

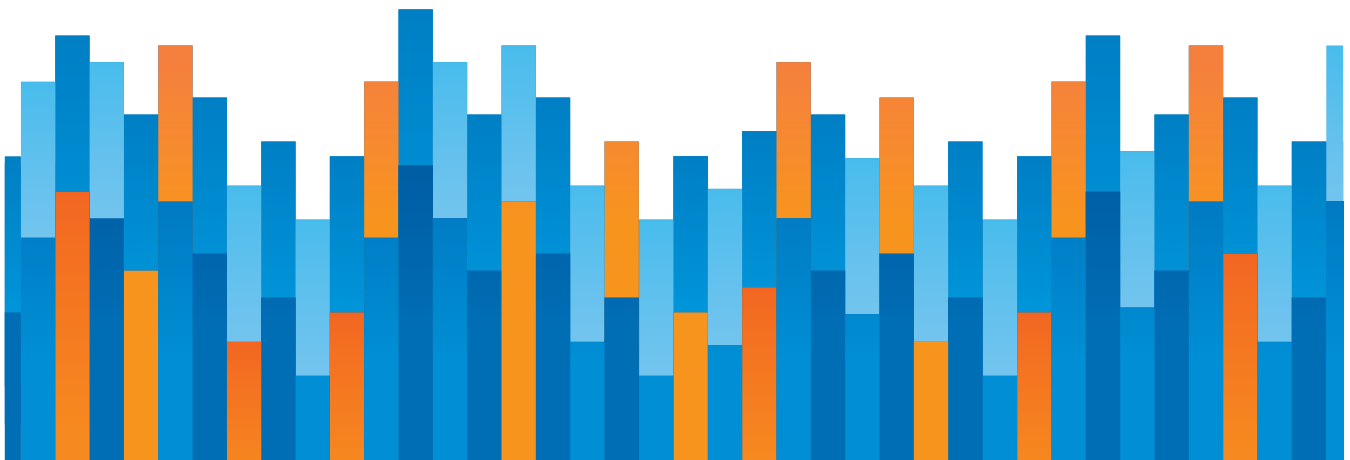


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III. METRO'S 28 BY 2028 PLAN: A CRITICAL REVIEW METRO'S TRANSIT RIDERSHIP IS DECLINING

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III. METRO'S TRANSIT RIDERSHIP IS DECLINING

Metro has many responsibilities. The largest is providing transit service, which represents over 90% of the agency's expenditures and staffing.¹ While Metro has funding, planning, and coordination roles with respect to highways and roads, it does not construct either. Metro provides the majority of transit services in the county. It plans, designs, and constructs most of the transit capital projects in the county. Metro funds, coordinates, and oversees the transit services it does not operate itself. Metro's non-transit activities are important, but its transit function is central to its mission, and vitally important to Los Angeles County residents.

RIDERSHIP TRENDS

Understanding transit ridership figures means distinguishing between linked and unlinked passenger trips ("UPT"). For example, if a rider gets on a bus near her home that goes to a rail station, boards a train, and exits the rail station to her job, this creates two **unlinked** passenger trips, one each on bus and rail, and one linked passenger trip. The technology did not exist for most transit agencies to track linked trips until recently. Consequently, unlinked trips have been what transit operators measure and report by default. This summary focuses primarily on unlinked trips, with some discussion of linked trips at the end.

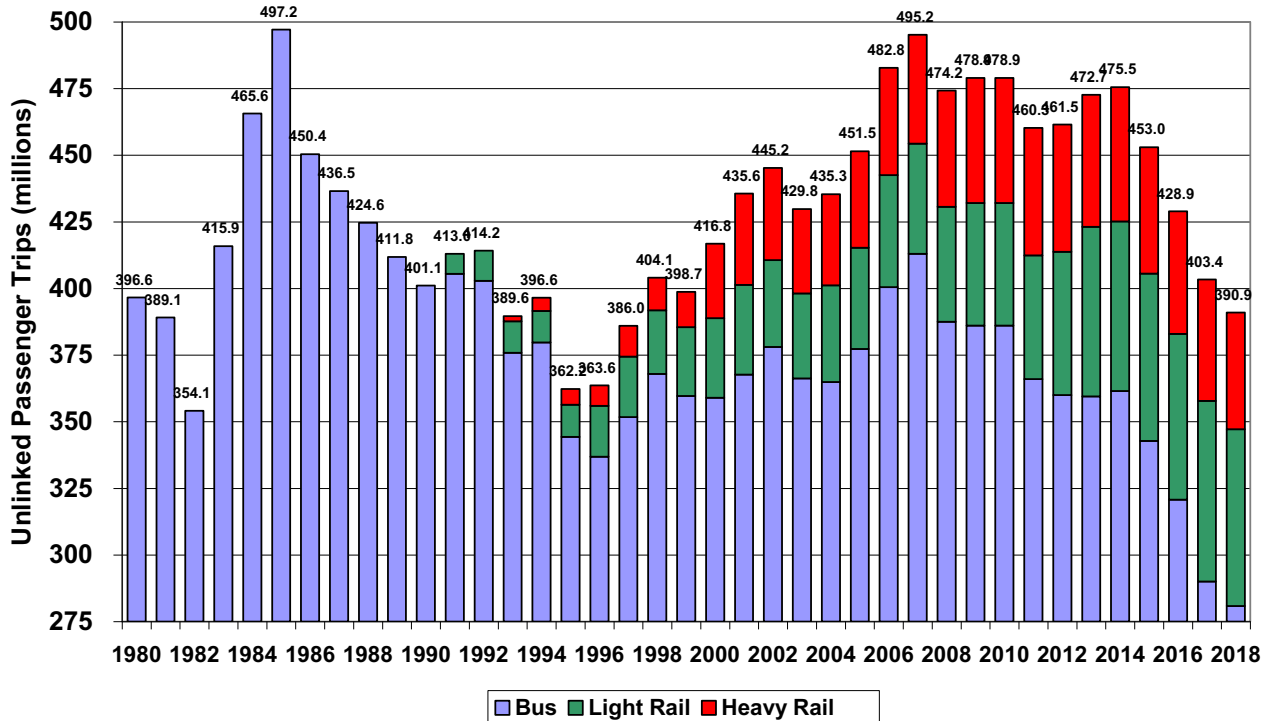
Metro's ridership record, along with that of its predecessor agencies, shows large variations in annual boardings. Most recently, as shown in **Figure 1**, the trend is mainly down.² Metro's Fiscal Year 2017-2018 ("FY18") ridership is down 21% from the FY85 all-time peak, and also down from the more recent FY07 peak. Between the peak transit ridership year of FY85 and FY18, rail UPT has grown from zero, when SCRTD was an all-bus system, to 110.2 million per year. However, while rail ridership has grown, bus ridership has fallen during this same period from 497.2 million to 280.8 million. This is a loss of 44%, or 216.4 million, a value over 96% larger than the increase in rail ridership.

The large increases in Metro transit ridership will be discussed in detail in Summary 5. Metro has a history of major ridership increases when it devotes a small portion of its funds, and attention to improving bus service. When the agency reduces bus spending to build rail projects ridership decreases significantly."

¹ *FY19 Budget*. Calculations from data on pages 30, 31, and 42 for expenditures and pages 46-47 for staff.

² Data through FY17 from U.S. Department of Transportation/Federal Transit Administration National Transit Database ("NTD"). <https://www.transit.dot.gov/ntd> FY18 and later data from Metro, "Interactive Estimated Ridership Statistics," <http://isotp.metro.net/MetroRidership/Index.aspx>

Figure 1: Los Angeles County Metropolitan Transportation Authority Unlinked Passenger Trips by Mode Fiscal Years 1980–2018



The ridership trend is starker if population growth is taken into account. **Figure 2** shows that Los Angeles County population increased 25% from FY85 to FY18 while Metro total UPT dropped 21%. Metro UPT *per capita* was thus down 37%.

Metro’s rail ridership has stopped growing. FY18 rail ridership was less than the FY13 ridership of 113.2 million, even though Metro opened two rail extensions during this period, the Expo Line to Santa Monica and Gold Line Foothill Extension to Azuza.

Figure 2: Los Angeles County Metropolitan Transportation Authority All-Mode Unlinked Passenger Trips by Mode Fiscal Years 1980–2018

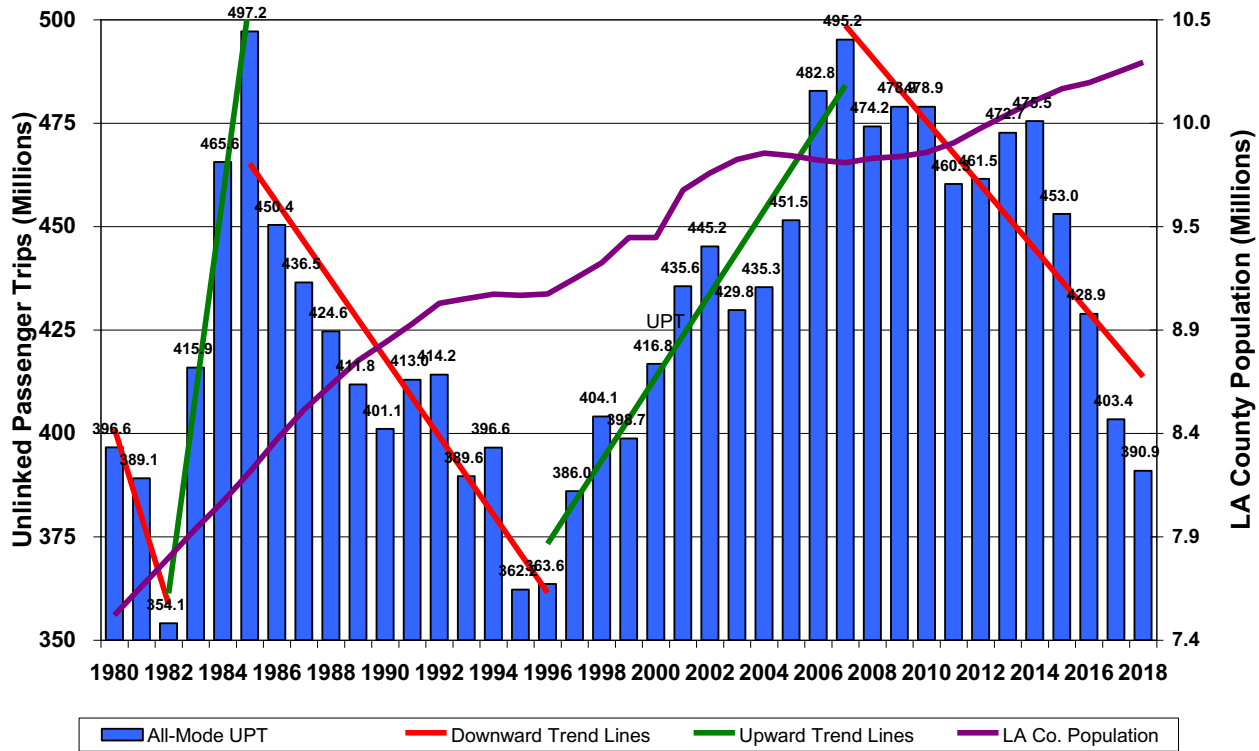
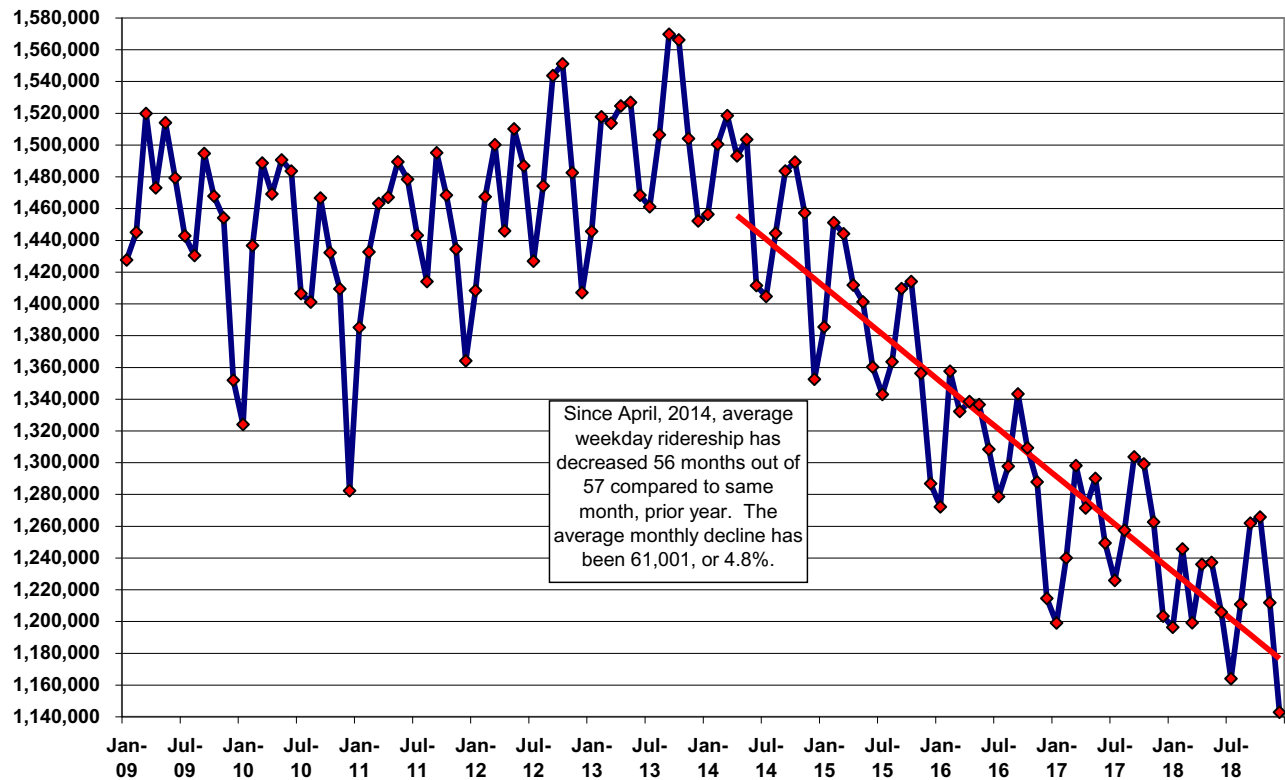


Figure 3³ shows that the recent detail record is even more disheartening. Metro’s most recent peak average daily UPT is 1.569 million in September 2013. Since then, ridership has fallen, current-month-vs.-same-month-previous-year, almost continuously. The September 2018 UPT was 1.262 million, down 20% from the September 2013 peak, and there appears to be no end in sight for this decline.

³ Metro. “Interactive Estimated Ridership Statistics.” Data utilized is “Systemwide (Bus and Rail) Estimated Weekday Ridership.” <http://isotp.metro.net/MetroRidership/Index.aspx>

**Figure 3: Los Angeles County Metropolitan Transportation Authority
Average Weekday System Ridership by Month: January 2009 – December 2018**



TRANSFERS

It is important to consider the effect of transfers on Metro’s ridership. The agency’s shift from an all-bus system, which began with the opening of the Long Beach Blue Line train in July 1990 (the beginning of FY91), to a multi-modal system changed the ratio of unlinked to linked passenger trips in a way that reduces the quality of service for riders.

Pre-rail, much of the SCRTD bus network operated on arterial streets that were aligned on a grid system of major north-south and east-west streets spaced approximately one mile apart. Many of the riders who could not take a single bus directly from their origin to their destination could complete their linked trip with a single transfer from an east-west route to a north-south route, or vice versa.

The county's rail network increases the number of transfers. There are approximately 26,000 bus stops in Los Angeles County,⁴ but only 93 Metro rail stations,⁵ and 27 Los Angeles County Metrolink stations.⁶ These counts exclude duplicates for stations that serve more than one line. This means that far fewer Los Angeles County transit users are within walking distance of a rail station at either end of their trip than they are proximate to a bus station. As a result, rail riders are far more likely than bus riders to need to make multiple transfers to complete their linked trips.

The SCRTD bus network was subject to only relatively minor changes between FY 1985 and FY 1993, chiefly the transfer of San Gabriel Valley bus lines to the Foothill Transit Zone between 1989 and 1992, and changes to serve as feeder/distributor routes to the Blue Line light rail and Metrolink regional rail services, both of which began service in July 1990. In calendar years 1991-1993, the only SCRTD rail line in operation was the Long Beach-Los Angeles Blue Line. Trains carried less than 3% of the system's total UPT at the end of this period, and the ratio of unlinked to linked trips was 1.65:1.⁷ By the early 2000s, the ratio had increased to a weighted value for the system as a whole of approximately 2.30:1.⁸ Assuming no further change, this means that each unlinked trip is associated with 28% fewer (1.65/2.30) linked trips. Applying this factor to the 37% reduction in Metro UPT *per capita* from FY85 to FY18, the reduction in Metro linked trips is 51%. Metro is now serving only half the daily riders it was during the FY85 peak.

It seems that Metro no longer queries riders about transfers in its annual passenger surveys. The last record of such data collection was in a 2005 report⁹ that produced a 3.13:1 ratio between unlinked

⁴ Hazen, Chip. Metro. "Bus Stop Usability Study," presented to the Los Angeles County Commission on Disabilities. January 18, 2012. Slide 10. <https://www.transit.dot.gov/ntd/data-product/2016-annual-database-service-0>

⁵ Authors' analysis of Metro Rail and Busway Map. <https://media.metro.net/documents/8f0fe43e-da3b-4a10-bd8e-4cfd54e30eb3.pdf>

⁶ Authors' analysis of Metrolink Map. <https://www.metrolinktrains.com/rider-info/general-info/stations/>

⁷ SCRTD, Passenger Survey Results ("FOCUS" Report).

⁸ Metro. *FY 2002 On-Board Bus Weekday Survey Report*. Volume I. Table 3. "Number of Buses/Trains Used on One-Way Trip (Weekday), page 8, which reported 2.26:1; *FY 2002 On-Board Bus Weekend Survey Report*, Table 4, "Number of Buses/Trains Used on One-way Trip (Weekend), page 8, which reported 2.27:1; *2004 Rail On-Board Survey Report*, Table 3.2, "Train/Bus Use per Trip," page 14, which reported 2.45:1.

http://media.metro.net/projects_studies/research/images/reports/2002_on-board_bus_weekday_report_vol_1_&_2.pdf

http://media.metro.net/projects_studies/research/images/reports/2002_on-board_bus_survey_weekend_report.pdf

http://media.metro.net/projects_studies/research/images/reports/metro_rail_2004_on-board_survey.pdf

⁹ Metro, "Combined Customer Satisfaction Survey—Spring 05," question 25., "How many buses/trains will you use to complete **THIS** one-way trip?"

http://media.metro.net/projects_studies/research/images/annual_survey_results/System_Results_Spring_2005.pdf

and linked trips. This figure is unreasonably high relative to industry experience and is likely inaccurate.

Due to the deliberate policy changes and decisions made by LACTC and continued under Metro, there has been a significant shift of ridership from SCRTD/Metro to the other Los Angeles County transit operators. For FY85, SCRTD carried 87.9%¹⁰ of all county riders. This estimate excludes 12 million annual boardings on lines shifted from SCRTD to other county transit operators, chiefly the Foothill Transit Zone. By FY16, this share had been reduced to 77.1%, including the 40% of Metrolink regional rail boardings assumed to be made by Los Angeles County residents.¹¹

Adjusting for this shift of transit trips away from Metro increases the estimate of current Los Angeles County linked transit trips to approximately 58% of what they were in FY85, when SCRTD ridership was at its peak: $51\% \times (87.9\% / 77.1\%) = 58\%$.

By any standard measure, transit use in Los Angeles County has dropped under Metro's watch. In subsequent summaries, we review in more detail how this decline has occurred, including why and how Metro's actions appear to have significantly contributed to this shift.

CONCLUSIONS

1. Metro is losing ridership, despite population growth in Los Angeles County. Ridership measured in UPT is down 20% from 2013. Metro UPT *per capita* is down 37% from Metro's all-time peak ridership in 1985 and, for all Los Angeles County transit operators, linked trips *per capita* are down 42%.
2. More riders are disappearing from buses than show up on rail. Rail ridership has stopped growing, despite the addition of new lines.
3. Reconfiguring bus lines to feed rail lines increases the number of transfers needed to complete a trip, and diminishes the competitiveness of Los Angeles transit, contributing to reductions in ridership. Metro's estimates of the number of transfers needed to complete a trip are far above the national average, and are so high that they are difficult to believe. In any event, the number of Los Angeles transfers is far above the norm.
4. The more rail service Metro delivers, the fewer riders it can expect.

¹⁰ Authors' calculation from data obtained from Florida Transit Information System, Integrated National Transit Database Analysis System. <http://www.ftis.org/INTDAS/Reports.aspx>, and based on T. Rubin's research while SCRTD CFO.

¹¹ Authors' calculation based on data from NTD, 2016 reporting year, "Annual Database Service" spreadsheet. <https://www.transit.dot.gov/ntd/data-product/2016-annual-database-service-0>