



# Public-Private Partnerships in Transit: Vanderbilt University and WeGo Public Transit

Syed Ali





# Population and Public Transit in Music City



- Vanderbilt University is located in Nashville, largest city in TN with a population of 683,622
- Combined Metropolitan Population of 1,315,000
- City and Metro Area have grown by 125 and 150 percent respectively since 2000
- Public Transit has lagged in Nashville despite its growth – carries around 2.5% of the population daily
- Seattle and Denver, cities of similar sizes, carry around 23% and 13% of their population daily
- Nashville – car dependent and congested
- According to Texas A&M, each Nashville commuter lost 66 hours and 1,465 dollars due to congestion in 2019



# Context: Unlimited Access Program with WeGo



- Nashville served by WeGo Public Transit
- WeGo – combination of services offered by Nashville Metropolitan Transportation Authority and Regional Transportation Authority
- Bus routes around Vanderbilt: 3, 7, 75, 77
- Vanderbilt and WeGo started an Unlimited Access program for stops to and from campus
- Expanded in 2020 to ride anywhere, anytime
- 2019 estimate of 1.5-million-dollar cost
- Parking makes up 25% of Vanderbilt's campus
- One of the largest participants of WeGo's *Ride* program for large employers
- Over 200,000 Vanderbilt-affiliated scans in 2023



# Vanderbilt-WeGo Ridership Dashboard



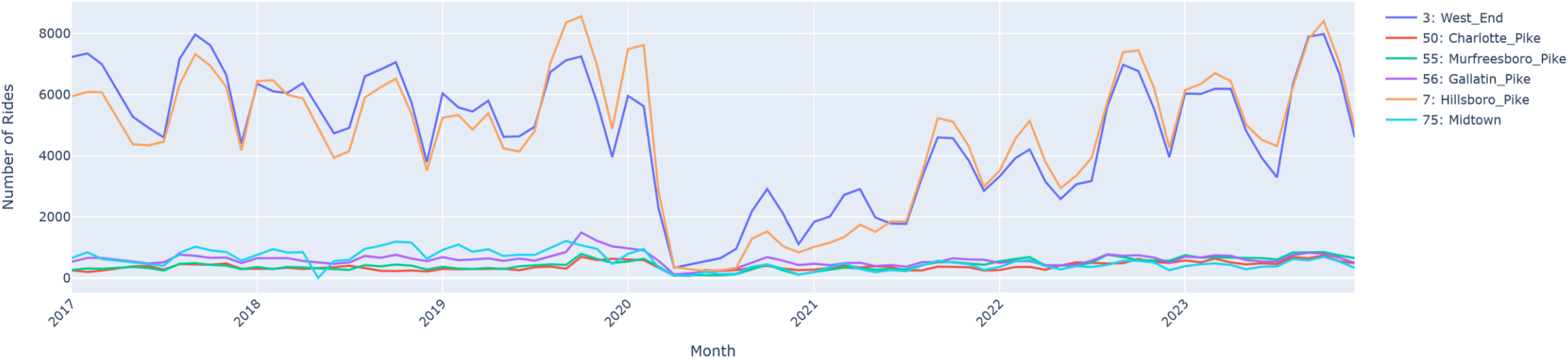
## Vanderbilt Ridership Dashboard

Check out the Vanderbilt Ridership Maps 2022/23!

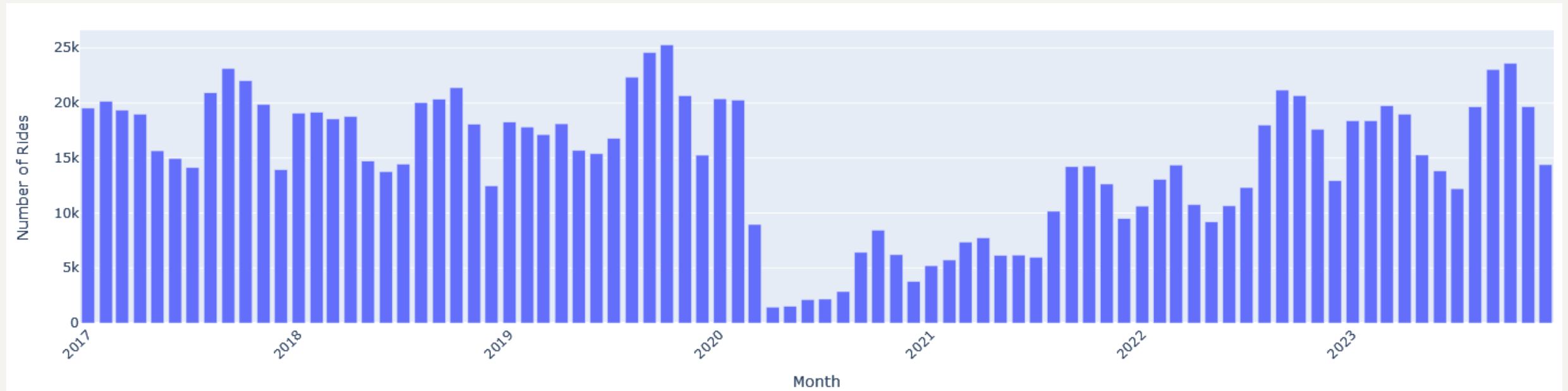
- Swipes per month Histogram
- Unique Users Graph
- Employee vs Student Ridership
- Ridership by Time of Day
- Routes Plot

2017-01 → 2023-12

Monthly Analysis of Routes

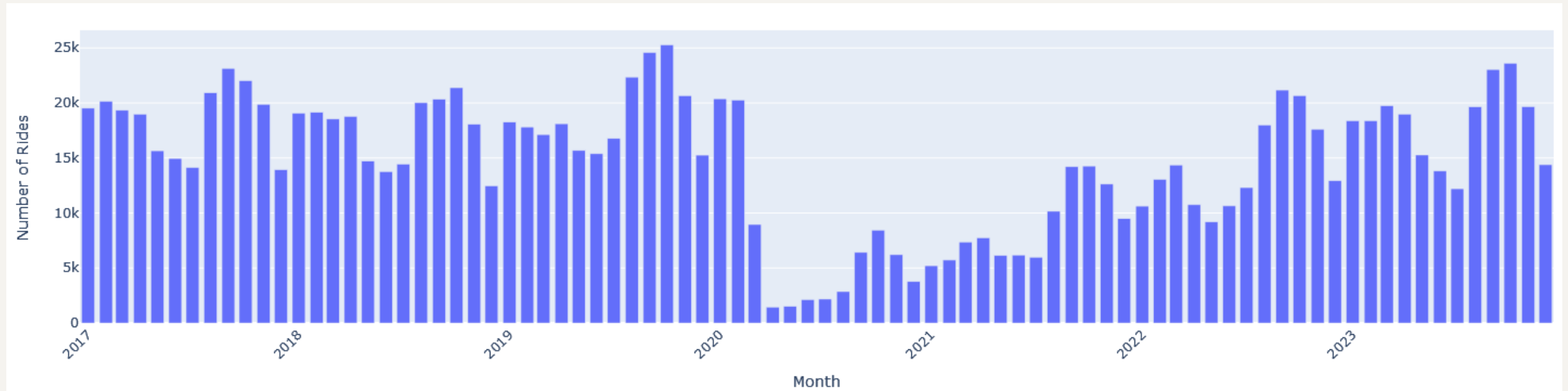


# Monthly Ridership (January 2017- December 2023)



- **Current Ridership is almost at Pre-Pandemic Levels and past 2017 and 2018!**
- **Cyclic Relationship with Academic Year**

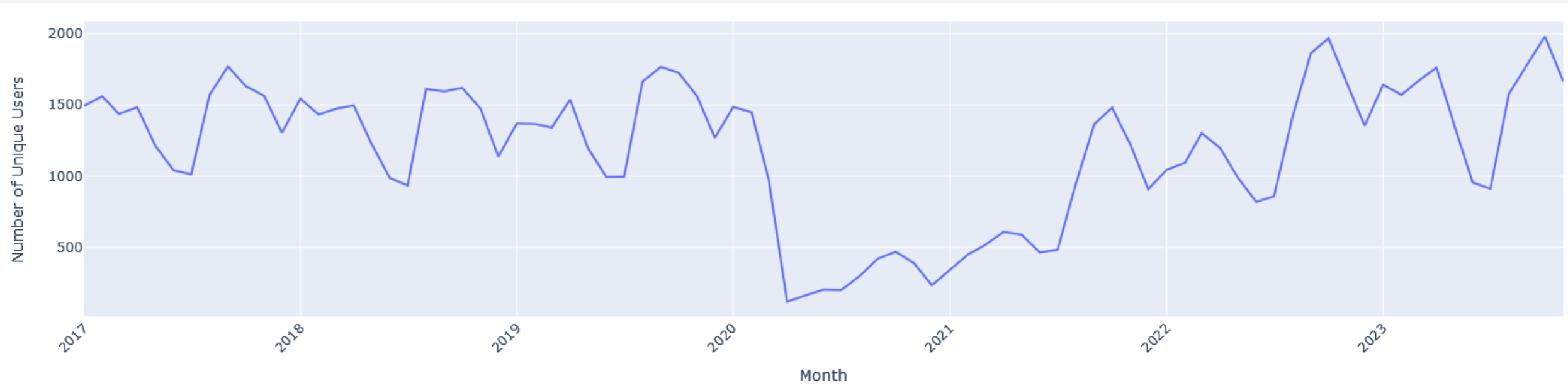
# Monthly Ridership (January 2017- December 2023)



- Peaks: Oct. 2019 – 25.275k, Oct. 2023 – 23.608k
- During Academic Months of 2023 (January, February, March, April, September, October, November), there was an average of 675 scans per day.

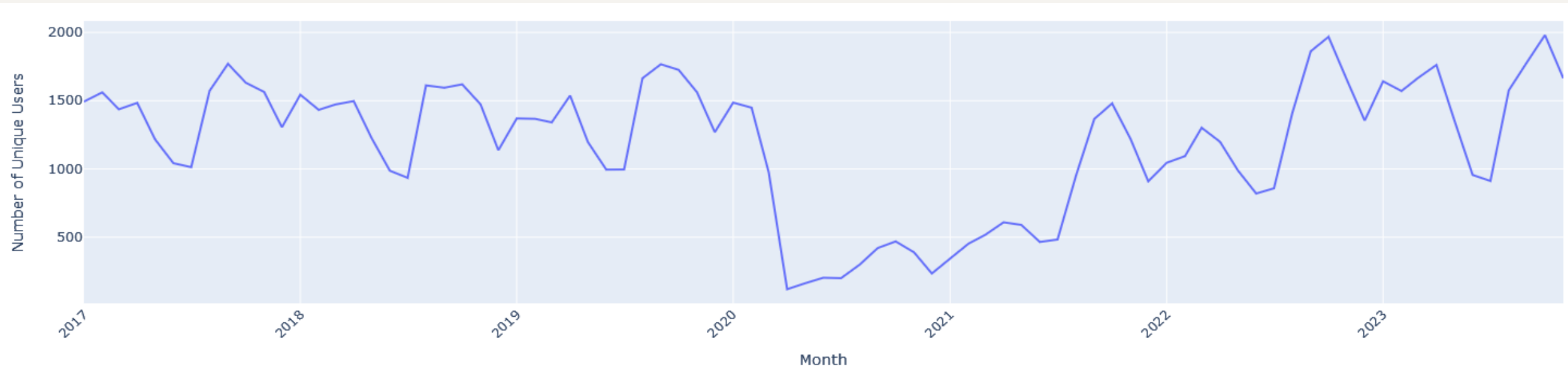


# Unique Riders (January 2017- December 2023)



- **Unique Ridership is past Pre-Pandemic Levels!**
- However, it is currently not as stable as it was pre-pandemic during non-academic months.
- Cyclic Relationship with Academic year

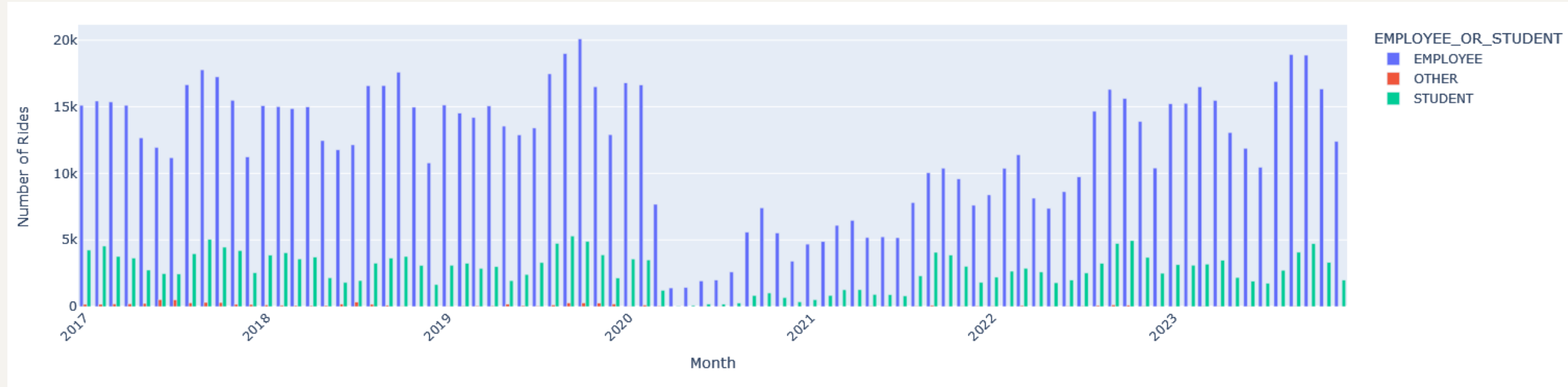
# Unique Riders (January 2017- December 2023)



- Peaks: Sept. 2019 – 1767, Oct. 2022 – 1968, Oct. 2023 – 1981
- During the Academic Months of 2023, there were 57 unique riders daily.

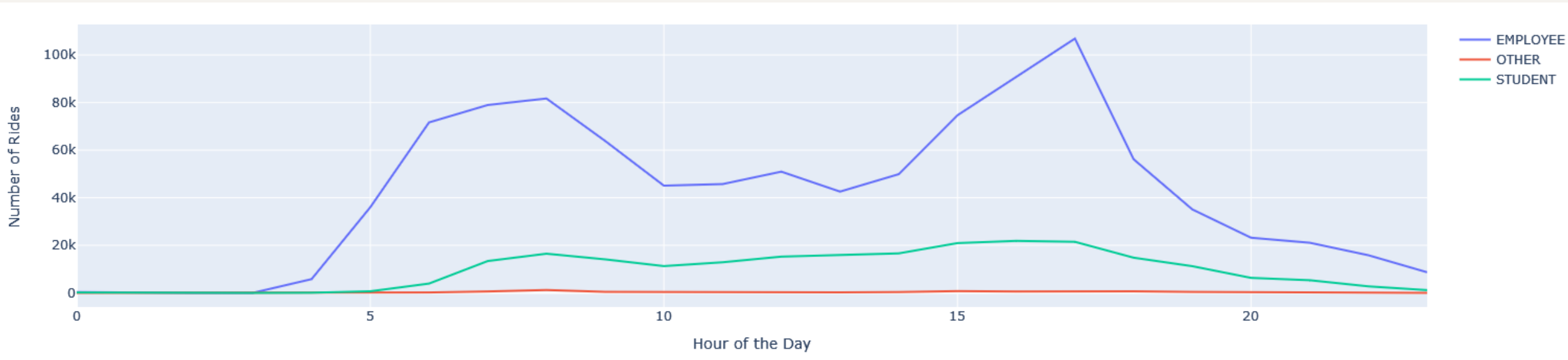


# Employee vs Student Ridership (January 2017- December 2023)



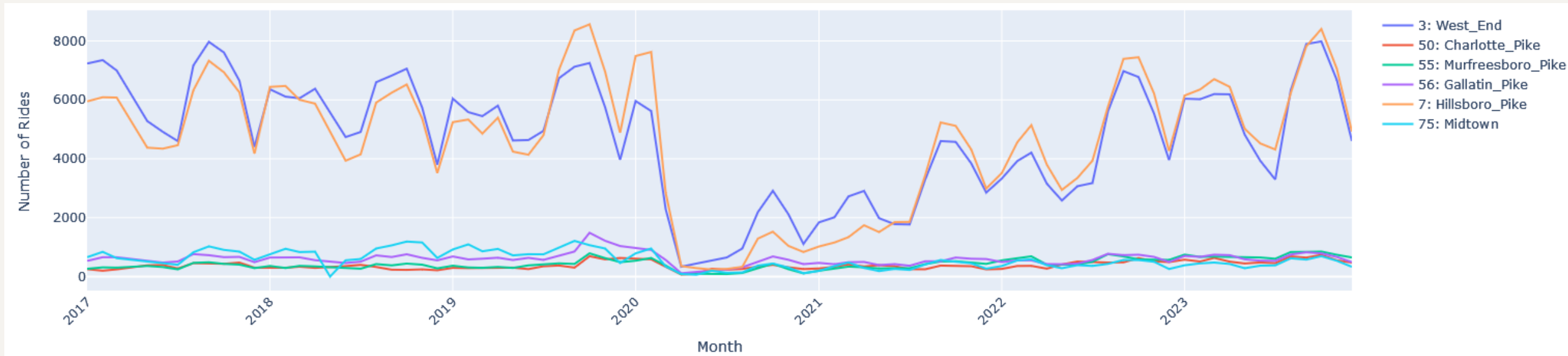
- Employees use this service **more** than students.
- Cyclic Relationship with Academic year

# Peak Usage Time by the Hour (Overall)



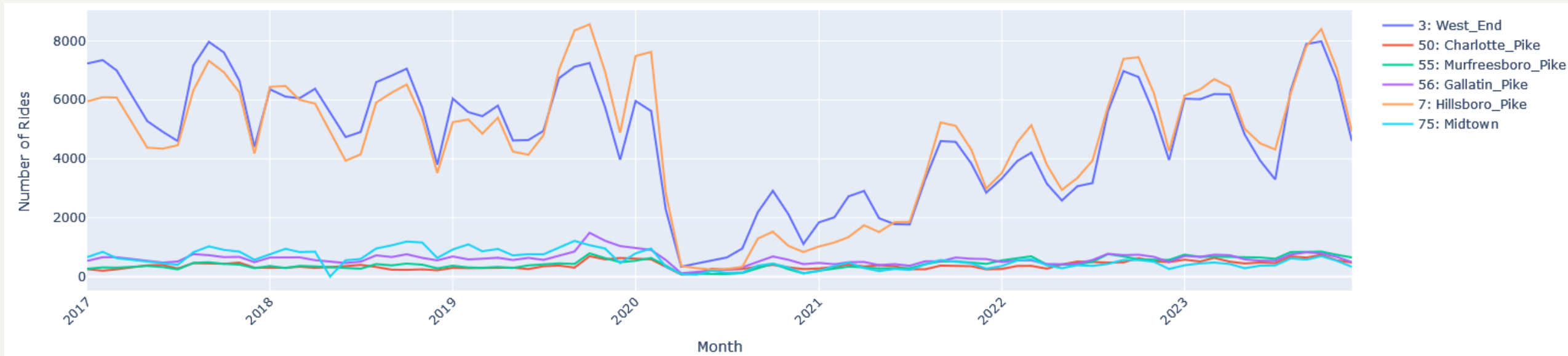
- Employees Usage follows a **typically commuter schedule** (9AM - 5PM)
- Student Usage is **varied** and throughout the day

# Top 6 Routes based on Vanderbilt Swipes (Jan. 2017- Dec. 2023)



- **Routes 3 (West End) and 7 (21<sup>st</sup> Avenue/Hillsboro Pike) are swiped the most by Vanderbilt Users**

# Top 6 Routes based on Vanderbilt Swipes (Jan. 2017- Dec. 2023)



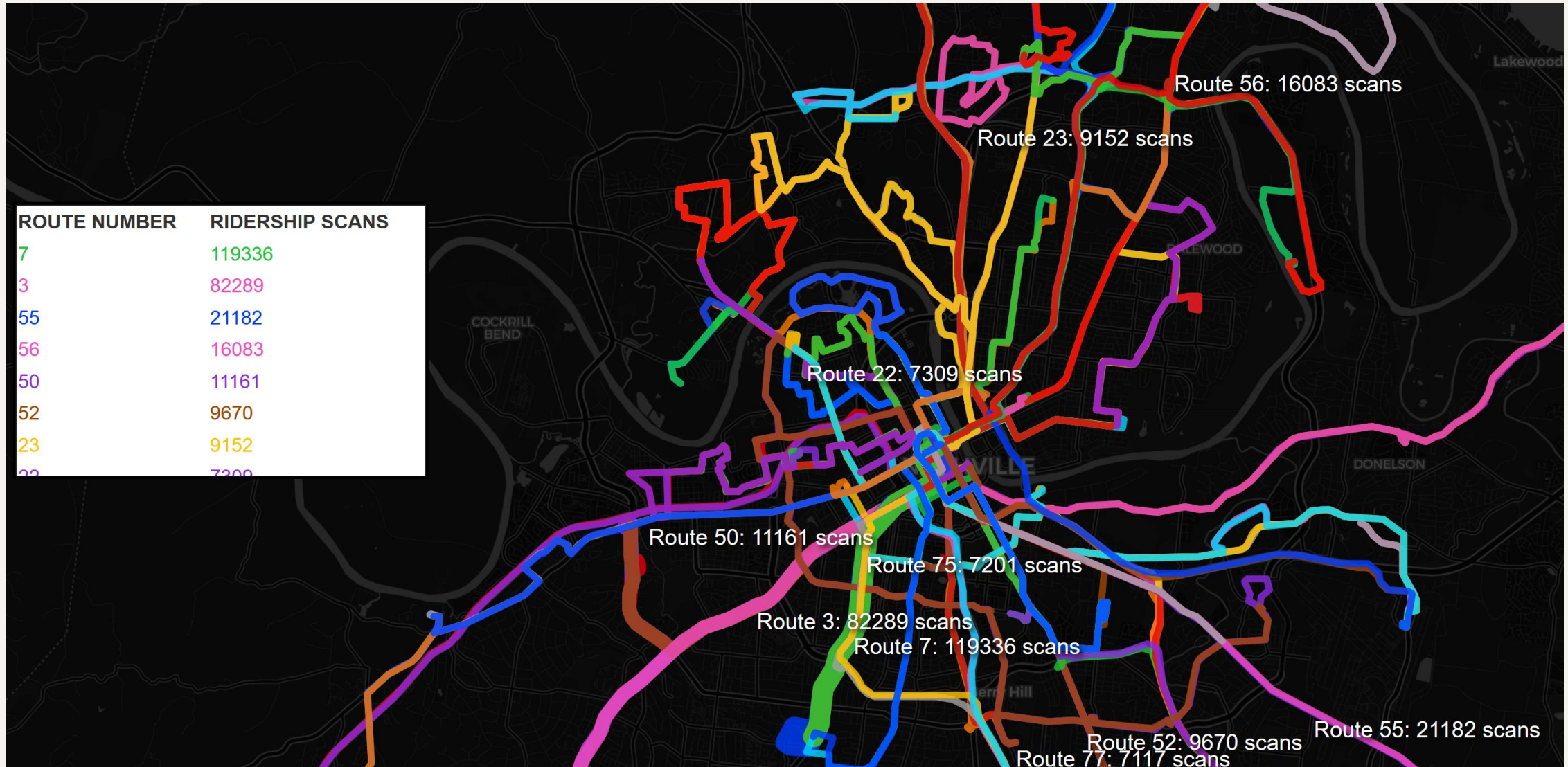
- Monthly Peaks for Route 3: Sept. 2017 – 7969, Oct. 2019 – 7251, Oct. 2023 – 7984
- Monthly Peaks for Route 7: Oct. 2019 – 8563, Oct. 2023 - 8405



# Explore Vanderbilt's Bus Swipes Visualization!



- **Link:** <https://movevu-busvisualization22-23.netlify.app/>



## Questions

- Is there additional analysis of these results you would like to see?
- What recommendations do you have for our next steps, based on your understanding and interpretation of the survey results?



## Next steps



**Website:** [vanderbilt.edu/MoveVU](https://vanderbilt.edu/MoveVU)

**Email:** [MoveVU@vanderbilt.edu](mailto:MoveVU@vanderbilt.edu)