



MOTOR BUS DIVISION

WARREN BISBEE BUS LINE #8

24 passenger, 1938 Yellow coach Model 1204, Serial 234

The late 1920's through the 1930's was a time of great transition in the development of transit buses. Originally all buses were built on a truck chassis in the conventional style with a hood out front. As purpose built buses began to appear, manufacturers experimented with the placement of the engine, trying both mid-bus and engine-forward with the body built over the engine. Both provided more inside room, but the engine next to the driver was too hot and noisy to endure all day long, especially during summer months. Thus, once an angle drive was perfected, the engines typically were moved to the rear where they have stayed in most transit buses ever since. In June 1936, Yellow Coach (owned by General Motors) introduced the Model 733, a 21-passenger, front-engine bus.



Tucson Rapid Transit photo

Tucson Rapid Transit Company's four Yellow Coach Model 733's c. 1938. Note entrance door behind front axle.

Although Yellow continued to sell 733's, two years later, in July 1938, they introduced the 24-passenger rear-engine Model 1204. It had essentially the same body as the 733 with the entrance door moved forward and the front axle moved back.

What we know today as the City of Bisbee, was originally a number of separate, small towns. The two largest, Warren and Bisbee, were about 5 miles apart. For 20 years starting in 1908 the Warren-Bisbee Railway served the area.

Warren Bisbee Railway car 102 proceeds down Main Street

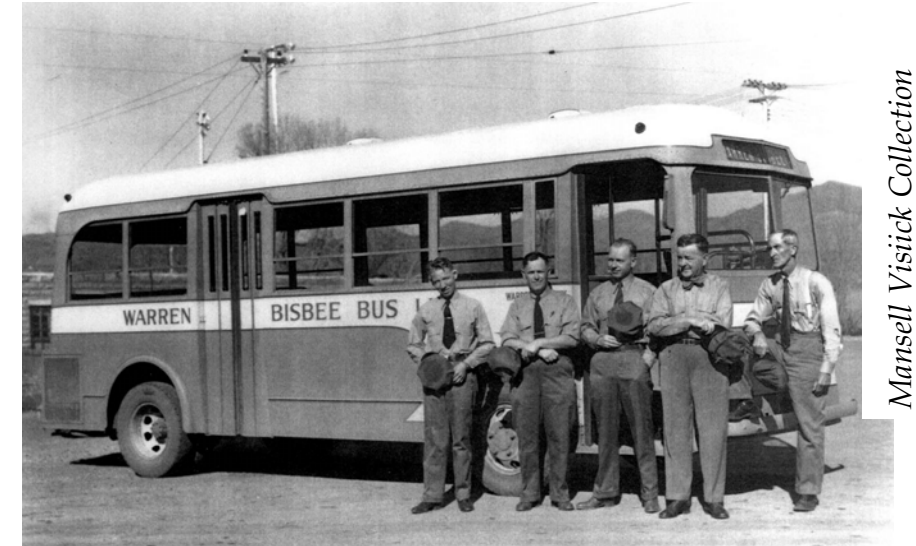


Arizona Historical Society



On June 1, 1928, the company name was changed to the Warren Bisbee Bus Line when two 40-passenger Twin Coaches (#1-2) and four 21-passenger Studebaker buses (#3-6) were substituted for the streetcars. Ten years later the Studebakers were replaced by two 24-passenger model 1204 Yellow Coaches (#7-8).

Warren Bisbee Bus Line #7 & 8 new at the factory in Pontiac, Michigan (left).



The driver's pose in front of a Yellow Coach in their forest green uniforms (right).

They served through World War II. Their aluminum bodies made them light-weight, thus fuel efficient, while their standard Chevrolet 216 engines made them very reliable. They stood up well throughout the stress of dramatically increased ridership during the war.

Bus #8 winds its way down Tombstone Canyon in 1950 (right) and one of the Yellow Coaches proceeds up Main Street (left)



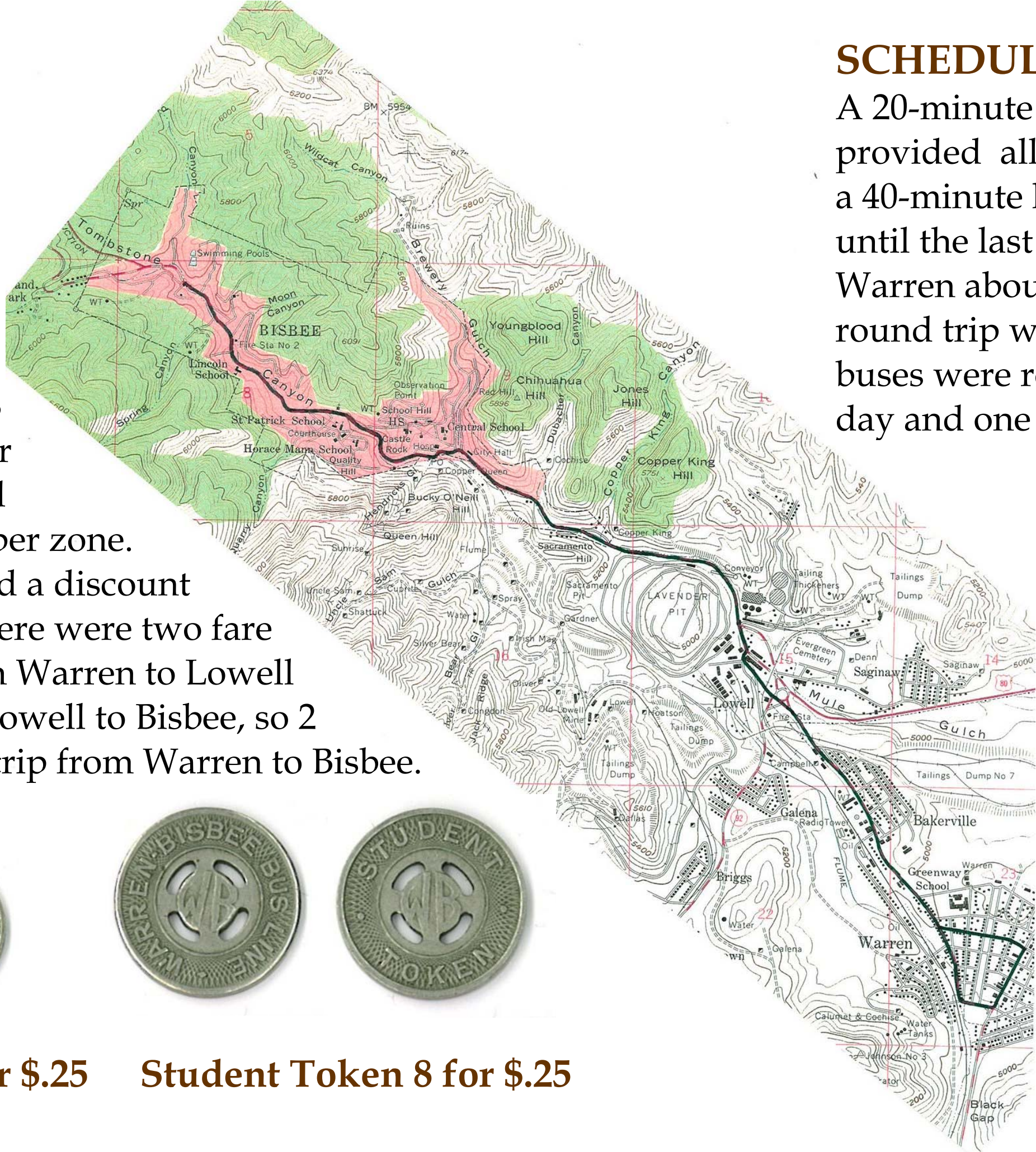
MAP OF WARREN BISBEE BUS LINE

FARES:

During the time bus 8 was in service, regular fares were 5 cents and student fares 4 cents per zone. These tokens provided a discount on each fare type. There were two fare zones, one token from Warren to Lowell and one token from Lowell to Bisbee, so 2 tokens for the whole trip from Warren to Bisbee.

SCHEDULE:

A 20-minute headway was provided all day until 6 p.m., and a 40-minute headway after 6 p.m. until the last bus from Bisbee to Warren about 11:20 p.m. The round trip was 40 minutes so two buses were required during the day and one in the evening.



Regular Token 6 for \$.25

Student Token 8 for \$.25

In 1939 and 41, Warren Bisbee Bus Line purchased two additional Yellow's of the same type, painted the same, and numbered 6 & 5 (numbers previously used on the Studebakers). After the war, two additional used Yellows were purchased from Tucson Rapid Transit Company. Their numbers are unknown. In 1951 all the pre-war buses were replaced by General Motors diesel buses. Twin Coach #1 and Yellow Coach #7 were purchased by Orrin and Edna Soles of Warren. They placed them on property they owned on Double Adobe Road, had a well drilled and power brought in and started to convert the buses to a rural retreat. Unfortunately, vandals began to damage the buses and they soon gave up the project, leaving the buses to further vandalism and decay from the weather.

Photo of badly vandalized bus #7 as it appeared in 1983 soon after its "discovery"

In July of 1995 OPT representatives contacted the Soles who agreed to donate both buses. On the return from a trip to Bisbee to determine what had to be done to move them, OPT volunteers discovered the body of Warren-Bisbee Bus Line # 8 in St. David. Its body was in good shape compared to #7. However, # 7 still had many of the running parts and even some interior parts missing from # 8. Thus a decision was quickly reached to restore # 8 using parts from # 7.



W. Eugene Caywood photo

Bus # 8 as discovered in St. David being used for storage

Inquiry at the nearest house led to the owners, Jack and Flora McRae, who agreed to donate the bus. They had purchased it for use as a road side food concession stand. When that need ended, they just kept it for storage. The axles had been removed to make a small trailer, which they donated along with the bus. Once paperwork had been completed, all three buses were moved to Tucson.



W. Eugene Caywood photo

RESTORATION:

In 1996, Old Pueblo Trolley was awarded a \$17,172 State of Arizona Heritage Fund grant to restore bus # 8. The grant required matching by donations and volunteer hours. It was followed by a second grant in the amount of \$23,562 in 1999. Once both those grants were expended, restoration continued through the generous donations of Old Pueblo Trolley members and local businesses.

MOST SIGNIFICANT DONATIONS:

- Arizona State Parks – Heritage Fund
- U. S. Coach – Luke Bonagura
- Fourth Avenue Merchants Association
- Pie Allen Neighborhood Association
- Architectural Openings – Jim Walters
- Proios Sandblasting & Painting
- City of Tucson
- Louis Grossman – Rocket Metals
- Wade Musil's Restoration Shop
- Dave Knittle Upholstery
- Arizona Byways – Rich Stutz
- Scott Supply Service – Joe Scott
- Bestway Electric Motor Service
- Jim Tyron – woodworking
- 20th Century Electric Railway Foundation
- FinishMaster – Michael Marquez
- Align-Rite – Matthew Dunne
- ABC Radiator
- The Old Ford Store – Peter Macey
- N. American Powder Coating
- Mark Hart
- Dana Pitt
- W. Eugene Caywood
- Jack Lewelling – donation of original parts

Restoration work started in January of 1997, was interrupted for one year between grants, and was completed in the first part of 2007.

The first major task was salvaging parts from and scrapping the body of bus #7. Work on rehabbing all parts attached to the chassis followed. The springs of #8 had been removed by torching them off the chassis. Rather than try to weld spring perches back on, it was decided to remove the body of #8 from its chassis and place it on #7's chassis.

Rehabed chassis of #7 sits ready to be rolled under the body of #8 which has been lifted 40 inches off the ground to provide clearance



Vacuum brake assist installed under floor



The next task was tackling the rehab of all the mechanical parts, many of which were badly worn due to heavy usage the bus received during World War II. The vacuum door motors and brake assist proved particularly challenging.



Roger Hobbie and Dave Sterle install the engine cradle with engine, transmission and angle drive

The exhaust system wraps around 360 degrees before exhausting on the left rear corner of the bus



A landmark day – December 10, 2005 – it runs for the first time in over 40 years!

But the biggest challenge still remained – replication of the missing transmission top that had been removed prior to OPT acquiring the bus. One was finally borrowed from Luke Bonagura of U. S. Coach in New Jersey and replicated with the help of three very talented people, sculptor Nick Burke and machinists Louis Grossman and Wade Musil.



Replicated transmission top (left) is fitted to the transmission gear case by Wade Musil (right)



Completion of the interior would not have been possible without the help of the late Stephan Swartzwald in alerting OPT to a potential parts bus in Hanford, CA., and the willingness of owner Lee Brazil to sell it.

Former San Bernadino and Hanford bus #106 contained the seats, heaters, unbroken dash instruments and other interior parts needed to complete OPT's restoration



Creating replacement interior wall and ceiling panels proved a challenge, especially those that had to be bent to a tight radius.

The gas tank installed with wood floor supports on top



Dave Sterle works on installing interior panels prior to painting



New wood flooring installed on driver's platform

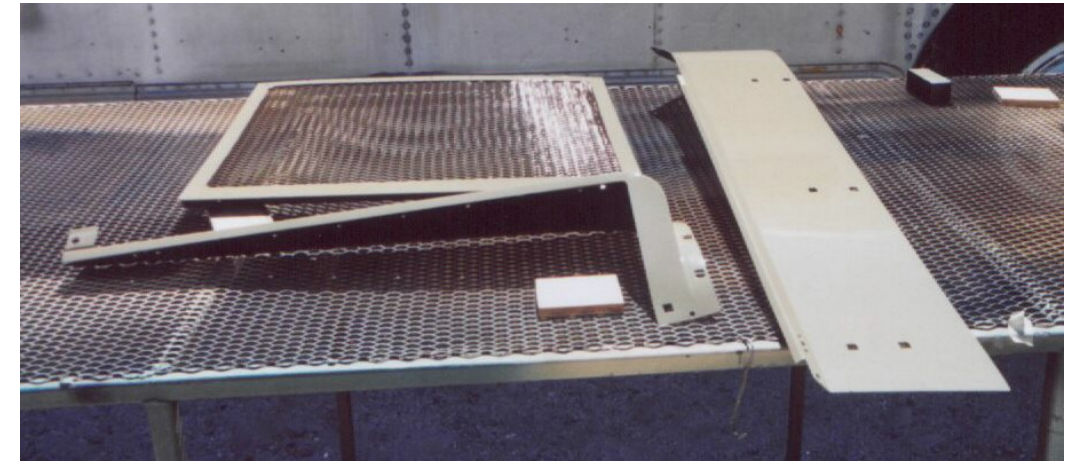


Fitting up the seats reupholstered by Dave Knittle Upholstery

Fitting up replacement lower body panels on the bus front



The body work and painting took hundreds of volunteer hours. The years of sitting on the ground as a storage shed had not been kind to the lower body panels, most of which had to be cut out and replaced involving aluminum welding and riveting.



After extensive body work and priming, the rear panels and door are ready for final painting



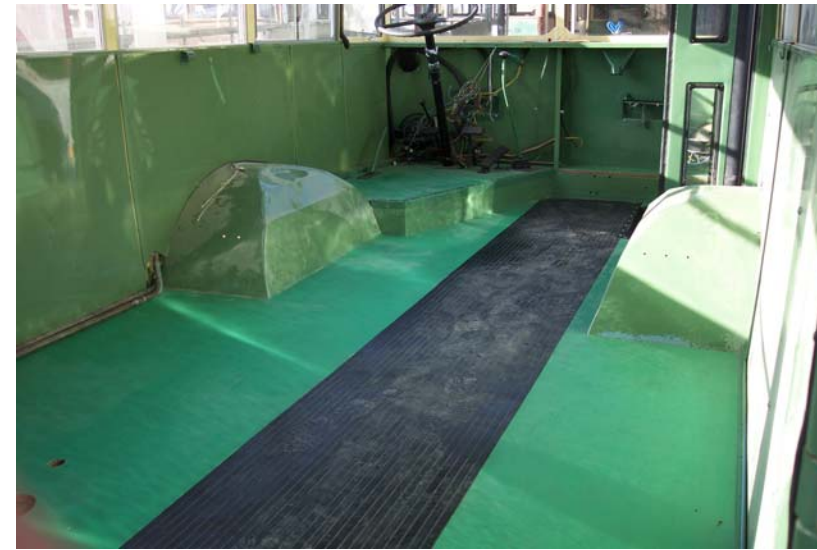
Final exterior painting was done by volunteer Dan Caywood in a large paint booth generously loaned by Rich Stutz of Arizona Byways

Bob Gosnell masks and preps Bus #8 in Arizona Byways paint booth for cream and red painting



The final product

Most work on the interior was accomplished in early 2007. One challenge was putting grooves in the black flooring since new flooring with the original pattern could not be located. Thanks go to Gary Afseth and Damon Prose for figuring out a way to do it.



New green under seat and black aisle flooring complete



The seats installed



The driver's area