

Of Traction and Syndicates:
How Great Men and Greed Built Los Angeles at 600 Volts

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Abstract:

The Pacific Electric Railroad was once the most extensive electric Interurban globally with 1,100 miles of electrified track over four counties; now, all that remains is 88 miles of light-rail track in Los Angeles. Why was the P.E. important to our local history, and who even cares about some old trains? This paper intends to link the development of "Greater Los Angeles" with the Pacific Electric and its predecessor companies. Great men who have left their lasting mark like Henry Huntington, Edward Harriman, Isais Hellman, and "General" Moses Sherman did so by using a combination of land speculation, utility development, and privately owned transit companies to lure millions of migrants to Southern California.

Keywords:

Interurban, Pacific Electric, Los Angeles, Citrus Agriculture, Land Speculation, Railroad, "Red Cars," California, Henry Huntington, E.H. Harriman, Southern Pacific

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Introduction

Why are we here in Southern California? What makes our suburbia so great? Where once were orange groves and celery fields now stand housing tracks, parks, and plenty of asphalt; should that be considered progress? Developers 100 years ago thought so! This thesis will link the economic growth of Southern California with the physical expansion of railroads and privately funded transit companies, namely the Pacific Electric Railway, with its overall consolidation of the Southern California transit market. The Pacific Electric was once the largest interurban railroad in the United States; Interurbans were the progenitors of today's light rail, with over 1,000 miles of track linking all four counties of the greater Los Angeles area.

At its debut, The electric streetcar was little more than a novelty; however, these "traction systems" rapidly overtook their dung dropping and cable-pulled predecessors through rapid technological development and slick marketing. Though the larger steam-powered railroads made the initial inroads of Los Angeles's growth, it was the humble streetcar that gave to our urban and suburban lifestyle. Smaller systems built by developers were often cheaply constructed, with life spans measured within months. Henry Huntington changed all of that with his vision of growth for Southern California; his conviction in his own success provided a blank check for his traction empire, the Pacific Electric. Incorporated in 1901, the Pacific Electric was just one part of Huntington Syndicate's real estate, water, gas, and electricity portfolio, but it was his crown jewel. His partnerships with Isais Hellman and Edward Harriman created the "California Dream" that of personal home ownership away from the urban center put Los Angeles on that map and created economic opportunities for millions to reap. Where Huntington laid tracks and erected trolley wire, the Big Red Cars ushered in economic prosperity through housing, water, and electricity.

Section I Colonial Los Angeles and Alta California

To understand the land of the Big Red Cars and Huntington's Empire, it is necessary to take a step back in time, into the age of Missionaries and Vaqueros. California, has had many visitors traverse her natural beauty. From the many First Nation peoples of Miwok, Ohlone, Yokut, Tongva, and Fort Ross's Russian trappers, the occasional English Privateer, and of course, the Spanish Empire. The Spanish first brought their brand of "Civilization" to California in 1769, which founded Pueblo de Los Angeles following the Portola Expedition.¹ While centuries earlier, the Spanish sailed along the coast and claimed it in the name of their Habsburg ruler Charles I, it was Gaspar de Portola who was selected to govern the future frontier of California.

Portola's expedition's planning was not unlike the previous strategies of controlling New Spain; it involved a two-pronged approach, building military Presidios to control the land and building Christian missions to control the native population. On the orders of the Viceroy of New Spain, now Governor of Las Californias Portola and Friar Junípero Serra set sail aboard two small packet-boats and a company of just under a hundred men.² Landing in Baja California, Portola's party was joined by a retinue of Christianized natives that accompanied them north to San Diego, acting as guides and interpreters. In San Diego, Friar Serra fell ill with a foot condition, and stayed behind to found Mission San Diego while the expedition trundled north for the following year. Portola and his mule train arrived in the Los Angeles basin to find a lush riparian area, differing from Sonora and Baja California. While amazed by the bountiful salmon and friendly locals, the Spanish trekked north to "discover" the San Francisco Bay and their

¹ H. D. Barrow, "GOV. GASPAR DE PORTOLA; OR THE STORY OF THE FIRST SETTLEMENT OF ALTA CALIFORNIA," *Annual Publication of the Historical Society of Southern California, Los Angeles* 3, no. 4 (January 1896): pp. 15-18, <https://doi.org/10.2307/41167595>.

² Herbert E Bolton, "PORTOLA'S LETTERS FOUND – THEY TELL HOW HE DISCOVERED SAN FRANCISCO BAY HOW WE DISCOVERED SAN FRANCISCO BAY," *San Francisco Call, Volume 106, Number 139*, October 17, 1909, <https://cdnc.ucr.edu/?a=d&d=SFC19091017&e=-----en--20--1--txt-txIN-----1>.

future capital of Monterey. The easily defendable Golden Gate made San Francisco the prime Californian city for the next hundred and thirty years; though reassured, Los Angeles will have its day.

Despite the successful expedition, Spanish California received the bare minimum inattention and resources from its Imperial rulers. Land grants were given out in the tens-of-thousand acres per male, and twenty Franciscan Missions were set up to “civilize” the local population.³ While only a few thousand settlers, the Las Californias territory was more of a political bulwark to keep the Russians and English out of the west coast rather than an economic powerhouse. Los Angeles would remain a sleepy and isolated settlement, barely boasting more than a few hundred residents. The rivers were diked by native labor, allowing for subsistence agriculture and trading. Life in Mexican Southern California was slow and relatively peaceful, which abruptly changed when the Americans attacked.

The Mexican-American War was a brutal, short affair that saw our nation expand from sea to shining sea. Los Angeles's isolation thankfully spared the destruction of other Mexican settlements; it did, however, bring a new form of conflict, a racial conflict.⁴ With California's statehood in 1850, the great westward movement of “Manifest Destiny” brought forth Protestant Euro-Americans that contrasted greatly with the Catholic mixed-race Mestizo Californians and the Christianized native peoples. Los Angeles quickly became segregated with an American v. California mindset vigilante justice was the norm as most American settlers traveled armed; visiting journalists from back east wondered if the war had indeed ended.⁵ While Mexican

³ Theodore E. Treutlein, “The Portolá Expedition of 1769-1770,” *California Historical Society Quarterly* 47, no. 4 (January 1968): pp. 291-300, <https://doi.org/10.2307/25154307>.

⁴ Krauze, Enrique. “Border Battle: The Ugly Legacy of the Mexican-American War.” *Foreign Affairs* 92, no. 6 (2013): 155-61. Accessed May 18, 2021. <http://www.jstor.org/stable/23527022>.

⁵ William Francis Deverell, “Whitewashed Adobe: The Rise of Los Angeles and The Remaking of Its Mexican Past,” in *Whitewashed Adobe: The Rise of Los Angeles and the Remaking of Its Mexican Past* (Berkeley, CA: Univ. of California Press, 2005), p. 13.

“gangsters” were hung by crowds, further south American Filibusters, those who sought additional territory by force, such Henry Crabb and William Walker, were venerated as heroes. The returning dead of these failed land grabs were met with parades of mourners and extolling newspaper articles. As More Americans moved in, more Californian land was squatted on, and not even the Missions were safe, as these natives were “liberated” from their oppressive past. The trend of American liberation from the Spanish and Mexican past will be the common thread shared by all the Land Promoters, Water Barons, and Railroad Executives of this paper; it was not until the Counterculture movement of the 1960s that gave any critical thought to Los Angeles's history.

Section II Of Octopus and Orange's

The Gold Rush created headlines worldwide, bringing dozens of nationalities through San Francisco and off to the Sierras, however Los Angeles remained isolated, reflected in its population . In 1850, San Francisco had ten times the population of Los Angeles's 3,350 residents. Only two incorporated cities in the entire Los Angeles Basin existed at that time, that of Anaheim and Los Angeles.⁶ This San Francisco envy did not stop when the Transcontinental Railroad was completed in 1869, linking San Francisco to Utah and beyond. While the greater had room to grow, Los Angeles was surrounded by mountains to the north, deserts to the east, and, most importantly, lacked a natural harbor. Prospective settlers either made their way by wagon train over the various Emigrant Trails, crossing the Arizona and New Mexico Territories' treacherous deserts, or arriving by clipper ship, either taking the detour through Panama or the long way around Cape Horn. What took the vessel and wagon trains months could be done in days by railroad. The Americans of Los Angeles desperately understood the need for a

⁶ Seventh Census of the United States, Population, Department of the Interior, Census Office Washington DC, p 111. <https://www.census.gov/library/publications/1853/dec/1850a.html>

transcontinental connection by rail, so in 1873 it would be up to Judge Robert Widney and his recently formed Chamber of Commerce to either entice the Southern Pacific Railroad (S.P.) or if need be, build one themselves.

The Chamber of Commerce held immense sway within budding Los Angeles and helped finance the Santa Monica wharf and a local railroad: the Los Angeles and Independence. Though the Independence had the potential of building through Nevada and onto Utah, it was indeed bait to capture the Southern Pacific's attention. The S.P. was run by the old Central Pacific's "Big Four," that of Leland Stanford, Mark Hopkins, Collis Huntington, and their President, Charles Crocker; and if there was one thing the S.P. despised, it was competition. Under Crocker's leadership, the S.P. aggressively negotiated with every town it reached, as they demanded publicly financed bonds for their construction or else the railroad would purposely route around the city. Los Angeles, through Widney, raised \$377,000, gifted 60 acres of land for a station, and sold off all control of the Santa Monica wharf to satisfy the S.P.⁷ The S.P.'s route originated from Milepost 0 at the Oakland Mole. Which ran south down the Central Valley and over the Tehachapi Loop, a construction marvel at that time, finally through Soledad Canyon to Los Angeles. The arrival of the Southern Pacific on September 6, 1876, would bring the proper transformative growth that the American settlers believed in. For the next decade, the Southern Pacific had a monopoly on all intrastate transit; during this time, the S.P. and smaller feeder lines spread throughout the area, laying the literal seeds of an agricultural boom.

As cotton was once "king" in the South, the citrus industry put Southern California on the map. Thanks to the Southern Pacific, Los Angeles had a fast connection to Eastern Seaboard through the original Transcontinental Railroad and, in 1882, over a southern route through Yuma, Arizona. In addition to the railroads, the future citrus boom was mainly due to the Department of

⁷ CECILIA RASMUSSEN, "USC Is Early Developer's Monument," *Los Angeles Time*, April 2, 2000.

Agriculture shipping seeds of navel oranges, which adapted to local conditions exceptionally well. Between 1876 and 1882, the Agriculture Census noted 450,000 orange trees and 64,000 walnut trees, as well as 48,000 lemon trees in the Southern California region of the San Gabriel Valley and Santa Ana.⁸ In just thirty years, the Greater Los Angeles area, including Orange, Riverside, and San Bernardino counties, had been transformed from a sleepy outpost to the United States's primary citrus producer.

As seasons came and went, tens of thousands of trees were planted, compounded by thousands of more American settlers. More and more were the native population and Mexican-Californians displaced. 1872 was the year of Los Angeles' last Mexican-born Mayor, and between 1850 and 1880, the Californians dropped from an 80% majority to a 20% minority in a single generation.⁹ While land boosters and speculators boasted a chimerical Latin past, these groups of remaining Californians were marginalized and often drowning in poverty; the recent American colonist called it the "Mexican Problem" and treated these locals with the expected racially fueled indignities. The upcoming "Boom of the Eighties" of the 1880s would be driven by speculation and technology, but like every bubble, it must eventually pop.

Section III "Boom of the 80s"

Huzzah! Los Angeles had its railroad at last, but to the surprise of Judge Widney, his Chamber of Commerce, and the growing number of Angelinos, they had sold their souls to the Southern Pacific. For the next eleven years, the Southern Pacific would have a complete monopoly on rail transits and the ability to set freight and passenger rates. As originally designed by the Associates and the Federal Pacific Railroad Acts, the Port of San Francisco was their

⁸ Glenn S. Dumke, *The Boom of the Eighties in Southern California*, (San Marino: Huntington Library, 1944), p. 15.

⁹ Deverell, 26.

terminal or end line for imports and exports.¹⁰ By appealing to San Francisco through discounted shipping, the S.P. received harbor land and appeased the growing merchants by acting in their interests. The setting of favorable rates through geographic discrimination was a common practice for railroads, and California port cities like Sacramento and Stockton withered under the S.P. monopoly of rail and water travel. A specific example of these favored rates were the cost of shipping between Los Angeles and Colton, 55 miles, costing the same amount as shipping between Los Angeles and Chicago, 2,200 miles.

Despite these limitations, just the news of S.P.'s track building set off a speculation frenzy in the Central Valley and Los Angeles, with a construction valuation of \$600,000 in 1874 and as well as a notable shift away from cattle rearing and into intensive wheat cultivation.

The first street railway of Los Angeles began much sooner than one would expect the Spring and Sixth Street Railroad Co. received its franchise on December 8, 1873; their franchise enshrined "AN ORDINANCE granting a franchise for a streetcar railroad in the City of Los Angeles to R. M. Widney"—and provided for a franchise for a period of twenty years...Fare ten cents.”¹¹ Judge Widney, a staunch Republican from Ohio, used his influence as a district judge to shape the local political scene in his favor. Widney would oversee the creation of Los Angeles’ Chamber of Commerce, but more notably, was a founder of the University of Southern California. Most of his projects relied on support from the of financial backing Isaias Hellman, a recent immigrant, and successful banker. Most importantly, Widney led the charge to pass the SP Bond, making Los Angeles an enticing terminus for the Southern Pacific. He wrote an influential pamphlet about "Stanford's Road" and the virtues of Southern Pacific's prowess against the Texas Pacific’s

¹⁰ Gregory Lee Thompson, “The Passenger Train in the Motor Age: California's Rail and Bus Industries: 1910-1941,” in *The Passenger Train in the Motor Age: California's Rail and Bus Industries: 1910-1941* (Columbus, OH: Ohio State University Press, 1993), p. 12.

¹¹“THE STREET RAILWAY HISTORY OF LOS ANGELES,” Electric Railway Historical Association of Southern California, August 14, 1996, <http://www.erha.org/railwayhis.htm>.

proposed San Diego routing.¹² Ironically, while there was plenty of growth, it was S.P. controlled growth, and it would be up to Widney and the Chamber Commerce once more to attract a new railroad into Southern California.

The Chamber Commerce, now joined by the L.A. Times editor Harrison Otis, would lead the charge in favor of railroad regulation against the S.P. and enticing the Aitchison, Topeka, and Santa Fe (ATSF) railroad to build to Los Angeles. The ATSF would come west through Texas and connect to San Diego in 1885 and finally Los Angeles in 1887. This triggered a rate war of staggering proportions that had profound and long-lasting impacts on the area. The passengers' rate from the Midwest and Southern California was a nominal \$125 in 1885 (\$3,355 in 2020), which rapidly went southward to \$100 to as low as \$5 in March 1887 and then stabilized at \$25 between the Missouri River and Los Angeles.¹³ This "Boom of the 80s" was mostly contained within 1887, specifically, the months of June, July, and August, where 38 Million dollars in real estate transactions were exchanged and \$100 Million for the whole year.¹⁴

This advertising was called "Railway Propaganda" as it was paid for by the railroads. Americans on the frigid east coast would soon hear about the sunny, seasonless California with its fresh air and dirt-cheap living costs.¹⁵ In many minds, California was still regarded as the frontier and Wild West, and much work was done to attract the more timid minded; Novelist Charles Nordhoff wrote, "There are no dangers to travelers on the beaten track in California; there are no inconveniences which a child or a tenderly reared woman would not laugh at;... when you have spent half a dozen weeks in the State, you will perhaps return with a notion that

¹² WIDNEY, R. M. "LOS ANGELES COUNTY SUBSIDY." *The Historical Society of Southern California Quarterly* 38, no. 4 (1956): 347-62. Accessed November 21, 2020. [doi:10.2307/41169117](https://doi.org/10.2307/41169117).

¹³ Dumke, 23-25.

¹⁴ Dumke, 49.

¹⁵ Dumke, 29.

New York is the true frontier land.”¹⁶ While Los Angeles lacked the great mines and forests of the east, it did have its climate, which was extolled for its health benefit and near-constant summer warmth; one writer wrote, "The purity of Los Angeles air is remarkable... when inhaled it gives the individual a stimulus and vital force," oh how things would change in a hundred years.¹⁷

The arrival of the S.P. boosted the local population by 100%; the ATSF brought a staggering 500% population growth to Los Angeles County; freight rates for bulk goods like coal and salt also dropped to \$1 per ton, which reduced the cost of living and commercial overheads. Agriculture also benefited, both with the rate reductions and ice-cooled refrigerator cars as well moving citrus and grape production to the "uplands" where it was frost-free year-round; by the end of the 1880s, the citrus industry had occupied 12,000 acres of land and grew into a 2 million dollar business. Cattle rancheros had given way to vineyards, and between 1875 and 1889, wine production rose from 1.3 million gallons to 14 million gallons on 150,000 acres of land. The most prominent of viticulturists was J. De Barth Shorb, who produced 500,000 gallons in 1889 and had international exports to England and Germany.¹⁸ The significant increase in agricultural development brought modern irrigation projects, land improvement societies that reclaimed alkali soils, and in 1889 the various growers would charter Orange County with its 30,000 residents.

Following Widney's prophetic economic boom, several more franchises were awarded by the mayor and city council. These mainly were tied to land developers and were little more than a few cheaply built miles of 20-pound rail. One notable, but unsuccessful route, was the Second

¹⁶ CHARLES NORDHOFF, "California: How to Go There, and What to See by the Way. Harper's 1872," California: How to Go There, and What to See by the Way. Charles Nordhoff. Harper's 1872, accessed February 23, 2021, <http://cpr.org/Museum/Nordhoff.html>.

¹⁷ *ibid*

¹⁸ Dumke, 13.

Street Cable Railroad of 1885 made to conquer Bunker Hill. Not too dissimilar from Nob Hill in San Francisco, Bunker Hill required the first cable pulled railway at a 27% grade and was built by the Los Angeles Improvement Company, which owned the subdivision on Bunker Hill.¹⁹ Another vital link in transit history was the Pico Street Electric Railway of 1887, which was built in the Pico Heights area. The Pico line was the first use of an overheard electric railroad on the west coast, utilizing the “Daft” system to propel the engine dummy and carriage to 12 miles an hour with 500-1500 monthly passengers.²⁰ While impressive like most technological firsts, these “early adopters” suffered from reliability issues that bankrupted their financiers, and their company histories were measured in weeks and months, rarely ever years.

Like all economic booms, bubble bursting was inevitable but surprisingly did not cause a national depression or shattering local bank runs. The boom died down almost as soon as it started in the spring of 1888, as credit began to run dry, interest rates rose, and national criticism mounted on the lack of substation local transit and the destruction of productive farmlands for empty plots. With over 100 chartered towns in Los Angeles, 60 of them were wiped off the map due to bankruptcy as boom-towns like Port Ballona, Cahuenga, and Gladstone were either annexed by their neighbors or reclaimed by Mother Nature. Nevertheless, the Eighties should not be remembered for what was lost. Los Angeles’s position on the national stage had been cemented, Los Angeles County valuations grew by 800%, where San Francisco only increased by 25%, four colleges were built, and public education had become forefront cause, and funded public road construction.²¹ Were it not for the Boom of the 80s, the coming 20th century by

¹⁹ “Report on Cable Railroads.” *The Street Railway Gazette* II, no. 6 (June 1887): 109.

<https://doi.org/https://ia800302.us.archive.org/21/items/electricrailwayg02newy/electricrailwayg02newy.pdf>.

²⁰ Thomas Whiteside Rae, “The Daft System of Overhead Conduction in Los Angeles,” *The Street Railway Journal* 3, no. 9 (July 1887): pp. 587-588,

<https://doi.org/https://babel.hathitrust.org/cgi/pt?id=njp.32101051126561&view=1up&seq=651&q1=pico>.

²¹ Dumke, 269.

Huntington, his Pacific Electric, and the later freeways would not have been possible if Los Angeles remained a one railroad town.

Section IV The First Sparks of Traction

Riding out of the primordial soup of the 1880s, transit riders of the 1890s would be in the era of great men and extraordinary innovation. Hometown heroes like Moses "General" Sherman and Isais Hellman would build upon the early adopter's failures with the region's first successful electric railroads. Building upon these early strides, two outsiders would begin at the close of the century, Henry Huntington, the Augustus of private transit, and Edward Harriman, the Trajan of American railroading power. General Sherman first brought the idea of Interurban Transit to the L.A. basin, the aptly named Los Angeles Pacific Railroad; so, what is an Interurban anyways? While there are many minute differences, an Interurban is a more extensive electric-powered streetcar that traveled a much longer distance. Unlike streetcars built in the middle of streets, Interurbans often had long stretches of private right of way, much like the steam railroads. Interurbans often developed freight services that could either be competition or a good feeder line for the steam roads. Compared to the steam roads, the electric Interurbans were faster, quieter, and much cheaper to operate. Where steam engines burned coal, shot soot, and needed a crew of five, an Interurban produced little noise and had a troupe of two; the rapid acceleration allowed for stops to be spaced every few blocks rather than the miles needed for the large steam engines. These attributes were crucial to the land promoters syndicates and their subdivisions plans and long-term health for the transit companies against rising labor costs and union disputes.

General Moses Sherman did not gain his title in the Civil War or fighting Indians but as the Attorney General of the Arizona Territory. In addition to being a well-known humorist,

Sherman had similar views of the boosters of yore, that Los Angeles had excellent growth potential and was quite involved with land speculation, water conveyance, and of course, transit.²² Sherman made his first mark by buying up the failed Pico Electric route and other small downtown horsecars enterprises in 1890 and rolled them into the Los Angeles Consolidated Electric Railways. For a street railway, it was reasonably successful and continued the use of narrow-gauge trollies to convert the former horse and cable routes to electric easily. However, urban roads weren't enough for Sherman, so he set out to something truly exemplary in 1896 by building the electric Pasadena and Pacific Railroad, which quickly became famous for its "Balloon Route," a sixty-five mile electrified pleasure cruise.²³ When the company was later reorganized into the broader Los Angeles Pacific, Moses was still at the helm, and the success was readily apparent with Santa Monica and Redondo Beach developing into resort towns with palatial hotels and sustained population growth. Moses Sherman held off selling his railroad for many years until relenting to the second iteration of the Pacific Electric and Harriman's vast sums of wealth.²⁴ Sherman stayed on with the P.E. and later built out the line to Sherman Oaks, named after himself, of course.

Isais Hellman played a small but integral part in developing street railways, culminating with owning a significant minority of the Pacific Electric and Los Angeles Railway. Hellman became a banker almost by accident and steadily grew his prestige by backing early projects with

²² Charles H Salmons, "Locomotive Engineers Journal," *Convention Notes* 38 (June 1904): p. 444, https://doi.org/https://www.google.com/books/edition/Locomotive_Engineers_Journal/ALQ4AQAAIAAJ?hl=en&gbpv=1&bsq=m.%20h.%20sherman.

²³ "Balloon Route Advertisement," *Out West Magazine*, (June 1903): p. xi https://www.google.com/books/edition/Overland_Monthly_and_Out_West_Magazine/cX_NAAAAIAAJ?hl=en&gbpv=1&bsq=balloon%20route.

²⁴ "A California Deal Confirmed," *Street Railway Journal*, 13, xxvii (March 31, 1906): 511. https://doi.org/https://www.google.com/books/edition/The_Street_Railway_Journal/q4dNAAAAIAAJ?hl=en&gbpv=1&dq=%22Los+Angeles+Pacific+Railroad%22+journal&pg=PA511&printsec=frontcover.

Judge Whitney and the Los Angeles Cable Railway.²⁵ Hellman made his way north to San Francisco and helped run the Market Street railroad under the Southern Pacific and mingled with the remaining “Big Four,” as well as meeting Henry Huntington. The two would form a long friendship and partnership, going on to founding the first Pacific Electric in 1901 and the Los Angeles Railway in 1898; Hellman would also be independently active in the oil industry financing the first wells. Hellman would later sell his shares in 1907 over a strained relationship due to Huntington reinvesting the dividends back into construction; while it made Huntington wealthy, his shareholders were sick of being left out.²⁶

Much like how the Southern Pacific laid the “seeds” of Southern California's agricultural boom, the Los Angeles Pacific laid the foundation of Interurban success for future investors like Huntington. The route through Hollywood and ending in Santa Monica was affectionately known as “Sherman's March to the Sea,” and while having nowhere near the number of resources as Huntington, he was able to corner the market of northern Los Angeles county. In the twenty years of operation, Moses's Los Angeles Pacific saw beach areas like Redondo, Playa del Rey, Venice, and Santa Monica explode in population and popularity; the coastal towns grew by over 20,000 permanent residents and several million dollars in valuation.²⁷ Every beach town had grand resorts like Hotel Arcadia and massive wharfs jutting into the ocean. This further transformed the local economy away from agriculture and into a suburban service industry. The focus of service industries, not heavy industries, made Los Angeles and its surrounding communities unique compared to other contemporary American cities. The idea of “suburban

²⁵ “Pointers, California.” *Street Railway Gazette*, (July 1887): 151

<https://ia800302.us.archive.org/21/items/electricrailwayg02newy/electricrailwayg02newy.pdf>

²⁶ *Los Angeles Evening News*, January 28, 1907.

²⁷ History Staff Jason Gauthier, “1910 Overview - History - U.S. Census Bureau,” 1910 Overview - History - U.S. Census Bureau (United States Census Bureau), accessed February 14, 2021, https://www.census.gov/history/www/through_the_decades/overview/1910.html.

sprawl" was championed by the various land promoters, away from the East Coast's blighted urban centers; while these are the same ideas from the 1880's it would be the Interurban to finally make these dreams come true.

Section V In Huntington We Trust

On February 27, 1850, a great man was born, Henry E. Huntington, who should be recognized as the single most influential person in Los Angeles' history. Nephew of Collis P. Huntington, one of the Southern Pacific's "Big Four," young Henry's life would be blessed by the shadows cast by Collis' guiding wings. Like many of the preceding Los Angeles land boosters, Henry would view Southern California as an empty canvas for near-infinite growth, baring one had the resources to achieve their dreams. This is what put Huntington on a level above the previous boosters, his extensive wealth, as well as, over two decades of railroad management. From track supervisors to acting President of the Southern Pacific, he knew how to run a railroad; he understood rolling-stock, developing customers, advertisements, and labour relations. His vast wealth allowed him to incorporate three companies that would be crucial to shaping Great Los Angeles, the Huntington Land and Improvement Company (HLIC), Pacific Light and Power company, and the Pacific Electric Railway (P.E.). All three of these companies worked in synchrony to create demand in lands that were once barren of civilization; word alone of Huntington's involvement would set off a frenzied boom. Over a hundred years later, the roads that Californians drive on, the cities and subdivisions they in, and the transit routes they ride on are in thanks due to Huntington's supreme confidence in Greater Los Angeles' success.

As the nephew of one of the most powerful men in America, Henry was never short of work in his Uncle's growing iron horse empire. His first significant job would come in 1871 in a small West Virginian sawmill that Collis purchased to supply railroad ties to his new Chesapeake

and Ohio Railroad; the 21-year-old Huntington quickly increased the efficiency of the mill by doubling shifts and working many long hours himself, which quickly gained him the support of his new employees. The elder Collis wrote in a letter, "I am glad to hear that your prospects for business are so good, but I did not expect anything else," the level of confidence placed by his Uncle would set the tone of their relationship for the next thirty years.²⁸ For the next two decades, Henry would work for a variety of his Uncle's railroads, such as the Kentucky Central, where he would continue to earn praise and profits from Uncle Collis and unturn every stone in the name of efficiency. Meanwhile, Collis Huntington would spend the 1880s undermining the other Big Four in pursuit of Presidency, which he would achieve in 1892 and require his trusted nephew to travel to San Francisco.

The next eight years in San Francisco would be some of Huntington's most formative. It would be here in the Golden Gate that Henry was to be introduced to Street Railroads, his first top-level corporate job, directly dealing with a board of directors and making friends, as well as an unexpected betrayal. Collis Huntington ousted the former S.P. President Leland Stanford, as being too distracted from other personal pursuits and his University; ironically, Collis himself was too busy in New York, so Henry would act as his "agent" and was looked upon as acting President of the Southern Pacific. He rapidly rose to prominence in the local business community and joined the prestigious Olympic Club, Pacific Union Club, and Bohemian Club; his then-wife Mary was also an avid socialite.²⁹ Henry quickly improved efficiencies and streamlined operations by eliminating positions he saw as unnecessary at their San Francisco headquarters,

²⁸ Friedrich's, William B. In *Henry E. Huntington and The Creation of Southern California*, 24. Columbus, OH: Ohio State Univ. Press, 1992. Collis Huntington to HEH, April 23, 1873, CPH Papers, microfilm, series 1, reel 5.

²⁹ Nancy Armitage, "Henry E. Huntington's (Bio) Biography File (1850-1927)," Inside the Huntington's Story - Huntington Library San Marino, CA, November 9, 2020, <https://insidethehuntingtonstory.com/2020/02/27/henry-e-huntingtons-bio-biography-file-1850-1927/>.

which he also moved to 1 Market Street. In San Francisco, Huntington was introduced to street railroad through the Market Street Railway (MSR).

The MSR was innovative as it was quick to realize the power of electric traction versus horse or cable, drastically reducing the cent per mile cost. He personally oversaw the electrification of the Mission Street line and introduced the then most extensive electric-powered streetcar in the West. He also kept his shops "open" and reduced workdays to eight hours and weekly schedules to four days in order to fight unionizing.³⁰ Huntington would also meet Isais Hellman, a prolific banker in California, funder of railroads, and essential bondholder of the MSR as well as President of the largest bank in San Francisco. Huntington and Hellman would become fast friends and business partners. Henry Huntington's life would be forever changed in 1900, after the surprise death of his Uncle Collis; one would think that Henry would ascend to the role of President of the Southern Pacific, a position he's been carrying out for the past eight years. However, the board blocked Huntington's natural rise and later chose Edward Harriman, the President of Union Pacific, among others. Tired of fighting the S.P.'s Board, Henry sold all of his shares, making him several million, and boarded his personal Pullman car to Los Angeles to start a new life and create a new way of living.

Huntington's relationship with Southern California had begun as soon as he was called West, taking the S.P.'s "Sunset Route" from New Orleans to Los Angeles in 1892, he was hosted in J. de Barth Shorb's expansive winery in San Marino. As his Uncle's agent and acting President, Henry also made several fact-finding trips to improve the S.P.'s efficiency and entice more customers away from the ATSF; San Marino would later be Huntington's homestead and the Huntington Library. In September 1898, Huntington and Hellman and other MSR investors

³⁰ Fredricks, 34-37.

Antoine Borel and Christian DeGuine made their first foray into Los Angeles transit as the *Huntington Syndicate* purchased the Los Angeles Traction Company. The Syndicate incorporated the Los Angeles Railway (LARy) and issued \$5 million in stock, \$5 million in bonds, and Huntington as President with 55% ownership.³¹ The LARy was a typical streetcar system like the MSR, its lines radiated around the central business district on a narrow-gauge track and the Syndicate came in and immediately ripped it up. Huntington personally inspected the LARy line by line and ordered a massive modernization scheme. All the rail was replaced with heavier tracks to support larger cars, and all the remaining horse, cable, and steam car lines were electrified swiftly, with dozens of miles being annually expanded; by 1900, the LARy held a near-monopoly on local transit. The St. Louis Car Company was selected to build the "Huntington Standard" streetcar, which had a central closed seating section and two open compartments for milder California climate. These handsome yellow and white wooden double-trucked cars were greater than those of the 1890s, and several examples are preserved in railroad museums. While the large infrastructure programs were shocking to the local railroaders, it was only foreshadowing what was to come in the next few years.

Section VI Red Car Empire

While Uncle Collis's death in 1900 was shocking, it was the betrayal by the S.P.'s Board of Directors that was the far deeper cut. Collis' estate was split evenly between his second wife Arabella and Henry; several million dollars worth of stock included the S.P., eastern railroads, and the Newport News Shipyard, making Arabella one of the wealthiest women in America.

³¹ B L Lewis, "THE STREET RAILWAY HISTORY OF LOS ANGELES," THE STREET RAILWAY HISTORY OF LOS ANGELES (Electric Railway Historical Society of Los Angeles), accessed March 5, 2021, <http://www.erha.org/railwayhis.htm>.

Bereft of the S.P.'s Presidency, Henry sold off all his shares to Harriman and ended Huntington's chapter in Northern California. With several million in cash, Henry and his syndicate incorporated the Pacific Electric Railway on November 10, 1901, just days after selling the MSR, selling ten million in stock and immediately beginning construction.³² The newspapers and industrial journals were rife with speculation as the Huntington boasted, even before the P.E., that they would build lines through the San Gabriel Valley, Long Beach, Anaheim, Santa Ana, Pasadena, and even San Bernardino.³³ Initially composed of five previous traction companies, most interestingly the Mt. Lowe Railway, the P.E. commenced their modernization and standardization plans.³⁴ Unlike the LARy, the P.E. would be of standard gauge as the steam roads, which would allow larger and faster cars and seamless freight car interchanges for future business. The Pasadena line held three impressive attractions on its line, the "Tournament of Roses," the Raymond Hotel, and the Cawston Ostrich Farm; of which a special 25 cent P.E. ticket could be purchased, including round trip transit and the farms fare.³⁵

July 4, 1902, would see the P.E.'s spine inaugurated, the Long Beach Line, not only their first original line constructed but also the P.E.'s last passenger line to close. The characteristics of the Long Beach Line would define the P.E. and what an Interurban should be. Built much like a steam railroad, the P.E. constructed an almost twenty-mile-long straight shot from the 6th and Main Street downtown hub to San Pedro Bay. With only six gentle curves in a private right of

³² Fredricks, 57.

³³ "News of the Week: Construction Notes," *Street Railway Journal* XVII, no. 20 (May 18, 1901), https://www.google.com/books/edition/_/Gj0_AQAAMAAJ?hl=en&gbpv=1.

³⁴ "Pacific Electric 'Trolley Trips Through Wonderland,'" Mount Lowe Preservation Society Inc., accessed March 26, 2021, <https://www.mountlowe.org/mlpsi-collection/brochures/pacific-electric-trolley-trips-through-wonderland-brochure/>.

³⁵ Wetzel, Tom. "Tour of the Sierra Vista Local Line and the Pasadena Short Line." El Sereno Historical Society, 2013. http://www.elsenohistoricalsociety.org/P___E_RR.php.

way, the electric cars could regularly reach their maximum speed of 80 miles an hour.³⁶ To further exemplify their focus on speed, every Pacific Electric car was painted a deep crimson, with hand-painted gold leaf adornments. Opening day at Long Beach brought thousands to the sleepy town of 498 residents; the sleek electric trains caused such a commotion that those who rode in on steam trains sacrificed their return ticket to ride the P.E. home!³⁷ The Long Beach line acted as the nucleus for P.E.'s expansion into Orange County with three separate lines, one along to the coast to Newport Beach, one in the middle to Santa Ana and Orange, and the third further north to La Habra and Fullerton; the terminus of the Long Beach line was San Pedro, home to the new municipal-owned port which ended S.P.'s Santa Monica port monopoly. The large swaths of private right of way further distinguished the P.E. from the other local electric railways; Sherman's LAP was built mile by mile through funds by subdivision builders, often in the center of their streets like any ordinary streetcar, slowed down by other traffic. Huntington's Syndicate's vast wealth allowed it to be built like a steam railroad, offering fast express services and luxurious parlor cars that matched any Pullman service of the day.

In a letter to *Railway Gazette*, Huntington divulged that he was “interested in the Los Angeles Railways growth, but he most excited about the Pacific Electric and its possibilities;” that excitement stemmed from the very rapid growth of his initial cities from the first year of construction.³⁸ From 1900 to 1910, the Census data of Pasadena, Whittier, Long Beach, and Los

³⁶ "Los Angeles Interurban Electric Railways," *Street Railway Journal*, 24, xix, June 14, 1902, p. 754: https://www.google.com/books/edition/Transit_Journal/eT0_AQAAMAAJ?hl=en&gbpv=1&dq=%22long+beach%22+railway+journal&pg=PA754&printsec=frontcover

³⁷ Kenneth Bickell, "Blue Line At 20: Looking Back At Early Service Between Los Angeles And Long Beach (1902-1961)," L.A. Metro: Dorothy Payton Grey Archives, January 10, 2011, <https://metroprimaryresources.info/blue-line-at-20-looking-back-at-early-service-between-los-angeles-and-long-beach-1902-1961/283/>

³⁸ Fredricks, 64.

Angeles all had triple-digit growth for population growth and several tens of millions of dollars added in valuations.³⁹

Incorporated City	1900 Population	1910 Population
Los Angeles	102,479	319, 198
Pasadena	9,117	30,291
Whittier	1,590	4,550
Long Beach	2,252	17,809

While the sleek red cars wooed the public, it was the land, not the trains, that made Huntington his wealth. 1902 would see Henry charter the Huntington Land and Improvement Company (HLIC), focusing its efforts in the San Gabriel Valley. The HLIC would purchase swaths of land in Alhambra, Pasadena, and San Marino, with Henry owning a hundred percent of its stock, personally leading the survey teams and spending long evenings reviewing maps.⁴⁰ While Huntington directed the long-term visions, he placed George Patton, father of the future General, in charge of the day-to-day operations; Patton initially worked for Shorb's winery, which Huntington also purchased. With transit and land development procured, Henry needed the electricity and water to supply his growing empire. Partnering with William G. Kerchoff, a long-time associate and electric power developer, they formed Pacific Light and Power Company (PL&P) on March 6, 1902. Kerchoff was in the midst of planning for a hydroelectric dam on the Kern River but lacked the capital needed. The Borel Dam, named after Antoine Borel, was completed in two years and sent 10 thousand volts over 127 miles to Los Angeles. It was also the

³⁹ US Census Bureau, "1910 Census Data, Population of Los Angeles and Surrounding Communities," Census.gov, 1998, <https://www.census.gov/data/>.

⁴⁰ Fredricks, 59.

first use of steel transmission towers and still operates to this day.⁴¹ To complete the utility triad, the San Gabriel Valley Water Company (SGVW) was later incorporated in 1907. The SGVW worked in tandem with the HLIC, either boring for wells or building aqueducts to raise the land value. In such a short amount of time, Henry Huntington wielded the ability to shape Southern California as he saw fit. He owned the land that could be cultivated or developed into subdivisions. He controlled the transit that carried the new arrivals to and fro their work, their new homes, and vast pleasure resorts on the coast and in the mountains. Finally, he controlled the water, gas, and electricity for his own enterprises and sold to the public at large, furthering regional growth, and it's only now rolling into 1903.

The new year would bring more growth, but finally, a few challenges for the Huntington Syndicate to grapple with. With PE trackage pushing near 200 miles, the other Syndicate members expected the profits to roll in, much like the MSR in San Francisco. But Henry held little interest in their short-term profits schemes and continued to fund expansion projects at the expense of paying out dividends. The members grew increasingly unsatisfied over Huntington's demand for cash for what they saw as side projects, causing DeGuine to sell a majority of his shares back to the Syndicate; these cracks would entice a new partner to step in.⁴²

Net Earnings	Los Angeles Railway	Pacific Electric Railway
1900	\$85,200	
1902		\$121,000

⁴¹ Tobin L Gibson and Brian McGurty, "Borel: A Historical Powerhouse Overcomes Challenges," Hydro Review Journal (Southern California Edison, November 1, 2011), <https://www.hydroreview.com/world-regions/hydro-hall-of-fame-borel-a-historical-powerhouse-overcomes-challenges/#gref>.

⁴² Fredricks, 65-67.

1903	\$366,100	\$37,600
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In stepped Edward Harriman, the last man Huntington expected to work with, but also the only man who shared his vision of Los Angeles and could out-fund him too. This new agreement was not some "Berlin-Moscow" axis, but a partnership of two titans that wished not to fight anymore. Harriman held similar long-term views with expensive infrastructure projects and oversaw several electrification and Interurban developments on lines in Utah, Oregon, and California. The P.E. ownership was reorganized, with Harriman and Huntington each owning 40%, while the Syndicate held only 20% or so; this development was dubbed the "Harriman-Huntington Syndicate" by railroading Journals.⁴³ Both the S.P. and Huntington's group had everything to gain and nothing to lose.

Harriman could not have joined at a more opportune moment as the three other Syndicate members, DeGuine, Borel, and Hellman had put their foot down to forbid any further track expansion in the Pacific Electric's territory. To bypass these restrictions and a miserable bond market, Huntington incorporated the Los Angeles Inter-Urban Railway (LAIU) on June 6 with \$10 million in stock and cash from Harriman to build out a total of 350 miles of track. The LAIU functioned as a shell company of the P.E. with the same managers and officers but directly under Huntington's control. It would be the LAIU that built all the lines into Orange and Riverside Counties, as well as to Covina, Burbank, and San Pedro; once the lines were built, they were then leased to the P.E. in perpetuity.⁴⁴ The coastal line to Newport Beach saw the takeover of "Pacific City," which was renamed Huntington Beach and later had a massive oil boom.

⁴³ News of the Week", *Street Railway Journal*, no4, vol xxii, July 25, 1903, p.141:

<https://ia800901.us.archive.org/33/items/streetrailwayjo221903newy/streetrailwayjo221903newy.pdf>

⁴⁴ "Los Angeles Inter-Urban Electric Railway," Los Angeles Inter-Urban Electric Railway (Electric Railway Historical Association of Los Angeles, 1998), <http://www.erha.org/laiuh.htm>.

Harriman, like Huntington, wanted complete control of the transit market to protect the Southern Pacific from the unnecessary competition, not land development. The acquisition of the P.E. partnership meant that the S.P. could cancel their local passenger services saving \$148,000 annually and standardizing rolling stock with the S.P.'s Oregon and Bay Area lines with the massive "Blimp" steel-bodied cars. The three minority partners in the Syndicate would hold onto their LARy shares for three more years until dumping them on Harriman in 1907; Huntington's refusal to pay out dividends killed off his partnerships and left the Greater Los Angeles transit in the hands of just two men.

Another impressive solo venture was Huntington's complete takeover of Redondo Beach in 1905 and its transformation into a saltwater playground. Redondo had been a long-running money sink for its original proprietors; while its hotel never turned a profit, their wharf had been the Los Angeles terminus for the ATSF railroad since 1888. Huntington had swept up ownership of the land, and its 57 miles long narrow-gauge Redondo and Los Angeles connecting to downtown L.A. Just his name alone reversed the economic trend with the L.A. Times reporting, "The magic name of Huntington awoke the dreamer by the sea, and for several days a frenzied scheme of mad speculation followed," in just a few weeks Huntington had recouped his initial investment of three million dollars and then dumped all the money right back into Redondo.⁴⁵ The next few years saw Redondo gain grand public pavilions, casinos, ballrooms, and rollercoasters, which were all powered by PL&P electricity and surfing lessons by pioneer George Freeth who Huntington personally hired from Hawaii. In 1909 the world's most extensive saltwater plunge was built at Redondo, consisting of three 720,000-gallon heated pools, Turkish

⁴⁵ *Los Angeles Times*, July 20, 1905.

baths, and swimming lessons for all ages.⁴⁶ During this time in 1906, Huntington and Harriman took over Moses Sherman's LAP, further dominating the coastal traffic and helping Redondo's population balloon by 243% in the 1910 census to just under 2,400 permanent residents.

Though Huntington rarely played nicely in groups, when he did, the results were spectacular; in 1904, Huntington, Harriman, the banker J.F. Satori, and fellow developer Leslie Brand formed the San Fernando Mission Land Company.⁴⁷ One year later after this incorporation, Moses Sherman, who served on L.A. 's water board, announced that the city of Los Angeles would construct an aqueduct from the Owens Valley; this imported water would only be available to residents of Los Angeles. Huntington's scheme was part of a more boundless operation alongside Henry Chandler, Harrison Otis, and Isaac Van Nuys to boost the price of the once arid San Fernando Valley. Huntington and Sherman would extend the P.E. through the Cahuenga Pass to the aptly named aqueduct terminus of Owensmouth, Otis, and Chandler to control public opinion through the *L.A. Times* and Sherman on the water board influenced the decision to build William Mulholland's L.A. Aqueduct. The Pacific Electric would be heavily advertised in the promotion of Burbank, San Fernando, and the future neighborhoods of Chatsworth and Van Nuys; the imported water would draw not only homes but also irrigated agriculture which the P.E. would haul as well.⁴⁸ A resident in the new development could take an interurban right into the heart of Hollywood and Los Angeles in under 45 minutes every day. With the Los Angeles Aqueduct opening in 1913, Southern California would transition into a

⁴⁶ "Redondo Beach Salt Water Plunge Advertisement," Gerth Archives & Special Collections (CSU-Dominguez Hills), accessed March 27, 2021, <https://cdm16855.contentdm.oclc.org/digital/collection/p16855coll2/id/3165>.

⁴⁷ Michael F. Sheehan, "Land Speculation in Southern California: The Roles of Railroads, Trolley Lines and Autos," *American Journal of Economics and Sociology* 41, no. 2 (April 1982): pp. 200-204, <https://doi.org/10.1111/j.1536-7150.1982.tb03173.x>.

⁴⁸ Jack Feldman, "L.A. Aqueduct Opening Ceremony," Water and Power Associates, Inc., accessed March 28, 2021, https://waterandpower.org/museum/Opening_of_LA_Aqueduct.html.

new era. The stipend that aqueduct water must go to L.A. citizens allowed L.A. to directly annex most lands in the San Fernando Valley, which greatly fueled the city's growth and control over smaller neighboring towns. The inauguration of the Los Angeles Aqueduct also marked the transition from private developers dictating growth to city councils gaining control of further development.

By the end of 1908, Huntington was beginning his exit plan. The panic of 1907 had soured real estate growth, and HLIC recorded its first-ever financial loss. While Henry knew this panic would pass, he was also interested in dedicating more time to his true passion, the collection of rare books and art. Huntington and Harriman had a verbal agreement of ownership swapping between the P.E. and LARy, in which Henry would gain sole ownership of the local yellow car lines. Unfortunately for them both, Harriman would die in 1909, delaying the sale for another year and bringing a slew of antitrust suites to break up Harriman's Union Pacific/Southern Pacific partnership. In September 1910, Huntington would be freed from the money sink Pacific Electric while still controlling his other companies that printed money.⁴⁹

Year	PE - Income	LARy - Income
1909	\$75,000	\$750,000
1910	-\$22,000	\$1,365,000

With the Southern Pacific entirely in control of the Pacific Electric, they had become the largest landowner in the State of California, and its subsidiary, the Southern Pacific Land Company, directly controlling 18% of the state's oil production. By all means, Huntington had walked away from this transaction at the top, though the S.P. had continued Harriman's plans of total economic control.

⁴⁹ Friedrich's, 99-102.

While Huntington was undoubtedly not the only large land developed in Southern California, the efforts of others would be for naught without his vast empire of electric-powered transit and utility development. The Pacific Electric, in just nine years of existence, had touched all four counties in Greater Los Angeles, as their terminal at Sixth and Main had shifted the downtown business district to their area. 18/21 new towns had a P.E. station, and most importantly, Los Angeles had the greatest amount of homeowners than any other large American city at 44%.⁵⁰ The promise of homeownership, not renting, was a unique appeal of Southern California, away from the urban slums of New York, Baltimore, and Boston, a simple wage earner, and their family could own property and live their California dream. The combination of advertisements and authentic offers lured millions out West. Though without Huntington's trollies, these new settlers could not have owned their land and commute to downtown every day; Los Angeles would have mirrored the slums of the east without the Red Cars.

Section VII End of the Line

With the Southern Pacific in total control of all of Los Angeles Interurbans, they spent the next year of what rail-fans call the “Great Merger of 1911” that saw all Interurbans merged into a “new” Pacific Electric on September 1, 1911. This new P.E. would be the largest in the world by track mileage with just over a thousand miles, nearly all of it electrified, though the days of a massive expansion to fuel real estate speculation were now long over. While the S.P. halted most expansion plans, it did fill the P.E. 's leadership with competent managers like Paul Shoup, the Southern Pacific's most ardent supporter of electrification. Shoup had also helmed Sunset Magazine previously advertised Los Angeles nationally and to Western Europe; he was

⁵⁰ Laura Redford, “The promise and principles of real estate development in an American metropolis: Los Angeles 1903-1923,” (University of California, Los Angeles, 2014), pp. 87-92, <https://escholarship.org/uc/item/9vx3c796>.

promoted to Presidency in 1912 and later became a V.P. for the Southern Pacific.⁵¹ To offset the annual losses, the Pacific Electric greatly expanded its freight operations and acted as a feeder to the Southern Pacific. This feeder traffic was the most prominent reason why the S.P. refused to share Interurban with either the ATSF or public ownership. In the Huntington era, freight was a consistent single-digit percentage of revenue. The new P.E. had freight rise quickly to the double digits and were responsible for the only two years of P.E. profitability post-1911. The PE operated as a vast switching network, hauling oil cars on the coast, citrus, and agriculture in the San Gabriel and San Bernardino valleys and controlling most traffic in and out of San Pedro's Port.

In addition to inheriting an annual financial loss, the California Railroad Commission (CRRC) had expanded their regulatory powers over utilities in 1911, which included street railways and interurbans. The CRRC was born to reign in the Southern Pacific during the 1870s and 80s and controlled rate setting and what passenger lines could be discontinued; its expansion to street railways meant that various electric roads of California could not raise their 5 cent fares without state approval. This could not have come at a worse time as the private automobile, and unregulated jitney bus would explode in popularity during the 1910s. It was the automobile that would be the primary cause of the P.E.'s downfall, however, it is not the only one. In the downtown area where both P.E. and LARy ran on the same track, it had already been congested for many years; with the private automobile growing in popularity, the congestion now moved like glacial ice. Los Angeles quickly had the highest ratio of people to automobiles in 1915 at eight cars per one resident, where nationally it was forty-three to one; in 1925, the ratio slimed to

⁵¹ "Guide to the Paul Shoup Papers," Online Archive of California, accessed April 10, 2021, https://oac.cdlib.org/findaid/ark:/13030/tf5c6004f9/entire_text/.

just two cars for every resident, and nationally it was six to one.⁵² The slowdown of public transit pushed the businesses to decentralize away from downtown commerce and expand into the commuter towns where the P.E. originated from. This shift of developing bedroom communities into comprehensive self-supporting towns decreased the need for rail transit even further and could not increase its fare to compensate for the ridership lost.

Despite these uphill battles, Pacific Electric, Business Leaders, City Officials, and citizen groups proposed dozens of transit improvements plans over the next few decades. While most plans remained headlines, including the monumental 1911 plan by famed engineer "Father of Third Rail," Bion J. Arnold called for dozens of miles of elevated track and subways to escape the downtown congestion.⁵³ While Bion's plan was not enacted, it did influence the short 8-mile-long Hollywood Subway open in 1925 and Los Angeles's Union Station of 1939, both of which were primarily built with private funding. The failure for large measures to pass only furthered Southern California's decentralization away from Downtown LA; the automobile had replaced the streetcar, and the suburban townsites had replaced the urban center. The Pacific Electric did everything in its power to reduce losses and still bring a quality service for its passengers and freight customers; their motto of "Comfort, Speed, and Safety" was applied even to citrus fruit haulage to decrease damaged product.⁵⁴ Unfortunately for the P.E. and most railroad in the United States, the Great Depression would wipe out any self-sufficiency potential. While traction companies large and small declared bankruptcy, national auto ownership only

⁵² Metro Digital Resources Librarian, "1922 Los Angeles: Unprecedented Growth, Congestion And A Plan For Relief," Metro's Primary Resources (L.A. Metro Library, January 11, 2011), <http://metropriamaryresources.info/1922-los-angeles-unprecedented-growth-congestion-and-a-plan-for-relief/281/>.

⁵³ Bion J Arnold, "The Transportation Problem of Los Angeles," *The California Outlook*, November 4, 1911, <http://libraryarchives.metro.net/dpgtl/trafficplans/1911-california-outlook-arnold-transportation-problem-los-angeles-1.pdf>.

⁵⁴ Geo H Squires, "Strides Made in Reducing Loss," *Pacific Electric Magazine*, December 10, 1925, p. 10, http://libraryarchives.metro.net/DPGTL/employeeenews/PE_Mag_1925_Dec_10.pdf.

increased through new car sales naturally dropping off. The P.E. staved off the Depression by substituting lower revenue passenger routes with gasoline powered buses, now called “bustitution” by transit authorities.

While the Depression spelled the end of the line for a profitable future, let us look back to see all that was accomplished. Between 1900 and 1930, Los Angeles County alone gained about 2.1 million residents, and almost every new town charted during that time was located on an interurban line. The 1910 census showed 11 out of 19 new towns had interurban service, with 8 of those towns having a higher percentage than the county. The 1920 census showed a population increase in 33 communities, with all but two of them being served by Pacific Electric, with 18 of those having growth larger than 50 percent.⁵⁵ These towns were within the 25-mile radius of Los Angeles, placing firmly in the bedroom community category. In 1900 the population density was reasonably even in the four counties. By 1920, the city of Los Angeles had the most substantial density of any city, much to other location's detriment. The introduction of an interurban stop set off speculation waves that shot up real estate prices for both barren parcels and existing communities with assessed valuations increasing annually. Between the 1900 and 1910 Census, LA County assessed valuation increased from around 100 million dollars to over 600 million.⁵⁶ In new towns like Alhambra, the business district down East Main Street naturally extended on either side of the P.E.'s right of way. For Los Angeles, the entire business district was shifted away from 2nd and Spring street to Pacific Electric's terminus on Sixth and Main, which was also L.A.'s first skyscraper.

Industrial development was a lesser concern, but the P.E. still played an important role. While a connection to the steam roads was a far greater value, the P.E. share many facilities and

⁵⁵ 1900, 1910, and 1920 Census data, Howard Smith 1965 Thesis.

⁵⁶ Ibid.

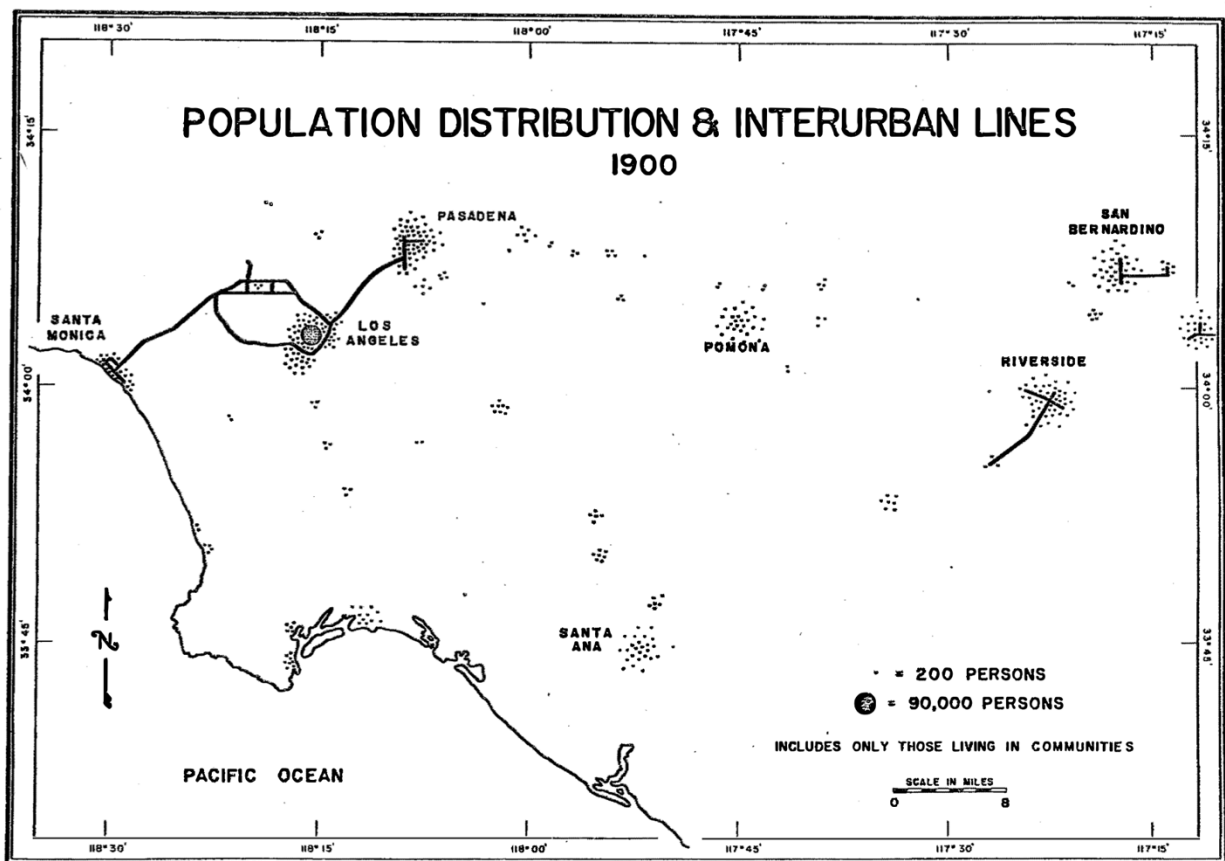
often acted as a switching nexus between the three major steam railroads. The P.E. had a much easier time influencing where these factory workers would live, and inverting caused Los Angeles's decline as a manufacturing hub. The growing young towns offered much lower land prices for businesses to purchase, and as the towns were often former farmlands, they possessed a cheap farm hands labor pool that could be re-trained for industrial work. This strengthening of suburban towns also downgraded many commuter routes as the jobs in Los Angeles were now only a short walk or drive away.

Not enough could be said about Henry Huntington's influence on the region, a dominating visionary that never gave up on his goal to make Los Angeles great. It must be reiterated again that the Pacific Electric was not designed to make a profit. These were not the rapid-transit elevated Manhattan or Chicago lines; this Interurban was intended to expand influence and anchor control. The P.E. was just one leg of Huntington's triad of real Estate, utilities, and transit; for the first ten years of the 20th Century, Henry Huntington was the regional planner who answered no one. When more electricity was needed for his trains, he dammed the Kern River in the first long distance electric transmission for Southern California. When he had a surplus of power, he sold it off to either L.A. or one of his real estate developments. He replicated a similar scheme with natural gas, and these utilities went on to form the modern SoCal Edison company. Many of the former P.E. right of ways are now paved over, while the rails are long gone. These roads and highways are the modern arteries of Los Angeles. It is one of the great ironies that Los Angeles County has spent many billions over the past three decades to regain just a fraction of what Huntington and his trusted men built in under a decade.

Conclusion

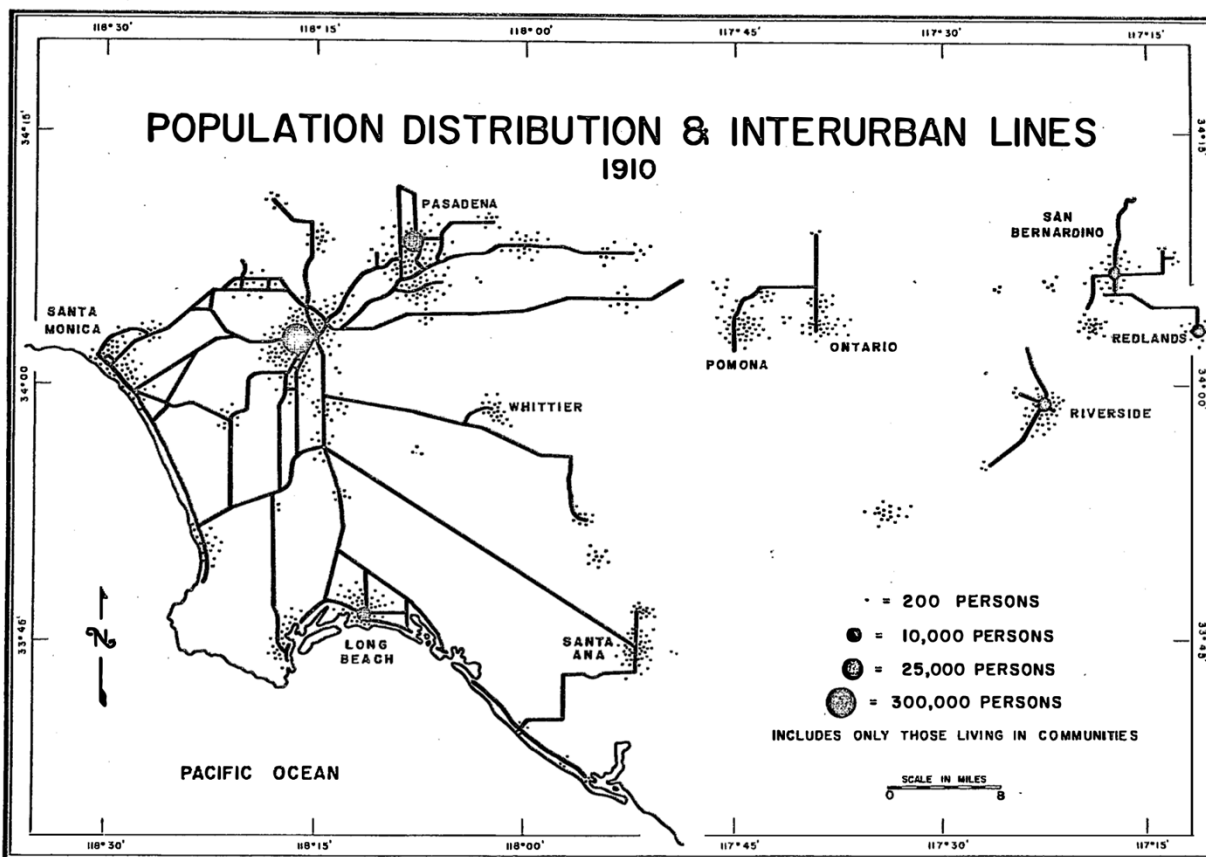
It must be reported to my fellow Railfans, Juice Fans, Foamers, and urban planning salivators that the Pacific Electric was not stabbed in the back by a grand conspiracy, but it collapsed in upon itself like a house of cards. The Pacific Electric failed the day Huntington sold his shares, as it had lost its original purpose and the Southern Pacific got stuck holding the bag. The S.P. was greedy and wagered wrongly that its new acquisition would be profitable; no-one expected L.A. to be home to the automobile, not even the traffic planners. Without Huntington and his incredible lust for growth and control, Southern California would not be how it is today. While the idea of a streetcar suburb was replicated nationwide, Huntington made a streetcar region, where a family spent the morning at the beach, their afternoon in downtown L.A., and then could rent a cabin in the shadow of Mt. Lowe all within a single day. The Pacific Electric dictated where the many new residents of Southern California would traverse. With reliable and frequent service, anyone could own their own home and commute into the big city. These lavish expenditures were taken for granted as the tracks were paved over to make room for cars; one type of greed was exchanged for another. When someone asks, "who killed the Red Cars?" we can only point to ourselves.

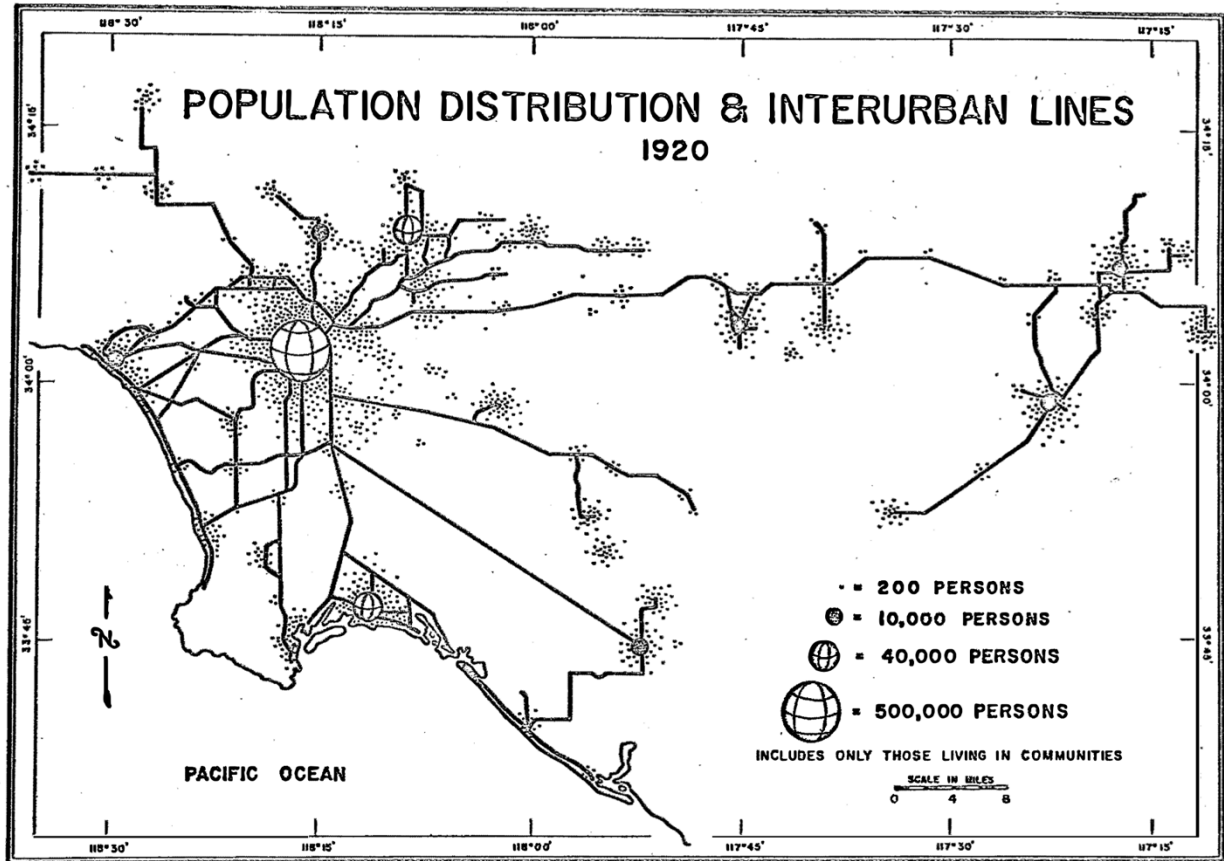
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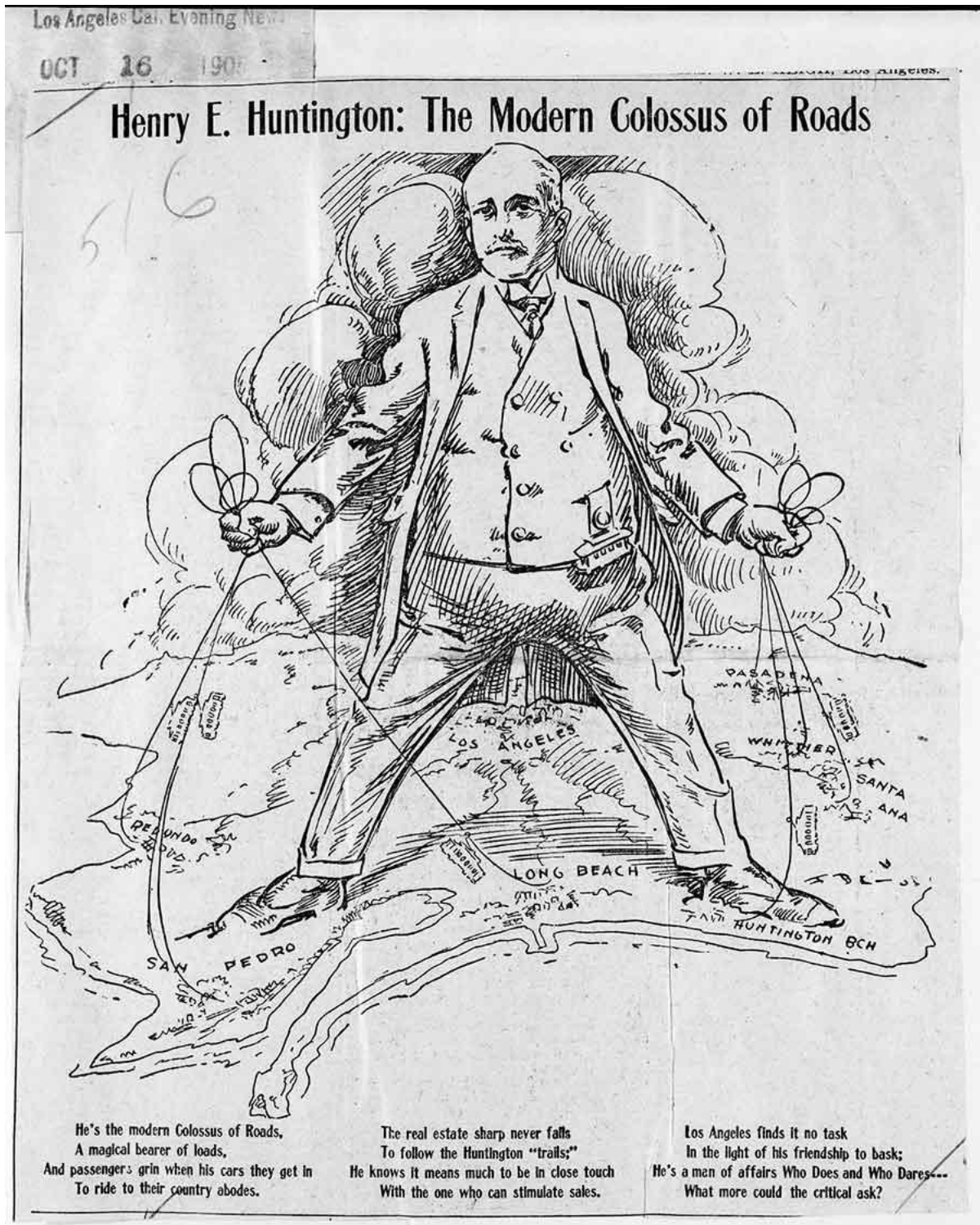


Howard J. Smith "The Role of the Interurban in the Los Angeles Area" 1965 thesis

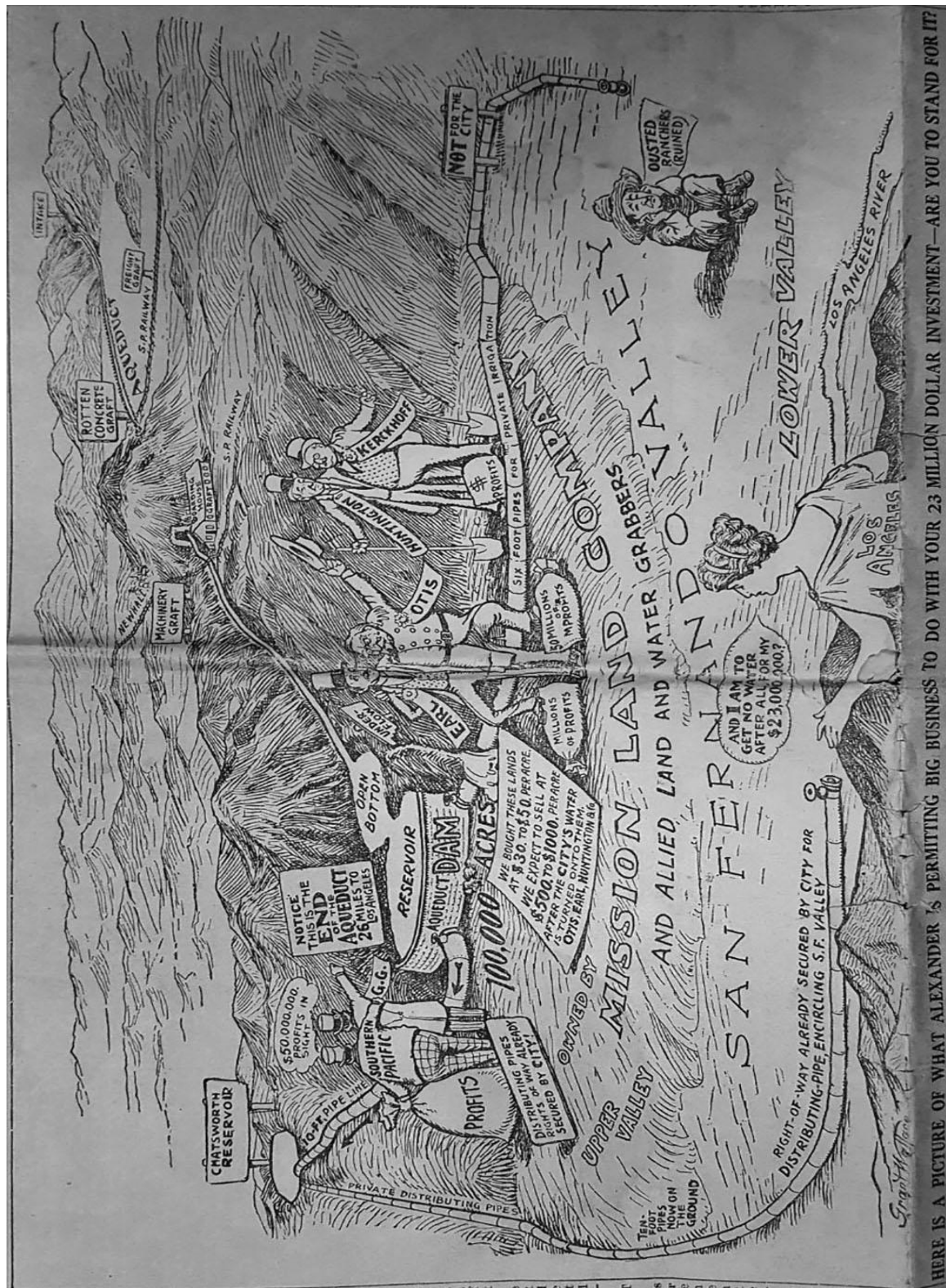
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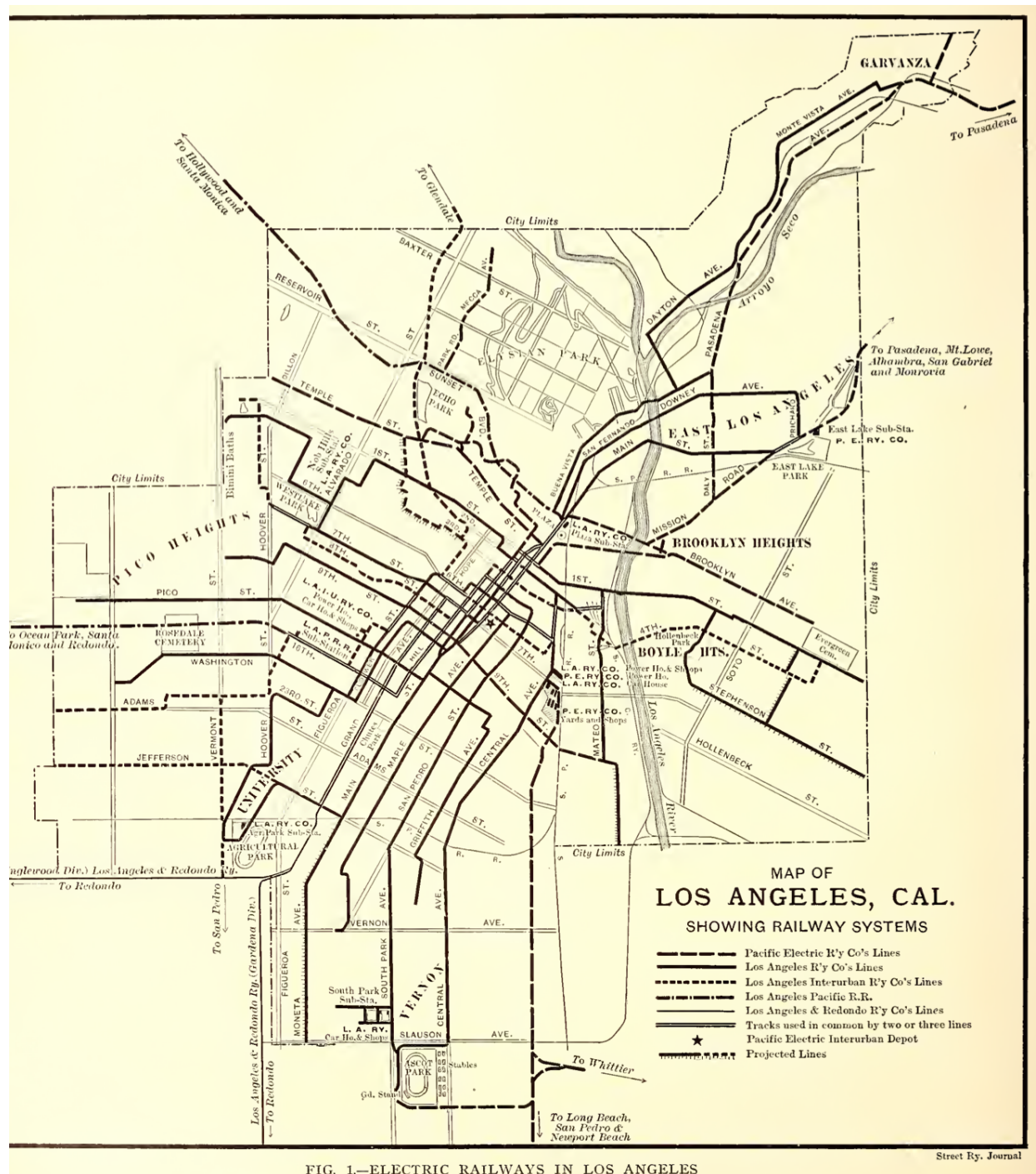




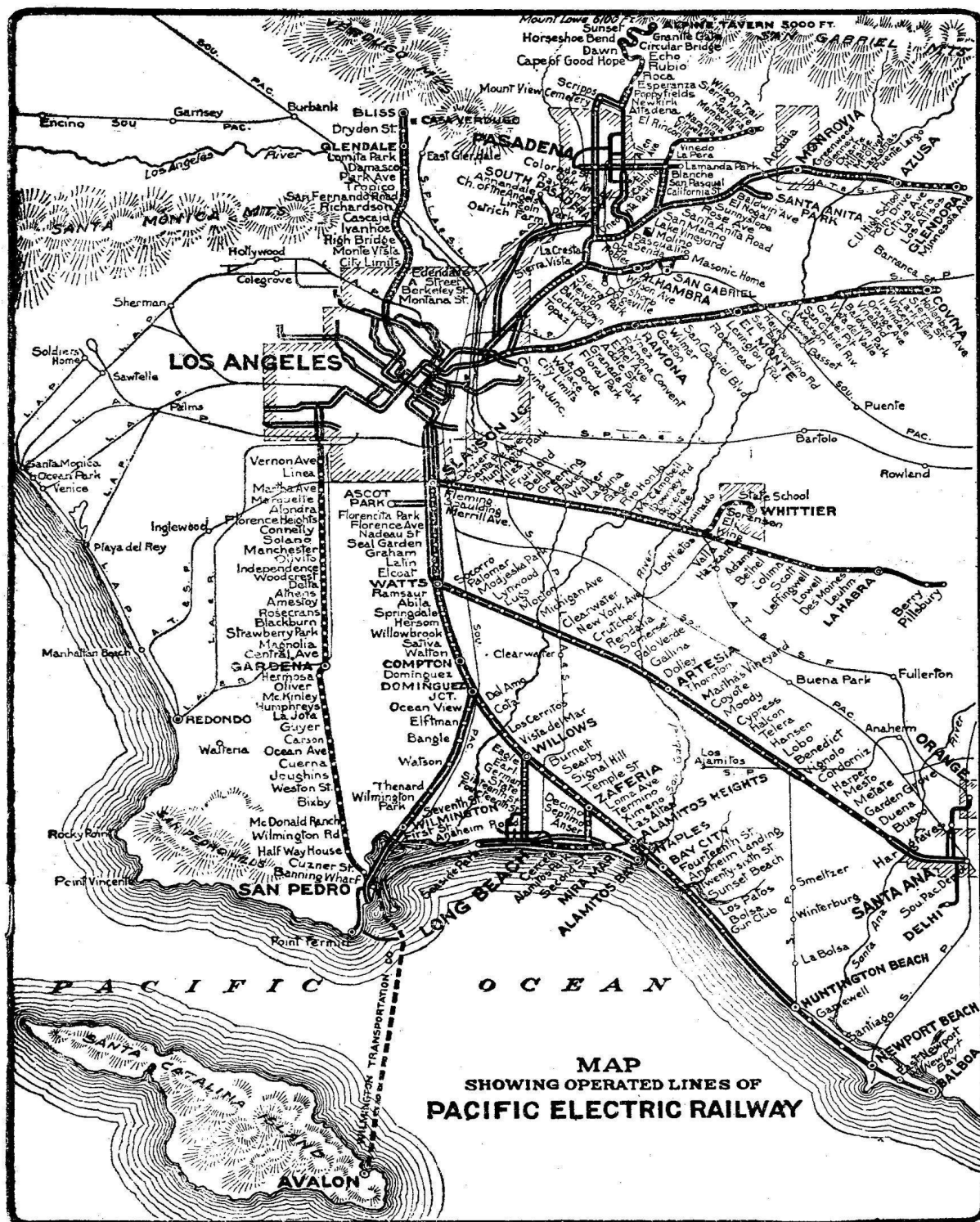
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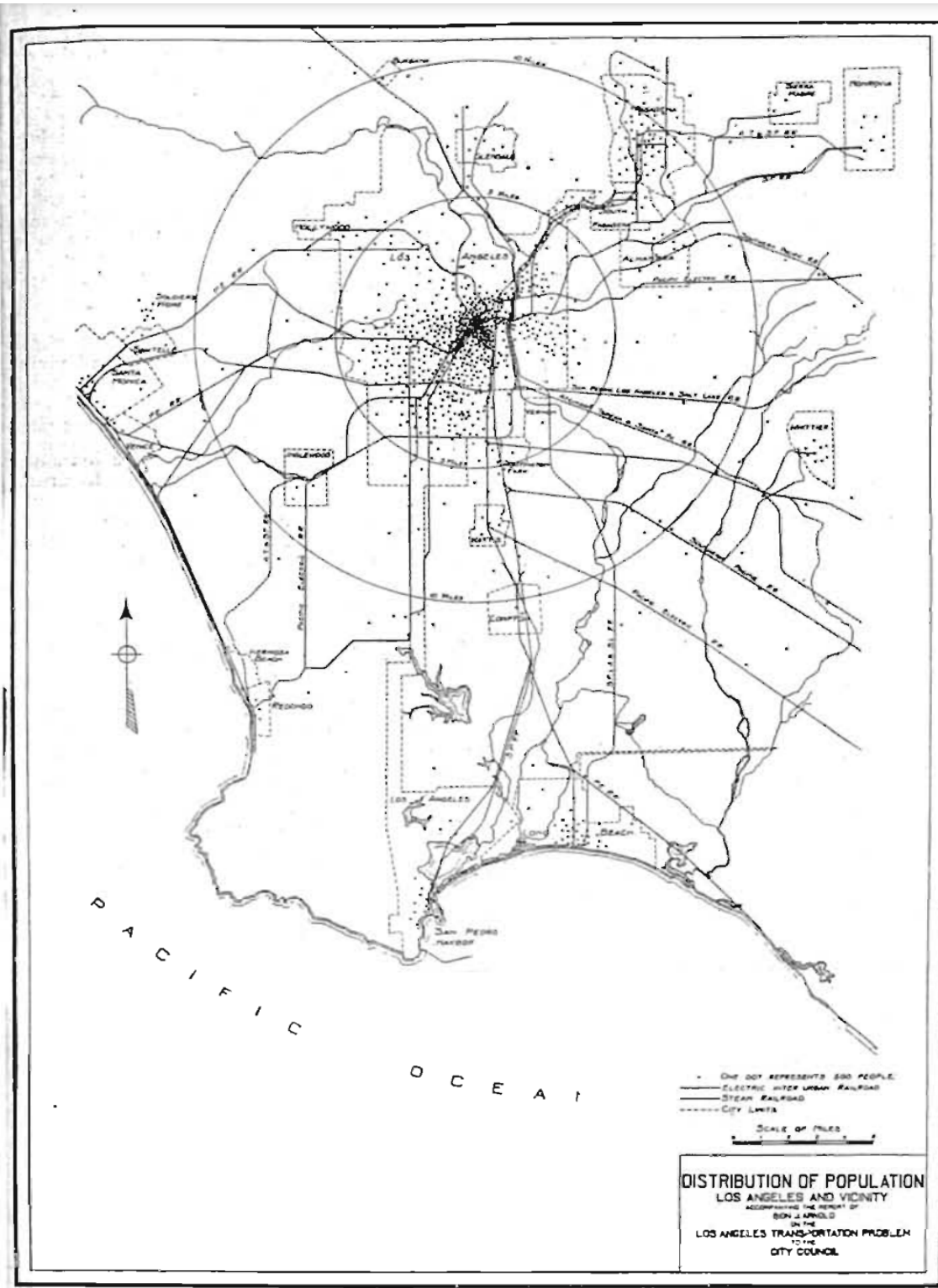
The Huntington Institute



Street Railway Journal 1903



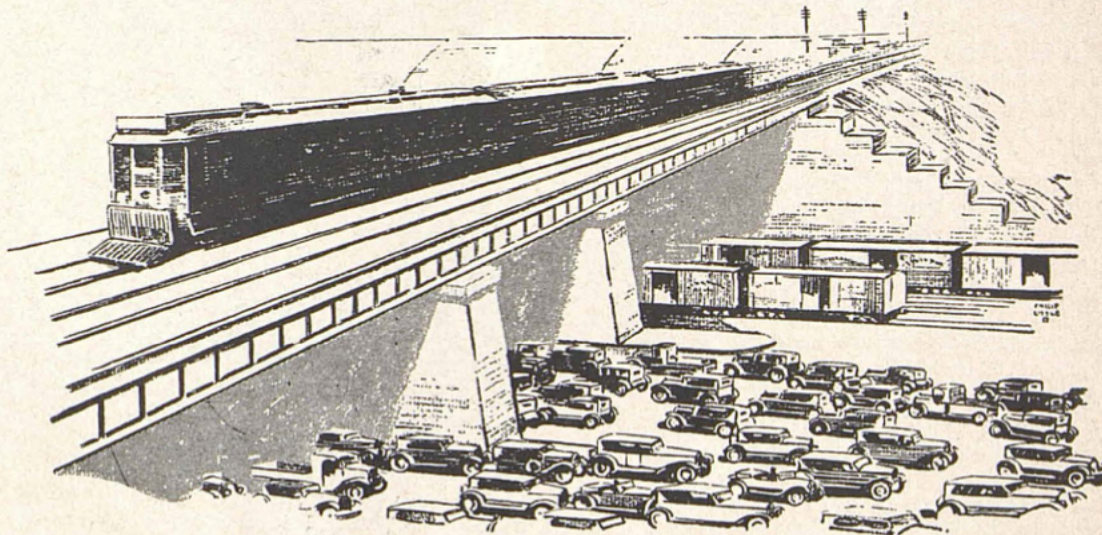
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Pacific Electric Magazine 1924



Take These *Saving* Short Cuts

Remember how you used to take the short cuts when you were going to school? Usually they were across lots and not inviting of travel. But it paid to take them because it saved time.

DO you know that today there are several short cuts between your home and downtown Los Angeles? And theirs is the same advantage that belonged to the back lots of your school days.

Only, the short cuts of today are modernized. They cost in the aggregate millions of dollars—and they're worth it.

In this community, they take the form of bridges over traffic lanes as pictured above, and rights-of-way across places where the highways must go around.

Theirs is a saving test you cannot well afford to ignore.

If you drive a car to and from your business, think for a moment what this saving means:

To begin with, there's your time to be considered. The Red Cars operate on a schedule which means punctuality.

Besides, there is the relief from the serious business of threading traffic and the eternal quest of parking space.

Not only do The Red Cars save the time involved in these difficulties, but the nerve strain as well. And this latter is serious.

You cannot realize the physical toll that motor-traffic takes until you are free from it for a few days.

Nor can you realize the great saving possible until you've reckoned the costs of travel by automobile vs. The Red Cars.



Pacific Electric Railway

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