I have reviewed your August, 2012 TIFIA Letter of Interest (LOI) application to TIFIA and want to provide KABATA a chance to correct my understanding before I contact the TIFIA administration and the US DOT Inspector General. I would appreciate it if you could contact me by COB 9/18/12 if my understanding of the following three basic problems with the August, 2012 LOI is incorrect:

- Your August, 2012 TIFIA LOI apparently includes revenue from what has to be four through lanes on the Bridge and approach roads after 2026 while also showing that four lanes through lanes will not be constructed until 2030 or more likely 2031.

- The minimum bond cover ratio of 1.33 for the proposed TIFIA loan (p. 1 8/14/2012 Citi Financial Plan http://www.knikarmbridge.com/documents/KnikArmCrossingProFormaModel_000.pdf) includes the revenue from what has to be 4 through lanes after 2026 to 2047 when the TIFIA loan is projected to be paid off. But the Phase 1 Financial Plan only includes the cost of a 2 lane Bridge (with superstructure to support 4 lanes) and 2 lane approach roads. So the bond cover ratio is invalid.

- The definition of the different elements Phase 2 for a four lane Bridge, four lane approach roads, and the new connection to Ingra-Gambell are not detailed or documented and the sum of all those project elements appears to be significantly lowballed from previous estimates. Unless all cost elements of four through lanes from Point MacKenzie Road to downtown Anchorage are included in Phase 2, no additional revenue from additional traffic above 22,500 vehicles a day in what you project as 2026 should be included in any Pro Forma Financial Plan.

Analysis and Documentation

The August 31, 2011 Wilbur Smith Associates Traffic and Toll Revenue contains the nearly identical annual gross toll revenue figures through 2039 as your 8/14/12 LOI Financial submitted with your Letter of Interest TIFIA application. The only significant change is Year 1 toll revenue now slips from 2016 to 12/1/2017. So Table 19 of the August, 2011 Traffic and Toll Update (p. 33 http://www.knikarmbridge.com/2011TIGER/T&RStudy.pdf), *Base Forecast using Expected Economic Assumptions*, shows the average daily transactions that generate the toll revenue in Table 23 (p. 42) with minimal differences. For example, the 2011 Wilbur Smith Toll Forecast shows 2030 gross toll revenue is $ 102,218,000 in Table 19 and $ 102,114,000 in Table 23 and $102,412,000 in what is now 12/1/31 in your 8/14/2012 Financial Plan pro forma (p. 6 http://www.knikarmbridge.com/documents/KnikArmCrossingProFormaModel_000.pdf).

The 8/14/2012 Financial Plan shows that Phase 2 will expand the Bridge and approach roads to 4 lanes and connect the Bridge to Ingra-Gambell (see p. 13 and p. 18 http://www.knikarmbridge.com/documents/KnikArmCrossingProFormaModel_000.pdf) presumably no earlier than 2030 or 2031 if KABATA does not sell construction bonds until 12/1/26 (see p.13 and 20 http://www.knikarmbridge.com/documents/KnikArmCrossingProFormaModel_000.pdf.) While the attached August, 2012 presentation attached to the LOI refers to a Phase 1 B (p. 17

http://www.knikarmbridge.com/documents/KACProjectupdate8.10.12.pdf), the timing, financing, and construction of the so-called Phase 1 B is not detailed elsewhere in the application. So this analysis assumes Phase 1 is referred to as a 2 lane Bridge (with superstructure for 4 lanes) and 2 lane approach lanes as originally described in the EIS and ROD and Phase 2 is the Bridge build out to 4 lanes and 4 lane approach roads with adding the new connection to Ingra-Gambell by a new viaduct over the Alaska Railroad.

It would be helpful for KABATA to detail the cost for all elements of Phase 2. Adding $188 M of the "developer obligation" which is apparently to add 2 lanes to the Bridge span (p. 18 http://www.knikarmbridge.com/documents/KnikArmCrossingProFormaModel_000.pdf) to the $365 M cost of the "KABATA obligation" to apparently add 4 lanes to both approach roads and connect to Ingra-Gambell totals a Phase 2 cost of $553 M. In May, 2009 KABATA participated with FHWA on a Cost Estimate Review what was then an 8200' Bridge (p. 4 http://www.knikarmbridge.com/Templates/tigerII/docs/costEstimate/Major%20Projects%20Cost%20Estimate%20Reveiw%202009.pdf). The agreed upon 90% likelihood cost for Phase 2 from the 2009 Cost Estimate was a $750-$920 M range which results in a median estimate of $835 M.

While the apparent plan is now to dig a cut and cover road through Government Hill only once, not twice, as originally planned, it is unclear how the cost of Phase 2 can now be $282 M less ($835 M-$553 M) than the median May, 2009 estimate on a project with a 1000' longer Bridge on a construction schedule project that has now slipped three years.

KABATA's August, 2012 TIFIA LOI shows annual toll revenue for 12/1/26 of $67,252,294 for 12/1/26 and $74,284,285 for 12/1/27. Those revenue numbers correspond to roughly 22,500 vehicles a day in what is now 2026 and 24,100 daily vehicles in 2027 (based on table 19 http://www.knikarmbridge.com/2011TIGER/T&RStudy.pdf with one year slippage).

The Highway Capacity Manual 2010 published by the Transportation Research Board, National Academy of Sciences, is the national standard used to assess roadway capacity and level of service. Chapter 15 documents the methodology and factors for determining two lane roadway capacity and level of service.

Knik Arm Bridge daily traffic of 22,500 in 2026 would strain service level D (acceptable); 24,100 vehicles a day in 2027 would be an unacceptable service level E. Daily traffic across a 2 lane Bridge and 2 lane northern approach road of 28,900 vehicles a day in 2030, or 30,300 vehicles a day in 2031 is practically impossible. That volume is slightly more than what is currently experienced on the 4 lane Glenn Highway between the Mat-Su Borough and Anchorage.

Scenario 1 of Phase 2 KABATA obligation in the August, 2012 LOI Financial Plan lists a 12/1/26 "delivery date" (p. 20) but the availability of four lanes on the Bridge and northern approach road must be 2030 or 12/1/31 since --

- debt service doesn't start until 12/1/26 and KABATA estimated in August, 2012 a four year construction schedule to expand the bridge to four lanes (slide 17, http://www.knikarmbridge.com/documents/KACProjectupdate8.10.12.pdf)

- the $71,341,975 in "current surplus" (p. 20 Financial Plan) for Phase 2 is not available until 12/1/29 when cumulative return reaches $82,522,697 (p.6 Financial Plan), and
- 2030 is given in the LOI as a possible date for Phase 2 (p. 13 http://www.knikarmbridge.com/documents/KnikArmCrossingFY2013-2014TIFIALOIFINAL_001.pdf)

The 12/1/31 date is also the delivery date for the developer obligation (p. 18 http://www.knikarmbridge.com/documents/KnikArmCrossingFY2013-2014TIFIALOIFINAL_001.pdf) so the financial plan is relying on what needs to be four lanes of thru traffic after 2026 to make the revenue numbers valid but those four lanes will not be available until 12/1/31 or at best a 4 lane Bridge in 2030 with 4 lane approach roads in 2031.

While two different elements are shown for financing Phase 2 expansion to 4 lanes on the Bridge and approach roads in the 8/14/2012 Financial Plan(p. 18 and p. 20), none of those costs are included in Phase 1 from showing revenues out to 2051 when average daily traffic is to be about 50,000 vehicles. Those costs need to be included to make the minimum bond cover ratio valid for repayment on the prospective TIFIA loan whose last payment is scheduled in 2047. The August, 2012 LOI states that the Bridge and approach roads would not be expanded to 4 lanes until demand warranted or 2030 (p. 13 and p. 19 http://www.knikarmbridge.com/documents/KnikArmCrossingFY2013-2014TIFIALOIFINAL_001.pdf).

The issue of who builds Phase 2 and when are separate issues from whether a pro forma can be considered complete or accurate if it includes the revenue from what clearly has to be 4 lanes after 2026 without also showing the cost of building those four lanes. A casual reader of the August, 2012 LOI might not notice that the KABATA Financial Plan counts on the revenue from four through lanes on the Bridge and approach roads after 2026 but that additional capacity for four through lanes is not available until 12/1/31.

As you know, I have raised this issue for over a year. First, in my 8/24/11 presentation which KABATA representatives attended to the MPO, the Technical Advisory Committee of the Anchorage Metropolitan Area Transportation Solutions meeting, (see slide 12 http://knikbridgefacts.org/wp-content/uploads/2011/09/AMATS_TAC_August_29_20111.pdf) and also at subsequent hearings and postings and legislative hearings last spring (see www.knikbridgefacts.org.)

There are other problems with the traffic and toll projections used as the basis for the KABATA 8/14/2012 Financial Plan:

- Future Mat Su population is overestimated.

  The Alaska Department of Labor estimates the 2035 Mat Su population will be 160, 693 (p. 46 http://labor.alaska.gov/research/pop/projected/pub/popproj.pdf) which compares to 159,050 from the University of Alaska Anchorage Institute of Social and Economic Research number used in the adopted 2035 Anchorage Metropolitan Transportation Plan (p. 5-2 http://www.muni.org/Departments/OCPD/Planning/AMATS/2035%20MTP/AMATS%20Chapter-

5_20120511_s.pdf) while the Wilbur Smith Traffic Analysis Zone (TAZ) map released by KABATA totals 191,156 people in Mat Su in 2035 for an area that does not include the entire Borough (http://www.arcgis.com/home/webmap/viewer.html?webmap=ac12e1bb0f12429087168410467b0e48).

- The August, 2012 LOI shows an 8200' Bridge costs at 35% design inflation corrected but the LOI application describes a now 9200' Bridge at the cost of an 8200' Bridge. This is implausible given that the application shows the per foot cost of a causeway as less than the per foot cost of a longer Bridge span.

- Although the Mat Su Borough adopted on 2/1/2011 a Port MacKenzie Master Plan for light industrial and manufacturing (http://ebookbrowse.com/port-mackenzie-master-plan-update-final-pdf-d339368204), the study submitted in support of the August, 2012 LOI shows Wilbur Smith, now CDM Smith, has projected 1.7 million square feet of retail at the same general location in 2035 (p. 35 http://www.knikarmbridge.com/documents/IndependentEconomicOverviewandDevelopmentForecast07022007.pdf). This huge amount of retail space is 2.4 times the Dimond Center, the largest mall in Alaska, and this large retail use would presumably be in conflict with expected industrial uses detailed in the Borough Port MacKenzie Master Plan. The 2011 Wilbur Smith TAZ map shows 13,828 jobs at Point MacKenzie in TAZ zones # 136 and # 593 in 2035 which is only 1,041 jobs fewer than the 2009 Census showed in the entire Borough today.

These three issues have been well discussed at public hearings and posted at www.knikbridgefacts.org over the last year However, it is only the issue of KABATA's persistence with a financial plan showing 4 lanes of revenue after 2026 without showing the cost of more than 2 lanes on the Bridge and northern approach road until 2031 that prompts this potential notification of TIFIA administrators and the US Department of Transportation Inspector General. In sum:

- Revenue from four thru lanes should not be shown in the KABATA Financial Plan until those lanes are actually built and the costs included.
- The minimum bond cover ratio should reflect the cost and financing from the revenue of only those lanes built.
- Phase 2 costs and scope should be detailed and documented.

I would appreciate it if you would let me know if I have misunderstood your August, 2012 TIFIA application including the 8/14/2012 Citi Financial Plan and the supporting Wilbur Smith 2011 Traffic and Toll Update before I raise these issues with federal transportation officials.