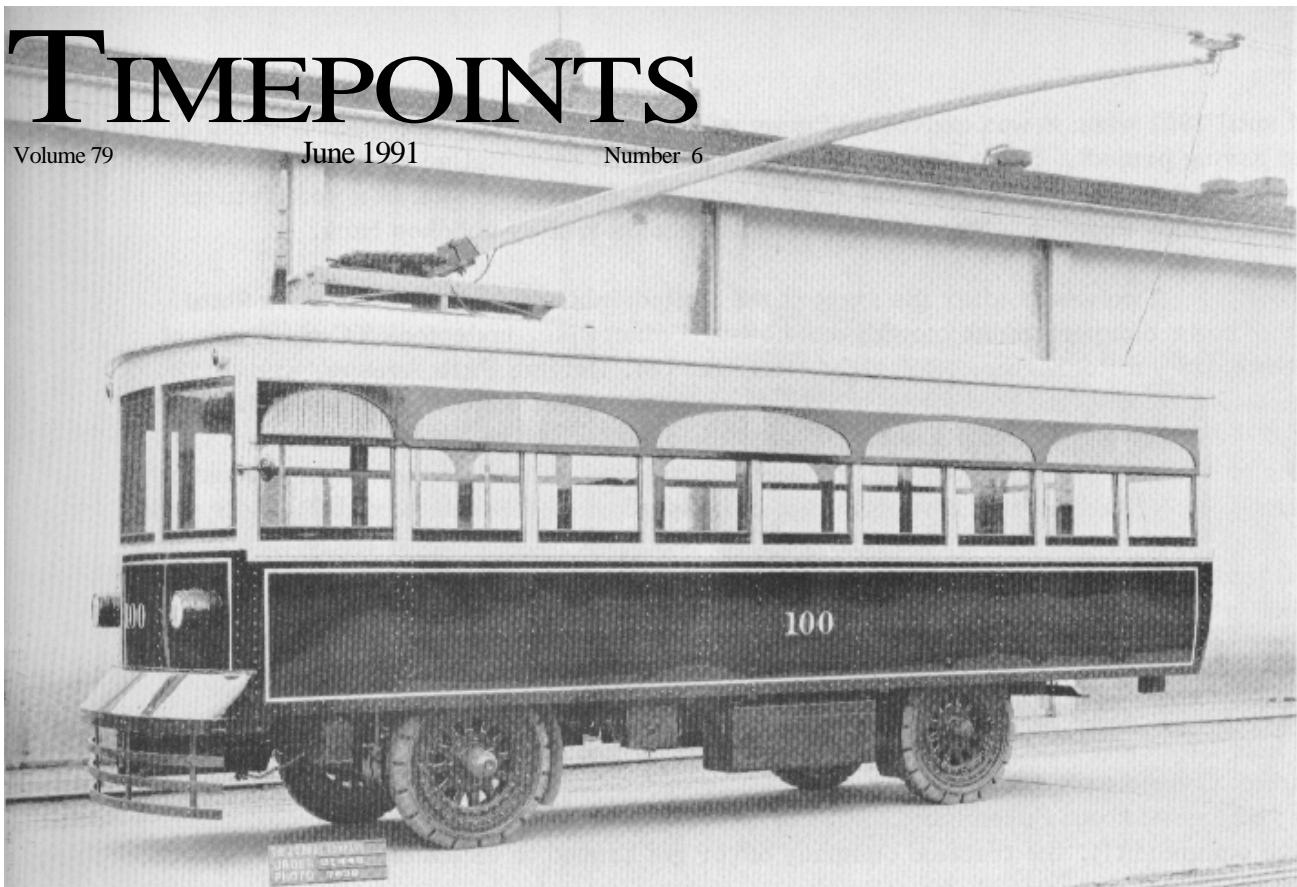


# TIMEPOINTS

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# Timepoints

## *The Southern California Traction Review*

by

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## President's Notebook Pittsburgh, Update

Construction on the current phase of Pittsburgh's light rail system is complete. The system connects downtown with suburbs to the south. Previously, the streetcars emerged from the South Hills Tunnel, then crossed the historic Smithfield Street Bridge and used surface streets in downtown, but now the cars turn sharply to the right (east) as they emerge from the tunnel, (whose floor has been paved to allow buses to share it), cross the Panhandle Bridge, (an abandoned

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On the Cover, (top), Builder's photo of Brill RailLess car in 1922. Car ran in a loop around LARY's South Park Shops for some months, and then was stored until scrapped in 1946. (bottom), RTD rendering of new 60ft articulated Trolley Bus.

railroad bridge), and enter downtown as subway operation. The first station is Steel Plaza, from which a shuttle connects with Penn Station, (the Amtrak stop for Pittsburgh), followed by Wood Street and Gateway, (the terminus, where all cars and trains loop). The rail system is divided into two parts, one run with new light rail vehicles, and the other with refurbished PCCs. The LRVs run on the 42S—South Hills Village via Beechview, 42—Mt. Lebanon Only, and 42L Library via Beechview lines. The PCCs run on the 47—Shannon Only via Overbrook, 47D—Drake via Overbrook, and 47S—South Hills Village via Overbrook lines. All the lines run through the South Hills Tunnel. The split occurs at South Hills Junction, with the PCC lines via Overbrook running to the southeast and the LRV lines to the southwest. The latter have been extensively rebuilt to high standards, and include street running, private right of way, and subway segments. The route passes through Beechview, Dormont and Mt. Lebanon before rejoining the Overbrook route at Castle Shannon Boro Hall. All lines share a main line from Castle Shannon to Washington Junction. At this point the 42L diverges to the southwest, terminating at Library. Years ago, this continued on as the interurban line to Charleroi, but it was cut back to Library, the last stop in Allegheny County. The PCC route from South Hills Junction to Castle Shannon via Overbrook is of great interest to electric-railway historians because of its stretches of single track across elderly bridges and for the PCC equipment itself. There is now some discussion of whether to rebuild or abandon this route. From Washington Junction, the cars not destined to Library all use the old interurban line to Washington, which was cut back to Drake just inside the county line. The Drake Loop itself is served by PCCs on the 47D Line, while Line 42S LRVs and 47S PCCs turn west before reaching Drake. There is new trackage to reach a terminus at the South Hills Village shopping center, whose large parking lots are convenient for use by park-and-ride transit patrons. The rail system runs from about 5 or 6 AM to 12 or 1 AM, seven days a week. Base headways on the 42L and 42S LRV Lines are 10 minutes, Monday through Saturday, and 15 minutes on Sundays on the 42S, but 30 minutes on the 42L, seven days a week. Monday through Friday, the

(continued on page 7)



Thirty ACF-Brill Model T46s, delivered in December, 1948. Weighing 19,000 lbs., these seated 46, were 36'10" long, 8'6" wide and had one GE 1213-J1 motor with dynamic brakes. Here, 9123 in "Fruit Salad" paint scheme of LATL in 1949, posed alongside Division One substation.

## Trolley Buses For Los Angeles - The Fourth Time Around

Southern California has always been a place of firsts, a barometer for worldwide trends. It is the inventor of television, chili dogs, theme parks, smog, miniature golf, California cuisine, and it is the birthplace of the trolley bus. In 1910 the Bungalowtown line of the Laurel Canyon Utilities Company became the first revenue trackless trolley line in North America. The line utilized two 16-passenger Oldsmobile motor bus bodies into which 15-horsepower electric motors had been installed. For five years the little buses bumped and lurched their way up a dirt road to a real estate development a mile-and-a-half up Laurel Canyon from a connection with Los Angeles Pacific's Hollywood Boulevard streetcar. The Bungalowtown line faded away in 1915, a fleeting Southern California first. Eighty years later Los Angeles may be up for another first, the city with more separate eras of trolley bus operation than any other city in the world; four in all. The fourth benchmark has yet to be established, but it is probable that the SCRTD will be operating ten trolley bus lines by 1998, with the initial two lines opening in 1995. Ironically, the diesel bus that doomed

so many trolley bus systems is now itself an endangered transit species on the verge of extinction. By 1995 federal emission standards will be so stringent that it will be nearly impossible for new diesel engines to meet those standards, and transit systems nationwide will be forced to seek alternative fuels, such as natural gas, methanol, and electricity, as they replace vehicles in their fleets. A joint study by the SCRTD and LACTC has pointed to the proven technology and non-polluting nature of the trolley bus, and has identified approximately 40 diesel bus routes that are viable candidates for electrification: the initial ten routes to be in operation within seven years. This will be Los Angeles' fourth flirtation with trackless trolleys, but its first commitment to a longterm relationship? Seven years after the Bungalowtown line quit operation, Los Angeles toyed with the trolley bus a second time. The Los Angeles Railway purchased a Brill "Rail-less" Car, similar to the ones in the small fleet that were to serve Philadelphia's 80-Oregon Avenue line starting in 1923. LARY car "100" was demonstrated on a test loop around South Park Shops, and was then stored and forgotten until it was scrapped in 1946 by the new owners of LARY, National City

Lines. Oddly enough, the test loop that had sat idle for 24 years became the training ground a year later for Los Angeles' third try at the trolley bus. (When NCL inaugurated service on the nine-mile 3-West Sixth St.-Central Ave. line on August 3, 1947.) NCL was headed by E. Roy Fitzgerald, a rotund and jowly former railroad man, who along with his brothers bought up scores of small and medium-sized street railways during the 1930s, and almost without exception quickly motorized them. Among NCL's major stockholders were General Motors, Shell Oil, Firestone Tire, and Mack Truck. At the time of NCL's greatest growth, following the second world war, the government was laying the groundwork to indict the company on anti-trust charges, (NCL was later found guilty), and it doesn't take a rocket scientist to realize that NCL's sudden surge of interest in trolley buses and new PCC cars for Los Angeles may have been the ultimate public relations promotion for the time. Nevertheless, Los Angeles wound up with a fleet of 110 trolley buses and 40 new PCC cars. The first fifteen trolley buses had been delivered in an orange and silver paint scheme to NCL's Key System Transit

Lines in Oakland, to replace streetcars on the 6-College Ave. and 7-Arlington-Euclid lines. They had been ordered by the previous owners, and some overhead was already in place. NCL decided on an all-diesel bus system for the East Bay however, and the coaches sat idle at Emeryville Shops from February to

August, 1946, when they were shipped to Los Angeles. Another twenty-five Brill TC-44s of the same design completed the initial LATL fleet. LATL ordered seventy additional trolley buses in 1948 to provide service on Los Angeles' second trackless trolley line, 2-Brooklyn Ave.-Hooper Ave., which replaced rail line B on December 5, 1948. Two years later the final expansion of the trolley bus system took place when the 3 line was extended three miles from Sixth & Wilton, north to Third and west to La Brea, on September 15, 1950.

The extension replaced the West Third St. branch of the S rail line. LATL's 110 trolley buses far exceeded the needs of two lines, and it was planned to use the surplus on a third line, by converting the heavy 41-Alvarado crosstown bus route to electric power. Although engineering studies were completed the plan never came to fruition. Los Angeles' small trolley bus system was well-maintained and operated efficiently throughout the fifties into the early sixties. When LATL and Pacific Electric were merged into the Los Angeles Metropolitan Transit Authority on March 3, 1958, the TCs continued to be kept in good operating condition, as did the overhead. LAMTA abandoned its vestigial trolley bus system on March 31, 1963, along with its five remaining streetcar lines. The all-Brill fleet sat at Vernon Yard for six years until it was sold to Mexico City. The fleet was intact

**For Supplementary Service**

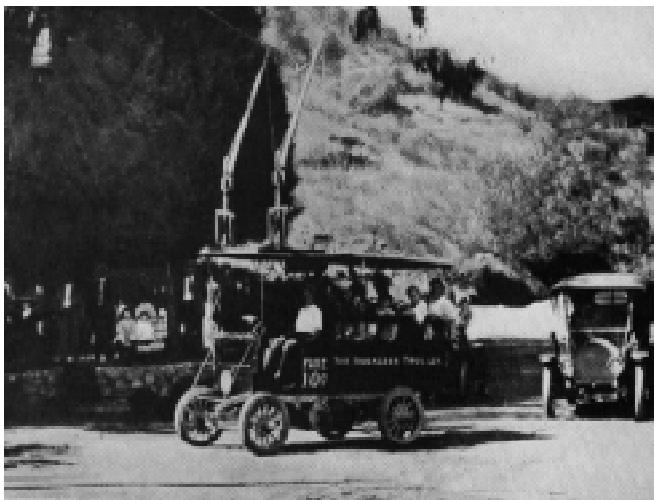
**Brill "Rail-less" Car**

The position of service extension was solved with the development of the Brill "Rail-less" Car. Its comparatively low installation cost affords an opportunity for electric railways to provide service with a vehicle with which their engineers are generally familiar, and at the same time its cost of operation is sufficiently low to assure profitable service.

The Brill "Rail-less" Car is equipped with two (2) 25-Hp. motors with series parallel control, mounted in tandem and driving the rear axle through the propeller shaft. Its construction is principally of steel and it measures 23 ft. 2½ in. long over the overhead 7 ft. 6 in. wide over pants and 9 ft. 7½ in. high from the ground to top of roof boards. Seating accommodations are provided for 10 passengers. Traction side posts are fitted with Brill "Reinier" spring base post casings which hold the window sash under compression thereby eliminating the possibility of suchattle, an essential feature for rail-less transportation vehicles.

**THE J. G. BRILL COMPANY**  
PHILADELPHIA, PA.  
American Car Co. — McPherson Car Co. — Western Motor Co.  
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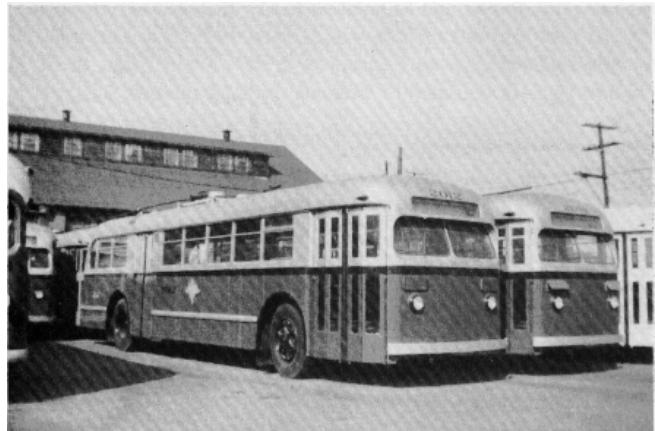
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Bungalowtown line circa 1911.

tio of vehicle service miles to route miles. From a standpoint of cost effectiveness, long routes with relatively few peak buses and long headways are the least desirable. The first ten routes are shorter, and have a large number of peak buses and short headways, with many stops and starts. (Some are noticeably hilly.) These factors have favored the recommendation for the initial ten lines, since diesel fuel consumption and emissions are comparatively high on routes of this sort. Phase One of the new trolley bus system will include the following routes: 16-W. Third St., 18-W. Sixth St.-Whittier Blvd., 30-W. Pico-Floral Dr., 33-Venice Blvd., 40-Hawthorne-Union Station, 45-Broadway, 92-Glendale Blvd., 180-Hollywood-Pasadena, 424-Ventura Blvd., and 76-Valley Blvd. In all community surveys so far, public reaction and acceptance

have been extremely positive. Residents of virtually all communities see reduction of air pollution as a major benefit, particularly in areas with heavy diesel bus traffic. (Along with the reduced noise and vibration that are trademarks of the trolley bus.) Areas expressing a particularly strong interest in having trolley buses introduced into their communities include Pasadena, Glendale, Burbank, the East Los Angeles business district, West Covina, the Crenshaw area, and the San Fernando Valley. In the surveys so far, some concern has been raised about the aesthetic acceptability of the overhead wires. Measures to minimize the visibility of wires have been included in the basic design and cost of the system. It is planned to use some traffic signal and streetlight poles to support the overhead, and to plant trees along the routes where they are appropriate. Another community concern has been the useful life of trolley bus technology. Will it become obsolete with advancements in battery, fuel cell, or roadway powered vehicles? All of these non-polluting technologies must overcome major design and cost obstacles before commercialization is practical or even feasible. Such developments can't be counted on or planned for. The trolley bus is a proven technology, and can yield near zero level pollution today. Los Angeles' new trolley buses will employ auxiliary power units consisting of a thousand pound battery system, requiring little maintenance, and enabling the coaches to operate on battery power from two to three miles. This innovation will save two million plus dollars in



These Oakland Brills rest in Los Angeles Transit Lines yard prior to entering service, 1946.

overhead special work in division yards, will allow the buses to maneuver around accidents, have flexible rush hour short turns, and will cut costs by eliminating overhead special work in loops and terminals. Increasing pollution and increasingly strict emission standards have caused Los Angeles' flirtation with trolley buses to become a shotgun wedding. It's about time.

My thanks to Scott Page of the SCRTD for assistance in the preparation of this article.

-Paul Ward



Los Angeles Brill 9007 at Union Station's streetcar loop. Thats 1267 loading for the "F" line on the loop, while the TC is on line 2 headed for City Terrace. (1948)

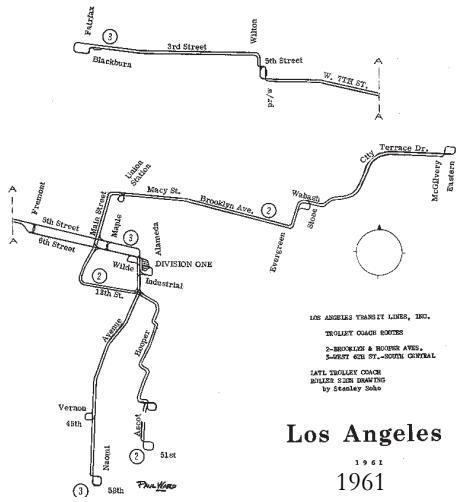
Line 3 coach 9129 is eastbound on West Sixth St., 1950.



(Pittsburgh Report Continued from page 2)

PCCs run every 15 minutes to Castle Shannon on the 42, with alternate cars providing 30-minute service to Drake Loop on the 42D. Only a dozen or so trips a day serve South Hills Village on the 47S. On weekends, PCCs run from downtown to Drake, as 47D cars, with 30-minute headways on Saturday and 45-minute headways on Sunday. Fares are collected upon boarding, inbound, and on alighting, outbound. Downtown is a free-fare zone, outside this zone, fares range from \$1 to \$2 during rush hours, and 75¢ to \$1.60 at other times. (Fare depends on length of ride.) Transfers good for one ride on any route in any direction during a three-hour period can be purchased for 25¢. Many transit historians will also enjoy riding the two surviving inclines, whose technology is basically that used on the Angel's Flight and Echo Mountain Inclines here in Southern California. The Monongahela Incline was opened in 1870 and has been operated by the transit agency since 1964. The base station is a short walk from the Station Square light rail station. The Duquesne Incline opened in 1877 and has been operated by the nonprofit Society for the Preservation of the Duquesne Heights Incline since 1963. Its base station can be reached from the Gateway light rail terminal station by walking across the Fort Pitt Bridge. A ride up one Incline can be combined with a ride down the other, since a pedestrian promenade with a spectacular view of Pittsburgh's downtown and two rivers link the upper stations along the top cliff edge of Mt. Washington. Pittsburgh is well worth a visit.

David G. Cameron



June

5, Wednesday. MOVIE, Last Remaining Seats, Orpheum Theatre, 842 So. Broadway, "The Kid Brother", Harold Lloyd, (w/Gaylord Carter at the Wurlitzer), (1927), 7:<sup>30</sup> (213) 623-CITY

7, Friday. MEETING, Bay Area Electric Railroad Society regular monthly meeting, 8:<sup>00</sup>

12, Wednesday. MOVIE, Last Remaining Seats, Million Dollar Theatre, 307 So. Broadway, "The Three Caballeros", Donald Duck, (1943), 7:<sup>30</sup> (213) 623-CITY for info.

14, Friday. MEETING, Pacific Railroad Society regular monthly meeting, 7:<sup>30</sup> at Joslyn Rec. Center

19, Wednesday. MOVIE, Last Remaining Seats, Los Angeles Theatre, 615 So. Broadway, "Grand Hotel", Greta Garbo, (1932), 7:<sup>30</sup> (213) 623-CITY for info.

21, Friday. MEETING, ELECTRIC RAILWAY HISTORICAL SOCIETY regular monthly meeting. Palms

Depot, Heritage Square. 7:<sup>30</sup> Business Meeting, 8:<sup>00</sup> Program George Garr, "Recollections of Toronto, 1950-1990"

26, Wednesday. MOVIE, Last Remaining Seats, Loew's State Theatre, 703 So. Broadway, "Gigi", (1958), 7:<sup>30</sup> (213) 623-CITY for info.

12, Friday. MEETING, Pacific Railroad Society regular monthly meeting, 7:<sup>30</sup> at Joslyn Rec. Center

19, Friday. MEETING, ELECTRIC RAILWAY HISTORICAL SOCIETY regular monthly meeting. Palms

Depot, Heritage Square. 7:<sup>30</sup> Business Meeting, 8:<sup>00</sup> Program Paul Ward, "Traction of Northern

Europe featuring East Berlin, Potsdam, Vienna, Zurich, Frankfort, Den Haig und Amsterdam."

3, Saturday. CONCERT, "LATOS", 8:00 at Sexson Auditorium, Walt Strongy

9, Friday. MEETING, Pacific Railroad Society regular

July

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monthly meeting, 7:<sup>30</sup> at Joslyn Rec. Center  
**16, Friday. MEETING, ELECTRIC RAILWAY HISTORICAL SOCIETY regular monthly meeting. Palms**  
Depot, Heritage Square. 7:<sup>30</sup> Business Meeting, 8:<sup>00</sup> Program Bay Area Traction, (watch for details).

Septem-

23, Friday. MEETING, Walter Abbenseth's annual extravaganza, Sunset, slides of the Pacific Electric. Alpine St., Pasadena

13, Friday. MEETING, Pacific Railroad Society regular monthly meeting, 7:<sup>30</sup> at Joslyn Rec. Center

13, Friday. MEETING, Pacific Railroad Society regular monthly meeting, 7:<sup>30</sup> at Joslyn Rec. Center

**20, Friday. MEETING, ELECTRIC RAILWAY HISTORICAL SOCIETY regular monthly meeting. Palms**

Depot, Heritage Square. 7:<sup>30</sup> Business Meeting, 8:<sup>00</sup> Program Scenes of Highland Park/Eagle Rock, (possible meeting at Cypress Park Substation?).

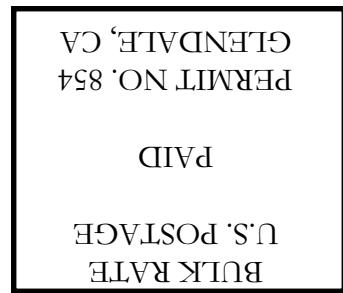
8, Friday. MEETING, Pacific Railroad Society regular monthly meeting, 7:<sup>30</sup> at Joslyn Rec. Center

**15, Friday. MEETING, ELECTRIC RAILWAY HISTORICAL SOCIETY regular monthly meeting. Palms**

Depot, Heritage Square. 7:<sup>30</sup> Business Meeting, 8:<sup>00</sup> Program South of the Border, (watch for de-

Novem-

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P.O. Box 24315  
Los Angeles, CA 90024

SOUTHERN CALIFORNIA

ELECTRIC RAILWAY HISTORICAL ASSOCIATION OF