



TRANSIT SERVICES ADVISORY COMMITTEE AGENDA
Charlotte-Mecklenburg Government Center
Room 280 and [Join TSAC Meeting via Zoom here.](#)
April 20, 2023
4:00- 5:30 pm

- | | |
|--|---|
| I. Call to Order
Approval of March Summary | Chair Krissy Oechslin |
| II. Public Comment | |
| III. Information Item:
A. Battery Electric Bus-Pilot Update
B. CATS Operating and Capital Improvement Budget
C. CATS Ridership and Service Update | Catherine Kummer
Chad Howell
Jason Lawrence |
| IV. Chair Report | Krissy Oechslin |
| Service Issues | All |
| Operation Planning Report | Pamela White |

NEXT MONTH'S TSAC MEETING IS MAY 11, 2023

TRANSIT SERVICES ADVISORY COMMITTEE

Meeting Summary

Thursday, March 9, 2023

Recording:

[TSAC March 9, 2023](#)

TSAC Members Present: Krissy Oechslin, Charlotte
Bob Doran, Matthews
Leroy Fields, Charlotte
Sam Grundman, Charlotte
Jarrett Hurms, Charlotte
Tim Spaulding, Charlotte

CATS/City of Charlotte Staff: Jason Lawrence, Pamela White, Rachel Gragg, Jennifer Fehribach, Kimera Coburn, Edwin Johnson, Natalie Bouchard, Lashima Tate, Logan Lover, Jayla Gittens, Deltrin Harris, Brandon Hunter, Arlanda Rouse, Brad Thomas, Brian Horton, Carlos Parada

Meeting Time 4:00-5:30 PM

I. **Call to Order**

Chair Krissy Oechslin called the meeting to order at 4:05 p.m.

Approval of February 2023 Meeting Summary

Chair Krissy asked for a motion to approve the amended meeting summary from February 2023. Tim motion to approve the summary. Jarrett seconded the motion. The February 2023 meeting summary was approved unanimously.

II. **Public Comment on Agenda Items:**

Mark commented on wanting a better understanding on where things are with CATS on moving towards restoring service and reliability and the things being done to fix the problem.

Jason Lawrence - Planning Director (CATS) - Looking at how to bring service back as fast as CATS can. It has been difficult to attract and pertain operators. It is a nationwide issue. It is CATS goal to be reliable first and then add service. Reliability is the main focus.

III. Information Item:

A. CATS Safety Performance Measures

David Moskowitz – Transit Safety & Security Manager (CATS) – presented January MTC packet slides that reports the four goals related to fatalities, reportable incidents, measuring reportable injuries, and service reliability. The Agency Safety Plan is available on CATS website

Discussion:

A preventable collision is an incident by which a collision occurs where the operator or condition exists where the incident was considered preventable. An action was not followed, or a rule, policy or procedure was not followed and as a result of that the accident or collision occurred.

A reliability incident is where there is a mechanical failure on the vehicle. The vehicle has to be taken out of service.

A reportable injury is an injury that requires the injured to be transported. Not assaults. Any injury that requires a transport from the scene. Bus and rail are different. Some instances have to be 2 or more people before it becomes reportable.

The operator order instructions for the streetcar have a dynamic envelope basically the space the train occupies on the track and in the roadway. If something is blocking the pathway the train is supposed to stop and call into the control center and that car needs to be moved or towed in order for the train to safely pass.

The issues that CATS is having on the Gold Line in relation to people double parking blocking the train. CATS has the authority to tow and ticket. Most of the time an officer is able to get to the scene the individual is done and has left.

B. 2023 Service Outlook

Jason Lawrence - Planning Director (CATS) – presented ridership trends and what is upcoming for 2023 slides.

Discussion:

Gold Line gets folded into the number on the rail ridership trend graph. Should break out the comparison.

Look at some of the routes that feed into the Blue Line serving areas of high industry to see what that looks like.

Need to look at pre-pandemic as a comparison from a performance standpoint but don't know what recovery really means. Some routes may have changed

and kind of ridership that they serve.

Interest from TSAC members in having Patrick come back and talk about missed trips and extra board. Splitting out the data by weekday versus weekend is important.

CATS sets the service levels. Expectation is to deliver the service that CATS has today. Talking to RATP Dev to see if bringing back frequency there would be benchmarks that CATS would have to meet. If operators are not there, CATS can't deliver the service. Come back with the number of operators it takes to put the service.

CATS hasn't changed a lot of routes over the years and is the same number of routes make the most sense that CATS has today with microtransit coming in? As those conversions happen can CATS save operators fold those back in the network and help with this. Look at the true need.

Jason Lawrence - Planning Director (CATS) – presented Microtransit Outreach.

Brian Horton – Transportation Planner II (CATS) – presented the microtransit public outreach and survey.

Discussion:

Signal Priority will be live communication to a couple of seconds between what CATS is scheduled to run and the signaling system. If within a threshold of running late it should hold the green or turn green to get through the light to get back on schedule. Testing right now with CDOT. Ideally do it systemwide.

Adopt a stop in partnership with Keep Charlotte Beautiful adopt a street program. Take ownership of that stop report any issues to CATS and collect any trash. It is a volunteer program and looking to pilot on corridors of opportunity to start with.

IV. Chair Report:

Krissy Oechslin – Chair Transit Services Advisory Committee (TSAC) – no MTC meeting from last month.

Jarrett Hurms – Co-Chair Transit Services Advisory Committee (TSAC) – Membership - Pineville, Mint Hill, Matthews, Davidson, and Huntersville openings.

V. Service Issues:

More delays with the Blue Line and mechanical issues. Mechanical issues are more on the operation side. Number of delays and missed trips on weekends.

Questions on why the Gold Line is an extended stop at CTC. Would be nice if the operator exchanges were at the end of the line. The swap out happens at CTC.

VI. Service Planning Report:

Taking a closer look at bus stops. Some stops that are missing belong in the ground and working with Facilities department to put those stops back in. Going forward have a better tracking system. Doing clean up on CATS up and what is on scheduling and what is on GIS to make sure all the resources are being synched.

The meeting was concluded and adjourned 5:45pm.

NEXT MEETING: THURSDAY April 13, 2023



Battery Electric Bus Mid-Pilot Update

Transit Services Advisory Committee

April 20, 2023



Areas of Focus

- ▶ Current Bus Fleet Composition
- ▶ Re-introduction | Timeline
- ▶ Opportunities and Challenges – To Date
- ▶ Zero Emission Fleet (ZEF) Transition Plan
- ▶ Next Steps

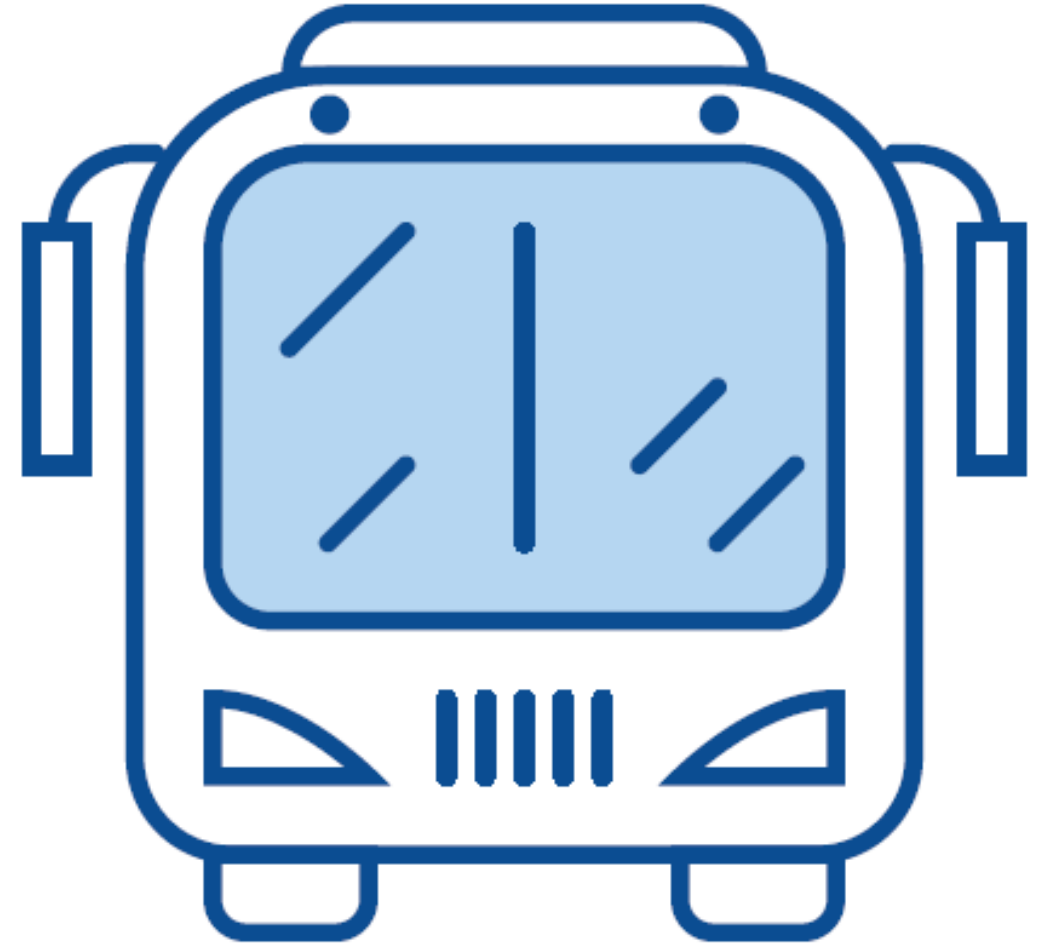
Current Fleet Composition

304
TOTAL BUSES

18
BATTERY
ELECTRIC BUSES

66
HYBRID
ELECTRIC BUSES

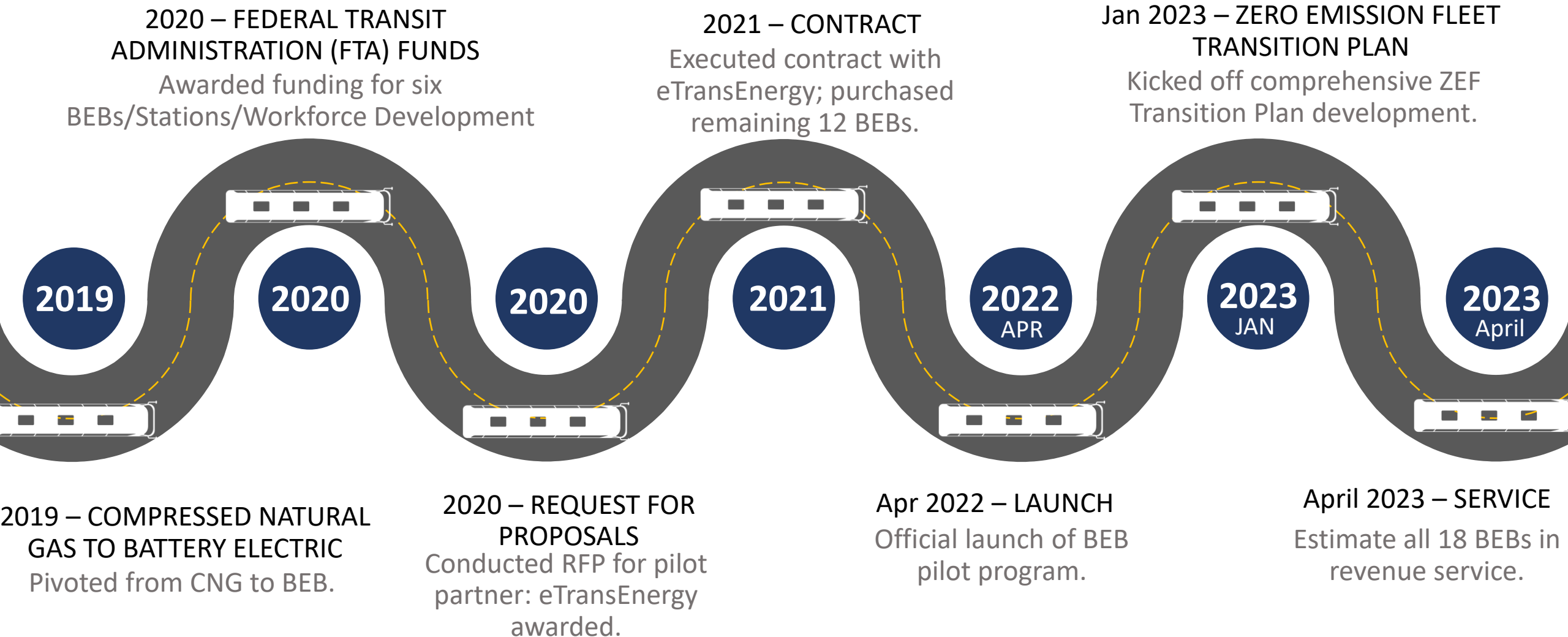
119
BUSES OVER 12 YEARS OF
AGE



Re-introduction

- ▶ Kicked off our first battery electric bus pilot program with eTransEnergy to pilot performance of BEB vehicles and charging infrastructure.
- ▶ Pilot program is allowing CATS to collect data and assess vehicle performance while operating across the transit system in preparation for future phases.
- ▶ Pilot supports our Strategic Energy Action Plan (SEAP) which strives to have city fleet and facilities fueled by 100 percent zero carbon sources by 2030.
- ▶ Buses arrived in a staggered capacity over 2022, all 18 have arrived and are planned to be in service together for the first time in April.

Timeline





Opportunities and Challenges

Opportunities and Challenges

Opportunities

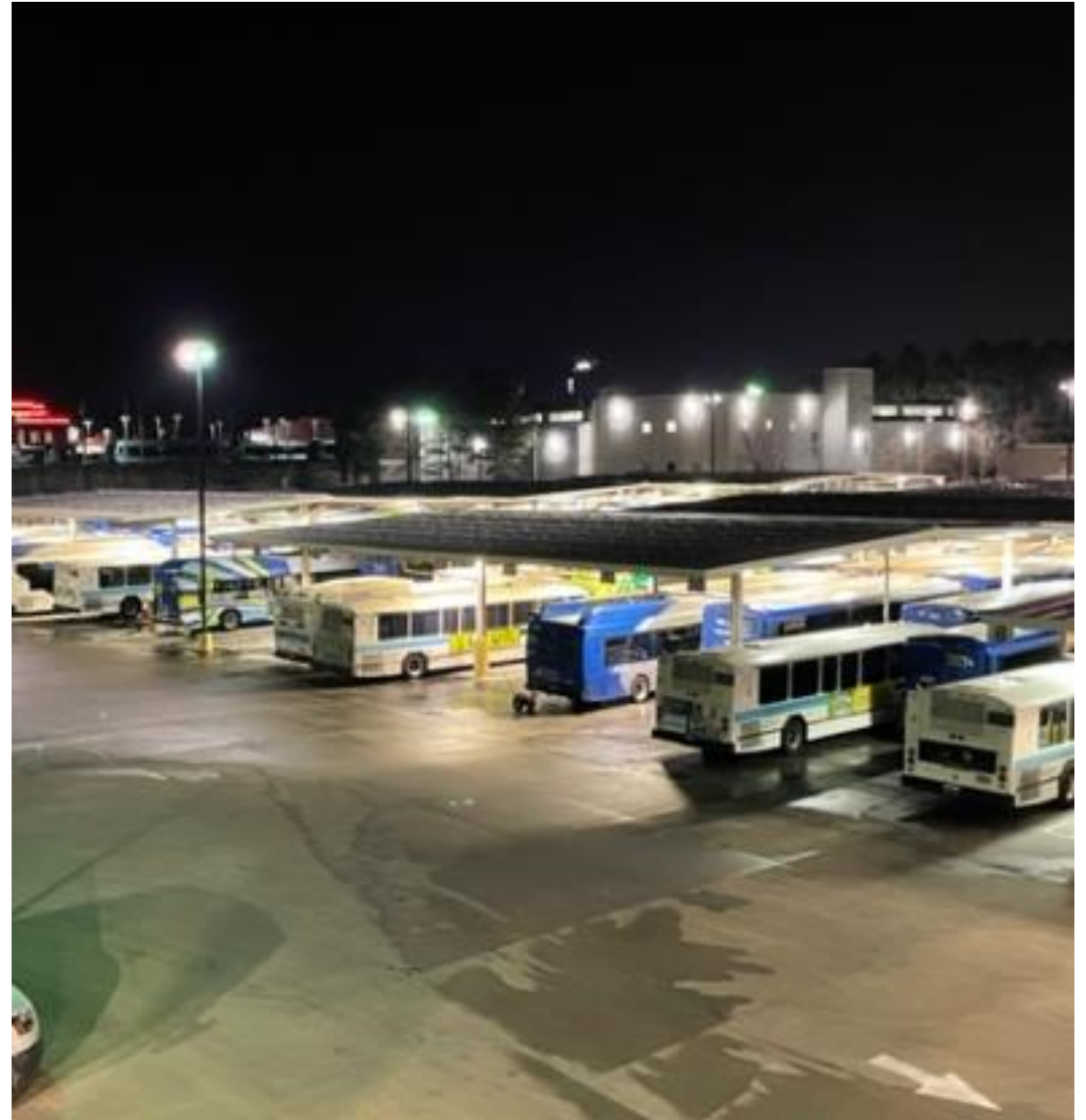
- BEB technology currently works for 70% of our current routes.
- BEBs provide a zero-emission option.
- Early industry modeling forecasts lower Total Cost of Ownership with BEB technologies.
- Federal Grant Funding

Challenges

- BEB technology does not work for 30% of our current routes.
- Increased shakeout period.
- Space limitations.
- Zero Emission Fleet Transition Plan is in process – limits full understanding now.



North Davidson Bus Lot – Early A.M. – Non-Peak Charging Window



South Tryon Bus Lot – Early A.M. – Non-Peak Charging Window



Zero Emission Fleet (ZEF) Transition Plan

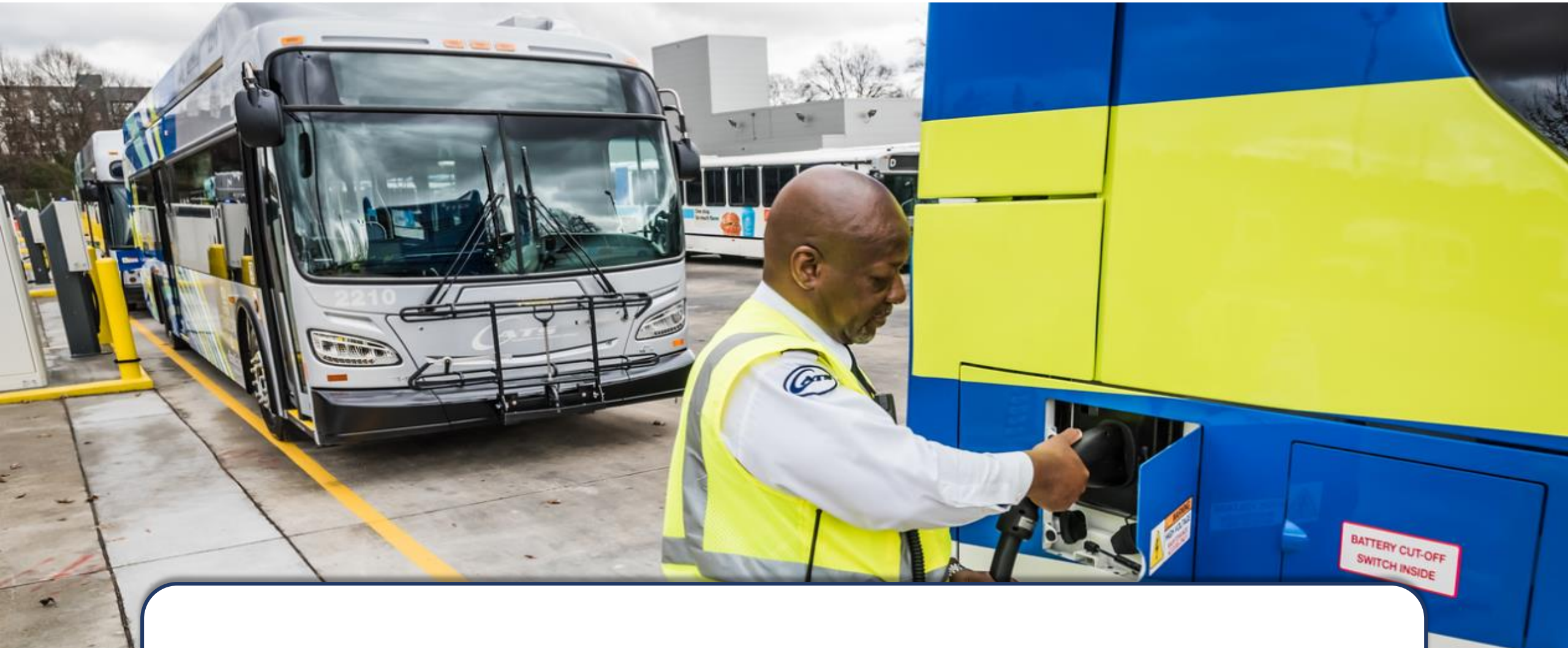
Zero Emission Fleet (ZEF) Transition Plan

- ▶ Comprehensive transition plan to 100% zero carbon technologies.
- ▶ Federal requirement for future fleet and charging infrastructure grants.
- ▶ Nine-month development period with consultant STV that builds upon BEB Pilot Program.
- ▶ Strategize infrastructure, operations, training, etc. for fleet conversion.

Next Steps | Key Dates

- ▶ March 22 – Metropolitan Transit Commission (MTC)
- ▶ March 29 – Strategic Energy Action Plan (SEAP) External Content Team

- ▶ October – BEB Pilot Program/ZEF Transition Plan completion



Questions?

FY 2024 Operating Budget & FY 2024 – FY 2028 Capital Improvement Plan

Presentation to Transit Services Advisory Committee

April 20, 2023

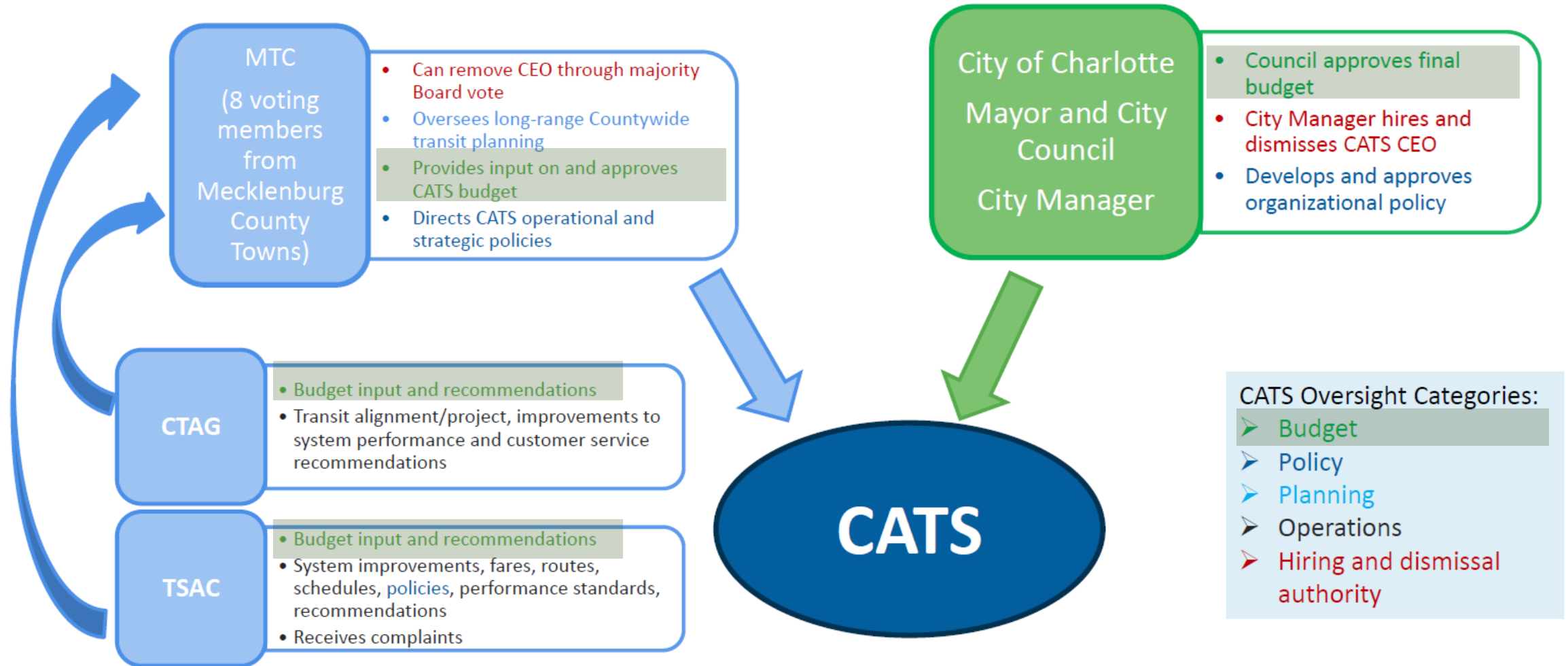


Discussion

- ▶ Budget Process
- ▶ CEO Focus Areas
- ▶ Operating Budget
- ▶ Debt Service Budget
- ▶ Capital Investment Program



Budget Review & Approval Process



Source: Management Partners CATS Management Roadmap

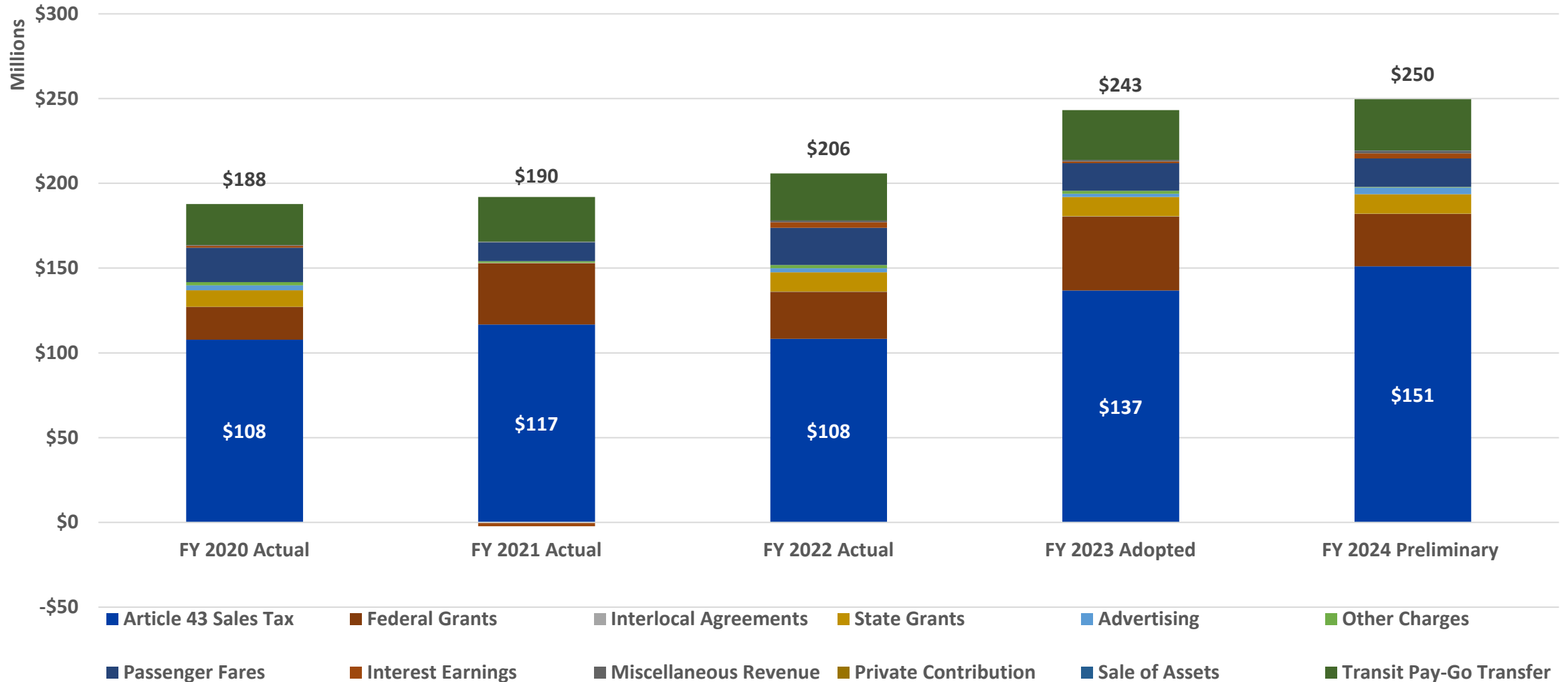
CEO Focus Areas

- ▶ Balanced Budget
- ▶ Safety and Security
- ▶ Valuing Employees
- ▶ Maintenance & Asset Preservation

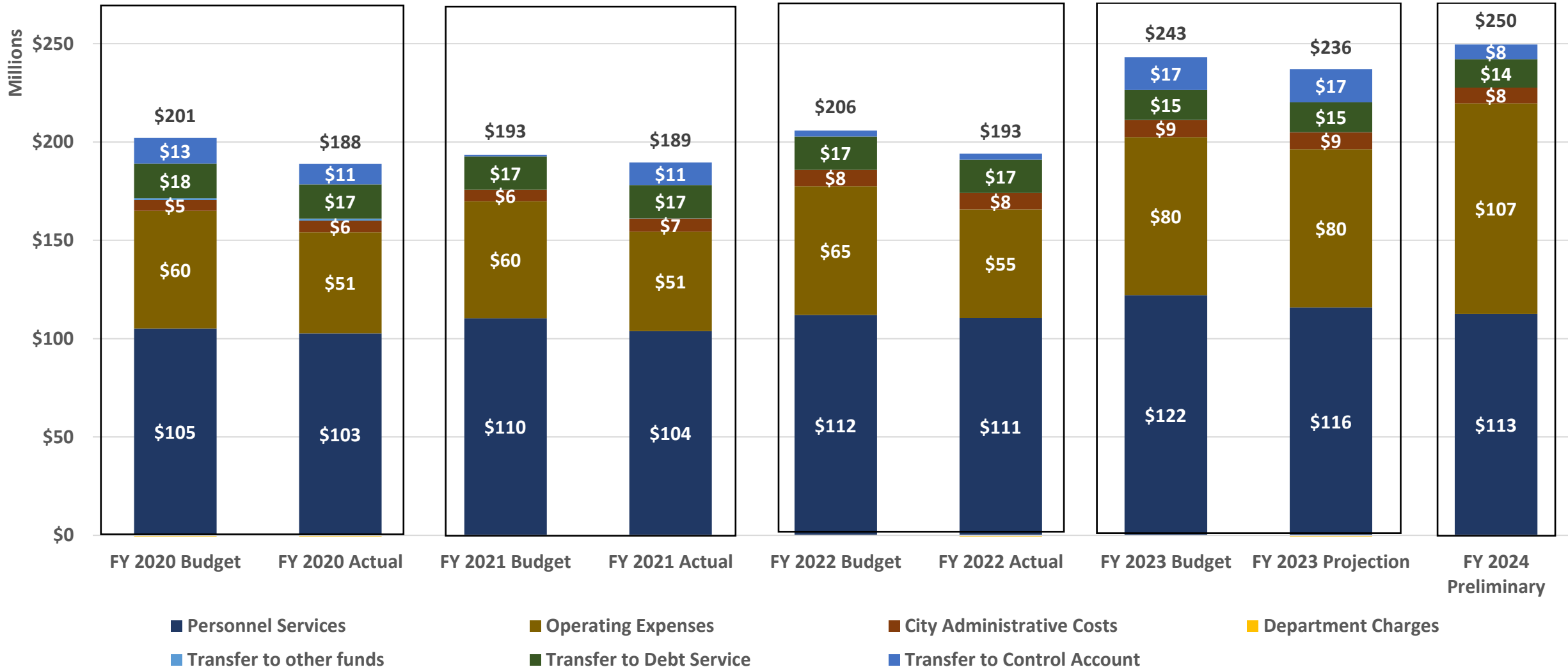


Operating & Debt Service

Operating Revenues



Operating Expenses



Enhancements

▶ Safety and Security

- Funding for expanded security contract
- Funding for operators and employee training
- Expand the transit ambassador program

▶ Valuing Employees

- eServe Academy – 4 program staff plus funding for 14 apprentices and 10 interns
- Rate & Compensation Study
- Right sizing workforce based on operational tempo and current needs – 30 FTEs

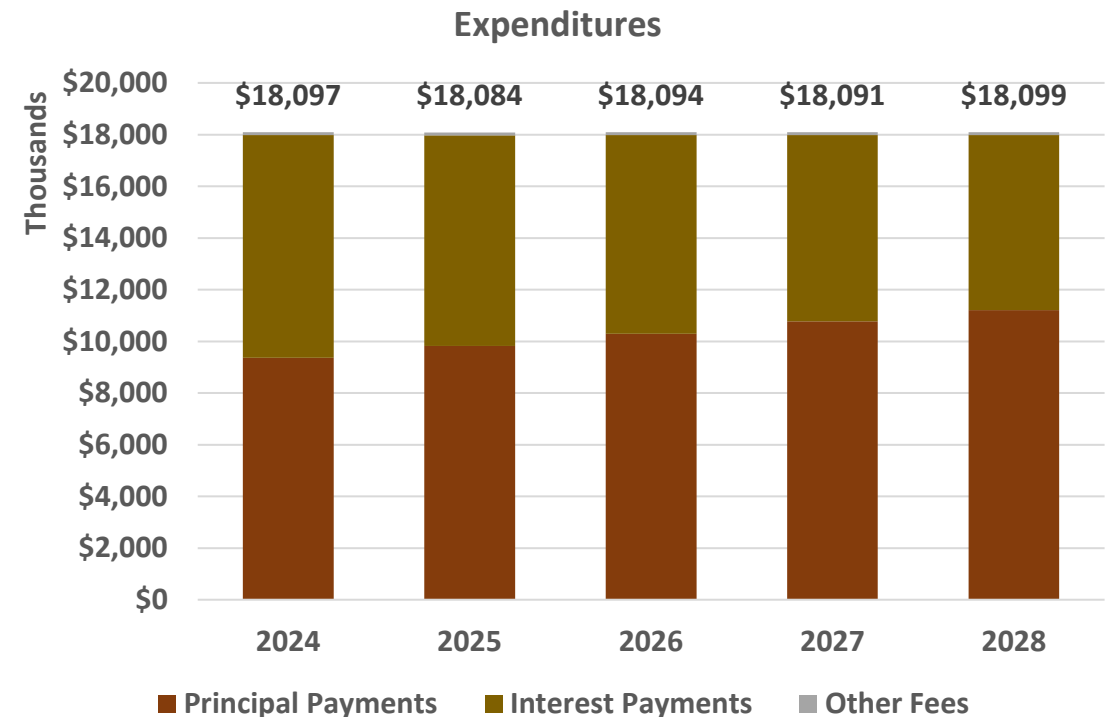
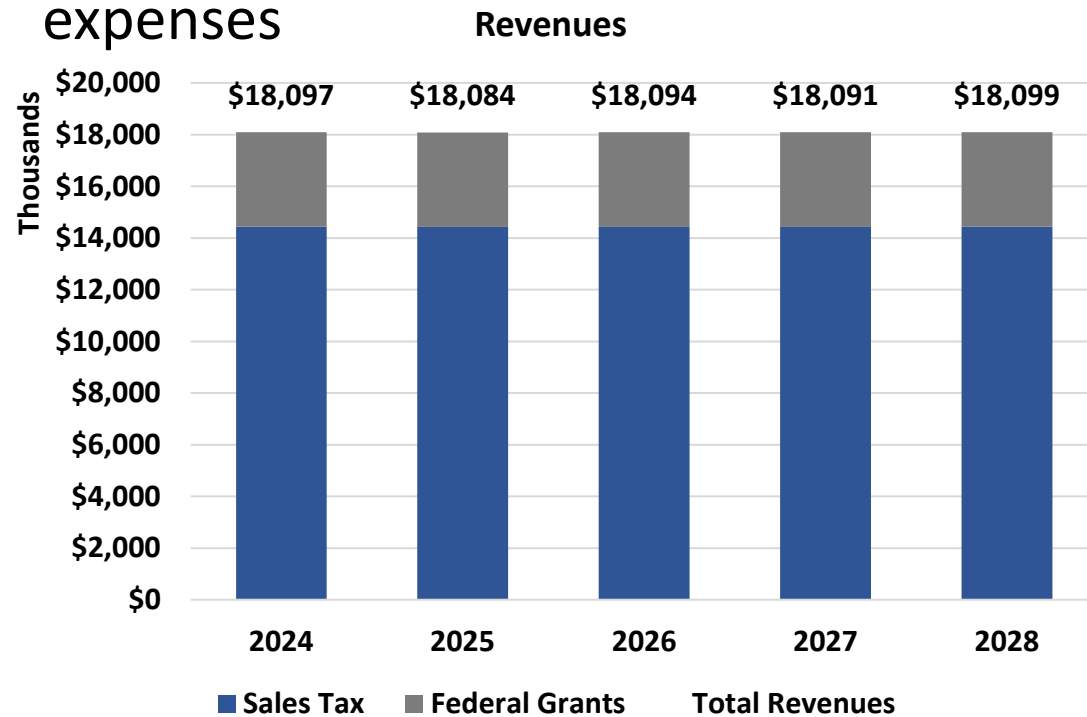
▶ Maintenance & Asset Preservation

- Increased preventative maintenance for facilities, bus, and rail



FY 2024 Debt Service

- ▶ FY2024 Debt Service Budget ~\$18.1 million
- ▶ Transit Sales Tax, Federal and State grant funds pay annual principal and interest expenses



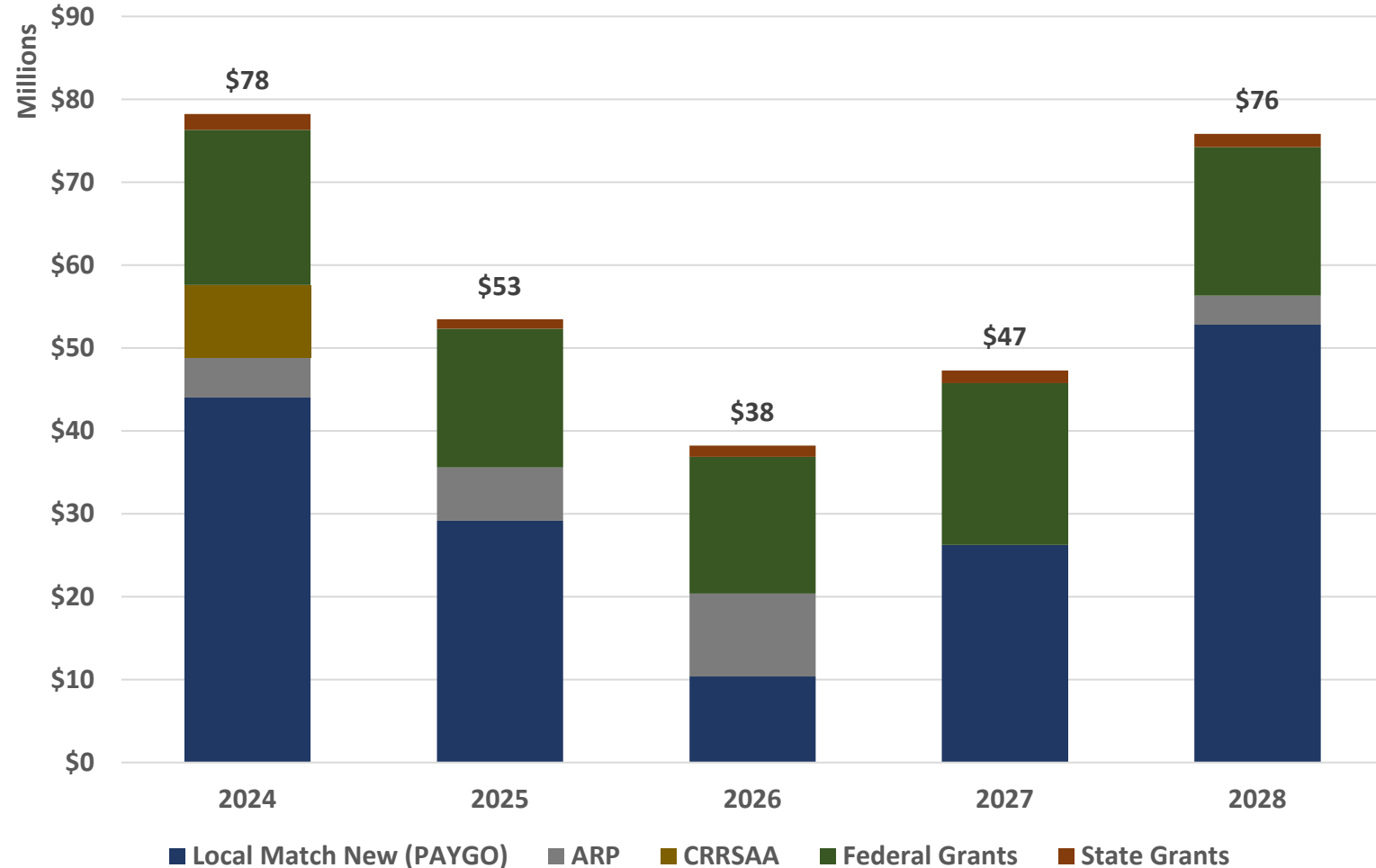
- ▶ No new debt issuance programmed for FY 2024

Capital Investment Plan

FY 2024 – FY 2028 CIP Sources of Funds

FY 2024 Highlights

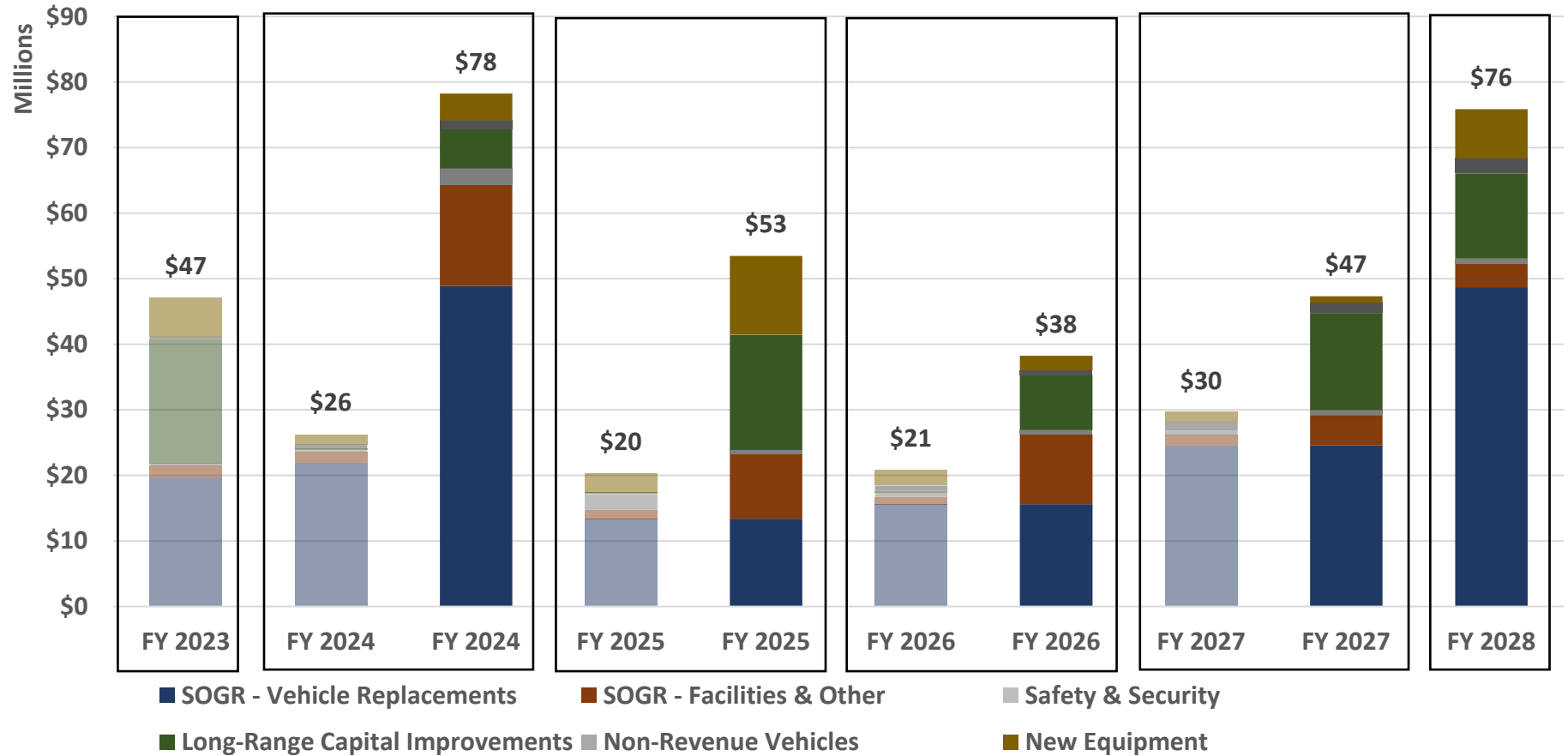
- ▶ Utilizes ~\$27 million in reserve funds to increase bus purchases
- ▶ Utilizes ~\$10 million in reserve funds for other projects and equipment purchases
- ▶ Working with City Finance to develop a long-term funding strategy for future revenue vehicle purchases



FY 2024 – FY 2028 CIP Expenditures

FY 2024 Highlights

- ▶ 37 Replacement Buses
- ▶ 19 Replacement STS Vehicles
- ▶ Transit Planning
- ▶ ADA Improvements
- ▶ Security Improvements
- ▶ Continues prior-year initiatives



Notes:
 1. Shaded columns represent FY 2023 to FY 2027 CIP
 2. FY2024 Preliminary Capital Budget excludes carry over amounts
 3. Excludes Grant-Funded Operating Projects

Questions

Ridership & Service Update

Transit Services Advisory Committee

April 20, 2023



Presentation Topics

- ▶ Ridership Sources & Reporting
- ▶ Ridership Trends
- ▶ Service Outlook

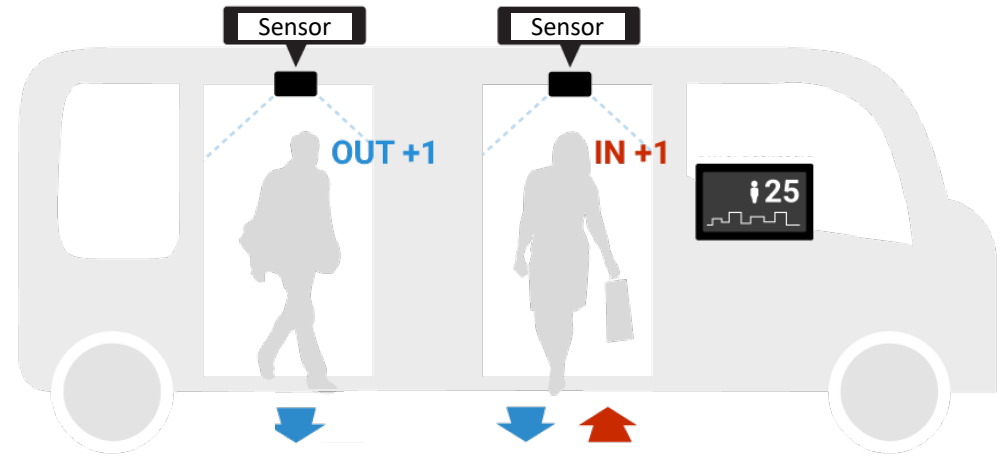
Ridership Sources & Reporting



Sources



Farebox



Automatic Passenger Counter



Sampling

Sources

▶ Farebox

- Details fare type and payment method
- Used for MTC reporting
- Provides transfer data
- Only available as a daily dataset

▶ Automatic Passenger Counts

- Provides Boardings and Alightings at the stop/station level
- FTA certified method for NTD Blue and Gold Line reporting
- Largest data set available and most useful for planning analysis
- Trip level dataset

▶ Sampling

- FTA certified method for NTD bus reporting
- Commonly used method for NTD reporting across transit agencies
- Used to verify rail ridership
- Only valid at the annual and system level

Reporting

- ▶ Quality issues with November and December farebox data.
- ▶ March MTC packet included November-February APC and Farebox ridership reports.
- ▶ Real time data requirements have improved APC data quality.
- ▶ Gap between APC and Farebox has increased.
- ▶ Beginning evaluation of expanded APC ridership reporting.

Farebox vs APC Percent Difference			
Nov-22	Dec-22	Jan-23	Feb-23
39%	41%	41%	25%

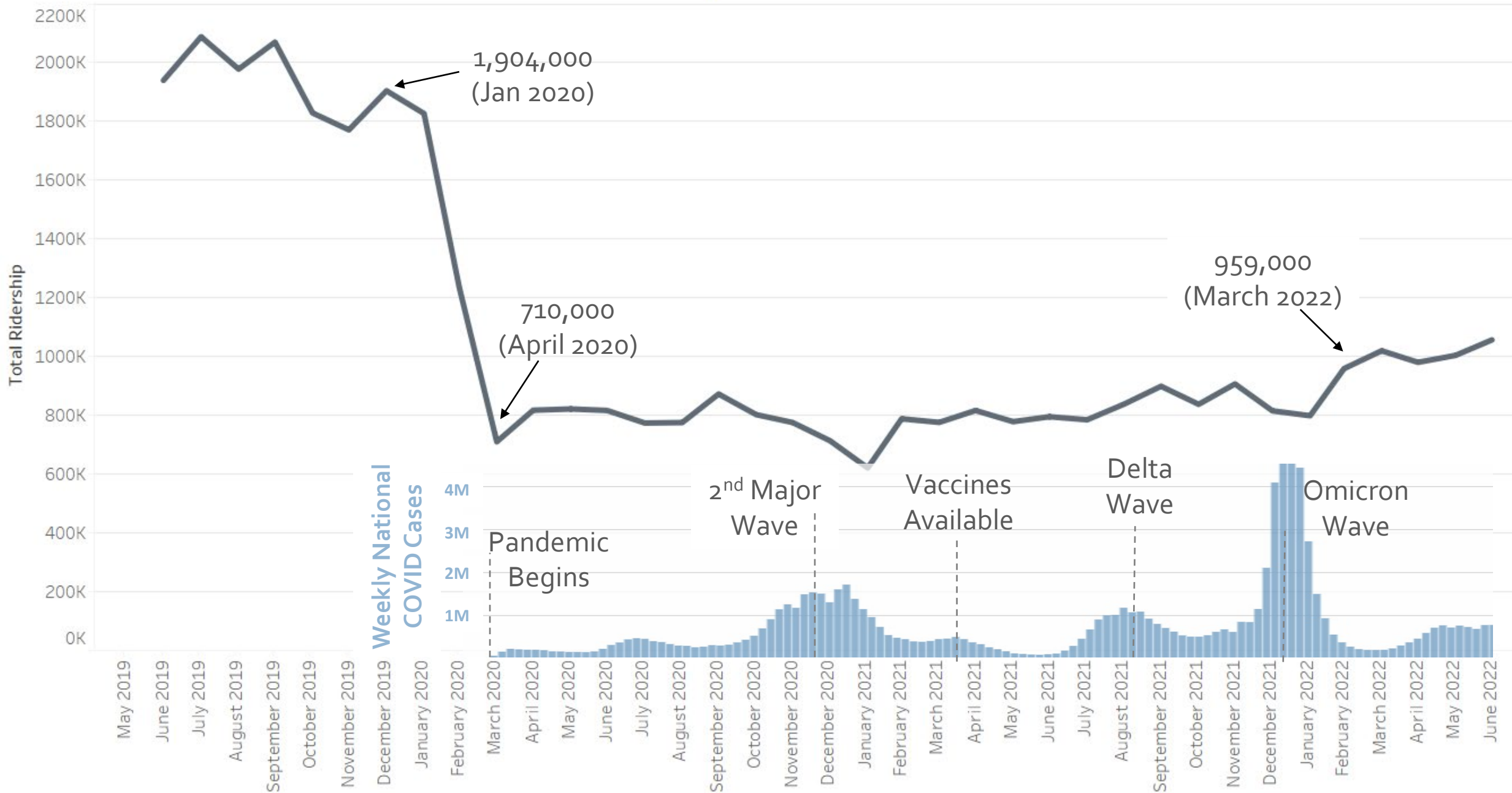
Ridership Trends



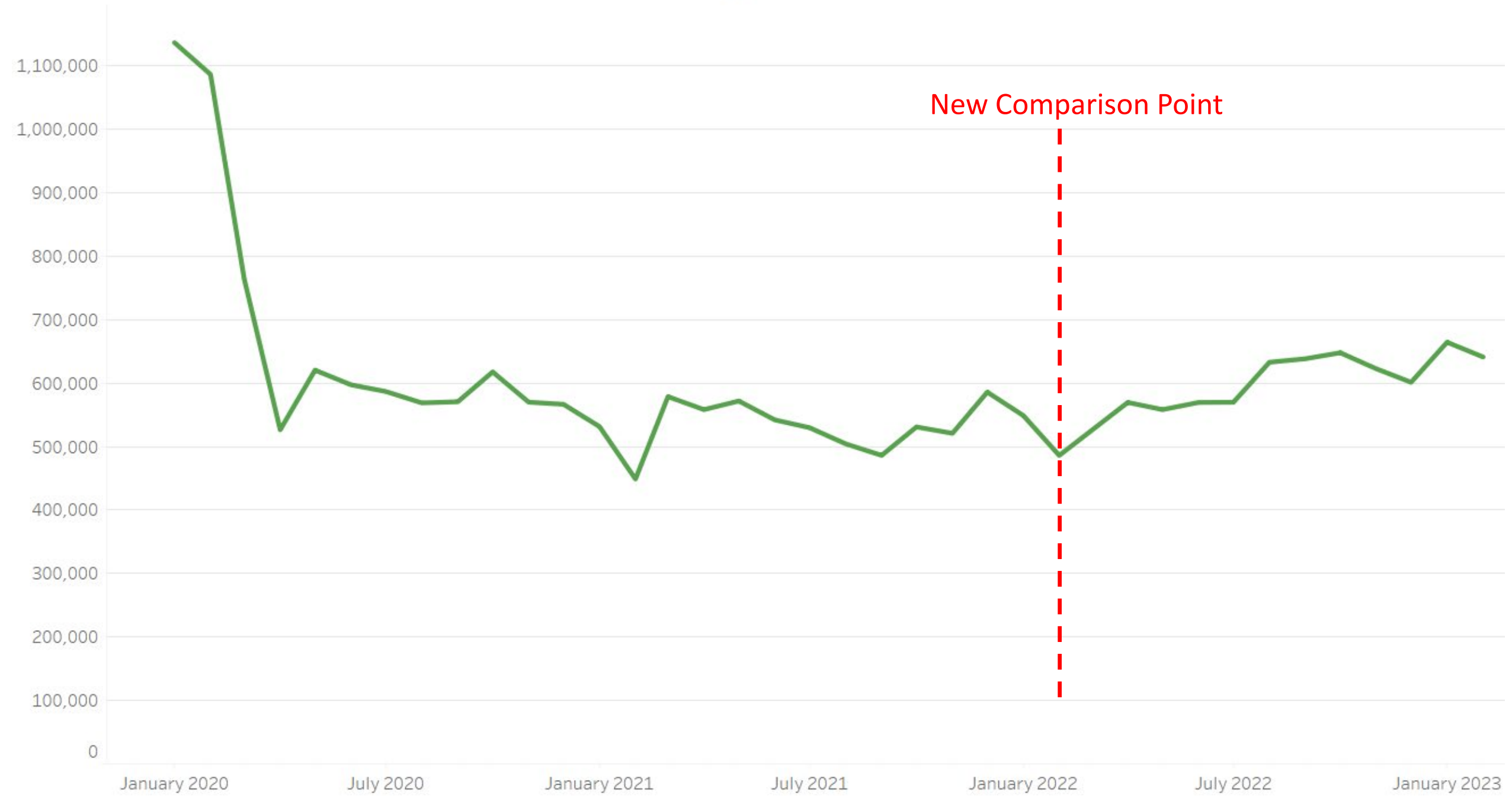
What to compare?

- ▶ Peak-hour ridership on the LYNX Blue Line has experienced increased demand, and CATS improved frequency in February 2023 to respond to the added demand
- ▶ Bus ridership has continued a modest increase since February 2022, helped in part by a more reliable schedule that was introduced in August 2022
- ▶ Early-2022 marked a major turning point in the post-pandemic world.
 - In January 2022, the Omicron variant spiked through our region, and ridership again experienced a decline.
 - However, the impacts of the Omicron variant were short-lived, and many major employers were returning employees to the office in March of 2022.
 - Ridership has since stabilized and going forward CATS will use 2022 as a point for comparison of ridership trends.
- ▶ Bus ridership was 21% higher in January 2023 compared with January 2022, and Rail ridership was 69% higher in January 2023 compared with January 2022.

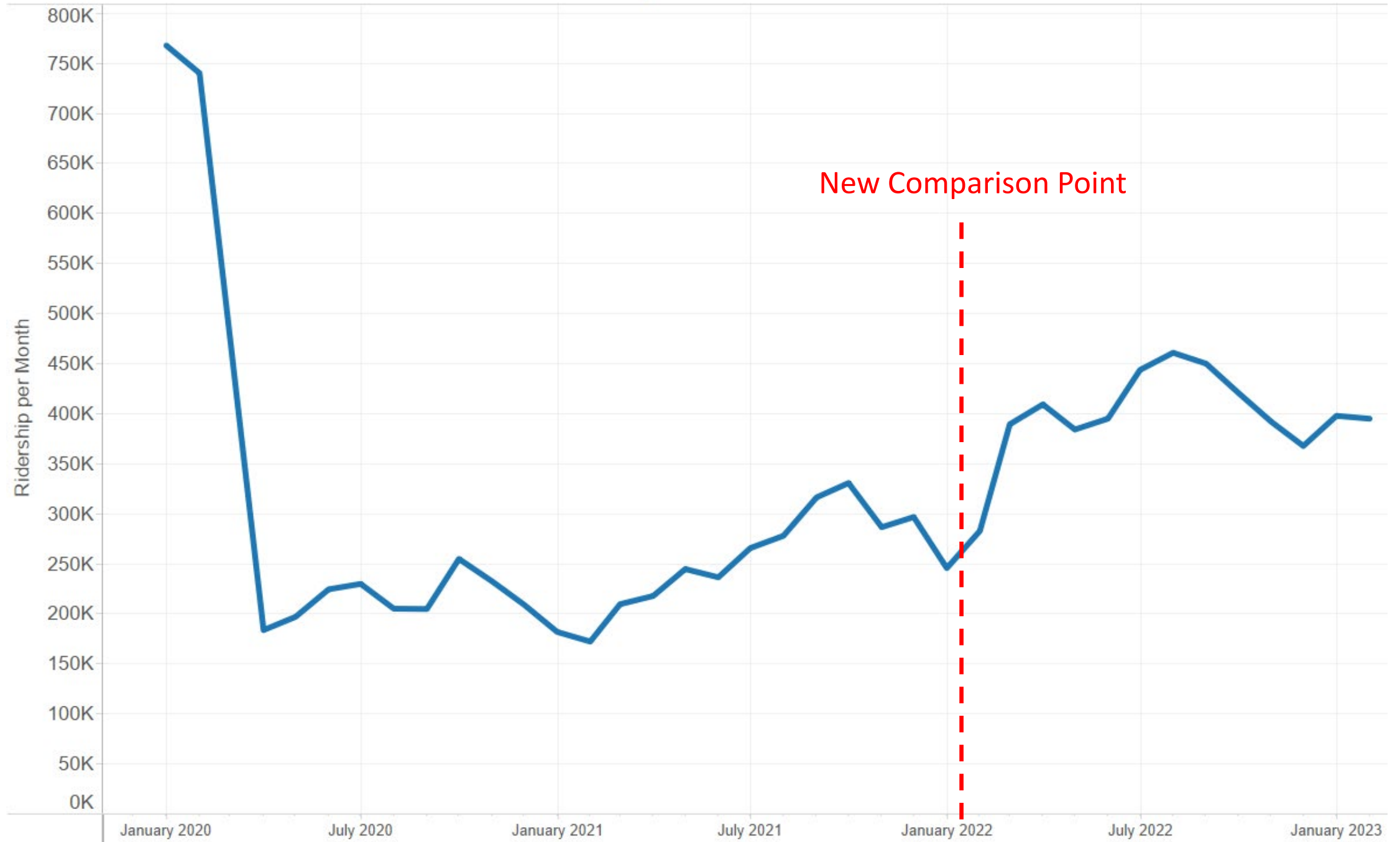
Ridership Trend - Bus & Rail



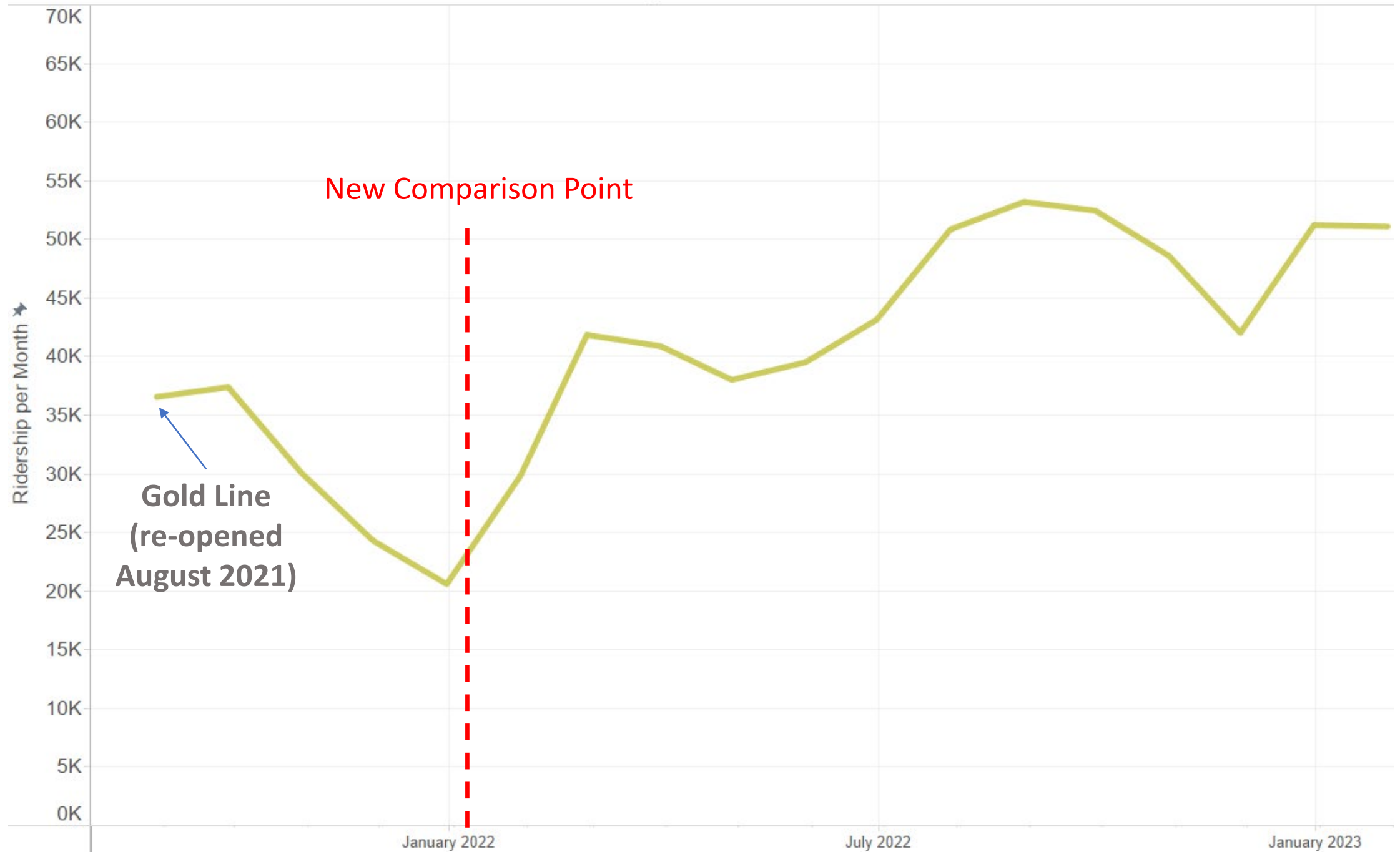
Ridership Trend - Bus



Ridership Trend - Blue Line



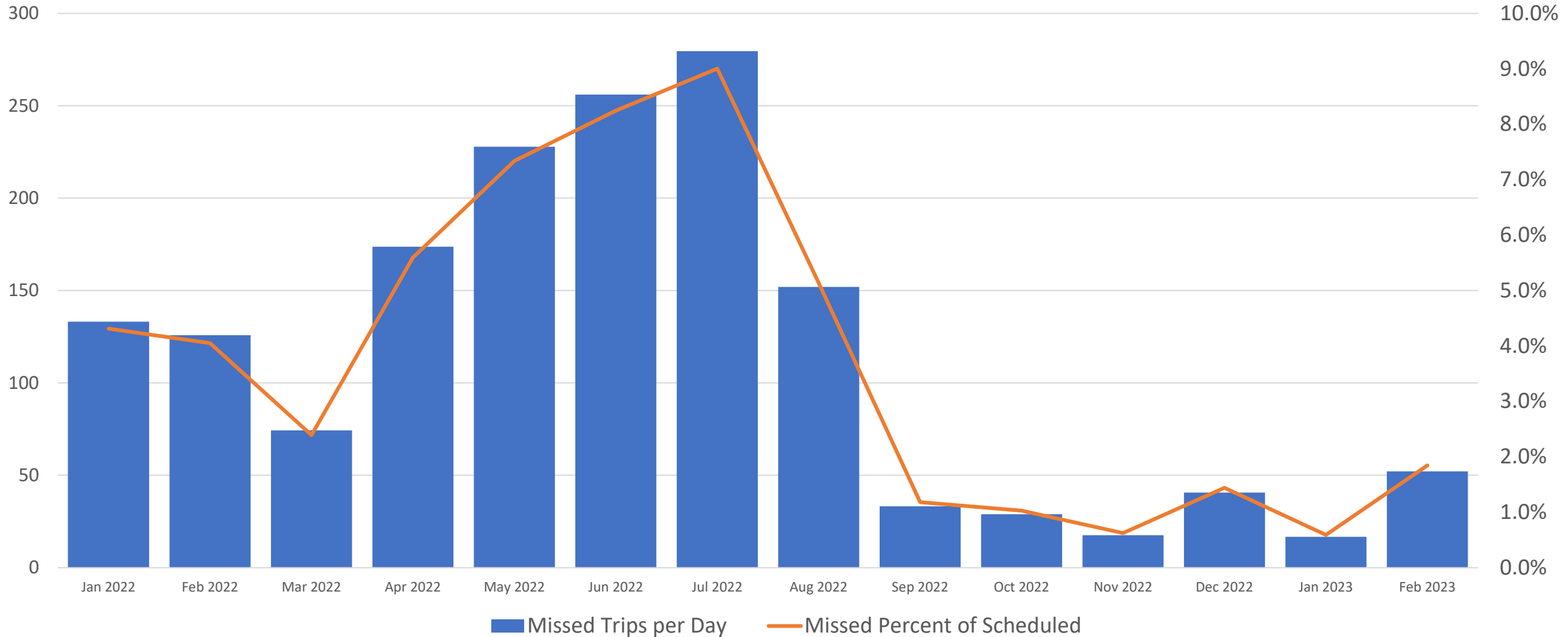
Ridership Trend - Gold Line



Service Outlook



Improved Reliability



Look Ahead

- ▶ Retain August 2022 adjustment to 20% of local and express routes to ensure improved service reliability.
- ▶ Continue evaluating ridership and operator levels to improve reliability and efficiency.
- ▶ Title VI evaluation and public outreach
- ▶ Future presentation on Bus Stop Committee

Questions?

