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Admiral J

CHRONOLOGY
OF THE
METRO RAIL PROJECT

March 13, 1986

Dec. 1971 SB 325 signed into law which provided ongoing subsidies to transit operators. First "starter line" proposed to travel from downtown Los Angeles to Long Beach.

Nov. 1972 Eight month technical analysis began to identify need for rapid transit system in LA County.

July 1973 A 140-mile priority corridor rail system study is produced. Construction would cost \$3.4 billion.

April 1974 A 145-mile priority rail system with bus TSM measures is proposed as a refinement to 140-mile system.

June 1974 Proposition 5 passes in State and LA County. Provides diversion of a portion of highway gas taxes for rail rapid transit construction.

Nov. 1974 Proposition "A" fails. (only 47%). Proposed 145-mile rail system is defeated at the polls.

Mar. 1975 Rapid Transit Advisory Committee (RTAC) is created by RTD Board. Composed of RTD, local cities, County of LA, State and Federal government representatives.

Sept. 1976 Four ELEMENT Regional Transit Development Program (RTDP) is recommended by the Rapid Transit Advisory Committee (RTAC).

Element I = TSM (SCRTD)
 Element II = Freeway Transit (CalTrans)
 Element III = People Mover (City of LA)
 Element IV = Regional Core Rapid Transit Project (SCRTD)

Dec. 1976 DOT funds \$11 million to above agencies for development of RTDP. Approximately \$2.5 million was allocated to SCRTD for the study of heavy rail in the Regional Core (Element IV).

May 1977 Begin AA/EIS/EIR for Element IV of RTDP.

Aug. 1977 Community Participation Program begins for AA/EIS/EIR.

Aug. 1978 UMTA reviews Preliminary Draft AA/EIS/EIR.

Oct. 1978 RTD Board adopts "Preferred Alternative" developed from AA/EIS/EIR
 (= 18.6 mile line, CBD to Valley)

* Indicates items relevant to the environmental process.

*Dec. 1978	Draft AA/EIS/EIR printed and distributed to the public.								
Feb. 1979	Public Hearings held for AA/EIS/EIR.								
Mar. 1979	Community Participation Program ends for AA/EIS/EIR.								
April 1979	Submission of grant application to UMTA for Preliminary Engineering and Final Design funding.								
*April 1980	Publication and Distribution of Final AA/EIS/EIR.								
June 1980	Funding approved for Phase I of Preliminary Engineering (P.E.).								
	<table border="0"> <tr> <td>UMTA</td> <td>= \$12 million</td> </tr> <tr> <td>CTC</td> <td>= \$ 2.8 million</td> </tr> <tr> <td>LACTC</td> <td>= \$ 0.75 million</td> </tr> <tr> <td><u>TOTAL</u></td> <td><u>= \$15.6 million</u></td> </tr> </table>	UMTA	= \$12 million	CTC	= \$ 2.8 million	LACTC	= \$ 0.75 million	<u>TOTAL</u>	<u>= \$15.6 million</u>
UMTA	= \$12 million								
CTC	= \$ 2.8 million								
LACTC	= \$ 0.75 million								
<u>TOTAL</u>	<u>= \$15.6 million</u>								
Nov. 1980	Proposition "A" approved by Voters. (54% majority)								
*Nov. 1980	SCRTD contracts with Converse Ward Davis Dixon - Earth Sciences Associates - Geo/Resource Consultants for comprehensive geotechnical investigation of the Metro Rail Project alignment.								
*July 1981	<p>Award of contracts totalling nearly \$6 million to private firms and City of LA to perform P.E.</p> <ol style="list-style-type: none"> 1. Ways and Structures - DMJM/PBQD 2. Subsystems - Kaiser 3. Station Design - Harry Weese 4. Systems Analysis & Engineering - Booz Allen & Hamilton 5. EIS/EIR - Sedway/Cooke 6. Traffic Analysis - LADOT 7. Specific Plans - City and County Planning Departments. 								
Aug. 1981	SCRTD contracts with Converse Ward Davis Dixon - Earth Sciences Associates to evaluate the seismological conditions along the Metro Rail alignment and to develop a seismic design criteria for the Project.								
*Oct. 1981	Begin 2nd Tier EIS/EIR for Phase I of P.E.								
Nov. 1981	Scoping Meetings held for 2nd Tier EIS/EIR.								

* Indicates items relevant to the environmental process.

*Dec. 1981 Converse transmits final report of the geotechnical investigation for the Metro Rail Project. The Executive Summary states: "The results of the geotechnical investigation indicate that the proposed alignment for the 18-mile Metro Rail Project is favorable for modern economical tunnel construction."

Mar. 1982 Community Participation Program begins for 2nd Tier EIS/EIR.

Mar. 1982 Milestone 1 (Preliminary System Definition and Operating Plan) and Milestone 2 (System Design Criteria) were published and community meetings held.

May 1982 Public Hearings for Milestones 1 and 2.

*May 1982 Milestone 3 (Route Alignment Alternatives) and Milestone 4 (Station Location Alternatives) were published and community meetings held.

May 1982 Funding approved for Phase II of P.E.

 UMTA = \$ 9.8 million
 CTC = \$ 1.7 million
 LACTC = .6 million
 TOTAL \$12.1 million

July 1982 Milestone 5 (Right-of-way Acquisition and Relocation Policies and Procedures) was published and community meetings held.

July 1982 Funding approved for Phase III of P.E.

 UMTA = \$ 9.3 million
 CTC = \$ 1.3 million
 LACTC = .6 million
 TOTAL \$11.2 million

July 1982 Public hearings for Milestones 3 and 4.

Aug. 1982 RTD Board adopts Milestones 1 and 2.

Aug. 1982 Public hearing on Milestone 5.

Aug. 1982 Begin "Special Alternatives Analysis" for Hollywood and North Hollywood.

*Aug. 1982 RTD Board adopts Milestones 3 and 4.

* Indicates items relevant to the environmental process.

Sept. 1982	Milestone 6 (Land Use and Development Policies) was published and community meetings held.
Sept. 1982	Funding approved for Phase I of <u>Continued P.E.</u> (CPE). UMTA = \$15 million CTC = \$ 2.8 million LACTC = \$ <u>.9 million</u> TOTAL = \$18.7 million
Sept. 1982	RTD Board adopts Milestone 5.
Nov. 1982	District hosted Hollywood and North Hollywood Citizen Advisory Councils (CAC's) on a tour of BART facilities.
*Nov. 1982	Milestone 7 (Safety, Fire/Life Safety, Security and Systems Assurance Policies) was published and community meetings held.
Nov. 1982	Milestone 8 (System and Subsystems) was published and community meetings held.
Nov. 1982	Public hearing held on Milestone 6.
Dec. 1982	Public hearing on Milestone 7.
Dec. 1982	Public hearing held on Special Alternatives Analysis.
Dec. 1982	RTD Board adopted route and station location recommendations from Special Alternatives Analysis.
Jan. 1983	Public hearing on Milestone 8.
*Mar. 1983	UMTA reviews Preliminary Draft EIS/EIR.
Mar. 1983	RTD Board adopts Milestone 6.
Mar. 1983	Milestone 9 (Supporting Services Plan) and Milestone 10 (Fixed Facilities) were published and community meetings held.
Mar. 1983	Public Hearing held on Milestone 9.
Mar. 1983	RTD Board adopts Milestone 7.
April 1983	Congress passes the Highway User Fee increase (5¢ additional charge on Federal gasoline tax) which benefits the construction of transit projects.

* Indicates items relevant to the environmental process.

April 1983	Funding approved for Phase II of CPE.
	UMTA = \$25 million
	CTC = \$ 5.5 million
	LACTC = <u>\$2.8 million</u>
	TOTAL = <u>33.3 million</u>
April 1983	Milestone 11 (Cost Estimate) was published and community meetings held.
April 1983	RTD Board adopts Milestone 9.
May 1983	Milestone 12 (Final System Definition) was published and community meetings held.
May 1983	Public hearing on Milestone 9.
May 1983	Converse transmits final seismological report investigation report and structural seismic design criteria for the Metro Rail Project.
May 1983	Public hearing on Milestone 10.
*June 1983	Engineering-Science is contracted to perform field testing and to recommend design criteria to mitigate against any hazards created by the presence of methane and other identified gases.
*June 1983	Draft 2nd Tier EIS/EIR printed and distributed to the public.
June 1983	Public hearings on Milestone 11.
June 1983	Public hearings on Milestone 12.
*July 1983	Public hearings held on Draft EIS/EIR.
Aug. 1983	RTD Board adopts Milestone 9.
Aug. 1983	RTD Board adopts Milestone 10.
Aug. 1983	Community Participation Program ends for EIS.
Aug. 1983	President Reagan signs DOT funding bill for fiscal year 1984, which contains a \$117.2 million appropriation to start construction of Metro Rail.
Aug. 1983	Governor George Deukmejian signs into law SB 1159 authorizing SCRTD to engage in <u>Joint Development</u> ventures.

* Indicates items relevant to the environmental process.

Sept. 1983	Funding approved for Acquisition of Santa Fe Rail Yard: UMTA = 0 CTC = \$31 million LACTC = \$ 1.7 million TOTAL = \$32.6 million
Sept. 1983	Funding approved for Advanced Land Acquisition. UMTA = \$14.8 million CTC, LACTC = 0 Total = \$14.8 million
Sept. 1983	RTD Board adopts Milestones 11 and 12.
*Sept. 1983	Converse Consultants is contracted to conduct additional geotechnical studies in the Fairfax District.
Oct. 1983	State Senate and Assembly passed into law SB 1238, which allows the District to create <u>Benefit Assessment Districts</u> .
Oct. 1983	RTD Board approves first Joint Development agreement between SCRTD and Park LaBrea Associates. This could provide a \$30 million saving in construction cost for the Wilshire/Fairfax station.
Nov. 1983	Public hearing held on grant application to fund final design and construction in the amount of \$2.1 billion.
Nov. 1983	RTD Board selects 16 architectural/engineering design firms as subconsultants to MRTC for station and tunnel design.
*Nov. 1983	RTD Board adopts EIS/EIR.
*Dec. 1983	Publication and Distribution of Final EIS/EIR.
*Jan. 1984	Engineering-Science issue: "Report of Subsurface Gas Investigation for the Metro Rail Project."
Mar. 1984	RTD Board passes resolution calling for UMTA to make full-funding commitment in the form of a Letter of Intent and Letter of No Prejudice.
April 1984	RTD Board selects joint venture Construction Management team, headed by Ralph M. Parsons Company.

* Indicates items relevant to the environmental process.

*Aug. 1984 Matrecon, Inc. is contacted to study methane transmission rates through barrier materials for tunnel construction.

May 1984 Funding approved for "Pre-Construction."

UMTA	= \$105.4 million
CTC	= \$ 24.4 million
LACTC	= \$ 33.9 million
LA CITY	= \$ <u>6.3 million</u>
TOTAL	= \$170.0 million

*May 1984 Begin Environmental Assessment (EA) for MOS-1.

June 1984 Community Participation Program begins for EA.

June 1984 Metro Rail Transit Consultants (MRTC) issues "Supplemental Criteria for Seismic Design of Underground Structures."

*July 1984 UMTA reviews "Preliminary Draft" EA.

*Aug. 1984 "Draft" EA printed and distributed to the public.

*Aug. 1984 Public hearing held on "Draft" EA.

*Sept. 1984 Publication and distribution of "Final" EA (Reprint).

*Oct. 1984 Publication and Distribution of Comments and Responses on EA.

Nov. 1984 Community Participation Program ends for EA.

*Nov. 1984 UMTA issues Finding of No Significant Impact (FONSI) for MOS-1.

*Dec. 1984 CAL-OSHA classifies Metro Rail tunnels as gassy and specifies that Title 8 Tunnel Safety Orders Requirements be met throughout the Project.

*Jan. 1985 Matrecon, Inc. issues report on "Methane Transmission Rates Through Various Barrier Materials For Tunnel Construction." Supplemental reports are published in February and June, 1985.

*Mar. 1985 An explosion and fire takes place at the Ross Dress-For-Less store in the Fairfax District.

* Indicates items relevant to the environmental process.

- *May 1985 Engineering-Science issues report of monitoring services to update subsurface gas concentrations and pressures along the Metro Rail route. Six monitoring rounds were conducted, the last one completing immediately after the March 24, 1985 incident.
- *May 1985 Converse Consultants transmits Interim Geotechnical Report for Design Unit A-250 (Fairfax District).
- *June 1985 The City Task Force issues its report on the March 24 methane gas explosion and fire.
- *Aug. 1985 The SCRTD General Manager outlines three initiatives to be accomplished prior to start of construction:
- (1) A thorough In-House review of tunneling and operation plans in gaseous areas.
 - (2) Commissioning of an Independent Review Board of outside experts with specific knowledge of methane gas.
 - (3) Supplemental Environmental Impact Statements for alignment adjustments as required by (1) or (2) above.
- *Aug. 1985 The In-House Board of Review meets to discuss and review current plans for tunneling and operating in gas bearing ground.
- *Aug. 1985 The SCRTD General Manager forms an Independent Review Board of outside experts to review the design, construction, and operation of Metro Rail in gaseous areas.
- *Sept. 1985 The In-House Board of Review issues "Draft Report on Construction and Operation in Gaseous Areas."
- *Sept. 1985 First meeting of the Independent Review Board on design, construction, and operation in gaseous areas.
- *Sept. 1985 SCRTD Board of Directors adopts a Policy Statement on Metro Rail Safety and directs that all appropriate measures required to ensure safe construction and operation be incorporated into the Project.

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- *Sept. 1985 The House of Representatives approves HR 3244 authorizing \$117 million for MOS-1. Congressmen Waxman and Dixon request the City of Los Angeles to initiate an Independent Technical Review Evaluation of the design and safety of MOS-1.
- *Oct. 1985 Second meeting of the Independent Review Board on design, construction, and operation in gaseous areas.
- *Oct. 1985 The L.A. City Council establishes a ten-member Independent Technical Review Committee to study the design and safety of MOS-1.
- *Oct. 1985 The Independent Review Board issues its "Report on Design, Construction, and Operation in Gaseous Areas." The report states that: "Because of the detail planning and design that has gone into the Project, there is no doubt that this Project will be the model that other projects in gassy ground will emulate."
- *Nov. 1985 SCRTD provides technical data to the Independent Technical Review Committee.
- *Jan. 1986 "Report of the Independent Technical Review Committee Evaluation of the MOS-1 Portion of the Los Angeles Metro Rail Project" issued. This report concludes that the Project is "feasible to construct and operate."
- *Jan. 1986 SCRTD Board of Directors adopts resolution to the effect that no part of the Metro Rail Project will tunnel into or through any zone designated as a potential risk zone in the Report of the City of Los Angeles dated June 10, 1985.
- *Feb. 1986 SCRTD Board of Directors adopts resolution to incorporate in the Metro Rail Project (MOS-1) the recommendations of the City's Independent Technical Review Committee.

* Indicates items relevant to the environmental process.

Metro Red Line Subway Chronology

1950s: Los Angeles experiences the waning days of its extensive trolley network, however, planners already are dreaming of a modern replacement rail system.

April 8, 1961: The last day of operation for the downtown Los Angeles to Long Beach Red Car.

March 31, 1963: Service on the Los Angeles Yellow Car discontinued.

1963: The last mass transit rail vehicle in Los Angeles is retired, succumbing to the power of the automobile and freeways.

June 1974: The first public money – a portion of highway gas taxes – was committed for the construction of a rail rapid transit system. Shortly thereafter, a Rapid Transit Advisory Committee is formed.

November 1980: Los Angeles voters approve a half-cent sales tax increase under Proposition A, which provides funding for a regional rail transit system as well as other transportation improvements.

July 1981: The first design contracts for Metro Rail begin to be awarded.

August 1983: President Ronald Reagan signs a U.S. Department of Transportation funding bill that provides \$117.2 million for the startup of Metro Rail construction, a major milestone leading to the eventual return of rail mass transit to Los Angeles.

March 1984: California State Transportation Commission approves \$361 million as first installment of matching funds for Metro Rail construction.

August 1984: The Los Angeles County Transportation Commission commits \$406 million (from sales tax revenue) as county matching funds for Metro Rail construction.

September 1984: City of Los Angeles commits \$34 million toward initial Metro Rail construction.

September 29, 1986: Groundbreaking ceremony for Segment 1 of Metro Red Line subway takes place at 1st and Hill streets. The 4.4 mile Segment 1 will start at Union Station and feature a total of five stations, ending at MacArthur Park.

MORE...

Page 2 Metro Red Line Chronology

1987: Construction of Segment 1 begins. Most of Segment 1 will be in its final stages of completion by October 1992.

April 1988: First 104 Metro Red Line cars ordered from manufacturer Breda Costruzioni Ferroviarie.

January 1989: Tunneling begins on Segment 2 of Metro Red Line to extend the subway west on Wilshire from MacArthur Park and north on Vermont to Hollywood.

1989: The Metro Rail program is officially placed under the auspices of the Los Angeles County Transportation Commission.

May 5, 1989: First Metro Red Line subway tunnel break through on Segment 1 at Civic Center station connecting Union Station with 1st & Hill streets.

June 11, 1990: Metro Red Line tunnel machines break through at Union Station from yard and shops area, completing tunneling for Segment 1.

November 1990: Los Angeles County voters approve Proposition C, raising the sales tax by another half-cent to expand and improve rail, bus and other transit services.

1990: The Metro Rail System makes its debut with the opening of the 22-mile Metro Blue Line, a light rail system which extends from downtown Long Beach to downtown Los Angeles, linking the two biggest cities in Los Angeles County.

July 1991: Metro Red Line rail maintenance yard opens.

November 1991: Test trains begin running on the 4.4 mile long Segment 1.

1991: Construction of Segment 2, the Wilshire Corridor, begins. Segment 2 will encompass 6.7 miles and includes two legs. The first leg, 2.1 miles, extends west along Wilshire Boulevard from the Westlake MacArthur Park station on Segment 1 to the Wilshire/Western station.

Segment 2's second and longer Vermont/Hollywood Corridor, 4.6 miles, turns north on Vermont Avenue and then west along Hollywood Boulevard to the Hollywood/Vine station and features three stations along Vermont and two on Hollywood Boulevard.

MORE...

Page 3 Metro Red Line Chronology

April 1, 1993: RTD and LACTC merge to become Los Angeles County's single transportation agency, the MTA.

January 30, 1993: Segment 1, connecting Union to MacArthur Park, a distance of 4.4 miles, opens to the public. A ceremonial subway train carries transit and elected officials to the Pershing Square Station to celebrate L.A.'s first modern subway. Initially, the line draws 18,000 passengers a day.

January 17, 1994: Nearly a year after opening day of Segment 1, a 6.7-magnitude earthquake jolts Los Angeles. A thorough inspection of the subway tunnels reveals no significant damage and trains are running the following day.

January 30, 1994: Metro Red Line carries more than 5 million riders in first year of operation.

December 1994: Traylor Brothers awarded 2-1/2 mile construction contract to build a Metro Red Line subway on Segment 3 underneath the Santa Monica Mountains from Hollywood to Universal City in North Hollywood.

March 1994: Tunneling begins on Segment 3.

May 1996: Two tunnel boring machines at Universal City worksite begin mining through the Santa Monica Mountains to Hollywood.

- When completed, the tunnel boring machines will pass 12,630 feet through eight distinct geologic formations, ranging in depth from 165 to 900 feet before meeting up with the Metro Red Line tunnels at La Brea Avenue and Hollywood Boulevard.
- The \$125.6 million project will link North Hollywood and two subway stations and two miles of tunnel, and the rest of the Metro Red Line system.
- Unlike previous segments of the Metro Red Line, which were built through loose sedimentary ground, the tunnels from Universal City to Hollywood pass through solid rock, including formations of granite.

July 13, 1996: The first leg of Segment 2 opens ahead of schedule to the public, expanding the subway by 50 percent. Sixteen Metro bus lines link with three new rail stations on Wilshire, providing speedy connections for thousands of commuters.

MORE...

Page 4 Metro Red Line Chronology

July 1997: Ridership on the Metro Red Line hits 39,700, up from 27,950 for the same period in July 1996. Overall, ridership on the Metro Rail System, which includes the light rail Metro Blue and Green lines, reaches 110,000 average weekday boardings.

October 1997: Segment 3 tunnel boring machines break through to Segment 2 in Hollywood at La Brea shaft. Segment 3 is expected to open for service in May 2000. Segment 2 is expected to open in December 1998.

MTA-216

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400-mile County comprehensive transportation system includes the following rapid transit systems which are a part of comprehensive Southern California (San Diego to Ventura County) multi-modal transportation network:

METRO RAIL RED LINE HISTORY (from MTA Library files 10/96):
operator run subway trains on steel tracks; can reach speeds of up to 70 mph; 165-200 (seated and standing) passengers per car.

1. 1974: Proposition 5 appd by st voters to allocate portion of St gas tx monies for rail constrn.
2. 1974: measure for funding of construction rail system rejected by cnty voters.
3. 1974: RTD receives fed Dept Transp Urban Mass Transit Agency (UMPTA) funding to evaluate 16 transit corridors in region & develop a Regional Transp Development Program.
4. 6/74: Proposition 5 appd by st voters to allow use of hwy funds for public transit on a formula basis.
5. 3/75: planning begins for 1st Metro Rail segment.
6. 6/76: measure for funding rail construction rejected by cnty voters.
7. 9/76: based on study of regl alternatives, Regional Transportation Development Program for comprehensive regl multi-modal transp system adopted by st & local jurisdictions & appd by fed DOT UMPTA incldng bus, bus-ways, fwy high occupancy vehicle prog, downtown people mover & regl rail transit.
8. 1976: St leg establishes LA Cnty Transp Comsn (LACTC) to centralize rapid transit plg in cnty under one agency.
9. 12/76: fed DOT approves funding for prelim engr; study to identify maj alt rts within LA cnty initiated.
10. 1978: cnty comty participation program.
11. 5/79: draft EIR, incldng alternatives, completed; RTD Bd identifies a preferred alignment.
12. 7/79: public hearing on 11 major alternatives.
13. 1-6/80: St Transp Comsn public hearings; Comsn endorses RTD preferred alignment.
14. 6/80: preliminary engr for subway initiated.
15. 1980: Proposition A appd by 59% (54%?) cnty voters to impose $\frac{1}{2}\%$ sales tx surcharge to fund constrn 150-mile rail transit system, multi-modal local transit projects in LA cnty.
16. 1981: prelim engr for 18.6 mi 1st segment of Metro Rail initiated.
17. 12/81: US Dept Transp Urban Mass Transit Agency awards 2nd

increment of \$9.8 mil & declares LA top priority.

18. 7/82: US DOT issues 3rd increment (\$9.3 mil) for prelim engr.
19. 1983: Surface Transportation Assistance Act appd by Cong; it provides \$117.2 mil in fed funds to US DOT for allocation to local jurisdictions & transp authorities for design & constrn; \$700 mil is allocated for 1st phase LA Metro Rail for envl study & plg.
20. mid-83: prelimin engr completed.
21. mid-1983-84: final design & rt-of-way acquisition.
22. 1985: fed spending bill containing \$429 mil allocation for LA subway 1st phase appd by Cong & signed by Pres Reagan.
23. 1986: P Reagan, citing growing budget deficit, places LA subway funding on hold; Cong overrides his withhold.
24. 1986: \$707 mil in revenue bonds issued by LACTC, largest public transit bond sale by a municipal agency in nation's history.
25. 9/29/86: ground breaking for 1st segment of Metro Rail (later renamed Red Line); 4.4. miles from Union Stn to MacArthur Pk.

Funding summary as of 9/86:

- a. \$176 mil fed Urban Mass Transit funds for design, engr & land acquisition;
 - b. \$225 mil fed gas tx appropriated by Cong for constrn 1st 4.4 mi segment;
 - c. est future share of fed gas tax \$203 mil (to be sought);
 - d. fed funds up to \$10.6 mil for constrn (anticipated);
 - e. Cal st \$213 mil;
 - f. LACTC \$176 mil;
 - g. LA City \$34 mil;
 - h. pvt sector (benefit assessment dists around each future stn) \$130 mil (est).
26. 1987: Cong allocates additional funds for constrn next segment (4.4 to 12 mile segment).
 27. 1/90: Red Line begins operation of initial 5 stn, 4.4 mi segment btwn Union Stn & McArthur Pk.
 28. 1990: St Crt of Appeals rules unconstitutional RTD's proposed benefit assessment district for com'l property owners to pay for part of constrn costs for 1st leg of subway.
 29. 1990: merger LACTC & RTD into single agency, Metropolitan Transportation Authority (MTA), approved by St Leg (Assembly Bill 1784, Katz).
 30. 6/90: LACTC assumes authority for Metro Rail constrn & forms Rail Construction Corp (RCC) to design & construct Red Line with RTD as subway operator.
 31. 6/90: St Prop 116 (\$1.9 mil bond issue for clean air transp improvements) & Prop 108 (\$3 bil bond issue for rail over 6

yrs) appd by voters.

32. 11/90: Prop C appd by cnty voters for additional ½¢ sales tx surcharge (in addition to 1980 Prop A) for 400-mi of transit related projects assoc with 550 miles of regl rail transp system; projected to produce \$400 mil annually.
33. 11/90 (?): St bond issue, voters author st to sell \$1 bil in gen obligation bonds for rail development.
34. 11/91: Pres Bush signs leg authorized \$888 mil for cnty transp to be issued btwn 1992-8 with periodic reauthorizations.
35. 1992: Cong affirms commitment to extending Metro Rail proj to 22 miles & adding addl \$1.2 bil for extension to No Hollywood, E LA & Pico/San Vicente (total 23-mi, 30-yr Red Line pl).
36. 1992: St Sup Crt upholds RTD's rt to estab benefit assessment dist which would assess 30¢ per sq ft on com'l properties within "walking" distance of Red Line stns.
37. 1/93: first Red Line segment (to Wilshire/Alvarado) opens; extension under constrn.
38. c 1994: N Hollywood segment constrn begun.
39. 1996: reauthorization of fed funds for cnty transp cut by Cong.
40. 9/96 Red Line extensiion to Wilshire/Western opens.

METRO BLUE LINE HISTORY (notes from MTA Library files 10/96): 22-mile operator run surface electric rail trolley between LA downtown and Long Beach; 22 stns; bus, Red Line (at Flower & 7th St stn) & to Green Line interface.

1. 1981: Blue Line feasibility study prepared.
2. 1982-3: preliminary engineering work.
3. 6/84 route and construction authorized by LA Cnty Transp Comsn (LACTC) with majority of guideway within median of Century (later renamed Glenn Anderson) Fwy. Originally intended to serve large aerospace industry in El Segundo-Redondo Beach area, recession had reduced aerospace industry (estimated 30,000 lost El Segundo-Redondo Beach) by 1984.
4. 10/85: ground breaking for construction.
5. 5/90: RTD assumes operation of completed system.
6. 7/14/90: opening Blue Line.
7. 11/91: responding to complaints from residential neighbors, especially in the Long Beach area, concerning excessive noise generated by the trolleys, consultant hired to study problems and propose mitigation.
8. 12/91: various noise mitigation measures instituted, including replacement or modification of horns to reduce sound to 87 dBa (existing air horns 105 dBa to be retained for emergencies) retrofitting cars with dampening fixtures and materials, car design modifications, and grinding of rails to attain 78 dBa noise level adjacent to residential areas.

METRO GREEN LINE HISTORY (notes from MTA Library files 10/96):
19.75 mi Norwalk (Rt 805/105 junction) to nr LAX to Redondo Beach
operator run surface electric rail trolley; totally grade
separated; 14 stations; 11 park-n-ride lots; bus & Blue Line
interface; 16.25 mi of guideway within median of I-105 (Glenn
Anderson) Fwy & 3.5 mi combination of elevated & ground level
guideways; shuttle to LAX; can travel at speeds of up to 60 mph.

1. 1970s: law suit stops construction Century Fwy.
2. 1982: agreement with Cal Dept Transp (Caltrans) stemming from law suit permits fwy constrn to proceed. Fwy to have 6 moving traffic lanes, HOV lanes and space for rail line.
3. 1984: MTA announces light rail will be constructed within median of new fwy.
4. 1/91: ground breaking for light rail (fwy already under construction).
5. 8/95: opening Green Line.

METRO-LINK HISTORY (notes from MTA Library files 10/96): operator run train system utilizing existing railroad tracks. Hub is LA Union Station from which lines serve Los Angeles, Ventura, San Bernardino, Orange, Riverside and San Diego counties. Features double decked cars which carry 145 passengers, each w bicycle storage & wheelchair access; can travel at speeds up to 79 mph.. Operating agency: Southern Calif Regional Rail Authority.

1. 1992: first lines open.
2. 1/94: ridership accelerated for areas north and west of Northridge following collapse of or structural damage to several freeways during Northridge earthquake.

Los Angeles Public Transportation Timeline

1874 – First rail line, the Spring and Sixth Street Railroad Company, opens with horse drawn streetcars.

1886 – First cable car powered rail line opens and cable cars become the preferred technology over horses.

1895 – Los Angeles Railway Company expands public transportation with overhead electrified streetcars

1899 – Pacific Electric Railway begins and creates interurban rail system to carry passenger longer distances.

1901 – Angels Flight railway opens.

1906 – First overnight Owl transit service begins and Los Angeles becomes a 24 hour transit accessible city.

1911 – The Great Merger knits together numerous smaller transportation providers into two main companies – Pacific Electric (Red Cars) for longer distance interurban service, and Los Angeles Railway (Yellow Cars) for connections between the Central Business District and local neighborhoods.

1923 – Pacific Electric and Los Angeles Railway form the Los Angeles Motor Coach Company to serve Wilshire Boulevard and other streets with transit buses.

1925 – The rail system reaches its peak size – connecting Los Angeles with Riverside, San Bernardino, Orange County and the San Fernando Valley with downtown Los Angeles and the local streetcar and bus system.

1945 – The Huntington Estate sells Los Angeles Railway (Yellow Cars) to Los Angeles Transit Lines. Two electric trolley bus lines begin operation.

1951 – The State creates the Los Angeles Metropolitan Transit Authority as a transportation planning agency.

1953 – Pacific Electric is sold to Metropolitan Coach Lines

1958 – The State authorizes the transit authority's purchase of Metropolitan Coach Lines and Los Angeles Transit Lines to create a cohesive mass transit system.

1962 – The "Backbone Route" creates the first subway to the sea plan, underground core samples are taken and preliminary engineering work is done. Two ground breaking ceremonies are held – one in downtown and one in Beverly Hills.

1963 – Governor Ronald Reagan signs a bill and creates the Southern California Rapid Transit District Law. It gives the successor to the Los Angeles Metropolitan Transit Authority much broader authority for joint development, planning, funding, construction and operation of mass transit service. Five remaining streetcar lines and two electric trolley bus lines are taken out of service and replaced with transit buses by the LAMTA before SCRTD's first meeting.

1968 – Air Conditioning, two way radios, and silent alarms become standard on all new bus orders. New mass transit plans are presented in numerous public meetings across Los Angeles.

1972 – First research investment in alternative fuel technology with steam powered buses.

1974 – Wheel chair lifts become standard equipment on all new bus orders. New mass transit plans are presented in public meetings throughout Los Angeles. The first public money, a portion of highway gas taxes, is committed for the construction of a rail rapid transit system.

1980 – Voters approve Proposition A, a half-cent sales tax, to provide dedicated funding for a regional rail transit system and other transportation improvements.

1983 – President Ronald Reagan signs a USDOT funding bill that includes \$117.2 million for the start-up of Metro Rail construction.

1985 – The Los Angeles County Transportation Commission breaks ground on the light rail Long Beach-Los Angeles Metro Blue Line.

1984 – California State Transportation Commission approves \$361 million as the first installment of matching funds for Metro Rail construction. SCRTD provides transit service to the International Olympic Games helping mitigate traffic impacts to a historic low.

1986 – Groundbreaking ceremony for the Heavy Rail Metro Red line is held at 1st Street and Hill.

1989 – First CNG bus is put in service.

1990 – Voters Proposition C, a 2nd half-cent sales tax, to improve rail service, fund commuter rail, and other transportation improvements. The light rail Long Beach-Los Angeles Metro Blue Line opens, linking the two largest cities in Los Angeles County.

1991 – Groundbreaking ceremony held for the light rail Metro Green Line.

1993 – The first 4.4 mile segment of the Metro Red Line subway opens, connecting with the Metro Blue Line. Alternative fuel policy adopted for all future bus purchases.

1995 – The light rail Metro Green Line opens and connects with the Metro Blue Line. The Patsaouras Bus Plaza at Union Station's East Portal opens making bus/rail connections between the Metro Rail system, Metrolink, Municipal Operators and others much easier as downtown's eastern multimodal hub.

1996 – Metro Red/Purple Line subway extension to Wilshire/Western opens. Consent Decree signed with the Labor Community Strategy Center, results in a 10 year, \$1.3 billion investment in improved bus equipment and services.

1997 – Bus feet is equipped with bike racks as a test, results in 100% of the bus fleet, over 2,700 buses, being equipped with bike racks within 4 years.

1999 – Metro Red Line subway extension to Hollywood opens.

2000 – Metro Red Line subway extension to North Hollywood opens simultaneously with Rapid Bus lines on Wilshire and Ventura boulevards. Construction begins on the Pasadena Gold Line held.

2003 – Light rail Metro Gold Line to Pasadena opens. Construction begins on the Metro Orange Line.

2004 – Construction begins on the Light Rail Metro Gold Line extension to East Los Angeles is held.

2005 – Metro Orange Line opens.

2006 – Construction begins on the light rail Exposition Line is held.

2008 – Voters approve Measure R, a half-cent sales tax for the next 30 years to fund bus, rail and highway projects.

2009 – Light rail Metro Gold Line extension to East Los Angeles opens. Construction begins on Metro Orange Line extension to Chatsworth.