Cheasty Mountain Bike Trail Monitoring – South Loop

Year 1 2023 Quarter 3 Monitoring Report

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September, 2023



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1. Introduction

Seattle Parks and Recreation contracted with EarthCorps in 2020 to develop and implement a monitoring plan prior to the construction associated with the <u>Cheasty Mountain Bike/Pedestrian</u> <u>Trail Pilot Project</u> at the Cheasty Natural Area in South Seattle. This report summarizes the findings for the Year 1 Quarter 3 monitoring period (July-September, 2023).

EarthCorps performed the following monitoring tasks for Quarter 3 on September 22, 2023:

- Cheasty Boulevard Car Parking Monitoring
- Plot Level Observational Vegetation Monitoring
- Plot Level Photo Monitoring
- Forest Monitoring Plot Photo Monitoring

Note that the Upper 2-way Option Loop trail was still under construction at the time of the Q3 survey. Plot three as-built monitoring has not occurred. The following table describes the proposed monitoring year designations for this three-year reporting period:

Baseline (pre-construction):	2020
Trail construction:	2021
Trail construction continued:	2022
Year 1 monitoring:	2023
Year 2 monitoring:	2024
Year 3 monitoring:	2025

2. Cheasty Boulevard Car Parking Monitoring

EarthCorps performed an observational survey for illegal or improperly parked cars along Cheasty Boulevard between Beacon Ave S and S Andover Street following trail monitoring. During the site visit on September 22, 2023, there were no improperly parked vehicles along the monitored road segment (see photos below). No other parking issues were observed at this time. In addition, there were no occupied homeless encampments noted near or within the Mountain Bike South Loop



3. Plot Level Linear Observational Vegetation Monitoring

Qualitative observations of vegetation conditions were noted along the linear trail edges within each plot. These observations are intended to identify and document general conditions and note any damage or decline to the native vegetation along the trail edges and to note any issues or concerns with non-native species within the plot. These observations will be updated at each quarterly visit and compliment the photo monitoring. Trends can be compared over time. The following observations were noted during the site monitoring visit on September 22, 2023:

Plot #1: Reseeded grass along exposed embankments on both sides of the trail becoming well established and being actively cut/pruned. Native species present along trail edge are made up predominantly of sword fern (*Polystichum munitum*), osoberry (*Oemleria cerasiformis*), and beaked hazelnut (*Corylus cornuta*). These species are not prevalent although appear healthy, also with extensive trailing blackberry (*Rubus ursinus*) well established in east portion of plot.

Some dead sword ferns are present along the trail corridor and appear to be failed transplants installed during or directly after trail construction.

Common blackberry (*Rubus bifrons*) is becoming well established and encroaching the trail in places. Common ivy (*Hedera helix*) is minimally established in the plot but appears to be spreading. General invasive plant management is recommended in the vicinity of plot #1.

Plot #2: Several of the well-established sword ferns along the trail showed signs of distress that could be related to drought, with some completely dead in narrow area between intersecting trails. Some of the dead ferns may be failed transplants. Side pruning of several young conifer saplings was observed on western red cedar (*Thuja plicata*) and Douglas fir (*Pseudotsuga menziesii*) trees in the northwest corner of the plot. Other native vegetation including low Oregon grape (*Mahonia nervosa*), trailing blackberry, osoberry, beaked hazelnut, and snowberry (*Symphiocarpos albus*) in the plot appeared healthy.

Common ivy is spreading within the plot and growing up the trunks of some of the mature trees and is recommended for control.

The silt fence that is in the plot and extending to the east was still generally intact although showing some signs of slumping and deterioration (see pics below), although no obvious signs of unwarranted access into the wetland was observed.



Plot #4: Moderate signs of intentional vegetation disturbance (pruning) noted, especially along the trail-left side of the trail inside the sharp turn in efforts to increase sight lines and visibility. Damaged vegetation include red osier dogwood (*Cornus sericea*), western red cedar (heavily damaged sapling trail-right in northwest corner), beaked hazelnut, and tall Oregon grape (*Mahonia aquifolium*). The hazelnut was observed newly pruned during the last monitoring period (Q2 2023) and is now heavily resprouting. Debris piles from the vegetation (some material may have been cut in areas outside of the plot) were noted in the northwest quadrant of the plot trail-right. Some significant side pruning has occurred on the more mature trees (western red cedar and Douglas fir) in the northeast quadrant of the plot on both sides of the trail. Young resprouting black cottonwood trees (*Populus balsamifera* ssp. *trichocarpa*) were noted growing directly adjacent to the trail tread and will require regular pruning to maintain.

Plot #5: Native vegetation in Plot 5 appears generally healthy. One sword fern showed moderate signs of distress. Trailing blackberry is well established and encroaching on the trail tread in places. Tall Oregon grape is also sprouting on or near the tread. Several conifer saplings growing close to the trail have been side pruned. A moderate area of bare ground persists in the middle of the plot trail right that is showing some signs of native (trailing blackberry, tall Oregon grape, and bracken fern (*Pteridium aquilinum*)) and non-native (Cherry laurel (*Prunus laurocerasus*) and common blackberry) vegetation reestablishment. The common blackberry is well established throughout the plot area and encroaching on to the trail corridor, general vegetation management recommended in the area.

4. Trail Plot Level Photo Monitoring

Photos were taken at each plot in the same manner established in 2022 Q4. Generally, photos were taken at the edge of the 1/10 acre plot looking along the trail corridor(s) towards the center of the plot. These photos can be compared to previous photo monitoring (and future iterations) to show change over time. Photos are included in Appendix A.

5. Forest Monitoring Plot Photo Monitoring

Photos were taken from the center of each of the three Forest Monitoring Plots located in the vicinity of the South Loop. Four photos were taken at each plot center looking in each cardinal direction. These photos can be used to compare change over time. Note that Cheasty Yard East is in the vicinity of the unfinished Upper 2-Way Option loop trail and has undergone substantial disturbance as a result of preliminary trail clearing activity. Photos are included in Appendix B.

Cheasty Greenspace Mountainbike/Pedestrian Trail – South Loop Photo monitoring Year 1, Q3 2023

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Plot	# of Photos			
1	4			
3 photo points at: #1 top of trail looking NE (1 photo), #2 southern switchback looking NW and				
NE (2 photos), and #3 bottom of trail looking N (1 photo)				

Plot 1 Photo Point 1 (NE)



Plot 1 Photo Point 2a (NW)



Plot 1 Photo Point 2b (NE)



Plot 1 Photo Point 3 (N)



Plot	# of Photos				
2 8					
4 photos at each of the individual trail legs that enter or exit the plot (3 looking downhill and 1					
looking uphill) starting at NW trail and continuing clockwise. #1 top of south leg looking SE. #2 at top					
of north leg looking SW. #3 at top of 2-way looking S. #4 at bottom of 2-way looking SW.					

Plot 2 Photo Point 1 (SE)



Plot 2 Photo Point 2 (SW)



Plot 2 Photo Point 3 (S)



Plot 2 Photo Point 4 (SW)



Plot	# of Photos			
4	4			
3 photo points at: #1 top of trail looking SW (1 photo), #2 at end of line-intercept transect				
looking N and E (2 photos), and #3 bottom of trail looking SW (1 photo)				

Plot 4 Photo Point 1 (SW)



Plot 4 Photo Point 2a (N)



Plot 4 Photo Point 2b (E)



Plot 4 Photo Point 3 (SW)



Plot	# of Photos			
5	2			
2 photo points at: #1 top of trail looking NE (1 photo) and #2 bottom of trail looking SW (1 photo)				

Plot 5 Photo Point 1 (NE)



Plot 5 Photo Point 2 (SW)





GSP Forest Monitoring Plot Location Map (see GSP Reference Map for phase data)

Cheasty Yard East (N)



Cheasty Yard East (E)



Cheasty Yard East (S)



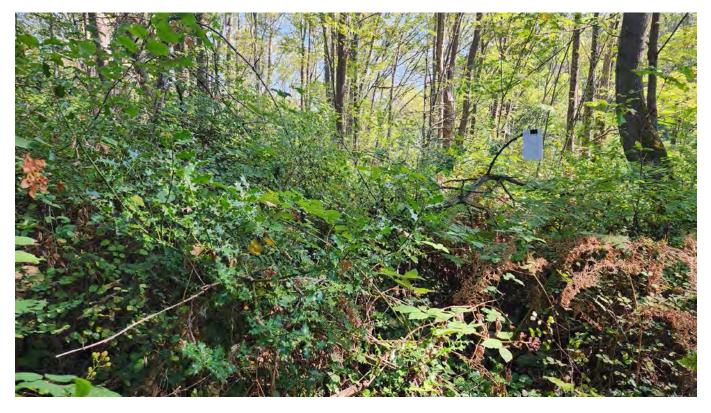
Cheasty Yard East (W)



Cheasty Yard (N)



Cheasty Yard (E)



Cheasty Yard (S)



Cheasty Yard (W)



Cheasty Yard-2 (N)



Cheasty Yard-2 (E)



Cheasty Yard-2 (S)



Cheasty Yard-2 (W)



Cheasty Quarterly Monitoring: Q3, 2023

Date: 9/29/23, 10:00 AM-11:00 AM

SPR Representative: Kelly Stamm

Other Attendees: Amir Williams

1. Illegal parking on Cheasty Boulevard

No vehicles observed parking on Cheasty Boulevard.

2. Wildlife observed

A woodpecker was observed. Flight paths were over the greenspace today so the Merlin app could not register specific bird calls, but half a dozen different bird calls were heard. No other wildlife was observed.

3. Camping/homeless encampment activity

No active encampments were seen. Two apparent previous encampments were seen near Cheasty Boulevard at the top of the Cottonwood Trail. Some trash/debris remained after cleanup at the lower previous encampment site but no new trash or debris was seen at either location.



Figure 1: Previous encampment at top of Cottonwood Trail



Figure 2: Debris from encampment at first switchback on Cottonwood Trail

4. Use/disuse of social trails

Active social trails were observed near 24th and Cheasty, at the bottom of the multi-use trail near Columbian Way and between the multi-use trail and meadow near Cheasty Boulevard. A previous social trail off the 2nd switch back on the Cottonwood Trail has regrown and is no longer visible..

The new mountain bike hill along the Cottonwood Trail was blocked from further building by forest stewards after last quarter report and has not continued to grow. Stewards plan to close trail more permanently now that we are in the rainy season.



Figure 3 New social trail on Cottonwood Trail



Figure 4: Social trail at Columbian Way

5. Damage and degradation to wetlands not protected by fencing

No damage or degradation to wetlands was observed.

6. Trash and dumping

Some minor litter was seen along the trails with no major trash dumping visible. Old couch is still in place along Cottonwood Trail. Previous monitored minor litter has been removed.

Corrective Actions this Quarter

Including but not limited to re-building or re-alignment of trail segments, new signage, new fencing, drainage modifications etc.

SPR is installing new gravel along the Cheasty Boulevard trail.

Rerouting of the Red Cedar trail is ongoing per the SDCI permit revision and will be complete prior to grading season end of 11/1/23.



Figure 5 New gravel at Cheasty Boulevard trail

Cheasty Trails



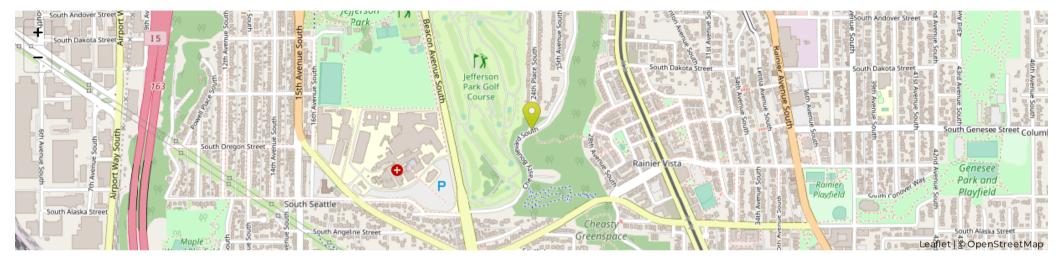
Kellina Stamm 09/29/2023



Cheasty Trails- Pedestrian- N. of 24th Pl

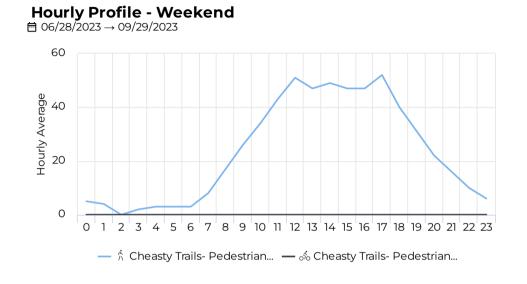
June 28, 2023 12:00 AM → September 30, 2023 12:00 AM

Location



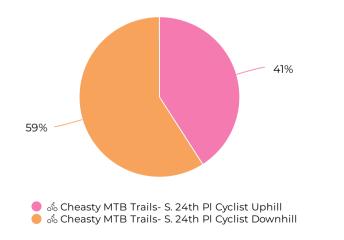
Daily Average Peds			Peak Day Peds		
Daily Average	Peak Day	Peak	Day		
704	Friday 8 Sep 29, 2023	Friday Aug 4, 2023	1,133		
	Daily Avg Weekend Ped&	•			
	Daily Average				
	567				
	 ₱ 06/28/2023 → 09/29/2023 Daily Average 	 ➡ 06/28/2023 → 09/29/2023 ➡ 06/28/2023 → 09/29/2023 ➡ Daily Average Peak Day 704 Friday Sep 29, 2023 Daily Avg Weekend Ped8 ➡ 06/28/2023 → 09/29/2023 ➡ Daily Average 			

June 28, 2023 12:00 AM \rightarrow September 30, 2023 12:00 AM



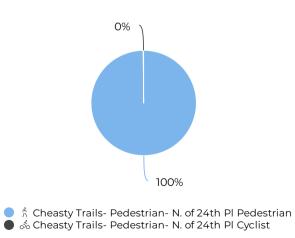
Downhill Vs Uphill Cyclists

 $\textcircled{i} 06/28/2023 \rightarrow 09/29/2023$





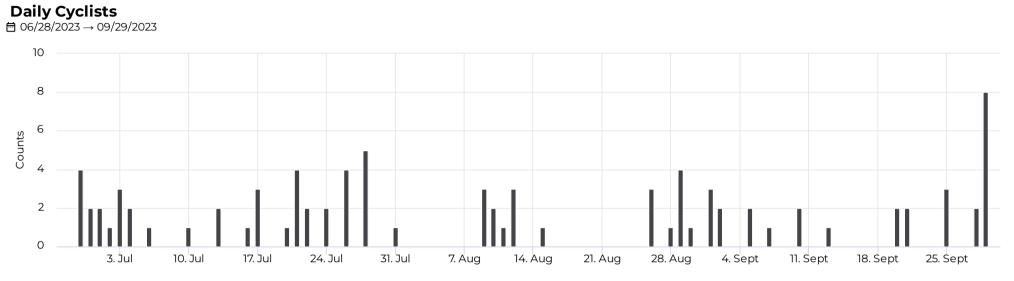
Bike/Ped Distribution

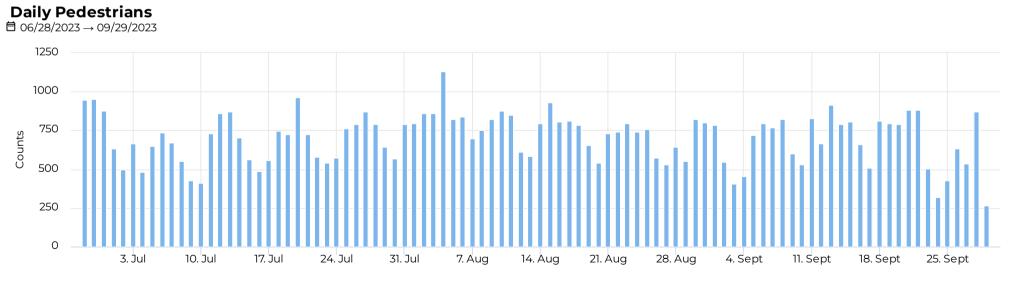




Cheasty Trails- Pedestrian- N. of 24th Pl

June 28, 2023 12:00 AM → September 30, 2023 12:00 AM



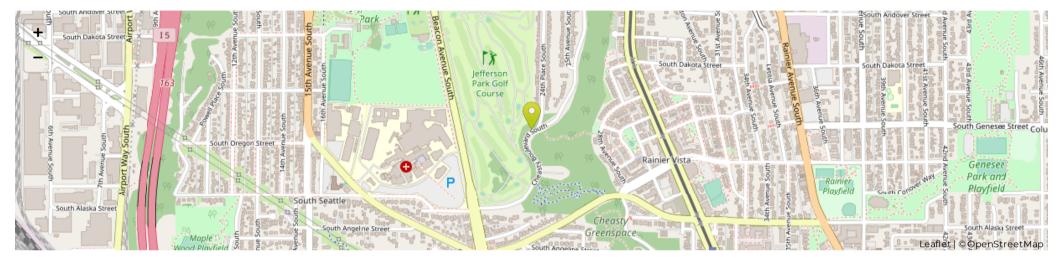




Cheasty Trails- Pedestrian- S. of 24th Pl

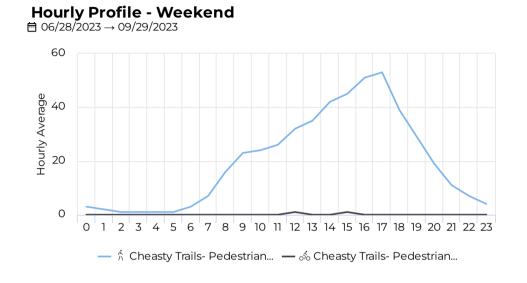
June 28, 2023 12:00 AM → September 30, 2023 12:00 AM

Location



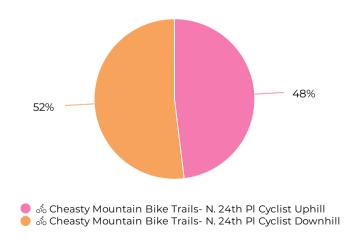
Daily Average Bicyclists	Daily Average Peds	Peak Day Bicyclists	Peak Day Peds
Daily Average	Daily Average	Peak Day	Peak Day
3	583	Thursday 13 Jul 20, 2023	Friday 971 Aug 4, 2023
Daily Avg Week Ped&Bike 혐 06/28/2023 → 09/29/2023		Daily Avg Weekend Ped&	•••
Daily Average		Daily Average	
628		477	

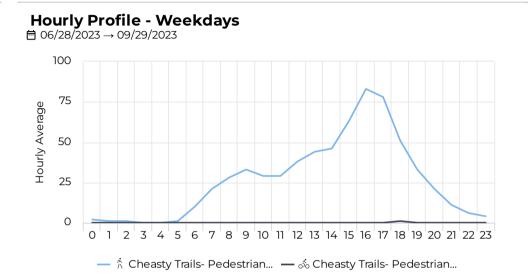
June 28, 2023 12:00 AM → September 30, 2023 12:00 AM



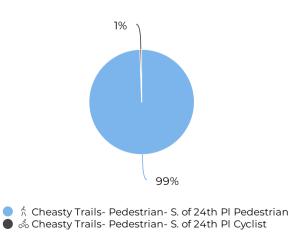
Downhill Vs Uphill Cyclists

 $\textcircled{\ } 06/28/2023 \rightarrow 09/29/2023$





Bike/Ped Distribution

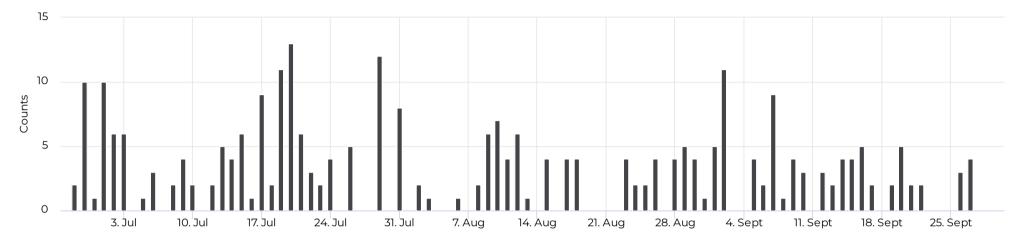


eco counter

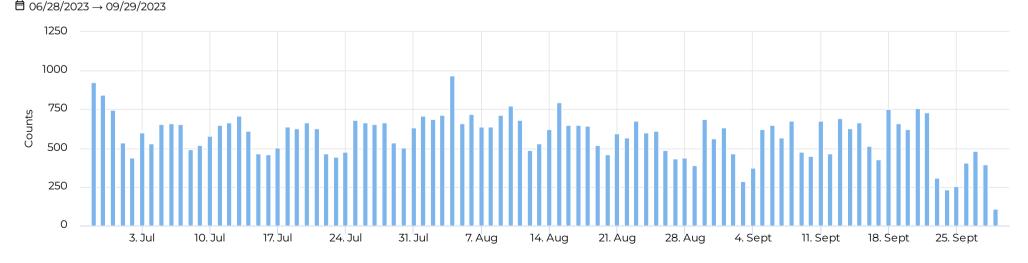
Cheasty Trails- Pedestrian- S. of 24th Pl

June 28, 2023 12:00 AM → September 30, 2023 12:00 AM





Daily Pedestrians ☐ 06/28/2023 → 09/29/2023

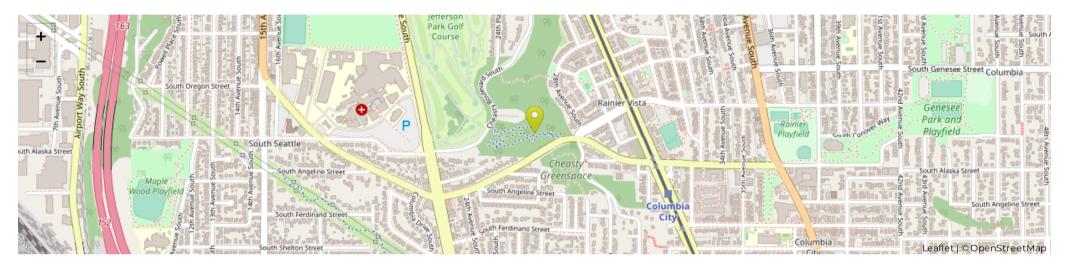




Cheasty Trails- Snowberry Trail

June 28, 2023 12:00 AM \rightarrow September 30, 2023 12:00 AM

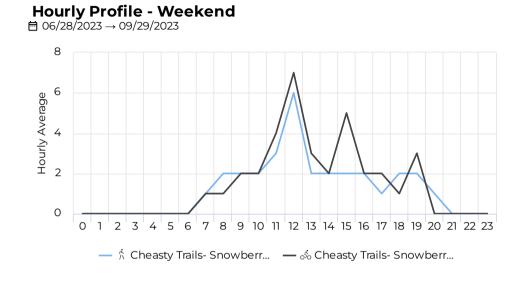
Location



Daily Average Bicyclists	Daily Average Peds	Peak Day Bicyclist		Peak Day Peds	2023
Daily Average	Daily Average	Peak Day		Peak D	ау
32	32	Saturday Jul 29, 2023	105	Tuesday Jul 25, 2023	94
Daily Avg Week Ped&Bike		Daily Avg Weeke			
Daily Average		Daily Average	e		
64		64			



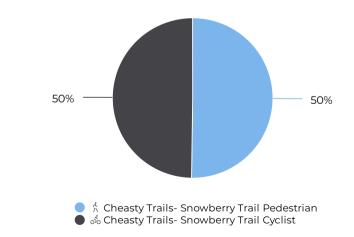
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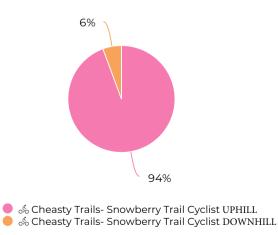


Bike/Ped Distribution



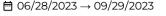
Downhill Vs Uphill Cyclists

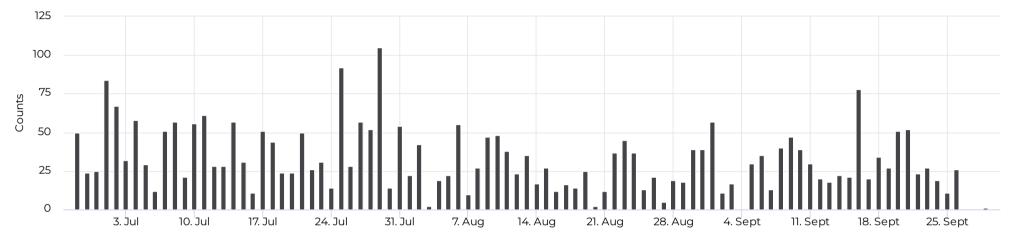
 $\overrightarrow{\square}$ 06/28/2023 \rightarrow 09/29/2023



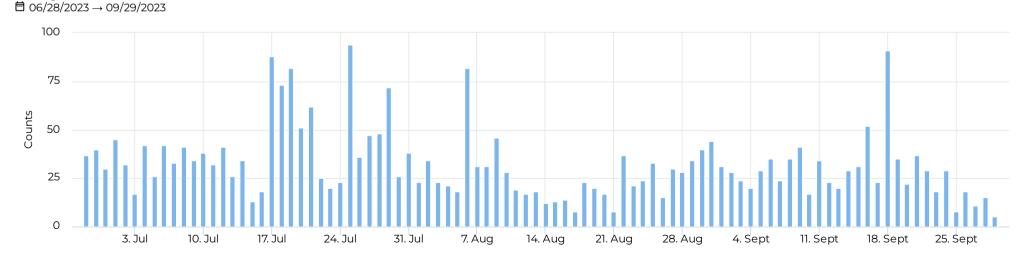
Cheasty Trails- Snowberry Trail

June 28, 2023 12:00 AM → September 30, 2023 12:00 AM



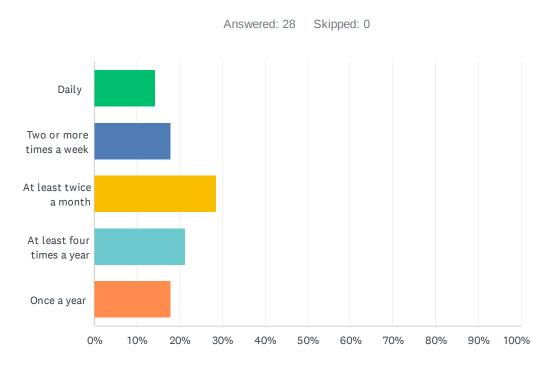


Daily Pedestrians ☐ 06/28/2023 → 09/29/2023





Q1 How often do you visit the Cheasty Pedestrian and Mountain Bike Trail?



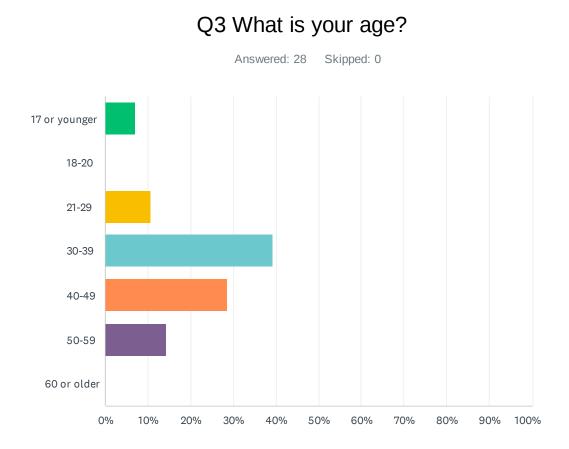
ANSWER CHOICES	RESPONSES
Daily	14.29% 4
Two or more times a week	17.86% 5
At least twice a month	28.57% 8
At least four times a year	21.43% 6
Once a year	17.86% 5
TOTAL	28

Q2 In what ZIP code is your home located? (enter 5-digit ZIP code; for example, 00544 or 94305)

Answered: 28 Skipped: 0

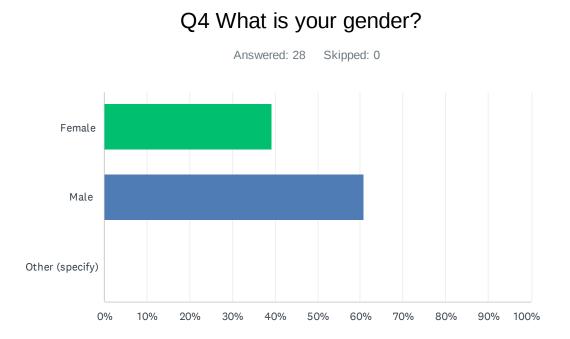
In what ZIP code is your home located? (enter 5-digit ZIP code; for example, 00544 or 94305)

Answered: 28 Skipped: 0								
RESPONSES (28)	WORD CLOUD	TAGS (3)						
Tags							+ N	lew Tag
98108	98108		_	25%	7	View all	Edit	Delete
98118	98118			17.86%	5	View all	Edit	Delete
98144	98144		-	17.86%	5	View all	Edit	Delete
Untagged				46.43%	13	View all		



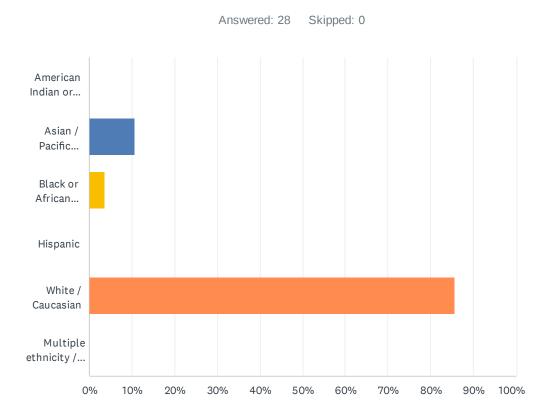
Cheasty Pedestrian	and Mountain Bike	Trail User Survey
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ANSWER CHOICES	RESPONSES	
17 or younger	7.14%	2
18-20	0.00%	0
21-29	10.71%	3
30-39	39.29%	11
40-49	28.57%	8
50-59	14.29%	4
60 or older	0.00%	0
TOTAL		28



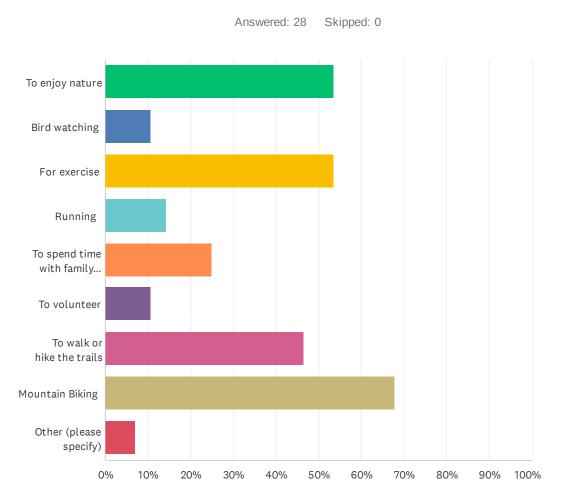
ANSWER CHOICES	RESPONSES	
Female	39.29%	11
Male	60.71%	17
Other (specify)	0.00%	0
TOTAL		28

Q5 Which race/ethnicity best describes you? (Please choose only one.)



ANSWER CHOICES	RESPONSES	
American Indian or Alaskan Native	0.00%	0
Asian / Pacific Islander	10.71%	3
Black or African American	3.57%	1
Hispanic	0.00%	0
White / Caucasian	85.71%	24
Multiple ethnicity / Other (please specify)	0.00%	0
TOTAL		28

Q6 Why do you visit the Cheasty Pedestrian and Mountain Bike Trail? (check all that apply)



ANSWER CHOICES	RESPONSES	
To enjoy nature	53.57%	15
Bird watching	10.71%	3
For exercise	53.57%	15
Running	14.29%	4
To spend time with family and/or friends	25.00%	7
To volunteer	10.71%	3
To walk or hike the trails	46.43%	13
Mountain Biking	67.86%	19
Other (please specify)	7.14%	2
Total Respondents: 28		

Q7 Rate your experience of the trail

Answered: 25 Skipped: 3



	1	2	3	4	5	TOTAL	WEIGHTED AVERAGE	
☆	0.00% 0	0.00% 0	20.00% 5	20.00% 5	60.00% 15	25		4.40

Cheasty Boulevard FindIt FixIt Data Summary

10/1/22-03/31/23

Report Type

	Illegal Dumping	Encampment	Pothole	Electrical	Signage	Vegetation	Parking
Near Trails*	20	0	0	0	2	1	0
Other parts of Blvd	7	0	3	2	0	0	0
On Trails	0	1	0	0	0	0	0
Total	27	1	3	2	2	1	0

04/01/23-06/30/23

	Report Type						_
	Illegal Dumping	Encampment	Pothole	Electrical	Signage	Vegetation	Parking
Near Trails*	10	0	0	0	0	0	2
Other parts of Blvd	7	1	1	1	0	5	0
On Trails	1	0	0	0	0	0	0
Total	18	1	1	1	0	5	2

7/1/23-09/30/23

., _, _0 00, 00, _0							
	Report Type						
	Illegal Dumping	Encampment	Pothole	Electrical	Signage	Vegetation	Parking
Near Trails*	1	0	0	0	0	1	0
Other parts of Blvd	7	1	0	1	1	0	0
On Trails	0	0	0	0	1	1	0
Total	8	1	0	1	2	2	0

*Defined as between 4310 Cheasty Blvd and 25th Ave S