

On-Demand Transit for remote communities



Designing Transit

MARCH, 2025

Nuxalk Nation is a coastal territory in British Columbia, where travel needs span both road and water routes. Existing limited transit requires at least 24 hours notice, and many residents rely on intermittent rides from friends or family.

Community input showed a clear demand for service that fits real life, including same-day booking for trips. A community-run transit service that could improve access to health care, school, and work.

Pantonium gathered community survey input, mapped trip patterns, and tested service designs using operational modeling and software simulations. A three-vehicle transit service simulation showed capacity for 42,000 trips per year with less than 10 minute wait times and 90% of trips shared at a fare cost for riders of \$3 per trip.

The study was structured to support an RTSF application and other funding opportunities, positioning the Nation for a summer 2026 launch with clear vehicle, service, and operating cost expectations before implementation.



Nuxalk Nation, BC
REGION

2,887
POPULATION

38 sq. KM
LAND AREA

STUDY RESULTS

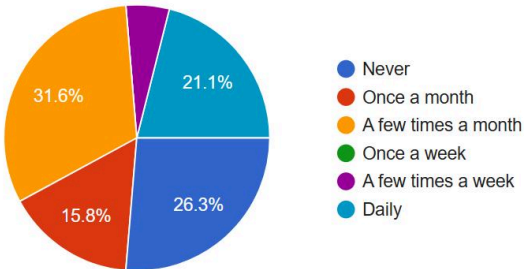
Confirm community needs

- Map routes, stops, and on-demand zones
- Define impacts on health, jobs, culture, and land access
- Survey results and priority trip types
- Determine the right size and types of vehicles for community

Cost-benefit analysis

- Forecast performance (riders/hour, wait time)
- Operating costs, staffing, and shifts
- Fare and revenue scenarios
- Implementation roadmap

If there was a transit option in and around Bella Coola and surrounding areas how often would you use it?



COMMUNITY SURVEY
INFORMED LEADERSHIP OF
RESIDENT NEEDS AND
EXPECTATIONS



Designing Multi-Modal Transit

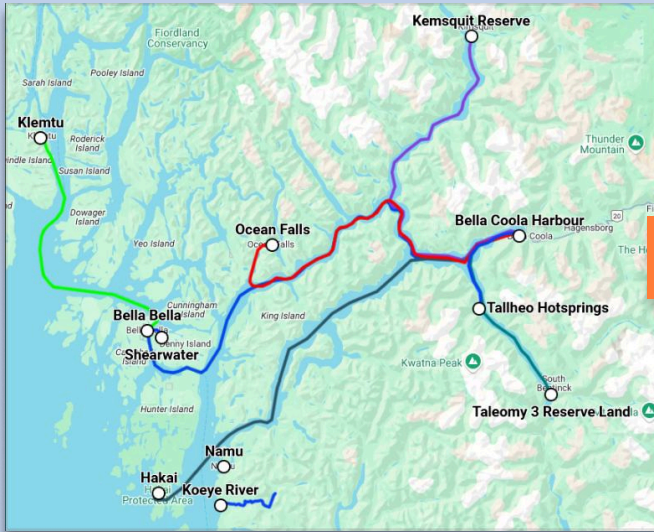
Communities around Bella Coola are spread across long distances by both water and road, with connections reaching over 240 km, covering a region of over 3000 km².

Many routine trips rely on expensive water taxis, and Nuxalk Nation also needs reliable access to remote reserve lands for traditions and land-based activities.

This multi-modal study combines scheduled road service on the main corridor with flexible service for smaller

settlements and special trip needs.

Pantonium modeled routes, schedules, vehicle sizing, and operating rules to reduce travel barriers while staying within a realistic operating plan that supports funding and implementation.



CONNECTING THE WIDER REGION BY ROAD AND WATER



Simulating On-Demand Transit

A feasibility study makes it easier for leadership to choose a transit model that fits local reality. A hybrid approach uses scheduled service where demand is predictable, and book-a-ride service where flexibility matters.

Simulations turn ideas into a low-risk decision. Instead of guessing, you can test options in actual routing software and see the trade-offs in coverage, cost, and service levels. That helps avoid common mistakes like overbuying vehicles, setting unsustainable service hours or launching a service that

people cannot use. For Nuxalk, survey input and local research let Pantonium create and simulate several service designs covering the region's needs prior to launch.

This produced practical designs for the main corridor and water routes, forging a path beyond the current 24-hour booking limits; instead showing a service matching day-to-day needs.

Next step

Book a 30-minute call to confirm your goals, constraints, and funding timeline. You will leave with a recommended study scope, a realistic schedule, and clear next steps.

SIMULATION OF ON-DEMAND SERVICE DETERMINES IDEAL ZONES AND HYBRID OVERLAP

