

2026 Micromobility and Pedestrian Count Report



Mayor Steven T. Noble

This report reviews a variety of pedestrian and micromobility traffic counts performed in Kingston from 2017 to 2025.

This report includes:

- An introduction to Kingston’s approach to traffic counts.
- A review of in-person traffic counts from 2017-25
- A review of camera-based micromobility counts from 2025
- A review of automated trail counts from 2019-25

Introduction

As part of the City of Kingston's ongoing efforts to promote active transportation and support its growing network of pedestrian and micromobility infrastructure, the City conducts regular counts of pedestrian and micromobility activity at key locations throughout Kingston. Micromobility refers to small, lightweight personal transportation modes including traditional and electric bikes, scooters, and skateboards. These counts serve as a critical tool for understanding how residents and visitors move through the city, tracking trends over time, and informing decisions about infrastructure investment, planning, and programming.

This report summarizes micromobility and pedestrian count data collected between 2017 and 2025 using three methodologies. In-person counts were conducted at six intersections along the Broadway corridor and at Westbrook Lane and Clinton Avenue, capturing pedestrian and bike (excluding scooters and skateboards) volumes as well as perceived gender data across multiple survey periods. Gender disparities in pedestrian and bike activity are well-documented in transportation research and are typically interpreted to reflect the impact of perceived safety. Camera-based counts

were conducted at 15 locations throughout the city in October 2025, using permanently installed camera systems to count all micromobility users. Automated trail counters operated by the City of Kingston and partner organizations recorded undifferentiated pedestrian and micromobility volumes at nine locations over multi-year periods, providing a longer-term view of non-motorized travel demand on the City’s trails.

COUNT METHODS AT A GLANCE:

Kingston uses in-person counts, camera-based counts, and automated trail counts to track active transportation.

Together, these data sources offer a multi-faceted picture of active transportation in Kingston. The findings highlight growing pedestrian activity along the Broadway corridor, strong micromobility use concentrated along the Kingston Greenline, and sustained trail usage at Greenline locations across the city. Significant gender disparities in cycling counts and, to a lesser degree, pedestrian counts are also documented. This report is intended to support the City's continued planning and advocacy for a safer, more equitable, and more connected active transportation network.

Micromobility and Pedestrian Count Locations

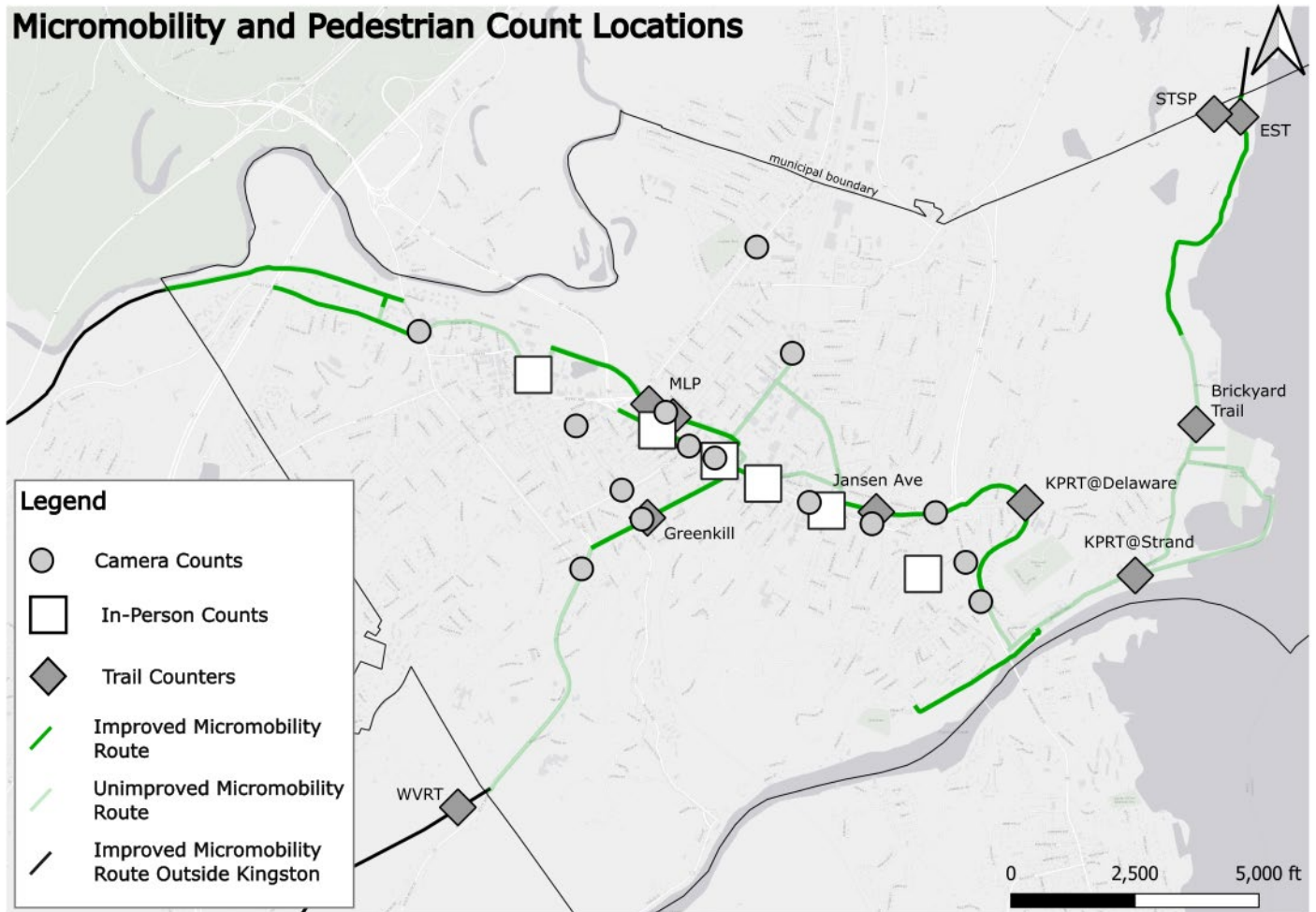


Figure 1. Bike/scooter and pedestrian count locations in the City of Kingston. Improved mobility routes are those where micromobility infrastructure has been added (bike lane, shared use path, cycletrack, etc.).

In-Person Count

In-person pedestrian and (e)bike (excluding other micromobility devices) counts were conducted at five locations along the Broadway corridor and one location at Westbrook Lane and Clinton Avenue during multiple survey periods between 2017 and 2025, with a gap in data collection in 2020 and 2021. Broadway and McEntee Street and Westbrook Lane and Clinton Avenue were first surveyed in autumn 2025. Counts were conducted typically over two to three days per counting period, using two standard time windows: 4–6pm on weekdays and 12–2pm on weekends. In autumn 2025, an additional 2–4pm weekday window was added at Broadway and Cornell Street and Broadway and Andrew Street, extending the afternoon coverage period. Perceived gender was also recorded during these counts as gender disparities in transportation choices can serve as a bellwether for perceived safety.

Westbrook Lane and Clinton Ave

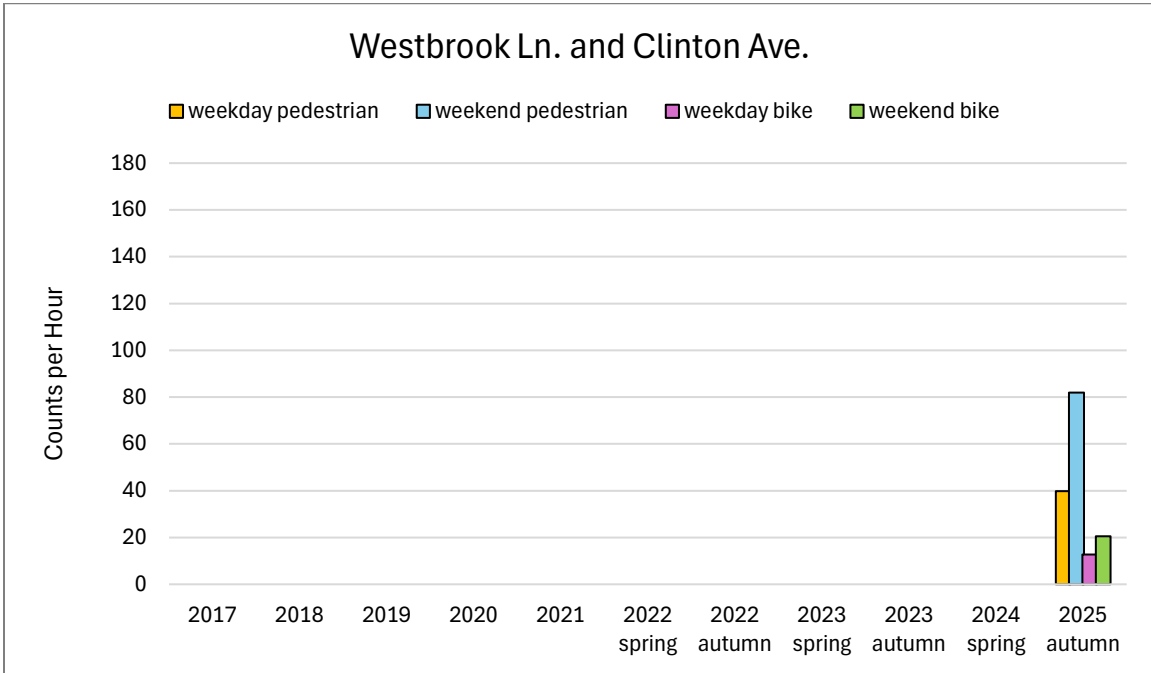


Figure 2. In-person count results for the intersection of Westbrook Ln. and Clinton Ave.

At Westbrook Lane and Clinton Avenue, counts were collected only in the autumn of 2025. Weekday data records an hourly pedestrian count of ~40 and a bike count of ~15 per hour. Weekend data records an hourly pedestrian count of ~80 and an hourly bike count of ~20.

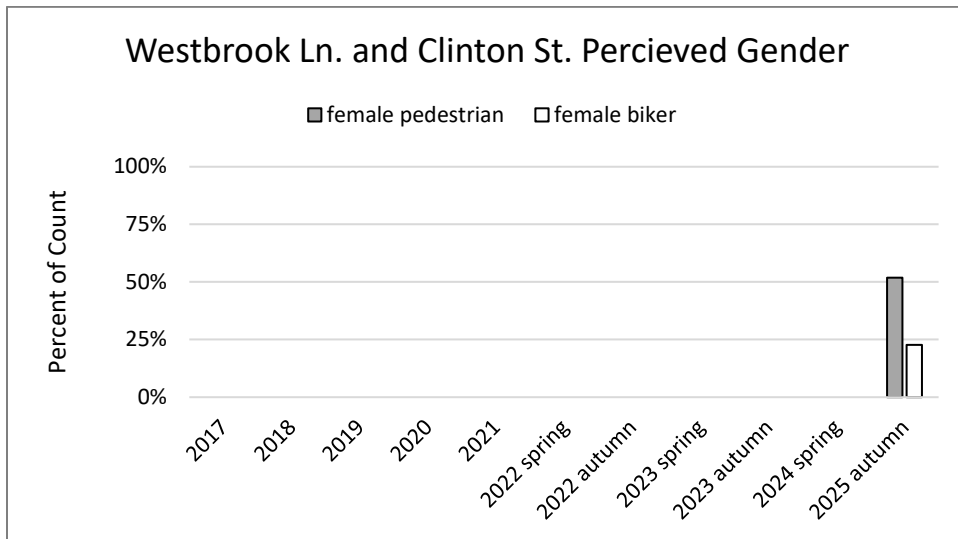


Figure 3. In-person count perceived gender at Westbrook Ln. and Clinton Ave.

Perceived gender counts at Westbrook Lane and Clinton Avenue show female pedestrians accounting for more than 50% of total pedestrian counts and female bikers representing around 25% of total bike counts.

Broadway and Franklin Street

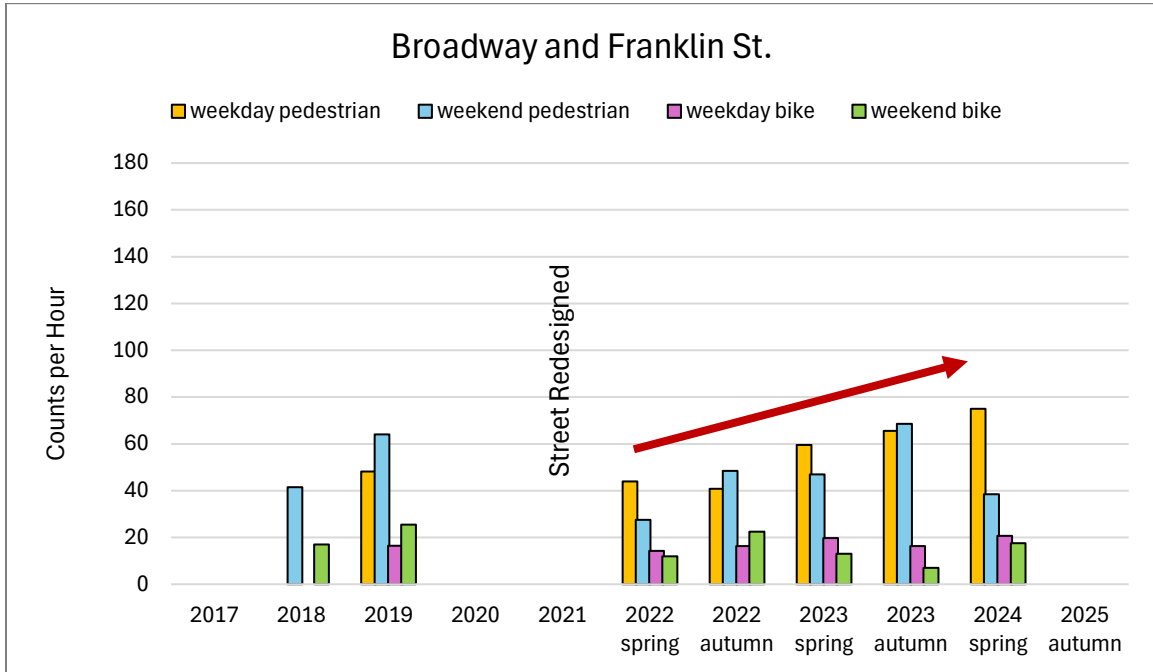


Figure 4. In-person count results for the intersection of Broadway and Franklin St.

At Broadway and Franklin Street, hourly weekday and weekend pedestrian counts were around 40-75 across surveys. Bike counts remain low throughout, generally staying below 25 per hour. Pedestrian counts trend upwards from 2022 to 2024.

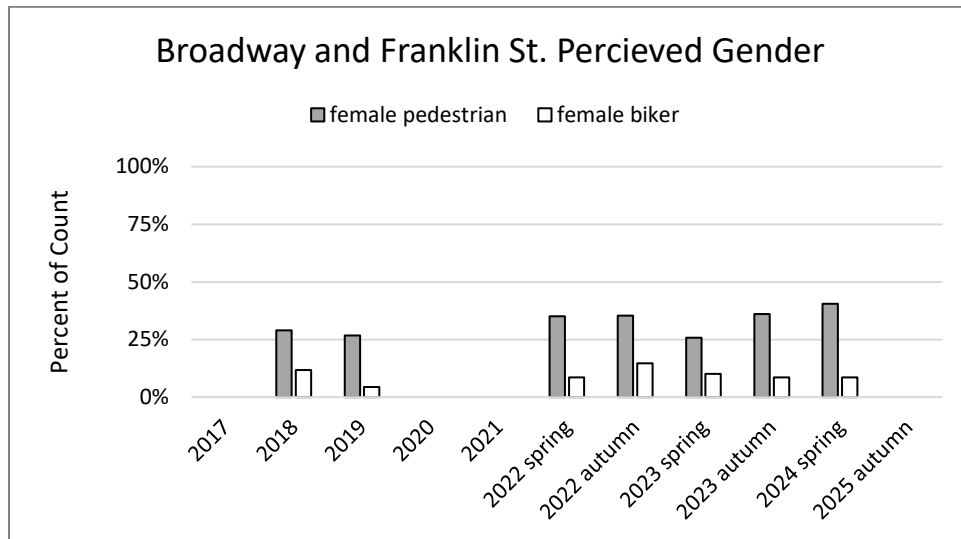


Figure 5. In-person count perceived gender at Broadway and Franklin St.

Perceived gender counts at Broadway and Franklin Street show female pedestrians consistently accounting for between 25% and 40% of total pedestrian counts across all periods. Female bikers account for a smaller share, ranging from approximately 5% to 15% of total bike counts.

Broadway and Cornell Street

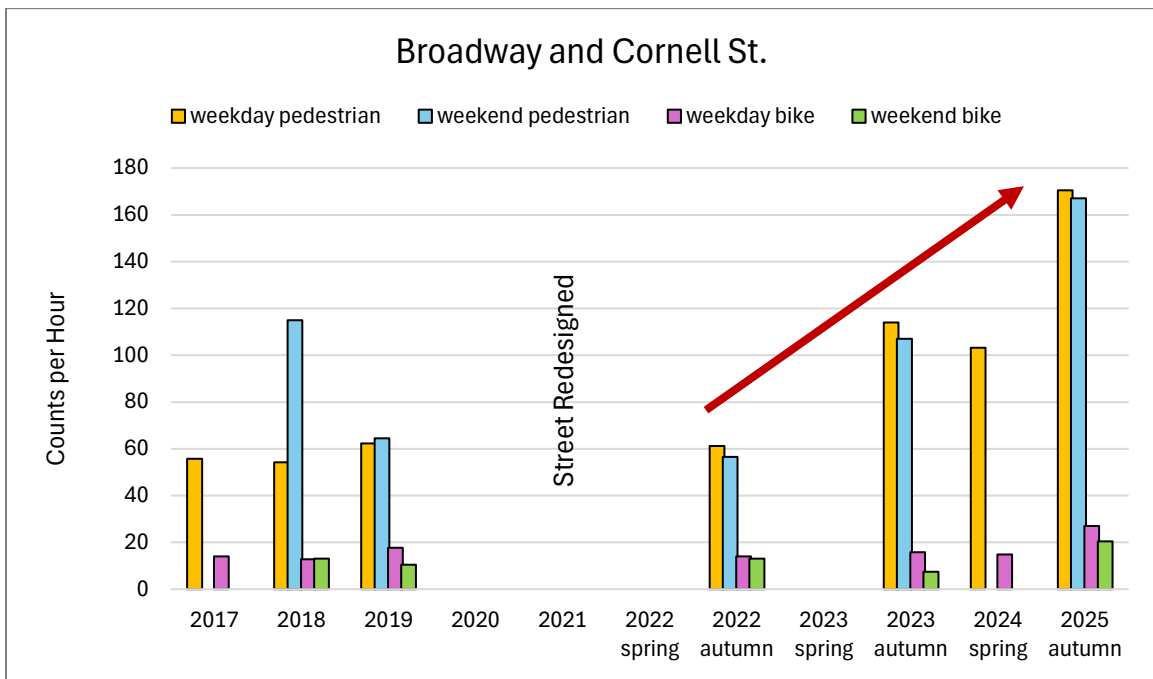


Figure 6. In-person count results for the intersection of Broadway and Cornell St.

At Broadway and Cornell Street, weekday and weekend hourly pedestrian counts range from 50-170 across surveys. Bike counts remain lower throughout, generally staying below 25 per hour. An upward trend in pedestrian counts from 2017 to present is notable. This intersection consistently records the highest pedestrian counts of all the Broadway locations.

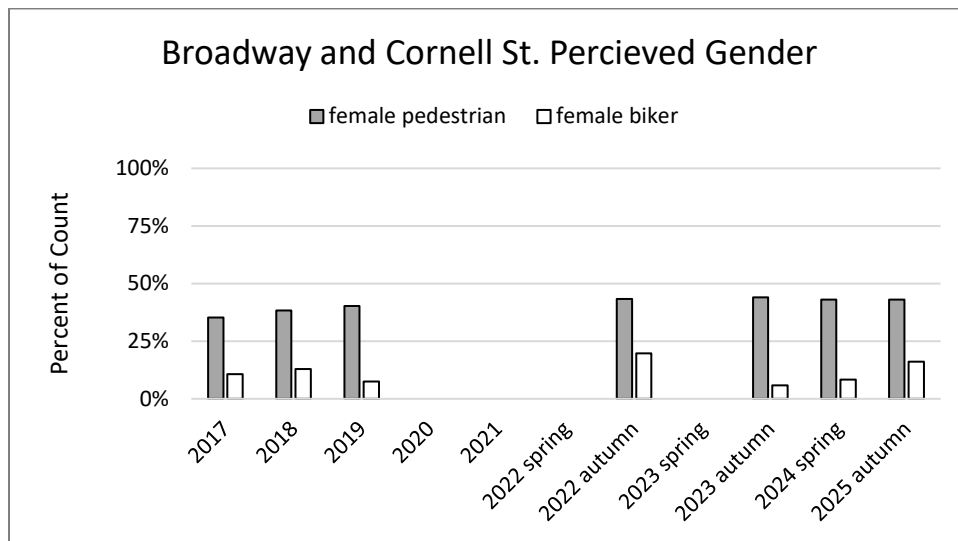


Figure 7. In-person count perceived gender at Broadway and Cornell St.

Perceived gender counts at Broadway and Cornell Street show female pedestrians consistently accounting for between 35% and 45% of total pedestrian counts across all periods. Female bikers account for a smaller share, ranging from approximately 5% to 20% of total bike counts.

Broadway and Prince Street

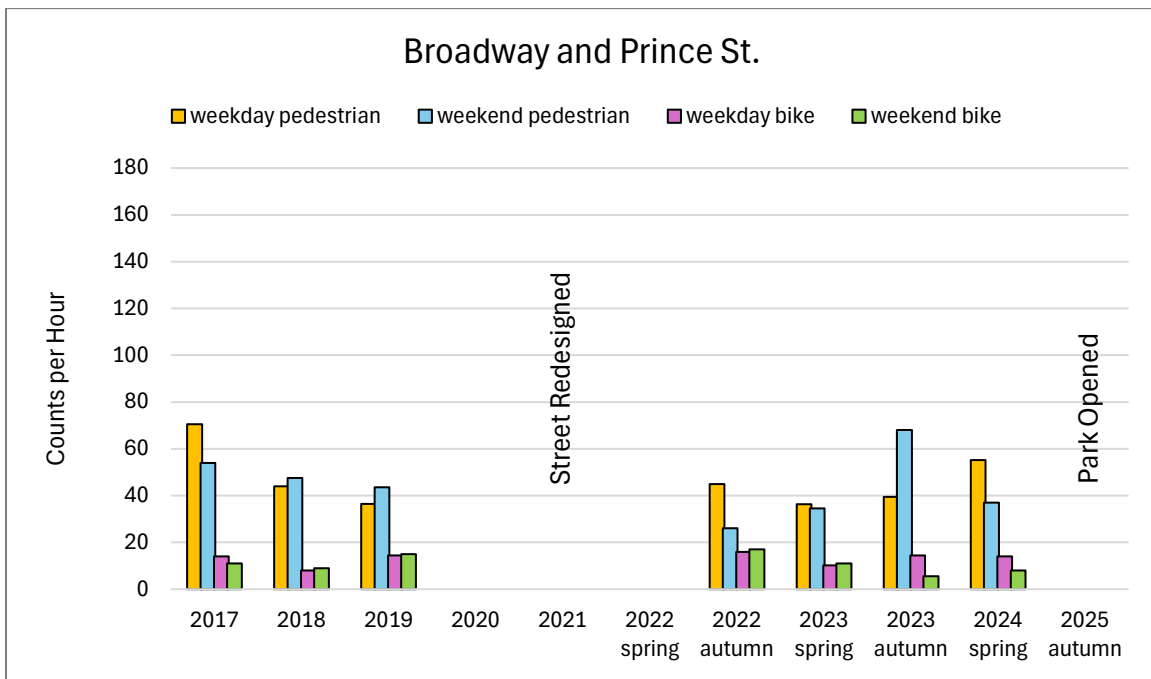


Figure 8. In-person count results for the intersection of Broadway and Prince St.

At Broadway and Prince Street, weekday and weekend hourly pedestrian counts range from 30-70 across surveys. Bike counts remain lower throughout, never rising above 20 per hour.

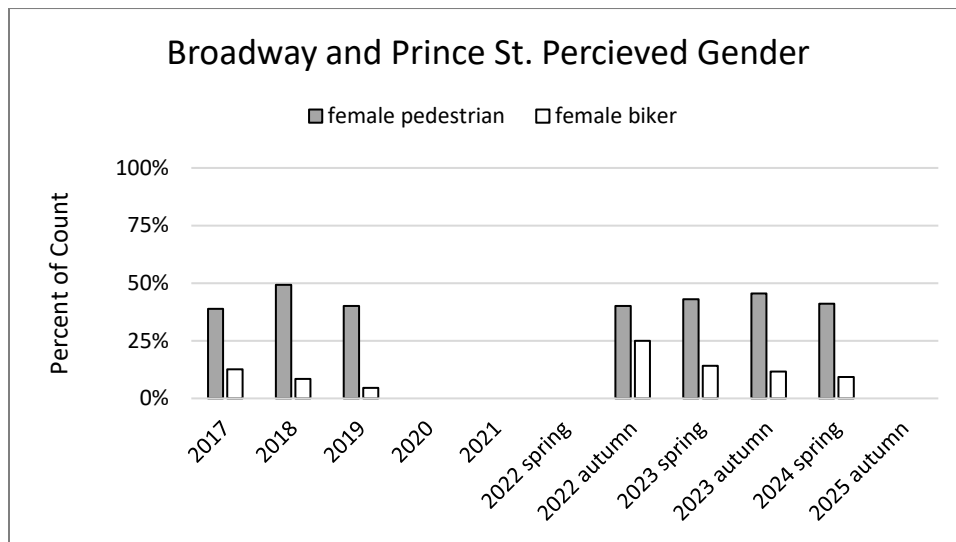


Figure 9. In-person count perceived gender at Broadway and Prince St.

Perceived gender counts at Broadway and Prince Street show female pedestrians consistently accounting for between 40% and 50% of total pedestrian counts across all periods. Female bikers account for a smaller share, ranging from approximately 5% to 25% of total bike counts.

Broadway and Andrew Street

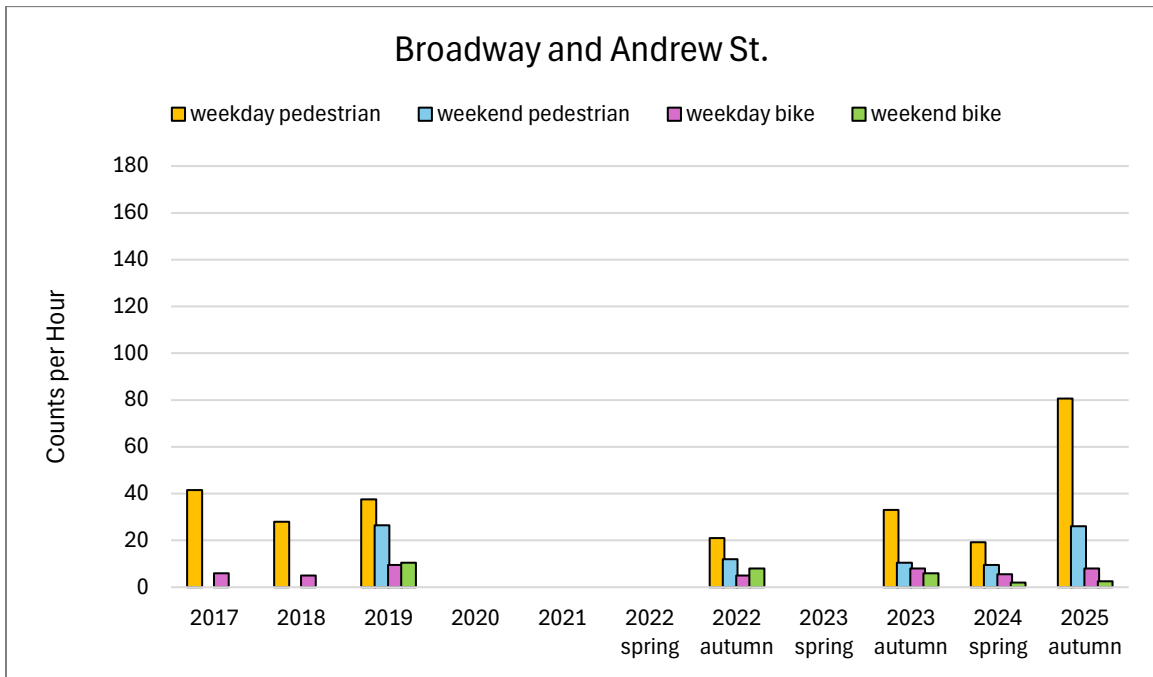


Figure 10. In-person count results for the intersection of Broadway and Andrew St.

At Broadway and Andrew Street, weekday and weekend hourly pedestrian counts range from 10-80 across surveys. Bike counts remain lower throughout, never rising above 10 per hour. Autumn 2025 shows a sharp spike in weekday pedestrian counts which is attributed to a change in survey time to capture school dismissal traffic from the nearby high school.

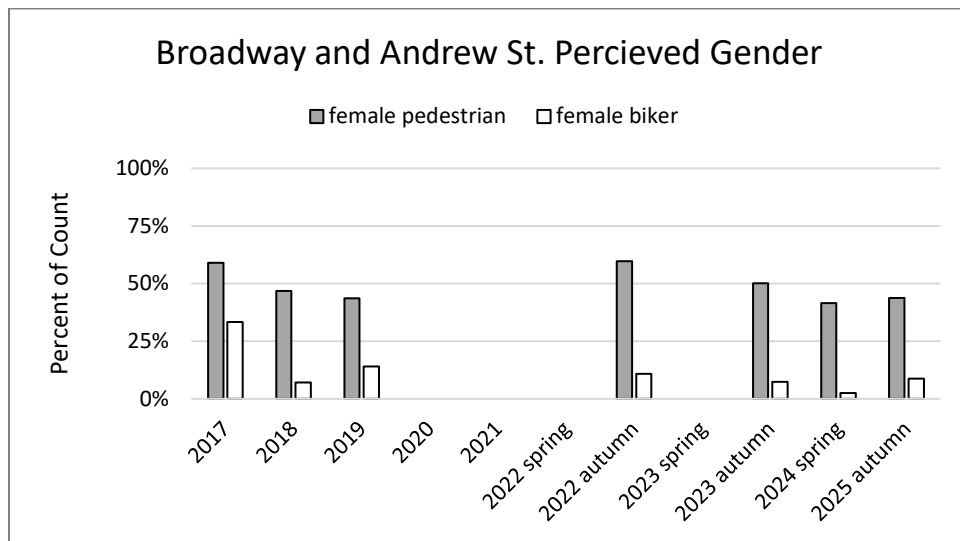


Figure 11. In-person count perceived gender at Broadway and Andrew St.

Perceived gender counts at Broadway and Andrew Street show female pedestrians accounting for between 40% and 60% of total pedestrian counts across most periods. Female bikers account for a smaller share, ranging from approximately 5% to 35% of total bike counts.

Broadway and McEntee Street

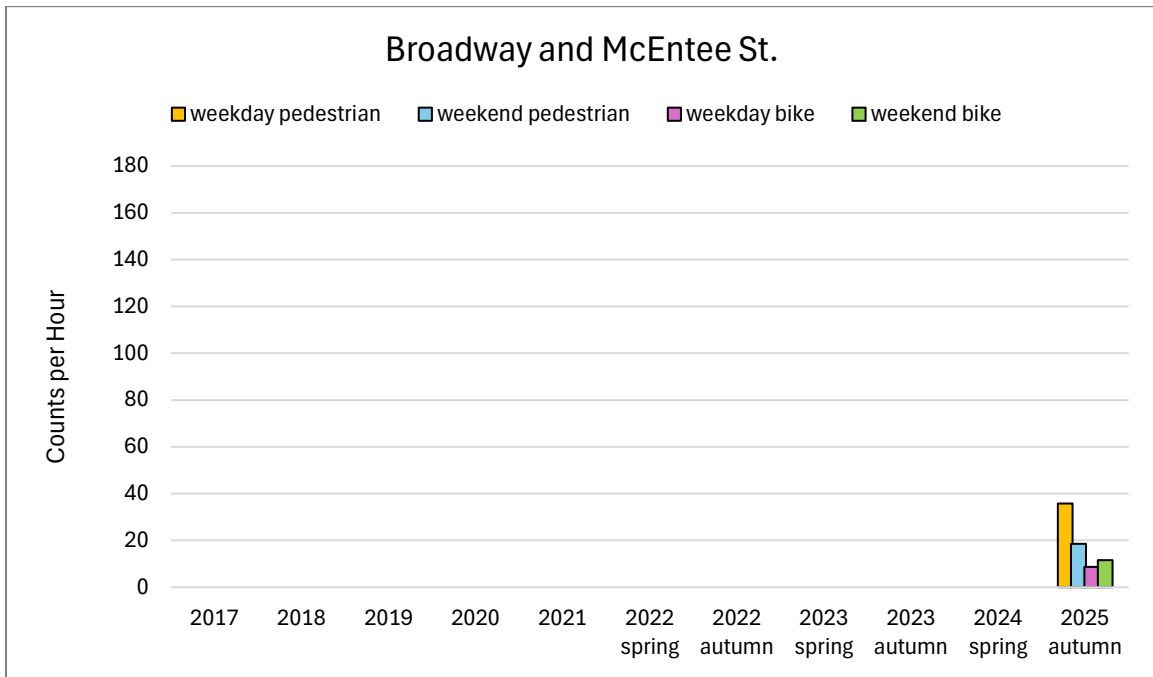


Figure 12. In-person count results for the intersection of Broadway and McEntee St.

At Broadway and McEntee Street, counts are only available for autumn of 2025. The autumn 2025 survey recorded an hourly pedestrian count between 20-40 and a bike count ~10 per hour.

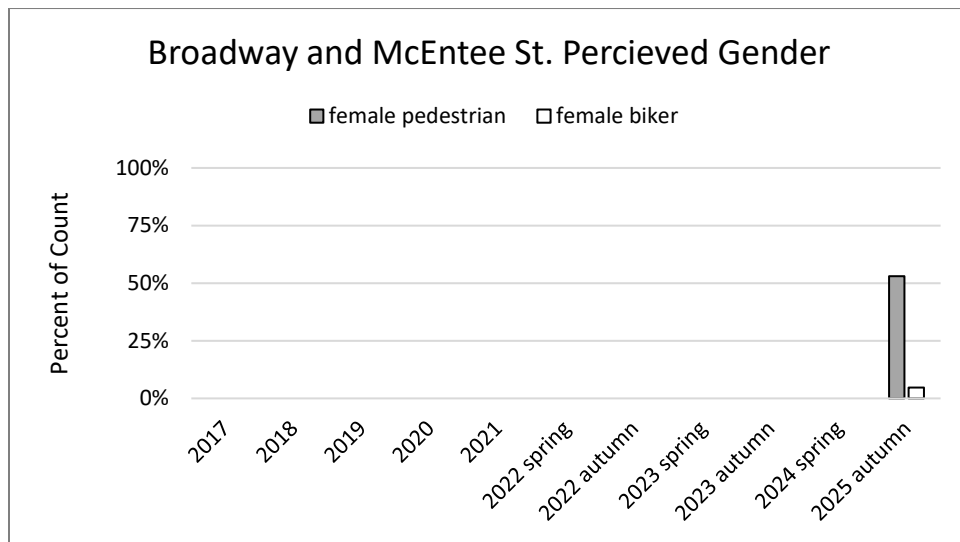


Figure 13. In-person count perceived gender at Broadway and McEntee St.

Perceived gender counts at Broadway and McEntee Street show female pedestrians accounting for approximately 53% of total pedestrian counts and female bikers representing around 7% of total bike counts.

In-Person Count Summary

Counts conducted at six locations across Kingston at various times from 2017-25 reveal pedestrian activity dominates at all sites, with cycling representing a significantly smaller portion of counts.

The intersection of Broadway and Cornell St. was the busiest, recording the highest pedestrian volumes of any counted site and demonstrating a clear upward trajectory in counts across the study period. Broadway and

Franklin Street intersection shows similar growth, with the spring 2024 count surpassing all earlier measurements. The Broadway and Andrew Street intersection recorded the lowest counts, excluding the 2025 count where the timing was changed to capture high school commuters.

Broadway and McEntee Street and Westbrook Lane and Clinton Avenue were surveyed for the first time in autumn 2025. McEntee Street recorded modest pedestrian-dominated activity consistent with the broader Broadway corridor, while Westbrook Lane and Clinton Avenue recorded pedestrian and bike weekend counts second only to the Broadway and Cornell intersection.

Perceived gender counts across all surveyed locations and time periods record an average of 42% female pedestrians and 11% female bikers. Across the whole study period, only 16% of surveys record 50% or more female pedestrians. The gender gap in biking is even more stark, with 75% of surveys counting less than 25% of bikers as female. Gender disparities are well-documented in transportation research and are typically interpreted to reflect the impact of perceived safety. The strength of the disparity in bike counts suggests that current road infrastructure may not yet provide the level of safety necessary to attract more equitable cycling participation across gender lines.

GENDER GAP: Only 42% of pedestrians and 11% of bikers were perceived to be female.

Camera-based Count

Camera-based micromobility counts were conducted across 15 locations throughout the City of Kingston using cameras during October 2025. Two weekdays (Wednesday, October 8 and Thursday, October 9) and one weekend (Saturday, October 11) were chosen to coincide with in-person counts. On Wednesday morning and Saturday evening there was slight rain. The O+ festival was also held in Uptown on Saturday October 11th.

Counts were conducted using the Alta camera system at all sites except the Greenline Tunnel, where an Ubiquiti camera system was used. Both Alta and Ubiquiti camera systems are permanently installed for policing purposes, and the software has a rudimentary ability to differentiate between pedestrians and vehicles. To perform counts, the automatic pedestrian detection system was used, and this subset of footage was reviewed manually to identify and count all small, lightweight personal transportation modes including traditional and electric bikes, scooters, and skateboards. Each micromobility user captured by the camera system was counted once per passage.

It should be noted that these counts are likely underestimates of total activity. User and camera errors including limited camera angles and challenges distinguishing micromobility users in groups or mixed traffic likely result in some riders being missed during the review process. As such, the reported values should be interpreted as conservative estimates of micromobility use at the surveyed locations.

UNDERCOUNTING: Limitations in software automation and camera placement mean cameras undercount users.

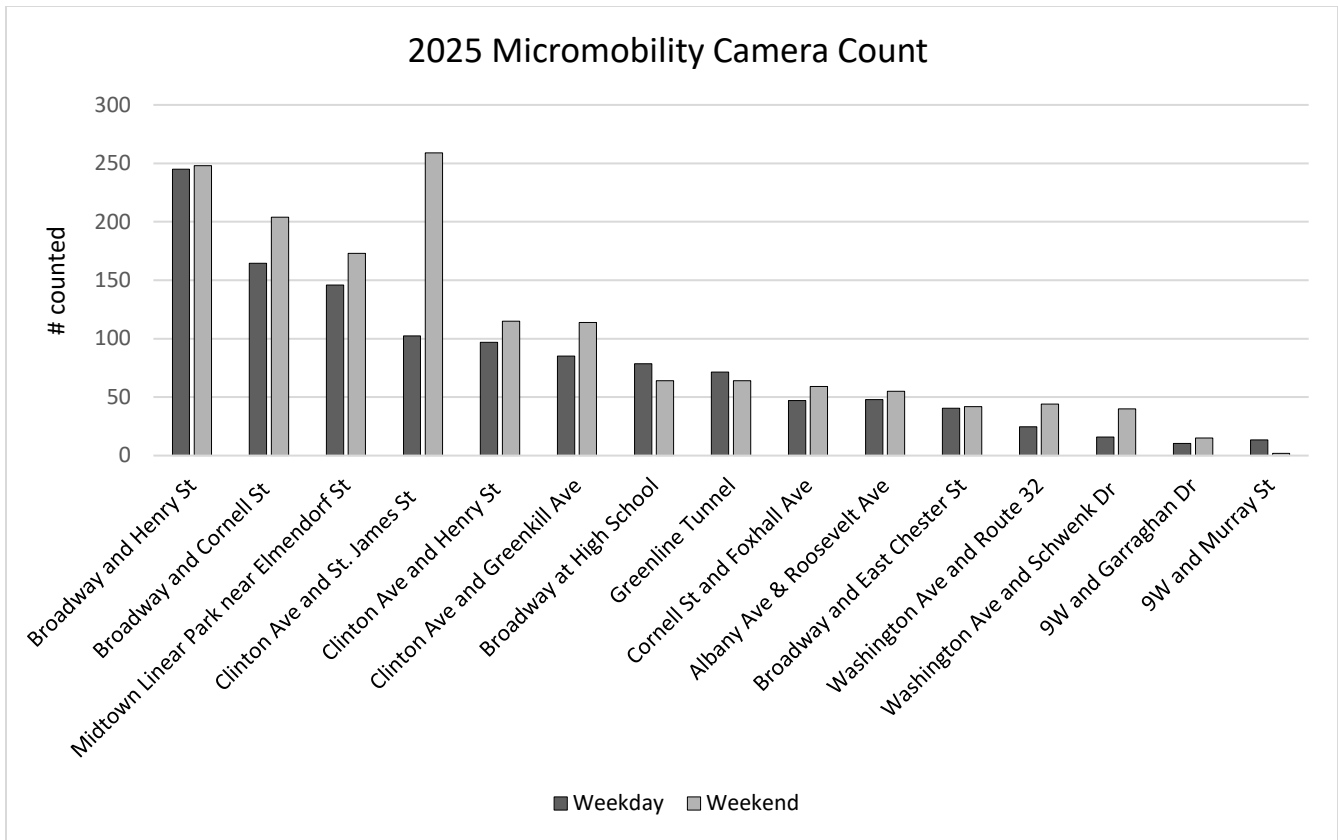


Figure 14. Weekday average and weekend micromobility count by camera at various locations in Kingston.

Camera-based counts at 15 locations show micromobility activity is not uniformly spread across Kingston. Broadway and Henry Street recorded the highest volumes of any site, with weekday and weekend counts closely matched at around 245 and 248 respectively. Broadway and Cornell Street and the Midtown Linear Park near Elmendorf Street follow as the next busiest locations, with weekend counts somewhat higher than weekday at both sites. Clinton Avenue and St. James Street is the notable outlier, where weekend volumes reach approximately 260 compared to a weekday average of around 100, a spike almost certainly driven by the O+ festival. At all other locations, weekday and weekend counts are broadly comparable. Activity drops off steadily through the middle tier of locations before reaching very low volumes at the Route 9W corridor sites, where counts rarely exceed 15 riders per session. In total, 3,857 micromobility counts were recorded over the three-day observation period.

Weekday Camera Count



Figure 15. Weekday average micromobility count from cameras

Weekend Camera Count



Figure 16. Weekend average micromobility count from cameras

Weekday and weekend maps show micromobility activity strongly concentrated in Midtown, with the largest counts on Broadway, Clinton Ave, the Midtown Linear Park, and Kingston Point Rail Trail. On weekdays, activity is spread more evenly, while the weekend map shows a more pronounced concentration at Clinton Avenue and St. James Street, reflecting the O+ festival's influence. Along the Greenline corridor moving away

from Uptown, counts decrease steadily, and locations along Route 9W and outer Washington Avenue are represented by the smallest bubbles on both maps, consistent with the low counts recorded at those sites.

Camera-Based Count Summary

Camera-based counts conducted across 15 locations in October 2025 recorded nearly 4,000 micromobility trips over three days. Activity was largely concentrated in Midtown, with Broadway and the Midtown Linear Park, both part of the Greenline, showing peak use. Clinton Avenue and St. James St. also emerge as critical network connectors despite not being on the Greenline. Conversely, low counts along Route 9W and outer Washington Avenue suggest that high-speed, vehicle-oriented roads with limited infrastructure present a significant barrier to micromobility use even when on or feeding into the Greenline.

THE GREENLINE EFFECT? The Greenline is busy with micromobility traffic but so are Midtown streets with no micromobility infrastructure.

Automated Trail Count

Automated trail counters operated by the City of Kingston, Kingston Land Trust, Hudson River Valley Greenway, and Scenic Hudson recorded activity at ten locations across Kingston, capturing a range of use patterns and user volumes. Depending on the site, Trafx or Eco-counter automated counters were used. Both counter types are prone to systematic undercounting and count error due to site conditions. To limit the effect of these known concerns on data quality, single day counts exceeding 1000 were assumed to be inaccurate and removed from the data. The following figures show daily counts averaged per month along with the standard deviation of daily counts over the month (how varied the daily count was over that month).

TRAIL COUNTER LIMITATIONS: Automated trail counters are good for spotting trends but do not provide precise counts of trail users.

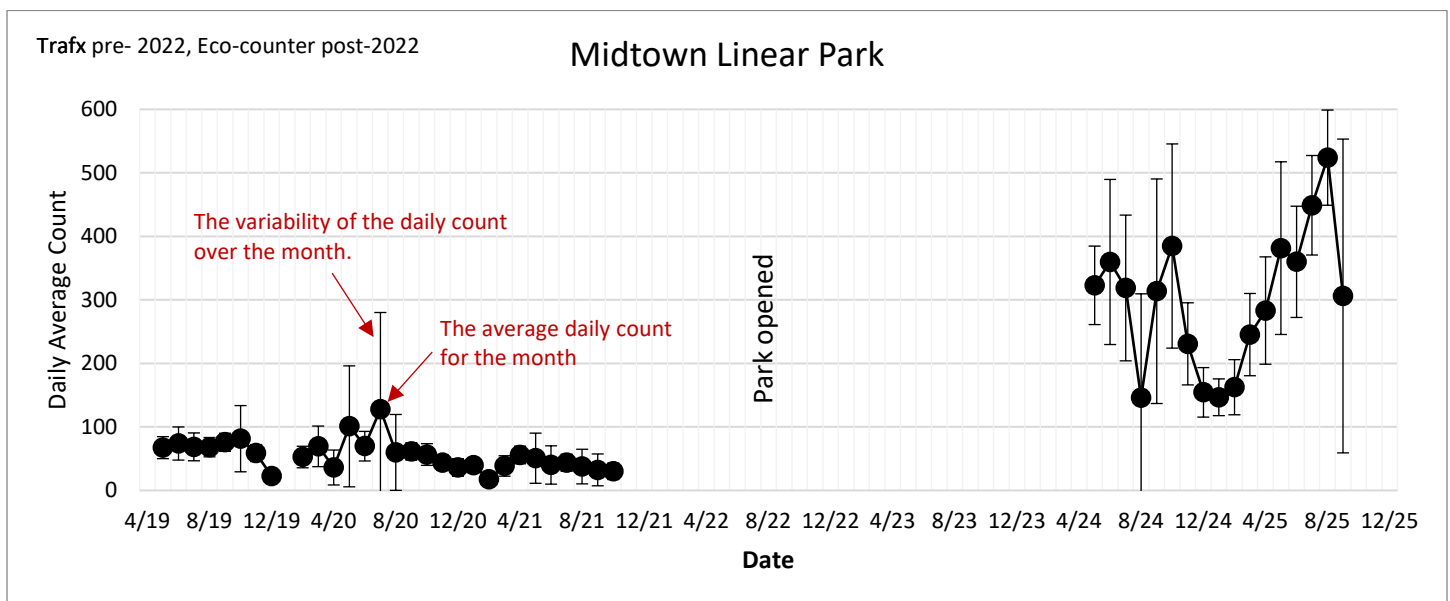
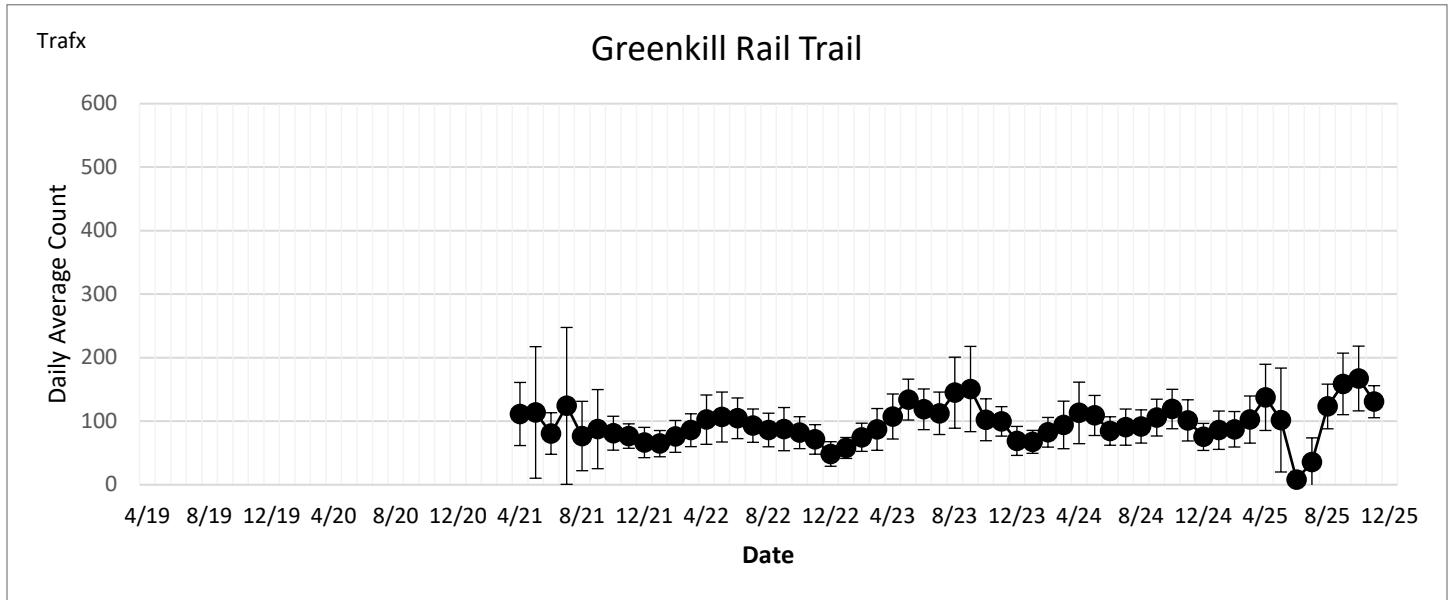


Figure 17. Daily average counts per month from automated trail counters on the Midtown Linear Park.

Daily average counts at Midtown Linear Park were recorded from early 2019 through late 2025, with a gap from late 2021 through early 2024 due to park construction and the replacement of the counting device. During the initial 2019–2021 period, before the park was completed, counts ranged from 40-100 per day. Counts after

the park opened in August 2022 typically range from 300-525 per day. Counts in this later period show considerable variability.



and into summer before tapering off in fall and winter. Peak monthly averages reach approximately 220–230 users around mid-to-late summer 2025, with notable error bars suggesting considerable day-to-day variability during peak season. Counts drop to around 40–75 during the winter months, with the lowest values occurring at the very start and end of the recorded period.

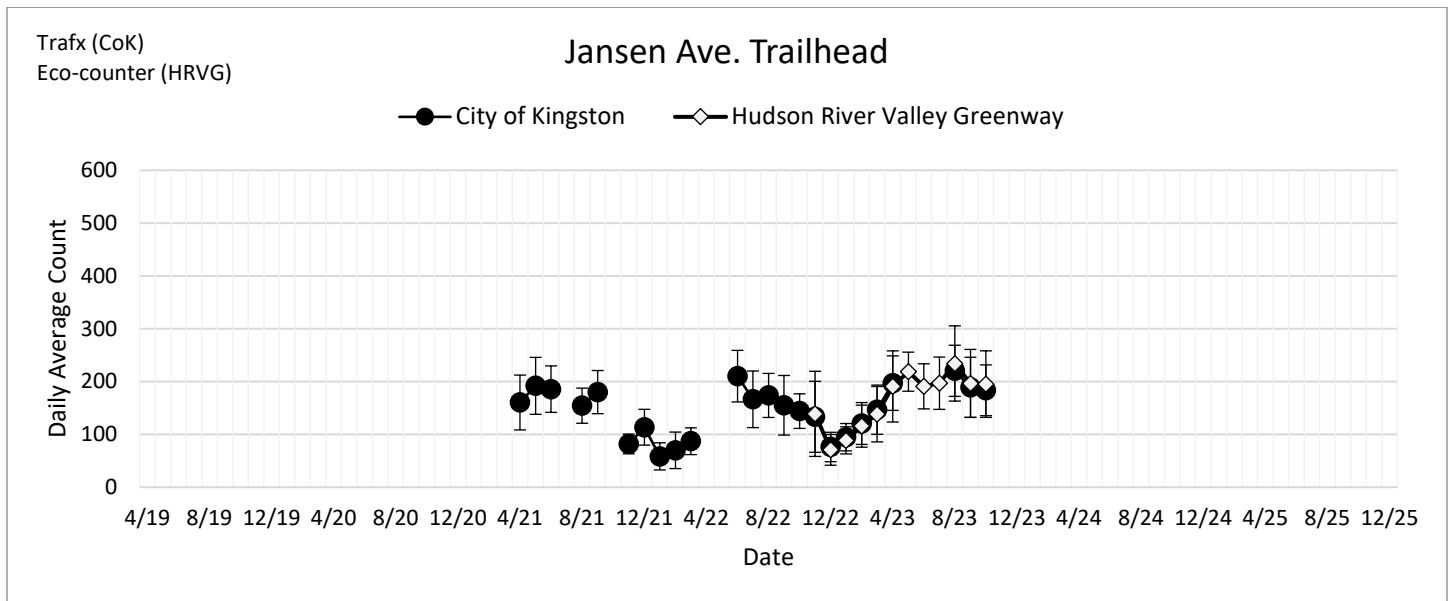


Figure 20. Daily average counts from an automated trail counter at the Jansen Ave Trailhead.

Daily average counts at the Jansen Ave Trailhead on East Chester St. were recorded intermittently from early 2021 through late 2025, using two counter systems, Trafx (City of Kingston) and Eco-counter (Hudson River Valley Greenway). Activity shows a clear seasonal pattern, with counts dropping in winter months and rising in spring and summer. Baseline daily averages during peak months typically range between 150 and 220 users. Winter counts dip to around 100, with the lowest counts occurring in early 2022. Beginning in spring 2023, Hudson River Valley Greenway data supplements the City of Kingston record, and the two sources track closely. Error bars remain relatively small throughout, indicating consistent day-to-day usage and minimal counter error, though variability increases slightly in the 2023–2024 period.

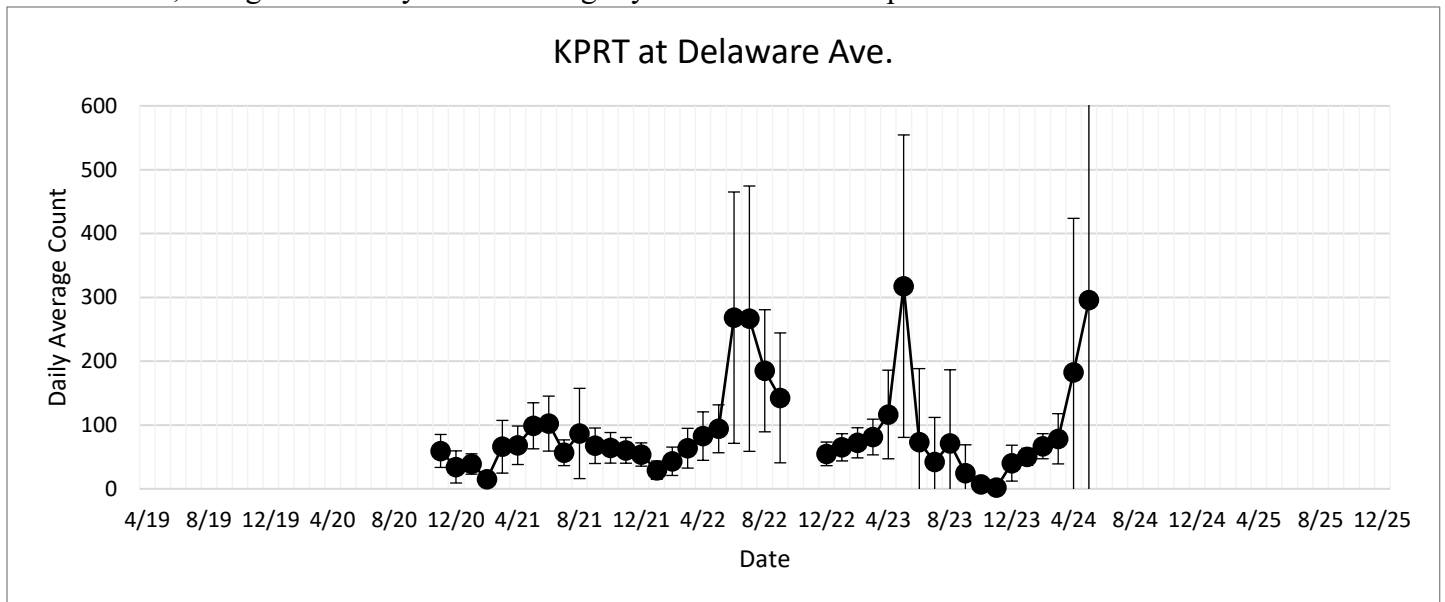


Figure 21. Daily average counts from an automated trail counter on the Kingston Point Rail Trail (KPRT) at Delaware Ave.

Daily average counts on the Kingston Point Rail Trail where it crosses Delaware Ave. were recorded from late 2020 through mid-2024. Activity follows a clear seasonal pattern, with counts rising during warmer months and declining in winter. Baseline daily averages during peak months typically range between 50 and 100 users. Three notable spikes occur in summer 2022, spring 2023, and spring 2024, where daily averages reach approximately 260–310, well above the typical seasonal range. These months also have high standard deviation in daily counts and most likely reflect spurious counts due to placement of the counter.

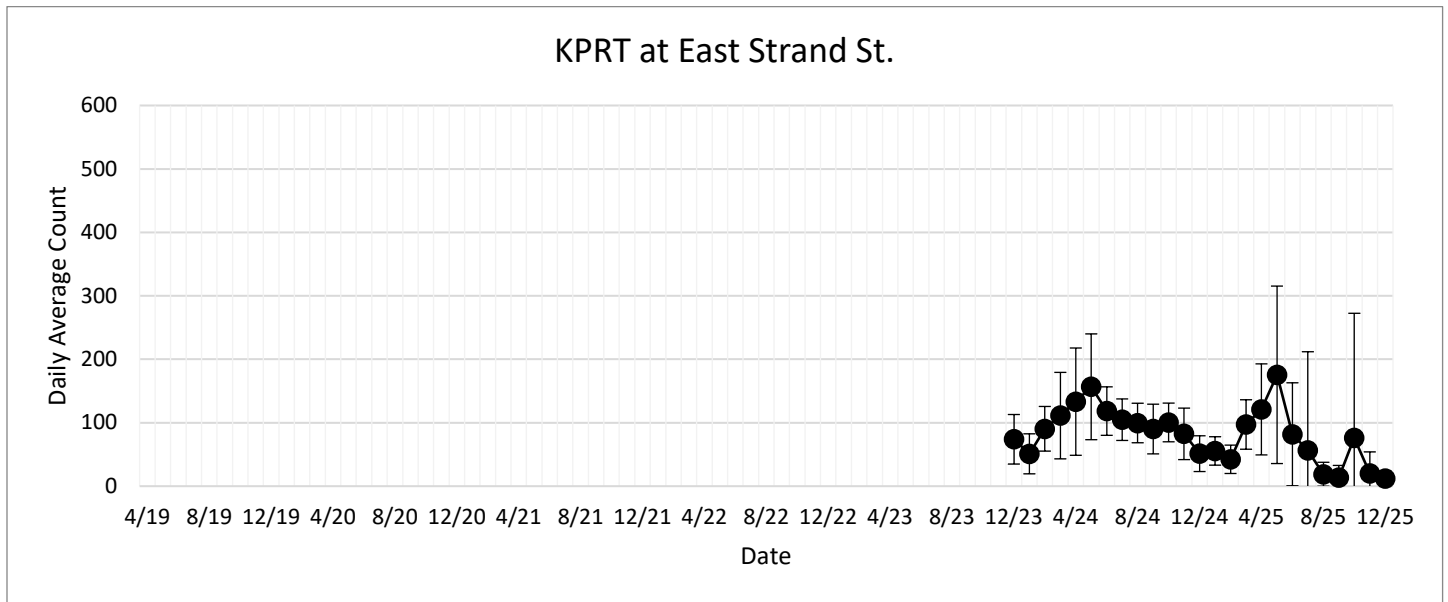


Figure 22. Daily average counts from an automated trail counter on the Kingston Point Rail Trail on East Strand Street.

Daily average counts on the Kingston Point Rail Trail where it intersects East Strand St. were recorded from late 2023 through late 2025. Activity shows a clear seasonal pattern, with counts rising during warmer months and declining in winter. Peak monthly averages typically range between 100 and 180 users during the summer and fall months.

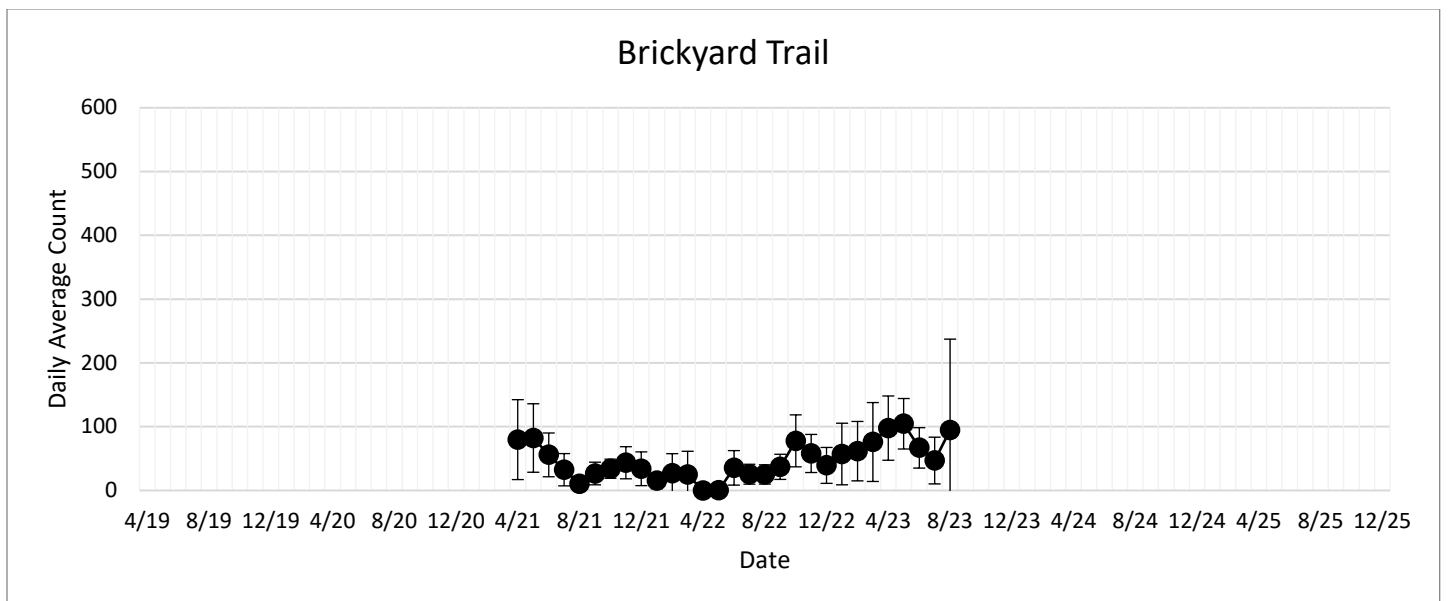


Figure 23. Daily average counts from an automated trail counter on the Brickyards Trail (In 2022 counter was moved to nearby EST location).

Daily average counts on the Brickyard Trail were recorded from early 2021 through summer 2023. This count period predates the opening of Sojourner Truth State Park which the Brickyard Trail runs through. Peak monthly averages range from 75 and 100 users and winter counts dropping to around 20–30. A modest upward trend is visible over the observation period, with counts in 2023 generally running somewhat higher than comparable months in 2021 and 2022.

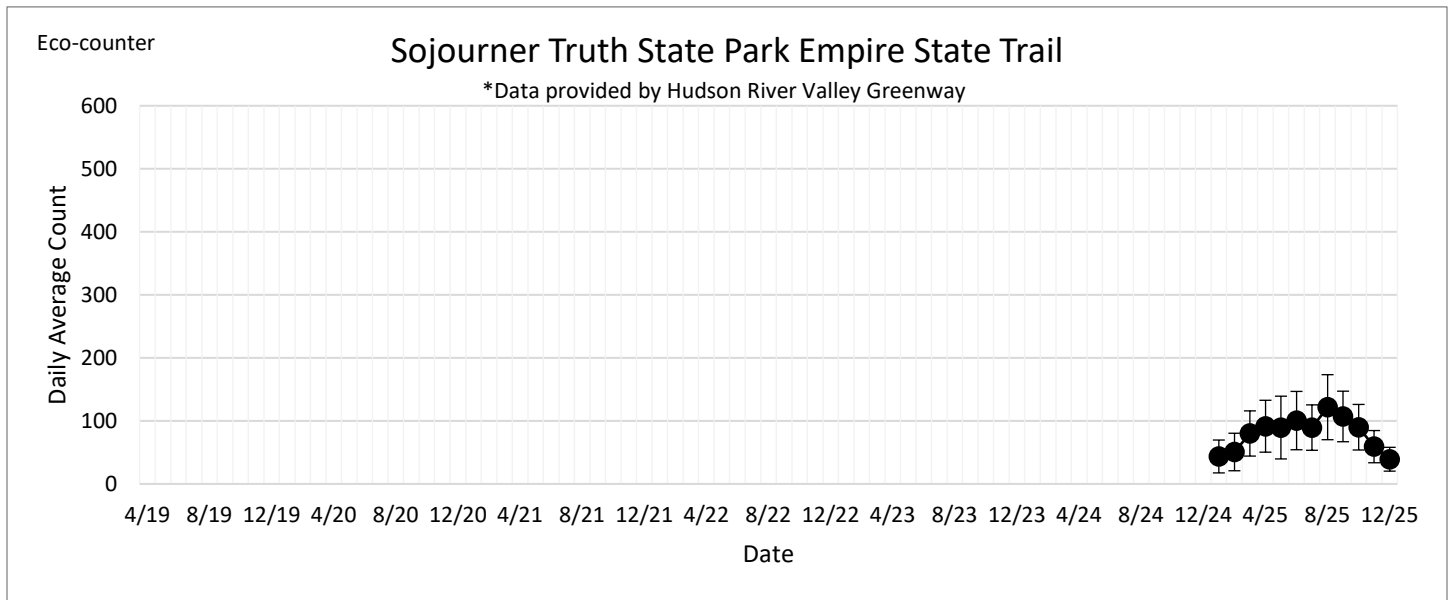


Figure 24. Daily average counts from an automated trail counter on the Brickyard/Empire State Trail in Sojourner Truth Park

Daily average counts on the Empire State Trail near the border with the Town of Ulster in Sojourner Truth State Park were recorded in 2025 by the Hudson River Valley Greenway. Activity follows a clear seasonal pattern, with counts rising through spring and peaking in summer before declining into fall and winter. Peak daily averages reach approximately 120–125 users around mid-2025, with error bars indicating moderate day-to-day variability. Counts drop to around 35–50 during the winter months, with the lowest values occurring at the start and end of the recorded period.

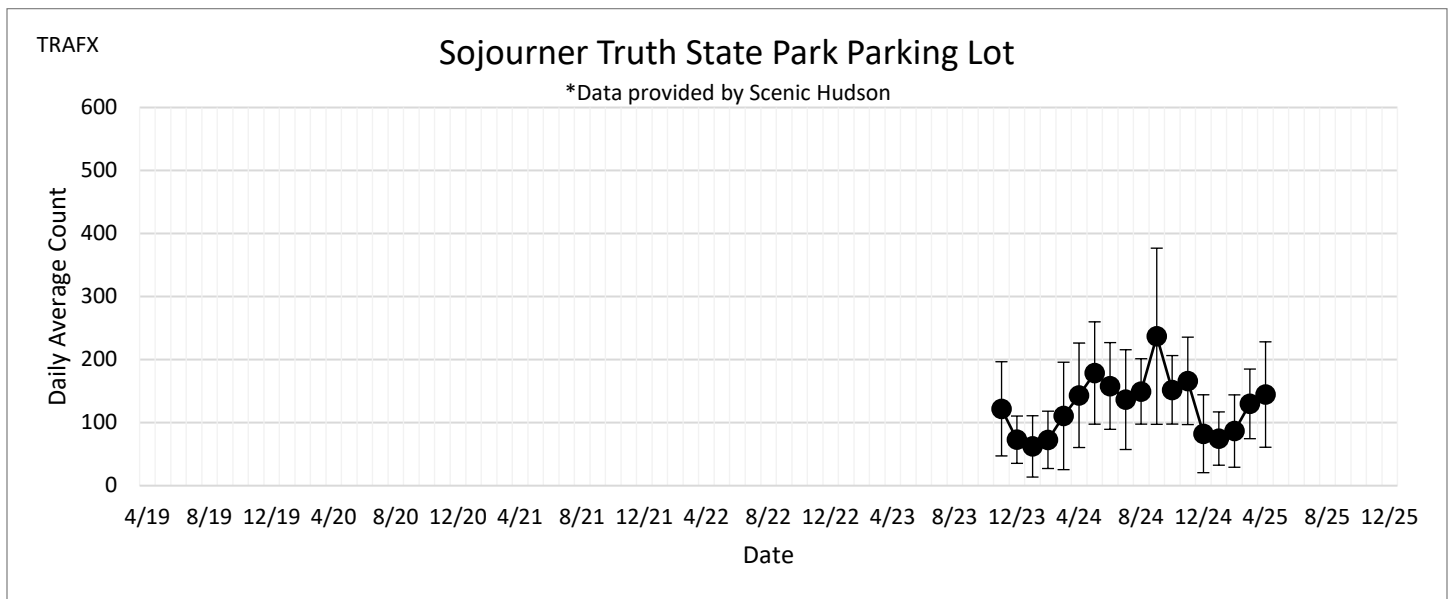


Figure 25. Daily average counts from an automated trail counter at the main Sojourner Truth State Park parking lot.

Daily average counts in Sojourner Truth State Park at the parking lot trailhead were recorded from late 2023 through late 2025 by Scenic Hudson. Activity shows a clear seasonal pattern, with counts rising during warmer months and declining in winter. Peak monthly averages typically range between 100 and 250 users during the summer and fall months, with a notable spike in late summer 2024 reaching approximately 250, accompanied by large error bars indicating high day-to-day variability. Winter counts drop to around 50–100, with the lowest values occurring in late 2023 and early 2024.

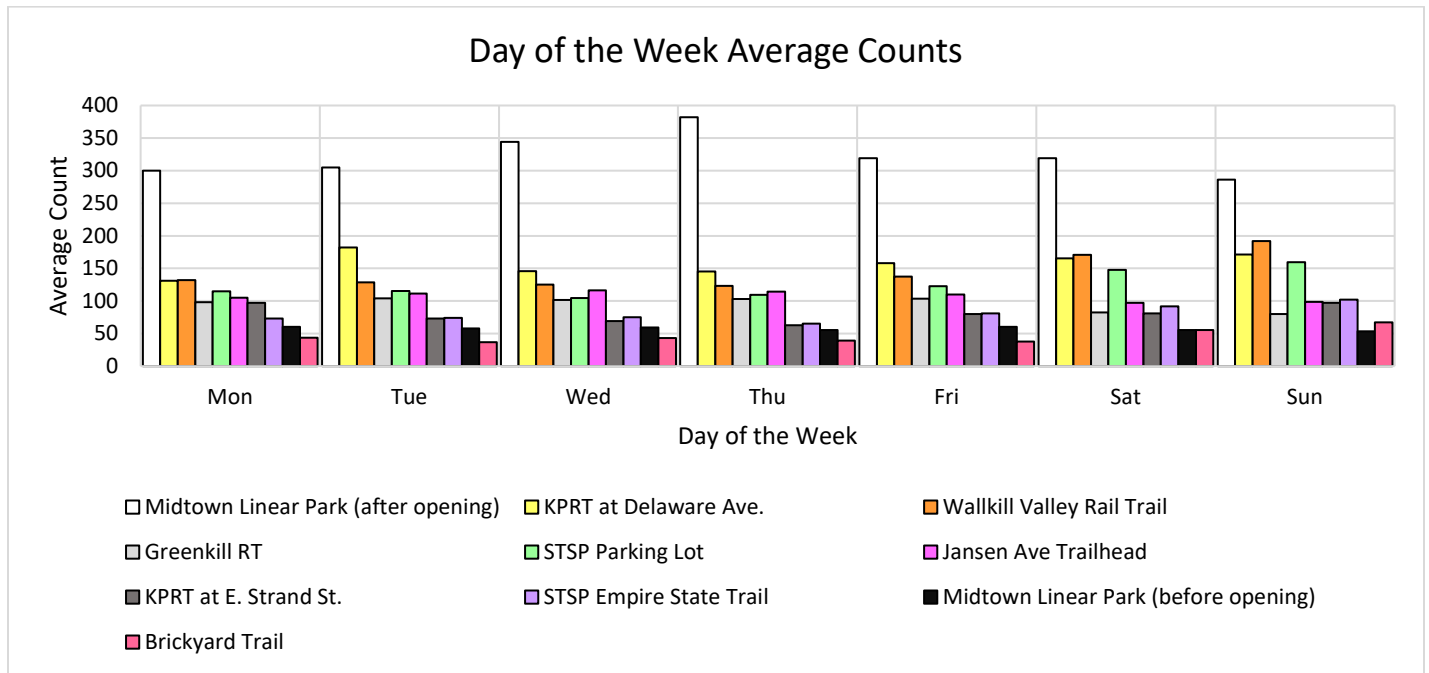


Figure 26. Day of week average counts for trail counters.

Day-of-week average counts across ten trail locations reveal two broad patterns of use: trails where activity is concentrated on weekends and trails where counts are more consistent or elevated on weekdays.

Several locations show clear weekend-oriented use, suggesting they serve primarily recreational purposes. The Wallkill Valley Rail Trail, Sojourner Truth SP parking lot, and STSP Empire State Trail all record noticeably higher counts on Saturdays and Sundays. The Brickyard Trail, while among the lowest-use locations overall likely due to counts taken before full opening of Sojourner Truth State Park, also shows a modest weekend uptick consistent with recreational use.

In contrast, several trails exhibit relatively flat or weekday-elevated patterns, suggesting a broader mix of utilitarian and commuter trips alongside recreation. Midtown Linear Park (after opening) has the highest counts by a wide margin, with daily averages ranging between approximately 300 and 375, and peaks mid-week rather than on weekends. The Greenkill Rail Trail similarly sees a decline in use over the weekend, which may point to a stronger commuter function. The KPRT at Delaware Ave, Jansen Ave Trailhead, and KPRT at E. Strand St. show less distinct day-of-week trends, indicating mixed-use ridership without a strong pull toward either weekdays or weekends. The high counts at the KPRT at Delaware Ave. likely do not accurately reflect trail use and may instead be due to count errors.

TWO KINDS OF TRAILS: Trails that are used primarily for recreation show peak use on weekends. Trails used for commuting tend to be busier on weekdays.

Trail Count Summary

Automated trail counters across ten locations in Kingston reveal consistent patterns of trail use, with counts strongly shaped by season, time of day, and infrastructure quality. Midtown Linear Park stands out as the highest-use facility by a substantial margin with daily averages after the park's opening in 2022 typically ranging from 300 to 525, compared to counts of 40 to 100 recorded at the same location prior to completion, underscoring the transformative effect of dedicated trail infrastructure on user volumes. Most other locations record peak monthly averages between 75 and 220 users per day, with clear seasonal variation: counts rise during spring and summer, decline through winter, and show the greatest day-to-day variability during peak months. Day-of-week variation distinguishes trails with a primarily recreational purpose vs. those that serve more utilitarian roles. Taken together, the trail count data reflects a growing and broadly distributed base of non-motorized trail users in Kingston, with the strongest activity concentrated along improved Greenline infrastructure.

Conclusion

The 2025 micromobility and pedestrian count data paints a picture of active transportation activity across Kingston. Pedestrian volumes along the Broadway corridor trended upward over the study period. Trail use is substantial and concentrated along improved Greenline infrastructure. Camera-based counts confirm that the Kingston Greenline serves as the backbone of micromobility activity in the city. As Kingston's active transportation network continues to expand, regular count data will remain essential for measuring progress, identifying gaps, and making the case for continued investment.