COPPER RIVER ACCESS STUDY

Study Background and Proposed Route

Ahtna

NATIONAL PARK SERVICE

U.S. Department of Transportation
Federal Highway Administration

Background

There are over 200 public easements crossing Ahtna, Inc., private lands in accordance with Alaska Native Claims Settlement Act (ANCSA) Section 17(b) to connect to federal lands. These easements are managed by federal land management agencies.

In the area near Glennallen and Gulkana, Alaska, it is not clear what the best route should be to allow public access to the Copper River between its connections with the Tazlina and Gulkana Rivers. Additionally, once users reach the Copper River, it's not clear where to launch their boats, connect with federal lands trails on the other side, or return to the proper 17(b) easement. This project therefore evaluates where to establish a permanent public easement across Ahtna land to the Copper River, what infrastructure is needed to support access, and what long term maintenance costs and responsibilities would be.

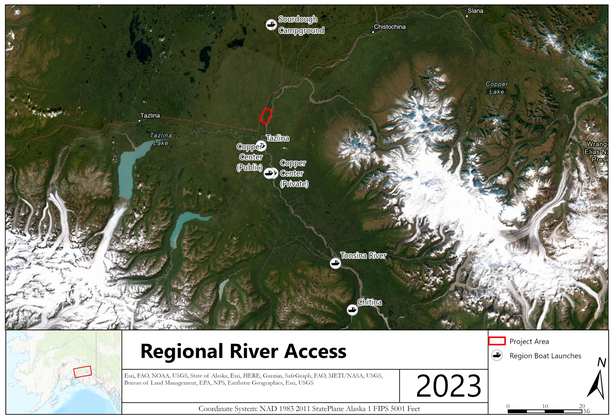
Goals

This project is meant to develop conceptual designs and cost estimates for a gravel or paved roadway connecting the Richardson Highway to the Copper River along with parking and boat launch facilities. The specific project goals are to:

1. Analyze three alternative unpaved routes, one of which will be chosen for public access across Ahtna, Inc. lands to access the Copper River
2. Evaluate feasibility of constructing and maintaining a one-acre parking area and Copper River boat launch
3. Identify a preferred public access route, including estimated construction and maintenance costs, easement needs, and land ownership patterns, cultural and natural resource constraints, recreational and subsistence opportunities

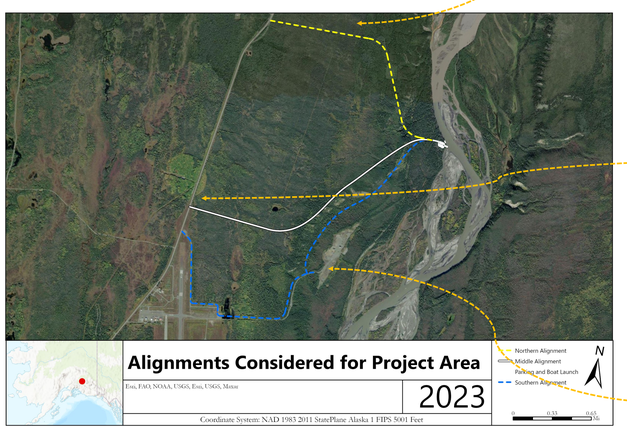
Quick facts about the Route

- **Roadway length**: 2.33 miles
- **Estimated cost**: $16.35M (2023 dollars) for 2.33 mile roadway
- **Recreation connections:** Copper River boating and fishing, access to Wrangell-St. Elias National Park
- **Users**: Bicycle, pedestrians, and recreation vehicles in non-snow months; snowmachines likely for snow months
- **Design considerations**: Provide long-term access to the Copper River, address any maintenance issues.
- **Areas of feedback especially needed:**
  - Use challenges or opportunities
  - Design considerations



The Regional Context and River Access

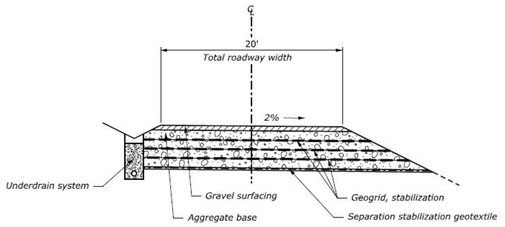
There is currently no direct public boat launch access to the Copper River between Christochina and Chitina. There are public boat launches on tributary rivers, such as the Tazlina, and a private boat launch on the Copper River. This project would address the public boat launch gap.



Road Route

The project team examined three possible routes with additional variations to each for connecting Richardson Highway to the Copper River. While each had strengths and weaknesses, the project team proposes the middle route shown in the map above as it:

- Aligns with the original ANCSA 17(b) easement most closely
- Remains entirely on Ahtna, Inc. lands
- Does not conflict with Alaska Native traditional uses in the area, known cultural sites, the gravel site, or future airport expansion needs



Design cross section of proposed roadway

Road Design

The proposed roadway would be a 20' wide gravel surface. It is designed assuming low traffic volume, use by vehicle pulling boat trailers, and with appropriate materials for drainage and frost needs.

Two images showing current conditions oof the northern route examined

Current conditions accessing the middle route from the Richardson Highway

Two images showing current conditions through the southern route examined, including through the gravel site

Design and Construction Cost Estimates

2022 Estimate								
Route Option	**Length (mi)**	**Construction**	**Contingency (30%)**	**Total Const.**	**PE (15%)**	**CE (10%)**	**CM (10%)**	**Total**
Yellow (N)	1.97	$7.86	$2.36	$10.22	$1.53	$1.02	$1.02	$13.80
White (M)	2.33	$9.32	$2.80	$12.11	$1.82	$1.21	$1.21	$16.35
Blue (S)	1.65	$6.60	$1.98	$8.58	$1.29	$0.86	$0.86	$11.58
2027 Estimate (4% Inflation)								
Yellow (N)	1.97	$9.57	$2.87	$12.44	$1.87	$1.24	$1.24	$16.79
White (M)	2.33	$11.33	$3.40	$14.73	$2.21	$1.47	$1.47	$19.89
Blue (S)	1.65	$8.03	$2.41	$10.44	$1.57	$1.04	$1.04	$14.09
2032 Estimate (4% Inflation)								
Yellow (N)	1.97	$12.33	$3.70	$16.03	$2.40	$1.60	$1.60	$21.63
White (M)	2.33	$14.60	$4.38	$18.98	$2.85	$1.90	$1.90	$25.63
Blue (S)	1.65	$10.34	$3.10	$13.45	$2.02	$1.34	$1.34	$18.15

What feedback do you have? Write it below or use the QR code to visit the project website and add it later!

Scan the QR code to visit the project website, view project documents, and submit feedback through the online comment form.

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Boat Launch: Design and Cost Estimates

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Parking Facility

The project team developed a one-acre parking facility to ensure compliance with ANCSA 17b easement regulations, inclusive of both parking and desired facility amenities. The parking facility will be paved and feature supporting amenities like bathrooms, trash receptacles, and picnic tables.

In order to employ a shorter boat ramp and pull through design, the parking lot is located close to the bank and may require additional fill and retaining walls, depending on the high-water levels.

Key Considerations Include

- One acre site to accommodate a parking lot as shown in the maps to the right.
- The parking lot has a circular pull through access to the boat launch, so that vehicles have a direct path to the ramp and parking stalls without backing in or out.
- Parking can accommodate 16 boat trailer stalls, 12 regular stalls, and two accessible stalls for a total of 30 stalls.
- An area for restroom, trash receptacles, and picnic tables off to the shoulder is also included.
- Locating these amenities off to the shoulder is preferable because it separates pedestrian activities from vehicular traffic and minimizes conflict points.

Parking Facility Design Goals

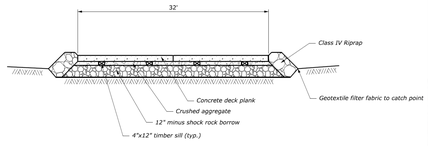
- Up to one acre site
- Including capacity to expand to one acre total
- At point of launch activity per ANCSA 17b requirements
- Long term usability and resilience
- Appropriate materials
- Management
- Prevent unauthorized uses, such as dumping

Boat Launch

The boat launch is designed as a concrete pad with rock material protection ("riprap") that is 32' across to accommodate two boats simultaneously.

Key Considerations Include:

- Survey information and the mean high-water mark (MHWM) will inform the designer how long the jetty and ramp need to extend for successful entry into the water.
- Typical guidelines recommend a ramp between 12% and 15%, with a rock pad at the bottom where water elevation is at least 4' above the rock pad.
- The riprap may use aggregate surfacing while the ramp should be concrete for stabilization and long-term integrity.
- The river experiences strong currents and spring ice breakup and thus it is not recommended to include physical features that extend into the water such as a dock or pier.

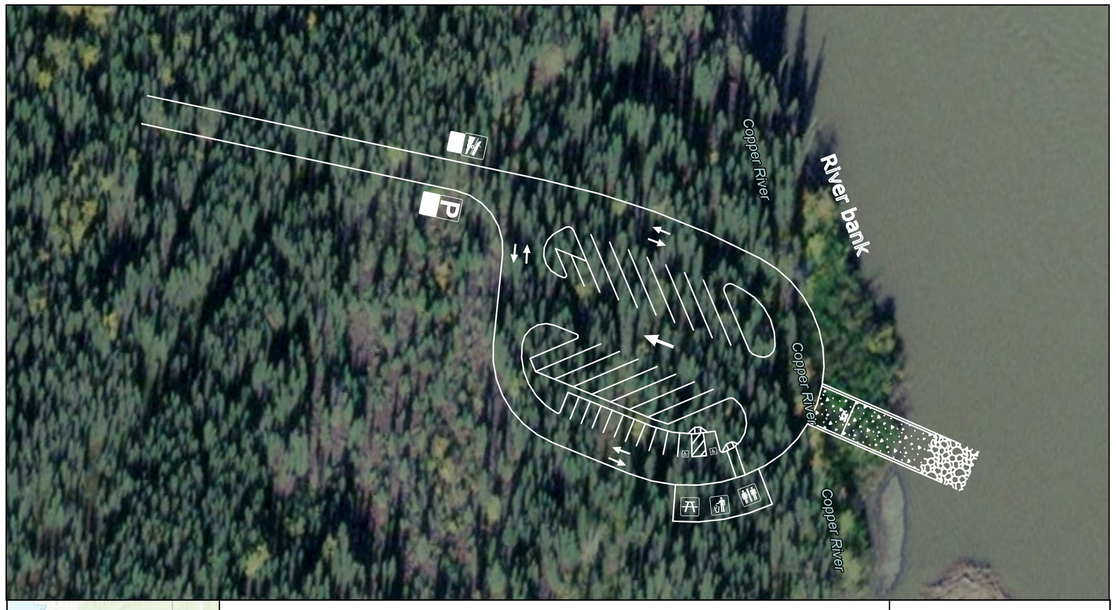


Design cross section of proposed boat launch

Example: Private boat launch in Copper Center with many of the same design features proposed

Boat Launch Design Goals

- Direct access to Copper River
- Maintenance cost
- Long-term use
- Resilience
- Manage silting
- Appropriate Materials
- Management
- Prevent unauthorized uses, such as dumping



Design and Construction Cost Estimates

The average cost for parking facilities in Alaska is $1.5 million per acre in 2022. The cost below include the $1.5 million for the parking area plus the cost of the boat launch. The access route through the parking area is considered a part of the boat launch estimate and not the parking area.

	Area (ac)	Construction	Contingency (30%)	Total Const.	PE (15%)	CE (10%)	CM (10%)	Total
2022 Estimate								
Parking Lot & Boat Ramp	1	$3.25	$0.98	$4.23	$0.63	$0.42	$0.42	$5.70
2027 Estimate (4% Inflation)								
Parking Lot & Boat Ramp	1	$3.96	$1.19	$5.15	$0.77	$0.51	$0.51	$6.95
2032 Estimate (4% Inflation)								
Parking Lot & Boat Ramp	1	$4.70	$1.41	$6.11	$0.92	$0.61	$0.61	$8.25

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