Building Safer and More Friendly Streets:

Lessons from Lime Data on Infrastructure, Safety, and Transit Access

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1 About

League of American Bicyclists

Since 1880, the League of American Bicyclists has been people-powered, with a goal to make bicycling safer and easier as a means of transportation and recreation. Today, the League continues to improve lives and strengthen communities through bicycling. We are more than 200,000 members and supporters strong with more than 1,000 state and local advocacy groups and bike clubs as well as thousands of businesses, universities, and communities together leading the movement to create a Bicycle Friendly America for everyone. For more information, go to bikeleague.org.

Lime

Lime's mission is to build a future where transportation is shared, affordable and carbon-free. As one of the world's largest providers of shared electric vehicles, Lime partners with cities to deploy electric bikes and scooters to serve any trip under five miles. A 2025 Time Magazine 100 Most Influential Company and past Fast Company Brand that Matters, Lime has powered more than one billion rides in around 30 countries across five continents, spurring a new generation of clean alternatives to car ownership. Learn more at li.me.

Authors

Lime
Marissa Cruse
Brandon Haydu

League of American Bicyclists
Amelia Neptune
Marlee Townsend

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2 Letter from the League of American Bicyclists

For more than 140 years, the League of American Bicyclists has been the national grassroots advocacy organization leading the movement to create a Bicycle Friendly America for everyone. Our Bicycle Friendly Community (BFC) program, in particular, exists to provide the tools, encouragement, and roadmap for communities to make bicycling safer, easier, and more accessible.

Since the 1990s, the League has worked with over 900 communities across the nation through the BFC program, providing these places with guidance and recommendations to shape their policies, plans, programs, and infrastructure. As new data, new technology, and new best practices surface, our standards for what it means to be a 'Bicycle Friendly Community' must also evolve to meet the moment.

In 2025, the League was thrilled to partner with Lime for a second year of the 'Lime Mobility Insights Competition' to help more communities in the BFC program take advantage of the powerful data that exists in their shared micromobility programs. The cities of Phoenix, Nashville, and Baltimore were selected for the 2025 Competition because these three Bronze-level BFCs share a similar foundation for growth: city-wide micromobility and transit systems commonly used in tandem, and burgeoning bikeway networks with a need for greater investments to build low-stress options for riders.
The insights from Lime's data outlined in this report help to demonstrate exactly why communities must continue to make these investments: we can see very clearly that building better infrastructure, and establishing policies to support that infrastructure, has real-world results in helping more people to safely make trips on two wheels. The data available to these and other cities with Lime systems is a powerful tool to make the case for these continued investments.

Whether your community has a shared micromobility system or not, the implications of this research are clear and we encourage every local bike advocate and decision maker to consider the potential impact of similar investments in your community.

- Bill Nesper
Executive Director,
League of American Bicyclists

National Bike Summit attendees gather before heading out on a group ride. Bill Nesper pictured center front row.
Photo: Brian Palmer.

3 Executive Summary

1. Shared micromobility users strongly prefer bike lanes, especially protected infrastructure

Across Baltimore, Nashville, and Phoenix, Lime trip data shows that riders overwhelmingly choose streets with dedicated bike infrastructure, particularly protected or separated lanes. New installations drove ridership gains vs baseline growth on streets with no dedicated bike infrastructure: up 207% in Baltimore, 39% in Nashville, and 35% in Phoenix. Surveys echo this trend: one in three riders prefer protected lanes, and one in four prefer painted lanes over roadways with no bike infrastructure. These findings make clear that safe, continuous, and low-stress networks are essential to growing ridership and public support for micromobility.

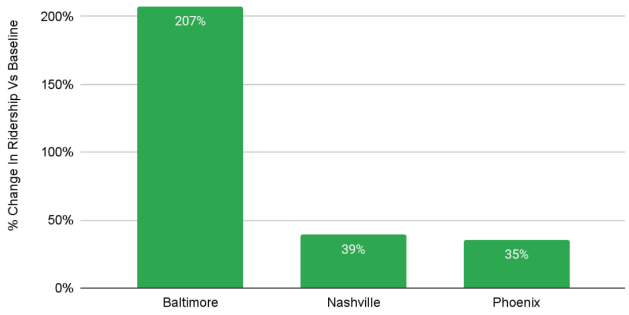


Figure 1. Ridership Growth Is Higher On New Bike Lanes Vs Baseline Growth On Streets Without Dedicated Bike Infrastructure

2. Safety outcomes are improving, thanks to better infrastructure

Safety outcomes continue to improve as cities invest in better infrastructure. Across more than 5 million Lime trips studied, 99.99% were reported incident-free. Furthermore, reported incident rates were 34% lower on streets with bike infrastructure than those without. This mirrors research showing that protected facilities reduce crash risk and underscores that building more bike infrastructure not only increases ridership but also improves safety.

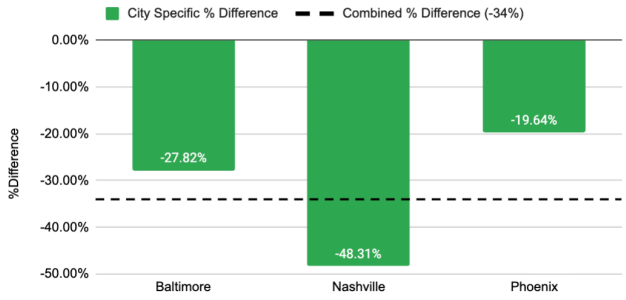


Figure 2. Reported Incident Rates Are Lower On Streets With Bike Infrastructure Compared To Streets Without Bike Infrastructure

3. Micromobility expands transit access

Shared micromobility is increasingly part of the first and last mile connection to public transit. Nearly 1 in 6 riders in the participating cities used Lime to reach transit, and over 80% said it helped them access new parts of their city. Furthermore, trips to and from transit averaged 1.2 miles in length, doubling the typical half-mile walkshed to transit (NACTO, 2015).

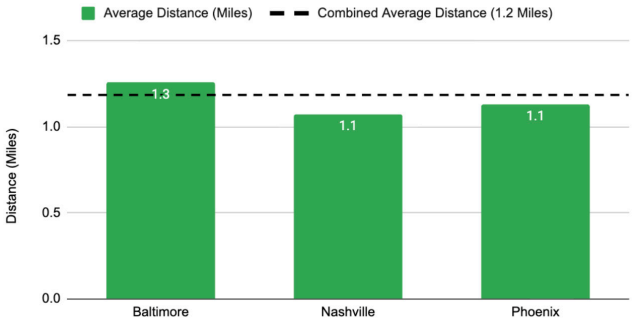


Figure 3. Average Trip Length of Lime Trips Connecting To or From Transit Stations

Policy and Planning Implications

The 2025 Mobility Insights findings illustrate that investments in bike infrastructure provide tangible safety, ridership, and connectivity benefits. Across Baltimore, Nashville, and Phoenix, the analysis demonstrates that well designed bike infrastructure, specifically protected or separated lanes, not only attract riders but make those trips safer. Furthermore, micromobility can greatly expand access to transit making it easier for residents to reach more neighborhoods across their city.

For cities looking to follow Baltimore, MD, Nashville, TN, and Phoenix, AZ, or to benefit from Lime's experience in cities around the world, Lime can provide data and support with transportation planning. Lime data can be used to identify corridors of high demand that warrant upgrades to bike infrastructure, measure outcomes of recent bike network expansions, or track progress toward city mode shift and safety goals.

Reflections from Baltimore, MD

Tyler Smith
Dockless Vehicle Program Manager

The rapid growth of micromobility—specifically the surging popularity of dockless e-scooters and e-bikes—has fundamentally reinforced the City of Baltimore's commitment to safety for every user of our transportation network. With ridership on track to exceed three million trips in 2025, the city's Department of Transportation (BCDOT) has clear data demonstrating a direct correlation that when we provide safer, connected infrastructure, ridership thrives and safety incidents decline.

Baltimore's participation in the Mobility Insights Competition reaffirms our belief that investing in a robust micromobility program, along with safe and protected biking infrastructure, directly increases how residents move throughout the city. This partnership has provided us with valuable insights that will be instrumental in structuring our future Complete Streets and dockless vehicle programming so that city streets are more accessible, connected, and equitable for all.

Reflections from Phoenix, AZ

Adriana Lopez Hernandez
Micromobility Planner

The City of Phoenix is encouraged by the insights generated through the Mobility Insights Competition and appreciates the collaborative efforts with Lime and the League of American Bicyclists. Mobility, road safety, and intermodal data are instrumental in shaping projects, policies, and infrastructure that respond to the community's evolving travel needs. Access to detailed trips and safety data enables us to better understand how rider behavior, infrastructure design, and safety outcomes intersect, allowing us to translate those insights into more equitable, data-driven decisions.

As Phoenix's micromobility program continues to expand its service area and fleet, new opportunities are emerging to strengthen connections with transit and improve system integration. Enhancing intermodal connectivity not only improves rider experience but also supports the City's broader sustainability goals outlined in the Climate Action Plan. Phoenix's Vison Zero Road Safety Action Plan and the Active Transportation Plan continue to guide the strategic implementation of bike lanes, street crossings and bike parking facilities. These efforts support active mobility as a viable and safe option for reaching local destinations, participating in social activities, and ultimately enhancing overall quality of life for our community.

The findings in this report reaffirm what we observe locally: riders prefer using dedicated bike facilities when available. These facilities are especially welcoming to new and occasional riders. The data further supports the importance of integrating bike lanes, parking zones, and safe crossings near high capacity stops an approach already shaping several upcoming City's projects and guiding the placement of designated parking corrals for the micromobility program.

Ultimately, this collaboration reinforces Phoenix's commitment to building safer, more equitable and better-connected streets. Phoenix is redefining what mobility means in a city. This partnership was more than a research exercise, it sheds light on the future we are building: one bike lane, one confident rider, one shared trip at a time.

Reflections from Nashville, TN

Meghan Mathson
TDM Administrator for the Nashville Department of Transportation and Multimodal Infrastructure

Participating in the Mobility Insights Competition has reaffirmed what we've believed in Nashville — that investing in safe, protected bike infrastructure directly improves how people move through our city. The data from Lime clearly shows that when we build better facilities, people use them — and they feel safer doing so. This partnership has provided us with valuable insights that will help guide our future planning and ensure that our streets are more accessible, connected, and equitable for all.

4 Introduction

Lime has partnered with the League of American Bicyclists in the second year of the Mobility Insights Competition, with the goal of partnering with jurisdictions in the U.S. to identify and address specific transportation issues that improve conditions for cyclists, micromobility users, and other vulnerable road users.

This initiative provided a unique opportunity for participating jurisdictions to harness Lime's extensive datasets, including detailed trip and safety analytics, and leverage expert guidance from both Lime's team of transportation professionals and the League's program advisors. The aim was to develop targeted, data-driven strategies that will enhance road safety, reduce incidents, and promote a more inclusive and secure transportation environment for pedestrians, cyclists, and micromobility users.

- **Data Utilization:** Participants worked with experts at Lime to harness Lime's trip data, including but not limited to Mobility Data Specification (MDS), General Bikeshare Feed Specification (GBFS), and safety data. This data provided invaluable insights into user behavior, traffic patterns, and micromobility usage trends.
- **Expert Collaboration:** Jurisdictions worked with Lime's in-house team of transportation planners, analysts, and researchers, who assisted the selected jurisdictions with data interpretation and implementation of findings to optimize urban transportation planning.
- **Infrastructure Planning Support:** The League and Lime sought to partner with jurisdictions in the process of developing or updating comprehensive transportation plans or Vision Zero Action Plans. By integrating micromobility data, jurisdictions can make informed decisions on infrastructure development, prioritizing safety, accessibility, and equity.

Research Questions

In consultation with staff from the Cities of Baltimore, Nashville, and Phoenix, the research team identified the following three questions as the focus of the Mobility Insights partnership:

1. **Bike lanes:** Do shared micromobility riders show a preference for bike facilities?
2. **Safety:** How are safety outcomes being impacted by infrastructure? Are we seeing improvements related to bike facility investments?
3. **Transit Access:** How does shared micromobility complement existing transit networks? How do riders use shared micromobility in combination with public transit?

5 Methods

Bike Infrastructure

Understanding where Lime trips are taken requires matching trip routes to a street network map. For this purpose, the research team relied on the widely-used, open-source tool, OpenStreetMap (Ferster et al., 2020). To identify how many Lime trips were taken on individual street segments, the research team examined the GPS "breadcrumb" route of every Lime trip taken for each month from the beginning of Lime's service through October 2025 and identified if the path passed through the street segment provided by OSM.

The research team worked with staff from the City of Baltimore, City of Nashville, and City of Phoenix to identify and extract data on the location of bicycle infrastructure as well as when it had been installed. In conjunction with Lime trip data, the bike infrastructure location and installation date information allowed the research team to examine how Lime trip volumes changed after the installation of bike infrastructure. We focused the analysis on differences between new bike infrastructure - bike infrastructure that was installed during Lime's service period, pre-existing infrastructure - bike infrastructure that was installed prior to Lime's service period, and shared infrastructure - shared bike facilities, and street segments with no bike infrastructure at all. For this report, bike infrastructure highlights separated, on-street infrastructure: protected bike lanes and painted bike lanes (separated bike or shared use paths were not included). We included shared infrastructure, such as sharrows, shared bus-bike lanes, sign-only bike routes, or bike boulevards as streets with no bike lanes. The months and years that were selected for each city vary to account for changes in operations of Lime or other operators, changes to the service area, or taking into consideration when new bike facilities were installed. Therefore, the study periods for each city are tailored to the local conditions.

Safety

Lime users can report safety incident data in a number of ways. When a Lime user is involved in an incident such as a crash or fall while using Lime, they are encouraged to report it directly on the app or to contact Lime by phone. An additional form is available on Lime's website for any third party involved in a safety incident with a Lime vehicle. Lime also works with the police in the event of a safety incident to report and retrieve incident data involving its vehicles.

Using rider-reported safety incident data, the research team compared the number of incidents reported to the number of trips taken to calculate a per-trip incident rate. The research team further broke down the rider-reported incident rate into hexagon grid cells to understand incident rates by roadway facility type. Finally, the research team examined how rider-reported incident rates varied by where incidents occurred, to examine whether the provision of bike infrastructure is associated with better safety outcomes as shown in **Figure 4.**

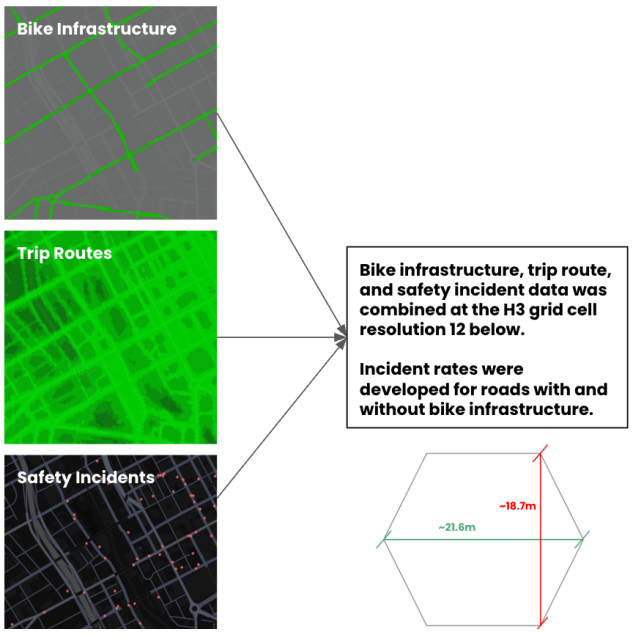


Figure 4. Lime Incident Rate By Facility Type Method

Transit Access & Connectivity

To assess how Lime riders use Lime in conjunction with public transit, we analyzed trips that began or ended within 50 meters of transit stations during the summer of 2025 for Baltimore and Nashville (June through August) and spring of 2025 for Phoenix (March through June). For each city, we examined trips along rail and high-frequency bus transit routes.

6 Results

Bike Infrastructure

Across Baltimore, Phoenix, and Nashville, riders show a clear preference for dedicated bike infrastructure. Growth in ridership was consistently highest on streets with new bike infrastructure. Furthermore, when looking at Lime's rider survey data of 951 responses between 2023 and 2025 across the three study cities, riders highlight their preference for bike infrastructure. When asked what type of infrastructure they prefer, 1 in 3 riders prefer a protected bike lane, and 1 in 4 prefer painted bike lanes, compared to roadways with no dedicated bike infrastructure. These results highlight the strong demand for protected and painted bike lanes as part of urban micromobility networks.

Baltimore, MD

In Baltimore, Lime ridership is concentrated downtown. The map below **(Figure 5)** shows the city's Open Street Map (OSM) street network classified by Lime trip volume and street segment type, highlighting new bike lanes (Lime green), pre-existing bike lanes (dark green), and shared lanes (grey).

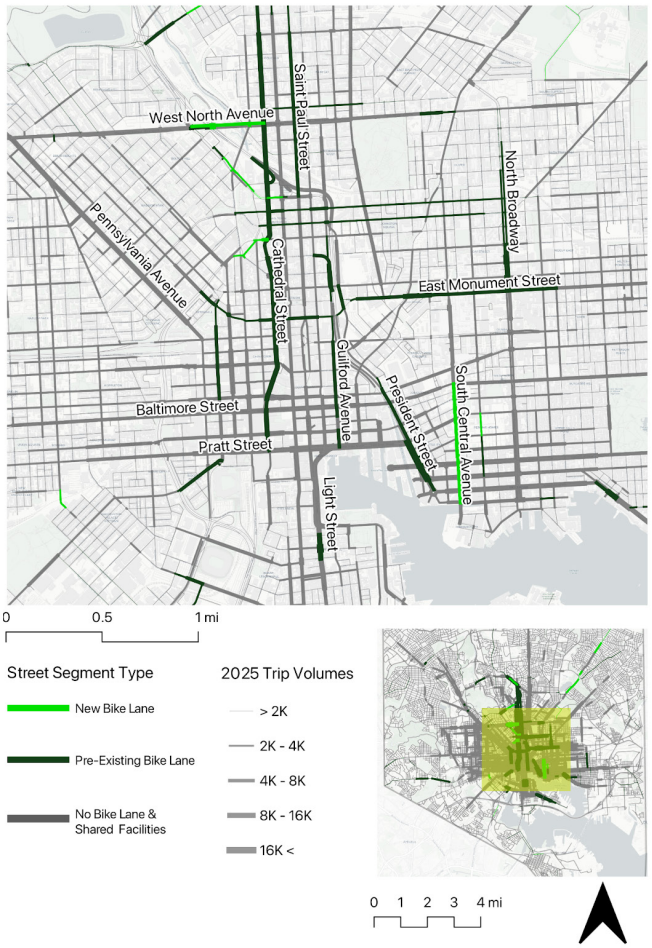


Figure 5. Map of trip volumes in Baltimore, MD Between January and October 2025

In Baltimore, bike infrastructure and Lime ridership has increased since Lime's service began in 2018. Having multiple years of ridership data allowed the research team to analyze growth in ridership on roads that had new bike infrastructure installed compared to baseline growth on streets with no infrastructure installed. For Baltimore, the research team analyzed ridership changes between the first six months of 2022 and 2025. Between 2022 and 2025, Baltimore installed 11.6 lane miles of bike infrastructure. **Lime trips on new bike lanes grew 207% more than baseline growth on streets without dedicated bike infrastructure** (shared lanes or no bike lanes), and Lime ridership on pre-existing bike infrastructure grew slightly more than baseline growth streets with shared infrastructure or no bike infrastructure, as shown in **Figure 6.** The difference in trip volume growth over the 3-year time period not only shows a clear preference for bike infrastructure amongst riders, it also shows that micromobility trips grow substantially when dedicated bike infrastructure is installed.

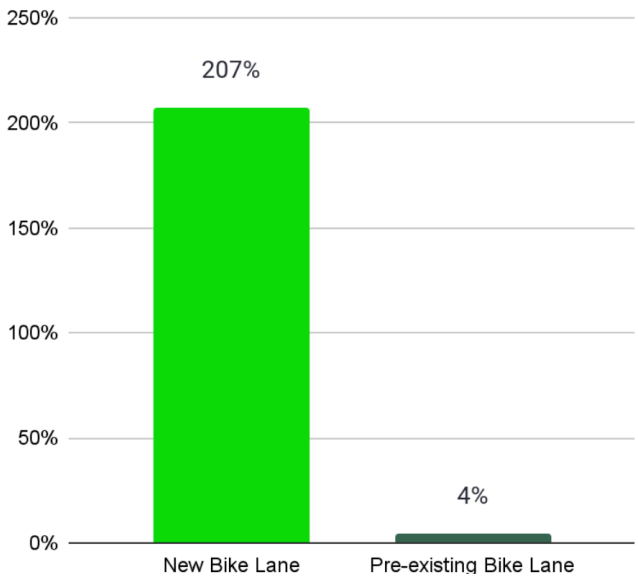


Figure 6. Lime trip growth on streets with bike infrastructure vs baseline growth on streets without bike infrastructure between the first 6 months of 2022 and 2025 in Baltimore

The research team also explored ridership patterns across a few high ridership corridors. 28th St, Harford Rd, and S Central Ave. experienced some of the highest ridership increases. 28th St. experienced a 526% increase in ridership between 2022 and 2025 during which time a separated bike lane was completed in 2023. Harford Rd. experienced a 423% increase in ridership between 2022 and 2025 during which time a separated bike lane was finished in 2024. S Central Ave. experienced a 229% increase in ridership between 2022 and 2025 during which time a separated bike lane was installed in 2022. **Figure 7** illustrates the protected bike lane installed on 28th St. along with a map showing all Lime trips that passed through this corridor between January and October 2025. As **Figure 7** shows, this piece of infrastructure serves residents across Baltimore illustrating how building protected bike infrastructure can provide benefits beyond the neighborhood where it is installed.

Figure 7. 28th St. Protected Bike Lane and Map of Lime Trips Passing Through This Corridor Between January and October 2025

Nashville, TN

In Nashville, Lime ridership is concentrated downtown, specifically near Broadway street. The map below (Figure 8) shows the city's Open Street Map (OSM) street network classified by Lime trip volume and street segment type, highlighting new bike lanes (Lime green), pre-existing bike lanes (dark green), shared bike facilities (dark green), and streets with no bike infrastructure (grey).

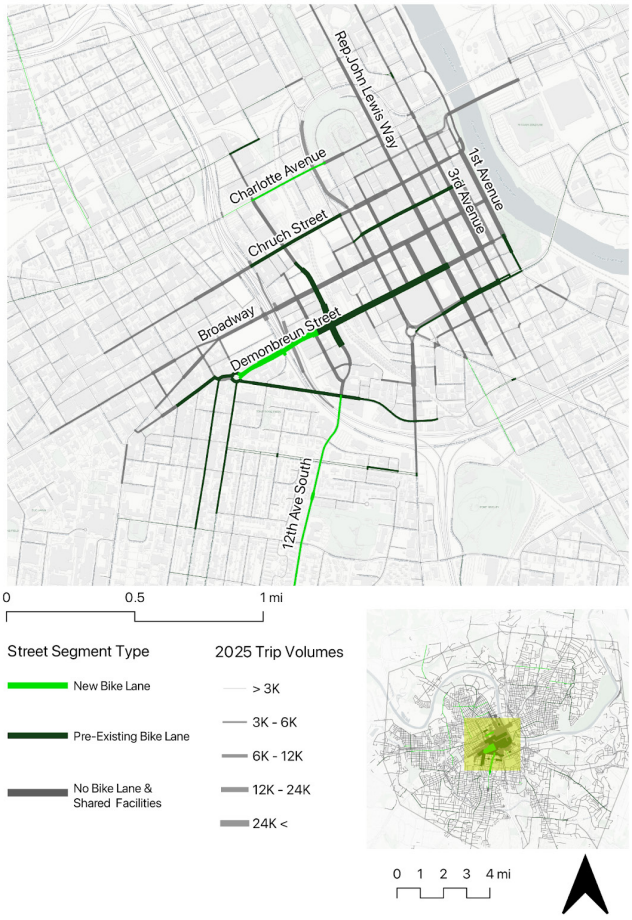


Figure 8. Map of trip volumes in Nashville, TN Between January and October 2025

In Nashville, bike infrastructure and Lime ridership has increased since Lime's service began in 2018. Between 2021 and 2025, Nashville installed 35 lane miles of bike infrastructure. Having multiple years of ridership data allowed the research team to analyze growth in ridership on roads that had new bike infrastructure installed compared to baseline growth on streets with no infrastructure installed as shown in **Figure 9.** Between the first 10 months of 2021 and 2025, Lime trips on new bike lanes grew 39% more than baseline growth on streets without dedicated infrastructure (shared lanes or no bike lanes), and Lime ridership on pre-existing bike infrastructure grew 20% more than baseline growth on streets with shared infrastructure or no bike infrastructure. The difference in trip volume growth over the 4-year time period not only shows a clear preference for bike infrastructure amongst riders, it also shows that micromobility trips grow substantially when dedicated bike infrastructure is installed.

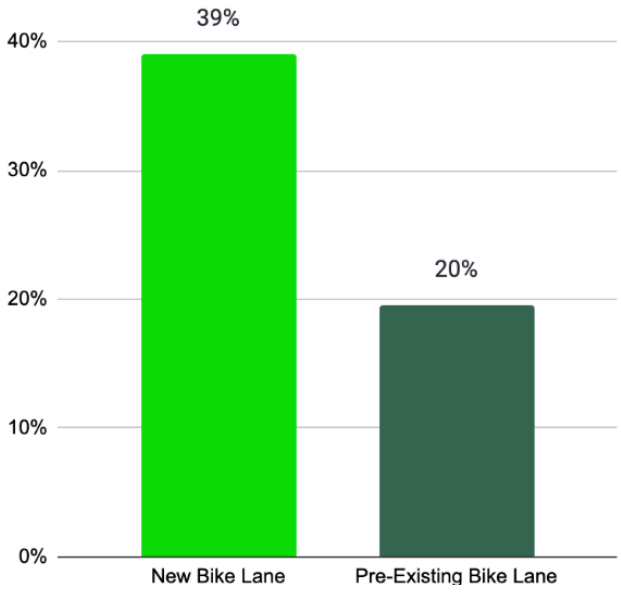
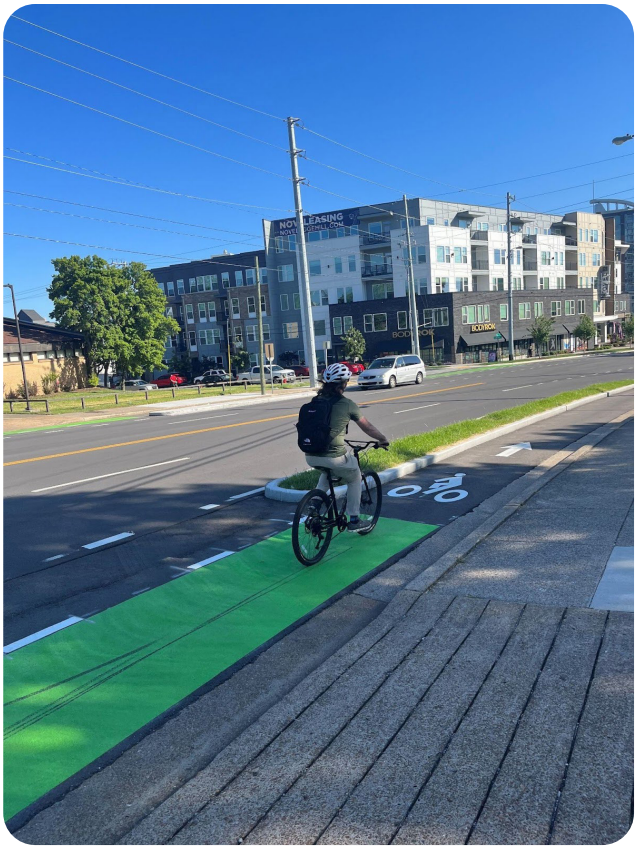


Figure 9. Lime trip growth on streets with bike infrastructure vs baseline growth on streets without bike infrastructure between the first 10 months of 2021 and 2025 in Nashville

The research team also explored ridership patterns across a few high ridership corridors. Demonbreun St, Commerce St, and 12th Ave S experienced some of the highest ridership increases. Demonbreun St. experienced a 53% increase in ridership between 2021 and 2025 during which time a separated bike lane was installed in 2024. Commerce St experienced a 46% increase in ridership between 2021 and 2025 after a protected bike lane was installed in 2020. 12th Ave South experienced a 109% increase in ridership between 2021 and 2025 during which time a separated bike lane was completed in 2023. Figure 10 illustrates the protected bike lane installed on 12 Ave. South along with a map showing all Lime trips that passed through this corridor between January and October 2025. As Figure 10 shows, this piece of infrastructure serves residents across Nashville illustrating how building protected bike infrastructure can provide benefits beyond the neighborhood where it is installed.



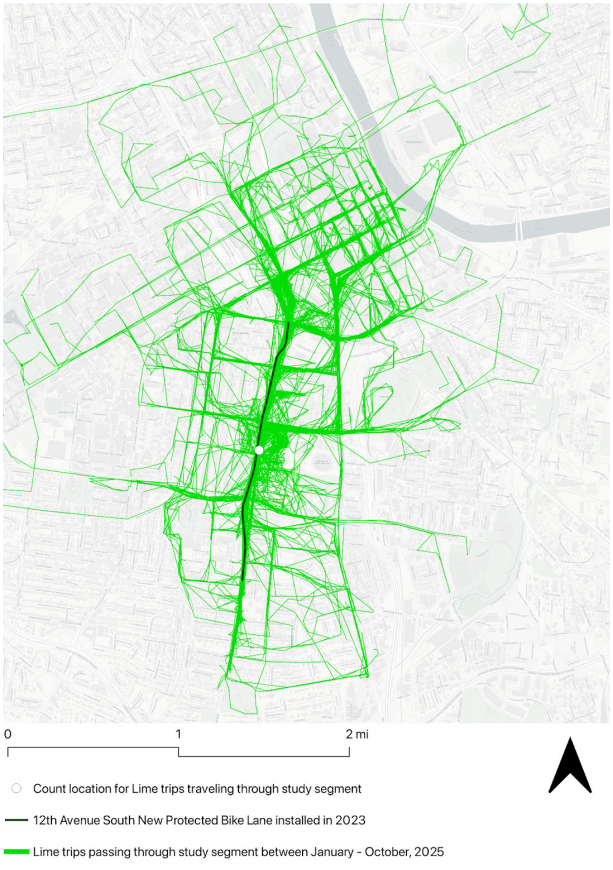


Figure 10. 12th Ave South Protected Bike Lane and Map of Lime Trips Passing Through This Corridor Between January and October, 2025

Phoenix, AZ

In Phoenix, Lime ridership is concentrated in the downtown core. The map below **(Figure 11)** shows the city's Open Street Map (OSM) street network classified by Lime trip volume and street segment type, highlighting new bike lanes (Lime green), pre-existing bike lanes (dark green), and shared bike facilities or streets with no bike infrastructure (grey).

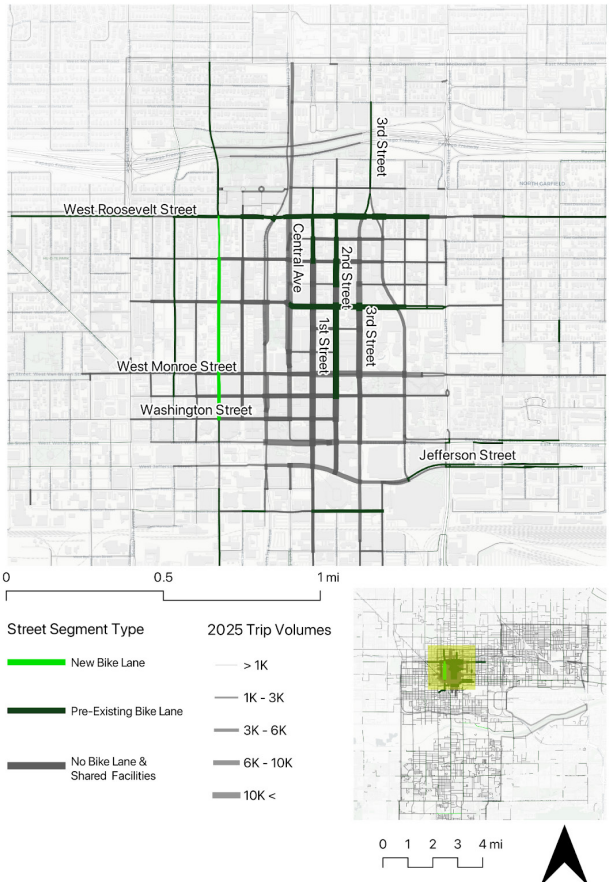


Figure 11. Map of trip volumes in Phoenix

In Phoenix, bike infrastructure and Lime ridership has increased since Lime's service began in 2017. Between 2023 and 2025, Phoenix installed 64.5 lane miles of bike infrastructure. Having multiple years of ridership data allowed the research team to analyze growth in ridership on roads that had new bike infrastructure installed compared to baseline growth on streets with no infrastructure installed as shown in **Figure 12.** Between 2023 and 2025 (during the months of February through May), Lime trips on new bike lanes grew 35% more than baseline growth on streets without dedicated infrastructure (shared

lanes or no bike lanes), and Lime ridership on pre-existing bike infrastructure grew slightly more than baseline growth on streets with shared infrastructure or no bike infrastructure. The difference in trip volume growth over the 2-year time period not only shows a clear preference for bike infrastructure amongst riders, it also shows that micromobility trips grow substantially when dedicated bike infrastructure is installed.

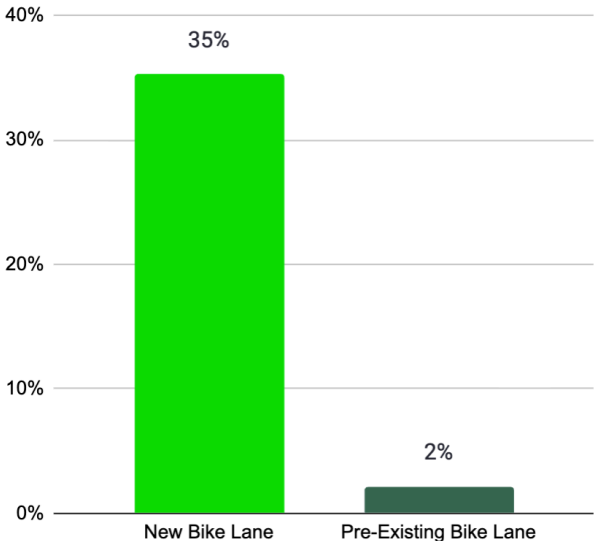


Figure 12. Lime trip growth on streets with bike infrastructure vs baseline growth on streets without bike infrastructure between 2023 and 2025 in Phoenix

The research team also explored ridership patterns across a few high ridership corridors. E. Fillmore St, North 3rd Ave, and Roosevelt St experienced some of the highest ridership increases. E. Fillmore St experienced a 39% increase in ridership between 2023 and 2025 after a protected bike lane was completed in 2022. North 3rd Ave. experienced a 102% increase in ridership between 2023 and 2025 during which time a protected bike lane was installed in 2024. Roosevelt St. experienced a 20% increase in ridership between 2023 and 2025 during which time a separated bike lane was installed in 2024. **Figure 13** illustrates the protected bike lane installed on E. Fillmore Street along with a map showing all Lime trips that passed through this corridor between January and October 2025. As **Figure 13** shows, this piece of infrastructure serves residents across Phoenix illustrating how building protected bike infrastructure can provide benefits beyond the neighborhood where it is installed.

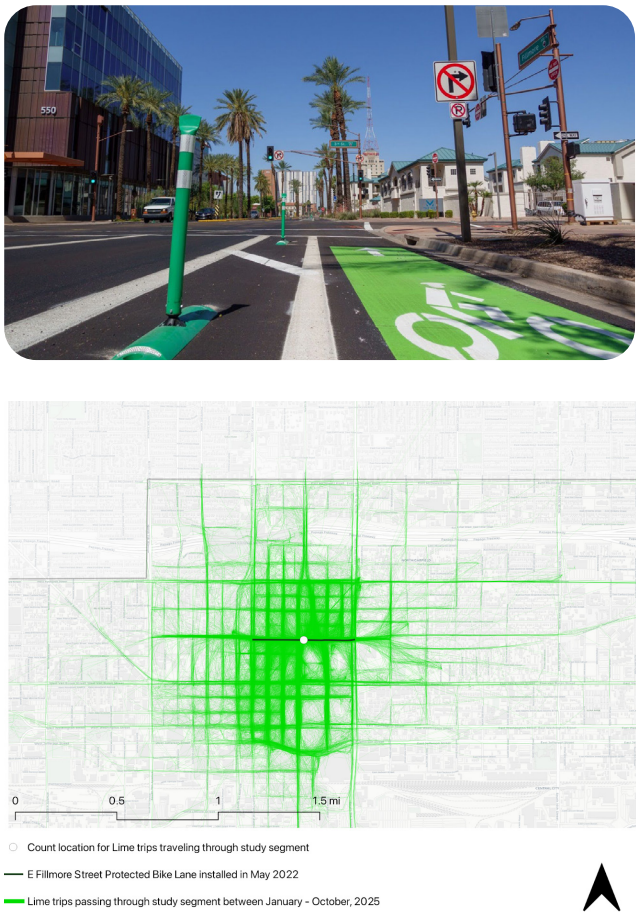


Figure 13. Fillmore Street Protected Bike Lane and Map of Lime Trips Passing Through This Corridor Between January and October 2025

Bike Infrastructure Summary

Across Baltimore, Nashville, and Phoenix, micromobility ridership is highest where bike infrastructure exists—especially downtown. New and well-maintained bike lanes drive the largest increases in trips, including a 174% rise on Baltimore's new bike lanes vs baseline growth on streets without bike infrastructure, a 109% increase in ridership on Nashville's new protected bike lane along 12th Ave S., and an 102% jump in Phoenix on the N 3rd Ave new protected bike lane.

Lime's trip data can help cities pinpoint high-activity shared corridors and streets without bike lanes that still attract significant ridership. These insights support data-driven recommendations for upgrading shared or unprotected lanes to separated facilities, ensuring infrastructure investments align with where people already ride.

Safety

Using rider-reported safety incident data, the research team compared the number of reported incidents to the number of trips taken to calculate a per-trip reported incident rate at a hexagonal grid cell level. The team used H3 Resolution 9, which is approximately ~300 square meters. This allowed the team to compare reported incident rates across facility types. The research team included painted bike lanes, protected bike lanes, separated paths, and bus-bike lanes as streets classified as 'with bike infrastructure'. Roads without separated infrastructure or signage only were classified as 'without bike infrastructure'. The research team did not disaggregate reported incident rates by bike infrastructure facility type because reported incident rates are low, making the data too sparse to compare by facility type. Data was collected for trips between January 2022 and September 2025.

Baltimore, MD

Since 2022, Lime riders in Baltimore have completed over 2 million trips. During this time period, over 99.99% of Lime trips in Baltimore have not had a reported incident. For the less than 0.01% of Lime trips in Baltimore where a rider reported a safety incident, the majority (over 67%) of reported incidents did not require any medical attention. Furthermore, 65% of reported incidents were single-vehicle falls, and less than 1% of reported incidents were with another bicyclist or pedestrian. This highlights that Lime riders pose little danger to the safety of other road users.

In addition to bike infrastructure being more popular for riders, it was also found to be safer. As shown in **Figure 14**, reported incident rates are almost 30% lower on streets with bike infrastructure in Baltimore.

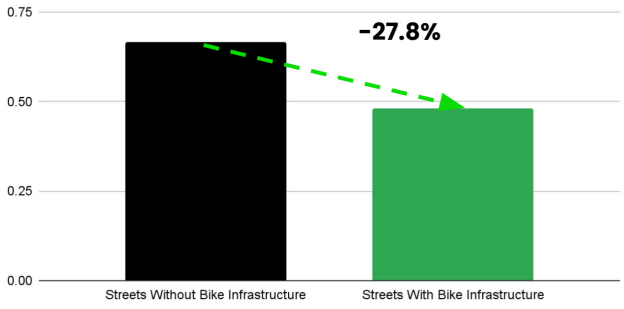


Figure 14. Reported Incident Rates Are Lower On Streets With Bike Infrastructure Compared To Streets Without Bike Infrastructure in Baltimore

Nashville, TN

Since 2022, Lime riders in Nashville have completed over 2 million trips. During this time period, over 99.99% of Lime trips in Nashville have not had a reported incident. For the less than 0.01% of Lime trips in Nashville where a rider reported a safety incident, the majority (over 73%) of reported incidents did not require any medical attention. Furthermore, 75% of reported incidents were single-vehicle falls, and less than 2% of reported incidents were with another bicyclist or pedestrian. This highlights that Lime riders pose little danger to the safety of other road users.

In addition to bike infrastructure being more popular for riders, it was also found to be safer. As shown in **Figure 15,** reported incident rates are 48% lower on streets with bike infrastructure in Nashville.

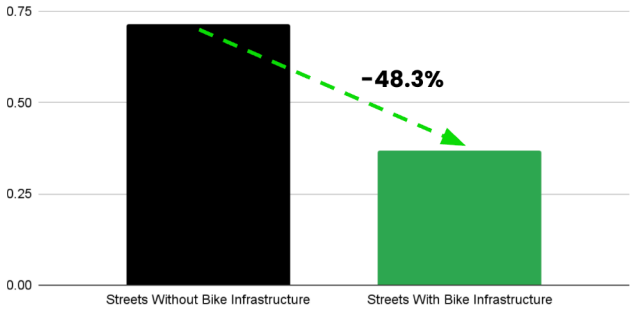


Figure 15. Reported Incident Rates Are Lower On Streets With Bike Infrastructure Compared To Streets Without Bike Infrastructure in Nashville

Phoenix, AZ

Since 2022, Lime riders in Phoenix have completed over 1 million trips. During this time period over 99.99% of Lime trips in Phoenix have not had a reported incident. For the less than 0.01% of Lime trips in Phoenix where a rider reported a safety incident, the majority (over 72%) of reported incidents did not require any medical attention. Furthermore, 78% of reported incidents were single-vehicle falls, and no reported incidents were with another bicyclist or pedestrian. This highlights that Lime riders pose little danger to the safety of other road users.

In addition to bike infrastructure being more popular for riders, it was also found to be safer. As shown in **Figure 16,** reported incident rates are almost 20% lower on streets with bike infrastructure in Phoenix.

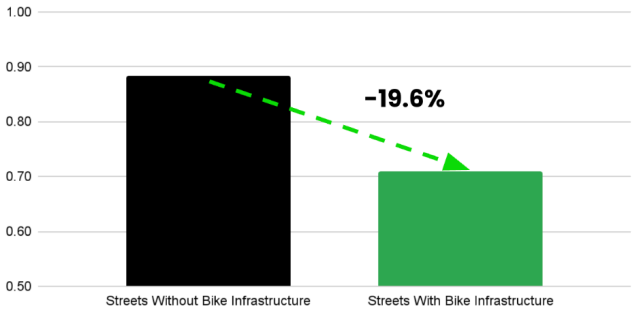


Figure 16. Reported Incident Rates Are Lower On Streets With Bike Infrastructure Compared To Streets Without Bike Infrastructure in Phoenix

Safety Summary

This research builds on previous studies finding that the presence of bike facilities improves safety for riders. For example, research from the American Journal of Public Health (AJPH) found that route infrastructure can be designed for primary prevention of injuries to cyclists (AJPH, 2012). Specifically, the results show that bike-specific, physically separated infrastructure (cycle tracks and dedicated bike lanes) provides substantial safety benefits compared to major streets with parked cars and no bike infrastructure. This finding builds on previous Lime analyses in Washington, DC and Bloomington, IN which found increases in bike infrastructure mileage coincides with lower Lime reported safety incidents (Cruse, 2024).

When analyzing over 5 million trips across all three cities, Baltimore, Nashville, and Phoenix, over 99.99% of Lime trips have not had a reported incident. Furthermore, less than 2% of reported incidents were with another bicyclist or pedestrian. This highlights that Lime riders pose little danger to other road users. Cities can use micromobility infrastructure to further improve the safety of pedestrians. **Figure 17** shows how micromobility parking can be used for 'daylighting' at intersections and driveways - improving pedestrian visibility for motorists.

Figure 17. Micromobility parking corral on Harford Road in Baltimore

Reported incident rates were lower on roads with bike infrastructure than roads without infrastructure. Across all three cities, reported incident rates on roads with bike infrastructure were 34% lower than streets without bike infrastructure as shown in Figure 18. Building more bike lanes helps to increase ridership and also makes those trips safer for users.

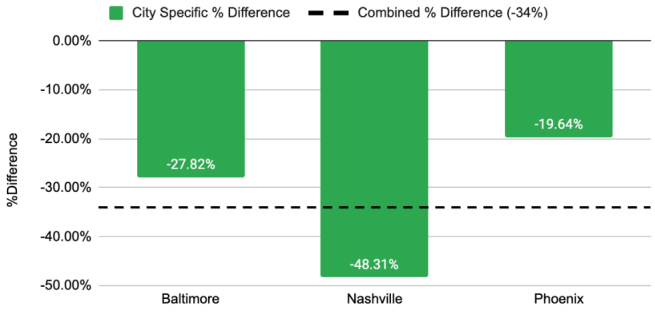


Figure 18. Reported Incident Rates Are Lower On Streets With Bike Infrastructure Compared To Streets Without Bike Infrastructure

Transit Access

Riders use shared micromobility as a first- and last-mile solution that helps them reach transit more easily and extend the range of trips they can take. According to a 2019 study of transportation access in Seattle, the introduction of scooters increased the percentage of households within 10 minutes of transit by 11 percentage points (67% to 78%) and increased job access within 45 minutes by 33% compared to walking alone (Conveyal, 2019).

Lime riders report using Lime to access public transit across Baltimore, Phoenix, and Nashville according to Lime's rider survey data in these three cities between 2023 and 2025 (951 responses). The following statistics from this rider survey data highlight how Lime improves access in these three cities:

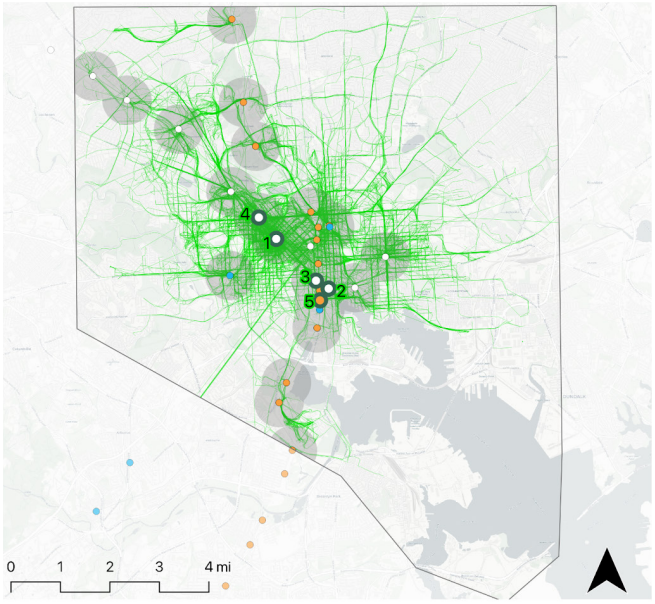
- → 4 in 5 riders report that Lime makes it easier to reach parts of the city they couldn't access before.
- → 16% of riders report connecting to transit before or after their Lime trips
- → 68% of riders say Lime helps them access other public transit options
- → 1 in 6 riders use Lime for commuting
- → 30% of Lime trips replace car trips

These results demonstrate Lime's potential to reduce car dependency, ease congestion, and expand transportation access - making communities more connected for all residents.

To better understand ridership patterns and transit activity, the research team analyzed trips that begin or end within 50 meters of key transit routes or stations identified by the transportation departments in Baltimore, Nashville, and Phoenix. While using a 50 meter buffer around transit stations isn't a perfect representation of riders connecting to transit, it does provide a reasonable approximation of transit access using micromobility. Observing trip routes that Lime riders take within 50 meters of a transit station can help measure how Lime can expand the rider's ability to access destinations that transit or walking alone may not allow them to reach.

Baltimore, MD

Knowing that Lime has the ability to expand rider's accessibility to destinations in Baltimore, we next investigate trips starting or ending within 50 meters of Baltimore's rail network (MARC, Lightrail, and Metro stations) between June and September 2025. These trips have an average distance of 1.3 miles, and **Figure 19** highlights the top five busiest stations and all trip routes starting or ending within 50 meters of a station. The Upton Metro Station (1) has no bike lane on Pennsylvania Avenue. The Convention Center Light Rail Station (2) has no bike lanes on Pratt Street, Howard Street, or Camden Street. The Lexington Market Metro Station (3) features a buffered bike lane. The Penn-North Metro Station (4) includes a shared bus-bike lane on North Avenue. The Charles Center Metro Station (5) also has a shared bus-bike lane on Baltimore Street. The map shows how Lime can greatly expand accessibility to transit stations within Baltimore. Installing dedicated bike infrastructure near top stations, such as the Upton Metro Station and the Convention Center Light Rail, could help riders feel more comfortable during first- and last- mile connections and further increase ridership.



Trip Routes Ending or Beginning Within 50 Meters of a Rail Station

Lime Trips June 1st - September 1st 2025

Top 5 Busiest Stations

- Light Rail
- Metro Stations
- Light Rail Stations
- MARC Stations
- Metro Stations
- Trip Routes
- Half Mile Walkshed

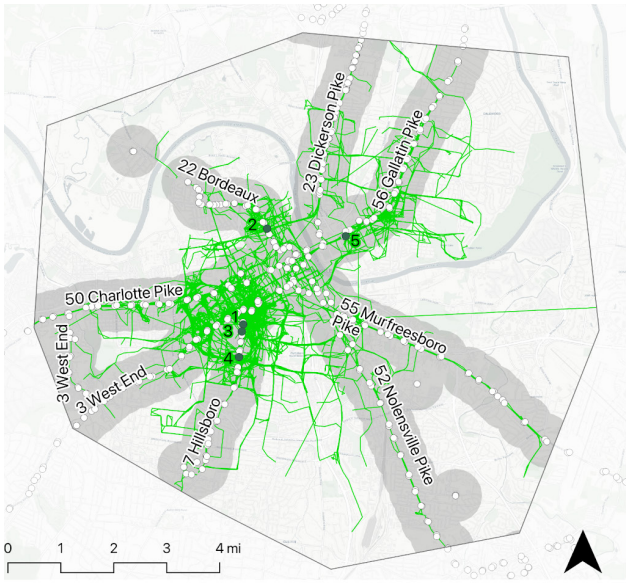
Top 5 Busiest Stations by Activity

1. Upton Metro Station
2. Convention Center Light Rail Station
3. Lexington Market Metro station
4. Penn-North Metro Station
5. Charles Center Metro Station

Figure 19. Trips starting within 50 meters of Baltimore's Rail Network - *MARC, Lightrail, & Metro*

Nashville, TN

The research team investigated trips starting or ending within 50 meters of Nashville's WeGo Frequent Service Network - Outside of Downtown between June and September 2025. These trips have an average distance of 1.1 miles, and **Figure 20** highlights the top five busiest stations and all trip routes starting or ending within 50 meters of a station. Stations along Broadway and within the downtown core are excluded from this analysis to focus attention on connections to outer transit stations. Focusing outside these areas, **Figure 20** highlights the top five busiest stations: 1) 21st Avenue South & Grand Avenue, 2) 8th Avenue North & Jefferson Street, 3) 21st Avenue South & Scarritt Place, 4) 21st Avenue South & Children's Way, and 5) Woodland St & S 5th St. None of these stations currently feature dedicated bike infrastructure, underscoring opportunities to increase transit ridership by enhancing first- and last-mile connectivity in neighborhoods beyond the central business corridor.



Trip Routes Ending or Beginning Within 50 Meters of a High Frequent Bus Route Station

Lime Trips June 1st - September 1st 2025

- Top 5 Busiest Stops
- High Frequent Bus Route Station
- Trip Routes
- Half Mile Walkshed

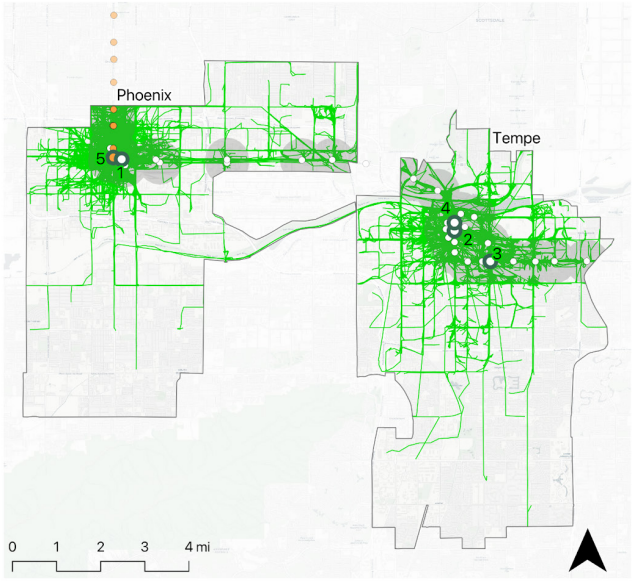
Top 5 Busiest Stations by Activity

1. 21st Ave S & Grand Ave
2. 8th Ave N & Jefferson St
3. 21st Ave S & Scarritt Pl
4. 21st Ave S & Childrens Way
5. Woodland St & S 5th St

Figure 20. Trips starting within 50 meters of Nashville's WeGo Frequent Service Network - Outside of Downtown

Phoenix, AZ

In Phoenix and Tempe, micromobility activity is concentrated near Light Rail stations. The research team investigated trips starting or ending within 50 meters of Light Rail stations between March and June 2025. These trips have an average distance of 1.1 miles, and **Figure 21** highlights the top five busiest stations and all trip routes starting or ending within 50 meters of a station. The top five busiest stations, measured by trips starting or ending within 50 meters of a light rail station, are 1) 3rd Street & Washington (Phoenix), 2) Third Street & Mill (Tempe) - bike lanes along Mill Ave, 3) Rural & Apache (Tempe) - bike lanes along Apache Blvd, 4) Sixth Street & Mill (Tempe) - bike lanes along Mille Ave, and 5) Washington & Central Avenue (Phoenix). The map shows how Lime can greatly expand accessibility to transit stations within Phoenix. Installing dedicated bike infrastructure near top stations, such as 3rd Street & Washington and Washington & Central Avenue, could help riders feel more comfortable during first- and last- mile connections and further increase ridership.



Trip Routes Ending or Beginning Within 50 Meters of a Light Rail Station

Lime Trips March 1st - June 1st 2025

Top 5 Busiest Stations

- Light Rail
- Central Light Rail
- Central Light Rail Stations
- Light Rail Stations
- Trip Routes
- Half Mile Walkshed

Top 5 Busiest Stations by Activity

1. 3rd St & Washington (Phoenix)
2. Third St & Mill (Tempe)
3. Rural & Apache (Tempe)
4. Sixth St & Mill (Tempe)
5. Washington & Central Ave (Phoenix)

Figure 21. Trips starting within 50 meters of Phoenix's Light Rail Network

Transit Summary

Across the three study cities, trips that begin or end within 50 meters of a transit stop have an average distance of 1.2 miles. Considering that a typical walkshed around a transit stop extends approximately half a mile (NACTO, 2015), these findings suggest that **Lime vehicles effectively double the average distance of access**, thereby enhancing first- and last-mile transit connectivity across communities.

7 Policy and Planning Implications

The 2025 Mobility Insights findings illustrate that investments in bike infrastructure provide tangible safety, ridership, and connectivity benefits. Across Baltimore, Nashville, and Phoenix, the analysis demonstrates that well-designed bike infrastructure, specifically protected or separated lanes, not only attract riders but make those trips safer. Furthermore, micromobility can greatly expand access to transit making it easier for residents to reach more neighborhoods across their city. As cities work to improve transportation safety and expand transportation access, the following policy and planning implications emerge.

Across all three cities, streets with new bike infrastructure experienced the greatest growth in ridership. At the same time, safety incident rates were 35% lower on roads with dedicated bike facilities than those without. These findings reinforce the need for separated and protected lanes rather than shared facilities alone. When new infrastructure is installed, cities should design for physical protection and separation, ensuring that facilities encourage greater use and deliver measurable safety benefits.

Nearly 1 in 6 Lime riders used micromobility for transit connections, and over 80% reported that it expanded their access to new parts of their cities. Furthermore, trips to and from transit averaged 1.2 miles in length, doubling the typical half-mile walkshed to transit. These results highlight the need to prioritize bike lanes and parking near high-frequency transit stops, further encouraging ridership to and from transit. Furthermore, micromobility service zones should complement transit service, making it easier for residents to access more of their cities.

For cities looking to follow Baltimore, MD, Nashville, TN, and Phoenix, AZ, or to benefit from Lime's experience in cities around the world, Lime can provide data and support with transportation planning. Lime data can be used to identify corridors of high demand that warrant upgrades to bike infrastructure, measure outcomes of recent bike network expansions, or track progress toward city mode shift and safety goals.

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