

Board Report

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Agenda Number: 30.

OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE APRIL 18, 2024

SUBJECT: NEXTGEN RIDERSHIP UPDATE - Q4 CY2023

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE the NextGen Bus Ridership Update.

ISSUE

This report provides an assessment of Metro bus system ridership for the fourth quarter of calendar year 2023 (Q4 CY2023, including the months October - December 2023) compared to ridership from the same period of 2019 (pre-pandemic/pre-NextGen Bus Plan). Ridership changes are examined by the day type (weekday, Saturday, Sunday), area, Equity Focus Communities (EFCs)/non-EFCs, time period, line/line group, and changes in average passenger trip length.

As of Q4 CY2023, average daily bus system ridership continues to show growth:

- Weekday ridership was at 83.4% (up from 78.6% in September 2023)
- Saturday ridership was at 90.3% (up from 86.0% in September 2023)
- Sunday ridership was at 99.97% (up from 92.4% in September 2023).

The San Fernando Valley continues to show the highest ridership recovery in Q4 CY2023 compared to the four other service areas, at 89.4% of pre-pandemic Q4 CY2019 levels weekdays, 101.5% Saturday, and 113.4% Sunday, benefitting from NextGen Bus Plan investments in this area.

The proportion of boardings in Equity Focus Areas remains around 1% above pre-pandemic levels.

Midday weekday Q4 CY2023 ridership recovery was at 85% of pre-pandemic levels at exceeding both AM peak (73%) and PM peak (81%) recovery.

There were 11 weekday (up from 6 in September 2023), 18 Saturday (up from 14), and 37 Sunday (up from 24) lines/line groups exceeding their pre-COVID Q4 CY2019 ridership numbers in Q4 CY2023.

BACKGROUND

- The NextGen Bus Plan was adopted by the Metro Board in October 2020, and was implemented in three phases between December 2020 and December 2021.
- The plan was designed to create a fast frequent, and reliable Metro bus system.
- While the NextGen Bus Plan was fully implemented by the end of 2021, the national operator shortage required Metro to temporarily reduce service by 10% in February 2022 to stabilize service reliability.
- Full restoration of NextGen Bus Plan service levels was completed in phases by December 2022.
- Metro continued to operate the full NextGen bus service levels through 2023 with improved reliability thanks to full bus operator staffing that was achieved by August 2023.

The NextGen Bus Plan was designed to be rolled out in two phases: Reconnect and Transit First. Reconnect is the initial phase set to restructure the existing network. Transit First is an additional phase that maximizes the plan's effectiveness through strategic, quick-build capital investments to improve bus speeds, and direct saved revenue service hours to bus frequency improvements.

The implementation of the NextGen Bus Plan Reconnect phase established a set of service frequency tiers for Metro's 120 bus lines, summarized in Table 1. Tiers 1 and 2 lines are all-day, high-frequency services designed to support ridership growth across the NextGen network and to help ridership recover after the drop caused by the pandemic. Tier 3 and 4 lines ensure neighborhood connectivity and coverage throughout the service area.

Service Type	Peak Weekday	Midday Weekday	Evening	Weekend	Number of Lines
Core Network (Tier 1)	5-10	5-10	10-15	7.5-15	31
Convenience Network (Tier 2)	12-15	12-15	20-30	15-d30	24
Connectivity Network (Tier 3)	20-30	20-30	30-60	30-60	26
Community Network (Tier 4)	40-60	40-60	60	60	39

Table 1: NextGen Frequency Tiers as of Dec 2022

When fully implemented, the Transit First scenario was expected to achieve a 15-20% increase in ridership. To date, 51.7 miles of new bus priority lanes have been implemented. Two additional corridors (Florence Av and Roscoe BI - 31.2 lane miles) will be delivered before the end of FY24, and 15 additional miles in planning (Vermont Av, Santa Monica BI). Transit signal priority and all-door boarding are other speed and reliability initiatives that should begin implementation in late 2024, with ongoing optimization of bus stops and terminals.

Metro bus ridership continues to recover towards pre-COVID levels. This quarterly report is intended to track progress towards the ridership growth expected from the NextGen Bus Plan, including growth from the implementation of the range of bus speed and reliability improvements planned as part of the Transit First scenario.

DISCUSSION

In examining ridership results to date, it is essential to note the impact of the COVID-19 pandemic beginning in March 2020, with the significant effects on both Metro bus service levels and ridership, but also to societal changes such as increased telecommuting coming out of the pandemic.

The attachments to this report provide detailed bus ridership data on systemwide and line/line group level for a typical weekday, Saturday, and Sunday observed between Q4 CY2019 (pre-pandemic and pre-NextGen) and the same period Q4 CY2023. The time period of this analysis tracks the significant drop in ridership at the beginning of the COVID pandemic in early 2020 and the subsequent recovery in ridership and service restoration in 2021 based on the implementation of the NextGen Bus Plan. A more detailed analysis is provided in Attachment A, which this report summarizes.

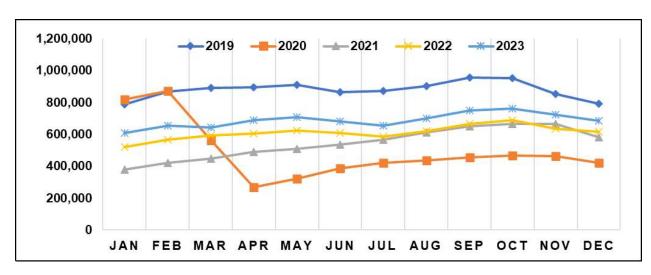
Ridership Trends from 2020 to 2023

Complete restoration of bus service by December 2022, combined with more reliable service delivery and new pilot programs such as GoPass for students, have contributed to much stronger ridership recovery in 2023. This reinforces the importance of frequent and reliable service delivery in attracting and retaining ridership.

As of Q4 CY2023, average daily ridership continues to show growth:

- Weekday bus system ridership recovery compared to Q4 CY2019 pre-COVID bus average daily ridership levels was at 83.4% overall (up from 78.6% in September 2023)
- Saturday ridership was at 90.3% (up from 86.0% in September 2023)
- Sunday ridership was at 99.97% (up from 92.4% in September 2023).

In September 2023, average weekday bus ridership exceeded 750,000 for the first time since the pandemic, and in October 2023, average weekday ridership reached 761,757, the highest monthly average of 2023. (Attachment A Chart 6 - Average Weekday Ridership 2019 - 2023)



Ridership by Service Area

Ridership recovery was examined for each of the five Metro Service Council areas. The San Fernando Valley shows the highest rate of weekday ridership recovery, at 89.4% in Q4 CY2023 (exceeding the 84.3% in September 2023). This recovery rate, in part, shows a strong response to NextGen Bus Plan improvements that created a network of ten local lines and the Metro G Line BRT with 10-15 minute frequencies all day on weekdays across the San Fernando Valley. The NextGen changes improved these lines, especially during off-peak hours when many of these lines had frequencies ranging from 20 to 30 minutes. Several lines in the east Valley were also restructured to better match travel patterns focused on North Hollywood.

The four other Service Council areas weekday ridership recovery rates was as follows:

- San Gabriel Valley: 78.7% (up from 75.2% in September 2023)
- Gateway Cities: 79.0% (up from 75.9% in September 2023)
- Westside 80.1% (up from 76.6% in September 2023)
- South Bay Cities: 82.4% (up from 77.6% in September 2023)

Similar patterns were seen for growth in average Saturday ridership with San Fernando Valley 101.5%, up from 96.9% in September 2023 and other areas 78.6 - 87.3% (up from 76.8 - 82.1% in September 2023).

Average Sunday ridership also increased, with San Fernando Valley 113.4% up from 106.9% in September 2023, and other areas 85.6 to 99.0% (up from 81.8 - 89.7%).

(See also Attachment A, Charts 10-12, Average Weekday, Saturday, and Sunday Ridership Recovery by Service Area Q4 CY2019 - Q4 CY2023)

Ridership by Time Period

As of Q4 CY2023, AM peak period ridership remains the least recovered at 73% below 2019 levels, but the PM peak recovery is 81% higher. By contrast, the base (midday), late evening, and Owl periods share of weekday ridership had both the least decline in 2020 due to COVID and the most recovered compared to 2019 (pre-pandemic) at 85%, 89%, and 96% respectively. This suggests that fewer traditional office workers commute on transit in the morning peak. The increase in midday share of weekday ridership is consistent with the intent of the NextGen Bus Plan to grow ridership on off-peak weekdays. Weekend ridership recovery by time of day has been similar as of 2023, with early AM and Owl showing over 100% recovered, though these are small parts of overall daily

ridership. (Attachment A, Charts 14- 16: Weekday, Saturday, and Sunday Ridership by Time Period Q4 CY2019 - Q4 CY2023)

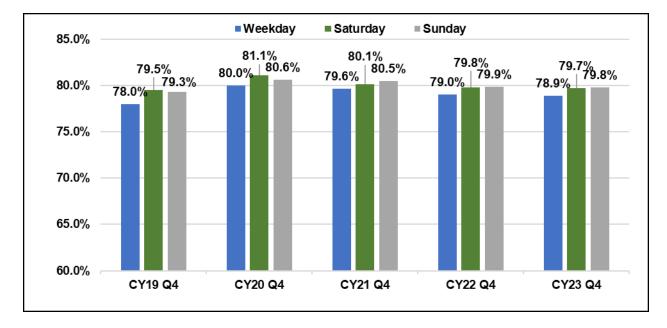
Ridership by Equity Focused Communities (EFC)

Q4 CY2023 average daily boardings in EFCs increased by up to 2% on weekdays and around 1.5%

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on weekends during early years of COVID compared to pre-COVID. By Q4 CY 2023, EFC boardings were still up around 1% higher than pre-COVID weekdays and somewhat less increased on weekends. The essential trips made in the early part of COVID are more likely to have been made by people who relied on transit to access essential jobs and services. The NextGen Bus Plan prioritized investing in EFCs, and that has likely also contributed to the 1% increase in the share of boardings that will continue to be seen in EFCs in 2023.

(See also Attachment A, Chart 13: Percentage of Total Boardings in EFCs by Day Type: Q4 CY2019 through Q4 CY2023)



Equity Focus Communities where ridership recovery has been strongest (over 95% recovered weekdays and weekends) include Vermont Av Local Line 204, Central Av Line 53, Slauson Av Line 108 through South LA, Soto St Line 251 through East LA and Huntington Park, and Van Nuys BI Line 233 in the San Fernando Valley, all of which operate 10 minute or better service all day weekdays as a result of the NextGen Bus Plan implementation.

Metro has deployed the full annualized 7 million revenue service hours planned under the NextGen Bus Plan, with service frequencies specifically targeting EFCs. Ridership recovery has been weaker on those lines serving downtown LA, which have seen reductions in daily office worker attendance due to increased telecommuting and associated impacts to service industry jobs, even with NextGen frequency improvements (examples include Broadway Line 45, Avalon Bl Line 51 in South LA, W Olympic Bl Line 28, and Pico Bl Line 30 on the inner westside). Metro will continue to monitor ridership recovery on each line to determine if adjustments to the NextGen Bus Plan are needed to address impacts coming out of COVID.

Average Trip Length

Metro Bus system average passenger (unlinked) trip length dropped from 4.2 miles to just below 3.0 miles in the early pandemic 2020-2021. This trend was likely due to a significant reduction in long-

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distance commute trips. As ridership recovered in 2022, average passenger trip lengths have increased to and remained through 2023 at around 3.5 miles, well below pre-COVID lengths. This change was expected as COVID has transitioned trip-making to shorter trips, a market identified through the NextGen Bus study as a significant opportunity to grow ridership with more frequent local bus lines serving shorter distance trips. This change in average passenger trip length is seen for weekdays and weekends. (Attachment A, Chart 17 Average Passenger Trip Length)

Ridership and Productivity by Service Tiers and Lines

Ridership was assessed based on individual lines or by groups of lines. In contrast, a NextGen Bus Plan change involved restructuring a group of lines to provide a fair comparison of the changes in ridership. The comparison was based on average Q4 CY2023 versus Q4 CY2019 ridership for each day type (weekday, Saturday, Sunday). While there are 120 Metro bus lines, ridership recovery rates were based on 82 weekdays, 75 on Saturday, and 75 on Sunday line/line groups. Detailed data is included in Attachments B, C, and D, respectively.

The overall system ridership recovery rate in Q4 CY2023 was 83.4% for weekdays, 90.3% for Saturdays, and 99.97% for Sundays compared to Q4 CY2019 as a pre-COVID baseline. There were 11 weekday, 18 Saturday, and 37 Sunday lines/line groups exceeding their pre-COVID Q4 CY2019 ridership numbers in Q4 CY2023. The review focused on lines showing above and below system average ridership recovery. The review also looked at lines/line groups for the four NextGen Bus Plan Tiers.

The high number of Tier 1 (10-minute or better weekday service) and Tier 2 (15-minute or better weekday service) lines/line groups (46% of all lines) with above-average recovery suggests that the improved frequencies implemented through the NextGen Bus Plan are a vital component of more robust ridership recovery:

- Weekday: 19-Tier 1 and 11-Tier 2 lines/line groups compared to only 6-Tier 3, 8-Tier four lines/line groups.
- Saturday: 15-Tier 1 and 9-Tier 2 lines/line groups compared to only 9-Tier 3, 6-Tier 4 lines/line groups
- Sunday: 14-Tier 1, 10-Tier 2, compared to only 8-Tier 3, 5-Tier four lines/line groups.

The Tier 1 and Tier 2 higher frequencies continue to show stronger recovery; some of these lines also include route changes to better connect riders to key destinations.

Common to some of the Tier 1 and Tier 2 lines with less ridership recovery was that they serve downtown LA. This location has seen reduced daily trip-making for work due to factors such as increased telecommuting. Some of these lines were also restructured to move riders to other lines. An opportunity exists to further promote downtown LA travel on the Metro bus network for work, as well as leisure and event activities.

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This same pattern was noted for the G and J Line BRT services, with notably lower ridership recovery, especially on weekdays. Before COVID, these lines had higher usage by discretionary riders who appear now in 2023 to not be traveling as much for work in downtown LA or other locations such as Van Nuys or Warner Center. Also notable were ridership changes in the Vermont corridor, where frequent Local and Rapid bus lines have continued to operate. The ridership recovery rate for the corridor overall was 84.0% weekdays (up from 77.4% in September 2023), with the Local Line 204 having a recovery rate of 103.5% (up from 95.2% in September 2023). By comparison, the Vermont Rapid Line 754 serves a very high EFC corridor with the same frequency as the local line but on a limited stop format and had a ridership recovery rate of 64.6% (up from 59.0% in September). Line 754 saw notably high cancellation rates in 2022, which may have seen people divert to using the local bus. The same patterns were seen for Saturday (Local 114.8%; Rapid 61.2%) and Sunday (Local 116.0%; Rapid 75.3%).

As mentioned, the performance of the largely Tier 2 network of lines in the San Fernando Valley is notable for their strong ridership recovery as a group. However, other Tier 2 lines across the Metro service area had high ridership recovery rates.

Several Tier 3 lines had frequency improvements that generated high ridership recovery. By comparison, many Tier 4 lines with low ridership recovery were commonly low frequency (40-60 minute frequency), in most cases with no NextGen route change and a lower percentage of route miles serving EFCs. It will be essential to test the best performers among these lines to upgrade to a 30-minute service to see what impact that might have on their ridership recovery.

Data also showed consistently that increased service hours implemented through the NextGen Bus Plan for many lines or line groups generated higher ridership recovery and better productivity compared to lines that saw stable or fewer service hours compared to pre-NextGen. This suggests the NextGen Bus Plan changes have successfully generated a good return from service hours reinvested in the NextGen frequent network.

Speed and Reliability

As part of the NextGen Bus Plan, over 50 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. This was followed by Alvarado St, and most recently in 2023 by Venice Bl, La Brea Av, and Sepulveda Bl. Data shows speed improvements and the positive perception of such speed improvements by riders in post-implementation surveys. Results include a two to three minute reduction in end to end travel times throughout the day weekdays from the Sepulveda Bl bus lanes, and one to two minute time savings weekends. Savings of up to a minute were seen from the peak period weekday La Brea bus lanes These bus priority lanes will support ridership recovery by 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.

More details for line-level ridership can be found in a report (Attachment A) and data tables (Attachments B, C, D). In general, this analysis shows that the NextGen Bus Plan's focus on a fast,

frequent, and reliable network supports higher ridership recovery. These ridership recovery results will continue to be tracked and reported on as further investments in NextGen bus speed and reliability improvements occur, including new bus lanes, expanded transit signal priority, and all door boarding. Staff will then review ridership for Q1 CY2024 as the basis for the following report to be presented in June 2024.

EQUITY PLATFORM

The NextGen Bus Plan was developed with an equity methodology, placing more service in Equity Focus Communities where transit was more likely to provide key mobility options for residents. This analysis shows that a greater proportion of ridership has occurred among EFC residents since the NextGen changes.

A central goal of the intent of the NextGen Bus Plan is to provide improved transit service frequencies, travel times, and reliability improvements to Metro system riders, of which 8 in 10 are Black, Indigenous, and/or other People of Color (BIPOC), nearly 9 in 10 live in households with total annual earnings below \$50,000, and nearly 6 in 10 are below the poverty line. The NextGen Bus Plan system provides the highest service levels on Metro bus lines that serve Metro's EFCs. This includes improved off-peak frequencies that have helped essential workers and essential trips, with an increased share of off-peak ridership noted during the height of the pandemic. Staff will continue to monitor ridership in EFC and Non-EFC areas to ensure NextGen benefits for marginalized groups.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommendation supports strategic plan goals:

Goal #1: Provide high-quality mobility options that enable people to spend less time traveling. Improving the speed and reliability of the bus network will reduce transit travel times and improve competitiveness with other transportation options.

Goal #2: Deliver outstanding trip experiences for all transportation system users. These initiatives help to move more people within the same street capacity, where currently transit users suffer service delays and reliability issues because of single-occupant drivers.

Goal #3: Enhance communities and lives through mobility and access to opportunity. With faster transit service and improved reliability, residents have increased access to education and employment, with greater confidence that they will reach their destination on time.

NEXT STEPS

The NextGen Bus Plan network ridership will continue to be monitored through the remainder of 2024 as Metro continues to deliver full service. The agency will continue to hire new bus operators to remain fully staffed and to reliably deliver full service daily. Metro will continue implementing improvements in bus speed and reliability, such as new bus lanes. Another update is planned for the Board in June 2024, tracking the detailed progress on ridership recovery during Q1 CY2024.

ATTACHMENTS

Attachment A - NextGen Ridership Analysis Q4 CY2023

- Attachment B Weekday Ridership Recovery Comparison by Line and Line Group, Q4 CY2023 to Q4 CY2019
- Attachment C Saturday Ridership Recovery Comparison by Line and Line Group, Q4 CY2023 to Q4 CY2019
- Attachment D Sunday Ridership Recovery Comparison by Line and Line Group, Q4 CY2023 to Q4 CY2019

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