

MEMORANDUM

Knik Arm Crossing Alternative

TO: Kelly Summers, P.E., Project Manager – Department of Transportation and Public Facilities (DOT&PF)

FROM: Renee Whitesell, PTP, Project Manager – DOWL

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PROJECT: Parks Highway Alternative Corridor Planning and Environmental Linkages (PEL) Study
Project Numbers: Federal-0A41039/004210000 State-CFHwy00421/0A41039

Overview

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) has identified the need for a future alternative highway corridor in the Wasilla area of the Matanuska-Susitna (Mat-Su) Borough and has chosen to use the Planning and Environmental Linkages (PEL) process to identify a recommended alternative highway corridor that connects the Parks Highway between approximately the Hyer Road Interchange and West Hawk Lane (refer to Figure 1).



Figure 1: Study Area

The project team commenced public involvement activities for the project on March 29, 2022, with a virtual public open house. Although the open house was intended to focus on baseline environmental conditions and emerging themes for the PEL study's purpose and need, most of the questions and comments from the public related to issues about potential locations being considered for the alternative corridor.

Several commenters requested a Knik Arm Crossing (KAC) be evaluated instead of an alternative corridor. It was their opinion the KAC would provide for faster connection between Anchorage and the Mat-Su and be less disruptive than identifying an alternative corridor in Wasilla. This memo documents the reasons why KAC will not be considered further as an alternative as part of this PEL Study.

Knik Arm Crossing – Project History

The KAC project was a proposed bridge and associated roadway connecting Anchorage and the Mat-Su across the Knik Arm of Upper Cook Inlet. It was expected to cost \$932 million to construct (although this estimate would need updating to consider the likely need for a four-lane crossing and to add the cost for the connection from the bridge to Settler's Bay). The KAC was intended to be a toll bridge, where toll fares would assist to offset construction, operation and maintenance costs¹. The project was initiated by DOT&PF in 2003 after legislation was passed forming the Knik Arm Bridge and Toll Authority (KABATA), a public corporation. The project was Title 23 eligible (Federal-Aid Highway Funding) and was pre-designated by the Federal Highway Administration (FHWA) as part of the National Highway System (NHS). The KAC completed the National Environmental Policy Act (NEPA) process and a Record of Decision (ROD) was signed by the FHWA on December 15, 2010. In 2011, the FHWA approved moving to the right-of-way (ROW) acquisition phase.

Two attempts were made to procure the project through a public-private partnership (P3), which were subsequently cancelled. A financing plan was then adopted (supported in 2014 legislation) that anticipated the state would borrow, on a senior lien non-recourse basis, approximately 33 percent (or \$378 million) of eligible project cost from the Transportation Infrastructure Finance and Innovation Act (TIFIA) program administered by the US Department of Transportation and FHWA; issue up to \$300 million of State-backed revenue bonds through the Department of Revenue, and to fund the remainder of the KAC construction through Federal Aid Highway Funds appropriations. A TIFIA letter of interest (LOI) was filed in 2015 incorporating this plan of finance, but the TIFIA loan was denied in 2016². Under the plan, the contract for the construction was anticipated to be tendered under a Design-Build Request for Proposals process.

On December 26, 2014, Governor Walker signed Administrative Order (AO) 271, limiting spending on the KAC and five other projects to essential spending only. On June 29, 2016, Governor Walker announced the shut-down of the KAC project and vetoed budgeted project federal-aid highway funding for the KAC. The KAC project records were archived, and the project was suspended in Fall of 2016.

On February 21, 2019, Governor Dunleavy signed AO 309, which rescinded AO 271. This allowed the KAC to potentially be reinitiated by the DOT&PF. To date, work completed includes the preparation of a report dated August 2019 and titled "Knik Arm Crossing Project: Analysis for Moving Forward to Financing and Construction". This report, often referred to as the Hemenway Report, examined the

¹ https://dot.alaska.gov/comm/documents/2019_8_KAC_Heminway_Analysis.pdf

² <https://akhouse.org/2016/08/17/news-knik-arm-bridge-should-be-removed-from-transportation-priority-list/>

steps needed to revive the KAC project. The report was made public on April 29, 2022 under a cover letter from DOT&PF Commissioner, Ryan Anderson. The letter states:

“The attached report, while a comprehensive overview of many factors to consider in evaluating a project of this magnitude, is no longer considered current. While useful as part of the previous record, at this point, the department can make no claims as to the relevancy and accuracy of the data in the report. The information provided regarding cost estimates, project schedules, traffic and toll revenue studies, financing, operations and maintenance, right of way, stakeholder engagement, and procurement will need to be re-evaluated and updated. The department will continue to work with our federal partners to fulfill the commitments made in 2016 when the project was paused.

Over the next year, DOT&PF will be performing due diligence, examining the merits of a strengthened Anchorage Mat-Su connection, either by expanding the Glenn Highway, or creating a new link, such as the Knik Arm Crossing. These efforts are critical to address highway safety, population growth, economic development, connectivity for people, freight and goods, and to ensure our Alaskan transportation system is resilient as we move forward into the future.”

Planning Framework

The KAC project must be consistent with State and local transportation plans and consider relevant land use plans under 23 USC 134 and 135, and 23 USC 450. This requires the KAC alternative to be included in any Metropolitan Planning Organization’s (MPO) Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP); and for the project to be included in the Statewide Transportation Improvement Program (STIP).

When the KAC was shut down in 2016 it was included in the MTP, TIP, and STIP. After the shutdown, the Anchorage MPO, Anchorage Metropolitan Area Transportation Solutions (AMATS), removed the KAC project from the 2040 MTP³ and from the TIP. The State also removed the project from the STIP⁴. The project will need to be reinstated into these plans to have access to federal transportation funding.

The Mat-Su Borough (MSB) is not an MPO and produced its own Long-Range Transportation Plan (LRTP)⁵. The traffic model produced as part of the LRTP included the KAC, but the project was shut down during plan development. In response to this the MSB chose to continue to use the traffic model and adjust recommendations accordingly to reflect the KAC not being built by 2035⁶ (beyond the planning horizon of the LRTP).

The KAC is a regional transportation solution, which would require coordinated effort and buy-in from multiple state, metropolitan and borough agencies. As KAC is not provided for in any state, Metropolitan or Borough transportation planning documents or programs, it is reasonable to exclude it from further consideration as an alternative in the Parks Highway Alternative Corridor PEL study.

³ AMATS 2040 MTP Final Chapter 1 includes key assumptions and parameters given by the AMATS Policy Committee to the MTP project team in October 2016 to guide the plan development process. Page 9 notes **“Knik Arm Crossing (KAC) Project:** The AMATS PC expresses its reservations regarding the need, impacts, and cost of the KAC project, and asks that the project be revisited as part of the 2040 MTP update process. [NOTE: Since this guidance was provided, the AMATS Policy Committee on August 24, 2017 determined that the KAC project was not to be included in the 2040 MTP.]”

https://www.muni.org/Departments/OCPD/Planning/AMATS/MTP/2040/Final_FHWA_FTA_Approved/2040_MTP_Final_Approved.pdf

⁴ <https://www.alaskasnewsresource.com/content/news/Defunded-project--390647961.html>

⁵ Matanuska-Susitna Borough 2035 Long Range Transportation Plan, Pg. 48.

⁶ Matanuska-Susitna Borough 2035 Long Range Transportation Plan, Pg. 48.

Purpose and Need

The Purpose and Need for the Parks Highway Alternative corridor and associated PEL Study is set out below.

Purpose

The Purpose of the Parks Highway Alternative Corridor PEL Study is to improve regional and local transportation through the Wasilla area of the Matanuska-Susitna Borough by identifying an alternative highway corridor that will improve safety for all transportation modes, reduce existing and future traffic congestion, and increase mobility. The study will seek to improve transportation for non-motorized users, respond to community values, and support or enhance economic, social, environmental and energy conditions.

Need

Through a collaborative process that balances multiple viewpoints of stakeholders, agencies, and the public, and working within regulatory requirements, DOT&PF determined that a successful solution should address the following needs:

- Improve safety in the corridor for vehicles, pedestrians, and bicyclists
- Decrease fatal and serious injury crashes
- Reduce existing traffic congestion and intersection delay on Parks Highway
- Add roadway capacity to meet projected transportation demand in the corridor
- Improve the roadway network to better separate local, regional, and through trips
- Improve efficiency for freight transport
- Improve multi-modal access and flexibility for all users
- Improve the durability of roadway maintenance improvements and ease maintenance operations

Improvements should also meet these additional goals:

- Improve the efficiency of the local and regional transportation system for all its users
- Enhance and protect public health and safety of travelers and the communities that transportation facilities traverse
- Improve existing natural environmental conditions when possible and avoid/minimize/mitigate adverse impacts to the natural environment
- Contribute to the improvement of the economy, social fabric, and quality of life along the Parks Highway corridor and in the greater Wasilla area
- Satisfy applicable federal, state, and local plans, policies, and regulations

The KAC does not fulfill the project's Purpose and Need as it will not improve regional and local transportation through the Wasilla area of MSB. Based on the 2025 LRTP model runs⁷, even if KAC were to be constructed, the Parks Highway entering Wasilla would still be at capacity⁷, and thus KAC cannot be considered a reasonable alternative to meet the Purpose & Need for this project. Furthermore, the 2015 PHAC report explains that the modeling done for this project at that time included conservative assumptions regarding the Knik Arm Bridge, to demonstrate that the bridge would not negate the need for a Parks Highway bypass around Wasilla. The modeling assumed that KAC would be in place in 2035 and that it would be built with two travel lanes in each direction. In addition, the modeling assumed no bridge toll. These assumptions resulted in best-case use of the bridge, but even under this scenario, because the bridge is at the southern edge of the PHAC project area, the modeling showed the configuration and operation of the bridge did not have a strong impact on traffic along the Parks Highway Corridor in the vicinity of Wasilla.⁸

Given this project's specific focus on Wasilla, the following needs will not be able to be addressed through a KAC alternative:

- Improve safety in the Parks Highway corridor through Wasilla for vehicles, pedestrians, and cyclists (other than an indirect safety benefit resulting from reduced traffic volumes by re-routing commuter traffic to a different corridor).
- Substantially decrease fatal and serious injury crashes in the Parks Highway corridor through Wasilla
- Reduce existing traffic congestion and intersection delay on the Parks Highway through Wasilla
- Improve the roadway network to better separate local, regional, and through trips
- Improve multi-modal access and flexibility for all users surrounding the Parks Highway through Wasilla.

On this basis, a KAC alternative would not pass the Phase 1 screening proposed for alternative development and evaluation.

Origin-Destination Study

An Origin-Destination study was completed to analyze and understand the travel patterns of drivers that currently use the Parks Highway. This study evaluated more than 900,000 trips undertaken during May and June 2021, and a comparison data set for May 2019. The study observed that 67 percent of the trips using this segment of the Parks Highway originated and had a destination within the Mat-Su. A further 31 percent of trips originated from, or are destined for, locations within the Mat-Su area and traveled to or from locations outside of the Mat-Su (i.e., trips started or finished in the Mat-Su and went to or from Anchorage or locations east of the Wasilla urban area. This captures "commuter" traffic). If you discount this "commuter" traffic, only three percent of trips originate from, or are destined to, locations outside the Mat-Su (pass-through traffic).

It is worth noting that the KAC would not serve the entirety of the Mat-Su Borough's "commuter" traffic. For example, motorists traveling to Anchorage from eastern portions of Wasilla and the Mat-Su

⁷ Under the 2025 LRTP model runs, the Parks Highway traffic volumes entering Wasilla would be 34,000 vehicles per day (vpd) in 2025 under the best bridge use; very close to current traffic volumes in the PHAC project area.

⁸ 2015, DOT&PF. Parks Highway Alternative Corridor Project Conceptual Planning Report

Borough would likely still choose to use the Parks-Glenn Highway route, as it would be shorter and faster.

Conclusion

Because the KAC would only serve a portion of the Mat-Su Borough's "commuter" traffic, and would not help improve regional and local transportation through the Wasilla area of MSB, which is the core purpose of this project, this alternative was determined not to meet the Purpose & Need, and is eliminated from further consideration. The KAC will be added to the list of early draft alternatives in the PEL Study and included in an appendix of the document where alternatives considered but dismissed from further evaluation are described, along with the rationale for eliminating each of those alternatives.