



KNIK ARM BRIDGE AND TOLL AUTHORITY  
KNIK ARM CROSSING PROJECT

KABATA

# ANNUAL Report 2004



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KABATA

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This Annual Report is submitted in compliance with AS 19.75 to inform the Governor and the Legislature on the status and prospects of the project. This Annual Report will be available to the public on the project website at [www.knikarmbridge.com](http://www.knikarmbridge.com), or through the KABATA office at 269-6698.

# Mission Statement

The Knik Arm Bridge and Toll Authority will develop, stimulate, and advance the economic welfare of the state and further the development of public transportation systems in the vicinity of the Upper Cook Inlet with construction of a bridge to span Knik Arm and connect the Municipality of Anchorage and the Matanuska-Susitna Borough.

# From the Chairman

KABATA

This year marks the first full year of activity for the Knik Arm Bridge and Toll Authority (KABATA) since the Alaska Legislature passed the enabling legislation in 2003. The leadership of Governor Murkowski and the Alaska Senate and House of Representatives is to be commended for its foresight and innovation in establishing a toll authority to manage this project.

The strategy of the KABATA Board of Directors has maximized the feasibility and planning phase while awaiting Congressional action on the Federal transportation bill – TEA-LU. The project's capital budget estimates construction costs between \$400 and \$600 million. It is anticipated that a portion of the cost of constructing a Knik Arm bridge will be funded federally, and the balance will be a combination of state, local and debt-financing.

Significant progress has been made this year in developing the baseline information that can be used to prepare the Environmental Impact Statement (EIS) required by the National Environmental Policy Act. Special recognition should be given to the Anchorage offices of our project consultants PND, URS and HDR and their subcontractors that have done the work reported herein. There is every reason to be proud of these fine Alaskans and their excellent work.

On 1 December 2004, KABATA submitted a request to the Federal Highway Administration to publish a Notice of Intent to undertake the EIS. Concurrently, HDR and its subcontractors were selected as the consultants to prepare the EIS. The first step in that process, scheduled for Spring 2005, is scoping. It provides an opportunity for the public and resource agencies to learn about and to comment on the project. The balance of the year 2005 will be dedicated to preparation of the Draft Environmental Impact Statement, ongoing fieldwork, and additional public reviews.

The success of this project will depend in large measure on Alaskans. Each of us has a stake in the future of our state. Building now, to prepare for the generations to come, is the opportunity before us.

Sincerely,



George Wuerch  
Chairman, Knik Arm Bridge and Toll Authority



“

The Toll Authority  
adds a new dimension  
to Alaska's capacity  
to build critical  
transportation  
infrastructure.

”

George Wuerch  
Chairman, KABATA

KABATA

# Knik Arm Crossing Project

KABATA

The Knik Arm Bridge and Toll Authority (KABATA) was created in 2003 by Alaska Statute (AS 19.75.011) to construct a cost-affordable, vehicular toll bridge to span Knik Arm connecting the Municipality of Anchorage and the Matanuska-Susitna Borough. Working with the Federal Highway Administration (FHWA) as lead agency, KABATA will develop a project to meet the following needs:

- An efficient link between the operations and infrastructure of the two ports
- Military logistics and deployment
- An alternate north-south emergency response and disaster evacuation route
- Transportation infrastructure for existing and projected population and economic growth, and
- Implementing the Alaska legislative mandate.

## Project Facts in Brief

- Location: Between the Port of Anchorage area and the Port MacKenzie area
- Length and Width: About two miles with proposed 3-lane crossing structure, including road connections on both sides
- Physical Environment: 50-60 feet of water with tidal fluctuation over 38 feet
- Current Funding: Planning funds secured for Environmental Impact Statement process and permitting
- Construction Cost: Estimated at \$400-600 million, from congressional appropriations (TEA-LU), state and local grants, and public and private sector investment including KABATA revenue bonds
- Schedule: Preparation of the Draft EIS and permitting, 2005-2006, and final design and construction, 2006-2010.



# Linking Two Ports and Regions

KABATA

The Knik Arm Crossing is proposed to link the Port of Anchorage area and the Port MacKenzie area. The two ports are now separated by 80 miles of road. The two-mile crossing would support freight handling capacity, mobility and improved regional operations serving airport, military, and Alaska consumer needs by:

- Effectively coordinating operations leveraging the strengths of each port facility;
- Providing direct access from an expanding Mat-Su Borough population center to the Port of Anchorage for efficient container movement;
- Meeting the regional demand for industrial land and commodities shipping that can be provided at Port MacKenzie;
- Linking Port MacKenzie and its 10,000-acres of commercial land directly to the Anchorage road, rail, marine and air transportation hub; improving intermodal connections to the rest of the state; and, reducing the indirect costs, time and labor to travel from port to port; and,
- Coordinating efficient container off-loading in Anchorage and commodity shipping and storage, and industrial manufacturing at Port MacKenzie to strengthen regional port capacity to serve airport, military, and statewide consumer needs.





## The Port of Anchorage

The Port of Anchorage began operations in 1961, and now serves 80% of Alaskans and major military installations from Homer to the North Slope by means of rail, road and air cargo connections. It is the primary container-handling port in the state, and is currently expanding its capacity. The port handles over 90% of all consumer goods sold in the railbelt. It stages 100% of the exports of refined petroleum products from the state's largest refinery in Fairbanks. It also provides direct interties with the Ted Stevens Anchorage International Airport for supplies of jet fuel and sea-air movement of cargo to Bush Alaska.



## Port MacKenzie

Port MacKenzie consists of a 500-foot bulkhead, and 10,000 acres of adjacent uplands available for commercial lease. There is also a rock ramp to allow heavy equipment to drive on and off the dock. Ongoing work will develop a deep-water dock to support a fully integrated and operational deep-water marine port and industrial complex. The Borough plans to provide services for bulk commodity storage, a floatplane base to serve Southcentral air taxi and private pilots, and a public boat launch ramp for commercial and private use.



# The Last 50 Years - A Timeline

## Alaska Bridges

Alaska Bridge



Healy River Bridge



Hurricane Bridge



KABATA

Alaska Railroad engineers made preliminary studies of a **causeway** to shorten route to Fairbanks.

**Anchorage Chamber of Commerce** formed a committee to explore a **causeway**. Commissioned Ivan Bloch and Associates to develop the Preliminary Appraisal of the Proposed Knik Arm Causeway, a study that reviewed the economic and defense benefits of a Knik Arm Crossing.

**AK Department of Highways** commissioned a study for the general subsurface conditions in Knik Arm to identify geologic factors that might influence location and design of proposed highway crossing.

A Phase I Feasibility Study of a Proposed **Knik Crossing Utilizing a Rail System** was commissioned by the **Alaska Department of Public Works**.

1923

1954

1955

1969

1970

1972

1975

Multi-purpose proposal by a **Seattle engineer** for a combination **causeway and tidal power plant** stretching across both Turnagain and Knik Arms joining on Fire Island.

**Tandy Industries** planned a city of 20,000 for Point MacKenzie. The **domed city** was to be auto-free, people moving around town via escalators and moving walkways, two links from Point MacKenzie to Anchorage; a monorail above Knik Arm, and a subway below the Arm.

**AK Department of Highways** hired Consulting Engineers to study existing data for technical issues associated with engineering a **structure across Turnagain Arm**. The study concluded that a bridge crossing was the most economically feasible alternative and had the least effect on the natural environment.

Hurricane Gulch



Wagon Bridge at Indian River



The ADOT produced the **Knik Arm Crossing Engineering Feasibility and Cost Estimate Update Project** updating the 1984 DEIS cost estimates using a general alignment named the "Hybrid Alignment" that included a Knik Arm Bridge Crossing with connector roads to the north and south. The report approximated the funding needs for future project budgeting and work-programming purposes.

An **Environmental Assessment** for the proposed **ferry crossing** the Knik Arm was prepared for the Mat-Su Borough and Federal Transit Administration (FTA). The document resulted in a **Finding of No Significant Impact (FONSI)**.

SB213 established the **Knik Arm Bridge and Toll Authority (KABATA)** to begin work on a Knik Arm crossing.

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The **Federal Highway Administration and ADOT** prepared the **draft EIS** that analyzed 5 alternatives for a Knik Arm Crossing.

The Mat-Su Borough in coordination with the MOA, Port, ARRC, and ADOT developed the **Knik ARM (Alaska Regional Multimodal) Transportation Project** to enhance public transportation through ferry service across Knik Arm and then a railroad between the Port at Point MacKenzie and Glenn Parks Highway.



ADOT prepared an **Economic Feasibility** report concluding the Knik Arm Crossing and approach roads are economically feasible under conservative assumptions, and compared favorably with other state transportation and infrastructure investment.

ADOT developed the **Implementation Options** report that presented the design, financial, and development options for implementing a Knik Arm crossing.

The Mat-Su Borough prepared a **Railroad Corridor Feasibility** study connecting the Parks Highway with Point MacKenzie.

Congress appropriated \$5M for advanced planning efforts to include; an updated 1984 DEIS feasibility and cost factors; soil sample drilling and analysis of foundation conditions in the riverbed; and **startup and staffing of KABATA.**

The **Federal Highway Administration and ADOT** evaluated alternative corridors for the best combination of positive features and documented in the **Final Corridor Alternatives** report created in support of the 1984 draft EIS.



KNIK RIVER BRIDGE  
Photo Credits: Anchorage Museum Archives

# The Year in Review

KABATA

The preliminary planning phase of the Knik Arm Crossing Project began with its formation in 2003. In 2004, three contractors (HDR, PND and URS) were selected to do conceptual engineering, environmental data review and studies, and regulatory compliance studies. Environmental studies with limited windows of opportunity, dependent on season and weather conditions began in summer of 2004. Some of this fieldwork will continue through 2005. KABATA, with the Federal Highway Administration (FHWA) as lead agency, will build on the planning and fieldwork of 2004 to conduct the National Environmental Policy Act (NEPA) Environmental Impact Statement and design processes necessary to construct the project. A summary of the 2004 fieldwork and outreach follows.



## Fisheries Fieldwork

Fish surveys to determine fish species and characterize the use of habitat

Sediment sampling to determine the invertebrate species in the area

## Beluga Whale Observations

Visual documentation of the numbers and locations of beluga whales in Knik Arm from five different observation points

Acoustic data collection with underwater recording devices to supplement visual observations, and to document sounds of underwater construction of Port MacKenzie

## Oceanography & Tidal Current Studies

Tidal current and sediment sampling documented flow velocities, tracking the tidal movement with buoys in Knik Arm

Ice pressure studies are scheduled for winter of 2004 -2005



## Regulatory & Environmental Studies

Review of existing environmental data and reports, and identification of key data gaps

Assessment of local, state and federal permits and approvals likely to be required for construction and operation of a Knik Arm Bridge

Assessment of National Environmental Policy Act (NEPA) compliance requirements



## Engineering, Seismic & Geotechnical Studies

Soils testing and seismic drilling in Knik Arm to determine subsurface materials and potential suitability for construction

Bathymetry to characterize the contours of the channel for concept designs

Initial design criteria and field studies to refine the corridor and the conceptual engineering for cost estimates

## Economic & Demographic Studies

Economic and demographic studies explored population and employment trends, traffic studies, and residential, port, industrial and commercial development in the Mat-Su Borough and the Municipality of Anchorage.



## Public Involvement

Informational project briefings were delivered to more than 60 community and professional groups.

Project Open Houses were held in Anchorage and Wasilla in the fall to disseminate project information, educate the public, and obtain public input.

A public opinion poll with the Anchorage Daily News in July indicated that 59% of the public identified the Knik Arm Crossing as the next Big Project.

The Civil Engineering Department at UAA took on the Knik Arm Crossing design as a class project.

A project website has been developed including a video flyover of the project area, citizen interviews, historic photos, a learning center for students and teachers, a project library and answers to Frequently Asked Questions.

Project brochures were developed and distributed to the public.

“

Anchorage will grow to about 373,000 people in 2030, and the rate of growth in Mat-Su could triple that to reach 156,000.

”

Scott Goldsmith  
Economist with ISER



# 2005 Milestones

“

We are pleased that KABATA believed in the capabilities and talents of our team of Alaska firms for this exciting project.

”

Duane Hippe  
HDR Alaska, Inc.  
Prime Contractor



KABATA

**December 2004** – Notice of Intent to Prepare and Consider Environmental Impact Statement for a Proposed Knik Arm Bridge was submitted to FHWA by KABATA. This notice will be published in the Federal Register by January 2005. Darryl Jordan was hired by the KABATA Board as Deputy Executive Director.

**January 2005** – Notice of Intent for the EIS will be published in the Federal Register by Federal Highway Administration (FHWA). An Alaska-based project team, with HDR Alaska as prime contractor, and subcontractors including URS, PND and RISE Alaska, will hold a kickoff meeting with KABATA and FHWA staff. Director of Regulatory and Environmental Affairs, Dale W. Paulson will join KABATA/DOT&PF staff. KABATA Board and staff will brief the Alaska Legislature and submit KABATA’s 2004 Annual Report.

**January-December 2005** – Current agency-requested fieldwork will continue to gather data for a full year cycle. Quarterly KABATA Board meetings will continue, with meeting summaries posted online at [www.knikarmbridge.com](http://www.knikarmbridge.com). The project website will continue to provide updated information and access to project documents for public review and feedback. Speaker’s Bureau efforts will be continued to brief and gather feedback from community and special interest groups throughout Anchorage and the Matanuska-Susitna Borough.

**Spring 2005** – Public and agency scoping meetings will be held in Anchorage and Matanuska-Susitna Borough.

**Summer 2005** – A Preliminary Draft Environmental Impact Statement will be circulated to state, federal and local resource agencies. Comments will be received and responses made by KABATA and the project team.

**Fall 2005** – The Draft Environmental Impact Statement will be circulated to the public with series of public meetings in Anchorage and Matanuska-Susitna Borough.

# Financials

## January 1, 2004 through December 31, 2004

The current authorizations and annual expenditures are as follows:

The Federal Highway Administration (FHWA) advanced construction funds for the planning and environmental phases of the project, including two special earmark appropriations totaling \$11 million	\$18.2 Million
2002/2003 expenditures, primarily by DOT&PF	\$1.1 Million
2004 KABATA expenditures, primarily four Professional Service Agreements	\$4.1 Million
The anticipated expenditures in 2005 include work for the EIS, permitting, and preliminary engineering in excess of \$5 million.	
Estimated project cost through construction	\$400-\$600 million

## Highlights of the 2004 Expenditures Include:

Contractor	Subcontractor	Contract Amount
<b>PND Incorporated</b>		<b>\$ 615,814.90</b>
	Hatch, Mott, MacDonald	215,562.36
	Figg Engineering Group	130,305.00
	VECO Alaska	42,713.50
	Orson Smith	38,964.00
	URS Corporation	49,960.00
	RISE Alaska	50,093.00
Total Agreement Amount:		\$ 1,143,412.76
<b>HDR Alaska, Inc.</b>		<b>\$ 611,369.56</b>
	Parsons Brinckerhoff	35,000.00
	Kinnetic Laboratories, Inc.	10,000.00
	Stephen Braund	30,000.00
	LGL Alaska Legal Research	505,351.00
	Northern Ecological Service	2,000.00
	Pentec Environmental	107,796.00
	Word Wrangling	10,000.00
Total Agreement Amount:		\$ 1,311,516.56
<b>URS Corporation</b>		<b>\$ 490,716.00</b>
	North Wind, Inc.	4,000.00
	Canter Associates	10,000.00
	RISE Alaska	186,373.00
	Northern Economics, Inc.	35,000.00
Total Agreement Amount:		\$ 726,089.00

The Knik Arm Bridge and Toll Authority (KABATA) will produce independently audited financial statements at the completion of the planning, design, and construction phases when KABATA formally enters the operational mode. For periods prior to this time, the State of Alaska Department of Transportation & Public Facilities (DOT&PF) budget, accounting, and reporting procedures will be used.

KABATA has entered into a Memorandum of Agreement with the DOT&PF effective on September 30, 2004. This Agreement pertains solely to the pre-construction phase of the Project including transportation planning, preliminary engineering, environmental and permitting, final engineering design, and reconnaissance, utilities and right-of-way phases of the Project. It also provides procedures and responsibilities for dealing with the FHWA.

The Agreement provides that, in addition to its other responsibilities under the Agreement, DOT&PF shall provide technical, professional, administrative and clerical support to KABATA to meet both the State and Federal financial and other regulatory requirements. One audit covering both State and Federal requirements will be utilized with the audit completed within one year after the close of KABATA's fiscal year for which the audit is required. The audit will be performed under DOT&PF's project audit procedures.

Respectfully Submitted,  
Heinrich Springer  
Executive Director  
January 3, 2005

# Board and Staff

KABATA



George Wuerch  
Chair



Bill Corbus  
Commissioner of Revenue



Darcie Salmon  
Vice Chair



Dave Haugen  
Vice President  
Lynden, Inc.



Senator Lyda Green



Henry Springer  
Executive Director  
Staff



Representative  
Bill Stoltze



Darryl Jordan  
Deputy Executive Director/  
Program Manager  
Staff



Mike Barton  
Commissioner of DOT&PF

Jim Cantor, Chief Assistant Attorney General  
Bill Greene, Sr. Assistant AG/Project Counsel  
Betty Fauber, Administrative Manager  
Amanda Torres, Administrative Clerk

# The Right Direction

“

Expanding the state's transportation infrastructure is an essential part of economic prosperity.

”

Governor Frank H.  
Murkowski

Dear Fellow Alaskans:

This is an exciting time for Alaska.

We are making progress on many fronts to put the state on track toward economic prosperity. This means good paying job opportunities for Alaskans, a healthy business environment to attract investment, and reliable revenue streams for school districts, municipalities and state government.

Expanding the state's transportation infrastructure is an essential part of economic prosperity. Unfortunately, our state's road network has not kept pace with the increasing population. I have identified a number of high priority infrastructure projects to meet the ever-increasing need for commuter traffic and freight handling. The Knik Arm Crossing is one of those projects.

I am pleased to report that the Alaska Congressional delegation is committed to securing federal funding to help finance construction of the Knik Arm Crossing. We all agree that now is the time to build this bridge to Alaska's future.

Governor Frank H. Murkowski



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