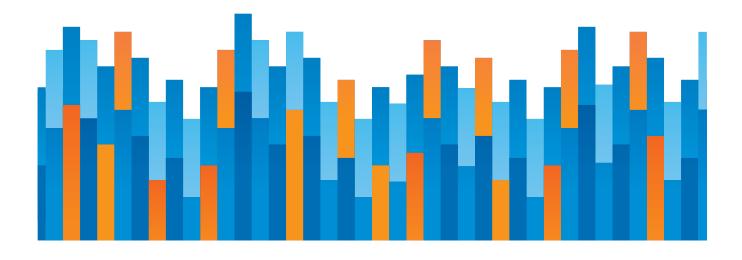


METRO'S 28 BY 2028 PLAN: A CRITICAL REVIEW I. INTRODUCTION

By Thomas A. Rubin, CPA, CMA, CMC, CIA, CGFM, CFM and James E. Moore, II, Ph.D.

March 2019



I. INTRODUCTION

The Los Angeles County Metropolitan Transportation Authority (Metro) is the surface transportation planning and funding agency for the largest county (by population) in the United States, and is the operator of the nation's third largest public transit system.

Metro has adopted 28 by 2028, a plan to complete 28 major transportation construction projects prior to the beginning of the 2028 Los Angeles Summer Olympics. This proposal accelerates eight projects for completion by 2028 in addition to the 20 specified in Measure M, the 2016 County transportation half-cent sales tax ballot measure. The plan was presented to the Metro Board of Directors and approved at the Board's February 28, 2019 meeting.

Metro has a history of over-promising and then failing to deliver on such projects, ultimately making conditions worse for Los Angeles transit users. The *28 by 2028* proposal appears to repeat the pattern.

This is the first brief in a series of summaries that examines Metro's record, and those of its predecessor organizations, over the past several decades. This history, additional facts, and economic logic show that 28 by 2028 is unlikely to succeed. Metro's attempt to accomplish too much too fast has a high likelihood of making transit in Los Angeles County worse for transit riders and other users of the local surface transportation system. The implications are worst for the most vulnerable group: the very large number of low-income and otherwise disadvantaged residents who are strongly dependent on public transit in their daily lives.

SUBJECTS THIS SERIES WILL COVER

Each of the summaries in this series presents information about one or more of the following:

- I. Introduction, Overview, and the Birth of Transit in Los Angeles
- II. The Rise of Los Angeles County Metropolitan Transportation Authority (Metro)
- **III.** Metro's Transit Ridership Is Declining—MTA Ridership is down 21% from its 1985 peak and has been declining significantly in recent years.
- **IV.** Metro's Long-Range Plans Overpromise and Underdeliver—Each of Metro's four half-cent sales taxes approved by the voters has been accompanied by a long-range plan showing construction of large numbers of new passenger rail lines—most of which get delayed or are never built.
- V. While Improving Bus Service and Reducing Fares Have Greatly Increased Transit Usage in Los Angeles Three Times, Metro Is Not Interested Pursuing This Goal
- VI. The Only U.S. Judicial System Decision re Bus vs. Rail—The question, "Which option produces the larger increase in transit ridership, prioritizing bus (including fare reductions) or prioritizing

rail?" has been asked and answered only once by the U.S. judicial system. This occurred in a federal case in Los Angeles, and the facts and findings strongly favor bus.

- VII. Metro Overestimates Sales Tax Revenues—Even after optimistic projections of future sales tax revenues have failed to develop, Metro continues to overstate expected revenues. Metro's most recent projections, for Measure M, are among the most optimistic it has ever produced, and are not credible.
- VIII. Metro Understates Transportation Project Costs—Metro has underestimated the costs of major construction projects, and then used accounting and budgeting gimmicks to conceal these overruns.
- **IX.** Metro's Congestion Pricing Revenue Estimates Are Not Credible—The agency is advancing congestion pricing as an important potential funding source, which it is, but Metro is projecting huge revenues that are too large to be credible. Implementing congestion pricing will require more time than Metro is projecting, requiring new legislation, and a focused campaign to promote public acceptance.
- X. Metro's Public-Private Partnership Revenue Estimates Are Not Credible—It is also advancing Public-Private Partnerships (P3) as a tool to reduce costs, which they can do, but Metro is projecting much larger savings than can be realized, to be delivered in a shorter time period than is feasible
- XI. Metro Will Not Have the Revenue and Legal or Actual Debt Capacity to Undertake All of the Proposed 28 Projects
- XII. Metro's Plans and Proposals Are Built on Questionable Assumptions and Errors
- XIII. Metro Has a History of Evading Legal Requirements to Which It Does not Wish to Be Subject, Potentially Ignoring the Law
- XIV. Metro's Congestion Eradication and Fareless Transit Proposal Are Unrealistic—The most audacious promises on which Metro bases 28 by 2028—including "eradication of congestion" and fareless transit—are infeasible and operationally impossible.
- XV. Metro Bus Is Very Productive and Cost-Effective, Rail Is Not, but Metro Favors Rail Over Bus

FOUNDATION DOCUMENTS CITED HERE

The following summaries refer to the Metro documents that, collectively, are the foundation for 28 by 2028:

PlanPowerPoint™ presentation, 28 by 2028 Financial Plan—Laying the Groundwork,
December 20181White PaperTwenty-Eight by '28 Program Financing/Funding White Paper, Board Report
attachment2

¹ http://metro.legistar1.com/metro/attachments/e48e3ad9-7f42-4011-849c-5666ed4f0cc6.pdf

² http://metro.legistar1.com/metro/attachments/18984512-fa10-4b43-aa52-524cfd8bb69a.pdf

Thomas A. Rubin and James E. Moore | Metro's 28 by 2028 Plan: A Critical Review

Remarks	Metro staff presentation remarks and Board Member and public comments from the December 6, 2018 meeting ³
FY19 Budget	Metro, <i>Adopted Budget</i> , July 1, 2018-June 30, 2019 (Fiscal Year 2019, FY19) ⁴
Measure M	Proposed Ordinance #16-01, Measure M—Los Angeles County Traffic
	Improvement Plan ⁵
Board Report	The Re-imagining of LA County: Mobility, Equity, and the Environment
	(Twenty-Eight by '28 Motion Response), Regular Board Meeting, January 24,
	2019, Agenda Number 43 ⁶
Re-imagining	The Re-imagining of LA County: Mobility, Equity, and the Environment,
	attachment to <i>Board Report</i> ⁷

A SHORT HISTORY OF PUBLIC TRANSIT IN SOUTHERN CALIFORNIA

A brief history of the important events in Los Angeles transit provides a foundation for the summaries in this series.

Much of the history of transportation and real estate development in Southern California in the first part of the 20th century involved Henry Huntington: the Los Angeles Railway (LARy), the Yellow Car streetcar system that was used for shorter trips, the Pacific Electric Railway (PE, or PERy), and the Red Car electric interurban system that was used for longer trips. These rail networks provided fast and consistent access to the downtowns of the region from suburban residential areas, and were directly responsible for much of the area's distributed real estate development.⁸ Southern California did not have a heavy rail, or subway, transit system similar to the lines in New York City, Chicago, Boston, or Philadelphia. Many Angelenos moved from these rail-heavy cities and wanted Los Angeles to build a rail system. Between 1911 and 1978, there were at least 18 different attempts to implement an extensive heavy rail transit system in Los Angeles County, including at least four that failed at the ballot box,⁹ one in 1978.

- ⁴ http://media.metro.net/about_us/finance/images/fy19_adopted_budget.pdf
- ⁵ http://theplan.metro.net/wp-content/uploads/2016/09/measurem_ordinance_16-01.pdf
- ⁶ https://boardagendas.metro.net/board-report/2019-0011/
- ⁷ This is available through links at the meeting agenda web page, item 43: http://metro.legistar1.com/metro/meetings/2019/1/1472_A_Board_of_Directors_-____Regular_Board_Meeting_19-01-24_Agenda.pdf
- ⁸ Wachs, Martin. "Autos, Transit, and the Sprawl of Los Angeles: The 1920s." *Journal of the American Planning Association*, 1984. 50 (3): 297-310, https://doi.org/10.1080/01944368408976597
- ⁹ Green, Maria L. "A History of Rail Setbacks." *Mass Transit* magazine. September 1985.

Thomas A. Rubin and James E. Moore | Metro's 28 by 2028 Plan: A Critical Review

 ³ http://metro.granicus.com/MediaPlayer.php?view_id=2&clip_id=987
The recording for this portion of the meeting is audio only. The *Plan* presentation begins at approximately 37:00. Board Member comments begin at approximately 1:13:00. Public comments begin at approximately 1:44:00. This agenda item concludes at approximately 1:49:30.

The LARy and PERy systems were among the most extensive urban passenger rail systems in the world. PERy peaked at 1,061 route miles;¹⁰ but, similar to most local and regional passenger rail systems in the U.S. and much of the rest of the world, both were surpassed and replaced by the private automobile and the motor bus. By the mid-1970s, there were only nine metropolitan areas that operated local/regional passenger rail service in the U.S.: Boston, Chicago, Cleveland, New Jersey, New York City, New Orleans, Philadelphia, Pittsburgh, and San Francisco.

While the story of General Motors (GM), National City Lines (NCL), and the "great conspiracy" to destroy the U.S. streetcars industry has become a staple of American conspiracy theorists and folklore,¹¹ the true story is that widespread local passenger rail networks were a technology for which the time came ... and went. Streetcars later transitioned to light rail in four of the eight U.S. metropolitan areas listed above that had them. Chicago's and New York City's streetcar systems ceased operating earlier in the 20th century, and New Orleans streetcar continues to operate today. Streetcars were still viable and useful in a handful of older cities, but for the most part, within a few years after their introduction in the second decade of the 20th century, buses had demonstrated significant advantages in terms of lower capital, capital renewal, replacement, and operating costs, as well as far greater flexibility.

The demise of local passenger rail networks was a natural economic outcome. Streetcar systems were abandoned in more cities where NCL never had a presence than those where it and other consolidators had operated. Streetcars disappeared from cities all over the world, such as London. The famous NCL anti-trust action¹² did produce a verdict against GM and the other NCL owners, but it was based on the legal theory of creating a monopoly on the sales of buses and bus system supplies, *not* on the elimination of streetcars. GM was fined \$5,000 and its treasurer was personally fined \$1.¹³ The trial judge remarked in his later Senate testimony, "I am very frank to admit to counsel that after a very exhaustive review of the entire transcript in this case, and of the exhibits that were offered and received in evidence, that I might not have come to the same conclusion as the jury came to were I trying this case without a jury."¹⁴

Indeed, a strong case can be made that, if NCL and the other local transit operators that replaced rail with buses had not done so, there would have been major problems in local transportation during

¹⁰ Pacific Electric Railway: *Comfort, Speed, Safety, American Rails.com.* https://www.american-rails.com/pacific-electric-railway.html

¹¹ Walt Disney Pictures. "Who Framed Roger Rabbit?" 1988.

¹² United States v National City Lines. 334 U.S. 573 (1948).

¹³ Slater, Cliff. "General Motors and the Demise of Streetcars." *Transportation Quarterly.* Vol. 51, No. 3. Summer 1997. 45-66.

¹⁴ Senate Subcommittee on Antitrust. "The Industrial Reorganization Act: hearings, Ninety-third Congress, first session, on S. 1167."*hathitrust.org.* U.S. Government Printing Office.

Thomas A. Rubin and James E. Moore | Metro's 28 by 2028 Plan: A Critical Review

the industrialization of the U.S. in its role as the World War II Arsenal of Democracy. It would have been difficult to transport workers to locations such as aircraft assembly plants that, by their nature, must be located away from city centers where runways can be constructed and operated.

By 1953 LARy and PERy were taken over by Metropolitan Coach Lines. The Los Angeles Metropolitan Transit Authority (LAMTA, not to be confused with the contemporary agency Metro, the Los Angeles County Metropolitan Transportation Authority) was formed by the State of California in 1951 to study the feasibility of monorail service (it concluded it was not), then later to evaluate and propose a multi-county transit system, and finally, in 1957, to take over the transit services of Metropolitan Coach Lines, which had long since ceased to be profitable and were unable to provide for capital renewal and replacement of vehicles and right-of-way. Under LAMTA, the last remaining SoCal passenger rail lines were taken out of service in 1963.

CONCLUSIONS

- 1. Los Angeles has a long standing investment in public transit. Rail transit has a long-history in the region.
- 2. It is a myth that Los Angeles' original rail transit system was destroyed by GM and NCL. This myth is not supported by evidence.
- 3. The demise of Los Angeles rail transit in the early 1960s was largely a result of market forces. These same forces operated in cities worldwide. Streetcar systems were abandoned in the vast majority of U.S. cities that had had them.
- 4. Economic and demographic changes amplified the demand for public transit in Los Angeles during the 1970s and 1980s. These sources of change still operate. The demand for public transit in Los Angeles remains strong. LA's transit system is large and vital to the local economy.

ABOUT THE AUTHORS

Thomas A. Rubin, CPA, CMA, CMC, CIA, CGFM, CFM, has over four decades of experience as a transit industry senior executive, consultant, and auditor. He founded and developed the transit practice of what is now Deloitte & Touche, LLP, growing it to the largest of its type, including working on several consulting and auditing projects for SCRTD and LACTC. He was the last Chief Financial Officer of SCRTD from 1989 to the formation of Metro; he declined the Metro CFO position and left it in 1994. He was later the chief transportation and finance expert/expert witness for the plaintiffs in *Labor/Community Strategy Center v MTA*, which led to the Consent Decree (CD) that produced the 36% increase in Metro transit ridership from FY97 to FY07. Over his career, he has served well over 100 transit operators, metropolitan planning organizations, state and the Federal Departments of Transportation, and various industry suppliers and industry associations, and written and presented well over 100 papers at industry and trade associations.

James E. Moore, II, Ph.D., is a Professor of Industrial & Systems Engineering, of Civil & Environmental Engineering, and of Public Policy and Management at the University of Southern California, where he serves as Director of the USC Transportation Engineering program and of the Systems Architecting & Engineering program. He is the Past President of the Institute of Industrial and System Engineers, and a former Vice Dean in the USC Viterbi School of Engineering. His areas of interest include economic impact analysis, engineering economics, transportation engineering, urban transportation, and infrastructure performance. His publications include hundreds of refereed publications, research reports, op-eds, and other pieces.

Mr. Rubin and Prof. Moore have been collaborators and co-authors for well over two decades, and have previously cooperated on over a dozen publications, including several commissioned papers for Reason Foundation, as well as refereed publications.