The Central Pacific was built almost totally by hand labor. Grading, excavations, tunneling, were all accomplished using hand carts, shovels and picks. When Crocker could not keep his Irish work crews on the job, he imported Chinese laborers. They performed so well that he eventually imported more than 7000. They drilled tunnel faces by hand; they hung in wicker baskets and chipped a ledge for track around Cape Horn; and later, using hand carts, they filled in many trestles to make them safer and more fire resistant.

Driving along Interstate 80 today, the motorist may see many portions of this truly National Historic Civil Engineering Landmark. A few miles east of Colfax, the highway winds up the so called Great Ravine while high overhead the rail line crosses both ravine and road and shortly thereafter passes around the famed Cape Horn. On the eastern side of Donner Summit, remnants of the snow sheds remain although timber has given way to reinforced concrete. By following old Route 40 over the summit, a closer vantage point may be obtained.

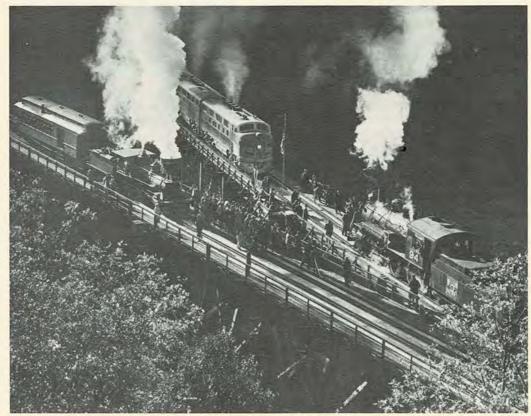
#### WESTERN PACIFIC RAILROAD

It was the Southern Pacific Railroad (then the Central Pacific) which created the impetus necessary for the construction in 1906 of a competing rail line across the Sierra. In order to combat the monopolistic tendencies of a single railroad, the businessmen of the San Francisco Bay Area rallied round the idea of a competing line, especially when it was rumored that George Gould, son of Jay Gould, would secretly back construction of a competitor for the Central Pacific-Union Pacific alliance. Gould controlled the Denver and Rio Grande Western railroad, with which the Western Pacific would (and does) connect when it was completed.

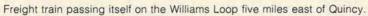
The Western Pacific runs from Salt Lake City to Oakland, by way of Beckwourth Pass and the scenic Feather River Canyon. In the original contract, Gould specified that grades were not to exceed 1%. This was to help lower operating costs, and thus be more competitive with the Southern Pacific. Although adding to the engineering difficulties, this was done, and this grade was maintained, even when eleven miles of main line were relocated for construction of the Oroville Dam in 1964.

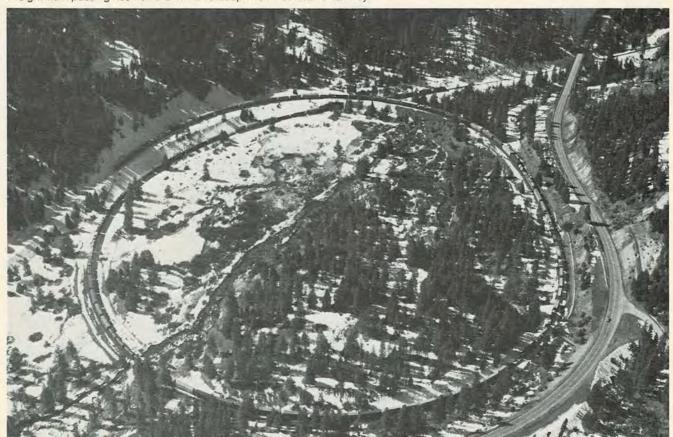


Arrival of Western Pacific's first passenger train in Sacramento.



Western Pacific's 40th Anniversary commemorated by an historic meeting of the California Zephyr, No. 94, and The Geneoa, on the Keddie Wye. The latter two engines are now on display in Old Sacramento.





On State Route 70, seven miles west of Quincy, California, the Keddie Wye may be seen. The Keddie Wye is named after the surveyor of the Western Pacific, Arthur Keddie. Two legs of the Wye span Spanish Creek and the Feather River respectively, while the third leg is tunneled through a granite bluff. The third line from the Wye connects with the Burlington Northern Railroad at Bieber, California, to form a part of the "Inside Gateway," (again, in competition with the Southern Pacific, this time their line from Portland, Oregon, to Oakland.)

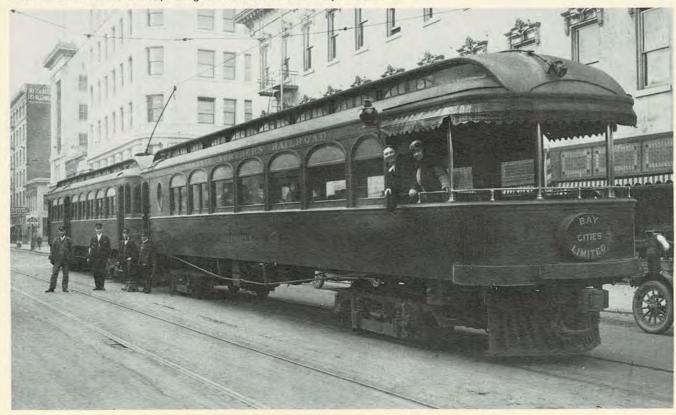
The most interesting and spectacular portion of the line may be seen from State Route 70, between Oroville and Hallelujah Junction, where Route 70 ends at U.S. Route 395. This includes the Feather River Canyon, with the Keddie Wye and Beckwourth

## THE SACRAMENTO NORTHERN RAILROAD

The Sacramento Northern Railroad, at its peak, connected Chico and Oroville with Oakland, via the state capitol at Sacramento. The main line run of 185 miles was the longest interurban passenger run in North America. Its 300 plus miles of trackage covered the largest geographic area of any interurban line in the West, although Southern California's Pacific Electric did have more traffic and track miles.

The "North End" was composed of the Northern Electric, a more or less "typical" interurban line that operated on 600 volts DC (outside third rail) between Sacramento and Chico, with major branches to Woodland, Oroville, and Colusa. The main line was opened for traffic in the summer of 1907. The Woodland branch was laid down in 1912, with the connection to Colusa being completed the following year.

Sacramento Northern's finest, pausing in Sacramento before daily run to Oakland.





## American Society of Civil Engineers Sacramento Section

## **Local Historic Civil Engineering Landmark**

# Western Pacific Railroad

## References

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