



2009 | Transportation

Town of Banff

Alberta

Population: 8,700



Roam Public Transit System

Summary

On June 2, 2008, the Town of Banff became the first Canadian municipality to operate a public transit fleet composed only of diesel-electric hybrid buses. Called Roam, the fleet of four Canadian-made buses save the town 14 per cent in monthly fuel costs. The town's strong commitment to environmental sensitivity and sustainability goes further. Instead of selling advertising panels on the buses, Banff partnered with Parks Canada to install panels that promote appreciation and respect for the area's wildlife. Each bus carries up to 84 passengers and is able to accommodate wheelchairs, strollers, bicycles, skis and snowboards. Ridership is up 36 per cent, fossil fuel consumption is down, and 16 new jobs have been created. The town expects the new fleet to reduce traffic congestion, parking problems and car dependency in Banff.

Background

Situated within Banff National Park and a UNESCO World Heritage Site, the Town of Banff recognizes the high environmental expectations held by its 8,700 residents and the three million people who visit annually. Squeezed into a varied mountain topography of less than four square kilometres, the town has suffered in recent years from congested main streets, lack of parking and air pollution. In fact, the only source of air pollution in the town comes from vehicles.

Thanks to the town's 2002 Environmental Stewardship Policy, both staff and politicians have been strongly committed to continually improving environmental performance. The town has also adopted the No Net Negative Environmental Impact (3NEI) commitment pioneered by the Minister of Canadian Heritage and adopted across Canada by Parks Canada.

With its former fleet of four diesel-powered buses adding to the town's pollution and with growing awareness that the aging vehicles needed to be replaced, the town had to decide whether going green was a priority. In 2006, a survey by Banff Family and Community Support Services (FCSS) revealed that affordable transportation was one of four main priorities for town residents. Acting on this knowledge and its environmental stewardship policy, the town decided the time was ripe to transform public transit from "just another service" to an environmentally friendly experience for residents and visitors alike.

Project Development

Aware that they could make an important environmental statement with the town's new fleet of buses, four of Banff's key departments worked together to ensure the bus project would reflect the "big picture" of place, purpose and professional excellence. Staff from several municipal departments, including engineering, marketing and communications, and operations, wanted the project to meet both residents' and visitors' needs and to epitomize best practices in design and delivery.

The cost of hybrid buses was estimated to be almost \$1 million more than their diesel-powered counterparts. In 2007, the town learned that its application for a \$1.2 million grant under the New Deal for Cities and Communities, administered through Alberta Infrastructure and Transportation, had been approved.

Banff's vintage 1980 diesel buses, and their drivers, had been contracted to the town. Now that it was buying new hybrid buses, the town decided the new fleet needed a new garage, built to Leadership in Energy and Environmental Design (LEED) Silver building standards. Funding for that part of the project, approximately \$410,000, came from the Alberta government's New Deal for Public Transit.

Serious planning for the project began in March 2007. The goal was to launch the new fleet by June 2008.

Project Implementation

The town chose Nova Bus, a bus manufacturing company based in Saint-Eustache, Québec (a suburb of Montréal) to build its four diesel–electric buses. Construction of the buses took place in Québec in winter 2008, and the buses arrived in Banff in April 2008.

The town chose to reflect the rugged beauty of Banff's geography in the new buses. In partnership with Parks Canada, the town installed interpretive panels inside each bus. Parks Canada provided design and content for the panels. Each bus features a theme animal on its exterior, with details about that animal included in the interior panels. Each bus was sent to Calgary to be “wrapped” in specially designed colour decals depicting one of four animals common in the Banff area: grizzly bears, elk, goats and wolves.

The town also had to address planning and operational questions regarding the Banff transit system. With visitors from around the globe, the town's new bus system needed to be accessible to everyone, and a cash-only rule for riding the new buses didn't seem like a practical idea.

Partnership thinking led to an innovative way to make the new buses accessible to both residents and visitors. For an annual flat fee, Banff's major hotels buy smartcards from the town. The hotels provide the cards free of charge to employees and make single-fare cards available to guests. This scheme came with an environmental bonus: two hotels retired their shuttle buses from service.

Another innovation was the installation of fare boxes made by a company called Fare Logistics (based in Victoria, B.C.). The boxes accept both Canadian and American money, as well as Roam tokens. When a rider does not have correct change, the fare box dispenses a change receipt that can be redeemed at four downtown locations.

To make riding the bus more attractive to local residents, the town decided to sell a six-month smartcard that offers unlimited rides for \$17.50 a month. A single-trip fare is \$2 for adults and \$1 for children and senior citizens.

The Roam branding for the town's new fleet was based on the idea that people in Banff could “Park” their cars and “Roam” using the bus. To let people know when their fuel-efficient bus would be coming, the town invested in a state-of-the-art tracking system in each bus and 10 LED display signs at different locales in the town. The web-based tracking system allows staff at hotels located along bus routes to monitor the location of buses and determine when they will arrive at the hotels. The town also uses the outdoor LED panels to display other messages, such as details about transit delays and special events.

Brewster Tours, a vacation travel and transportation company with its roots and head office in Banff, was contracted to provide professional bus drivers and daily cleaning services. The drivers received special training in customer service and on Banff's natural and cultural heritage so that they could enhance visitors' experience of riding the bus.

To make sure its new buses would meet the multiple needs of residents and visitors, the town equipped the fleet to handle wheelchairs, strollers, bicycles, skis and snowboards.

Letting people in Banff know about the new buses was the final step in launching the service. In the weeks before the official launch, more than 25,000 brochures were delivered to local residents and businesses. A special package of promotional materials directed at hotel guests was distributed through the Banff Lake Louise Hotel Motel Association. Print and radio ads encouraged residents to use the new bus system, while town councillors and potential sponsors were educated about the new transit system in face-to-face meetings.

The buses were launched on June 2, 2008. Construction of the new maintenance and storage facility began in November 2008. The completion date is set for August 2009.

Results

- Bus ridership has increased by 36 per cent (based on a comparison of the first six months of Roam with the same timeframe in 2007).
- Studies completed by the Greater Vancouver Transit Authority (GVTA) and Natural Resources Canada show that hybrid diesel–electric buses reduce greenhouse gas emissions by approximately 20 per cent, compared to standard diesel buses.
- Monthly fuel savings since Roam's inception have been as much as 14 per cent.

- Roam has created jobs for 14 bus drivers, one mechanic and one customer service agent.
- The launch of the new system received media attention at the provincial and national levels. As a result, interested municipalities have contacted the town with questions about many of Roam's unique features.

Lessons Learned

- **LET PARTNERSHIPS SUPPORT THE SYSTEM.** In some municipalities, transit systems partner with schools, colleges or universities. In Banff, the town partnered with hotels and local attractions. "The good thing about these partnerships is that we have a guaranteed revenue source," says Jason Zimmerman, an engineering technician with the Town of Banff. The town expects to realize 60 to 70 per cent fare recovery thanks to these partnerships, whereas most transit systems only average 30 to 40 percent fare recovery.
- **TEST NEW SYSTEMS.** The real-time information system includes 10 electronic signs located around town that tell riders when their buses are going to arrive. The system is based on a GPS cell phone signal rather than a satellite signal. "We had a chance to really test the system for two months so we could find out which cell phone signal was the strongest and most reliable," says Zimmerman. "It worked really well after the launch...no problems at all."
- **ALLOW TIME FOR TRAINING.** "We had a laundry list of problems when we launched the fare boxes because we hadn't had time to train the drivers and test the fare boxes," says Zimmerman. Once the bus drivers were trained to use them and could solve problems, the fare boxes were an excellent addition to the buses.

Related and Future Initiatives

Roam's fare boxes track ridership in a very detailed way. As a result, the Town of Banff has been able to review and analyze data on ridership to plan for the future. "We'll be launching a 20-minute frequency on major routes in the summer of 2009," says Jason Zimmerman. "On the route to the Sulphur Mountain gondola and the hot springs, we'll be running buses from noon until 9:00 p.m. each day because we know from last summer's statistics that ridership skyrockets from noon until evening."

The town will also be building a new bus-only road into an RV campground, creating a loop that will make it easier for people in this year-round facility to take the bus into town.

Partners and Collaboration

Rimrock Resort Hotel

Banff Gondola

Banff Upper Hot Springs (Parks Canada)

Banff Lodging Company

Hostelling International (HI) Canada

Douglas Fir Resort

All the above partners provide guests and employees with free access to Roam.

Parks Canada provided \$45,000 in writing and design expertise to create the interpretive panels inside each of the new buses.

Contact Information

Jason Zimmerman, Engineering Technician

Town of Banff

Tel: 403-762-1225

E-mail: jason.zimmerman@banff.ca

Website: www.banff.ca/locals-residents/public-transit-buses.htm

Photo Information

Photo Caption: A Roam bus is wrapped in a grizzly bear motif.

Photo Credit: Town of Banff