

SAGEBRUSH HEADLIGHT

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THE NEVADA STATE RAILROAD MUSEUM
An Agency of the Division of Museums and History
Nevada Department of Cultural Affairs

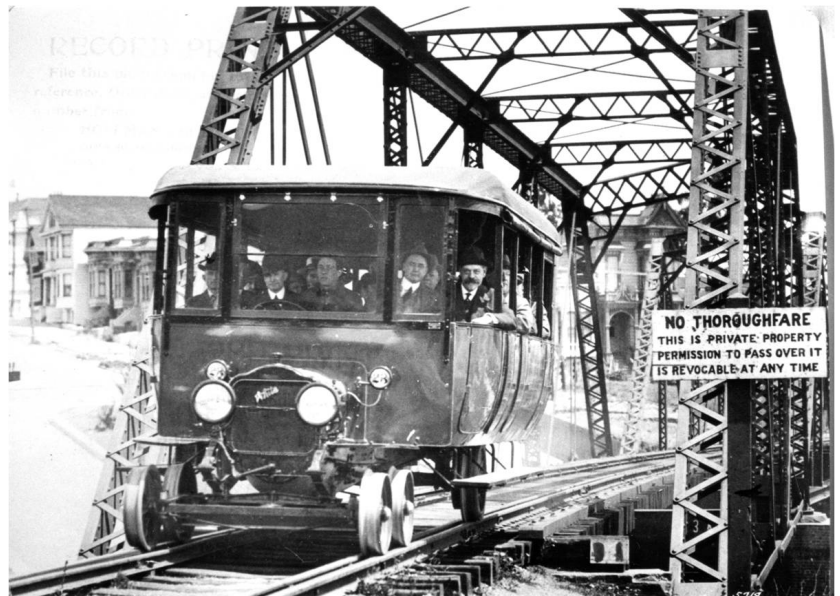
Winter 2010

Self-Propelled Passenger Cars in Nevada: Part I

Stephen E. Drew, Chief Curator (retired) California State Railroad Museum

The self-propelled passenger car was the savior of 20th-Century railroad branches and short lines, especially in Nevada. In place of a full-crew steam train carrying LCL freight, passengers, baggage, mail and express, a motor car combined these into one economical vehicle operated by a crew of one or two—and could pull a passenger coach or a couple of freight cars besides.

Self-propelled passenger cars kept low-volume rail lines in operation, forestalling further service reductions or eventual abandonment. This three-part series takes a look at 28 passenger motor cars on ten Nevada railroads, emphasizing the state's short lines and the surviving passenger motor-car collection at the Nevada State Railroad Museum.



Nevada Copper Belt Railroad

The name Fairbanks, Morse & Company of Chicago is synonymous with precision-built platform scales, hand presses, coffee grinders, water tanks, farm machinery, and car wheels. After acquiring the Sheffield Velocipede Car Company of Three Rivers, Michigan, F-M expanded into the burgeoning field of gasoline-engine track cars. Self-propelled passenger cars followed, with the Type 19 open car, the larger Type 23, and, in 1909, the Type 24 with wood carbody by J.G. Brill or G.C. Kuhlman. About 65 four-wheel, 50-horsepower cars had been sold when production ended in 1916.

In 1909, the Copper Belt purchased its first gasoline motor car, a Model 24 F-M, for \$8,055. As NCB No. 20, this car (*right*) operated on the relatively flat 23.7 miles between Mason and Wabuska. The 34-foot, 12½-ton car seated 36 passengers. It operated daily until the volume of traffic exceeded its capacity and two larger cars were purchased.



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NEVADA STATE RAILROADMUSEUM

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www.nevadaculture.org

Open 8:30 to 4:30 Fridays through
Mondays except Dec. 25 and Jan. 1
Admission: Adult \$4, Senior \$3
Children under 18 and members of
the Friends of the Nevada State
Railroad Museum are admitted FREE



The museum is an agency of the
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**Submissions for the Spring Sagebrush Headlight
must arrive at the editor's desk by Monday, March 1, 2010.**



October 15, 2009—With NSRM Restoration Shop Supervisor Chris de Witt at the controls, restored V&T McKeen car No. 22 moved under its own power for the first time since its retirement by the railroad in 1945. Restoration Specialists Lee Hobold (*left*) and Rick Stiver stand beside the pilot. Restoration has included reconstruction of missing elements including both trucks. The car is now powered by a 215 horsepower Caterpillar 3208 engine donated to NSRM by Dave Kloke, President of Kloke Construction in Elgin, Illinois. Work continues as the car's May 9, 2010 centennial approaches. The next major task is the fifteen reproduction interior lamps, expected January 4, which NSRM staff will finish-coat, install and wire.



Conductor's desk inside Western Pacific caboose No. 657, donated to NSRM by Ponderosa Ranch Stables, Incline Village, Nevada. The caboose has been moved to the museum, where it awaits exterior painting, roof repairs, minor interior repairs and cleaning before being opened to the public.

The railroads of northern Nevada enabled settlement and the rapid, profitable exploitation of resources in a hostile environment.

PRESIDENT'S MESSAGE

As of this month I retire from the Board of Trustees of the Friends of the Nevada State Railroad Museum. Friends by-laws require board members to sit out for at least a year after serving three terms. I thank the members for their support, suggestions, and yes, criticism, during my nine years on the board. These years have reinforced the need to practice saving for a "rainy day." As a nation we've gone from fiscal feast to famine. Nowhere is this more evident than in the State budget cuts that have reduced funding and staffing at NSRM.

Current financial conditions highlight the value of support organizations like the Friends of the Nevada State Railroad Museum. Thanks to your membership and volunteer efforts we continue to offer valuable assistance with the projects and activities of the museum. Understandably, our membership has decreased somewhat. We are asking friends, neighbors and museum visitors to consider the benefits of joining the Friends. Membership makes a great gift for Christmas, birthdays or other special occasions.

If you live nearby, please consider volunteering at the museum. Your participation will offer rewards to the museum and to you. Through the generosity of Ponderosa Ranch Stables at Incline Village the museum acquired a Western Pacific Railroad caboose (*Photo, Page 2, bottom*) built during World War II. The interior of the caboose is just as it was in railroad service, including mattresses on the bunks. Before the caboose can be opened to the public it will need painting and roof repairs – projects that are to be done by volunteers. When completed, this artifact will interpret what life was like for a train crew on the road. If you'd like to lend a hand on this project or any of the other opportunities for volunteering, please contact Museum Attendant Lara Mather at 687-6953 x233, or email LMather@nevadaculture.org.

Please involve yourself as much as you can during the coming year and continue to offer your input and support to the board. The Friends of the Nevada State Railroad Museum is a great organization that now more than ever is needed to support the museum in its mission to preserve and interpret the rich history of Nevada's railroads.

On behalf of the Board of Trustees I wish everyone a joyous and prosperous New Year.

—Bill Kohler

Spotlight on Jan Joslin

Jan Joslin, a volunteer in the museum store since 1995, has just returned from spending a month in Uganda, Africa. She lived in a guest house in Bwindi Impenetrable Forest, one of the last places to see Gorillas. This part of Uganda has been developed for tourism. The indigenous pygmy people are being moved from their traditional areas throughout the forest and taught farming and animal husbandry.

Jan stayed at a hospital compound created in 2000 by a doctor from the Rotary Club of Nevada City, California. The hospital was developed to help the indigenous people transition into this developing nation. Each day was a new adventure for Jan. She tracked gorillas, herded goats, and toured new schools.

Jan also was able to tour the city of Dubai, the layover stop on the way to Africa. She is happy to be home but says she will never forget the wonderful people of Uganda.

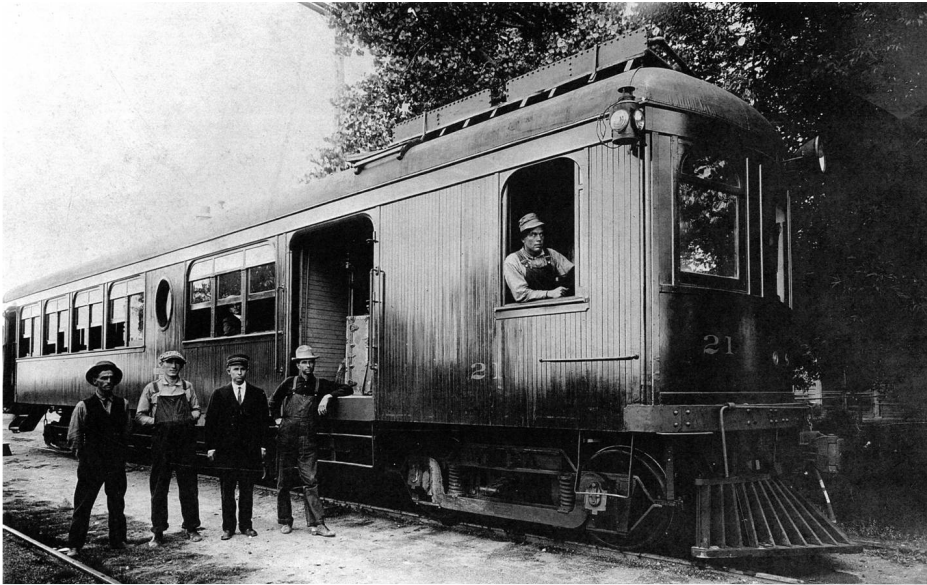
—Lara Mather



Continued from Page 1

Stored in the enginehouse at Mason, No. 20 was destroyed in a disastrous November 1916 fire along with 1891 Baldwin ten-wheeler No. 1.

Two motor cars built by the Hall-Scott Motor Car Co. of West Berkeley, Calif., came to Nevada. Both were owned by the Copper Belt. Hall-Scott had been building motor cars for two years when the NCB placed an order for its No. 21 (*below*).



Completed in November 1911 as H-S construction number five, the car had engine, baggage, smoking, and general passenger compartments. The wooden carbody was built by the Holman Car Co. of San Francisco to Hall-Scott specifications. J. G. Brill Co. of Philadelphia manufactured the trucks. The car's six-cylinder Hall-Scott M-6 gasoline engine, with transmission on the rear truck, developed 150 horsepower at 600 rpm. The 54-foot, 36-ton car cost \$14,635 f.o.b. Hall-Scott's shops. It made the 337-mile trip from West Berkeley to Mason largely under its own power. Seating capacity of 69 was figured at *three* friendly passengers per seat on extra-long car seats, with an 18½-inch center aisle. The car entered revenue service December 1, 1911.

The Orem family of Salt Lake City were major NCB stockholders. Their Salt Lake & Utah Railroad was incorporated in October 1912. Following the success of NCB No. 21, the Orem family ordered three new Hall-Scott motor cars that were to be the SL&U's primary motive power and passenger equipment until the line electrified in July 1914. SL&U combination baggage-smoker-passenger car No. 503, completed in January 1914, was the first of the three identical cars to depart the Utah interurban line after electrification. The car was sold to NCB late in 1915. Repainted on the SL&U to

mineral red, lettered as NCB No. 22 and varnished, the 40-ton all-steel car (*right*) entered NCB service in February 1916.

NCB No. 22 bore Hall-Scott construction No. 13 and had a six-cylinder, 150 horsepower H-S engine, nearly identical to that in No. 21. The 60-foot, H-S riveted-steel carbody seated 56 passengers.

The H-S cars saw consistent use right up to the final years of the NCB. They pulled a boxcar or two over the relatively flat terrain between Wabuska and Mason when traffic and scheduling warranted.

Near the short-line's end in 1947, NCB crews seemed to favor more-modern steel car No. 22. When Bay Area railroad enthusiasts chartered No. 22 for a sentimental photo trip over the line in October 1946, they were offered No. 21 and promptly purchased it. Restored, the car was presented in 1990 to the California State Railroad Museum, where, on occasion, it operates. No. 21 is believed to be the oldest operating passenger motor-car in North America with its original engine.

No. 22 had a less-glamorous end. When scrappers removed its trucks, engine, and seats in 1947, the carbody remained in Nevada, eventually becoming part of a plumbing-and-heating shop in Carson City. It came to the Nevada State Railroad Museum in 1996. NCB No. 22 was the subject of a 2008 restoration feasibility study commissioned by the Museum. Of 23 gasoline motor cars built by Hall-Scott between 1909 and 1921, NCB No. 22 is the only steel-shelled H-S motor car to survive.

Virginia & Truckee Railway

Like the NCB, the nearby Virginia & Truckee Railway also had three gasoline motor-cars: one of two McKeen cars owned by short lines in the state and two much-smaller White Company trucks with wooden carbodies. Between the two Whites came an interesting Ford touring car.

The dapper William R. McKeen, Jr. was the designer and aggressive salesman of his innovative steel gasoline motor cars. In his role as Superintendent of Motive Power and Machinery for the Union Pacific Railroad at Omaha, Nebraska, McKeen launched his first streamlined motor car in March 1905. The McKeen Motor Car Company opened in August 1908. The lightweight steel carbodies featured a



distinctive styling: wind-splitter nose, rounded rear, and porthole-style windows. The gasoline engine pivoted with the forward truck. The cars were popular on branch lines throughout North America and as far away as Australia. In 15 years McKeen produced 160 motor cars, many trailers, several experimental locomotives, and a fleet of lightweight steel freight cars.

Virginia & Truckee's McKeen car became probably the longest running McKeen with its original six-cylinder engine. The 70-foot, 34-ton steel car (*Photo, Page 2*) had an 84-passenger capacity and was intended for service on the new 15.2 mile branch to Minden. With its purchase price of \$22,000 and "modern" gasoline engine, the car was viewed as an economical two-man alternative to a full-crew steam train. Arriving at Carson City on May 9, 1910, it entered service between Carson City and Minden, and soon north to Reno. Often the car hauled a freight car or V&T's small express-mail car. In 1932 the railway would modify the McKeen car itself for passenger, Railway Post Office, and express service.

For eight years in the 1920s, longtime V&T engineer Grover C. Russell was the McKeen's primary motorman. He said the car, which he called "The Big Red Devil," was popular with passengers in its early years but that you had to be a machinist to operate it. Russell blamed his hearing loss on being the McKeen's operator in its very-resonant steel engine room.

After the McKeen Company closed in 1920, Union Pacific continued to supply replacement parts. By 1945 spare parts had not been available from McKeen or UP for seventeen years and V&T's car had the last operating McKeen engine in North

America. The car's last run occurred on a rainy Nevada Day in October 1945. The car had accumulated a remarkable 539,800 miles in its three-and-a-half decades of service. The V&T scrapped the engine, trucks and interior furnishings and sold the carbody for \$1,000 for use as a diner in Carson City. Upon the 1946 sale of the carbody, V&T Master Mechanic Arnold Lee Gillie wrote in his shop notebook about the well-used motor car "Made a restaurant out of it. Ought had been sold 30 yr. ago."

By 1962 the McKeen and the carbody of NCB car No. 22 were incorporated into the Al's Plumbing & Heating shop on Carson Street. In April 1996, the two were trucked to the Nevada State Railroad Museum. A restoration feasibility investigation completed in August 1997 kicked off what became the finest restored and only operating McKeen car in North America if not the world.

The V&T's second motor car (*Photo, Page 1, top*) was ordered from The White Company of Cleveland, Ohio. White manufactured sewing machines, roller skates, bicycles, lathes, and phonographs before entering the truck and internal-combustion-engine business. V&T gasoline motor car No. 23 had a body made by White subcontractor Thomson-Graf-Elder of San Francisco. The 25-passenger, wood-and-metal open bus body was mounted on a White Model GTB chassis. With a four-cylinder engine that developed 30 horsepower, the 16-foot car weighed two tons and cost \$3,040. V&T Vice President Alexander M. Ardery acquired the car "to take the place of the motor car [No. 22] when required for small crowds." After road testing by White on Southern Pacific track in San Francisco, V&T No. 23 arrived at Carson City on a flat car in July 1917 and was immediately placed in service.

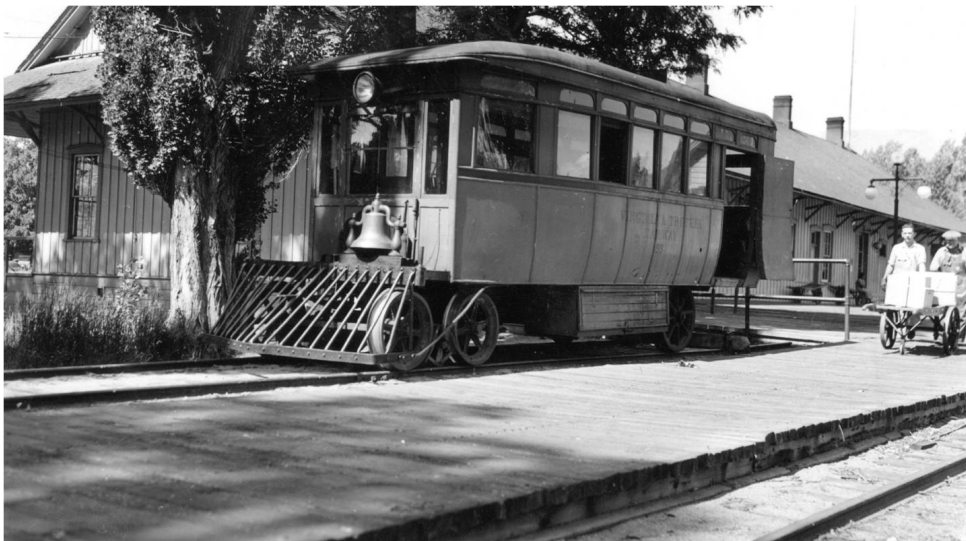
The July 23, 1917 trip to Minden and Virginia City by the new motor car (nicknamed *Canary* for its bright-yellow finish) was documented by a short clip of nitrate motion-picture footage that still exists. The car saw use on all 67 miles of the V&T. It was converted for mail-express-baggage service in 1929, with its passenger capacity reduced to eight.

Next on the V&T motor-car roster came No. 24, a five-seat, four-door, four-cylinder 1923 Ford Model T touring car used for track inspections. The V&T

converted the \$302 rubber-tired, green-and-yellow automobile for rail service (*below*) by means of a \$145 kit from the Kalamazoo Railway Supply Company of Kalamazoo, Michigan. Unfortunately the car's operating career was limited to three years. After colliding with a truck near Browns station, it was retired January 10, 1927.



V&T's last passenger motor car No. 99 (*below*), was a 1921 White Co. product with a Thomson-Graf-Elder enclosed bus-body. The two-ton car seated 22 and produced 47½ horsepower.



Built in 1921 for \$8,150 as Tonopah & Goldfield Railroad No. 99, the car came to the V&T in 1926 with 14,000 miles on its odometer—for \$3,400. V&T re-lettered the car, but retained its T&G number. Like the *Canary*, which it augmented, No. 99 operated anywhere on the V&T that traffic warranted. Its light weight and single operator made it economical to operate compared with a two-man crew on the much-larger McKeen. In 1932 the V&T

converted the motor car for passenger-mail-express service. Soon in yellow-and-orange livery, No. 99 held down the Carson City-Virginia City assignment. The car racked up 80,955 miles on the V&T.

McKeen car No. 22 and mixed trains handled the Reno-Carson City-Minden traffic, and the *Canary* was not needed after the June 1938 closing of the 21-mile Carson City-Virginia City line. Stored in the Carson City enginehouse, Nos. 23 and 99 were retired in December 1941. No. 23 succumbed to World War II scrap drives and no pieces survive. Although No. 99's engine and seats were scrapped, its chassis became a V&T maintenance-of-way trailer. About 1949 it too was scrapped. No. 99's locally sold body was rediscovered in the 1960s in a shed in Virginia City. It sat in Sparks for more than a decade before coming to the Nevada State Railroad Museum.

The museum commissioned a restoration feasibility assessment in 1982 and purchased several White chassis. Restoration prospects looked bright until an April 1985 wind storm demolished the carbody, leaving only a few fragments.

Photo credits: Page 1, top—V&T Car No. 23 being tested on Southern Pacific track at Dolores Street, San Francisco; July 15, 1917. White Co. Photograph. Page 1, bottom—Postcard photograph courtesy of Robert Greenwood. Page 4—California State Railroad Museum, courtesy of George Childs. Page 5—NCB Car No. 22 in Wilson Canyon, Oct. 12, 1946. Wilbur C. Whitaker Photograph. Page 6, top—Nevada Historical Society photographic collection. Page 6, bottom—V&T No. 99 at Carson City waiting to depart for Minden; June 6, 1938. David J. Welch Photograph.

This article is adapted from the author's presentation of October 17, 2009, at the 38th Annual Nevada Railroad History Symposium in Carson City. Future parts of this article will

describe cars of the Death Valley, Eureka-Nevada, N-C-O, Nevada Central, Nevada Short Line, Silver Peak, Tonopah & Goldfield, and Tonopah & Tidewater railroads.

The author acknowledges the generous assistance of Kyle K. Wyatt, and staff of the California State Railroad Museum Library, especially Cara Randall and Kathryn Santos.

SELECTIONS FROM THE MUSEUM STORE *The store specializes in railroad books for adults and children, Nevada history books, train video and audio recordings, toys, train models, hats and apparel, railroad pins and jewelry, train novelties and souvenirs, note cards, artwork and calendars. We encourage you to visit the store in person. For those of you won't have the opportunity to visit soon, the merchandise selections below, along with many others, are available by mail-order. Proceeds from sales are used by the Nevada State Railroad Museum to fund a variety of museum projects and public interpretive programs.*

To learn more about the fascinating history of the McKeen Motor Car and other self-propelled cars in Nevada, we recommend these reports available from the museum store:

Item #101233. **Restoration Feasibility Investigation—V&T Rwy. McKeen Motor Car No. 22.**
(Drew, August 1997) 124 pages, comb bound. \$19.95.

Item #146006. **Restoration Feasibility Assessment—Nevada Copper Belt Railroad Hall-Scott Motor Car No. 22..** (Drew & Wyatt, November 2008) 134 pages, wire bound. \$19.95.

End of the season – Winter Book Sale!

Now is a great time to curl up with a good book. Take advantage of these great savings!

<u>Item #</u>	<u>Title</u>	<u>Author</u>	<u>Price</u>	<u>Sale Price</u>
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102823	Pacific Coast Railway	Best	49.95	40.00
100426	Milwaukee Road E, F, & FP Diesels	Strauss	59.95	48.00
101350	Union Pacific Vol. One	Klein	24.95	20.00
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100214	Cajon: Rail Passage to the Pacific	Walker	60.00	48.00
101079	RRs of Arizona Vol. Five: AT&SF/Phoenix	Myrick	65.00	52.00
100461	Nevada Ghost Towns Atlas Vol. One & Two	Paher	32.50	26.00
102817	Boomtown Saloons (Virginia City)	Dixon	34.95	28.00
102348	Saddles and Spurs (Pony Express)	Settle	14.95	12.00
100706	Home on the Rails (Women in the West)	Richter	19.95	16.00

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UPCOMING EVENTS

Monday Evening Programs

- | | | |
|------------|--|-------------------------------|
| January 18 | <i>Western Pacific Centennial-Part II</i> | Presented by Dick Dorn |
| | Please note that <u>this is the <i>THIRD Wednesday in January!</i></u> | |
| February 8 | <i>Railroad Rhythms</i> | Presented by The Little Toots |
| March 8 | <i>Postcards from the Past</i> | Presented by Bill Kohler |
| | Transportation Images of the Past from the Bear Postcard Co. Archives | |

Evening programs are held at the Museum's Interpretive Center on the second Monday of each month except as noted. Programs begin at 7:00 PM (or as noted). Regular Museum admission charges apply.