

Annual Bicycle and Pedestrian Projections Data Report

2012 - 2024

Wichita Area Metropolitan Planning Organization (WAMPO)

Overview of Counts

To better understand how bicycle and pedestrian data collection methods and counts have evolved, this report includes data spanning from 2012 to 2024. The accuracy and reliability of the data collected at each count location can be influenced by several factors, which should be considered when interpreting trends and making comparisons between years.

One significant factor is weather conditions during the count periods. Weather can affect a person's decision to walk or bike. For example, if unusually cold or rainy weather occurs on the count days, it can lead to lower counts across all sites, as fewer individuals are willing to engage in outdoor activities. Conversely, warmer and more favorable weather may result in higher participation, leading to a potential spike in count numbers.

Another critical aspect is the availability of volunteers to perform the counts. Bicycle and pedestrian counts rely on volunteers to collect the data at multiple locations across the region. If there is a shortage of volunteers, some locations may be left uncounted or only partially covered, affecting the completeness and representativeness of the data. This can introduce variability in the counts from year to year. Figure 1 provides an example of this inconsistency by illustrating variations in count numbers at one specific location over multiple years.

Additionally, 2024 marks the third year that WAMPO has implemented mathematical projection methods to estimate typical bicycle and pedestrian traffic based on collected data. These projections are crucial for providing a more stable analysis of trends, as they help to mitigate the natural fluctuations caused by weather, volunteer shortages, or other unpredictable factors. By applying these formulas, WAMPO can offer a clearer picture of long-term active transportation patterns, ensuring that the data remains meaningful and actionable despite the yearly variances in actual counts.

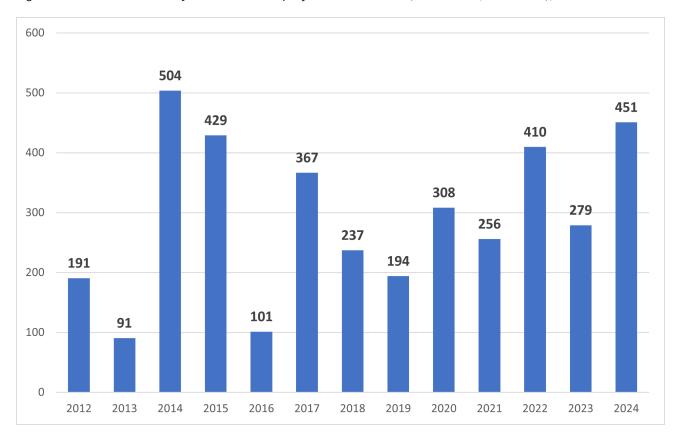


Figure 1: Pedestrian and Bicycle riders count projections at site 26 (1st & Grove, in Wichita), 2012-2024

Project Background

Since 2012, WAMPO has been conducting bicycle and pedestrian traffic counts at numerous designated locations throughout the region. These counts follow the standardized methodology set by the National Bicycle and Pedestrian Documentation Project (http://bikepeddocumentation.org) to ensure consistency and accuracy in data collection and analysis.

The counts are carried out in September over the course of five separate two-hour sessions: two weekday mornings, two weekday evenings, and one Saturday afternoon. A complete count for a particular site includes data from one weekday morning, one weekday evening, and the Saturday afternoon session. These specific times and days are recommended by the National Bicycle and Pedestrian Documentation Project to capture a representative sample of pedestrian and bicycle traffic.

Each location where counts take place is categorized as either a screenline or an intersection. At screenline sites, all non-motorized traffic passing a specific line is counted. At intersection sites, volunteers not only count the individuals but also record their direction of travel. This level of detail is crucial for understanding movement patterns and traffic flow. All counts are conducted by volunteers who play a vital role in collecting this important data for the region.





Figure 3: Example of an Screenline Count Location

The collected count data is returned to WAMPO and entered into spreadsheets for further analysis. Using the methodology outlined by the National Bicycle and Pedestrian Documentation Project, mathematical projections are then applied to convert the raw counts into Annual Average Daily Traffic (AADT) figures. In this context, the "T" in AADT can represent either "Trips" or "Traffic," which are considered synonymous. These projections help provide a more accurate estimate of daily pedestrian and bicycle activity and are utilized to create various maps that visually represent active transportation patterns across the region.

Utility of Count Results

Bicycle and pedestrian counts provide valuable insights into multimodal traffic volumes, helping prioritize improvements to roads, sidewalks, and paths, as well as guiding the development of new transportation projects based on usage levels. These data offer a clearer understanding of how people in the region choose to travel and remain active, highlighting the connections between transportation, land use, and mobility patterns. Additionally, because the information is standardized and easily shared, it enables comparisons with other regions across the country, offering a broader context for local transportation planning decisions.

Interactive Map

WAMPO has created a user-friendly, interactive ArcGIS Online map that showcases bicycle and pedestrian count data, available at www.wampo.org/bicycle-pedestrian. This interactive tool allows users to explore both recent and historical count data at various locations throughout the region. Users can easily focus on information that aligns with their specific interests or concerns. Additionally, the map provides context by showing how count locations are situated in relation to multiuse trails, sidewalks, bikeways, major roadways, and the different municipalities within the WAMPO region, offering a comprehensive view of transportation patterns.

2024 Bicycle and Pedestrian

AADT

In 2024, counts were conducted at 36 locations throughout the WAMPO region. Daily bicycle and pedestrian traffic at these individual sites ranged from 100 to 7,301 trips. Across all locations, the average Annual Average Daily Traffic (AADT)—which represents the estimated number of daily trips based on the count data—was 971, while the median was 462. AADT is a projection that helps account for variations in data by estimating the typical number of daily trips at a given location over the course of a year.

Figure 4 highlights the five locations with the highest bicycle and pedestrian AADT in 2024. For the previous two years, the intersection of Douglas Ave. and Washington St. in Wichita held the top spot for the highest bicycle/pedestrian AADT. However, in 2024, the highest count location shifted to the Arkansas River Path at the Keeper of the Plains, reflecting a change in activity patterns within the region. This new top location indicates an increase in bicycle and pedestrian traffic along the scenic river path, demonstrating how activity levels can evolve over time at different sites.

2024 Data by Count Location

Table 1 presents summary data for each count location in 2024. The last three columns indicate the percentage breakdown, or "Average Daily Split," of bicycle use, pedestrian travel, and motor-vehicle use. While we continue to observe a high volume of travel dominated by motor vehicles at most sites, there is a noticeable increase in activity from pedestrians and bicycle riders, reflecting a gradual shift toward more balanced transportation modes in the region.

Figure 4: Top five (5) count locations in the WAMPO Region in 2024











Table 1: 2024 Count Data and Average Daily Split

City	Site	Site Number	Bicycle & Pedestrian AADT 2024	Vehicle AADT 2024	Average Daily Split Cycling 2024	Average Daily Split Walking 2024	Average Daily Spilt Vehicle 2024
Wichita	K-96 Path, at Greenwich	4	451	-	58.82%	41.18%	-
Kechi	Oliver at 61st, Kechi Park	5	1228	-	13.68%	86.32%	-
Wichita	17th St Rail bed, at Rock	6	178	-	51.16%	48.84%	-
Mulvane	Main and 2nd	9	178	2086	3.42%	4.45%	92.13%
Wichita	Mt. Vernon and Edgemoor	13	366	4086	3.72%	4.50%	91.78%
Wichita	I-135 Canal Route, at Linwood Pk	14	650	535	34.38%	20.51%	45.12%
Wichita	Pawnee and Broadway	15	934	6964	4.33%	7.50%	88.18%
Wichita	Ark River Path, near Broadway	18	380	-	44.44%	55.56%	-
Wichita	Douglas and Washington	25	1785	7252	3.89%	15.86%	80.25%
Wichita	1st and Grove	26	451	4707	5.67%	3.07%	91.26%
Wichita	Redbud Path, East of I-135 Canal Path	33	577	-	57.33%	42.67%	-
Wichita	Broadway and 1st	37	1193	7444	3.47%	10.34%	86.19%
Wichita	Oak Park, River Blvd and 11th	41	1020	-	13.66%	86.34%	-
Wichita	Ark River Path, at Keeper of the Plains	43	7301	-	16.44%	83.56%	-
Wichita	Zoo Path, at Westdale	48	303	-	93.02%	6.98%	-
Wichita	21st and Maize Rd	49	791	15646	2.08%	2.73%	95.19%
Wichita	21st St, West of 135th	50	100	8758	0.27%	0.85%	98.88%
Mt. Hope	Ohio and Main	56	228	253	9.13%	38.33%	52.54%
Wichita	Harry and Greenwich	69	238	5539	2.15%	1.97%	95.88%
Goddard	Prairie Sunset Trail	77	2460	-	27.27%	72.73%	-
Wichita	1st and Waco	81	1142	14262	3.05%	4.36%	92.59%
Wichita	Broadway and Central	84	2539	6717	5.90%	21.53%	72.57%
Haysville	Main and Grand	86	764	3275	7.27%	11.64%	81.09%
Andover	Central and Andover Rd	87	419	5814	2.50%	4.21%	93.28%
Wichita	Central and Socora	89	472	14643	0.77%	2.36%	96.88%
Wichita	Maple at the Big Ditch	90	248	6797	1.55%	1.96%	96.49%
Derby	Rock St, South of Madison	94	414	10134	1.13%	2.79%	96.07%
Wichita	K-96 Path, at Great Plains Nature Center	100	621	-	41.86%	58.14%	-
Wichita	Sedgwick County Park at 13th Street	111	1790	-	55.61%	44.39%	-
Wichita	Sedgwick County Park at 21st Street	112	2524	-	30.40%	69.60%	-
Wichita	Triple Creek & Tall Tree	113	424	2233	6.67%	9.28%	84.05%
Wichita	17th St & Hillside St	114	338	5855	2.79%	2.67%	94.54%
Wichita	15th St & Broadway St	115	351	1870	5.97%	9.85%	84.18%
Andover	Redbud Path, Patrica Ln	116	1423	-	69.71%	30.29%	-
Valley Center	5th St & Meridian	117	410	5391	3.71%	3.37%	92.93%
Bel Aire	Isely School (near Woodlawn & 53rd)	118	273	654	10%	19%	71%

Mapped Count Projections

As shown in Map 1, darker shades of orange and red represent higher levels of bicycle and pedestrian traffic. The locations with the most traffic are concentrated in central Wichita.

Mode-Share Maps

Some Metropolitan Planning Organizations (MPOs) present site-specific AADT data using mode-share maps, which display the percentage of travelers using different modes of transportation, such as walking, biking, and driving. These maps typically feature pie charts at each location, showing the proportion of motor-vehicle usage compared to bicycle and pedestrian travel, provided motor-vehicle AADT data is available for that location. Sites lacking motor-vehicle AADT data, such as screenlines on shared-use paths not near roadways, may not include this information.

In the WAMPO region, most count locations show highly imbalanced mode shares, with either very high motor-vehicle usage or very high bicycle and pedestrian activity. As a result, mode-share maps were not considered useful visuals for this report. However, WAMPO can provide mode-share data and pie charts upon request for those interested in a detailed breakdown of transportation modes at specific locations.

Map 1: 2024 Bicycle and Pedestrian Count Projections

