White Paper on the Knik Arm Bridge Project

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by Jamie Kenworthy and Bob French[1]

Introduction

When the Alaska Legislature passed the Knik Arm Bridge and Toll Authority (KABATA) bill in 2003, few could predict the consequences of giving such a large project to a single-purpose public corporation. Eleven years after KABATA was created, the State of Alaska has spent well over $80 M but still lacks the permits and financing needed to move the project forward. This paper explains the circumstances and decisions that led to the current situation, analyzes the structural and management flaws that have prevented progress, and concludes that the project is no longer viable, if it ever was.

Abbreviated History of KAB Project

The mission of KABATA, created as an instrumentality of the state, was "construction of a bridge to span Knik Arm and connect the Municipality of Anchorage and the Matanuska-Susitna Borough."[2] KABATA was given broad powers in its original and then amended legislation. These included the power of eminent domain to acquire right of way, and to issue bonds and incur indebtedness that did not directly pledge the state's credit.

Working with federal funds retained from a federal earmark, KABATA commenced environmental studies and devised an idea to finance bridge construction at no additional cost to the State of Alaska through a public-private partnership ("P3").[3] Two ensuing rounds of solicitations for private partners failed to yield either a contract or a realistic financial plan.

Knik Arm Bridge Project Timeline

2003 – KABATA authorizing legislation enacted (Ch. 77 SLA 03)
2006 – Authorizing legislation amended to allow public/private

KABATA next asked the legislature to decrease the financial risk to a private partner by authorizing appropriations to pay all future expenses not covered by toll revenue.[4] This legislation advanced significantly but ultimately failed to pass, at least in part because a Legislative Audit report released in April 2013 criticized key aspects of KABATA's financial projections.[5]

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[2] Ch. 77 SLA 03, Section 1 (2003).
[3] "KABATA is utilizing a P3 model in which a private partner provides financing, design, construction, operations and maintenance of the bridge. In turn, KABATA will pay the private developer an availability payment over a 35-year contract with revenue generated from tolls." http://knikarmbridge.com/p3/ .
[4] *See* proposed SB 80, introduced 2/4/11, at Section 6 (including language that is understood to create a "moral obligation" of the state to appropriate funds into a reserve fund).
[5] The report can be found at http://www.legaudit.state.ak.us/pages/audits/2013/pdf/30068rpt.pdf .

During the most recent legislative session (2014), the P3 approach was abandoned in favor of a straight-up publicly financed project.[6] Simultaneously, project management was moved to DOT&PF.[7] Under the current scheme, bridge construction depends on a low-cost federal loan ("TIFIA loan"[8]) for approximately one third of project costs, federal highway funds that could be spent on other projects in Alaska, and state bonds of about $250 M[9]. The loans and bonds would be repaid by user-generated toll revenue, although maintenance and operations also would rely on toll revenue. In the (likely) event that toll revenue is insufficient to repay state bonds and fund maintenance and operations, appropriations from the state's General Fund are authorized to be used.[10]

KABATA stated during the Dec. 8, 2014 AMATS[11] Joint Policy and Technical Advisory Committee meeting that it intended to re-apply for a federal TIFIA loan in the near future.[12]

Although the state bond and federal loan payments are intended to be repaid solely with toll revenues, the viability of this idea is difficult to assess because no financial plan, nor any schedule showing annual toll revenue and debt payments, is publicly available. [13]

PART I:
Increasing Costs and Exaggerated Revenue

Part I lays out a realistic estimate of the total project cost, a figure that is higher than those proposed by project supporters. Unlike those other statements, the cost estimate below is based

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[6] *See* Ch. 51 SLA 14 (2014).

[7] *Id.*, at Sections 2 and 14, effective July 1, 2014. If the bridge is constructed, KABATA will be in charge of its operations and management. The KABATA Board remains in place for one year but without any real function. All of the KABATA staff except its "Legislative Liaison" were transferred to DOT&PF. Since there has been continuity in staff and the key consultants predicting traffic and toll revenue and the resulting financial plans, the use of "KABATA" in this document describes a state agency before 7/1/14 and a Board and DOT&PF employees after 7/1/14.

[8] TIFIA stands for the federal Transportation Infrastructure Finance and Innovation Act.

[9] *See* Ch. 51 SLA 14 at Section 12.

[10] *See* Ch 51 SLA 14 at Sec. 37.15.260(g): "To ensure the required debt service reserve is maintained in the reserve fund, the legislature may appropriate annually for deposit in the fund the sum, certified by the commissioner of revenue to the governor and to the legislature that is necessary to restore the fund to an amount equal to the required debt service reserve. The commissioner of revenue annually, before January 30, shall make and deliver to the governor and to the legislature a certificate stating the sum required to restore the fund to that amount, and the certified sum may be appropriated during the then current state fiscal year. Nothing in this subsection creates a debt or liability of the state."

[11] AMATS stands for Anchorage Metropolitan Area Transportation Solutions, the federally-recognized Metropolitan Planning Organization for the community. Federal funding for Anchorage roads, transit, and non-motorized transportation comes through AMATS.

[12] Meeting minutes are not yet available; video available at
http://anchorageak.granicus.com/MediaPlayer.php?view_id=9&clip_id=4128 .

[13] In testimony to the legislature, state officials were optimistic there would be sufficient toll revenue to repay approximately $300 M in the proposed TIFIA loan. However, no assurances were given that the tolls would cover repayments of the estimated $250 M state loan. *See, e.g.* Minutes of Senate Finance Committee Meeting on April 2, 2014 at 3:21 pm; discussion of state bond obligation begins around 3:29:36 pm.

on a critical assessment of likely additional construction costs on the one hand, and likely lower project revenues on the other hand.

A. Increasing Costs: Bridge Cost $2 Billion or Unknown?

As KABATA has pursued various financing schemes and legislative appropriations over the past decade, estimates of construction costs have risen. While many of these estimates represented good guesses based on available design and engineering information, there are a number of factors that have not been accounted for in any published estimate, factors which are likely to raise costs even higher.

1. <u>Multiple Cost Estimates</u>

In November 2014, the Federal Highway Administration (FHWA) released a revised cost estimate for the bridge of $937 million[14] a slightly higher number than the $894 million cost reported to the legislature in March 2014.[15] These amounts represent an increase over FHWA's 2009 cost estimate of $670 – $740 M.[16] All these cost estimates in turn have exceeded the $600 M. specified in the 2007 Final Environmental Impact Statement.[17]

2. <u>Cost Factors Not Accounted For</u>

Evidence exists that the actual project cost could exceed even the highest figure of $937 M. Listed below are five key project components that have not been accounted for in cost estimates published to date.

a. <u>Longer Bridge.</u> The recent cost review assumed a final bridge span of 8200', despite the National Marine Fisheries Service's (NMFS) demand that the span be lengthened from 8200' to 9200' to mitigate environmental impacts.[18] Increasing the span by that amount would noticeably increase costs.
b. <u>Only 35% Design.</u> The recent cost estimate is based on a 35% design done by PND Engineers, Inc.[19] in 2010.[20] The costs of most "mega-scale" projects increase as the design is refined and cost elements missing from the early designs are discovered.[21]

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[14] FHWA's cost estimate report is available upon request from the authors. Note that KABATA staff and their consultant HDR participated in this cost review.
[15] See transcript of testimony by Deven Mitchell, Executive Director, Alaska Municipal Bond Bank Authority, Department of Revenue, 9:23:16 am, on March 19, 2014 before the Senate Finance Committee.
[16] US DOT, Federal Highway Administration, *Knik Arm Crossing Cost Estimate Review Final* (May 2009) at p. 4, available at http://knikbridgefacts.org/Knik%20Arm%20CER%202009%20Final%20Report.pdf.
[17] See Knik Arm Crossing: Final Environmental Impact Statement and Final Section 4(f) Evaluation prepared for Federal Highway Administration by Knik Arm Bridge and Toll Authority, Alaska Department of Transportation & Public Facilities (2007) at p. S-4, footnote 1 (available from Alaska State Library). The Record of Decision was issued in 2010.
[18] http://knikbridgefacts.org/wp-content/uploads/2012/08/NMFS-COE-KABATA-404-Permit-App-1-27-12.pdf. For reference, the 9200' Knik Arm Bridge would be longer than the Golden Gate Bridge.
[19] This same firm provided the problematic design and developed the cost estimate for the Port of Anchorage expansion project. The Port of Anchorage expansion project was halted in 2009 because of problems with the installation and design of the open cell sheet piling system (patented by PND Engineers, Inc.) called for in the design. The cost of the project also was a problem, having ballooned from $211 M to $1 B. AK Dispatch, *City Considers New Strategy for Troubled Port of Anchorage Project* (Aug. 17, 2014).

c. Missing Permits. The project has an approved Environmental Impact Statement (EIS), and it obtained a Record of Decision from FHWA in 2010. KABATA submitted the Clean Water Act Section 404 permit application to the U.S. Army Corps of Engineers in September 2011 (revised November 2011).[22] Yet after three years of statements from KABATA officials that critical permits from the U.S. Army Corps of Engineers and the National Marine Fisheries Service, as well as the United States Coast Guard were forthcoming "within months,"[23] none of those permits has been issued. The reasons for the delays are not available in the public record; however, it would be prudent to assume that substantive concerns, possibly related to the final bridge span length, need to be resolved. It is even possible that the permitting authorities would require KABATA to lengthen the bridge beyond 9200', up to the "bank to bank" width of 14,000', to reduce impacts to the Port of Anchorage, and to fisheries and whales.

d. Longer Piles and More Drilling Needed? In 2006, KABATA contractor and geotechnical engineering firm Shannon and Wilson, Inc. recommended that when the exact route of the bridge was known, a second "test pile program" be initiated for the east side of Knik Arm to determine the exact depth of Bootlegger Cove Clay and any possible presence of large boulders because there was a "lack of understanding greatly affecting a reliable determination of pile lengths."[24] The unstable clay present liquefies in a major seismic event and is a major reason why the PND design for the Port of Anchorage expansion has been abandoned in favor of a more traditional design.[25] KABATA has not followed the recommendation of its consultant to do further drilling, asserting that the construction risk of having to drive piles deeper than estimated would be taken (and presumably bid) by the contractor.[26]

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[20] http://www.knikarmbridge.com/Templates/tigerII/docs/area_maps/CostUpdates.pdf

[21] *See* Bent Flyvbjerg, Mette K. Holm and Soren L. Buhl, *Underestimating Costs in Public Works Projects: Error or Lie*? JOURNAL OF THE AMERICAN PLANNING ASSOCIATION, Vol. 68, No. 3, Summer 2002, page 279. The article considered 258 significant rail and highway projects in over 20 countries, and found that 90% suffered cost overruns, with the average highway project costing 20% more than projected.

[22] Application available at http://knikbridgefacts.org/wp-content/uploads/2012/01/KABATA_COE-PN_POA-2005-97.pdf . The notice of the permit application specifies that the bridge span is 9200'.

[23] Some of the KABATA board meeting minutes that mention the permits are available here:
http://knikarmbridge.com/wp-content/uploads/2012/12/Minutes-6-13.pdf
and here: http://knikarmbridge.com/documents/BODmtgMinutes6.12.pdf
and here: http://knikarmbridge.com/wp-content/uploads/2012/12/Minutes-1-13.pdf
and here: http://knikarmbridge.com/documents/6-11Wasilla102011.pdf . Additional examples from 2014 KABATA Board meeting minutes and earlier minutes are difficult to find on the "knikarmbridge.com" website and therefore are not cited here.

[24] Shannon & Wilson, *Knik Arm Crossing Final Geotechnical Memorandum* (Feb. 2006) at p. 4, available at http://www.knikarmbridge.com/Tech_Reports/Boiler%20QC/geoTech/Geotechnical%20Memorandum.pdf.

[25] *See* Hansen, W.R., *Effects of the earthquake of March 27, 1964, at Anchorage, Alaska*, U.S. Geological Survey Professional Paper 542–A (1965), available at http://pubs.usgs.gov/pp/0542a/ .

[26] Letter from Andrew Niemiec, KABATA Executive Director, to Sen. Johnny Ellis (dated Dec. 2012) at page 1; available at http://knikbridgefacts.org/wp-content/uploads/2013/01/12.28.12-Response-to-Senator-Ellis-cost-estimate-inquiry.pdf.

e. Extra Financing Costs. A normal state bond, like a home mortgage, has a steady payment schedule with interest costs going down each year as the amount of principle paid off increases. However, because the expected toll revenue in the years after the bridge is opened will not cover bond payments, the amount owed will increase as interest is paid on interest. Under the very optimistic assumptions (discussed in Part II, below) of KABATA's last published financial plan,[27] the amount that needs to be financed for only the first 9 years the bridge is open grows with additional interest costs as the amount owed increases. None of those financing costs are reflected in the $937 million estimate of the project's construction cost.

f. No TIFIA Loan. According to the FHWA's TIFIA website, 48 projects have been approved for a total of $19.9 B in federal assistance since the program began. The MAP-21 transportation authorization legislation increased TIFIA funding from $122 million in previous years to $1.75 billion for fiscal years 2013 and 2014 combined. Nevertheless, applications for TIFIA loans far exceed available funds.

   Approximately 40 projects are submitted for each round of funding; around 5-8 are actually chosen each round. Of the 48 letters of interest listed on FHWA's web site as of January 9, 2015, KABATA's 2012 submission is the third-oldest. Projects funded in 2014 include the Dulles – DC metro rail link (three phases), a bridge replacement in California, and a highway expansion in Florida. It appears that all TIFIA authorization through FY2014 has now been used. More importantly, it does not appear that any recent TIFIA awards have gone to toll projects not backed by a public or private guarantee or both. Without a public guarantee to cover the toll shortfall, KABATA's future TIFIA letters of interest are no more likely to succeed than its past ones.

B. Exaggerated Revenue: Expected Tolls Half KABATA's Projections?

Because KABATA's financial plan relies on toll revenues to repay bonds and loans, realistic toll revenue projections are critical to limiting the state's financial exposure. These revenue projections in turn depend heavily on population forecasts, which in turn form an important basis for all predicted trip counts and the resulting toll revenue necessary to pay off the bonds and other costs. This section explains how KABATA's population and trip numbers have been consistently higher than, and out of line with, independent estimates.

1. 60% Higher Mat-Su Population Growth?

   People who live in the Mat-Su Borough and travel back and forth to Anchorage are expected to be the main users of the bridge. A larger number of Mat-Su residents thus would represent a larger pool of potential bridge users. To predict the size of this potential pool of bridge

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[27] http://www.knikarmbridge.com/documents/KnikArmCrossingProFormaModel_000.pdf. This plan assumed a federal TIFIA loan could cover 49% of project costs; however, the FHWA has stated that a TIFIA loan exceeding 33% of project costs is unlikely. Letter from Duane Callender, Director, TIFIA Joint Program Office, to Kevin Hemenway, KABATA CFO, dated Dec. 11, 2012, available at http://www.knikarmbridge.com/documents/Knik_Arm_Response_from_USDOT-12-11-12.pdf.

users, experts and consultants estimate the number of people who will live in the Mat-Su over the next 30 years. In 2009, the University of Alaska Anchorage Institute of Social and Economic Research (ISER) forecast 159,050 people living in the Mat-Su by the year 2035.[28] In 2014, the Alaska state demographer predicted 166,338 in Mat-Su by 2042;[29] the McDowell Group revised that Alaska Department of Labor forecast to 151,241 in 2040.[30] In contrast, KABATA's consultant Cardno, Inc. recently released an estimate of 207,888 Mat-Su residents by 2040, a significantly higher prediction.[31]

Another way to understand these predictions is to consider how many new people would move to the Mat-Su under each forecast. Currently the Mat-Su has 94,000 residents. The ISER and state/McDowell projections add about 60,000-70,000 people by 2040, while the KABATA consultant adds 115,000 more people, *over 60 % more than the independent estimates*.

2. Point MacKenzie Boomtown?

In addition to considering the pool of *potential* bridge users, forecasters must try to refine the subset of people for whom the bridge *actually* would be an attractive option. For this calculation, it is assumed that most Mat-Su residents would use the shortest route. Under this assumption, few people living in Palmer and Wasilla would take the bridge, because the Glenn would be shorter for them (and free). In contrast, residents of the Point MacKenzie/Knik Goose Bay Road area would be more likely to take the bridge if they could afford the tolls, because the bridge would be shorter.

Predictably, then, KABATA's consultants projected a great share of Mat-Su growth to occur in the Point MacKenzie/Knik Goose Bay (KGB) Road area, and not in the Borough's current Wasilla-Palmer core area.[32] In order to support high numbers of residents around Point MacKenzie, the consultants made a number of assumptions that are not well supported. First, they assumed a new road connecting Point Mackenzie to the Parks Highway at Willow ($250 million to construct?), and the completion by 2040 of most of the six new Borough-defined town sites around KGB and Point MacKenzie. Yet the projected density of those town sites is not likely with the "well and septic" lot sizes that have typified development in the Mat-Su to date. Those new towns will require the infrastructure of at least 3 batch sewage treatment plants, new water treatment plant(s), schools, police, fire and roads. The consultants do not

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[28] 2035 Metropolitan Transportation Plan, Chapter 5, at p. 5-2, citing ISER data, available at: http://www.muni.org/Departments/OCPD/Planning/AMATS/2035%20MTP/AMATS%20Chapter-5_20120511_s.pdf

[29] http://laborstats.alaska.gov/pop/projected/pub/popproj.pdf .

[30] The AMATS Staff memo from November 20, 2014 is available on request from the authors.

[31] CDM Smith, Comprehensive Traffic and Revenue Study for the Knik Arm Crossing Project (Dec. 2014) at page 3-11, available at: http://knikarmbridge.com/wp-content/uploads/2014/03/KAC-TR-12-5-14-wo-appendices-PRINT-VERSION-compressed.pdf . Note that oil prices were about $100/bbl when the state demographer's estimated future population growth was published in April 2014, but they had dropped to around $60/bbl when the higher Cardno number came out in December, 2014.

[32] *See* Cardno, Inc, *Independent Socioeconomic Review and Forecast: Anchorage & Matanuska Susitna Borough Region, Knik Arm Crossing* (Dec. 5, 2014), available at: http://knikarmbridge.com/wp-content/uploads/2014/03/KAC-TR-Appendix-A.pdf .

identify a source of infrastructure funding necessary to achieve their assumed housing and employment density. Second, it is not clear that the projected density is consistent with the current agricultural zoning in much of the area and the state covenants on that land.

3. Point MacKenzie's Different Futures

Different KABATA consultants have projected at Point MacKenzie either a major housing development, major industrial facilities, a shopping center four times the size of the state's largest mall, or an unlikely combination of at least two of these incompatible land uses.

a. Major Housing Development. Cardno, Inc.'s latest 2014 socioeconomic data presumes that the Mat-Su Borough will change the allowable land use in what is currently set aside as part of the Port Industrial District, and instead allow for high density housing.[33] (That assumption is questionable due to the inherent dangers of allowing residential areas adjacent to industrial facilities, including tank farms and natural gas liquefaction facilities that are currently proposed at Point MacKenzie). The Cardno, Inc. forecast from December 2014 shows 19,151 population at Point MacKenzie in 2040.[34]

b. Major Job Center. In 2011, CDM Smith used a different assumption, one that showed a high number of jobs, predicting 13,828 new jobs at Point MacKenzie by 2035.[35] (In comparison, in 2009 the US Census counted 14,869 jobs as non-farm employment in the entire Mat-Su Borough, and 13,155 jobs in the entire Kenai Peninsula Borough.)

c. Retail. In its 2007 federal TIFIA loan application,[36] KABATA predicted 6,740 new employment positions in the Point MacKenzie area in 2030, less than half what it predicted in its 2011 forecast. That 2007 prediction included an assumption that there would be retail square footage four times the size of Alaska's current largest mall, the Dimond Center.

While these land use scenarios are significantly different, all have the same effect of raising trips and toll projections for the bridge. Such disparate scenarios suggest that the number of daily trips, rather than a realistic prediction of future land use and population, is the goal KABATA's consultants focused on.

[33] Author's personal conversation with Bill Reid of Cardno, Inc. on Dec, 8, 2014.

[34] P. 32 of the AMATS Presentation by Cardno/CDM Smith: http://knikarmbridge.com/wp-content/uploads/2014/09/AMATS-SE-and-TR-Presentation-12.8.2014.pdf .

[35] http://knikbridgefacts.org/13828-jobs-at-point-mackenzie-in-2035-release-of-traffic-analysis-zone-data-raises-more-questions-on-kabata%e2%80%99s-revenue-projections/ . The following website hosts an interactive map where visitors can click on any of the Traffic Analysis Zones (TAZ) to see KABATA's 2011 projected population and employment data:
http://www.arcgis.com/home/webmap/viewer.html?webmap=ac12e1bb0f12429087168410467b0e48 .

[36] Page A-7 (appendix A, page 72 of the PDF file, TAZ areas 136 and 593, the same TAZ areas in 2011)
http://www.knikarmbridge.com/documents/KABATATIFIAApplicationExhibitVIII.pdf .

4. Trips and Toll Projections 2x Reality?

After assuming aggressive growth scenarios in the Point MacKenzie/KGB Road area, KABATA's consultants not surprisingly predicted that the number of bridge trips taken would be high. KABATA's most recent study by Cardno, Inc. predicted 40,700 average daily traffic (ADT) in 2040.[37] This number is similar to an earlier number of 36,000 ADT by 2035 supplied by KABATA consultant CDM Smith, a number criticized by the Legislative Budget and Audit report as producing "unreasonably optimistic" and undocumented trip and revenue forecasts.[38] By comparison, the proposed Highway to Highway project in Anchorage, which covers some of the same region, projected Knik Arm Bridge trips in 2035 of 17,700 ADT, *less than half* the KABATA number. A Wasilla Bypass study, authored by HDR, predicted 9,400 ADT over the bridge in 2035.[39]

Summary: Is the Real Cost $2 Billion or Unknown?

With a substantially higher bridge cost and toll revenues halved from KABATA's estimate to be consistent with other sources, we suggest a final approximate cost of over $2 billion.[40] An alternative approach is to conclude that given the issues identified here and the impact of $60 oil or lower for an indefinite period, bridge cost and toll revenue estimates range so widely that the final project cost is basically unknown.

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[37] CDM Smith, Comprehensive Traffic and Revenue Study for the Knik Arm Crossing Project (Dec. 2014) at page 5-9, available at: http://knikarmbridge.com/wp-content/uploads/2014/03/KAC-TR-12-5-14-wo-appendices-PRINT-VERSION-compressed.pdf .

[38] See the audit at http://www.legaudit.state.ak.us/pages/audits/2013/pdf/30068rpt.pdf. In fact, the LB&A report's criticism of the CDM Smith figures is what prompted KABATA to commission the Cardno Inc. study. See KABATA Board of Directors Meeting Summary, April 23, 2013: http://knikarmbridge.com/wp-content/uploads/2012/12/Minutes-2-13.pdf .

[39] The document is available at: http://www.legis.stateak.us/basis/get_documents.asp?session=28&docid=20069 .

[40] The authors' January 2013 estimate identified a $2.6 billion cost under the then-current public-private partnership (P3) model where the contractor was financing the project at 10% annual rate instead of the state financing it at 4%. http://knikbridgefacts.org/wp-content/uploads/2013/02/13-02-08-KABATA-2013-REAL-COST.pdf. The paper identified $300 million in interest savings if the state financed the project directly. The Department of Revenue in November 2013 recommended that the project be publicly financed. *See* Memo to Angela Rodell, Commissioner of Alaska Department of Revenue, from Steven J. Kantor, Managing Director, First Southwest Financial, dated November 2013, available on page 2 of www.knikbridgefacts.org. KABATA subsequently canceled the second P3 procurement.

Part II:

Project Management Problems

Since 2003, KABATA project management has been plagued by three problems that have largely been self-inflicted: the moving target of the project's structure, questionable consultant work, and seven key misrepresentations or missteps. The result has been unnecessary costs and confusion.

A. The Moving Target Which Has Not Yet Been Hit

There have been four different iterations of KABATA's approach to how the project should be structured, and we would argue that all of them either have been unrealistic, or have exposed Alaska to unwarranted financial risks.

1. Public Financing Including Federal Earmarks

   The initial plan counted on additional federal earmarks over the original $200+ million. KABATA assumed that other state and federal funds would be combined with projected toll revenue to earn the investment grade rating necessary for a TIFIA loan. The Knik Arm Crossing then gained nationwide notoriety as one of two "Bridges to Nowhere" and Congress removed the earmarks for the Knik Arm Bridge and the Gravina Bridge in Ketchikan. Governor Murkowski redistributed over $100 million of the Knik Arm Bridge earmark to other projects. This action, the demise of federal earmarks in general, and KABATA's apparent realization that projected toll revenue would not be sufficient to win an investment grade rating to obtain the federal TIFIA loan[41] resulted in abandonment of this plan.

2. Public-Private Partnership (P3)

   Plan 2 in 2007 was a public private partnership (P3) that short-listed two private sector teams headed by Macquarie and Bouygues.[42] Proposed legislation failed that would have allowed the legislature to appropriate 35 years of undefined annual payments to the contractor (not a legally binding guarantee, but a "moral obligation" as recognized by markets and rating agencies), and authorized a state loan for $150 million.[43]

3. P3 Do-Over.

   Plan 3 in 2011 canceled the original P3 partnership procurement and rebid the P3 partnership with three new teams pre-qualified to prepare a final bid.[44] Proposed legislation failed that would have would have allowed the legislature to appropriate 35 years of what KABATA estimated to be $2.3 billion in cumulative annual payments to the contractor[45] (again, not a legally binding guarantee, but a "moral obligation" recognized by markets and rating agencies).

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[41] FHWA website, TIFIA Technical Assistance Background Resources (Dec. 18, 2014), p. 1; available at: http://www.fhwa.dot.gov/ipd/tifia/technical_resources/background.aspx
[42] http://tollroadsnews.com/news/two-interested-in-concession-for-anchorage-knik-arm-bridge
[43] See proposed SB 80, introduced 2/4/11.
[44] http://www.knikarmbridge.com/documents/PRShortListfinalversion102411.pdf .
[45] P. 3 http://www.knikarmbridge.com/documents/KnikArmCrossingProFormaModel_000.pdf

4. Public Financing via Federal Loan

Current Plan 4 adopted in 2014 canceled the second P3 procurement and returned to the public finance model of Plan 1 with KABATA management insisting that projected tolls would cover the hoped-for federal TIFIA loan and a state bond for approximately two-thirds of project costs. In 2014 the legislature approved state bonds for the project, contingent upon receipt of the TIFIA loan to cover approximately one-third of project costs. The state and federal bond payments are not guaranteed by the state but rather backed solely by toll revenues.[46]

While a KABATA representative stated during the Dec. 8, 2014 AMATS Policy Committee meeting that it intends to re-apply for the TIFIA loan in the near future, there currently is no financial plan publicly available for Plan 4 or any schedule showing annual toll revenue and debt payments. In enacting CSHB23 in the final hours of the 2014 session, the legislature relied on just a one-page financial plan from KABATA and DOT&PF that listed potential sources of money but provided no details on project financing debts or costs such as an estimate of annual toll revenue available to pay annual costs.[47]

B. Non-Standard Work from KABATA-Managed Consultants

KABATA's selection and management of the CDM Smith and Insight Research Corporation contracts suggest that KABATA management preferred high population, traffic numbers, and anticipated toll revenues to more standard professional work that would produce more-supportable numbers which would have brought into question the project's viability.

1. CDM Smith

CDM Smith Inc., formerly Wilbur Smith & Associates, is one of the largest traffic and toll projection firms in the world. Its recent record suggests it is more focused on serving clients who want the numbers to build projects rather than accurately predicting traffic and toll revenue for creditors and units of government that end up owning the risk of toll shortfalls:

a. An independent study of the national track record for traffic and toll consultant CDM Smith found a tendency to overestimate tolls by 114%, or more than a factor of two.[48]
b. CDM Smith and Wilbur Smith & Associates provided the toll and revenue forecast for three toll projects that have recently gone bankrupt: The Indiana Toll Road (IN),[49] the South Bay Expressway (CA),[50] and the Southern Connector (SC).[51] The Pocahontas Parkway (VA) went through two de-facto bankruptcies with the creditors and the state

[46] In testimony to the legislature, state officials were optimistic there would be sufficient toll revenue to repay approximately $300 M in proposed TIFIA loan. Discussion assumed that the legislature would have to make up the shortfall to repay an estimated $250 M state loan.
[47] http://www.legis.state.ak.us/basis/get_documents.asp?session=28&docid=19766
[48] http://tollroadsnews.com/news/wilbur-smith-assoc-forecasting-record-slammed-in-report-for-reston-va-group-enlarged-report along with the data from a Transportation Research Board of the National Academies of Sciences report http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_364.pdf.
[49] http://usa.streetsblog.org/2014/11/20/the-great-traffic-projection-swindle/
[50] http://tollroadsnews.com/news/south-bay-expressway-company-files-for-bankruptcy-in-san-diego.
[51] http://tollroadsnews.com/news/greenville-sc-southern-connector-toller-files-for-bankruptcy.

finally taking over the project.[52] In all cases, tolls were one-third to one-half of Smith projections.

c. In projecting future tolls on a proposed I-5 Bridge linking Portland and Washington State, CDM Smith told the Oregon State Legislature that the Bridge would carry 160,000 ADT, while the estimate provided privately to potential investors was 78,400 ADT.[53]

2. Insight Research Corporation

In 2007, KABATA hired Scott Goldsmith of ISER to estimate area population in 2030. Dr. Goldsmith's number of 204,400 for the Mat-Su apparently proved too low for KABATA's purposes, so KABATA then hired the small firm of Insight Research Corporation of Dallas, Texas, which produced a number of 250,700 or the equivalent of adding the population of Palmer, the Borough's second largest city, to the Borough for every year to 2030.[54]

Both the AMATS Technical Committee and later the 2013 Legislative Audit[55] questioned the assumptions and documentation of the Insight Research study. KABATA then commissioned another toll and revenue report in 2011 from CDM Smith; this study never stated a number for Mat-Su population. [56]

3. Summary. There are three consistent themes to KABATA's management of consultants producing socioeconomic information:

a. Preferring out-of-state firms which provide higher numbers rather than using in-state firms for new work.
b. Apparent reluctance to use the existing data relied on by planning agencies like the Municipality of Anchorage, AMATS, or the State of Alaska.
c. While KABATA's consultants' reports are usually long and appear thorough with excellent graphics and long discussions of technical issues like Monte Carlo simulations and trip forecasting methodology, the key macroeconomic assumptions such as the assumed price of oil, or the date of construction, or the size of a predicted natural gas pipeline, or whether or not key projects like the Pebble Mine will be constructed, are seldom documented or even stated.[57]

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[52] http://tollroadsnews.com/news/pocahontas-parkway-turned-over-to-lenders-additions, http://tollroadsnews.com/news/pocahontas-parkway-revenues-about-half-forecast

[53] http://www.wweek.com/portland/article-21194-the_toll_truth.html. Largely because of this dispute about financial feasibility, the I-5 Bridge project between Washington and Oregon was subsequently canceled.

[54] http://www.knikarmbridge.com/documents/10082007ProposedKnikArmBridgeFinalTrafficandTollRevenueForecastDRAFT.pdf , at p. 9.

[55] http://www.legaudit.state.ak.us/pages/audits/2013/pdf/30068rpt.pdf.

[56] http://www.knikarmbridge.com/2011TIGER/T&RStudy.pdf.

[57] This is in contrast to work produced by ISER, in which every ISER forecast details the macroeconomic assumptions (for example, gas line in year X, Pebble developed or not, etc.). The 2014 population forecast by KABATA consultant Cardno, Inc does not state its macroeconomic assumptions.

C. Management Misrepresentations and Confusion

There have been at least eight key misrepresentations or missteps by KABATA management:

1. Four Full Lanes of Traffic Cannot Cross a Two-Lane Bridge

   To prove a project is financially feasible usually requires a bond cover ratio over 1.25 meaning the project will generate $1.25 of revenue to pay off a $1 of bond payments and other costs. KABATA's 2012 TIFIA Letter of Interest loan application showed the cost of building a two-lane bridge and approach roads, but showed revenue from over 40,000 trips a day in its finance plan. Unfortunately, 20,000 trips a day is considered the maximum on an unrestricted two-lane highway at any acceptable service level. KABATA then separated the cost of what it called Phase 1B, which widened the bridge and approach roads to four lanes, from the costs of Phase 2, which included a new four-lane bridge and four-lane connection to the Ingra-Gambell Couplet.[58] When the cost of Phases 1B and Phase 2 were included, what KABATA had touted to the legislature as an estimated total construction cost of ~$1 billion, then became $1.6 billion total construction cost in the outline of KABATA's financial plan which was cited in the 2013 Legislative Audit.[59]

2. Right of Way: Was the Cart Before the Horse?

   About half of a budgeted $15 million has now been spent acquiring right of way (ROW) on Government Hill and Mat-Su for a project that lacks financing or even a current financial plan.

   To make a project "shovel ready," ROW is often acquired before the financing is in place. However, this megaproject has been turned down six times for a federal TIFIA loan to complete financing, and KABATA management can point to no other investors, including the State of Alaska, who are willing to fully finance the project.

   Despite any reasonable prospect of financing, the Sourdough Motel and two homes on Government Hill have been acquired with bids in the $500K- $1 million range, and are slated for demolition. KABATA staff has argued that it is more cost-effective to demolish than maintain the structures.[60] The owners of the two homes acquired were not allowed to have short-term leases although the DOT&PF Central Region *Right of Way Manual* allows former owners to stay in their former homes on a month to month basis if the ROW is not needed in the immediate future.

[58] The author Jamie Kenworthy documented from KABATA reports the use of the revenue from 4 lanes to support a 2 lane bridge in constructing the minimum bond cover ratio in its 2012 Letter of Interest TIFIA loan application, and gave KABATA staff a chance to respond. http://knikbridgefacts.org/wp-content/uploads/2012/11/KABATA-IG-Notice-on-TIFIA-Application.pdf. KABATA management chose not to respond, and the complaint was then forwarded to the Inspector General of the U.S. Department of Transportation, http://knikbridgefacts.org/page/3/ . The U.S. DOT IG chose not to investigate a non-funded project, suggesting the issue could be dealt with by the Juneau office of FHWA. Kenworthy met with FHWA in spring, 2012, and KABATA's subsequent financial plans broke out the cost of Phase 1B and Phase 2.

[59] P. 25 http://www.legaudit.state.ak.us/pages/audits/2013/pdf/30068rpt.pdf

[60] http://dot.alaska.gov/comm/pressbox/arch_2014/PR14-2539.shtml

After a public outcry, KABATA in November 2013 allowed two viable Government Hill businesses, the Tesoro Station and Subway store, to remain operating until needed for the project.[61] Almost a year later, the Tesoro tenant managers removed their gas pumps, apparently deciding not to invest in new double-walled underground tanks when faced with the threat that they could soon lose their lease.[62]

The premature and inconsistent approach to ROW acquisition and the rush to demolish properties without any project financing in sight suggests that ROW decisions may have been driven by a management decision to create "facts on the ground" designed to persuade the public and policy makers that the project is inevitable.

3. The State or State Agency Has Always Held the Liability

Legislative Transportation and Finance Committees have spent many hours trying to understand the costs of the project, and where the ultimate liability for any cost over-runs would lie. It has not helped that the former KABATA board chair and KABATA staff have described the project as "cost free" to the state, or requiring "only" a $150 million loan that would be paid back, and even that the project would repay all loans and then generate an extra $5.6 billion to support other state needs.[63] Those predicted "extra revenues" above project construction and financing costs were predicted as $9.1 billion in 2012 and then dropped to $2.2 billion in 2013.[64]

KABATA representatives consistently testified that the state's credit was not at risk. Legislators were often led to confusion about whether the public sector held the risk, the private sector held the risk, or the risk was somehow shared.[65] In the latest finance plan, officials from the Departments of Transportation and Revenue told the Senate Finance Committee in March, 2014 that the state is not responsible if toll revenue is not sufficient to repay the proposed $343.4 million federal TIFIA loan.[66]

In fact:

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[61] http://www.adn.com/article/20131126/knik-bridge-board-says-government-hill-businesses-can-stay-now

[62] http://www.adn.com/article/20141015/government-hill-gas-station-ends-fuel-sales-over-knik-bridge-uncertainty

[63] Slide 38 http://knikarmbridge.com/documents/KnikArmCrossingProjectUpdateJuly2010.pdf

[64] Slide 28 in the August 10, 2012 project update provided to the Alaska State Legislature and slide 35 in the January 29, 2013 PowerPoint presentation to the Senate/House Joint Transportation Committees. Those documents appear to have been removed from the KABATA web site but electronic copies are available from the authors upon request.

[65] http://www.legis.state.ak.us/basis/get_audio.asp?session=28&chamber=H&comm=TRA&date1=3/12/2013&start=1304&bill=HB23.

[66] State debt manager Deven Mitchell has insisted in a private conversation with Dr. Kenworthy that the state is under no direct obligation to repay the federal TIFIA loan and could default on that federal obligation without threatening the state's credit rating. No Alaska state agency has defaulted on its own paper. The authors of this paper have consulted with three Alaskan financial professionals who have marketed state debt and/or packaged state issues. All believe that such a default on a $300 million TIFIA federal loan would be noted by the national rating agencies and a downgrade of the state's AAA rating to AA would likely result. At current market rates there is about a half percent difference between AAA and AA tax-free paper for long-term issues, so financing a $8 billion state stake in the gas line could cost the state an approximate $1 billion in extra interest costs over 35 years if the state is downgraded to AA.

a. The KABATA bills of 2011-2013 contained long and confusing sections about the project, but always included the standard language any bond counsel would recognize as signaling the legislature's intent to appropriate funds to cover future revenue shortfalls (often referred to as a "moral obligation" of the state): "the Governor or Commissioner will annually certify the amount of legislative appropriation necessary to meet scheduled obligations…."
b. The risks of tolls being insufficient to pay off project bonds or annual availability payments to a P3 partner has always been borne by the state or a state agency, never by the private partner.

4. <u>KABATA Numbers Are Not Consistent With ISER</u>

While all the population forecasts from both ISER and KABATA's consultants have trended downwards since 2005 because of the national recession and lowering Borough growth rates, KABATA has not admitted when questioned that its numbers were higher than the ISER or AMATS forecasts. Rather, the standard KABATA response in legislative testimony has been to claim that its numbers are "consistent with ISER."[67] This is then "demonstrated" by taking a former ISER forecast number and constructing a growth factor from an earlier, cherry-picket time period when all sources projected higher growth. That growth factor is then multiplied by an outdated ISER forecast number to show a derived number similar to KABATA's latest high population or employment estimate.

This is an artificial mathematical exercise rather than any standard professional method used by demographers or professional analysts.[68]

5. <u>$300 million Federal TIFIA Loan Is Not Imminent</u>

KABATA board members and staff have repeatedly insisted that a low-cost federal loan is expected or is almost assuredly in the bank if proposed legislation would pass.[69] KABATA has been turned down six times for the project, the latest in 2012.[70] In the December 2014 listing of all 43 TIFIA "letter of interest" applications, the Knik Arm Crossing shows as the third oldest non-funded project but it is still at the earliest stage of the process, neither under review or even had any documents requested.[71] KABATA's previous letters of interest to TIFIA have relied on state-backed guarantees of loan repayments which have been promised to be enacted by upcoming legislatures. However, the current "Plan 4" is relying solely on toll revenues to repay what was recently estimated to be a $343.4 million federal TIFIA loan, which means that KABATA is probably less likely to get a TIFIA loan than other projects that have a defined payment obligation from a unit of government.

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[67] http://www.adn.com/article/20111102/knik-bridge-key-growth-alaska .
[68] A 2011 letter from Dr. Scott Goldsmith, formerly of ISER, explains some of the problems with KABATA's approach and methodology: http://knikbridgefacts.org/wp-content/uploads/2011/05/Goldsmith-letter-KABATA-population-projections.pdf .
[69] http://www.adn.com/article/20131102/kabata-plows-bridge-legislative-limbo .
[70] *See* letter from U.S. DOT's D. Callender to KABATA's K. Hemenway dated Dec. 2012, available here: http://www.knikarmbridge.com/documents/Knik_Arm_Response_from_USDOT-12-11-12.pdf .
[71] http://www.fhwa.dot.gov/ipd/tifia/letters_interest_applications/tifia_review_process_chart.aspx

6. <u>The Knik Arm Bridge is not a regional project "outside" normal planning processes and federal fiscal constraint requirements</u>.

   By insisting that the Knik Arm Bridge was a regional and not a local project, and that state money spent on the Knik Arm Crossing would not affect funding of Municipality of Anchorage projects, KABATA staff sought to place itself outside the state-Muni AMATS planning process. Rather than trying to reconcile KABATA's higher population, household, and employment figures with Department of Labor figures, the 2035 Long Range Transportation Plan (LRTP) adopted by AMATS and the Anchorage Assembly accepted having two sets of demographic assumptions about how many households and jobs would exist in the Anchorage and Mat-Su areas in 2035, and it did not state a population number.[72]

   State of Alaska and AMATS transportation plans must show "fiscal constraint;" that is projects eligible for state and federal transportation dollars must be constrained to show they can be financed by actual expected revenue sources.[73] In order to meet this requirement, the 2035 Anchorage Long Range Transportation Plan had to assume that the financing of the Knik Arm Bridge would not affect expected state funds to AMATS, and that the private partner would bear the risk of financing the project.[74]

7. <u>The AMATS 2040 Long Range Transportation Plan will not be based on latest and best available socioeconomic data</u>.

   On December 8, 2014 KABATA consultant Cardno, Inc released its long-delayed socioeconomic data report which projected 207,888 people and 59,504 jobs in the Mat-Su by 2040.[75] In contrast, the Alaska Department of Labor/McDowell forecast commissioned by

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[72] MOA 2035 LRTP, Chapter 5, pp. 5-18 and 5-19, available at : http://www.muni.org/Departments/OCPD/Planning/AMATS/2035%20MTP/AMATS%20Chapter-5_20120511_s.pdf AMATS relied on 2009 ISER data for the Plan but never cited KABATA's population figures for either Anchorage or Mat-Su because the 53-page toll and revenue forecast from CDM Smith never stated one (see http://www.knikarmbridge.com/2011TIGER/T&RStudy.pdf), and the earlier Insight Research Corporation (called Independent Research Corporation in the Plan) had a 250,700 population for Mat-Su in 2030 that the AMATS Technical Committee found not credible. The AMATS report did not cite the Highway to Highway projected 2035 bridge traffic number of 17,700 ADT authored by CH2M Hill based on the same ISER 2009 data used by AMATS for its 2035 plan. Rather, the 2035 LRTP used a Department of Transportation number of 36,000 ADT that modeled Knik Bridge traffic with no tolls even though no plans were being considered for a "no toll" bridge. Since tolls decrease traffic demand, modeling a "no toll" Knik Bridge allowed the DOT estimate of 36,000 ADT to be close to KABATA's number of 36,600.

[73] As a designated Metropolitan Planning Organization (MPO), AMATS receives federal dollars to support transportation planning. In its 2011 recertification of AMATS as an MPO, the FHWA expressed concern that KABATA, AMATS, Anchorage, and the Mat-Su Borough had not coordinated consistent socioeconomic data and coordinated planning between the separate organizations. Although many meetings were held between KABATA, AMATS staff, and individual AMATS technical committee members from Anchorage and DOT&PF, these attempts to coordinate planning data and make it consistent failed.

[74] Pp. 6-30-31 http://www.muni.org/Departments/OCPD/Planning/AMATS/2035%20MTP/AMATS%20Chapter-6_20120511.pdf. The KABATA claim that the private partner would "finance" the project rested on the assumption of the P3 partnership (former Plans 2 and 3), under which the legislature would pass legislation signaling its intent to appropriate funds to cover annual "availability payments" to the partner who would then use those proceeds to make the bond payments (this proposed legislation which contained the "moral obligation" did not pass).

[75] P 5-22 and 5-45 http://knikarmbridge.com/wp-content/uploads/2014/03/KAC-TR-Appendix-A.pdf

AMATS predicted 151,241 people and 53,800 jobs in Mat Su by 2040. Faced with these wildly different population and employment forecasts, the AMATS Technical Committee overruled its staff recommendation and declined to choose between the KABATA and ADOL/McDowell numbers. Instead it halved the difference between the KABATA and ADOL/ISER numbers to create what it called a "spliced" approach of assuming 48,543 jobs and 176,121 people in Mat Su in 2040 for the 2040 Long Range Transportation Plan.[76] This "spliced approach" shows 16% more people being supported by 10% fewer jobs, an outcome that demonstrates a weakness of the approach. Unless corrected, the substitution of a derived compromise instead of documented methodology is unlikely to meet the requirement that federally supported planning efforts must use "latest available estimates and assumptions for the population, land use, travel, employment."[77] More importantly, the apparent continual need by AMATS to show consistency between KABATA and non-KABATA (and to some extent between Anchorage and Mat-Su) socio-economic data, threatens the accuracy of long range transportation planning in the region.

8. <u>KABATA has not been transparent on key information</u>

The KABATA web site formerly catalogued an enormous amount of press releases, newsletters, and reports, but most of the critical data related to the financial feasibility of the project was obtained only by Alaskan citizens using the Public Records Act (PRA). Examples:

a. As discussed above, public documents from the "Highway to Highway" project showed only the estimated ADT over the Knik Arm Bridge based on a "no toll" assumption. Through a PRA request, citizens obtained a Ch2MHill trip forecast conducted for the Highway to Highway project using a "toll" assumption, a document that had been withheld from public release.[78] The withheld document showed only 17,700 ADT crossing the Bridge in 2035, while the publicly released document showed 36,000 ADT. Similarly, the Knik Arm Bridge traffic predicted by the 2013 Wasilla Bypass project showed only 9,400 ADT in 2035.[79]
b. After KABATA CFO Kevin Hemenway told legislators and the Anchorage Assembly in 2010 that no state funds backed the Knik Arm Bridge project, a PRA request yielded the 2010 KABATA "letter of interest" TIFIA loan application that stated that the amount of tolls collected did not matter because "it is anticipated that the State of Alaska will agree

[76] *See* AMATS, *Travel Demand Model Update Planning Assumptions Memo*, dated November 20, 2014, at page 5; available at http://knikbridgefacts.org/wp-content/uploads/2015/01/PC_SE_Explanatory_Memo_v2_11_19_717_-AM.pdf .
[77] *Id.* at page 1.
[78] In response to inquiries, the authors were told by DOT&PF and contractors that the "tolled" ADT number did not exist or would not be released or there were many numbers; the number surfaced only after a second PRA request to DOT&PF Central Region Director Campbell.
[79] A map from the Wasilla Bypass project showing the ADT is available here: http://www.akleg.gov/basis/get_documents.asp?session=28&docid=20069 .

to annually appropriate the availability payments" regardless of the amount of tolls collected.[80]

c. The proposed 2012 P3 contract was drafted by Los Angeles firm Nossaman and Associates at a cost of over $1 million.[81] The first PRA request for the proposed contract was denied, even though the draft previously had been circulated to the final bidding teams for their comments. The document was not released until citizens sent the Department of Law an internal memo instructing that information should be made public when it already has been disclosed to non-government individuals.

Summary: $ 90 Million Spent with No Permits or Financing

Two socioeconomic research studies (UAA's ISER and Northern Economics)[82] have been largely ignored by KABATA when the data proved too pessimistic to justify the project. KABATA then chose two major population estimates produced by "Outside" firms (Insight Research and Cardno, Inc.) that produced more optimistic numbers. Those socioeconomic studies along with three major traffic and toll revenue studies by Wilbur Smith/CDM Smith in 2007, 2012, and 2014, and at least seven full financial plans from Citigroup Global Markets have produced significantly different scenarios over the years to support four different financial plans.

What is the result of all these shifting plans and studies?

a. Well over $80 million has now been spent by KABATA.
b. An estimated $5 million has been spent by private firms competing for the two canceled P3 procurements.[83]
c. The project lacks still permits from National Marine Fisheries Services, the U.S. Army Corps of Engineers, and the Coast Guard necessary for construction. The original EIS is now out of date because of three major changes: the plan for the Government Hill approach road, the overall project scope, and the overall financial structure. Project observers have flagged for FHWA the need for an updated EIS, and the topic likely would have been discussed during the most recent cost estimate review. Although the

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[80] P.7 of the following document: http://www.knikarmbridge.com/Templates/tigerII/docs/loi/Knik%20Arm%20Crossing%20TIFIA%20Letter%20of%20Interest%20August%2023%202010%20FINAL.pdf

[81] P. 488 http://doa.alaska.gov/dof/reports/resource/vn_detail_fy12.pdf.

[82] References available on request from the authors.

[83] KABATA staff told the legislature that the two final teams in the first P3 procurement and the three teams in the second P3 procurement would spend $2 million apiece making a final bid. Both procurements featured an initial pre-qualification round to narrow the group down to the final teams. KABATA announced that the final losing teams would be paid $2 million apiece allegedly for the intellectual property contained in their bids. This larger-than-standard payment functioned as an incentive to keep the teams in the game. With five teams selected in two rounds and other teams not making the initial cut in either round, at least $5 million has probably been spent by all firms to date.

As long as there remains a chance that a team will be selected for this large project, no firm has found it prudent to criticize KABATA publicly for the two canceled procurements and three changes of financing plans. In addition to private sector bid and proposal funds spent to date to no effect, there may be some unquantifiable cost to the state for the loss of credibility with major finance and construction firms after what they have learned about how Alaska has done business on this project.

public record does not show what internal action has been taken, there is some indication that a new contract has been let to update the EIS.

d. Most importantly, none of this work has yet convinced federal transportation officials that the project can meet the major requirement to receive a federal TIFIA loan: the "*project needs to earn on its senior debt an investment grade rating from two nationally recognized rating agencies*."[84] KABATA has now been turned down for at least *three* small federal Transportation Investment Generating Economic Recovery, or TIGER, grants and *six* times has failed to advance to the application stage for a federal TIFIA loan.

Part III
Next Steps: Cutting Further Costs and Avoiding Federal Repayment

Given the above history and the extremely low probability the Knik Arm Crossing will be financed by any other entity but the State of Alaska, the logical goal is to reduce further staff time and costs spent on the project.

A. Next Steps

The next DOT&PF Commissioner should consider taking the following steps:

1. Reallocate Funds. Remove all existing funding for the Knik Arm Bridge in the Statewide Transportation Improvement Plan and distribute it to other, higher-priority projects, e.g., upgrading bridges, maintaining existing highways, etc.

2. Cancel Demolition. The current demolition contract for Government Hill properties and suspend any further Right of Way expenditures. Leasing back DOT&PF land to tenants should be encouraged as it is consistent with the current DOT Central Region *Row of Way Manual* on the disposition of DOT&PF property not needed in the immediate future.

a. If in the distant future, population growth merits a Knik Arm Crossing, the state can retain some or all of current ROW property; but it should consult with Anchorage, the Mat-Su Borough, and the Government Hill Community Council and the Point McKenzie Community Council on steps DOT&PF should take to ensure that the current ROW does not create a permanent or long-term eyesore that encourages neighborhood blight.

3. Cancel or finish up existing consultant contracts that can be wrapped up within a month.

4. Do not submit a seventh Letter of Interest for a TIFIA loan. In addition to the application's very low probability of success, compiling the TIFIA application will necessitate further expenditure of consultant work for a new financial plan. Further, it is not prudent to submit any application that rests on the Cardno, Inc. and CDM Smith socio-economic data, since they are inconsistent with other socio-economic work from the Department of Labor and AMATS.

5. Align AMATS. Discuss with state representatives serving on the AMATS Technical and Policy Committees the use of the best and latest socio-economic data in working on the 2040

[84] P. 1 http://www.fhwa.dot.gov/ipd/tifia/technical_resources/background.aspx

LRTP. Advise them to take the "fiscal constraint" requirement seriously in terms of the state's current fiscal and budget realities and realistic projections of expected future federal highway trust fund tax revenue.

6. Reassign existing DOT staff now assigned to the Knik Arm Crossing project.

B. Avoid the $80+ M. Federal Payback

Alaska has spent approximately $8 million on the project to date matching approximately $82 million in federal funds. According to the spreadsheet of discretionary and non-discretionary obligations submitted to the Governor on January 5, 2015, there are approximately $96 million in federal and state funds (approximately a 90/10 split, respectively) authorized to be spent.[85] The unspent federally authorized funds can be moved to other projects in the approved Statewide Transportation Improvement Program; state authorized funds must be reallocated by the legislature.

Mathematically, the logic of the argument that spending to date mandates that the rest of the $1.6 billion to $2 billion in construction costs and extra financing costs be expended is equivalent to suggesting that if you have spent 5 cents on a project, it is now prudent to put the other 95 cents in.

The DOT&PF Commissioner, the Walker Administration, and the state delegation should commence exploring options for avoiding a request to pay back the approximate $82 million in federal funds spent to date. Since these options require consultation with local and national FHWA officials, it cannot now be determined which path is most promising and all should be explored.

1. Determine if FHWA can declare the project sufficiently controversial with information to date having raised sufficient concern about the project's cost and viability that FHWA and the state mutually cancel the project. The Alaska precedent for such an action is the FHWA and state cancellation of the south extension of the Tony Knowles Coastal Trail with no payback of expended federal funds required.[86]
2. Congressional action which absolves the state from the payback provision of this project.

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[85] https://omb.alaska.gov/ombfiles/16_budget/AO271/Knik_Arm_Crossing_and_Juneau_Access-OMB.pdf

[86] See testimony from DOT&PF Director of the Division of Program Development Jeff Ottesen at 1:37 PM http://www.legis.state.ak.us/basis/folioproxy.asp?url=http://www.legis.state.ak.us/cgi-bin/folioisa.dll/cm25/query=*/doc/%7Bt7393%7D/pageitems=%7Bbody%7D? Note that in the Coastal Trail Extension project, the EIS had to be reopened to document new information that made the project more costly and less viable. Over the objections of the Government Hill Community Council, the original EIS for the Knik Arm Crossing project did not thoroughly evaluate the no-build option making the no payback option more challenging. However, the precedent of the southern extension of the Knowles Coastal Trail suggests that the currently reopened EIS work would have to document changes to revenue projections, project scope, the slower than anticipated growth in the Mat-Su and Glenn Highway traffic to make the case for a project cancellation with no further financial obligation to the state. Having attended legislative hearings and expressed concern in 2011 during the AMATS recertification process about different AMATS-KABATA socio-economic assumptions, FHWA staff are well aware of the record of skepticism expressed by non-KABATA reviewers of high population, trip, and toll numbers produced by KABATA. So this path may not be as difficult as currently foreseen by those in DOT&PF who are bridge proponents.

3. Some combination of the two options above that elevates the discussion to a policy level for relief for a state whose economy is expected to underperform the national economy as long as oil stays below $80-100 a barrel. It should be a straightforward exercise to document that lower oil prices in Alaska traditionally lowers population growth and that higher growth was once counted on to pay for the bridge.

Postscript & Acknowledgments

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