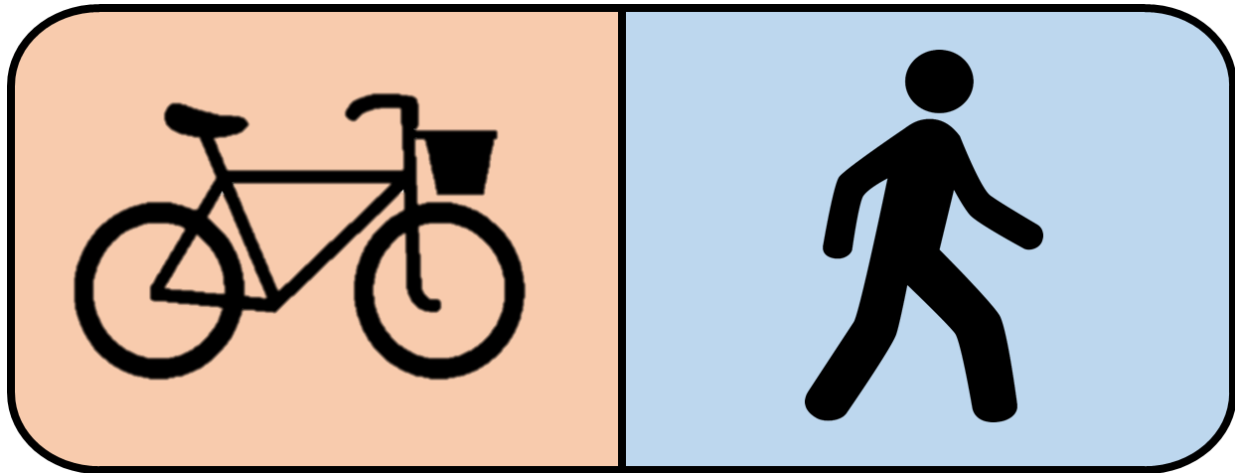


Bicycle and Pedestrian Counts



Eight Week Report for Eric E. Austin Memorial Bypass

(Formerly Referred to as the Marys River/Crystal Lake
Multi-Use Path)

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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 eight weeks of counting on the Eric E. Austin Memorial Bypass (formerly the Marys River/Crystal Lake Multi-Use Path) in Corvallis. The eight week reporting period covered in this report began on Monday, November 23, 2020 and extended through Sunday, January 17, 2021. This represents the first full deployment of CAMPO's counting equipment.

Counter Equipment and Set Up

In late 2019 CAMPO purchased two mobile MULTI bicycle/ pedestrian counting units. The equipment package is comprised of (1) a pyro-box utilizing 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

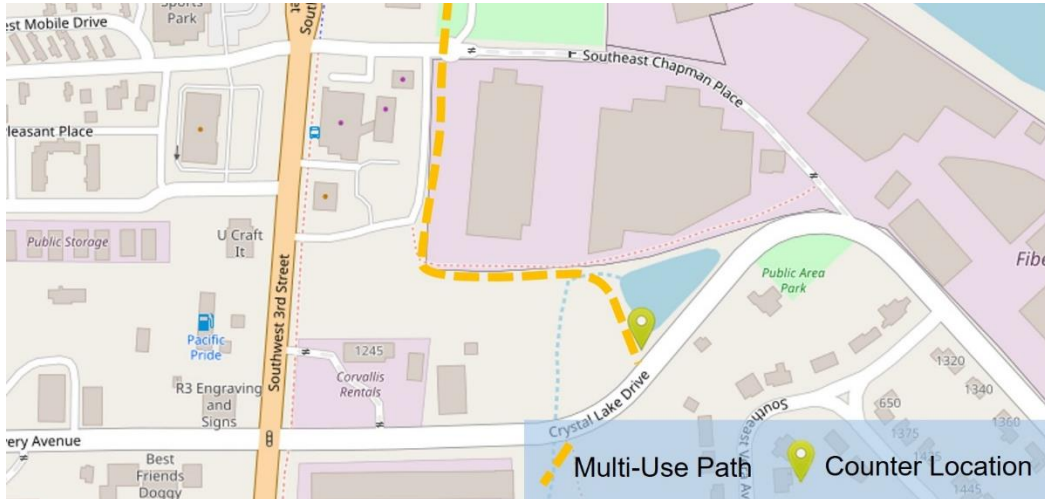


Count Location

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 cyclists and pedestrians and collect information on direction of travel. The count location can be seen in the map below (**Figure 3**).

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

Figure 3: Count Location



Why Count People Walking and Riding Bicycles?

Program Purpose: Develop a better understanding of how people walking and riding bicycles 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 provides an overview of data captured while the counting equipment was deployed in the field.

- **Part 1 – Eight Week Summary Data** provides summary information covering the entire eight 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 – Hourly Totals** breaks the data down into further detail providing a snapshot of hourly count data on a select number of days
- **Part 4 – Weather Conditions** explores daily temperature and compares daily high temperature with total number of counts

Part 1 – Eight Week Summary Data

Figure 4: Eight Week Summary Data




	Combined (Pedestrian + Cyclist) 	Pedestrian 	Cyclist 
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%		
WEEKLY AVERAGE	1084	526	558
DAILY AVERAGE	155	75	80

Figure 5: Weather Information²

Average Daily High Temperature During Reporting Period	Average Daily Low Temperature During Reporting Period
49.3 degrees	36.6 degrees

² Weather data is from weather.com

Information on daily precipitation was initially collected for the first two weeks of the reporting period, 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 Total –Eight Week Period³

Date	Combined Total	Total Pedestrian	Total Cyclist
M, Nov. 23	175	88	87
Tu, Nov. 24	160	86	74
W, Nov. 25	155	74	81
Th, Nov. 26	166	57	109
F, Nov. 27	122	53	69
Sa, Nov. 28	185	95	90
Su, Nov. 29	136	79	57
M, Nov. 30	198	91	107
Tu, Dec. 1	179	93	86
W, Dec. 2	169	79	90
Th, Dec. 3	160	74	86
F, Dec. 4	202	133	69
Sa, Dec. 5	156	94	62
Su, Dec. 6	167	75	92
M, Dec.7	169	81	88
Tu, Dec. 8	185	96	89
W, Dec. 9	186	94	92
Th, Dec. 10	99	57	42
F, Dec. 11	95	48	47
Sa, Dec. 12	159	85	74
Su, Dec. 13	91	41	50
M, Dec. 14	156	70	86
Tu, Dec. 15	88	26	62
W, Dec. 16	72	33	39
Th, Dec. 17	134	60	74
F, Dec. 18	171	75	96
Sa, Dec. 19	131	84	47
Su, Dec. 20	25	7	18
M, Dec. 21	126	47	79
Tu, Dec. 22	194	95	99
W, Dec. 23	143	74	69
Th, Dec. 24	106	66	40
F, Dec. 25	48	25	23
Sa, Dec. 26	164	60	104
Su, Dec. 27	181	67	114
M, Dec. 28	228	88	140
Tu, Dec. 29	146	60	86
W, Dec. 30	92	56	36
Th, Dec. 31	195	124	71
F, Jan. 1	106	50	56
Sa, Jan. 2	49	19	30
Su, Jan. 3	155	99	56
M, Jan. 4	131	84	47
Tu, Jan. 5	231	134	97
W, Jan. 6	88	32	56
Th, Jan. 7	262	125	137
F, Jan. 8	196	93	103
Sa, Jan. 9	176	79	97
Su, Jan. 10	148	75	73
M, Jan. 11	182	82	100
Tu, Jan. 12	104	42	62
W, Jan. 13	267	134	133
Th, Jan. 14	237	88	149
F, Jan. 15	181	85	96
Sa, Jan. 16	215	102	113
Su, Jan. 17	227	94	133
TOTAL	8669	4207	4462

³ The figure above uses color categories to illustrate variation in count totals. Darker colors mean a larger number of counts. For the “Combined Total” column: values less than 165 = light orange; values between 165 and 200 = medium orange; values over 200 = dark orange. For the “Total Pedestrian” and “Total Cyclist” columns: values less than 80 = light orange; values between 80 and 100 = medium orange; values over 100 = dark orange.

Figure 7: Daily Count Totals –Eight Week Period

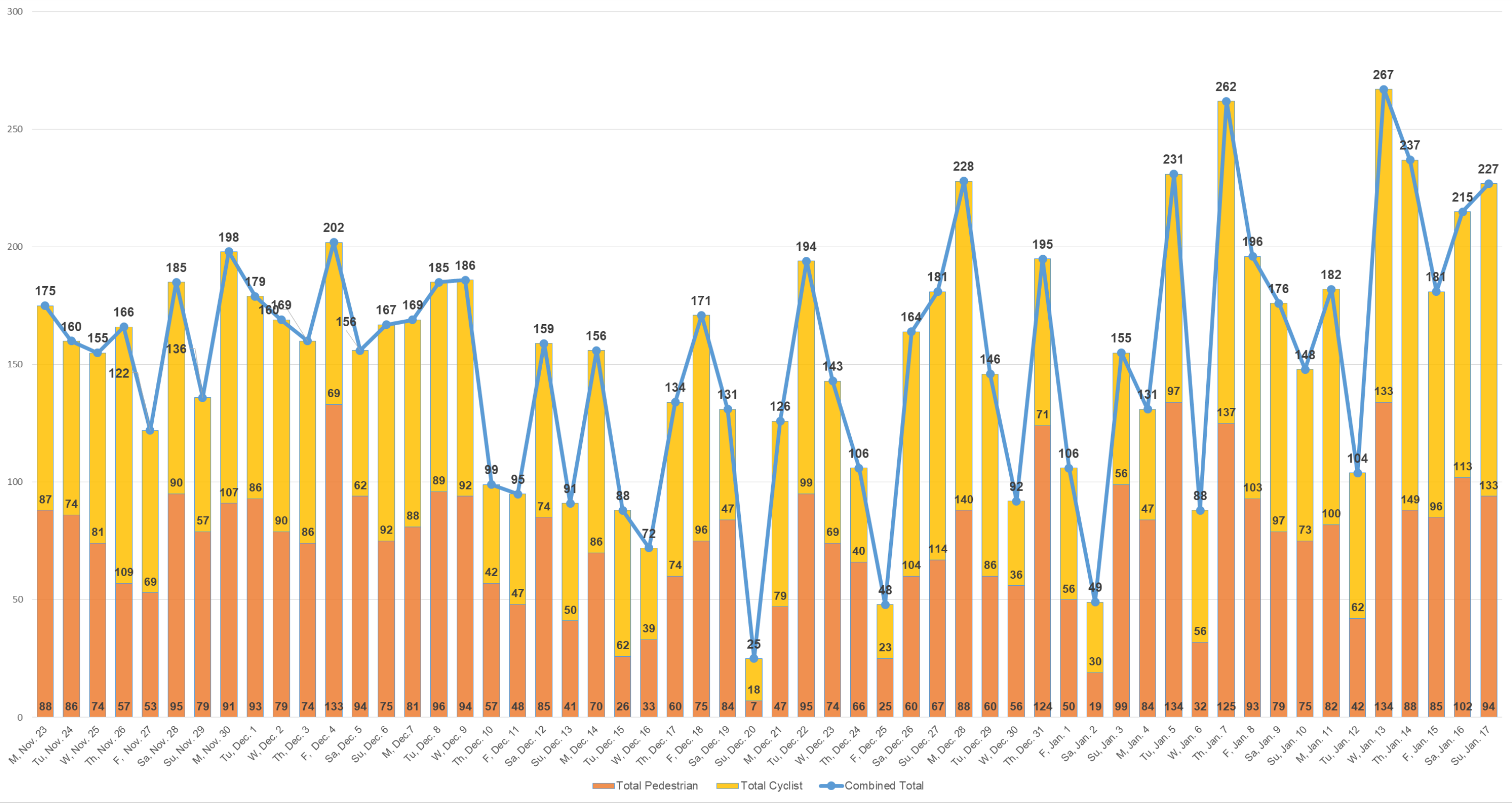
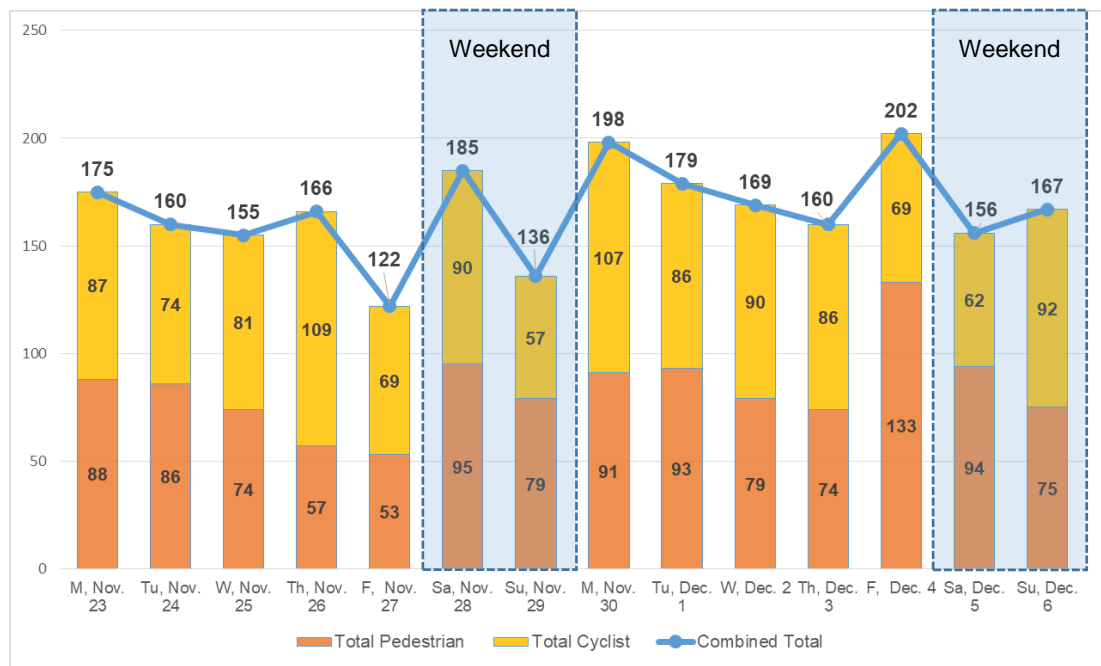


Figure 8: Daily Count Totals –Nov. 23 through Dec. 6



Note, the tables displayed on this page depict the same data captured in **Figure 7**. The information here simply breaks the data into two week intervals for viewing purposes.

Figure 9: Daily Count Totals –Dec. 7 through Dec. 20

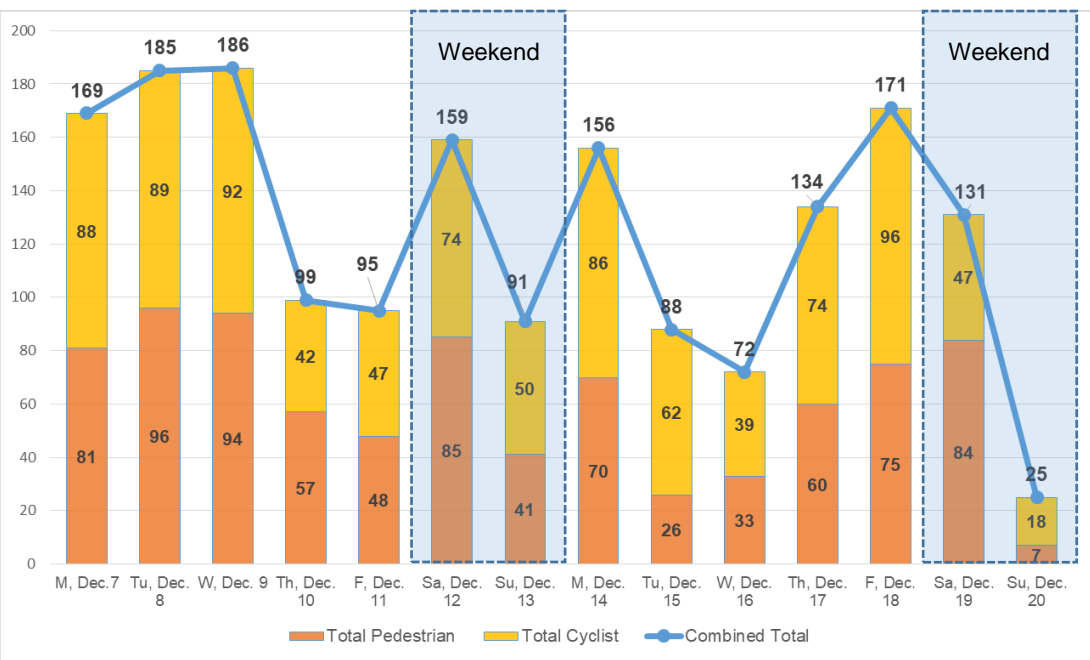


Figure 10: Daily Count Totals –Dec. 21 through Jan. 3

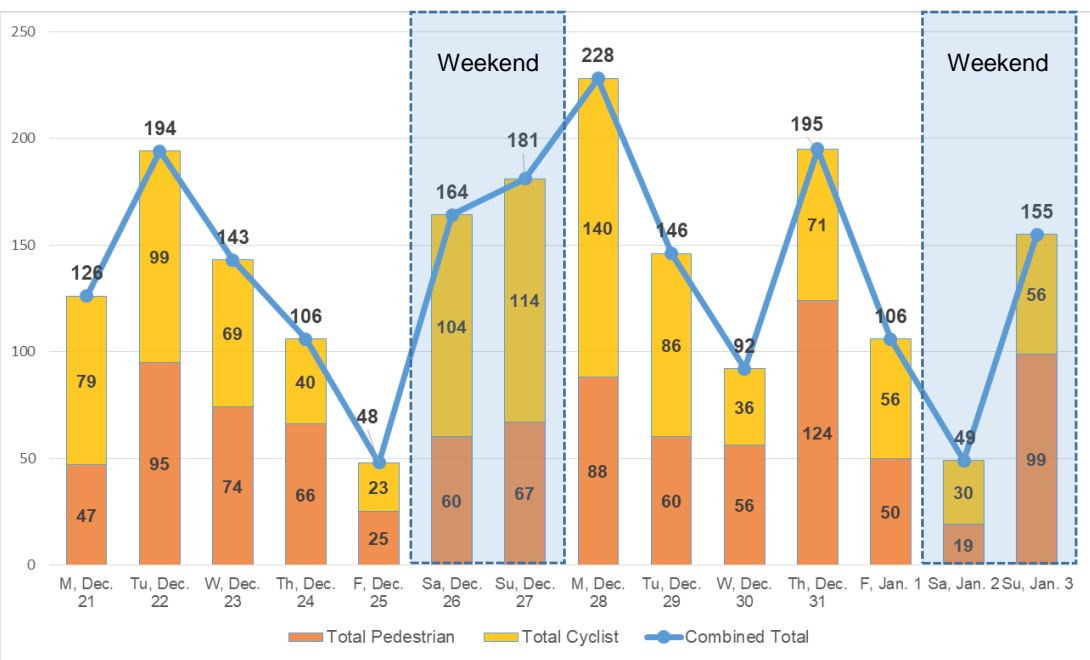


Figure 11: Daily Count Totals –Jan. 4 through Jan. 17

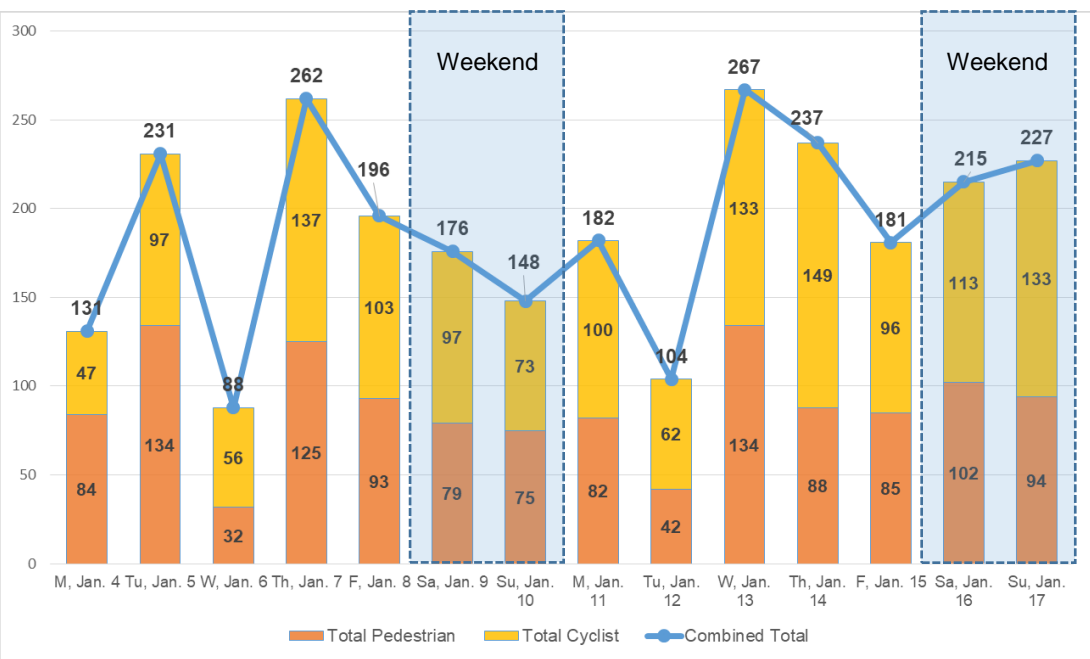


Figure 12: Direction of Travel

Date	Combined Counts		Pedestrian Counts		Cyclist Counts	
	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound
M, Nov. 23	100	75	55	33	45	42
Tu, Nov. 24	85	75	49	37	36	38
W, Nov. 25	87	68	45	29	42	39
Th, Nov. 26	97	69	28	29	69	40
F, Nov. 27	62	60	22	31	40	29
Sa, Nov. 28	109	76	60	35	49	41
Su, Nov. 29	71	65	44	35	27	30
M, Nov. 30	101	97	45	46	56	51
Tu, Dec. 1	95	84	53	40	42	44
W, Dec. 2	101	68	49	30	52	38
Th, Dec. 3	94	66	51	23	43	43
F, Dec. 4	123	79	84	49	39	30
Sa, Dec. 5	94	62	60	34	34	28
Su, Dec. 6	93	74	37	38	56	36
M, Dec.7	96	73	44	37	52	36
Tu, Dec. 8	103	82	58	38	45	44
W, Dec. 9	107	79	58	36	49	43
Th, Dec. 10	56	43	34	23	22	20
F, Dec. 11	51	44	30	18	21	26
Sa, Dec. 12	81	78	39	46	42	32
Su, Dec. 13	46	45	19	22	27	23
M, Dec. 14	78	78	35	35	43	43
Tu, Dec. 15	43	45	13	13	30	32
W, Dec. 16	37	35	16	17	21	18
Th, Dec. 17	71	63	29	31	42	32
F, Dec. 18	86	85	37	38	49	47
Sa, Dec. 19	68	63	36	48	32	15
Su, Dec. 20	14	11	5	2	9	9
M, Dec. 21	73	53	28	19	45	34
Tu, Dec. 22	100	94	53	42	47	52
W, Dec. 23	70	73	38	36	32	37
Th, Dec. 24	60	46	41	25	19	21
F, Dec. 25	31	17	17	8	14	9
Sa, Dec. 26	75	89	29	31	46	58
Su, Dec. 27	86	95	34	33	52	62
M, Dec. 28	127	101	46	42	81	59
Tu, Dec. 29	77	69	36	24	41	45
W, Dec. 30	52	40	30	26	22	14
Th, Dec. 31	107	88	66	58	41	30
F, Jan. 1	55	51	27	23	28	28
Sa, Jan. 2	27	22	11	8	16	14
Su, Jan. 3	82	73	46	53	36	20
M, Jan. 4	69	62	38	46	31	16
Tu, Jan. 5	118	113	65	69	53	44
W, Jan. 6	46	42	13	19	33	23
Th, Jan. 7	151	111	63	62	88	49
F, Jan. 8	110	86	51	42	59	44
Sa, Jan. 9	91	85	40	39	51	46
Su, Jan. 10	84	64	42	33	42	31
M, Jan. 11	92	90	38	44	54	46
Tu, Jan. 12	61	43	23	19	38	24
W, Jan. 13	157	110	76	58	81	52
Th, Jan. 14	115	122	42	46	73	76
F, Jan. 15	94	87	47	38	47	49
Sa, Jan. 16	114	101	55	47	59	54
Su, Jan. 17	119	108	47	47	72	61
TOTAL	4692	3977	2277	1930	2415	2047

Part 3 – Hourly Totals

Figure 13: Weekend Hourly Totals (Saturday, Nov. 28 & Sunday, Nov. 29)

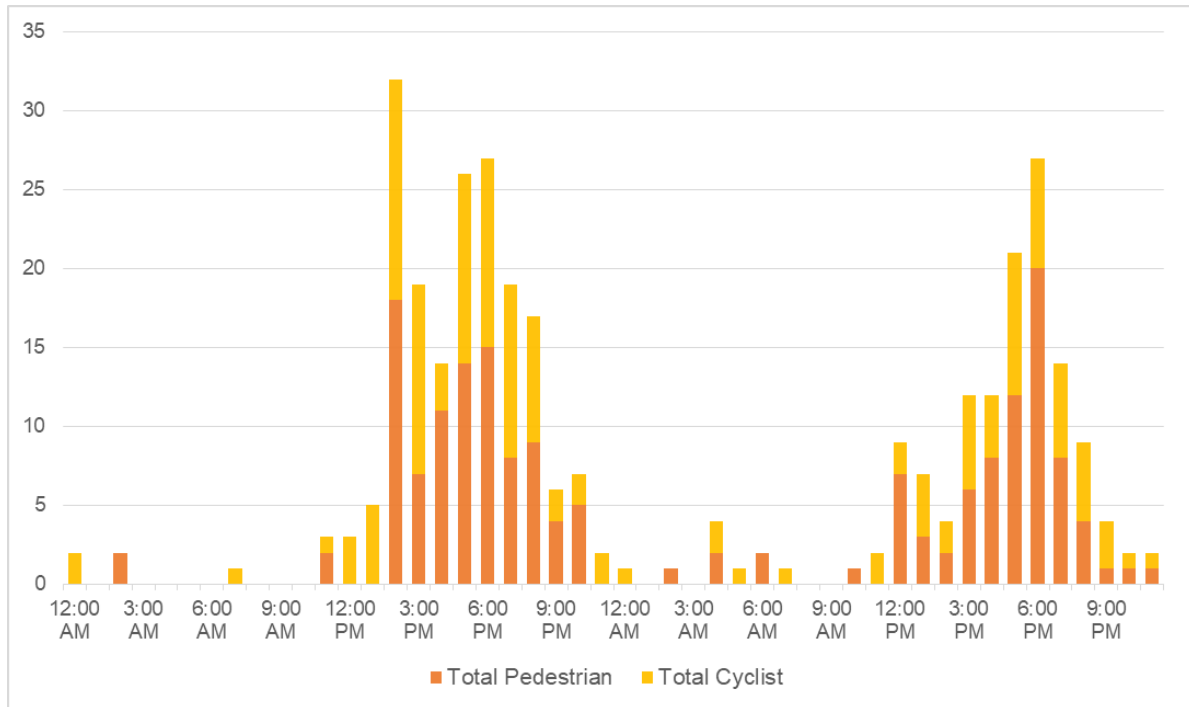


Figure 14: Weekday Hourly Totals (Wednesday, Dec. 2 & Thursday, Dec. 3)

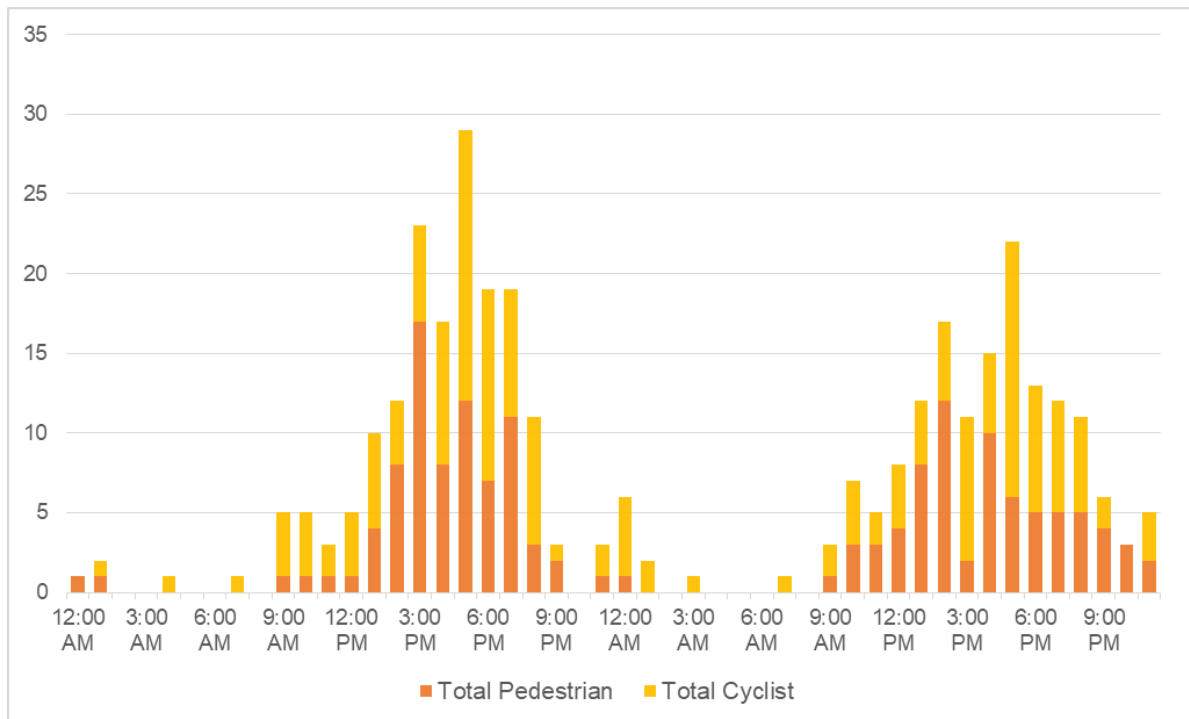
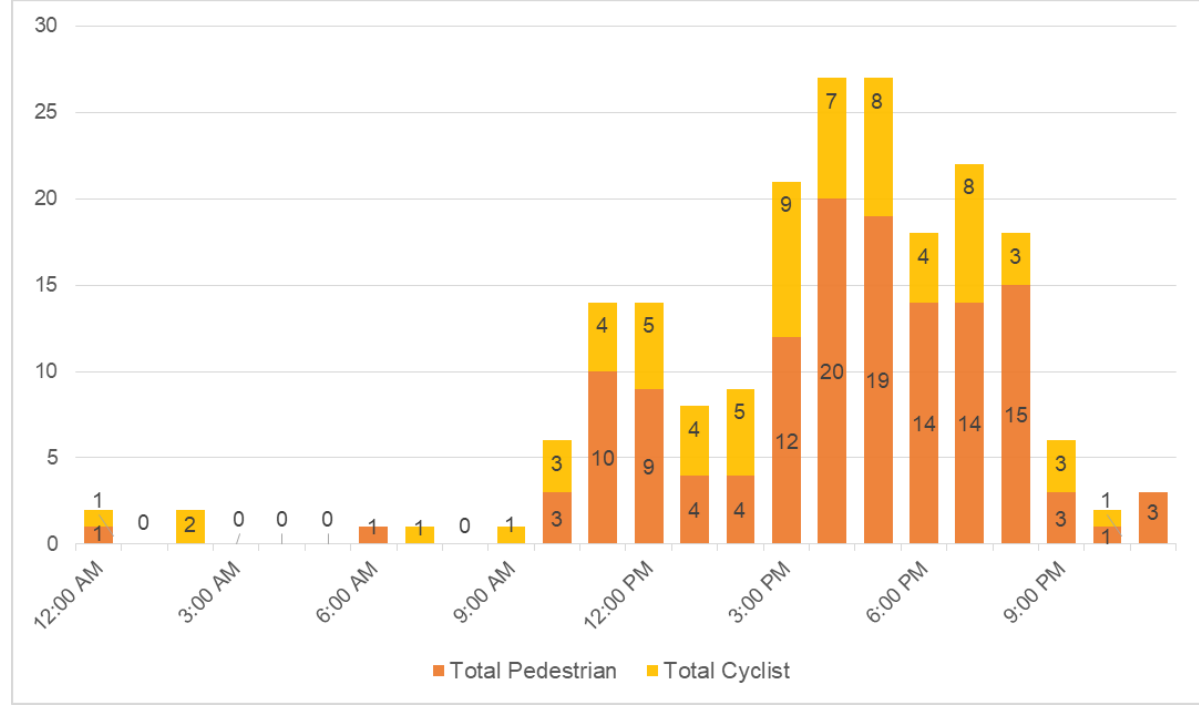


Figure 15: Single Day Hourly Totals (Friday Dec. 4)



Part 4 – Weather Conditions

Figure 16: Daily High Temperature (Fahrenheit) and Total Counts

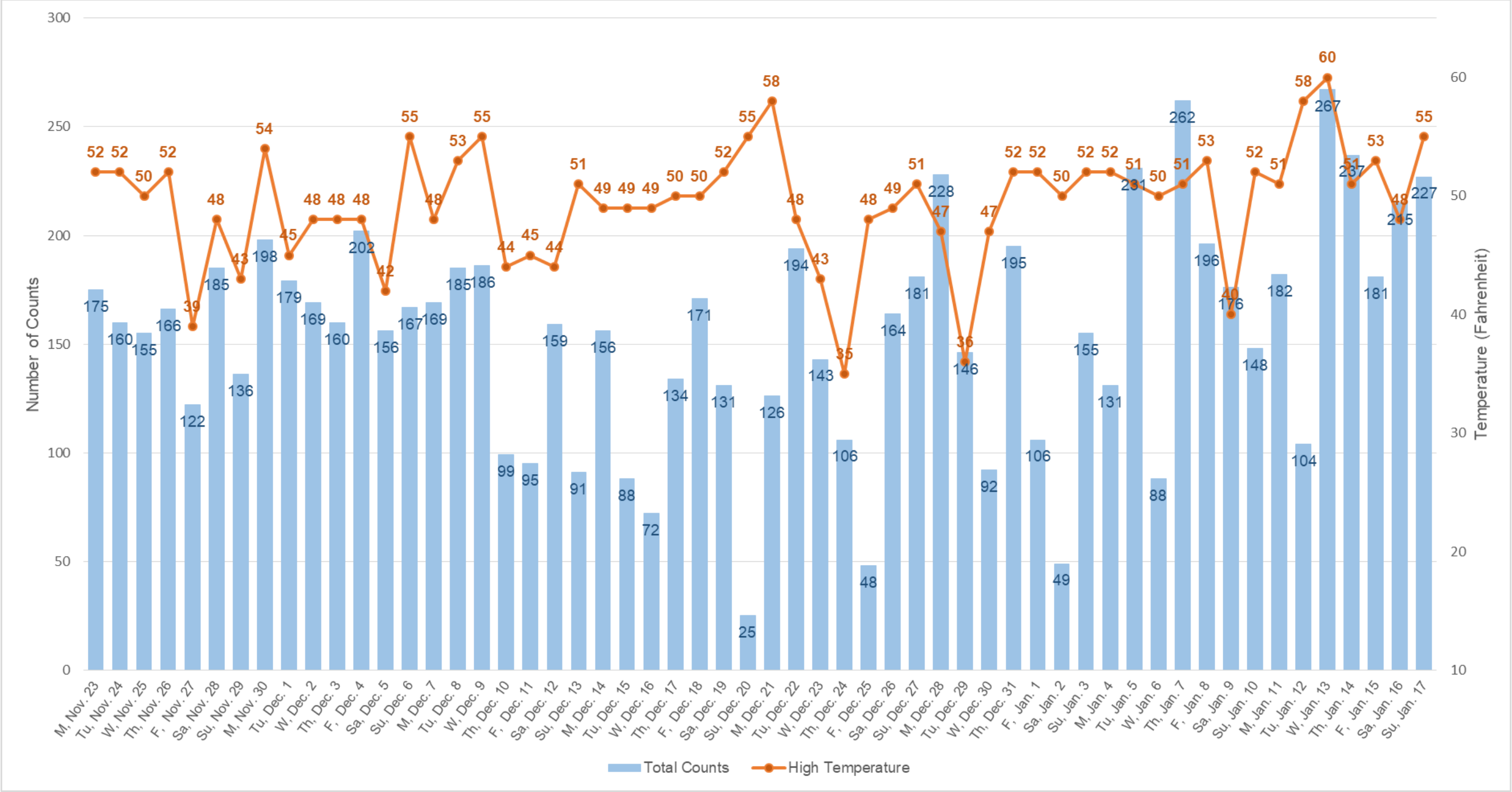


Figure 17: Daily Temperature (Fahrenheit)

