



Because demand for the Transportation Infrastructure Finance and Innovation Act (TIFIA) credit program exceeds budgetary resources, the DOT is utilizing periodic fixed-date solicitations to establish a competitive group of projects to be evaluated against program objectives. Applicants must prepare a Letter of Interest using the format provided below.

Letters of Interest being submitted for this funding cycle are due by 4:30 p.m. ET on March 1, 2011. The total narrative for this letter should not exceed 20 pages, excluding any exhibits.

Only competitive projects identified at the Letter of Interest stage will be considered and invited to submit a formal application. As such, this Letter of Interest format incorporates information related to the project's satisfaction of the statutory evaluation criteria, as detailed in the January 2011 Federal Register notice and summarized below. Please reference the Notice of Funding Availability published in the Federal Register in January 2011 and the TIFIA Program Guide for guidance on the TIFIA evaluation criteria and the application process.

After concluding its review of the Letters of Interest, the DOT will invite complete applications (including the Executive Summary, preliminary rating opinion letter and detailed plan of finance) for the highest-rated projects. The application due date will be established after consultation between the TIFIA JPO and the applicant. By submitting this Letter of Interest, the applicant certifies that if selected to submit a formal application and enter negotiations, the applicant will pay the required fees.

If you have any questions regarding completing this form, please contact Duane Callender at (202) 366-9644. Please complete all applicable information using this Letter of Interest form and attach this request via email to [TIFIAcredit@dot.gov](mailto:TIFIAcredit@dot.gov) by 4:30 p.m. ET on March 1, 2011. Other than the changes to this introductory section and the addition of the certification language at the end, no other revisions to the Letter of Interest form have been made since the December 2009 version was issued.

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**A) Project Description. Describe the project, including its location, purpose, design features, estimated capital cost, and development schedule.**

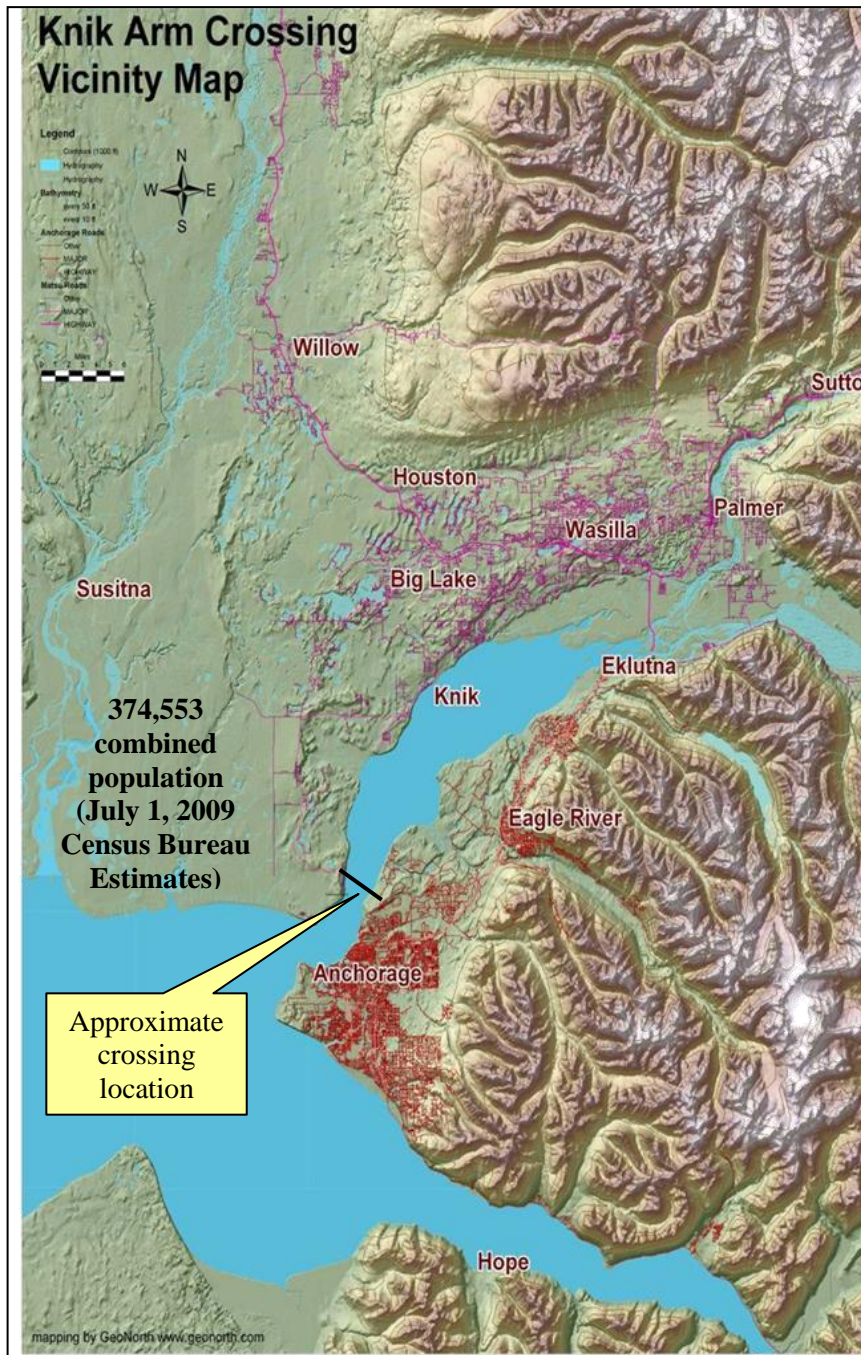
In 2003, the Alaska Legislature established the Knik Arm Bridge and Toll Authority (KABATA) as a public corporation and an instrumentality of the State of Alaska within the Alaska Department of Transportation and Public Facilities (ADOT&PF). The specific purpose of KABATA is "... to develop, stimulate, 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" (Alaska Statutes § 19.75 [AS § 19.75]). The Federal Highway Administration has designated the project the Knik Arm Crossing (Project).

The Project will: (i) improve regional transportation infrastructure to meet existing and projected population growth; (ii) facilitate locally adopted economic development, land use, and transportation plans in a manner providing for more sustainable, smart growth over current patterns; (iii) enhance regional transportation connectivity for the movement of people and freight to, from, and between the Municipality of Anchorage, the Mat-Su Borough, and Interior Alaska; (iv) establish both safety and transportation system redundancy for alternative travel routing and access between regional airports, ports and hospitals, while integrating fire, police, and disaster relief services for emergency response and evacuation; and (v) promote and ensure the quality of life of the citizens in the region and the State of Alaska.

The Project will beneficially affect the pattern of future growth that is coming to the Mat-Su Borough, substantially reducing vehicle miles traveled (VMT), vehicle hours traveled (VHT), fuel consumption, air quality impacts, greenhouse gas emissions, and congestion. EPA's endorsed planning software, PlanBuilder, with applied smart growth principles, indicates that the Project would reduce the environmental impacts of projected population growth in the Mat-Su compared to that of a "no-build" alternative; largely because the Project shifts growth closer to Anchorage. It is a smarter way to accommodate continued growth in the region by promoting urban infill. The result will be a more livable, sustainable and environmentally friendly community than if this Project is not built.



The Project Vicinity Map depicts the relationship of the Mat-Su Borough and Municipality of Anchorage areas and the approximate location of the proposed toll bridge crossing. Additional maps showing the Project vicinity, transportation network, and Project alignment are also provided on the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).



Matanuska-Susitna Borough, population 88,379, is the 31<sup>st</sup> fastest growing “county” in the United States according to U.S. Census Bureau estimates

Municipality of Anchorage, population 286,174, is the transportation and economic hub of the region and the largest population center in a 1,200 mile radius

The Project improvements include a minimum 8,200 foot toll bridge and approximately 18 miles of two lane approach and connector roads and associated facilities, including an approximately 800 foot cut-and-cover tunnel on the Anchorage side of the bridge. The bridge will cross the Knik Arm of Upper Cook Inlet, connecting Anchorage, the largest city in Alaska, and the Mat-Su, the 31<sup>st</sup> fastest growing county in the U.S. The Project will be designed to NHS Standards. Future construction will expand capacity to four lanes. A bicycle and pedestrian path enhances livability benefits for the surrounding communities by providing better access to recreational opportunities in the area. These improvements promote



transit development and connectivity throughout the region by creating an opportunity for new and more efficient bus transit routes between Anchorage and the Mat-Su.

The Project construction cost has been developed and reviewed under several engineering studies including a 35% design estimate by two separate independent engineering firms and the FHWA Major Projects team in February 2009. Costs were confirmed by a constructability review by marine construction experts and a contractor style estimate in 2010. Escalated to year of expenditure dollars, the Project construction cost is estimated at \$716 million, including the cost of engineering, project management and Right-of-Way (ROW) acquisition and exclusive of development phase cost, capitalized interest, debt issue costs, required debt service reserves and the cost to upgrade 9.5 miles of roadway completed in 2009 at a cost of \$15 million using State of Alaska funds. See the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html) for additional project cost information.

The Project has been designated by Congress as a project of national significance under SAFETEA-LU (Public Law 109-59, § 1302). Recent Alaska Governors, including the current Governor Sean Parnell, have expressed their support for the Project, as has the Alaska Congressional delegation. Regional Mayors, City Councils and Assemblies have voiced strong support for the Project. A survey conducted in January 2011 confirms strong support for the Project by Alaskans, with 64% of regional residents and 60% statewide supporting construction of the Project as early as possible. Letters and expressions of support and the complete survey results are provided on the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).

The Project is in the regional Long-Range Transportation Plan (LRTP) and Transportation Improvement Plan (TIP) of the Anchorage MPO. The Project has been reviewed and approved for air quality conformance by the FHWA and the FTA. The Project is also in the State Transportation Improvement Plan (STIP). The State Legislature has expressed its support through enabling legislation under AS 19.75 and the appropriation of \$129 million in state and federal funding for the Project, including \$105 million of Title 23 funding. \$54.7 million has been invested in development phase activities as of January 31, 2011. The State Legislature is presently considering a \$150 million appropriations bill and a bill amending AS 19.75 to enhance the Project credit. (See HB158 and HB159, and SB79 and SB80 and track them on the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).) A further description of this proposed legislation is provided below in Section F.

The Project achieved two major project milestones in the last three months. On November 30, 2010, the National Marine Fisheries Service issued a Biological Opinion indicating that construction of the Project would not likely jeopardize the Cook Inlet stock of beluga whales and on December 15, 2010 the FHWA issued a build Record of Decision (ROD).

Most of the Project ROW is owned by public entities, including the State of Alaska, the Mat-Su Borough, the Municipality of Anchorage, the University of Alaska, the Bureau of Land Management and the U.S. Department of Defense (DOD). The remaining portion, representing approximately 1% of the necessary Project ROW, is owned by private parties. Of these private takes, only 3 involve residential structures. KABATA expects to acquire the Project ROW prior to award of a Public-Private Agreement (PPA).

KABATA has engaged all required permitting agencies and believes all major preconstruction environmental permits will be secured prior to award of the PPA. A table listing the major permits for the Project is provided on the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).

KABATA initiated procurement of a private partner for the design, construction, finance, operations and maintenance of the Project by soliciting Statements of Qualifications on December 13, 2006. Two international consortia led by Macquarie and Bouygues Travaux were shortlisted. The positive evolution of the Project development since then, most notably receipt of the ROD and a no jeopardy biological opinion regarding the Cook Inlet beluga whales, will heighten the interest of the private sector. In addition, modifying the transaction structure to an availability payment form of public-private partnership (P3) will invigorate competition, attract better financing terms, and deliver the best value to the State. Therefore, KABATA anticipates commencing a new procurement in spring of 2011, with award of a PPA, completion of negotiations and commercial and financial close as early as the 2<sup>nd</sup> quarter of 2012 and construction beginning as early as summer of 2012. Execution of the TIFIA Credit Agreement will occur concurrently with financial close. Construction is estimated to require 3-5 years to complete and the facility could be operational by 2015.





The following table indicates the anticipated Project procurement timeline and PPA milestones:

ACTIVITY	TENTATIVE SCHEDULE
Issue RFQ	June 2011
SOQs Due	July 2011
Shortlist Proposers	August 2011
Industry Review	August 2011 – October 2011
Issue Final RFP	October 2011
Proposals Due	March 2012
Selection of Private Partner (Project Award)	April 2012
Negotiations	April 2012 – May 2012
Commercial Close	May 2012
Financial Close	July 2012
Facility Open for Traffic	2015/2016

**B) Project Participants.** Describe the overall organizational structure for the project. What entity (i.e., public-sector agency/authority or private-sector company) will serve as the applicant? Will the applicant and the borrower be the same entity? Who are the members of the project team?

*Name of Applicant/Borrower:*

KABATA, as Project owner, will be the Applicant and expects to file the TIFIA loan application under the terms of a previously executed SEP-15 Early Development Agreement (EDA) dated July 19, 2007 among ADOT&PF, KABATA and FHWA.<sup>1</sup> The EDA is available on the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html). The Project will be procured as a P3 through an availability payment concession. The private partner consortium selected through the procurement process will be the Borrower and shall design, build, finance, operate and maintain the Project over the term of the PPA.

*Organizational Structure:*

Additional information about the legal structure and team members of the private partner consortia will be provided to the TIFIA JPO during the procurement and credit application process as outlined in the EDA. KABATA has also engaged an industry leading team of legal, financial and technical advisors to support its efforts in applying for TIFIA credit and to support the PPA procurement process. That team presently consists of the following firms:

- |                                  |  |
|----------------------------------|--|
| a. Bond Counsel -                | Ballard Spahr, LLP                     |
| b. P3 Counsel -                  | Nossaman, LLP                          |
| c. Authority Counsel -           | State of Alaska Department of Law      |
| d. P3 Financial Advisor -        | Citigroup Global Markets Inc. ("Citi") |
| e. Technical Advisor -           | HDR, Inc.                              |
| f. P3 Advisor/T & R Consultant – | Wilbur Smith Associates                |

The ADOT&PF and the FHWA are also active project participants representing the public sector.

*Project Website or Applicant/Borrower Website:*

[www.knikarmbridge.com](http://www.knikarmbridge.com) (see also ADOT&PF's website at <http://www.dot.state.ak.us/> and the TIFIA LOI webpage for the Project, including all exhibits, at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html)).

<sup>1</sup> For purposes of this LOI, KABATA assumes that the SEP-15 EDA represents the terms and conditions by which the TIFIA JPO will process the application, credit approval and loan documentation. KABATA is open to discussion of any modifications to this process that the TIFIA JPO desires to conform to its current procedures.



**C) *Proposed Financing.*** Describe the plan of finance. State the proposed sources and uses of funds for the project, including the type and the amount of credit assistance sought from DOT. Identify the source(s) of revenue or other security that would be pledged to the TIFIA credit instrument. Address the status of any revenue feasibility study.

*Sources and Uses of Funds:*

Financing for the Project will be achieved through an availability payment concession, whereby the private partner will design, build, finance, operate and maintain the Project under a concession of approximately 35 years after substantial completion in exchange for availability payments from KABATA. The availability payments will be paid from a Project reserve fund that will hold toll revenues as well as any appropriated funds. The Project reserve fund will set forth minimum reserve requirements that, if not met, will trigger a request for appropriation from the State of Alaska (See HB158 and HB159, and SB79 and SB80 on the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html)). The tolls will be collected either by the private partner or another provider on behalf of KABATA and the State of Alaska. The concession will include one or more milestone payments at or after substantial completion of Project construction or Project construction phases, which the private partner may use to reduce outstanding debt. KABATA shall set toll rates.

The following represents the proposed sources and uses of funds under the pro forma plan of finance, including the potential TIFIA loan:

<b>Pro Forma Sources and Uses of Funds</b>					
	<b>Available</b>		<b>Anticipated</b>		<b>Total</b>
					<b>Percent</b>
<b>Sources of Funds:</b>					
Tax-exempt Bonds	\$	-	\$	396,951,847	\$ 396,951,847 36.9%
TIFIA Loan		-		306,019,062	306,019,062 28.4%
Private Partner Equity		-		78,605,917	78,605,917 7.3%
Federal Highway Funds		112,572,342		-	112,572,342 10.5%
State Matching Funds		17,324,917		-	17,324,917 1.6%
State Commerce Grant		15,000,000		-	15,000,000 1.4%
State Reserve Appropriation		-		150,000,000	150,000,000 13.9%
<b>Total Sources of Funds</b>	<b>\$</b>	<b>144,897,259</b>	<b>\$</b>	<b>931,576,826</b>	<b>\$ 1,076,474,085 100.0%</b>
<b>Uses of Funds:</b>					
Deposit to Construction Fund	\$	62,495,013	\$	650,698,937	\$ 713,193,950 66.3%
Port MacKenzie Road Upgrade		15,000,000		-	15,000,000 1.4%
KABATA Development Costs		67,402,246		-	67,402,246 6.3%
Upfront Payment to TIFIA		-		10,000,000	10,000,000 0.9%
Deposit to State Reserve Fund		-		150,000,000	150,000,000 13.9%
Deposit to Capitalized Interest Fund		-		66,277,301	66,277,301 6.2%
Deposit to Prepaid Interest Fund		-		1,105,300	1,105,300 0.1%
Debt Service Reserve Fund		-		39,695,185	39,695,185 3.7%
Cost of Issuance		-		8,689,037	8,689,037 0.8%
Underwriter's Discount		-		1,984,759	1,984,759 0.2%
Other Transaction Costs		-		3,126,307	3,126,307 0.3%
<b>Total Uses of Funds</b>	<b>\$</b>	<b>144,897,259</b>	<b>\$</b>	<b>931,576,826</b>	<b>\$ 1,076,474,085 100.0%</b>

As identified in the table above, the pro forma plan of finance anticipates the use of multiple financing sources to fund the Project's hard and soft costs. The financing sources envisioned include tax-exempt bonds, tax-exempt Private Activity Bonds (PABs), TIFIA, public funding (both Title 23 and state government sources) and private partner equity. The tax-exempt bonds will consist primarily of current interest bonds with some capital appreciation bonds. Equity approximating 10% of the Project's private financing will be fully committed at closing by the private partner, in addition to Title 23 and state funds previously appropriated for the Project by the Alaska Legislature and a \$150 million state appropriation currently being considered by the Alaska Legislature under HB159 and SB79. This financing structure is consistent with the recent availability payment financings completed in the United States, such as the Presidio Parkway, I-595 Corridor Roadway, Port of Miami Tunnel, and Denver Transit Partners Eagle P3 projects. The comprehensive pro forma plan of finance is provided on the webpage for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).



The pro form plan of finance includes use of non-federal Project funding sources to pay at least \$10 million, and potentially up to 100%, of the subsidy for the TIFIA credit in lieu of using the USDOT's scarce TIFIA budget authority. For more information, see discussion under *Budget Authority* at page 17 below.

***Type of Credit Assistance:***

A secured (direct) loan, subordinate to senior project debt, to assist with funding costs associated with the Project and (potentially) a standby line of credit to assist with funding project costs and capital cost overruns.

***Amount:***

The amount of requested TIFIA credit assistance is \$306 million based on 33% of estimated Eligible Project Costs.

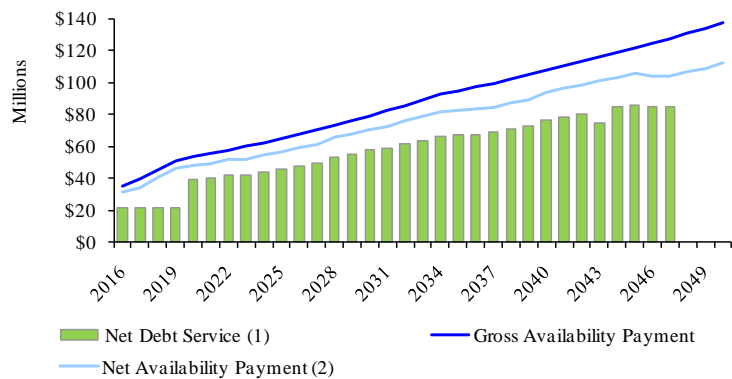
***Description of Revenue Source(s) Pledged to Repayment:***

The main source of revenue from the Project is tolls. A traffic and toll revenue feasibility study for the Project was prepared by Wilbur Smith Associates (WSA) and updated in February 2011. That study predicts traffic demand and revenue potential and identifies the essentiality of the Project for Alaska.

The Alaska Legislature is considering amendments to KABATA's enabling statute (SB80 and HB158) and a \$150 million appropriation for the Project reserve fund (SB79 and HB159) to support the milestone and availability payments.

Payment of Project debt (including the TIFIA loan and the tax-exempt bonds) will be secured by the milestone and availability payments through a Project reserve fund established by KABATA. All toll revenue, plus any state appropriations, will be deposited in the Project reserve fund. The disbursement of the milestone payment(s) will be subject to successful completion of the Project or specified Project construction phases. The disbursement of the availability payments will be subject to successful completion of construction and opening of the Project. The payments will be subject to reduction for failure to achieve specific performance standards. The TIFIA loan and other secured debt will be payable from the availability payments, net of administration, operations and maintenance, tolling and renewal capital costs. The Debt Service and Availability Payments chart above provides a graphic depiction of the projected debt service and availability payment structure for the Project.

**Debt Service and Availability Payments**



(1) Tax-exempt and TIFIA debt service, net of effect of debt service reserve fund release.  
(2) Net of operation, maintenance, tolling and capital expenditure expenses.

***D) Satisfaction of TIFIA Selection Criteria. Describe the potential benefits to be achieved through the use of a TIFIA credit instrument with respect to the TIFIA selection criteria, as clarified.***

*Significance (also address issues related to the Project's impact on: livability (providing transportation options linked with housing and commercial development to improve the economic opportunities/quality of life in U.S. communities); economic competitiveness (improving the long-term efficiency and reliability in the movement of people and goods); and safety (improving the safety of U.S. transportation facilities and systems and the communities and populations they impact.)*

The Project will further the development of the transportation network in the Upper Cook Inlet region by providing new surface transportation connectivity between Anchorage and the Mat-Su Borough for a safer and more efficient movement of people and freight. Thus, the Project when completed will dramatically improve the quality of life throughout the region. A summary of the Project's objectives is found in Section A on page 1.



#### Communities Connected by the Project

Together, Anchorage and the Mat-Su comprise the Anchorage Metropolitan Statistical Area (Anchorage MSA), which represents 54% of the population of Alaska – a statistic that has continued to climb as the area population is growing faster than the rest of Alaska.

Anchorage, population 286,174 (U.S. Census Bureau July 2009 population estimates), is the largest city in a 1,200 mile radius and the economic, commercial and transportation hub for the State of Alaska with its multimodal airports, sea ports, rail, and pipeline facilities. The financial, energy, educational, medical, and military headquarters for the State reside in Anchorage.

The Mat-Su Borough, population 88,379, is the 31<sup>st</sup> fastest growing county in the U.S. this past decade (U.S. Census Bureau July 2009 population estimates). This rapid population growth has been spurred by the diverse and growing regional economy and the shortage of residential housing and undeveloped land in Anchorage compared to the abundance of housing and land in the Mat-Su. Historically, most of the population growth has settled in the Palmer-Wasilla corridor along the Parks and Glenn Highways. The Palmer-Wasilla corridor is the first available land north of Anchorage via the existing Glenn Highway. This single highway is the only existing route to and from Anchorage to the north.

In more recent years, as the population density in the Palmer-Wasilla corridor increased, the west side of Knik Arm in the Knik-Fairview area of the Mat-Su has replaced them as the fastest growing area of the State. As a result of this natural growth pattern, Glenn Highway commuters experience frequent congestion and closures during accidents and winter storms. On average, Mat-Su commuters drive over 50 miles each way, burning excessive fossil fuels and spending considerable time travelling. The limited transportation network has resulted in detrimental impacts on emergency services, the environment, and quality of life, while increasing urban sprawl and dependence on fossil fuels.

Just across Knik Arm lies land closer to Anchorage that the Project makes accessible for smart growth of residential and commercial use. The Project also provides better and safer access to the State's resource base, including the Prudhoe Bay oil and gas fields, base and rare-earth metals important to the green economy, the Goose Creek Correctional Center, and agricultural lands. Numerous commercial and industrial projects are planned for the Mat-Su Borough. They will support jobs and commerce for generations of citizens. The Project will facilitate these new economic opportunities.

The growth in the Mat-Su will continue regardless of whether the Project is built. Absent the Project, this organic growth would lead to increased traffic levels on the Glenn Highway which lowers the quality of life and sustainability of the communities which are growing in the Mat-Su. The Project will facilitate an orderly, well planned, growth pattern within the Mat-Su which will create more sustainable communities and minimize urban sprawl and its adverse environmental impacts.

#### Transportation Network and Project Intermodal Connectivity

The Project will integrate with the regional transportation network, including highways, ports, airports and rail, in order to support domestic and international commerce, improve the economic competitiveness of the United States, and improve the efficiency and reliability of the movement of people and freight in the region. FHWA designated the Project as part of the National Highway System. It will connect to the Glenn and Seward Highways in Anchorage and the Parks Highway in the Mat-Su. It also connects into the Strategic Highway Network (STRAHNET) to support the DOD mission and national security. The Project will be only the second road link between Anchorage and the rest of the State.

The Anchorage MSA is an important air and sea freight port for both Alaska and the United States because of its strategic location, both within the State and relative to North America, Asia and Europe. The Port of Anchorage (POA) is located one mile south of the eastern shore of the Project crossing. Due to limited road access and Alaska's distance from other North American markets, very little freight arrives via road. Since there are no rail lines between Alaska and the rest of North America, nearly all freight destined for Alaska arrives via ship, with approximately 90% of container freight arriving at the POA (which serves 85% of Alaska residents). Much of that freight is destined for the Mat-Su, Fairbanks, the Interior and the North Slope. The POA is currently undergoing an approximately \$700 million expansion to handle increasing freight volumes that will double the POA area. The POA also supports the U.S. military mission and has been named one of 19 strategic seaports in the U.S. by the DOD. The Project will provide a much more efficient and direct route for freight originating in the POA and destined for points north for consumers, commercial and governmental interests. The more direct northbound route will improve the efficiency and reliability of the movement of people and freight in the region and significantly reduce transportation costs. Within Anchorage, the Project will provide an alternative route for the substantial



freight traffic originating at the POA which otherwise must utilize city streets to access the Glenn Highway. This preserves pavement, reduces congestion and harmful vehicle emissions, and enhances safety and commute times for both residents and truckers.

Port MacKenzie, the nation's northernmost deepwater port, is located on the west side of the Project. Via the existing road network Port MacKenzie is approximately 85 miles from downtown Anchorage and the POA. However, the Project would reduce that distance to only three miles. Port MacKenzie is a strategic port that will serve future economic development in both the local area and the Interior. It is designed to export bulk commodities such as base and rare earth mineral ores, coal, woodchips, and gravel and to import bulk materials such as cement and steel pipe. The Port of McKenzie Industrial District contains 8,940 acres and is the logical area for expansion of port related economic development. The Project provides intermodal connectivity between Port MacKenzie and the POA and provides access to labor resources in Anchorage just minutes away.

Because of its strategic location within nine hours of 95% of the industrialized world, the Ted Stevens Anchorage International Airport (TSAIA) is the largest air cargo hub in the United States in terms of landed tonnage and is the sixth largest freight airport in the world for total throughput. An estimated 90% of air cargo between Asia and North America passes through the TSAIA. Atlas Air, Federal Express, Northwest Cargo, United Parcel Service, and the U.S. Postal Service have established international cargo sorting hubs at TSAIA because of the accessibility of U.S. Customs agents in dedicated foreign trade zones. The TSAIA also serves as the primary point of entry and departure for business and recreational passenger air travel to and from Alaska, with over 5 million arriving, departing and transiting passengers annually. The TSAIA supports approximately 18,000 jobs in the region and is located six miles south of the Project, which will provide an important and much improved link between the region's most important airport and points north.

The Alaska Railroad Corporation (ARRC) is headquartered in Anchorage and its main rail yard is adjacent to the POA and the Project. The ARRC carries both passengers and freight between Seward, to the South, and Fairbanks, to the north. ARRC passenger ridership was 470,786 and it carried 6.16 million tons of freight during 2009. The Surface Transportation Board, on behalf of the ARRC and Mat-Su Borough, is studying a rail spur line to Port MacKenzie on the west side of the Project crossing and has published a draft EIS. The Project will serve as the vital intermodal link between the two rail yards and seaports.

There are a number of other regional transportation projects planned or underway that will connect with the Project. The ADOT&PF is evaluating alternatives to provide a second major arterial connecting to the west side of the Project. The Alaska Legislature has funded an EIS to develop a rail transportation corridor between Willow or Houston, Alaska, Port MacKenzie and the Project (during the 2010 legislative session it approved \$35 million of State funds to construct a portion of the rail extension, complete engineering and acquire ROW). The Legislature has also approved \$300 million of bonding authority for the ARRC to construct the rail line and the governor has submitted an additional \$20 million of funding for the rail extension in his 2011 capital budget. The Mat-Su Borough has reserved ROW on all Borough owned lands along the planned corridor. The planned corridors will provide a more direct route for the movement of people and freight between Anchorage, Denali National Park, Fairbanks and Interior Alaska, and the North Slope.

#### Livability Attributes of the Knik Arm Crossing

The Knik Arm Bridge has significant positive benefits relating to livability for both the Anchorage and the Mat-Su Boroughs. These include quantifiable benefits such as reduced VMT, reduced VHT and travel times, potential transit opportunities and better recreational access, as well as qualitative benefits related to quality of life in the community. Enhanced regional mobility, provided by the Project, will open employment, recreational, and social opportunities for the region's residents that would not be practical or even feasible without the Project.

Under all expectations and projections, substantial growth and development of the Mat-Su Borough will continue. In the face of this growth and development, the question becomes where will it go and can it be directed in a smarter, environmentally sensitive, affordable, livable and sustainable way. The Project is a key ingredient in redirecting growth to meet these objectives.

[Anchorage 2020](#), a comprehensive long-range plan by the Anchorage Planning and Zoning Commission, states that the single biggest issue facing Anchorage is the shortage of residential, commercial and industrial land to support the growth of the community. Due to the geography of the region and the governmental land uses that surround Anchorage, the amount of remaining developable land to accommodate the Anchorage area's growing population is very limited. Land uses that are





not developable include military installations that are critical to the area's economy and national security, and mountains, parks and wetlands that are essential to maintaining the environment. The lack of developable land has led to significant increases in land cost that threaten the area's ability to offer livable communities at affordable prices. Because of its land shortage, the average new single family home in Anchorage is about \$140,000 more than a similar home in the Mat-Su and rents are also correspondingly higher.

Due to this shortage of housing and the high housing prices in Anchorage, many in the regional work force live in more affordable Mat-Su communities and drive to higher wage Anchorage jobs. More than 40% of the Mat-Su workforce commutes an average of about 50 miles one-way to or through Anchorage for work. Because of the Project, working families will no longer have to choose between affordable housing and long commutes, or excessively expensive housing closer to good jobs.

The Project's beneficial impact on the pattern of this future growth and livability is dramatic. The Project reduces VMT while simultaneously supporting population and economic growth in the region. The statistics on VMT reduction are set forth in the Environmental Benefits from VMT Reduction section, below. This reduction is particularly important and impressive in light of the forecast population growth of 150,000 to 250,000 by 2030, or about a 50% increase in the population of the Anchorage MSA.

Other cost savings can also be quantified. Based on benefit cost analysis studies and studies of the reductions in carbon emissions performed by WSA for KABATA, the Project will reduce VMT and save \$30,900,000 in vehicle operating costs in the opening year rising to \$43,200,000 in year 10. If fixed costs were also included, these savings would increase by a factor of three.

These same studies show that VHT for trips that are able to use the Project instead of existing routes are also significantly reduced. Annual savings in the opening year total 5,111,000 hours and in year 10, 7,296,000 hours. A fleet average value of time of \$0.22 per minute or \$13.20 per hour was reported in the *Proposed Knik Arm Bridge Final Traffic and Revenue Forecast*, produced in September of 2007. Using this value, the reduced VHT quantifies to \$67,470,000 in opening year and \$96,310,000 in year 10 (constant dollars).

The Project will further enhance livability by supporting opportunities for improvements to the Municipality of Anchorage People Mover bus transit system which currently carries an average of over 14,000 riders daily during weekdays and averaged 11,463 riders per day during 2009. The main bus terminal for the People Mover system is located within one-mile of the south eastern terminus of the Project and provides commuter parking for the intermodal bus terminal facility. The Project has the potential to significantly increase transit ridership from the present municipal system to a larger regional network by extending route coverage to the Mat-Su. This will not only provide the traveling public with expanded commute choices, but will give low income commuters an affordable option. In order to keep fares both attractive and affordable, KABATA is considering the potential for reduced tolls or free access for use of the facility by transit buses. Without the Project, it is very unlikely that the Anchorage bus transit system could effectively or economically be expanded to the Mat Su area as a regional provider.

The Municipality of Anchorage boasts an award-winning trail system citywide. Enthusiasts of skiing, running, biking, walking, horseback riding, hiking, rollerblading, dog mushing, snowshoeing and skijoring all enjoy the trail system. The Project's multi-use bicycle and pedestrian path will connect into Anchorage's extensive trail network, providing trail users access to the southern Mat-Su Borough. The Project's multi-use path is included in the [Anchorage Bicycle Plan](#) adopted by the Anchorage MPO in March 2010. In addition, the Project will make excellent recreational activities in the areas north and west of the Knik Arm far easier to reach for residents and for Alaska's many tourists.

While it is possible to quantify many of the livability benefits of the Project, some of the most important benefits can only be related in qualitative terms. Reducing the VMT means less time spent in automobiles. This provides several benefits, including increased time for other activities, improved air quality, and safer streets. Saving 10 minutes per commute frees up 86 hours of time each year. The value of time saved is not just a number, it directly relates to families and their quality of life.

#### Economic Benefits Enabled by the Project

In addition to the economic benefits for Anchorage and the Mat-Su described below, most of rural Alaska is experiencing significant unemployment (see the Statewide unemployment map on the website for this LOI at



[www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html)). By lowering the cost of transportation for people and freight and promoting access to good jobs for thousands of Alaskans in economically distressed regions of the State, including many Native Alaskans, the Project is expected to benefit numerous residents and areas outside of the Anchorage and Mat-Su Boroughs.

Based on a study by Insight Research Corporation (IRC) of socio-economic impacts, the Project will generate immediate and lasting economic benefits to the region as a result of the more efficient transportation network. These benefits include access to developable land for commercial, industrial and residential uses and operating efficiencies availed to Port MacKenzie for bulk commodities import and export. Those economic benefits will extend throughout the State. Among other projections cited in the study, IRC found that the first 23 years of Project operations would likely:

- Generate 5,000 construction related jobs and 3,000 indirect jobs during Project construction.
- Enable 14,000 additional permanent direct and indirect jobs in the region
- Support \$18 billion of incremental economic activity.
- Produce \$1.2 billion of tax increment to local governments to fund schools, public safety and infrastructure for the growing population.

Since the Project is designed for a 100 year life, these economic benefits will accrue to many generations of citizens. For further information about the immediate and lasting economic and job benefits enabled by the Project, please review the IRC socio-economic study on the website for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).

The IRC study results are consistent with the benefit-cost study prepared for the Project by WSA. Both studies confirm the Project's essential nature. The calculated benefit-cost ratio is 5.36 and 3.54 assuming a 3% and 7% discount rate, respectively, as summarized in the following table. The full benefit- cost analysis is available on the LOI website, [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).

Benefit-Cost Ratio Summary (26 Year Period)			
Parameter	Undiscounted	3% Discount Rate	7% Discount Rate
Analysis Period Benefit	\$ 9,768,812,274	\$ 5,268,838,067	\$ 1,850,746,463
Analysis Period Cost	\$ 1,307,275,851	\$ 983,840,588	\$ 729,651,953
Net Benefit	\$ 8,461,536,423	\$ 4,284,997,479	\$ 1,121,094,510
Benefit-Cost Ratio	<b>7.47</b>	<b>5.36</b>	<b>3.54</b>

Source: Wilbur Smith Associates based on STEAM 2.0 analysis.

#### Safety and National Defense

The Project will significantly improve safety and reduce accidents in the region. The large reduction in unproductive VMT discussed above has a direct impact on safety and accident rates. Because total accidents for the overall MSA are evaluated based on total VMT, it is reasonable to determine the

number of accidents avoided by the reduction in unproductive VMT. Based on per VMT rates calculated and on information presented in the August, 2010 Knik Arm Crossing Project Benefit Cost Analysis, accidents that would be expected to occur due to unproductive VMT travel is shown in the table at right. The reduction in the number of traffic fatalities is based on ADOT&PF reported 1.5 traffic fatalities per 100 million VMT. See the link to ADOT&PF's report on the LOI website at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).

Projected Reduction in Accidents		
	2015	2024
Annual VMT Reduction (millions)	194.4	307.0
Annual Accident Reduction (number):		
Fatal	0.5	0.9
Injuries	34.2	49.1
Property Damage Only	71.2	101.7

The Kenai Peninsula and Anchorage have only one highway ingress and egress point to the north – the Glenn Highway. Over 40% of the Mat-Su workforce commutes to or through Anchorage on a daily or periodic basis, and congestion on the Glenn Highway is straining its capacity. The Project will provide the second highway link from Anchorage and the Kenai Peninsula to the Mat-Su and points north. This is critical for safety and network redundancy. Accidents and emergencies frequently block the Glenn Highway for hours, tying up commuters and freight movement from the Port of Anchorage. In the event of a major disaster, it would be nearly impossible to evacuate over 350,000 people, or 50% of Alaska's total population, via the Glenn Highway. The Anchorage MSA lies in a subduction fault zone between the Pacific and North



American tectonic plates and is prone to a high frequency of seismic and volcanic activity. There are at least four active volcanoes on the west side of Cook Inlet in sight of Anchorage and the Kenai Peninsula. Historic events that demonstrate the probability of future natural disasters include the 1964 Good Friday Earthquake that measured 9.2 on the Richter scale and the 1912 eruption of the super volcano Novarupta across Cook Inlet, the most powerful eruption of the 20<sup>th</sup> century. Mt. Redoubt erupted 19 times during 2009, closing airspace and producing ash fall events in Anchorage and the Kenai Peninsula. The Project is being designed with these events in mind and will be an essential future evacuation route.

Anchorage is a strategic location for national defense. Approximately 13,000 troops are stationed at Elmendorf Air Force Base and Fort Richardson (U.S. Army), representing a key national defense asset for rapid deployment and support for Pacific Theater and world-wide military operations. The Project crosses the Knik Arm of Upper Cook Inlet on the west boundary of the Elmendorf Air Force Base and will tie into the STRAHNET within Alaska. The Project supports the DOD mission for deployment and supply of military operations at these two installations as well as Eielson AFB and Fort Wainwright in interior Alaska where an additional 8,000 troops are stationed.

#### Summary of Regional and National Significance

The integration of the Project into the existing State and national transportation infrastructure is designed to meet current and future needs for projected population growth and economic development, improved transportation connectivity for the movement of people and freight, and enhanced safety and transportation system redundancy. Implementation of the Project is essential to achieve this rapidly developing region's full economic potential.

Congress recognized the regional and national significance of the Project for the promotion of economic growth and international or interregional trade by designating funding for it as Project 14 under SAFETEA-LU. The State of Alaska also recognized the regional and national significance of the Project and included it in the STIP. The Project has been incorporated into the Anchorage MPO's LRTP and TIP. SAFETEA-LU, STIP, TIP and LRTP excerpts relevant to the Project are included on the website for this LOI at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html). The Project is supported by the current and former Governors, key State and local officials and the Alaska Congressional Delegation. Finally, the Alaskan public strongly favors the Project, as evidenced by a 2011 comprehensive State-wide survey of attitudes about the Project, indicating that 64% of regional residents and 62% of all Alaskans support the Project and believe it should be built now.

#### *Private Participation:*

This is the first transportation project in the State of Alaska being delivered under a P3. The PPA procurement brings together the potential for a wide range of P3 innovation and forms the basis for extended private participation in delivery of the Project, using an availability payment concession. This method of delivery has proven successful for numerous transportation infrastructure projects both nationally and internationally, including the Presidio Parkway project in San Francisco, the I-595 Corridor Roadway project and the Port of Miami Tunnel in Florida, and the Denver Transit Partners Eagle P3 project, all of which include TIFIA financing in their plans of finance. The selected private partner is expected to fund, in the form of debt and equity, approximately 90% of the Project's design and construction cost. This equates to a projected \$703 million of debt (including a \$306 million TIFIA loan) and \$79 million of equity as indicated in the Sources and Uses in Section C, *Financing* of this LOI and in the pro forma plan of finance available on the website for this LOI.

#### The Public-Private Partnership Agreement (PPA)

The Project is being developed using a competitive procurement process to select a qualified private partner consortium for the award of a PPA to design, build, finance, operate and maintain the Project pursuant to an availability payment concession. Roles, responsibilities and risks will be clearly assigned between KABATA and the selected private partner in the PPA.

The selected private partner consortium will be responsible for financing, final design and construction, and operations and maintenance of the Project for a term of approximately 35 years after substantial completion. This allocation of design and construction responsibilities provides the flexibility for the private partner to proceed with some construction activities prior to completion of all design features, thus achieving significant cost and time savings. Additionally, in light of the long-term operations and maintenance responsibilities, the private partner has strong incentives to optimize the whole-life construction, operations, and maintenance costs of the Project. These savings, along with control over operations and maintenance activities (potentially including toll collection operations on behalf of KABATA), allows the private partner to predict costs and, together with the availability payment mechanism, secure financing.



Under the PPA, the private partner will assume all or a significant portion of the risks and responsibilities relating to:

- Project cost (beyond the fixed public investment)
- Availability payment commencement date risk
- Financing risk
- Site conditions
- Identification of utilities requiring relocation
- Interface with utility owners and providing utility relocation/adjustment services where authorized by utility owners
- Defects in design and construction
- Management and disposal of all hazardous materials encountered during the term of the PPA
- Construction permitting
- Project and systems integration
- Operations and maintenance risk
- Lifecycle costs risks.
- Handback (end of term) risks

The benefits of using the PPA approach for delivering and operating the Project include:

- No State indebtedness incurred for Project; State funding obligations consist of milestone payments upon satisfaction of stated milestones, and availability payments (subject to appropriations in the event toll revenues are insufficient)
- KABATA retains toll revenues to support availability payments and invest in other Title 23 eligible projects
- Guaranteed revenue commencement dates with potential liquidated damages for failure to achieve
- Long-stop deadline with potential termination for default for failure to commence revenue service by such deadline
- Time savings/acceleration of project delivery
- Earlier and greater cost and schedule certainty
- Quality of construction, operations and maintenance
- Innovative construction, operations and maintenance techniques
- Life-cycle approach to the Project, with performance measures, noncompliance points and availability payment reductions to help assure contractual commitments to quality operations and maintenance are met.

KABATA is using a two-step procurement process for the Project. The first step is issuance of a request for qualifications (RFQ) followed by a shortlist of proposers based on evaluation of submitted qualifications. In the second step, a request for proposals (RFP) will be issued to the shortlisted proposers and selection of the best proposal for negotiations of a PPA will be based on a methodology that determines the “best value” to KABATA and the State of Alaska. The “best value” determination will include both a financial (in terms of lowest proposed availability payment) and technical/qualitative component.

#### Private Partner’s Responsibilities During Design and Construction

The Project consists of Sections 1 through 9 as described in the cost estimate included the website for this LOI under Knik Arm Crossing Capital Cost Information. (Project Section 1 is included in the FEIS, but has already been constructed using State funds). Sections 2 through 5 include the bridge structure and approaches and will be operated and maintained by the private partner after construction. Project Sections 6 through 9, behind the POA and through Government Hill, will be constructed by the private partner and will be turned over to the ADOT&PF for operations and maintenance upon acceptance. The private partner will also have the obligation to design and construct certain additional improvements, potentially including design and installation of a permanent toll system. The cost to design and construct Project Sections 2-9 is \$716 million in year of expenditure dollars. The private partner will be responsible for financing all of the cost to design and construct Project Sections 2-9 not funded by the estimated \$65 million of Title 23 and state funds available for Project construction.

#### Private Partner’s Responsibility for Operations and Maintenance

The Project will be opened to traffic immediately upon substantial completion and satisfaction of PPA conditions. The private partner will be responsible for the operation, management, maintenance, renewal, and rehabilitation of Project Sections 2-5 and for implementation of appropriate safety compliance measures.

By committing to pre-set handback requirements at the end of the PPA term and to perform operations and maintenance for the duration of the concession term for Project Sections 2-5 in return for availability payments, the private partner in essence provides a long-term warranty of the Project. The PPA structure creates a special incentive to perform rigorous value engineering, design and construction quality control to minimize Project life-cycle costs.





KABATA will have the right to audit and monitor design, construction, operations and maintenance. The Project will be transferred to KABATA upon termination of the PPA, at no charge to KABATA, in accordance with detailed handback requirements specified in the PPA.

Private Partner Responsibility for Toll Collection System Operations and Maintenance

Either the private partner or a separate contractor retained by KABATA will operate and maintain the toll collection system for the Project. Toll rates will be set, and toll revenue will be owned, by KABATA. Toll revenue will be deposited into a Project reserve account, the primary purpose of which will be to make availability payments to the private partner. The toll collection system will incorporate open road, barrier-free electronic toll collection (ETC), including a video recognition system, but cash toll collection facilities may be permitted during traffic ramp-up. Within Project Sections 2-5, either the private partner or a separate contractor retained by KABATA will be responsible for installing, operating and maintaining tolling field systems, and collecting tolls, revenue handling and accounting, and customer service and support for the Project. Alaska does not have any ETC or other open road tolling installed base or standard that must be considered for interoperability, providing maximum flexibility to KABATA in designing and implementing the toll collection system.

*Environment (also address issues related to sustainability (improving energy efficiency, reducing dependence on oil, reducing greenhouse gas emissions and reducing other transportation-related impacts on ecosystems, including the use of tolling or pricing structures to reduce or manage high levels of congestion on highway facilities and encourage the use of alternative transportation options); and state of good repair (improving the condition of existing transportation facilities and systems, with particular emphasis on projects that minimize lifecycle costs and use environmentally sustainable practices and materials):*

The Project has a positive impact on the human and natural environment. The exceptional attention paid to design, construction and mitigation minimizes negative impacts.

Environmental Benefits from VMT Reduction<sup>2</sup>

Efficient travel in a growing community is necessary for it to function and to improve its environment. If the Project is not built, the trips from the Mat-Su to Anchorage that would still occur would require an additional 200,000,000 VMT annually by the year it would have opened and over 300,000,000 VMT annually 10 years later. The Project will result in a daily net reduction in VMT for traffic using the bridge of 372,000 upon opening, with the daily net reduction in VMT increasing to 519,000 in year 10. Annual net VMT reductions are 135,600,000 and 189,270,000 for opening year and year 10, respectively.

The reduction in VMT directly attributable to the Project results in a significant reduction in fuel use and greenhouse gas emissions. Using the net VMT reductions discussed above, and taking into account the impacts of rising Corporate Average Fuel Economy (CAFE) standards, fuel use is reduced by 5,256,000 gallons annually in opening year and 6,309,000 in year ten. Again accounting for rising CAFE standards, the annual reduction in CO<sub>2</sub> emissions is calculated to be 53,900 metric tons per year in opening year and 63,500 metric tons per year in year ten. Emissions calculations are based on fleet-wide emissions data presented in *Light-Duty Automotive Technology, Carbon Dioxide Emissions, and Fuel Economy Trends: 1975 Through 2009* published by the United States Environmental Protection Agency. For medium and heavy trucks, this information was supplemented by data from the *Transportation Energy Data Book: Edition 28* prepared by Oak Ridge National Laboratory.

Reduced VMT means that fewer lane miles of highway will need to be constructed to handle traffic demand. Using an assumed capacity of 9,000 vehicles per day per lane mile of road, over 93 lane miles of road that would have been otherwise required will not need to be built. Using an average construction cost of \$4.34 million per lane-mile in the Anchorage area, this is a capital cost savings of over \$400 million. In addition, over 5,600,000 square feet of land which would be covered by asphalt can remain undisturbed. Because the Project provides a new alternative to the Glenn Highway that will relieve congestion on that corridor and elsewhere in the network, it will help to maintain the condition of existing transportation facilities by reducing wear, as well as minimizing costly and environmentally intrusive expansion of the Glenn Highway.

<sup>2</sup> VMT figures discussed in this LOI are based on the WSA 2007 traffic and toll revenue study.



The Project will also reduce VMT in the existing Carbon Monoxide (CO) maintenance area in Anchorage; therefore, the Project will maintain compliance with the National Ambient Air Quality Standards (NAAQS) for CO. The Project meets air quality conformity and is well within the CO emissions budget.

#### Historic Preservation

The Project invested \$1.2 million to fund a Programmatic Agreement under Section 106 of the Historic Preservation Act for the Knik Tribe, the Native Village of Eklutna, the Mat-Su Borough and the Municipality of Anchorage to develop historic preservation portions for their borough, tribal, and neighborhood plans. The Agreement also funded the State Historic Preservation Officer to assist the Mat-Su in developing a GIS data base of historic and archaeological sites for use in land use planning and permitting decisions.

The Project crosses over the former site of Tak'at, an Alaska Native fish camp of the Dena'ina people. The fish camp was burned by the military circa 1941, and is buried under World War II-era refuse. Because of military security concerns, neither the Knik nor Eklutna Tribes have had access to this location since its destruction. While no mitigation is required, KABATA has offered to secure a replacement location where the tribes could help maintain their historic identities by operating a traditional fish camp along with the activities and ceremonies that are a part of their heritage.

#### Beluga Whale and Other Marine Mammal Protection

Following the completion of the EIS, the Cook Inlet beluga whale was listed under the Endangered Species Act. KABATA and FHWA have modified the Project to reduce the potential for impacts to the whale. A Biological Assessment and a Letter of Authorization were prepared and submitted to National Marine Fisheries Services (NMFS) by FHWA. In response to the BA and the modifications made, NMFS issued a Biological Opinion on November 30, 2010 that construction of the Project is unlikely to jeopardize the continued existence of the Cook Inlet beluga whales.

The following conservation measures are planned to be incorporated to avoid, minimize, and mitigate impacts to marine mammals during construction:

- Large diameter foundation piles will be installed by oscillating drilled shafts to minimize noise impacts to beluga whales.
- Impact pile driving and vibratory removal of template piles will be conducted during the December through July time period when beluga whale numbers in Knik Arm are low.
- No permanent boat launch facilities and no direct access to tidelands will be provided.
- Experienced marine mammal observers will be positioned at sites appropriate for monitoring whales and seals within and approaching the safety zone where marine mammals might be disturbed by pile-driving operations at a sufficient distance to allow for advance warning to stop pile driving.
- During the fall, when beluga whales are present in the Arm in greater numbers (August 1 to November 30), impact pile driving in subtidal waters will not be conducted.
- A "soft start" technique will be used at the beginning of each piling installation to allow any marine mammal that may be in the area to leave before impact piling reaches full energy.
- Initially the marine mammal safety zones will be defined based on measurements made at the nearby Port MacKenzie dock construction.
- Sound generated by the pile driver will be measured and used to refine the radii of the safety zones for the marine mammals.
- The safety zone around the pile-driving activity will be monitored for the presence of marine mammals before, during, and after pile-driving activity. The safety zone will be monitored for 30 minutes prior to initiating the soft start for pile driving.
- If the safety radius is obscured by fog or poor lighting conditions, pile driving will not be initiated until the entire safety radius is visible.
- If marine mammals are present in the safety zone (as confirmed by the monitors), the start of pile driving will be delayed until the animals leave the area.
- If marine mammals enter the safety zone during pile driving, pile driving will cease until the animals leave the area (as confirmed by the monitors).
- A Bridge Construction Monitoring and Reporting Plan will be developed and implemented to protect the beluga.

An Environmental Management System (EMS) will be implemented for tracking compliance with environmental commitments.



#### Government Hill Environmental Solutions

The Project's connection to the transportation system in Anchorage is designed to minimize impacts to the environment by constructing a cut-and-cover tunnel under Government Hill. The tunnel will minimize community impacts and maintain community cohesion. All mainline Project-related traffic will be routed through the tunnel and ramps will re-establish access to Government Hill for local traffic only. The tunnel location minimizes ROW relocations and adverse impacts to the Government Hill community. Indirect adverse effects to the Government Hill Urban Renewal Historic District will be significantly diminished. A Context Sensitive Solutions session has been completed and follow up sessions will be held. Architectural details for the roadway and cut-and-cover tunnel, including vegetation, lighting, and signs, will be integrated into the historic look of the neighborhood.

#### Life Cycle Environmental Benefits

The Project is being procured under a PPA to minimize lifecycle costs which is discussed in detail under *Private Participation* in this section. Minimizing lifecycle costs provides environmental benefits by reducing the need to reconstruct and rehabilitate the Project and minimizing the environmental impacts of those activities over its operating life. In addition, performance specifications for the Project will focus on and encourage practices and methods that reduce emissions, promote conservation and promote recycling, including use of recycled materials in construction where appropriate.

#### Mat-Su Borough Land Use Planning

Although FHWA does not require mitigation of indirect and cumulative impacts, KABATA will fund a new staff position in the Mat-Su Borough for two years to help develop a consolidated permitting process and facilitate appropriate land use, development, and environmental planning efforts in the Borough. KABATA will fund up to \$70,000 to be used by the Borough and other agencies to facilitate orderly land use and economic development, including resource inventories.

#### *Project Acceleration:*

Inclusion of TIFIA assistance in the plan of finance will substantially accelerate Project delivery by providing a more cost effective and flexible financing structure not available in the capital markets. The Project is substantially accelerated because TIFIA's low-cost, patient lender model is vital in the early years of Project operation when, according to the WSA 2011 traffic and toll revenue update, traffic volumes and toll revenue will be constrained. Without TIFIA credit, the State of Alaska would have to commit either to a larger State capital outlays and/or to a larger availability payment to support the higher cost of debt financing in lieu of TIFIA credit. Relying solely on State funds to substitute TIFIA funds disregards numerous other demands for State general funds and transportation funds. Similarly, a larger availability payment would impact other areas of the State's budget. Without TIFIA credit, risk that toll revenues would be insufficient in the early years to pay the larger availability payments is substantially increased. For all these reasons, KABATA believes it would be more costly and difficult to proceed without TIFIA credit.

Given the organic growth which is already occurring in the Mat-Su such a delay will result in increased VMT, reduced connectivity, increased carbon emissions, lower quality of life due to extended travel times, increased congestion, decreased traffic safety, delay in the efficient extension of transit services into the Mat-Su, and a continued trend of uncontrolled urban sprawl. TIFIA credit accelerates the Project schedule by reducing the level of the availability payment required for the Project to an acceptable level of general fund support during traffic ramp-up. By enabling lower tolls to meet availability payments, TIFIA credit reduces traffic diversion and optimizes the economic, financial, environmental, and livability benefits of the Project.

Purely on a construction cost basis, the Project costs have been estimated by FHWA to increase by \$25 million per year of delay. Accelerated Project delivery avoids higher costs and mitigates inflationary pressures on highway construction costs. A 5-year delay due to unavailability of a TIFIA loan, would equate to \$125 million without compounding, or about \$135 million with compounding at 4% inflation. Given this increased cost, the Project may always be "chasing" financial feasibility as cost escalation eats into potential increases in toll revenue and State funds that might accrue during such 5-year delay.

Beyond direct Project cost implications, the societal benefits delivered to citizens from earlier Project delivery are substantial. The Project will reduce average commute distance by 68 miles per day, saving an hour or more in travel time, based on the WSA 2007 traffic and toll revenue study. This will reduce fuel consumption, emissions, dependence on oil, congestion, and improve the quality of life and safety for the traveling public. Positive economic impact translates directly to jobs, economic opportunities and improved economic competitiveness for the U.S. will occur through accelerated



delivery of the Project. The substantial societal benefits delivered to citizens from earlier Project delivery are discussed in greater detail under the *Significance* and *Environment* criteria of this section of the LOI. Delaying or jeopardizing the realization of these key societal, economic, environmental and safety benefits if TIFIA credit is not available for the Project will have substantial negative impacts to the region and the State.

*Creditworthiness (to the extent information is available at this stage):*

As discussed in Section C, *Proposed Financing*, the expected revenue pledge for debt repayment are milestone and availability payments from KABATA's project reserve fund established to hold toll revenue and appropriated funds. The private partner will have the ability to pledge its interest in the Project reserve fund to its lenders. KABATA will not undertake any direct obligation with respect to debt incurred to finance the Project, although it may act as a conduit issuer of such debt.

Preliminary Rating Opinion Letter

Under the conditions of the EDA, the pro forma plan of finance submitted by KABATA must demonstrate that the senior obligations have high potential to achieve an investment grade rating. Further, the private partner consortium must submit to KABATA and the TIFIA JPO a preliminary ratings opinion letter indicating that the senior obligations have the potential to achieve an investment grade not later than the time it submits its proposal.

The pro forma plan of finance submitted with this LOI demonstrates the senior lien obligations of the private partner will be able to achieve investment grade because of the following (the "Credit Structure"):

- Obligations of KABATA under the PPA being obligations of the State of Alaska, subject to appropriation;
- The State of Alaska's current appropriation credit rating of AA by Standard and Poors and Aa3 by Moodys;
- An initial \$150 million appropriation by the State of Alaska Legislature;
- Establishment of the Project reserve fund to assure the appropriated funds and toll revenues are pledged toward monetary obligations under the PPA, including any milestone payment(s) and the availability payments;
- An automatic statutory trigger for KABATA to request the State Legislature to act on supplemental appropriations if ever necessary to replenish the project reserve fund to the minimum requirement; and
- Initial sizing of the Project reserve fund sufficient to meet the reserve requirement while covering the availability payments during the first 10 years of operations, with projected toll revenues sufficient to fully support the availability payments thereafter.

The following are also strengths in the analysis of the Project by the nationally recognized statistical rating organizations (NRSROs):

- Ability of the private partner to pledge the milestone payment(s) and availability payments, and its beneficial interest in the Project reserve fund.
- Substantial capital funding by the State via the existing Title 23 and state funds, driving down the availability payment amounts.
- Project traffic and toll revenue studies indicate a substantial committed funding source for the State to draw from to meet the availability payments.
- Strategic importance and essentiality of the Project.
- Strong, counter-cyclical regional economy supporting economic, population and traffic growth.
- Strategic importance to the nation of Alaska's natural resources and military bases generates economic stability and upside catalyst for the base case traffic model.
- High median household and family income translate to ability to pay tolls.
- Broad public support for the Project, recognizing its benefits and essentiality.
- Significant expansions under way at the POA and Port of Mackenzie that will result in increased use, demand and need for the Project.
- Strategic Project location relative to ports, airports and rail support.
- Tourism represents seasonal boost to stable core traffic levels.

Information Concerning the Borrower's Ability to Repay All Borrowed Funds

The pro forma plan of finance submitted is preliminary and may differ materially from the financial plan submitted by the selected private partner. The actual TIFIA facility will be determined by the private partner who will be responsible for negotiating final terms and conditions of any TIFIA credit directly with the TIFIA JPO under the EDA. Given the benefits of the TIFIA program and its critical use in all recent P3 projects in the U.S., all proposers are very likely to include TIFIA





credit as a key component of their financial proposals. The private sector will structure their proposed availability payment to be able to repay the TIFIA credit.

#### Copy of Existing Financing Documents

The private partner must arrange all debt and equity financing. Therefore, the private partner will provide its financing documents to the TIFIA JPO in connection with satisfying the conditions to finalize the TIFIA credit commitment. Furthermore, the TIFIA credit's status in relation to pledged security, coverage, treatment under any additional bonds tests or other relevant credit factors cannot be determined until the proposers submit their proposals to KABATA and a selection and award is made. The pro forma plan of finance submitted with this LOI makes certain assumptions concerning the financing structure which may differ materially from those of the private partner.

#### Other Information in Support of Projects Creditworthiness

The Project is essential for Alaska's citizens. The Anchorage MSA is the hub of the Alaskan economy and transportation network. Anchorage has had 20 consecutive years of economic and employment growth prior to a mild downturn in 2009, and enjoys median family and household income consistently ranked in the top five cities in the U.S. with a population over 250,000. The geography of the region limits the connectivity between the Anchorage and the Mat-Su, supporting the essentiality of the Project. The Project has a compelling business case and a solid traffic and toll revenue model that, together with the strong financial position, the creditworthiness of the State of Alaska, and the Project reserve appropriation currently under consideration by the Alaska Legislature, serves as the foundation for potential equity investors, debt investors and NRSROs to rely on the availability payments as a revenue pledge.

#### *Use of Technology:*

Because KABATA is entering into a P3 to deliver the Project, it is utilizing performance-based contract provisions to encourage the private partner to design innovative technologies and systems for use in the operations and maintenance of the Project. The Project will include an array of innovative and cutting-edge technologies, developed and implemented to safely and efficiently move traffic on, off and along the Project. Examples of promising technologies applicable to the Project which would enhance its efficiency and capacity or reduce environmental impacts include:

- Anti-icing and Deicing Technologies – to prevent the formation of bonded snow and ice and to break the bond of snow and ice especially within the crossing area.
- Asphalt Deck Bonding Technologies – to prevent debonding of asphalt paving from the bridge deck.
- Earthquake Energy Absorber Technologies – to help the bridge structure absorb earthquake events with minimized damage.
- Driver Information Technologies – to provide changeable message signs, including advisory signs with roadway condition information especially within the 14,000 foot crossing.
- User Classification Technologies – to accurately classify each vehicle passing at highway speeds through the tolling zone according to its height, length, and number of axles.
- Video Exception Technologies – to capture visually vehicle license information for toll collection and enforcement.
- Closed Circuit Television – to provide visual verification of congestion and incidents and providing safety and security measures.
- Electronic Toll Collection Technologies – to allow travel without stopping to pay tolls including the use of mounted transponder units and video recognition systems to allow users to be charged monthly based on their vehicle registration.
- Oscillated Drilled Shaft Technologies – to reduce noise and minimize impacts on the environment during construction.
- Quiet Pavement Technologies – to reduce noise and minimize impacts on the environment during facility operations.

#### *Budget Authority (to the extent information is available at this stage):*

The pro forma plan of finance is structured to minimize the consumption of TIFIA budget authority. This is accomplished through a combination of:

- The strong Credit Structure;
- The low ratio of the senior lien debt and total debt (including TIFIA) to the total Project capital costs due to the substantial capital funding from Title 23 and State appropriated funds; and
- Funding at financial close of at least \$10 million, and potentially 100%, of the subsidy for the TIFIA credit from non-federal Project sources rather than from the USDOT's scarce TIFIA budget authority. Assuming the proposed KABATA legislation is enacted the pro forma plan of finance has the capacity to fund the entire TIFIA credit subsidy.



The pro forma plan of finance assumes tax exempt bonds. KABATA has obtained from USDOT a \$600 million PABs allocation that will be made available to the private partner. KABATA anticipates that the private partner will use PABs in its proposed plan of finance. PABs are tax exempt, bear a lower interest cost, and are generally more attractive than taxable senior lien bank debt. The availability to proposers of PABs as an option for the senior debt could further reduce the amount of TIFIA credit assistance.

*Reduced Federal Grant Assistance:*

TIFIA credit, coupled with private equity and State of Alaska funding, has reduced the need for Title 23 grant assistance by approximately \$230 million for the Project. Alternatively, if the State chose to fund from future federal transportation bills, the Project would likely consume an additional \$230-\$350 million of Title 23 funds after consideration of cost escalation.

***E) Environmental Review. Summarize the status of the project's environmental review. Specifically, discuss whether the project has received a Categorical Exclusion, Finding of No Significant Impact, or Record of Decision or whether a draft Environmental Impact Statement has been circulated.***

The FHWA, in cooperation with the ADOT&PF and KABATA, published a Final EIS for the Project on January 18, 2008. On November 30, 2010, NMFS issued a Biological Opinion indicating that construction of the Project would not likely jeopardize the continued existence of the Cook Inlet stock of beluga whales. This "No Jeopardy" opinion allowed FHWA to issue a "Build" Record of Decision for the Project on December 15, 2010. A copy of these documents can be found on the TIFIA LOI webpage at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).

***F) Other Information. Briefly discuss any other issues that may affect the development and financing of the project, such as community support, pending legislation or litigation.***

Legislation has been introduced in the State of Alaska Legislature to improve the financial feasibility of the Project and the use of an availability payment form of project delivery and financing. The two bills introduced in the Senate (SB79 and SB80) and two bills introduced in the House (HB158 and HB159) are available on the TIFIA LOI webpage at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).

If enacted, the legislation would accomplish the following:

- Clearly provide that all monetary obligations of KABATA under the PPA, including milestone payments and availability payments, are obligations of the State, satisfaction of which is subject to appropriation (to the extent the obligations exceed available toll revenues), as required by the Alaska constitution;
- Authorize KABATA to establish a project reserve fund to hold toll revenues, appropriated funds and other KABATA revenues, and available to pay PPA monetary obligations and KABATA's own operating costs, with surplus available to pay for capacity improvements and expansions related to the Project and other Title 23 eligible transportation improvements and transit;
- Establish for KABATA a procedure, comparable to that available to other public corporations under Alaska law, to report to the legislature and request further appropriations if the project reserve fund falls below a minimum reserve fund requirement;
- Increase KABATA's bonding authority to \$600 million, enabling KABATA to act as conduit issuer for the full amount of the PABs allocation;
- Exempt the private partner's interest from state and local real property taxes and assessments; and
- Appropriate \$150 million for the Project, to be deposited into the project reserve fund at or after PPA execution.

Expressions of support and the bills under consideration by the Alaska Legislature can be found on the TIFIA LOI webpage at <http://www.knikarmbridge.com/TIFIA.html>. Currently the legislation is working its way through committees and KABATA will update this LOI with any new information that emerges concerning the legislation.



***G) Is the project consistent with the State Transportation Plan and, if applicable, the metropolitan plan?***

☐ No

☒ Yes

☐ Not applicable

*Please briefly elaborate.*

The Knik Arm Crossing is in the STIP and in the Anchorage MPO's conforming TIP and LRTP. See the LOI website at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html) for excerpts from the STIP, TIP and LRTP.

***H) Is the project prepared to submit an application for TIFIA assistance within a short timeframe after receiving an invitation from the TIFIA JPO? What factors could impact this timetable?***

The Project is absolutely prepared to submit an application for TIFIA credit assistance within a short timeframe after receiving an invitation from the TIFIA JPO, especially in light of a key project milestone having recently been accomplished with the issuance of a "Build" Record of Decision by FHWA on December 15, 2010.

KABATA has the experience and capability to adhere to the application process in an efficient and timely manner. KABATA previously filed an application for TIFIA credit assistance and paid the application fee of \$30,000 in August 2007 under the terms of the EDA. That application was subjected to risk assessment by the TIFIA JPO completed in early 2008, resulting in a recommendation that the USDOT Credit Council conditionally allocate up to \$261 million of TIFIA credit to the Project under a revenue risk transfer P3 model.<sup>3</sup> We have exceeded the requirements for submission with this TIFIA LOI, including most of the substantive requirements of a full application provided at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html). KABATA and our consultants have demonstrated experience in filing applications with TIFIA and our TIFIA Orals presented with the 2007 application were heralded by the TIFIA JPO as a model for the application process.

Factors that could impact the Project timetable include (a) whether the State Legislature enacts pending legislation to establish the project reserve fund, clarify that PPA monetary obligations are state obligations subject to appropriation, and to provide an appropriation, and (b) whether litigation related to NEPA occurs. However, neither of those items should have a material impact on submittal of a TIFIA application. KABATA and the Project stand ready to do so in a manner consistent with the current NOFA.

The schedule for procurement of an availability payment PPA has been designed to provide for high assurance of award, commercial close and financial close within the current NOFA time frame.

***I) Please provide any additional information necessary.***

Appendices and exhibits to this and TIFIA LOI and other supporting documentation are available at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html)

***J) Identify a key contact person with whom all communication should flow.***

Name: Kevin P. Hemenway  
Title: Chief Financial Officer  
Street Address: 550 West 7<sup>th</sup> Avenue, Suite 1850  
City/State: Anchorage, Alaska 99501  
Phone: (907) 269-6698

<sup>3</sup> No budget authority was obligated to the Project at that time pending proposals from private partner consortia.



*Fax:* (907) 269-6697

*E-mail:* Kevin.Hemenway@Alaska.gov

**Fees.** The undersigned certifies that, if invited to submit a formal application, payment of a non-refundable \$50,000 application fee will be made to the DOT concurrent with the application submission. For projects that enter credit negotiations, the undersigned further certifies a transaction fee will be paid at closing or, in the event no final credit agreement is reached, upon invoicing by the DOT, in the amount equal to the actual costs incurred by the DOT in procuring the assistance of outside financial advisors and legal counsel. This fee is due whether or not the loan closes.

**Debarment.** The undersigned certifies that it is not currently, nor has it been in the preceding three years: 1) debarred, suspended or declared ineligible from participating in any Federal program; 2) formally proposed for debarment, with a final determination still pending; 3) voluntarily excluded from participation in a Federal transaction; or 4) indicted, convicted, or had a civil judgment rendered against it for any of the offenses listed in the Regulations Governing Debarment and Suspension (Government-wide Nonprocurement Debarment and Suspension Regulations: 49 C.F.R. Part 29).

**Default/Delinquency.** The undersigned further certifies that neither it nor any of its subsidiaries or affiliates is currently in default or delinquent on any debt or loans provided or guaranteed by the Federal Government.

**Signature:** By submitting this Letter of Interest, the undersigned certifies that the facts stated herein are true, to the best of the applicant's knowledge and belief after due inquiry, and that the applicant has not omitted any material facts. The undersigned is an authorized representative of the applicant.

**Submitted by:**

**Applicant/Borrower Name** Knik Arm Bridge and Toll Authority (Applicant)

**Signature** \_\_\_\_\_

**Name/Title** Andrew J. Niemiec, Executive Director

**Date** March 1, 2011

***Please attach any relevant documents (e.g., maps, organization charts, etc.).***

Because of their voluminous nature and large files sizes, exhibits to this TIFIA LOI and other relevant documents are provided at [www.knikarmbridge.com/TIFIA.html](http://www.knikarmbridge.com/TIFIA.html).