## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

TELEPHONE (262) 547-6721 FAX (262) 547-1103

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#### STAFF MEMORANDUM

TO: Jeremy Raw, Federal Highway Administration

FROM: Southeastern Wisconsin Regional Planning Commission Staff

DATE: May 31, 2016

SUBJECT: NON-MOTORIZED COUNT PROGRAM FINAL REPORT

In May 2015, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) was selected as one of ten metropolitan planning organizations (MPOs) around the nation to participate in the Federal Highway Administration (FHWA) Bicycle-Pedestrian Count Technology Pilot Project. The purpose of the FHWA pilot project was to identify organizational and technical capacity needs at MPOs, develop resources for addressing these needs, and transfer lessons learned across the country. This effort was intended to increase the capacity of MPOs for establishing and operating bicycle and pedestrian counting programs. Participating MPOs, including SEWRPC, received a federal grant of \$20,000 which required a 20 percent match in the amount of \$5,000.

To meet the purpose of the FHWA pilot program, the objective of the SEWRPC Non-Motorized Count Program was to initiate a regional bicycle and pedestrian count program for Southeastern Wisconsin through the purchase and deployment of bicycle and pedestrian counters. The count program involved the collection of short term (two-week) counts on regional off-street paths in Southeastern Wisconsin to determine average daily volumes and to observe the effects that area type, temperature, and weather may have on nonmotorized volumes. From August 2015 through March 2016, SEWRPC collected count data at 29 locations on 11 regionally significant off-street paths within the seven county Southeastern Wisconsin Region, consisting of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties.

This document describes the process SEWRPC utilized to select the type of counter that would best meet the needs of the Pilot Non-Motorized Count Program for Southeastern Wisconsin, provides summaries and analysis of the count data collected, identifies current and future non-motorized count activities to support other regional planning efforts, and identifies future work to improve the accuracy of the count data and to develop annual expansion factors for the short term counts.

#### PREPARATIONS FOR THE COUNT PROGRAM AND COUNT TECHNOLOGY SELECTION

Introductory webinars were held in May 2015 by FHWA to introduce the participating MPOs to the goals of the pilot project, and to describe the various count technologies that were tested and analyzed in the National Cooperative Highway Research Program Report 797: Guidebook on Pedestrian and Bicycle Volume Data Collection (hereafter referred to as the NCHRP 797 report). In preparation for the data collection effort that started in August 2015, Commission staff reviewed the different types of non-motorized count technologies described in the NCHRP 797 report to compare the advantages and disadvantages of each technology and to determine which count technology would be best for taking non-motorized counts on off-street paths in the Region. Commission staff also researched websites of companies that specialized in non-motorized count devices. Information was collected on product descriptions, compatibility to using these devices on trails, and estimated costs. In addition, Commission staff contacted several government agencies and communities in Wisconsin currently conducting bicycle and pedestrian counts to learn more about the count programs they manage, their experiences, and costs associated with the counters they deploy. The agencies and communities contacted were the Wisconsin Department of Transportation (WisDOT), East-Central Regional Planning Commission (ECWRPC), Milwaukee County, and the City of Milwaukee.

The agencies located within the Southeastern Wisconsin Region—Milwaukee County, the City of Milwaukee, and WisDOT Southeast Region— all use Pyro-Box counters from Eco-Counter, a company based in Montreal that specializes in non-motorized count technologies. All of the agencies noted positive experiences with the Pyro-Box counter.

The Pyro-Box counter is a small, portable device that is ideal for counting on trails and is practical for the short term counts that the Commission has taken throughout the Region. The Pyro-Box uses a passive infrared sensor to collect volumes and operates on a battery with an expected ten-year life. It functions well as either a permanent or mobile device and easily mounts to a post along a trail or street. The Pyro-Box provides options for count intervals (15 minute or hourly) and for directionality (one-way or both). Purchase of the Pyro-Box provides access to an on-line database within the Eco Counter website in which count data is stored and archived. Through this website, count data can be viewed in tables or charts by direction, by count interval, and by day, and can be exported to Microsoft Excel for further analysis. As well, access to the on-line count data from one agency can be provided to other agencies. While manual retrieval of the count data is standard, an automatic data retrieval option can be purchased for an additional cost. The count data is uploaded from the counter to the online database on the Eco Counter website on a daily basis. The automatic data transfer also has an email alert service, which can be customized to send an email when counts may be non-typical. Examples include significant variation in data from day-to-day, a full day of zero counts, and issues with data not being transmitted on a daily basis.

The NCHRP 797 report noted that a couple drawbacks of the passive infrared counter were that the device is unable to differentiate among various users (i.e. bicyclists and pedestrians) and may undercount users due occlusion, which occurs when one user blocks the counter's view of other users. Despite these limitations, the mobility of the device, ease of placement and setup, battery life, and as well the positive experiences by agencies within the Region led the Commission to select the Pyro-Box counter for the FHWA pilot project.

The Commission purchased the bi-directional capability, hourly data collection intervals, and automatic data transfer with email alert feature was also purchased. The automatic data transfer feature and the email alert service have enabled staff to monitor the counts every day and to address potential problems with the counters almost immediately rather than discovering an issue with the counts after the short term count was completed. The Commission used \$11,160 of the initial \$25,000 pilot project budget to purchase three Pyro-Box counters and the additional options as shown in Table 1.

Table 1
COSTS FOR ECO COUNTER PYRO-BOX COUNTERS

Element	Price	Quantity	Total
Pyro-Box with Bi-Direction and 15' sensor range	\$3,275	3	\$9,825
Eco Visio Account with Automatic Data Transfer and Alert Service	\$420	3	\$1,260
Shipping	\$75	1	\$75
		Total	\$11,160

#### COUNT LOCATIONS AND SCHEDULE

Commission staff determined that counts on the regional off-street path system would be the focus of the counting effort during the FHWA pilot project. The intent of the count program was to collect short term counts on these trails to determine estimated trail usage, total volumes, and average volumes by day of the week. Since Milwaukee County and the City of Milwaukee were already operating a total of 5 permanent count sites within Milwaukee County, SEWRPC focused most of the Pilot count program on expanding nonmotorized count coverage to other trail systems in urban, suburban, and rural settings in the other six counties in Southeastern Wisconsin. For the six count locations within Milwaukee County, the study provided enhanced coverage to the existing trail count program managed by Milwaukee County by targeting locations identified by Milwaukee County as potential future count sites. The City of Milwaukee benefitted as well since a few locations counted on the Oak Leaf Trail were adjacent to or in the vicinity of the Milwaukee city limits.

Map 1 shows the count locations collected August 3, 2015 through March 27, 2016. The map also includes the permanent count sites managed by Milwaukee County and the City of Milwaukee to provide a more comprehensive picture of non-motorized counting within Southeastern Wisconsin. Table 2 presents a summary of the count volumes at each count site categorized by area type (urban, suburban, and rural), including the path name, a brief description of the count location, and duration of the count.

A count was conducted on at least one trail in five of the seven counties during the pilot project—Kenosha, Milwaukee, Ozaukee, Racine, and Waukesha Counties. Trails in Walworth and Washington Counties were not counted within this timeframe, but are expected to be counted after the pilot project ends. Where possible, SEWRPC identified three locations on an individual trail, with counters typically placed at locations in the center and at each end of the trail. This setup was applied to trails such as the New Berlin Trail and the Lake Country Trail in Waukesha County and the Racine County North Shore Trail/Kenosha County North Bike Trail, a continuous trail between each county with segments owned by each county. For the Ozaukee Interurban Trail, which runs nearly 30 miles and crosses the full length of Ozaukee County from the Milwaukee County line on the south to the Sheboygan County line on the north, six count locations were identified. Three locations in the southern half were counted during the first two-week session followed by the three locations in the northern half during the subsequent two-week count session. Because the Oak Leaf Trail encompasses Milwaukee County, selected segments of the trail were counted for geographic coverage.

#### Count Schedule

In the summer and fall of 2015 and in the spring of 2016, SEWRPC conducted two week counts, as recommended by the NCHRP 797 report, in an effort to identify normal trail volumes and to minimize the effects of inclement weather and changing temperatures. Between the summer and fall—August to November 2015—Commission staff collected data at 24 locations (eight two-week count periods). In March 2016, SEWRPC was able to collect data at six additional locations. To observe the effect that temperatures and weather conditions may have on trail usage and also to provide a comparison between summer/fall and winter trail use, Commission staff conducted a winter count (December 1, 2015 to February 28, 2016), placing the three counters at locations where some of the highest volumes were observed during the 2015 summer/fall counting season. The locations were on the New Berlin Trail at 124<sup>th</sup> Street at the Milwaukee-Waukesha county line, on the Ozaukee Interurban Trail north of Bonniwell Road between the City of Mequon and the City of Cedarburg, and on the Racine County North Shore Trail north of CTH KR at the Kenosha-Racine county line. The winter count locations also were intended to collect information from both urban and rural areas.

SEWRPC staff used Mondays to set up and take down the counters at the count locations. Whenever possible, the transfer process occurred in the morning so that start and end times of the count sessions would

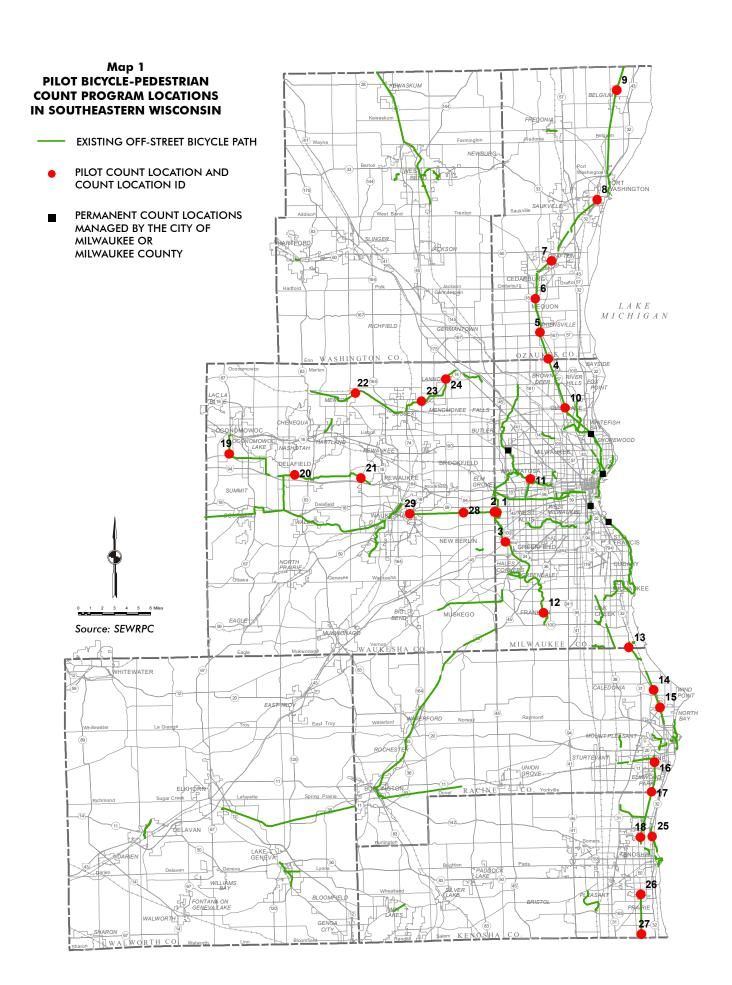


Table 2

PILOT BICYCLE-PEDESTRIAN COUNT LOCATIONS SOUTHEASTERN WISCONSIN

County	Off-street Path	Location	Community	Area Type	Count Location ID	Count Duration	Number of Full Days	Total Volume	Average Weekday	Average Weekend Day
Kenosha	Kenosha County	North of 27th	Kenosha	Suburban	18	October 12-25, 2015	14	1,680	120	120
	North Trail	Street								
	Kenosha County	North of	Pleasant	Suburban	26	February 29-	14	1,580	120	155
	South Trail	Springbrook Road	Prairie			March 13, 2016				
		South of 116th	Pleasant	Rural	27	February 29-	14	1,380	105	140
		Street	Prairie			March 13, 2016				
	Pike Bike Trail	South of Carthage College	Kenosha	Suburban	25	February 29- March 13, 2016	14	2,020	165	155
Milwaukee	Oak Leaf Trail	South of the New Berlin Trail	West Allis	Urban	1	August 3-16, 2015	14	7,190	480	600
	At Beloit Road west of STH 100	Greenfield	Suburban	3	August 3-16, 2015	14	4,900	325	415	
	North of Puetz Road	Franklin	Suburban	12	September 14-27, 2015	14	6,610	425	590	
		South of Mill Road	Glendale	Urban	10	September 14-27, 2015	14	3,150	205	280
		East of the Menomonee River and west of Hart Park	Wauwatosa	Urban	11	September 14-27, 2015	14	15,120	960	1,380
	WE Energies Trail	North of County Line Road	Oak Creek	Rural	13	September 28-October 11, 2015	14	295	20	25
Ozaukee	Ozaukee Interurban Trail	North of County Line Road	Mequon	Suburban	4	August 18-31, 2015	14	4,690	290	570
		South of Division Road	Thiensville	Suburban	5	August 18-31, 2015	14	6,260	390	750
		North of Bonniwell	Mequon	Suburban	6	August 18-31, 2015	14	6,370	390	785
		Road				November 30, 2015-	91	6,110	50	230
						February 28, 2016				
		East of 1st Avenue	Grafton	Suburban	7	September 1-13, 2015	13	3,020	185	345
		South of Oakland Avenue	Port Washington	Suburban	8	September 1-13, 2015	13	2,510	140	310
		North of Silver Beach Road	Belgium	Rural	9	September 1-13, 2015	13	2,390	130	335

## Table 2 (continued)

					Count Location		Number of Full	Total	Average	Average Weekend
County	Off-street Path	Location	Community	Area Type	ID 11	Count Duration	Days	Volume	Weekday	Day
Racine	MRK Trail	West of Douglas	Caledonia	Suburban	14	September 28-October	14	375	30	30
		Avenue South of 3 Mile	Racine	Suburban	15	11, 2015	14	770	60	55
		Road	Racine	Suburban	15	September 28-October 11, 2015	14	770	60	55
	Racine County North Shore Trail	South of 21st Street	Racine	Urban	16	October 12-25, 2015	14	1,400	95	115
		North of CTH KR	Mt Pleasant	Suburban	17	October 12-25, 2015	14	1,910	130	155
						November 30, 2015-	91	4,390	40	135
						February 28, 2016				
Waukesha Bugline Trail	East of Lake Five Road	Lisbon	Rural	22	November 9-22, 2015	14	1,160	65	150	
		East of CTH V	Lannon	Rural	23	November 9-22, 2015	14	800	25	105
		Between Main Street and Maple Road	Menomonee Falls	Suburban	24	November 9-22, 2015	14	620	35	70
	Lake Country Trail	South of Oconomowoc Parkway	Oconomowoc	Suburban	19	October 26-November 8, 2015	14	1,250	100	120
		West of Lapham Peak Road	Delafield	Rural	20	October 26-November 8, 2015	14	1,340	100	115
		West of CTH G	Pewaukee	Suburban	21	October 26-November 8, 2015	14	1,140	85	120
	New Berlin Trail	East of Springdale Road	New Berlin	Urban	29	March 14-27, 2016	14	1,610	80	200
		West of Moorland Road	New Berlin	Urban	28	March 14-27, 2016	14	1,550	105	180
		At 124th Street	New Berlin	Urban	2	August 3-16, 2015	14	7,530	485	670
						November 30, 2015- February 28, 2016	91	4,370	35	165
						March 14-27, 2016	14	1,720	105	215

be within hours of each other. However, due to the size of the Region, in some cases the count sites were broken down on a Monday morning and were set up at the new sites in the afternoon.

SEWRPC staff performed a few tasks to keep local community staff informed of the counting effort. Prior to the start of a new two-week count session and for the winter counts, the county or local community who owned the trail was notified of the intent to take the counts to ensure there would be no issues. After the counters were placed, pictures and a description of the specific location of the count sites were provided to the local community. After the count session was complete, staff provided the county or local community with a summary of the count data. The data summaries developed and provided to local communities for each location collected August 3, 2015 through March 27, 2016 is provided in the appendix to this memorandum. The total cost for deploying and developing the summary information for this pilot project between August 2015 and April 2016 was approximately \$23,000.

## **COUNT DATA SUMMARIES AND ANALYSIS**

Data from each count location was retrieved from the Eco Counter website that served as the clearinghouse for the count data. After each count period concluded, Commission staff entered the data into spreadsheets for developing the summary reports that were provided to the corresponding county or local community that owned the trail. As previously mentioned, the summary data attendant to each location collected August 2015 through March 2016 is provided in the appendix to this report. As part of the data entry process, Commission staff obtained hourly temperatures and weather conditions for each count location from the Weather Underground website. The hourly temperatures were used to obtain the average daily temperature that were used in the tables and graphs for the summary reports. Each summary included an area map for reference, the count duration, and a brief narrative that explained the average daily volumes, if rain or snow affected the counts, and any unique observations of the counts. The summary also included tables with key statistics such as total and weekly volumes and comparison of the counts by day and their averages. Graphs were also provided showing the interaction between daily volumes and average daily temperatures as well as showing the trend of average volume by day of the week.

As requested by FHWA, in February 2016, SEWRPC staff worked on formatting the raw count data for one location into the format that is described in Chapter 7 of the FHWA Traffic Monitoring Guide (TMG). Staff produced a count station file and a volume file consistent with the TMG format for the New Berlin Trail count at 124<sup>th</sup> Street that occurred from Monday, August 3 to Sunday, August 16, 2015. When the files were submitted to FHWA, Commission staff outlined the assumptions made about the file formats since some of the descriptions for the various fields were unclear or difficult to understand. In response, FHWA staff acknowledged that similar concerns about the TMG formats had been received through two other ongoing FHWA projects. FHWA would be reviewing and evaluating the TMG format as a way to address the feedback received. FHWA staff indicated that raw data could be submitted without being in the TMG format, and Commission staff submitted the raw data collected August 2015 through November 2015 as MS Excel spreadsheets.

### Count Analysis

For this document, the count summaries and analysis are based on the raw count data collected August 2015 through March 2016. Although counts continued to be conducted in April and May, Commission staff was unable to summarize and analyze that data prior to submittal of this document. The following analyses of the count data were used to evaluate the data and to develop some general conclusions about what Commission staff observed.

### Count Volumes by Area Type

Commission staff conducted an analysis on the relationship between count volumes and area type (urban, suburban, and rural) to determine if area type could be used to estimate of average volume that could be expected on an off-street path. The count data for the two-week count periods collected between August

and November 2015 and in March 2016 were first sorted by the three area types—urban, suburban, and rural—and then the corresponding volumes for the counts were averaged to determine average volume by weekday, weekend day, and total weekly volume for each area type as shown in Table 3. The count locations and geographic distribution of the area types, which are based upon population and employment densities, are shown in Map 2. Average weekday volumes, average weekend day volumes, and average total weekly volumes are all highest in urban locations, which is expected due to closer proximity to residential neighborhoods, activity centers, and parks. There were eight counts located in urban areas with average weekly volumes that ranged between 700 and 7,560. There were 16 counts that were located in suburban areas with average weekly volumes that ranged between 200 and 3,300. The six counts located in rural areas had average weekly volumes that ranged from 150 to 1,200.

## Count Volumes by Season

The highest volumes of any of the count seasons occurred in the summer. The 12 count locations in August and September were all conducted in Milwaukee and Ozaukee Counties with most of the locations in urban and suburban settings where it would be expected that the highest totals would occur. Count totals for the two-week count periods by site ranged from approximately 2,400 to just over 15,000. In the fall, the 12 count locations in October and November were taken within Kenosha, Racine, and Waukesha Counties in a mix of suburban and rural settings. These totals were much lower than the summer counts, which may be attributed to lower adjacent development densities, cooler temperatures, and fewer hours of daylight. Count totals for the two-week count periods by count site ranged from approximately 300 to 1,900.

The three counts conducted in the winter session from December 2015 to February 2016 experienced the greatest variation in temperature and weather conditions. As would be expected, count volumes often increased and decreased with the rise and fall of temperatures. Days with above normal temperatures that were in the 40s and 50s generally had the highest volumes. The three counts all showed that on the majority of bitterly cold days—temperatures in the single digits or around zero degrees—resulted in some of the lowest volumes, which would most often be in the single digits. Weekends that had a considerable temperature increase after a stretch of cold days often caused a significant increase in volumes. This effect was very evident on Saturday, February 20 and during the weekend of February 27-28 when temperatures reached into the 40s after previous days that were in the 20s. The weekend volume totals were approximately three to six times higher than the preceding weekdays.

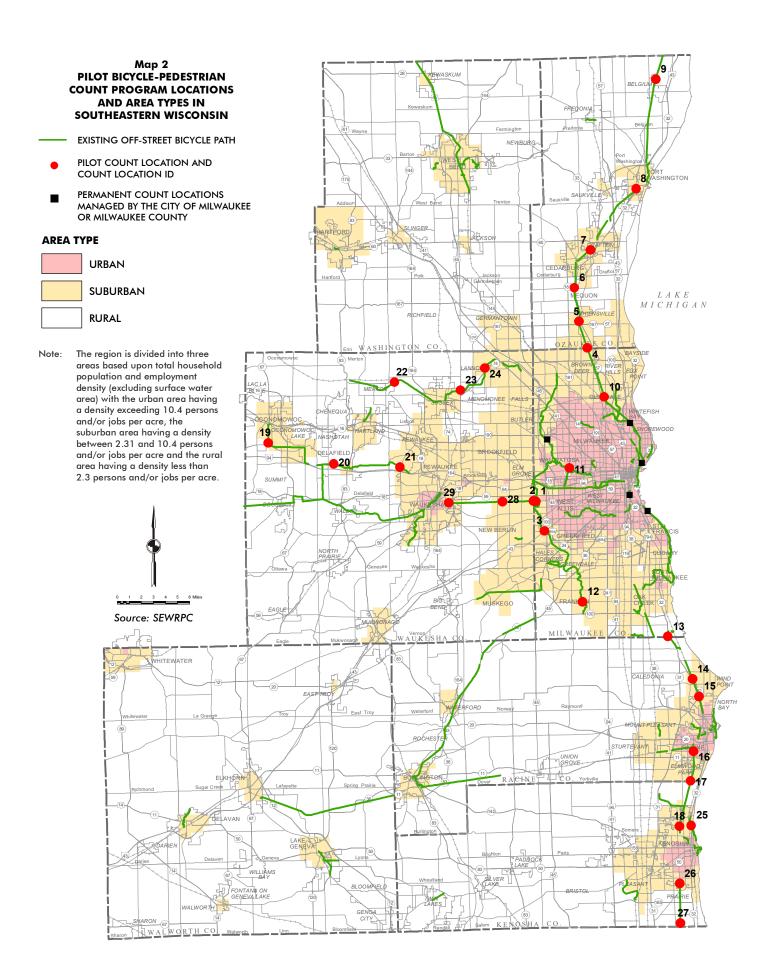
Two of the three winter counts, despite the longer count period covering three months, had total volumes less than their equivalent two-week count period from the summer. The New Berlin Trail at 124<sup>th</sup> Street had a winter volume of 4,390 and a summer volume of 7,190. The Ozaukee Interurban Trail at Bonniwell Road had a winter volume of 6,110 and a summer volume of 6,370. The third location on the Racine County North Shore Trail at CTH KR had a winter count of 4,390 while its fall volume was 1,910. When comparing temperatures and volumes, the October count period had similarities to the month of December during the winter session, which may account for the total winter volume being higher than the fall volume at this location. The first two weeks in December had a count of 975, less than the October two-week count of 1,910.

Two-week counts resumed in March 2016 and included a sampling of just six locations. Counts were taken in Kenosha and Waukesha Counties within urban, suburban, and rural areas. These counts had similar patterns to the winter session in that volumes often increased and decreased with the rise and fall of temperatures and volumes typically rose significantly on days when temperatures reached beyond the 40s. This was evident during a three-day period in which temperatures in the 50s and 60s resulted in daily volumes that ranged from 120 to 450. By comparison, count volumes were generally under 50 on days when temperatures were in the teens and 20s. The changes in temperatures and several precipitation events made it difficult to determine what typical volumes should have been for these trails in the spring. Count totals for the two-week count periods by count site ranged from approximately 1,380 to just over 2,000.

Table 3
COUNT VOLUMES BY AREA TYPE

Area Type	Average Weekday Volume	Average Weekend Day Volume	Average Total Weekly Volume <sup>a</sup>
Urban	315	455	2,455
Suburban	185	295	1,430
Rural	75	145	615
Region	200	310	1,540

 $<sup>^{\</sup>it o}$  Days with rain events were excluded from weekday and weekend averages but were included in the total weekly volume.



## Trends for Average Volume by Day of the Week

The count data that was collected at the 24 locations in the summer and fall generally showed two common trends for average volume by day of the week. The first trend showed that daily volumes increased through the middle of week, dropped on Thursday and Friday, then increased again during the weekend. Weekend volumes were often the highest at the locations. This trend was common at urban locations on the Oak Leaf Trail and New Berlin Trail. The trend for these locations may indicate a mix of utilitarian trips and recreation trips due to the proximity of these trails to residential and commercial areas. The second trend showed that daily volumes remained rather consistent during the weekdays and increased considerably on Saturday. This trend tended to be common at rural and suburban locations on the Ozaukee Interurban Trail and the MRK Trail. The trend for these locations may indicate a higher percent of recreational trips due to higher weekend volumes and the lower land use densities in the vicinity of these trails which would attract utilitarian travel during weekdays. Representative examples of the two common average volume by day trends are shown in Figure 1. The variability of temperatures and weather that impacted count volumes during the winter count session made it difficult to identify a typical trend for average volume by day of the week unlike the summer and fall counts.

## Effects of Temperature

The hourly and average daily temperatures that Commission staff collected for each count location during the pilot project provided opportunities to evaluate the potential effect temperature had on each count's volume totals for the entire count period. Commission staff performed an analysis on the relationship between count volumes and temperature range to determine an estimate of average daily volumes that could be expected on an off-street path that is located within a particular area type given a certain temperature range. For each count period collected, August 2015 through March 2016, the daily volumes for each location were grouped by temperature range and averaged. All of the individual count locations were then sorted by area type and then averaged by temperature range. As shown in Table 4, average volumes were the highest for urban and suburban areas when temperatures were in the 50s, 60s, and 70s. For rural areas, average volumes were the highest when temperatures were in the 50s and 70s; however it should be noted that the volume of 160 shown for the temperature range in the 70s represented only one count location. When temperatures were 80 degrees or higher, the average volumes had a noticeable decrease which may indicate a threshold of intolerance for hot temperatures by trail users. Conversely, when temperatures fell below 30 degrees, average daily volumes for all three area types were the lowest and tended to have similar volumes, which may indicate a threshold of intolerance for cold temperatures by trail users. Some additional outliers are apparent in the table, which may be addressed through the development and application of annual expansion factors and seasonal adjustment factors.

## Effects of Weather

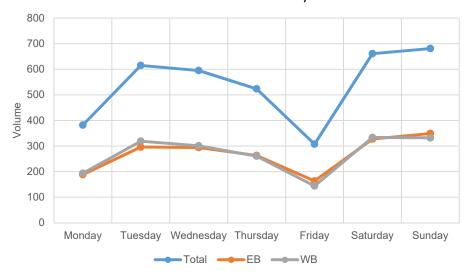
In addition to temperature data, Commission staff also collected information on rain and snow events to evaluate their effect on count volumes. Throughout all of the seasons, rain had a noticeable effect on the counts. For the purposes of this study, a significant rain event was identified based on rain occurring for the majority of daylight hours and during the hours when the greatest number of trail users would be expected. Days with rain were usually excluded from the average volume by day for the summary reports because these low volumes were not an accurate representation of what volume would have been had the rain not occurred. Exceptions were made when it was determined that rain only caused a temporary drop in volume but did not have a significant effect on the overall volume for the entire day.

A total of 12 days during the pilot project had a rain event that affected bicycle and pedestrian counts and impacted 21 locations. Due to the proximity of the three locations being counted during each two-week count periods, typically all three counts would be impacted by the rain event. During the winter count period, the three locations were more geographically dispersed and each count tended to have its own weather conditions that differed from the other two locations. As shown in Table 5, days with rain were compared to its equivalent preceding or succeeding day of the week to analyze the impact of rain. On

Figure 1

COMMON TRENDS FOR AVERAGE VOLUME BY DAY DURING THE SUMMER/FALL COUNT SESSION

## Oak Leaf Trail at Beloit Road in the City of Greenfield



## Ozaukee Interurban Trail at County Line Road in the City of Mequon

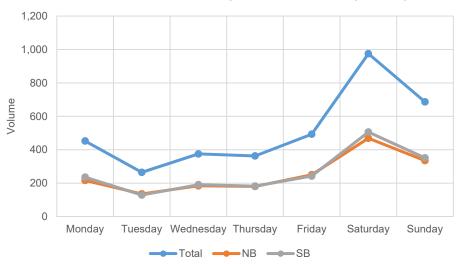


Table 4

AVERAGE DAILY VOLUMES BY TEMPERATURE RANGE

		Temperature Range									
Area Type	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89		
Urban	15	20	30	135	115	450	530	530			
Suburban	15	25	40	80	120	170	250	440	190		
Rural		25	20	75	90	175	105	160ª	105		
Region	15	25	30	90	110	215	285	445	170		

<sup>&</sup>lt;sup>a</sup>This volume only represents one location in a rural area.

Table 5
IMPACT OF PRECIPITATION ON DAILY VOLUMES

						Daily V	olume <sup>a</sup>	
Path	Location	Community	Surface Type	Count Duration	Date of Event	Precipitation <sup>b</sup>	No Precipitation	Percent Reduction
Ozaukee	North of County Line Road	Mequon	Paved	August 18-31, 2015	Saturday, August 29, 2015	86	669	87.1
Interurban Trail	South of Division Road	Thiensville	Paved	August 18-31, 2015	Saturday, August 29, 2015	128	923	86.1
	North of Bonniwell Road	Mequon	Paved	August 18-31, 2015	Saturday, August 29, 2015	125	975	87.2
We Energies Trail	North of County Line Road	Oak Creek	Paved	September 28- October 11, 2015	Tuesday, September 29, 2015	2	22	90.9
MRK Trail	West of Douglas Avenue	Caledonia	Unpaved	September 28- October 11, 2015	Tuesday, September 29, 2015	4	23	82.6
	South of 3 Mile Road	Racine	Unpaved	September 28- October 11, 2015	Tuesday, September 29, 2015	17	54	68.5
Lake Country	South of Oconomowoc	Oconomowoc	Paved	October 26-	Wednesday, October 28, 2015	16	128	87.5
Trail	Parkway			November 8, 2015	Saturday, October 31, 2015	10	88	88.6
	West of Lapham Peak	Delafield	Paved	October 26-	Wednesday, October 28, 2015	45	127	64.6
	Road			November 8, 2015	Saturday, October 31, 2015	32	76	57.9
	West of CTH G	Pewaukee	Paved	October 26-	Wednesday, October 28, 2015	21	98	78.6
				November 8, 2015	Saturday, October 31, 2015	12	81	85.2
Bugline Trail	East of Lake Five Road	Lisbon	Paved	November 9-22,	Tuesday, November 17, 2015	11	125	91.2
				2015	Wednesday, November 18, 2015	36	109	67.0
	East of CTH V	Lannon	Paved	November 9-22,	Tuesday, November 17, 2015	10	76	86.8
				2015	Wednesday, November 18, 2015	18	88	79.5
	Between Main Street and	Menomonee	Paved	November 9-22,	Tuesday, November 17, 2015	21	79	73.4
	Maple Road	Falls		2015	Wednesday, November 18, 2015	30	65	53.8
New Berlin Trail	At 124th Street	New Berlin	Paved	November 30, 2015- February 28, 2016	Monday, December 21, 2015	25	33	24.2
Ozaukee Interurban Trail	North of Bonniwell Road	Mequon	Paved	November 30, 2015- February 28, 2016	Monday, December 21, 2015	36	39	7.7
Racine County	North of CTH KR	Mt Pleasant	Paved	November 30, 2015-	Sunday, December 13, 2015	37	109	66.1
North Shore Trail				February 28, 2016	Monday, December 21, 2015	33	53	37.7
			<u> </u>		Friday, January 08, 2016	12	22	45.5
Pike Bike Trail	South of Carthage College	Kenosha	Paved	February 29- March 13, 2016	Sunday, March 13, 2016	45	129	65.1
Kenosha County South Trail	North of Springbrook Road	Pleasant Prairie	Paved	February 29- March 13, 2016	Sunday, March 13, 2016	29	176	83.5

## Table 5 (continued)

						Daily Volume <sup>a</sup>			
			Surface				No	Percent	
Path	Location	Community	Type	Count Duration	Date of Event	Precipitation <sup>b</sup>	Precipitation	Reduction	
Kenosha County	South of 116th Street	Pleasant Prairie	Paved	February 29-	Sunday, March 13, 2016	21	136	84.6	
South Trail				March 13, 2016					
New Berlin Trail	At 124th Street	New Berlin	Paved	March 14-27, 2016	Wednesday, March 23, 2016	14	21	33.3	
					Thursday, March 24, 2016	11	103	89.3	
	West of Moorland Road	New Berlin	Paved	March 14-27, 2016	Wednesday, March 23, 2016	11	40	72.5	
					Thursday, March 24, 2016	4	95	95.8	
	East of Springdale Road	New Berlin	Paved	March 14-27, 2016	Wednesday, March 23, 2016	18	38	52.6	
					Thursday, March 24, 2016	14	95	85.3	
	Average Percent Reduction 7								

<sup>&</sup>lt;sup>a</sup>The volume from the date of the precipitation event is compared to its equivalent preceding or succeeding day of the week.

<sup>&</sup>lt;sup>b</sup>A rain event was determined as rain occurring for the majority of the daylight hours and during the hours when the greatest number of users would be expected.

average, days with rain reduced daily volumes by approximately 70 percent. In some cases, a day with rain had an impact of reducing counts up to 80 to 90 percent of what the volume should have been under normal weather conditions. The daily volumes in Table 5 also indicate that the effect of rain on reducing trail usage is about the same regardless of season.

With regards to snow events, the only significant region-wide snowfall that affected all three counts during the winter session occurred on Monday, December 28, 2015. Having only one significant snow event limited the opportunity to better analyze the impact of snow on count volumes. As shown in Table 6, daily volume was reduced by snow on average by approximately 70 percent, which is similar to the average reduction in volume due to rain. The percent reductions in the table were determined by comparing the snow event to the following Monday (January 4, 2016).

## SUPPORT FOR CURRENT AND FUTURE NON-MOTORIZED PLANNING EFFORTS

This ongoing bicycle and pedestrian counting effort can provide opportunities to support other planning efforts in the Region. The regional count program may also be able to provide assistance to the local counties and communities as they plan for future bicycle and pedestrian facilities.

## Before-and-After Counts on Off-street Paths

Long range planning efforts conducted by the Commission have identified several opportunities in the Region to address gaps in, and expand the network of, off-street paths to improve connectivity within and between the four urbanized areas and between cities and villages with a population of 5,000 or more. Taking counts on existing segments of this regional network of off-street paths near the locations where planned expansion is programmed or currently under construction can help provide before-and-after volumes which can then be used to estimate increased usage in other areas of the Region attendant to similar projects. Another opportunity to support bicycle and pedestrian planning efforts is to collect before-and-after counts on off-street paths with unpaved surfaces that will be paved in the future. By taking counts before and after the trail is paved, a potential change in volume could be estimated attendant to the paving of a trail.

One such opportunity presented itself during the pilot project. In November 2015, Milwaukee County completed a new segment of the Oak Leaf Trail that extended the existing trail at Estabrook Park near Hampton Road north to the existing trail just south of Mill Road. Milwaukee County set up a permanent counter at Estabrook Park in July 2014 to collect volumes prior to the trail expansion and has kept the counter in place since the expansion for a comparison of before-and-after counts. In April 2015, the count volume at Estabrook Park had a total of 23,650. In April 2016, the count total was 24,480 for an increase of nearly 4 percent.

To determine the impact this new segment of trail will have on volumes north of the new trail segment, SEWRPC assisted Milwaukee County by conducting a two-week count near Mill Road in the City of Glendale in September 2015 as part of the pilot project to collect nonmotorized volumes on the northern side of the extension prior to the new trail segment being completed. SEWRPC will be conducting another count at this Mill Road location in September 2016 to assess the change in volume resulting from the extension of the Oak Leaf Trail.

#### Support for TAP and CMAQ Projects

A robust bicycle and pedestrian count program could also support local communities with their applications for the FHWA Transportation Alternatives Program (TAP) and the FHWA Congestion Mitigation and Air Quality (CMAQ) Program funds. As an example, during the recent evaluation of candidate TAP projects for FFY 2019-2020 funding, non-motorized count data collected by Commission staff on the Lake Country Trail and by Milwaukee County on the Menomonee River Parkway were used as part of the evaluation of proposed underpasses for both of these trails. The count data was one of several criteria used to evaluate TAP projects.

Table 6

IMPACTS OF SNOW ON DAILY VOLUMES<sup>a</sup>

						Daily Volume <sup>b</sup>		
Path	Location	Community	Surface Type	Count Duration	Date of Event	Snow <sup>c</sup>	No Snow	Percent Reduction
New Berlin Trail	At 124 <sup>th</sup> Street	New Berlin	Paved	November 30, 2015- February 28, 2016	Monday, December 28, 2015	7	28	75.0
Ozaukee Interurban Trail	North of Bonniwell Road	Mequon	Paved	November 30, 2015- February 28, 2016	Monday, December 28, 2015	14	40	65.0
					Average	Percent R	eduction	70.0

<sup>&</sup>lt;sup>a</sup>The Racine County North Shore Trail was excluded from this analysis as it is not plowed to allow for cross-country skiing.

<sup>&</sup>lt;sup>b</sup>The volume from the date of the snow event is compared to Monday, January 4 which was the succeeding Monday.

<sup>&</sup>lt;sup>c</sup>A snow event was determined to be a significant snowfall of several inches.

There are several bicycle and pedestrian projects in Southeastern Wisconsin with committed CMAQ funding as identified in the 2015-2018 Transportation Improvement Program. These projects include the construction of on- and off-street paths and installation of bicycle lanes. Counts can be collected for candidate projects to determine existing bicycle and pedestrian volumes and then taken again after project implementation to gauge the change in non-motorized use. The previously mentioned Oak Leaf Trail extension north of Estabrook Park was funded through the CMAQ program and provides an ongoing opportunity to evaluate a CMAQ-funded project through the permanent count station managed by Milwaukee County and the short term counts conducted by the Commission. In order to collect before and after usage statistics, Commission staff acknowledges that there may be challenges to collecting data on existing bicycle and pedestrian volumes, especially in cases where a new facility is being constructed, and that different count devices may be required for some of these projects, particularly with a bicycle lane project. As experience grows in the Region in counting nonmotorized travel, many of these challenges will likely be overcome.

#### **FUTURE WORK**

SEWRPC has identified several activities for consideration that would continue to improve and expand upon the bicycle and pedestrian counting efforts that occurred during the FHWA pilot project.

## Effects of Wind

An analysis could be done to evaluate the effect wind speeds have on daily volumes. Similar to the analysis that compared average volumes to temperature ranges, daily wind speeds could be averaged and grouped to determine an estimate of volume that could be expected given a certain range of wind speed.

#### Manual Counts and Correction Factors

Since the counters are susceptible to occlusion, manual counts should be conducted to determine error in count data and to create correction factors. During this pilot project, Commission staff only conducted one to two hour manual counts to validate the counters. These manual counts showed that the Pyro-Box counters tended to underreport volume by approximately 10-15 percent. Future efforts will include the conduct of manual counts in a variety of urban, suburban, and rural areas to determine if the accuracy of the counters is impacted based on the unique volumes and environments of these locations.

## **Expansion Factors**

Another important activity will be expanding the counts for determining annual estimates and to account for seasonal variation volume. The guidance provided by the NCHRP 797 report and through the webinars by the FHWA technical support team would be considered. Currently, five permanent count locations are operated by Milwaukee County and the City of Milwaukee within the Region. The data from the permanent counts will be used for expanding the short term counts, as demonstrated during one of the webinars during the pilot project. These five permanent count stations are within urban areas and should be compatible with many of the urban short-term counts that SEWRPC collected throughout the Region. As part of the ongoing count program, permanent count sites should be selected in order to develop seasonal adjustment factors for the rural and suburban areas as well. Work over the summer will focus on the development and potential application of seasonal and annual adjustment factors.

## Other Locations for Bicycle and Pedestrian Counts

As described throughout this report, SEWRPC chose to focus its counting efforts on off-street paths for the pilot project. Commission staff will be considering how best to collect pedestrian and bicycle counts on sidewalks and on-street bicycle lanes. While the Eco Counter Pyro-Box is an ideal counter for trails, it can also be utilized for taking counts on sidewalks as long as precautions are taken into consideration. Many characteristics of the surrounding environment could affect the count and would need to be avoided. The counter would need to be positioned away from traffic and would need to face a solid surface like the wall

of a building. The counter would also need to be placed away from benches, transit stops, or other locations where people would linger to avoid false counts. Manual counts for determining accuracy of the counter would be critical since downtown areas would likely have high incidences of occlusion (one pedestrian blocking the counter's view of other pedestrians). Hose counters, in conjunction with the Pyro-Box counters, could be used to collect bicycle and pedestrian data. Hose counters could be used to collect bicycle usage in the bicycle lanes. Despite these known issues, taking pedestrian and bicycle counts in other locations would be beneficial for estimating overall volumes and for determining daily and weekly volume trends in these areas.

## Regional Bicycle and Pedestrian Counting Coordination

In early 2016, the Commission—along with WisDOT, Milwaukee County, the City of Milwaukee, staff from the University of Wisconsin-Milwaukee, and Eco Counter—initiated work on the creation of a shared database that would be accessed through the Eco Counter website to share all of the counts collected within Southeastern Wisconsin that use Eco Counter products. Each agency would be capable of transferring the count data from its own online database to the shared database. All agencies would then use one username and password to access the shared database for viewing and downloading the count data that is being collected by the individual agencies.

In addition, since several government agencies in Southeastern Wisconsin are already conducting ad hoc or localized bicycle and pedestrian counts, the Region may also benefit from creating a regional bicycle and pedestrian group to further coordinate counting efforts. This effort could provide opportunities for agencies to expand their existing bicycle and pedestrian planning activities or for new agencies to become involved in non-motorized counting. The group could develop a more formalized counting program that identifies permanent sites and a schedule of short-term count locations to provide for geographic coverage of the Region. The group would be able to identify opportunities for collaboration and coordination between individual count programs to ensure the efficient use of limited funding while providing effective count coverage. Staff from local and regional government agencies and those in the academic field with experience with non-motorized counting efforts could be the initial participants in the group. Additional agencies could also provide support to and benefit from participating in this counting group.

## OVERALL EXPERIENCE WITH THE FHWA PILOT PROJECT

The following summarizes observations that Commission has made during the conduct of the pilot project and may provide some guidance to other MPOs or agencies that are considering a count program. For the short-term counts that occurred every two weeks, Commission staff typically committed between a half-day and a full day for deployment of the counters based on the geographic locations of the count sites. Reviewing, summarizing, and analyzing the count data by two to three employees typically resulted in a number of hours that cumulatively totaled another one to two full days of work every two weeks.

Researching the various count technologies and reviewing the guidance in the NCHRP 797 report is critical for selecting the appropriate device for the type of counts that will be conducted. Each technology has advantages and disadvantages that must be compared to the purpose of the count program. One important consideration for infrared sensor devices like the Pyro-Box is the placement of the counter and assessing the surrounding environment. The counter must be facing trees or other vegetation to prevent the sensor from detecting other sources of heat beyond the trail. The Pyro-Box cannot be directed toward streets, and even trains on railroad tracks that are over 50 feet from, but parallel to, the trail can be detected by the counters.

The automatic data transfer feature offered by Eco Counter proved to be beneficial for Commission staff. This option was purchased for this study due to the short amount of time for the study of August 2015 through March 2016. Commission staff wanted to be able to react to any issues with a location quickly so as to collect as many sites as possible during the pilot study. As part of a larger ongoing nonmotorized count

program, the automatic data transfer feature would be more practical for permanent count sites as a means of quickly identifying potential problems with a permanent site. As these sites would be used to develop seasonal adjustment factors and annual expansion factors, the loss of data would have the potential to significantly impact the count program. The loss of one short term (one- to two-week) count would likely have minimal impact to the overall nonmotorized count program. As the Commission works to develop the nonmotorized count program, additional counters purchased by the Commission to be used for the short-term counts are not likely to include this feature.

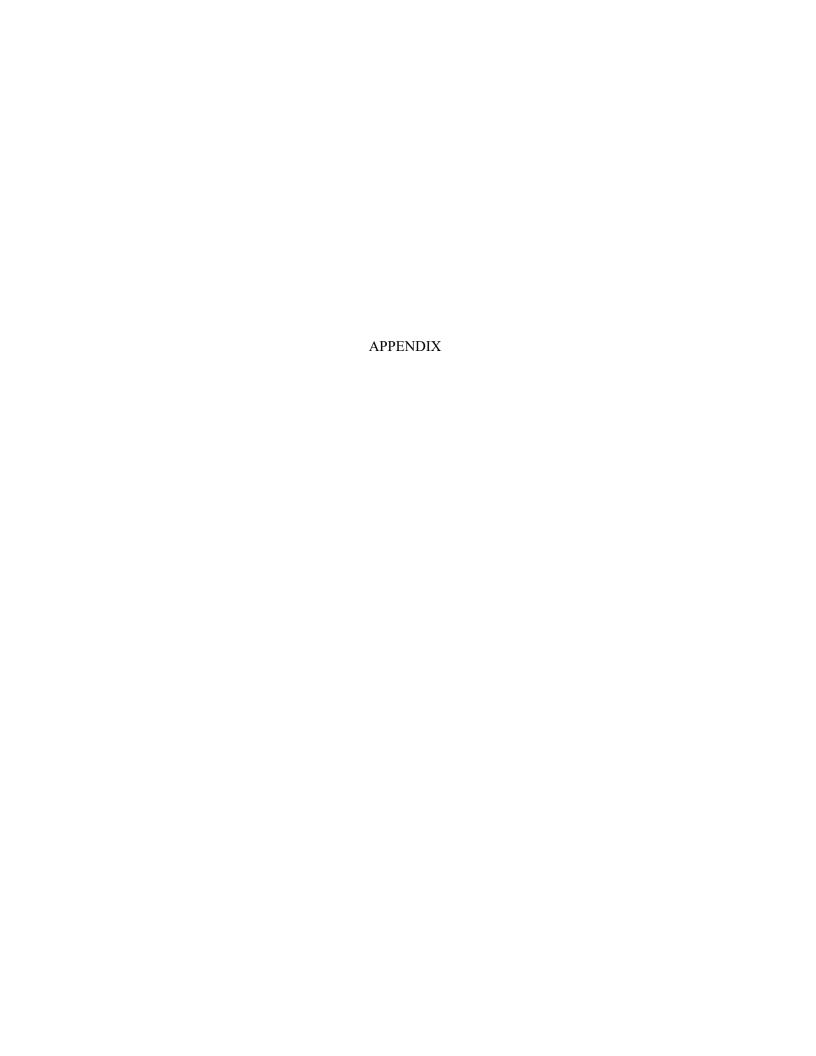
Prior to deployment of the counters, Commission staff determined that the weather option provided by Eco Counter, in which daily temperatures, wind speeds, and weather conditions from a nearby weather station are assigned to a counter, was ineffective as this option is designed for permanent installations and a counter can only be linked to a specific weather station once. Since the counters were relocated every two weeks Commission staff determined this weather option was impractical for the pilot project and therefore collected temperature and weather information from the *Weather Underground* website. When the Commission selects permanent count sites, purchasing this weather option from Eco Counter may be considered.

The pilot project provided SEWRPC with the opportunity to conduct a region scale non-motorized count program which had not previously existed for the Southeastern Wisconsin. Over the past nine months, this counting effort has provided a more comprehensive understanding of estimated volumes on off-street paths in the Region. The pilot project enabled Commission staff to expand non-motorized counts in the Region beyond those that are currently being conducted by the City of Milwaukee, Milwaukee County, and WisDOT while also increasing coordinated activities with and between these local agencies. Participation in the pilot project provided Commission staff with the basic structure for a count program that will be further developed into a more robust Regional count program.

The next step is for Commission staff to determine how to manage a more comprehensive count program for the Region that identifies additional permanent count sites and the appropriate number of locations on regional off-street paths within the various area types that can serve as representative sites to establish estimates of volumes for other trails with similar characteristics. The frequency of conducting counts at these locations will also need to be determined for developing adjustment factors. An ongoing schedule of manual counts will be necessary for determining the accuracy of the count data. Specific goals of the regional count program will need to be developed through coordination with state and local agencies and those in the academic field who are already involved with non-motorized counting efforts. The intent will be to develop a sustainable counting program for the Region that builds upon existing counting efforts and encourages other agencies to become involved in the program.

\* \* \*

KRY/CTH/JMD #231280-3



## BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Oak Leaf Trail south of the New Berlin Trail in the City of West Allis

Monday, August 3 to Sunday, August 16, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Oak Leaf Trail south of the New Berlin Trail in the City of West Allis from Monday, August 3 to Sunday, August 16, 2015. Setup and removal of the counter occurred on Monday, August 3 and Monday, August 17. For this summary, the partial count data from August 17 was combined with the partial count data from August 3 to expand August 3 to a full day count. The count data indicate that weekday usage, on average, was highest on Monday through Wednesday and declined on Thursday and Friday. Scattered rain showers occurred in the afternoon on Monday, August 10 and may have had some impact on the count that day, but the count was still about 55 percent of the total on Monday, August 3. Each Friday had some of the lowest daily totals for the count period. The weekends had relatively similar totals and may be representative of typical weekend usage.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, AUGUST 3 TO SUNDAY, AUGUST 16, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	7,189	3,647	3,542
August 3-9 Total	3,799	1,930	1,869
Mon-Fri Total	2,529	1,260	1,269
Sat-Sun Total	1,270	670	600
August 10-16 Total	3,390	1,717	1,673
Mon-Fri Total	2,264	1,152	1,112
Sat-Sun Total	1,126	565	561
Percent of Usage by Direction		50.7	49.3
Weekly Average	3,595	1,824	1,771
Average on a Weekday	479	241	238
Weekend Average	599	309	290

Table 2
COMPARISON OF DAILY COUNT DATA: AUGUST 3-16, 2015

Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 3	518	263	255	74	Partly Cloudy
August 10	295	155	140	72	Cloudy
Average Monday Usage	407	209	198		

Tuesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 4	584	296	288	70	Clear
August 11	557	301	256	70	Partly Cloudy
Average Tuesday Usage	571	299	272		

Wednesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 5	569	282	287	66	Clear
August 12	591	293	298	69	Partly Cloudy
Average Wednesday Usage.	580	288	293		

Thursday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 6	491	241	250	69	Clear
August 13	465	227	238	74	Clear
Average Thursday Usage	478	234	244		

Friday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 7	367	178	189	70	Mostly Cloudy
August 14	356	176	180	77	Clear
Average Friday Usage	362	177	185		

Saturday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 8	572	299	273	68	Mostly Cloudy
August 15	599	308	291	76	Clear
Average Saturday Usage	586	304	282		

Sunday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 9	698	371	327	69	Partly Cloudy
August 16	527	257	270	79	Clear
Average Sunday Usage	613	314	299		

Figure 3

DAILY USAGE: AUGUST 3-16, 2015

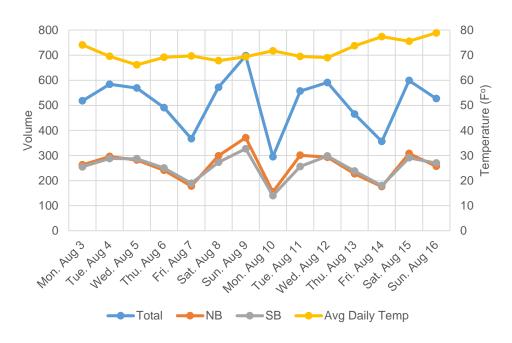


Figure 4

AVERAGE USAGE BY DAY



## BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

# New Berlin Trail at 124<sup>th</sup> Street in the City of New Berlin

## Monday, August 3 to Sunday, August 16, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the New Berlin Trail at 124<sup>th</sup> Street in the City of New Berlin from Monday, August 3 to Sunday, August 16, 2015. Setup and removal of the counter occurred on Monday, August 3 and Monday, August 17. For this summary, the partial count data from August 17 was combined with the partial count data from August 3 to expand August 3 to a full day count. The count data indicate that weekday usage, on average, was highest on Tuesday through Thursday. Scattered rain showers occurred in the afternoon on Monday, August 10 and may have had some impact on the count that day, but the count was still about 60 percent of the total on Monday, August 3. Each Friday had some of the lowest daily totals for the count period. Both Saturdays and both Sundays had very similar totals respective to each other and may be representative of typical weekend usage.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, AUGUST 3 TO SUNDAY, AUGUST 16, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	7,530	3,763	3,767
August 3-9 Total	3,990	1,983	2,007
Mon-Fri Total	2,546	1,256	1,290
Sat-Sun Total	1,444	727	717
August 10-16 Total	3,540	1,780	1,760
Mon-Fri Total	2,300	1,154	1,146
Sat-Sun Total	1,240	626	614
Percent of Usage by Direction		50.0	50.0
Weekly Average	3,765	1,882	1,884
Average on a Weekday	485	241	244
Weekend Average	671	338	333

Table 2

COMPARISON OF DAILY COUNT DATA: AUGUST 3-16, 2015

Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 3	481	238	243	74	Partly Cloudy
August 10	283	139	144	72	Mostly Cloudy
Average Monday Usage	382	189	194		

Tuesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 4	591	288	303	70	Clear
August 11	639	304	335	70	Partly Cloudy
Average Tuesday Usage	615	296	319		

Wednesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 5	623	303	320	66	Clear
August 12	567	285	282	69	Partly Cloudy
Average Wednesday Usage.	595	294	301		

Thursday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 6	574	285	289	69	Clear
August 13	473	241	232	74	Clear
Average Thursday Usage	524	263	261		

Friday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 7	277	142	135	70	Mostly Cloudy
August 14	338	185	153	77	Clear
Average Friday Usage	308	164	144		

Saturday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 8	706	356	350	68	Mostly Cloudy
August 15	616	299	317	76	Clear
Average Saturday Usage	661	328	334		

Sunday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 9	738	371	367	69	Partly Cloudy
August 16	624	327	297	79	Clear
Average Sunday Usage	681	349	332		

Figure 3

DAILY USAGE: AUGUST 3-16, 2015

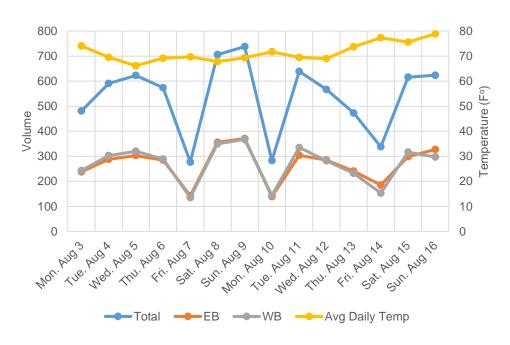


Figure 4

AVERAGE USAGE BY DAY



## BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Oak Leaf Trail at Beloit Road in the City of Greenfield

## Monday, August 3 to Sunday, August 16, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Oak Leaf Trail at Beloit Road in the City of Greenfield from Monday, August 3 to Sunday, August 16, 2015. Setup and removal of the counter occurred on Monday, August 3 and Monday, August 17. For this summary, the partial count data from August 17 was combined with the partial count data from August 3 to expand August 3 to a full day count. The count data indicate that weekday usage, on average, was highest on Tuesday through Thursday. Scattered rain showers occurred in the afternoon on Monday, August 10 and may have had some impact on the count that day, but the count was still about 50 percent of the total on Monday, August 3. Each Friday had some of the lowest daily totals for the count period. Weekend usage on August 15-16 was lower than the previous weekend, which may have been affected by warmer temperatures that reached into the 80s.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, AUGUST 3 TO SUNDAY, AUGUST 16, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	4,902	2,545	2,357
August 3-9 Total	2,755	1,397	1,358
Mon-Fri Total	1,736	870	866
Sat-Sun Total	1,019	527	492
August 10-16 Total	2,147	1,148	999
Mon-Fri Total	1,501	777	724
Sat-Sun Total	646	371	275
Percent of Usage by Direction		51.9	48.1
Weekly Average	2,451	1,273	1,179
Average on a Weekday	324	165	159
Weekend Average	416	225	192

Table 2
COMPARISON OF DAILY COUNT DATA: AUGUST 3-16, 2015

Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 3	399	199	200	75	Cloudy
August 10	189	101	88	72	Cloudy
Average Monday Usage	294	150	144		

Tuesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 4	413	206	207	72	Cloudy
August 11	379	197	182	70	Cloudy
Average Tuesday Usage	396	202	195		

Wednesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 5	377	182	195	68	Cloudy
August 12	430	216	214	69	Cloudy
Average Wednesday Usage.	404	199	205		

Thursday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 6	356	186	170	69	Cloudy
August 13	321	164	157	75	Cloudy
Average Thursday Usage	339	175	164		

Friday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 7	191	97	94	71	Cloudy
August 14	182	99	83	80	Cloudy
Average Friday Usage	187	98	89		

Saturday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 8	504	259	245	69	Cloudy
August 15	347	193	154	76	Cloudy
Average Saturday Usage	426	226	200		

Sunday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
August 9	515	268	247	70	Cloudy
August 16	299	178	121	80	Cloudy
Average Sunday Usage	407	223	184		

Figure 3

DAILY USAGE: AUGUST 3-16, 2015

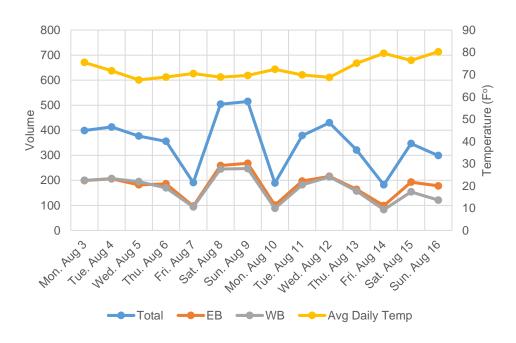


Figure 4

AVERAGE USAGE BY DAY



# Ozaukee Interurban Trail at County Line Road (Ozaukee-Milwaukee county line)

Tuesday, August 18 to Monday, August 31, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Ozaukee Interurban Trail just to the north of County Line Road (Ozaukee-Milwaukee county line) from Tuesday, August 18 to Monday, August 31, 2015. The count data indicate that usage, on average, tended to slowly decrease through the weekdays then increased on Fridays and during the weekend. Monday through Wednesday, August 24-26, had daytime temperatures that were much cooler than average for late August but did not seem to affect usage. The low usage on Saturday, August 29 was greatly impacted by rain; however, the usage on the previous Saturday is a likely indicator of typical Saturday usage. For this reason, the count for August 29 was not included in the weekend average shown in Table 1 or in the average Saturday usage shown in Table 2 and in Figure 4 since the count was only 13 percent of the count recorded on August 22. Usage by direction was nearly equal, showing no distinct bicyclist and pedestrian flow from one county to the other.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: TUESDAY, AUGUST 18 TO MONDAY AUGUST 31, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	4,691	2,421	2,270
August 18-24 Total	2,551	1,339	1,212
Mon-Fri Total	1,542	807	735
Sat-Sun Total	1,009	532	477
August 25-31 Total	2,140	1,082	1,058
Mon-Fri Total	1,348	692	656
Sat-Sun Total	792	390	402
Percent of Usage by Direction		51.6	48.4
Weekly Average	2,346	1,211	1,135
Average on a Weekday	289	150	139
Weekend Average <sup>a</sup>	572	293	279

<sup>&</sup>lt;sup>a</sup>Count data from Saturday, August 29 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: AUGUST 18-31, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
August 24	293	149	144	Mostly Cloudy
August 31	423	223	200	Clear
Average Monday Usage	358	186	172	

Tuesday Comparison	Total	Northbound	Southbound	Weather
August 18	279	140	139	Partly Cloudy
August 25	272	139	133	Mostly Cloudy
Average Tuesday Usage	276	140	136	

Wednesday Comparison	Total	Northbound	Southbound	Weather
August 19	294	156	138	Mostly Cloudy
August 26	245	128	117	Mostly Cloudy
Average Wednesday Usage.	270	142	128	

Thursday Comparison	Total	Northbound	Southbound	Weather
August 20	241	126	115	Mostly Cloudy
August 27	159	80	79	Partly Cloudy
Average Thursday Usage	200	103	97	

Friday Comparison	Total	Northbound	Southbound	Weather
August 21	435	236	199	Partly Cloudy
August 28	249	122	127	Partly Cloudy
Average Friday Usage	342	179	163	

Saturday Comparison	Total	Northbound	Southbound	Weather
August 22	669	359	310	Clear
August 29	86	43	43	Rain, Cloudy
Average Saturday Usage <sup>a</sup>	669	359	310	

Sunday Comparison	Total	Northbound	Southbound	Weather
August 23	340	173	167	Partly Cloudy
August 30	706	347	359	Mostly Cloudy
Average Sunday Usage	523	260	263	

<sup>&</sup>lt;sup>a</sup>The Saturday average does not include August 29 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: AUGUST 18-31, 2015

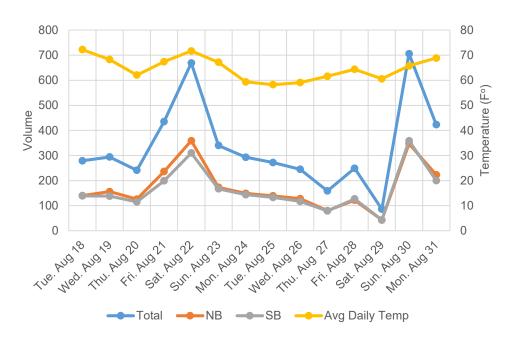
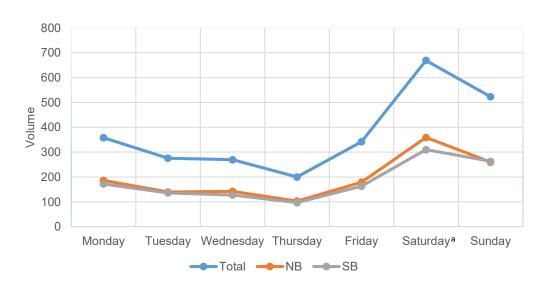


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Saturday, August 29 is not included due to rain that greatly reduced usage on this day.

## Ozaukee Interurban Trail south of Division Street in the Village of Thiensville

Tuesday, August 18 to Monday, August 31, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Ozaukee Interurban Trail south of Division Street in the Village of Thiensville from Tuesday, August 18 to Monday, August 31, 2015. The count data indicate Monday and Friday have the highest usage on weekdays. After usage decreases from Monday to Tuesday, there is a gradual increase on Wednesday and Thursday. Monday through Wednesday, August 24-26, had daytime temperatures that were much cooler than average for late August and may have had a slight impact on usage when compared to the previous week. The low usage on Saturday, August 29 was greatly impacted by rain; however, the usage on the previous Saturday is a likely indicator of typical Saturday usage. For this reason, the count for August 29 was not included in the weekend average shown in Table 1 or in the average Saturday usage shown in Table 2 and in Figure 4 since the count was only 14 percent of the count recorded on August 22.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: TUESDAY, AUGUST 18 TO MONDAY, AUGUST 31, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	6,256	3,113	3,143
August 18-24 Total	3,385	1,680	1,705
Mon-Fri Total	2,026	1,011	1,015
Sat-Sun Total	1,359	669	690
August 25-31 Total	2,871	1,433	1,438
Mon-Fri Total	1,859	939	920
Sat-Sun Total	1,012	494	518
Percent of Usage by Direction		49.8	50.2
Weekly Average	3,128	1,557	1,572
Average on a Weekday	389	195	194
Weekend Average <sup>a</sup>	748	367	380

<sup>&</sup>lt;sup>a</sup>Count data from Saturday, August 29 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2

COMPARISON OF DAILY COUNT DATA: AUGUST 18-31, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
August 24	359	179	180	Mostly Cloudy
August 31	561	283	278	Clear
Average Monday Usage	460	231	229	

Tuesday Comparison	Total	Northbound	Southbound	Weather
August 18	339	171	168	Partly Cloudy
August 25	304	155	149	Mostly Cloudy
Average Tuesday Usage	322	163	159	

Wednesday Comparison	Total	Northbound	Southbound	Weather
August 19	373	182	191	Mostly Cloudy
August 26	281	146	135	Mostly Cloudy
Average Wednesday Usage.	327	164	163	

Thursday Comparison	Total	Northbound	Southbound	Weather
August 20	333	169	164	Mostly Cloudy
August 27	373	186	187	Partly Cloudy
Average Thursday Usage	353	178	176	

Friday Comparison	Total	Northbound	Southbound	Weather
August 21	622	310	312	Partly Cloudy
August 28	340	169	171	Partly Cloudy
Average Friday Usage	481	240	242	

Saturday Comparison	Total	Northbound	Southbound	Weather
August 22	923	465	458	Clear
August 29	128	61	67	Rain, Cloudy
Average Saturday Usage <sup>a</sup>	923	465	458	

Sunday Comparison	Total	Northbound	Southbound	Weather
August 23	436	204	232	Partly Cloudy
August 30	884	433	451	Mostly Cloudy
Average Sunday Usage	660	319	342	

<sup>&</sup>lt;sup>a</sup>The Saturday average does not include August 29 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: AUGUST 18-31, 2015

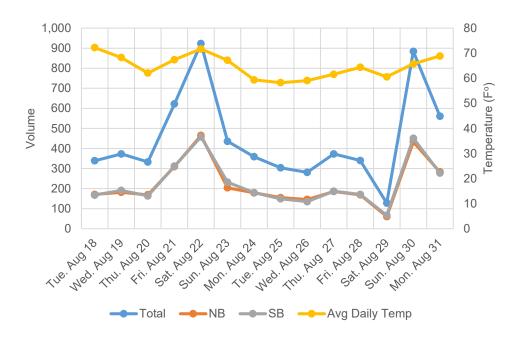
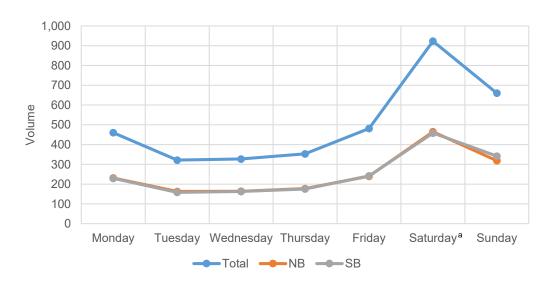


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Saturday, August 29 is not included due to rain that greatly reduced usage on this day Source: SEWRPC

## Ozaukee Interurban Trail north of Bonniwell Road in the City of Mequon

Tuesday, August 18 to Monday, August 31, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Ozaukee Interurban Trail just north of Bonniwell Road in the City of Mequon from Tuesday, August 18 to Monday, August 31, 2015. The count data indicate Monday and Friday have the highest usage on weekdays. Usage decreases from Monday to Tuesday, increases on Wednesday, and remains level on Thursday before increasing again on Friday. Monday through Wednesday, August 24-26, had daytime temperatures that were much cooler than average for late August and may have had a small effect on usage. The low usage on Saturday, August 29 was greatly impacted by rain; however, the usage on the previous Saturday is a likely indicator of typical Saturday usage. For this reason, the count for August 29 was not included in the weekend average shown in Table 1 or in the average Saturday usage shown in Table 2 and in Figure 4 since the count was only 13 percent of the count recorded on August 22.

Figure 1

AREA MAP OF COUNT LOCATION

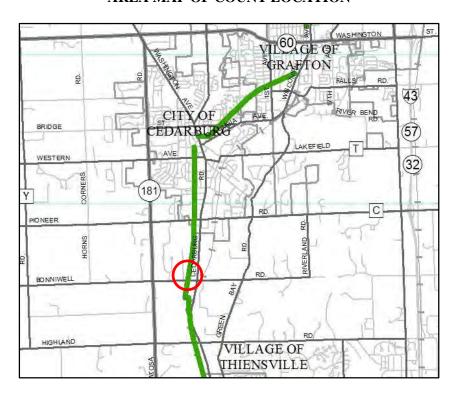


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: TUESDAY, AUGUST 18 TO MONDAY, AUGUST 31, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	6,370	3,137	3,233
August 18-24 Total	3,422	1,676	1,746
Mon-Fri Total	1,971	975	996
Sat-Sun Total	1,451	701	750
August 25-31 Total	2,948	1,461	1,487
Mon-Fri Total	1,926	960	966
Sat-Sun Total	1,022	501	521
Percent of Usage by Direction		49.2	50.8
Weekly Average	3,185	1,569	1,617
Average on a Weekday	390	194	196
Weekend Average <sup>a</sup>	783	380	403

<sup>&</sup>lt;sup>a</sup>Count data from Saturday, August 29 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: AUGUST 18-31, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
August 24	359	169	190	Mostly Cloudy
August 31	546	264	282	Clear
Average Monday Usage	453	217	236	

Tuesday Comparison	Total	Northbound	Southbound	Weather
August 18	286	145	141	Partly Cloudy
August 25	244	127	117	Mostly Cloudy
Average Tuesday Usage	265	136	129	

Wednesday Comparison	Total	Northbound	Southbound	Weather
August 19	389	193	196	Mostly Cloudy
August 26	361	175	186	Mostly Cloudy
Average Wednesday Usage.	375	184	191	

Thursday Comparison	Total	Northbound	Southbound	Weather
August 20	297	144	153	Mostly Cloudy
August 27	429	217	212	Partly Cloudy
Average Thursday Usage	363	181	183	

Friday Comparison	Total	Northbound	Southbound	Weather
August 21	640	324	316	Partly Cloudy
August 28	346	177	169	Partly Cloudy
Average Friday Usage	493	251	243	

Saturday Comparison	Total	Northbound	Southbound	Weather
August 22	975	469	506	Clear
August 29	125	63	62	Rain, Cloudy
Average Saturday Usage <sup>a</sup>	975	469	506	

Sunday Comparison	Total	Northbound	Southbound	Weather
August 23	476	232	244	Partly Cloudy
August 30	897	438	459	Mostly Cloudy
Average Sunday Usage	687	335	352	

<sup>&</sup>lt;sup>a</sup>The Saturday average does not include August 29 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: AUGUST 18-31, 2015

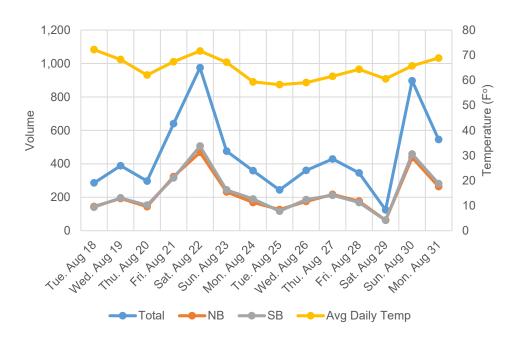
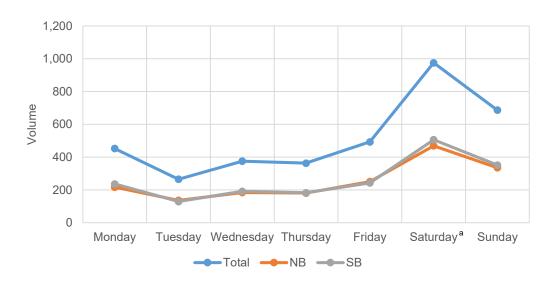


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Saturday, August 29 is not included due to rain that greatly reduced usage on this day.

# Ozaukee Interurban Trail east of 1st Avenue in the Village of Grafton

Tuesday, September 1 to Sunday, September 13, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Ozaukee Interurban Trail east of 1<sup>st</sup> Avenue in the Village of Grafton from Tuesday, September 1 to Sunday, September 13, 2015. Due to an adjustment in the counting schedule from the previous count session that counted an extra day, this count session only collected 13 days of data at this location, with only one Monday being counted. The count on Monday, September 7 was Labor Day and likely does not represent typical Monday usage. Rain storms on Tuesday, September 8 resulted in the lowest counts of the entire session. Although this count was slightly less than half of the count on Tuesday, September 1, it was still included in the average daily usage. When comparing the two weekend counts, Saturday and Sunday, September 5-6 may have had a slightly higher than normal usage given the holiday weekend. Due to the holiday and rain during the second week of counts, it is likely that the first week is a more accurate representation of usage, in that the numbers gradually decreased until Wednesday and then increased the rest of the week.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: TUESDAY, SEPTEMBER 1 TO SUNDAY, SEPTEMBER 13, 2015

Statistic	Total	Eastbound	Westbound
Two-week Period Totala	3,019	1,589	1,430
September 1-7 Total	1,772	909	863
Mon-Fri Total	1,011	514	497
Sat-Sun Total	761	395	366
September 8-13 Total	1,247	680	567
Tue-Fri Total	636	343	293
Sat-Sun Total	611	337	274
Percent of Usage by Direction		52.6	47.4
Weekly Average	1,510	795	715
Average on a Weekday	183	95	88
Weekend Average	343	183	160

<sup>&</sup>lt;sup>a</sup>Only one Monday was counted during this count session.

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 1-13, 2015

Monday Comparison	Total	Eastbound	Westbound	Weather
September 7 <sup>a</sup>	283	147	136	Mostly Cloudy
Average Monday Usage	283	147	136	

Tuesday Comparison	Total	Eastbound	Westbound	Weather
September 1	179	88	91	Clear
September 8	87	44	43	Rain, Cloudy
Average Tuesday Usage	133	66	67	

Wednesday Comparison	Total	Eastbound	Westbound	Weather
September 2	140	76	64	Clear
September 9	223	121	102	Clear
Average Wednesday Usage .	182	99	83	

Thursday Comparison	Total	Eastbound	Westbound	Weather
September 3	172	81	91	Partly Cloudy
September 10	133	74	59	Rain, Cloudy
Average Thursday Usage	153	78	75	

Friday Comparison	Total	Eastbound	Westbound	Weather
September 4	237	122	115	Mostly Cloudy
September 11	193	104	89	Mostly Cloudy
Average Friday Usage	215	113	102	

Saturday Comparison	Total	Eastbound	Westbound	Weather
September 5	396	213	183	Mostly Cloudy
September 12	312	174	138	Partly Cloudy
Average Saturday Usage	354	194	161	

Sunday Comparison	Total	Eastbound	Westbound	Weather
September 6	365	182	183	Clear
September 13	299	163	136	Clear
Average Sunday Usage	332	173	160	

<sup>&</sup>lt;sup>a</sup>Only one Monday was counted during this count session. Monday, September 7 was Labor Day.

Figure 3

DAILY USAGE: SEPTEMBER 1-13, 2015

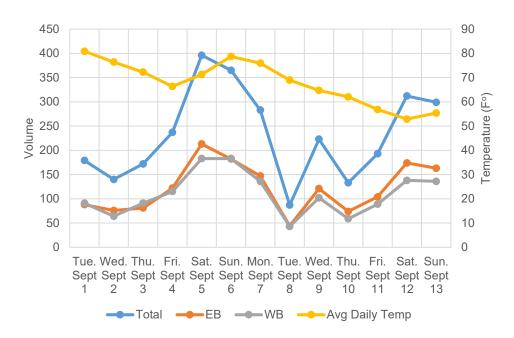
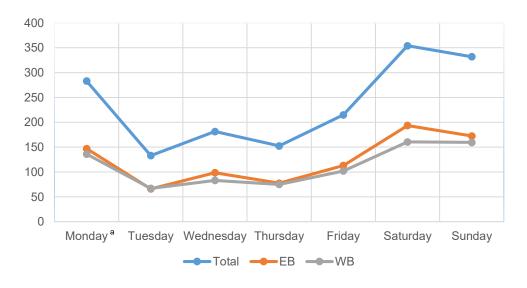


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Only one Monday was counted during this count session. Monday, September 7 was Labor Day.

## Ozaukee Interurban Trail south of Oakland Avenue in the City of Port Washington

Tuesday, September 1 to Sunday, September 13, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Ozaukee Interurban Trail south of Oakland Avenue in the City of Port Washington from Tuesday, September 1 to Sunday, September 13, 2015. Due to an adjustment in the counting schedule from the previous count session that counted an extra day, this count session only collected 13 days of data at this location, with only one Monday being counted. The count on Monday, September 7 was Labor Day and likely does not represent typical Monday usage. Tuesday, September 8 appears to have been affected by rain storms since this count was the lowest of the count session. Although this count was about one-third of the count on Tuesday, September 1, it was still included in the average daily usage. When comparing the two weekend counts, Saturday and Sunday, September 5-6 had much higher usage which could be attributed to the holiday weekend. It is likely that the first week is a more accurate representation of usage, in that the numbers gradually decreased until Wednesday and then increased the rest of the week. Although daily counts on average were less than the counts taken at 1st Avenue in the Village of Grafton, both counts seem to demonstrate a similar daily use pattern.

Figure 1

AREA MAP OF COUNT LOCATION

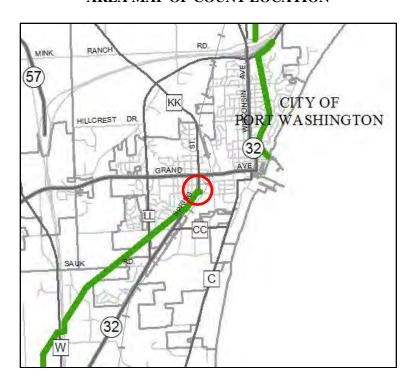


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: TUESDAY, SEPTEMBER 1 TO SUNDAY, SEPTEMBER 13, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total <sup>a</sup>	2,505	1,241	1,264
September 1-7 Total	1,595	790	805
Mon-Fri Total	819	402	417
Sat-Sun Total	776	388	388
September 8-13 Total	910	451	459
Tue-Fri Total	450	221	229
Sat-Sun Total	460	230	230
Percent of Usage by Direction		49.5	50.5
Weekly Average	1,253	621	632
Average on a Weekday	141	69	72
Weekend Average	309	155	155

<sup>&</sup>lt;sup>a</sup>Only one Monday was counted during this count session.

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 1-13, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
September 7 <sup>a</sup>	275	138	137	Mostly Cloudy
Average Monday Usage	275	138	137	

Tuesday Comparison	Total	Northbound	Southbound	Weather
September 1	156	73	83	Clear
September 8	51	23	28	Rain, Cloudy
Average Tuesday Usage	104	48	56	

Wednesday Comparison	Total	Northbound	Southbound	Weather
September 2	126	62	64	Clear
September 9	172	82	90	Clear
Average Wednesday Usage.	149	72	77	

Thursday Comparison	Total	Northbound	Southbound	Weather
September 3	103	53	50	Partly Cloudy
September 10	59	31	28	Rain, Cloudy
Average Thursday Usage	81	42	39	

Friday Comparison	Total	Northbound	Southbound	Weather
September 4	159	76	83	Mostly Cloudy
September 11	168	85	83	Mostly Cloudy
Average Friday Usage	164	81	83	

Saturday Comparison	Total	Northbound	Southbound	Weather
September 5	414	208	206	Mostly Cloudy
September 12	231	120	111	Partly Cloudy
Average Saturday Usage	323	164	159	

Sunday Comparison	Total	Northbound	Southbound	Weather
September 6	362	180	182	Clear
September 13	229	110	119	Clear
Average Sunday Usage	296	145	151	

<sup>&</sup>lt;sup>a</sup>Only one Monday was counted during this count session. Monday, September 7 was Labor Day.

Figure 3

DAILY USAGE: SEPTEMBER 1-13, 2015

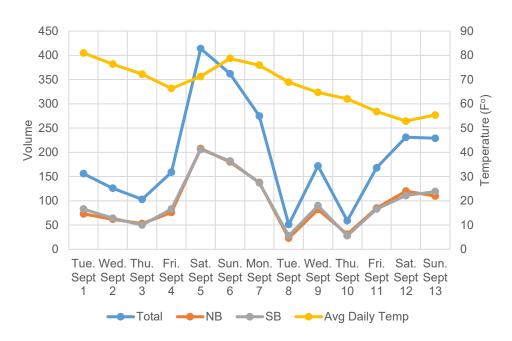
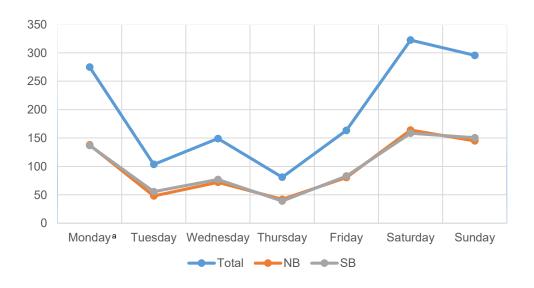


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Only one Monday was counted during this count session. Monday, September 7 was Labor Day.

## Ozaukee Interurban Trail north of Silver Beach Road in the Village of Belgium

Tuesday, September 1 to Sunday, September 13, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Ozaukee Interurban Trail north of Silver Beach Road in the Village of Belgium from Tuesday, September 1 to Sunday, September 13, 2015. Due to an adjustment in the counting schedule from the previous count session that counted an extra day, this count session only collected 13 days of data. As a result, only one Monday was counted. The count on Monday, September 7 was Labor Day and likely does not represent typical Monday usage. Counts on Tuesday, Wednesday, and Thursday, September 1-3, were about the same with an increase on Friday and during the holiday weekend. During the second week of counts, rain on Tuesday, September 8 likely affected usage and resulted in the lowest count of the entire session. For this reason, the count for September 8 was not included in the weekday average shown in Table 1 or in the average Tuesday usage shown in Table 2 and in Figure 4. The weekend of September 12-13 had higher usage than the holiday weekend. This count location provided some indication of bicycle and pedestrian travel in and out of the Region. Although the count location was not right at the Ozaukee-Sheboygan county line, the total number of users by direction showed about 61 percent of users were heading southbound during the two-week count period. The weekend of September 12-13 had an average of about 73 percent of users who were heading south, which could likely be attributed to people who came from Sheboygan County on this trail but did not return by the same route.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: TUESDAY, SEPTEMBER 1 TO SUNDAY, SEPTEMBER 13, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total <sup>a</sup>	2.394	922	1.472
	,	·	,
September 1-7 Total	1,034	495	539
Mon-Fri Total	572	278	294
Sat-Sun Total	462	217	245
September 8-13 Total	1,360	427	933
Tue-Fri Total	488	188	300
Sat-Sun Total	872	239	633
Percent of Usage by Direction		38.5	61.5
Weekly Average	1,197	461	736
Average on a Weekday <sup>b</sup>	130	57	73
Weekend Average	334	114	220

<sup>&</sup>lt;sup>a</sup>Only one Monday was counted during this count session.

 $<sup>^</sup>b$ Count data from Tuesday, September 8 was not included in this weekday average due to rain that greatly reduced usage on this day.

Table 2

COMPARISON OF DAILY COUNT DATA: SEPTEMBER 1-13, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
September 7 <sup>a</sup>	170	66	104	Mostly Cloudy
Average Monday Usage	170	66	104	

Tuesday Comparison	Total	Northbound	Southbound	Weather
September 1	103	68	35	Clear
September 8	17	7	10	Rain, Cloudy
Average Tuesday Usage <sup>b</sup>	103	68	35	

Wednesday Comparison	Total	Northbound	Southbound	Weather
September 2	87	42	45	Clear
September 9	182	86	96	Clear
Average Wednesday Usage.	135	64	71	

Thursday Comparison	Total	Northbound	Southbound	Weather
September 3	86	42	44	Partly Cloudy
September 10	70	35	35	Rain, Cloudy
Average Thursday Usage	78	39	40	

Friday Comparison	Total	Northbound	Southbound	Weather
September 4	126	60	66	Mostly Cloudy
September 11	219	60	159	Mostly Cloudy
Average Friday Usage	173	60	113	

Saturday Comparison	Total	Northbound	Southbound	Weather
September 5	248	124	124	Mostly Cloudy
September 12	553	128	425	Partly Cloudy
Average Saturday Usage	401	126	275	

Sunday Comparison	Total	Northbound	Southbound	Weather
September 6	214	93	121	Clear
September 13	319	111	208	Clear
Average Sunday Usage	267	102	165	

<sup>&</sup>lt;sup>a</sup>Only one Monday was counted during this count session. Monday, September 7 was Labor Day.

<sup>&</sup>lt;sup>b</sup>The Tuesday average does not include September 8 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: SEPTEMBER 1-13, 2015

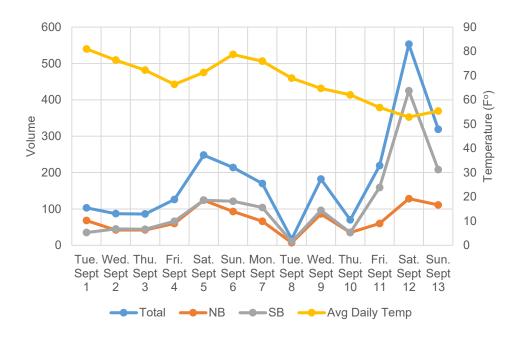
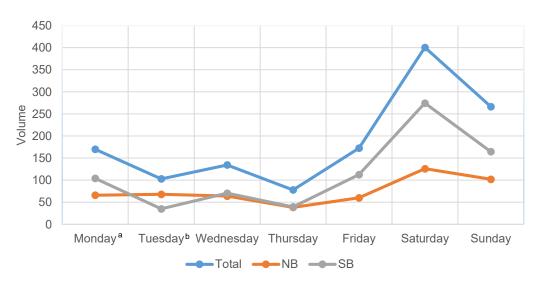


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Only one Monday was counted during this count session. Monday, September 7 was Labor Day.

<sup>b</sup>Tuesday, September 8 is not included due to rain that greatly reduced usage on this day.

## Oak Leaf Trail south of Mill Road in the City of Glendale

### Monday, September 14 to Sunday, September 27, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Oak Leaf Trail south of Mill Road in the City of Glendale from Monday, September 14 to Sunday, September 27, 2015. Setup and removal of the counter occurred on Monday, September 14 and Monday, September 28. For this summary, the partial count data from September 28 was combined with the partial count data from September 14 to expand to a full day count. The count data indicate that weekday usage, on average, increased from Monday to Wednesday followed by a gradual decrease on Thursday and Friday. Saturday had the highest usage of the week, and Saturday, September 26 recorded the highest daily usage of the two-week count period. By the end of the year, Milwaukee County anticipates the completion of an extension of the Oak Leaf Trail from Estabrook Park that will connect to this segment. When complete, the Oak Leaf Trail will provide a continuous, off-street connection from downtown Milwaukee to the Ozaukee Interurban Trail. The counts at this location were taken to collect a sampling of usage prior to the Oak Leaf Trail extension. Another count at this location could be taken next year for comparing usage of this trail segment before and after the extension.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, SEPTEMBER 14 TO SUNDAY, SEPTEMBER 27, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	3,153	1,468	1,685
September 14-20 Total	1,502	723	779
Mon-Fri Total	971	478	493
Sat-Sun Total	531	245	286
September 21-27 Total	1,651	745	906
Mon-Fri Total	1,056	499	557
Sat-Sun Total	595	246	349
Percent of Usage by Direction		46.6	53.4
Weekly Average	1,577	734	843
Average on a Weekday	203	98	105
Weekend Average	282	123	159

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 14-27, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
September 14	205	98	107	Clear
September 21	178	85	93	Clear
Average Monday Usage	192	92	100	

Tuesday Comparison	Total	Northbound	Southbound	Weather
September 15	216	100	116	Clear
September 22	242	114	128	Clear
Average Tuesday Usage	229	107	122	

Wednesday Comparison	Total	Northbound	Southbound	Weather
September 16	236	120	116	Clear
September 23	237	105	132	Clear
Average Wednesday Usage .	237	113	124	

Thursday Comparison	Total	Northbound	Southbound	Weather
September 17	164	80	84	Partly Cloudy
September 24	197	100	97	Clear
Average Thursday Usage	181	90	91	

Friday Comparison	Total	Northbound	Southbound	Weather
September 18	150	80	70	Cloudy
September 25	202	95	107	Clear
Average Friday Usage	176	88	89	

Saturday Comparison	Total	Northbound	Southbound	Weather
September 19	247	113	134	Mostly Cloudy
September 26	381	151	230	Mostly Cloudy
Average Saturday Usage	314	132	182	

Sunday Comparison	Total	Northbound	Southbound	Weather
September 20	284	132	152	Clear
September 27	214	95	119	Cloudy
Average Sunday Usage	249	114	136	

Figure 3

DAILY USAGE: SEPTEMBER 14-27, 2015

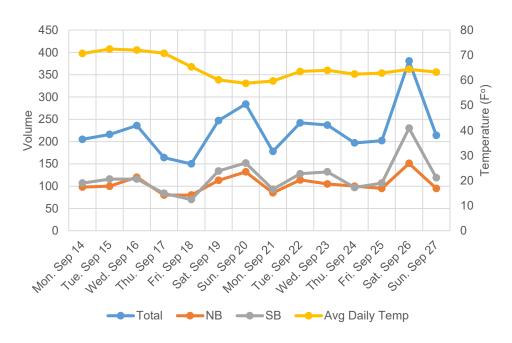
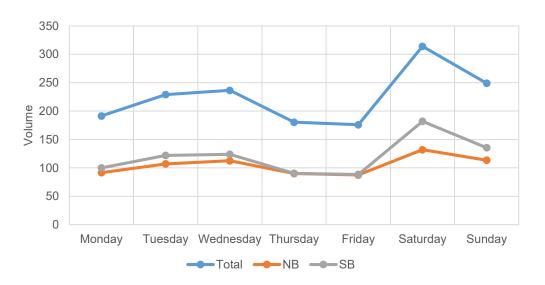


Figure 4

AVERAGE USAGE BY DAY



### Oak Leaf Trail between the Menomonee River and Hart Park in the City of Wauwatosa

Monday, September 14 to Sunday, September 27, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Oak Leaf Trail between the Menomonee River and Hart Park in the City of Wauwatosa from Monday, September 14 to Sunday, September 27, 2015. Setup and removal of the counter occurred on Monday, September 14 and Monday, September 28. For this summary, the partial count data from September 28 was combined with the partial count data from September 14 to expand to a full day count. This count location had the highest usage of all counts taken to date. Several weekdays had approximately 1,000 users and the weekends averaged over 1,300 users. The count data indicate that weekday usage, on average, was fairly similar Monday through Thursday with a slight increase seen on Tuesday. Each Friday had the lowest daily totals for both weeks. Saturday, September 26 had the highest number of users during the two-week period. The high count totals at this location can be attributed to its proximity to downtown Wauwatosa to the west and the sports fields in Hart Park to the east. This trail segment also traverses the City of Wauwatosa and provides a connection to the north-south segments of the Oak Leaf Trail through the western end of Milwaukee County.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, SEPTEMBER 14 TO SUNDAY, SEPTEMBER 27, 2015

Statistic	Total	Eastbound	Westbound
Two-week Period Total	15,121	7,462	7,659
September 14-20 Total	7,168	3,574	3,594
Mon-Fri Total	4,419	2,196	2,223
Sat-Sun Total	2,749	1,378	1,371
September 21-27 Total	7,953	3,888	4,065
Mon-Fri Total	5,180	2,640	2,540
Sat-Sun Total	2,773	1,248	1,525
Percent of Usage by Direction		49.3	50.7
Weekly Average	7,561	3,731	3,830
Average on a Weekday	960	484	476
Weekend Average	1,381	657	724

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 14-27, 2015

Monday Comparison	Total	Eastbound	Westbound	Weather
September 14	1,000	502	498	Clear
September 21	1,006	500	506	Clear
Average Monday Usage	1,003	501	502	

Tuesday Comparison	Total	Eastbound	Westbound	Weather
September 15	1,002	488	514	Clear
September 22	1,213	659	554	Clear
Average Tuesday Usage	1,108	574	534	

Wednesday Comparison	Total	Eastbound	Westbound	Weather
September 16	994	509	485	Clear
September 23	982	488	494	Clear
Average Wednesday Usage .	988	499	490	

Thursday Comparison	Total	Eastbound	Westbound	Weather
September 17	882	438	444	Partly Cloudy
September 24	1,012	503	509	Clear
Average Thursday Usage	947	471	477	

Friday Comparison	Total	Eastbound	Westbound	Weather
September 18	541	259	282	Cloudy
September 25	967	490	477	Clear
Average Friday Usage	754	375	380	

Saturday Comparison	Total	Eastbound	Westbound	Weather
September 19	1,395	695	700	Mostly Cloudy
September 26	1,707	777	930	Mostly Cloudy
Average Saturday Usage	1,551	736	815	

Sunday Comparison	Total	Eastbound	Westbound	Weather
September 20	1,354	683	671	Clear
September 27	1,066	471	595	Cloudy
Average Sunday Usage	1,210	577	633	

Figure 3

DAILY USAGE: SEPTEMBER 14-27, 2015

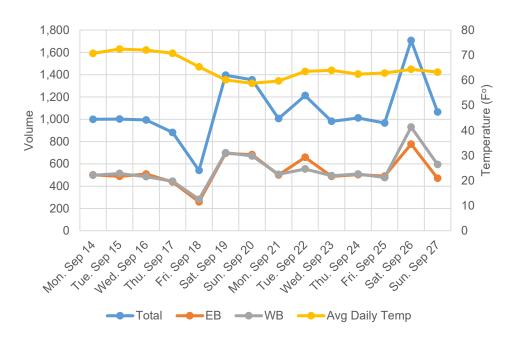
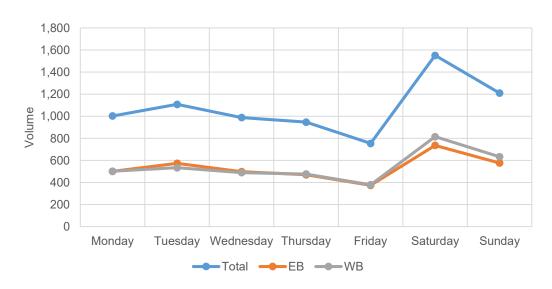


Figure 4

AVERAGE USAGE BY DAY



# Oak Leaf Trail north of Puetz Road in the City of Franklin

### Monday, September 14 to Sunday, September 27, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Oak Leaf Trail north of Puetz Road in the City of Franklin from Monday, September 14 to Sunday, September 27, 2015. Setup and removal of the counter occurred on Monday, September 14 and Monday, September 28. For this summary, the partial count data from September 28 was combined with the partial count data from September 14 to expand to a full day count. The count data indicate that weekday usage, on average, was highest on Monday through Wednesday. Rain in the afternoon on Thursday, September 17 appears to have had some impact on the count that day but the count was still about two-thirds of the total on Thursday, September 24. Each Friday, similar to many other count locations taken in Milwaukee County, had the lowest daily totals for the count period. The weekend of September 26-27 had similar usage each day and may be representative of typical weekend usage.

Figure 1

AREA MAP OF COUNT LOCATION

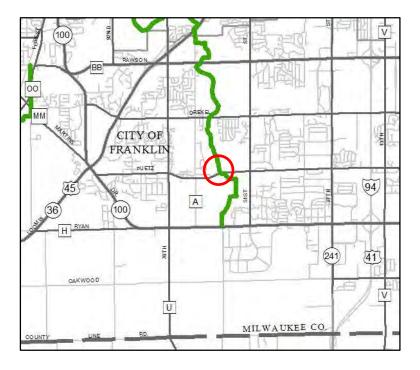


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, SEPTEMBER 14 TO SUNDAY, SEPTEMBER 27, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	6,605	3,282	3,323
September 14-20 Total	3,339	1,661	1,678
Mon-Fri Total	2,024	994	1,030
Sat-Sun Total	1,315	667	648
September 21-27 Total	3,266	1,621	1,645
Mon-Fri Total	2,216	1,125	1,091
Sat-Sun Total	1,050	496	554
Percent of Usage by Direction		49.7	50.3
Weekly Average	3,303	1,641	1,662
Average on a Weekday	424	212	212
Weekend Average	591	291	301

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 14-27, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
September 14	527	279	248	Mostly Cloudy
September 21	518	264	254	Partly Cloudy
Average Monday Usage	523	272	251	

Tuesday Comparison	Total	Northbound	Southbound	Weather
September 15	469	252	217	Cloudy
September 22	507	257	250	Partly Cloudy
Average Tuesday Usage	488	255	234	

Wednesday Comparison	Total	Northbound	Southbound	Weather
September 16	586	233	353	Cloudy
September 23	494	257	237	Cloudy
Average Wednesday Usage .	540	245	295	

Thursday Comparison	Total	Northbound	Southbound	Weather
September 17	244	129	115	Rain, Cloudy
September 24	384	191	193	Cloudy
Average Thursday Usage	314	160	154	

Friday Comparison	Total	Northbound	Southbound	Weather
September 18	198	101	97	Cloudy
September 25	313	156	157	Cloudy
Average Friday Usage	256	129	127	

Saturday Comparison	Total	Northbound	Southbound	Weather
September 19	549	281	268	Cloudy
September 26	543	253	290	Cloudy
Average Saturday Usage	546	267	279	

Sunday Comparison	Total	Northbound	Southbound	Weather
September 20	766	386	380	Cloudy
September 27	507	243	264	Cloudy
Average Sunday Usage	637	315	322	

Figure 3

DAILY USAGE: SEPTEMBER 14-27, 2015

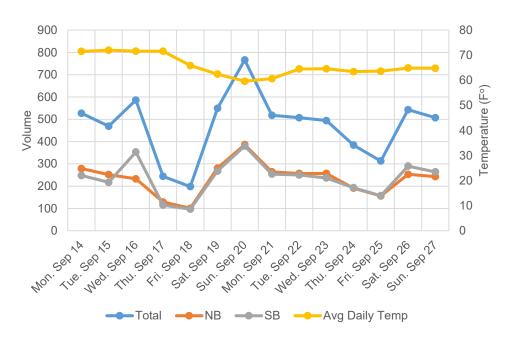
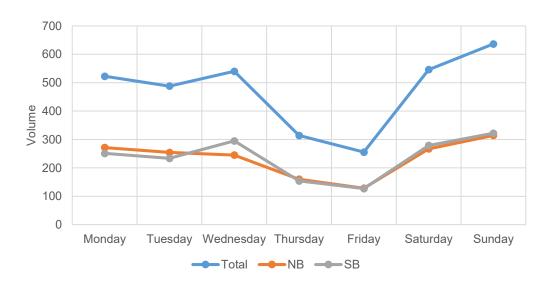


Figure 4

AVERAGE USAGE BY DAY



# We Energies Trail north of County Line Road (Milwaukee-Racine county line)

Monday, September 28 to Sunday, October 11, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the We Energies Trail north of County Line Road (Milwaukee-Racine county line) in the City of Oak Creek from Monday, September 28 to Sunday, October 11, 2015. Setup and removal of the counter occurred on Monday, September 28 and Monday, October 12. For this summary, the partial count data from October 12 was combined with the partial count data from September 28 to expand to a full day count. The count data indicate that weekday usage, on average, decreased on Tuesday, increased Wednesday and Thursday, then dropped again on Friday. Each Friday also had some of the lowest daily totals, which has been seen similarly with many other count locations taken in the Region. Rain on Tuesday, September 29 significantly impacted the count that day, resulting in just a couple of people who used the trail. For this reason, the count on September 29 was not included in the weekday average shown in Table 1 or in the average Tuesday usage shown in Table 2 and in Figure 4. The Saturday average was lower than every weekday except Friday while the Sunday average was only higher than three of the weekdays. This count location had the lowest two week period total of all counts taken to date, likely due to the path's short distance and the low development density of the surrounding area.

Figure 1

AREA MAP OF COUNT LOCATION

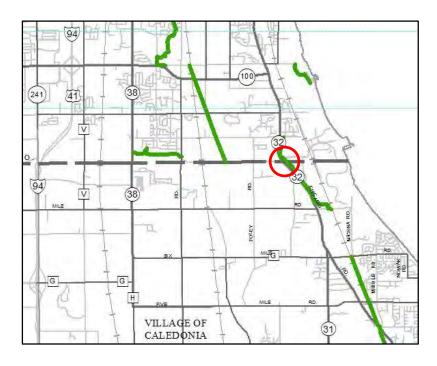


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, SEPTEMBER 28 TO SUNDAY, OCTOBER 11, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	294	142	152
September 28-Oct 4 Total	116	60	56
Mon-Fri Total	90	47	43
Sat-Sun Total	26	13	13
October 5-11 Total	178	82	96
Mon-Fri Total	113	56	57
Sat-Sun Total	65	26	39
Percent of Usage by Direction		48.3	51.7
Weekly Average	147	71	76
Average on a Weekday <sup>a</sup>	22	11	11
Weekend Average	23	10	13

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, September 29 was not included in this weekday average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 28-OCTOBER 11, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
September 28	39	20	19	Cloudy
October 5	16	9	7	Cloudy
Average Monday Usage	28	15	13	

Tuesday Comparison	Total	Northbound	Southbound	Weather
September 29	2	1	1	Rain, Cloudy
October 6	22	11	11	Cloudy
Average Tuesday Usage <sup>a</sup>	22	11	11	

Wednesday Comparison	Total	Northbound	Southbound	Weather
September 30	24	13	11	Cloudy
October 7	24	12	12	Cloudy
Average Wednesday Usage.	24	13	12	

Thursday Comparison	Total	Northbound	Southbound	Weather
October 1	11	6	5	Cloudy
October 8	43	18	25	Cloudy
Average Thursday Usage	27	12	15	

Friday Comparison	Total	Northbound	Southbound	Weather
October 2	14	7	7	Cloudy
October 9	8	6	2	Cloudy
Average Friday Usage	11	7	5	

Saturday Comparison	Total	Northbound	Southbound	Weather
October 3	12	6	6	Cloudy
October 10	27	12	15	Cloudy
Average Saturday Usage	20	9	11	

Sunday Comparison	Total	Northbound	Southbound	Weather
October 4	14	7	7	Cloudy
October 11	38	14	24	Cloudy
Average Sunday Usage	26	11	16	

<sup>&</sup>lt;sup>a</sup>The Tuesday average does not include September 29 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: SEPTEMBER 28-OCTOBER 11, 2015

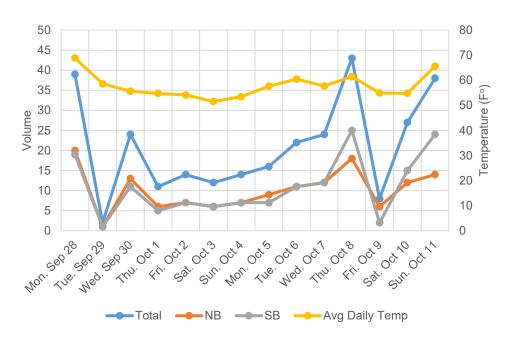
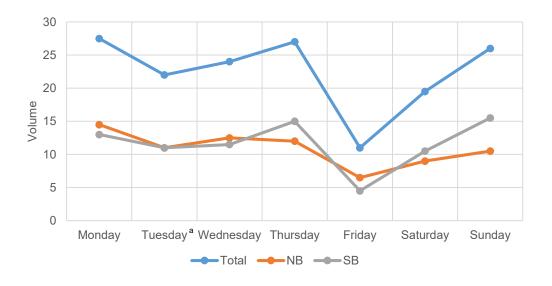


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Tuesday, September 29 is not included due to rain that greatly reduced usage of this day.

# MRK Trail west of Douglas Avenue in the Village of Caledonia

### Monday, September 28 to Sunday, October 11, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the MRK Trail west of Douglas Avenue in the Village of Caledonia from Monday, September 28 to Sunday, October 11, 2015. Setup and removal of the counter occurred on Monday, September 28 and Monday, October 12. For this summary, the partial count data from October 12 was combined with the partial count data from September 28 to expand to a full day count. The count data indicate that weekday usage, on average, increased and decreased in an alternating pattern Monday through Friday. The Friday average was the highest of the weekdays, which has not been typical with counts taken to date. Rain on Tuesday, September 29 significantly impacted the count that day. For this reason, the count on September 29 was not included in the weekday average shown in Table 1 or in the average Tuesday usage shown in Table 2 and in Figure 4. Typical weekend usage was not entirely evident by these counts since the first Saturday and both Sundays had less than 20 users while Saturday, October 10 had three times that amount.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE

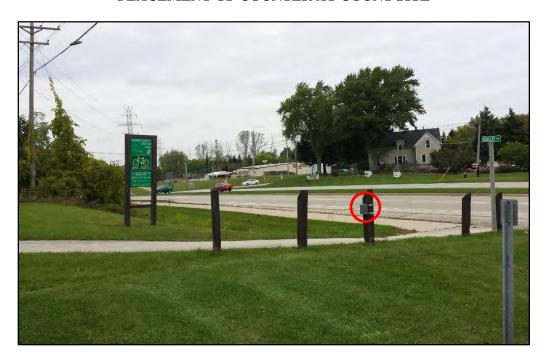


Table 1
KEY STATISTICS: MONDAY, SEPTEMBER 28 TO SUNDAY, OCTOBER 11, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	373	193	180
September 28-Oct 4 Total	138	64	74
Mon-Fri Total	104	46	58
Sat-Sun Total	34	18	16
October 5-11 Total	235	129	106
Mon-Fri Total	154	77	77
Sat-Sun Total	81	52	29
Percent of Usage by Direction		51.7	48.3
Weekly Average	187	97	90
Average on a Weekday <sup>a</sup>	28	14	15
Weekend Average	29	18	11

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, September 29 was not included in this weekday average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 28-OCTOBER 11, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
September 28	29	13	16	Partly Cloudy
October 5	30	15	15	Cloudy
Average Monday Usage	30	14	16	

Tuesday Comparison	Total	Northbound	Southbound	Weather
September 29	4	1	3	Rain, Cloudy
October 6	23	8	15	Partly Cloudy
Average Tuesday Usage <sup>a</sup>	23	8	15	

Wednesday Comparison	Total	Northbound	Southbound	Weather
September 30	7	4	3	Cloudy
October 7	53	27	26	Partly Cloudy
Average Wednesday Usage.	30	16	15	

Thursday Comparison	Total	Northbound	Southbound	Weather
October 1	25	11	14	Mostly Cloudy
October 8	24	12	12	Mostly Cloudy
Average Thursday Usage	25	12	13	

Friday Comparison	Total	Northbound	Southbound	Weather
October 2	39	17	22	Partly Cloudy
October 9	24	15	9	Mostly Cloudy
Average Friday Usage	32	16	16	

Saturday Comparison	Total	Northbound	Southbound	Weather
October 3	18	7	11	Cloudy
October 10	63	41	22	Clear
Average Saturday Usage	41	24	17	

Sunday Comparison	Total	Northbound	Southbound	Weather
October 4	16	11	5	Cloudy
October 11	18	11	7	Clear
Average Sunday Usage	17	11	6	

<sup>&</sup>lt;sup>a</sup>The Tuesday average does not include September 29 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: SEPTEMBER 28-OCTOBER 11, 2015

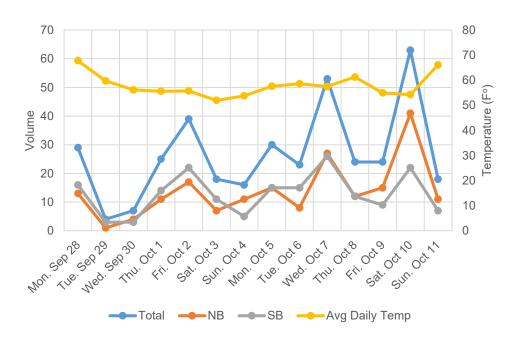
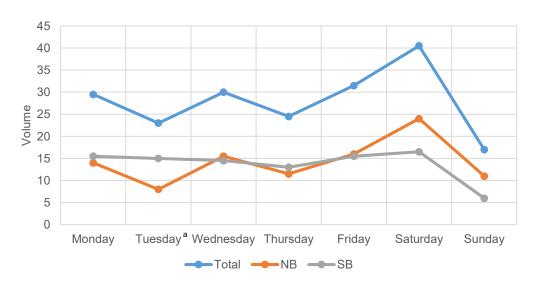


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Tuesday, September 29 is not included due to rain that greatly reduced usage of this day.

# MRK Trail south of 3 Mile Road in the City of Racine

### Monday, September 28 to Sunday, October 11, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the MRK Trail south of 3 Mile Road in the City of Racine from Monday, September 28 to Sunday, October 11, 2015. Setup and removal of the counter occurred on Monday, September 28 and Monday, October 12. For this summary, the partial count data from October 12 was combined with the partial count data from September 28 to expand to a full day count. The count data indicate that weekday usage, on average, was fairly similar for all weekdays. Rain on Tuesday, September 29 greatly impacted the count that day. For this reason, the count on September 29 was not included in the weekday average shown in Table 1 or in the average Tuesday usage shown in Table 2 and in Figure 4. Weekend usage indicates that Saturday, October 10 and Sunday, October 11 were nearly double the previous Saturday and Sunday. However, due to the varying range of these counts, it was difficult to determine typical weekend usage.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, SEPTEMBER 28 TO SUNDAY, OCTOBER 11, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	769	377	392
September 28-Oct 4 Total	333	166	167
Mon-Fri Total	258	136	122
Sat-Sun Total	75	30	45
October 5-11 Total	436	211	225
Mon-Fri Total	294	135	159
Sat-Sun Total	142	76	66
Percent of Usage by Direction		49.0	51.0
Weekly Average	385	189	196
Average on a Weekday <sup>a</sup>	59	29	30
Weekend Average	54	27	28

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, September 29 was not included in this weekday average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: SEPTEMBER 28-OCTOBER 11, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
September 28	63	27	36	Partly Cloudy
October 5	65	34	31	Cloudy
Average Monday Usage	64	31	34	

Tuesday Comparison	Total	Northbound	Southbound	Weather
September 29	17	7	10	Rain, Cloudy
October 6	54	22	32	Partly Cloudy
Average Tuesday Usage <sup>a</sup>	54	22	32	

Wednesday Comparison	Total	Northbound	Southbound	Weather
September 30	43	24	19	Cloudy
October 7	72	36	36	Partly Cloudy
Average Wednesday Usage.	58	30	28	

Thursday Comparison	Total	Northbound	Southbound	Weather
October 1	56	30	26	Mostly Cloudy
October 8	56	21	35	Mostly Cloudy
Average Thursday Usage	56	26	31	

Friday Comparison	Total	Northbound	Southbound	Weather
October 2	79	48	31	Partly Cloudy
October 9	47	22	25	Mostly Cloudy
Average Friday Usage	63	35	28	

Saturday Comparison	Total	Northbound	Southbound	Weather
October 3	49	14	35	Cloudy
October 10	93	53	40	Clear
Average Saturday Usage	71	34	38	

Sunday Comparison	Total	Northbound	Southbound	Weather
October 4	26	16	10	Cloudy
October 11	49	23	26	Clear
Average Sunday Usage	38	20	18	

<sup>&</sup>lt;sup>a</sup>The Tuesday average does not include September 29 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: SEPTEMBER 28-OCTOBER 11, 2015

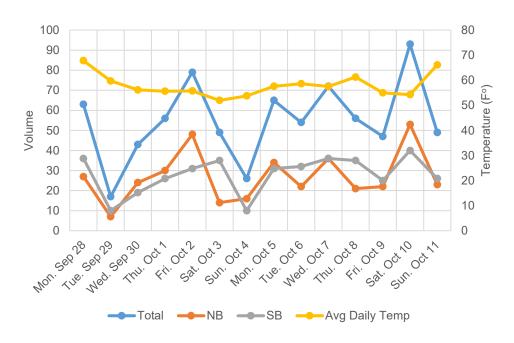
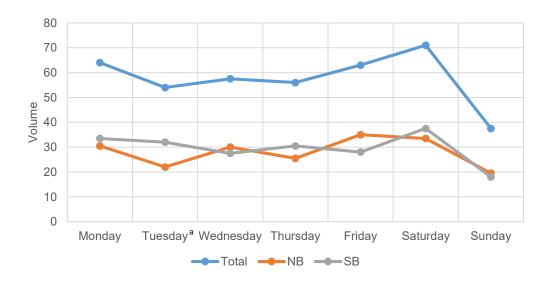


Figure 4

AVERAGE USAGE BY DAY



<sup>a</sup>Tuesday, September 29 is not included due to rain that greatly reduced usage of this day.

# Racine County North Shore Trail south of 21st Street in the City of Racine

Monday, October 12 to Sunday, October 25, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Racine County North Shore Trail south of 21st Street in the City of Racine from Monday, October 12 to Sunday, October 25, 2015. Setup and removal of the counter occurred on Monday, October 12 and Monday, October 26. For this summary, the partial count data from October 26 was combined with the partial count data from October 12 to expand to a full day count. The count data indicate that weekday usage, on average, was the highest on Monday, Wednesday, and Thursday and each of those days had a relatively equal average. The average usage on Monday, Wednesday, and Thursday was also higher than the Saturday average. Decreases occurred on both Tuesday and Friday and each of those days had about the same average. Weekend usage indicates that although Sunday had more people than Saturday, each weekend had a similar average of about 115 users.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, OCTOBER 12 TO SUNDAY, OCTOBER 25, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	1,398	744	654
October 12-Oct 18 Total	729	398	331
Mon-Fri Total	498	272	226
Sat-Sun Total	231	126	105
October 19-25 Total	669	346	323
Mon-Fri Total	449	232	217
Sat-Sun Total	220	114	106
Percent of Usage by Direction		53.2	46.8
Weekly Average	699	372	327
Average on a Weekday	95	50	44
Weekend Average	113	60	53

Table 2
COMPARISON OF DAILY COUNT DATA: OCTOBER 12-OCTOBER 25, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
October 12	107	63	44	Clear
October 19	91	47	44	Clear
Average Monday Usage	99	55	44	

Tuesday Comparison	Total	Northbound	Southbound	Weather
October 13	83	48	35	Cloudy
October 20	77	37	40	Cloudy
Average Tuesday Usage	80	43	38	

Wednesday Comparison	Total	Northbound	Southbound	Weather
October 14	105	50	55	Clear
October 21	107	57	50	Partly Cloudy
Average Wednesday Usage.	106	54	53	

Thursday Comparison	Total	Northbound	Southbound	Weather
October 15	100	56	44	Cloudy
October 22	110	54	56	Clear
Average Thursday Usage	105	55	50	

Friday Comparison	Total	Northbound	Southbound	Weather
October 16	103	55	48	Mostly Cloudy
October 23	64	37	27	Cloudy
Average Friday Usage	84	46	38	

Saturday Comparison	Total	Northbound	Southbound	Weather
October 17	101	57	44	Partly Cloudy
October 24	80	42	38	Cloudy
Average Saturday Usage	91	50	41	

Sunday Comparison	Total	Northbound	Southbound	Weather
October 18	130	69	61	Clear
October 25	140	72	68	Clear
Average Sunday Usage	135	71	65	

Figure 3

DAILY USAGE: OCTOBER 12-OCTOBER 25, 2015

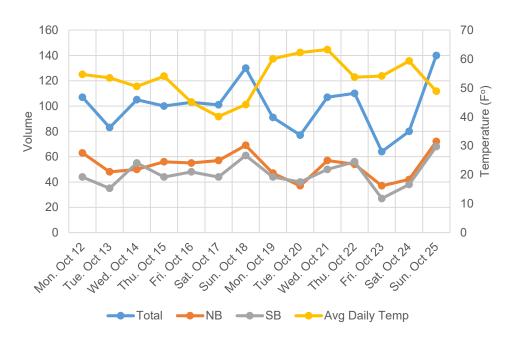
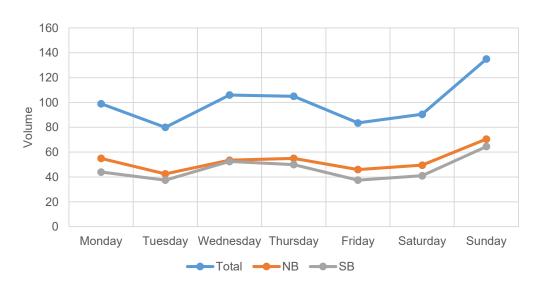


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



# Racine County North Shore Trail north of CTH KR in the Village of Mount Pleasant

Monday, October 12 to Sunday, October 25, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Racine County North Shore Trail north of CTH KR in the Village of Mount Pleasant from Monday, October 12 to Sunday, October 25, 2015. Setup and removal of the counter occurred on Monday, October 12 and Monday, October 26. For this summary, the partial count data from October 26 was combined with the partial count data from October 12 to expand to a full day count. The count data indicate that weekday usage, on average, increased from Monday to Wednesday with declines in usage on Thursday and Friday. Each Saturday had nearly the same number which could indicate a likely representation of typical Saturday usage. Each Sunday had some of the highest daily numbers of the entire count session. Even though this count was located outside of urban areas and about halfway between the cities of Kenosha and Racine, the count had about 500 more users than the count in Racine at 21st Street and about 230 more people than the count in Kenosha at 27th Street. This could be attributed to walking and biking trips that start within the cities but do not necessarily begin on the ends of the path where the other counters were placed. Usage by direction however was nearly equal, showing no distinct bicyclist and pedestrian flow from one county to the other.

Figure 1

AREA MAP OF COUNT LOCATION

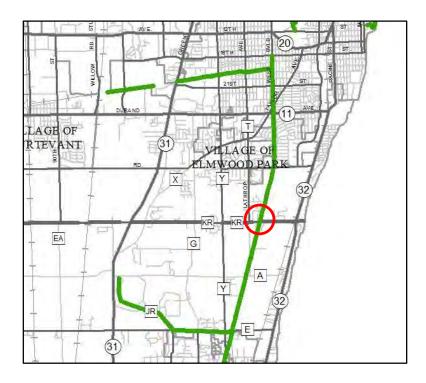


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE

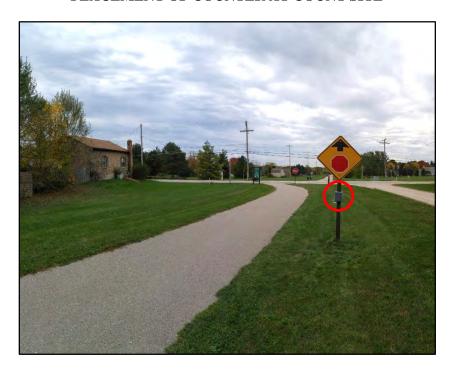


Table 1
KEY STATISTICS: MONDAY, OCTOBER 12 TO SUNDAY, OCTOBER 25, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	1,908	902	1,006
October 12-Oct 18 Total	964	443	521
Mon-Fri Total	666	308	358
Sat-Sun Total	298	135	163
October 19-25 Total	944	459	485
Mon-Fri Total	620	309	311
Sat-Sun Total	324	150	174
Percent of Usage by Direction		47.3	52.7
Weekly Average	954	451	503
Average on a Weekday	129	62	67
Weekend Average	156	71	84

Table 2
COMPARISON OF DAILY COUNT DATA: OCTOBER 12-OCTOBER 25, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
October 12	145	65	80	Clear
October 19	112	61	51	Clear
Average Monday Usage	129	63	66	

Tuesday Comparison	Total	Northbound	Southbound	Weather
October 13	129	59	70	Cloudy
October 20	133	69	64	Cloudy
Average Tuesday Usage	131	64	67	

Wednesday Comparison	Total	Northbound	Southbound	Weather
October 14	166	79	87	Clear
October 21	144	73	71	Partly Cloudy
Average Wednesday Usage.	155	76	79	

Thursday Comparison	Total	Northbound	Southbound	Weather
October 15	124	57	67	Cloudy
October 22	152	68	84	Clear
Average Thursday Usage	138	63	76	

Friday Comparison	Total	Northbound	Southbound	Weather
October 16	102	48	54	Mostly Cloudy
October 23	79	38	41	Cloudy
Average Friday Usage	91	43	48	

Saturday Comparison	Total	Northbound	Southbound	Weather
October 17	137	62	75	Partly Cloudy
October 24	138	68	70	Cloudy
Average Saturday Usage	138	65	73	

Sunday Comparison	Total	Northbound	Southbound	Weather
October 18	161	73	88	Clear
October 25	186	82	104	Clear
Average Sunday Usage	174	78	96	

Figure 3

DAILY USAGE: OCTOBER 12-OCTOBER 25, 2015

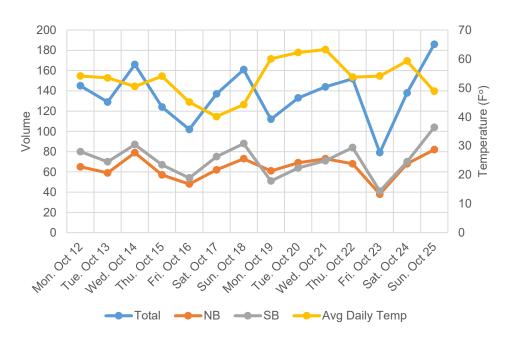
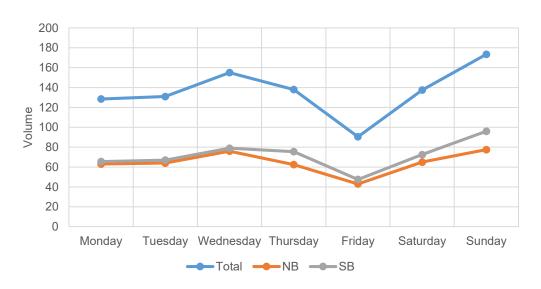


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



# Kenosha County North Trail north of 27<sup>th</sup> Street in the City of Kenosha

Monday, October 12 to Sunday, October 25, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Kenosha County North Trail north of 27<sup>th</sup> Street in the City of Kenosha from Monday, October 12 to Sunday, October 25, 2015. Setup and removal of the counter occurred on Monday, October 12 and Monday, October 26. For this summary, the partial count data from October 26 was combined with the partial count data from October 12 to expand to a full day count. The count data indicate that Wednesday and Thursday had nearly equal average use that was the highest for the weekdays while Tuesday and Friday had nearly equal average use that was the lowest for the weekdays. Wednesday and Thursday also had higher averages than both Saturday and Sunday. Saturday, October 24 had about half the number of users that were recorded on the previous Saturday. Rain was not a factor and temperatures were comfortable that day so it is uncertain as to why the drop in usage occurred. The weekend of October 17-18 may be more indicative of typical weekend usage.

Figure 1

AREA MAP OF COUNT LOCATION

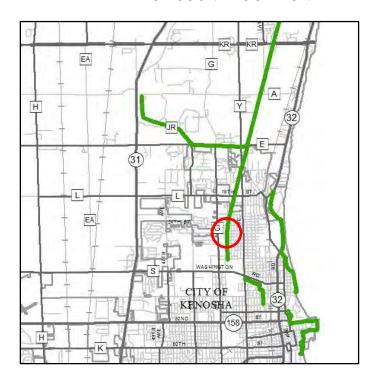


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, OCTOBER 12 TO SUNDAY, OCTOBER 25, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	1,675	851	824
October 12-Oct 18 Total	897	452	445
Mon-Fri Total	629	316	313
Sat-Sun Total	268	136	132
October 19-25 Total	778	399	379
Mon-Fri Total	572	300	272
Sat-Sun Total	206	99	107
Percent of Usage by Direction		50.8	49.2
Weekly Average	838	426	412
Average on a Weekday	120	62	59
Weekend Average	119	59	60

Table 2
COMPARISON OF DAILY COUNT DATA: OCTOBER 12-OCTOBER 25, 2015

Monday Comparison	Total	Northbound	Southbound	Weather
October 12	127	76	51	Mostly Cloudy
October 19	120	66	54	Clear
Average Monday Usage	124	71	53	

Tuesday Comparison	Total	Northbound	Southbound	Weather
October 13	106	45	61	Cloudy
October 20	93	51	42	Cloudy
Average Tuesday Usage	100	48	52	

Wednesday Comparison	Total	Northbound	Southbound	Weather
October 14	155	76	79	Clear
October 21	120	61	59	Clear
Average Wednesday Usage.	138	69	69	

Thursday Comparison	Total	Northbound	Southbound	Weather
October 15	112	62	50	Partly Cloudy
October 22	160	84	76	Clear
Average Thursday Usage	136	73	63	

Friday Comparison	Total	Northbound	Southbound	Weather
October 16	129	57	72	Partly Cloudy
October 23	79	38	41	Cloudy
Average Friday Usage	104	48	57	

Saturday Comparison	Total	Northbound	Southbound	Weather
October 17	145	75	70	Clear
October 24	78	32	46	Cloudy
Average Saturday Usage	112	54	58	

Sunday Comparison	Total	Northbound	Southbound	Weather
October 18	123	61	62	Clear
October 25	128	67	61	Clear
Average Sunday Usage	126	64	62	

Figure 3

DAILY USAGE: OCTOBER 12-OCTOBER 25, 2015

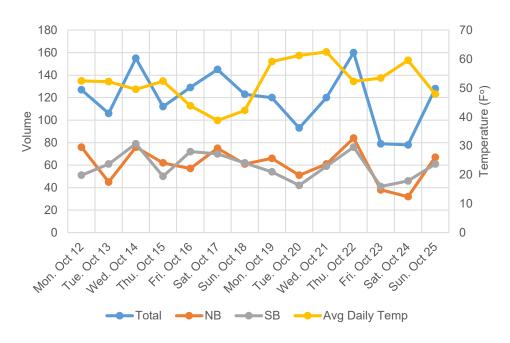
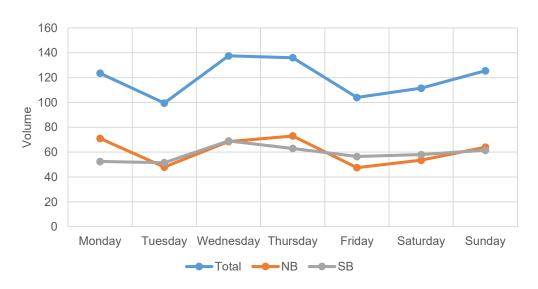


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



# Lake Country Trail south of Oconomowoc Parkway in the City of Oconomowoc

Monday, October 26 to Sunday, November 8, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Lake Country Trail south of Oconomowoc Parkway in the City of Oconomowoc from Monday, October 26 to Sunday, November 8, 2015. Setup and removal of the counter occurred on Monday, October 26 and Monday, November 9. For this summary, the partial count data from November 9 was combined with the partial count data from October 26 to expand to a full day count. During the first week of counts, rain on Wednesday, October 28 and Saturday, October 31 significantly impacted the counts on those days. For this reason, the counts on October 28 and October 31 were not included in the weekday and weekend average shown in Table 1 or in the average Wednesday and average Saturday usage shown in Table 2 and in Figure 4. Cooler weather also appears to have had some effect on the counts that week as well. During the second week, warmer than normal temperatures on Monday through Thursday resulted in numbers that were likely higher than normal. Based on the data that was collected, Monday through Wednesday had similar average use with declines on Thursday and Friday. The weekend of November 7-8 had similar numbers on both Saturday and Sunday while rain and warm temperatures affected the counts during the previous weekend. Given the variation in weather conditions, it is likely that the average daily usage from this count session is not representative of typical use.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, OCTOBER 26 TO SUNDAY, NOVEMBER 8, 2015

Statistic	Total	Northbound	Southbound
Two-week Period Total	1,249	620	629
Oct 26-Nov 1 Total	435	218	217
Mon-Fri Total	261	129	132
Sat-Sun Total	174	89	85
November 2-8 Total	814	402	412
Mon-Fri Total	628	312	316
Sat-Sun Total	186	90	96
Percent of Usage by Direction		49.6	50.4
Weekly Average	625	310	315
Average on a Weekday <sup>a</sup>	97	48	49
Weekend Average <sup>b</sup>	117	58	59

<sup>&</sup>lt;sup>a</sup>Count data from Wednesday, October 28 was not included in this weekday average due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>Count data from Saturday, October 31 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: OCTOBER 26-NOVEMBER 8, 2015

Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
October 26	94	39	55	42	Clear
November 2	154	77	77	57	Clear
Average Monday Usage	124	58	66		

Tuesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
October 27	72	42	30	50	Partly Cloudy
November 3	192	98	94	58	Clear
Average Tuesday Usage	132	70	62		

Wednesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
October 28	16	8	8	47	Rain
November 4	128	60	68	58	Clear
Average Wednesday Usage <sup>a</sup>	128	60	68		

Thursday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
October 29	37	18	19	38	Cloudy
November 5	108	54	54	62	Cloudy
Average Thursday Usage	73	36	37		

Friday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
October 30	42	22	20	43	Cloudy
November 6	46	23	23	45	Cloudy
Average Friday Usage	44	23	22		

Saturday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
October 31	10	5	5	45	Rain
November 7	88	43	45	39	Partly Cloudy
Average Saturday Usage <sup>b</sup>	88	43	45		

Sunday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
November 1	164	84	80	49	Clear
November 8	98	47	51	38	Clear
Average Sunday Usage	131	66	66		

<sup>&</sup>lt;sup>a</sup>This Wednesday average does not include October 28 due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Saturday average does not include October 31 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: OCTOBER 26-NOVEMBER 8, 2015

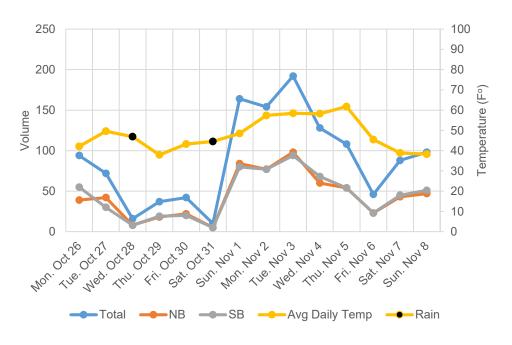
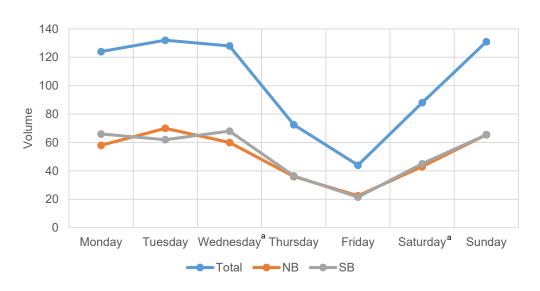


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



<sup>a</sup>Wednesday, October 28 and Saturday, October 31 are not included due to rain that greatly reduced usage on these days.

# Lake Country Trail west of Lapham Peak Road in the City of Delafield

Monday, October 26 to Sunday, November 8, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Lake Country Trail west of Lapham Peak Road in the City of Delafield from Monday, October 26 to Sunday, November 8, 2015. Setup and removal of the counter occurred on Monday, October 26 and Monday, November 9. For this summary, the partial count data from November 9 was combined with the partial count data from October 26 to expand to a full day count. During the first week of counts, rain on Wednesday, October 28 and Saturday, October 31 may have had some effect on these counts. For this reason, the counts on October 28 and October 31 were not included in the weekday and weekend average shown in Table 1 or in the average Wednesday and average Saturday usage shown in Table 2 and in Figure 4. Warmer than normal weather during the second week likely explains the high totals seen on Monday, November 2 through Thursday, November 5. Based on the data collected, the counts indicate that average use increased from Monday to Tuesday and then declined Wednesday through Friday. Each Sunday had some of the highest totals for the entire two week count session. Given the weather variations during these two weeks, it is likely that the average daily usage from this count session is not representative of typical use.

Figure 1

AREA MAP OF COUNT LOCATION

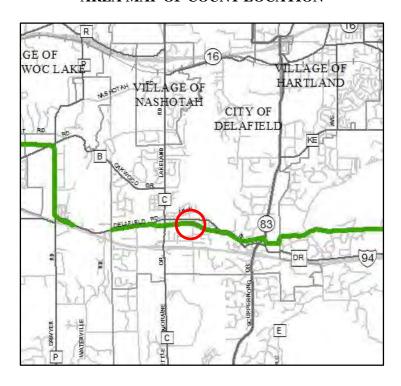


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, OCTOBER 26 TO SUNDAY, NOVEMBER 8, 2015

Statistic	Total	Eastbound	Westbound
Two-week Period Total	1,338	697	641
Oct 26-Nov 1 Total	528	286	242
Mon-Fri Total	353	192	161
Sat-Sun Total	175	94	81
November 2-8 Total	810	411	399
Mon-Fri Total	604	304	300
Sat-Sun Total	206	107	99
Percent of Usage by Direction		52.1	47.9
Weekly Average	669	349	321
Average on a Weekday	101	52	49
Weekend Average	116	61	55

<sup>&</sup>lt;sup>a</sup>Count data from Wednesday, October 28 was not included in this weekday average due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>Count data from Saturday, October 31 was not included in this weekend average due to rain that greatly reduced usage on this day

Table 2
COMPARISON OF DAILY COUNT DATA: OCTOBER 26-NOVEMBER 8, 2015

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 26	99	56	43	41	Clear
November 2	125	64	61	57	Clear
Average Monday Usage	112	60	52		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 27	81	43	38	50	Partly Cloudy
November 3	183	93	90	58	Clear
Average Tuesday Usage	132	68	64		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 28	45	27	18	47	Rain
November 4	127	67	60	58	Clear
Average Wednesday Usage.	127	67	60		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 29	58	31	27	38	Cloudy
November 5	101	51	50	62	Cloudy
Average Thursday Usage	80	41	39		

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 30	70	35	35	43	Cloudy
November 6	68	29	39	45	Cloudy
Average Friday Usage	69	32	37		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 31	32	17	15	45	Rain
November 7	76	36	40	39	Partly Cloudy
Average Saturday Usage	76	36	40		

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 1	143	77	66	49	Clear
November 8	130	71	59	38	Clear
Average Sunday Usage	137	74	63		

<sup>&</sup>lt;sup>a</sup>This Wednesday average does not include October 28 due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Saturday average does not include October 31 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: OCTOBER 26-NOVEMBER 8, 2015

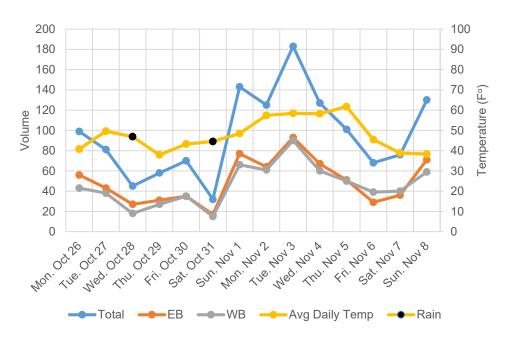
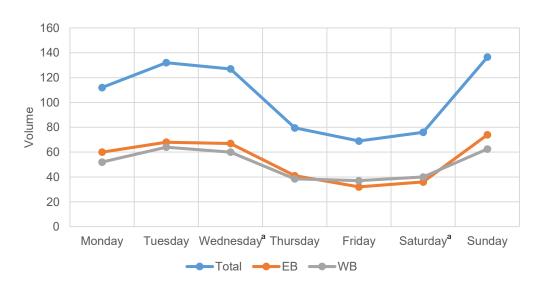


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



<sup>a</sup>Wednesday, October 28 and Saturday, October 31 are not included due to rain that greatly reduced usage on these days.

# Lake Country Trail west of CTH G in the City of Pewaukee

### Monday, October 26 to Sunday, November 8, 2015

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Lake Country Trail west of CTH G in the City of Pewaukee from Monday, October 26 to Sunday, November 8, 2015. Setup and removal of the counter occurred on Monday, October 26 and Monday, November 9. For this summary, the partial count data from November 9 was combined with the partial count data from October 26 to expand to a full day count. Rain on Wednesday, October 28 and Saturday, October 31 significantly impacted the counts on those days. For this reason, the counts on October 28 and October 31 were not included in the weekday and weekend average shown in Table 1 or in the average Wednesday and average Saturday usage shown in Table 2 and in Figure 4. Cooler weather appears to have affected the counts as well. During the second week, warmer than normal temperatures on Monday through Thursday resulted in numbers that were likely higher than normal. The count data indicate that Monday, Tuesday, and Wednesday had the highest weekday average use with decreases on Thursday and Friday. The weekend of November 7-8 had similar numbers each day while rain and warm temperatures affected the counts during the previous weekend. Given the variation in weather conditions, it is likely that the average daily usage from this count session is not indicative of typical use.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, OCTOBER 26 TO SUNDAY, NOVEMBER 8, 2015

Statistic	Total	Eastbound	Westbound
Two-week Period Total	1,138	575	563
Oct 26-Nov 1 Total	445	229	216
Mon-Fri Total	244	126	118
Sat-Sun Total	201	103	98
November 2-8 Total	693	346	347
Mon-Fri Total	532	264	268
Sat-Sun Total	161	82	79
Percent of Usage by Direction		50.5	49.5
Weekly Average	569	288	282
Average on a Weekday <sup>a</sup>	84	42	42
Weekend Average <sup>b</sup>	117	60	57

<sup>&</sup>lt;sup>a</sup>Count data from Wednesday, October 28 was not included in this weekday average due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>Count data from Saturday, October 31 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2

COMPARISON OF DAILY COUNT DATA: OCTOBER 26-NOVEMBER 8, 2015

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 26	83	44	39	41	Clear
November 2	128	66	62	57	Clear
Average Monday Usage	106	55	51		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 27	46	24	22	50	Partly Cloudy
November 3	174	85	89	58	Clear
Average Tuesday Usage	110	55	56		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 28	21	10	11	47	Rain
November 4	98	46	52	58	Clear
Average Wednesday Usage <sup>a</sup>	98	46	52		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 29	23	12	11	38	Cloudy
November 5	98	50	48	62	Cloudy
Average Thursday Usage	61	31	30		

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 30	71	36	35	43	Cloudy
November 6	34	17	17	45	Cloudy
Average Friday Usage	53	27	26		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
October 31	12	6	6	45	Rain
November 7	81	41	40	39	Partly Cloudy
Average Saturday Usage <sup>b</sup>	81	41	40		

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 1	189	97	92	49	Clear
November 8	80	41	39	38	Clear
Average Sunday Usage	135	69	66		

<sup>&</sup>lt;sup>a</sup>This Wednesday average does not include October 28 due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Saturday average does not include October 31 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: OCTOBER 26-NOVEMBER 8, 2015

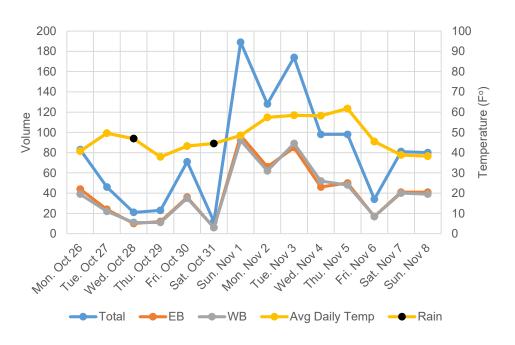
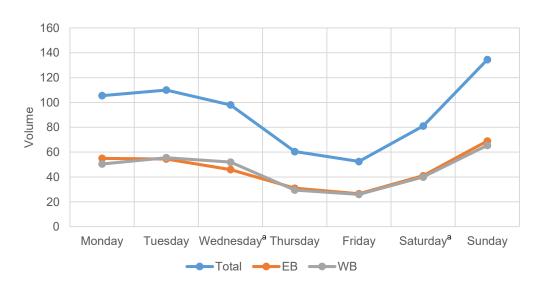


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



<sup>a</sup>Wednesday, October 28 and Saturday, October 31 are not included due to rain that greatly reduced usage on these days.

## BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Bugline Trail east of Lake Five Road in the Town of Lisbon

## Monday, November 9 to Sunday, November 22, 2015

### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Bugline Trail east of Lake Five Road in the Town of Lisbon from Monday, November 9 to Sunday, November 22, 2015. Setup and removal of the counter occurred on Monday, November 9 and Monday, November 23. For this summary, the partial count data from November 23 was combined with the partial count data from November 9 to expand to a full day count. The data indicated that average weekday volumes were highest on Tuesday and Wednesday with decreases on both Thursday and Friday. A clear, cool Saturday and a warmer than normal Sunday on November 14 and 15 contributed to very high usage that weekend. The week of November 16 had low volumes likely due to seasonably cool temperatures but was impacted by rain on Tuesday and Wednesday, November 17-18. For this reason, these counts were not included in the weekday average shown in Table 1 or in the average Tuesday and Wednesday usage shown in Table 2 and in Figure 4. Snow occurred on Saturday, November 21 but the low temperatures were more likely the reason for the low numbers, similar to what was seen on Sunday, November 22. Given the variation in temperatures between the two weeks and days of inclement weather, it is likely that the average daily usage from this count session is not indicative of typical use.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, NOVEMBER 9 TO SUNDAY, NOVEMBER 22, 2015

Statistic	Total	Eastbound	Westbound
Two-week Period Total	1,161	576	585
Nov 9-Nov 15 Total	892	438	454
Mon-Fri Total	334	163	171
Sat-Sun Total	558	275	283
November 16-22 Total	269	138	131
Mon-Fri Total	220	113	107
Sat-Sun Total	49	25	24
Percent of Usage by Direction		49.6	50.4
Weekly Average	581	288	293
Average on a Weekday <sup>a</sup>	63	32	32
Weekend Average	152	75	77

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, November 17 and Wednesday, November 18 were not included in this weekday average due to rain that greatly reduced usage on these days.

Table 2
COMPARISON OF DAILY COUNT DATA: NOVEMBER 9-NOVEMBER 22, 2015

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 9	37	16	21	32	Clear
November 16	95	48	47	51	Cloudy
Average Monday Usage	66	32	34		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 10	125	63	62	38	Clear
November 17	11	6	5	49	Rain
Average Tuesday Usage <sup>a</sup>	125	63	62		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 11	109	54	55	48	Mostly Cloudy
November 18	36	18	18	53	Rain
Average Wednesday Usage <sup>b</sup>	109	54	55		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 12	43	21	22	43	Cloudy
November 19	33	17	16	37	Cloudy
Average Thursday Usage	38	19	19		

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 13	20	9	11	36	Mostly Cloudy
November 20	45	24	21	32	Partly Cloudy
Average Friday Usage	33	17	16		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 14	215	106	109	38	Clear
November 21	31	14	17	26	Snow
Average Saturday Usage	123	60	63		-

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 15	343	169	174	52	Clear
November 22	18	11	7	19	Cloudy
Average Sunday Usage	181	90	91		

<sup>&</sup>lt;sup>a</sup>This Tuesday average does not include November 17 due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Wednesday average does not include November 18 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: NOVEMBER 9-NOVEMBER 22, 2015

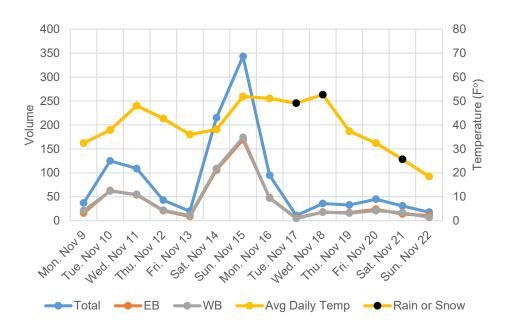
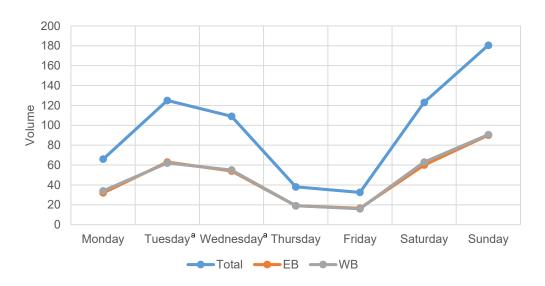


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



<sup>a</sup>Tuesday, November 17 and Wednesday, November 18 are not included due to rain that greatly reduced usage on these days.

## BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Bugline Trail east of CTH V in the Village of Lannon

## Monday, November 9 to Sunday, November 22, 2015

### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Bugline Trail east of CTH V in the Village of Lannon from Monday, November 9 to Sunday, November 22, 2015. Setup and removal of the counter occurred on Monday, November 9 and Monday, November 23. For this summary, the partial count data from November 23 was combined with the partial count data from November 9 to expand to a full day count. The data indicated that average weekday volumes gradually increased from Monday through Wednesday and then declined on Thursday followed by a slight increase on Friday. A clear, cool Saturday and a warmer than normal Sunday on November 14 and 15 contributed to very high usage that weekend. The week of November 16 had low volumes likely due to seasonably cool temperatures but was impacted by rain on Tuesday and Wednesday, November 17-18. For this reason, these counts were not included in the weekday average shown in Table 1 or in the average Tuesday and Wednesday usage shown in Table 2 and in Figure 4. Snow occurred on Saturday, November 21 but the low temperatures likely contributed to the low numbers, as was seen on Sunday, November 22 as well. Given the variation in temperatures between the two weeks and days of inclement weather, it is likely that the average daily usage from this count session is not indicative of typical use.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, NOVEMBER 9 TO SUNDAY, NOVEMBER 22, 2015

Statistic	Total	Eastbound	Westbound
Two-week Period Total	802	405	397
Nov 9-Nov 15 Total	636	318	318
Mon-Fri Total	241	125	116
Sat-Sun Total	395	193	202
November 16-22 Total	166	87	79
Mon-Fri Total	147	75	72
Sat-Sun Total	19	12	7
Percent of Usage by Direction		50.5	49.5
Weekly Average	401	203	199
Average on a Weekday <sup>a</sup>	45	23	22
Weekend Average	104	51	52

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, November 17 and Wednesday, November 18 were not included in this weekday average due to rain that greatly reduced usage on these days.

Table 2
COMPARISON OF DAILY COUNT DATA: NOVEMBER 9-NOVEMBER 22, 2015

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 9	31	21	10	35	Clear
November 16	68	33	35	53	Cloudy
Average Monday Usage	50	27	23		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 10	76	37	39	40	Clear
November 17	10	6	4	50	Rain
Average Tuesday Usage <sup>a</sup>	76	37	39		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 11	88	44	44	50	Mostly Cloudy
November 18	18	10	8	54	Rain
Average Wednesday Usage <sup>b</sup>	88	44	44		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 12	23	10	13	45	Cloudy
November 19	14	9	5	40	Mostly Cloudy
Average Thursday Usage	19	10	9	-	

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 13	23	13	10	38	Mostly Cloudy
November 20	37	17	20	34	Partly Cloudy
Average Friday Usage	30	15	15		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 14	114	53	61	39	Clear
November 21	6	3	3	27	Snow
Average Saturday Usage	60	28	32		

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 15	281	140	141	54	Clear
November 22	13	9	4	21	Cloudy
Average Sunday Usage	147	75	73		

<sup>&</sup>lt;sup>a</sup>This Tuesday average does not include November 17 due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Wednesday average does not include November 18 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: NOVEMBER 9-NOVEMBER 22, 2015

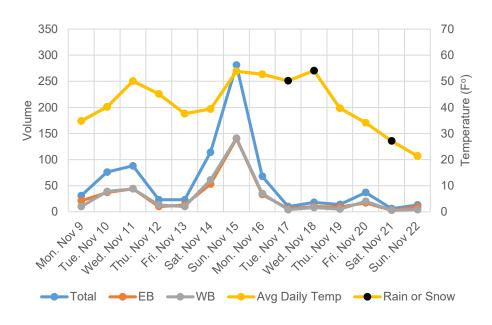
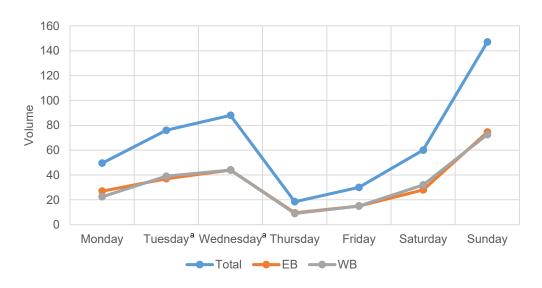


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



<sup>&</sup>lt;sup>a</sup>Tuesday, November 17 and Wednesday, November 18 are not included due to rain that greatly reduced usage on these days.

## BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Bugline Trail between Main Street and Maple Road in the Village of Menomonee Falls

Monday, November 9 to Sunday, November 22, 2015

### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Bugline Trail between Main Street and Maple Road in the Village of Menomonee Falls from Monday, November 9 to Sunday, November 22, 2015. Setup and removal of the counter occurred on Monday, November 9 and Monday, November 23. For this summary, the partial count data from November 23 was combined with the partial count data from November 9 to expand to a full day count. The data indicated that average weekday volumes were highest on Tuesday and declined on Wednesday and Thursday followed by a slight increase on Friday. Sunday, November 15 was warmer than normal and had a count total that was more than twice the volume of any other day during the count session. The week of November 16 had low volumes likely due to seasonably cool temperatures but was impacted by rain on Tuesday and Wednesday, November 17-18. For this reason, these counts were not included in the weekday average shown in Table 1 or in the average Tuesday and Wednesday usage shown in Table 2 and in Figure 4. Although it snowed on Saturday, November 21, very cold temperatures on this day and on Sunday, November 22 likely contributed to their very low volumes. Given the variation in temperatures between the two weeks and days of inclement weather, it is likely that the average daily usage from this count session is not indicative of typical use.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

KEY STATISTICS: MONDAY, NOVEMBER 9 TO SUNDAY, NOVEMBER 22, 2015

Statistic	Total	Eastbound	Westbound
Two-week Period Total	618	322	296
Nov 9-Nov 15 Total	461	244	217
Mon-Fri Total	206	106	100
Sat-Sun Total	255	138	117
November 16-22 Total	157	78	79
Mon-Fri Total	136	68	68
Sat-Sun Total	21	10	11
Percent of Usage by Direction		52.1	47.9
Weekly Average	309	161	148
Average on a Weekday <sup>a</sup>	36	19	18
Weekend Average	69	37	32

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, November 17 and Wednesday, November 18 were not included in this weekday average due to rain that greatly reduced usage on these days.

Table 2
COMPARISON OF DAILY COUNT DATA: NOVEMBER 9-NOVEMBER 22, 2015

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 9	28	17	11	34	Clear
November 16	35	18	17	53	Cloudy
Average Monday Usage	32	18	14		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 10	79	42	37	40	Clear
November 17	21	10	11	50	Rain
Average Tuesday Usage <sup>a</sup>	79	42	37		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 11	65	32	33	50	Mostly Cloudy
November 18	30	16	14	54	Rain
Average Wednesday Usageb	65	32	33		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 12	11	4	7	45	Cloudy
November 19	23	11	12	40	Mostly Cloudy
Average Thursday Usage	17	8	10		

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 13	23	11	12	38	Mostly Cloudy
November 20	27	13	14	34	Partly Cloudy
Average Friday Usage	25	12	13		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 14	77	40	37	39	Clear
November 21	9	4	5	27	Snow
Average Saturday Usage	43	22	21		

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
November 15	178	98	80	54	Clear
November 22	12	6	6	21	Cloudy
Average Sunday Usage	95	52	43		

<sup>&</sup>lt;sup>a</sup>This Tuesday average does not include November 17 due to rain that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Wednesday average does not include November 18 due to rain that greatly reduced usage on this day.

Figure 3

DAILY USAGE: NOVEMBER 9-NOVEMBER 22, 2015

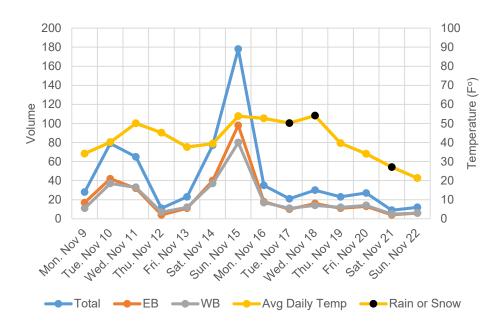
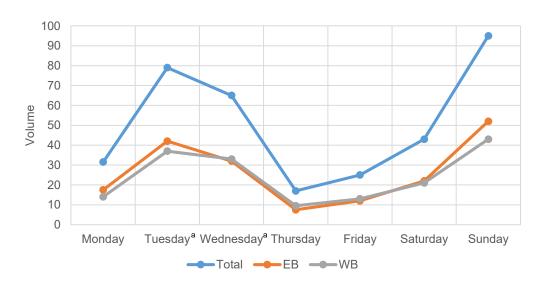


Figure 4

AVERAGE USAGE BY DAY OF THE WEEK



<sup>&</sup>lt;sup>a</sup>Tuesday, November 17 and Wednesday, November 18 are not included due to rain that greatly reduced usage on these days.

### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

# New Berlin Trail at 124<sup>th</sup> Street in the City of New Berlin

Monday, November 30, 2015 to Sunday, February 28, 2016

### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the New Berlin Trail at 124<sup>th</sup> Street in the City of New Berlin from Monday, November 30, 2015 to Sunday, February 28, 2016. This count location was selected for the winter count session because it had some of the highest count volumes observed during the summer/fall count session. As the purpose for the winter count session was to observe the effect temperatures and weather could potentially have on trail usage, this and two other high volume locations were selected for long duration counts over the winter months. During these 13 weeks, total count volume was approximately 4,370 as shown in Table 1. By comparison, the two-week total for this count location from August 3 to August 16 was approximately 7,190. A map and image of the site are shown in Figures 1 and 2.

Count volume totaled approximately 2,045 from Monday, November 30, 2015 to Sunday, January 3, 2016 as shown in Table 2. Daily volumes and average daily temperatures are presented in Table 3 and Figure 3. During the first two weeks of December, average temperatures ranged from the high 30s to the low 50s and most of these days had some of the highest volumes of the entire month. As temperatures began to gradually get colder during the last half of December, daily volumes began to drop as well. On December 28, a significant snowfall occurred that greatly reduced volume on this day. The New Berlin Trail is plowed and the counts indicate that trail usage began to increase again in the days following the snow event.

Count volume totaled approximately 705 from Monday, January 4 to Sunday, January 31 as shown in Table 4. Daily volumes and average daily temperatures are presented in Table 5 and Figure 5. During these four weeks, the effect of colder temperatures is evident on trail usage as the volumes on the trail appear to follow the changes in temperature. Days with temperatures above 20 had relatively good volumes between 20 and 40 users per day. The lowest daily volumes were typically seen when temperatures dropped into the single digits. Sunday, January 10 was the only day that had rain, and along with having single digit temperatures, resulted in one of the lowest daily volumes. Saturday, January 23 and Saturday, January 30 had noticeable increases in volume compared to other days during those weeks, which could be attributed to warmer temperatures on those days.

Count volume totaled approximately 1,620 from Monday, February 1 to Sunday, February 28 as shown in Table 6. Daily volumes and average daily temperatures are presented in Table 7 and Figure 7. Although average temperatures in the first three weeks of the month varied considerably, daily volumes stayed relatively constant. Temperatures were mainly in the 30s during the first week, dropped into the teens and single digits during the second week, and steadily rose into the 40s during the third week. Aside from a small increase in volumes during the first weekend, daily volumes remained at typically less than 25 users per day despite these temperature variations. No rain or snow events impacted the counts throughout the month. A stretch of days in the 30s at the end of February likely contributed to an increase in daily volume. The last two Saturdays, February 20 and 27, had warmer than normal temperatures that saw significant increases in volume.

During the winter count session between December and February, the data indicate that average daily volumes are often about the same during each weekday and increase during the weekends, as shown in

Figure 4, Figure 6, and Figure 8. Warm days on several Saturdays helped to increase the weekend averages. Conversely, the two week summer session showed that volumes gradually increased from Monday to Wednesday, dropped on Thursday and Friday, and were highest on the weekend. Volumes averaged about 50 per day in the winter compared to about 515 per day in the summer. In one instance, the volume on Sunday, August 9 was nearly equal to the entire total of the January 4-31 count period.

The data also seem to indicate that in most cases daily volumes were affected by the changes in temperature. In December, the highest daily volumes occurred in the early part of the month when temperatures were the warmest and began to decrease as the temperatures gradually dropped. As seen particularly in January, volumes increased and decreased in relation to the rise and fall of temperatures. However, despite the variation in temperatures through most of February, daily volumes stayed relatively constant. Throughout the winter count session, days in which temperatures rose considerably after periods of cold days often resulted in a brief increase in volume, seen especially on a few weekends during this count session. The lack of significant snow events, other than the one that occurred on December 28, likely kept volumes higher than what they might have been if heavy snowfalls had occurred more frequently.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

DAILY COUNT VOLUME: DECEMBER 1, 2015 - FEBRUARY 28, 2016

				. 5 :	
	Total	Eastbound	Westbound	Average Daily Temperature	Weather
Tuesday, December 1, 2015	74	34	40	36	Mostly Cloudy
Wednesday, December 2, 2015	30	16	14	30	Mostly Cloudy
Thursday, December 3, 2015	46	22	24	33	Cloudy
Friday, December 4, 2015	75	35	40	35	Clear
Saturday, December 5, 2015	151	69	82	35	Clear
Sunday, December 6, 2015	143	71	72	32	Mostly Cloudy
Monday, December 7, 2015	58	27	31	34	Mostly Cloudy
Tuesday, December 8, 2015	80	36	44	38	Mostly Cloudy
Wednesday, December 9, 2015	113	57	56	40	Mostly Cloudy
Thursday, December 10, 2015	89	45	44	45	Mostly Cloudy
Friday, December 11, 2015	90	44	46	39	Clear
Saturday, December 12, 2015	79	35	44	40	Cloudy
Sunday, December 13, 2015	75	42	33	51	Cloudy
Monday, December 14, 2015	33	15	18	49	Mostly Cloudy
Tuesday, December 15, 2015	76	37	39	35	Cloudy
Wednesday, December 16, 2015	29	15	14	39	Cloudy
Thursday, December 17, 2015	44	22	22	28	Mostly Cloudy
Friday, December 18, 2015	36	22	14	22	Mostly Cloudy
Saturday, December 19, 2015	26	14	12	19	Clear
Sunday, December 20, 2015	111	56	55	36	Clear
Monday, December 21, 2015	25	12	13	39	Rain
Tuesday, December 22, 2015	58	28	30	34	Cloudy
Wednesday, December 23, 2015	37	18	19	47	Mostly Cloudy
Thursday, December 24, 2015	72	35	37	35	Cloudy
Friday, December 25, 2015	66	34	32	30	Mostly Cloudy
Saturday, December 26, 2015	53	25	28	35	Mostly Cloudy
Sunday, December 27, 2015	67	34	33	32	Cloudy
Monday, December 28, 2015	7	3	4	28	Snow
Tuesday, December 29, 2015	21	9	12	27	Cloudy
Wednesday, December 30, 2015	32	15	17	26	Cloudy
Thursday, December 31, 2015	47	25	22	22	Mostly Cloudy
December Subtotal	1,943	952	991		
Friday, January 1, 2016	24	11	13	21	Mostly Cloudy
Saturday, January 2, 2016	40	20	20	24	Clear
Sunday, January 3, 2016	38	18	20	24	Cloudy
Monday, January 4, 2016	28	17	11	22	Partly Cloudy

Table 1 (continued)

	Total	Eastbound	Westbound	Average Daily Temperature	Weather
Tuesday, January 5, 2016	19	12	7	21	Clear
Wednesday, January 6, 2016	29	14	15	27	Partly Cloudy
Thursday, January 7, 2016	26	14	12	33	Mostly Cloudy
Friday, January 8, 2016	20	11	9	35	Cloudy
Saturday, January 9, 2016	39	21	18	30	Mostly Cloudy
Sunday, January 10, 2016	2	1	1	8	Snow
Monday, January 11, 2016	29	13	16	1	Clear
Tuesday, January 12, 2016	19	8	11	4	Clear
Wednesday, January 13, 2016	9	5	4	6	Mostly Cloudy
Thursday, January 14, 2016	36	18	18	25	Mostly Cloudy
Friday, January 15, 2016	24	13	11	31	Mostly Cloudy
Saturday, January 16, 2016	31	16	15	18	Partly Cloudy
Sunday, January 17, 2016	3	1	2	0	Clear
Monday, January 18, 2016	2	1	1	0	Clear
Tuesday, January 19, 2016	31	17	14	3	Clear
Wednesday, January 20, 2016	14	7	7	14	Mostly Cloudy
Thursday, January 21, 2016	19	10	9	18	Cloudy
Friday, January 22, 2016	18	10	8	22	Cloudy
Saturday, January 23, 2016	53	25	28	 25	Mostly Cloudy
Sunday, January 24, 2016	29	15	14	24	Mostly Cloudy
Monday, January 25, 2016	25	13	12	29	Mostly Cloudy
Tuesday, January 26, 2016	20	11	9	27	Mostly Cloudy
Wednesday, January 27, 2016	27	15	12	26	Mostly Cloudy
Thursday, January 28, 2016	29	14	15	31	Cloudy
Friday, January 29, 2016	29	13	16	20	Clear
Saturday, January 30, 2016	76	35	41	35	Clear
Sunday, January 31, 2016	21	11	10	34	Mostly Cloudy
January Subtotal	809	410	399		
Monday, February 1, 2016	43	17	26	32	Clear
Tuesday, February 2, 2016	7	3	4	32	Mostly Cloudy
Wednesday, February 3, 2016	21	11	10	30	Mostly Cloudy
Thursday, February 4, 2016	11	3	8	23	Cloudy
Friday, February 5, 2016	18	8	10	26	Mostly Cloudy
Saturday, February 6, 2016	49	25	24	28	Cloudy
Sunday, February 7, 2016	58	34	24	35	Partly Cloudy
Monday, February 8, 2016	16	6	10	25	Mostly Cloudy
Tuesday, February 9, 2016	25	12	13	13	Mostly Cloudy
Wednesday, February 10, 2016	4	2	2	8	Mostly Cloudy

Table 1 (continued)

	Total	Eastbound	Westbound	Average Daily Temperature	Weather
Thursday, February 11, 2016	26	13	13	8	Clear
Friday, February 12, 2016	8	4	4	12	Mostly Cloudy
Saturday, February 13, 2016	4	2	2	2	Clear
Sunday, February 14, 2016	13	7	6	10	Cloudy
Monday, February 15, 2016	25	12	13	20	Cloudy
Tuesday, February 16, 2016	20	11	9	25	Cloudy
Wednesday, February 17, 2016	19	8	11	20	Clear
Thursday, February 18, 2016	16	8	8	25	Mostly Cloudy
Friday, February 19, 2016	47	25	22	42	Mostly Cloudy
Saturday, February 20, 2016	210	97	113	42	Clear
Sunday, February 21, 2016	82	36	46	31	Mostly Cloudy
Monday, February 22, 2016	51	25	26	30	Cloudy
Tuesday, February 23, 2016	66	34	32	32	Cloudy
Wednesday, February 24, 2016	27	15	12	33	Cloudy
Thursday, February 25, 2016	57	28	29	30	Cloudy
Friday, February 26, 2016	32	14	18	26	Partly Cloudy
Saturday, February 27, 2016	376	179	197	41	Clear
Sunday, February 28, 2016	289	128	161	46	Partly Cloudy
February Subtotal	1,620	767	853		
Count Session Total	4,372	2,129	2,243		

Table 2

KEY STATISTICS: MONDAY, NOVEMBER 30, 2015 TO SUNDAY, JANUARY 3, 2016

Statistic	Total	Eastbound	Westbound
Count Period Total	2,045	1,001	1,044
November 30-December 6 Total	519	247	272
Mon-Fri Total	225	107	118
Sat-Sun Total	294	140	154
December 7-13 Total	584	286	298
Mon-Fri Total	430	209	221
Sat-Sun Total	154	77	77
December 14-20 Total	355	181	174
Mon-Fri Total	218	111	107
Sat-Sun Total	137	70	67
December 21-27 Total	378	186	192
Mon-Fri Total	258	127	131
Sat-Sun Total	120	59	61
December 28-January 3 Total	209	101	108
Mon-Fri Total	131	63	68
Sat-Sun Total	78	38	40
Percent of Usage by Direction		48.9	51.1
Weekly Average	409	200	209
Average on a Weekday <sup>a</sup>	49	24	25
Weekend Average	157	77	80

<sup>&</sup>lt;sup>a</sup>Count data does not include Monday, December 21 due to rain and Monday, December 28 due to snow, which greatly reduced usage on these days.

Table 3

COMPARISON OF DAILY COUNT DATA: NOVEMBER 30, 2015-JANUARY 3, 2016

	Date	Total	Eastbound	Westbound	Avg Daily Temp	Weather
	November 30	22	9	13	38	Mostly Cloudy
ys	December 7	58	27	31	34	Mostly Cloudy
Mondays	December 14	33	15	18	49	Mostly Cloudy
	December 21	25	12	13	39	Rain
	December 28	7	3	4	28	Snow
	Average Usage <sup>a</sup>	38	17	21		
	December 1	52	25	27	36	Mostly Cloudy
တ	December 8	80	36	44	38	Mostly Cloudy
Tuesdays	December 15	76	37	39	35	Cloudy
esc	December 22	58	28	30	34	Cloudy
Τ	December 29	21	9	12	27	Cloudy
	Average Usage	57	27	30		
	December 2	30	16	14	30	Mostly Cloudy
)s	December 9	113	57	56	40	Mostly Cloudy
sda	December 16	29	15	14	39	Cloudy
que	December 23	37	18	19	47	Mostly Cloudy
Wednesdays	December 30	32	15	17	26	Cloudy
	Average Usage	48	24	24		
	December 3	46	22	24	33	Cloudy
S	December 10	89	45	44	45	Mostly Cloudy
Thursdays	December 17	44	22	22	28	Mostly Cloudy
urs	December 24	72	35	37	35	Cloudy
Τ̈́	December 31	47	25	22	22	Mostly Cloudy
	Average Usage	60	30	30		
	December 4	75	35	40	35	Clear
	December 11	90	44	46	39	Clear
ays	December 18	36	22	14	22	Mostly Cloudy
Fridays	December 25	66	34	32	30	Mostly Cloudy
ш .	January 1	24	11	13	21	Mostly Cloudy
	Average Usage	58	29	29		
	December 5	151	69	82	35	Clear
φ	December 12	79	35	44	40	Cloudy
Saturdays	December 19	26	14	12	19	Clear
atur	December 26	53	25	28	35	Mostly Cloudy
ιχ	January 2	40	20	20	24	Clear
	Average Usage	70	33	37		
	December 6	143	71	72	32	Mostly Cloudy
ω	December 13	75	42	33	51	Cloudy
day	December 20	111	56	55	36	Clear
Sundays	December 27	67	34	33	32	Cloudy
(7)	January 3	38	18	20	24	Cloudy
	Average Usage	87	44	43		

<sup>&</sup>lt;sup>a</sup>This Monday average does not include December 21 due to rain and December 28 due to snow that greatly reduced usage on these days.

Figure 3

DAILY VOLUME: NOVEMBER 30, 2015-JANUARY 3, 2016

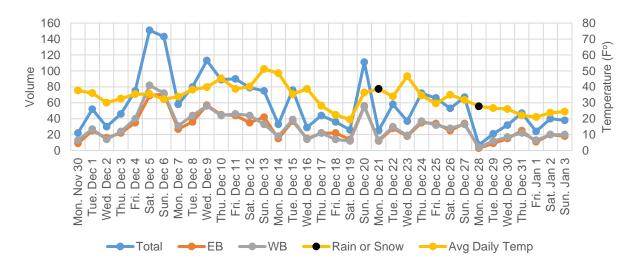
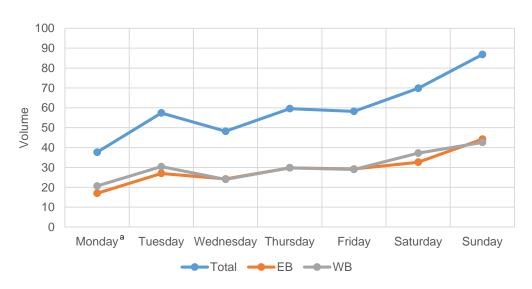


Figure 4

AVERAGE VOLUME BY DAY OF THE WEEK NOVEMBER 30, 2015-JANUARY 3, 2016



<sup>&</sup>lt;sup>a</sup>Monday, December 21 and Monday, December 28 are not included due to rain and snow that greatly reduced volume on these days.

Table 4

KEY STATISTICS: MONDAY, JANUARY 4 TO SUNDAY, JANUARY 31, 2016

Statistic	Total	Eastbound	Westbound
Count Period Total	707	361	346
January 4-10 Total	163	90	73
Mon-Fri Total	122	68	54
Sat-Sun Total	41	22	19
January 11-17 Total	151	74	77
Mon-Fri Total	117	57	60
Sat-Sun Total	34	17	17
January 18-24 Total	166	85	81
Mon-Fri Total	84	45	39
Sat-Sun Total	82	40	42
January 25-31 Total	227	112	115
Mon-Fri Total	130	66	64
Sat-Sun Total	97	46	51
Percent of Usage by Direction		51.1	48.9
Weekly Average	177	90	87
Average on a Weekday <sup>a</sup>	23	12	11
Weekend Average	63	31	32

<sup>&</sup>lt;sup>a</sup>Count data does not include Sunday, January 10 due to snow which greatly reduced usage on this day.

Table 5
COMPARISON OF DAILY COUNT DATA: JANUARY 4-31, 2016

	Date	Total	Eastbound	Westbound	Avg Daily Temp	Weather
(n	January 4	28	17	11	22	Partly Cloudy
Mondays	January 11	29	13	16	1	Mostly Cloudy
lonc	January 18	2	1	1	0	Clear
2	January 25	25	13	12	29	Mostly Cloudy
	Average Usage	21	11	10		
	January 5	19	12	7	21	Clear
ıys	January 12	19	8	11	4	Clear
sda	January 19	31	17	14	3	Clear
Tuesdays	January 26	20	11	9	27	Mostly Cloudy
'	Average Usage	22	12	10		
S	January 6	29	14	15	27	Partly Cloudy
Wednesdays	January 13	9	5	4	6	Mostly Cloudy
esc	January 20	14	7	7	14	Mostly Cloudy
edr	January 27	27	15	12	26	Mostly Cloudy
>	Average Usage	20	10	10		
	January 7	26	14	12	33	Mostly Cloudy
ays	January 14	36	18	18	25	Mostly Cloudy
rsd	January 21	19	10	9	18	Cloudy
Thursdays	January 28	29	14	15	31	Cloudy
'	Average Usage	28	14	14		
	January 8	20	11	9	35	Cloudy
s/s	January 15	24	13	11	31	Mostly Cloudy
Fridays	January 22	18	10	8	22	Cloudy
뇬	January 29	29	13	16	20	Clear
	Average Usage	23	12	11		-
	January 9	39	21	18	30	Mostly Cloudy
Saturdays	January 16	31	16	15	18	Partly Cloudy
urd	January 23	53	25	28	25	Mostly Cloudy
Sat	January 30	76	35	41	35	Clear
	Average Usage	50	24	26		
	January 10	2	1	1	8	Snow
ays	January 17	3	1	2	0	Clear
Sundays	January 24	29	15	14	24	Mostly Cloudy
Su	January 31	21	11	10	34	Mostly Cloudy
	Average Usage <sup>a</sup>	18	9	9		

<sup>&</sup>lt;sup>a</sup>This Sunday average does not include January 10 due to snow that greatly reduced usage on this day.

Figure 5

DAILY VOLUME: JANUARY 4-31, 2016

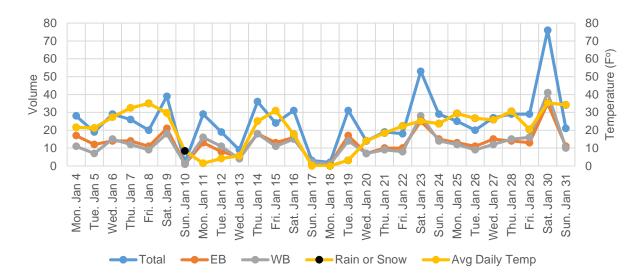
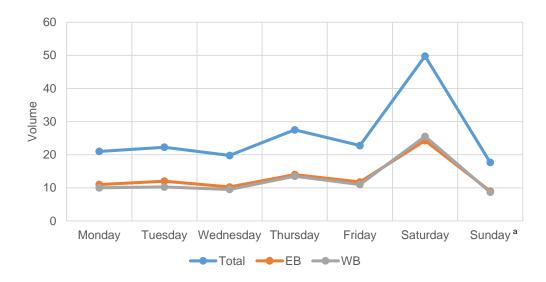


Figure 6

AVERAGE VOLUME BY DAY OF THE WEEK
JANUARY 4-31, 2016



<sup>a</sup>Sunday, January 10 is not included due to snow that greatly reduced volume on this day.

Table 6
KEY STATISTICS: MONDAY, FEBRUARY 1 TO SUNDAY, FEBRUARY 28, 2016

Statistic	Total	Eastbound	Westbound
Count Period Total	1,620	767	853
February 1-7 Total	207	101	106
Mon-Fri Total	100	42	58
Sat-Sun Total	107	59	48
February 8-14 Total	96	46	50
Mon-Fri Total	79	37	42
Sat-Sun Total	17	9	8
February 15-21 Total	419	197	222
Mon-Fri Total	127	64	63
Sat-Sun Total	292	133	159
February 22-28 Total	898	423	475
Mon-Fri Total	233	116	117
Sat-Sun Total	665	307	358
Percent of Usage by Direction		47.3	52.7
Weekly Average	405	192	213
Average on a Weekday	27	13	14
Weekend Average	270	127	143

Table 7

COMPARISON OF DAILY COUNT DATA: FEBRUARY 1-28, 2016

	Date	Total	Eastbound	Westbound	Avg Daily Temp	Weather
S	February 1	43	17	26	32	Clear
Mondays	February 8	16	6	10	25	Mostly Cloudy
	February 15	25	12	13	20	Cloudy
2	February 22	51	25	26	30	Cloudy
	Average Usage	34	15	19		
	February 2	7	3	4	32	Mostly Cloudy
ays	February 9	25	12	13	13	Mostly Cloudy
sde	February 16	20	11	9	25	Cloudy
Tuesdays	February 23	66	34	32	32	Cloudy
'	Average Usage	30	15	15	= =	
S	February 3	21	11	10	30	Mostly Cloudy
Wednesdays	February 10	4	2	2	8	Mostly Cloudy
Jesi	February 17	19	8	11	20	Clear
/edi	February 24	27	15	12	33	Cloudy
>	Average Usage	18	9	9		
	February 4	11	3	8	23	Cloudy
ays	February 11	26	13	13	8	Clear
Thursdays	February 18	16	8	8	25	Mostly Cloudy
Thu	February 25	57	28	29	30	Cloudy
	Average Usage	28	13	15	-	
	February 5	18	8	10	26	Mostly Cloudy
ys	February 12	8	4	4	12	Mostly Cloudy
Fridays	February 19	47	25	22	42	Mostly Cloudy
Ē	February 26	32	14	18	26	Partly Cloudy
	Average Usage	26	13	14		
	February 6	49	25	24	28	Cloudy
Saturdays	February 13	4	2	2	2	Clear
turd	February 20	210	97	113	42	Clear
Sat	February 27	376	179	197	41	Clear
	Average Usage	160	76	84		
	February 7	58	34	24	35	Partly Cloudy
ays	February 14	13	7	6	10	Cloudy
Sundays	February 21	82	36	46	31	Mostly Cloudy
Su	February 28	289	128	161	46	Partly Cloudy
	Average Usage	111	51	59		

Figure 7

DAILY VOLUME: FEBRUARY 1-28, 2016

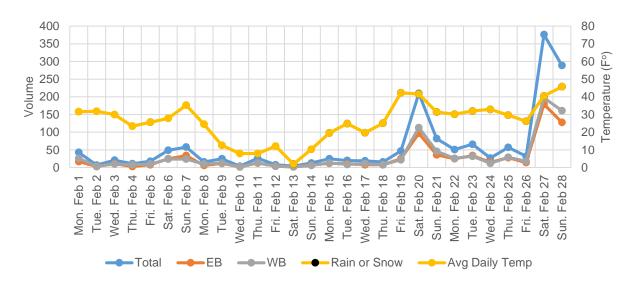
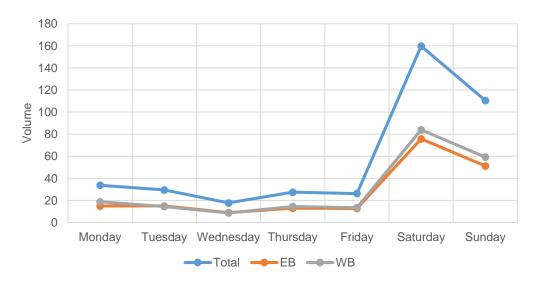


Figure 8

AVERAGE VOLUME BY DAY OF THE WEEK
FEBRUARY 1-28, 2016



### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Ozaukee Interurban Trail north of Bonniwell Road in the City of Mequon

Monday, November 30, 2015 to Sunday, February 28, 2016

### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Ozaukee Interurban Trail north of Bonniwell Road in the City of Mequon from Monday, November 30, 2015 to Sunday, February 28, 2016. This count location was selected for the winter count session because it had some of the highest count volumes observed during the summer/fall count session. As the purpose for the winter count session was to observe the effect temperatures and weather could potentially have on trail usage, this and two other high volume locations were selected for long duration counts over the winter months. During these 13 weeks, total count volume was approximately 6,110 as shown in Table 1. By comparison, the two-week total for this count location from August 18 to August 31, 2015 was approximately 6,370. A map and image of the site are shown in Figures 1 and 2.

Count volume totaled approximately 2,435 from Monday, November 30, 2015 to Sunday, January 3, 2016 as shown in Table 2. Daily volumes and average daily temperatures are presented in Table 3 and Figure 3. During the first week of December, average temperatures were in the 30s and in the second week, average temperatures were mostly in the 40s. Most of the days in these two weeks had some of the highest volumes of the entire month. As temperatures began to gradually get colder during the last half of December, daily volumes began to drop as well although there was an occasional increase in volume on single days during this time. On Monday, December 28 a significant snowfall occurred that greatly reduced volume on this day. It was discovered that snow and ice from this snow storm blocked the sensor in the counter which prevented counts from being taken on Tuesday and Wednesday, December 29-30. The issue was not resolved until Wednesday afternoon and counts were not obtained. The Ozaukee Interurban Trail is plowed and the counts did increase again at the end of the week. It is likely that had the counter not been blocked by snow and ice, the Tuesday and Wednesday counts would have been similar to those from later in the week.

Count volume totaled approximately 1,340 from Monday, January 4 to Sunday, January 31 as shown in Table 4. Daily volumes and average daily temperatures are presented in Table 5 and Figure 5. For most of this month, the effect of temperature change is evident on trail usage as the volumes appear to follow the changes in temperature. In the first week, despite a slight increase in average temperatures, volumes dropped slightly before rising again on Saturday, January 9. During the second week, counts were the lowest in the middle of the week and on Sunday, January 17 when average temperatures were in the single digits. When temperatures briefly returned to normal averages on Thursday through Saturday, January 14-16, the counts also returned to typical volumes. In the third week, as temperatures became to climb back to seasonal averages, the daily volumes started to slowly increase each day as well. The fourth week had volumes mostly changing in response to the modest changes in temperatures. Although the weekend of January 30-31 had the same average daily temperature, a relatively warm afternoon on Saturday may explain the noticeable increase in volume compared to the volume seen on Sunday. No significant rain or snow events occurred during the month.

Count volume totaled approximately 2,335 from Monday, February 1 to Sunday, February 28 as shown in Table 6. Daily volumes and average daily temperatures are presented in Table 7 and Figure 7. Average

temperatures in February varied considerably. Temperatures were at seasonal averages for the first week, dropped into the teens during much of the second week, climbed back to seasonal averages for most of the third week and reached the 40s by that weekend, and remained at seasonal averages during the fourth week with another warmup on the final weekend. Volumes for the most part did not follow the changes in temperatures as seen in January. While there was some change in the first week, the remainder of the month had relatively consistent day-to-day volumes that had a very gradual increase as the weeks went on. The exceptions were the last two weekends where warmer than normal temperatures saw significant increases in volume on both Saturdays as well as Sunday, February 28. No rain or snow events impacted the counts throughout the month.

During the winter count session between December and February, a different trend for average daily volumes is seen for each of the three months. In December as seen in Figure 4, the trend indicates weekday volumes increased from Monday to Tuesday, remained about the same through Thursday, decreased on Friday, and increased again on Saturday with a slight drop on Sunday. This trend resembles many of the counts that were taken in the summer/fall session. In January as seen in Figure 6, the average daily temperatures slightly declined from Monday to Tuesday, rose steadily through Thursday before another slight decline on Friday, and then rose sharply on Saturday followed by a sharp decline on Sunday. The Saturday average is skewed due to the considerable volume increase that occurred on January 30. This trend is comparable to the summer count taken at this location. In February as seen in Figure 8, all of the weekdays stayed relatively consistent while Saturday had a significant increase followed by a slight decrease on Sunday. The other two winter counts also had this similar trend in February. Volumes averaged about 70 per day in the winter compared to about 455 per day in the summer.

The data seem to indicate that in most cases daily volumes were affected by the changes in temperature. In December, the highest daily volumes occurred in the first half of the month when temperatures were the warmest and began to decrease as the temperatures gradually dropped. As seen particularly in January, volumes increased and decreased in relation to the rise and fall of temperatures. However, despite the variation in temperatures through most of February, daily volumes stayed relatively constant. Throughout the winter count session, days in which temperatures rose considerably after periods of cold days often resulted in a brief increase in volume, seen especially on a few weekends during this count session. The lack of significant snow events, other than the one that occurred on December 28, likely kept volumes higher than what they might have been if heavy snowfalls had occurred more frequently.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

DAILY COUNT VOLUME: NOVEMBER 30, 2015 - FEBRUARY 28, 2016

				A 5 "	
	Total	Northbound	Southbound	Average Daily Temperature	Weather
Tuesday, December 1, 2015	92	49	43	38	Mostly Cloudy
Wednesday, December 2, 2015	35	17	18	32	Mostly Cloudy
Thursday, December 3, 2015	66	33	33	34	Mostly Cloudy
Friday, December 4, 2015	124	62	62	38	Clear
Saturday, December 5, 2015	170	89	81	37	Clear
Sunday, December 6, 2015	89	48	41	34	Clear
Monday, December 7, 2015	73	38	35	35	Mostly Cloudy
Tuesday, December 8, 2015	97	49	48	40	Mostly Cloudy
Wednesday, December 9, 2015	150	72	78	42	Clear
Thursday, December 10, 2015	117	57	60	48	Clear
Friday, December 11, 2015	66	35	31	41	Clear
Saturday, December 12, 2015	139	68	71	42	Mostly Cloudy
Sunday, December 13, 2015	62	34	28	52	Cloudy
Monday, December 14, 2015	39	18	21	50	Mostly Cloudy
Tuesday, December 15, 2015	69	35	34	37	Cloudy
Wednesday, December 16, 2015	61	31	30	41	Cloudy
Thursday, December 17, 2015	57	30	27	30	Mostly Cloudy
Friday, December 18, 2015	47	24	23	25	Mostly Cloudy
Saturday, December 19, 2015	62	29	33	23	Clear
Sunday, December 20, 2015	154	79	75	38	Clear
Monday, December 21, 2015	36	18	18	40	Rainy
Tuesday, December 22, 2015	66	32	34	36	Cloudy
Wednesday, December 23, 2015	62	30	32	48	Mostly Cloudy
Thursday, December 24, 2015	98	49	49	36	Mostly Cloudy
Friday, December 25, 2015	65	33	32	32	Mostly Cloudy
Saturday, December 26, 2015	55	30	25	36	Mostly Cloudy
Sunday, December 27, 2015	87	45	42	34	Cloudy
Monday, December 28, 2015	14	7	7	29	Snow
Tuesday, December 29, 2015 <sup>a</sup>	N/A	N/A	N/A	29	Cloudy
Wednesday, December 30, 2015 <sup>a</sup>	N/A	N/A	N/A	27	Cloudy
Thursday, December 31, 2015	53	24	29	25	Mostly Cloudy
December Subtotal	2,305	1,165	1,140		
Friday, January 1, 2016	33	15	18	23	Mostly Cloudy
Saturday, January 2, 2016	53	29	24	26	Clear
Sunday, January 3, 2016	45	21	24	26	Mostly Cloudy
Monday, January 4, 2016	40	19	21	24	Partly Cloudy

Table 1 (continued)

				Average Daily	
	Total	Northbound	Southbound	Temperature	Weather
Tuesday, January 5, 2016	42	22	20	23	Clear
Wednesday, January 6, 2016	58	28	30	29	Mostly Clear
Thursday, January 7, 2016	49	26	23	35	Mostly Cloudy
Friday, January 8, 2016	36	18	18	37	Cloudy
Saturday, January 9, 2016	95	47	48	33	Mostly Cloudy
Sunday, January 10, 2016	19	11	8	11	Clear
Monday, January 11, 2016	18	9	9	4	Clear
Tuesday, January 12, 2016	22	11	11	7	Clear
Wednesday, January 13, 2016	10	5	5	8	Partly Cloudy
Thursday, January 14, 2016	43	22	21	27	Clear
Friday, January 15, 2016	35	18	17	31	Clear
Saturday, January 16, 2016	62	34	28	20	Clear
Sunday, January 17, 2016	9	5	4	0	Clear
Monday, January 18, 2016	11	4	7	0	Clear
Tuesday, January 19, 2016	15	7	8	6	Clear
Wednesday, January 20, 2016	29	14	15	17	Mostly Cloudy
Thursday, January 21, 2016	44	22	22	21	Mostly Cloudy
Friday, January 22, 2016	49	21	28	25	Cloudy
Saturday, January 23, 2016	81	41	40	28	Mostly Cloudy
Sunday, January 24, 2016	82	38	44	26	Mostly Cloudy
Monday, January 25, 2016	63	34	29	31	Mostly Cloudy
Tuesday, January 26, 2016	34	18	16	29	Mostly Cloudy
Wednesday, January 27, 2016	42	21	21	28	Mostly Cloudy
Thursday, January 28, 2016	58	30	28	33	Cloudy
Friday, January 29, 2016	55	27	28	23	Clear
Saturday, January 30, 2016	174	89	85	36	Clear
Sunday, January 31, 2016	63	30	33	36	Mostly Cloudy
January Subtotal	1,469	736	733		
Monday, February 1, 2016	91	47	44	34	Clear
Tuesday, February 2, 2016	25	13	12	34	Mostly Cloudy
Wednesday, February 3, 2016	32	17	15	32	Mostly Cloudy
Thursday, February 4, 2016	56	28	28	25	Mostly Cloudy
Friday, February 5, 2016	44	20	24	28	Clear
Saturday, February 6, 2016	94	45	49	30	Cloudy
Sunday, February 7, 2016	181	87	94	37	Clear
Monday, February 8, 2016	24	12	12	28	Cloudy
Tuesday, February 9, 2016	22	12	10	16	Cloudy
Wednesday, February 10, 2016	23	8	15	10	Clear

Table 1 (continued)

	Total	Northbound	Southbound	Average Daily Temperature	Weather
Thursday, February 11, 2016	14	8	6	10	Clear
Friday, February 12, 2016	17	7	10	15	Mostly Cloudy
Saturday, February 13, 2016	11	4	7	5	Clear
Sunday, February 14, 2016	25	13	12	13	Cloudy
Monday, February 15, 2016	44	21	23	22	Cloudy
Tuesday, February 16, 2016	38	20	18	27	Cloudy
Wednesday, February 17, 2016	44	22	22	22	Clear
Thursday, February 18, 2016	41	21	20	26	Clear
Friday, February 19, 2016	49	26	23	44	Clear
Saturday, February 20, 2016	280	133	147	44	Clear
Sunday, February 21, 2016	112	57	55	33	Mostly Cloudy
Monday, February 22, 2016	64	32	32	31	Cloudy
Tuesday, February 23, 2016	67	33	34	31	Cloudy
Wednesday, February 24, 2016	54	25	29	33	Cloudy
Thursday, February 25, 2016	59	30	29	31	Cloudy
Friday, February 26, 2016	60	28	32	28	Partly Cloudy
Saturday, February 27, 2016	367	191	176	42	Clear
Sunday, February 28, 2016	396	199	197	46	Partly Cloudy
February Subtotal	2,334	1,159	1,175		
Count Session Total	6,108	3,060	3,048		

<sup>&</sup>lt;sup>a</sup>Snow and ice from a storm on Monday, December 28 blocked the sensor and it was not resolved until Wednesday, December 30. Data from December 29-30 were not obtained.

Table 2

KEY STATISTICS: MONDAY, NOVEMBER 30, 2015 TO SUNDAY, JANUARY 3, 2016

Statistic	Total	Northbound	Southbound
Count Period Total	2,436	1,230	1,206
November 30-December 6 Total	576	298	278
Mon-Fri Total	317	161	156
Sat-Sun Total	259	137	122
December 7-13 Total	704	353	351
Mon-Fri Total	503	251	252
Sat-Sun Total	201	102	99
December 14-20 Total	489	246	243
Mon-Fri Total	273	138	135
Sat-Sun Total	216	108	108
December 21-27 Total	469	237	232
Mon-Fri Total	327	162	165
Sat-Sun Total	142	75	67
December 28-January 3 Total	198	96	102
Mon-Fri Total	100	46	54
Sat-Sun Total	98	50	48
Percent of Usage by Direction		50.5	49.5
Weekly Average	487	246	241
Average on a Weekday <sup>a</sup>	59	29	29
Weekend Average	183	94	89

<sup>&</sup>lt;sup>a</sup>Count data does not include Monday, December 21 due to rain and Monday, December 28 due to snow, which greatly reduced usage on these days. Count data also does not include Tuesday and Wednesday, December 29-30 due to snow and ice that blocked the sensor and prevented data from being obtained.

Table 3

COMPARISON OF DAILY COUNT DATA: NOVEMBER 30, 2015-JANUARY 3, 2016

	Date	Total	Northbound	Southbound	Avg Daily Temp	Weather
Mondays	November 30	28	16	12	40	Mostly Cloudy
	December 7	73	38	35	35	Mostly Cloudy
	December 14	39	18	21	50	Mostly Cloudy
	December 21	36	18	18	40	Rain
	December 28	14	7	7	29	Snow
	Average Usage <sup>a</sup>	47	23	22		
Tuesdays	December 1	64	33	31	38	Mostly Cloudy
	December 8	97	49	48	40	Mostly Cloudy
	December 15	69	35	34	37	Cloudy
res	December 22	66	32	34	36	Cloudy
=	December 29				29	Cloudy
	Average Usage <sup>b</sup>	74	37	37	= =	
	December 2	35	17	18	30	Mostly Cloudy
ays	December 9	150	72	78	42	Mostly Cloudy
sda	December 16	61	31	30	41	Cloudy
dne	December 23	62	30	32	48	Mostly Cloudy
Wednesdays	December 30				27	Cloudy
	Average Usage <sup>b</sup>	77	38	40		
	December 3	66	33	33	34	Mostly Cloudy
S/	December 10	117	57	60	48	Clear
Thursdays	December 17	57	30	27	30	Mostly Cloudy
ınıs	December 24	98	49	49	36	Mostly Cloudy
È	December 31	53	24	29	25	Mostly Cloudy
	Average Usage	78	39	40		
	December 4	124	62	62	38	Clear
	December 11	66	35	31	41	Clear
Fridays	December 18	47	24	23	25	Mostly Cloudy
rid	December 25	65	33	32	32	Mostly Cloudy
	January 1	33	15	18	23	Mostly Cloudy
	Average Usage	67	34	33		
	December 5	170	89	81	37	Clear
s/	December 12	139	68	71	42	Mostly Cloudy
rda	December 19	62	29	33	23	Clear
Saturdays	December 26	55	30	25	36	Mostly Cloudy
S	January 2	53	29	24	26	Clear
	Average Usage	96	49	47		
Sundays	December 6	89	48	41	34	Clear
	December 13	62	34	28	52	Cloudy
	December 20	154	79	75	38	Clear
	December 27	87	45	42	34	Cloudy
	January 3	45	21	24	26	Mostly Cloudy
	Average Usage	87	45	42		

<sup>&</sup>lt;sup>a</sup>This Monday average does not include December 21 due to rain and December 28 due to snow that greatly reduced volume on these days.

<sup>&</sup>lt;sup>b</sup>Snow and ice from a storm on Monday, December 28 blocked the sensor and it was not resolved until Wednesday, December 30. These averages do not include volumes from December 29 and 30.

Figure 3

DAILY VOLUME: NOVEMBER 30, 2015-JANUARY 3, 2016

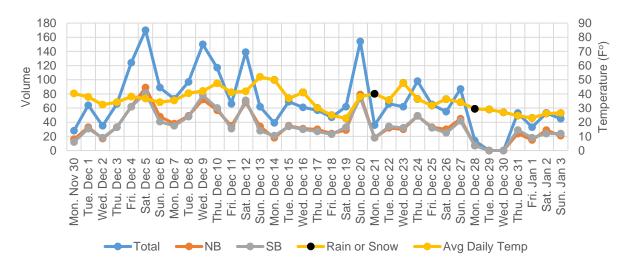
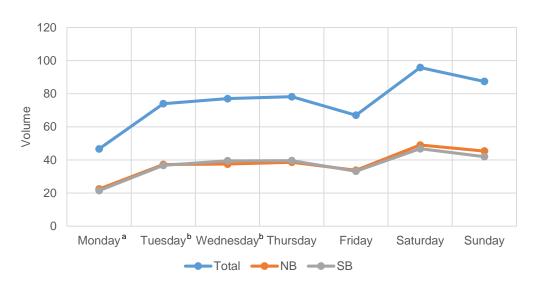


Figure 4

AVERAGE VOLUME BY DAY OF THE WEEK NOVEMBER 30, 2015-JANUARY 3, 2016



<sup>&</sup>lt;sup>a</sup>Monday, December 21 and Monday, December 28 are not included due to rain and snow that greatly reduced volume on these days.

<sup>&</sup>lt;sup>b</sup>Tuesday and Wednesday, December 29-30 are not included due to snow and ice that blocked the sensor.

Table 4

KEY STATISTICS: MONDAY, JANUARY 4 TO SUNDAY, JANUARY 31, 2016

Statistic	Total	Northbound	Southbound
Count Period Total	1,338	671	667
January 4-10 Total	339	171	168
Mon-Fri Total	225	113	112
Sat-Sun Total	114	58	56
January 11-17 Total	199	104	95
Mon-Fri Total	128	65	63
Sat-Sun Total	71	39	32
January 18-24 Total	311	147	164
Mon-Fri Total	148	68	80
Sat-Sun Total	163	79	84
January 25-31 Total	489	249	240
Mon-Fri Total	252	130	122
Sat-Sun Total	237	119	118
Percent of Usage by Direction		50.1	49.9
Weekly Average	335	168	167
Average on a Weekday	38	19	19
Weekend Average	146	74	73

Table 5
COMPARISON OF DAILY COUNT DATA: JANUARY 4-31, 2016

	Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
	January 4	40	19	21	24	Partly Cloudy
Mondays	January 11	18	9	9	4	Clear
pud	January 18	11	4	7	0	Clear
Mc	January 25	63	34	29	31	Mostly Cloudy
	Average Usage	33	17	17		
	January 5	42	22	20	23	Clear
Tuesdays	January 12	22	11	11	7	Clear
pse	January 19	15	7	8	6	Clear
Tue	January 26	34	18	16	29	Mostly Cloudy
	Average Usage	28	15	14		
s/	January 6	58	28	30	29	Clear
Wednesdays	January 13	10	5	5	8	Partly Cloudy
nes	January 20	29	14	15	17	Mostly Cloudy
/ed	January 27	42	21	21	28	Mostly Cloudy
>	Average Usage	35	17	18		
	January 7	49	26	23	35	Mostly Cloudy
ays	January 14	43	22	21	27	Clear
Thursdays	January 21	44	22	22	21	Mostly Cloudy
Thu	January 28	58	30	28	33	Cloudy
-	Average Usage	49	25	24		
	January 8	36	18	18	37	Cloudy
ys	January 15	35	18	17	31	Clear
Fridays	January 22	49	21	28	25	Cloudy
Ē	January 29	55	27	28	23	Clear
	Average Usage	44	21	23		
	January 9	95	47	48	33	Mostly Cloudy
Saturdays	January 16	62	34	28	20	Clear
nrd	January 23	81	41	40	28	Mostly Cloudy
Sat	January 30	174	89	85	36	Clear
	Average Usage	103	53	50		
	January 10	19	11	8	11	Clear
ays	January 17	9	5	4	0	Clear
Sundays	January 24	82	38	44	26	Mostly Cloudy
Su	January 31	63	30	33	36	Mostly Cloudy
	Average Usage	43	21	22		

Figure 5

DAILY VOLUME: JANUARY 4-31, 2016

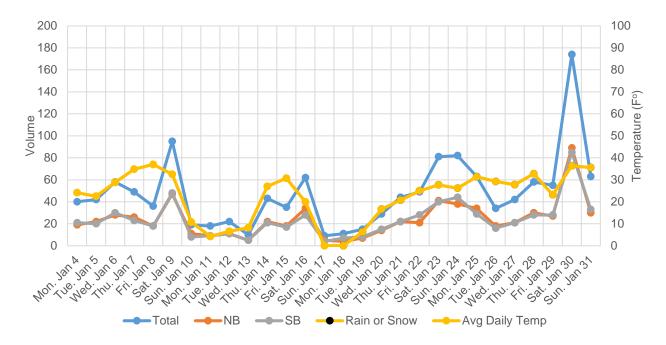


Figure 6

AVERAGE VOLUME BY DAY OF THE WEEK
JANUARY 4-31, 2016

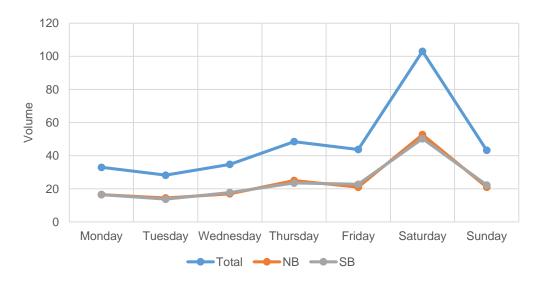


Table 6
KEY STATISTICS: MONDAY, FEBRUARY 1 TO SUNDAY, FEBRUARY 28, 2016

Statistic	Total	Northbound	Southbound
Count Period Total	2,334	1,159	1,175
February 1-7 Total	523	257	266
Mon-Fri Total	248	125	123
Sat-Sun Total	275	132	143
February 8-14 Total	136	64	72
Mon-Fri Total	100	47	53
Sat-Sun Total	36	17	19
February 15-21 Total	608	300	308
Mon-Fri Total	216	110	106
Sat-Sun Total	392	190	202
February 22-28 Total	1,067	538	529
Mon-Fri Total	304	148	156
Sat-Sun Total	763	390	373
Percent of Usage by Direction		49.7	50.3
Weekly Average	584	290	294
Average on a Weekday	43	22	22
Weekend Average	367	182	184

Table 7

COMPARISON OF DAILY COUNT DATA: FEBRUARY 1-28, 2016

	Date	Total	Northbound	Southbound	Avg Daily Temp	Weather
Mondays	February 1	91	47	44	34	Clear
	February 8	24	12	12	28	Cloudy
nda	February 15	44	21	23	22	Cloudy
Mc	February 22	64	32	32	31	Cloudy
	Average Usage	56	28	28		1
	February 2	25	13	12	34	Mostly Cloudy
ays	February 9	22	12	10	16	Cloudy
Tuesdays	February 16	38	20	18	27	Cloudy
Tue	February 23	67	33	34	31	Cloudy
	Average Usage	38	20	19		
/S	February 3	32	17	15	32	Mostly Cloudy
Wednesdays	February 10	23	8	15	10	Clear
nes	February 17	44	22	22	22	Clear
/ed	February 24	54	25	29	33	Cloudy
>	Average Usage	38	18	20	-	-
	February 4	56	28	28	25	Mostly Cloudy
Thursdays	February 11	14	8	6	10	Clear
ırsd	February 18	41	21	20	26	Clear
Thu	February 25	59	30	29	31	Cloudy
	Average Usage	43	22	21	-	-
	February 5	44	20	24	28	Clear
ys	February 12	17	7	10	15	Mostly Cloudy
Fridays	February 19	49	26	23	44	Clear
Ē	February 26	60	28	32	28	Partly Cloudy
	Average Usage	43	20	22		
	February 6	94	45	49	30	Cloudy
ays	February 13	11	4	7	5	Clear
Saturdays	February 20	280	133	147	44	Clear
Sat	February 27	367	191	176	42	Clear
	Average Usage	188	93	95		
	February 7	181	87	94	37	Clear
ays	February 14	25	13	12	13	Cloudy
Sundays	February 21	112	57	55	33	Mostly Cloudy
Su	February 28	396	199	197	46	Partly Cloudy
	Average Usage	179	89	90		

Figure 7

DAILY VOLUME: FEBRUARY 1-28, 2016

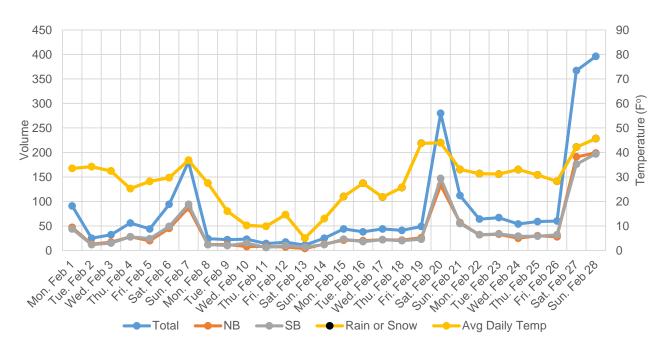
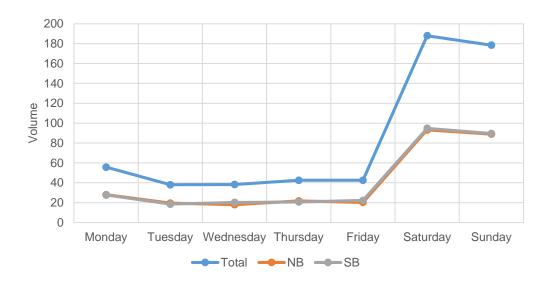


Figure 8

AVERAGE VOLUME BY DAY OF THE WEEK
FEBRUARY 1-28, 2016



### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Racine County North Shore Trail north of CTH KR in the Village of Mount Pleasant

Monday, November 30, 2015 to Sunday, February 28, 2016

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Racine County North Shore Trail north of CTH KR in the Village of Mount Pleasant from Monday, November 30, 2015 to Sunday, February 28, 2016. This count location was selected for the winter count session because it had some of the highest count volumes observed during the summer/fall count session. As the purpose for the winter count session was to observe the effect temperatures and weather could potentially have on trail usage, this and two other high volume locations were selected for long duration counts over the winter months. During these 13 weeks, total count volume was approximately 4,390 as shown in Table 1. By comparison, the two-week total for this count location from October 12 to October 25, 2015 was approximately 1,910. This is the only winter count of the three to have a higher count in the three months than in the two-week session. A map and image of the site are shown in Figures 1 and 2.

Count volume totaled approximately 2,015 from Monday, November 30, 2015 to Sunday, January 3, 2016 as shown in Table 2. Daily volumes and average daily temperatures are presented in Table 3 and Figure 3. For most of the month, volumes alternated between increases and decreases almost day to day. On several occasions the increase or decrease in count volumes was opposite of the rise or fall in temperature. The days with the warmest temperatures did not necessarily have the highest volumes. Rain on Sunday, December 13 and on Monday, December 21 reduced the count volumes despite temperatures in the 40s and 50s. On Monday, December 28 a significant snowfall occurred that greatly reduced volume on this day, and volumes remained low in the days following the snow event. Racine County does not plow this trail so that it may be used for cross-country skiing, however Kenosha County does plow their portion of the trail.

Count volume totaled approximately 685 from Monday, January 4 to Sunday, January 31 as shown in Table 4. Daily volumes and average daily temperatures are presented in Table 5 and Figure 5. In the first week, count volumes began to increase again as the temperatures became warmer, although rain on Friday, January 8 did reduce the count that day despite its average temperature. The rest of month demonstrated a more consistent interaction between volumes and temperatures as the volumes typically followed the changes in temperature. January 17 through January 19 had bitterly cold temperatures which dropped the counts considerably. As temperatures began to steadily warm up again through the last 10 days of the month, the counts also began to increase. Although the weekend of January 30-31 had the same average daily temperature, a relatively warm afternoon on Saturday may explain the noticeable increase in volume compared to the volume seen on Sunday.

Count volume totaled approximately 1,690 from Monday, February 1 to Sunday, February 28 as shown in Table 6. Daily volumes and average daily temperatures are presented in Table 7 and Figure 7. Average temperatures in February varied from week to week. Temperatures were at seasonal averages for the first week, dropped into the teens during much of the second week, climbed back to seasonal averages for most of the third week and reached the 40s by that weekend, and remained at seasonal averages during the fourth week with another warmup on the final weekend. Volumes for the most part followed the changes in temperatures as seen through most of January. A couple of exceptions were seen on a few days in the first

and fourth weeks when volumes were changing although temperatures stayed relatively consistent. The last two weekends did have warmer than normal temperatures which caused significant increases in volume on both Saturdays as well as Sunday, February 28. No rain or snow events impacted the counts throughout the month.

During the winter count session between December and February, a different trend for average daily volumes is seen for each of the three months. In December as seen in Figure 4, the trend indicates weekday volumes increased from Monday to Tuesday, slightly dropped through Thursday, and then had alternating increases and decreases through Sunday. The Saturday average was about equal to most of the weekdays. In January as seen in Figure 6, the average daily temperatures rose from Monday to Thursday, had a slight decline on Friday, and then sharply rose on Saturday followed by a sharp decline on Sunday. The Saturday average is likely skewed due to the considerable volume increase that occurred on January 30. This trend is comparable to the summer count taken at this location. In February as seen in Figure 8, all of the weekdays stayed relatively consistent while Saturday had a significant increase followed by a slight decrease on Sunday. The other two winter counts also had this similar trend in February. Volumes averaged about 50 per day in the winter compared to about 135 per day in the fall.

The data seem to indicate that daily volumes were affected by the changes in temperature in most cases in January and February. During these months, volumes often increased and decreased in relation to the rise and fall of temperatures. In December, the effect of temperature on the counts was more difficult to discern due to the alternating increases and decreases in volumes that occurred almost day to day. Throughout the winter count session, days in which temperatures rose considerably after periods of cold days often resulted in a brief increase in volume, seen especially on a few weekends during this count session. The lack of significant snow events, other than the one that occurred on December 28, likely kept volumes higher than what they might have been if heavy snowfalls had occurred more frequently.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1

DAILY COUNT VOLUME: NOVEMBER 30, 2015 - FEBRUARY 28, 2016

				Average Daily	
	Total	Northbound	Southbound	Temperature	Weather
Tuesday, December 1, 2015	88	45	43	40	Mostly Cloudy
Wednesday, December 2, 2015	38	21	17	33	Cloudy
Thursday, December 3, 2015	58	29	29	35	Mostly Cloudy
Friday, December 4, 2015	75	37	38	39	Clear
Saturday, December 5, 2015	98	48	50	36	Clear
Sunday, December 6, 2015	109	46	63	35	Clear
Monday, December 7, 2015	57	30	27	35	Mostly Cloudy
Tuesday, December 8, 2015	83	42	41	42	Mostly Cloudy
Wednesday, December 9, 2015	124	60	64	44	Clear
Thursday, December 10, 2015	55	29	26	49	Clear
Friday, December 11, 2015	87	44	43	43	Clear
Saturday, December 12, 2015	68	32	36	43	Cloudy
Sunday, December 13, 2015	37	20	17	51	Rain
Monday, December 14, 2015	53	28	25	50	Mostly Cloudy
Tuesday, December 15, 2015	68	34	34	39	Cloudy
Wednesday, December 16, 2015	42	22	20	43	Mostly Cloudy
Thursday, December 17, 2015	53	26	27	31	Mostly Cloudy
Friday, December 18, 2015	59	32	27	26	Mostly Cloudy
Saturday, December 19, 2015	55	24	31	23	Clear
Sunday, December 20, 2015	94	45	49	40	Clear
Monday, December 21, 2015	33	14	19	43	Rain
Tuesday, December 22, 2015	103	53	50	38	Cloudy
Wednesday, December 23, 2015	51	27	24	48	Mostly Cloudy
Thursday, December 24, 2015	72	36	36	38	Mostly Cloudy
Friday, December 25, 2015	86	46	40	34	Mostly Cloudy
Saturday, December 26, 2015	60	28	32	39	Mostly Cloudy
Sunday, December 27, 2015	104	49	55	36	Cloudy
Monday, December 28, 2015	26	11	15	32	Snow
Tuesday, December 29, 2015	6	3	3	31	Mostly Cloudy
Wednesday, December 30, 2015	21	11	10	28	Cloudy
December Subtotal	1,979	981	998		
Thursday, December 31, 2015	16	9	7	25	Mostly Cloudy
Friday, January 1, 2016	13	5	8	24	Mostly Cloudy
Saturday, January 2, 2016	15	8	7	26	Clear
Sunday, January 3, 2016	6	2	4	27	Cloudy
Monday, January 4, 2016	13	7	6	27	Mostly Cloudy

Table 1 (continued)

				Average Daily	
	Total	Northbound	Southbound	Temperature	Weather
Tuesday, January 5, 2016	30	14	16	24	Clear
Wednesday, January 6, 2016	40	21	19	30	Clear
Thursday, January 7, 2016	25	12	13	37	Cloudy
Friday, January 8, 2016	12	7	5	39	Rainy
Saturday, January 9, 2016	25	12	13	34	Mostly Cloudy
Sunday, January 10, 2016	13	7	6	12	Clear
Monday, January 11, 2016	13	7	6	5	Clear
Tuesday, January 12, 2016	14	7	7	8	Clear
Wednesday, January 13, 2016	15	7	8	9	Mostly Cloudy
Thursday, January 14, 2016	29	14	15	27	Clear
Friday, January 15, 2016	22	11	11	36	Mostly Cloudy
Saturday, January 16, 2016	40	22	18	23	Clear
Sunday, January 17, 2016	7	4	3	0	Clear
Monday, January 18, 2016	7	4	3	0	Clear
Tuesday, January 19, 2016	11	6	5	6	Clear
Wednesday, January 20, 2016	25	13	12	16	Mostly Cloudy
Thursday, January 21, 2016	23	11	12	21	Mostly Cloudy
Friday, January 22, 2016	19	9	10	26	Cloudy
Saturday, January 23, 2016	37	20	17	28	Mostly Cloudy
Sunday, January 24, 2016	31	16	15	26	Mostly Cloudy
Monday, January 25, 2016	38	20	18	32	Partly Cloudy
Tuesday, January 26, 2016	20	10	10	30	Cloudy
Wednesday, January 27, 2016	25	13	12	28	Mostly Cloudy
Thursday, January 28, 2016	32	17	15	34	Cloudy
Friday, January 29, 2016	24	10	14	25	Clear
Saturday, January 30, 2016	63	33	30	39	Clear
Sunday, January 31, 2016	33	18	15	38	Mostly Cloudy
January Subtotal	720	367	353		
Monday, February 1, 2016	61	33	28	33	Clear
Tuesday, February 2, 2016	22	10	12	34	Mostly Cloudy
Wednesday, February 3, 2016	23	12	11	34	Cloudy
Thursday, February 4, 2016	39	19	20	26	Cloudy
Friday, February 5, 2016	36	15	21	28	Mostly Cloudy
Saturday, February 6, 2016	64	34	30	31	Mostly Cloudy
Sunday, February 7, 2016	122	59	63	38	Clear
Monday, February 8, 2016	35	19	16	28	Cloudy
Tuesday, February 9, 2016	28	13	15	17	Cloudy
Wednesday, February 10, 2016	25	12	13	12	Mostly Cloudy

Table 1 (continued)

	Total	Northbound	Southbound	Average Daily Temperature	Weather
Thursday, February 11, 2016	29	14	15	12	Clear
Friday, February 12, 2016	20	11	9	16	Mostly Cloudy
Saturday, February 13, 2016	18	9	9	6	Clear
Sunday, February 14, 2016	22	12	10	15	Cloudy
Monday, February 15, 2016	21	11	10	23	Mostly Cloudy
Tuesday, February 16, 2016	43	20	23	27	Mostly Cloudy
Wednesday, February 17, 2016	45	23	22	23	Clear
Thursday, February 18, 2016	38	20	18	29	Clear
Friday, February 19, 2016	54	28	26	46	Clear
Saturday, February 20, 2016	206	109	97	46	Clear
Sunday, February 21, 2016	74	36	38	35	Mostly Cloudy
Monday, February 22, 2016	69	35	34	33	Cloudy
Tuesday, February 23, 2016	79	38	41	34	Cloudy
Wednesday, February 24, 2016	48	23	25	35	Cloudy
Thursday, February 25, 2016	47	26	21	33	Cloudy
Friday, February 26, 2016	62	35	27	30	Mostly Cloudy
Saturday, February 27, 2016	188	93	95	42	Clear
Sunday, February 28, 2016	172	81	91	33	Clear
February Subtotal	1,690	850	840		
Count Session Total	4,389	2,198	2,191		

Table 2

KEY STATISTICS: MONDAY, NOVEMBER 30, 2015 TO SUNDAY, JANUARY 3, 2016

Statistic	Total	Northbound	Westbound
Count Period Total	2,013	996	1,017
November 30-December 6 Total	466	226	240
Mon-Fri Total	259	132	127
Sat-Sun Total	207	94	113
December 7-13 Total	511	257	254
Mon-Fri Total	406	205	201
Sat-Sun Total	105	52	53
December 14-20 Total	424	211	213
Mon-Fri Total	275	142	133
Sat-Sun Total	149	69	80
December 21-27 Total	509	253	256
Mon-Fri Total	345	176	169
Sat-Sun Total	164	77	87
December 28-January 3 Total	103	49	54
Mon-Fri Total	82	39	43
Sat-Sun Total	21	10	11
Percent of Usage by Direction		49.5	50.5
Weekly Average	403	199	203
Average on a Weekday <sup>a</sup>	52	27	26
Weekend Average <sup>b</sup>	122	56	65

<sup>&</sup>lt;sup>a</sup>Count data does not include Monday, December 21 due to rain and Monday, December 28 due to snow, which greatly reduced usage on these days.

<sup>&</sup>lt;sup>b</sup>Count data does not include Sunday, December 13 due to rain that greatly reduced usage on this day.

Table 3

COMPARISON OF DAILY COUNT DATA: NOVEMBER 30, 2015-JANUARY 3, 2016

	Date	Total	Northbound	Westbound	Avg Daily Temp	Weather
	November 30	27	15	12	42	Mostly Cloudy
S	December 7	57	30	27	35	Mostly Cloudy
Mondays	December 14	53	28	25	50	Mostly Cloudy
lono	December 21	33	14	19	43	Rain
Σ	December 28	26	11	15	32	Snow
	Average Usage <sup>a</sup>	46	24	21		
	December 1	61	30	31	40	Mostly Cloudy
ပ္	December 8	83	42	41	42	Mostly Cloudy
Tuesdays	December 15	68	34	34	39	Cloudy
nes	December 22	103	53	50	38	Cloudy
Ĕ	December 29	6	3	3	31	Mostly Cloudy
	Average Usage	64	32	32		
	December 2	38	21	17	33	Cloudy
ays	December 9	124	60	64	44	Clear
Wednesdays	December 16	42	22	20	43	Mostly Cloudy
dne	December 23	51	27	24	48	Mostly Cloudy
We	December 30	21	11	10	28	Cloudy
	Average Usage	55	28	27		
	December 3	58	29	29	35	Mostly Cloudy
s/	December 10	55	29	26	49	Clear
Thursdays	December 17	53	26	27	31	Mostly Cloudy
nurs	December 24	72	36	36	38	Mostly Cloudy
È	December 31	16	9	7	25	Mostly Cloudy
	Average Usage	51	26	25		
	December 4	75	37	38	39	Clear
	December 11	87	44	43	43	Clear
ays	December 18	59	32	27	26	Mostly Cloudy
Fridays	December 25	86	46	40	34	Mostly Cloudy
	January 1	13	5	8	24	Mostly Cloudy
	Average Usage	64	33	31		
	December 5	98	48	50	36	Clear
s/	December 12	68	32	36	43	Cloudy
Saturdays	December 19	55	24	31	23	Clear
atuı	December 26	60	28	32	39	Mostly Cloudy
S	January 2	15	8	7	26	Clear
	Average Usage	59	28	31		
	December 6	109	46	63	35	Clear
S	December 13	37	20	17	51	Rain
day	December 20	94	45	49	40	Clear
Sundays	December 27	104	49	55	36	Cloudy
(0)	January 3	6	2	4	27	Cloudy
	Average Usage <sup>b</sup>	78	36	43		

<sup>&</sup>lt;sup>a</sup>This Monday average does not include December 21 due to rain and December 28 due to snow that greatly reduced usage on these days.

<sup>&</sup>lt;sup>b</sup>This Sunday average does not include December 13 due to rain that greatly reduced usage on this day.

Figure 3

DAILY VOLUME: NOVEMBER 30, 2015-JANUARY 3, 2016

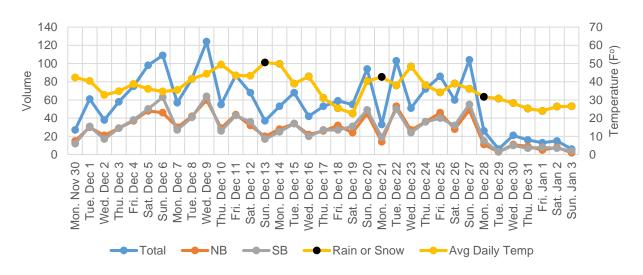
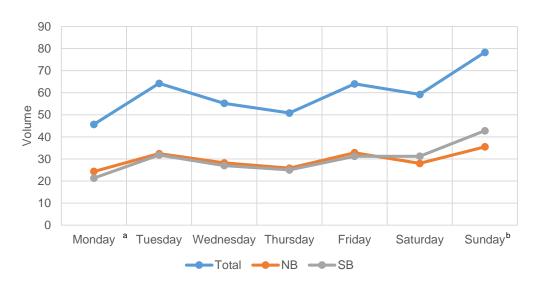


Figure 4

AVERAGE VOLUME BY DAY OF THE WEEK NOVEMBER 30, 2015-JANUARY 3, 2016



<sup>a</sup>Monday, December 21 and Monday, December 28 are not included due to rain and snow that greatly reduced volume on these days.

<sup>b</sup>Sunday, December 13 was not included due to rain that greatly reduced volume on this day.

Table 4

KEY STATISTICS: MONDAY, JANUARY 4 TO SUNDAY, JANUARY 31, 2016

Statistic	Total	Northbound	Westbound
Count Period Total	686	352	334
January 4-10 Total	158	80	78
Mon-Fri Total	120	61	59
Sat-Sun Total	38	19	19
January 11-17 Total	140	72	68
Mon-Fri Total	93	46	47
Sat-Sun Total	47	26	21
January 18-24 Total	153	79	74
Mon-Fri Total	85	43	42
Sat-Sun Total	68	36	32
January 25-31 Total	235	121	114
Mon-Fri Total	139	70	69
Sat-Sun Total	96	51	45
Percent of Usage by Direction		51.3	48.7
Weekly Average	148	75	72
Average on a Weekday <sup>a</sup>	21	11	11
Weekend Average	62	33	29

<sup>&</sup>lt;sup>a</sup>Count data does not include Friday, January 8 due to rain which greatly reduced usage on this day.

Table 5
COMPARISON OF DAILY COUNT DATA: JANUARY 4-31, 2016

	Date	Total	Northbound	Westbound	Avg Daily Temp	Weather
	January 4	13	7	6	27	Mostly Cloudy
3ys	January 11	13	7	6	5	Mostly Clear
Mondays	January 18	7	4	3	0	Clear
Мо	January 25	38	20	18	32	Partly Cloudy
	Average Usage	21	11	10		
	January 5	30	14	16	24	Clear
ays	January 12	14	7	7	8	Mostly Clear
sds	January 19	11	6	5	6	Clear
Tuesdays	January 26	20	10	10	30	Cloudy
	Average Usage	19	9	10		
Ø	January 6	40	21	19	30	Mostly Clear
Wednesdays	January 13	15	7	8	9	Mostly Cloudy
Jesi	January 20	25	13	12	16	Mostly Cloudy
/edi	January 27	25	13	12	28	Mostly Cloudy
>	Average Usage	26	14	13		
	January 7	25	12	13	37	Cloudy
ays	January 14	29	14	15	27	Clear
Thursdays	January 21	23	11	12	21	Mostly Cloudy
Thu	January 28	32	17	15	34	Cloudy
	Average Usage	27	14	14		
	January 8	12	7	5	39	Rain
ys	January 15	22	11	11	36	Mostly Cloudy
Fridays	January 22	19	9	10	26	Cloudy
Ē	January 29	24	10	14	25	Mostly Clear
	Average Usage <sup>a</sup>	22	10	12		
	January 9	25	12	13	34	Mostly Cloudy
Saturdays	January 16	40	22	18	23	Mostly Clear
turd	January 23	37	20	17	28	Mostly Cloudy
Sat	January 30	63	33	30	39	Mostly Clear
	Average Usage	41	22	20		
	January 10	13	7	6	12	Mostly Clear
ays	January 17	7	4	3	0	Clear
Sundays	January 24	31	16	15	26	Mostly Cloudy
Su	January 31	33	18	15	38	Mostly Cloudy
	Average Usage	21	11	10		

<sup>&</sup>lt;sup>a</sup>This Friday average does not include January 8 due to rain that greatly reduced volume on this day.

Figure 5

DAILY VOLUME: JANUARY 4-31, 2016

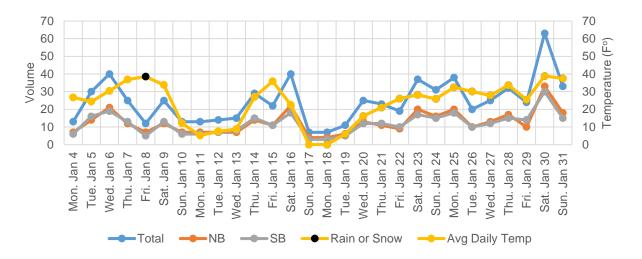
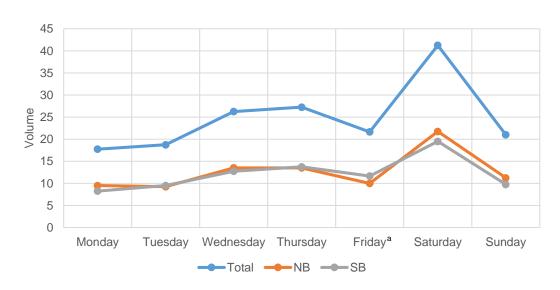


Figure 6

AVERAGE VOLUME BY DAY OF THE WEEK

JANUARY 4-31, 2016



<sup>a</sup>Friday, January 8 is not included due to rain that greatly reduced volume on this day.

Table 6
KEY STATISTICS: MONDAY, FEBRUARY 1 TO SUNDAY, FEBRUARY 28, 2016

Statistic	Total	Northbound	Westbound
Count Period Total	1,690	850	840
February 1-7 Total	367	182	185
Mon-Fri Total	181	89	92
Sat-Sun Total	186	93	93
February 8-14 Total	177	90	87
Mon-Fri Total	137	69	68
Sat-Sun Total	40	21	19
February 15-21 Total	481	247	234
Mon-Fri Total	201	102	99
Sat-Sun Total	280	145	135
February 22-28 Total	665	331	334
Mon-Fri Total	305	157	148
Sat-Sun Total	360	174	186
Percent of Usage by Direction		50.3	49.7
Weekly Average	333	169	164
Average on a Weekday	41	21	20
Weekend Average	217	108	108

Table 7

COMPARISON OF DAILY COUNT DATA: FEBRUARY 1-28, 2016

	Date	Total	Northbound	Westbound	Avg Daily Temp	Weather
	February 1	61	33	28	33	Clear
ays	February 8	35	19	16	28	Cloudy
Mondays	February 15	21	11	10	23	Mostly Cloudy
Mc	February 22	69	35	34	33	Cloudy
	Average Usage	47	25	22		1
	February 2	22	10	12	34	Mostly Cloudy
Tuesdays	February 9	28	13	15	17	Cloudy
spse	February 16	43	20	23	27	Mostly Cloudy
Tue	February 23	79	38	41	34	Cloudy
	Average Usage	43	20	23		
δ	February 3	23	12	11	34	Cloudy
Wednesdays	February 10	25	12	13	12	Mostly Cloudy
nes	February 17	45	23	22	23	Clear
/ed	February 24	48	23	25	35	Cloudy
>	Average Usage	35	18	18	-	-
	February 4	39	19	20	26	Cloudy
Thursdays	February 11	29	14	15	12	Clear
ırsd	February 18	38	20	18	29	Clear
Thu	February 25	47	26	21	33	Cloudy
	Average Usage	38	20	19	-	-
	February 5	36	15	21	28	Mostly Cloudy
ys	February 12	20	11	9	16	Mostly Cloudy
Fridays	February 19	54	28	26	46	Clear
Ē	February 26	62	35	27	30	Mostly Cloudy
	Average Usage	43	22	21		
	February 6	64	34	30	31	Mostly Cloudy
Saturdays	February 13	18	9	9	6	Clear
urd	February 20	206	109	97	46	Clear
Sat	February 27	188	93	95	42	Clear
	Average Usage	119	61	58		
	February 7	122	59	63	38	Clear
ays	February 14	22	12	10	15	Cloudy
Sundays	February 21	74	36	38	35	Mostly Cloudy
Su	February 28	172	81	91	50	Clear
	Average Usage	98	47	51		

Figure 7

DAILY VOLUME: FEBRUARY 1-28, 2016

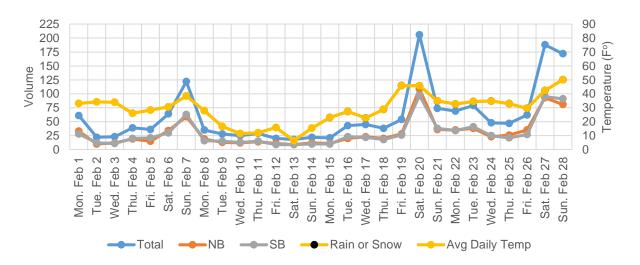
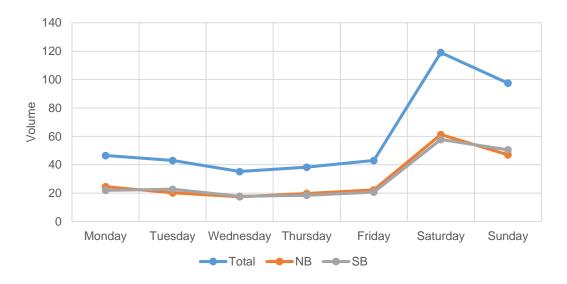


Figure 8

AVERAGE VOLUME BY DAY OF THE WEEK
FEBRUARY 1-28, 2016



#### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

## Pike Bike Trail south of Carthage College in the City of Kenosha

Monday, February 29 to Sunday, March 13, 2016

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Pike Bike Trail south of Carthage College in the City of Kenosha from Monday, February 29 to Sunday, March 13, 2016. Setup and removal of the counter occurred on Monday, February 29 and Monday, March 14. For this summary, the partial count data from March 14 was combined with the partial count data from February 29 to expand February 29 to a full day count. During the first week, seasonably cool temperatures kept daily volumes low, although these volumes may be typical for this time of the year. During the second week, several warm days—notably Monday, March 7 through Wednesday, March 9—greatly increased the volumes. Snow on Tuesday, March 1 and rain on Sunday, March 13 significantly reduced the counts, and these days are not included in the weekday and weekend averages shown in Table 1 or in the average Tuesday and Sunday usage shown in Table 2 and in Figure 4. Average daily volumes show a large increase from Monday to Tuesday—though this is impacted by the very high count that occurred on March 8 due to the warm temperature—and a relatively similar average for the rest of the week. Due to the variation in temperatures between the two weeks and days of inclement weather, the average daily volume from this count session is not indicative of typical use. This count period did however demonstrate the impact that temperature can have on the counts as seen by the typical volumes when temperatures remained seasonably cool and by the significant increase in volume that can occur when temperatures rise much higher than normal.

Figure 1

AREA MAP OF COUNT LOCATION

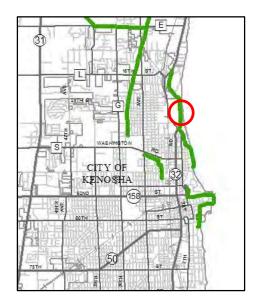


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, FEBRUARY 29 TO SUNDAY, MARCH 13, 2016

Statistic	Total	Northbound	Southbound
Two-week Period Total	2,108	996	1,022
February 29-March 6 Total	458	225	233
Mon-Fri Total	244	122	122
Sat-Sun Total	214	103	111
March 7-13 Total	1,560	771	789
Mon-Fri Total	1,260	620	640
Sat-Sun Total	300	151	149
Percent of Usage by Direction		49.4	50.6
Weekly Average	1,009	498	511
Average on a Weekday <sup>a</sup>	166	82	84
Weekend Average <sup>b</sup>	156	77	79

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, March 1 was not included in this weekday average due to snow that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>Count data from Sunday, March 13 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: FEBRUARY 29-MARCH 13, 2016

Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
February 29	92	47	45	34	Mostly Cloudy
March 7	300	147	153	54	Clear
Average Monday Usage	196	97	99		

Tuesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 1	8	2	6	22	Snow
March 8	451	224	227	63	Cloudy
Average Tuesday Usage <sup>a</sup>	451	224	227		

Wednesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 2	23	14	9	17	Clear
March 9	247	119	128	58	Mostly Cloudy
Average Wednesday Usage.	135	67	69		

Thursday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 3	24	12	12	28	Mostly Cloudy
March 10	133	65	68	43	Mostly Cloudy
Average Thursday Usage	79	39	40		

Friday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 4	97	47	50	26	Clear
March 11	129	65	64	37	Clear
Average Friday Usage	113	56	57		

Saturday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 5	85	39	46	34	Partly Cloudy
March 12	255	129	126	44	Partly Cloudy
Average Saturday Usage	170	84	86		

Sunday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 6	129	64	65	40	Mostly Cloudy
March 13	45	22	23	45	Rain
Average Sunday Usageb	129	64	65		

<sup>&</sup>lt;sup>a</sup>This Tuesday average does not include March 1 due to snow that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Sunday average does not include March 13 due to rain that greatly reduced usage on this day.

Figure 3

DAILY VOLUME: FEBRUARY 29-MARCH 13, 2016

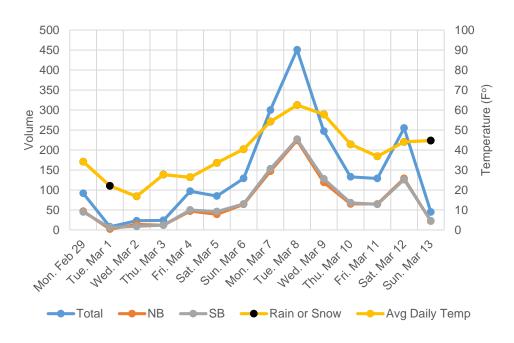
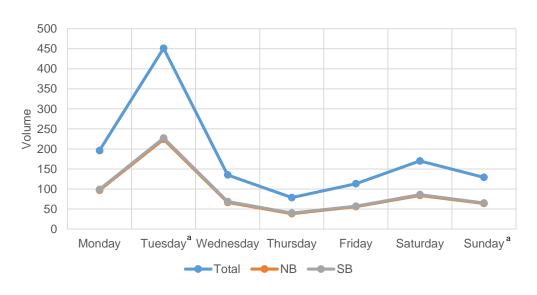


Figure 4

AVERAGE VOLUME BY DAY OF THE WEEK



<sup>&</sup>lt;sup>a</sup>Tuesday, March 1 and Sunday, March 13 are not included due to snow and rain that greatly reduced usage on these days.

#### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

# Kenosha County South Trail north of Springbrook Road in the Village of Pleasant Prairie

Monday, February 29 to Sunday, March 13, 2016

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Kenosha County South Trail north of Springbrook Road in the Village of Pleasant Prairie from Monday, February 29 to Sunday, March 13, 2016. Setup and removal of the counter occurred on Monday, February 29 and Monday, March 14. For this summary, the partial count data from March 14 was combined with the partial count data from February 29 to expand February 29 to a full day count. There were considerable temperature variations between the two weeks of the count period. Seasonably cool temperatures kept volumes low during the first week while much warmer than normal temperatures caused a significant increase in volumes during the second week, especially on Monday, March 7 through Wednesday, March 9. Snow on Tuesday, March 1 and rain on Sunday, March 13 greatly reduced the counts, and these days are not included in the weekday and weekend averages shown in Table 1 or in the average Tuesday and Sunday usage shown in Table 2 and in Figure 4. Average daily volumes show a large increase from Monday to Tuesday due to the warm temperatures on March 8, a drop in volumes on Wednesday and Thursday, and a steady increase on Friday and through the weekend. Due to the variation in temperatures between the two weeks and days of inclement weather, the average daily volume from this count session is not indicative of typical use. This count period did however demonstrate the impact of temperature change on the counts as seen by the typical volumes when temperatures remained seasonably cool as well as by the significant increase in volume that can occur when temperatures rise much higher than normal.

Figure 1

AREA MAP OF COUNT LOCATION

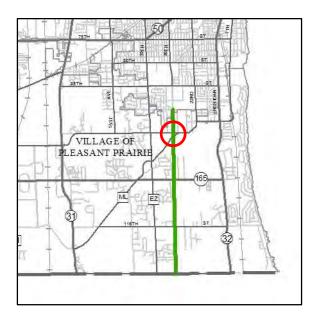


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, FEBRUARY 29 TO SUNDAY, MARCH 13, 2016

Statistic	Total	Northbound	Southbound
Two-week Period Total	1,583	803	780
February 29-March 6 Total	403	206	197
Mon-Fri Total	189	95	94
Sat-Sun Total	214	111	103
March 7-13 Total	1,180	597	583
Mon-Fri Total	896	448	448
Sat-Sun Total	284	149	135
Percent of Usage by Direction		50.7	49.3
Weekly Average	792	402	390
Average on a Weekday <sup>a</sup>	120	60	60
Weekend Average <sup>b</sup>	156	82	75

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, March 1 was not included in this weekday average due to snow that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>Count data from Sunday, March 13 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: FEBRUARY 29-MARCH 13, 2016

Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
February 29	88	46	42	34	Mostly Cloudy
March 7	237	123	114	54	Clear
Average Monday Usage	163	85	78		

Tuesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 1	9	4	5	22	Snow
March 8	299	152	147	63	Cloudy
Average Tuesday Usagea	299	152	147		

Wednesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 2	26	15	11	17	Clear
March 9	165	80	85	58	Mostly Cloudy
Average Wednesday Usage.	96	48	48		

Thursday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 3	20	9	11	28	Mostly Cloudy
March 10	83	42	41	43	Mostly Cloudy
Average Thursday Usage	52	26	26		

Friday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 4	46	21	25	26	Clear
March 11	112	51	61	37	Clear
Average Friday Usage	79	36	43		

Saturday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 5	38	19	19	34	Partly Cloudy
March 12	255	134	121	44	Partly Cloudy
Average Saturday Usage	147	77	70		

Sunday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 6	176	92	84	40	Mostly Cloudy
March 13	29	15	14	45	Rain
Average Sunday Usageb	176	92	84		

<sup>&</sup>lt;sup>a</sup>This Tuesday average does not include March 1 due to snow that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Sunday average does not include March 13 due to rain that greatly reduced usage on this day.

Figure 3

DAILY VOLUME: FEBRUARY 29-MARCH 13, 2016

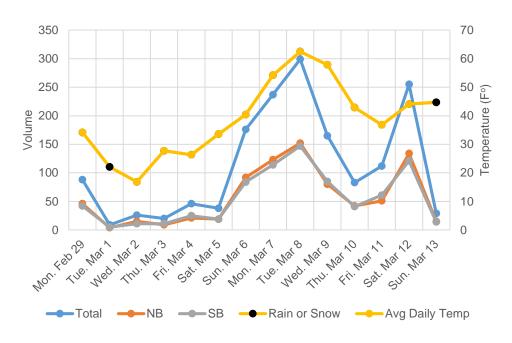
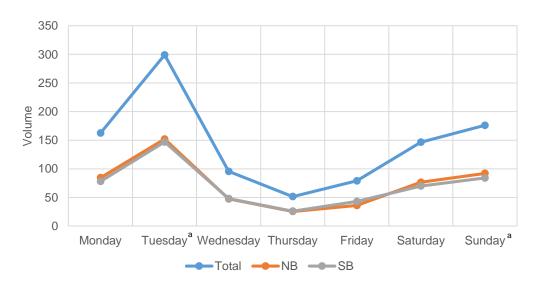


Figure 4

AVERAGE VOLUME BY DAY OF THE WEEK



<sup>&</sup>lt;sup>a</sup>Tuesday, March 1 and Sunday, March 13 are not included due to snow and rain that greatly reduced usage on these days.

### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

# Kenosha County South Trail south of 116<sup>th</sup> Street in the Village of Pleasant Prairie

Monday, February 29 to Sunday, March 13, 2016

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the Kenosha County South Trail south of 116th Street in the Village of Pleasant Prairie from Monday, February 29 to Sunday, March 13, 2016. Setup and removal of the counter occurred on Monday, February 29 and Monday, March 14. For this summary, the partial count data from March 14 was combined with the partial count data from February 29 to expand February 29 to a full day count. This count period had a substantial change in temperatures that impacted the daily volume totals. The first week had seasonably cool temperatures with volumes that were likely typical for this time of year. A significant warmup in temperatures, especially on Monday, March 7 through Wednesday, March 9 greatly increased the counts during the second week. Snow on Tuesday, March 1 and rain on Sunday, March 13 reduced the volumes, and are not included in the weekday and weekend averages shown in Table 1 or in the average Tuesday and Sunday usage shown in Table 2 and in Figure 4. Average daily volumes show a large increase from Monday to Tuesday due to the warm temperatures on March 8, a drop in volumes on Wednesday and Thursday, and a steady increase on Friday and into the weekend. Due to the variation in temperatures between the two weeks and days of inclement weather, the average daily volume from this count session is not indicative of typical use, but this count period did demonstrate the impact that temperature can have on the counts. With this count being just a half mile from the Illinois state line, it provides an estimate of volume between the states, but a fairly equal directional split does not necessarily indicate if more users were entering or leaving Wisconsin from the adjoining trail in Illinois.

Figure 1

AREA MAP OF COUNT LOCATION

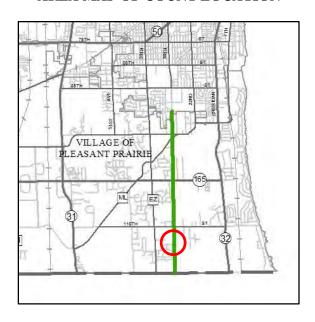


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, FEBRUARY 29 TO SUNDAY, MARCH 13, 2016

Statistic	Total	Northbound	Southbound
Two-week Period Total	1,382	718	664
February 29-March 6 Total	369	194	175
Mon-Fri Total	181	94	87
Sat-Sun Total	188	100	88
March 7-13 Total	1,013	524	489
Mon-Fri Total	761	391	370
Sat-Sun Total	252	133	119
Percent of Usage by Direction		52.0	48.0
Weekly Average	691	359	332
Average on a Weekday <sup>a</sup>	104	53	50
Weekend Averageb	140	74	66

<sup>&</sup>lt;sup>a</sup>Count data from Tuesday, March 1 was not included in this weekday average due to snow that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>Count data from Sunday, March 13 was not included in this weekend average due to rain that greatly reduced usage on this day.

Table 2
COMPARISON OF DAILY COUNT DATA: FEBRUARY 29-MARCH 13, 2016

Monday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
February 29	89	43	46	34	Mostly Cloudy
March 7	253	132	121	54	Clear
Average Monday Usage	171	88	84		

Tuesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 1	7	4	3	22	Snow
March 8	193	97	96	63	Cloudy
Average Tuesday Usagea	193	97	96		

Wednesday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 2	34	20	14	17	Clear
March 9	120	60	60	58	Mostly Cloudy
Average Wednesday Usage.	77	40	37		

Thursday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 3	15	9	6	28	Mostly Cloudy
March 10	81	42	39	43	Mostly Cloudy
Average Thursday Usage	48	26	23		

Friday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 4	36	18	18	26	Clear
March 11	114	60	54	37	Clear
Average Friday Usage	75	39	36		

Saturday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 5	52	24	28	34	Partly Cloudy
March 12	231	122	109	44	Partly Cloudy
Average Saturday Usage	142	73	69	-	

Sunday Comparison	Total	Northbound	Southbound	Avg Daily Temp	Weather
March 6	136	76	60	40	Mostly Cloudy
March 13	21	11	10	45	Rain
Average Sunday Usageb	136	76	60		

<sup>&</sup>lt;sup>a</sup>This Tuesday average does not include March 1 due to snow that greatly reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Sunday average does not include March 13 due to rain that greatly reduced usage on this day.

Figure 3

DAILY VOLUME: FEBRUARY 29-MARCH 13, 2016

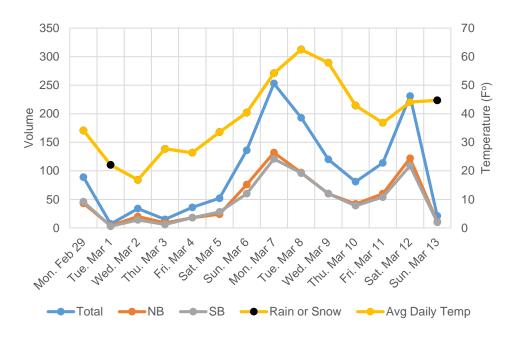
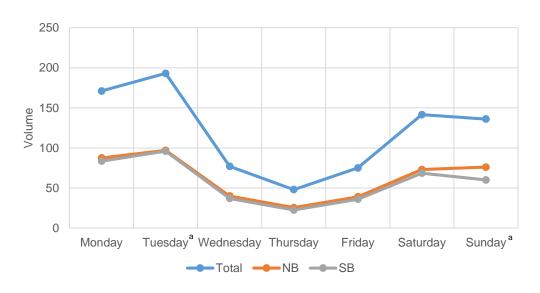


Figure 4

AVERAGE VOLUME BY DAY OF THE WEEK



<sup>&</sup>lt;sup>a</sup>Tuesday, March 1 and Sunday, March 13 are not included due to snow and rain that greatly reduced usage on these days.

### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

# New Berlin Trail at 124<sup>th</sup> Street in the City of New Berlin

# Monday, March 14 to Sunday, March 27, 2016

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the New Berlin Trail at 124<sup>th</sup> Street in the City of New Berlin from Monday, March 14 to Sunday, March 27, 2016. Setup and removal of the counter occurred on Monday, March 14 and Monday, March 28. For this summary, the partial count data from March 28 was combined with the partial count data from March 14 to expand March 14 to a full day count. Although average daily temperatures were generally steady in the 30s and 40s, the average daily volumes tended to vary throughout the week. During the weekdays, volumes often alternated between increases and decreases day-to-day. Average daily volume rose slightly from Monday to Tuesday, noticeably dropped on Wednesday, increased again on Thursday, and dropped slightly on Friday. Rain on Wednesday, March 23 and on Thursday, March 24 reduced the counts, and these days are not included in the weekday and weekend averages shown in Table 1 or in the average Wednesday and Thursday usage shown in Table 2 and in Figure 4. Each weekend had one day with a significant increase in volume and a more typical volume on the other day. Sunday, March 20 and Saturday, March 26 had the highest counts of the two-week count period. This average daily volume trend was similar to those on the New Berlin Trail west of Moorland Road and east of Springdale Road that were also counted during this two-week period.

Figure 1

AREA MAP OF COUNT LOCATION

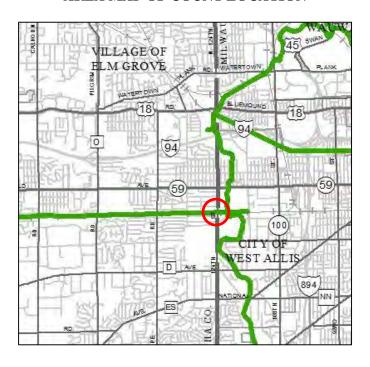


Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, MARCH 14 TO SUNDAY, MARCH 27, 2016

Statistic	Total	Eastbound	Westbound
Two-week Period Total	1,717	835	882
March 14-20 Total	898	439	459
Mon-Fri Total	442	219	223
Sat-Sun Total	456	220	236
March 21-27 Total	819	396	423
Mon-Fri Total	421	196	225
Sat-Sun Total	398	200	198
Percent of Usage by Direction		48.6	51.4
Weekly Average	859	418	441
Average on a Weekday <sup>a</sup>	105	51	54
Weekend Average	214	105	109

<sup>&</sup>lt;sup>a</sup>Wednesday, March 23 and Thursday, March 24 are not included in this average due to rain that reduced the counts.

Table 2
COMPARISON OF DAILY COUNT DATA: MARCH 14-27, 2016

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 14	154	79	75	44	Cloudy
March 21	92	45	47	35	Clear
Average Monday Usage	123	62	61		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 15	91	43	48	42	Mostly Cloudy
March 22	199	92	107	44	Mostly Cloudy
Average Tuesday Usage	145	68	78		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 16	21	13	8	46	Cloudy
March 23	14	6	8	33	Rain
Average Wednesday Usage <sup>a</sup>	21	13	8		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 17	103	48	55	42	Mostly Cloudy
March 24	11	4	7	29	Rain
Average Thursday Usage <sup>b</sup>	103	48	55		

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 18	73	36	37	35	Cloudy
March 25	105	49	56	31	Clear
Average Friday Usage	89	43	47		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 19	129	66	63	31	Cloudy
March 26	308	157	151	37	Mostly Cloudy
Average Saturday Usage	219	112	107		

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 20	327	154	173	33	Mostly Cloudy
March 27	90	43	47	40	Mostly Cloudy
Average Sunday Usage	209	99	110		

<sup>&</sup>lt;sup>a</sup>This Wednesday average does not include March 23 due to rain that reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Thursday average does not include March 24 due to rain that reduced usage on this day.

Figure 3

DAILY VOLUME: MARCH 14-27, 2016

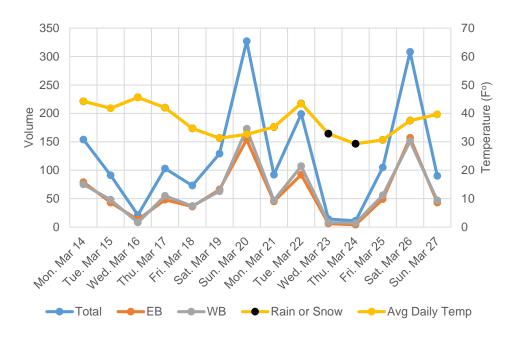
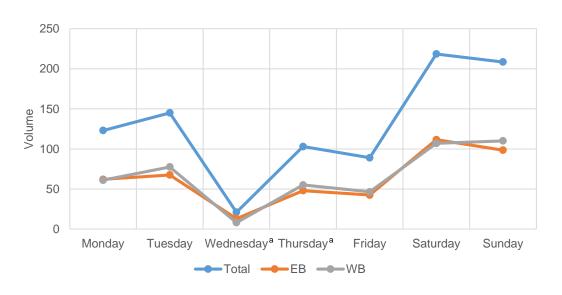


Figure 4

AVERAGE VOLUME BY DAY



<sup>&</sup>lt;sup>a</sup>Wednesday, March 23 and Thursday, March 24 are not included due to rain that reduced usage on these days.

#### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

# New Berlin Trail west of Moorland Road in the City of New Berlin

Monday, March 14 to Sunday, March 27, 2016

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the New Berlin Trail west of Moorland Road in the City of New Berlin from Monday, March 14 to Sunday, March 27, 2016. Setup and removal of the counter occurred on Monday, March 14 and Monday, March 28. For this summary, the partial count data from March 28 was combined with the partial count data from March 14 to expand March 14 to a full day count. Although average daily temperatures were generally steady in the 30s and 40s, the average daily volumes tended to vary throughout the week. During the weekdays, volumes often alternated between increases and decreases day-to-day. Average daily volume was almost equal on Monday and Tuesday, noticeably dropped on Wednesday, increased again on Thursday, and declined on Friday. Rain on Wednesday, March 23 and on Thursday, March 24 reduced the counts, and these days are not included in the weekday and weekend averages shown in Table 1 or in the average Wednesday and Thursday usage shown in Table 2 and in Figure 4. Each weekend had one day with a significant increase in volume and a more typical volume on the other day. Sunday, March 20 and Saturday, March 26 had the highest counts of the two-week count period. This average daily volume trend was similar to those on the New Berlin Trail at 124<sup>th</sup> Street and east of Springdale Road that were also counted during this two-week period.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, MARCH 14 TO SUNDAY, MARCH 27, 2016

Statistic	Total	Eastbound	Westbound
Two-week Period Total	1,546	793	753
March 14-20 Total	830	426	404
Mon-Fri Total	486	247	239
Sat-Sun Total	344	179	165
March 21-27 Total	716	367	349
Mon-Fri Total	353	182	171
Sat-Sun Total	363	185	178
Percent of Usage by Direction		51.3	48.7
Weekly Average	773	397	377
Average on a Weekday <sup>a</sup>	103	53	50
Weekend Average	177	91	86

<sup>&</sup>lt;sup>a</sup>Wednesday, March 23 and Thursday, March 24 are not included in this average due to rain that reduced the counts.

Table 2
COMPARISON OF DAILY COUNT DATA: MARCH 14-27, 2016

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 14	170	90	80	44	Cloudy
March 21	106	54	52	35	Clear
Average Monday Usage	138	72	66		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 15	118	56	62	42	Mostly Cloudy
March 22	164	89	75	44	Mostly Cloudy
Average Tuesday Usage	141	73	69		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 16	40	24	16	46	Cloudy
March 23	11	6	5	33	Rain
Average Wednesday Usage <sup>a</sup>	40	24	16		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 17	95	46	49	42	Mostly Cloudy
March 24	4	2	2	29	Rain
Average Thursday Usage <sup>b</sup>	95	46	49		

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 18	63	31	32	35	Cloudy
March 25	68	31	37	31	Clear
Average Friday Usage	66	31	35		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 19	62	32	30	31	Cloudy
March 26	279	144	135	37	Mostly Cloudy
Average Saturday Usage	171	88	83	-	

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 20	282	147	135	33	Mostly Cloudy
March 27	84	41	43	40	Mostly Cloudy
Average Sunday Usage	183	94	89	-	

<sup>&</sup>lt;sup>a</sup>This Wednesday average does not include March 23 due to rain that reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Thursday average does not include March 24 due to rain that reduced usage on this day.

Figure 3

DAILY VOLUME: MARCH 14-27, 2016

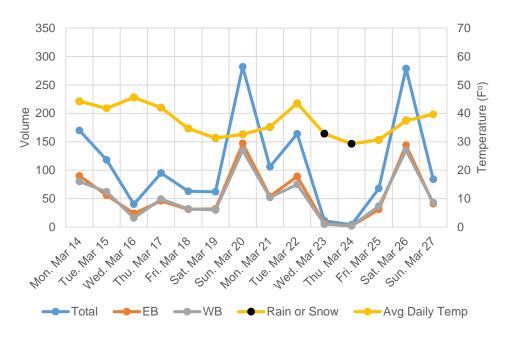
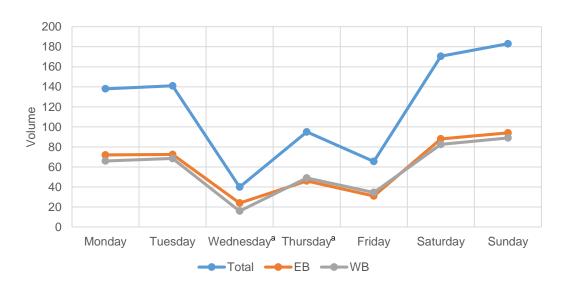


Figure 4

AVERAGE VOLUME BY DAY



<sup>a</sup>Wednesday, March 23 and Thursday, March 24 are not included due to rain that reduced usage on these days.

### BICYCLE AND PEDESTRIAN COUNT DATA SUMMARY

# New Berlin Trail east of Springdale Road in the City of New Berlin

## Monday, March 14 to Sunday, March 27, 2016

#### **COUNT DATA SUMMARY**

Bicycle and pedestrian counts were taken on the New Berlin Trail east of Springdale Road in the City of New Berlin from Monday, March 14 to Sunday, March 27, 2016. Setup and removal of the counter occurred on Monday, March 14 and Monday, March 28. For this summary, the partial count data from March 28 was combined with the partial count data from March 14 to expand March 14 to a full day count. Although average daily temperatures were generally steady in the 30s and 40s, the average daily volumes tended to vary throughout the week. During the weekdays, volumes often alternated between increases and decreases day-to-day. Average daily volume increased from Monday to Tuesday, noticeably dropped on Wednesday, increased again on Thursday, and declined on Friday. Rain on Wednesday, March 23 and on Thursday, March 24 reduced the counts, and these days are not included in the weekday and weekend averages shown in Table 1 or in the average Wednesday and Thursday usage shown in Table 2 and in Figure 4. Each weekend had one day with a significant increase in volume and a more typical volume on the other day. Sunday, March 20 and Saturday, March 26 had the highest counts of the two-week count period. This average daily volume trend was similar to those on the New Berlin Trail at 124<sup>th</sup> Street and west of Moorland Road that were also counted during this two-week period.

Figure 1

AREA MAP OF COUNT LOCATION



Figure 2
PLACEMENT OF COUNTER AT COUNT SITE



Table 1
KEY STATISTICS: MONDAY, MARCH 14 TO SUNDAY, MARCH 27, 2016

Statistic	Total	Eastbound	Westbound
Two-week Period Total	1,610	810	800
March 14-20 Total	782	394	388
Mon-Fri Total	369	183	186
Sat-Sun Total	413	211	202
March 21-27 Total	828	416	412
Mon-Fri Total	434	217	217
Sat-Sun Total	394	199	195
Percent of Usage by Direction		50.3	49.7
Weekly Average	805	405	400
Average on a Weekday <sup>a</sup>	96	48	48
Weekend Average	202	103	99

<sup>&</sup>lt;sup>a</sup>Wednesday, March 23 and Thursday, March 24 are not included in this average due to rain that reduced the counts.

Table 2
COMPARISON OF DAILY COUNT DATA: MARCH 14-27, 2016

Monday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 14	122	62	60	44	Cloudy
March 21	115	58	57	35	Clear
Average Monday Usage	119	60	59		

Tuesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 15	66	33	33	42	Mostly Cloudy
March 22	209	105	104	44	Mostly Cloudy
Average Tuesday Usage	138	69	69		

Wednesday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 16	38	19	19	46	Cloudy
March 23	18	8	10	33	Rain
Average Wednesday Usage <sup>a</sup>	38	19	19		

Thursday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 17	95	46	49	42	Mostly Cloudy
March 24	14	8	6	29	Rain
Average Thursday Usageb	95	46	49	-	

Friday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 18	48	23	25	35	Cloudy
March 25	78	38	40	31	Clear
Average Friday Usage	63	31	33		

Saturday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 19	104	51	53	31	Cloudy
March 26	307	154	153	37	Mostly Cloudy
Average Saturday Usage	206	103	103	-	

Sunday Comparison	Total	Eastbound	Westbound	Avg Daily Temp	Weather
March 20	309	160	149	33	Mostly Cloudy
March 27	87	45	42	40	Mostly Cloudy
Average Sunday Usage	198	103	96	-	

<sup>&</sup>lt;sup>a</sup>This Wednesday average does not include March 23 due to rain that reduced usage on this day.

<sup>&</sup>lt;sup>b</sup>This Thursday average does not include March 24 due to rain that reduced usage on this day.

Figure 3

DAILY VOLUME: MARCH 14-27, 2016

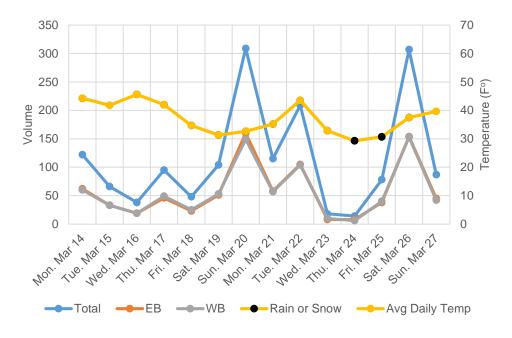
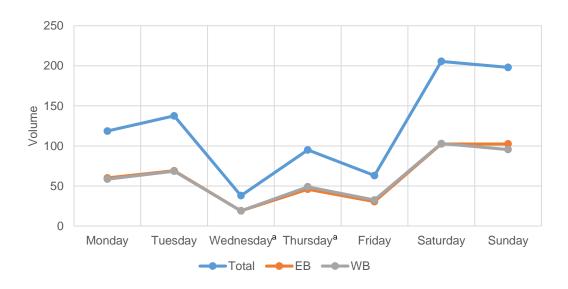


Figure 4

AVERAGE VOLUME BY DAY



<sup>a</sup>Wednesday, March 23 and Thursday, March 24 are not included due to rain that reduced usage on these days.