

# Alaska Department of Transportation and Public Facilities Industrial Ports and Roads Program

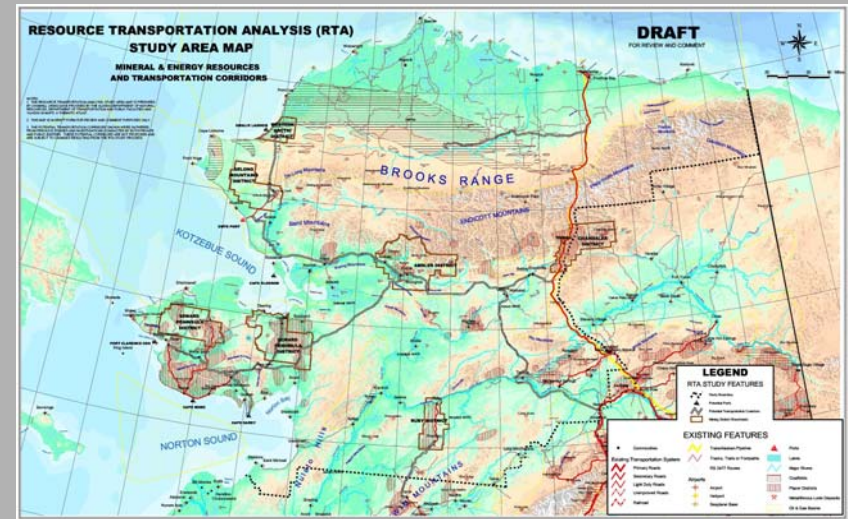


**Status Report**

May 2005

Mike McKinnon

# Resource Transportation Analysis-Phase I 2002



## DOT&PF:

- Looked at energy and mineral deposits to see if State investment in transportation systems could accelerate resource development
- Examined access to resources and transport to world markets
- Found oil and gas development remains Alaska's primary economic opportunity
- For oilfield development on the North Slope, all-season mainline gravel roads, in lieu of seasonal ice roads, can improve existing operations and encourage new field development
- Found that for mining operations, traditional long-distance, overland routes do not work well in today's marine transport-based systems
- A port site, even seasonal, as close as possible to a mine and a direct road between port and mine is the best model for major mine projects

# Projects Carried into RTA Phase II

## North Slope Oilfield Roads

Bullen Point Road

West Foothills Roads

Colville River Road



## Mine Roads and Ports

Delong Mountain Terminal Port Expansion

Point Lay Deadfall Syncline Coal Mine Access

Noatak Airport-Red Dog Mine Access Road

Nome Glacier Creek Road to Rock Creek Mine

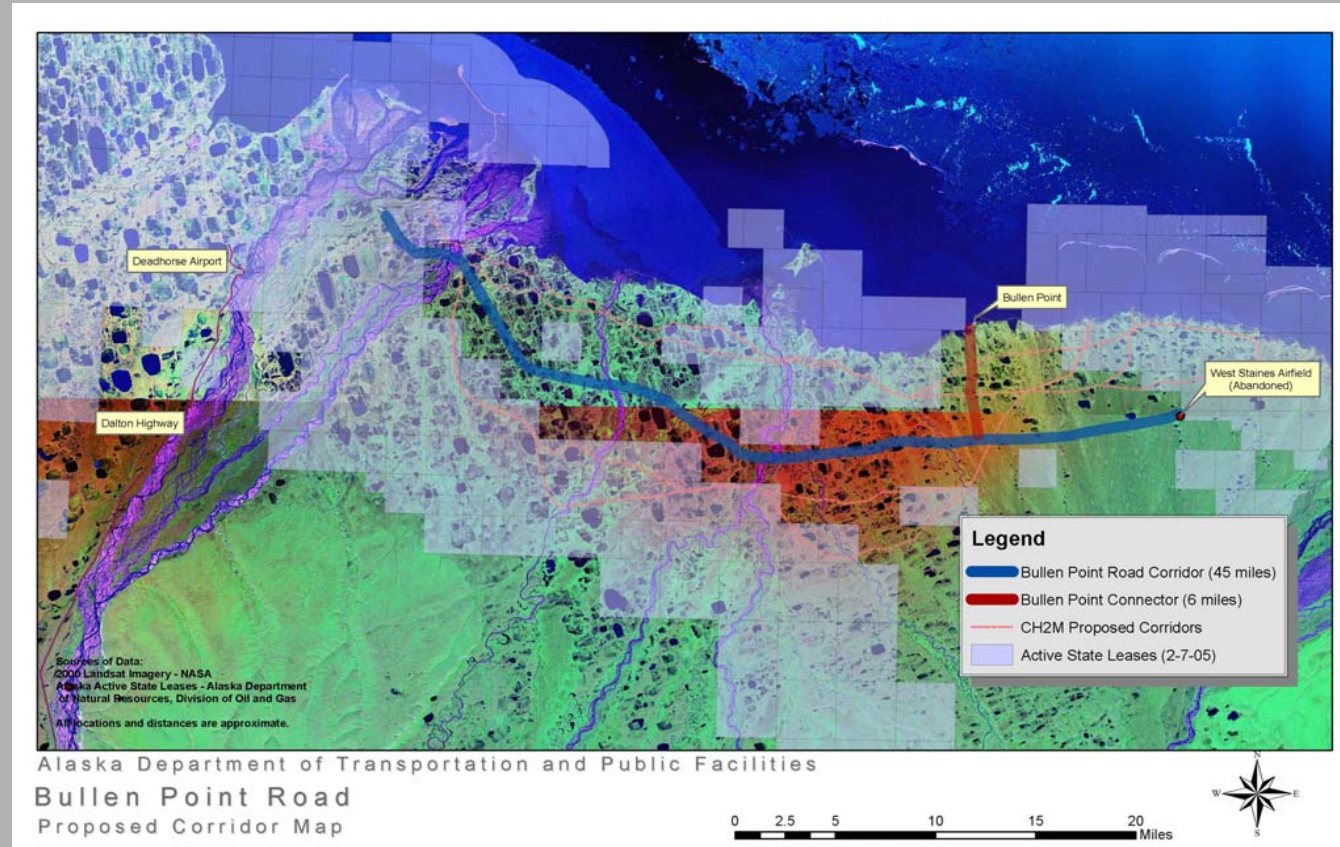
Yukon-Kuskokwim Rivers Ports and Road

Pebble Gold-Copper Port and Road





# Bullen Point Road



A road, and a pipeline R/W east off the Dalton Highway to oil/gas developments. In addition to the coastal route, shown on the map, the design team is looking at route options to the south in the Franklin Bluffs area

- Baseline Studies for Design/EIS
- Construction Start-up

Underway  
Winter/Spring 2007/2008

**This design-stage project is now at ADOT&PF Northern Region Design**  
**Patty Miller, (907) 465-2275, is the project manager**

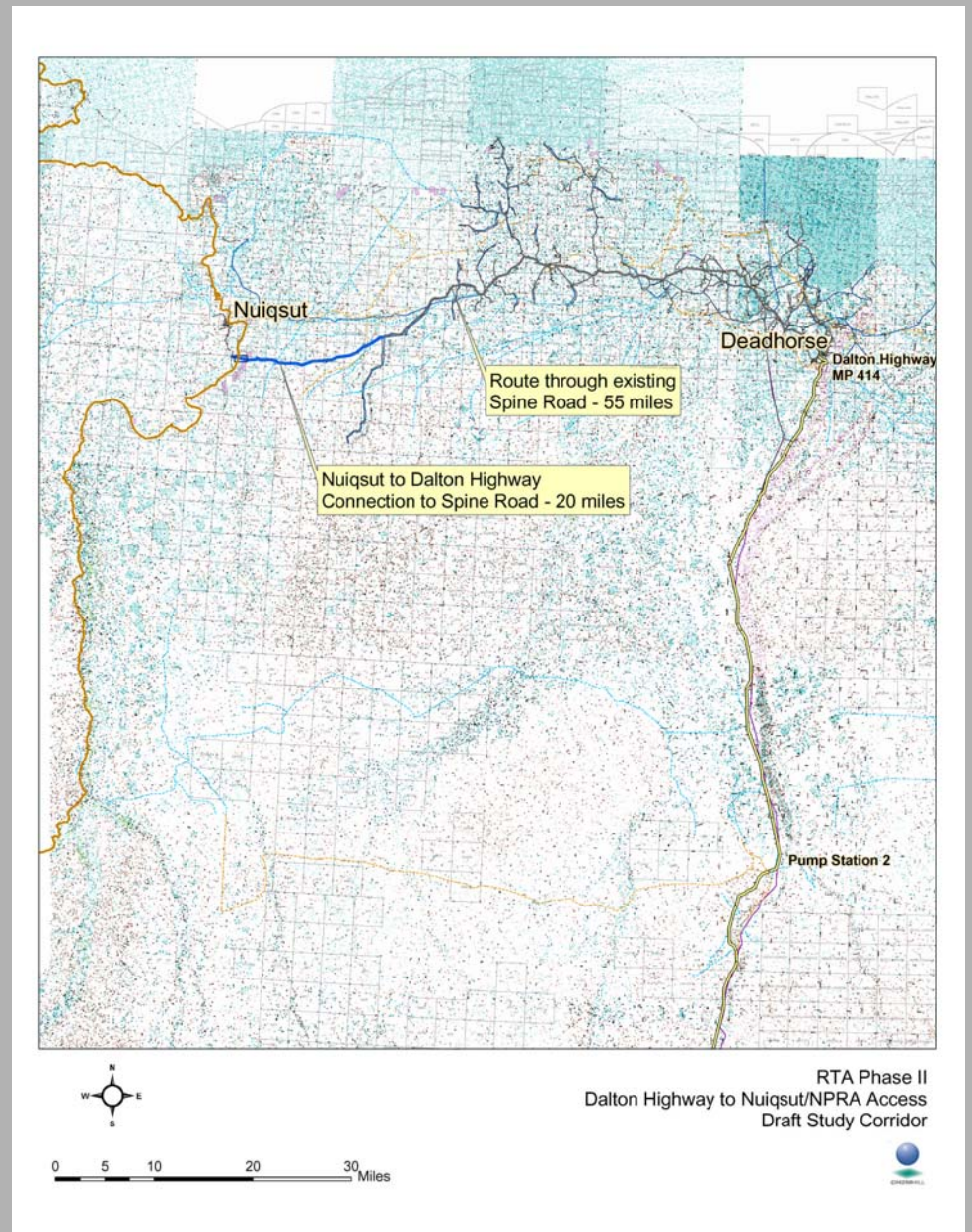
# Colville River Road

One of two primary alternatives examined to access NPR-A, this 20-mile road west from the Spine Road to a 3,300-foot bridge over the Colville River Bridge was selected for design and construction in early 2004. Its goal was to improve NPR-A access, and facilitate oilfield development.

Changes in industry development schedules and patterns in NPR-A and concerns about security resulted in the shut down of this project in late 2004.

Bridge crossing information will be held for a potential future crossing. Road engineering data may be of use to industry in the future.

Cost estimate-\$120-150 million



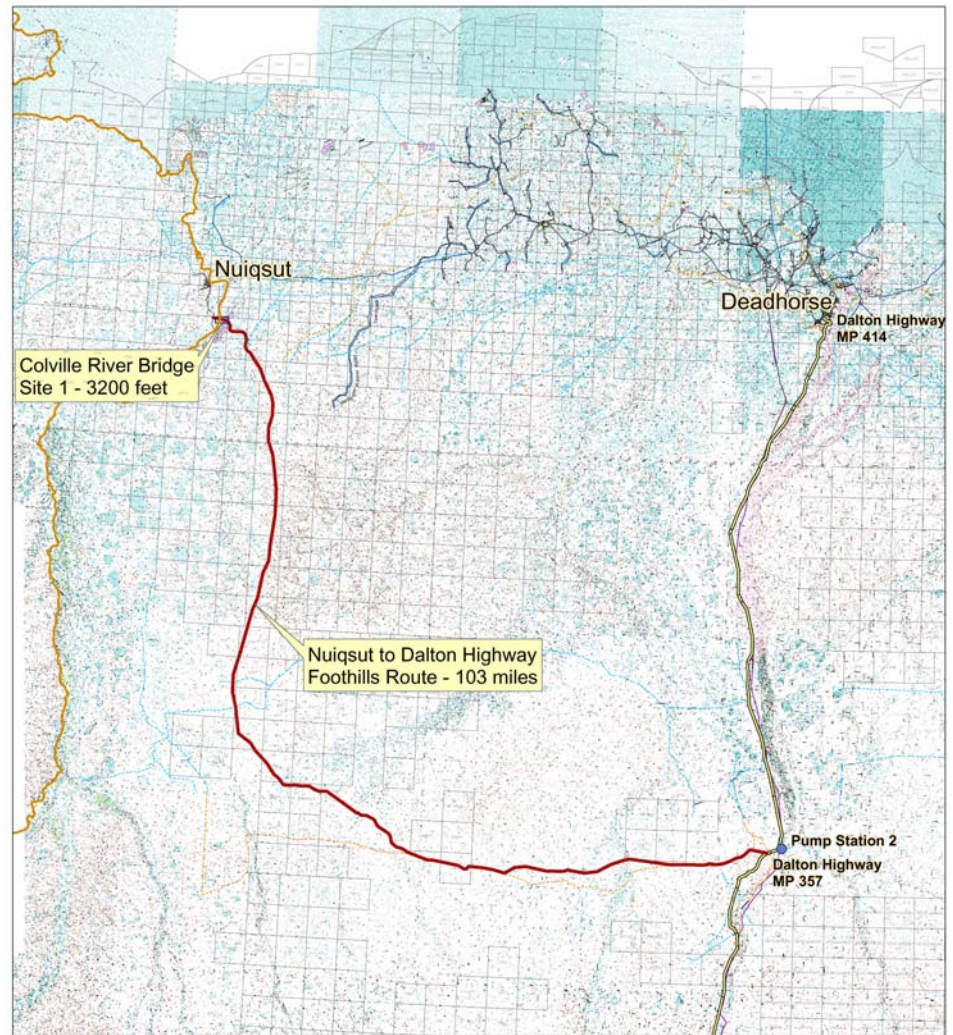


# Colville River Road

One of two alternatives primary routes investigated to access NPR-A also provided access to Brooks Range Foothills oil/gas leases

This route offered access to two major oil/gas field targets, but construction costs of \$450 million made the project impractical given the long development lead time in the foothills

This alternative was set aside in favor of the more direct Spine Road Extension project



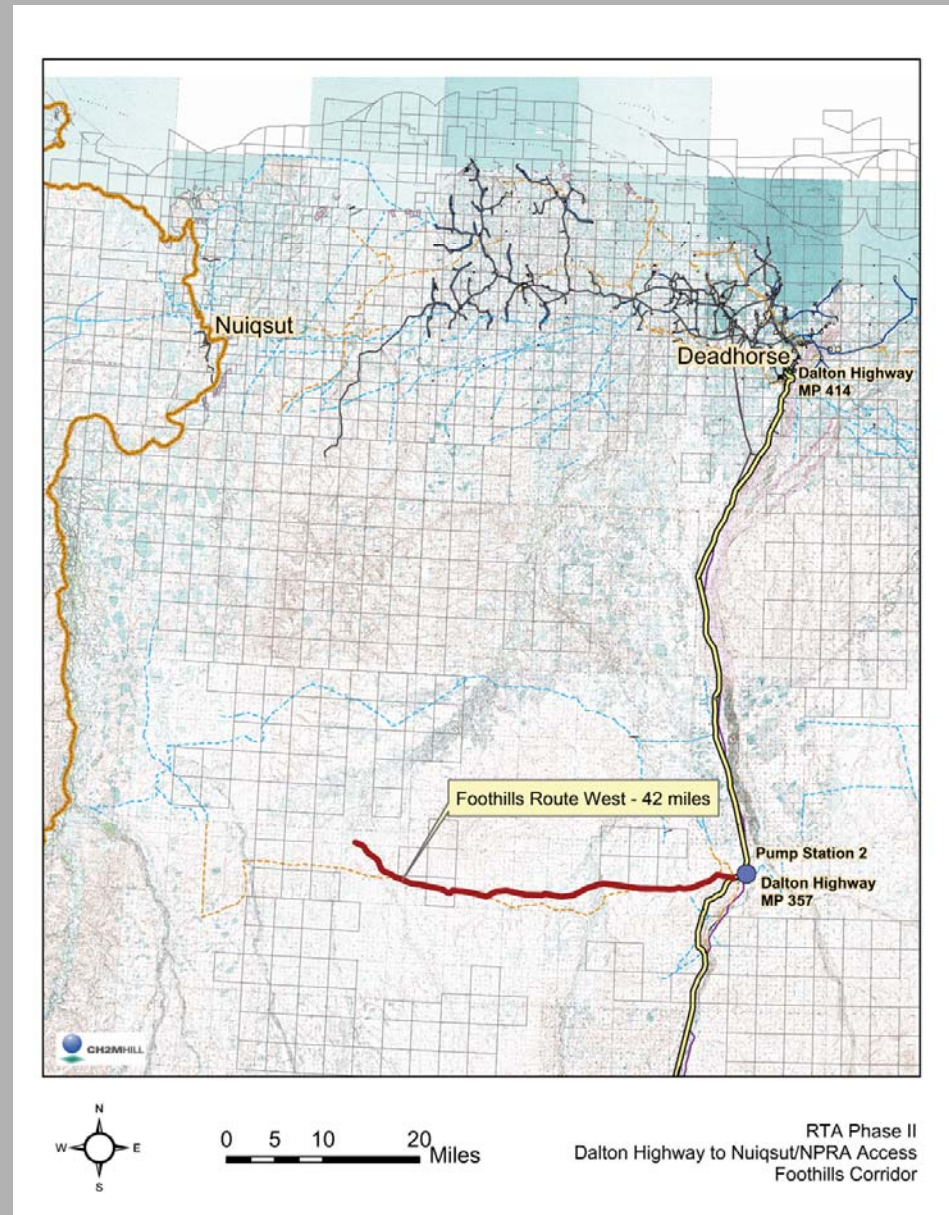
RTA Phase II  
Dalton Highway to Nuiqsut/NPRA Access  
Foothills Corridor



# Foothills Access Road

This project is the east to west section of the long route to NPR-A. It is a 45-mile all-season road west off Dalton Highway to the Kuparuk River area. Its purpose is to access basin and foothills leases.

- The project scope has been revised to include analysis of a route north of the White Hills into the primarily oil-prone basin area and an analysis of an aviation-based approach to exploration activities for both the oil-prone basin area and the gas-prone foothills area.
- Reconnaissance engineering scheduled for completion in late 2006





# Red Dog Zinc Mine

(Delong Mountain Terminal Port Expansion)  
Working with NANA, TechCominco, AIDEA

Existing system--Barge delivery to ships  
offshore



Proposed Port Expansion--Ship  
would come directly into port  
through a dredged channel and  
turning basin.

COE Draft EIS review for the  
project will begin in mid-2005





# Deadfall Syncline Coal Mine near Point Lay

Working with: ASRC, NANA, and TechCominco

Reconnaissance engineering underway to determine if there is a practical road route between the coal mine and Delong Mountain Terminal.

Mine could eventually export 1-2 million tons of high-quality coal per year to Asia for use in coal-blend formulas.

90-mile road to Delong Mountain Terminal appears most practical. Grades and terrain breaks appear to preclude rail.

Reconnaissance engineering will be complete in late 2005.

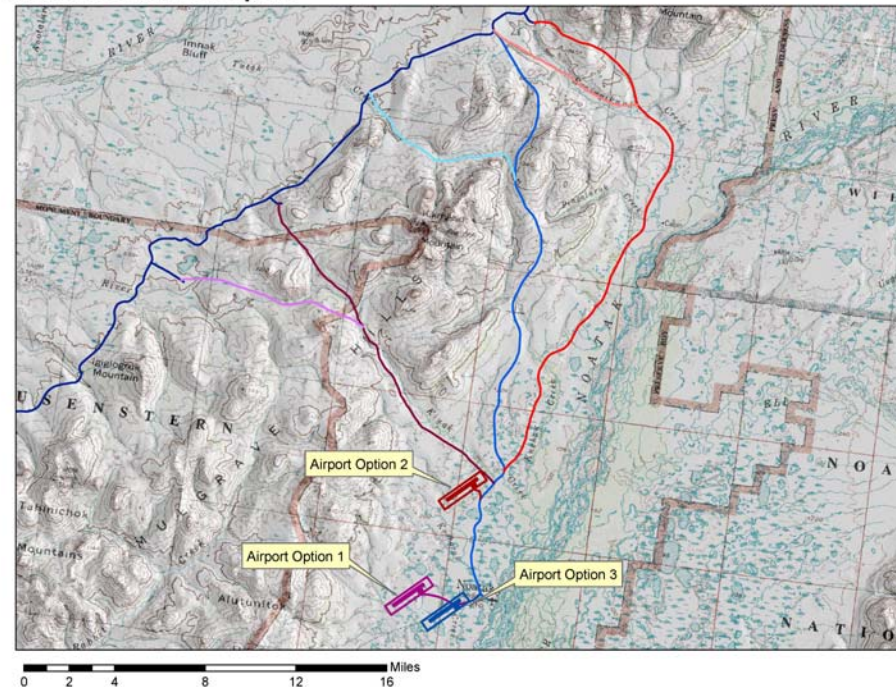


# Noatak Airport and Red Dog Mine Access Road

Alaska Department of Transportation and Public Facilities  
DeLong Mountain Transportation System

## Project Overview

### Noatak Road and Airport

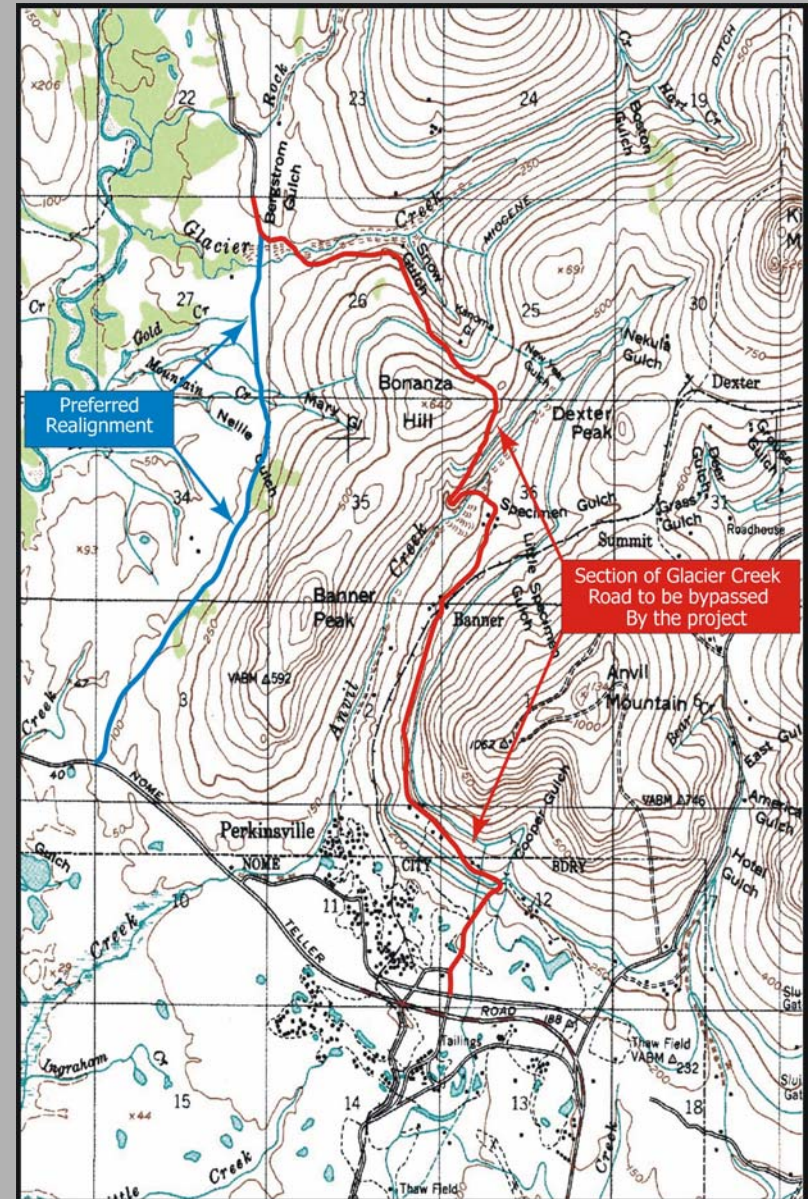


- A jet-capable runway at Noatak and 20-35-mile road to Red Dog Mine is being investigated to determine if these will improve air carrier operations at the mine
- Benefits Noatak by fuel and heavy freight deliveries from DMT port
- A route through Cape Krusenstern Monument that is favored by locals has been added back into the analysis
- Draft reconnaissance engineering report due June 2005

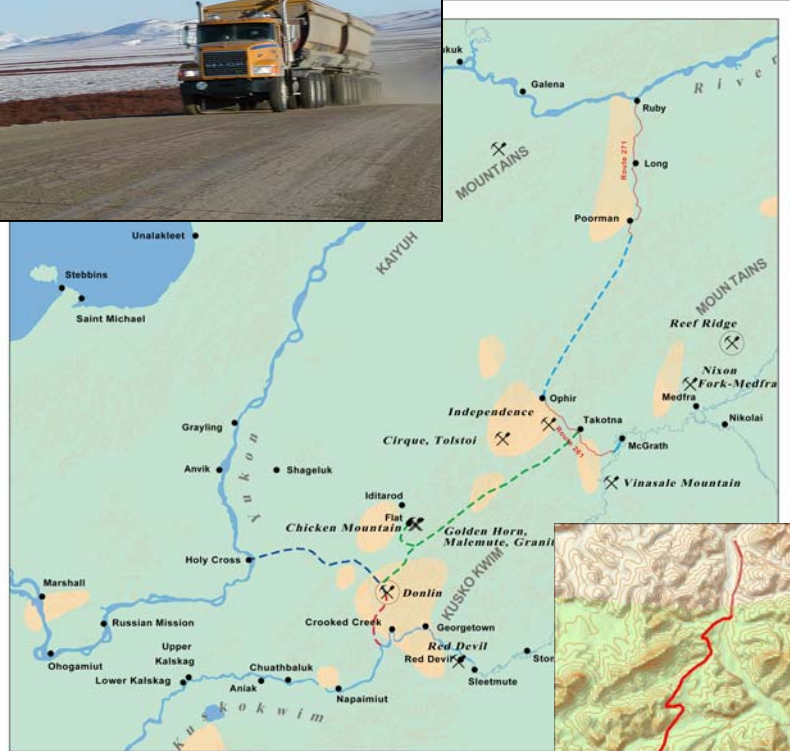


# Nome Glacier Creek Road Realignment

- 3-mile road improves access to Rock Creek Gold Mine
- Removes traffic from Nome watershed
- Improves State M&O costs
- Funded through Federal-Aid Highway program
- Two-season construction project is underway and will be complete by fall 2005



# Yukon-Kuskokwim Transportation Corridor



RTA Phase II reconnaissance engineering work found that ports on the Yukon and Kuskokwim Rivers, and roads linking the ports to region's mineralized area is a practical construction project

**Phase 1-**A barge port on the Kuskokwim River and a 24-mile road from the port to the Donlin Creek Mine area (inset map)

**Phase 2-**A mainline barge port on the Yukon River and a 65-mile road to the Donlin Creek Mine area

**Phase 3-**Road north from Donlin Creek Mine) area to McGrath and Ruby to access known and potential deposits in the mineral-rich region



# Yukon-Kuskokwim Transportation Corridor

## Current Status

In January, 2005, Placer Dome, Inc., Donlin Creek Mine developer, took over design and construction responsibility for the Phase 1-Kuskokwim River port, and road from the port to the mine.

This action was due largely to three factors:

- Public access challenges associated with a public-funded road
- Costs, including vehicle licensing, fuel taxes, differential insurance rates and other costs associated with using a public instead of private road
- Control of design and construction timing; making sure that construction startup is compatible with the mine development schedule

Phases 2 and 3 have also been closed at ADOT&PF. Donlin Creek Mine, the primary near-term target in the region does not need a road from the Yukon River for their operation. If they do use the Yukon River for fuel transport, they would build a buried pipeline during with a winter construction project. There are no other near-term major mine developments in the region that warrant State investment in a Yukon River port and road.

# Pebble Gold-Copper Port and Road Reconnaissance Engineering



This project includes a west Cook Inlet port and 95-mile road to the Pebble Gold-Copper mine area. The road would be a public road that served the area villages as well as the mining district.

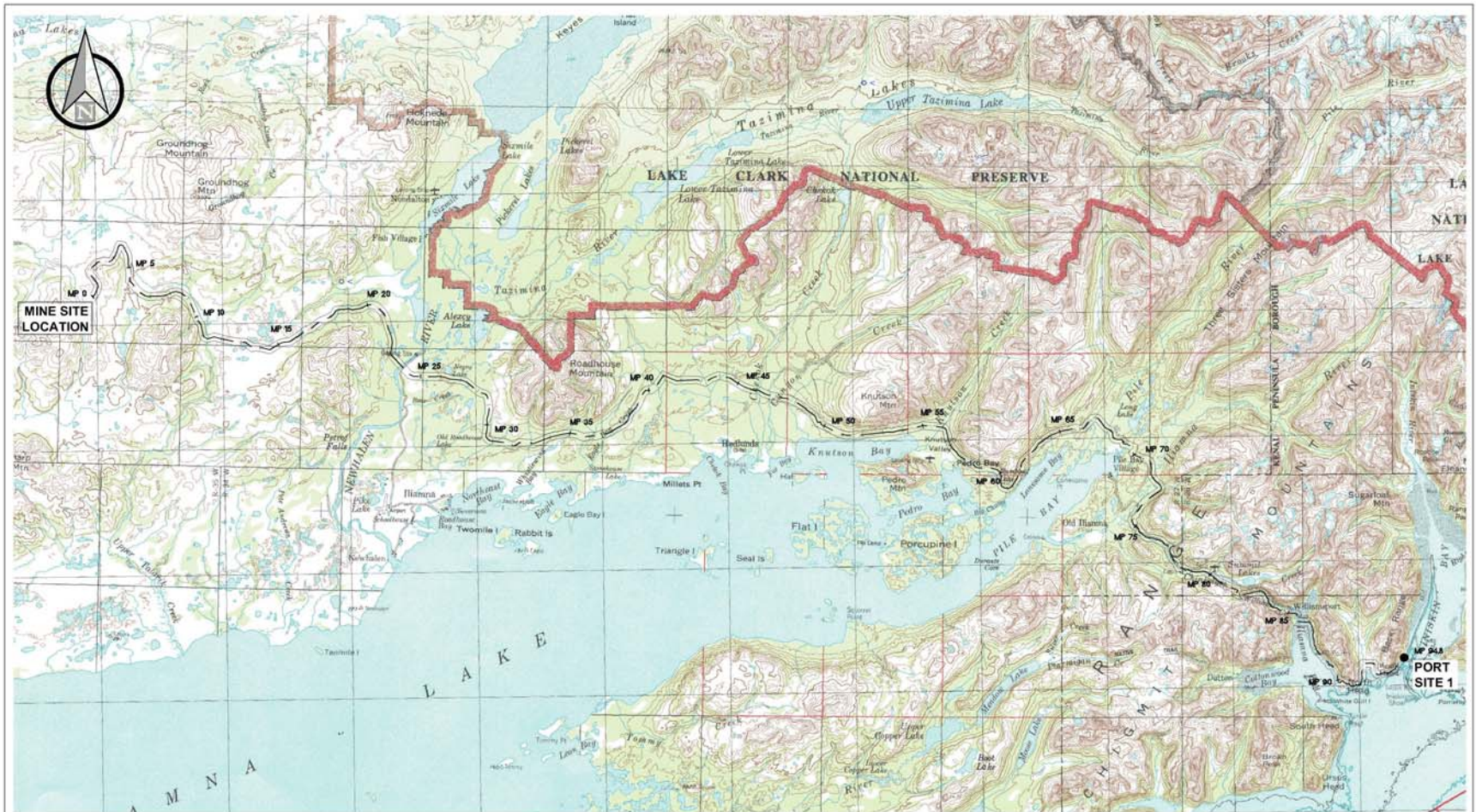
Reconnaissance Engineering has determined there is:

- A port site that appears adequate-summer 2005 bathymetric survey is scheduled to confirm port and ship approach depths
- A practical road corridor that could connect port and mining district-final field work during summer 2005 will refine the corridor

A Benefit/Cost Analysis scheduled for summer of 2005 will help determine the value of State investment in the project.



# Pebble Gold-Copper Port and Road



**DRAFT**

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STATE OF ALASKA  
INDUSTRIAL ROADS  
CORRIDOR ANALYSIS  
FINAL CORRIDORS

REV	DATE	DESCRIPTION

DRAWN BY:	WJG
DESIGNED BY:	TO DATE: JUNE '04
CHECKED BY:	JWP PROJECT NO: 041018

FIGURE 1-3

# Pebble Gold-Copper Project Tasks to Complete

- Refine road corridor and conduct port survey
- Conduct a Benefit/Cost Analysis
- Prepare Draft Reconnaissance Engineering Report
- Conduct DOT&PF/DNR Draft Report review-September/October 2005
- Make the Draft Report available to the public-November 2005
- Prepare a Final Reconnaissance Engineering Report
- Complete Reconnaissance Engineering-March 2006
- DOT&PF work will go on Standby until mine permit applications are submitted
- Port and road project will be incorporated into mine EIS

