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Passenger Service and the Seeds of Decline, 1856–1920

At the peak of its influence around 1910, California’s railroad system provided few clues to its impending decline. Since the end of the business depression in 1897 railroad traffic had mushroomed throughout the United States, but it grew particularly fast in wealthy and rapidly urbanizing California. During the thirteen-year period, California passenger traffic tripled and freight traffic doubled, challenging rail managers with the enviable problem of finding ways to accommodate growth. Managers met the challenge by employing thousands of workers to rebuild and expand trains, tracks, and terminals, essentially scrapping the primitive system of 1897 and replacing it with a larger and more efficient one. Such efforts, according to the 1914 *Census of Manufacturers*, furnished California with “excellent transportation facilities by land.” The state’s 8,368 miles of steam and 2,382 miles of electric railroad lines provided a high level of freight and passenger service, attracted heavy traffic, and made money for investors.

Despite such favorable indicators, California’s railroads began to decline around 1910. The amount of money that the typical Californian spent on passenger service peaked about 1910 and fell rapidly after 1914. The demand for freight service also slowed after 1910, and profits shrank as well. With a few exceptions, physical improvements under way or planned for the railroad system in 1910 turned out to be the last until recent years. As the historian Fred Matthews observed, California’s railroad plant of the late 1940s took shape largely between 1897 and about 1915, a period sometimes referred to as the Harriman Era.

Railroads in other regions of the country also began to decline about the same time. Business historian Albro Martin, one of the few scholars to study the sudden turnaround of railroad fortunes, attributes it to a punitive regulatory regime that ensued from Congress’s 1906 passage of the Hep-
burn Act and 1910 passage of the Mann-Elkin Act. Subsequent shortsighted rate regulation depressed railroad earnings, which in turn shattered investor confidence and dried up investment.\(^3\)

I argue for a more fundamental cause in California: the business community's hostility toward the corporations running the railroads. By 1910 the hostility was evident to those who looked beyond the railroads to their users. California business interests, particularly those associated with land development, showed little appreciation for the accomplishments of railroad managers and increasingly vilified the corporations operating the railroads. By 1910 the business community was winning the battle against the railroads for political control of the state and also was promoting various private and government-supported competitors to railroads. While both punitive regulation and subsidized competition, of which the automobile was but one example, precipitated railroad decline, business displeasure constituted the more fundamental cause.

Business hostility played a large role in shaping the nature of the passenger system of 1910, and it defined the business environment in which railroad managers continued to work. To adapt the passenger train to the automobile age, managers would have to have done a better job of ameliorating such hostility. This chapter sets the foundation for analyzing how well rail managements did their jobs by describing the complementary evolution of the railroad system and the society that it served in California, paying particular attention to the conflict between business and railroad corporations that was a part of that evolution. I argue that the conflict arose from a paradox of laissez-faire America in which privately owned and operated railroads were incompatible with a society that highly valued the unconstrained exploitation of land. Private railroad operation required profits. Unconstrained land exploitation demanded more transportation than railroads could provide at a profit. Railroad managers initially tried to resolve the conflict by subsidizing the strongest development interests, encouraging their further growth, while extracting profits from other regions. This approach worked for a while, but those who were left out turned bitter and eventually formed a coalition powerful enough to topple railroad dominance. Whom the railroad managers chose to benefit, the responses of those less fortunate, and railroad reaction to those responses constituted a dialectic that shaped the development of California and its railroads. It also contained the seeds of railroad decline.

Jack Simmons suggests that a similar dialectic may have partly shaped the evolution of English railways, but its intensity was greater in the United States, where land exploiters played a much larger role in business and national life.\(^4\) Edmund Morgan, Merritt Roe Smith, and Thomas C.
Cochran, among other prominent American historians, comment on the rise and importance of land speculation during the colonial and early national periods. The urban historian Sam Bass Warner, Jr., and Cochran both document how the courts between the 1790s and the 1830s gradually sanctified the private right to exploit land, even if public purposes were harmed by so doing. Cochran states further, “Throughout our history, ‘real estate’ has been the biggest business.” He also notes that the American business in western lands had no European counterpart, and that the frontier West was a region of business enterprise where some of the highest profits came from town promotion. Robert R. Dykstra’s excellent case study of Kansas cattle towns underscores this point.

Collectively, these historians suggest that a potent economic and political force centered on land speculation and development helped mold the history of the United States. Some contemporary observers call this force the growth machine. Its power was the greatest in those areas with the greatest potential for growth. During the time of westward expansion desirable areas of the frontier provided such opportunity. The greatest opportunity lay in California.

The unfolding of conflict between California’s growth machines and pioneer railroads began in the 1860s with the construction of the first transcontinental railroad. At the end of the 1850s Theodore Judah, the chief engineer of a short line railroad that extended from Sacramento, obtained financial backing from four Sacramento merchants to survey a railroad route across the Sierra Nevada. He succeeded in finding a favorable route, and to arouse interest in building it, he and the merchants, who later became known as the Big Four or the Associates, incorporated the Central Pacific Railroad in 1861. They then persuaded Congress to designate the Central Pacific as the western half of the proposed Pacific Railroad that would terminate in Sacramento. With the benefit of large federal subsidies and land grants, they subsequently built the Central Pacific and connected it with the Union Pacific and the eastern rail network in 1869.

When the Associates incorporated the Central Pacific, California contained but 380,000 people and few cities. San Francisco (map 1.1) was the largest and grew because it commanded the most convenient location for transshipping goods between oceangoing sailing ships and river steamers bound for interior mining activity. Around the city’s docks sprang up warehouses, wholesale trading houses, and financial, legal, and labor institutions. These activities supported a population of 57,000 people in 1860. The state contained only a few other cities of significance. Sacramento’s state government and trading activities supported 13,800 inhabitants. Be-
between 3,500 and 4,500 people resided in Los Angeles and Stockton, while Oakland, San Diego, and Visalia each contained fewer than 1,500 people.¹⁰

Most California commercial groups initially opposed the Central Pacific Railroad from fear that it would undermine their standing in relation to interests in Sacramento. Having the most to lose, established San Francisco interests voiced their objections the loudest, and the Associates attempted to placate them. The Pacific Railroad Acts of 1862 and 1864 redesignated San Francisco as the western terminal of the railroad, and through construction and the purchase of short lines, the Associates extended tracks to Oakland and San Francisco by 1869. They persuaded Oakland to grant the railroad monopoly rights for the development of port facilities, while San Francisco and the state granted the railroad the choicest sites for terminal and port facilities in that city. By the early 1870s the Associates monopolized all rail and water transportation in the Bay Area, but through that
decade they generally acted in the interests of San Francisco merchants. In 1873 they relocated the railroad headquarters to San Francisco. Most importantly, they established a system of freight tariffs that discriminated in favor of San Francisco and against most other points in California.11

Geographic rate discrimination was common at the time and arose from the way that railroad managers viewed the economics of railroad ing.12 To managers, railroads were huge, expensive machines that incurred vast capital and labor charges whether or not they carried any traffic. Debt interest, stock dividends, the salaries of managers, and the wages of maintenance forces in shops and on the line were thought to go on day after day during times of slack or heavy traffic. Managers viewed such supposedly constant expenses as overhead, which from the 1850s into the 1930s they figured at about 75 percent of their total annual expenses.13

Because managers believed that most of their expenses came from overhead and not from the operation of trains, they set rates regardless of the distance that the traffic moved. They faced only three constraints. First, rates had to at least cover the variable costs of moving the traffic. As the business historian Alfred D. Chandler observed, “Any rate that covered more than the variable costs of transporting a shipment brought the road extra income.” 14 Second, total revenues from all rates had to cover all variable and overhead costs and provide a profit; otherwise, the railroad could not stay in business. This meant that if managers discounted rates for shippers in one geographic area to the point that they barely covered operating costs, shippers in most other areas had to pay much higher rates. Third, no rate could be so high as to stop the flow of traffic or hinder the prosperity of the regions that the railroad served.15

Holding such views, Central Pacific managers lowered rates for San Francisco interests in the early 1870s to appease hostile San Francisco merchants as well as to meet the competition provided by sailing ships from the eastern seaboard. Once they did so, however, they resisted pressure from other geographic areas to similarly lower rates. If the managers yielded to all interests for lower rates, the heavy overhead burden would go unpaid, taking the railroad into bankruptcy court.16

By the early 1870s these practices resulted in freight rates that had two components between eastern and California points. The first component was a relatively low transcontinental rate between eastern points to San Francisco. The remainder of the move from San Francisco to other places in California was covered by a much higher local rate, which was moderated to some extent where there was coastal or river steamer competition. Local traffic within California also moved at the high rates.17

During the 1870s the discriminatory rate structure benefited San Fran-
cisco wholesale houses and their jobbers, who ordered goods from eastern manufacturers for resale to retail outlets in other towns in the West. As the rails of the Central Pacific and the affiliated Southern Pacific spread north and south from San Francisco, the trade area of San Francisco jobbers also spread. In most other California regions, development interests anticipated prosperity from the railroad, but the actual arrival of the railroad generally left them disappointed. Except for San Francisco, rates remained too high for dramatic growth.\textsuperscript{19}

The 1876 arrival of the Southern Pacific in Los Angeles illustrates this point. After completing the Central Pacific in 1869, the Associates began extending mainlines north into Oregon and south to Texas and New Orleans. The mere extension of Central Pacific and Southern Pacific rails\textsuperscript{20} south through the San Joaquin Valley set off a land boom in Los Angeles in 1873 and 1874. The boom quickly collapsed, but promoters expected that the actual arrival of the tracks in Los Angeles would precipitate a new boom.\textsuperscript{21}

They were disappointed. The Associates announced that rather than detouring the mainline through Los Angeles, they would serve the town with a branch line. Los Angeles interests wanted the mainline so badly that the city voted a large subsidy for the Associates to change their mind. However, no great commercial boom ensued after the eagerly anticipated mainline reached the city, and disappointment quickly turned to bitterness. Town boosters resented the railroad’s rate structure that discriminated in favor of San Francisco, making Los Angeles merchants more subservient to wholesale houses located in San Francisco.\textsuperscript{22}

The passage of the mainline through the San Joaquin Valley had the same disappointing results. About five years before the railroad arrived in 1871, extensive wheat farming began replacing cattle production in the valley. Wagons carried the grain to tidewater at Stockton, from which sailing ships transported it to world markets. The arrival of the railroad quickly replaced wagon movement to Stockton, but it failed to replace sailing ships taking the grain to the eastern United States and to other parts of the world. Lower freight rates compared to those for wagons hastened the expansion and intensification of wheat farming, which fostered population growth. However, the rate of growth between 1870 and 1880 actually was less than that between 1860 and 1870, before the railroad arrived. Some new towns formed along the line of the railroad, Fresno being the most important, but the pre-existing town of Visalia, which was bypassed by the railroad, also continued to grow. Overall, the coming of the railroad in 1871 intensified trends already under way but brought no economic revolution to the San Joaquin Valley. Freight rates remained too high.\textsuperscript{23}
Although San Francisco's growth rate fell off compared to the 1860s, when the city commanded water transportation in the state, no other California region came close to matching San Francisco's absolute growth of 127,000 people during the 1870s. San Francisco's good fortune angered development interests in other parts of the state because they believed that the city grew at their expense through rate discrimination. The respected Berkeley economist Stuart Daggett reported that most communities in California believed railroads discriminated against them and therefore sought political and economic redress. He also observed that each town sought to gain advantage over other towns in terms of railroad service and rates, concluding that "city ambitions are limitless, and impossible to satisfy." Research by the California historian Ward McAfee supports this position. McAfee noted that entire communities, and not particular economic interests within the communities, fought the Southern Pacific. In his analysis of the evolution of California's business institutions, the historian Mansel Blackford viewed hostility toward the railroads as a clash of emerging business interests with established railroads, a consequence of geographic rate discrimination.

Disaffected town boosters adopted two strategies for redressing their grievances. They tried to regulate the railroad, and they promoted competition. The latter bore the tastiest fruit.

Regulation was tried early but failed dismally. Before 1876 more groups opposed regulation than favored it. The Associates and San Francisco interests opposed regulation because they benefited from the rate structure as it then existed. Communities without railroad service (most notably Los Angeles) also opposed regulation because they feared that it would cripple railroad expansion. However, as more communities received rail service and were disappointed in the lack of subsequent economic growth, the balance swung in the other direction. After 1876 Los Angeles led the pro-regulation camp, and a state constitutional convention was called in 1878. The convention created a three-person elected railroad commission to regulate rates. Anti-railroad delegates to the convention, led by those from Los Angeles, reasoned that an elected commission would circumvent the corrupt state legislature, whose members appeared to be routinely manipulated by the railroad. As it turned out, during the next twenty years the elected commission did nothing to harm Southern Pacific's interests.

Competition appeared more slowly but eventually wrought the desired results. In 1885 the Atchison, Topeka & Santa Fe Railroad opened a direct route between Kansas City and both Los Angeles and San Diego. In 1887 it opened an extension from Kansas City to Chicago. Almost at once the San
Francisco-based rate structure of the Southern Pacific toppled south of the Tehachapi Mountains, which separated Los Angeles from the San Joaquin Valley. Los Angeles interests now enjoyed low rates and fast service directly to Chicago, and Chicago jobbers displaced San Francisco jobbers in the southern California counties. A rate war also broke out between the Southern Pacific and the Santa Fe, which drove down transcontinental passenger rates to absurdly low levels. In their battle to capture the market, each railroad outdid the other in hiring artists and writers to romanticize the region’s ideal climate and dramatic beauty.  

The competitive war between the Southern Pacific and the Santa Fe touched off the population and commercial boom that Los Angeles promoters long had awaited. The perceptive California historian Carey McWilliams called this the Pullman car migration, the first of many population explosions in southern California. Not only did tourists flock to the region, but wealthy professional families began to relocate there from small towns in the Northeast. McWilliams reported that in 1887 the Southern Pacific transported 120,000 people to Los Angeles, while the Santa Fe operated four passenger trains a day into Los Angeles from the East. Town promoters took advantage of the influx by laying out sixty new towns in southern California between 1887 and 1889. Most of the town sites quickly were abandoned, but a few attracted substantial numbers of the new migrants and grew.  

Most developers in southern California and the rest of California learned the lesson of 1887–88 well. Outside of San Francisco, a region served by only one railroad prospered little more than a region served by no railroad at all. Prosperity required railroad competition and lower rates. Henceforth development interests outside of San Francisco, led by those in Los Angeles, worked to undermine the political dominance of the Southern Pacific in California as they also sought to bring more railroad competition to the state.  

The Los Angeles Chamber of Commerce led in this fight. Even before the boom of 1887–88 several of the city’s leaders foresaw the unlimited drawing power of Los Angeles’s ideal climate. However, they also realized that in almost every other respect nature had endowed their hated competitor to the north with far better assets necessary for growth. San Francisco possessed one of the world’s finest natural harbors, a vast, rich hinterland drained in part by navigable rivers that funneled into the harbor, plenty of water, and a national railroad system that focused on the city. In contrast, Los Angeles had a sparse hinterland, no navigable rivers, no harbor, little water, no obvious source of power, and before the arrival of the Santa Fe, inadequate rail facilities with rates that were far too high.
To compensate, the city’s developers organized the Los Angeles Chamber of Commerce in 1888 under the leadership of Los Angeles Times owner Harrison Gray Otis. This group of remarkable, if reactionary, men intended to coerce the powers of government into providing their region with endowments that nature so thoughtlessly had neglected, while ensuring that labor costs remained far below those in northern California. In so doing, they intended to systematically remove obstacles to development. In their minds, the Central Pacific/Southern Pacific constituted one of the biggest constraints to their freewheeling desires. They intended that in the future they, and not private railroad corporations, would dictate major policy on infrastructure affecting their region.

In 1891 the chamber engaged the Associates in a bitter battle, from which it emerged victorious six years later. Both groups lobbied the United States Congress to finance the construction of a large, artificial harbor to serve Los Angeles, but they differed on the issue of access. The Associates wanted the new harbor in Santa Monica, where the Southern Pacific controlled all access. The chamber wanted it in San Pedro. Although the Southern Pacific served San Pedro, interests affiliated with the chamber also owned terminal facilities there, together with a local railroad running to downtown Los Angeles, the Los Angeles Terminal Railroad. The chamber knew that a third transcontinental railroad might be built into Los Angeles from a connection with the Union Pacific at Salt Lake City. It hoped to encourage such construction by offering the Terminal Railroad and its San Pedro facilities to the railroad promoters. If Congress designated San Pedro as the new harbor site, the chamber’s enticement had tremendous value.31

The chamber won this critical fight. In 1897 Congress designated San Pedro as the new harbor, which the city of Los Angeles then annexed. The congressional decision not only prevented the Southern Pacific from monopolizing harbor access, but it also stimulated construction of the San Pedro, Los Angeles & Salt Lake, which absorbed the Terminal Railroad and completed its line between its namesake cities in 1905.32

Overall, the strategy of the Los Angeles Chamber of Commerce proved remarkably successful. By 1910 vast public works that it had conceived in the 1890s were completed, and others were under way. Those completed included the nation’s most ambitious privately and publicly built hydroelectric system, which transmitted power over hundreds of miles at high voltages. They included the construction of a public aqueduct bringing water three hundred miles from the Owens Valley. They included the private construction of street railways as well as a vast system of local interurban electric railways that interlaced the inhabitable parts of Los Angeles, Orange, Riverside, and San Bernardino counties with more than one thou-
sand miles of track. They included the marshaling of federal and state governments to build the world’s largest artificial harbor, and one of the busiest. These facilities supported the beginnings of one of the largest migrations in the history of the United States. By 1910 more than 500,000 people lived in Los Angeles County, and migrants continued to flood in. As Carey McWilliams remarked, Los Angeles did not just grow; rather, the Los Angeles Chamber, and particularly Otis, conjured the metropolis into existence. They did so with the benefit of subsidized infrastructure, both public and private. Taxpayers and railroad shippers in other parts of the state and country provided the subsidies; the area’s developers reaped the rewards.

The beneficent effects that the Santa Fe had for the developers of Los Angeles, and the muscle of the Los Angeles Chamber of Commerce, attracted attention in other parts of the state. Commercial interests in San Francisco reacted most strongly and in a way that greatly enhanced the state’s further railroad development. From the end of the 1870s the freight rate favoritism that the Southern Pacific gave San Francisco gradually eroded under competitive pressure from the Santa Fe and increasing political pressure from other communities in California. By 1890 the Southern Pacific granted many California towns terminal status, meaning that the railroad would ship eastern goods to the towns so designated at relatively low rates. This condition applied not only to points in southern California served by the Santa Fe, but to points monopolized by the Southern Pacific, such as Fresno. Because high local freight rates still prevailed, the lower rates to eastern points from smaller California towns weakened the power of San Francisco wholesale houses. By the late 1880s many towns could do business more cheaply with houses in Chicago, who began muscling out San Francisco jobbers. San Francisco merchants turned their anger on the hapless Southern Pacific.

To regain their position, San Francisco merchants organized the California Board of Trade in 1890. The board had two objectives. One was to operate clipper ships to New York at rates much lower than those charged by the Southern Pacific-influenced steamship lines. The idea was to force transcontinental rail rates to San Francisco down to a level much lower than to any other point in the West. The second objective was to build a railroad from San Francisco through the San Joaquin Valley to a connection with the Santa Fe at Mojave. This line would compete with the Southern Pacific, forcing down local rates. With ultra-low transcontinental rates to San Francisco, and with low local rail rates from San Francisco to towns such as Fresno, San Francisco wholesale merchants hoped to protect their territory from Chicago jobbers.
The board quickly realized its first objective, but for several years it could not obtain sufficient backing for the more ambitious task of building a railroad. San Francisco's merchant community would not provide the necessary funds. Little progress was made until communities in the San Joaquin Valley began looking to Los Angeles for a direct railroad connection. In 1893 the newly formed Kings County in the southern San Joaquin Valley petitioned the Los Angeles Chamber of Commerce to sponsor a new, direct railroad over Tejon Pass into the San Joaquin Valley. Although the valley's southernmost town of Bakersfield was no further than ninety-nine miles from downtown Los Angeles, two formidable mountain ranges stood between the two cities. Even worse, because serving Los Angeles had been only an afterthought when the Southern Pacific built its mainline in 1876, the rail route between Los Angeles and Bakersfield was 170 miles long, and the fastest passenger train required more than seven hours to make the trip. Freight trains took more than sixteen hours. Understandably, Kings County not only wanted a new railroad to drive down rates, but a direct railroad to bring it closer to the fabulous new riches of Los Angeles. Other valley points also looked to Los Angeles rather than to San Francisco for competing rail service.36

To lessen valley pressure for a Los Angeles rail connection, real estate interests in San Francisco, under the direction of sugar magnate Claus Spreckles, took control of the Board of Trade in 1895 and provided the financial support to build the railroad. They evidently hoped that a Santa Fe connection to San Francisco would not only stop valley interests from agitating for a direct rail line to Los Angeles, but would provide the same development impetus to San Francisco that it had to Los Angeles. Construction began almost immediately on the San Francisco & San Joaquin Railroad, and in 1897 the company opened service between Stockton and Bakersfield. In 1898 the San Francisco interests sold the line to the Santa Fe, which completed the extension between Stockton and San Francisco via a ferry connection from Richmond. The Santa Fe also obtained permission to use Southern Pacific tracks between Bakersfield and its own system at Mojave. The first Santa Fe train ran through the San Joaquin Valley to San Francisco in 1900 (map 1.2).37

The Santa Fe ended up with an extremely circuitous 284-mile connection between Los Angeles and Bakersfield via Barstow. Despite this liability, the Santa Fe extension to San Francisco brought a new competitive order to central California whose result could not have differed more from what the California Board of Trade intended. The extension temporarily, at least, lowered local valley rates, but more importantly it resulted in permanently lower rates between valley points and both Los Angeles and Chicago.38
The lower rates quickly changed the economy of the San Joaquin Valley. While the valley’s first large-scale agriculture, extensive wheat farming, required only local railroads to take grain to tidewater, the far more profitable but perishable products of fruit farming required the speed of transcontinental rail service. In addition, they necessitated the adoption of refrigerator cars and interrail competition to bring down rates. Not until the late 1890s had all of these requirements fallen into place. Thereafter, fruit and nut farming rapidly displaced wheat and at the same time increased wealth and urbanization. This was because the capital and labor intensiveness of the new mode of agriculture demanded new financial, labor, legal, and marketing institutions. It also required ancillary packing and canning industries. These institutions and industries located in cities, not only in the major metropolises of San Francisco and Los Angeles, but in the valley. Between 1897 and 1910 the valley experienced a wave of new town formations, accompanied by an almost doubling of its population.\textsuperscript{39}

Out of the dialectic between railroad entrepreneurs and development interests in California there emerged by 1910 a populous, increasingly complex, and wealthy society. Some 2.4 million people lived in the state, and although agriculture, particularly the growing of fruit and vegetables, grossed more than any other state industry, the 1910 U.S. Census classified only 36 percent of the state’s residents as rural. Only 20 percent of employed persons in the state worked in agricultural activities. Most other Californians lived in cities, suburbs, and smaller towns, where they worked in a variety of trades. Manufacturing employed 27 percent of the work force and was growing rapidly, facilitated in part by the increasing availability of cheap electrical power. Between 1900 and 1910 the value of manufactured products doubled in California, and in the next four years it grew almost as much again. Trade, personal services, the professions, and government accounted for another 35 percent of California’s work force in 1914; taking its population into consideration, California had about 50 percent more people employed in these occupations as did the nation as a whole. Rail transportation employed another 9 percent of the work force, a representation about 40 percent heavier than for the nation as a whole. Californians also earned more than most Americans. In 1929, the first year for which the census published comparative figures, the average Californian earned $995, which was 41 percent more than the average American and higher than citizens in all but three eastern states.\textsuperscript{40}

California’s expanding economy demanded increasingly large amounts of transportation, particularly after the end of the national business depression in 1897. Measured as a passenger riding one mile in nonsuburban service, Southern Pacific passenger traffic tripled between 1899 and
1910, while freight traffic almost doubled. The remarkable passenger traffic growth derived in equal proportions from local and through passengers, as evidenced by the fact that the average trip length of Southern Pacific non-commuter passengers did not vary much from seventy-five miles between 1899 and 1914.41

Such passenger and freight traffic growth reflected the increasing complexity of California's internal economy as well as its integration into that of the nation. It also reflected the relative wealth of Californians, who spent more on rail travel than most Americans. In 1911, the first year for which California figures are available, Californians spent more than $9.40 per capita on just Southern Pacific and Santa Fe intercity railroad trains, compared to the national average of $7.02 spent on all intercity trains.42

To better manage their sprawling transportation enterprises, the remaining Associates reorganized them in the early 1890s into the new Southern Pacific Company. This company directly operated all of its lines between Portland, Ogden, and El Paso, which it called its Pacific System. Included in the Pacific System was the original Central Pacific Railroad, which remained as a separate company that was leased to the Southern Pacific Company and directly operated by it. In addition, the Southern Pacific Company held subsidiary railroads in Texas and Louisiana, as well as steamship lines operating along the West Coast, from San Francisco and Los Angeles to the Orient, and from Galveston and New Orleans to New York. Overall, it owned 9,441 miles of track and was the largest transportation enterprise in the world.

As impressive as it was, by about 1900 its managers realized that the Southern Pacific needed modernization. The business historian Maury Klein quotes Southern Pacific chief engineer William Hood observing in 1901 that he had a good nineteenth-century railroad adequate to the traffic of the time.43 However, its facilities could not accommodate growth. During the last few years of the nineteenth century, the most capable and the last survivor of the Associates, Collis P. Huntington, began the herculean task of improving the facilities, but his unexpected death in August 1900 cut the program short. The financier and owner of the Union Pacific, Edward H. Harriman, then bought control of the Southern Pacific Company and combined it with his Union Pacific. Harriman continued the modernization program with a vengeance. Under him, Southern Pacific management upgraded mainlines, extended branch lines and electrified some of them, purchased additional local electric railways, added signal systems, and purchased more powerful new locomotives and new steel rolling stock. It also greatly expanded the volume of service. By the end of their reign in 1912, the Harriman interests had invested $247 million in physical improvements.
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to properties owned by the Southern Pacific Company. This amount was more than half as much as the $450 million that had been invested to build and upgrade the 9,441-mile system to 1900 (map 1.3). 

Harriman directed a large part of the improvements toward handling local traffic. In writing on the evolving complexity of California’s economy and business institutions between 1890 and 1920, Mansel Blackford correctly stresses the importance of the eastern market and the role railroads played in opening it. Over time, however, the swelling local market contributed as much if not more to the emerging business interests of the state. Because the flood of wealthy tourists and migrants demanded luxury hotels, restaurants, and above all else, homes, they spurred the development of domestic manufactures, financial and legal institutions, and an increasingly interdependent society. Such intense local interactions could not have occurred without the concurrent development of the state’s rail routes oriented to local travel. As new towns appeared in the San Joaquin Valley after 1897, for example, both the Southern Pacific and the Santa Fe extended branch lines and, more importantly, greatly expanded the volume of local trains using these lines (map 1.4). Vast steam and electric suburban and interurban train lines germinated and interlaced both the Los Angeles and the San Francisco areas during this period. In 1910 Harriman bought control of the last of several separate interurban companies in Los Angeles and reorganized them into the thousand-mile Pacific Electric Railway, the largest suburban electric system in the world. He also improved and electrified his suburban lines in the San Francisco East Bay area, improved and electrified longer distance local train services centered on Portland, and bought smaller electric interurban and streetcar companies in California.

At the height of the passenger era between 1910 and 1915 a wide variety of passenger trains served California, but the overwhelming majority of them served local passengers. While numerous luxury limited trains catered to transcontinental and transcoastal travel demands, for every such train about fifty steam locals shuttled between the smaller towns of the state. At the maximum extent of passenger service, the Southern Pacific lines between Portland and El Paso operated about 20 million train miles per year in passenger service. Local trains, mostly operating in California, accounted for 50 percent of these, while suburban trains in the San Francisco Bay area accounted for another 19 percent. Mainline limited trains accounted for only 31 percent of the service. These figures do not reflect passenger trains using the Pacific Electric or other local subsidiaries of the Southern Pacific.

The Santa Fe also operated more local than through train service in California. In 1910 the company scheduled 3.1 million passenger train
1.3 Mainlines of the Southern Pacific and the Union Pacific, ca. 1915.
miles in California, 71 percent of which operated for intrastate passengers. Service expanded rapidly, reaching its peak of 4.9 million train miles in 1916. Of this amount, 68 percent operated for the benefit of intrastate passengers.47

Figure 1.1 shows a schematic of local and through Southern Pacific passenger train services in the San Joaquin Valley in 1915. The schematic illustrates the remarkable extent to which passenger service developed in the valley in a very short period of time.48 Passenger train density on some of the secondary lines actually exceeded that on the north-south mainline, and moreover, more passengers used the local trains. The Exeter Sun reported in 1944, for example, that at the peak of the passenger train era more passengers rode the east side line through Porterville and Exeter than the mainline via Tulare.49

Passengers had good reason to ride these trains; although they were
1.1 Southern Pacific passenger train services in central California, ca. 1915. Source: SFC, exhibit 626
slow, averaging 20 to 25 miles an hour, they offered relatively comprehensive service. An examination of employee timetables from the period shows relatively good spacing of the local and through steam and electric trains and good scheduled connections between intersecting trains at Goshen Junction and at Exeter. From many of the towns in the San Joaquin Valley a person could travel to many other towns, conduct business or visit, and return the same day.

Many transportation commentators believe that local trains always lost money. This was not so in California, where, as Stuart Daggett notes, the Southern Pacific’s enviable earning power around the turn of the century derived from its heavy local California traffic. Daggett referred primarily to freight, but evidence suggests that local passengers also contributed to company coffers. In the appendix, I estimate the revenues and the fully allocated costs for Southern Pacific steam through trains and steam locals in 1911. These calculations show that on average through trains netted about $1.29 per train mile, while local trains netted about $0.79. Because through trains operated 6 million miles of service and local trains 9.7 million miles of service, both types of trains each contributed about $8 million in net revenue in 1911.

Despite dramatic improvements to the rail system between 1897 and 1910, regions of the state monopolized by the Southern Pacific stagnated in comparison to those with rail competition. The difference in the development history of the Sacramento region compared to those of Los Angeles, San Francisco, and the San Joaquin Valley underscores this point, as shown in figure 1.2. The Sacramento area possessed perhaps the most fertile combination of soil, water, and climate in the state, and it also received the first rail service. Yet the Southern Pacific monopolized transportation to the region, and the Sacramento region’s growth lagged behind that of the other parts of the state. The lesson was clear. To grow, an area needed cheap transportation. The more transportation the area got, and the cheaper the transportation was, the faster the area would grow. It can be inferred that this was the reason that the state’s development and business interests continued their attacks on the Southern Pacific and fostered the development of alternative and redundant forms of transportation.

Regulation and competition continued to be the weapons with which development and business interests fought the railroad corporations. The regulatory movement gained considerable strength when San Francisco interests finally realized that the Southern Pacific could no longer discriminate in their favor. Between 1897 and 1910 they and most other major interest groups in the state decided that railroad political influence had to end. These sentiments culminated in the 1910 elections, when Hiram Johnson
1.2  Population growth in California regions, 1860–1910
campaigned for California's governorship on just one substantive issue—
kick Southern Pacific out of politics. To flaunt his independence from the
railroad, the San Francisco lawyer shunned the customary campaign train
in favor of a bright red Locomobile, which his son navigated over Califor-
nia's rutted dirt roads. Ringing a large cowbell as he entered each town,
Johnson called the faithful to his side to harangue them about the evils of
railroad influence in the state. If elected along with an anti-railroad and
insurgent legislature, he promised that he would sponsor the creation of a
people's railroad commission that would tame the octopus, as the railroad
was popularly known. Although another anti-railroad Republican candidate
out-polled him in San Francisco, Johnson's margin in southern California
was so large that he carried the primary. Capitalizing on strong anti-railroad
sentiment from almost all organized business groups in the northern and
southern parts of the state, Johnson went on to win the election. On his
coattails rode an insurgent-majority legislature. In 1911 they created a new,
strong railroad commission, and beginning that year the Southern Pacific
ceased its overt political activities.53

Under Johnson's general leadership, members from the new legisla-
ture and the old railroad commission drafted constitutional amendments and
legislation defining a powerful new railroad commission. Perhaps viewing
the political tide as irreversible, the Southern Pacific surprisingly submit-
ted to these changes without a fight.54 In 1911 the legislature submitted to
the voters three constitutional amendments that transformed the California
Railroad Commission into a five-member, governor-appointed body. Simul-
taneously, the commission organized itself into departments to discharge
its enlarged responsibilities for rates, legal matters, administrative affairs,
statistics and accounting, service, and stocks and bonds. The legislature
also adopted the Stetson-Eshleman Bill, granting the commission maximum
powers authorized under the amended constitution. The new California
Railroad Commission took office in March 1912.55

During the same period coalitions of national shippers gained control
of the Interstate Commerce Commission with the passage of the Hepburn
Act of 1906 and the Mann-Elkins Act of 1910. The shippers used their
to freeze freight and passenger rates during a period of price infla-
tion. These measures weakened the earning power of the nation's railroads
and crippled their ability to raise capital.56

In California the new railroad commission exacerbated this condition.
While it had jurisdiction only over intra-California rates, these provided
California railroads with much of their profits. This was particularly so for
the Southern Pacific, because of its favorable position in the large intra-
California market. After the Santa Fe entered California, the importance of
local earnings fell, but at the end of the 1890s they still elevated Southern Pacific's earnings per mile of track considerably above those of all other western railroads.57

The new railroad commission set about ending geographic rate discrimination in California, which meant generally reducing intra-California rates.58 It also denied railroad-requested rate increases. After Southern Pacific rebuilt and electrified its Oakland, Alameda, and Berkeley suburban lines in 1911–12, for example, it discovered that the services lost money and petitioned the railroad commission for rate increases. In spite of need, the commission denied the petition.59

After interests opposed to railroad corporation policies breached the railroads’ political defenses, the railroads proved politically powerless to defend themselves from unreasonable attacks. Refusing to even consider the railroad viewpoint on the matter, the 1911 legislature required California’s railroads to add an extra brakeman to trains. The stated purpose was to improve railroad safety, but the addition had no effect on safety and it increased operating costs.60 In 1913–14, after having been denied local rate increases by the California Railroad Commission, Southern Pacific sought to implement more efficient work rules on its newly electrified East Bay suburban train operation to take advantage of the safer and more efficient technology. When labor refused the company’s initiative, the matter was referred to arbitration, pursuant to new federal legislation. The local arbitration panel ruled against the railroad, and as a consequence, the company could not operate the new service profitably.61 These actions compounded the effects of the Interstate Commerce Commission’s refusal to increase railroad freight rates in the inflationary period prior to World War I.

Another serious government attack started in December 1912 when the U.S. Supreme Court upheld a ruling by the Justice Department that the combined Union Pacific/Southern Pacific violated anti-trust statutes. The court ordered Union Pacific to divest itself of all Southern Pacific stock, a ruling that deprived the Southern Pacific of easy access to capital. Even more damaging, the Union Pacific unmerger case led into the Central Pacific unmerger case. On 11 February 1914 the Justice Department brought suit against the Southern Pacific and Central Pacific, charging that the combination of the two systems constituted restraint of trade of the Sherman Anti-Trust Act. Southern Pacific bitterly fought this case but did not win until 1923. The ten-year fight deeply scarred the company, as Southern Pacific historian Don Hofsommer documents.62

Development interests also fostered transportation competition. Most of the electric interurban railways that spread rapidly between 1897 and 1914 were promoted by local interests.63 Coastal water transportation also made
a dramatic comeback during this era, facilitated by growing transportation demand, improved steamship technology, and large public expenditures in harbor improvements. Prior to 1900 the Southern Pacific-controlled Pacific Coast Steamship Company monopolized service between Seattle, San Francisco, Los Angeles, and San Diego. Although it continued to expand service on these routes during the first decade of this century, by 1912 it had to fight with five competitors for the market. By 1914 the competitors increased to eleven. At that time the fastest steamers beat Southern Pacific passenger trains between San Francisco and Portland and took a large part of the passenger market. In the Los Angeles to San Francisco market the fast Harvard and Yale, with their nineteen-hour overnight schedules, could not match the fastest train schedules of fourteen hours, but their very much lower fares combined with luxurious accommodations attracted several hundred passengers per night, about as many as were carried by rail.64 In 1912 the United States government completed the Panama Canal, and almost immediately this vast public works project increased the competitiveness of transcontinental steamship service. Congress prohibited railroad-owned steamship lines from using the canal. In his history of the Union Pacific, the business historian Maury Klein vividly portrays how quickly and deeply the canal cut into transcontinental rail traffic, while further lowering rates. By 1921 the overwhelming majority of freight leaving Los Angeles and San Francisco went by water.65 As late as 1927 coastal steamers carried 60 percent of the freight moving between California and Oregon.66

Other public works projects sponsored by California development interests increased competition to rail services even more. Since the 1890s the good roads movement attracted zealous adherents in California, who in the latter part of that decade persuaded the state legislature to adopt a master plan for a statewide system of improved wagon roads.67 No funding or administrative apparatus was created to build the system, but the plan remained a goal that business interests gradually embraced.

The 1906 San Francisco earthquake provided a wonderful opportunity for transforming the state highway dream into reality. To repair quake damage, local governments demanded emergency engineering services from the state, including road repair and reconstruction. Nathan Ellery, who recently had been appointed state road commissioner, strongly advocated road development. He used the pressure from local jurisdictions to persuade the legislature in 1907 to create a new department whose responsibilities included roads. Ellery headed the new Department of Engineering, administrative ancestor to today’s California Business and Transportation Agency. The legislation permitted counties to sell bonds for highway repairs and construction and specified that the state engineer’s office would coordinate
county road work. This act led to the passage of bond issues amounting to $7.3 million for road construction in San Diego, Los Angeles, San Joaquin, and Sacramento counties by 1910, as well as the establishment of county highway commissions to carry out the work.\(^{68}\)

After 1907 San Francisco interests pushed particularly hard for the construction of a state road system patterned after the 1896 plan. State engineer Ellery, soon to become chief engineer for the city and county of San Francisco, worked with Governor James N. Gillett, the San Francisco Commonwealth Club, and the Automobile Club of California (a San Francisco organization) to draft a statewide road plan, which the legislature adopted in 1909. A scaled-down version of the 1896 roads master plan, the State Highway Act of 1909 provided $18 million in state-supported bonds to construct 3,082 miles of paved highways. Two north-south trunks would run the length of the state and generally parallel the state’s main rail routes. A series of east-west laterals would connect all county seats and major cities and towns to the north-south routes.\(^{69}\) The legislature put the act on the 1910 ballot for acceptance or rejection by the public.

That San Francisco interests intended to benefit from the road plan is indicated not only by the groups who supported the act, but also by the vote for its adoption. At the time the legislature recognized that $18 million could build only a fraction of the road system, but it set the price tag low in order to obtain voter approval.\(^{70}\) Obviously some areas would not obtain state highways until the legislature provided additional funding. The 1910 election revealed that voters in southern California viewed the program as something designed to further San Francisco’s interests, most likely by assigning construction priority to roads linking San Francisco with the territory it dominated. They voted three to one against the measure, while Bay Area counties voted by equally large margins in favor of it. In the San Joaquin Valley the vote was evenly split. The issue narrowly passed.\(^{71}\)

The regional nature of the highway vote suggests that popular enthusiasm for automobiles had little influence on the drafting of the initial highway act. If newspaper accounts are any indication, by 1910 the auto had already captured the public’s imagination in all parts of the state. In the weeks before and after the passage of the act in 1909 and the election the following year, the San Francisco Chronicle and the Los Angeles Times widely and enthusiastically reported automobile shows and races, most likely because automobile ownership was beginning to soar. The state’s equitable climate made year-round driving possible even before the widespread adoption of the enclosed automobile in the early 1920s. As recently as 1906 only three out of every thousand Californians owned autos, but by 1910 this figure increased fivefold to fifteen per thousand (see table 3 in the appendix). At the time of the election, however, both papers carried no editorials, adver-
tisements, or stories, save one, either in favor of or opposed to the state highway act. The Chronicle merely noted four days following the election that the measure had barely passed, with most opposition centered in southern California. The Times did not mention even that much. The lack of popular enthusiasm for the state highway program suggests that its support was narrowly based and largely behind the scenes.

This finding is consistent with the work of the auto historian James J. Flink, which shows that auto diffusion before 1910 failed to correlate with commitments for highway improvement. In most of the United States farming and bicycle interests swelled the ranks of good roads movements, which agitated for good farm-to-local-market roads. In California urban interests, most notably those in San Francisco, pushed for intercity roads most likely to better link San Francisco with its market area. Given the area’s role in transportation development to that time, the motivation likely was the attainment of comparative advantage for purposes of trade and development.

Despite San Francisco’s initial interest in the road plan, Los Angeles interests captured the nascent highway bureaucracy. Led by Los Angeles County, southern California counties purchased more highway bonds than any other group. The Chandler Act of 1911 also created a new administrative structure for road building that took control away from San Francisco personnel. The act created a new three-member advisory panel that became known as the California Highway Commission and that initially was headed by an energetic thirty-seven-year-old civil engineer from Los Angeles, Newell Dyke Darlington. Darlington previously served on the Board of Public Utilities of the City of Los Angeles. For its first highway engineer, the commission chose Austin B. Fletcher, previously secretary-engineer of the San Diego County Highway Commission.

The California Highway Commission first met in 1911, and by 1912 Fletcher had staffed the organization with professional engineers, adopted specific routes and construction standards, and begun construction. The commission’s objective was to provide free roads with no barriers to their use. Initial road standards included fifteen-foot concrete pavements with maximum grades of 6 percent in mountain passes and minimum curvature of one hundred feet. These contrasted with the unkept, narrow, rutted surfaces, the twenty-foot radius curves, and the 20 to 30 percent grades that then typified California roads.

Next to free roads, the most important policy of the highway commission was the routing of roads as directly as practicable between large population centers. In 1913 the commission pronounced that the new state highways would not deviate even short distances from direct routes to serve intermediate population centers, even those of considerable magnitude, nor
would they serve a farm-to-local-market function. The time of through travelers, and the cost of shipping through goods, would not be sacrificed for local needs. Within this general principle, the commission stated that one of its most important objectives was to link Los Angeles more closely to the San Joaquin Valley and the northern part of the state.  

Most of the state highways followed already existing county roads, to which the state took title and upgraded. The commission boldly departed from this practice in laying out the route between Los Angeles and Bakersfield. Known as the Ridge Route, the 125-mile road over Tejon Pass was 45 miles shorter than the rail route and 50 miles shorter than the old dirt road. It opened in 1915, and in that year the state engineering office observed that even with a lunch stop, motor stages traveled the still unpaved road more quickly than the train traveled between Los Angeles and Bakersfield. Just a year earlier motorists had had to allow as much as two days to make this trip. By 1916 the Automobile Club of Southern California observed that travel between Los Angeles and the San Joaquin Valley had increased greatly and predicted that the new link would bring the southern San Joaquin Valley into the social and economic sphere of Los Angeles. The club called the Ridge Route the magnum opus of southern California road construction.

As the state highway program's backers predicted, the California Highway Commission ran out of money long before it completed the 1909-mandated state highway system. In 1916 the commission asked the voters for more money, and this time they responded enthusiastically. Rising auto ownership had created support for road improvements. In 1914, 42 people out of a thousand owned cars; the number per thousand increased to 97 in 1917 and 150 by 1920 (see table 3). In the 1916 election, voters approved the issuance of $15 million worth of additional highway bonds by a four-to-one margin.

When the highway commission exhausted that money in 1919, it still had not completed all of the state routes included in the 1909 plan. California voters then approved another $40 million in bonds. The additional monies also failed to complete the system, but they provided enough support to link all of California's population centers with concrete roads by 1920.

While the state highway system took shape, networks of local roads also developed. Between 1914 and 1920 county road expenditures reached $104.2 million, compared to $42.2 million for state roads (see table 4). The densest networks developed in southern California, which, according to the Automobile Club of Southern California, was constructing more roads than any area of the world circa 1914.
During the period that California's paved highways took form California's intercity bus industry also emerged. According to most histories of the industry, intercity bus service began in 1913 or 1914 when a Swedish immigrant, Carl Eric Wickman, started shuttling passengers in a Hupmobile between Hibbing and Alice, Minnesota, two miles apart. Becoming progressively more successful with his bus operations, Wickman founded the Greyhound Corporation in the late 1920s.\(^1\)

Actually, intercity bus services already existed in California by 1910, and by 1914 they were flourishing. As Albert E. Meier's and John P. Hoschek's short but excellent history of the intercity bus industry in the United States shows, the industry expanded faster in California than elsewhere in the United States. While Wickman and his earliest associates did indeed found the holding company that became the Greyhound Corporation, much of its substance and leadership came from California bus pioneers W. E. "Buck" Travis and Fred Ackerman and their efforts at finding accommodation with California's rail industry.\(^2\)

George Tatterson may have pioneered what then was known as interurban jitney service. By 1910 he was driving a touring car and open-air trailer in regular service for paying passengers between Ripon, Manteca, and Stockton, the county seat of San Joaquin County. According to Tatter- son, similar services soon operated in all directions from Stockton.\(^3\)

In the first phase of California intercity bus development, small entrepreneurs bought various types of autos or small truck chassis, which they modified to carry additional passengers. They operated the vehicles along relatively short routes over dirt roads, charging fares for passengers. Speaking of a service that he started in 1911 between Brawley and Calexico in California's Imperial Valley, Tom Morgan recalled, "During the first three years there I drove during the daytime and repaired the cars at night and kept the books on Sundays."\(^4\)

Such services grew spontaneously not only in the San Joaquin and Imperial valleys but in most parts of the state where towns existed. By 1915 the California Railroad Commission estimated that five hundred interurban jitneys operated in the state, and by 1917 the number ballooned to more than seventeen hundred.\(^5\) These operators covered a large proportion of the state and county roads and thrived on travelers making very short trips.\(^6\)

As more Californians owned cars and found that they could drive them where they wanted on the rapidly expanding state highway system, their demand for all forms of public transportation declined. By 1915 steam train, electric interurban railway, and interurban jitney operators found themselves competing for a market that no longer was expanding. In that year the Western Association of Short Line Railroads and the United Railroads
of San Francisco (an urban streetcar company) filed complaints with the California Railroad Commission over, respectively, unregulated truck and bus competition. Some of the interurban jitney operators also organized in an attempt to restrict entry to the field. Tatterson, the Stockton-area bus pioneer, captured the spirit of the times when he later wrote, “The early-day operation was quite competitive—everybody for himself and to control the situation the Star Stage Association was formed and at one time had 67 members and any newcomers were run off the road.”

Not only did jitney owners form operating associations, but in 1915 they also formed a political association. The short line and street railroad complaints, as well as the efforts of the association of interurban jitney operators, all worked to the same purpose, which was to bring trucks and interurban jitneys under the jurisdiction of the California Railroad Commission. They succeeded with the Auto Truck and Stage Act of 1917. Thereafter, the commission regulated the entry of new bus services. Operators existing in 1917 were given grandfather rights to continue operation; newcomers could enter the business only by obtaining commission permission either to purchase the rights from an already existing operator or to be issued a new certificate.

From the outset, the railroad commission refused to issue new certificates for services duplicating already existing bus services. This policy effectively prevented bus competition within California, and until a U.S. Supreme Court ruling in 1925, it restricted interstate bus service, as well. Between 1925 and 1935, when Congress passed the Motor Carrier Act, interstate service was unregulated, and during the late 1920s and early 1930s various long distance services competed for traffic from the East to and from Los Angeles and San Francisco, and from the North to San Francisco. However, the railroad commission forbade these services to carry California intrastate passengers.

Only three years after passage of the act, the interurban jitney industry of owner-operators evolved into the intercity bus industry, characterized by regional corporate monopolies. Through mergers and buyouts of operating rights, certain entrepreneurs rose to dominate different regions of the state. They consciously pursued policies of what now is known as economies of scope. That is, they attempted to create networks of routes, which simultaneously served a large number of origin-destination pairs, in order to fill up empty seats (i.e., achieve a high load factor) in a declining market. Through trial and error, they developed a strategy of connecting major cities with trunk bus routes that offered frequent service and stops on demand. The completion of long distance concrete highways made long distance bus service a practical proposition. The more alert bus entrepreneurs discovered that such services attracted both price-sensitive long distance
travelers and frequency-sensitive short distance riders. During the 1920s and 1930s, bus operators found they needed the symbiosis between the two types of riders in order to remain profitable. Bus operators outside of metropolitan areas who catered only to long distance or to short distance riders went out of business. So did those who were not cost-conscious.\(^{93}\)

W. E. “Buck” Travis would eventually emerge from this transition as California’s dominant bus entrepreneur. Travis bought his way into the business in 1920, but unlike most of the original owner-operators, he came from a business family and had years of experience running large-scale transportation enterprises. His father operated stage lines throughout the West, and after growing up on the family ranch in Nevada and then attending Harvard, Travis took over the business. He prospered, but around 1907, as a consequence of government restrictions, he transferred his investments to urban taxis, first in Chicago and later in San Francisco. Travis not only operated taxis, he built them; and he soon found that the emerging interurban jitney operators demanded his vehicles. When the owner-operators began consolidating after the passage of the 1917 bus and truck act, Travis saw an opportunity for increasing his investment. He later testified that the act ended cutthroat competition “and created a semblance of stability for investments that might be made in equipment, terminals or improvements of any character.”\(^{94}\) In 1920 Travis bought the operating rights from the fifty-four owner-operators who remained in the Star Auto Stage Association, which he erroneously believed was profitable. Intending to reorganize and tighten up its operations, he incorporated the Star Auto Company, which later in 1920 he renamed the California Transit Company.\(^{95}\)

By 1920 seven regional bus systems such as the California Transit Company covered the settled areas of the state. Hundreds of owner-operators also continued in service, but they increasingly operated on the fringes as the larger systems purchased the more lucrative certificates.\(^{96}\) In that year intercity buses using state highways, excluding those between Los Angeles and Santa Ana in the Los Angeles basin, carried about 117 million passenger miles, or about one-sixth the volume of intrastate, non-commuter traffic riding the rails. Of the 103 routes surveyed, four exceeded one hundred miles in length.\(^{97}\)

As the United States began adjusting to the postwar world of 1920, California’s rapidly evolving intercity bus services added but one additional element of competition to California’s rail passenger services. The groundwork for such competition was laid from almost the beginning of the rail era in California and stemmed from conflict between California’s various development communities, who wanted subsidized transportation, and the promoters of private railroads, who needed profits to survive. Until the
1890s the will of rail entrepreneurs generally prevailed, but as California’s economy grew and became more complex, other economic interests became more powerful. Even as rail managers industriously expanded and strengthened California’s rail facilities and services in the decade preceding 1910, business and development interests in the state weakened them through regulation and competition.

Under such forces the political hegemony of the national rail corporations rapidly crumbled in California after 1910, and their economic hegemony in passenger travel crumbled almost as fast. By 1920 not only did electric railways and steamships threaten their once profitable passenger business, but a comprehensive state highway system paralleled the major rail routes within the state. Rapidly increasing numbers of motorists drove over concrete highways between major cities and small towns alike, leaving behind slower and more indirect trains. Primitive bus competition also appeared in the closing days of the dirt road era. Offering several trips per day over most of the new state highways, interurban jitneys gave travelers still another choice.

Railroad managers faced a new era in which their passenger and even freight trains were no longer essential. Various interests in the regions they served wanted cheap and plentiful transportation, which almost all agreed spurred rapid regional economic growth, but they cared little about the health of the transportation companies providing it. Such interests created a situation where, if one transportation company or technology disappeared, two or three others easily could step in, using subsidized infrastructure. To adapt the passenger train to the new era, railroad managers had to change their emphasis from building capacity sufficient for demand to finding a role acceptable to California’s business interests for at least some of their vast collection of passenger train services.