



Kahtnu Area Transit Fixed Route Development

Project Overview, Purpose and Need

Kenaitze Indian Tribe is working with R&M Consultants, Inc. to develop a plan for Kenaitze’s new fixed-route bus service, Kahtnu Area Transit (KAT). The bus service will provide expanded transportation services to supplement complementing Kenaitze Tribe’s existing transportation program and other existing services in the Kenai Peninsula Borough. The KAT service aims to lower barriers to opportunities for healthcare access, education, work, and recreation through transportation access for all. This fact sheet provides a summary of progress, current recommendations, and upcoming steps.

Community Involvement to Date

Date	Event
June 28, 2023:	Public Meeting #1: Project introduction, Soldotna Chamber of Commerce and Kenaitze Tribal Council
June/July	Outreach to other rural transportation providers around Alaska
August/September	Community survey (310 responses)
November 29, 2023	Public Meeting #2: Draft Year 1 stops and route alternatives: 2:00pm at the Challenger Learning Center, Aurora Borealis Room
December	Final Year 1 plan and Expansion Plan review with Kenaitze Tribal Council

Community Survey: Executive Summary

R&M conducted a survey about travel patterns in the central Kenai Peninsula community to help identify bus stop locations and plan routes for KAT bus service. The survey was available from August 23, 2023, through September 11, 2023 and collected a total of 310 responses from residents of Kenai, Soldotna, Nikiski, Sterling, and Kalifornsky. Most respondents were from Kenai and Soldotna and most travel is assumed to be to and from Kenai and Soldotna. Grocery shopping, errands/appointments and work were the most common reasons to leave home and respondents indicated they were overall likely to use transit, if available, to access those types of destinations. Most respondents were willing to walk between 5-15 minutes to reach a bus stop and most preferred to travel no more than 30-45 minutes total to reach their destination. Best practices, survey results and population distribution in the central Kenai peninsula yields general recommendations for directing stop placement, schedule, and route geometry, which are summarized below.

Stops, Routes, and Schedule

Route Structure Alternatives and Trade-Offs

Choosing when (what days or times of day) to offer service to Nikiski and Sterling will be important for the tribe and community. Service coverage to Nikiski and Sterling is likely costly with few passengers per mile or per hour, at the expense of more frequent service and ridership in Kenai and Soldotna.

For example, two-bus service between Kenai and Soldotna may be able to achieve reasonable headway (30-minute wait times) in Kenai or Soldotna. But extending that same two-bus service to Nikiski and Sterling yields inconsistent and infrequent stops in Kenai and Soldotna (up to 75-minute wait times).

Scheduling

- Goal: All day weekday service in Kenai and Soldotna (approximately 6:00AM-7:00PM)
- Recommendation: Limited weekday commuter service to Nikiski and Sterling



Kahtnu Area Transit Fixed Route Development

Stop Placement Approach

Goal	Strategy
Increase ridership	Place stops where riders are most likely to go: Larger, dense populations; higher volume roads; commercial areas
Fast and Frequent	Straight lines: Reduce deviations and simplify route geometry
Support walkability	Locate and distribute stops within 10-minute walk of multiple destinations
Increase safety	Locate stops where there is supportive infrastructure such as: pavement, wide shoulders, sidewalks, signalized crossings, parking lot out of roadway

Year 1 Preliminary Locations

The table below shows twenty locations, each providing access to many destinations that may generate greater numbers of boardings, and together covering a wide area. Route schedules can be planned around arrival times at these stops. These locations are priorities for further research and evaluation as feasible stop locations. As such, the list may grow slightly or shrink or adjust as stops are evaluated, moved, or better substitutes identified. Multiple other stops may and should be placed between timed stops for coverage along main routes while minimizing deviations.

Timed Bus Stop	Major Road	Cross Street (Approx)	Community
Kenaitze Transportation Center	Mission Ave	Overland Way	Kenai
Denaina Wellness Center	Overland Way	Upland St	Kenai
Kahtnu Early Education Center	Kenai Spur Hwy	S. Forrest Dr	Kenai
Aspen Creek Senior Living	N. Forrest Dr	Elm Ave	Kenai
Redoubt Ave	Kenai Spur Hwy	Redoubt Ave	Kenai
Nikiski Mall	Kenai Spur Hwy	Nikishka Beach Rd	Nikiski
Kenai Shopping Center	Kenai Spur Hwy	Main Street Lp Rd	Kenai
Kenai Airport	N. Willow St	Airport Way	Kenai
Wal-Mart	Marathon Rd	Magic Ave	Kenai
Safeway	Kenai Spur Hwy	Main Street Lp Rd	Kenai
Three Bears, Kenai	Kenai Spur Hwy	Bridge Access Rd	Kenai
Beaver Creek Ridgeway	Kenai Spur Hwy	Togiak St/N. Dogwood Rd	Ridgeway
E. Marydale Ave	Kenai Spur Hwy	E. Marydale Ave	Soldotna
Central Peninsula Hospital	Fireweed St.	W. Marydale Ave	Soldotna
Safeway	Sterling Hwy	S. Binkley St	Soldotna
E. Park Ave	Kenai Spur Hwy	E. Park Ave	Soldotna
Soldotna Creek Park	Sterling Hwy	Birch Pl	Soldotna
Fred Meyer	Sterling Hwy	Devin Dr	Soldotna
Swanson River Rd	Sterling Hwy	Swanson River Rd	Sterling
Kenai Peninsula Food Bank	Kalifornsky Beach Rd	Community College Dr	Kalifornsky
Kalifornsky	Kalifornsky Beach Rd	Poppy Ln	Kalifornsky

Year 2 and Beyond

To improve service along existing routes, continual development of additional stops between the primary timed stops is recommended. To expand service, a third bus could provide a dedicated commuter route between Nikiski and Sterling and effectively reduce headway in Kenai and Soldotna.