

E. PITKIN ST. ADVISORY LANES PROJECT  
SEMI-ANNUAL PROGRESS REPORT #4 (OCTOBER 2023)

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## BACKGROUND

On September 20, 2021, the City of Fort Collins was granted approval from the Federal Highway Administration to experiment with advisory bike lanes on E. Pitkin St. from Remington St. to Smith St. A street with advisory bike lanes provides for two-way motor vehicle and non-motorized traffic using a center lane with advisory lanes on either peripheral side of the roadway. The center lane is dedicated to, and shared by, motorists traveling in both directions and bicyclists have right-of-way in the advisory bike lanes, although motorists may utilize the advisory lanes to pass non-motorized traffic after yielding to non-motorized traffic, namely bicycles, e-bicycles, and e-scooters. The corridor redesign includes the following primary elements:

- 7-foot eastbound advisory bicycle lane with skip stripe.
- 16-foot center travel lane with no center striping.
- 6.5-foot westbound advisory bicycle lane with skip stripe.
- 2-foot buffer between the westbound advisory bicycle lane and on-street parking.
- 8-foot on-street parking lane on the north side of the street.
- Bike lane (R3-17) and two-way traffic warning (W6-3) signs.
- Bicycle lane pavement markings every 600 feet.

The restriping of E. Pitkin St. was coordinated with utilities and resurfacing work and was a joint effort between the City’s FC Moves (Transportation Planning), Traffic Operations, Streets, and Utilities departments. At the time the request to experiment was submitted, the City anticipated repaving E. Pitkin St. in Spring 2022. Utilities improvements on E. Pitkin St. were delayed due to supply chain issues, material backlogs, and weather. The City completed repaving and restriping E. Pitkin St. in late September 2022, and the street was reopened to vehicular traffic on October 9, 2022.

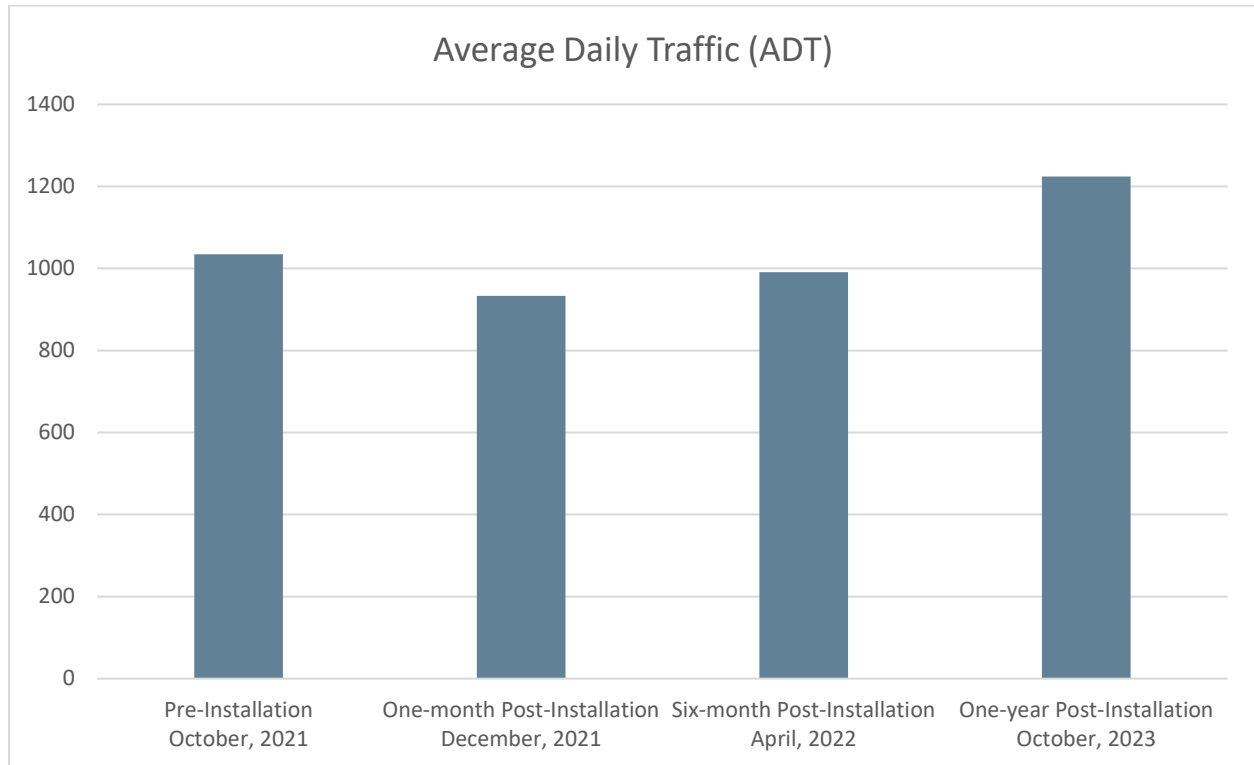
Pre-installation data and post-installation data were collected to evaluate the effects of the treatment on vehicular and active mode transportation user behavior. A report summarizing the data collected one-month following the installation was submitted in February of 2023. A second post-installation progress report was submitted in August of 2023, which compared data collected 6 months following the project completion to the pre-installation data and the one-month post-installation data. This third progress report includes one-year post-installation data and shows the trends in vehicle and active mode use within the study area from pre-installation to one-year-post installation.

## BEFORE AND AFTER STUDIES

### VOLUME

Average daily traffic (ADT) volume studies were conducted by Traffic Operations on E. Pitkin St. between Matthews St. and Peterson St. for the pre-installation period and the post-installation periods. Figure 1 summarizes the recorded traffic volume for the 4 data collection periods. Detailed volume study data for the one-year post-installation period can be found in Appendix 1.

Figure 1. ADT Volumes Before and After Pitkin Advisory Lanes Installation



A traffic camera was used to record video of street and sidewalk activity before and after the project completion. The camera was first installed on the south side of E. Pitkin St. between Peterson St. and Whedbee St. Pre-installation surveillance video was collected on Thursday, October 14<sup>th</sup>, 2021 through Saturday, October 16<sup>th</sup>, 2021.

One-month post-installation surveillance video was collected on Sunday, December 4<sup>th</sup>, 2022 through Tuesday, December 6<sup>th</sup>, 2022. Six-month post-installation surveillance video was collected on Sunday, April 16<sup>th</sup>, 2023 through Tuesday, April 18<sup>th</sup>, 2023. One-year post-installation surveillance video was collected on Thursday, October 12<sup>th</sup>, 2023 through Saturday, October 14<sup>th</sup>, 2023. Video footage was analyzed for the time periods of 7-9 AM, 12-2 PM, and 3-5 PM for all of the surveillance dates.

Both the traffic study volumes (Figure 1) and the video surveillance data (Table 1) indicate a decrease in the vehicular traffic and active modes traffic in the study area in the one-month post-installation period, followed by a slight increase in the six-month period, and a substantial increase in the one-year post-installation period. Vehicle traffic in the one-year post-installation period was 7.6% greater than pre-installation levels, while bike and pedestrian numbers decreased 15% and 25% respectively. Table 1 below highlights this data.

There are a few factors that may have influenced these metrics:

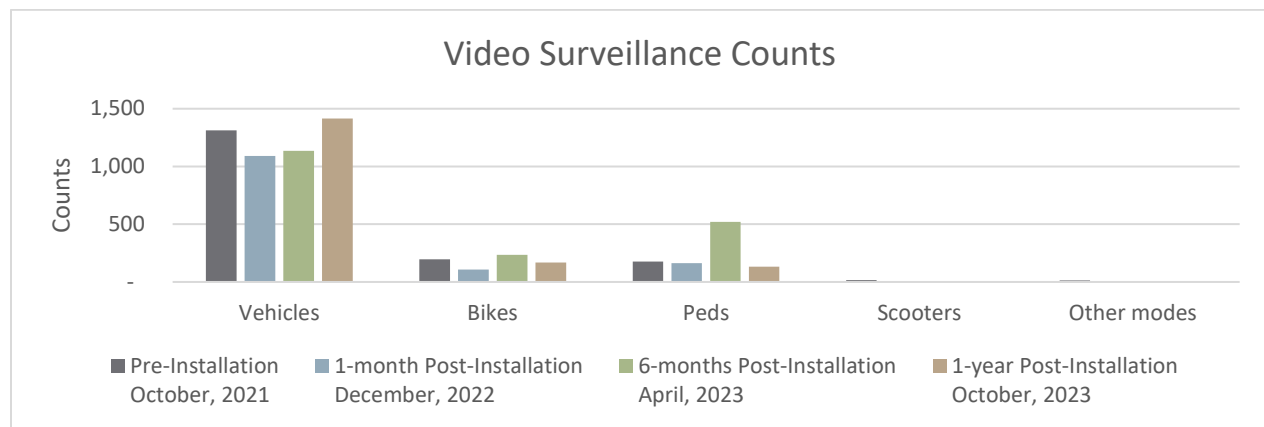
1. Time of year: The first round of camera counts was conducted in mid-October, when the length of daylight was on average 11 hours, 19 minutes. The second round of camera counts were conducted in early December, when the length of daylight was on average 10 hours, 1 minute. The third round of camera counts were conducted in mid-April, when the length of daylight was on average 13 hours, 22 minutes. The fourth round of camera counts were conducted in late October, when the length of daylight was on average 11 hours, 13 minutes.
2. Weather: The mean daily high temperature for the pre-installation camera surveillance period was 77° F, with a range of 74° – 81° F. The mean daily high temperature for the one-month post-installation camera surveillance period was 43° F, with a range of 32° – 53° F. The mean daily high temperature for the six-month post-installation camera surveillance period was 54° F, with a range of 30° – 76° F. The mean daily high temperature for the one-year post-installation camera surveillance period was 45° F, with a range of 34° – 56° F.
3. Altered travel habits: The study area was under construction for a period of over four-months, during which time people would have had to use alternative routes to get to their destinations. This change in traffic patterns may have had a lasting effect on people’s daily commuting habits.

Table 1: Volume count comparison pre-installation and post-installation.

Video Evaluation Period	Vehicles	Bikes	Peds	Scooters	Other modes
Pre-Installation October, 2021	1,314	197	177	15	13
1-month Post-Installation December, 2022	1,092	106	164	1	2
6-months Post-Installation April, 2023	1,136	235	519*	5	4
1-year Post-Installation October, 2023	1,414	167	133	9	2

\*This surveillance period captures the Leshler Middle School Cross Country Team out running in the neighborhood.

Figure 2: Video Surveillance Counts



**OBSERVATIONS**

Video footage for the dates and time periods specified above was also analyzed for road user behavior and conflicts. The following observations were recorded:

Table 2: Video surveillance data showing road and sidewalk activity pre-installation and post-installation.

	<b>Pre-Installation</b>	<b>1-month Post-Installation</b>	<b>6-months Post-Installation</b>	<b>1-year Post-Installation</b>
Number of cars westbound	648	539	553	635
Number of cars eastbound	666	553	583	779
Number of bikes westbound	112	56	115	87
Number of bike eastbound	85	50	120	80
Wrong way bikes	2	0	3	2
Bikes on sidewalk	2	0	1	0
Number of pedestrians on north side	92	110	92	78
Number of pedestrians on south side	85	54	427	55
Number of scooters westbound	7	1	1	4
Number of scooters eastbound	8	0	4	5
Other modes westbound	6	2	4	1
Other modes eastbound	7	0	0	1

Table 3: Percent of vehicles crossing into bike lanes from video surveillance data.

	<b>1-month Post-Installation</b>	<b>6-months Post-Installation</b>	<b>1-year Post-Installation</b>
Westbound, no obvious passing	41%	37%	33%
Westbound, while passing	17%	23%	26%
Eastbound, no obvious passing	0%	1%	1%
Eastbound, while passing	0%	1%	2%

\*It is worth noting that the metric “no obvious passing” was based on what could be seen on the video footage and does not take into account the longer visual distance that a driver on the street has in seeing approaching traffic.

\*\*When a vehicle did not cross into the bike lane when passing traffic, it was because the opposing vehicle was the one to cross over.

Video observations from the one-month post installation period show 6% of bicyclists riding in the center lane as opposed to the bike lane. In the six-month post-installation video footage, 9% of bicyclists rode in the center lane, while in the one-year post-installation video footage, 3% of bicyclists rode in the center lane.

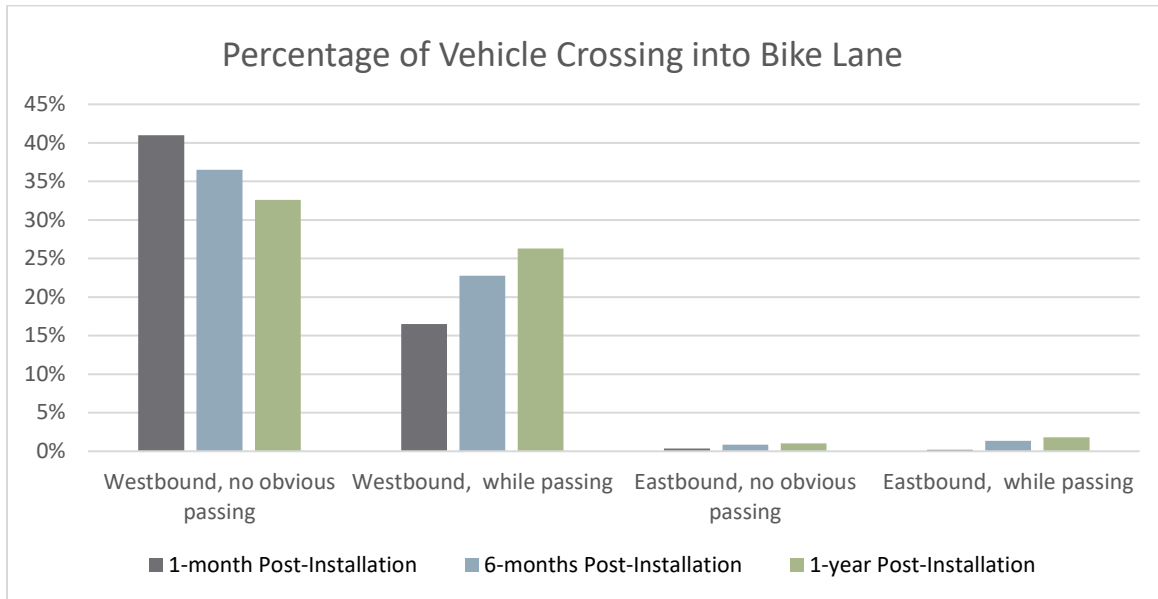
Two bicyclists were observed on the sidewalk in the pre-installation video surveillance; one was walking their bike. In the one-month post-video surveillance, five people were observed riding bicycles on the sidewalk. Out of the five people, 3 were children. In the six-month post-video surveillance, only one person (a youth) was observed riding a bike on the sidewalk. In the one-year post-video surveillance, no bicyclists were observed riding on the sidewalk.

No conflicts were observed between any of the travel modes (bicycling, driving, walking, skateboarding, and scootering) in the pre-installation nor the one month and six month post-installation videos. Drivers in both the pre-installation video and the post-installation videos yielded to bicyclists, appeared to give at least three feet passing distance, and stayed in the center lane in the case of the post-installation videos. It was not possible to see if and when drivers returned to the center lane when passing other vehicles because of the limited frame of the camera.

There was one instance of a potential conflict in the one-year post-installation video where an eastbound car crossed into the eastbound bike lane, then returned to the center lane to let a bicyclist pass, then once again crossed into the eastbound bike lane to perform a U-turn. It was not possible to see if the bicyclist had to yield at all to the car as the bicyclist was off camera.

As shown in Figure 3, there was a significant number of westbound vehicles crossing over into the bike lane, although that behavior has decreased 20% from the one-month post-installation period to the six-month post-installation period. One possible reason for this behavior includes confusion with regards to the lane striping. The westbound bike lane has a parking buffer. With over 31 miles of buffered bike lanes in Fort Collins, with a buffer between the bike lane and the vehicular travel lane, it’s possible that many Fort Collins’ drivers have grown accustomed to driving alongside a buffer.

Figure 3: Graph of percentage of vehicles crossing into bike lanes from video surveillance data.



Another possibility is that the drivers were able to see an oncoming vehicle that was not within the frame of the video surveillance, since the line of sight for a driver extends beyond the area captured by the camera frame. There was some subjectivity in determining this metric. If a vehicle came into the camera frame a few seconds after the westbound vehicle crossed over into the bike lane and went out of the frame, this was counted as crossing over “while passing oncoming traffic”, but there may have been instances when drivers crossed over into the bike lane earlier because they saw an approaching vehicle further away since the on-street line of sight is much greater than what is shown in the video frame.

**CRASH DATA**

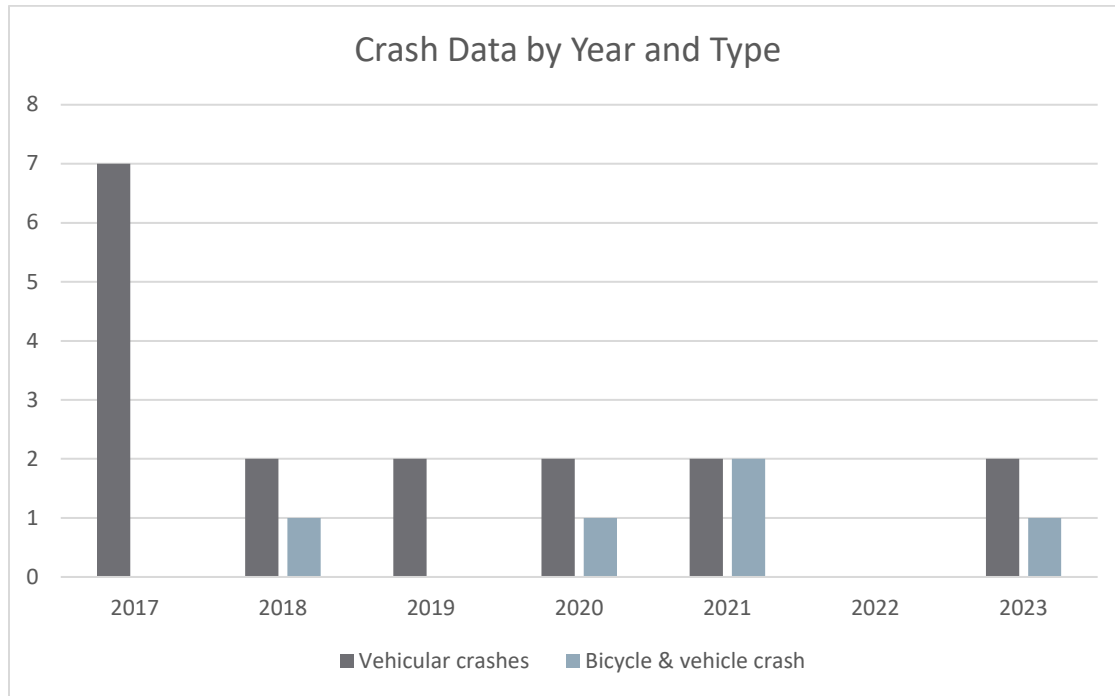
Prior to the installation of the Advisory Bike Lanes, crash data from 2017 - 2021 was evaluated to determine what types of traffic crashes were occurring in the vicinity of the project location, if any. In previous reports, it was incorrectly stated that no crashes occurred in the vicinity of the project area. Upon further investigation, we determined that crashes at intersections were omitted from the original query. In revisiting the crash data for 2017-2021, 19 crashes were identified that happened along or adjacent to the study area in that timeframe (Figure 4). Four of the crashes were listed as possible injury crashes, and one was a suspected injury crash. None involved fatalities.

Of the 19 crashes that occurred prior to the installation of the advisory lanes, the causes of the crashes were as follows:

- 4 disregarded stop signs
- 11 failed to yield ROW

- 1 followed too closely
- 2 improper backing
- 1 lane violation

Figure 4. Crash data by year and type



Since the reopening of the study area, there have been three reported crashes in this area resulting in property damage only; one on the far east side, and one on the far west side.

On June 2, 2023, at 5:34 PM, a vehicle crashed with a bicycle at the intersection of E. Pitkin St. and Whedbee St. The vehicle failed to yield the right of way. No injuries were reported.

On June 2, 2023, at 6:41 PM, two vehicles collided at the intersection of E. Pitkin St. and Remington St. A northbound vehicle disregarded the stop sign and collided with a vehicle making a left turn, claiming not to have seen it. No injuries were reported.

On June 22, 2023 at 8:56 AM, vehicle two was traveling west on E. Pitkin St. approaching Smith St. Vehicle one stopped at a stop sign on southbound Smith St. at E. Pitkin St. Vehicle one proceeded into the intersection failing to yield the right of way to vehicle two. Vehicle two was not able to stop in time and the front of vehicle one collided with the front of vehicle two causing damage. The contributing factor listed in the police report was that the driver was unfamiliar with the area. No injuries were reported.



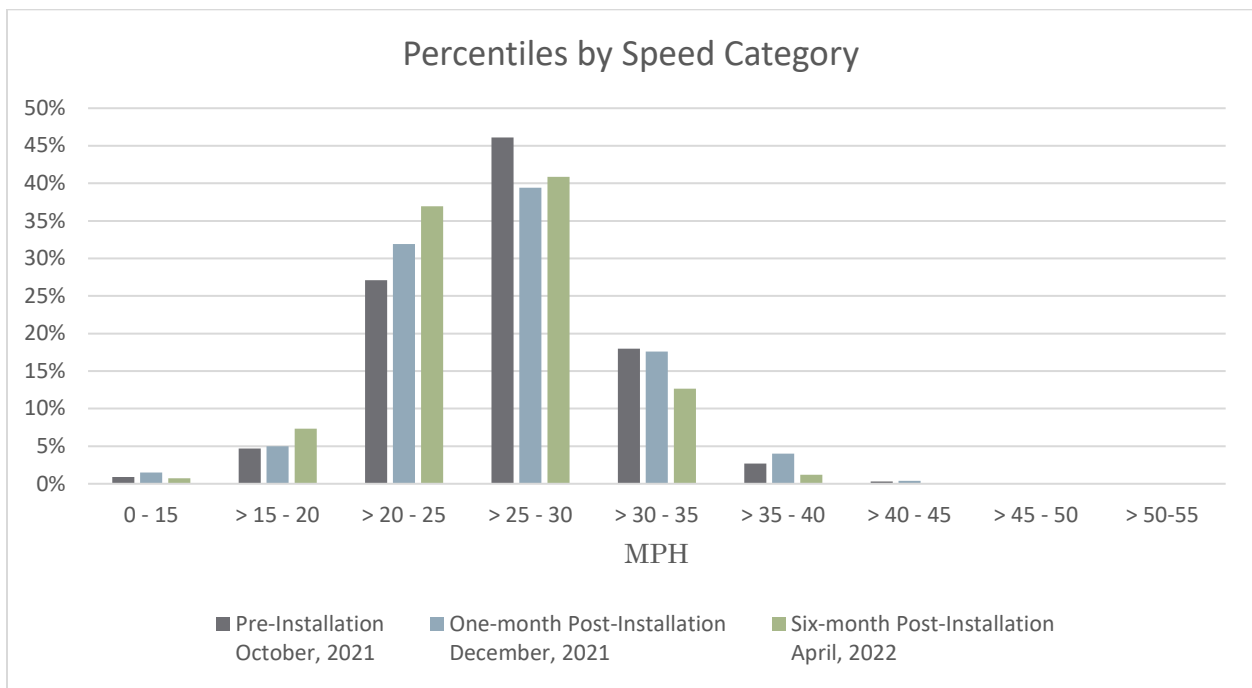
**SPEED STUDY**

Speed studies for the project were conducted before and after the installation of the advisory bike lanes between Matthews St. and Peterson St.

The posted speed limit on E. Pitkin St. is 25 mph. The pre-project speed study was conducted on Thursday, October 7<sup>th</sup>, 2021. The one-month post-project speed study was conducted from Monday, October 31<sup>th</sup>, 2022 through Wednesday, November 2<sup>nd</sup>, 2022. The six-month post-project speed study was conducted on Tuesday, April 25<sup>th</sup>. A one-year-post-installation speed study was conducted from Wednesday, October 4, 2023 through Tuesday, October 10, 2023. Upon examination of the speed study data, there were enough erroneous data points in the dataset that the integrity of the data is in question. Several data points indicated vehicle speeds greater than 100 mph, which would be impossible on this roadway.

A detailed version of the erroneous speed study can be found in Appendix 2. Another speed study will be conducted in April of 2024 to ensure data accuracy. The data presented in figure 5 do not include the erroneous data.

Figure 5. Pre-Installation and Post-Installation Project Speed Studies



**PUBLIC ENGAGEMENT SURVEY**

An online survey was developed to assess travel experience and comfort levels on E. Pitkin St. before and after the advisory bike lane installation. No additional survey responses have been submitted since the previous progress report.

## PUBLIC COMMENTS

Since the previous progress report, no additional public comments have been received about the Pitkin advisory lanes.

## PUBLIC OUTREACH

The City of Fort Collins has raised awareness about the E. Pitkin St. advisory bike lanes using the following outreach strategies in coordination with the Utilities and Streets departments:

- public website,
- presentations,
- neighborhood meetings,
- postcard mailers,
- pop-up educational events,
- press release,
- *Momentum* e-newsletter,
- stakeholder meetings,
- e-mail updates,
- videos,
- targeted communications to nearby schools,
- bilingual educational materials,
- outreach to local driver's education programs

### Website

The following website was created as a way to inform the public about the upcoming changes on E. Pitkin St.:

<https://www.fcgov.com/fcmoves/east-pitkin-street>

The website currently contains the following information related to the project:

- A link to sign up for regular email updates related to the project,
- A link to the survey soliciting input from the public regarding their experience travelling along E. Pitkin St. following the project,
- The project overview, including video content and a link to the Bicycle Master Plan,
- Videos explaining the project and how to share the road on a street with advisory bike lanes,
- A map of the project area,
- A definition of advisory bike lanes with additional resource links,
- Parking information for those affected by construction-related street closures, and
- Contact information for the project managers

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B

Station ID:

Pitkin St

East of Mathews

Comment 1:

Comment 2:

Serial Number: 38255

0.000000

0.000000

10/2/2023	10/2/2023		10/3/2023		10/4/2023		10/5/2023		10/6/2023		Weekday Average		10/7/2023		10/8/2023	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	*	*	*	*	*	*	2	1	3	1	2	1	4	1	8	1
1:00	*	*	*	*	*	*	0	0	2	0	1	0	3	1	3	2
2:00	*	*	*	*	*	*	2	1	1	0	2	0	2	2	2	1
3:00	*	*	*	*	*	*	2	2	1	1	2	2	2	2	3	1
4:00	*	*	*	*	*	*	0	2	0	0	0	1	0	0	1	1
5:00	*	*	*	*	*	*	3	1	1	2	2	2	0	0	0	6
6:00	*	*	*	*	*	*	5	5	4	9	4	7	3	4	4	6
7:00	*	*	*	*	*	*	58	65	50	61	54	63	13	10	2	12
8:00	*	*	*	*	*	*	39	41	35	38	37	40	9	23	9	15
9:00	*	*	*	*	*	*	34	52	43	40	38	46	20	27	26	44
10:00	*	*	*	*	*	*	32	42	30	33	31	38	32	29	37	29
11:00	*	*	*	*	*	*	43	33	40	43	42	38	25	25	31	30
12:00 PM	*	*	*	*	55	47	44	40	47	39	49	42	40	29	33	30
1:00	*	*	*	*	51	36	29	41	43	33	41	37	45	31	42	36
2:00	*	*	*	*	67	43	79	65	76	64	74	57	33	27	30	18
3:00	*	*	*	*	55	52	49	45	61	55	55	51	57	17	31	23
4:00	*	*	*	*	68	51	93	56	67	136	76	81	50	26	36	14
5:00	*	*	*	*	79	47	71	55	72	56	74	53	33	31	29	32
6:00	*	*	*	*	50	37	37	33	64	37	50	36	38	19	29	15
7:00	*	*	*	*	32	21	31	29	44	24	36	25	24	9	21	17
8:00	*	*	*	*	22	10	32	12	29	13	28	12	17	10	23	14
9:00	*	*	*	*	29	7	26	10	28	12	28	10	18	8	11	3
10:00	*	*	*	*	9	3	15	5	27	10	17	6	22	8	4	4
11:00	*	*	*	*	7	1	10	2	11	4	9	2	7	3	5	2
Total	0	0	0	0	524	355	736	638	779	711	752	650	497	342	420	356
Day	0		0		879		1374		1490		1402		839		776	
AM Peak							7:00	7:00	7:00	7:00	7:00	7:00	10:00	10:00	10:00	9:00
Volume							58	65	50	61	54	63	32	29	37	44
PM Peak					5:00	3:00	4:00	2:00	2:00	4:00	4:00	4:00	3:00	1:00	1:00	1:00
Volume					79	52	93	65	76	136	76	81	57	31	42	36

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B

Station ID:

Pitkin St

East of Mathews

Comment 1:  
 Comment 2:  
 Serial Number: 38255

0.000000

0.000000

10/9/2023	10/9/2023		10/10/2023		10/11/2023		10/12/2023		10/13/2023		Weekday Average		10/14/2023		10/15/2023	
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
12:00 AM	3	1	2	1	*	*	*	*	*	*	2	1	*	*	*	*
1:00	0	0	5	0	*	*	*	*	*	*	2	0	*	*	*	*
2:00	3	0	0	0	*	*	*	*	*	*	2	0	*	*	*	*
3:00	0	1	2	0	*	*	*	*	*	*	1	0	*	*	*	*
4:00	1	0	2	1	*	*	*	*	*	*	2	0	*	*	*	*
5:00	2	3	2	1	*	*	*	*	*	*	2	2	*	*	*	*
6:00	7	6	2	9	*	*	*	*	*	*	4	8	*	*	*	*
7:00	54	58	55	70	*	*	*	*	*	*	54	64	*	*	*	*
8:00	29	61	38	48	*	*	*	*	*	*	34	54	*	*	*	*
9:00	34	35	31	53	*	*	*	*	*	*	32	44	*	*	*	*
10:00	22	44	43	66	*	*	*	*	*	*	32	55	*	*	*	*
11:00	45	34	47	57	*	*	*	*	*	*	46	46	*	*	*	*
12:00 PM	32	42	65	47	*	*	*	*	*	*	48	44	*	*	*	*
1:00	46	41	48	43	*	*	*	*	*	*	47	42	*	*	*	*
2:00	97	56	72	63	*	*	*	*	*	*	84	60	*	*	*	*
3:00	47	44	75	45	*	*	*	*	*	*	61	44	*	*	*	*
4:00	72	49	76	51	*	*	*	*	*	*	74	50	*	*	*	*
5:00	61	42	75	59	*	*	*	*	*	*	68	50	*	*	*	*
6:00	45	31	49	46	*	*	*	*	*	*	47	38	*	*	*	*
7:00	29	17	37	25	*	*	*	*	*	*	33	21	*	*	*	*
8:00	15	11	46	16	*	*	*	*	*	*	30	14	*	*	*	*
9:00	14	6	29	12	*	*	*	*	*	*	22	9	*	*	*	*
10:00	9	9	10	5	*	*	*	*	*	*	10	7	*	*	*	*
11:00	10	2	11	2	*	*	*	*	*	*	10	2	*	*	*	*
Total	677	593	822	720	0	0	0	0	0	0	747	655	0	0	0	0
Day	1270		1542		0		0		0		1402		0		0	
AM Peak	7:00	8:00	7:00	7:00							7:00	7:00				
Volume	54	61	55	70							54	64				
PM Peak	2:00	2:00	4:00	2:00							2:00	2:00				
Volume	97	56	76	63							84	60				
Comb Total	1270		1542		879		1374		1490		2804		839		776	
ADT	ADT: 1,224		AADT: 1,224													

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B  
 Station ID:  
 Pitkin St  
 East of Mathews

Comment 1:  
 Comment 2:  
 Serial Number: 38255

0.000000  
 0.000000

Direction: Combined

10/4/2023	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	5	19	37	22	18	1	0	0	0	0	0	0	0	102
1:00	4	12	42	10	16	3	0	0	0	0	0	0	0	87
2:00	3	21	51	25	5	4	1	0	0	0	0	0	0	110
3:00	3	16	42	19	14	13	0	0	0	0	0	0	0	107
4:00	0	16	52	33	10	8	0	0	0	0	0	0	0	119
5:00	1	16	51	33	13	10	1	0	0	1	0	0	0	126
6:00	3	13	34	23	8	5	1	0	0	0	0	0	0	87
7:00	2	5	25	12	5	4	0	0	0	0	0	0	0	53
8:00	1	4	7	16	4	0	0	0	0	0	0	0	0	32
9:00	4	7	15	8	2	0	0	0	0	0	0	0	0	36
10:00	3	2	5	2	0	0	0	0	0	0	0	0	0	12
11:00	0	1	4	2	1	0	0	0	0	0	0	0	0	8
<b>Total</b>	<b>29</b>	<b>132</b>	<b>365</b>	<b>205</b>	<b>96</b>	<b>48</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>879</b>
			Percentile	15th	50th	85th	95th							
			Speed	19	24	31	35							
			Mean Speed (Average)	24.5										
			10 MPH Pace Speed	20-29										
			Number in Pace	569										
			Percent in Pace	64.7%										
			Number > 25 MPH	353										
			Percent > 25 MPH	40.2%										

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B  
 Station ID:  
 Pitkin St  
 East of Mathews

Comment 1:  
 Comment 2:  
 Serial Number: 38255

0.000000  
 0.000000

Direction: Combined

10/5/2023	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	3
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3
3:00	0	0	3	0	1	0	0	0	0	0	0	0	0	4
4:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
5:00	0	1	0	3	0	0	0	0	0	0	0	0	0	4
6:00	0	2	0	5	2	0	1	0	0	0	0	0	0	10
7:00	0	4	26	62	17	11	3	0	0	0	0	0	0	123
8:00	3	4	28	32	10	1	2	0	0	0	0	0	0	80
9:00	4	6	20	32	16	7	1	0	0	0	0	0	0	86
10:00	3	11	12	25	16	7	0	0	0	0	0	0	0	74
11:00	3	2	19	30	16	5	1	0	0	0	0	0	0	76
12:00 PM	0	2	21	33	14	11	2	1	0	0	0	0	0	84
1:00	0	1	24	17	15	10	1	2	0	0	0	0	0	70
2:00	3	8	40	44	16	15	14	3	1	0	0	0	0	144
3:00	2	20	20	17	3	14	10	5	2	1	0	0	0	94
4:00	2	34	41	21	13	14	13	5	2	4	0	0	0	149
5:00	8	24	39	9	13	11	10	5	5	1	1	0	0	126
6:00	5	8	24	7	5	8	7	6	0	0	0	0	0	70
7:00	1	18	18	7	6	4	2	4	0	0	0	0	0	60
8:00	4	19	7	4	4	2	3	1	0	0	0	0	0	44
9:00	5	11	11	2	1	3	1	2	0	0	0	0	0	36
10:00	1	6	8	1	3	1	0	0	0	0	0	0	0	20
11:00	4	3	3	1	1	0	0	0	0	0	0	0	0	12
Total	48	185	367	353	175	124	71	34	10	6	1	0	0	1374

Percentile	15th
Speed	20
Mean Speed (Average)	27.3
10 MPH Pace Speed	20-29
Number in Pace	717
Percent in Pace	52.2%
Number > 25 MPH	774
Percent > 25 MPH	56.3%

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B  
 Station ID:  
 Pitkin St  
 East of Mathews

Comment 1:  
 Comment 2:  
 Serial Number: 38255

0.000000  
 0.000000

Direction: Combined

10/6/2023	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	1	0	1	1	0	1	0	0	0	0	0	0	0	4
1:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
2:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
3:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	1	1	0	0	1	0	0	0	0	0	0	3
6:00	0	2	2	3	2	2	0	2	0	0	0	0	0	13
7:00	0	15	31	8	18	16	11	7	2	2	1	0	0	111
8:00	1	4	25	8	5	11	7	8	2	2	0	0	0	73
9:00	3	15	19	12	7	4	9	5	5	2	0	1	1	83
10:00	5	7	20	8	2	4	5	3	4	0	2	0	3	63
11:00	2	20	20	11	7	5	10	3	2	0	0	2	1	83
12:00 PM	0	7	32	18	15	10	3	1	0	0	0	0	0	86
1:00	4	13	27	12	6	10	4	0	0	0	0	0	0	76
2:00	6	22	48	17	22	17	6	1	0	0	1	0	0	140
3:00	8	13	33	19	16	10	13	2	1	1	0	0	0	116
4:00	6	17	48	26	43	28	19	8	5	3	0	0	0	203
5:00	5	23	28	25	19	12	12	2	0	1	1	0	0	128
6:00	6	20	30	19	12	9	3	1	0	1	0	0	0	101
7:00	5	21	14	10	6	4	4	1	1	0	0	0	2	68
8:00	3	7	13	10	0	7	0	1	0	1	0	0	0	42
9:00	2	7	16	4	5	3	3	0	0	0	0	0	0	40
10:00	0	11	13	4	3	3	2	0	0	1	0	0	0	37
11:00	0	2	7	3	2	0	1	0	0	0	0	0	0	15
<b>Total</b>	<b>57</b>	<b>228</b>	<b>430</b>	<b>220</b>	<b>190</b>	<b>156</b>	<b>113</b>	<b>45</b>	<b>22</b>	<b>14</b>	<b>5</b>	<b>3</b>	<b>7</b>	<b>1490</b>

Percentile	15th	50th	85th	95th
Speed	19	25	39	47
Mean Speed (Average)	28.7			
10 MPH Pace Speed	16-25			
Number in Pace	657			
Percent in Pace	44.1%			
Number > 25 MPH	775			
Percent > 25 MPH	52.0%			

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B  
 Station ID:  
 Pitkin St  
 East of Mathews

Comment 1:  
 Comment 2:  
 Serial Number: 38255

0.000000  
 0.000000

Direction: Combined

10/7/2023	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	0	0	3	2	0	0	0	0	0	0	0	0	0	5
1:00	0	0	4	0	0	0	0	0	0	0	0	0	0	4
2:00	0	0	0	2	0	2	0	0	0	0	0	0	0	4
3:00	1	0	1	0	1	1	0	0	0	0	0	0	0	4
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00	0	0	2	2	0	3	0	0	0	0	0	0	0	7
7:00	2	4	8	3	2	2	1	1	0	0	0	0	0	23
8:00	1	2	7	10	7	2	2	0	0	1	0	0	0	32
9:00	0	4	14	14	7	7	0	1	0	0	0	0	0	47
10:00	2	4	24	10	9	7	3	2	0	0	0	0	0	61
11:00	1	5	12	12	5	9	5	1	0	0	0	0	0	50
12:00 PM	1	6	28	11	11	6	5	1	0	0	0	0	0	69
1:00	0	12	22	19	12	10	1	0	0	0	0	0	0	76
2:00	1	8	20	16	9	4	2	0	0	0	0	0	0	60
3:00	2	15	29	13	4	4	6	1	0	0	0	0	0	74
4:00	3	21	23	12	8	5	3	1	0	0	0	0	0	76
5:00	1	19	18	12	6	7	1	0	0	0	0	0	0	64
6:00	4	20	16	8	6	1	1	1	0	0	0	0	0	57
7:00	2	4	20	4	1	1	1	0	0	0	0	0	0	33
8:00	3	7	10	3	2	2	0	0	0	0	0	0	0	27
9:00	1	8	8	6	1	1	1	0	0	0	0	0	0	26
10:00	5	6	12	3	2	1	1	0	0	0	0	0	0	30
11:00	3	3	3	0	1	0	0	0	0	0	0	0	0	10
Total	33	148	284	162	94	75	33	9	0	1	0	0	0	839

Percentile	15th
Speed	19
Mean Speed (Average)	25.6
10 MPH Pace Speed	20-29
Number in Pace	446
Percent in Pace	53.2%
Number > 25 MPH	374
Percent > 25 MPH	44.6%



# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B

Station ID:

Pitkin St

East of Mathews

Comment 1:

Comment 2:

Serial Number: 38255

0.000000

0.000000

Direction: Combined

10/8/2023	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	4	4	1	0	0	0	0	0	0	0	0	0	0	9
1:00	1	4	0	0	0	0	0	0	0	0	0	0	0	5
2:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
3:00	1	0	3	0	0	0	0	0	0	0	0	0	0	4
4:00	0	1	0	1	0	0	0	0	0	0	0	0	0	2
5:00	2	3	1	0	0	0	0	0	0	0	0	0	0	6
6:00	3	3	4	0	0	0	0	0	0	0	0	0	0	10
7:00	1	7	5	1	0	0	0	0	0	0	0	0	0	14
8:00	9	10	4	1	0	0	0	0	0	0	0	0	0	24
9:00	9	30	25	2	4	0	0	0	0	0	0	0	0	70
10:00	11	26	15	8	4	1	1	0	0	0	0	0	0	66
11:00	7	26	9	12	4	2	1	0	0	0	0	0	0	61
12:00 PM	4	20	23	6	8	2	0	0	0	0	0	0	0	63
1:00	6	25	22	15	7	2	1	0	0	0	0	0	0	78
2:00	6	16	10	8	5	3	0	0	0	0	0	0	0	48
3:00	4	10	23	8	4	5	0	0	0	0	0	0	0	54
4:00	6	18	15	6	1	2	1	0	0	1	0	0	0	50
5:00	8	19	19	8	5	2	0	0	0	0	0	0	0	61
6:00	10	8	14	5	5	2	0	0	0	0	0	0	0	44
7:00	5	14	10	3	5	1	0	0	0	0	0	0	0	38
8:00	12	13	7	4	0	1	0	0	0	0	0	0	0	37
9:00	4	3	5	1	1	0	0	0	0	0	0	0	0	14
10:00	0	4	1	2	1	0	0	0	0	0	0	0	0	8
11:00	0	2	3	2	0	0	0	0	0	0	0	0	0	7
Total	113	268	220	93	54	23	4	0	0	1	0	0	0	776

Percentile	15th	50th	85th	95th
Speed	15	20	28	33
Mean Speed (Average)	20.5			
10 MPH Pace Speed	15-24			
Number in Pace	484			
Percent in Pace	62.4%			
Number > 25 MPH	175			
Percent > 25 MPH	22.6%			

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B  
 Station ID:  
 Pitkin St  
 East of Mathews

Comment 1:  
 Comment 2:  
 Serial Number: 38255

0.000000  
 0.000000

Direction: Combined

10/9/2023	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	3	0	1	0	0	0	0	0	0	0	0	0	0	4
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
3:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
5:00	0	1	1	1	1	1	0	0	0	0	0	0	0	5
6:00	0	5	4	2	1	1	0	0	0	0	0	0	0	13
7:00	4	32	37	13	15	8	2	1	0	0	0	0	0	112
8:00	12	19	22	18	14	5	0	0	0	0	0	0	0	90
9:00	1	25	14	8	14	5	1	1	0	0	0	0	0	69
10:00	2	14	17	17	7	6	3	0	0	0	0	0	0	66
11:00	2	31	20	11	11	2	2	0	0	0	0	0	0	79
12:00 PM	2	14	19	9	16	8	2	2	0	0	0	0	2	74
1:00	3	30	23	12	12	4	3	0	0	0	0	0	0	87
2:00	12	64	34	10	14	14	5	0	0	0	0	0	0	153
3:00	9	24	22	8	5	11	8	3	1	0	0	0	0	91
4:00	9	58	20	8	13	7	6	0	0	0	0	0	0	121
5:00	10	32	23	8	13	12	3	1	1	0	0	0	0	103
6:00	14	32	10	16	4	0	0	0	0	0	0	0	0	76
7:00	8	22	10	4	2	0	0	0	0	0	0	0	0	46
8:00	3	10	11	2	0	0	0	0	0	0	0	0	0	26
9:00	9	8	1	2	0	0	0	0	0	0	0	0	0	20
10:00	6	5	6	1	0	0	0	0	0	0	0	0	0	18
11:00	4	4	3	0	1	0	0	0	0	0	0	0	0	12
<b>Total</b>	<b>113</b>	<b>431</b>	<b>300</b>	<b>151</b>	<b>143</b>	<b>85</b>	<b>35</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1270</b>
			Percentile	15th	50th	85th	95th							
			Speed	16	21	33	38							
			Mean Speed (Average)	23.2										
			10 MPH Pace Speed	15-24										
			Number in Pace	726										
			Percent in Pace	57.2%										
			Number > 25 MPH	426										
			Percent > 25 MPH	33.5%										

# City of Fort Collins - Traffic Operations

## Volume Study

Site Code: PIT02-EW-23B  
 Station ID:  
 Pitkin St  
 East of Mathews

Comment 1:  
 Comment 2:  
 Serial Number: 38255

0.000000  
 0.000000

Direction: Combined

10/10/2023	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	Total
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	
12:00 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	3
1:00	2	2	1	0	0	0	0	0	0	0	0	0	0	5
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	1	0	1	0	0	0	0	0	0	0	0	0	0	2
4:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
5:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
6:00	2	3	4	0	2	0	0	0	0	0	0	0	0	11
7:00	19	71	31	3	0	0	1	0	0	0	0	0	0	125
8:00	22	46	14	3	1	0	0	0	0	0	0	0	0	86
9:00	17	49	16	1	0	0	1	0	0	0	0	0	0	84
10:00	33	54	13	3	3	2	1	0	0	0	0	0	0	109
11:00	27	43	22	6	3	3	0	0	0	0	0	0	0	104
12:00 PM	25	58	21	5	1	1	1	0	0	0	0	0	0	112
1:00	19	47	19	1	2	1	1	1	0	0	0	0	0	91
2:00	36	68	21	6	2	2	0	0	0	0	0	0	0	135
3:00	42	48	22	4	4	0	0	0	0	0	0	0	0	120
4:00	42	59	16	7	3	0	0	0	0	0	0	0	0	127
5:00	32	72	23	4	2	1	0	0	0	0	0	0	0	134
6:00	21	45	16	11	1	0	1	0	0	0	0	0	0	95
7:00	10	32	14	5	1	0	0	0	0	0	0	0	0	62
8:00	21	24	12	3	1	0	0	1	0	0	0	0	0	62
9:00	17	15	4	1	3	1	0	0	0	0	0	0	0	41
10:00	3	7	5	0	0	0	0	0	0	0	0	0	0	15
11:00	3	5	5	0	0	0	0	0	0	0	0	0	0	13
<b>Total</b>	<b>395</b>	<b>754</b>	<b>282</b>	<b>63</b>	<b>29</b>	<b>11</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1542</b>
			Percentile	15th	50th	85th	95th							
			Speed	13	17	22	27							
			Mean Speed (Average)	16.9										
			10 MPH Pace Speed	15-24										
			Number in Pace	1033										
			Percent in Pace	67.0%										
			Number > 25 MPH	111										
			Percent > 25 MPH	7.2%										
<b>Grand Total</b>	<b>788</b>	<b>2146</b>	<b>2248</b>	<b>1247</b>	<b>781</b>	<b>522</b>	<b>265</b>	<b>98</b>	<b>34</b>	<b>23</b>	<b>6</b>	<b>3</b>	<b>9</b>	<b>8170</b>
<b>Stats</b>			Percentile	15th	50th	85th	95th							
			Speed	16	22	33	40							
			Mean Speed (Average)	23.8										
			10 MPH Pace Speed	15-24										
			Number in Pace	4354										
			Percent in Pace	53.3%										
			Number > 25 MPH	2988										
			Percent > 25 MPH	36.6%										