am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 19.10.370

**Editor's note:** The address for submitting the certification of compliance portion of the *State of Alaska Commercial Vehicle Enforcement Driver/Vehicle Inspection Report* form, as required under 17 AAC 25.220 is State of Alaska, Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, 11900 Industry Way, Building M, Anchorage, Alaska 99515-3567.

## 17 AAC 25.230. Commercial Motor Vehicle Inspections

- (a) An enforcement officer may:
- (1) require the operator of a commercial motor vehicle to stop the motor vehicle and submit to commercial vehicle safety inspections and tests;
  - (2) inspect and test all components of a commercial motor vehicle, including the interior of the cab, the inside of cargo compartments, and all exterior equipment;

- (3) remove and reapply cargo compartment sealing devices; and
  - (4) enter upon, inspect, and examine all land, buildings, and equipment of a motor carrier, and inspect and copy all accounts, books, records, memoranda, correspondence, and other documents of that carrier.
- (b) At the request of an enforcement officer, a motor carrier and other person subject to 17 AAC 25.200 - 17 AAC 25.250 shall submit all accounts, books, records, memoranda, correspondence, and other documents for inspection and copying, and shall make all lands, buildings, and equipment available for examination and inspection.
- (c) An enforcement officer shall accept an inspection conducted in another state to the same extent that that person would accept an inspection in this state if the:
  - (1) inspection conducted in the other state was performed in accordance with standards equivalent to those applied in this state; and
  - (2) operator of the commercial motor vehicle provides evidence satisfactory to the enforcement officer that the inspection was performed in accordance with (1) of this subsection.

History: Eff. 11/16/2004, Register 172

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 19.10.370

## 17 AAC 25.240. Unsafe or Defectively Equipped Commercial Motor Vehicles

- (a) An enforcement officer may issue a citation to the driver or owner of a commercial motor vehicle that is not in safe mechanical condition or properly equipped as required in AS 28 or in 17 AAC 25.200 - 17 AAC 25.250. A citation issued under this section must specify the section of AS 28 or 17 AAC 25.200 - 17 AAC 25.250 that has been violated and the repair or adjustment to be made, and must require the driver or owner to appear in court after a period of at least five days, holidays and weekends excluded, from the date of the violation.
- (b) The citation issued under (a) of this section requires the driver or owner of the commercial motor vehicle specified in the citation to repair the commercial motor vehicle so that it is in safe condition and its equipment is in proper repair and adjustment. Except as provided in (c) of this section, the citation also requires the

owner or driver to secure a certificate of inspection and approval before any further driving or movement on a highway or vehicular way or area.

- (c) A person may not drive or move a commercial motor vehicle after being directed under this section to have it repaired or adjusted, except as may be necessary to return the commercial motor vehicle to the residence or place of business of the owner or driver of the commercial motor vehicle or to a garage, until the commercial motor vehicle and its equipment have been repaired or adjusted as required by the citation. If repair or adjustment of a commercial motor vehicle or its equipment is found necessary upon inspection, the owner or driver of the commercial motor vehicle may obtain the repair or adjustment at a place of that person's choosing, within a 100-mile radius of the place where the citation issued under (a) of this section was issued, or otherwise at the nearest place of repair.
- (d) If a commercial motor vehicle is, in the reasonable judgment of the person issuing the citation, in a condition that further driving or movement would be hazardous, the person issuing the citation may require that the commercial motor vehicle not be driven or moved under its own power, or that it be driven to the nearest garage or other place of safety. This section does not preclude the impounding of a commercial motor vehicle under AS 19.10.375 or AS 28.05.091.

History: Eff. 11/16/2004, Register 172

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 19.10.310, AS 19.10.340, AS 19.10.370, AS 19.10.399, AS 45.75.131

## 17 AAC 25.250. Definitions for 17 AAC 25.200 - 17 AAC 25.250

In 17 AAC 25.200 - 17 AAC 25.250, unless the context requires otherwise,

- (1) "commercial motor vehicle" has the meaning given in AS 19.10.399;
- (2) "vehicular way or area" has the meaning given in AS 19.10.399;
- (3) "working day" means a day other than Saturday, Sunday, or a state holiday.

History: Eff. 11/16/2004, Register 172

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 19.10.310, AS 19.10.340, AS 19.10.370, AS 19.10.399

---

## Article 3 Oversize and Overweight Vehicles

### Section

- 310. Weigh stations and traffic stops.
- 320. Permits for oversize or overweight vehicles.
- 330. Applications for permits.
- 335. Weighing allowance.
- 340. Enforcement.
- 350. Stop orders.
- 360. Offloading of vehicles.
- 370. Revocation of permits.
- 375. Appeals.
- 380. Oversize and overweight vehicle permit fees.

### 17 AAC 25.310. Weigh Stations and Traffic Stops

- (a) A commercial motor vehicle must stop for weighing and vehicle inspection where an official highway sign indicates that a weigh station is in operation or at the direction of an enforcement officer.
- (b) In this section,
  - (1) "commercial motor vehicle" means a motor vehicle of more than 10,000 pounds gross vehicle weight rating (GVWR) or gross combination weight rating (GCWR) used in commerce;
  - (2) "gross combination weight rating" has the meaning given that term in AS 19.10.399;
  - (3) "gross vehicle weight rating" has the meaning given that term in AS 19.10.399.

History: Eff. 10/7/2001, Register 160; am 11/16/2004, Register 172

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

## 17 AAC 25.320. Permits for Oversize or Overweight Vehicles

- (a) The department will issue a permit authorizing the movement of a vehicle or load of a size or weight exceeding the limitations specified in this chapter if the department determines that:
  - (1) the overweight vehicle or load is a non-divisible vehicle or load; or
  - (2) each of the following requirements is met:
    - (A) the state's best interests are served by the permit;
    - (B) the usefulness of the highways traveled is not diminished;
    - (C) the safety of other users is not compromised;
    - (D) the traveling public will not be unreasonably inconvenienced.
- (b) As it considers necessary to assure that the requirements listed in (a)(2)(A) - (D) of this section are met, the department will, as conditions for a permit issued under (a)(1) or (2) of this section, establish time limitations for movement, designate routes, limit the number of trips, or otherwise restrict the movement of oversize or overweight vehicles and loads. The movement of permitted oversize or overweight vehicles or loads must comply with the requirements for towing vehicles, pilot cars, warning signs and lights, hours of darkness, and other safety considerations specified in the department's *Administrative Permit Manual: Oversize and Overweight Permits*, revised as of March 2012, and adopted by reference.
- (c) Subject to its determination that the requirements listed in (a)(2)(A) - (D) of this section are met, the department will, in a permit issued under (a)(1) or (a)(2) of this section, authorize movement of an oversize or overweight vehicle or load over an extended period of up to one year. However, in a permit issued under (a)(1) or (a)(2) of this section, the department will not authorize movement over an extended period for any of the following vehicles:
  - (1) vehicles or loads over 10 feet 6 inches wide under 17 AAC 25.012(a);
  - (2) vehicles or loads over 15 feet high, other than vehicles or loads exempt under 17 AAC 25.012(b)(3);
  - (3) vehicles or loads over 17 feet high operating between the Fox Weigh Station and Prudhoe Bay on the Dalton and Elliott Highways;

- (4) vehicles or loads that exceed legal length under this chapter;
  - (5) vehicles or loads with a rear overhang that exceeds 10 feet;
  - (6) vehicles or loads that exceed 125 percent of legal weight under this chapter.
- (d) Issuance of a permit does not relieve the vehicle operating under the permit from the requirement of 17 AAC 25.310.
  - (e) If a vehicle operating under a permit breaks down to a degree that roadside repairs are impractical or impossible, a similar vehicle may be substituted for the vehicle described in the permit if the substitute vehicle is validly registered under AS 28.10 and if the substitution does not materially alter the conditions listed on the original application for the permit. The driver, owner, or lessee shall report a substitution at the nearest weigh station along the route of travel or to the division's commercial vehicle customer service center.
  - (f) The department may deny a permit to a person who has incurred three or more violations under AS 45.75.380(a)(10) or (11) during the 90-day period immediately preceding the date the person submits the permit application.

History: Eff. 10/7/2001, Register 160; am 11/16/2004, Register 172; am 12/31/2006, Register 180; am 12/30/2010, Register 196, am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

**Editor's note:** Copies of the Department of Transportation and Public Facilities' *Administrative Permit Manual: Oversize and Overweight Permits*, adopted by reference in 17 AAC 25.320, are available for inspection at the offices of the Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, 11900 Industry Way, Building M, Anchorage, Alaska 99515.

The Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, Commercial Vehicle Customer Service Center is located at 11900 Industry Way, Building M, Anchorage, Alaska, telephone: (800) 478-7636 toll-free for callers within the state and outside the Anchorage area; 365-1200 for callers within the Anchorage area; (907) 365-1200 for callers outside the state.

## 17 AAC 25.330. Applications for Permits

- (a) An application for a permit must specifically describe the vehicle and the load to be moved, the origin, destination, proposed route, date and times of movement,

and other items pertinent to the operation of the vehicle under the permit and requested on the application form provided by the division. The application must describe the characteristics of the vehicle or load that create the necessity for the permit and, if the applicant believes that the vehicle or load is a non-divisible vehicle or load, an explanation of the reasons for this belief.

- (b) An application for a permit is a certification by the applicant that the information on the application is correct, that the applicant is a duly authorized representative of the owner or lessee of the vehicle, and that the vehicle driver, owner, and lessee will comply with the conditions and restrictions indicated in the permit.
- (c) As a condition for issuance of a permit, the driver, owner, and lessee of the vehicle for which the permit was issued shall agree to indemnify and hold the state and its officers, agents, and employees harmless from suit, damages, and other claims arising as a result of the movement of the vehicle or load under the permit. If the department determines it to be in the state's best interest, the department will require the posting of a surety bond or other suitable instrument, conditioned upon the satisfaction of liability for injury to persons or damage to property arising as a result of the movement of the vehicle or load under the permit.

History: Eff. 10/7/2001, Register 160

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

**Editor's note:** As of Register 162 (July 2002), the regulations attorney made a technical revision under AS 44.62.125 (b)(6), to 17 AAC 25.330(c).

## 17 AAC 25.335. Weighing Allowance

- (a) The department will weigh vehicles in their as-found condition and will grant weight allowances, as described in this section, to the weight limits set out in 17 AAC 25.013. If the as-found condition exceeds the allowances described in this section, the allowance weights will be included in the fine calculations and not subtracted from the violation. An additional allowance of up to 400 pounds will be added to a power unit's axle weights or the allowable gross vehicle weights for trucks or truck tractors equipped with an auxiliary power unit or idle reduction unit if the requirements of 17 AAC 25.013(g) are met.
- (b) The department will observe the following procedures if enforcing the gross weight requirements in 17 AAC 25.013:

- (1) if the gross weight of the vehicle and load is over the amount allowed in 17 AAC 25.013 and (3) of this subsection by no more than 1,000 pounds, a written violation will be noted on the inspection form, and the vehicle will be allowed to proceed;
  - (2) if the gross weight is over the amount allowed in 17 AAC 25.013 and (3) of this subsection by more than 1,000 pounds, the driver of the vehicle will be issued a citation for the violation and be directed to a location to unload the excess weight from the vehicle;
  - (3) from October 1 through April 30 of each year, in addition to the amount allowed in 17 AAC 25.013, an additional 1,500 pound allowance will be granted for snow and ice build-up, if evidence of that build-up exists; this allowance is the maximum allowance regardless of the make-up of the vehicle combination.
- (c) The following procedures will be observed while enforcing the axle group weight requirements set out in 17 AAC 25.013:
- (1) if the weight of an axle group on a vehicle is over the amount allowed in 17 AAC 25.013 by no more than 500 pounds,
    - (A) an oral warning will be given or a written violation will be noted on the inspection form; and
    - (B) the vehicle will be allowed to proceed;
  - (2) if the weight of an axle group on a vehicle is over the amount allowed in 17 AAC 25.013 by more than 500 pounds, but no more than 1,000 pounds, a written violation will be noted on the inspection form, and the vehicle will be allowed to proceed;
  - (3) if the weight of an axle group on a vehicle is over the amount allowed in 17 AAC 25.013 by more than 1,000 pounds, but no more than 2,000 pounds, and can be corrected at the weigh station by shifting the load, a written violation will be noted on the inspection form, the load must be corrected by shifting, and the vehicle will be allowed to proceed;
  - (4) if the weight of an axle group on a vehicle is over the amount allowed in 17 AAC 25.013 by more than 1,000 pounds, but no more than 2,000 pounds, and cannot be corrected at the weigh station by shifting the load, the driver of the vehicle will be issued a citation for the violation and be directed to a location to unload the excess weight from the vehicle;



- (5) if the weight of an axle group on a vehicle is over the amount allowed in 17 AAC 25.013 by more than 2,000 pounds, the driver of the vehicle will be issued a citation for the violation and be directed to a location to unload the excess weight from the vehicle; however, if the weight of that axle group is over the legally allowed amount by more than 125 percent of the legally allowed amount and cannot be corrected by shifting the load, the vehicle will be parked at the weigh station or enforcement site until the vehicle's weight can be reduced to within the amount allowed in 17 AAC 25.013 or in a permit issued under 17 AAC 25.320.

History: Eff. 10/7/2001, Register 160; am 4/9/2009, Register 190; am 12/30/2010, Register 196

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050, AS 45.75.131

### 17 AAC 25.340. Enforcement

- (a) If an enforcement officer has reason to believe that a vehicle or load is oversize, is overweight, violates 17 AAC 25.210, or violates a requirement adopted by reference in 17 AAC 25.210, the enforcement officer may require the driver to stop for inspection or for weighing by means of portable scales or at the nearest weigh station.
- (b) A driver of a vehicle may not refuse to stop and submit the vehicle and load to weighing or inspection.
- (c) If the movement of a vehicle or load is authorized by a permit issued under 17 AAC 25.320, upon request by an enforcement officer, the driver shall produce the permit for inspection.
- (d) A permit that has been altered is void upon the alteration.

History: Eff. 10/7/2001, Register 160; am 12/30/2010, Register 196

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050, AS 45.75.131

### 17 AAC 25.350. Stop Orders

An enforcement officer may order that movement of a vehicle be stopped, if that vehicle violates the safety, size, weight, or load limitations of this chapter or the terms of an oversize or overweight permit issued under 17 AAC 25.320, and if the enforcement

officer considers stopping the vehicle's movement necessary to protect the public safety or the highway and its apparatus. If ordered to stop its movement, the driver of the vehicle shall move the vehicle to a location specified by the enforcement officer and arrange to bring the vehicle into compliance with this chapter or the permit within 72 hours. Vehicles abandoned on a highway right-of-way or other public property in excess of 72 hours may be removed at the owner's or lessee's expense.

History: Eff. 10/7/2001, Register 160; am 4/9/2009, Register 190

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030

## 17 AAC 25.360. Offloading of Vehicles

An enforcement officer may order the removal of a portion of a load if the officer determines that the size or weight of a vehicle or load violates the size, weight, or load limitations of this chapter or the terms of an oversize or overweight permit issued under 17 AAC 25.320 and if the enforcement officer considers removal necessary to protect the public safety or the highway and its apparatus. If ordered to remove a portion of a load, the driver of the vehicle shall move the vehicle to the location specified by the enforcement officer and remove the portion of the load. The vehicle and the load must not interfere with the movement of traffic and must be removed from the highway right-of-way or other public property within 72 hours. The owner or lessee of the vehicle shall bear the expense of unloading and removing the excess load. Loads abandoned on a highway right-of-way or other public property in excess of 72 hours will be removed at the owner's or lessee's expense.

History: Eff. 10/7/2001, Register 160

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030

## 17 AAC 25.370. Revocation of Permits

The department may revoke a permit based upon a violation of the terms and conditions of its issuance or the alteration of a permit without the department's consent, or for a violation of this chapter.

History: Eff. 10/7/2001, Register 160

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030

## 17 AAC 25.375. Appeals

- (a) To appeal from a denial under 17 AAC 25.320, from an order under 17 AAC 25.350 or 17 AAC 25.360, or from a permit revocation under 17 AAC 25.370, an aggrieved person must make a written appeal to the division director. Any appeal must be received by the division director not later than seven days after the date of the denial, order, or revocation. The written appeal must set out the grounds for the appeal and any argument in support of the appeal. A denial, an order, or

revocation from which an appeal is made remains in effect until a final decision is issued under (b)(5) or (c) of this section.

- (b) As the division director considers necessary to resolve disputed questions of fact, the division director shall, within 10 days after receiving an appeal, hold a hearing in substantial accordance with the following procedures:
  - (1) the division director may designate an employee of the department to conduct the hearing, if the designated employee did not take part in the original order or revocation;
  - (2) the department will provide at least five days' notice of the time and place of the hearing to the appellant;
  - (3) written statements may be submitted;
  - (4) the hearing will be recorded;
  - (5) within 10 days after the hearing, the division director shall issue a written decision affirming, modifying, or reversing the original order or revocation.
- (c) If the division director does not consider a hearing to be necessary under (b) of this section, the division director, within 10 days after receiving an appeal, shall issue a written decision affirming, modifying, or reversing the original order or revocation. The division director may designate an employee of the department to issue the written decision, if the designated employee did not take part in the original order or revocation.
- (d) The decision under (b)(5) or (c) of this section is a final department decision for purposes of an appeal to the superior court under the Alaska Rules of Appellate Procedure.

History: Eff. 10/7/2001, Register 160, am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030

## 17 AAC 25.380. Oversize and Overweight Vehicle Permit Fees

- (a) The department will calculate a total permit fee from one or more of the following component fees, if applicable under (b) of this section:

- (1) for a single move by a vehicle or load that is oversize only, other than a vehicle or load that is exempt under 17 AAC 25.012(b)(3), and except as provided in (5) of this subsection,
  - (A) the basic processing charge is \$35;
  - (B) a surcharge will be added for excess width as follows, if applicable:
    - (i) for an overall width in excess of 10 feet and no more than 16 feet, \$20;
    - (ii) for an overall width in excess of 16 feet, \$30; and
  - (C) a surcharge will be added for excess height as follows, if applicable:
    - (i) for an overall height in excess of 16 feet and no more than 16.5 feet, \$20;
    - (ii) for an overall height in excess of 16.5 feet, \$30;
- (2) for a single move by a vehicle or load operating between the Fox Weigh Station and Prudhoe Bay on the Dalton and Elliott Highways and that is oversize only under 17 AAC 25.012(a) and (b)(3), and except as provided in (5) of this subsection,
  - (A) the basic processing charge is \$35;
  - (B) a surcharge will be added as set out in (1)(B) of this subsection for excess width, if applicable; and
  - (C) a surcharge will be added for excess height as follows, if applicable:
    - (i) for an overall height in excess of 17 feet and no more than 18.5 feet, \$20;
    - (ii) for an overall height in excess of 18.5 feet, \$30;
- (3) for a single move by a vehicle or load that is overweight only, and except as provided in (5) of this subsection,
  - (A) the basic processing charge is \$35; and

- (B) a surcharge of \$20 will be added if gross weight is 150,000 pounds or greater;
- (4) for a single move by a vehicle or load that is oversize and overweight, and except as provided in (5) of this subsection,
  - (A) the basic processing charge is \$60;
  - (B) a surcharge will be added as set out in (1)(B) of this subsection for excess width, if applicable;
  - (C) a surcharge will be added as set out in (1)(C) or (2)(C) of this subsection for excess height, if applicable; and
  - (D) a surcharge of \$20 will be added if gross weight is 150,000 pounds or greater;
- (5) for an oversize or overweight vehicle that requires the department's bridge design section review and approval to protect the public safety or the highway and its apparatus, a per-hour rate of \$75;
- (6) subject to the requirements for an extended use authorization under 17 AAC 25.320(c), and for an unlimited number of moves by a vehicle or load that is oversize, overweight, or both oversize and overweight during the period of:
  - (A) no more than 30 days, the fee is
    - (i) \$75 for a vehicle or load that is oversize only;
    - (ii) \$75 for a vehicle or load that is overweight only; and
    - (iii) \$150 for a vehicle or load that is both oversize and overweight;
  - (B) more than 30 days, but no more than 90 days, the fee is:
    - (i) \$200 for a vehicle or load that is oversize only;
    - (ii) \$200 for a vehicle or load that is overweight only; and
    - (iii) \$350 for a vehicle or load that is both oversize and overweight;
  - (C) more than 90 days, but no more than six months, the fee is:

- (i) \$300 for a vehicle or load that is oversize only;
  - (ii) \$300 for a vehicle or load that is overweight only; and
  - (iii) \$550 for a vehicle or load that is both oversize and overweight;
- (D) more than six months, but no more than nine months, the fee is:
  - (i) \$450 for a vehicle or load that is oversize only;
  - (ii) \$450 for a vehicle or load that is overweight only; and
  - (iii) \$850 for a vehicle or load that is both oversize and overweight;
- (E) more than nine months, but no more than 12 months, the fee is
  - (i) \$500 for a vehicle or load that is oversize only;
  - (ii) \$500 for a vehicle or load that is overweight only; and
  - (iii) \$1,000 for a vehicle or load that is both oversize and overweight.
- (b) The department will calculate the total fee for a permit issued under 17 AAC 25.320 for oversize and overweight vehicles and loads as follows:
  - (1) for a single-trip permit for a single vehicle, the department will charge the applicable single move fee under (a)(1) - (5) of this section;
  - (2) for an extended-period permit for a single vehicle, the department will charge the applicable fee under (a)(6) of this section for an unlimited number of moves;
  - (3) repealed 11/16/2004;
  - (4) for a pre-issue single-trip permit, as described on page 6.2 of the Department of Commerce and Economic Development's *Administrative Permit Manual: Oversize and Overweight Permits*, as adopted by reference in 17 AAC 25.320(b), the department will charge the applicable single move fee under (a)(1) - (5) of this section;
  - (5) for a seasonal permit, as described on page 6.2 of the Department of Commerce and Economic Development's *Administrative Permit Manual*:

*Oversize and Overweight Permits*, as adopted by reference in 17 AAC 25.320(b), the department will charge the applicable fee under (a)(6) of this section for an unlimited number of moves;

- (6) for a single-trip permit for a convoy, as described on page 6.3 of the Department of Commerce and Economic Development's *Administrative Permit Manual: Oversize and Overweight Permits*, as adopted by reference in 17 AAC 25.320(b), the department will charge for each vehicle in the convoy the single move fee applicable to that vehicle under (a)(1) - (5) of this section; a convoy is eligible for a single-trip permit only;
  - (7) for equipment engaged in snow removal, the department will charge the applicable fee under (a)(6) of this section for an unlimited number of moves.
- (c) The permit replacement fee is \$25.
  - (d) The permit change fee for each change submitted is \$25.
  - (e) The permit cancelation fee is \$25 for each canceled permit. A permit may not be canceled after the permit expiration date.
  - (f) The call-out fee for permit applications submitted before 8:00 a.m. and after 5:00 p.m. Monday through Friday, on weekends, and on holidays as defined in AS 44.12.010 is \$75.

History: Eff. 10/7/2001, Register 160; am 11/16/2004, Register 172; am 4/9/2009, Register 190, am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

---

## Article 4 Unified Carrier Registration

### Section

#### 400. Unified Carrier Registration program requirements



## 17 AAC 25.400. Unified Carrier Registration Program Requirements

- (a) To own or operate a commercial motor vehicle as a motor carrier or motor private carrier, or to provide services as a freight forwarder, broker, or leasing company, in interstate commerce, in this state, a company or individual shall register annually in the Unified Carrier Registration (UCR) program established under 49 U.S.C. 14504a.
- (b) Each registration must be accompanied by a fee, the amount of which will be determined annually by the Secretary of the United States Department of Transportation under 49 U.S.C. 14504a. Fees for UCR registration will be published by the Department of Transportation and Public Facilities. Annual fees must be paid directly to the Department of Transportation and Public Facilities or through a national or regional electronic system approved by the department. (Eff. 4/9/2009, Register 190)
- (c) An enforcement officer shall order that movement of a vehicle be stopped if the registrant fails to pay the fee required under (b) of this section. If ordered to stop its movement, the driver of the vehicle shall move the vehicle to a location specified by the enforcement officer. The stop movement order remains in effect until the registrant provides proof of payment of the fees.

History: Eff. 04/09/2009, Register 190; am 04/12/2013, Register 206

**Authority:** AS 19.05.010, AS 19.05.040, AS 19.10.060, AS 19.05.020, AS 44.42.020, AS 44.42.030

**Editor's note:** The address for registering in person or by mail, as required under 17 AAC 25.400 is State of Alaska, Department of Transportation and Public Facilities, Division of Measurement Standards and Commercial Vehicle Enforcement, Commercial Vehicle Customer Service Center, 11900 Industry Way, Building M, Anchorage, AK 99515. The facsimile number for filing a motor carrier identification report is (866) 345-2641, toll-free for filers within the state, 365-1221 for filers within the Anchorage area, or (907) 365-1221 for filers outside the state. The approved Internet site for electronic filing is [www.ucr.in.gov](http://www.ucr.in.gov). The Unified Carrier Registration form is available from the Commercial Vehicle Customer Service Center at the above-noted address, or may be requested by calling (800) 478-7636 toll-free for callers within the state, 365-1200 for callers within the Anchorage area, or (907) 365-1200 for callers outside the state. The form may also be down-loaded from <http://www.dot.state.ak.us/mscve>.

## Article 5 Waivers

### Section

800. Waiver of provisions.

## 17 AAC 25.800. Waiver of Provisions

- (a) The commissioner, or the commissioner's designee, will waive a requirement of this chapter for a particular state highway system route or a portion of that route, if the commissioner, or the commissioner's designee, issues a written determination that the
  - (1) state's best interests are served by the waiver;
  - (2) usefulness of the particular highway is not diminished;
  - (3) safety of other users is not compromised; and
  - (4) traveling public will not be unreasonably inconvenienced.
- (b) Repealed 4/9/2009.
- (c) Repealed 10/7/2001.

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160; am 4/9/2009, Register 190

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

---

## Article 6 General Provisions

### Section

#### 900. Definitions.

## 17 AAC 25.900. Definitions

Unless the context indicates otherwise, in this chapter:

- (1) "axle" means the common axis of rotation of two or more wheels, whether power-driven or freely rotating, attached to the vehicle for the purpose of carrying a portion of the vehicle weight, including any load;
- (2) "axle group" means two or more axles where an individual axle is spaced less than 8 feet and 1 inch from any other axle, as measured from the centers of the axles;
- (3) "belly axle" means a single axle on a trailer or semitrailer that is located at least 8 feet and 1 inch from the nearest rear axle of a vehicle;
- (4) "booster axle" means an axle on a truck that is designed to transfer a portion of the truck weight to the steering axle, and that is located more than 8 feet and 1 inch from the nearest axle;
- (5) "cargo-carrying length" means the portion of the overall length of a trailer, excluding the coupling device, upon which a load can be carried;
- (6) "cargo-carrying vehicle" means a truck, trailer, semitrailer, or other vehicle capable of carrying a load;
- (7) "commissioner" means the commissioner of transportation and public facilities;
- (8) "department" means the Department of Transportation and Public Facilities;
- (9) "division" means the division of measurement standards and commercial vehicle enforcement within the department;
- (10) "dromedary" means a box, tank, deck, or plate that does not exceed 10 feet in length, and that may be used to carry cargo on a truck-tractor;
- (11) "emergency" means a condition that is potentially hazardous to life or property, or that prevents a damaged highway from being used by the public;
- (12) "enforcement officer" means a:

- (A) peace officer; or
- (B) department employee who is:
  - (i) authorized by the commissioner of transportation and public facilities under AS 45.75.131; and
  - (ii) appointed as a special officer by the commissioner of public safety under AS 18.65.010;
- (13) repealed 11/16/2004;
- (14) "4-axle group" or "quad axle" means a multi-axle group of four axles that is attached with a connecting mechanism, with each separate axle located less than 8 feet and 1 inch from the other axles;
- (15) "full mount" means a vehicle mounted completely upon the first or last vehicle in a saddlemount combination;
- (16) "gross weight" or "gross vehicle weight" means the total weight of a vehicle, or a combination of vehicles, including load and any accumulated snow, ice, mud, rocks, or dirt;
- (17) "height" means the total vertical dimension of a vehicle above a roadway, including any load, load-holding device, and equipment;
- (18) "inclement weather" means:
  - (A) fog, rain, or snow conditions that restrict visibility to less than 1,000 feet;
  - (B) wind conditions that render a vehicle unable to maintain directional control within one driving lane; or
  - (C) an accumulation of ice, snow, or freezing rain upon a roadway that render a vehicle unable to maintain traction;
- (19) "jeep" means a short frame-type trailer complete with upper coupler, fifth wheel, and undercarriage assembly and designed so that, when coupled between a semitrailer and tractor, the jeep carries a portion of the trailer king pin load while transferring the remainder of that load to the tractor's fifth wheel;

- (20) "king pin" means the device that connects the upper half to the lower half of a coupling device in a manner that permits relative motion in a horizontal plane between a towed vehicle and a towing vehicle;
- (21) "length" means the total longitudinal dimension of a vehicle;
- (22) "lift axle" or "variable suspension axle" means an axle:
  - (A) with mounted tires and rims; and
  - (B) that may be elevated or regulated by raising its tires from the roadway, with the result that a portion of the vehicle weight is transferred to another axle or axle group;
- (23) "load" means anything that is carried on or in a vehicle, but that is not permanently attached to the vehicle;
- (24) "long combination vehicle" or "LCV" means a combination of a power vehicle and cargo-carrying vehicles that exceeds the length specified in 17 AAC 25.012(c);
- (25) "multi-axle group" means an assembly of more than two axles that are attached with connecting devices;
- (26) "non-divisible vehicle or load" means a vehicle or load that:
  - (A) exceeds a length or weight limit set out in this chapter; and
  - (B) if separated into smaller vehicles or loads, would:
    - (i) compromise the intended use of the vehicle;
    - (ii) destroy the value of the load or vehicle; or
    - (iii) require more than eight work hours to dismantle using appropriate equipment;
- (27) "overall length" means the total longitudinal length of a vehicle or a combination of vehicles, including the load;
- (28) "overall width" means width as measured in accordance with 17 AAC 25.012(a);
- (29) "permit" means an authorization issued under 17 AAC 25.320 for movement or operation of oversize and overweight vehicles on a highway;

- (30) "pounds per inch of tire width" means a measure of weight restriction based upon a tire manufacturer's rating of nominal tire width;
- (31) "power vehicle" means a truck, a truck-tractor, or another vehicle capable of towing a cargo-carrying vehicle;
- (32) "saddle" means a mechanism that connects the front axle of a towed vehicle, by a king pin, to the frame or fifth wheel of the towing vehicle;
- (33) "saddlemount combination" means a power unit towing up to three other power vehicles, each connected to the preceding vehicle by a saddle;
- (34) "semitrailer" means a vehicle or cargo-carrying vehicle without motive power designed for carrying persons or property, and so constructed to be drawn by a power vehicle such that some part of its own weight and that of its load rests on or is carried by another vehicle;
- (35) "shifting" means the process by which a portion of a load is transferred from one axle group to another by adjusting air pressure, adjusting the fifth wheel, or physically moving part of the load to another axle group without removing the load from the vehicle;
- (36) "single axle" means an assembly of two or more wheels whose centers are in one transverse vertical plane not less than 8 feet and 1 inch from another axle, and extending across the full width of a vehicle;
- (37) "single axle weight" means the total weight transmitted to the roadway by the wheels of a single axle;
- (38) "state" means State of Alaska;
- (39) "steering axle" means one or more axles on the front of a power vehicle that can be activated by the operator to directly accomplish guidance or steering of the power vehicle or a combination of vehicles;
- (40) "steerable axle" means an axle that has a self-steering mechanism that operates while a vehicle is in motion;
- (41) "supplemental axle" means a lift axle, a variable suspension axle, or a belly axle;
- (42) "tandem axle weight" means the total weight transmitted to the roadway by a two axle group;

- (43) "terminal" means a business licensed under AS 43.70 where commercial goods are loaded or unloaded from commercial vehicles or services for commercial vehicles are obtained;
- (44) "3-axle group" or "tridem axle" means a multi-axle group of three axles that is attached to a vehicle with a connecting mechanism, with each separate axle located less than 8 feet and 1 inch from the other axles;
- (45) "trailer" means a towed cargo-carrying vehicle with one or more axles configured so that no significant portion of its total weight rests upon the towing vehicle;
- (46) "truck" means a motorized cargo-carrying vehicle that is designed, used, or maintained primarily for the movement of a load; "truck" includes a vehicle that pulls trailers or semitrailers;
- (47) "truck-tractor" means a motorized vehicle designed and used primarily for pulling cargo-carrying vehicles; however, "truck-tractor" includes a truck-tractor with a dromedary;
- (48) "2-axle group" or "tandem axle" means an assembly of two axles that are attached to a vehicle by a connecting mechanism designed to distribute weight equally to both axles of the group, "2-axle group" or "tandem axle" does not include lift axles, variable suspension axles, booster axles, or belly axles located within less than 8 feet and 1 inch of that assembly;
- (49) "variable suspension axle" has the meaning given to "lift axle" in this section;
- (50) "vehicle" means a wheeled device capable of transporting persons or property on a highway; "vehicle" includes anything permanently attached to the wheeled device that is not included in the definition for "equipment" in this section.
- (51) "intrastate commerce" has the meaning ascribed to it in 49 C.F.R. 390.5, adopted by reference in 17 AAC 25.210(a).

History: Eff. 8/13/95, Register 135; am 10/7/2001, Register 160; am 11/16/2004, Register 172; am 4/9/2009, Register 190; am 12/30/2010, Register 196

**Authority:** AS 19.05.010, AS 19.05.020, AS 19.05.040, AS 19.10.060, AS 44.42.020, AS 44.42.030, AS 45.75.050

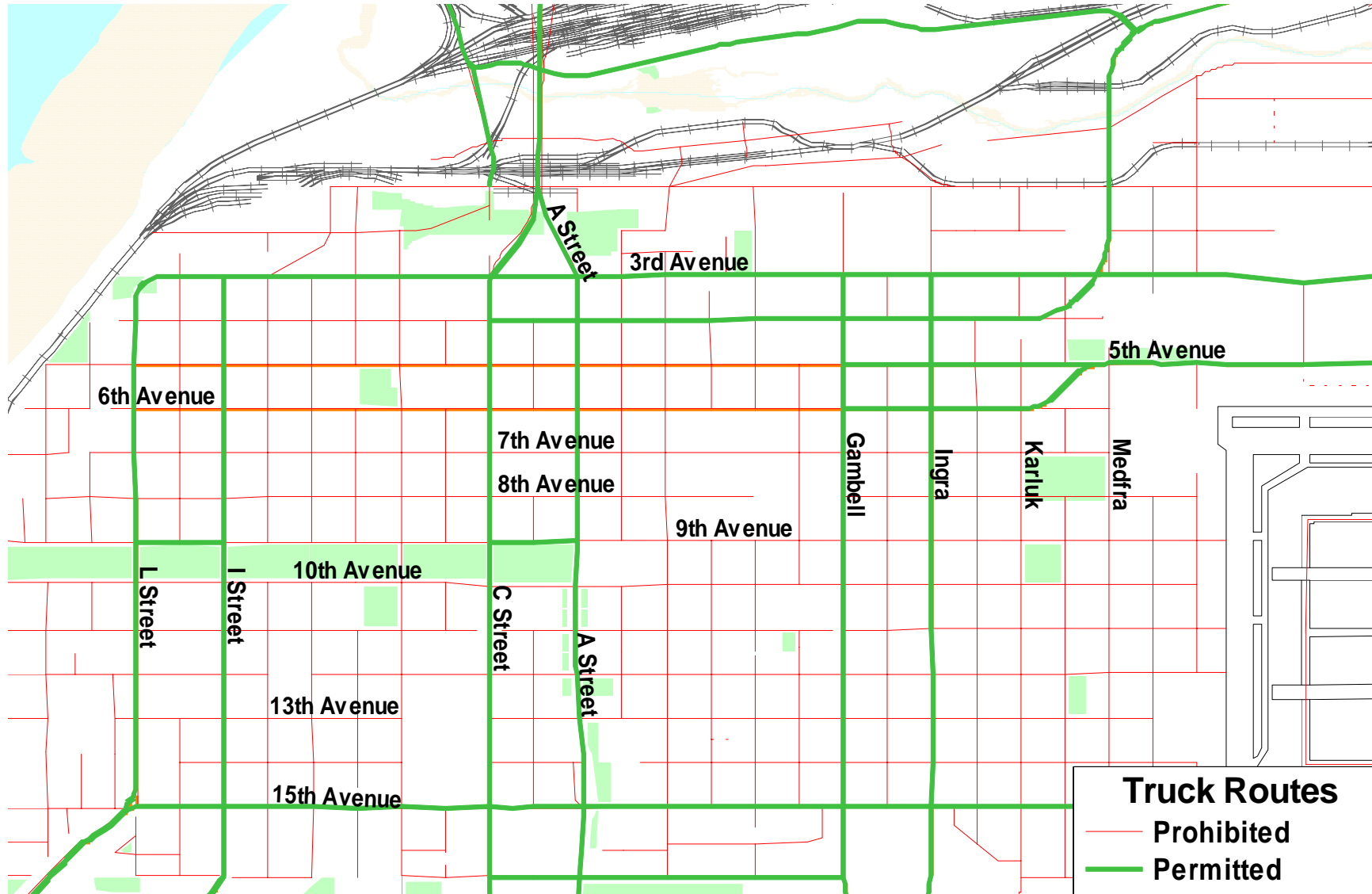




## APPENDIX I: MUNICIPALITY OF ANCHORAGE TRUCK ROUTES

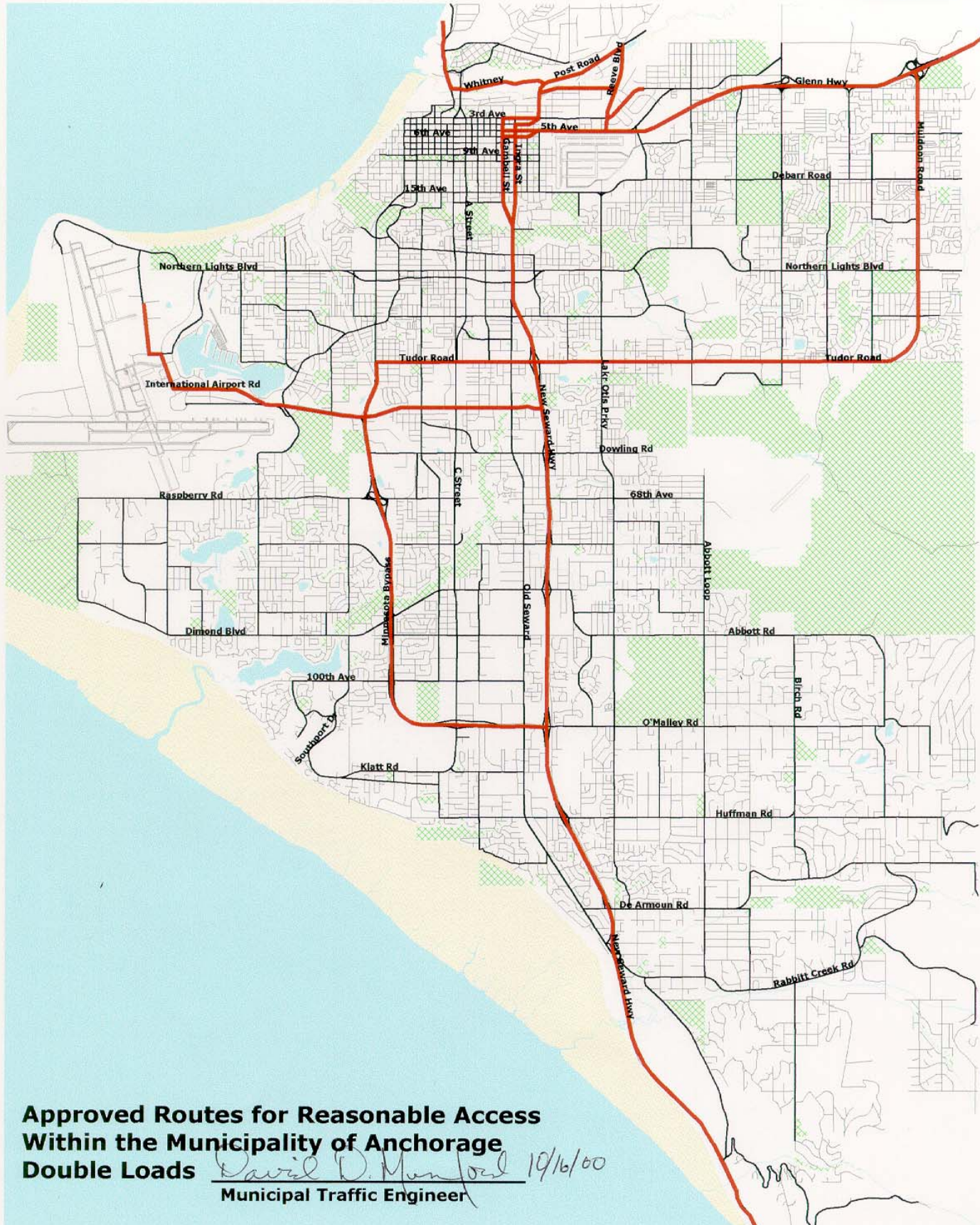


## Downtown Truck Routes





# Municipality of Anchorage



## APPENDIX J: ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES SEASONAL WEIGHT RESTRICTIONS



**DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES**  
**DIVISION OF MEASUREMENT STANDARDS and COMMERCIAL VEHICLE ENFORCEMENT**

## WEIGHT RESTRICTION INFORMATION BULLETIN

17 AAC 25.100 (a) The Department of Transportation and Public Facilities...may impose restrictions on any aspect of vehicle operation on any highway whenever the highway, in the judgment of the Commissioner, may be seriously damaged or destroyed by such operation...The restrictions shall be effective after due notice has been given to the public, except in an emergency requiring immediate action. (b) Except for steering axles, whenever weight restrictions imposed by the Commissioner or representative are stated as a percentage of legal allowable weights, the percentage shall be applied to the maximum allowable axle loading of 17 AAC 25.013 (a)(2).

### Dual Tired Maximum Allowable Axle\* or Axle Group Weight in Pounds

Axle Weight Restriction%	1 Axle*	2 Axles	3 Axles**	4 Axles	5 Axles	6 Axles
Legal 100%	20,000	38,000	42,000	50,000	58,000	66,000
85%	17,000	32,300	35,700	42,500	49,300	56,100
75%	15,000	28,500	31,500	37,500	43,500	49,500
50%	10,000	19,000	21,000	25,000	29,000	33,000

\* Tire tread width must be 9.25" or larger or legal weight is controlled by tires

\*\* Reference 17AAC25.013 (a) (B) for additional allowable weight on certain (3) axle combinations.

- 100% represents the legal maximum allowable weight. Restrictions are based on 85%, 75% or 50% of the maximum allowable axle/axle group weight.
- 8'1" is the minimum spacing between axle groups. Axles spaced less than 8'1" apart are considered acting as one group.
- Lift axle(s) in the drive group of the power unit are not counted in determining the legal maximum allowable weight.
- The maximum allowable weight for the **steering axle(s)** of a power unit (does not apply to other steerable axles) is determined by the number of tires multiplied by the tire tread width and then multiplied by 600 pounds/inch of tire tread width and remains unchanged at 85%, 75% and 50% weight restrictions.
- The allowable weight when determined by tires on all but the steering axle(s) of the power unit is equal to the number of tires multiplied by the tire tread width in inches and then multiplied by 550 pounds/inch of tire tread width.
- The legal weight at 100% is **always the most restrictive weight as figured by:**
  - (1) the bridge formula (chart) or**
  - (2) the summation of each of the individual axle/axle group weights.****The individual axle/axle group weight is the most restrictive of the weight determined by tires or by axle(s).**

### Single Tired Steering Axle Weights in Pounds

8" tread width = 9,600	11" tread width = 13,200	14" tread width = 16,800
9" tread width = 10,800	12" tread width = 14,400	15" tread width = 18,000
10" tread width = 12,000	13" tread width = 15,600	16" tread width = 19,200

V:\Permits\Weight Restriction Items\Weight restriction bulletin\_on letterhead.doc

*"Providing for the safe movement of people and goods and the delivery of state services."*

## WEIGHT RESTRICTION EXCEPTIONS

1. Within seven (7) days of the effective date of the restriction, vehicles enroute at the time of restriction are allowed 100% of legal load, except when the effective date of the restriction is known 30 days in advance. A bill of lading is required to verify the shipping date. These vehicles are subject to the restrictions seven (7) days after the effective date of the restriction.
2. Interstate sealed and charged produce vans are allowed 100% of legal load when they have been charged prior to the effective date of the restriction. A bill of lading is required to verify the shipping date. These trucks are subject to the restrictions when loaded after the effective date of the restriction.
3. Intermodal (IM) portable tanks or compartments having a volume greater than 7,500 liters (1,980 U.S. gallons) are allowed 100% of legal load because they may not be loaded to a filling density less than 80% by volume by federal law, (49 CFR Part 173.32(f)(5)). A bill of lading identifying the product name and identification number is required.
4. The following vehicles are allowed 100% of legal axle loading or bridge weight during more restrictive percentages, no overweight loading will be allowed:
  - a. Bulk Milk Tankers
  - b. Sewage Pump trucks
  - c. Local Water Delivery Trucks
  - d. Local Home heating oil/propane Trucks
  - e. Garbage and/or Dumpster Trucks
  - f. School and Municipal Buses.
  - g. LNG tankers
5. Commercial or governmental trucks used in transportation of mobile dumpsters containing trash while in the act of transporting such dumpsters are allowed 100% of legal load. No permit is required.
6. School and municipal buses engaged in transporting people are allowed 100% of legal load. No permit is required.