



NEVADA MUSEUMS & HISTORY

Joe Lombardo | Governor

Dan Thielen | Administrator

NEVADA STATE RAILROAD

MUSEUM, BOULDER CITY

Christopher MacMahon Ph.D. | Director

MUSEUM LOCATION

601 Yucca Street
Boulder City, NV 89005

MAILING ADDRESS

600 Yucca Street
Boulder City, NV 89005

Proposal for Railbike Programming at the Nevada State Railroad Museum Boulder City

Overview

This proposal for a railbike program at the Nevada State Railroad Museum Boulder City, operated solely by the museum, analyzes start-up costs, addresses staffing needs, and outlines possible revenue generating outcomes.

The museum has had multiple third-party vendors who have operated railbike tours, proving the market demand for a railbike operation. However, the museum has faced ongoing difficulties with vendors adhering to the museum’s schedules, programming, property and safety requirements. The museum believes its interests would be better served by operating railbike tours itself.

Self-sustained operations will allow the museum to schedule railbike tours to align with other museum programming, ensure the highest levels of safety standards are in place, and comply with all regulations while exposing guests to educational information presently lacking.

Demand

Available rider data from previous years confirms a strong demand for a railbike program at the museum, and that the demand is seasonal.

2022 Railbike Rider Snapshot

JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	NOV
1042	2139	4481	5509	4680	2516	2696	1512	1412	3047

These numbers reflect potential railbike tours as high as eight tours per day in peak seasons.

Start-Up Costs

The most significant challenge to the museum starting its own railbike program is acquiring the funds to begin the operation. There are four areas of cost associated with this endeavor: acquiring bikes, upgrading bikes, infrastructure, and staffing.

Railbikes

The first cost the museum would incur would be the purchase of the railbikes themselves. Negotiations with the current railbike vendor has resulted in the opportunity to purchase their railbikes for \$119,000.

This proposal recommends purchasing a total of 15 bikes. This allows for 10 guest bikes, a lead guide bike, a rear guide bike, and three bikes rotated out for routine maintenance.

Total purchase costs: \$119,000

Bike Upgrades

The bikes themselves are basic design and upgrades are recommended to improve safety.

Total upgrade costs: \$14,000

Infrastructure

The museum can rely on some infrastructure already in place (ticket office and/or gift shop) and existing restroom facilities. Two areas would require additional upgrades.

First, the museum would need to create a picnic area at Railroad Pass for guests to wait while the bikes are prepared for the return journey. The museum recommends purchasing Adirondack chairs and picnic tables. The museum recommends 5 picnic tables at an average cost of \$350 each, \$1,750 total; and 20 chairs at an estimated cost of \$200 each, \$4,000 total. Given the remote location, solar lighting should be installed along with a solar powered security camera at an estimate of \$500. The total cost for the end-of-line picnic area is estimated at \$6,250. Additional site upgrades could be installed with revenues generated from the program. If the museum intends to use this end of track long term, the installation of a vault toilet or restroom is recommended.

Second, the museum would need to create a work area for maintenance of the bikes. The museum proposes purchasing a prefabricated, solar-powered wooden shed at the east end of the existing platform, adjacent to the south display track. Snap track would be built into the shed allowing the bikes to be taken off the display track and rolled into the shed for maintenance. The estimated cost of the shed, equipment and solar panels is \$6,000.

A battery storage and charging station will need to be constructed to store and charge the batteries for the electric motors on the bikes. The charging station needs to be in an area that presently has power yet self-contained to avoid spread of fire should a battery spontaneously ignite. Cost depends on the dimensions of the battery chargers and energy needs, which cannot be determined until a product is selected. The museum recommends reserving \$5000 for this need; this estimate is intentionally inflated to incorporate present unknowns.

Staffing

The program requires one receptionist to book tours, assist guests with questions, complete waivers, and check in for their tour; one maintenance person to repair and maintain the bikes; and three guides per tour. Guides and receptionists could cross-train and rotate responsibilities if needed. Additional staff positions are needed to ensure a rotation of regular days off.

Short Term

The museum proposes hiring six seasonal positions that would work 36-hour weeks through a Manpower contract. Six positions allow for a rotating work schedule that accounts for days off.

	Base Pay	Manpower Fee	TOTAL
<i>Hourly</i>	\$21.00/hour/	\$5.00	\$26.00
<i>Weekly</i>	\$756	\$180	\$936.00
<i>Monthly</i>	\$3,024	\$720	\$3,744.00
<i>Six Employees</i>	\$18,144	\$4,320	\$22,464.00

A part-time maintenance person would be required to maintain the bikes and could be contracted through Manpower if needed short-term. The museum recommends hiring a Railroad Restoration Specialist I, who would maintain bikes part time while focusing on routine railroad maintenance and restoration projects the remainder of their time (see *Long Term*).

Total Start-Up Costs

Bikes	Upgrades	Infrastructure	Staffing	TOTAL
\$119,000	\$14,000	\$9,500*	\$18,720**	\$ 161,220

* Remaining costs will be incurred based on revenue generated.

** First month of staffing will be at a reduced level – 5 contract staff (1 manager + 4 guides) - \$18,720

Funding Requests

BA 5037 Nevada State Railroad Museums, Category 48, Board Approved Special Projects

Boulder City \$56,628

Carson City \$104,592*

*Repayment of investment will be based on actual net program profits.

Long Term

The museum proposes transitioning two Manpower positions to two full-time Museum Attendant I positions at earliest opportunity. These individuals would support museum programming year-round and fill a critical need welcoming and engaging with guests at the museum pavilion during weekdays. In addition to receptionist duties for the railbikes, this staff would also answer the museum mainline phone, interact with visitors to the museum, and answer guest questions. These individuals would also assist in excursion train ticket sales.

Position	Grade	Monthly	Annual
Museum Attendant I	21	\$2,747.46	\$32,969.52
Restoration Specialist I	27	\$3,469.56	\$41,634.72
Seasonal Manpower Staff x 4	-	\$12,000	\$144,000
Total	-	\$20,964.48	\$251,573.76

The above chart shows annual costs for 12 months of operation. Manpower costs may be reduced through seasonal operation.

While full-time positions could be staffed via private funds transferred through revenues generated, the museum strongly discourages this practice. The Railroad Restoration Specialist I position should not be connected to the private funds, but we also recognize it may be the only way to meet staffing needs. The option is listed here for an analysis of the associated costs while also addressing ongoing museum programs and needs. The above costs do not include the cost of a benefits package which would raise expenses. Staffing via Manpower may also be a long-term possibility.

Operating Plan

The museum will include educational information as part of our railbike programming, emphasizing the historic Boulder Branch Line which guests will traverse on their tour. Informational sessions will be included at the start of the tour, along with the safety briefing, and additional historical information will be presented during the turnaround at Railroad Pass.

The museum proposes running the railbike program seasonally with ridership data showing declines in winter and summer. Operations in July and August are untenable due to heat concerns.

Winters are generally mild in southern Nevada and offer some flexibility in operations. The museum's excursion trains are busiest during the month between the Thanksgiving and Christmas holidays, and priority should be given to these existing programs with well-established customer bases. If the museum were to run railbikes in the month of December, it should do so on weekdays only. The museum traditionally takes a two-week maintenance break following Christmas which could make railbikes the primary attraction for the New Year holiday if winter operations are pursued.

Alternate approaches include a 10-month operating schedule, September through June, or a seasonal schedule with either a December-January pause, or just January along with July and August.

The museum proposes charging \$90 for a two-person bike, or \$170 for a four-person bike. These rates match those by previous vendors and demonstrates the market will bear the rates. If a six-seat bike is possible, the museum proposes a rate of \$250.

The following charts track possible revenue projections based on the \$90 per bike fee.

Weekly Revenue Projections

Capacity	Single Tour	4 Tours Daily	5-day Week	7-day Week
30%	\$270	\$1,080	\$5,400	\$7,560
50%	\$450	\$1,800	\$9,000	\$12,600
80%	\$630	\$2,500	\$12,600	\$17,640
100%	\$900	\$3,600	\$18,000	\$25,200

Annual Revenue Projections (5 Day Operations)

Capacity	Monthly	8 Months	9 Months	10 Months
30%	\$21,600	\$172,800	\$194,400	\$216,000
50%	\$36,000	\$288,000	\$324,000	\$360,000
80%	\$50,400	\$403,200	\$453,600	\$504,000
100%	\$72,000	\$576,000	\$648,000	\$720,000

Annual Revenue Projections (7 Day Operations)

Capacity	Monthly	8 Months	9 Months	10 Months
30%	\$30,240	\$241,920	\$272,160	\$302,400
50%	\$50,400	\$403,200	\$453,600	\$504,000
80%	\$70,560	\$564,480	\$635,040	\$705,600
100%	\$100,800	\$806,400	\$907,200	\$1,008,000

Monthly Revenue Less Expenses

Capacity	Monthly Income	Misc Expenses	Staffing (FTE)	Total
5 Day Ops	\$72,000	\$500	\$20,964.48	\$50,535.52
7 Day Ops	\$100,800	\$500	\$20,964.48	\$79,335.52

Capacity	Monthly Income	Misc Expenses	Staffing (Temp)	Total
5 Day Ops	\$72,000	\$500	\$18,000	\$53,500
7 Day Ops	\$100,800	\$500	\$18,000	\$82,300

Annual Revenue Less Expenses (10 month)

Capacity	Annual Income	Misc Expenses	Staffing (FTE)	Total
5 Day Ops	\$720,000	\$5,000	\$251,573.76	\$463,426.76
7 Day Ops	\$1,008,000	\$5,000	\$251,573.76	\$823,426.24

Capacity	Annual Income	Misc Expenses	Staffing (Temp)	Total
5 Day Ops	\$720,000	\$5,000	\$180,000	\$535,000
7 Day Ops	\$1,008,000	\$5,000	\$180,000	\$823,000

Summary

If initial funding is obtained, this program would provide an opportunity for daily programming and complement other outdoor recreation in the Boulder City area, operating in conjunction with the proposed Adventure Center. Keeping the program within the museum allows educational programming as part of its mission, ensuring the railbike employees adhere to the museum’s high safety standards, and allows the museum greater control over scheduling to maximize attendance where possible. Even operating at half capacity, the program would generate enough revenue to pay for itself.

A railbike program compliments the museum’s mission of interpreting Nevada’s railroad history and culture for all who visit and reaches an audience who would not normally visit a railroad museum. Revenues generated from a railbike program can be reinvested in the museum to expand our programming, preserve artifacts in our care, and undertake future restoration projects. I believe managing a railbike operation is in the museum and State of Nevada’s best interest and should be pursued without delay once funding is secured.

Respectfully Submitted,



Christopher MacMahon, Ph.D.
 Museum Director
 Nevada State Railroad Museum Boulder City