



**Board Report**

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**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE  
NOVEMBER 16, 2023**

**SUBJECT: NEXTGEN RIDERSHIP UPDATE**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE the NextGen Bus Ridership Update.

**ISSUE**

This report provides an assessment of Metro bus system ridership as of September 2023 by comparing ridership from 2019 (pre-pandemic/pre-NextGen Bus Plan) through mid-2023. Ridership changes are examined by the day of the week, area, Equity Focus Communities (EFCs)/non-EFCs, time period, line/line group, and changes in average passenger trip length.

The NextGen Bus Plan was approved by Metro’s five Regional Service Councils in September 2020 and adopted by the Metro Board in October 2020. The Plan was implemented in three phases between December 2020 and December 2021 to create a network of high-frequency bus lines.

The national operator shortage required Metro to temporarily reduce service by 10% in February 2022 to stabilize service reliability. However, full restoration of NextGen Bus Plan service levels was completed in phases by December 2022. Metro continues to operate the full NextGen bus service levels, improving reliability, and full bus operator staffing was achieved by August 2023, making this an appropriate time to review ridership.

**BACKGROUND**

The NextGen Bus Study began in 2018 as a reimagining of the Metro bus system to make it more competitive in the overall travel market and reverse the bus ridership decline that occurred over the previous decade. The study identified the need to create a fast, frequent, reliable bus system to take people where and when they need to go. The resulting NextGen Bus Plan was developed based on both robust data analysis and public engagement.

The NextGen Bus Plan was scheduled to be rolled out in two phases; an initial phase (Reconnect) to restructure the existing network, with an additional phase (Transit First) maximizing the Plan’s effectiveness through strategic, quick-build capital investments to improve bus speeds with a goal of directing saved revenue service hours to bus frequency improvements. These two NextGen Bus Plan

phases are outlined below:

**Reconnect** - Routes and schedules were redesigned in the Reconnect phase to attract trips where and when there is the greatest market potential. Lessons learned through the NextGen Bus Plan analysis and outreach presented a path forward for reinventing the bus network, including:

- Maintaining coverage as much as possible by minimizing discontinued segments, coordinating with municipal operators, and introducing MicroTransit, all while more efficiently linking people to where they want to go.
- Creating a competitive transit network that reduces overall travel time by optimizing all components of the trip, including time spent accessing the bus stop, waiting, and riding.
- Building a competitive and attractive network by investing in fast, frequent, and reliable service, especially during the midday, evenings, and weekends when the greatest opportunity to grow ridership exists.
- Integrating Metro's Equity Framework as reflected in the service changes that focus resources in Metro's EFCs where the need for high-quality transit service is greatest.

When fully implemented, the Reconnect Scenario was expected to achieve a 5-10% increase in ridership. The majority of planned route changes in this phase were implemented in three phases between December 2020 and December 2021.

**Transit First** - This phase builds onto Reconnect by adding capital infrastructure to support the new service plan, including:

- **Bus Speed and Reliability:** Implementing speed and reliability improvements such as bus lanes where appropriate, signal priority, optimizing bus stop spacing, and implementing all-door boarding. By speeding up the bus system, more service can be provided within the same number of service hours while making bus service more competitive.
- **Customer Experience:** Investing in improving the comfort and safety of the wait environment, especially at major transfer points. This addresses a major barrier to attracting more potential customers to transit.

When fully implemented, the Transit First scenario is expected to achieve a 15-20% increase in ridership. As of October 2023, 51 miles of bus priority lanes are in operation with 100+ total miles planned as part of the NextGen Bus Plan, together with other speed and reliability improvements such as transit signal priority coverage along the routes of Metro's most frequent bus lines, and bus stop and terminal optimization.

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. The NextGen Bus Plan as implemented in

December 2021 (and restored by December 2022) represents the completion of the Reconnect phase of the plan.

**Table 1: NextGen Frequency Tiers as of Dec 2022**

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

As part of the Transit First scenario, bus priority measures such as new bus lanes to reduce travel times and improve reliability continue to be implemented. Progress updates on the NextGen Bus Plan Speed and Reliability Program are provided to the Metro Board at key milestones. To date, 51.7 miles of new bus priority lanes have been implemented. These include 5<sup>th</sup>, 6<sup>th</sup>, Grand, Olive, Figueroa, Flower, Spring, Cesar/Chavez/Sunset, two Aliso/Alameda Streets in downtown Los Angeles, as well as portions of Alvarado St, Venice Bl, Wilshire Bl, La Brea Av, Sepulveda Bl, and Ventura Bl, with two additional corridors (Florence Av and Roscoe Bl - 31.2 lane miles) due to be delivered before the end of FY24, and 15 additional miles in planning (Vermont Av, Santa Monica Bl). 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. These initiatives, together with Customer Experience improvements, are designed to further enhance the service frequency improvements.

The modeled results of the NextGen Bus Plan, compared to the pre-NextGen network (baseline), forecasted significant benefits. In particular, convenient access to the most frequent bus services increased substantially, with an overall increase of 112.4% for population and 106.8% for households within 0.25 miles of the most frequent service (NextGen Tier 1 lines with 10-minute or better service) weekdays. Especially significant increases were achieved for midday weekdays with +600-700% increases in households and population (including EFCs) with easy access to a higher frequency (10-minute or better) weekday bus service. Access to jobs showed a +350% increase. Off-peak travel was a key market segment identified as having significant ridership growth potential in the NextGen Bus Study. Even peak periods showed a 50-65% increase in access for households and populations and a 30-40% increase in access to jobs with 10-minute or better bus services.

Forecasted competitiveness based on all trips made (not just transit) that could now be made on the Reconnect network as implemented in December 2021 also improved. Competitive trips were defined as those in which transit travel times were no more than 2.5 times the travel times for private autos. This analysis showed the share of all transit-competitive trips increasing by 2.4% from 22.1% to 24.5%. The share of transit competitive trips increased more for trips for EFCs (+3.1%) than for non-EFCs (+2.1%). The gains were even higher (+4.7%) for trips already being made on transit that were no more than 2.5 times the private auto travel time, which should allow more existing transit trips to be retained by the Metro bus system. This market segment increased more for trips for EFCs

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(+5.1%) versus non-EFCs (+4.1%), suggesting a large portion of the Plan's benefits are occurring in EFCs where more people are reliant on transit for their mobility. Travel times for all trips (not just transit trips) that could be completed on transit in 30 minutes or less increased by 13% with the NextGen Reconnect network. Existing transit trips that could now be completed in 30 minutes or less increased by 20%. All of these results should increase with the implementation of additional bus speed and reliability improvements as part of NextGen Bus Plan's Transit First scenario.

The NextGen Bus Plan as implemented in December 2021, was also estimated to increase the number of key destinations within 0.25-mile access to the 10-minute or better lines compared to the pre-NextGen network. Increased access to facilities for health care (+10%), education (+16%), and grocery stores (+19%) on the 10-minute or better frequency Metro bus lines shows the NextGen Bus Network improves access to many key destinations.

## **DISCUSSION**

Comparing travel using the baseline pre-NextGen network to how those trips could be made using the NextGen Reconnect network shows the potential of the NextGen Bus Plan as implemented to increase ridership. This section of the report discusses actual ridership changes as a result of NextGen. In examining ridership results to date, it is important to note the impact of the COVID-19 pandemic beginning in March 2020, with the significant impacts to 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 data on systemwide and line level ridership for a typical weekday, Saturday, and Sunday observed between 2019 (pre-pandemic and pre-NextGen) and 2023. With full operator staffing and reliable service delivery being achieved in 2023, September 2023 is an ideal time to review ridership. For this report, bus ridership changes are examined by the day of the week, area, EFCs/non-EFCs, time-period, and line/line group, as well as changes in average passenger trip length. The time period of this analysis tracks the large 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 Trend from 2020 to 2023**

During the pandemic's Stay-at-Home orders, ridership declined sharply in 2020, with trip lengths shortening because many people were not commuting as much and traveling close to home. Non-peak ridership was more resilient as those trips were largely composed of essential workers and/or essential trips. As people adjusted to the pandemic, ridership grew quickly in 2021, as did overall travel (as measured from cell phone location data).

While transit and travel demand as a whole grew less significantly in 2022, it spiked above 2019 levels during the 3 PM hour in 2022 though overall travel demand in 2022 was still below 2019 levels. This may have been caused by people making more short distance trips to run errands during the middle of the day vs. their typical longer commutes home during the PM peaks. Despite the reintroduction of fares in January 2022 and the temporary bus service reduction in February 2022,

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ridership growth did not seem to slow during the first half of 2022. A big push to enroll low-income riders in the LIFE (Low Income Fare is Easy) program for discounted fares at the time fare collection was reinstated on buses may have helped to maintain the growth in ridership. Ridership recovery was slower in the second half of 2022, which may have been a result of the temporary service reductions implemented in February 2022.

The full 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 being able to attract and retain ridership. As of September 2023, weekday bus system ridership recovery is at 78.6% overall, Saturday ridership is 86.0% recovered, and Sunday ridership is at 92.4% of pre-COVID bus average daily ridership levels. September 2023 average weekday bus ridership exceeded 750,000 for the first time since the pandemic.

### Ridership by Service Area

Ridership recovery was examined for each of the five Metro Service Council areas. The San Fernando Valley shows the most weekday ridership recovery, exceeding 84% in 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 weekday across the San Fernando Valley. The NextGen changes improved these lines especially off-peak, where many of these lines had frequencies ranging from 20 to 30 minutes. There was also restructuring of several lines in the east Valley to better match travel patterns focused on North Hollywood. The four other Service Council areas varied between 77.6% for the South Bay Cities and 75.2% for the San Gabriel Valley. Similar patterns were seen for average Saturday (San Fernando Valley 96.9%, other areas 76.8 - 82.1%) and Sunday ridership (San Fernando Valley 106.9%, other areas 81.8 - 89.7%), with higher overall recovery on these days, as was seen for the bus system ridership overall.

### Ridership by Time Period

As of September 2023, the midday share of weekday ridership remains around 2% higher than it was pre-pandemic. By contrast, AM peak period ridership remains 3% below 2019 levels, but the PM peak is 1% higher. This suggests less commute trips made on transit to office jobs in the AM peak. The increase in midday share of weekday ridership is consistent with the intent of the NextGen Bus Plan to grow ridership in off-peak weekdays. Weekend ridership by time of day tended to have remained relatively stable.

### Ridership by Equity Focused Communities (EFC)

Boardings in EFCs where transit usage is expected to be higher, increased by up to 2% weekdays and weekends during early years of COVID compared to pre-COVID. In 2023, the boardings in EFCs was up to 1% higher than pre-COVID weekday 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 continues to be seen in EFCs in 2023.

### Average Trip Length

Average passenger (unlinked) trip length dropped from 4.2 miles to just below 3.0 miles in the early pandemic 2020-2021 for the Metro bus system. This trend was likely due to a significant reduction in long-distance commute trips. As ridership recovered in 2022, average passenger trip lengths have increased to around 3.5 miles, remaining well below pre-COVID lengths. This type of change was expected as COVID has transitioned trip-making overall to shorter trips, which was 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 as well as weekends.

### Ridership by Service Tiers and Lines

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. The comparison was based on average September 2023 versus September 2019 ridership for each day type (weekday, Saturday, Sunday). While there are 120 Metro bus lines, ridership recovery rates were based for 82 weekday, 75 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 September 2023 was 78.6% for weekdays, 86.0% for Saturday, and 92.4% for Sunday when compared to September 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 review focused on lines showing above and below system average ridership recovery. The review also looked at lines/line groups for each of 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 (which make up 46% of overall lines) with above average recovery suggests that the improved frequencies implemented through the NextGen Bus Plan are a key component of stronger ridership recovery:

- Weekday: 20-Tier 1 and 14-Tier 2 lines/line groups compared to only 4-Tier 3, 7-Tier 4 lines/line groups.
- Saturday: 14-Tier 1 and 12-Tier 2 lines/line groups compared to only 6-Tier 3, 5-Tier 4 lines/line groups
- Sunday: 14-Tier 1, 12-Tier 2, compared to only 5-Tier 3, 9-Tier 4 lines/line groups.

The Tier 1 and Tier 2 higher frequencies appear to be showing 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, a location that has seen reduced daily trip making for work due to factors such as

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increased telecommuting. Some of these lines were also restructured in ways that moved some of their riders to other lines. An opportunity exists to further promote downtown LA travel on the Metro bus network for work, but more so leisure and event activities.

This same pattern was noted for the G and J Line BRT services that had notably lower ridership recovery, especially on weekdays. Prior to 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 both frequent Local and Rapid bus lines have continued to operate. The ridership recovery rate for the corridor overall was 77.4% weekdays, with the Local bus line 204 having a recovery rate of 95.2%. By comparison, the Vermont Rapid Line 754, serving the same a very high EFC corridor with the same frequency as the local line, but on a limited stop format, had a ridership recovery rate of 59.0%. The 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 104.4%; Rapid 56.1%) and Sunday (Local 99.4%; Rapid 65.9%).

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, though there were other Tier 2 lines across the Metro service area with high ridership recovery rates.

There were a number of Tier 3 lines that 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 important to test the best performers among these lines to upgrade to 30 minute service to see what impact that might have on their ridership recovery.

### 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 as well as the positive perception of such speed improvements by riders in post-implementation surveys. These 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 the NextGen Bus Plan's focus on a fast, frequent, and reliable network is supporting higher ridership recovery. These ridership recovery results will continue to be tracked and reported on as further investment in NextGen bus speed and reliability improvements occur, including new bus lanes and expanded transit signal priority and all door boarding. Staff will next review ridership up to Thanksgiving 2023 as the basis for the next report to be presented in March 2024.

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## **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 a greater proportion of ridership occurring in EFC residents after 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 the benefits of NextGen are benefiting marginalized groups.

## **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Recommendations support strategic plans:

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, as well as improve competitiveness with other transportation options.

Goal #2: Deliver outstanding trip experiences for all users of the transportation system. 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 2023 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 to implement new bus speed and reliability improvements, such as new bus lanes. Another update is planned for the Board in March 2024, tracking the detailed progress on ridership recovery during the period from October through December 2023. Monthly bus and rail system overall ridership is reported.

## **ATTACHMENTS**

Attachment A - NextGen Ridership Analysis



Attachment B - Weekday Ridership Recovery Comparison by Line and Line Group,  
September 2023 to September May 2019

Attachment C - Saturday Ridership Recovery Comparison by Line and Line Group,  
May 2023 to May 2019

Attachment D - Sunday Ridership Recovery Comparison by Line and Line Group,  
May 2023 to May 2019

Prepared by: Joe Forgiarini, Senior Executive Officer, Service Development,  
(213) 418-3400

Reviewed by: Conan Cheung, Chief Operations Officer, (213) 418-3034



Stephanie N. Wiggins  
Chief Executive Officer