Municipality of Anchorage comments on the Draft Environmental Impact Statement for the proposed Knik Arm Crossing

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for Mayor's Cover Letter

Organization of Comments

The Municipality has worked diligently to express its thoughts and concerns on the Draft Environmental Impact Statement (DEIS) in the limited time available.

Section 1. is summary of the Primary Issues concerning the Municipality of Anchorage.

Section 2. is a discussion and comments directed to the Technical Reports and Appendices supplementing the DEIS. The growth allocation and travel forecasting methodology documentation is not in the DEIS, but is found in separate appendices. This methodology is of fundamental importance to the Knik Arm Crossing (KAC) project DEIS evaluation. Therefore, we comment first on the forecasting methodology and then on successive chapters.

Section 3. includes a presentation for each of the Draft Environmental Impact Statement (DEIS) chapters.

The Municipality requests that responses to our comments, questions and concerns be incorporated in an updated DEIS or the Final EIS for the proposed KAC project.

SECTION 1.
PRIMARY ISSUES

The following Primary Issues have been identified during the Municipality's review of the Knik Arm Crossing DEIS.

- Downtown Anchorage Impacts
- Lack of Alternatives
- Government Hill
- Transportation Funding Priorities
- Project Financing
- Anchorage 2020 Comprehensive Plan Consistency
- Anchorage Property Values
- Port of Anchorage Impacts
- DEIS Comment Period

Each issue is summarized below.

Downtown Anchorage Impacts: The Knik Arm Crossing's connection to the A/C Couplet will seriously disrupt ongoing and planned investment in Downtown Anchorage. This connection and its immediate impact on Anchorage is unacceptable.

It has been recognized through the Municipality's recent Central Business District (CBD) Plan process that one of the key long-term economic development assets for Downtown is its comparatively high quality pedestrian environment. A goal of the CBD planning efforts is to bring new incentives and encouragement for private development that enhances the

pedestrian environment further, and brings more investments and pedestrians to Downtown. An intra-state thoroughfare through Downtown Anchorage will severely impact our ability to attract investment that builds on its natural strengths as a pedestrian and living environment.

A and C Streets in the CBD are already significant barriers to pedestrian east-west travel. The Anchorage Museum, the National Park Service Building and the Fifth Avenue Garage all currently suffer from difficult pedestrian crossings of A and C Streets. Likewise, efforts to stimulate downtown development east of A Street has been challenging, because pedestrians are uncomfortable with those two crossings. The addition of thousands of vehicle trips to the already busy streets is unacceptable.

A key element of the new investment in Downtown Anchorage is the expansion of the Anchorage Museum of History & Art. The Museum's ongoing expansion will be exactly bracketed by the primary connection to the proposed KAC. The future traffic growth and potential increase in heavy trucks moving freight and gravel as a result of the bridge connection will certainly be a detriment to the $100 M investment a private organization is currently making.

Our analysis projects a daily volume of 160-480 gravel-haul trucks based on the DEIS information, in addition to other tractor-trailer trucks from the Bridge through our Downtown District. This is detrimental to the Municipality. Moreover, projected traffic volumes on the proposed Phase I connector alternatives via the A/C Couplet are unworkable. Our analysis indicates the A/C Couplet Viaduct over Ship Creek will be over capacity and dis-functional well before projected in the DEIS.

Lack of Alternatives: The three alternatives presented for public review do not provide the Municipality or the public an adequate range of options to consider. The description of the Degan and Erickson alternatives as different and distinct is not convincing. These two routes are virtually identical in terms of every key impact on the affected neighborhoods and the entire Anchorage community. Offering these as the only "build" alternatives leads the public to believe FHWA has either predetermined the exact route of the project or is trying to create a fatal process flaw designed to derail the project. Both of those outcomes are unacceptable.

The decision to exclude consideration of a route from the proposed KAC through Elmendorf AFB to the Boniface interchange was never fully explained. Such a routing option could have addressed several of the Municipality's most serious concerns. The USAF leadership has indicated their support for a thorough consideration of such a route. Please reference the letter from Lt. General Chandler dated August 2005 addressed to Mr. George Wuerch, Chairman of the Knik Arm Bridge & Toll Authority. Similarly, the Hiland Road connection was evaluated in the PDEIS, but excluded without satisfactory explanation in the DEIS.

Government Hill: The Government Hill neighborhood will be directly impacted by the connection of Knik Arm Bridge to the Anchorage transportation system. Government Hill is one of the oldest neighborhoods in Anchorage. It is also one of the most ethnically and socio-economically diverse. As a neighborhood, it has incorporated its diversity and its historic characteristics into a special identity that is distinctive among all Anchorage neighborhoods. The DEIS does nothing to recognize these special qualities and presents no specific plans to ameliorate the short or long-term construction impacts of an estimated 100 foot-wide highway trench through the center of the area.

Government Hill will be impacted in several areas. Each of these must be appropriately mitigated. The Degan/Erickson alternative does not satisfactorily address any of them.

As a result of the proposed a project a significant percentage of the single-family and other low-density residential property in the neighborhood will be destroyed. Successful neighborhoods must maintain an adequate residential property base to maintain their commercial sector, their schools, their open space and character. The analysis in the DEIS takes none of this into account and no mitigation is proposed.

The proposed KAC also removes significant quantity of the very limited commercial land in the neighborhood. Again, successful neighborhoods must have an appropriate balance of many land uses. The DEIS does not evaluate, or propose mitigation for, this impact.

Several park areas and recreation facilities will be demolished or substantially reduced if the proposed KAC is built on the Degan/Erickson alignment. Harvard and Sunset Parks, the Square and Round Dance Center and the Curling Building are all slated for destruction or serious impact by the Degan/Erickson alternative. The Municipality has been working with the project staff for more than a year on appropriate mitigation for these assets, but no mitigation strategy has been identified. Federal law sets very specific parameters for mitigation of these types of lands and facilities. To date, the DEIS has not identified a solution that meets federal law.

The DEIS has also identified a large number of historic properties that will pose a significant challenge for the project to address. A satisfactory solution on this issue has not been proposed. Additionally, the environmental impacts (noise, air quality, etc) of the Degan/Erickson alternative on the neighborhood, its schools, day care facilities, homes and businesses have not been evaluated or, if necessary, addressed.

Until the Government Hill impacts are addressed and satisfactory mitigation strategies are approved, the Degan/Erickson alternative cannot go forward.

Transportation Funding Priorities: The proposed KAC project directly competes for Alaska transportation funds with other high priority Municipality, State and Mat-Su Borough projects. The bridge project is clearly diverting federal and state funding from other high priority transportation improvements. Federal and State monies devoted to bridge planning, environmental impact analyses, future engineering design, and construction costs preempt funds for these other projects. The Municipality believes that

the KAC project merits should be considered and prioritized for investment just as other STIP and regional TIP projects are evaluated. Further, if the proposed KAC project moves forward, the MOA and the State of Alaska must have an iron-clad commitment that no additional federal and state funding will be required for operation, maintenance, debt service and future connector costs.

Project Financing: The proposed Knik Arm Crossing is a very high-risk investment project. The travel demand model, which is the foundation of the traffic and toll revenue estimates is seriously flawed and no compelling evidence has been demonstrated of its validity in forecasting inter-regional travel flows. A single regional population and jobs growth allocation has been projected with no sensitivity or risk analyses to assess implications of forecasting uncertainty or other unknowns. The Municipality's own evaluation convinces us the entire project financial feasibility hinges on uncertain development projections, faulty travel forecasting, and transportation connections that cannot be funded. This is a recipe for financial failure, not a reliable transportation asset.

KABATA proposes to use innovative financing mechanisms to execute this project. The proposed three-tier financial scheme anticipates the private-sector would be willing to make a $100M investment and stand third in line for toll receipts to recoup its investment. The MOA has some concern as to the financial viability of this project.

The combined effects of inadequate connectors, dependency on large scale west Mat-Su growth for bridge tolls and feasibility, cost to appropriately connect the bridge to Anchorage's existing and planned transportation network, financing constraints based on the bridge toll revenues, other demands for scare transportation infrastructure funding resources, and priority projects already programmed in the Anchorage and Mat-Su jurisdictions indicate the proposed Knik Arm Crossing is not a viable undertaking at this time.

The MOA urges the State and FHWA to seek independent financial feasibility counsel to guide further efforts and decisions. An independent review of financial feasibility is warranted before this project proceeds, given the decided risks and uncertainties referenced above, the scale of the proposed investment, the adverse impact of the proposed KAC project funding on other Anchorage, Mat-Su and State priority projects funding, and the large, long-term consequences of this investment decision.

Anchorage 2020 General Plan Consistency: The proposed KAC project is not consistent with *Anchorage 2020, the Anchorage Bowl Comprehensive Plan.* The proposed KAC project disregards the fundamental elements of the plan – to create a more compact, more mixed-use development, more pedestrian-friendly community *Anchorage 2020* sets the preferred directions for long-term growth in the Bowl and the proposed KAC is clearly inconsistent with that direction..

The proposed KAC project creates disincentives to new economic investment in Anchorage and seriously dilutes Anchorage's economic base as it induces redistribution of housing and jobs away from Anchorage. It hinders economic incentives for infill, rehabilitation, and

redevelopment to meet housing future needs, reshaping major employment centers, mixed-use redevelopment areas and revitalization of older areas. The proposed KAC exacerbates and reinforces auto dependency and increases per capita vehicle miles of travel rather than promoting other transportation options.

The proposed KAC will not create new economic growth and investment, but merely shift it away from Anchorage. This is contrary to *Anchorage 2020* public preferences, principles and policies. The proposed KAC does not represent what our citizens have told us is desired and needed in the future. *Anchorage 2020* is a long range plan - a policy document that sets direction for land use, growth, and public/private investments that will last a very long time. The KAC project as proposed appears to be the antithesis of this plan.

Anchorage Property Values: If assumptions described in the DEIS are accurate and significant residential and commercial development occurs in the western Mat-Su Borough, property values in Anchorage will be negatively affected. Residential property values, especially single-family detached housing, will be severely impacted. The DEIS has forecasted the addition of 18,100 housing units on the Mat-Su side, likely all single-family residences and in the areas likely to use the proposed KAC as a commuting route to Anchorage by the year 2030. Homes in that area could have the same or shorter commute times to Downtown or Midtown employment centers as thousands of Hillside or South Anchorage homes. The laws of supply and demand will inevitably address the addition of new housing capacity by lowering the values of comparable Anchorage residential property, especially in South Anchorage. The DEIS process has recognized this impact, but has proposed no mitigation to offset loss of Anchorage homeowner value.

Port of Anchorage (PoA): The PoA is Alaska's primary port for general freight. The PoA has significant concerns about the proposed KAC's impacts on its water-side and land-side operations. In Cook Inlet, significant changes in currents, docking patterns, approach patterns, and in the Knik Arm Shoal dredge area, overall changes in sedimentation deposits and dredging requirements during and after proposed KAC construction may increase the operations and maintenance costs of the PoA.

Land side issues for the PoA are related to the actual land availably for current port operation and future expansion plans. Slope stabilization of any road located adjacent to the east boundary of the port is critical, especially in the vicinity of unstable slopes below Cherry Hill housing. Careful consideration is important in developing this area. At this time, the PoA would not support the construction of a direct entry from the proposed KAC to the port for security reasons. It is possible the Port could support direct access from the Port to the proposed KAC. Further study of these options will be necessary.

The adopted PoA Master Plan calls for future expansion of the PoA to the north. The PoA has interests in tidelands north of Cairns Point to Six Mile Creek. Use of those tidelands for this project greatly impedes the PoA from developing any facilities to the north in the long-term. In addition, the proposed KAC connector roadway schemes include a major impact on PoA use of the upper Defense Fuels property. That area is targeted as a potential port development site.

If this project moves forward, the proximity of the PoA to the project construction work will likely impact PoA operations. Finally, the proposed KAC ties bridge traffic to the A/C Couplet. The preferred connection for Port traffic is to Gambell/Ingra for better connection to Glenn and Seward Highways and reduction of commercial traffic through Downtown Anchorage.

DEIS Comment Period: The original public review period for this document of 45 days was unreasonable. The 17-day extension is appreciated, but still severely restricts public comment opportunity. A more realistic comment period would be 90 days.

If built, the project will be the most expensive surface transportation project in the state's history. It involves the state's two most populated areas and affects hundreds of thousands of residents, businesses, and institutions. As presented, this is the only opportunity for the public to review the key assumptions, critical analyses and preliminary decisions of the applicant and FHWA.

We understand that FHWA took five months to review the draft EIS submitted by the applicant before releasing it to the public. How can FHWA believe the public can do in 62 days what took the agency 150 days? We strongly encourage FHWA to provide a supplemental public comment period through January 15, 2007.

A public comment period this short appears to avoid and thwart thorough review of the project and the DEIS. We cannot determine why this short review period decision was made. We sincerely hope it is not because the agency has already pre-determined the outcome of the NEPA process. We also trust that there is no intentional creation of another opportunity for delaying, and probably successful, litigation.

SECTION 2.
COMMENTS ON TECHNICAL REPORTS AND APPENDICIES

This section includes discussion and comments directed to the Technical Reports and Appendices supplementing growth allocations and travel forecasting methodology and documentation not in the DEIS, but found in separate appendices. This methodology is of fundamental importance to the Knik Arm Crossing (KAC) project DEIS evaluation. Therefore, we comment first on the forecasting methodology and then on successive chapters following this section

The Municipality requests that responses to our comments, questions and concerns be incorporated in an updated DEIS or the Final EIR for the proposed KAC project.

Travel Model Base Year Calibration/Validation and Forecasts; Population, Household, Demographic Attributes, and Employment

Our comments in this section are directed to regional population and employment forecasts and the travel estimation methodology for the KAC project. These topics are covered in Technical Reports and Appendices supplementing the DEIS. We note that more in-depth coverage should be incorporated in the DEIS for these important socio-economic and related travel-determinant topics, given their high significance to the KAC feasibility analyses. We particularly emphasize the importance attached to the logical structure of the travel model, its validation, and sensitivity tests of its behavior response to key variable changes.

Population, households and employment are key socio-economic data used to define existing conditions, future growth and travel.[1] The **Land Use and Transportation Forecasting Report** provides qualitative information and two maps showing "Household Differences 2030" for Anchorage and Mat-Su. But the meaning of "difference" is not defined, nor is statistical or mapped summaries by geographic planning areas included. Omission of such information impedes understanding, interpretation and comprehension of the KAC projections for the region.

(Appendix G) **Memorandum on the Economic and Demographic Impacts of a Knik Arm Bridge** by Dr Scott Goldsmith at UAA's Institute for Social and Economic Research (ISER), is the foundation for the KAC DEIS estimates of future population, households and jobs for 2025 and 2030 forecast years. The primary conclusions of Dr. Goldsmith's ISER projection to 2030 are:

[1] The forecast and allocations of these variables are described in various appendices and partially documented in various sections of the DEIS. Statistical data summaries by KAC traffic analysis zones (TAZs) are not reported. Geographic summaries are dispersed in the DEIS in fragmented pieces. A section of the DEIS should be devoted to fully covering the current and future scenario(s) for the region and include the population, household and employment growth, allocation to geographic subareas, mapped summaries, statistical tables, and overall interpretive synopsis of the future to convey the information in an understandable and cohesive way.

1. "The Greater Anchorage-Mat Su Borough region neither gains nor loses population and employment as a result of bridge construction" (page 17 Table 6). The KAC will produce **no net regional gain in economic activity;** population and employment projected to 2030 in the region (MOA and Mat-Su) is no different with or without the KAC.
2. "It is impossible to say exactly what the pattern of development would be in the Port MacKenzie region of the Mat-Su Borough in the event that a bridge were built." [page 15 para 1].
3. "Growth in the basic industries in Mat-Su, including mining and timber, is not significantly impacted by the bridge." [page 15, bullet 4].
4. The alternative future scenario with the KAC will not significantly increase Mat-Su commuters working in Anchorage. [Table 8, page 17 predicts that the KAC will result in 1,750 more commuters living in Mat-Su in 2030 and working in Anchorage than if there were no bridge.] This number of commuters would be expected to make approximately 2,700 to 3,000 daily work trips. Therefore, how can the projected traffic volume on the KAC bridge be over 45,000 vehicles daily in light of this economic analysis finding? Moreover, the DEIS analysis of the build alternatives estimates that trips coming from the Mat-Su along the Glenn Highway corridor remain basically the same with the bridge or without the bridge. The magnitude of future 2025 and 2030 travel between Mat-Su and Anchorage appears severely overstated – how can this be reconciled?
5. Projected gains in Mat-Su wage and salary employment and population through 2030 correspond exactly to losses in Anchorage employment and population due to the KAC [page 18, Tables 9 and 10].

   The MOA believes that this outcome poses a serious and highly substantial policy issue for the region. The KAC is clearly the catalyst for more dispersed development, urban land absorption, increased automobile dependency, higher vehicle travel miles, more mobile emission and greenhouse gases, and significant new and larger public infrastructure needs. Will the region be better or worse for it? What are the significant effects on/of global warming and climate change? We find the KAC DEIS largely muted on most of these very important questions. We request that the KAC DEIS clearly articulate the major trade-offs and present the impacts to the finest detail possible. Where definitive answers are not possible, we recommend that the pro and con arguments be succinctly presented.
6. The ISER memorandum indicates there is a high probability between 2006 and 2020 of an economic slowdown in the Alaska economy. [page 4, Figure 1]. The DEIS offers no apparent recognition of this event and its implications for KAC's revenues stream and financial feasibility. The MOA believes that such an event could have significant implications for KAC's future revenues and feasibility. We believe that an assessment or sensitivity analysis for such a scenario in the DEIS is needed; has KABATA performed such an evaluation and, if so, what are the findings? The **Wilber Smith Preliminary Traffic and Toll Revenue Study** report estimates that only 900 vehicle trips per day would use the KAC bridge on opening day if Mat Su were to continue its trend growth; but under the KAC DEIS job and household growth re-allocations to the Point MacKenzie area, 6,700 bridge vehicle

trips are projected on opening day. Thus the DEIS forecasts anticipate significant growth inducement (5,800 vehicles daily) even by opening day of the bridge.

The MOA's examination of the DEIS and supporting documents leads us to a fundamental assessment that the DEIS estimated geographic allocation of future Mat-Su employment by industry sectors, population, households, demographic attributes and forecasted travel patterns are the ***primary determinant of future bridge traffic and KAC project feasibility.*** Because the KAC feasibility is so highly intertwined with these growth allocations, the MOA believes that sensitivity analysis of their probability and assessments of different future outcomes, including economic slowdown impacts as referenced by ISER, are essential to informed decision-making. Has KABATA performed such assessments and, if so, what are the conclusions? If not, what assurances can be made that projected toll revenue and bonding capacity will be realized? We strongly recommend that growth allocation sensitivity scenarios be completed and reported to reflect and assess forecasting uncertainty. (We mean scenarios with variation in the magnitude and location of population and job growth – not simply 'smart growth' redistribution of constant 2025 or 2030 estimated values).

Appendix H: "**Population and Employment Distribution Technical Report"** presents descriptions of the procedures and methodology used for geographic allocations of household and employment growth in both Anchorage and the Mat Su Borough. The presentation is substantially qualitative with mapped illustrations of growth with and without the bridge. However, the maps defy quantitative interpretation and no population or job allocation statistics or data summaries are included. What is the shift in population and jobs from Anchorage communities that are projected to occur with the bridge by 2025 and 2030? How many jobs by industry sectors will shift from Anchorage to Mat-Su due to the KAC? Where will they come from in Anchorage? Where will they locate in Mat-Su? What type of households – retirees, 1st-time home owners, single worker, multiple workers, with and without school age children -- will relocate from Anchorage to Mat-Su? What are their incomes? From what Anchorage neighborhoods and communities? Where are these same households re-located in the Mat Su Borough?

The population, household and employment data forecasts need to be summarized and discussed. Neither the MOA nor other interested parties are able to interpret and assess the reasonableness of the KAC growth allocation information or findings from the report. The MOA requests more responsive and digestible informative be presented on forecast data to help our evaluations and decision-making.

Appendix I: **"Draft Transportation Planning Model Technical Report".** This report documents the development, validation, and application of the KAC travel model for a base year (2000/2002) and application of the travel estimation model for future forecast years (2025 & 2030). The MOA's review of this document raises five fundamental issues/deficiencies with the travel modeling structure, credibility, and documentation:

- The dominant issue for the KAC project environmental and feasibility analysis is travel behavior regarding trip interchanges between the MOA and the Mat Su Borough. The MOA believes that the travel model's performance in inter-regional

travel estimation is at the core of the KAC feasibility and the public's confidence in the DEIS. However, the modeling methodology, process, validation, and report do not address this fundamental issue. No analyses or sensitivity cases – pricing, trip length, trip purpose, SOV vs. HOV tripmaking, etc. -- are documented to substantiate that the travel model is satisfactorily calibrated and validated for inter-regional trip interchanges, that it exhibits appropriate traveler behavior response to change, and that the model structure is conceptually grounded. We strongly urge KABATA and the FHWA to conduct such analyses and present evidence that the KAC travel model performs logically for inter-regional trips and is sensitive to pricing, trip length, trip purpose, and traveler socio-economic attributes.

- Given the central significance of inter-regional trips to the KAC project feasibility, the MOA argues that the KAC's forecasting and travel modeling process is significantly flawed because it does not incorporate the effects of tolling in household or employer location decisions, in trip destination selection, or in traffic routing decisions. The MOA believes this is a major deficiency. Tolling at $6.00 or $7.00 per round trip is substantial and clearly weighs upon housing location selections and traveler decisions.

  Indeed, the DEIS consultants acknowledge the significance of cost on travel demand and traveler decisions in their evaluation of various approach bridge corridors in Anchorage. Tables 2-2 and 2-3 on pages 2-43 and 2-44 compare average daily traffic demand for six approach corridor alternatives. The demand for the corridor with the lowest traveler cost is reported to be 45,870 daily vehicle trips; for the highest cost corridor (about 75% higher than the lowest case) the demand falls to 22,498. The evidence is clear and unequivocal – traffic estimates for the KAC toll bridge cannot be determined without explicit consideration of traveler toll costs.

- The scope of validation for the travel model is not sufficiently robust to render confidence in the model's performance. The primary evidence presented for model validity is comparison against traffic volume on road facilities. But traffic volume alone is not sufficient to establish validation of model performance. Validation needs to encompass estimated vs. actual origin-destination trip patterns as well as road volumes comparisons to substantiate base year travel model performance. Further, validation tests should include comparison against US Census journey-to-work data and independent KAC surveys; trip length distributions by trip purpose; comparison of base year truck interchanges to/from major facilities including the Port of Anchorage, Port MacKenzie, TSIAA, and road truck volumes at permanent ADOT&PF classification counting stations; comparison of actual vs. estimated base year O-D trip interchanges between significant geographic communities in the region; analyses of inter-regional trips by purpose between Mat-Su and the MOA areas; and sensitivity of the model to variable changes. These types of transportation modeling checks are normal practice, and they are necessary to establish confidence in the travel model.

- The commercial vehicle (truck) modeling is not Convincing. No evidence is presented that modeled truck volume estimates conform to ADOT&PF truck count volumes, to Port of Anchorage truck movements, to Port MacKenzie truck activity,

nor to logical interchanges for truck flows. The Port MacKenzie District is reported to hold some 40 million tons of aggregate which will be commercialized if the KAC is built. But the DEIS does not even reference an estimate for truck loads of aggregate in its KAC bridge travel projections.

- The Alaska Railroad Corporation currently transports about 4 million tons of aggregate into Anchorage annually. Port MacKenzie's aggregate resources will capture a significant share of the aggregate market because of its close proximity to Anchorage via the KAC Bridge. Reasonable expectations would be between 200 and 600 gravel trucks per day crossing the bridge and moving through neighborhoods in Government Hill. An estimated 80% of the total truckloads – 160 to 480 heavy trucks – would likely traverse the Anchorage Downtown District daily. The adverse community impacts of these heavy truck units include pavement deterioration, noise, dust and particulate matter, and aesthetic disruption.

  The DEIS indicates that 12% of the KAC bridge traffic will be trucks. What is their origin and destination? How many combo truck units will be passing through the Anchorage Downtown District?

- The report does not document fundamental socio-economic data and statistical summaries nor trip generation estimates by geographic area. These are the foundation for the traveling modeling. We believe that KABATA and FHWA should include this basic information in the DEIS reporting.

Page 5, Sections 5.2 and 5.3: Documentation is not sufficient regarding how households were profiled by socio-economic attributes for each TAZ. The MOA requests that more complete methodology and results be reported. Did the modeling consider household income levels? Workers per household? Household size and school-age children? What are the cross-classification categories used for trip generation? What are the trip generation rates for each category and trip purpose? Is trip generation for person or vehicle trips? How are non-motorized trips estimated? What truck trip estimates were used for major commercial vehicle generators – the Port of Anchorage? Port MacKenzie? TSIAA? How was mode choice reflected in trip distribution? How was peak period vs. off peak travel time and accessibility accounted for in trip distribution? What method and factors are used for conversion of person trips to vehicle trips? Are the road network improvements assumed to be in place in the DEIS for Mat-Su and Anchorage reasonably likely given foreseeable transportation funding resources?

Page 6 Table 3: The data presented here are trips not trip rates. Reporting needs to include the trip rates for trips produced/generated by purpose by household socio-economic cross-classification categories. Similarly, the report should show trip attraction rates by purpose for trips attracted per household, retail employment, other employment and total employment.

Page 6 Table 3 and Page 8, Table 5: Each table shows average trip length (in minutes) for each trip purpose. The numbers do not agree; for example home-based work trip length in Table 3 is 10.89 minutes vs. 17.47 minutes in Table 5. What are the correct values for each

purpose? The MOA requests that the documentation also include trip length frequency distribution graphs for each trip purpose.

Page 8, Section 6. Base Year Traffic Assignment and Validation: Results of the travel model assignment of estimated vehicle traffic vs. observed traffic count volumes is presented, but no information is presented to summarize the critical traffic volume interchange between Mat-Su and Anchorage. Further, the scope of the validation process is far too narrow. The MOA requests data showing comparisons of independently-derived statistics vs. the model results. For example, how many model-estimated work trips from Mat-Su to Anchorage (and visa versa) vs. US Census, 2002 Anchorage household travel survey, and KAC household surveys? How many combo and single truck trips to and from the Port of Anchorage in total vs. the model results? What share of truck trips from the PoA travel to Mat-Su and north – modeled and actual? Are trip Production-to-Attraction interchanges (or shares) between major communities and/or commercial areas reasonable? These types of tests and validation comparisons are standard model validation practice and the Municipality considers them critical to provide confidence in the model results.

Further the MOA requests that travel model sensitivity tests be executed to establish the travel model's interregional trip estimation performance and response for travel between Mat-Su and Anchorage to tolls, congestion, propensity by trip purpose, geographic pairing (i.e., where from and where to) for interregional trips, and trip length frequency distributions.

Page 12, Section 7.2 and 7.3: See comments above regarding socio-economic profiles and trip generation data. The MOA finds this section entirely inadequate to understand the future household location allocation and composition, trip-production and attraction by purpose and location summaries, etc. Please present the "2025 and 2030 distribution of housing and employment" as well as the corresponding trip production and attraction by purpose and geographic subarea locations. Regarding model-estimated future 2025 and 2030 trip interchanges between Mat-Su and Anchorage, please incorporate maps illustrating trip volumes between planning areas of the Mat-Su and the Municipality by trip purpose. We also request trip length frequency charts be shown for 2025 and 2030 trips by trip purpose as well as a statistical table comparing the mean values by purpose for the base year, 2025 and 2030.

Page 15-17 Anchorage Approaches & Initial Screening: The screening evaluation concludes that the proposed Phase II connector to Ingra – Gambell would be required sometime after 2020 when the KAC-generated volume demand would exceed the estimated capacity of the Phase I A/C Couplet connection. However, the MOA believes the DEIS capacity assessments are erroneous.

The capacity of the A/C Couplet is represented as 35,000 vehicles per day; but that value is overly optimistic due to downtown intersection traffic signaling limitations, pedestrian movements, and truck traffic composition. Moreover, the critical capacity deficiency

would occur by 2015 when level of service would be LOS D (volume/capacity = 0.85). Therefore the Phase II connector becomes critical much earlier than depicted in the DEIS and the utility of the Phase I connector is limited.

The traffic assignment attachments to Appendix I depict KAC-generated daily traffic volumes of approximately 42,000 vehicles traversing the Government Hill community. This creates dramatically higher traffic impacts than currently prevails in these neighborhoods. The MOA believes that the screening analysis and DEIS examination of these impacts through regional-level modeling is not satisfactory to identify and assess community impacts properly.

Attachments 6 and 7 : The MOA notes that traffic assignments for the No Build and the Build Alternative depict little difference in Glenn Highway daily traffic volume between the two alternatives. The No Build case reports 32,815 vehicle trips per day (actually the ADT is 65,630, twice the volume shown in Figure 5-1) between Mat-Su and Anchorage; the KAC Build alternative shows 29,825 (really 59,650) vehicle trips per day on the Glenn Highway above Eklutna plus 46,250 vehicles on the Knik Arm Crossing bridge. The implication is that construction of the KAC (a) has almost no effect on Glenn Highway inter-regional traffic, and (b) induces 40,270 additional vehicle trips per day between Mat-Su and Anchorage. But the economic forecast is only a population shift of 16,225 and an employment the Mat-Su due to the bridge. The scale of predicted bridge traffic volume increase is not plausible with the level of household and job shifts to the Mat-Su. MOA believes these inconsistencies reinforce the modeling validity questions posed above

SECTION 3.
COMMENTS ON DEIS CHAPTERS (Executive Summary, Chapters 1-4)

Our comments in the following section are directed to the chapters of the DEIS document.

***The Municipality requests that responses to our comments, questions and concerns be incorporated in an updated DEIS or the Final EIR for the proposed KAC project*.**

Executive Summary

Page ES-2, Proposed Action, paragraph 3 cites funding using federal credit assistance programs. Will such funding for the KAC impact state transportation funding resources for other project needs within the MOA, the Mat-Su Borough, and the state? What action would be required should future traffic volume estimates and toll revenues be less than the DEIS projections? What is the tipping point at which traffic and toll revenue volumes would undermine bonding and KAC financing feasibility for the basic project (Phase 1)? For bonding capacity to complete Phase 2? In the event that the proposed KAC project is built, and toll revenues fall well below the projections, how would the KABATA respond to its financial obligations and what sources/mechanisms would be required to fulfill debt servicing and bridge continuing operations commitments?

Page ES-3 Port MacKenzie Development: Port MacKenzie development appears to be assumed at the same level in the No Build and the Build alternatives, irrespective of the KAC project. Therefore, the implicit assumption in the DEIS is that Port MacKenzie economic activity is independent of transportation access via the KAC to the largest market in Alaska. How can that be?

The DEIS does not address nor answer the question, "To what extent does the feasibility of the KAC project depend upon realization of the plans and estimated economic growth of Port MacKenzie?" This question is at the core of the project purpose, "…through an efficient and economically viable crossing of Knik Arm, including adequate connections to the existing roadway network and other transportation projects that have committed funding." The MOA is not confident the DEIS because it does not present appropriate information and risk analysis for this large public investment. Confidence in the DEIS is further diminished by the defects in travel modeling methodology and forecasts referenced earlier. If Port MacKenzie should develop to, say only 50% of the level estimated in the DEIS, or 75%, what would be the impact on the KAC project feasibility? Similarly what if development occurs over a longer time frame? The MOA believes that further model forecasting verification together with sensitivity analysis and risk management assessment is absolutely essential for informed decision-making on the proposed project.

Page ES-3 Future Land Use for Communities and the Region: The text does not present or summarize meaningful information for the proposed project no-build and build alternatives cases with respect to current and projected household and job statistics and their future geographic allocations estimated in the DEIS. The MOA believes that the DEIS should

present at least an overview in this section of the projected development that underpins the KAC DEIS analysis and reference further elaboration in the appropriate chapter(s) later. This information is important to understanding how much growth will occur – jobs and households and employed persons in successive future years and where. What doe the DEIS estimate the geographic allocations to be? How does the KAC projection compare with current land use and socio-economic projections without the proposed project? We believe that a summary of these data with appropriate tables, charts, and graphics is important to include in the executive summary.

The DEIS does not present a "risk analysis" to enable reasoned understanding and decision-making as to the "efficient and economically viable" performance of the proposed project or its financial feasibility. There is reason to question the traffic forecasts and the veracity of the financial mechanisms proposed to accomplish the KAC project. We believe that sensitivity analysis is needed to understand the consequences if growth occurs differently than projected by the KAC consultants or if lesser or slower overall growth should occur.

More specifically, what is the break-point in required west Mat Su employment development in the Point MacKenzie area to assure the KAC project is economically viable /financially feasible within proposed KABATA financing mechanisms? Similarly, how much housing and commercial development in western Mat-Su [i.e., the KAC tributary trafficshed vs. Glenn Highway's trafficshed] is critical to assure a sustainable KAC project?

1.0 Purpose of and Need for the Action

The MOA finds this chapter is excessively verbose with extraneous materials. The chapter does not succinctly articulate the purpose and need for the proposed action. We recommend that the chapter be focused more explicitly to concisely articulate the specifics of the proposed project purpose and need. Much of the material in this chapter would be more appropriate in Chapters 2 or 3.

1.0 Purpose of and Need for the Action, Page 1-1, para 2: The statement .. "With the rebound of local, state, and regional economies that diversified throughout the 1990s, the need for an efficient and economically viable Knik Arm connector has grown substantially." lacks adequate evidence and substantiation. What is the basis and justification for this assertion?

Page 1-1, Para 3: The content and context presented in this paragraph implies a strong need for interconnection of the Port of Anchorage and Port MacKenzie. What is the nature of this need? What is its magnitude? How is it manifested? What is the basis for the interpretation that these two marine terminals have significant interaction across Cook Inlet and require major investment in transportation infrastructure connectivity?

Page 1-3, Para 4:: Why does this paragraph omit reference to the Alaska Railroad Corporation (ARRC) as a significant modal entity in regional and statewide freight flows? The statement regarding emergency disaster response ("In the event of natural disaster, fire,

accidents, or man-made disruption, overland connections within and access to the region's airports, ports, hospitals, police, fire and disaster relief services and employment and financial centers are significantly limited" exaggerates the likelihood/expanse/coverage of a rare emergency situation. The statement also seriously minimizes and misrepresents the extent and structure of the transportation network in place to support emergency response initiatives. It presumes "evacuation" is the emergency response. Under seismic or tsunami emergencies, two potentially reasonable scenarios, how likely would the KAC across the Cook Inlet water body be a strong asset? The MOA believes the rationalization presented here as it pertains to the proposed KAC is not reasonable or valid.

1.1 Description of the Study Area, Page 1-3 & 4: We believe this material is largely irrelevant to the Purpose and Need question and exposition. How do these paragraphs contribute to the articulation of the proposed project Purpose and Need?

1.2 Purpose of and Need for the Proposed Action, Page 1-5: The MOA disagrees with the concept and rationalizing that the purpose and need justification for the proposed KAC project would be … "The proposed project would further the development of transportation systems in the Upper Cook Inlet region by providing improved vehicular access and surface transportation connectivity between Anchorage and the Mat-Su …". The MOA believes this statement argues, 'the purpose of the project is to become a project'. This anomaly and the circular logic of supporting arguments are substantially self-fulfilling:

- The projected population growth trend in current plans locates much of the Mat-Su future growth in central and eastern Mat-Su areas. Current plans do not show a "need" for a western Mat Su connection to Anchorage
- The DEIS asserts that growth prompts a need for the KAC. However, the reverse is more likely the fact: Construction of the KAC will greatly induce growth within its service area in western Mat-Su and thereby "create" travel demand which otherwise would not exist. In essence: the stated Purpose and Need is a self-fulfilling argument. Such logic is not consistent with Federal NEPA or FHWA guidelines or an appropriate basis for proposed projects. Nor is the resultant low-density urban development sprawl outcome positive in terms of induced travel miles, auto dependence, natural habitats intrusion, natural environment impacts, mobile air pollution emissions, and greenhouse gases contribution that are producing very serious global consequences.
- The DEIS demonstrates that the proposed KAC project is ineffective unless expensive and complicated connections, especially within Anchorage are included. Recent KABATA documents indicate that KABATA is … "responsible for a small portion of the Upper Cook Inlet transportation infrastructure, specifically the Knik Arm Crossing", and that "KABATA's obligation is to ….only construct and operate that portion assigned to KABATA by statute."

Our MOA analyses of the KAC DEIS conclude that the proposed project carries very large and significant financial risks. The KAC project has potentially strong adverse fiscal impacts on the MOA and competes directly for transportation funding resources with other

high-priority Anchorage projects. We do not find the proposed KAC project is an efficient and economically-viable transportation project investment at this time for the following reasons:

- ✓ A bridge across Knik Arm attracts insignificant traffic or toll revenue without Mat-Su and Anchorage connections
- ✓ Traffic demand and toll revenue for the KAC is entirely dependent upon significant induced population and job growth shifts to the west Point MacKenzie area
- ✓ Meaningful KAC toll revenues will not be realized unless appropriate connectors are completed in Anchorage
- ✓ Transportation network connection links in Anchorage are costly, complicated, and disruptive
- ✓ The proposed KAC Phase I connector to the A-C Couplet in Anchorage is not viable nor acceptable to the Municipality. Its adverse neighborhood effects, park and historic property takes, routing of heavy truck flows through the Downtown District, and overburden of the Couplet capacity by 2015 impose harmful and adverse impacts on Anchorage.
- ✓ The combined effects of inadequate connectors, dependency on large-scale west Mat-Su growth for bridge tolls, cost to appropriately connect the bridge crossing to our existing and planned transportation network, bridge bond financing constraints, and general funding resource limits indicate the KAC is not a viable undertaking at this time
- ✓ The Municipality of Anchorage concludes that the Knik Arm bridge crossing project would not be a cost-effective or economically viable public investment as currently proposed in the DEIS at this time

1.2 Purpose of and Need for the Proposed Action, Page 1-6, Item 1: Alaska State Legislature AS § 19.75 states

> "The purpose of the authority created by this chapter 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"

As noted earlier, The KAC bridge project will produce no net regional gain in economic activity {ISER Report, Appendix G]. Population and employment projected to 2030 in the MOA and Mat-Su region is no different with or without a KAC bridge.

The statute references "public transportation system(s)". The KAC DEIS does not devote adequate consideration to and integration of public transportation, ridesharing, non-truck goods movement options and non-motorized transportation among the alternatives examined, the travel model mode choice procedures, and the modal composition of the proposed project. [*Note:* C*orresponding clarification regarding mode discussion is also appropriate on page 1-14]*.

1.3.1 Discussion of the Purpose and Need for the Proposed Action, Pages 1-6,7,8,9:

The MOA finds this section excessively verbose and not directly germane to the project Purpose and Need. To the extent that the data and discussion is directly germane, the presentation should focus much more directly upon Purpose and Need justification. A substantial portion of the presentation might better be transferred to Chapter 3. We also note that the adopted AMATS 2005 LRTP is conspicuously missing among the citations on pages 1-10 and 11, whereas it is a highly relevant document for citation here.

Page 1-8, Para 1 states "…. the Municipality of Anchorage calculated (in *Anchorage 2020*) that remaining vacant and underdeveloped residential land could support approximately 20,700 additional dwelling units. The forecasts for growth in the Anchorage Bowl by 2020, based on *Anchorage 2020*, indicate a need to accommodate 31,600 more households and 39,600 more employees". The Municipality is well aware that these figures are dated and superseded by more recent ISER population and employment projections (in 2002, 2004 and 2005). Moreover, the context for the referenced discussion in the Anchorage 2020 Plan pertains to a continuation of then-prevailing development trends, rather than the more-compact, mixed-used, pedestrian-oriented framework which underpins the Anchorage 2020 Plan. Additionally, as noted in the DEIS, very large land holdings remain available in the Chugiak-Eagle River area of the MOA.

Page 1-8, Para 3: The DEIS makes an assertion that a Knik Arm bridge would stem out-migration from Alaska. The KABATA household/commuter survey is alleged to be the basis for such a premise; sampling statistical confidence as well as common sense would question the credibility of this statement.

The final sentence of this paragraph again repeats an incorrect reference to Resolution 2005-268 of the Anchorage Assembly. If you choose to cite the resolution, please report the full content and meaning of the resolution **including "subject to the resolution of the required economic and environmental issues."**

Page 1-9, final Para: The MOA disagrees with the DEIS statement that the proposed KAC project is a complement to the Alaska Railroad Corporation. The KAC is detrimental to integrated rail intermodal service in a number of ways. For example, it will result in transporting a large tonnage of Port MacKenzie area quarry aggregate materials by motor truck over municipal streets in lieu of current rail car movements. In addition to excessive pavement wear, heavy truck movements disrupt neighborhoods and our downtown district and contribute to PM_{10} and PM_{25} pollutants which are primary concerns, Omission of rail-highway multimodal services in the KAC corridor is a transport efficiency degradation for the region and the State.

Page 1-10 & 11, Referenced Plans and Studies: The MOA believes the citations here are selective and do not always convey the full context of the referenced works. For example, on page 1-11, paragraph one, the text fails to incorporate the October 2005 Anchorage Assembly Resolution AR 2005-268 language…"subject to the resolution of the required

economic and environmental issues". Also, several different plans for the Port of Anchorage are cited, but not in their chronological sequence nor in recognition of evolving knowledge and conditions over time. Similarly, the Long Range Transportation Plan for the Anchorage Bowl, completed and adopted in 2005, includes a placeholder reference for the KAC project pending development of adequate information for evaluation and feasibility decision-making; no endorsement or recommendation for construction is implied. Several other references on page 1-11 cite actions indicating support for a Knik Arm crossing study. It could be noted that these were largely responsive to KABATA prompting. MOA believes the Draft EIS language is biased toward favorable findings, and not altogether objective. We believe that is inappropriate, especially so for large-scale public investment decisions of this magnitude.

Page 1-12: The Municipality does not agree that the RTPO regional prioritization process and list constitutes an endorsement for construction of the KAC project. Clearly, subject to environmental, economic, fiscal, funding sources financial resources, and project priority processes, the proposed KAC project is a potential candidate for infrastructure investment consideration. However, the consideration must of necessity be tempered by economic and fiscal reality and project merits vs. competing demands upon scarce transportation infrastructure investments. Multiple decision steps have yet to be played out for the proposed KAC project.

2.0 Alternatives

2.1. Alternatives Development and Screening Process: The alternatives presented for public review, and the criteria by which alternatives are judged in the KAC DEIS, do not provide the public an adequate range of options to consider. The Degan and Erickson alternatives are not sufficiently different to be credible distinct alternatives. The rejected alternatives do not appear to have received equivalent consideration and evaluation, and the basis for rejection is not consistently clear. The military clearly assigned resources and presented issues/objections which were effective. The Government Hill community did not have equivalent assessment resources and the reasons for rejection their preferred solutions are not fully apparent.

2.2.1 Purpose and Need Screening Criteria, Page 2-2: The enumerated screening criteria are narrowly defined. They are devoid of environmental, community values, and transportation system performance metrics. While these criteria may be necessary, explanation is needed as to how they are sufficient for assessment of alternatives absent community values and other non-transportation evaluation criteria.

Criterion P&N-2 is extremely narrowly defined. As acknowledged and reported in other chapters and technical appendices, this criterion does not even meet a 20-year design volume forecast period, and it excludes the cost burden imposed by the proposed KAC facility on other parties – local governments, connecting transportation system infrastructure, other public infrastructure and services required to service induced growth, tax receipts transfer/losses, change in real estate values, fiscal impacts on government

entities, noise, traffic intrusion, and quality of life in impacted neighborhoods, heavy commercial vehicle through traffic effects, commercial district impacts, etc. etc..

Criterion P&N-3 seems to be a generally warped definition of sustainability. A common meaning of sustainability is an action that is environmentally and eco-system neutral or results in improved conditions. The definition posited in this criterion really addresses only tolling income production, not the full public cost of vehicular travel. It appears to preclude public transportation options as well as multi-modal transportation management strategies from consideration. The DEIS needs to explain how and why a $600 million capital intensive project with ongoing operation and maintenance cost and external costs which are excluded is a priori superior to alternative projects with markedly lower capital cost but somewhat higher operating cost. KABATA and FHWA also need to explain why their DEIS screening of alternatives and evaluation process did not consider and incorporate costs and impacts of induced lower-density growth patterns, vehicle miles of travel, safety, other infrastructure requirements and costs, environmental impacts and mitigations, emissions and greenhouse gas effects, social and community disruption, effects on mobility impaired populations, and economic vitality of the region.

Criterion P&N-4 only vaguely defines efficiency and lacks specificity to enable external parties to apply and interpret it

Five of the eight criteria are mutually interdependent and duplicative, generally related to "…. further development of transportation system sin the Upper Cook Inlet region ….". Additionally, at least for the connections and facilities within Anchorage, non-motorized uses should be considered in the alternatives. Title 2.85.090 requires that streets carrying more than 1,000 average daily trips shall have sidewalks on both sides of the facility.

2.4.2.1 Key environmental and physical constraints, page 2-8: Why are the referenced objectives not reflected in the Purpose and Needs or Technical Screening Criteria cited earlier. This paragraph references "…to minimize construction risks ..."; what risk assessment and risk management analysis has been performed for the KAC project? The MOA asks that KABATA and FHWA document such investigations, analyses findings and conclusions in the DEIS to inform the general public, our elected officials, and decision-makers regarding the project.

2.5.2 Level I Screening: Transportation Modes, pages 2-18 to 2-23: Please include an explanation why the criteria used to screen modes effectively precludes all consideration of public transportation, rail and non-personal vehicle/truck modes. Explain why this evaluation framework is biased to exclude all but personal auto and truck scenarios. Explain why the scope of the screening excludes all externalities and impacts of the project on other parties or entities, including the environment, eco-systems, communities, other infrastructure required including parking space, vehicle crash consequences, air pollutant emissions, greenhouse gas implications, government fiscal structures, etc. etc.

2.5.2.2 Rail bridge across Knik Arm: page 2-18&19: Discussion of the rail bridge alternative illustrates and exemplifies a convoluted assessment process and criteria. First, all alternatives are posited as single mode, which is widely understood to be non-optimum. A case for long range needs for efficient and cost-effective freight and person movement systems is not considered in the Knik Arm Crossing envelope. The scoping and planning framework for the DEIS analysis eliminates worthy strategies in favor of a limited range of options.

2.5.2.4 Transportation Package (multimodal), page 2-22: the sustainability assessment is nonsensical because this alternative does not require a $600 million up-front investment nor does it require an additional large investment for connecting road infrastructure as does the KAC bridge build alternative. KABATA and FHWA cannot say from their DEIS evaluation that the multimodal alternative is more costly on a life-cycle basis than is the KAC alternative.

The efficiency analysis is equally gratuitous and no factual analysis is presented to substantiate the claims in the DEIS. Population and employment distribution to southwest and west Mat-Su would be markedly less without the KAC bridge construction. Development would be more compact and amenable to multimodal service.

The growth need argument is spurious. It is the KAC bridge construction that induces population and employment distribution to southwest and west Mat-Su and creates a "demand" for 45,870 vehicles per day. That demand would not exist across the Upper Cook Inlet without a KAC bridge. Instead development would be more intensive and compact in central and east Mat-Su and likely more amenable to multimodal service.

2.5.2.6 Summary of Alternatives Carried Forward, page 2-111 through 114: KABATA and FHWA's alternative screening methodology and process did not determine a "travel demand" for movements across Upper Cook Inlet. In the absence of a defined travel demand, the alternatives screening process does not define which of the alternatives considered is most cost-effective. The screening methodology interprets that there is a demand for 45,780 vehicles per day. That premise is faulty because (1) the travel forecast model procedures are flawed and (2) the KAC bridge alternative induces a large portion of that 45,780 demand whereas other candidate alternatives would not and therefore may well be less costly, more-cost efficient, and have lower community, social, economic, and environmental adverse impacts. The KABATA and FHWA alternatives screening and evaluation methodology does not answer these basic questions and therefore invalidates the screening conclusion that (a) there is no viable alternative to a KAC bridge/roadway crossing and (b) that only a roadway is a reasonable alternative.

2.6 Proposed General Design Features, Bridge Deck Section page 2-120: the initial bridge deck shown here is a 2-lane traveled way with shoulders/refuge lanes, and a future expanded cross section of 4 lanes with only 4-foot shoulders. What provisions are incorporated for vehicle refuge areas and incidents in the four lane scenario? What capacity does KABATA estimate for the 2-lane section and when is implementation of the 4-lane facility anticipated?

2.6.4 Anchorage Approach Alternatives, page.2-121, para 3: A right-of-way of 1000 feet is referenced for the Degan Alternative; where does that occur and why is such a large take required?

Figure 2-6, page 2-128: the typical section for the "to/from A&C" shows only a 6-foot refuge area for NB traffic. Is that a sufficient refuge area for the anticipated volume on this important facility?

3.0 Affected Environment

3.1.1.1.1 Metropolitan Planning Organization regulations, page 3- 4, para 3 and 4: The KAC is a proposed project. The MOA understands that as the proposed KAC project EIS is completed, evaluation and financing information becomes available, and decisions are reached as to its merit, corresponding actions will be required by AMATS. The MOA further consider these latter items are critical to the determination of a fiscally constrained plan, air quality conformity and the assessments of KAC project elements in the AMATS project priority ranking criteria for placement on the AMATS Transportation Improvement Program (TIP).

3.6.3.1 Regional context, page 3-146: Please note that the Anchorage Bowl Park, Natural Resource, and Recreation Facility Plan was formally adopted as an element of Anchorage 2020 Plan in spring, 2006.

3.6.3.2 Viewsheds Page 3-150 and Table 3-23: We suggest that this section include Downtown Anchorage residents and tourists because they share the similar expectation of other listed groups. The proposed KAC crossing and connection will impact viewsheds from Downtown. Please also reference that Anchorage 2020 findings show a strong citizen preference for natural landscapes and viewsheds in the Bowl.

4.0 Environmental Consequences

4.1 Land Use Impacts, page 4-2: If the DEIS future projections are accurate that the KAC bridge project induces significant residential and commercial development in western Mat-Su Borough, property values in Anchorage likely will be negatively impacted. Residential property values, especially lower income and single-family detached housing, could be severely impacted. The DEIS has forecasted over 17 thousand new housing units, likely all single-family residences, on the Mat-Su side of the bridge by the year 2030. Homes in that area could have similar commute times to Downtown or Midtown employment centers as Hillside or South Anchorage subdivisions. The DEIS should address this competitive impact on both homeowners and commercial/industrial business enterprises. The DEIS process also should include proposed mitigation to offset homeowner and non-residential property owner value dilution.

Table 4-1 2020 Population and Employment by Area, page 4-14: this table conforms to the ISER projection and conclusion that the KAC produces no net economic gain for the Anchorage and Mat-Su region. The primary effect of public investment up to $600 million is redistribution of people and jobs, primarily from Anchorage to Mat-Su but also shifting growth within Mat-Su from eastern areas to the western area.

4.1.2 Consistency with Land Use Plans and Policies, page 4-19, Para 1: The reference here to Anchorage Assembly resolution 2005-268 is incomplete; please add the resolution language "subject to resolution of environmental and economic issues."
Additionally, the MOA requests rephrasing of the final sentence in this paragraph to more accurately reflect the requirement that project eligibility for federal funding ***requires*** *that* the project be a part of an adopted MPO LRTP.

4.1.2.1 Build alternatives, page 4-19: Again this characterization of the Anchorage Assembly resolution is misleading and needs to incorporate the language "subject to resolution of environmental and economic issues."

4.1.2.2.3 Anchorage approach alternatives, page 4-20 & 21: The MOA does not concur with the characterization and representation of the KAC project as consistent with Anchorage 2020 Plan or with the Transportation Element of the Plan. Please also note that the AMATS 2025 LRTP is not a draft plan, it was adopted in 2005.

4.1.3 Farmland Impacts, page 4-21: The DEIS notes the Agricultural Area land reserve in the Point MacKenzie area, jurisdictional authority issues regarding change agricultural restriction covenants, and the likelihood of conversion of large parcels owned by speculators to residential development if covenants are relaxed. What assumptions did KABATA make for future development of the agricultural holdings and how many dwellings are placed in the Agricultural Area ? How did KABATA assess the corresponding requirements for local roads, electric service, water and waste systems, schools, fire and police facilities and services, other public facilities and services, and on-going sustainability of these induced development impacts?

4.2.1.2 Build alternatives – direct impacts; Figure 4-7 Degan Alternative Plan and Profile, page 4-37 and Figure 4-9 Erickson Alternative Plan and Profile, page 4-39: Both of these figures depict significant fill for the proposed roadway between Sta 172 and Sta 216 and an elevated structure between Sta 242 and Sta 272. What viewsheds and visual/aesthetic impacts will be affected by these alignments and structures?

4.2.2.1.3 Transportation Indirect impacts, Figures 4-8 and 4-10 Projected V/Cs – 2030, pages 4-38 and 4-41: The MOA finds these figures displaying 2030 traffic volumes and V/C metrics too small scale and unintelligible. Additionally, the traffic volumes displayed are erroneous because only one-direction volumes are posted on numerous facilities. Please correct and enlarge these exhibits to enable interpretation of traffic data within Anchorage.

Table 4-3 2030 peak Hour LOS, page 4-42: The data in this table is meaningless because no intersections are identified.

Table 4-4 2030 vehicular travel performance measures, page 4-43: Several of the metrics in this table are not comprehensible. What is "total flow"? "average flow"? "average VMT?" "average VHT?" "average delay"? "average percentage delay?" These are not non typical system performance measures which are not defined nor obviously meaningful. Performance measures that distinguish facility classes, geographic areas and degree of congestion would generally be more informative.

Table 4-5 2030 vehicular travel performance measures compared with Base Year, page 4-45: There appear to be anomalies among the alternatives shown. Is it reasonable that Mat-Su would experience the same VMT for the no-action and build cases? Why would the total VHT in Mat-Su be less for the no-action case than the build alternatives? What do "average VMT "and "average VHT" mean or measure?

Truck trip forecast and road volumes: The DEIS says very little about goods movement and truck volumes, despite the forecast that 12% of the KAC bridge traffic will be trucks. The DEIS needs to address truck traffic and its impact (hazardous loads, PM25 and PM10 pollutants, truck volume on Government Hill roads and the number of trucks estimated into/out of the Port, through the Downtown district, and using the A-c Couplet or the Ingra-Gambell Couplet when Phase 2 is completed.

The DEIS references Point MacKenzie area gravel and aggregate resources of some 40 million tons. The KAC bridge will be the most direct access for aggregate haul to markets in Anchorage and south since there is no rail alternative that is competitive. How many daily gravel truck loads during summer construction months will be carried on the KAC bridge? On the Anchorage connector roadway? Across the A /C Couplet and into downtown? The DEIS needs to address these questions as well as similar questions for other important truck corridors and movements.

4.2.2.2 Marine transportation impacts, page 4-47: The KAC Bridge does not increase the security of the PoA and its freight movements. In fact, the KAC bridge access road at higher elevation paralleling and adjacent to the Port may challenge Port security, increasing daily observation of Port activity and potentially compromising operational security and rendering military movement of goods and equipment to the Port during deployments vulnerable to conflicting traffic. The PoA is designated a strategic port for national defense. Port security across all MARSEC levels needs to be maintained.

The PoA is concerned for water-side operations in Cook Inlet with respect to significant changes in currents, docking patterns, approach patterns and the Knik Arm Shoal dredge area, overall changes in sedimentation deposits and dredging practices during and after construction associated with the bridge and causeways, any and all of these items may impact POA operations and maintenance costs.

Land side impact issues for the PoA are related to land availably for port operation and security. The slope stabilization of any road located adjacent to the east boundary of the port is critical, especially in the vicinity of unstable slopes below Cherry Hill housing. At this time, the PoA would prefer that no port entry ramps from the KAC connection roadway be considered as part of the proposed KAC for security reasons, but may be interested in Port egress ramps onto the KAC connector road to allow traffic to exit the port both north and south.

The PoA Master Plan calls for future expansion of the PoA towards the north. Loss of critical acreage in the North Tidelands area, and cost to replace that critical acreage must be reconciled. The PoA storm water drainage system is under capacity. Drainage management from the surface area of the KAC connection roadway must be included or the existing drainage system expanded to accommodate highway runoff.

4.2.2.3 Rail transportation impacts, page 4-48 & 49: The ARRC intermodal yards, rail facilities and headquarter offices in Ship Creek are important contributors to the Anchorage economy and business climate. The MOA is concerned that the railroad's operating efficiency, flexibility, competitiveness, and freight and passenger service vitality not be compromised in any way as a result of, or in connection with, the KAC project. The Municipality highly values the railroad's interaction with our Port facilities, the utility and cost-effectiveness of railroad transport of heavy and bulk materials, and the services the railroad provides for goods and passenger movement that would otherwise strain our road network.

4.2.2.5 Impacts on transit, page 4-51: The DEIS indicates that KABATA has done no work to assess how to integrate public transportation service into the KAC project. The result is that all inter-regional travel is dependent on auto/trucks which is inconsistent with the Anchorage 2020 Plan and has an adverse traffic affect on Anchorage, dilutes the potential for transit service improvements within Anchorage due to population and job out-migration induced by the bridge crossing, and requires more space and land consumption for vehicle parking. None of these impacts appear to be considered or documented in the DEIS.

4.2.2.6 Impacts on pedestrians and bicyclists, page.4-52: Added traffic and vehicle-miles of travel through the Government Hill area will increase pedestrian and cyclist risks as well as incidence of crashes in that community and police, ambulance and fire emergency response needs. Both the Degan and Erickson alternatives cut off the walking route to the Government Hill Elementary School during construction and the competed project likely will affect walking routes also. The MOA requests that pedestrian and cyclist pathway needs be integrated in the proposed project

The Erickson alternative will remove an existing playground and picnic shelter in Sunset Park as well as a sledding area. These impacts need to be specifically reflected in the DEIS and mitigation treatment provided that compensates in a better quality play space and loss during construction. Additionally, added traffic on the A-C Couplet and will exacerbate pedestrian incidents, particularly involving chronic public inebriates along the 3rd Street corridor.

4.2.3 Impacts on Community Facilities, Public Services, and Fiscal Conditions: page.4-53:
The KAC bridge will impact Anchorage's tax base for both residential and commercial properties values. The expected impact will be both a loss of Anchorage households and jobs through relocation to western Mat Su as well as suppression of Anchorage real estate values caused by the supply of commercial and residential land development in the Mat-Su Borough. The DEIS needs to include assessment of these impact since no Anchorage real estate tax yield is applicable to personal property located in the Mat-Su Borough (now in much closer proximity to the Anchorage market),

We believe the DEIS needs to address how differences in tax policy and exemption by local option could create competition between Boroughs that may undermine sources of revenue such as hotel bed tax, rental car tax, sales tax, tobacco or alcohol tax. These outcomes could create hardships for property owners who have invested in the community relying on a particular tax environment. The DEIS should discuss mitigation such as for tax relief (similar to the current Mat-Su Borough relief to the Port MacKenzie District) to keep established enterprises competitive in a changing economic situation.

The DEIS does not address impacts of the proposed KAC project on other priority transportation infrastructure funding. Federal and State funding for the KAC project, under SAFETY-LU will redirect that same amount of funding from other state and regional priority projects. This has a direct and cumulative impact on the Municipality's primary road network and infrastructure improvements. This impact is further compounded by the transportation infrastructure investments required to connect the KAC project to the existing and planned transportation networks in both anchorage and the Mat-Su Borough. Not only are these investments very large, they are competing for attention directly with other high priority projects that have been vetted by quantitative prioritization criteria for Transportation Improvement Program (TIP) implementation. Funding shortfalls and deferrals of completion these other priority projects will result in safety costs, additional travel delay to our citizens, and related community costs. This topic deserves explicit recognition and mitigation actions in the DEIS.

The DEIS does not speak to the likely effect of Mat-Su borough residents, now in much closer proximity to Anchorage, drawing on MOA social and other public services. This outcome, triggered by the KAC bridge project, is not positive for Anchorage. Recognition and estimates of these impacts together with mitigations need to be incorporated in the DEIS for these effects. In-commute and in-visitor traffic will burden Municipality services. The DEIS estimates over 45,000 daily vehicle KAC vehicle trips into/out of Anchorage daily in 2030. This high visitor population will demand policing, parking enforcement, and personnel time of community service organizations. As but one example, Animal Control likely will need to deal with an increased number of visitors' pets within the Municipality and corresponding animal care center activity, enforcement services, animal waste and associated waterway impacts. Similarly, demand for community health clinic services, facilities and programs (such as WIC) will likely rise without commensurate funding. The consequences of the KAC project's influence on population and job shifts from Anchorage to Mat-Su needs investigation and reporting in the DEIS to assess how Municipal revenues

and expenditures are affected. Similarly, its effect on driver travel delay, health care costs, parking provision for commuters and visitors, downtown business environment effects bear examination,

The incomplete definition of a preferred Anchorage connection alternative in the DEIS is troubling to the MOA. We are uncertain why the DEIS is going forward without delineation and reconciliation of a preferred choice. We remain concerned that the DEIS does not portray fully the impacts, costs, corollary issues and mitigation actions needed with respect to our Government Hill community, commercial district, pedestrian and cycling amenities, safety, neighborhood cohesion, loss of parklands, historic districts impact, traffic volume levels, intersections performance, truck movement sensitivities, and a host of other fine-grain effects.

4.2.4 Impacts on Population and Social Groups, page 4-66: A consequence of the KAC project will be a jurisdictional issue for emergency services response for safety, health and enforcement personnel. Bridge crashes, fire, other incidents, even water responses, will require working collaboration between enforcement agencies and political jurisdictions. Additionally, roadway tunnels will pose further risks and issues related to transport of flammable, toxic, explosive, and otherwise hazardous materials and associated emergency response protocols. Rules and mutual aid arrangements will be required. Enforcement and emergency services personnel deployment may necessitate a station at the bridge toll plaza or nearby. These topics need to be incorporated in the DEIS.

4.5.4 Impacts Relating to Hazardous Materials , page 4-135: Transport of hazardous, toxic and flammable materials pose special risk and issues through the proposed tunnels under Government Hill and on the KAC bridge span. The DEIS needs to address management and emergency response provisions dealing with safety and human population risks in the event of crashes or other emergencies.

4.6.3.2 Impacts to key views, page.4-166: The proposed KAC crossing and connection will impact viewsheds from Downtown and the adjoining Government Hill community neighborhoods. Please describe and discuss these impacts for both residents and Anchorage visitor populations.

4.9 Cumulative Impacts, page 4-255: the MOA believes that further elaboration and assessment of the proposed KAC project is needed regarding cumulative impacts on Knik Arm inter-tidal habitats, the Ship Creek estuary, marine fish and affected salmon populations in Ship Creek, Six Mile Creek, and other water habitats to the north.

4.12 Environmental Commitments, Mitigation, and Monitoring, Table 4-52, page 4-320: Proposed mitigation measures for the KAC project are summarized in Table 4-52.
Sec 4.2.1 The proposed KAC project connector roadway construction through and beneath Government Hill will have material impact on the commercial area, the historic district, and nearby residences. The MOA concurs that context sensitive solutions can help ameliorate the impacts. However we expect KABATA to assert a more constructive posture to work with the Municipality and the Government Hill community Council toward

revitalizing the area and the connector corridor to achieve an end-product which all view as an asset to the community.

Sec 4.2.2 Mitigation for the Downtown District to address heavy truck movements, pedestrian safety, and to sustain commercial district ambience for downtown workers, visitors, and tourists needs to be delineated.

Sec 4.2.2 Mitigation for slope stabilization and seismic security for the roadway parallel to the Port of Anchorage will be required for public safety and security of port assets. Further DEIS investigation and mitigation actions are required pertaining to sedimentation deposition within and around the Port of Anchorage and bridge piers.

Sec 4.2.2 Mitigation actions in and around the Alaska Railroad Corporation facilities, yards, and equipment must be predicated on long-term management flexibility and on-going efficiency of rail operations.

Sec 4.2.2 The MOA expects that pedestrian safety mitigation measures must be addressed for the entire KABATA project construction period and area. In addition provision for non-motorized travel must be incorporated in KABATA project plans and actions.

Sec 4.2.2 The MOA believes that DEIS content needs to be added to address hazardous materials, toxics, and flammable materials transport through proposed tunnels and the KAC bridge span and to incorporate mitigation and emergency response actions related to incidents involving these materials.

Sec 4.2.3 The DEIS is incomplete and insufficient with respect to identification of public service and facilities impacts within the MOA. The Municipality expects that further work will be executed to correct these deficiencies in the DEIS and that mitigations to address damages incurred by disadvantaged parties will be specified.

Sec 4.2.4 The DEIS is incomplete and insufficient with respect to identification and quantification of anticipated impacts on residential property owners and non-residential property owners and businesses due to the proposed KAC project. The Municipality expects that further work will be executed to correct these deficiencies in the DEIS and that appropriate mitigations to address damages incurred by parties suffering property value loss and/or business deterioration will be specified.