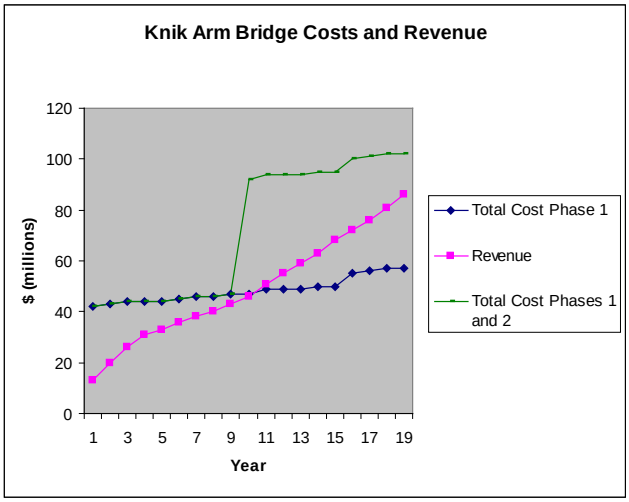
Knik Arm Bridge Financials

Assumptions:

- Phase 1 cost: $686 million (M) (National Constructors Group, 2009); Phase 2 needed to address traffic in Year 10: $835 M (Federal Highway Administration, 2009)
- Assumes $60 M in remaining KABATA funding allocated to: $36 M for Phase 1 costs and $24 M for two years pre-bridge opening KABATA operating expenses and bond issuance costs and underwriters discount
- Assumes debt service based on 4.3% for 37.5 years which equals $35 M/yr ($650 M financed or $686 M minus $36 M)
- O & M and toll operations cost estimates from Wilbur Smith Associations, 2005
- Assumes administrative costs drop to $2 M/yr with bridge opening and increase with inflation to $5 M/yr by Year 19
- Toll revenue estimates from U.S. DOT, 2008
- 8,200' bridge; if 14,000' design needed to protect belugas, costs increase significantly
- Assumes no private partner

Phase 2 upgrades the bridge to 4 lanes and connects it to Ingra-Gambell rather than the A/C couplet through downtown



Summary

The first three years of bridge operating deficits approximately equal the total amount of federal, state, and local current spending in Anchorage for surface transportation over those three years. The spreadsheet on p. 2 shows $70 M in cumulative deficits over the first three years of bridge operations during the same period that Anchorage would spend approximately $66 M on transportation. Over the first nine years of bridge operations in Phase 1, the cumulative deficit is $121 M or an average of $13.4 M/year, or over 60% of current surface transportation funding done. By year ten, when Phase 1 breaks even, an unfunded Phase 2 will be required to address traffic needs on the bridge and downtown which independent analysts estimate will cost more than Phase 1.

Analysis

KABATA's written materials state that private investors will not fund Phase 2 of the project until traffic warrants it. "KABATA stands ready to deliver the Ingra/Gambell connection before it is required by traffic if public funding for this Project component is made available." [1]

Since revenue is substantially less than total cost for the first ten years of the project, the state likely would need to guarantee tax exempt bonds for those bonds to be sellable. If required, bond insurance costs, not included in this analysis, would be up to 2% of the bond or $13 M.

Why assume no private partner invests in the bridge? The Citigroup estimate done for KABATA by Citigroup Global Markets (9/2007) projected a $86 M private equity contribution to the project but also showed those investors extracting significant equity in the early years of project at a 15.6% total internal rate of return. In

[1] KABATA Answers to Selkregg/Flynn and Epstein Questions Regarding Knik Arm Crossing Project, August 7, 2008, Question II.A.3.a.

that scenario, more private dollars were extracted than invested in the 37.5 year life of the project before the bonds were paid off. It is doubtful that bond creditors would allow significant equity extraction without a state guarantee on the revenue bonds. In the current economic environment, public-private infrastructure deals need an investment grade credit rating to sell infrastructure bonds at reasonable rates, and rating agencies look for projects expected to be cash flow positive from day one or to have a public guarantee (or, more likely, both); – the proposed Knik Arm Bridge has neither. As further evidence of the unlikelihood of private investment, the state's independent engineering cost estimate study (2009) stated that "without an equitable [financial] risk sharing agreement, the Project will not be economically feasible if proposals are received wherein all risks are passed on to the contractor,"[2] i.e., implying that state/local financial participation is critical for the project to move forward.

For the project to be cash flow positive from the first year would require the state or a private partner to put up $540 M of the $650 M Phase 1 construction costs since the $6 M net revenue in Year 1 available for debt service can only support an approximate $110 M bond.

For the first nine years of bridge operation, the average toll would need to be $9 for passenger vehicles and $32 for commercial vehicles each way to generate breakeven revenue (assuming *very optimistically* that a higher toll does not decrease bridge travel). This contrasts with the starting tolls of $5 for passenger vehicles and $18 for commercial vehicles projected by Wilbur Smith (2007).

Year	O & M	Toll Operations Cost	Debt Service	Admin. Costs	Phase 2 Cost (P2)	Phase 1 Cost (P1)	Total Cost (P1&2)	Revenue	Net
1	3	2	35	2	0	42	42	13	-29
2	3	3	35	2	0	43	43	20	-23
3	3	3	35	3	0	44	44	26	-18
4	3	3	35	3	0	44	44	31	-13
5	3	3	35	3	0	44	44	33	-11
6	4	3	35	3	0	45	45	36	-9
7	4	4	35	3	0	46	46	38	-8
8	4	4	35	3	0	46	46	40	-6
9	4	4	35	4	0	47	47	43	-4
10	4	4	35	4	45	47	92	46	-46
11	5	5	35	4	45	49	94	51	-43
12	5	5	35	4	45	49	94	55	-39
13	5	5	35	4	45	49	94	59	-35
14	5	6	35	4	45	50	95	63	-32
15	5	6	35	4	45	50	95	68	-27
16	10	6	35	4	45	55	100	72	-28
17	10	6	35	5	45	56	101	76	-25
18	10	7	35	5	45	57	102	81	-21
19	10	7	35	5	45	57	102	86	-16

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[2] *Knik Arm Crossing Conceptual Cost Estimate (Final)*, prepared for the Alaska Department of Transportation and Public Facilities by The National Constructors Group, January 2009, p. 1-20 (see http://www.dot.alaska.gov/comm/pressbox/arch_2009/Knik-Arm-Crossing-Report-Executive-Summary.pdf).