



KABATA

KNIK ARM CROSSING

DOT&PF



Meeting Notes

Subject	Agency Scoping	Sheet	1	of	15
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Project Number	21132
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Meeting Date	May 11, 2005	Meeting Location	4 th Floor Conference Room
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Notes by	Terry McConnell	Office	Anchorage
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Attendees:	See List Below		

Topics Discussed	Accomplishments Since Last Meeting	Purpose and Need	Concept Alternatives
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Mark Fink	Alaska Department of Fish and Game (ADF&G)		
Marcie Menefee	Alaska Department of Natural Resources (ADNR)		
Don Perrin	Alaska Department of Natural Resources (ADNR)		
Kim Rice	Alaska Department of Transportation and Public Facility (DOT&PF)		
Bruce Carr	Alaska Railroad Corporation (ARRC)		
James Spell	Alaskan Command (ALCOM)		
Rodney Huffman	Bureau of Land Management (BLM)		
Murph O'Brien	Matanuska Susitna Borough (MSB)		
Fred Carpenter	Municipality of Anchorage (MOA)		
Larry Peltz	National Oceanic and Atmospheric Administration (NOAA) Fisheries		
Danny Barnett	U.S. Air Force (USAF)		
Valerie Payne	U.S. Air Force (USAF)		
Allen Lucht	U.S. Army		
Skip Joy	U.S. Army Corps of Engineers (COE)		
Heather Dean	U.S. Environmental Protection Agency (EPA)		
Elaine Somers	U.S. Environmental Protection Agency (EPA)		
Phil Brna	U.S. Fish and Wildlife Service (USFWS)		
Denny Lassuy	U.S. Fish and Wildlife Service (USFWS)		
Rima Lewis	Federal Highway Administration (FHWA)		
Edrie Vinson	Federal Highway Administration (FHWA)		
William Greene	Knik Arm Bridge and Toll Authority / Department of Transportation and Public Facility (KABATA/DOT&PF)		
Dale Paulson	Knik Arm Bridge and Toll Authority / Department of Transportation and Public Facility (KABATA/DOT&PF)		
Louise Smart	CDR Associates		
Rosetta Alcantra	HDR Alaska		
Bill Chopyk	HDR Alaska		
Kevin Doyle	HDR Alaska		



Meeting Notes

Jim	Garrelts	HDR Alaska
Duane	Hippe	HDR Alaska
Terry	McConnell	HDR Alaska
John	McPherson	HDR Alaska
Robin	Reich	HDR Alaska
Sarah	Schoen	HDR Alaska
Carla	SlatonBarker	HDR Alaska
Jeff	Turner	HDR Alaska
Dale	Funk	LGL
Paul	Kendall	PND
Doug	Kenley	PND
Lindsey	Holmes	RISE Alaska
Rich	Stern	Stephen R. Braund and Associates (SRBA)
Jack	Colonell	URS Corporation
Jim	Glaspell	URS Corporation
Jon	Isaacs	URS Corporation
Lisa	Loy Gray	URS Corporation
Robin	Senner	URS Corporation

Lunchtime Open House Poster Stations

Louise Smart (CDR) Welcom

Introductions around the room

Louise Smart (CDR)

The purpose of this meeting is to discuss crossing concepts and their reasonableness. Our goal is to have direction from you about which ones are not reasonable. We will be talking about crossing modes and crossing types. After your input, alignment alternatives will be what is left. The project team is going to show you project concepts and how we are applying criteria. We would like to know if we are on track. Today's discussion is not about a final decision or concepts to dismiss because the Purpose and Need is still being worked. We will have a feedback sheet at the end of the meeting. These sheets have been a very useful tool for the project team to assess their direction. From what we heard in the last scoping meeting on April 25, the Purpose and Need has been changed and sent out to all the agencies for feedback. Do you have any comments about that?

Kevin Doyle (HDR)

The purpose of the Knik Arm crossing project is to provide improved, regionally significant vehicular access and intermodal surface transportation connectivity between the Municipality of Anchorage and its Port of Anchorage/Ship Creek industrial area and the Matanuska-Susitna Borough and its Port MacKenzie District with a financially feasible crossing to meet the regional transportation infrastructure needs for:



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- Efficient transportation infrastructure to support existing and projected population growth and economic development for the Upper Cook Inlet region and as directed by the Alaska State Legislature in Alaska Statutes chapter 19.75;
- Efficient and direct surface transportation connectivity for the movement of people and the movement of freight and goods to, between, and distribution from the Port of Anchorage/Ship Creek industrial area and the Port MacKenzie District;
- Redundant overland route for access to regional airports, ports, military bases, hospitals, and fire, police and disaster relief services for emergency response and evacuation.

Murph O'Brien (MSB)

The first one deals with regional connectivity and planning. The Mat-Su Borough is concerned with some of the drawings we've seen because of additional infrastructure needed on that side. We've only seen port to port connectivity. Is it going to be logical termini or port to port?

Elaine Somers (EPA)

I haven't read the background documentation but my question is about evacuation. What kind of evacuation and why? For example tsunami evacuation would probably not make sense by using a bridge.

Kevin Doyle (HDR)

The vulnerability concern is that there is only one arterial highway for incident management or a catastrophic event. System redundancy is the goal, especially looking into the future.

John McPherson (HDR)

Emergency access works both ways. Folks from outside Anchorage also have a need to get to Anchorage hospitals for example.

Edrie Vinson (FHWA)

We will be working on that to be sure we have a full understanding of the issues.

Bruce Carr (ARRC)

The Purpose and Need reads well. When I read the current project background, it leaves out the Alaska Railroad. The railroad is the fastest growing freight mover by using containers on rail. The Purpose and Need must build up the rest of the transportation system and infrastructure of all modes.



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Louise Smart (CDR)

Do you like how the Purpose and Need is going?

Elaine Somers (EPA)

Regarding infrastructure on the Mat-Su side; it raises the question about individual utility of this project.

Kevin Doyle (HDR)

AMATS 2025 network plans to tie into what the future looks like. This would include the 800' railway corridor from west of the Little Susitna River, west of Red Shirt Lake to the Parks highway near Willow. This project goes through 2030. We see the connection as land use is built out.

Jon Isaacs (URS)

A crossing must keep in mind other planning that will occur whether or not a bridge is built. A crossing must fit connectivity.

Murph O'Brien (MSB)

The railroad corridor to Willow is about the same cost as this project. Some of their improvements may be in a plan, but how are they going to be funded?

Skip Joy (COE)

We want to consider the impacts of this bridge.

Kevin Doyle (HDR)

The Economic Working Group is going to be revealing exactly that picture.

Jamie Spell (ALCOM)

In terms of Emergency Response, we are concerned about proximity security issues.

Kevin Doyle (HDR)

In regards to the study area, as constraint concepts moved forward, Government Hill strongly requested a potential route through Elmendorf. The military is willing to look at corridor concepts on base. Nothing is off the table. So the study area has expanded. The goal is to minimize damage to tidelands. We met with Jamie Spell (ALCOM) and the Government Hill representatives. One concept runs on top of the Elmendorf bluff through Cherry Hill housing. It has some relocation costs associated with it, but we will approach this as a corridor in the NEPA process. Another option goes through the base, cutting to Boniface and the Glenn highway. There is also an old rail alignment that would exit at Post Road. An old north port access study shows a route to the Glenn Highway at the Highland interchange, but would need a grade separation crossing to allow military activities.



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Bruce Carr (ARRC)

Mat-Su Borough just completed a study of the 800' rail corridor. The current 200' corridor creates a conflict because it limits expansion.

Phil Brna (USFWS)

A lot of us are working on the Port of Anchorage expansion. Many of these ideas present opportunities as we see it.

Mark Fink (ADF&G)

I have a question for the military. If there is a corridor through military land, in an emergency, would you cut off access?

Jamie Spell (ALCOM)

There would be no stopping or leaving the corridor. Security measures would have to work from the beginning.

Phil Brna (USFWS)

Such a security restrictive corridor would most likely block critter movement.

Elaine Somers (EPA)

Did you say you were trying to avoid the CERCLA site?

Kevin Doyle (HDR)

Yes

Elaine Somers (EPA)

EPA would prefer to see building on contaminated sites, rather than disturbing new sites. It is more efficient to actually use those sites if possible.

Robin Senner (URS)

Indirect and Cumulative Methodology Feedback

- Methodology Comments
 - Regional perspective that is broader north/south
 - Systemic connectivity – regional transportation systems north/south
 - Incorporate watershed for quality and supply
 - Ecological connectivity
 - Aquifers and surface water
 - Wetlands and streams
 - Habitat and wildlife corridors
- RFFA's (Handout)
 - Future wild land fire management
 - Future military operational changes
 - Increased aquaculture



Meeting Notes

- Port of Anchorage expansion

Kevin Doyle (HDR)

Draft Screening Criteria

Our first task is to take all ideas and determine which are reasonable to be included in the DEIS. We want you to help us define “reasonableness” for mode/type. We will then screen them through the Purpose and Need to see if they pass the “reasonableness” test. It should then show what the project should look like. The criteria should show any fatal flaws.

- Purpose and Need Screening Criteria
 - Provides improved, regionally significant vehicular access and connectivity between the POA/Ship Creek industrial area and Port MacKenzie District.
 - Is financially feasible (construction, life-cycle, and O&M).
 - Provides efficient transportation infrastructure and connectivity to meet existing and projected population growth and economic development for the Upper Cook Inlet region.
 - Provides a redundant transportation route for emergency response and evacuation.
 - Provides efficient and direct surface transportation connectivity for freight and goods movement to, between, and distribution from the Strategic Port of Anchorage/Ship Creek industrial area and the Port MacKenzie District.
 - Meets the intent of the Alaska Legislature to support the economic welfare of the State through development of the Upper Cook Inlet transportation systems.
- Technical Screening Criteria
 - Has logical termini.
 - Meets transportation function for travel demand.
 - Is feasible and practicable from an engineering perspective and minimizes construction risk.
 - Is compliant with airspace restrictions and operations.
 - Is compliant with federal, state, and local regulatory and permitting requirements and regulatory authority.
 - Is consistent with regional transportation plans and air quality conformity requirements.
 - Allows for future rail crossing to the maximum extent practicable.
 - Supports port operations and does not conflict with navigation.
 - Does not conflict with military missions and operations.

Kevin Bruce (ARRC)

The last one should say “Support military mission.”

Kevin Doyle (HDR)

It can't say that.



Meeting Notes

Jamie Spell (ALCOM)

Kevin spoke correctly. Otherwise it implies we have a requirement for a bridge and we do not.

Louise Smart (CDR)

Are there additional technical criteria?

Phil Brna (USFWS)

What about something on the environment like “minimize impacts” in terms of fatal flaws?

Kevin Doyle (HDR)

The intent is for the project to be permittable.

Murph O’Brien (MSB)

What is the time frame for us to comment on the criteria for reasonableness?

Kevin Doyle (HDR)

Is two weeks reasonable? (Agreement) Robin Reich will send out a reminder for comments.

Louise Smart (CDR)

Is this a viable approach for reasonableness? Let’s have a show of thumbs up, down, or sideways for “need more information.” (All but one sideways – one thumbs up)

Break

Louise Smart (CDR)

This is the point where we are looking at concepts that have come up. Is there another mode or type that needs a good look?

John McPherson (HDR)

Concept – Marine Vessels

The information for this concept is from the Mat-Su Borough’s work. They spent four years looking at this corridor and vessel demand. There is a 2007-2008 time frame proposed for a small waterplane area twin hull connecting Anchorage to Port MacKenzie. Round trip time including docking is approximately one hour. Demand in five years is estimated at 230-816 passenger trips per weekday and 313-703 on weekends.

Murph O’Brien (MSB)

We have gone through the environmental process, and we are well into design.



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John McPherson (HDR)

We assume the Ferry will be occurring. It will be evaluated as a part of the “No Action” alternative.

Skip Joy (COE)

Would you say the numbers show a demand for a bridge in 5 years?

Murph O’Brien (MSB)

We consider the ferry an initial phase of the Knik Arm Crossing. The Ferry will support bridge construction activities.

Marcie Menefee (ADNR)

Did you assume passenger cars would use this?

Murph O’Brien (MSB)

Yes

Heather Dean (EPA)

What is the Anchorage terminus?

Robin Reich

Ship Creek Point

Elaine Somers (EPA)

Please provide us with the assumptions that went into the travel demand.

Bill Chopyk (HDR)

The Alaska Railroad has studied this extensively. The Knik Arm Railroad Crossing Feasibility Study has been completed. It concluded that there could be a rail only crossing.

- Light Rail/Commuter Rail around Knik Arm
 - Travel time 66 minutes (Wasilla to downtown Anchorage)
 - Demand 520 passengers per day.
- Light Rail/Commuter Rail Across Knik Arm
 - Annual ridership few, unless a rail line from Mat-Su core area is constructed
- Heavy Rail Across Knik Arm
 - Freight originate or end at Port MacKenzie until northern Line constructed
 - Constructed on Knik Arm Crossing
 - Constructed separate from Knik Arm Crossing

Bruce Carr (ARRC)



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Light Rail and Commuter Rail are not the same thing. You could remove Light Rail (by definition electric) to be more accurate. We have the 66 minute travel time down to 54. Your comments are good. The north corridor will go to Willow not Wasilla.

Duane Hippe (HDR)

Tunnels

- Submersed tube vs. bored tunnel
- Two 50 ft diameter tunnels
- Extensive ventilation, lighting, and safety systems
- Works with “below the bluff” alignment
- Ends at backside of Port MacKenzie

Doug Kenley (PND)

Bridges

- Pile supported
 - Used for spans ranging from 200 ft - 300 ft
 - Pile supported with steel or concrete girders
- Truss
 - Uses intermittent support foundations with large truss structure for spans
 - Can accommodate varied spans, typically 200 ft -500 ft
- Cable-Stayed
 - Used for spans ranging from 450 ft -1200 ft
 - Good for deep water
 - Allows clearance for ship traffic
- Suspension
 - Used for spans in excess of 1200 ft
 - Good for deep water
 - Allows clearance for ship traffic
- Floating
 - Rests on the water surface
 - Supported by floating pontoons
 - Deck provides stiffness

Don Perrin (ADNR)

Which of these designs falls out of reasonableness because of the antenna sites?

Doug Kenley (PND)

We have been told we don't have to consider that right now.

Kevin Doyle (HDR)

Tidal Dam



Meeting Notes

- Tidal Dam
 - This was dismissed in the 1984 studies. It was estimated to cost \$3.8 billion
 - It is a causeway entirely filled containing turbines
 - Our mandate is not for energy production

Louise Smart (CDR)

How do we apply these to reasonableness?

Skip Joy (COE)

We haven't heard different alignments. Is the location locked in?

Kevin Doyle (HDR)

We do have a parallel path looking at corridor alignments but the location is not locked in.

John McPherson (HDR)

Marine Vessels

This is part of the "No Action" alternative, so it will be included in the EIS. The question then is "What about bigger ferries or more of them?"

- Does not meet Purpose and Need Screening Criteria
 - Will not provide capacity for regional needs.
 - Not financially feasible; requires subsidy to cover O&M costs.
 - Not efficient due to schedule, transit time, operation hours, hazardous materials.
 - Will not accommodate projected growth.
 - Insufficient capacity during emergencies.
 - Not efficient or direct due to schedule, transit time, and operation hours. Commodities are limited.
 - Although ferry forthcoming, legislature/Congress moving forward with bridge.

Bill Chopyk (HDR)

Rail

- Commuter Rail Around Knik Arm
 - Does not meet Purpose and Need Screening Criteria
 - Does not provide vehicular access and connectivity across Knik Arm.
 - Not financially feasible; operates at a loss (\$2.2-3.6 million based on \$4.50 fare).
- Commuter Rail Across Knik Arm
 - Does not meet Purpose and Need Screening Criteria
 - Not efficient due to travel times and schedule
 - Will not accommodate growth and economic development
 - Does not provide vehicular access and connectivity



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KNIK ARM CROSSING

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Meeting Notes

- Heavy Rail Across Knik Arm (Separate from Vehicular Bridge)
 - Does not meet Purpose and Need Screening Criteria
 - Does not provide vehicular access and connectivity
 - Not efficient due to travel times and schedule
 - Not financially feasible
- Heavy Rail Across Knik Arm (With Vehicular Bridge)
 - Does not meet Purpose and Need Screening Criteria
 - Not financially feasible (incremental cost to add rail to bridge approximately \$350 million [2002 dollars])

Duane Hippe (HDR)

Tunnels

- Does Not Meet Purpose and Need Screening Criteria
 - Not financially feasible.
 - Expensive construction costs = > \$1 billion.
 - Expensive operation, and maintenance costs = \$3 - 5 million per year.

Doug Kenley (PND)

Bridges

- Pile Supported
 - Commonly used span meets length needs of this project
 - Most economical for this project
 - Proven construction in Knik Arm
 - Pile foundations more forgiving in scour conditions
- Truss
 - Old technology
 - Maintenance intensive
 - Load restrictive (weight, width)
- Cable-Stayed
 - No need for large spans for this crossing
 - Higher capital costs (2x pile supported girder bridge)
 - Higher maintenance costs (usually proportioned to span length)
- Suspension
 - No need for large spans for this crossing
 - Higher capital costs (2x pile supported girder bridge)
 - Higher maintenance costs (usually proportioned to span length)
- Floating
 - Difficult design conditions (ice floe, tidal currents, wave action in high winds)
 - Icing problems

Mark Fink (ADF&G)



Meeting Notes

Why are three of the designs (truss, cable-stayed and suspension) not reasonable?

Doug Kenley (PND)

The pile supported bridge passes the Purpose and Need and is the most reasonable cost.

Kevin Doyle

A tidal dam is not reasonable at this point. It is an old idea that was estimated to cost \$3.8 billion in 1984.

Murph O'Brien (MSB)

There is a lot of information coming which makes processing it all a challenge. John is saying the ferry is being taken as "No Bridge Alternative." The bridge needs to be self-supporting. I have concerns about how this presentation presents the ferry. There is a different Purpose and Need for the ferry. Be sensitive to the fact that the ferry is an existing project. To say a subsidy makes a project "not feasible" is not true.

John McPherson (HDR)

If the toll structure that comes back from Wilbur Smith will not support the maintenance and some capital costs, then that is a non-starter.

Edrie Vinson (FHWA)

I acknowledge this is a lot of information, and I'm concerned about the impact on the current ferry project.

Bruce Carr (ARRC)

I'm not convinced you must talk negatively about these other alternatives to support your Purpose and Need for a bridge. Be very careful how you give written presentations because we need the support of the public to run ferries and railroads. Talk of regional transportation systems without harming other modes in your presentations. It could be that other projects are complimentary to this one over the long range, like a ferry with a bridge. Your Purpose and Need statement requires regional infrastructure all at once. It also states "provides connectivity". The railroad provides connectivity. Instead maybe you should say "vehicular connectivity." In your presentation, maybe you should combine "Heavy Rail" and "Commuter Rail." The railroads are efficient; they connect all three south central ports and have opened up the interior of Alaska. We connect four military bases and the major communities. Just be careful that you don't harm other modes.

John McPherson (HDR)

In an EIS, should we be looking at rail and ferries as the solution to this Purpose and Need?

Bruce Carr (ARRC)

The original plan was for a combination of vehicular and rail bridge but it was too expensive.



Meeting Notes

Elaine Somers (EPA)

Why do the two ports need to be connected?

Kevin Doyle (HDR)

It's not just the ports. It is to provide multi-pronged connectivity to the industrial areas and beyond for truck traffic etc.

Bruce Carr (ARRC)

The Alaska Railroad area is larger than the Port of Anchorage. 80-90% of the goods coming into the state are distributed through the port. Distribution is the key. We have thousands of car loads to distribute. We don't have an efficient distribution system now.

Skip Joy (COE)

Do tunnels have high maintenance costs? Bridge maintenance costs are high. How does it compare?

Duane Hippe (HDR)

It depends on the bridge type. The type we are proposing has the lowest maintenance costs, far less than others.

John McPherson (HDR)

The mechanical systems like fans and motors for a tunnel would have substantial maintenance costs as well as monitoring costs.

Skip Joy (COE)

A bridge has a large surface area that needs to be maintained too. I would like to see cost comparison.

Kevin Doyle (HDR)

Cost for tunnel vs. bridge was studied in the 1984 DEIS and it was 2-3 times more expensive.

Allan Lucht (US Army)

What is a reasonable cost? The public needs to understand that so it needs to be defined.

Kevin Doyle (HDR)

There are two answers:

- NEPA does not put a threshold. It is both cost and impacts
- KABATA figures show \$400-\$600 million to own operate and maintain.

Edrie Vinson (FHWA)



Meeting Notes

This has been good. Our intent is not to make other projects look bad, but rather to support others.

Danny Barnett (USAF)

You haven't shown improving existing routes, like adding a forth lane to the highway.

Kevin Doyle (HDR)

That will be part of the "No Action" alternative.

Danny Barnett (USAF)

Looking at total cost, you're assuming infrastructure on the other side will be built.

Skip Joy (COE)

It sounds like you're locked down on Purpose and Need.

Kevin Doyle (HDR)

No, we have not locked it down. Nothing has been dismissed.

Elaine Somers (EPA)

Does the \$400-\$600 million include environmental mitigation?

Kevin Doyle (HDR)

Yes, in a placeholder sense. It assumes \$200-\$280 bridge costs. Several mitigation costs are included like cut and cover tunnel in Government Hill. Until we know what the project is, it's hard to get exact costs, but there are practical ways like "fee in lieu" or "in kind replacement." They are credible placeholders from other work in Alaska.

Louise Smart (CDR)

We are passing out the feedback form. These forms have been very helpful as we look at your feedback. Initial scoping comments are due tomorrow. Our next meeting is set for June 29. Written comments on concepts, reasonableness and application of reasonableness are due in two weeks. You should mail these to Edrie Vinson at Federal Highway Administration. At the same time you can just email these to Dale Paulson (KABATA/DOT&PF), Kevin Doyle and Robin Reich (HDR) for the Administrative Record.

Kevin Doyle (HDR)

At the next meeting there will be a lot of "old business."

- Agency comments from May 12 which may change the direction of the next meeting
- Update on Purpose and Need
- Further advancement of environmental studies
- A chart applying some of these to corridors, looking at order of impacts
- Alignment phase



Meeting Notes

Murph O'Brien (MSB)

Please make sure I am on your email list.

Skip Joy (COE)

I would like to receive hard copies of all correspondence.

Elaine Somers (EPA)

I would like to receive everything by email and hard copy.

Bruce Carr (ARRC)

Can we get a list of all the things you have sent out?

Phil Brna (USFWS)

Will all the agency comments be on the website?

Kevin Doyle (HDR)

The Scoping Summary Report will be placed on the website, but the agencies will get a copy first.

Edrie Vinson (FHWA)

I really appreciate your participation in these meetings and feedback.