

NextGen Ridership Analysis

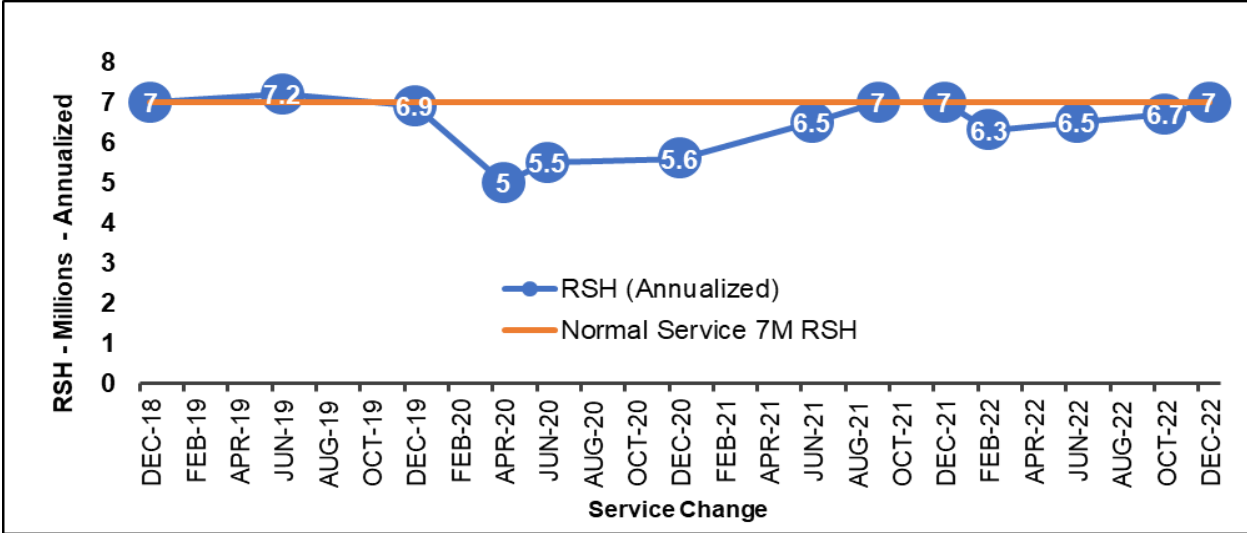
In reviewing Metro ridership, it is important to look at the overall changes occurring over the last five years (2019 through 2023). The period reviewed includes two significant events: 1) changes implementing the NextGen Bus Plan (implemented between December 2020 to December 2021) and 2) changes to the overall travel market and transit service resulting from the COVID-19 pandemic and its impacts on the community, beginning in March 2020.

Analysis and discussion are provided regarding how these changes may relate to actual Metro bus ridership trends in terms of average weekday, Saturday, and Sunday ridership between 2019 to 2023 (when ridership last peaked), as well as ridership by area, EFC/non-EFC, time of day, and line/line group level. Data is also presented on changes to average passenger trip lengths.

Metro Bus Service Levels:

A significant emergency reduction in annual bus revenue service hours (RSH) from 7 million to 5 million with the onset of the pandemic in April 2020. NextGen Bus Plan implementation began in December 2020. A small ramp-up of service occurred in June 2020 to increase RSH to 5.5 million as an initial step towards the restoration of service levels. The most significant increase to restore service levels occurred in June 2021, with a jump from 5.6 million to 6.5 million annual RSH with the second phase of NextGen Bus Plan changes. Full recovery to the pre-COVID 7 million RSH was implemented in September 2021, and the third phase of NextGen Bus Plan changes was implemented in December 2021.

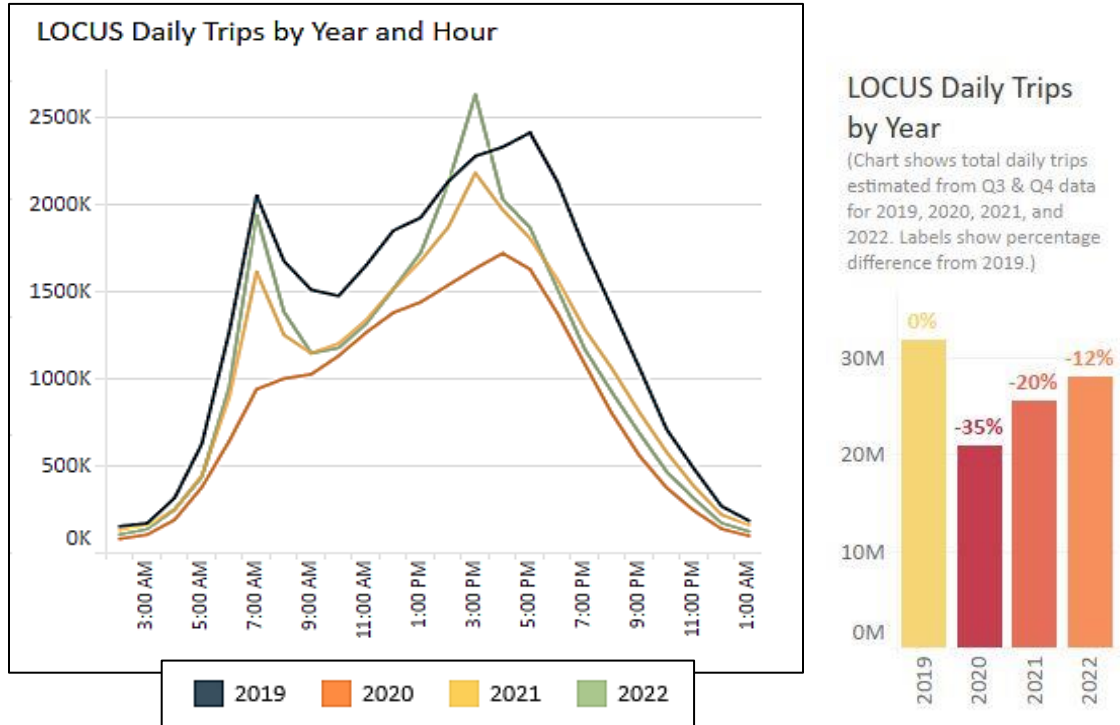
Chart 1: Metro Bus Service – Annual Revenue Service Hour Levels 2019 – 2022



However, the national shortage of bus operators led to high service cancellation levels, necessitating a reduction of service in February 2022 from 7 million to 6.3 million RSH. Successive cycles of service restoration occurred in June, October, and December 2022, at which time the 7 million RSH was again restored. Hiring of new bus operators

continues during 2023 to ensure full service is delivered as Metro remains committed to the reliable delivery of full service levels in 2023 and beyond. The history of changes in Metro bus system annual revenue service hours is shown in Chart 1.

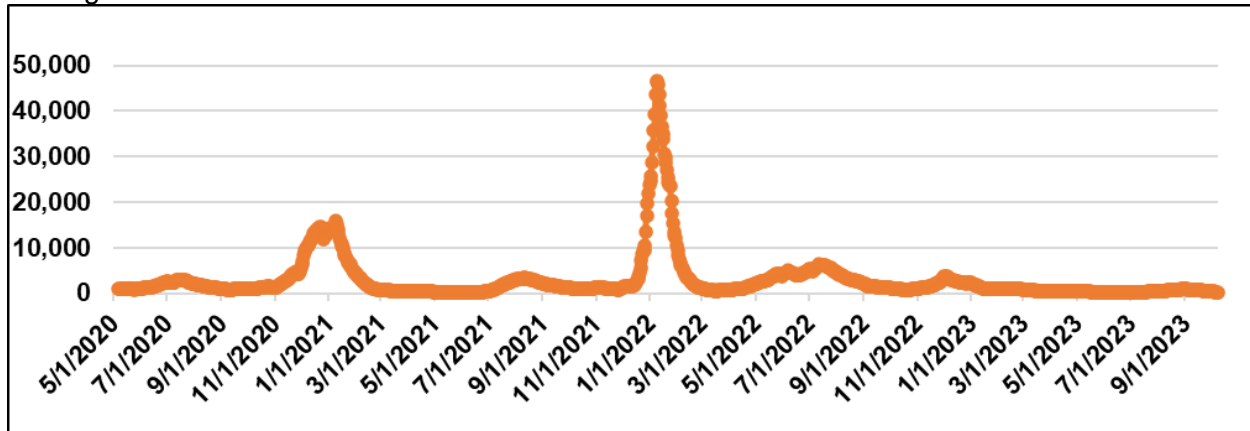
Charts 2 and 3: Total Trips By Time of Day and By Year, LA County 2019-2022



Overall travel demand calculated from Location Based Services (LBS) cell phone data as shown in Charts 2 and 3 suggests travel continues to recover but remains below pre-COVID levels. After an initial 35% drop in 2020 with the pandemic, travel demand rebounded strongly 2020 to 2021 recovery (+15%) with a smaller recovery between 2021 and 2022 (+8%), with total travel demand remaining overall about 12% below pre-COVID levels. However, patterns by time of day are mixed. AM peak travel volumes returned to pre-COVID levels in 2022, with a new afternoon peak exceeding pre-COVID levels in the 3 PM hour, though other time periods such as midday, 5 PM “commuter peak”, and evenings changed very little between 2021 and 2022.. Some of this lack of recovery may also relate to more online services and commerce (midday) as well as more telecommuting (5 PM peak). These trends will continue to be monitored to help understand bus ridership patterns in 2023. Recent research by UCLA suggests changes in not just work commutes but also other travel segments.

Chart 4 provides a reference to the periods when COVID was most active in our community which may have resulted in impacts to ridership that occurred at these times. COVID cases spiked most notably at the end of 2020 (Delta) and at the end of 2021 (Omicron), with much smaller spikes in new cases during the middle and end of 2022. Case numbers have remained very low in 2023.

Chart 4: LA County (excluding Long Beach, Pasadena) New Daily COVID Cases 7-Day Average



Weekday Bus System Ridership

After the initial 70% drop in ridership in March/April 2020 with the onset of the COVID-19 pandemic, weekday ridership recovered steadily beginning in the second half of 2020 and continued throughout 2021 and the first half of 2022. This growth was similar to that illustrated in Charts 2 and 3 of overall travel in LA County in terms of the initial large increase in travel and bus ridership in 2021 with more gradual growth in 2022.

The usual seasonal summer dip in bus ridership was not seen in 2020 and 2021; ridership recovery was more continual coming out of the depths of the ridership decline of 2020. The smaller summer spikes in COVID during mid-2020 and mid-2021 do not appear to have impacted weekday ridership recovery. However, the typical holiday season bus ridership decrease in December/January was seen in 2020, 2021, and 2022, though some of it may relate to COVID spikes, especially at the end of 2021 (Omicron).

Ridership growth continued steadily even with minimal increases in bus service between June 2020 and June 2021 as available spare capacity was utilized to accommodate growth. The significant service restoration in the second half of 2021 (see Chart 1) added valuable extra capacity to accommodate and incentivize the return of ridership.

The reintroduction of fares in January 2022 and the bus service reduction in February 2022 did not seem to slow ridership growth in the first half of 2022. There was a big push to enroll low-income riders in the LIFE (Low Income Fare is Easy) program for discounted fares prior to the reinstatement of fare collection on buses which may have helped avoid the loss of some ridership from this change. There were also concerted efforts to enroll strong school districts into the GoPass programs for their students. Mid-2022 showed some seasonal summer dip in ridership, but this may also reflect the COVID case increases in the community at that time.

The second half of 2022 saw weekday bus ridership similar to 2021 levels, suggesting ridership may have leveled off similar to travel demand changes between 2021 and

2022 (see Charts 2 and 3). This period also saw a temporary reduction in Metro bus service (-10%) and high levels of canceled service due to the bus operator shortage.

Restoration of full scheduled NextGen bus service levels was completed in December 2022. Continued new bus operator hiring has resulted in improvements in reliability (lower service cancellation levels) through 2023. At the time of writing this report (October 2023), operator staffing levels are fully restored. Chart 5 shows the progress made since December 2022 in reducing canceled bus service levels. The reliable delivery of all daily bus service is critical so that the NextGen commitment to Metro bus riders of fast, frequent, and reliable service can be fully realized.

Chart 5: Percentage Cancelled Service By Week

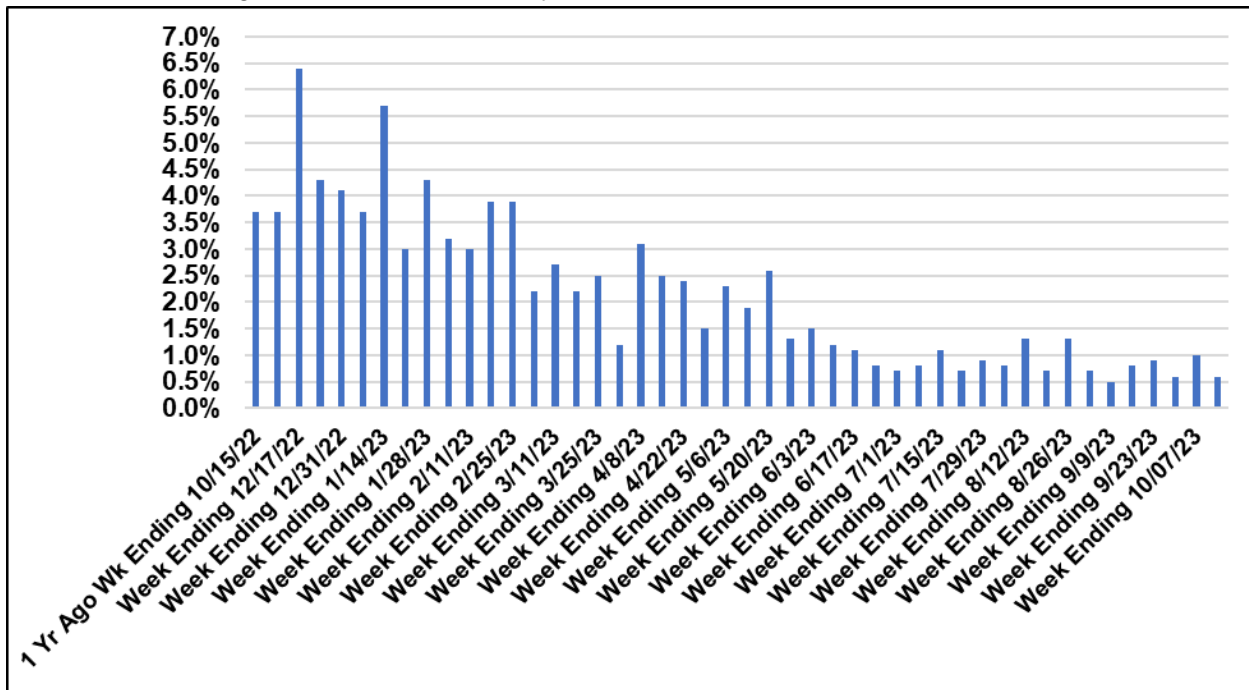
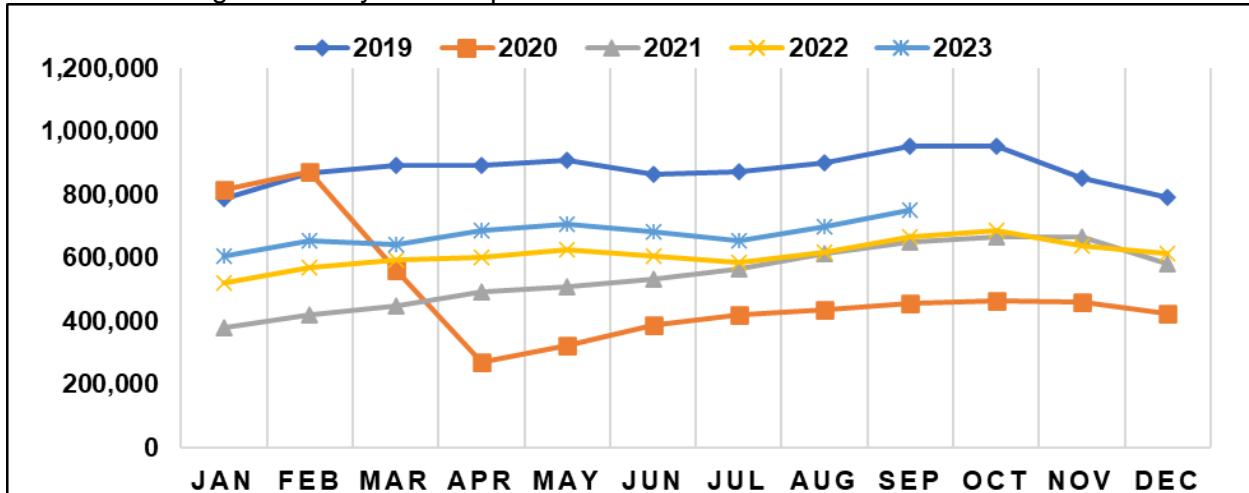


Chart 6 – Average Weekday Ridership 2019 – 2023

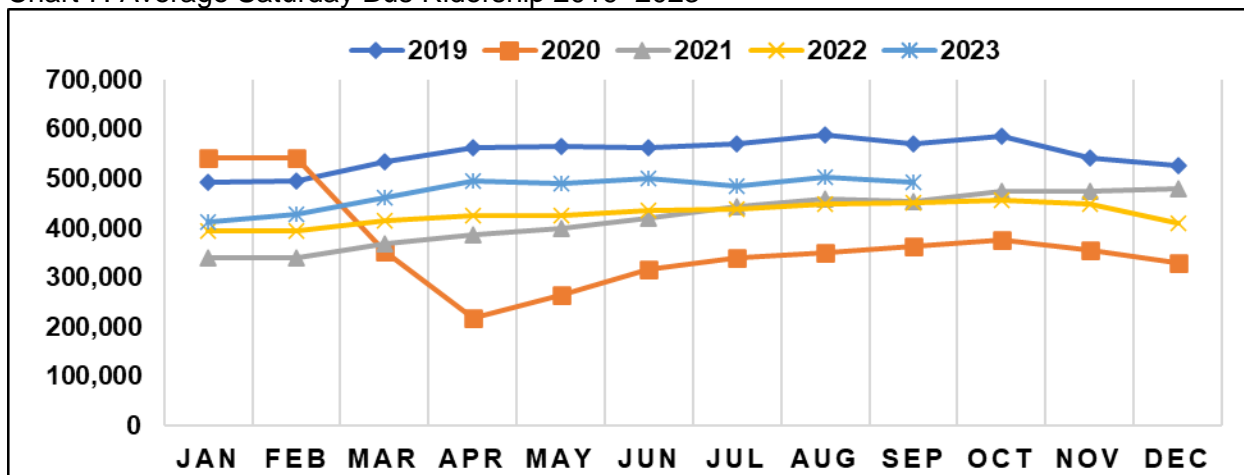


As Chart 6 shows, after a slight dip in ridership during the rainy December 2022 period, weekday ridership has shown strong growth through September 2023, with September 2023 Weekday ridership at 78.6% of pre-COVID 2019 levels. May 2023 weekday ridership exceeded 700,000 for the first time since COVID impacts were felt and September 2023 average weekday ridership exceeded 750,000 for the first time since the pandemic.

Saturday Bus System Ridership

Similar to weekdays, average Saturday ridership showed a steady recovery through mid-2022, with the recovery slowing in the second half of 2022, matching 2021 results, as shown in Chart 7.

Chart 7: Average Saturday Bus Ridership 2019–2023



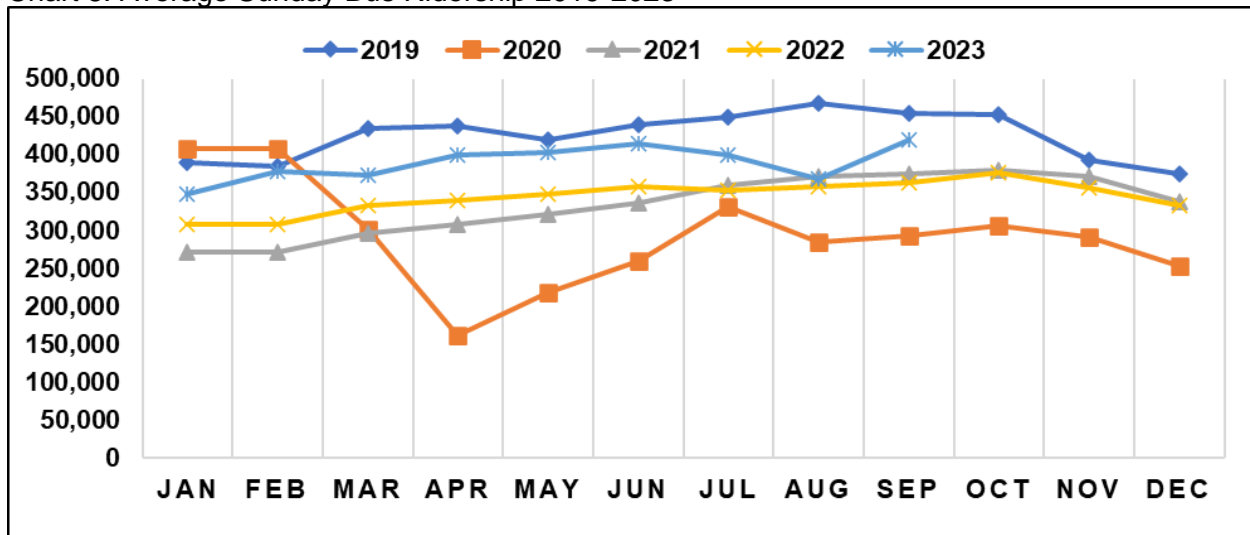
As was seen with weekdays, service reliability was a problem in 2022 due to the operator shortage and resulting service cancellations, with reduced service levels implemented in February 2022 to help stabilize service reliability. Full Saturday service was restored in December 2022 which, together with more operators hiring, has improved service in 2023 with gains in ridership seen.

Interestingly, there was no seasonal dip in Saturday ridership at the end of 2021, though the dip was observed at the end of 2020. After a dip in the rainy 2022 holiday season, ridership recovery resumed in the first half of 2023. As of September 2023, Saturday ridership was 86% of pre-COVID levels.

Sunday Ridership

Similar to weekdays and Saturdays, average Sunday ridership recovered steadily through mid-2022, with an early peak in recovery in July 2020. A holiday season dip was seen at the end of each year.

Chart 8: Average Sunday Bus Ridership 2019-2023

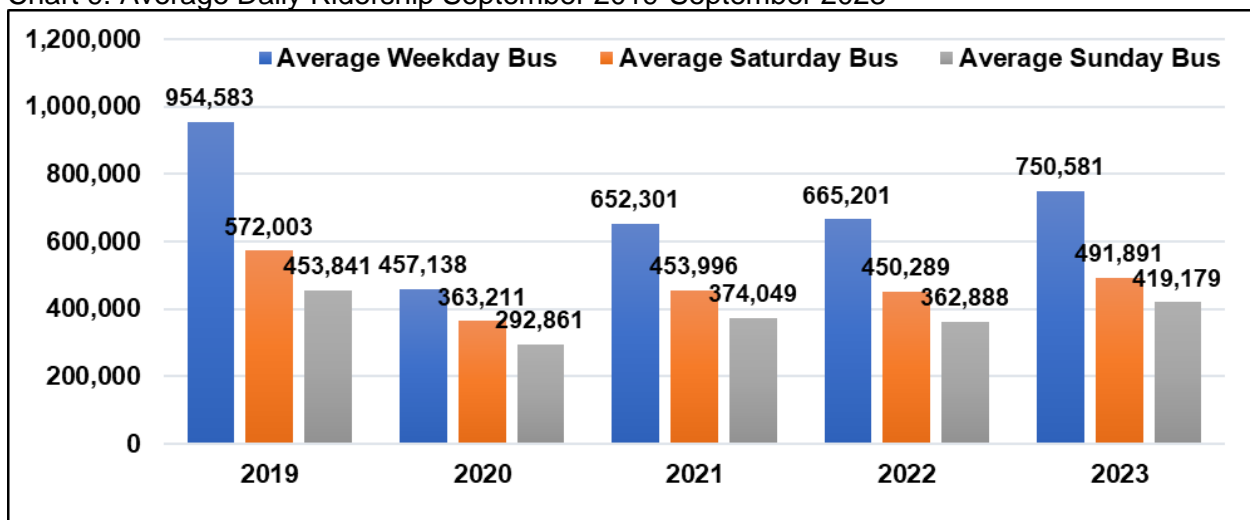


By mid-2022, average Sunday bus ridership remained similar to the 2021 levels, with Sunday bus service seeing the highest levels of cancellations due to the bus operator shortage in 2022. For the first half of 2023, growth continued, with February 2023 almost matching pre-COVID February 2019, and June 2023 showing a 94% recovery rate. As of September 2023, the recovery rate was 92.4%.

Current Ridership

September average daily ridership between 2019 and 2023 shown in Chart 9 is provided as the most recent available at the time of preparation of this board report.

Chart 9: Average Daily Ridership September 2019-September 2023



After an initial large increase in September 2021 over September 2020 from the low point of pandemic ridership in 2020, weekday ridership recovery continued to incrementally increase between September 2021 and September 2022. This slower rate of growth may be expected after the large surge in ridership in 2021 and is similar to the

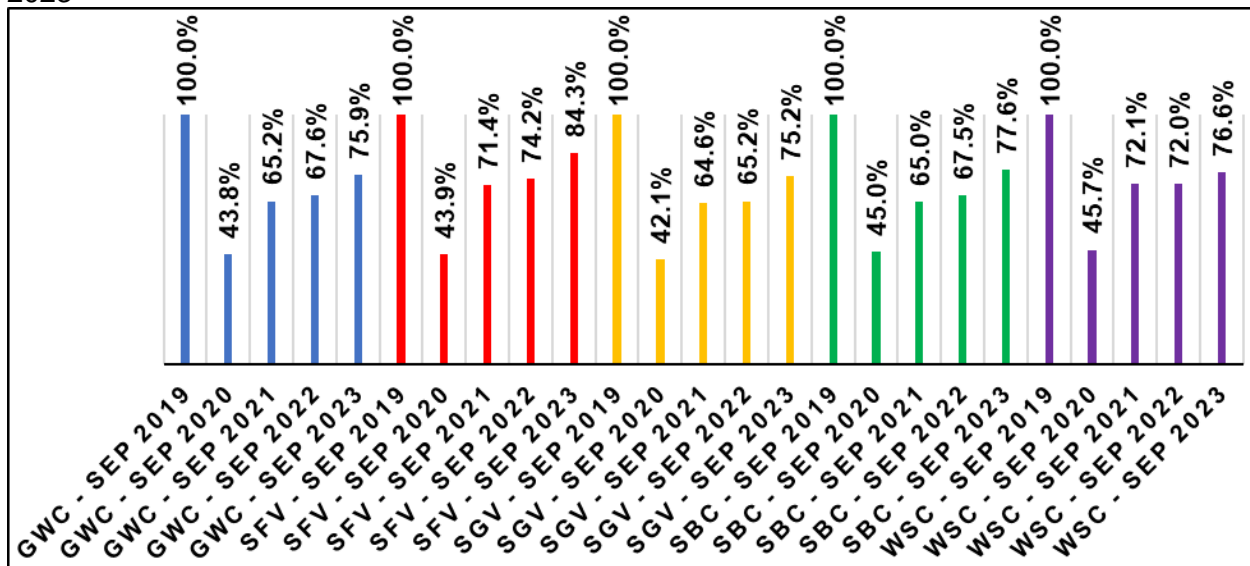
slower growth in travel demand as shown in Charts 2 and 3 as well as to bus service reliability problems at that time.

Metro reduced bus service by 10% in February 2022 in response to significant service cancellations caused by a shortage of bus operators. Bus service levels were fully restored by December 2022 and service reliability improved significantly in 2023 as the bus operator shortage was resolved. Full service restoration and improved reliability together with the LIFE and GoPass fare programs have likely supported the stronger ridership recovery seen in 2023. There have been much more substantial ridership gains in 2023 over the previous September, for both weekdays and weekends.

Bus System Ridership by Service Area

This section examines ridership recovery by service area, based on the five Metro Regional Service Council boundaries. As shown in Chart 10, weekday ridership recovery has occurred in each of the five Metro Council areas after the large decline in 2020 that was slightly less in the South Bay Cities (SBC) and Westside Central (WSC) areas compared to the other three regions - San Fernando Valley (SFV), San Gabriel Valley (SGV) and Gateway Cities (GWC). All areas show ridership recovery, with the San Fernando Valley showing the most weekday ridership recovery, exceeding 84% in 2023. This recovery rate was significantly higher than the recovery rates in the four other areas, which varied between 77.6% for the South Bay Cities and 45.7% for the San Gabriel Valley.

Chart 10: Average Weekday Ridership Recovery by Service Area, September 2019-September 2023



Historically, the San Fernando Valley transit lines had less frequent off-peak service. With the NextGen service improvements, local lines in the San Fernando Valley improved frequency in the midday weekdays as follows:

- Tier 1: three local lines increased from every 14 to 33 minutes to every 10 minutes (Lines 233, 234, 240)

- Tier 2: seven local lines increased from every 19 to 30 minutes to every 15 minutes (Lines 94, 152, 162, 164, 165, 166, 224)
- Tier 3: four local lines increased from every 25 to 49 minutes to every 20 minutes (Lines 90, 92, 150, 230) and three lines increased from every 49 to 61 minutes to every 30 minutes (Lines 235/236, 244, 690)
- Tier 4: two lines increased from every 60 to every 40 minutes (Lines 242, 243)

A total of 19 San Fernando Valley lines have improved weekday midday frequencies. Several key route restructurings focused on more direct connections to North Hollywood (Lines 90 and 94) are also likely contributing positively to the ridership recovery.

Highlights from NextGen frequency changes weekdays in the Westside Central service area include:

- Tier 1: Nine local lines had frequencies improved:
 - Line 2 increased from every 10 to every 7.5 minutes peak periods and from every 12-15 to every 10 minutes midday (Sunset - Alvarado)
 - Line 4 increased from every 15 to every 7.5 minutes peak and midday periods (Santa Monica BI)
 - Line 18 increased from every 10 to 7.5 minutes weekday midday (6th - Whittier)
 - Line 20 increased from every 15 to every 12 minutes peak periods (Wilshire – 6th St)
 - Line 28 increased from every 18 to every 7.5-10 minutes peak periods and from every 27 to every 10 minutes midday (Olympic BI)
 - Line 30 increased from every 12 to 10 minutes midday (Pico BI)
 - Line 33 increased from every 17-18 to 7.5 minutes peak hours and midday (Venice BI)
 - Line 66 increased from every 12-15 to every 10 minutes peak periods and from every 18 to every 10 minutes midday (Olympic BI)
 - Line 217 increased from every 12-15 to every 10 minutes peak and midday periods
- Tier 2:
 - Line 10 increased from every 20 to 15 minutes midday
 - Line 603 increased from every 15 to every 12 minutes weekday peak periods and from every 20 to every 12 minutes weekday midday
 - Line 605 increased from every 23 to every 15 minutes midday
- Tier 4: Line 617 (formerly Line 17) increased from every 60 to every 45 minutes peak and midday

Highlights from NextGen frequency changes weekdays in the South Bay Cities service

area include:

- Tier 1: Eight local lines had frequency improved:
 - Line 40 increased from every 15 to every 7.5-10 minutes peak and from every 20 to every 10 minutes midday periods
 - Line 45 increased from every 15 to every 10 minutes midday
 - Line 51 increased from every 12 to 7.5 minutes midday
 - Line 111 increased from every 12-15 minutes to every 10 minutes peak and midday periods
 - Line 204 increased from every 12-15 to every 7.5 minutes weekday peak and midday
 - Line 207 increased from every 15 to every 6-7.5 minutes peak and from every 18 to every 7.5 minutes midday periods
 - Line 210 increased from every 20 to every 10 minutes peak and midday periods
 - Line 212 increased from every 12-15 to every 10 minutes peak and midday periods
 - Express service J Line increased from every 15 minutes to every 10 minutes during midday periods
- Tier 2: three local lines had improved frequencies
 - Line 110 increased from every 24 to every 15 minutes midday
 - Line 117 increased from every 18-20 to every 15 minutes peak and midday periods
 - Line 206 increased from every 20 to 15 minutes midday
- Tier 3: three local lines had improved frequencies:
 - Line 125 increased from every 25-35 to every 20 minutes peak and midday periods
 - Line 232 increased from every 22 to every 15 minutes peak periods
 - Line 246 increased from every 60 to every 30 minutes midday
- Tier 4: had two changes
 - Line 202 added new 60-minute midday service
 - Line 130 west of Artesia A Line Station was transferred to Torrance Transit.

Highlights from NextGen frequency changes weekdays in the Gateway Cities service area include:

- Tier 1: five local lines had frequency improvements:

- Line 53 increased from every 15 to every 10 minutes midday
- Line 60 increased from every 18 to every 10 minutes midday
- Line 105 increased from every 18-20 to every 10 minutes peak and midday periods
- Line 108 increased from every 10 to every 7.5 minutes peak periods and from every 15 to every 10 minutes midday
- Line 251 increased from every 22 to every 10 minutes midday
- Tier 2: Line 55 increased from every 15 to every 12 minutes peak periods and from every 20 to every 15 minutes midday
- Tier 4: changes consisted of:
 - Line 127 added new 60-minutes peak and midday periods
 - Line 130 east of Artesia A Line Station was transferred to Long Beach Transit.

Highlights from NextGen frequency changes weekdays in the San Gabriel Valley service area include:

- Tier 1: three local lines had frequency improvements:
 - Line 70 increased from every 15 to every 7.5 minutes peak and midday periods
 - Line 78 increased from every 20 to every 10 minutes midday
 - Line 180 increased from every 12 to every 10 minutes midday
- Tier 2: Line 260 increased from every 12-15 to every 12 minutes peak periods and from every 20 to every 15 minutes midday
- Tier 3: Line 266 increased from every 24 to every 20 minutes peak and from every 33 to every 20 minutes midday
- Tier 4: part of Line 256 (CSULA – Commerce) transferred to Commerce Municipal Bus Lines.

Saturday ridership recovery has occurred across all regions between September 2020 and September 2023. As with weekdays, the highest ridership recovery on Saturdays was in the San Fernando Valley (96.9%). The other four areas show recovery rates between 76.8% on the lower end (Gateway Cities) and 82.1% (South Bay Cities) South Bay, San Gabriel, and Westside Central all had recovery rates of over 80%. San Fernando Valley Saturday service frequency increases were not as widespread as the weekday ones but were still significant:

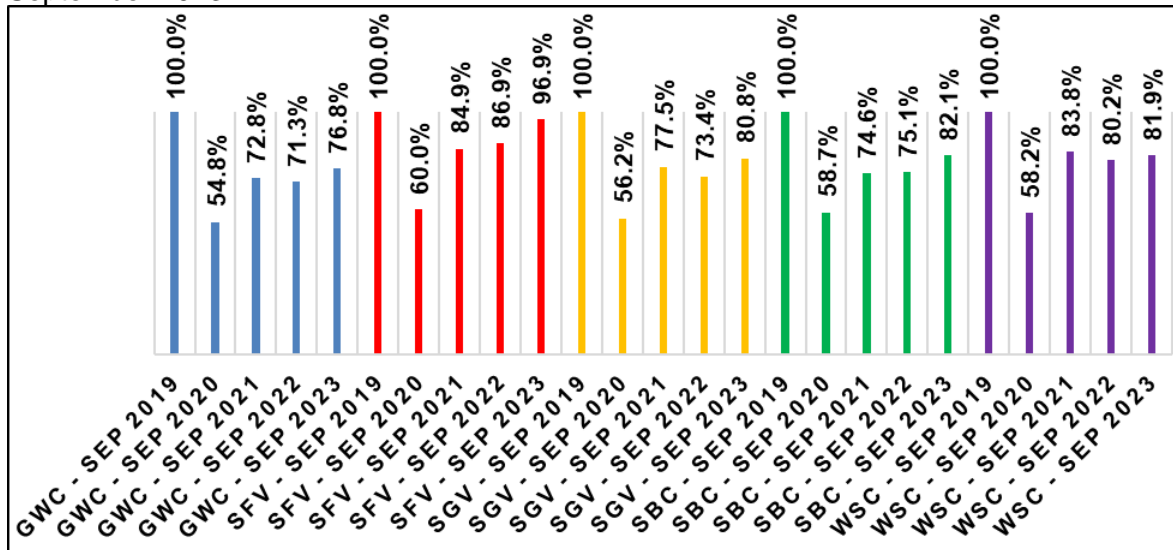
- Tier 1: two local lines increased from every 16 to 30 minutes to every 12 to 15 minutes (Lines 234, 240)
- Tier 2: three local lines increased from every 24 to 30 minutes to every 20 minutes (Lines 152, 162, 224)

- Tier 3: two local lines increased from every 50 to every 30 minutes (Lines 230 and 690)
- Tier 4: Lines 242 and 243 increased from every 60 to every 40 minutes

Three lines gained Saturday service (Oxnard/Burbank, Saticoy, White Oak) that previously had no weekend service, The same refocus of two lines on North Hollywood weekdays was made on Saturday (Lines 90, 94).

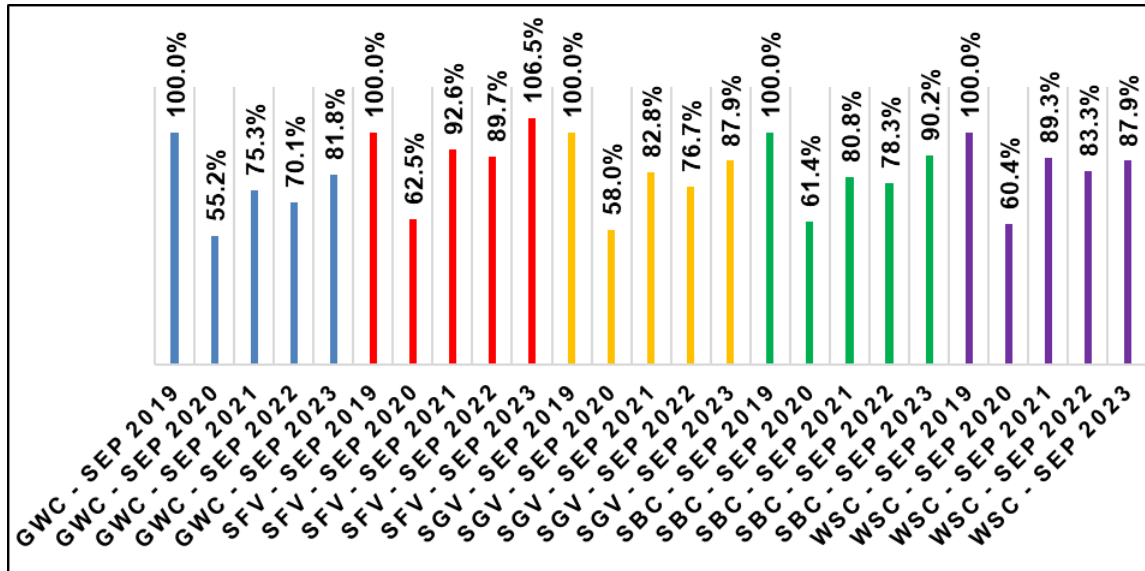
The percentage of Saturday ridership recovery by area is shown in Chart 11.

Chart 11: Average Saturday Ridership Recovered by Service Area, September 2019 - September 2023



Sunday ridership recovery by area displayed in Chart 12 shows consistent recovery across all areas between September 2020 and September 2023. As with weekdays and Saturdays, the San Fernando Valley leads in ridership recovery and has exceeded the pre-COVID 2019 ridership for that area (106.5% recovered). The Westside Central, San Gabriel Valley, and South Bay Cities all show recovery rates approaching or at 90%. The GWC area again shows the least recovery (81.8% recovery), well below other areas' recovery rates that are above 87%.

Chart 12: Average Sunday Ridership Recovered by Service Area, September 2019 - September 2023



The San Fernando Valley Sunday service frequency increases were not as widespread as the weekday or even Saturday ones but were still significant:

- Tier 1: two local lines increased from every 19 to 30 minutes to every 12 to 15 minutes (Lines 234 and 240)
- Tier 2: one local line increased from every 32 to every 20 minutes (Line 152)
- Tier 3: two local lines increased from every 50 to every 30 minutes (Lines 230 and 690)

Five lines in the San Fernando Valley gained Sunday service (Oxnard/Burbank, Saticoy, Tampa, Winnetka, White Oak) that previously had no weekend service, The same refocus of two lines on North Hollywood weekdays was made on Sunday (Lines 90, 94).

The changes made in frequency, days of operation, and routing likely have all combined to provide a more customer-friendly network for travel across the San Fernando Valley, helping achieve higher ridership recovery in this area.

Highlights from NextGen frequency changes weekends in the Westside Central service area include:

- Tier 1: nine local lines had improvements made:
 - Line 2 increased from every 12-15 to every 10 minutes Saturday and from every 15-20 to every 10 minutes Sunday
 - Line 4 increased from every 15 to every 10 minutes Saturday and Sunday
 - Line 18 increased from every 10 to 7.5 minutes Saturday and from every 15 to every 7.5 minutes Sunday

- Line 20 increased from every 15 to every 12 minutes Saturday and from every 20 to every 12 minutes Sunday
- Line 28 increased from every 15 to every 12 minutes Saturday and from every 18 to every 12 minutes Sunday
- Line 30 increased from every 12 to 10 minutes Saturday and Sunday
- Line 33 increased from every 20 to 10 minutes peak hours and midday
- Line 66 increased from every 20 to every 15 minutes Sunday
- Line 217 increased from every 15 to every 12 minutes Saturday and from every 20 to every 12 minutes Sunday
- Tier 2:
 - Line 14-37 increased from every 20 to 15 minutes Saturday and Sunday
 - Line 603 increased from every 18 to every 12 minutes Saturday and from every 18 to every 15 minutes Sunday
 - Line 605 increased from every 35 to every 20 minutes midday
 -
- Tier 4: Line 617 (formerly Line 17) had new 60 minute Saturday and Sunday service added

Highlights from NextGen frequency changes weekends in the South Bay Cities service area include:

- Tier 1: Seven local lines had frequency improvements
 - Line 40 increased from every 20 to every 12 minutes Saturday and from every 20 to every 15 minutes Sunday
 - Line 45 increased from every 15 to every 10 minutes Sunday
 - Line 51 increased from every 10 to every 7.5 minutes Saturday and from every 12 to every 10 minutes Sunday
 - Line 204 increased from every 20 to every 12 minutes Saturday and Sunday
 - Line 207 increased from every 15 to every 10 minutes Saturday and Sunday
 - Line 210 increased from every 20 to every 10 minutes Saturday and Sunday
 - Line 212 increased from every 18 to every 15 minutes Saturday and from every 23 to 15 minutes Sunday
- Tier 3: two local lines had frequency improvements made:
 - Line 125 increased from every 40 to every 30 minutes Sunday
 - Line 246 increased from every 40 to every 30 minutes Saturday and from

every 60 to every 30 minutes Sunday

- Tier 4: Line 130 west of Artesia A Line Station was transferred to Torrance Transit.

Highlights of NextGen weekends frequency changes in the Gateway Cities service area include:

- Tier 1:
 - Line 53 increased from every 20 to every 15 minutes Sunday
 - Line 60 increased from every 12-15 to every 10 minutes Saturday and Sunday
 - Lines 105 and 108 increased from every 20 to every 15 minutes Sunday
- Tier 4:
 - Line 127 added new 30-60 minute Saturday and Sunday service
 - Lines 128 and 258 added new 60-minute Sunday service
 - Line 130 east of Artesia A Line Station was transferred to Long Beach Transit

Highlights of NextGen weekends frequency changes in the San Gabriel Valley service area include:

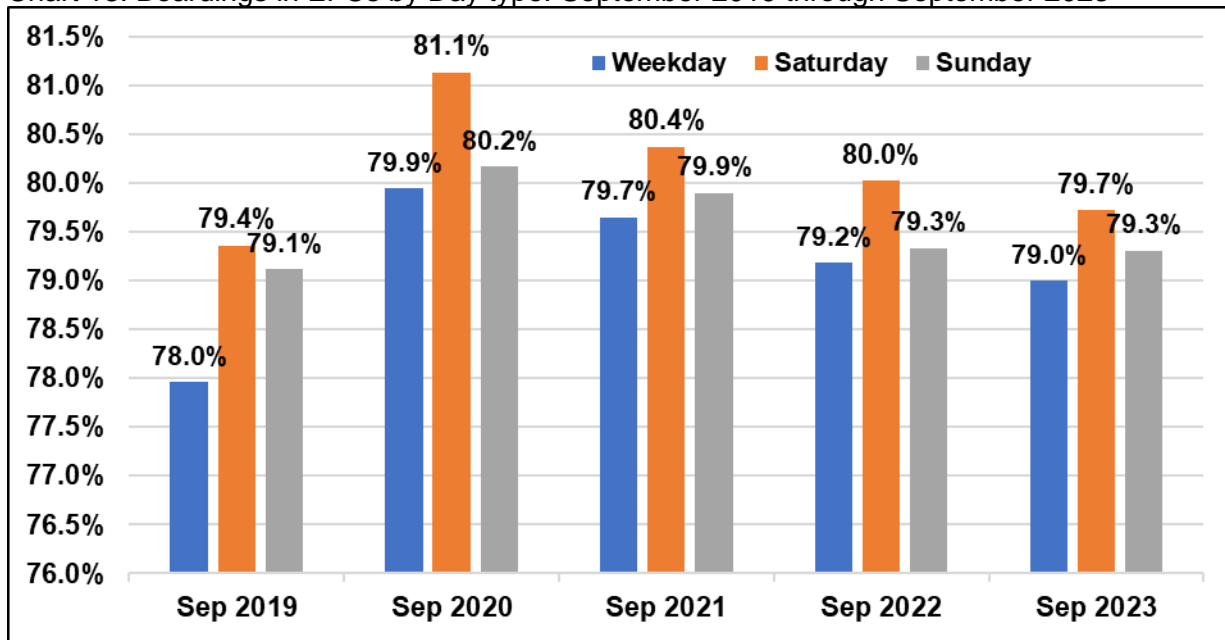
- Tier 1: Line 70 increased from every 15-20 to every 10 minutes Saturday and Sunday midday periods
- Tier 3: Line 266 increased from every 45 to every 30 minutes Saturday and Sunday
- Tier 4: part of Line 256 (CSULA – Commerce) transferred to Commerce Municipal Bus Lines.

Bus System Ridership of Equity Focus Communities (EFC)

Bus system boardings in EFCs were reviewed to see if the recovery was stronger in EFCs than the network overall. Chart 13 shows changes in the proportion of boardings occurring in EFCs by day of the week between 2019 (pre-NextGen and pandemic) through 2023.

The proportion of boardings occurring in Metro's 2023 EFCs increased by 1-2% in 2020 as was expected with the pandemic and those with limited other options travelling as needed. This increased share of boardings was smaller in 2022 and 2023 with around 1% higher for weekdays and around 0.5% weekends, suggesting that the NextGen changes have benefitted EFCs where transit is critical to access to jobs, services, and opportunities, more than other areas.

Chart 13: Boardings in EFCs by Day type: September 2019 through September 2023

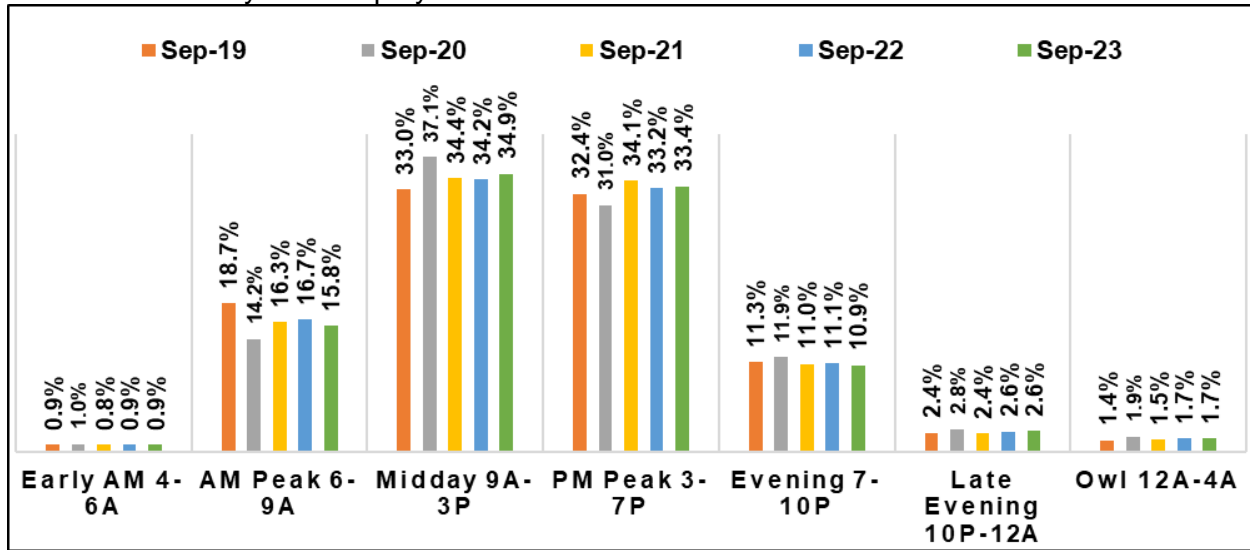


This higher proportion of trips in EFCs reflects the efforts of the NextGen Bus Plan to ensure many service improvements were made to lines serving EFCs where the need for good transit is highest, even during the early months of the COVID-19 pandemic, and just as important now. The gains for EFC residents should continue as bus speed and reliability improvements increase the competitiveness of the NextGen Bus Plan.

Average Ridership by Time of Day

Consistent with the decrease in peak period travel due to the impacts of the COVID pandemic, the AM and PM peak shares of average weekday ridership dropped by 4% and 1% respectively with many people traveling less in 2020 compared to 2019. Midday ridership took up a larger share (+4%) of average weekday ridership in 2020. By 2022 and 2023, the share by time period had returned to about 1% higher than 2019 levels for the PM peak, though the AM peak share remained around 3% below the 2019 level. There is a 2% increase in 2023 for midday travel compared to 2019, and that comes at the expense particularly of weekday AM peak travel. This may suggest the improved midday weekday service frequencies for many transit lines implemented as part of the NextGen Bus Plan have been successful in gaining a larger share of ridership. Late evening and Owl periods are also up slightly in 2023 compared to their share of 2019 ridership, though evening is down slightly. Weekday ridership by time period is depicted in Chart 14.

Chart 14: Weekday Ridership by Time Period



As shown in Charts 15 and 16, Saturday and Sunday midday shares of ridership peaked in 2020 and 2021 respectively, but by 2023 they dropped below 2019 levels. Saturday and Sunday AM peak shares returned to above 2019 levels on Sundays, remained below 2019 levels on Saturdays, and dropped in 2020 and 2021. PM Peak, evening, late evening, and overnight Owl ridership shares remained generally around 2019 levels, other than PM peak dropping in 2020. The NextGen Bus Plan service level changes on weekends were not as large as those on weekdays so changes between time periods were not as large.

Chart 15: Saturday Ridership by Time Period

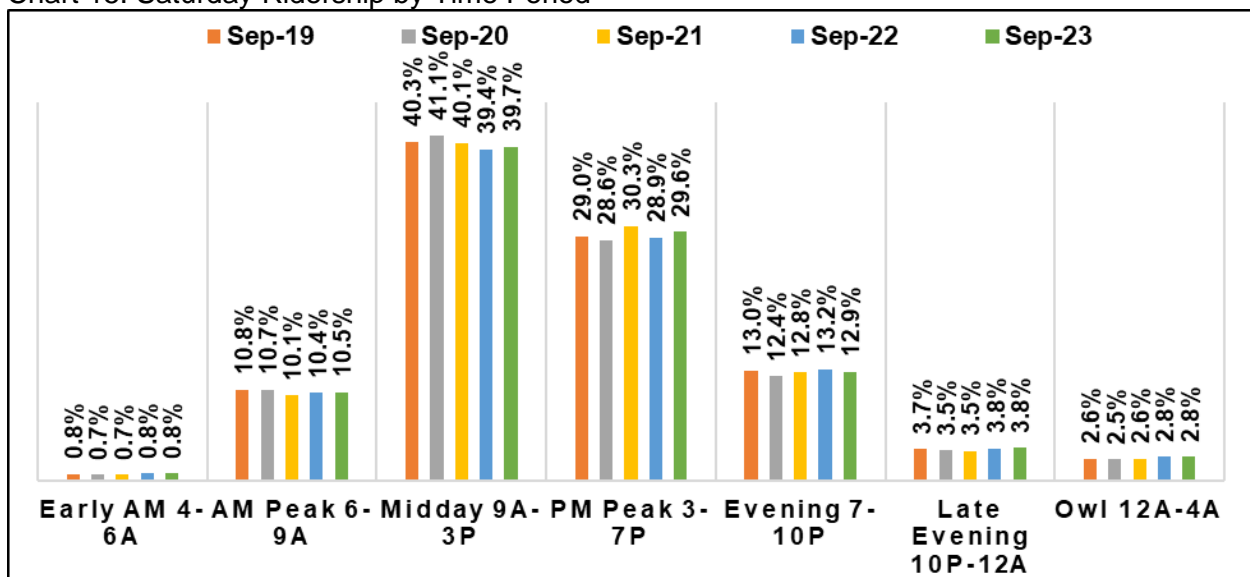
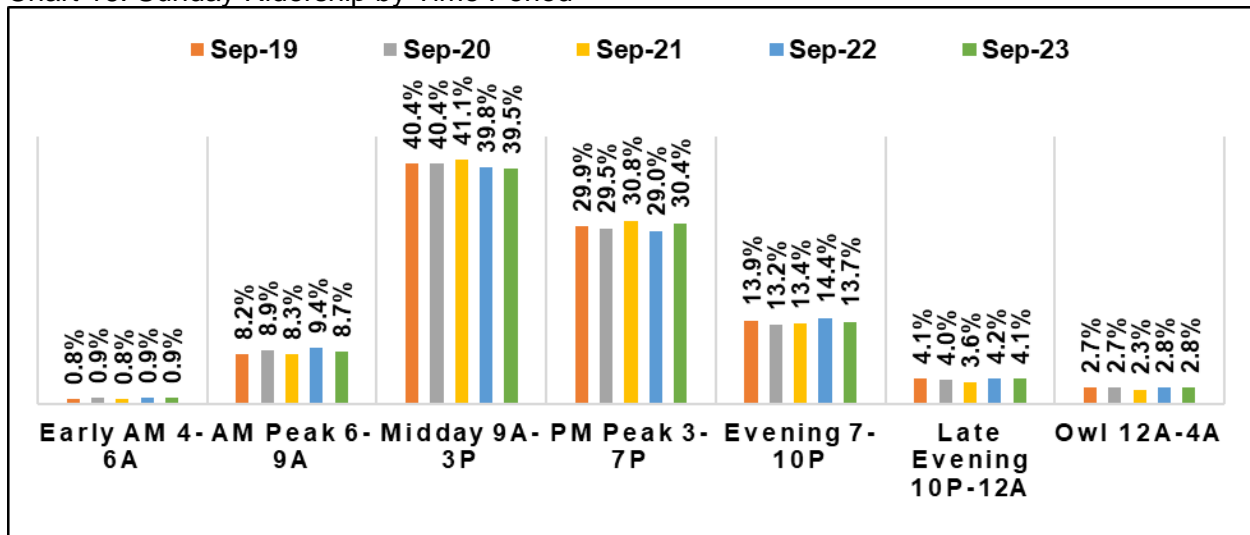


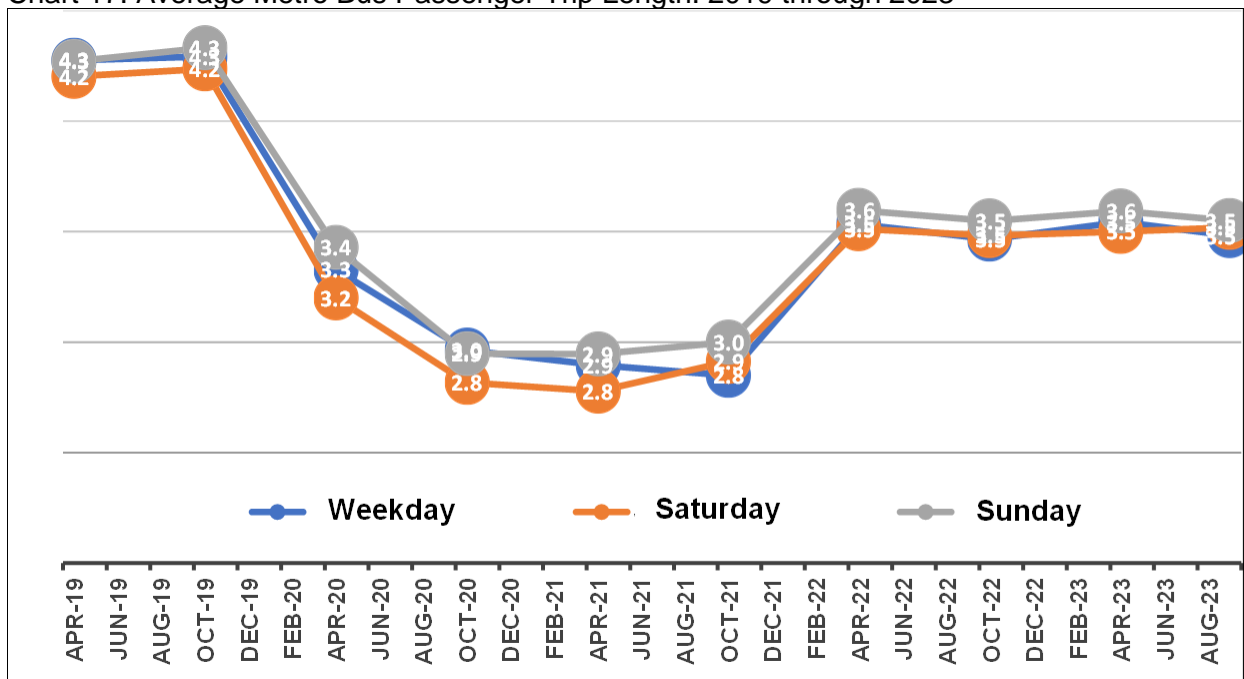
Chart 16: Sunday Ridership by Time Period



Average Passenger Trip Length

Trip length dropped from over 4 miles to 3 miles between 2019 and 2020 and remained lower in 2021. It then increased to around 3.5 miles in 2022 and remains around that level in 2023. The initial changes can likely be attributed to the COVID-19 pandemic which resulted in people staying closer to home. As people adapted to living with the pandemic, by 2022 and 2023, average trip lengths had increased, though not back to 2019 levels. The NextGen Bus Plan was also designed to capture a larger share of shorter-distance travel and this data suggests that goal is being achieved. Chart 17 shows the average passenger trip length for two points in each year from 2019 through 2023.

Chart 17: Average Metro Bus Passenger Trip Length: 2019 through 2023



Ridership by Line and Line Group

Ridership was assessed based on individual lines, or in some cases by groups of lines where a NextGen Bus Plan change involved a restructuring of a group of lines, for a fair comparison of the changes in ridership. Ridership recovery rates for 82 weekday, 75 Saturday, and 75 on Sunday line/line groups are included in Attachments A, B, and C respectively.

Table 2: Ridership Recovery Distribution, September 2023 versus September 2019

Average % Ridership Recovery Sept 2023 versus Sept 2019	Number of Weekday Lines/ Line Groups	Number of Saturday Lines/ Line Groups	Number of Sunday Lines/ Line Groups
>= 140.0%	0	0	1
130.0 – 139.9%	0	2	1
120.0 – 129.9%	0	3	5
110.0 – 119.9%	1	1	6
100.0 – 109.9%	5	8	11
90.0 - 99.9%	20	13	21
80.0 - 89.9%	15	25	13
70.0 - 79.9%	18	15	13
60.0 - 69.9%	13	3	3
50.0 - 59.9%	7	4	0
40.0 - 49.0%	1	0	0
30.0 - 39.9%	2	1	1
Total Lines/Line Groups	82	75	75

Table 2 shows the number of lines/line groups for weekday, Saturday, and Sunday at various levels of ridership recovery as of September 2023 compared to September 2019 (Pre-COVID/Pre-NextGen Bus Plan).

The overall system ridership recovery rate in September 2023 was 78.6% for weekdays, 86.0% for Saturday, and 92.4% for Sunday when compared to May 2019 as a pre-COVID baseline. There were 6 weekday, 14 Saturday, and 24 Sunday lines/line groups exceeding their pre-COVID September 2019 ridership numbers in September 2023.

The ridership recovery results reflect both the general return of ridership after the COVID impacts since 2020, but also reflect the impacts of the NextGen Bus Plan with its focus on fast, frequent, and reliable service. The following review of results focuses on analysis of NextGen Bus Plan impacts to ridership.

Service Reliability

September 2023 saw full NextGen Bus Plan service levels provided with low cancellation rates, comparable to pre-COVID levels of cancellations in September 2019. This was the result of a significant number of new bus operators hired in 2022 and 2023 to address the bus operator shortage. Service cancellations therefore should not be a

major factor in explaining ridership recovery, though the opportunity exists for Metro to message about the now-reliable service to riders and those who may be hesitant to return to the system due to past unreliable service experiences.

Service Frequency:

The NextGen Bus Plan created high frequency bus services with weekday service every 15 minutes or better (Tiers 1 and 2). When looking overall at weekday line by line ridership recovery compared to the system average ridership recovery weekdays of 78.6% recovered, 20-Tier 1, 14-Tier 2, 4-Tier 3, and 7-Tier 4 lines/line groups had above average ridership recovery.

- The high number of Tier 1 and Tier 2 lines with above average recovery suggests that the improved frequencies implemented through the NextGen Bus Plan are a key component of stronger ridership recovery.
- The above-average pattern existed for Saturday lines that were over 86% recovered with a mix of 14-Tier 1, 12-Tier 2, 6-Tier 3, and 5-Tier 4 lines/line groups.
- Sunday lines that were over 92.4% recovered were a mix of 14-Tier 1, 12-Tier 2, 5-Tier 3, and 9-Tier 4 lines/line groups.

Tier 1 Highest Frequency Lines:

NextGen Tier 1 lines provide at least 10 minute or better service frequency weekday peak and midday periods on Metro's busiest ridership corridors, with typically 10 to 15-minute weekend service frequency.

The weekday ridership recovery for Tier 1 NextGen service included a high of 111.7% for Line 66 serving E Olympic/W 8th St (this line also had a strong in its Saturday 101.0%, and Sunday 113.3% ridership). Six other Tier 1 lines/line groups exceeded 90% recovery weekdays:

- Vermont Local Line 204: 95.2% weekday, 104.4% Saturday, 99.4% Sunday.
- Sepulveda/Van Nuys group based on Lines 233, 234, 761: 94.4% weekday, 109.4% Saturday, 118.0% Sunday.
- Florence Av Line 111: 93.8% weekday, 89.2% Saturday, 89.9% Sunday
- Slauson Av Line 108: 92.5% weekday, 90.8% Saturday, 108.0% Sunday
- 3rd St Line 16 90.6% weekday, 92.5% Saturday, 100.4% Sunday
- Soto St Line 251: 90.3% weekday, 85.8% Saturday, 99.2% Sunday.

These higher recovery Tier 1 lines serve the most transit-dependent EFCs through areas such as South LA, the inner Westside, East LA, and the San Fernando Valley. Besides the high frequencies offered on both peak and midday weekdays that are assisting the recovery of some of these lines is improved access, such as:

- Line 66 trips serve Commerce Center and are one of the closest services

available in place of Line 51 no longer operating on 7th St west of Westlake/MacArthur Park.

- Line 761 now provides all-day, all-week Rapid service on Van Nuys BI in addition to frequent Local Line 233.
- Soto St Line 251 now extends many trips each day to Eagle Rock (replaced other bus lines there)

An additional 12 NextGen Tier 1 lines exceeded system average ridership recovery weekdays. Among these was Line 53 with 89.3% recovery weekdays (92.1% Saturday, 109.6% Sunday), which benefitted from both high frequency and a reroute to Willowbrook/Rosa Parks Station, thus providing access to more transit connections and local retail, medical, and educational facilities.

Half of the Tier 1 lines focus on downtown LA, such as Lines 4 (Santa Monica BI), 18/20/720 (Whittier BI/Wilshire BI), 33 (Venice), 40 (MLK/Hawthorne BI), 70 (Garvey/Cesar Chavez), and 78 (Huntington/Las Tunas); less travel to office jobs in downtown may be impacting these lines. In some cases, these lines exceeded the system average ridership recovery on Saturdays and Sundays. This group represents an opportunity to promote downtown LA travel for both work and leisure.

There were nine Tier 1 lines with below system average ridership recovery. Most notable among this group are the two BRT services, with G Line (Orange) at 62.0% and J Line (Silver) at 74.7% on weekdays. The J Line received an increased midday weekday frequency of 10-minute instead of the 15-minute prior frequency while the G Line service did not change, which may explain the higher weekday ridership recovery of the J Line. Again, former markets of weekday discretionary riders may be significantly impacting the recovery of these BRT lines that had higher levels of discretionary riders pre-COVID, though this again opens the opportunity for promotion to build new markets.

- The J Line had 91.1% recovery on Saturdays, and 91.2% recovery on Sundays, suggesting people are using this service actively for events such as games at Expo Park. G Line Saturday recovery was 73.8%, with Sundays at 81.3%, which are better than the weekday rate but still falls below the J Line recovery.
- Vermont Rapid Line 754 had only a 59.0% recovery on weekdays. It experienced very high cancellations in 2022, so it may take some time to rebuild the market now that riders can depend on it. Line 754 operates the same route and service levels as Local 204 but with fewer stops. In contrast, Line 204 had a recovery of 95.2%. The same low ridership recovery pattern for Line 754 held for Saturdays with 56.1% recovery and Sundays 65.9%, compared to Line 204 recovery rates of 104.4% Saturdays and 99.4% Sundays. These patterns require more investigation; if this trend continues, there may need to redistribute service between the Vermont Av Local and Rapid lines.
- Other Tier 1 lines that had significant NextGen route changes include Line 28 (W Olympic BI – 65.5% recovered weekday, 74.0% Saturday, 70.9% Sunday) and Line 30 (Pico BI – 72.7% recovered weekday, 70.9% Saturday, 73.5% Sunday), which both now end in downtown LA and do not travel to northeast LA or East LA

respectively. Line 251 was extended to Eagle Rock to replace Line 28, and hence has much higher ridership recovery, while Line 30 in East LA was replaced by the new E Line light rail through the Regional Connector as well as other bus service. Similarly, the north and south ends of Line 45 on Broadway moved to other lines which helps explain its lower recovery (70.6% weekday, 71.7% Saturday, 85.5% Sunday), though it may also partially relate to loss of Rapid service from this corridor.

- Line 210 on Crenshaw with 77.1% recovery weekday (87.0% Saturday, 99.8% Sunday) likely has some former riders now using the K Line light rail, though that number is likely low based on K Line ridership. This recovery rate may also relate to the loss of Rapid service on this corridor.
- Line 66 likely gained ridership from Line 51 in the area west of Westlake/MacArthur Park, with Line 51 recovery at a low 73.3% weekday (73.0% Saturday, 78.6% Sunday).
- Line 2 on Sunset merged with Line 200 on Alvarado, with an overall 75.7% recovery weekday (77.5% Saturday, 90.7% Sunday), with Line 4 (88.2% recovered weekday, 90.2% Saturday, 95.3% Sunday) gaining more ridership as a result of the Line 2 change between downtown LA and Echo Park since Line 2 no longer continues into downtown LA. The recovery of both these lines is likely being impacted by post-pandemic downtown LA economic recovery.

A key component of the Tier 1 lines was the creation of a single high-frequency line in place of separate, less frequent Rapid and Local services. On weekdays, this change occurred on 17 lines, with a range of performance across these lines from a high of 90.3% on Soto to a low of 65.5% on W Olympic. The Crenshaw, W Olympic, and Broadway corridors where Rapid lines were replaced by high frequency local bus had below average ridership recovery rates on weekdays, but these results are likely mostly attributable to the restructuring of these lines discussed above. The overall transition away from Rapid lines will need to be further examined through approaches such as rider surveys.

NextGen Tier 2 Lines

The NextGen Tier 2 lines operate 12-15 minute daytime weekday service on some of Metro's next busiest corridors after the Tier 1 corridors discussed above. On Saturdays and Sundays, Tier 2 lines generally range from 20-minute to 30-minute daytime frequencies.

Most notable is the strong performance of the Tier 2 east-west lines in the San Fernando Valley which have responded well to their improved frequencies of weekday all-day 15-minutes under NextGen. During midday weekdays, these lines previously provided service only every 20-30 minutes. Weekend service on these lines with more limited frequency improvements still performed strongly, suggesting the weekday improvements have also had the benefit of attracting more weekend ridership. These San Fernando Valley lines include:

- Sherman Way Line 162 (104.4% weekday, 130.9% Saturday, 127.6% Sunday)
- Vanowen St Line 165 (98.5% weekday, 107.5% Saturday, 123.0% Sunday)
- Nordhoff St Line 166 (96.0% weekday, 112.3% Saturday, 128.9% Sunday)
- Victory Bl Line 164 (95.5% weekday, 87.6% Saturday, 97.3% Sunday).
- Roscoe Bl (86.3% weekday, 100.0% Saturday, 115.8% Sunday)

The Roscoe Bl recovery weekdays was notably lower, though still well above the system average, primarily due to route segments moved to other lines including Sherman Way.

Other notably high ridership recovery NextGen Tier 2 lines are discussed here with frequency improvements a common theme among them:

- Line 605 (LAC USC Medical Center Shuttle - 96.6% recovery weekdays, 127.2% Saturday, 123.7% Sunday) linking Boyle Heights high EFC area to key medical centers benefitted from 15-minute all day service (previously 23-minute midday frequency) and weekend 20-minute service improved over previous 35 minute service).
- Line 55 (Compton Av – 93.9% recovery weekdays, 95.3% Saturday, 104.2% Sunday) between Willowbrook and downtown LA, through high EFC communities, with 12-minute weekday peak and 15-minute weekday midday service replacing previous 15-minute peak and 20-minute midday service. Weekends did not see a significant frequency increase but still saw a strong recovery.
- Lines 110 (Gage Av – 93.0% recovery weekdays, 89.6% Saturday, 104.6% Sunday) and 117 (Century Bl – 92.3% recovery weekdays, 89.5% Saturday, 99.2% Sunday), which both serve EFC communities through South LA and the Gateway Cities. These lines now have consistent 15-minute all-day service in place of their previous 19-24 minute midday weekday frequencies. They recovered strongly on weekends even without significant frequency improvements.
- Line 603 on Hoover St links Glendale and the USC/Expo Park area every 12 minutes (pre-NextGen every 15-20 minutes). This line has a 91.2% recovery on weekdays, even after accounting for the ridership of the nearby Glendale/Silver Lake Line 201 that was discontinued as part of the NextGen Bus Plan. Saturday was 92.4% recovery with 12-minute frequency in place of the previous 18-minute, though Sunday was lower at 84.6% recovery with 15-minute in place of the previous 18-minute service. This line has recovered strongly overall.
- Three other Tier 2 lines, Line 94 (San Fernando Rd North Hollywood), Line 206 (Normandie Av), and Line 260 (Atlantic Bl) had weekday recovery rates of slightly above average at 79.0%, 79.2%, and 80.4% respectively. Lines 94 and 260 were both significantly restructured, which may in part impact their lower overall recovery:

- Line 94 offers 15-minute service (about twice as often as it previously ran) between Downtown LA, Glendale, Burbank, and North Hollywood, with service now operating through the heart of downtown Glendale, and the extension to North Hollywood replacing a former lower frequency line. The Line 94 group had stronger weekend recovery, with 104.0% Saturday and 112.9% Sunday. Other lines such as Line 92 discussed in the NextGen Tier 3 and 4 Lines section are likely gaining from the Line 94 changes.
- Line 260 also offers 12-minute peak and 15-minute midday service, an increase over its previous 17-minute peak and 21-minute midday weekday service. Its weekend recovery was also below average, with 85.1% Saturday and 87.5% Sunday in response to continued 20-minute service frequency. The northern portion of this line was set up as a separate Line 660 linking Pasadena and Altadena, and this is taken into account in the ridership recovery rate.
- Line 206 in contrast to Lines 94 and 260 above did not have any change of routing. It now offers consistent 15-minute service all day weekdays, improving on the 20-minute weekday midday service previously offered. Line 206 weekend recovery was below average, with 84.2% Saturday and 88.0% Sunday, with a smaller frequency improvement (22 minute to 20 minute).
- Two other Tier 2 lines were just below the system average: Lines 224 (Lankershim) and 115 (Manchester-Firestone).
- Line 224 was part of an overall line group that saw significant restructuring to focus on the North Hollywood and Sylmar areas. It had a stronger weekend recovery at 99.1% Saturday and 109.7% Sunday. Line 224 received weekday 15-minute midday service and 20-minute weekend service, improved over the 19-minute and 24-minute frequencies previously provided.
- Compared to Line 224 above, Line 115 did not have significant route changes but did receive a 12-minute weekday peak frequency, a slight increase over the previous 14-minute service (off-peak frequencies did not change). Line 115 weekend recovery was also slightly below average with 85.6% Saturday and 90.6% Sunday.

Five other lines/line groups in NextGen frequency Tier 2 had below system average ridership recovery:

- Performance ranged from a high of 73.9% recovery for Line 81 (Figueroa St – Saturday 82.9%, Sunday 92.4%) to a low of 61% for Line 10/48 (Melrose Av/Main-San Pedro, Saturday 59.5%, Sunday 70.9%).
- Other lines in this group included
 - Line 76 on Valley Bl (68.9% weekday, 68.0% Saturday, 71.7% Sunday),
 - Line 14/37 on Beverly Bl/W. Adams (65.6% weekday, 78.8% Saturday, 79.8% Sunday) and

- Line 35/38 Washington Bl/W. Jefferson (62.1% weekday, 63.9% Saturday, 72.6% Sunday).

The common aspect of these lines is that they focus on downtown LA as their key destination, with its recovery helping determine the success of these lines, even on weekends. There may be marketing opportunities. Unlikely the other lines in this group, Line 81 also was part of a significant and complex line restructuring in Northeast LA, an area served by the A Line which now utilizes the new Regional Connector through downtown LA. This change included a new direct link from Highland Park to East Hollywood (Line 182). This area may benefit from the marketing of both A Line light rail and the NextGen Bus Plan's new Line 81 and 182 services.

NextGen Tier 3 and 4 Lines

These services operate every 20-30 minutes (Tier 3) or 40-60 minutes (Tier 4), providing coverage for communities and on corridors with generally lower ridership levels.

There were a few high performers in terms of ridership recovery. Strongest in this group was Line 235/236 serving Balboa Bl (107.3% recovery weekdays, 107.6% Saturday, 101.8% Sunday) which appears to have responded well to the 30-minute combined service now offered compared to the previous 40-60 minute service weekdays, though weekend recovery was also strong with just 60-minute service. Line 236 also now offers a more direct connection to Sylmar, and Line 235 service was retained weekdays in Granada Hills which is also contributing to the recovery. Other examples include:

- Rosemead Bl Line 266 service between Lakewood and Pasadena (103.8% recovery weekdays, 108.7% Saturday, 119.0% Sunday) recovery is likely due to improvement to 20-minute weekday frequency from the former 24-33-minute service, and 30-minute weekend service instead of the previous 43-48 minutes.
- Line 344 Rancho Palos Verdes service (103.2% recovery weekday, 92.9% Saturday, 103.6% Sunday) is likely a more general recovery as the service levels and route were unchanged for this line from pre-NextGen.
- Line 125 on Rosecrans Av between the South Bay and Norwalk (100.9% recovery weekdays, 86.9% Saturday, 107.0% Sunday), similar to Line 266 above, is likely benefiting from the all-day 20-minute service improved from the former 27-33-minute frequency. The pre-NextGen Sunday 40-minute service was also improved to every 30 minutes with a strong ridership recovery.
- Express Line 577 between El Monte Station and Long Beach VA (95.9% recovery, weekday-only service) may be benefitting from recent high gas prices as well as the improved 30-minute peak service (previously 48 minutes on average).
- Line 202 serving Willowbrook Av in the high EFC Compton area saw 95.98% recovery (service only runs weekdays), a result of shortening the line away from low usage industrial areas and transferring the savings to offer weekday off-peak service (this line previously only ran weekday peak periods). However, even with the strong ridership recovery, this line has low overall ridership and productivity.

- Line 92 between downtown LA and Sylmar via Glenoaks BI (95.6% recovery weekday, 86.6% Saturday, 100.0% Sunday) is likely benefitting from now being the primary line between downtown LA and Sylmar, as Line 94 which offered a similar link was redirected to North Hollywood to better match regional travel patterns. Line 92 now offers consistent 20-minute service on daytime weekdays and 30-minute weekends, with most trips operating the full line beyond downtown Burbank to Sylmar. This is an improvement on the previous service that was closer to every 30 minutes weekdays and Saturdays, and every 42 minutes Sundays.
- Lines 242/243 (Tampa/Winnetka) in the northwest San Fernando Valley had 93.2% recovery weekdays and 121.2% Saturdays (service was newly added Sundays). These lines now operate every 40 minutes all day weekday and weekend (previously every 48-60 minutes weekday and 60-minute Saturday). This result is even more interesting when taking into account the north end of these lines above Devonshire St to Porter Ranch was replaced by Metro Micro service.
- Line 611 Huntington Park Shuttle (91.6% recovery weekdays, 95.9% Saturday, 99.1% Sunday) continues to run hourly, so appears to be general ridership recovery not attributable to a NextGen change.
- The Line 232 route between LAX and Long Beach via Sepulveda BI and Pacific Coast Highway (90.3% recovery weekdays, 84.3% Saturday, 91.9% Sunday) was not changed but was improved to 15-minute peak service in place of the previous 22-minute peak service weekday.

Three other Tier 4 services exceeded the system average ridership recovery, with rates between 83-84%, without any significant route or frequency changes. There are a notable number of Tier 4 lines with hourly frequency and low ridership recovery rates below 60% weekdays. These include:

- Line 601 Warner Center Shuttle (30.0% recovery weekdays, 31.5% Saturday, 37.9% Sunday) operates in a western San Fernando Valley office park with a largely closed retail mall. This service will need further review due to its very low productivity. This office park has been significantly impacted by post-COVID telecommute work patterns.
- Line 177 between Pasadena and the Jet Propulsion Lab has also seen a low ridership recovery (56.8%, only runs weekdays) likely for the same work pattern changes associated with more telecommuting.

Key aspects of other Tier 4 lines with low ridership recovery include low frequency (mostly 40-60 minute), in most cases no route change, and a lower percentage of route miles serving EFCs. Examples include:

- Line 161 (Canoga Station – Thousand Oaks) with 66.1% recovery weekdays, 74.1% Saturday, but a high 112.8% Sunday recovery rate).
- Line 602 (Westwood/UCLA - Pacific Palisades) with 58.9% recovery weekdays, but higher weekend recovery at 96.4% Saturday, 103.3% Sunday.

- Line 134 (Santa Monica – Malibu) with 63.3% recovery weekdays, 78.1% Saturday, 93.3% Sunday, so much higher recovery on weekends.
- Lines 96 (Riverside Dr) with 48.9% recovery weekdays, 51.2% Saturday, 71.2% Sunday, consistently low. This line was cut back to the north end of downtown LA near Union Station.
- Line 158 (Plummer/Woodman) with 61.6% recovery weekdays, 78.0% Saturday, 74.4% Sunday.
- Line 167 (Devonshire-Coldwater Canyon) with 62.4% recovery weekdays, 65.9% Saturday, 72.1% Sunday).
- Line 218 (Studio City – Beverly Hills) with 56.0% recovery weekday, 71.6% Saturday, 61.3% Sunday.
- Line 265 (Paramount Bl) with 66.6% recovery weekdays, 75.1% Saturday, 75.7% Sunday.

A small number of Tier 4 low frequency lines with a higher percentage of route miles serving EFCs areas show some of the lowest ridership recovery, suggesting their low frequency is the main limitation for ridership recovery among the above lines and the examples below:

- Line 62 (Telegraph Rd) with 71.6% recovery weekday, 70.3% Saturday, and 76.9% Sunday was not changed significantly in route or frequency other than the straightening of the line in downtown Norwalk. This line serves downtown LA and is likely reduced due to less activity there.
- Line 102 (La Tijera-Exposition Bl) with 53.0% recovery weekdays, 59.6% Saturday, 61.7% Sunday, is low likely due to the hourly service level now offered, though over 50% of line miles are in EFCs.
- Line 209 (Van Ness Av) with 38.1% recovery, only runs weekdays and has hourly frequency and was significantly shortened. It was originally proposed for elimination. Over 50% of its line miles in EFCs.
- Lines 211/215 (Inglewood Av/Prairie Av – 55.3% recovery) only offers peak hour weekday service. Other than some well-used trips of school student ridership, these lines have low productivity.
- Line 665 (City Terrace – CSULA Shuttle) in a higher EFC area had a low 67.6% recovery weekdays, likely related to worker and student travel to CSULA. It had 133.7% recovery Saturday, and 183.9% Sunday, with weekend ridership results due to the expanded span of service.

There may be value in testing 30-minute service on the most productive of the above Tier 4 lines to determine the value of such investment in terms of ridership growth.

There are a small number of freeway express bus lines that warrant comment:

- Line 460 Disneyland – Norwalk – Downtown LA Express had ridership recovery

of 74.4% weekdays, 78.7% Saturday, 81.8% Sunday with no major changes in service levels or routing. This line may require more promotion coming out of the pandemic, especially with recent increases in gas prices.

- Line 501 Freeway Express between Pasadena, Glendale, Burbank, and North Hollywood has ridership recovery of 68.1% weekday, but 128.0% Saturday, and 139.8% Sunday. This line was modified to better serve the heart of downtown Glendale as part of NextGen Bus Plan but may be hampered in recovery by more telecommuting weekdays. Line 501 appears to have attracted significant new weekend ridership for retail and entertainment trips to places like downtown Glendale.

Pasadena/Altadena and Metro Micro

The Tier 3 and 4 lines in the Pasadena/Altadena area went through a significant restructuring. The area also now has one of Metro's busiest Micro Transit zones which replaced some fixed route service such as lines through Sierra Madre. The recovery rate here is a low 56.5% overall weekdays, but a higher 90.3% Saturday, and 97.2% for Sunday. This area requires more review in conjunction with the review of Metro Micro. It includes a mix of lines such as 487/489 freeway express lines to downtown LA which are impacted, especially weekdays, by downtown LA economic recovery, and the truncation of part of Line 487 through Sierra Madre in conjunction with the Metro Micro launch. Weekday ridership recovery may also be impacted by economic recovery and changes in office and other jobs in Pasadena, similar to downtown LA.

Bus Speed and Reliability:

As part of the NextGen Bus Plan, over 40 miles of bus priority lanes have been implemented across Metro's service area. In 2020-2021, the primary focus was on new bus lanes in downtown LA on key streets serving multiple Metro bus lines such as Flower, Figueroa, 5th, 6th, Grand, Olive, and Aliso Sts. This was followed by Alvarado St (Line 2) and most recently in 2023 by Venice Bl, La Brea Av, and Sepulveda Bl. Data shows speed improvements as well as the perception of such speed improvements by riders in post-implementation surveys. These lanes will help support ridership recovery through increasing service reliability and decreasing bus travel times. They will also be complemented by additional bus priority lanes such as on Florence Av plus expanded transit signal priority and all door boarding programs during 2024.