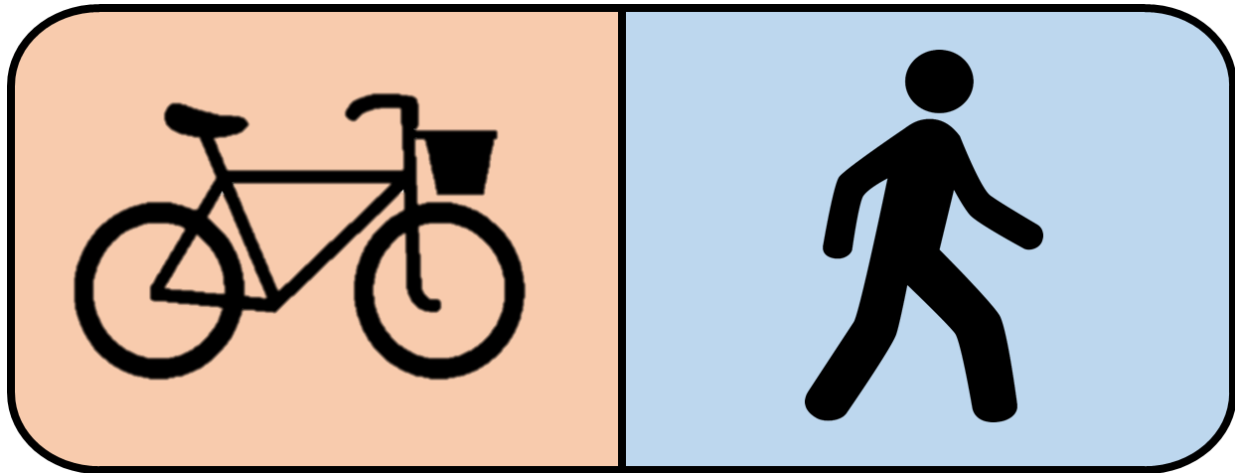


Bicycle and Pedestrian Counts

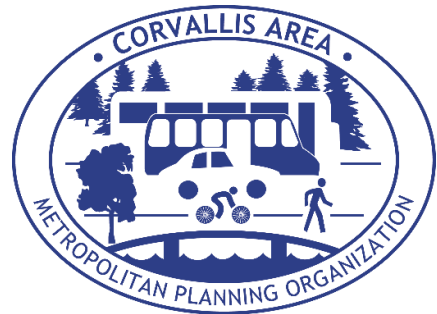


Summer Report for Eric E. Austin Memorial Bypass

October 6, 2021

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Introduction

Purpose of this Report

The purpose of this report is to provide an overview of bicycle and pedestrian count data collected by the Corvallis Area Metropolitan Planning Organization's (CAMPO) automated counter. This report covers six weeks of counting on the Eric E. Austin Memorial Bypass (formerly the Marys River/Crystal Lake Multi-Use Path) in Corvallis. The six week reporting period covered in this report began on Monday, June 28, 2021 and extended through Sunday, August 8, 2021. This is the second deployment of CAMPO's counting equipment at this location. CAMPO staff produced two reports on the first round of bicycle and pedestrian counts, links to those reports can be found here:

- [Two Week Report \(Nov. 23 to Dec. 6\)](#)
- [Eight Week Report \(Nov. 23 to Jan. 17\)](#)

Information about bicycle and pedestrian counts at other locations can be found [HERE](#).

Part four of the report includes a seasonal comparison of count numbers during the winter and summer.

Counter Equipment and Set Up

In late 2019 CAMPO purchased two mobile MULTI bicycle/ pedestrian counting units. Each counting unit is comprised of (1) a pyro-box which utilizes passive infrared technology to detect the body heat of passing cyclists and pedestrians and (2) pneumatic tubes which capture air pulses generated by bicycles passing over them. The different types of trips are classified using an intelligent device called the Smart Connect which is capable of differentiating between pedestrians and cyclists. Data is then collected and stored to be analyzed with Eco-Counter software.¹

Figure 1 and **Figure 2** show the counter equipment set up in the field.

Figure 1: Counter Set Up



Figure 2: Pyro Box on Pole



¹ <https://www.eco-compteur.com/en/produits/multi-range/mobile-multi/>

Count Location

The automated counting equipment was installed at the south entrance to the Eric E. Austin Memorial Bypass. Count equipment was set up across the path in order to log the number of people walking and riding bikes and collect information on direction of travel. The count location can be seen in the map below (**Figure 3**).

Figure 3: Count Location



Why Count People Walking and Riding Bikes?

Program Purpose: Develop a better understanding of how people walking and riding bikes are traveling throughout the CAMPO planning area.

Program Goals:

1. Measure the long-term usage of bicycle and pedestrian facilities (including changes in use over time)
2. Evaluate the impact of projects
3. Understand safety trends
4. Help prioritize long-range infrastructure investment

What is in this Document?

The remainder of this document is broken into four parts:

- **Part 1 – Six Week Summer Data** provides summary information covering the entire six week counting period and highlights several key statistics
- **Part 2 – Daily & Weekly Totals** focuses on daily and weekly count totals including both aggregate data and information arranged in two week intervals
- **Part 3 – Weather Conditions** explores daily temperature and compares daily high temperature with total number of counts
- **Part 4 – Seasonal Comparison** focuses on changes in the number of people walking and riding bikes during winter and summer

Part 1 – Six Week Summer Data

Figure 4: Six Week Summer Data




	Combined (Walking + Biking) 	People Walking 	People Riding Bikes 
TOTAL	15,028	4,613	10,415
PERCENTAGE	100%	30.7%	69.3%
TOTAL NORTH BOUND	7,972	2,618	5,354
TOTAL SOUTH BOUND	7,056	1,995	5,061
% NORTH BOUND	53.0%		
% SOUTH BOUND	47.0%		
WEEKLY AVERAGE	2505	769	1736
DAILY AVERAGE	358	110	248

Figure 5: Weather Information²

Average Daily High Temperature During Reporting Period	Average Daily Low Temperature During Reporting Period
85.7 degrees	55.8 degrees

² Weather data is from weather.com

Information on daily precipitation was initially collected for the two weeks during the winter, however, additional data is no longer available at this point in time and therefore not included in this report.

Part 2 – Daily & Weekly Totals

Figure 6: Daily Count Totals –Six Week Period

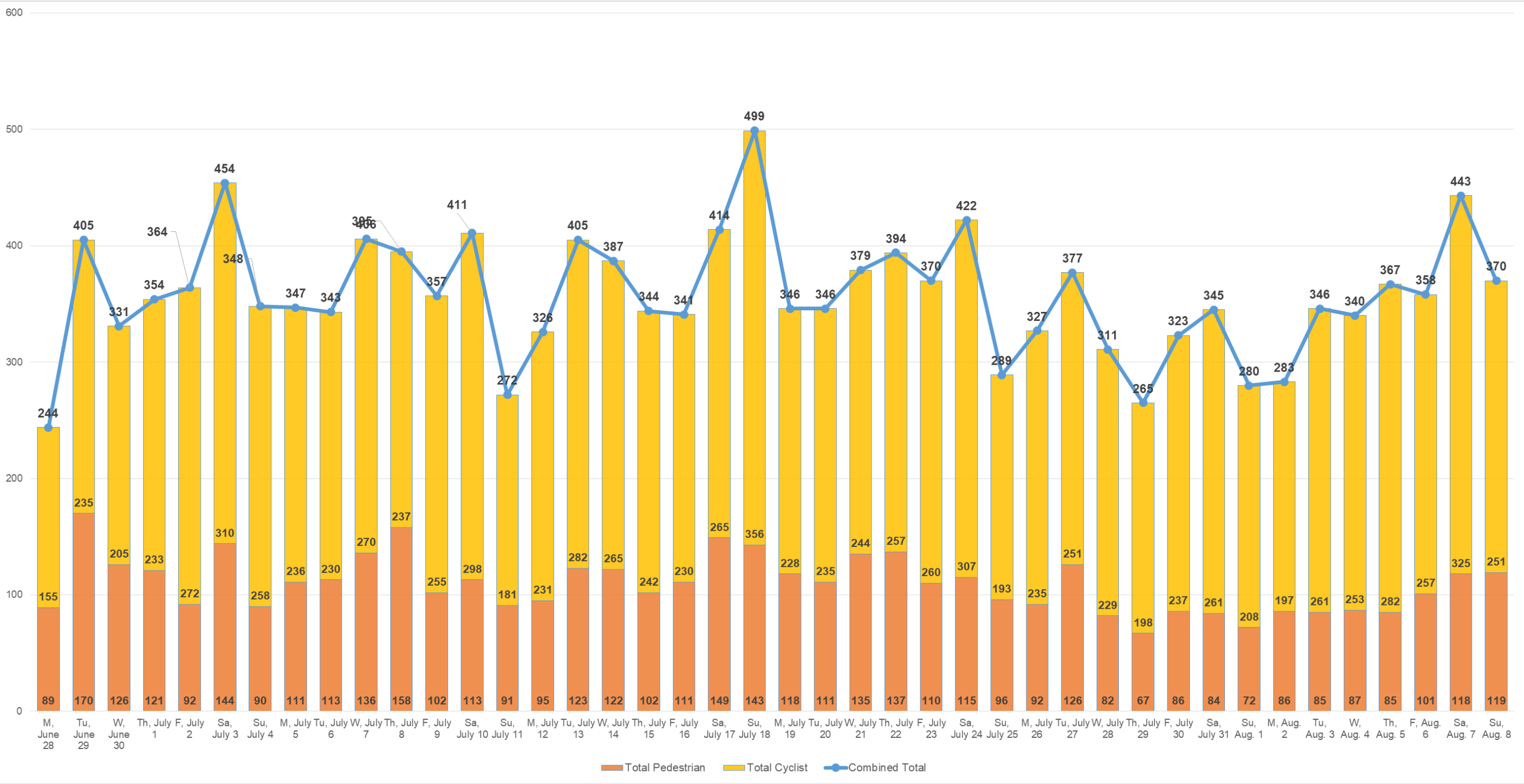
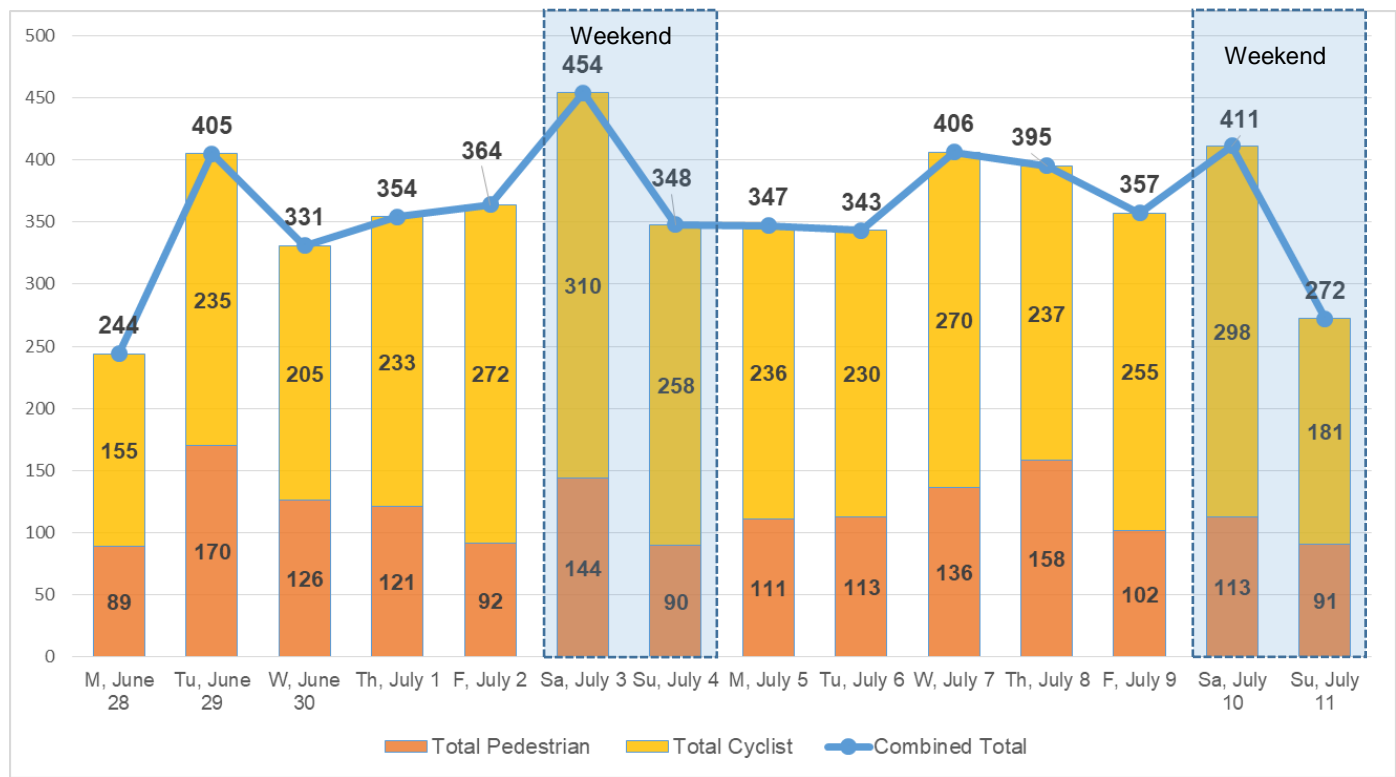


Figure 7: Daily Count Totals –June 28 through July 11



Note, the tables displayed on this page depict the same data captured in **Figure 6**. The information here simply breaks the data into two week intervals for viewing purposes.

Figure 8: Daily Count Totals –July 12 through July 25

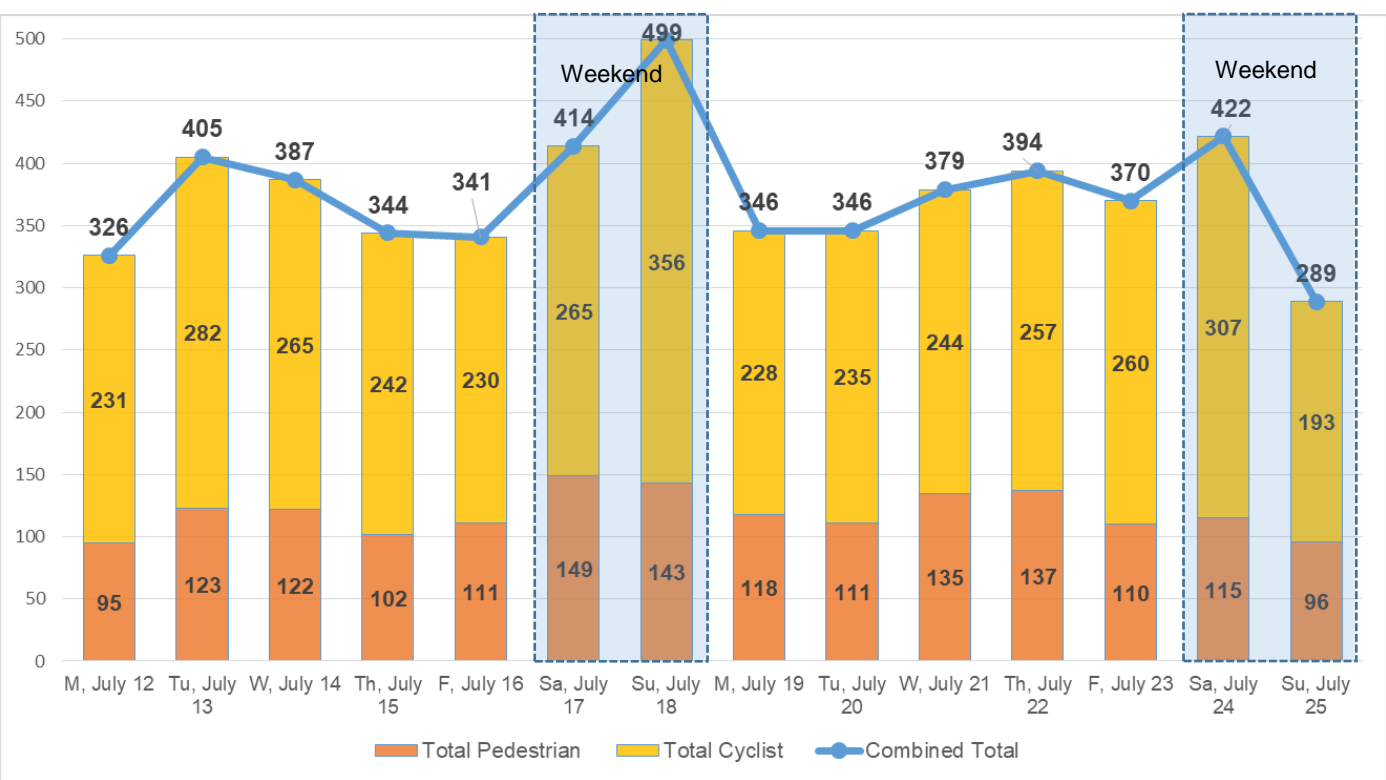
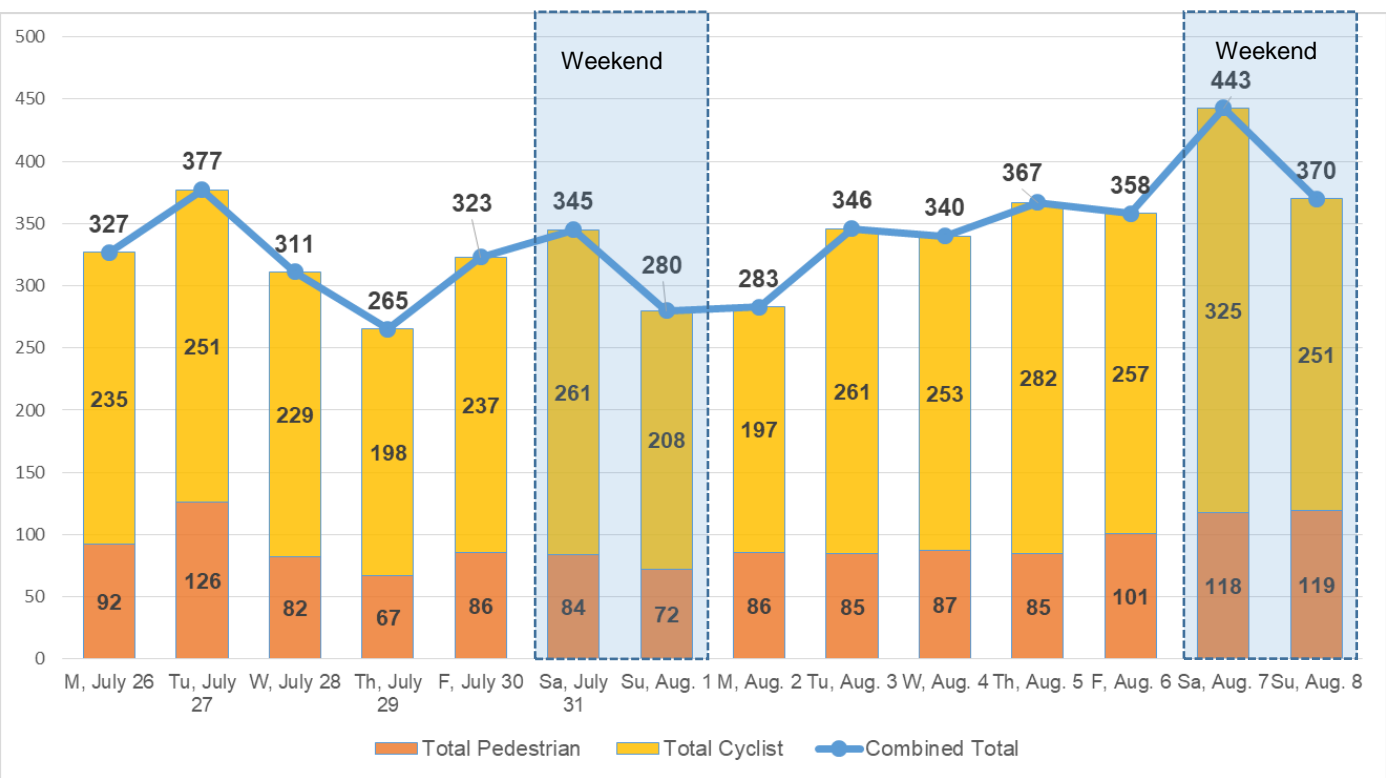


Figure 9: Daily Count Totals –July 26 through Aug. 8



Part 3 – Weather Conditions

Figure 10: Daily High Temperature (Fahrenheit) and Total Counts

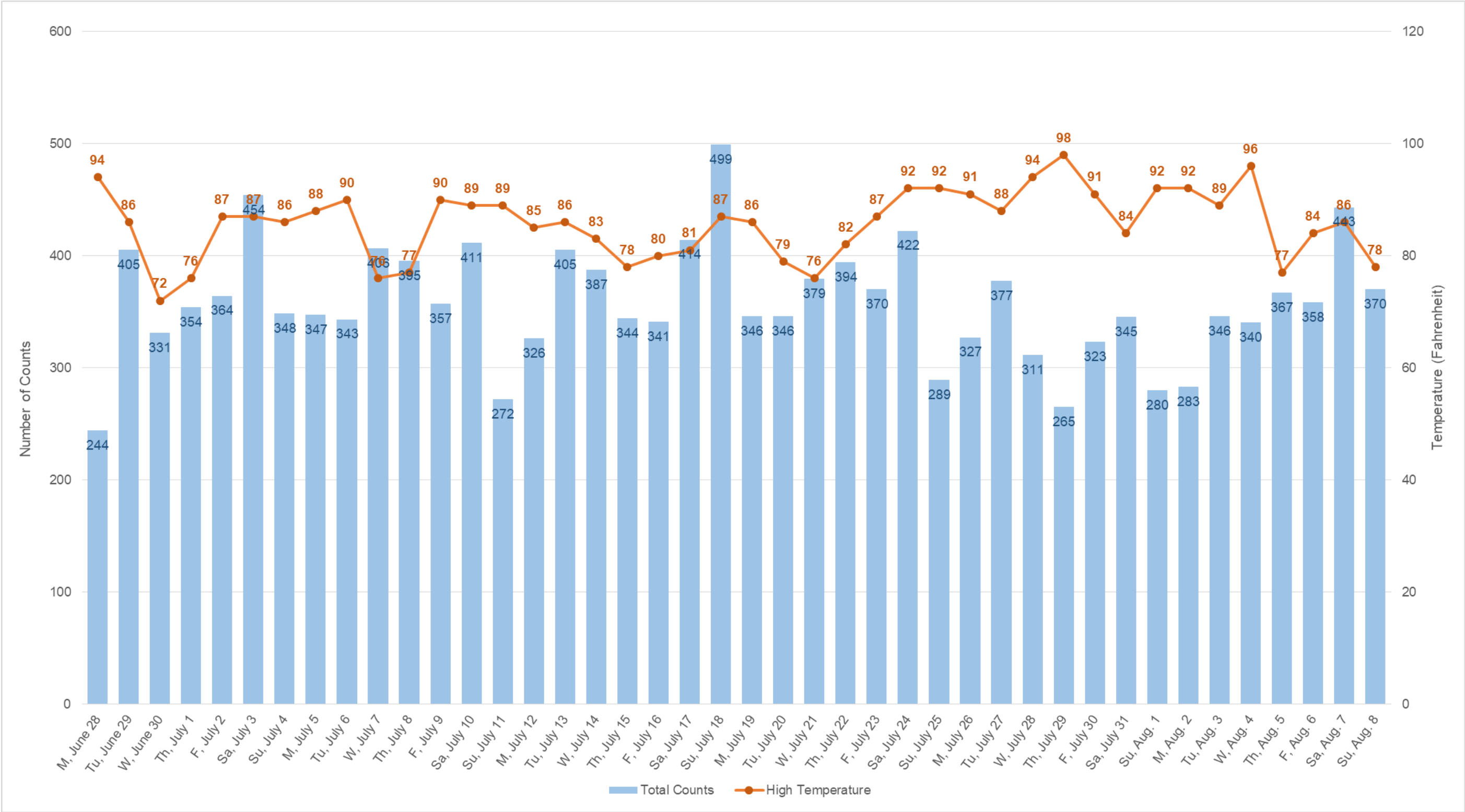
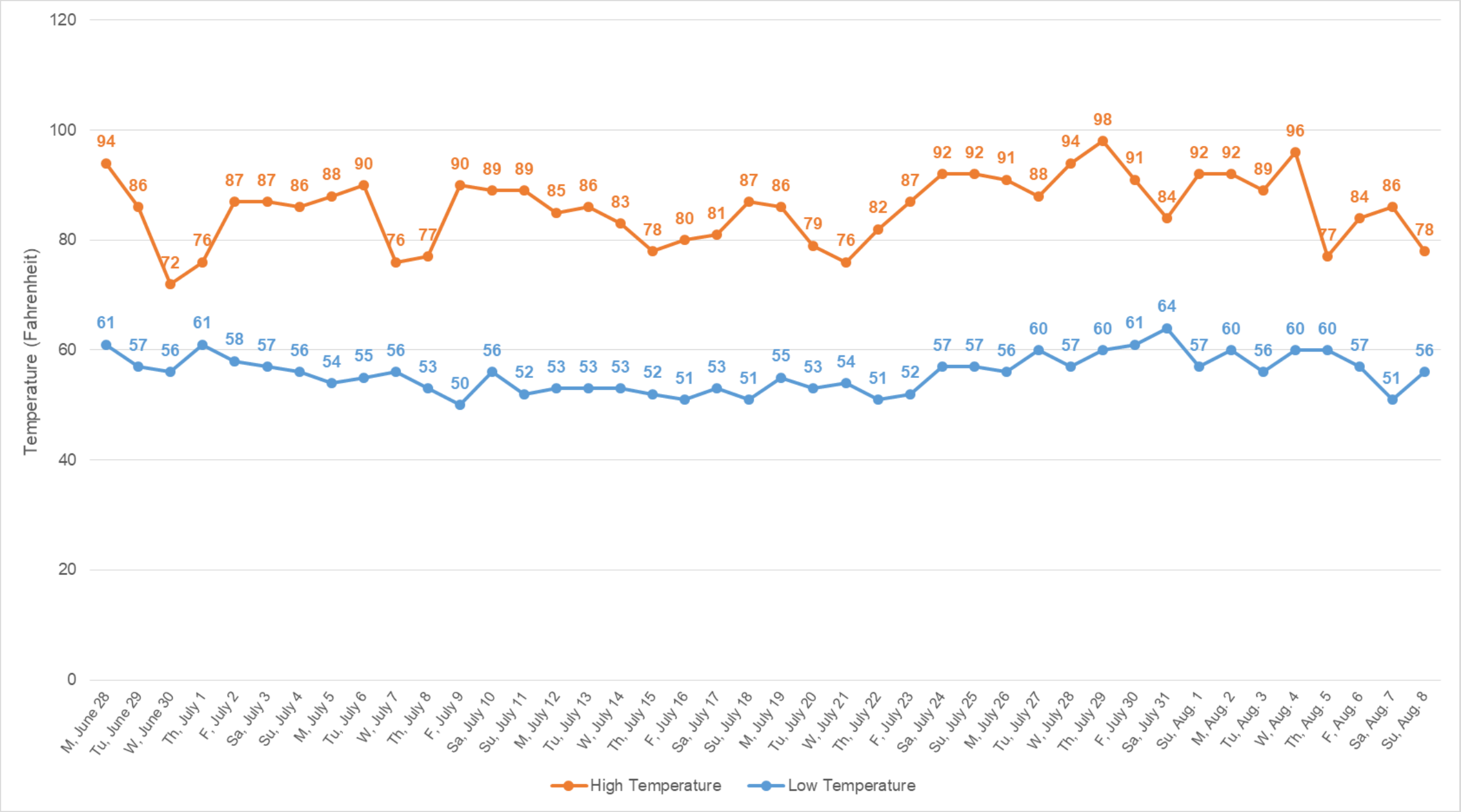


Figure 11: Daily Temperature (Fahrenheit)



Part 4 –Seasonal Comparison

After completing bicycle and pedestrian counts during both winter and summer CAMPO staff can now begin comparing changes over time. First, it is important to note that the winter counts were conducted over an eight week period (56 days) while the summer counts only cover a six week period (42 days). Despite counting for two weeks fewer, the total number of people walking and riding bikes on the Eric E. Austin Memorial Bypass grew significantly during the summer. A total of **8,669 walkers and bikers were counted during the winter reporting period** while a total of **15,028 were counted during the summer reporting period**.

While there was also growth in the number of people walking during the summer the majority of the observed increase came from people riding bikes. **Over ten thousand people riding bikes were counted on the Eric E. Austin Bypass during the six week summer reporting period** accounting for 69.3% of total users. The sharp increase in the share of summer biking can most likely be attributed to warmer, dryer weather and longer days.

During both the winter and summer reporting period slightly more people used the multiuse path going northbound than southbound.

Figure 12: Winter (Eight Week) Summary Data

Winter (Eight Weeks)			
	Combined (Walking + Biking)	People Walking	People Riding Bikes
TOTAL	8,669	4,207	4,462
PERCENTAGE	100%	48.5%	51.5%
TOTAL NORTH BOUND	4,692	2,277	2,415
TOTAL SOUTH BOUND	3,977	1,930	2,047
% NORTH BOUND	54.1%		
% SOUTH BOUND	45.9%		

Figure 13: Summer (Six Week) Summary Data

Summer (Six Weeks)			
	Combined (Walking + Biking)	People Walking	People Riding Bikes
TOTAL	15,028	4,613	10,415
PERCENTAGE	100%	30.7%	69.3%
TOTAL NORTH BOUND	7,972	2,618	5,354
TOTAL SOUTH BOUND	7,056	1,995	5,061
% NORTH BOUND	53.0%		
% SOUTH BOUND	47.0%		

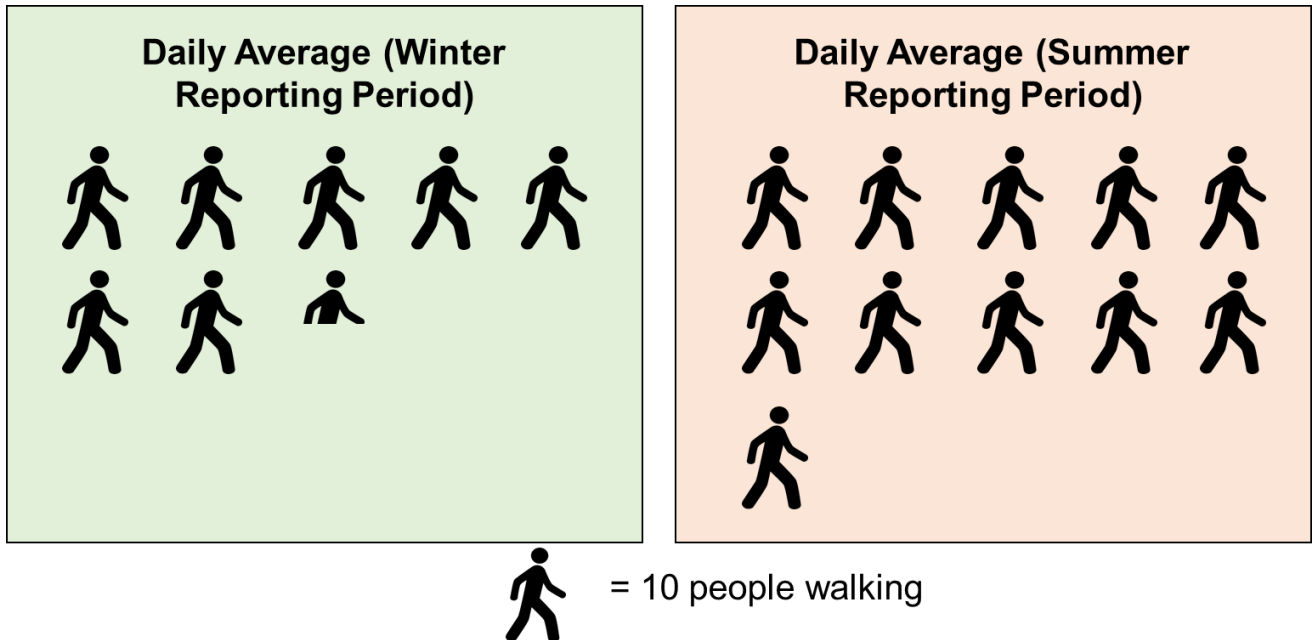
Figure 14 captures average use of the Eric E. Austin Memorial Bypass during the winter and summer reporting periods. Presenting weekly and daily averages allows for direct comparison using a consistent time frame. Key takeaways include:

- The average number of users (walking and biking combined) **more than doubled** during the summer (131% increase)
- The average number of people walking increased by 46% during the summer reporting period
- The average number of people riding bikes during the summer **tripled** with a 211% increase

Figure 14: Comparison of Weekly and Daily Averages

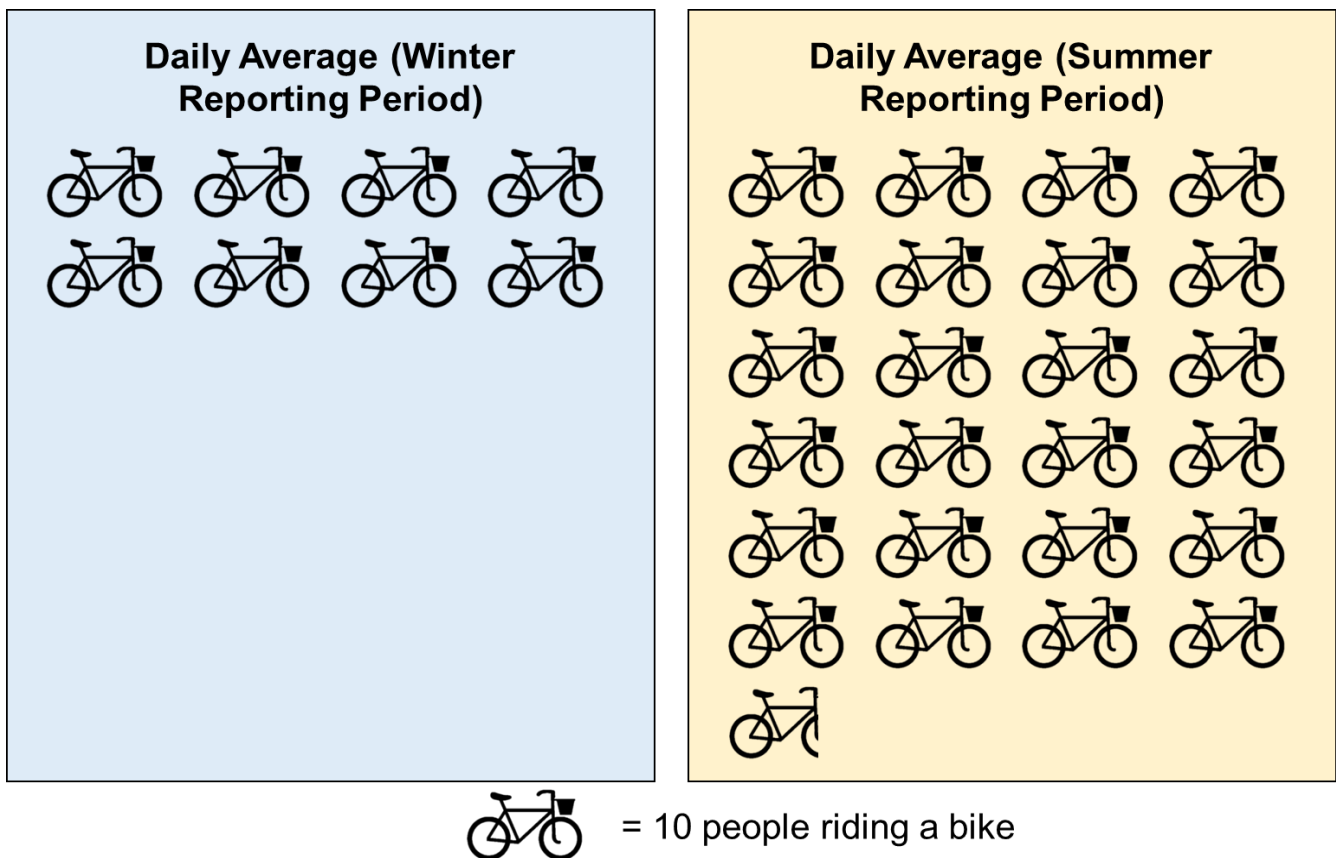
Combined (Walking + Biking)			
	Winter (Eight Weeks)	Summer (Six Weeks)	Percent Change
WEEKLY AVERAGE	1084	2505	131% Increase in summer
DAILY AVERAGE	155	358	
People Walking			
	Winter (Eight Weeks)	Summer (Six Weeks)	Percent Change
WEEKLY AVERAGE	526	769	46% Increase in summer
DAILY AVERAGE	75	110	
People Riding Bikes			
	Winter (Eight Weeks)	Summer (Six Weeks)	Percent Change
WEEKLY AVERAGE	558	1736	211% Increase in summer
DAILY AVERAGE	80	248	

Figure 15: Daily Average –People Walking (Visual Comparison)



*Winter Reporting Period = 75 people walking daily; Summer Reporting Period = 110 people walking daily (a 46% increase)

Figure 16: Daily Average –People Riding Bikes (Visual Comparison)



*Winter Reporting Period = 80 people biking daily; Summer Reporting Period = 248 people biking daily (a 211% increase)