

**01/29/2014
PRESENTATION:
RURAL
TRANSPORTA-
TION
INFRASTRUC-
TURE
DEVELOPMENT**

<TARGET><BILL></BILL><SUBJECT>01-29-2014 PRESENTATION
RURAL TRANSPORTATION INFRASTRUCTURE
DEVELOPMENT</SUBJECT><COMM>SFIN28</COMM></TARGET>

1/29/14

Rural Transportation Infrastructure Development

Local Roads

Community Connectors

Regional Fuel & Freight Transport

Goal-Vehicle Fleet Appropriate Solutions

Local Dirt Roads







Board Roads







ATV Roads

- Safer Travel & Reduced Fatigue
- Less Wear & Tear on Vehicles
- Significant Reduction in Fuel use
- 10-12 mile distance practical today



- Community roads
- Subsistence access roads
- Roads between communities









Community Connector Roads

Arctic

Noatak to Red Dog Mine Road
Kobuk-Ambler-Shungnak
Teller-Brevig Mission

Interior

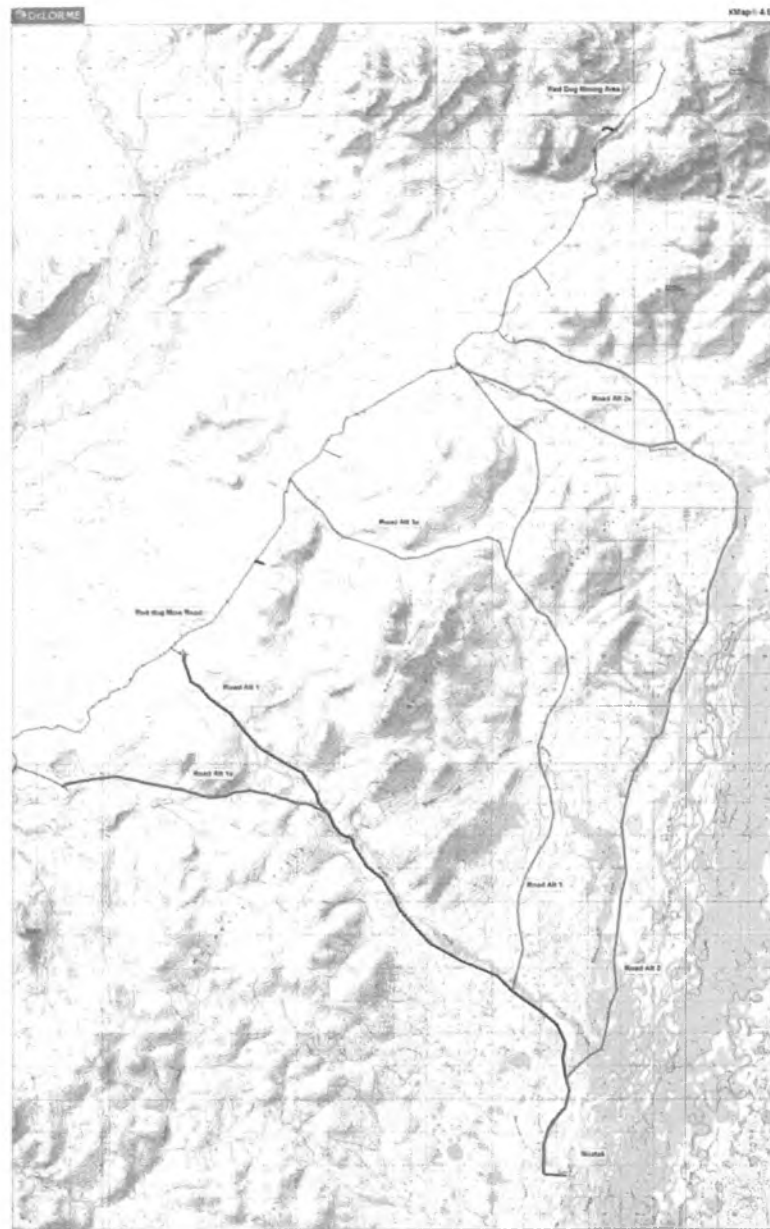
Stevens Village to Dalton Highway
Bettles-Evansville to Dalton Highway
Allakaket-Alatna
Ruby-Poorman-Ophir-Flat

Y-K Delta

Atmautluak-Kasigluk-Nunapitchuk
Nightmute-Toksook Bay-Tununak
Tuntutuliak-Kongiganak

Bristol Bay

Dillingham-Manokotak

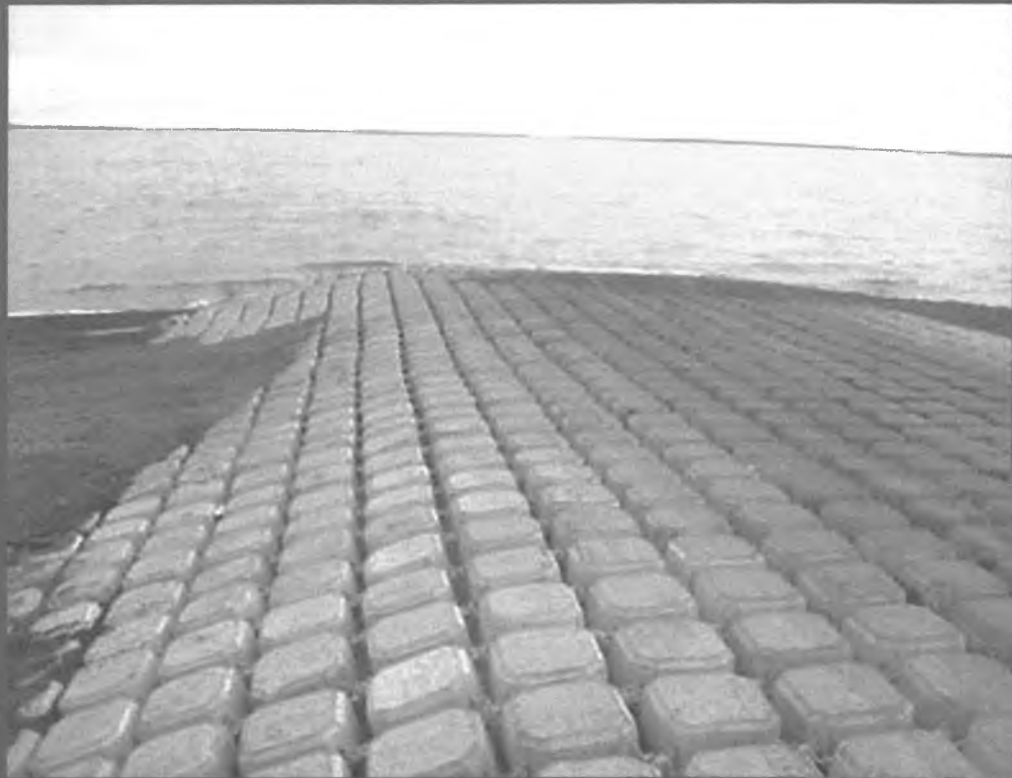


Do not alter or remove
this information without
written permission of the
author.

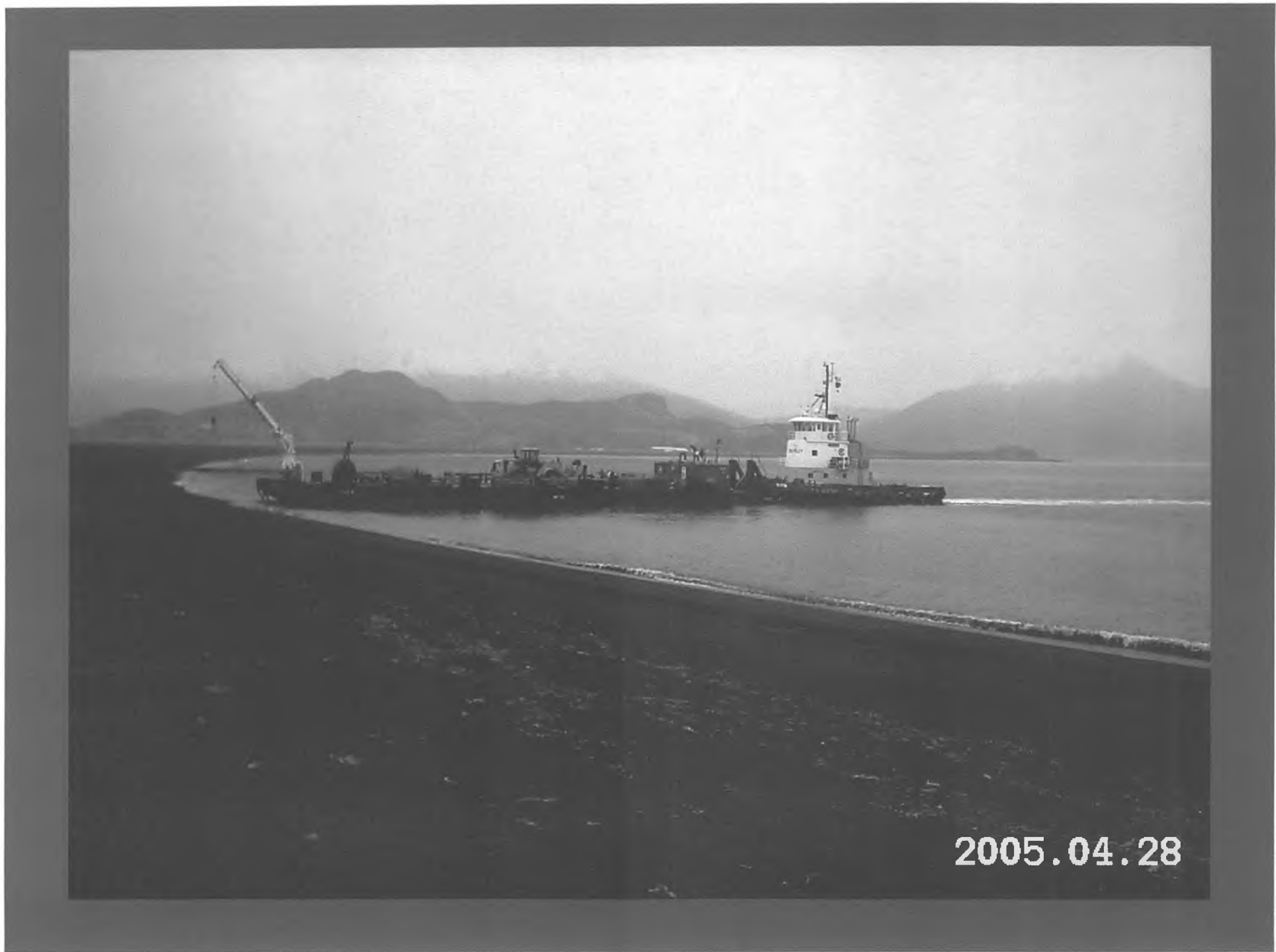


1A









2005.04.28

Most Small Communities Need Barge Mooring Points

Improve Safety

Improve Operational Efficiency

Reduce Environmental Impacts

Reduce nearshore shoals from tug operations

- 2-3 Mooring points installed at each landing site

- Test Installation at Chevak

 - Straightforward construction

 - Good reports from barge operators



Yukon-Kuskokwim Freight & Energy Corridor

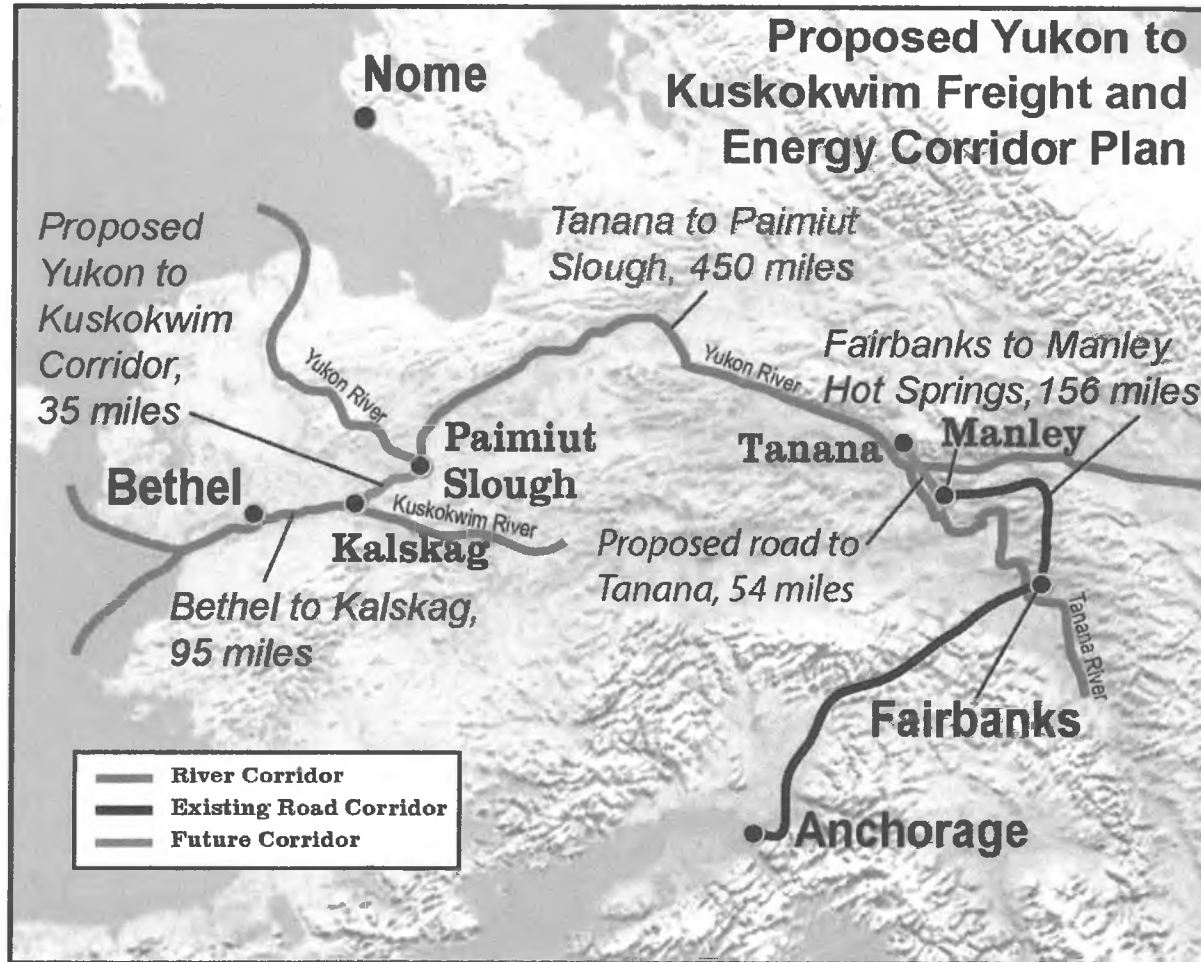
Connect Western Alaska fuel and freight markets to
Fairbanks transportation hub

AVCP Freight and Energy Corridor Plan

- Identify fuel and freight delivery system
- Estimate construction and operation costs
- Identify public & private finance options
- Develop priority order of transport improvements

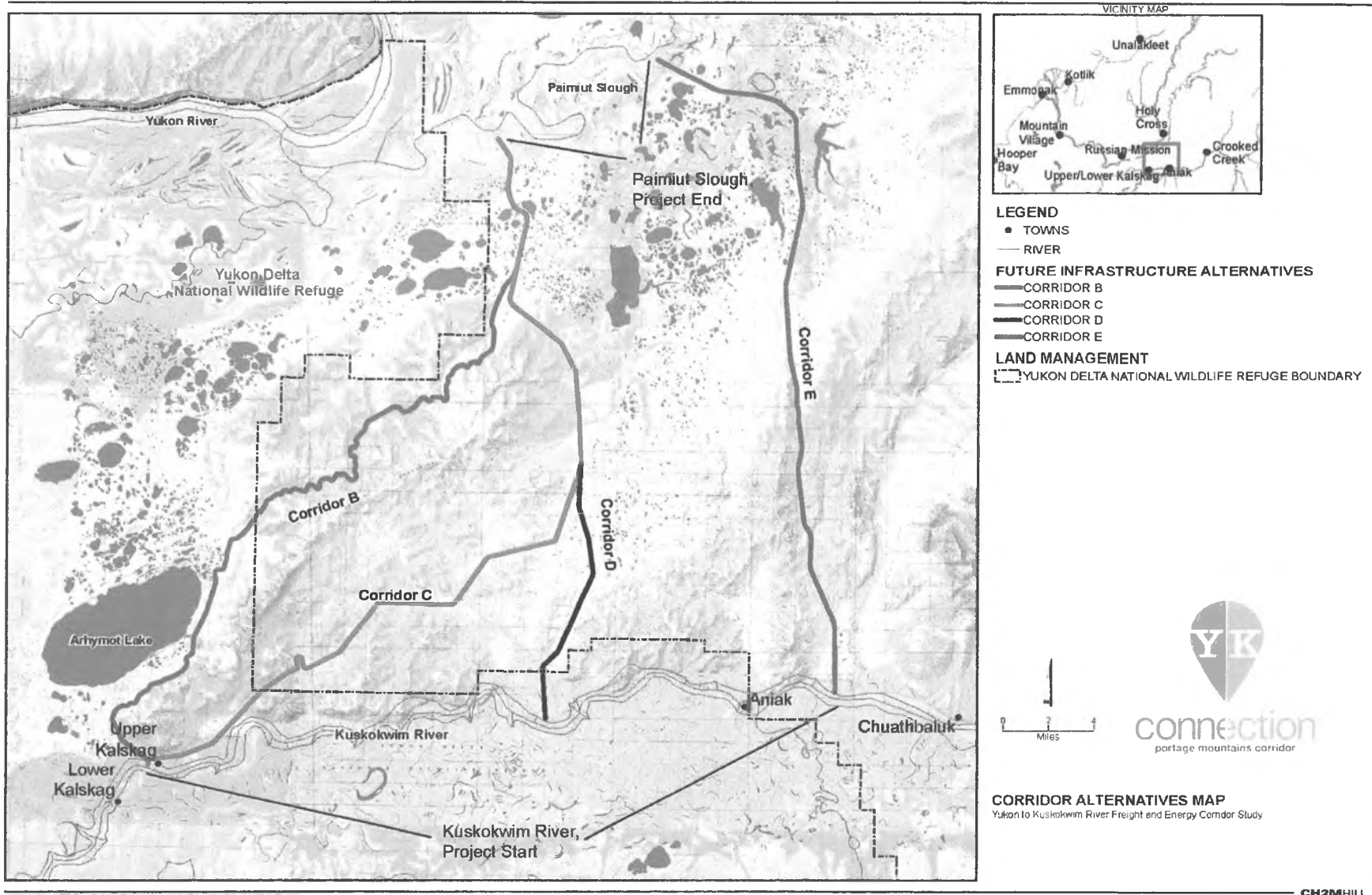


Railbelt-Based Transportation System



Yukon to Kuskokwim Freight and Energy Corridor Plan

2014 Select Corridor for Design



23

Design Criteria

Commercial Vehicle Road

- 2-lane, seasonal gravel road with dust palliative
- 40 mph design speed

Barge Port

- Sheet pile bulkhead or Pile-supported wharf with trestle
- Upland staging and storage
- Potential barge-to-barge transfer system

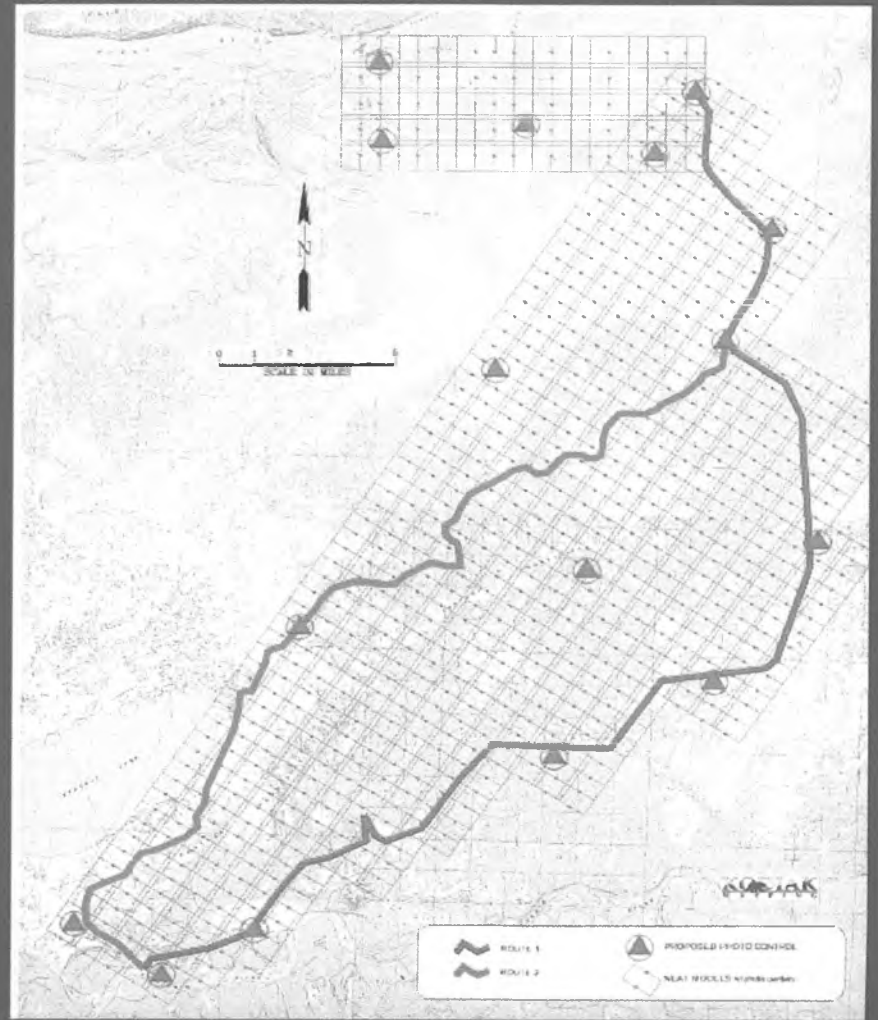
Fuel Pipeline(s)

- Small diameter pipeline for port-to-port or barge-to-barge operations
- Buried, with wall thickness for corrosion allowance

LiDAR and Aerial Surveys Complete

Corridors B/C and Paimiut Slough

Creates 3-D digital terrain model
of existing ground



2014 Corridor Plan Schedule

Road, pipeline, port engineering

March – October

Economic/business development plan

April - August

Corridor selection

May - August

Plan Presentation - AVCP 50th Convention

October

Complete Corridor Plan

December



Yukon-Kuskokwim Freight & Energy Corridor

Project Timeline

Corridor Planning Complete	December	2014
Design Start	January	2015
60% Design & Permit Start	November	2016
Design Complete	March	2019



Rural Transportation Project Development

Good Morning, for the record my name is Mike McKinnon. I am the owner of McKinnon & Associates, LLC, a transportation planning and project development business with a focus on rural Alaska. With me today are:

Christine Klein Chief Operating Officer
 Calista Corporation

Mike Hoffman Executive Vice President
 Association of Village Council Presidents

We are here to present on recent developments in local and regional transportation project delivery by request of the committee. We would like to make a short introduction and then turn to a series of slides to talk about projects.

First, though a few words about the role DOT&PF plays in rural Alaska transportation infrastructure.

DOT&PF has developed transportation projects in just about every rural community, especially with regard to the aviation system. The runways that they have built over the last 30 years, especially the upgrades in the last 10 years, have created an exceptional runway network.

This is not only a vital community service, the runway upgrades have also allowed rural air carriers to invest in new aircraft and navigation systems that are growing their businesses and significantly improving safety and service levels.

The project teams in the regional offices who work on these projects have also brought their expertise to local and regional level road projects. Projects over the last 15 years include reconstructing the state-owned main roads in most rural hub communities, and road projects that came to the department through its project selection processes and through directed appropriations under the 2005 SAFETEA-LU highway reauthorization act and other legislation.

DOT&PF has also built many small community roads in the last 20 years, focusing on high-value health-related roads serving landfill, water source and sewer system developments. And, the department works with coastal communities on port and harbor projects, and has a continuous effort underway to improve and maintain Alaska Marine Highway System shoreside facilities. The role of DOT&PF in rural Alaska is far-reaching and their teams are expert in their tasks.

Yet, with a primary mission of major infrastructure development and repair, DOT&PF will not be able to address community road needs in the near future.

In 2005, partly in response to local needs, SAFETEA-LU included new funding for rural Alaska communities through the Tribal Transportation Program, and the Denali Commission. More recently new highway bills provided additional funding through, economic recovery and stimulus programs. The state has participated in most of these programs through matching fund appropriations and direct grants to communities and tribal organizations. Collectively, these funding sources have provided rural communities with an opportunity to improve local transport systems.

Over the last 8 years, rural roads and waterfront development projects across the state have totaled in the range of \$50,000,000 a year. While a significant portion of this funding has gone to communities along the road system and coastal communities served by the Alaska Marine Highway System, about half has gone to communities off the road network in western and arctic Alaska.

Some larger communities quickly developed the ability to manage local road projects, but in most cases, boroughs and regional tribal non-profit organizations have taken the lead in project development.

They developed transportation departments, and through training and hiring, now have a solid record of successful local and regional road projects. The regional tribal non-profits, including ICAS, which works with the North Slope Borough; Kawerak, based in Nome and AVCP, based in Bethel; have developed good working relationships with the Federal Highway Administration (FHWA), who provides technical support and most coordinate their work with DOT&PF, DCCED and other state agencies who provide funding and technical support. In addition, Regional Native Corporations have contributed to success of these relatively new programs through technical support and in some cases, local road building materials supply.

Most important, in remote areas where shipping in gravel and other road building material can cost 40% of overall project costs, communities and transportation departments have come up with some very cost-effective solutions to standard road improvements, which we will review this morning.