

Silicon Valley's Modern Transit Start-Up

■ June 6, 2016

Hon. Rod Diridon Sr.

Chair, US High Speed Rail Association

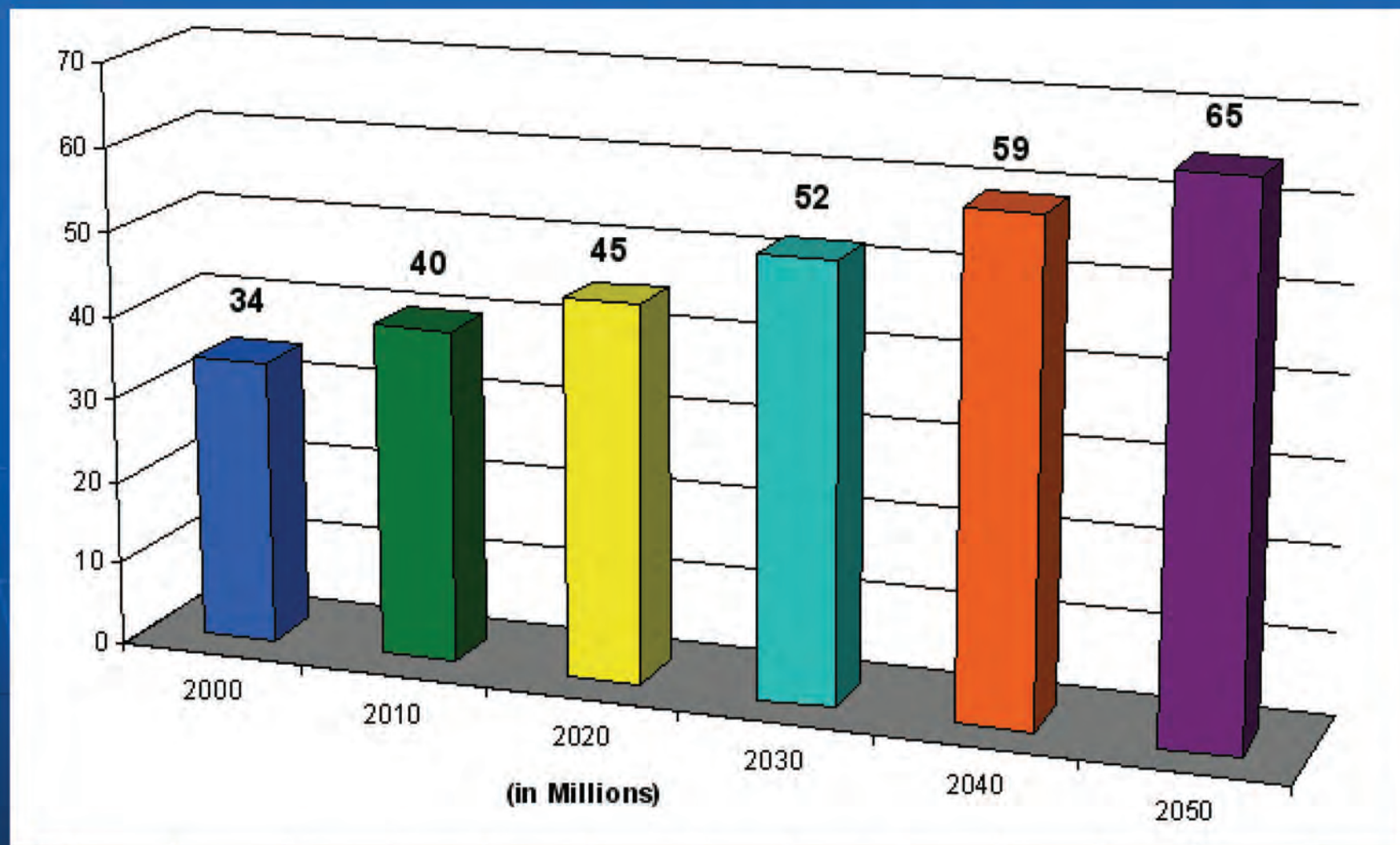
***Past Chair Intercity High Speed Rail Committee
American Public Transit Association***

***Chair Emeritus
California High Speed Rail Authority Board***

***Emeritus Executive Director
Mineta National Transit Research Consortium
Mineta Transportation Institute***



California's Projected Population



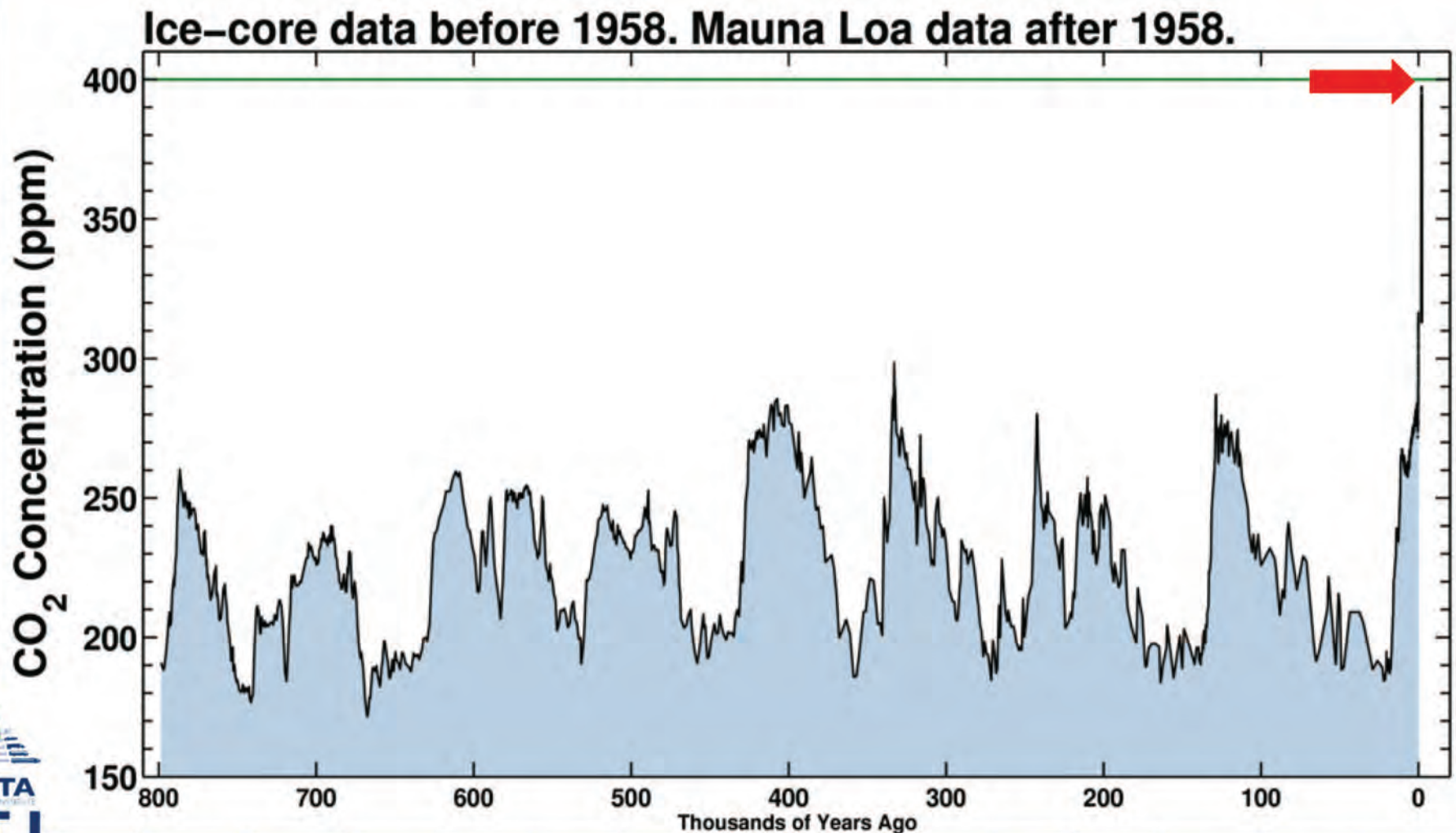
Sources: U.S. Census Bureau; Projections - CA Dept. of Finance

Created by Mineta Transportation Institute

The New York Times

Heat-Trapping Gas Passes Milestone, Raising Fears

May 11, 2013



San Jose Mercury News

Front Page, August 8, 2013

State report says global warming's wrath has already arrived

By Paul Rogers

progers@mercurynews.com

Rising ocean waters. Bigger and more frequent forest fires. More brutally hot summer days.

These aren't the usual predictions about global warming based on computer forecasts. They're changes already happening in California, according to a detailed new report issued Thursday by the California Environmental Protection Agency.

Climate change is "an immediate and growing threat" affecting the state's water supplies, farm industry, forests, wildlife and public health, the report says. The 258-page document was written by 51 scientists from the Univer-

sity of California, Scripps Institution of Oceanography, Lawrence Berkeley National Laboratory, U.S. Geological Survey and the National Oceanic and Atmospheric Administration, among other agencies and institutions.

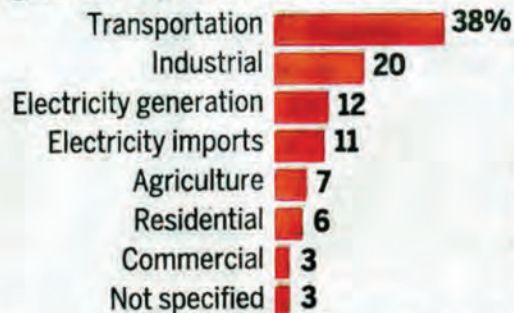
"Climate change is not just some abstract scientific debate," said California EPA Secretary Matt Rodriguez. "It's real, and it's already here."

Most Californians seem to agree. In a poll last month by the nonpartisan Public Policy Institute of California, 63 percent of the state's residents said the effects of global warming are already being felt, while 22 percent

See **WARMING**, Page 8

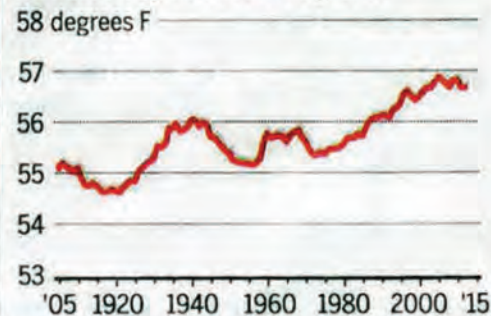
Sources of emissions

Transportation, industry and electrical generation account for 81 percent of all greenhouse gas emissions in California.



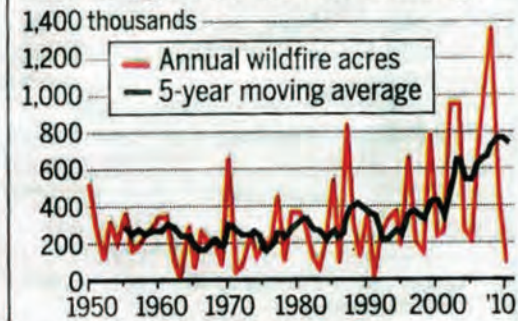
Rising temperatures

Since 1895, annual average temperatures in California have increased by about 1.5 degrees.



More severe fires

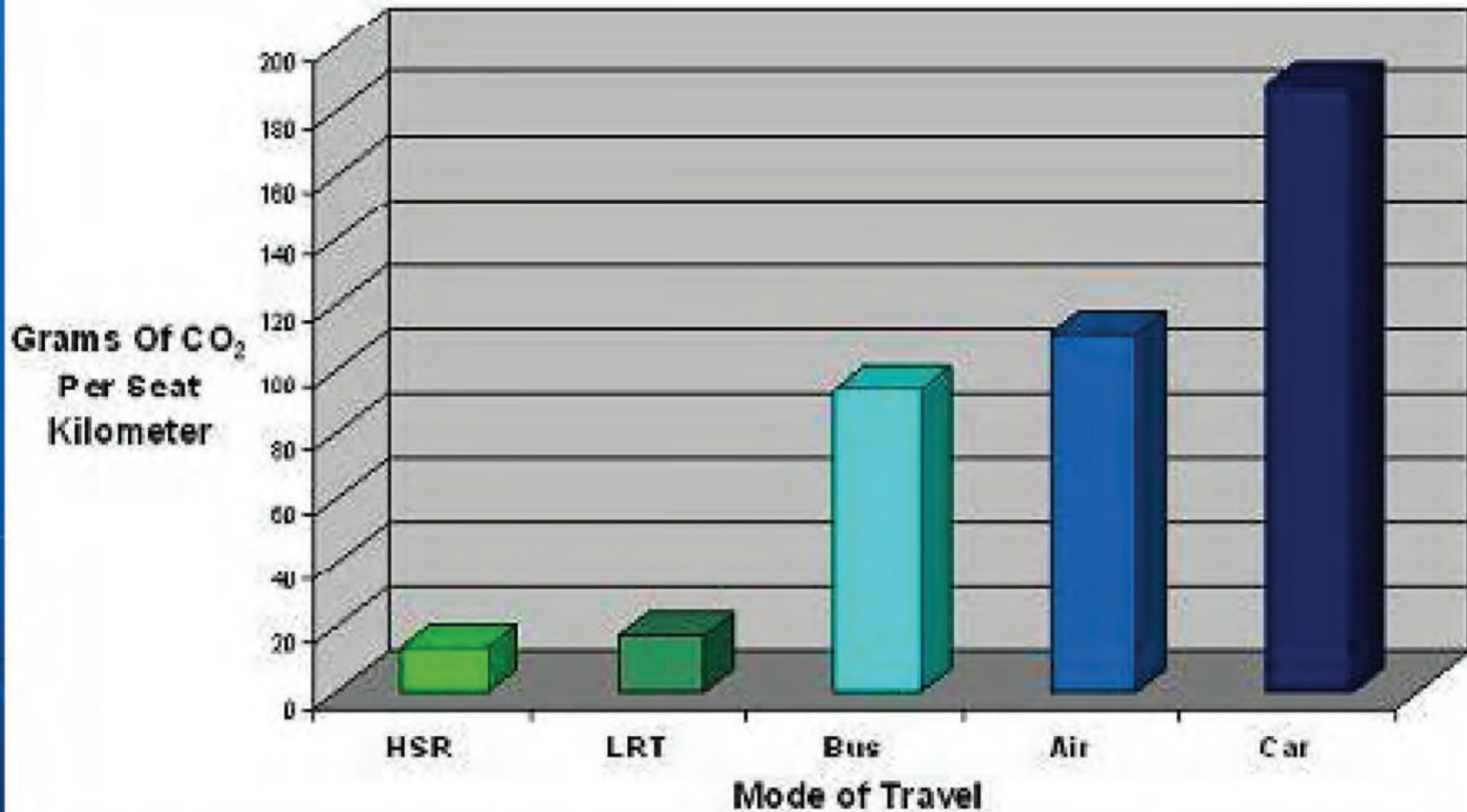
The average annual acreage burned in wildfires in the state since 2000 is almost twice as high as the 1950-2000 average.



Source: Indicators of Climate Change in California, Office of Environmental Health Hazard Assessment

BAY AREA NEWS GROUP

Carbon Footprint Mode Comparison



Data provided by Dr. Anthony Perl

Created by Mineta Transportation Institute

A Sampling: High-Speed Rail Around the World



Created by Mineta Transportation Institute

High Speed Rail in Japan

Route Map

SHINKANSEN NETWORK



Japan: N700



High Speed Rail in Korea Route Map



Korea: KTX



Created by Mineta Transportation Institute

High Speed Rail in Taiwan Route Map



Taiwan: 700T



High Speed Rail in China Route Map



Created by Mineta Transportation Institute

China: CRH 2C and 3C





Europe 2025

France: AGV



Germany: ICE



ICE-2

ICE-3



Created by Mineta Transportation Institute

Italy: ETR 1000



Spain: AVE

AVE S 100



AVE S 102



AVE S 103
(ICE-3)



Turkey: Tulomsas



Federally Designated HSR Corridors



California HSR with Stations and Feeders



790 Miles
26 Stations

The Santa Clara County Transit Agency (TA)

The Foundation for Transportation Systems Funding Success (1971 to 1995)

THE SECRET WEAPON: Take the time to invite the public to help find the solution.

- **1971** – Concept study conducted by SCC Public Works Department lead by Director Jim Pott. The concept was shared with the public via hundreds of public meetings and brochures via the media.
- **1972** – SCC voter approval of the Mills, Alquest, Deddah Act measure creating the SCC TA and obtaining the annual subvention of ¼ cent of the state sales tax (STA) to fund the new transit agency.
- **1972** – Began the SCC Rapid Transit Development Project Phase 1 (systems level alternatives analysis and environmental clearance lead by a Joint Powers Board representing the principle legal entities).
- **1975/6** – Conclusion of the RTDP with hundreds of public meetings and pamphlets distributed via the media and direct mail to educate and support and encourage attendance at the public meetings.
- **1976** – March special election – SCC presented the first local ½ cent sales tax for transit in the state to the voters which was adopted by 56% in a special election with a focused campaign. The voters approved this preeminent ½ cent sales tax for the TA and also required the RTDP master plan be restudied and updated every four years and submitted for reapproval to the voters.
- **1980** – and every four years until 1996 - TA conducted a systems level alternatives analysis update and environmental clearance that lead to several new projects and also additional sales taxes even after Proposition 13 increased the approval level to 2/3 support. Never has a sales tax measure failed in Santa Clara County!

THE MORAL OF THE STORY:

Santa Clara County/Silicon Valley voters are smart. They experience the rapidly increasing traffic congestion, air pollution and climate change, and urban sprawl. The sequence of professionally done and highly publicized and accessible alternatives analysis and environmental clearness with the thousands of public meeting and millions of pieces of literature over time have allowed these smart constituents to see clearly the viability of the alternatives and the need for action. And, whenever that action has been requested, the voters of our Valley have responded favorably.

The second part of the formula is that when the project's plans and the tax have been approved, the TA and more recently the successor Valley Transportation Authority (VTA) have always delivered. Projects, such as the original light rail, HWs 85/87/101 expansion, Caltrain, and current BART extension were delivered on budget and schedule giving the voters the confidence that the funding is being well spent.

THE NEXT CHAPTER: Because of the major, unexpected down turns in sales tax revenue (dot com and banking busts) an added sales tax is necessary to complete the next round of projects. The November 2016 election will be the next test of this hypothesis and determine the viability of Silicon Valley.

San Francisco Bay Area Transit Integration

■ Commuter Rail

- Caltrain, ACE, Amtrak



■ BART Rapid Transit

- Existing
- Silicon Valley Extension



■ Light Rail Transit

- Existing
- Vasona/Capitol Extensions
- Potential Future Corridors



■ Bus, Local & Express Service



■ Proposed High Speed Rail

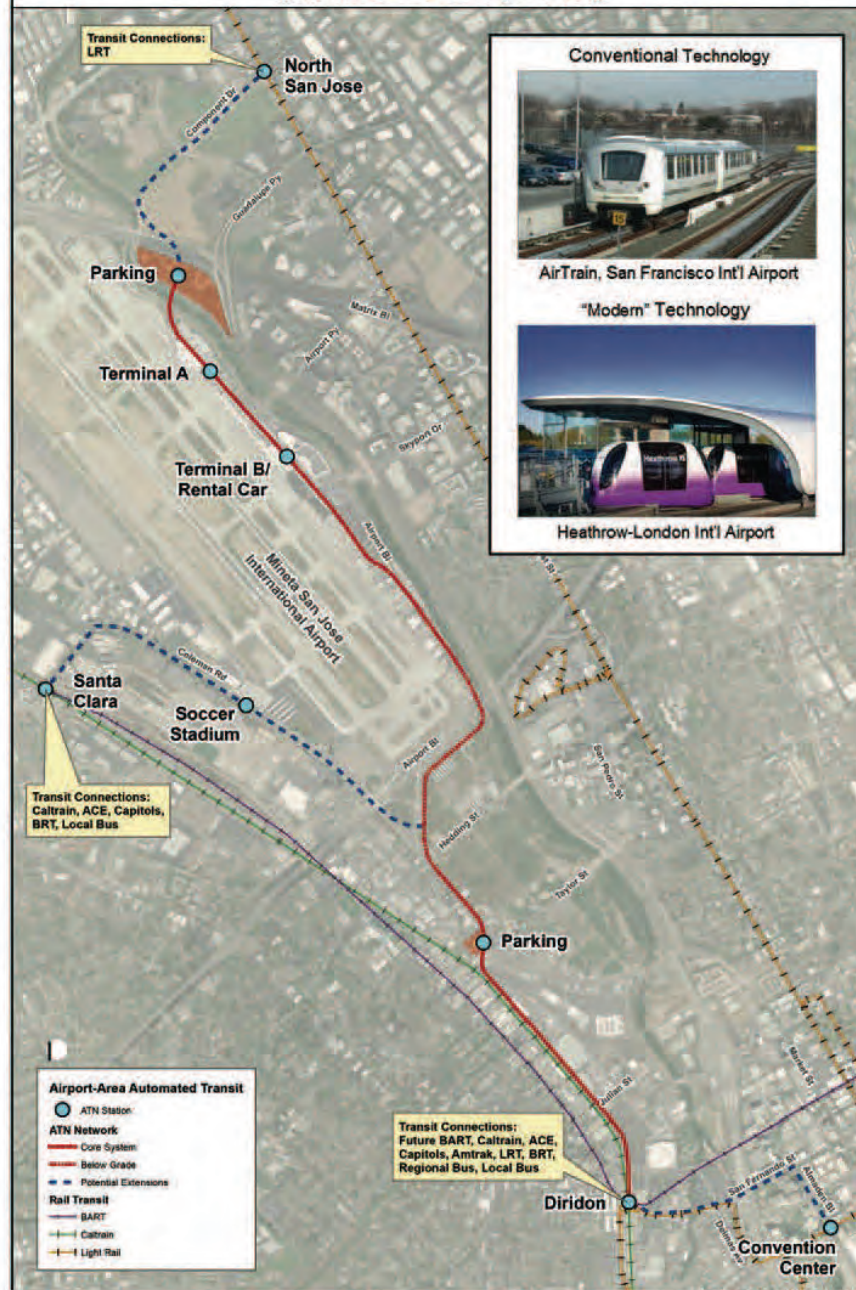


■ Multimodal Station Hubs

- Downtown Diridon Station
- SJ Mineta International Airport



San Jose Airport-Area Transit Connection Concept (Automated Guideway Transit)

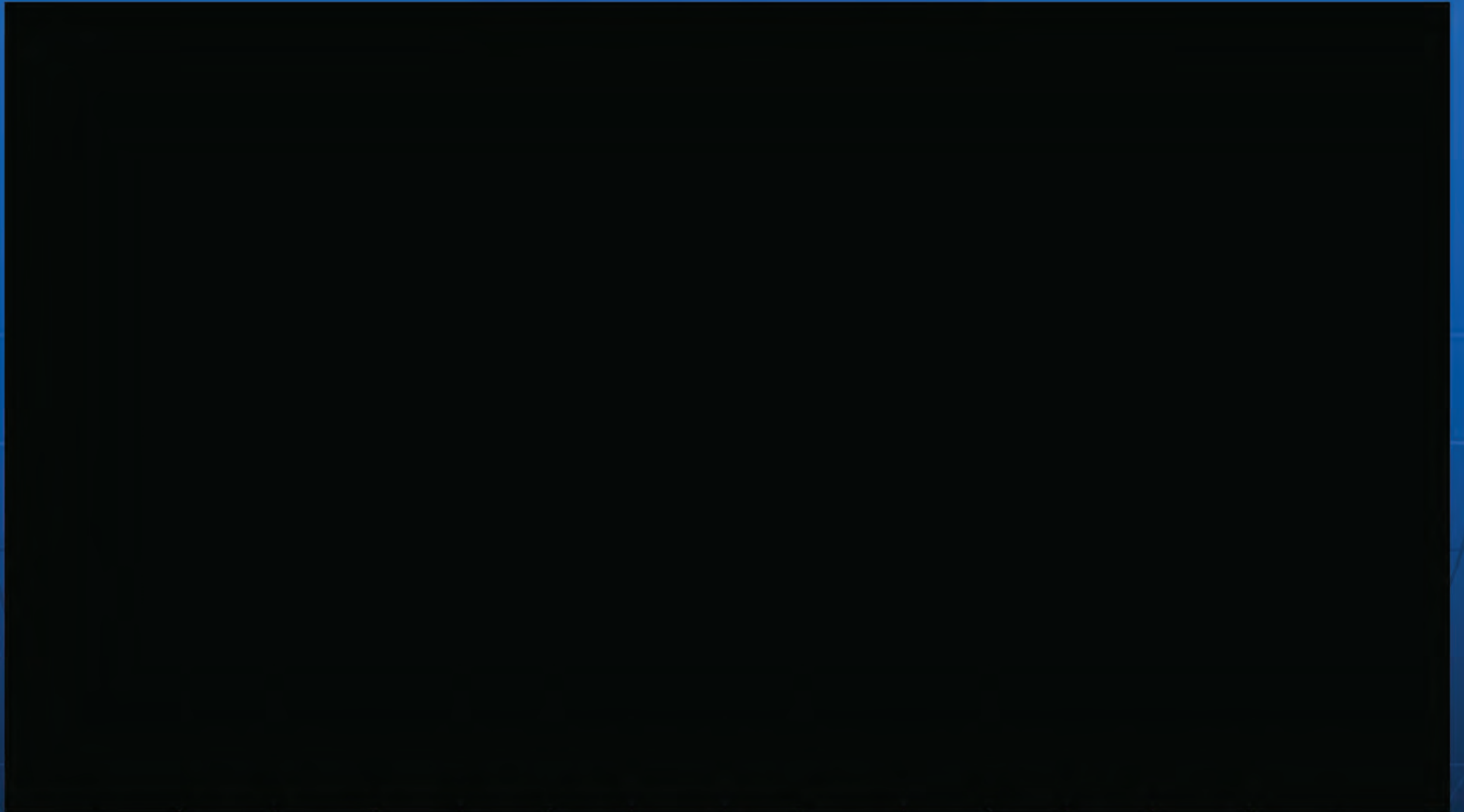


Provided by:

Santa Cruz County
Regional Transportation
Commission



California HSR Corridor



Contact Information

Mineta Transportation
Institute's

National HSR Policy Center

210 North Fourth Street

Fourth Floor

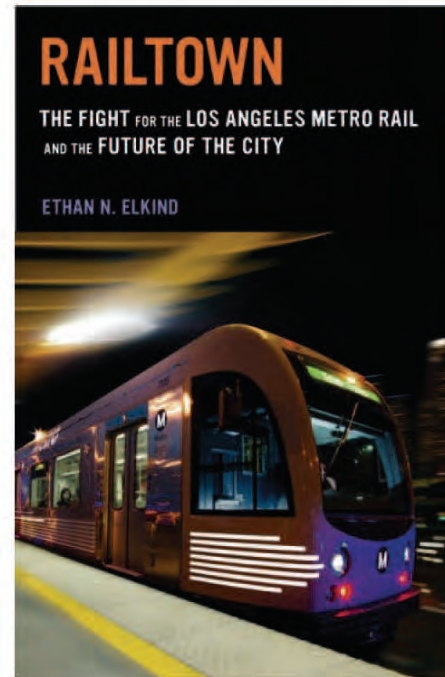
San Jose CA 95112 USA

+1-408-924-7560

www.transweb.sjsu.edu

Railtown

The Fight For the Los Angeles Metro Rail



Ethan Elkind

Director of the Climate Change and Business Program
UC Berkeley / UCLA Schools of Law

BerkeleyLaw
UNIVERSITY OF CALIFORNIA

Center for Law, Energy &
the Environment

UCLA LAW

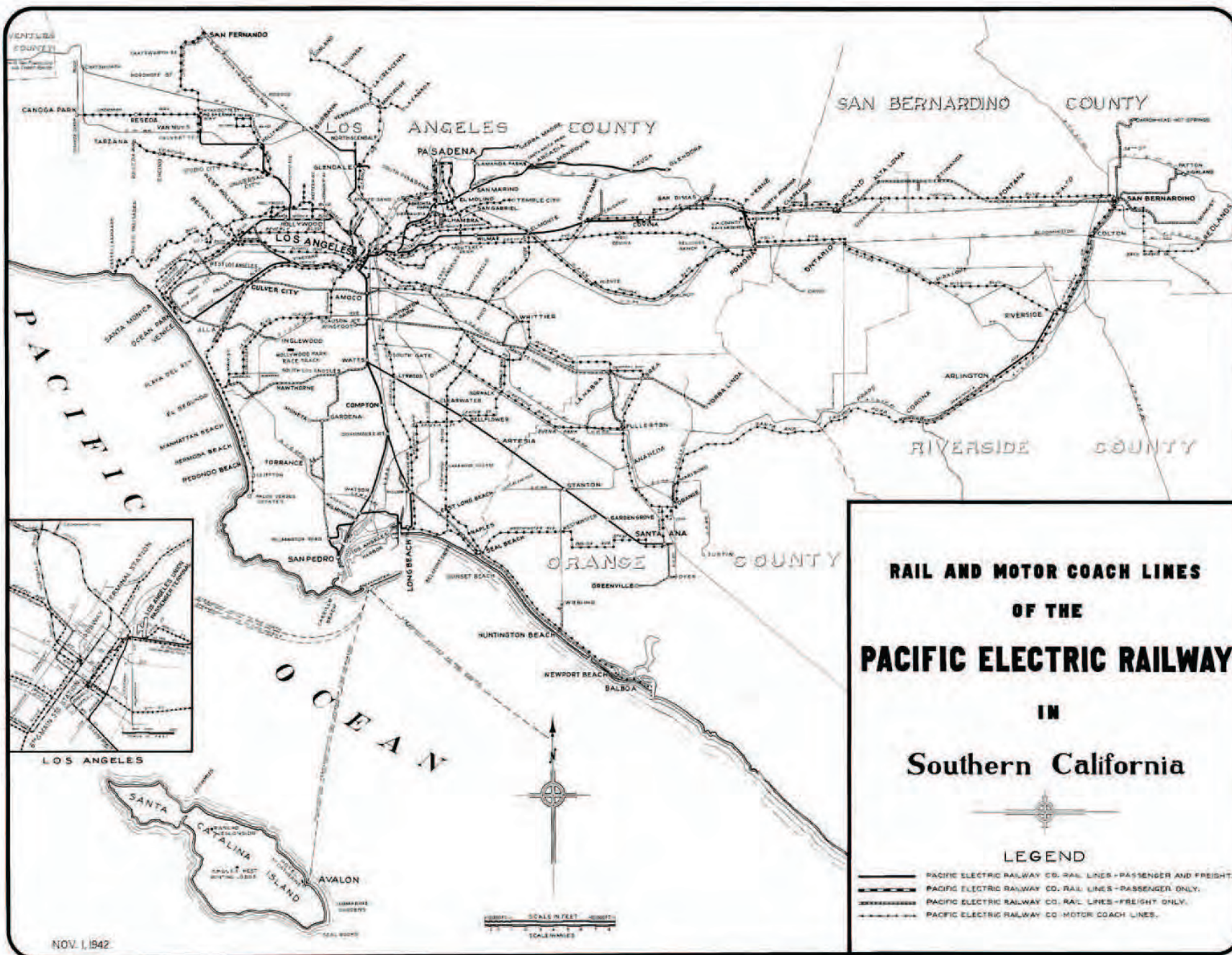
UCLA ENVIRONMENTAL LAW CENTER

EMMETT CENTER ON CLIMATE CHANGE
AND THE ENVIRONMENT



Flat, Pleasant & Uncrowded

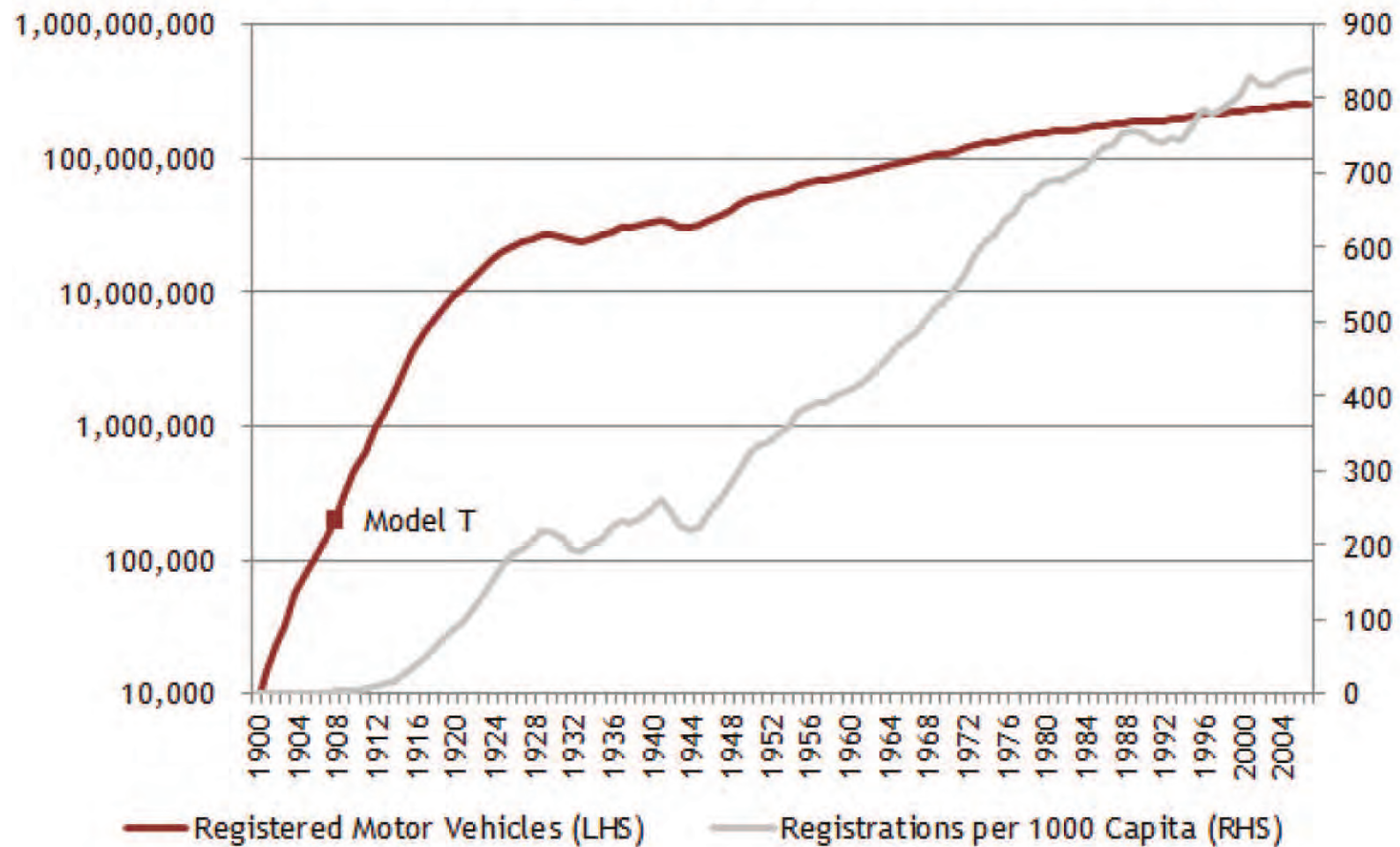






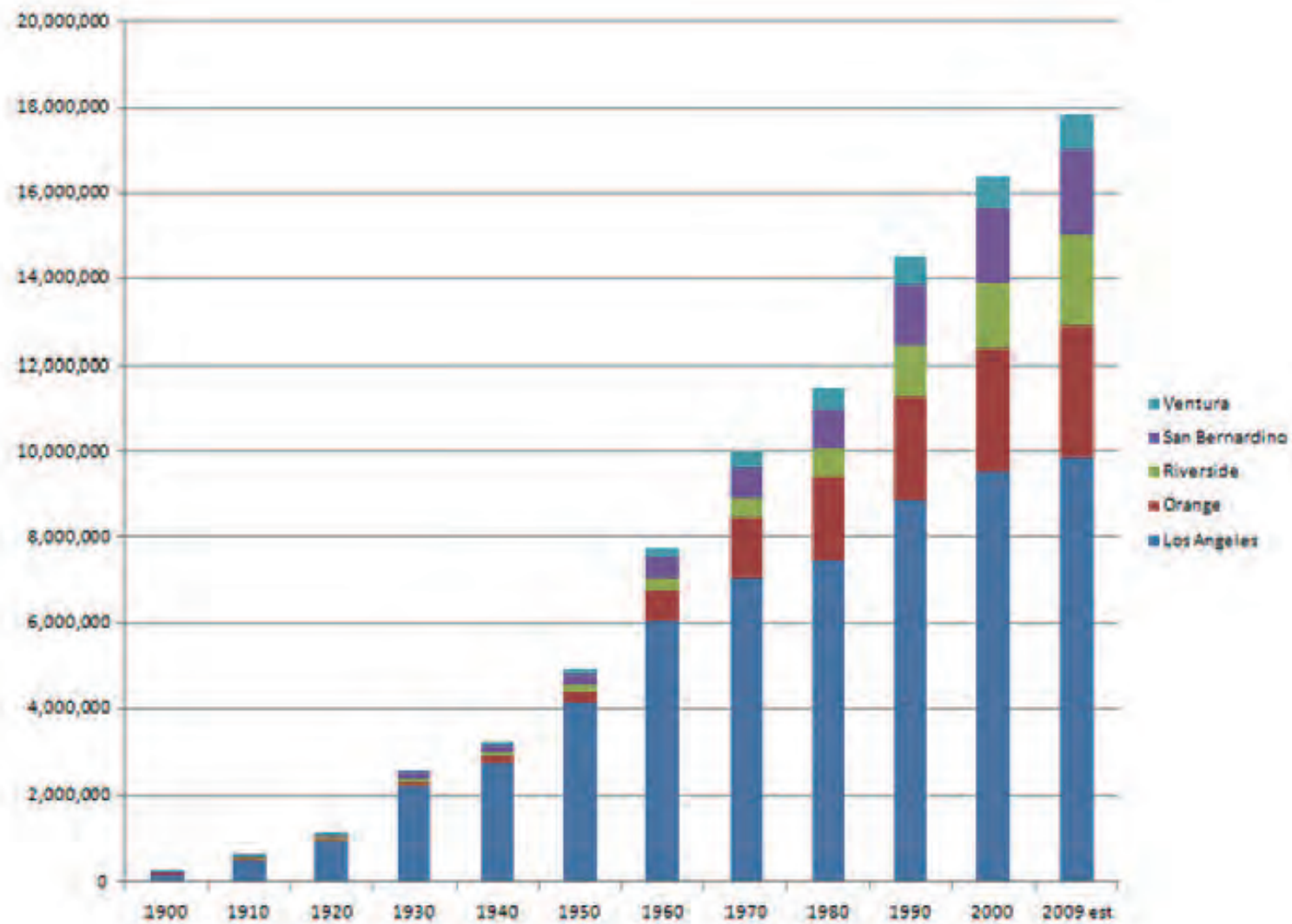
Who Killed the Electric Train?

US Motor Vehicle Registrations Since 1900



1961: Death of Rail





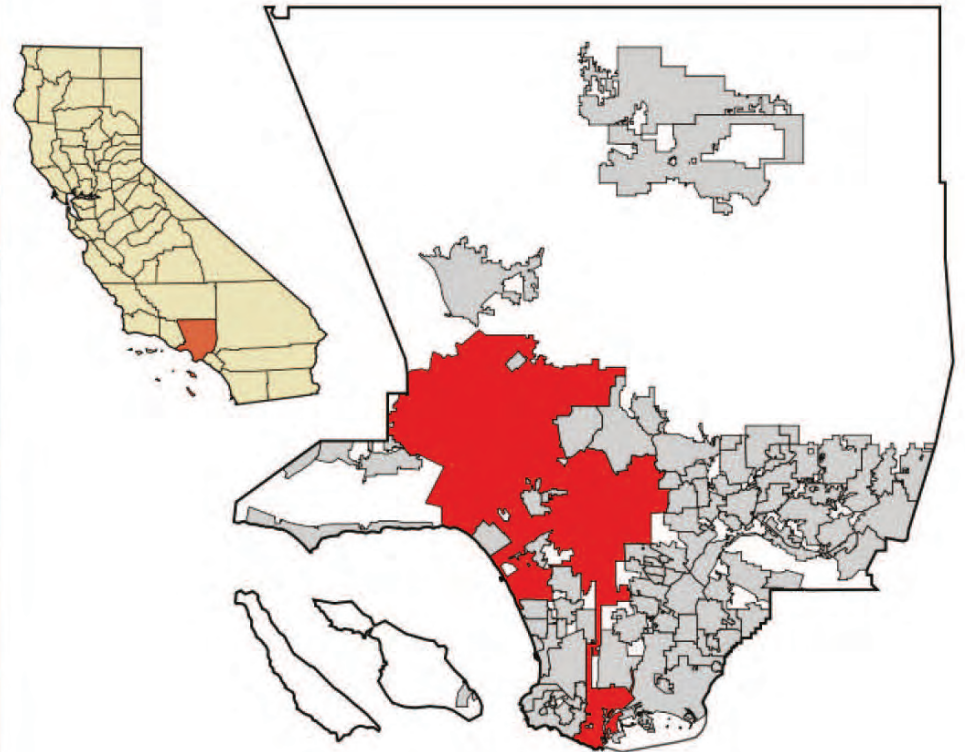
Southern California Population Growth Since 1900

Los Angeles_United States

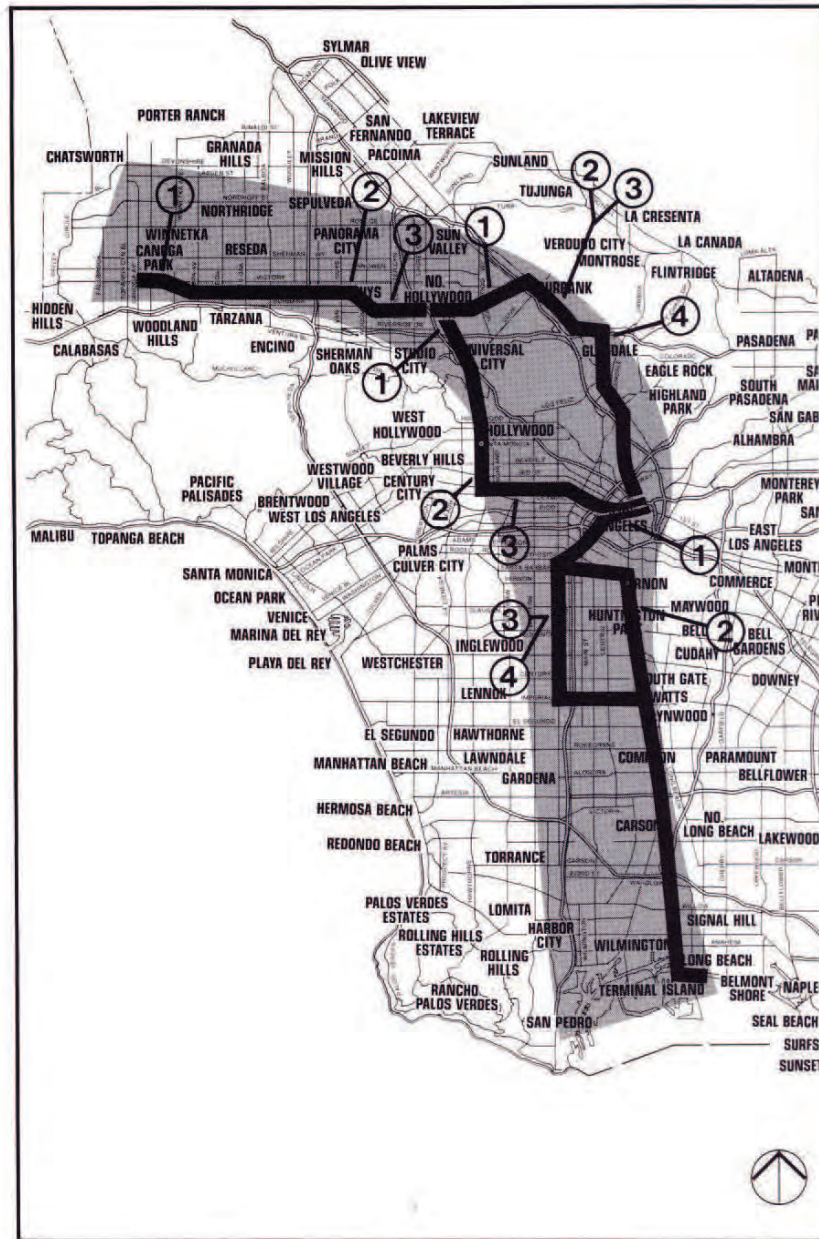
1877



1877

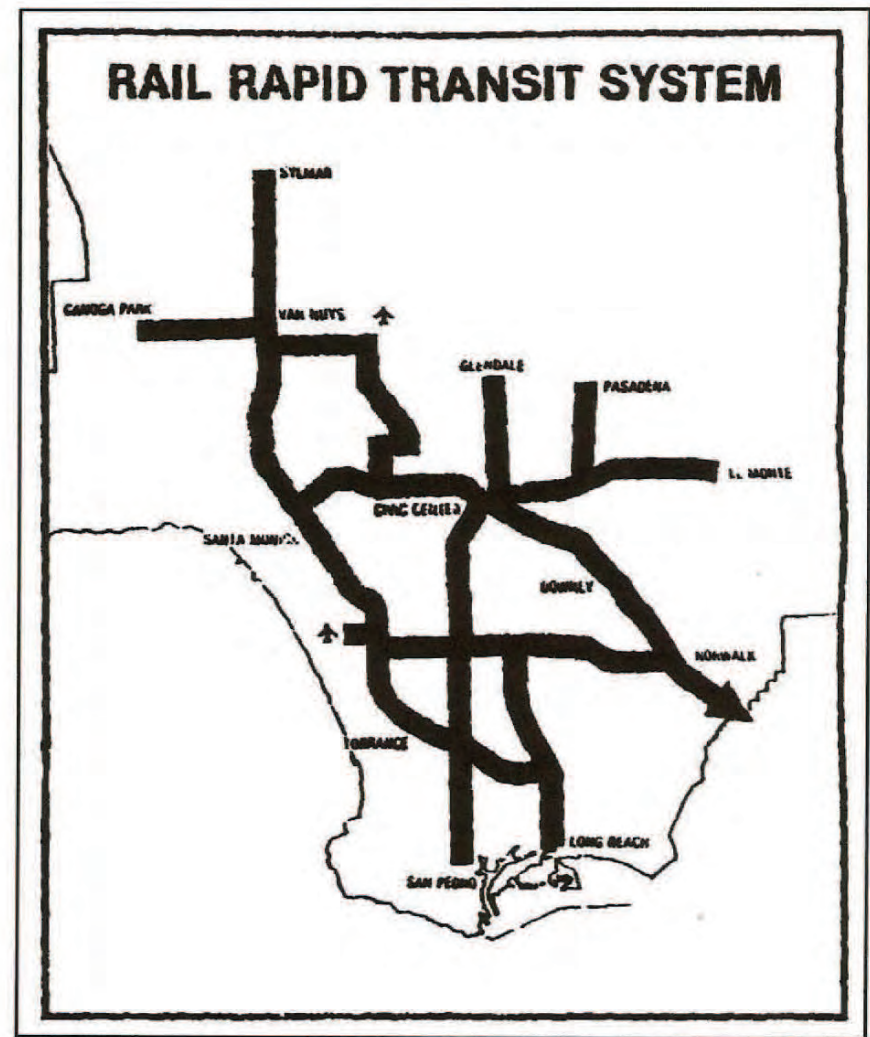


1973-4: Bradley & L.A. County

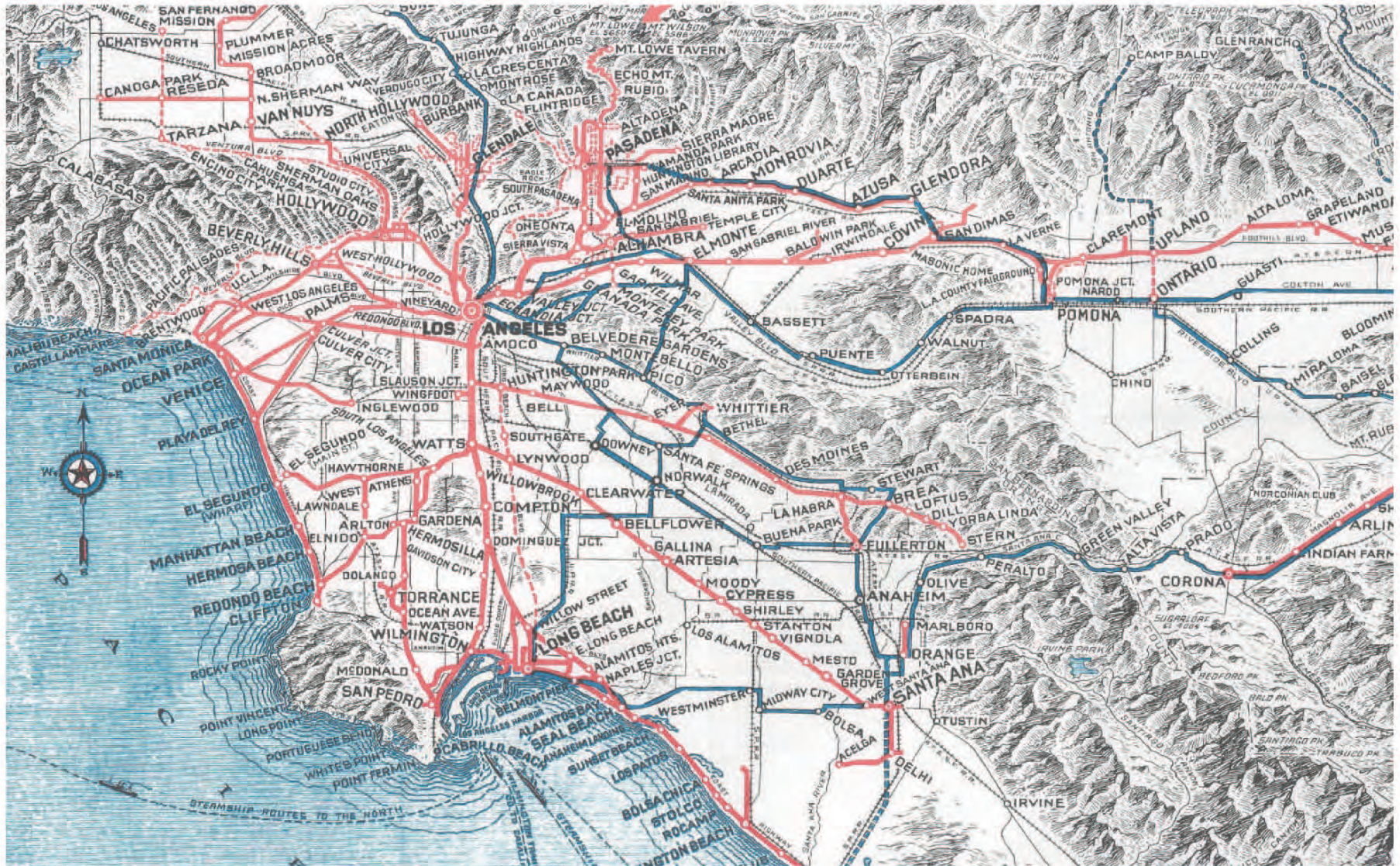


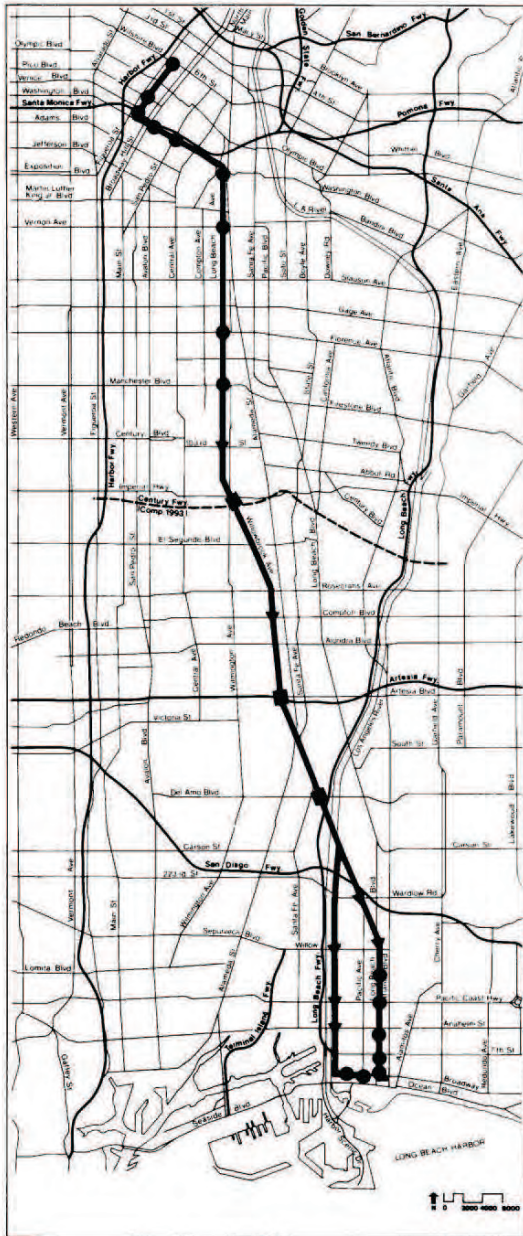
1970s: “Starter Line”

1980: Kenny Hahn & Prop A



Where to put rail?





1982: Long Beach in the House



1984: Green Line

1980s: Battle for Wounded Knee



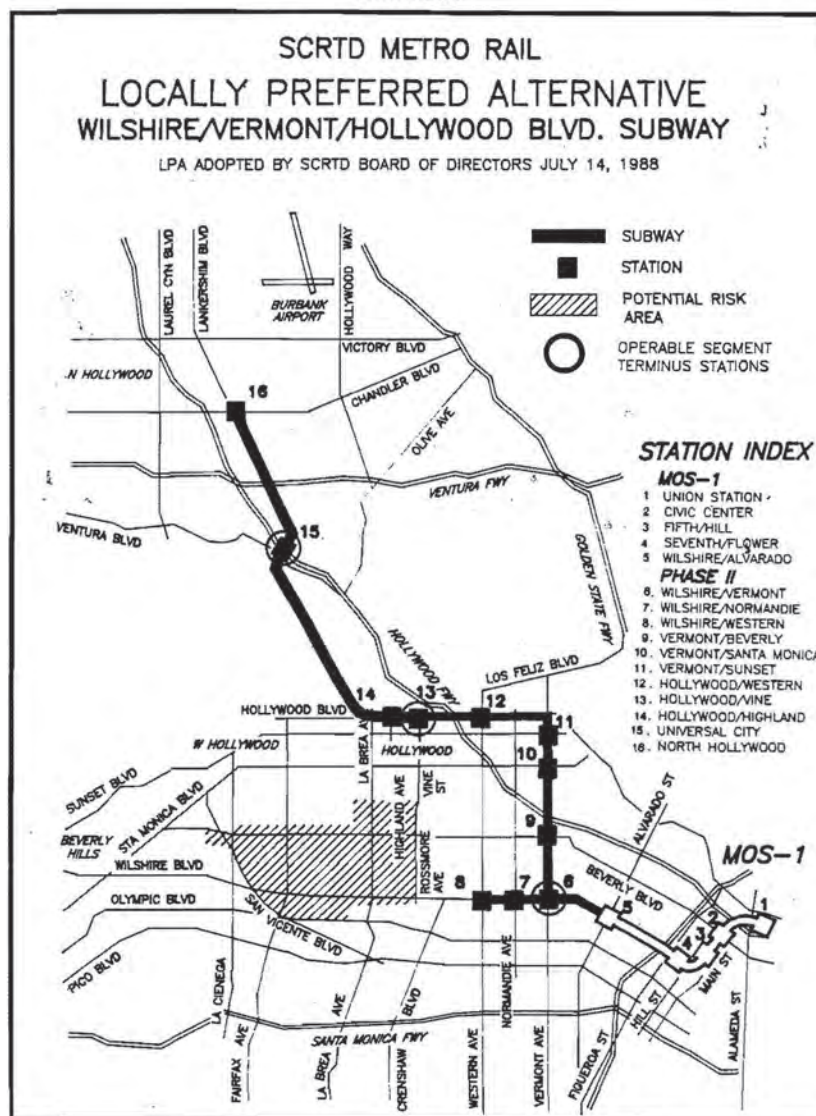
1985: Fairfax Explosion



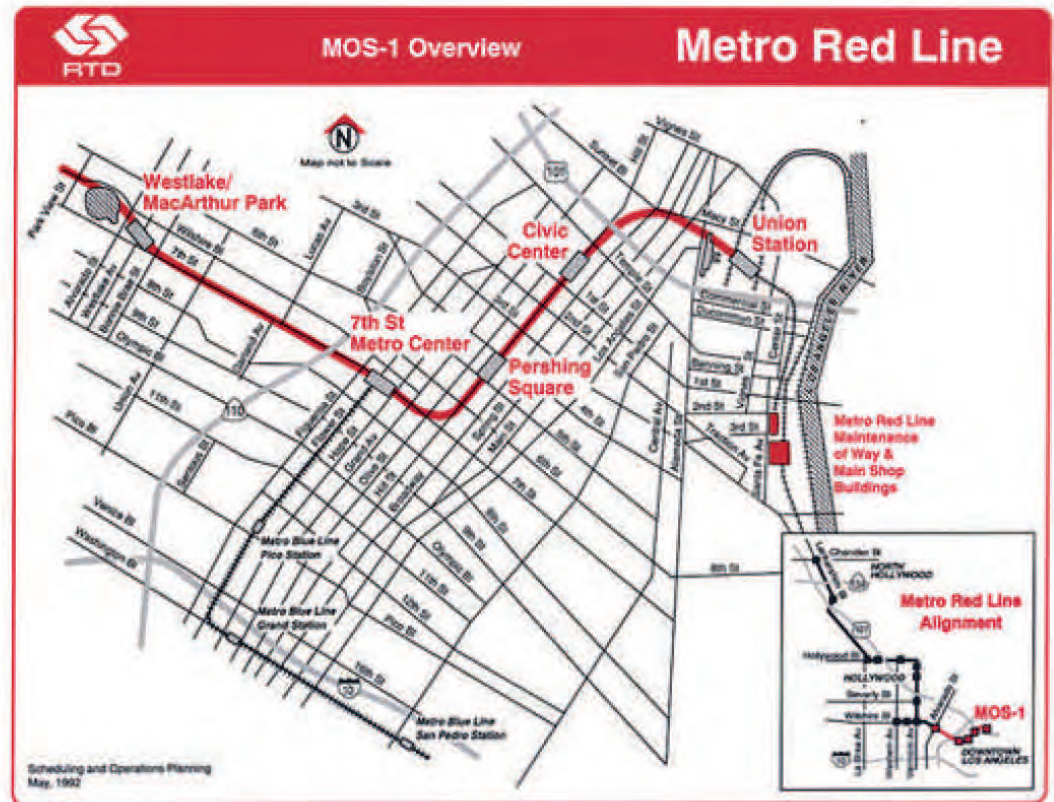
Waxman-Dixon Line



FIGURE S-1



1986: Subway Groundbreaking





Openings

Blue Line light rail (1990):

22 miles, \$877M

Red Line subway (1993):

4.4 miles, \$1B

Green Line light rail (1995):

20 miles, \$718M





Openings

Red Line subway to NoHo (2000):

18.6 miles, \$4.7B

Pasadena Gold Line light rail (2003):

13.7 miles, \$900M

2008: Measure R





Openings

Eastside Gold Line (2009): 6 miles, \$898M

Gold Line to Azusa (2016): 11.5 miles, \$735M

Expo Line:

8.6 miles, \$930M to Culver City (2012)

6.6 miles, \$1.5B to Santa Monica (2016)



Bus Rapid Transit

Orange Line (2005):

14 miles, \$330M

4 mile extension (2012)

[illegible]

Future Lines

Subway to the Sea & Wilshire BRT
Crenshaw light rail line to LAX
Regional (downtown) connector

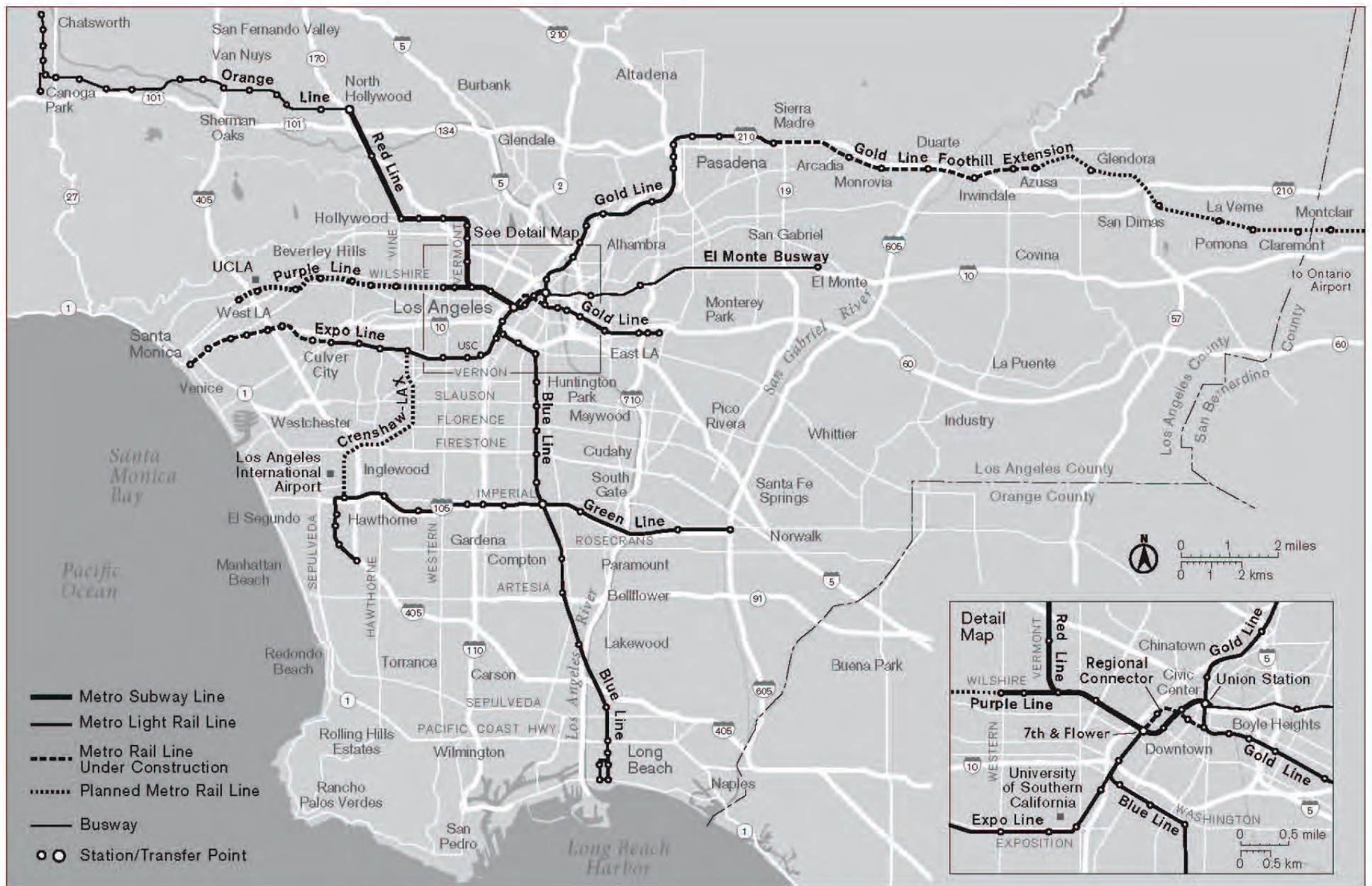
Lessons Learned:

Need density requirements

Streamlining planning & construction

More low-cost transit options





RAILTOWN

THE FIGHT FOR THE LOS ANGELES METRO RAIL
AND THE FUTURE OF THE CITY

ETHAN N. ELKIND



Thank You

Email:

eelkind@law.berkeley.edu

Blog:

legal-planet.org

ethanelkind.com

Twitter:

@ethanelkind

CALIFORNIA HIGH-SPEED RAIL
INITIAL OPERATING SECTION (IOS)

