

# 2019 Northwest Arkansas Trail Usage Monitoring Report

## **Summary Findings**

- Cycling and pedestrian activity has continued to grow since 2017. The 2019 study finds a 10% increase in cycling over the past two years and 36% growth since 2015. The report also finds a 2% increase in pedestrian activity over the past two years and 13% growth since 2015.
- Activity levels on multi-use paths continued to climb, with the average volume across all count sites increasing 8% for cycling and 10% for pedestrians since 2017. While overall activity levels on natural-surface trails were higher in 2019 than in 2015, the average volume of bicycles and pedestrians across all the count sites decreased 8% and 24%, respectively, since 2017. Even so, six of the ten natural-surface trail count sites showed increased activity levels since 2017.
- Cycling activity is still highest on the weekends, but pedestrian activity has shifted to higher numbers early in the week. Peak times on weekends continued to shift earlier from previous years, with the highest activity levels in mid-morning—around 9am for pedestrians and between 10 and 11am for bicycles. On weekdays, activity levels of all types peak at 6 p.m., which is consistent with previous years.
- Activity levels on Northwest Arkansas trails relative to other more densely populated areas remain strong. Northwest Arkansas trails have higher levels of activity than San Diego when considering total population but have lower activity than best-in-class areas like Vancouver, Minneapolis and Portland.

## Study Overview

The Walton Family Foundation has supported the development of an expansive trail network in the foundation's home region of Northwest Arkansas. This is a key focus in the Home Region Program's 2020 Strategic Plan and resulted in the addition of 181 miles of natural-surface trails and 35 miles of multi-use paths since 2015, bringing the total miles of trails in the region to 484 by the end of 2019. To understand how many people are using the trails and assess the impact of these investments, the foundation has periodically monitored the levels of cycling and pedestrian activity on the region's trail network. A team of researchers at San Diego State University's Active Transportation Research Center conducted trail use monitoring studies in 2015 and 2017, and this 2019 study is the third in the series.

To measure cycling and pedestrian activity levels, the research team used automatic counting devices placed at various sites along the trail network. Each location included a combination of pneumatic tubes laid across the trail and pyro boxes affixed to trees or poles alongside the trail. Together, these devices are able to distinguish cyclists from pedestrians, which direction they are traveling, and collect data on a 24-hour, continuous basis. Data for this study were collected between May and July of 2019.

User counts were captured at a total of 54 locations that were evenly distributed geographically across the network and comprised a representative sample of locations in terms of population, employment density and income levels of residents in the immediate surrounding area. This included 39 sites on multi-use paths, 10 on natural-surface trails, three on sidewalks, and two on protected bike lanes. For each site, the research team calculated the average weekday and weekend/holiday volumes and then used those averages to estimate the annual volume at each site and for the entire network.

## **Key Findings**

In 2019, the network saw an average annual volume of 92,167 cyclists and 66,329 pedestrians per site. That equates to an average of 203 cyclists and 175 pedestrians per day on weekdays and 376 cyclists and 203 pedestrians per day on weekends.

The average annual volume per site has grown considerably since the 2015 baseline study, with cycling activity up 36% and pedestrian activity up 13%. The majority of these gains, however, occurred between 2015 and 2017, when cycling increased 24% and pedestrian use increased 10%, with smaller increases occurring between 2017 and 2019, when cycling increased 10% and pedestrian use was up just 2%.

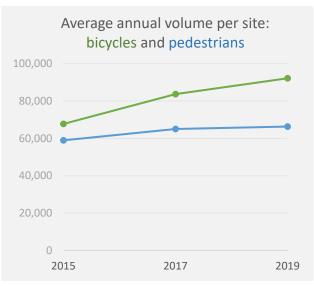


Figure 1: Cycling and pedestrian activity network-wide

#### How does trail use differ by trail type?

As in previous years, the volume of activity was much higher on multi-use paths than natural-surface trails in 2019. Sites on multi-use paths saw average annual volumes of 117,302 cyclists and 86,503 pedestrians, while those on natural-surface trails averaged 9,314 cyclists and 12,756 pedestrians.

The level of activity on multi-use paths has continued to grow since the 2015 baseline, with a 38% increase in cycling and 19% increase in pedestrian activity. While the growth in cycling was smaller from 2017 to 2019 (8%) than 2015 to 2017 (29%), the increase in pedestrian activity was more evenly split, with 9% from 2015 to 2017 and 10% from 2017 to 2019.

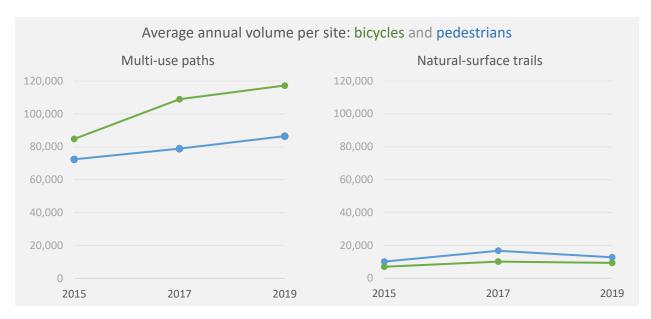


Figure 2: Cycling and pedestrian activity on multi-use paths and natural-surface trails

Activity levels on natural-surface trails, however, have followed a different pattern. After seeing similar growth rates as multi-use paths from 2015 to 2017 (a 33% increase in cycling and 26% increase in pedestrian activity), the average annual volume per site went back down in 2019; cycling fell 8%, and pedestrian use dropped 24%.

Since the sample of natural-surface trails was considerably smaller than that for multi-surface trails, much of the variation in use comes down to a handful of specific sites. Two of the ten sites on natural surface trails saw declines in both cycling and pedestrian activity: the trail at Park Springs Park in Bentonville and the Lake Atalanta trails at Lakeview Dr in Rogers. The Slaughter Pen Trail in Bentonville saw the number of cyclists fall by almost half but still saw an increase in the number of pedestrians. Conversely, the trailheads off Blowing Springs Rd (north trails) in Bella Vista and Mt. Kessler Trail in Fayetteville saw considerable increases in cycling but sizeable decreases in pedestrians.

Some of the decreases in use could be attributed to the increase in natural-surface trail options. Between 2017 and 2019, 93 miles of natural-surface trails were added within the region (a 41% increase). As trail mileage has significantly expanded in such a short time, it's likely that their use has become more dispersed, which may have caused the activity levels on existing trails to increase less or even decline, even as the overall volume of users has increased.

#### How does trail use vary over the course of the week and day?

As one might expect, cycling activity was highest on weekends, with an average daily volume of 327 cyclists on Saturdays and 347 on Sundays, while average weekday volumes consistently hovered closer to 200. Pedestrian activity in 2019 was highest on Mondays, with an average daily volume of 206 per site, mostly declined through the rest of the week, and then ticked back up near 200 on Saturday and Sunday. This is fairly different from the pattern seen in 2017, where the weekends saw highest levels of pedestrian activity.

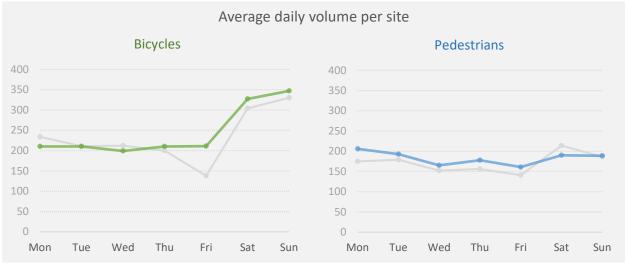


Figure 3: Cycling and pedestrian activity by day of the week

On weekends, cycling activity climbs quickly throughout the morning, peaking between 10 and 11 a.m. and gradually comes down throughout the afternoon and evening. On weekdays, however, cycling activity increases steadily throughout the morning, lulls in the afternoon, and then climbs steeply over

the course of the evening commute (peaking at 6pm), and falls sharply by 8pm. The same general pattern has stayed largely intact over the three report cycles. However, the peak weekend time has shifted earlier over the years from mid-afternoon in 2015 to mid-morning in 2019.

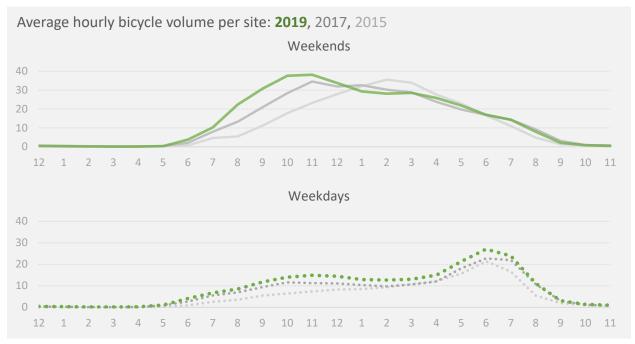


Figure 4: Cycling activity by hour of the day

Pedestrian activity levels exhibit similar patterns as those of cyclists but peak slightly earlier on weekends (9am) and show a sharper and earlier increase in the morning on weekdays, while still peaking at 6pm. As with cycling, the peak weekend time for pedestrians has shifted earlier in the day.

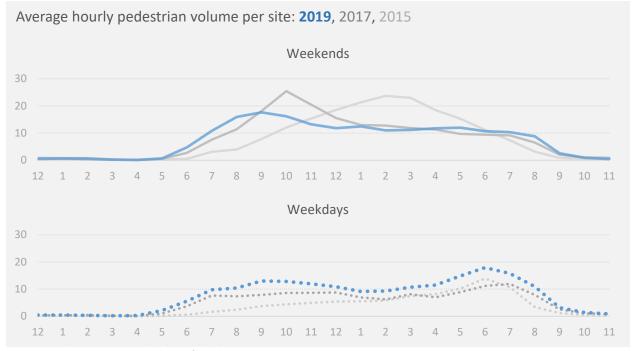


Figure 5: Pedestrian activity by hour of the day

### Which specific trail sites saw the most use?

The multi-use path site with the highest annual cycling volume in 2019 was the North Bentonville Trail near Northwest A Street in Bentonville, with an estimated 205,006 cyclists, followed by the Frisco Trail at Maple St in Fayetteville, with 190,701. Several points along the Scull Creek Trail in Fayetteville also had high usage: at N Quality Ln (189,480), N Furtrall Dr (185,455), and W North St (183,640) as well as the Lake Fayetteville Trail at N Crossover Rd in Fayetteville (180,752).

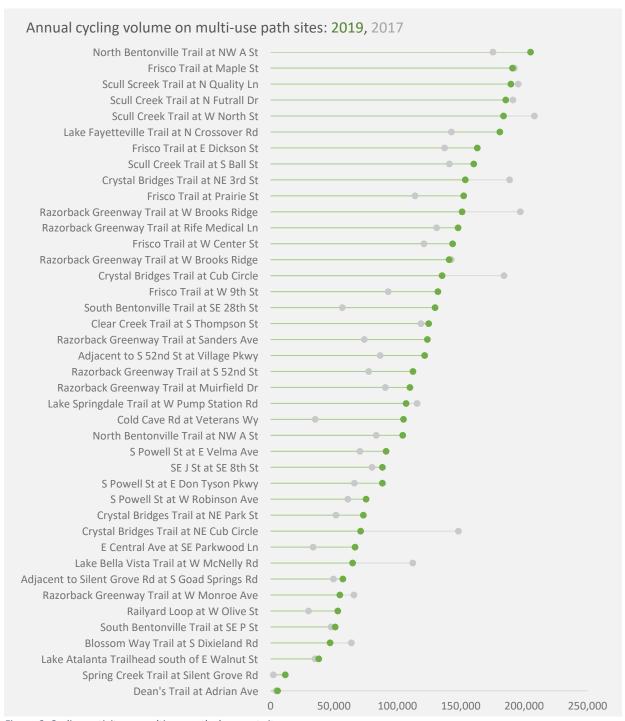


Figure 6: Cycling activity on multi-use paths by count site

Although most sites on multi-use paths saw increases in cycling activity since 2017, a handful experienced notable decreases, including three of the four sites on the Crystal Bridges Trail.

In terms of pedestrian use, the multi-use path sites with the highest annual volume by far were along the Crystal Bridges Trail in Bentonville: at Cub Circle (328,909), NE 3<sup>rd</sup> St (328,014), and NE Cub Circle (283,642). The Crystal Bridges Trail at Cub Circle and NE Cub Circle also saw tremendous growth in

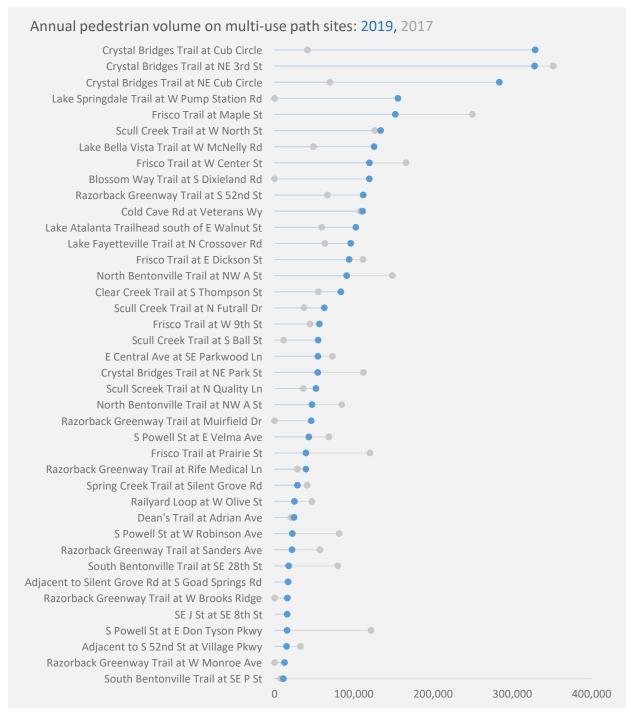


Figure 7: Pedestrian activity on multi-use paths by count site

pedestrian activity since 2017. The site at NE 3<sup>rd</sup> St, however, saw slightly lower pedestrian numbers compared to 2017. Several sites on the Frisco Trail also saw declines in pedestrian activity.

The natural-surface trail site with the highest annual cycling volume in 2019 was the Seed Tick Shuffle Trail in Bentonville with an estimated 27,936, followed by the trailhead at NE A St and Tiger Blvd in Bentonville with 14,645 and the trailhead off Blowing Springs Rd (south trails) in Bella Vista with 12,714. The majority of count sites saw growth in cycling volume since 2017 or very slight declines. The two exceptions were the Slaughter Pen Trail, which fell by about 40%, and the trail at Park Springs Park, which saw the most dramatic change of all the natural surface trail sites, falling from the highest cycling numbers in 2017 to the second lowest in 2019.



Figure 8: Cycling activity on natural-surface trails by count site

The natural surface trail sites with the highest annual pedestrian volume were the trailhead off Blowing Springs Rd (south trails) in Bella Vista with an estimated annual volume of 28,093, the Mt Kessler Trail trailhead in Fayetteville with 23,817, and the trailhead at NE A St and Tiger Blvd in Bentonville with 20,430. The trailhead for the south trails off Blowing Springs Rd saw the number of pedestrians almost double since 2017, the trailhead for the north trails fell by nearly two-thirds.

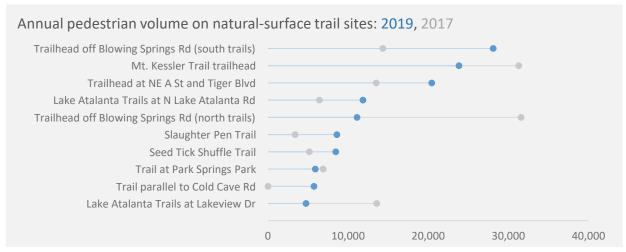


Figure 9: Pedestrian activity on natural-surface trails by count site

#### How does trail use in Northwest Arkansas compare to other regions?

When compared to other regions with prominent trail systems, the volume of cycling activity on Northwest Arkansas trails is well below that of best-in-class cycling cities like Vancouver, Minneapolis, and Portland, even when adjusting for the total population of the region. However, Northwest Arkansas trails have a slightly higher volume of cyclists than San Diego County and even more so when considering the total population size.

Region	Daily Cyclists per 1,000	Daily Cyclists*	Population
Vancouver	29.6	20,000	676,700
Minneapolis	24.8	10,540	425,403
Portland	21	13,703	653,115
San Francisco	8.9	7,881	883,305
Northwest Arkansas	4.29	2,482	518,328
San Diego County	0.65	2,164	3,343,364

<sup>\*</sup>Combined count from top three sites with the highest average daily volume

Similarly, pedestrian activity on Northwest Arkansas trails is far below that of San Francisco, Portland, Minneapolis, and Vancouver, even when adjusting for the total population of the region. Although Northwest Arkansas trails have a lower volume of pedestrians than San Diego County, they have a higher number of pedestrians per 1,000 in total population.

Region	Daily Pedestrians per 1,000	Daily Pedestrians*	Population
San Francisco	404.76	357,526	883,305
Portland	79.38	51,845	653,115
Minneapolis	78.3	33,310	425,403
Vancouver	31.91	21,959	676,700
Northwest Arkansas	5.46	2,831	518,328
San Diego County	2.64	8,810	3,343,364

<sup>\*</sup>Combined count from top three sites with the highest average daily volume

#### Conclusion

This third report in the trail usage monitoring series has shown that overall activity levels on Northwest Arkansas trails have been strong and continued to grow as the network has grown. The analysis also reveals that activity levels vary considerably by the type of trail and location of the count site. For instance, the sites with the highest activity levels are directly on the Razorback Greenway (and in densly populated areas), while sites with the lowest use are furthest away from the central greenway corridor. In addition, trail sites that at or near popular destinations like a lake or museum tended to have the highest pedestrian activity, suggesting that destinations are an important driver of trail use, both for recreation and transportation purposes.

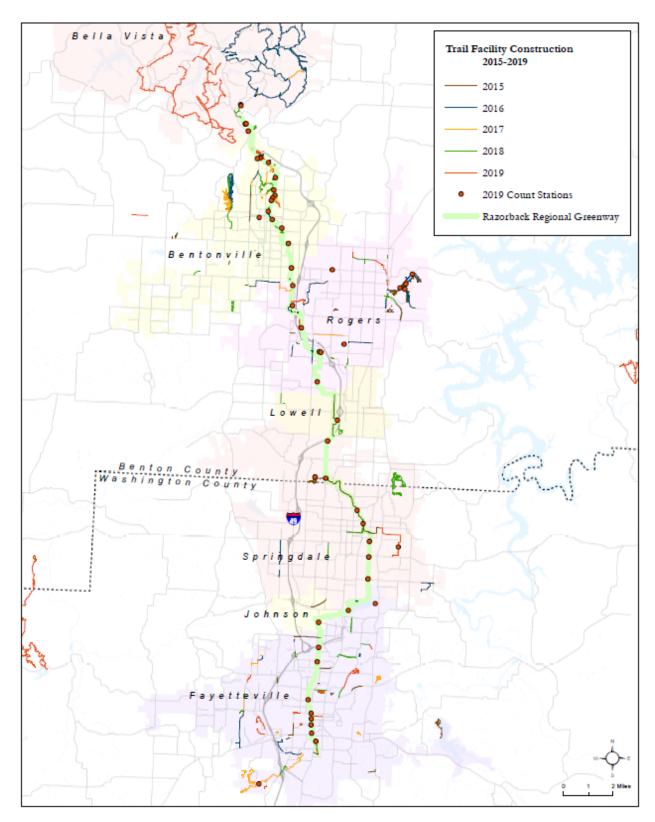


Figure 10: Locations of 2019 count sites