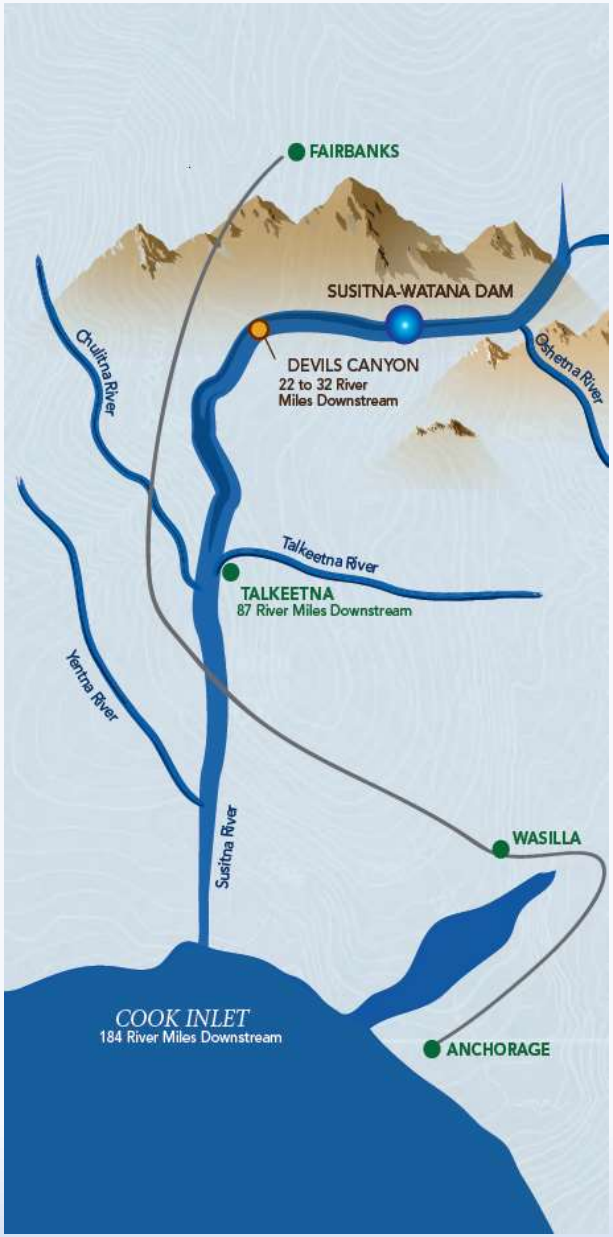

Initial Study Report Meeting

Study 15.7 Transportation Resources

March 30, 2016

Prepared by

DOWL

Study 15.7 Status

ISR documents (ISR Part D Overview):

- Initial Study Report: Parts A, B and C (June 3, 2014)
- 2014 Study Implementation Report (SIR) (November 4, 2015)

Status:

- Completed review of existing data and bibliography compilation.
- Completed inventory of assets.
- Completed documentation of existing conditions for transportation modes.
- Documented forecasts for various transportation modes.
- Individual interviews and additional information on river and trail transportation use effects are still needed.

Study 15.7 Objectives

- 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.

- 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.

Study 15.7 Components

- Collect and Review Data (ISR Part A, Section 4.1; pg 2)
- Inventory Assets and Conduct Any Field Studies (ISR Part A, Section 4.2; pg 2)
- Document Existing Conditions (ISR Part A, Section 4.3; pg 3)
- Forecast Future Conditions (ISR Part A, Section 4.4; pg 4)

Study 15.7 Variances

- The ports of Seward and Whittier were added to the study area, as were the associated rail lines.
- Bridge data integration was limited to bridges whose current structural or functional condition was determined to have a potential adverse impact on Project-related travel.
- River travel data was not captured through agency and individual interviews as scheduled in the Study Plan; this remains to be done.
- Forecasts for existing highway facilities were documented from existing traffic demand models or developed using historic growth rates. Aviation forecasts were documented using published aviation data.
- Potential effects on transportation systems and river use were evaluated qualitatively.

Study 15.7 Summary of Results (ISR Part A, Section 5)

- Roads – 14 assets inventoried
  - Ownership, length, use levels, level of service, functional classification, costs, safety
- Aviation – 11 assets inventoried
  - Ownership, use, facilities, design aircraft, cost, safety, distance from project
- Railroad – 9 assets inventoried
  - Facilities, passenger usage, freight usage
- Ports – 4 assets inventoried
  - Ownership, use types and levels, facilities, operating parameters (depth, ice), costs
- Easements – 32 assets inventoried
  - Includes RS 2477 and 17(b) easements
  - Length, location, allowable uses, access points

Study 15.7 Summary of Results (ISR Part A, Section 5)

Existing Conditions

- Roadways
  - Owned by Alaska Department of Transportation & Public Facilities (ADOT&PF), Municipality of Anchorage, and Matanuska-Susitna Borough
  - 160,600 Annual Average Daily Traffic (AADT) on approximately 720 centerline miles of roadway
  - Weight/travel restrictions on at least one Denali Highway bridge limits allowable heavy truck traffic
- Aviation
  - Owned by ADOT&PF, Municipality of Anchorage, City of Wasilla, City of Palmer, and City of Nenana
  - Estimated 2,000 Average Daily Operations (ADO) at 11 airports totaling approximately 126,000 feet of runway
- Rail
  - Estimated 23 average arrivals/departures per day via Alaska Railroad Corporation's approximately 485 miles of track
- Port
  - 770 annual vessel calls at 4 ports
- Easements
  - Approximately 450 miles of RS 2477 easements
  - Approximately 70 miles of 17(b) easements

Study 15.7 Summary of Results (ISR Part D, Section 5 and SIR Section 5)

Project Facilities

- Roadways
  - All-season gravel access road from Denali Highway or Gold Creek rail facility
  - Bridge, culvert and road improvements on Denali Highway if Denali corridor selected
  - Potential intersection improvements at Parks/Denali if Denali corridor selected
  - Traffic on access road limited to project-related vehicles
  - Internal road system between dam, power house and other facilities
- Aviation
  - 5,000 ft by 100 ft airstrip with 8,000 sf apron
  - Capable of handling large cargo aircraft
  - Helicopter pad
  - Support facilities include fuel storage, office and waiting room
- Rail
  - New rail storage and transloading facility at Gold Creek or Cantwell (40 acres)
  - Support facilities include camp facilities, tractor-trailer parking, fuel storage, office
  - Helicopter pad
  - Some improvements required for wide loads transported by rail (bridge improvements, rock cuts)
- Other Potential Transportation
  - Helicopter, heavy lift airships, hoverbarge could be used pre-road or for specific large items

Study 15.7 Summary of Results (SIR Section 5)

Project Effects

- Roadways
  - Increased traffic on highways between ports and railhead
  - Increased traffic congestion in Whittier during construction
  - Potential for increased air traffic at smaller airports in MSB
  - Denali corridor would result in substantial increase in truck traffic on Denali Highway during construction – but within highway design capacity
- Aviation
  - Increased passenger and cargo operations during construction
  - Increased air traffic in vicinity of project
  - No substantive operations or safety effects on regional aviation system

Study 15.7 Summary of Results (SIR Section 5)

Project Effects

- Rail
  - Two 70-car trains from Whittier to project railhead per week
  - Sufficient rail capacity available, low likelihood of conflicts with passenger and other freight operations
- Port
  - One additional ship per week during construction
  - Over 50% increase in operations during construction
  - Whittier port capacity available, additional capacity available to supplement Whittier at Port of Anchorage and potentially others in future
- River
  - Construction activities expected to have limited effects on river transportation
  - Operations effects may result in changes to river flows and ice formation
  - More information on uses, locations and timing of use is needed to assess potential effects

AEA's Proposed Modifications to Study 15.7 (ISR Part D, Section 7)

- Forecasts for existing highway facilities were documented from existing traffic demand models or developed using historic growth rates. Aviation forecasts were documented using published aviation data. Forecasts for various modes may be updated if new data is available. River use forecasts will be qualitatively evaluated based on data obtained through interviews with knowledgeable persons.
- Project effects on all transportation modes will be qualitatively evaluated based on the level of Project information available, professional judgment, and interviews with knowledgeable individuals. This differs from RSP Section 15.7.4.5, which implied that effects would be quantified for highway and rail modes.

Steps to Complete Study 15.7 (ISR Part D, Section 8)

- Conduct interviews with knowledgeable individuals to gather information on current and future river and trail transportation use.
- Supplement Project effects analysis with additional information on the potential effects of the Project on river and trail transportation uses.

Licensing Participants Proposed Modifications to Study 15.7?

- Agencies
- CIRWG members and Ahtna
- Public