Return to ERHA homepage

1873-1910 The Street Railway History of Los Angeles

The Seven Eras of Rapid Transit Planning in Los Angeles

People have been talking about and planning rapid transit in this region for more than seventy-five years. In that span of time, twenty or so proposals have been generated. We have organized this brief overview into seven, sometimes overlapping "eras," and by focusing attention on the most important plans, it is possible to lead one rather quickly through a meaningful overview of what was, until a short time ago, Los Angeles's greatest non-success story.

Era 1: Private Capital

Today rail rapid transit is a large public expense of state and national, as well as local significance. Such was not always the case. Between 1870 and 1910, most rapid transit lines in America were privately financed, and during this first era, "the era of private capital", Los Angeles itself came tantalizingly close to acquiring rapid transit at no cost to taxpayers. Shortly after the turn of the century, the southern pacific railroad bought a trolley system named the Los Angeles Pacific Company. Among the improvements the new owners contemplated were high-speed bypasses through Hollywood, and what is now the Wilshire District, funneling into a tunnel between Vermont avenue and Hill street station. Work actually began on this ambitious project in 1907.

Local civic leaders were thrilled at the idea of Los Angeles joining the municipal big leagues with a local subway. Alas, their bubble burst; the financial panic of 1907 cut off funds and construction was suspended indefinitely. Thereafter, private financing of rapid transit was more the exception than the rule, although electric railways remained a booming business for many years to come.

In 1911, an event called "the great merger" took place. Several interurban trolley companies were combined into the Pacific Electric railway, the famous "red car" system. Today, many people look back upon this thousand mile, *now abandoned*, asset as having been a rapid transit system that was thrown away. Well, some of the system was rapid transit and parts of it weren't.

High-speed rights-of-way contrasted with slow street running sections. During its forty-two year life as a passenger carrier, the Pacific Electric was not a financial success, and never had the money to reinvest back into those very many line and rolling stock improvements which would have been needed for real rapid transit.

One noteworthy exception was the Bunker Hill tunnel and Subway terminal; actually a starting over of the 1907 project. For the most part, the P.E. was reconciled to making do with what it had inherited from the good old days of cheap land, cheap materials, cheap labor and eastern money. Even as the 1920's roared on, the era of private Capital faded away.

Era 2: Grand Design

Public sponsorship of rapid transit studies in Los Angeles began during the same year as the great merger. A Chicago consultant, Bion J. Arnold prepared a report to the Los Angeles Board of Harbor Commissioners, in which he recommended several transportation improvements. Chief among the recommendations was a complete system of downtown subways for interurban trains. However, the outstanding feature of the Arnold report must have boggled the contemporary imagination. He proposed, in a corridor paralleling the shoestring annexation strip to San Pedro, eight railroad tracks flanked by grade-separated roads, to be known as the "auto speedway".

Such intermodal coordination was certainly farsighted for its time, and as one can see from the dream's eventual fulfillment, the harbor freeway and the Alameda Corridor Project, Bion J. Arnold was a prophet without honor in southern California.

The Arnold report heralded the beginning of era number two, "the first era of grand designs". It reached its high point in 1925 with publication of the Kelker, DeLeuw "Report on Comprehensive Rapid Transit Plan for the City and County of Los Angeles." In their inch—thick hardbound volume, the consultants detailed an extensive two-stage network costing about $320 million. A key element of the comprehensive plan was upgrading of the best parts of the red car system and connecting them to new high-speed rights-of-way.

For an urban area which was growing very fast, which suffered from lots of traffic congestion even in 1925, and whose public transportation was of very much inconsistent quality, the comprehensive rapid transit plan offered the hope of a uniformly high

level of mass transportation throughout the entire region. Unfortunately, it had a lot of ultimately fatal, flaws.

Its most apparent and controversial drawback was in its vertical configuration. Although the core of the rapid transit system was to be underground, a considerable part of the new mileage was to be elevated over streets. Foreseeing a hostile reaction to this idea, the consultants took great pains to explain how judicious use of sculptured concrete could make the overhead structures esthetically benign.

In 1926, a political battle flared up over the location of a union passenger terminal. The Southern Pacific Railroad, the Pacific Electric, and most newspapers favored a site around Fifth street and Central avenue. Included in the Terminal layout was a sort of "initial increment" of elevated access trackage from the Los Angeles river to the Pacific Electric's 6th & Main street station to take interurban trains off the streets and out of traffic. The Los Angeles Times favored the plaza site for the union station, and was dead set against elevated railways. The paper editorialized that the elevated access was but a foretaste of horrible things to come — a network of noisy, ugly "Els" all over town! When the union station issue and the elevated to Main street station were put to an advisory referendum, the people sided with the times position, and by implication, against any rapid transit system which included elevated railways.

Actually, the voters never got to decide on the Comprehensive plan itself, and the Los Angeles city Council refused to accept it. Little was done about rapid transit for a while, although the issue was widely debated. Finally, in the late 1920's, various interest groups decided that it was time to get the ball rolling.

A bill was introduced into the legislature to expedite formation of tax assessment districts to finance rapid transit lines. The Los Angeles board of city planning commissioners, in order to get a feel for public opinion before things moved too far ahead, held two conferences on the rapid transit question during the first half of 1930. Most of the papers read at these forums were favorable to the idea of a rapid transit system, but there were also papers read which were not, or which were hesitant, and they raised some very big questions. Among the objections were the following:

- Elevated railroads were totally unacceptable, as they depreciated neighborhoods and property values.
- The property tax assessments would be too much of a burden on the small homeowner.
- Outlying areas would benefit at the expense of inner areas.
- The transit companies would benefit at taxpayer expense.
- Regional business centers, such as Hollywood, would not be as well served as downtown Los Angeles.
- Traffic congestion would not go down.
- Most transit riders would not find the rapid transit lines convenient to use.

After the two conferences, the comprehensive plan was a dead issue. Its demise can be attributed to four factors, put succinctly: over-ambitious, over-extended, over-priced, and overhead!

The failure of the comprehensive plan did not interrupt the search for rapid transit, which was still seen as a pressing public need in Los Angeles during the early 1930's. Mayor Shaw made it a campaign promise, and responding to his mandate, the Los Angeles Central Business District association engaged a prominent local consultant, Donald N. Baker, to come up with a less objectionable and less costly alternative. Baker's report, published in 1933, recommended a subway under Hill street and four radiating grade-separated rapid transit rights-of-way covering the heaviest of the P.E. travel corridors. At $30 Million, the Baker plan seemed highly affordable, especially if a federal public works grant could pick up a third of the tab. But, it too did not come to pass.

The Los Angeles Railway sponsored its own study of Streetcar subways to be built in conjunction with the Baker rapid transit routes for interurban trains. What a marvelous opportunity was passed up for Los Angeles to get a relatively inexpensive, but highly useful mass transit infrastructure which would be difficult to assail, and unthinkable to abandon in the forthcoming years!

Era 3: Intermodal Sketch Planning

The first era of grand designs went out with the 1930's. More political attention was being devoted to road building, for Los Angeles had become the most automobile—oriented large city in the United States. Even so, some of the earliest freeway plans did not ignore rapid transit, but, rather, saw it as something to be build in conjunction with super highways. One may say that the third era, "the era of intermodal sketch planning", began in 1939, with a report to the Transportation Engineering Board of the city of Los Angeles. The report's author, Stone and Webster, emphasized freeways, but definitely cited rail rapid transit as something, which would be necessary as densities, increased. Freeways should, therefore, be designed to accommodate rail tracks, and the outer parts of the Pacific Electric should be tied in with them. The consultants also recommended subways in certain locations, including Wilshire boulevard; the first proposal for a subway under this thoroughfare.

The era of intermodal sketch planning almost became an era of construction in 1940, when the city of Los Angeles opened the Cahuenga Pass freeway, into whose median the P.E. tracks to the San Fernando Valley had been relocated. Many people hoped for an extension of this intermodal concept throughout the region.

In 1945, DeLeuw, Cather expanded on the rail-in-freeway idea in its report to the city. According to this plan, subways, both for streetcars and for interurban trains, would be needed only for short segments in the downtown. Most new rights-of-way would be in freeway medians, and, again, the Pacific Electric lines were to be tied in with them. The Los Angeles Chamber of Commerce created a "rapid transit action group" to drum up support for the DeLeuw, Cather plans budgeted at $310 million. They also recommended a Metropolitan Transit District to fund and construct it. However, the Los Angeles City Council refused to recommend the district to the legislature, and during 1949, testimony in the state capital on public transportation needs for southern California were hostile to rail, favoring buses instead as the only way to serve the requirements of a decentralized city. After a brief life, the era of intermodal sketch planning expired with unimodalism ascendant.

Era 4: Autopia

"Unimodalism" was the hallmark of the fourth era, "the era of autopia". State highway officials wanted no rail in their freeways, and the majority of people were not much concerned about mass transportation, which had become a product for the underclass, to be avoided as one started living in the middle class. The pro-freeway forces, known as the "highway lobby", were the "haves," and the advocates of rail transit the have-nots. Rapid transit was seen as a purely local financing matter. By contrast, seemingly endless amounts of money came from state and federal gasoline tax revenues, which were dedicated exclusively to road construction. Nobody raised much fuss about increasing taxes for this purpose. The highway trust funds were overflowing cups full of money. During the era of Autopia, balanced transportation meant "half concrete, half asphalt".

The era of autopia reached a crescendo in the 1960's when ten-cent dollars from Uncle Sam added many miles of freeway as part of the interstate system.

Then, feelings began to change, construction costs rose, people began to resist the massive condemnations needed to cut freeways through built up areas. The environmental movement, the OPEC cartel, and the oil embargoes increased awareness of the ecological dis-benefits and strategic vulnerability of the auto-dominated, unimodal transportation system. Very suddenly, the era of autopia went from the dream of a glittering future of limitless mobility, to an awakening to the sober reality of today.

Where did the local transit industry stand during the era of autopia? The private operators demolished electric railways and held on to the coats of the highway lobby in its effort to frustrate rapid transit. The Pacific Electric and the Los Angeles railway had become ambivalent toward rail transit in the 1930's, although much of the rail network had remained intact, and was invaluable during World War II. But, with the coming of Peace, there were major policy changes.

National City Lines, a bus-minded holding company, gained control of the Los Angeles railway and began a program of converting the streetcar system over to buses. The Pacific Electric then embarked on a series of large-scale rail conversions. In 1953, it sold its passenger routes to another bus company, Metropolitan Coach Lines, which started to administer a coup-de-grace on the remaining red cars. Neither company was to deal the final blows, however. The private bus companies viewed rail rapid transit as a losing venture and freeways as an aid in their struggles to retain old travel markets and gain new ones. They endorsed the concept of bus rapid transit, although buses in mixed traffic have no competitive edge over private automobiles.

Around 1955 there were studies of busways and bus subways, but nothing came of these, and another study of the time concluded that buses alone could never satisfy the mass transportation needs of Los Angeles. Public transportation ridership declined steadily nationwide and in Southern California in the years following the war. In spite of poor business prospects, there were those in the transit industry who looked forward to more than just retrenchment and marginal profits. They reasoned that if revolutionary technologies had brought about the automobile and air ages, might not they also usher in a renaissance for mass transportation. Beginning in the late 1940's, some of these visionaries raised their eyes to the skies and saw — monorails. Their upward gaze started the fifth era, "the era of futurism".

Era 5: Futurism

The era of futurism got official backing in 1951 with creation of the Los Angeles Metropolitan Transit Authority, a state agency empowered to study, construct and operate a monorail in a broad corridor curving through the San Fernando valley and down to long beach. Early in 1954, the authority's consultants submitted their report, wherein they proposed a 45-mile, $165 Million suspended railway from Panorama City, through Hollywood and downtown Los Angeles. Monorail was attractive, because it would cost much less to build than subways, and because its relatively lean, streamlined overhead structures would supposedly

be inoffensive to the urban landscape. Also, monorail had pizzazz, an otherwise dull commute could become a thrill ride, something like a trip to Disneyland. Furthermore, monorail was, strictly speaking, a proven technology, as a passenger carrying suspended railway had been running in Wuppertal, Germany since 1901. Its design standards fell short of what was proposed for Los Angeles. It was, and still is, an eight-mile, upside-down streetcar line plodding along at 30 miles per hour.

By contrast, the Southern California version was to whiz through the skies at sixty, and carry far more people. Doubts as to economic feasibility, unresolved engineering questions and, very likely, aesthetic considerations, helped put the 1954 monorail plan on the shelf with Los Angeles's growing pile of discarded rapid transit proposals. Its failure did not lessen enthusiasm for the monorail mode, and ideas for novel aerial railways kept coming forth from several promoters. A German-Swedish firm named Alweg developed a variant in which trains ride atop a single beam. In 1962, the Alweg company installed a short, but full scale pilot line between downtown Seattle and the World's Fair site. A year later, the firm was in Los Angeles with plans for a much larger 42-mile system, costing $288 million. The promoters contended that the price could be paid out of the farebox, but closer scrutiny of the proposed financing mechanism suggested that this would not be so, and the Alweg monorail took its place on the library shelf.

Today, one can get a glimpse of what might have been by visiting Disneyland and riding their monorail which has been running since 1959. Monorails are somewhat popular in amusement parks, but they have never caught on as the staples of urban rapid transit networks.

The era of futurism saw consideration of other new ideas beside monorail. In 1958, the Metropolitan Transit Authority bought out the remaining private bus and trolley operators. A major objective of public ownership was to be the creation of a modern rapid transit system. A consultant study designated four major corridors for an initial rapid transit system. During 1959 and 1960, the MTA and Daniel, Mann, Johnson and Mendenhall evaluated forty new technologies as candidates to serve these corridors. They recommended a modification of the French rubber tired rapid transit train for a 75-mile, $529 million system over the four corridors, mostly on surface and elevated structures.

Among the advantages cited for pneumatic tires were their ability to climb steeper grades than steel wheels and quietness. As to the latter virtue, the consultants were dead wrong. Their prototype, the Paris Metro, which had rubber-tired trains on two lines at the time, is a low-speed system. At low speeds, rubber tires were quieter than steel wheels, but as velocities increase, the advantage disappears very quickly. Each car of a rubber-tired train has as much wheel-to-surface contact area as a tractor-trailer rig. At the 80-mile-per-hour speeds contemplated for the four-corridor system an eight-car train would create an enormous racket.

The era of futurism responded to autopia's glamour, rather than to its traffic congestion. People held the belief that any "modern and up-to-date" transportation had to fly through the skies or run on rubber tires, or do both. Monorails and pneumatic tired trains possessed trendy images which satisfied this misconception, and only served to divert attention from finding workable means of getting people about town.

While technologically part of the era of futurism, the rubber-tired train system also began era number six, "the second era of grand designs". The era did not start smoothly, there was great opposition to the elevated structures, which the MTA was accused of trying to jam down peoples' throats. Seemingly, the lessons of 1925-1930 had been forgotten. However, the authority maintained that only an overhead system, using existing streets and other rights-of-way, had a prayer of being self-supporting,

Era 6: The Second Coming of Grand Designs

Since it had no power to tax, after more intensive economic investigations, it appeared that the answer to even this scheme would be, "no!" Therefore, the MTA lowered its expectations and went back to basics. In 1961, it came out with a 23-mile, Century City-Downtown-El Monte "backbone route". For a while, there was a glimmer of hope, ridership estimates suggested that this line's $218 million cost could be paid from fare receipts, and federally backed financing arrangements were sought. The federal government refused to participate, however, and the backbone route was discarded. The backbone plan was to have been the start of a regional rapid transit system. In 1963, Kaiser engineers expanded it over part of the four corridors; at a projected cost of $619 million. This 64-mile system was financially out of sight.

The Metropolitan Transit Authority was in the transit business for six years. Its accomplishments were unifying the bus service and ending all remaining rail service. The Long Beach interurban line closed in 1961, followed by the last streetcars two years later. It had been hoped that rapid transit lines would replace these abandoned facilities, but all the people got for the study efforts were piles of paper, the requirement for financial self-sufficiency made rail rapid transit all but unattainable in Los Angeles. Meanwhile in the San Francisco bay area, people had come to grips with the need for subsidy, and had voted a

property tax to help build the BART system. Such a commitment was much harder to come by in the Southland. Nevertheless, the state's senators and assemblymen were persuaded to exercise some leadership. So, in 1964, they reconstituted the MTA as the Southern California Rapid Transit District. The new agency bore a specific mandate to build a rapid transit system, and possessed, subject to voter approval, the power to levy taxes.

The RTD carried out its assignment promptly. After an in-depth study, in 1968, it proposed an 89-mile, five-corridor system costing $2.5 billion. Its design standards were based very much on the bay area system, which was considered state-of-the-art for rapid transit at the time. Because public hearings had revealed that property taxes would not be an acceptable means of financing the five-corridor system, the RTD substituted a ½ cent sales tax placed on the November, 1968 ballot; it was rejected by the voters, fifty-five percent to forty-five percent. Blame for the defeat was placed, officially on the public's dislike of higher taxes, not hostility to rapid transit itself. Blame was probably shared by an antipathy to more taxation, and a general feeling, still prevalent, that Los Angeles was an autopian, decentralized garden city with no place for rail transit.

There were some influential voices that continued to encourage this line of thinking. In spite of the setback at the polls, the rapid transit planning effort continued. In 1971, SB 325 dedicated part of sales tax revenues to subsidize transit systems. Federal Aid was also increasing, so, with these funding sources in mind, the RTD made plans for a "starter line" from downtown Los Angeles to Long Beach. There were high hopes that this south central corridor would see the first rapid transit trains; however, disagreement between the city of Los Angeles and the county over corridor priorities frustrated efforts.

Political and financial support for public transportation increased nationally during the early 1970's. Sensing the better climate, the RTD and its partner agencies decided that the time was ripe to see if the people would do what they had refused to do in 1968 — vote for a tax to build a rail system. An extensive corridor study was undertaken, the result of which was a master rapid transit plan with a 145-mile, $6.6 billion first phase. To help pay for this system, whose technology was not specified, but subject to further evaluation, the RTD put a one-cent sales tax increase on the November, 1974 ballot. It too was defeated, but by a smaller margin than in 1968; 47 per cent for, 53 per cent against, with a majority favoring in the city of Los Angeles and a few other cities.

1974 was not totally disappointing for mass transportation, the El Monte busway was opened. Whatever one may think of buses as rapid transit, this facility was the region's first private right-of-way for public transit vehicles since the Long Beach rail line had ended service.

A financial boost for rail came when California's power brokers decided to cut up a large tax pie to provide more money for rapid transit. With the highway lobby licking its wounds after the oil embargo, the legislators placed upon the spring ballot "proposition 5", which would allow diversion of some gasoline tax revenues to fund fixed guideway construction. For a part of the country so wedded to the private automobile, this was a radical step, but the people went for it.

Thereafter, rail transit advocates weren't just the have-nots. After the 1974 election setback, the RTD turned away from comprehensive rapid transit plans. There were still some, though, who believed that the people would buy them if they were comprehensive enough. One such person was former county supervisor Baxter Ward. In 1976, he proposed a 230-mile, $7.2 billion "Sunset Coast Line", and it was to be the "route of the new red cars". But the voters rejected his one-cent sales tax to finance the Coast line. Baxter ward persisted, coming out in 1978 with a more modest "Sunset Limited:, by this time, however, more serious, and eventually more fruitful rapid transit planning efforts were under way. Baxter Ward's schemes were the final gasps of the second era of grand designs. Meanwhile, the established transit agencies of Los Angeles had recognized the fact that entire rapid transit systems could not be financed at the same time; so they changed their approach to one of building incrementally. Beginning with a single line in the area of greatest need, building consensus on this area, while simultaneously addressing the demand of the entire region for high quality public transportation would not be easy, as the 1971 starter line experience had shown.

Therefore, in 1975, representatives of elected officials and the RTD formed a "Rapid Transit Advisory Committee." To arrive at a consensus, this committee designated a "rapid transit starter line corridor", which curved through the San Fernando Valley and down to Long Beach; in fact, very similar to the 1951 monorail corridor. Within and around the strip, the committee members evaluated various combinations of buses, light rail and heavy-duty rapid transit. Their effort marked the beginning of the seventh era, "the era of Alternatives Analysis".

Era 7: Alternatives Analysis

Its first product was a multi-modal "Regional Transit Development Program" (RTDP). In this program, rail transit was to be limited for the immediate future to a high density, right-angled corridor from downtown Los Angeles, out Wilshire boulevard and up through Hollywood to North Hollywood. Buses on freeways, later called "freeway transit" would render more

widespread high-speed service. Other elements of the RTDP were improved local bus service, called "transportation systems management", and a downtown people mover for Los Angeles.

In September of 1976, the city of Los Angeles and the SCRTD jointly submitted an application to the Urban Mass Transportation Administration for preliminary engineering on all elements of the RTDP. UMTA's response three months later was to approve preliminary engineering on the bus elements and the people mover, but to consider only more bus vs. rail "alternatives analysis" on the regional core element. Therefore, in the middle of 1977, the RTD rail planning staff and a handful of consultants began working on this compulsory "sober second thought."

After two years of study, the preliminary findings showed that a rail line was a clear front runner. The RTD Board of Directors selected a "preferred alternative", an approximately 18-mile rapid transit line from Union Station, through downtown Los Angeles out Wilshire boulevard to Fairfax avenue, then north, doubling back into Hollywood, and then paralleling the Cahuenga pass to North Hollywood.

After evaluating the alternatives analysis and environmental impact statement, UMTA decided that this line was very promising, and approved the first part of a preliminary engineering grant in the spring of 1980. Whether one chose to believe it or not, Los Angeles was closer than it ever had been since 1907 to getting a subway.

1980 was a banner year for public transportation in Los Angeles in another way. For the first time ever, the voters approved a local tax to support transit. The Los Angeles County Transportation commission put proposition 'A', a ½ cent sales tax increase, on the November

Ballot. Against a generally conservative drift, the Measure passed by a comfortable 54 per cent. Because constitutionality of the simple majority was not certain, the matter was referred to the courts and RTD staff and consultants carried on preliminary engineering on the rail line, which had been named the "Metro Rail Project." After a while, local transit officials began to sit on the edges of their seats. The first months of the Reagan administration did not provide good news for mass transit. The downtown people mover was killed, the Stockman budget proposed to phase out operating subsidies, and for a while, even the Metro Rail Project was not a sure thing. With the passage of time, however, Administration officials and members of congress warmed up to the Los Angeles subway, and more preliminary engineering money came forth. In the spring of 1982, the California Supreme Court upheld the validity of proposition 'A', and some $200 million annually began to come in to help out local transit systems. With this bonanza in mind, the County Transportation Commission began preliminary engineering on a rail project of its own, a light rail line from Los Angeles to Long Beach on the old Pacific Electric right-of-way.

Metro Blue Line preliminary engineering and final design was followed by construction, resulting in the line opening to the public on July, 14, 1990 eventually running from 7th & Flower to downtown Long Beach.

The first segment of the Red Line opened to MacArthur Park January 30, 1993, followed by extensions to Vermont and Western along Wilshire, to Hollywood and Vine (1999) and to Chandler boulevard in North Hollywood. (2000)

The entire Green Line opened between Norwalk and Redondo Beach on August 12, 1995.

The metro rail project together with the light rail lines and the El Monte busway, provide fast, reliable mass transportation over most of the 1959 rapid transit corridors. Whether they will constitute the initial segments of a 160-mile regional rail system is doubtful at this point in time. The voters of Los Angeles County passed a measure in November 1998 banning local funding of any more subway construction and it is thought quite unlikely that the State or Federal governments will pay for something that the local population will not.

However, if this capsule summary of transit planning in Los Angeles tells us anything, it is that there is nothing new under the sun, and today's dead idea is tomorrow's bright new one.

Robert P. Sechler

Return to ERHA homepage