

# Connecticut Trail Census

A statewide multi-use trail user study and volunteer data collection program

PROGRAM WELCOME WEBINAR  
NOVEMBER 17, 2016





*2016-2017*

# CT Trail Census

Pilot funded by DEEP Rec Trails grant  
12 trails selected to participate



## GOALS

**DEVELOP A BETTER UNDERSTANDING OF MULTI-USE TRAIL USE IN THE STATE AND TO MAKE THIS IMPORTANT INFORMATION AVAILABLE TO TRAIL USER GROUPS, ADMINISTRATORS, GOVERNMENT AGENCIES, AND THE GENERAL PUBLIC.**

## STATEWIDE

Understand when, who, how, and why people use multi-use trails. Use state data to educate trail user groups, administrators, state and local government agencies, and the general public about trails and their impacts

## MULTI-YEAR

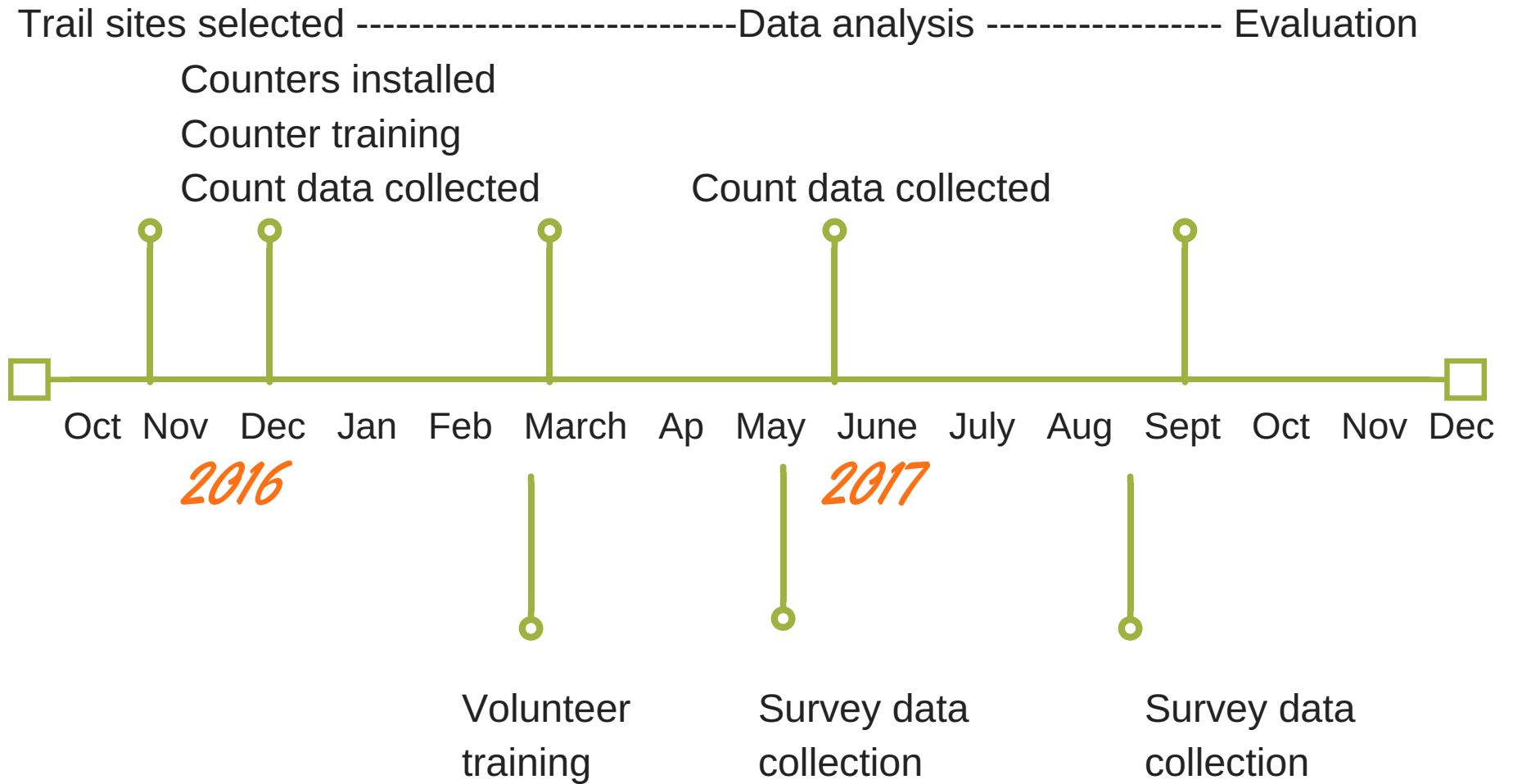
Obtain multi-year information about trail use, user demographics, economic impacts, and trail amenities for identification of patterns and trends

## VOLUNTEER-BASED

Promote active community participation in monitoring. Encourage data informed trail building and maintenance programs.

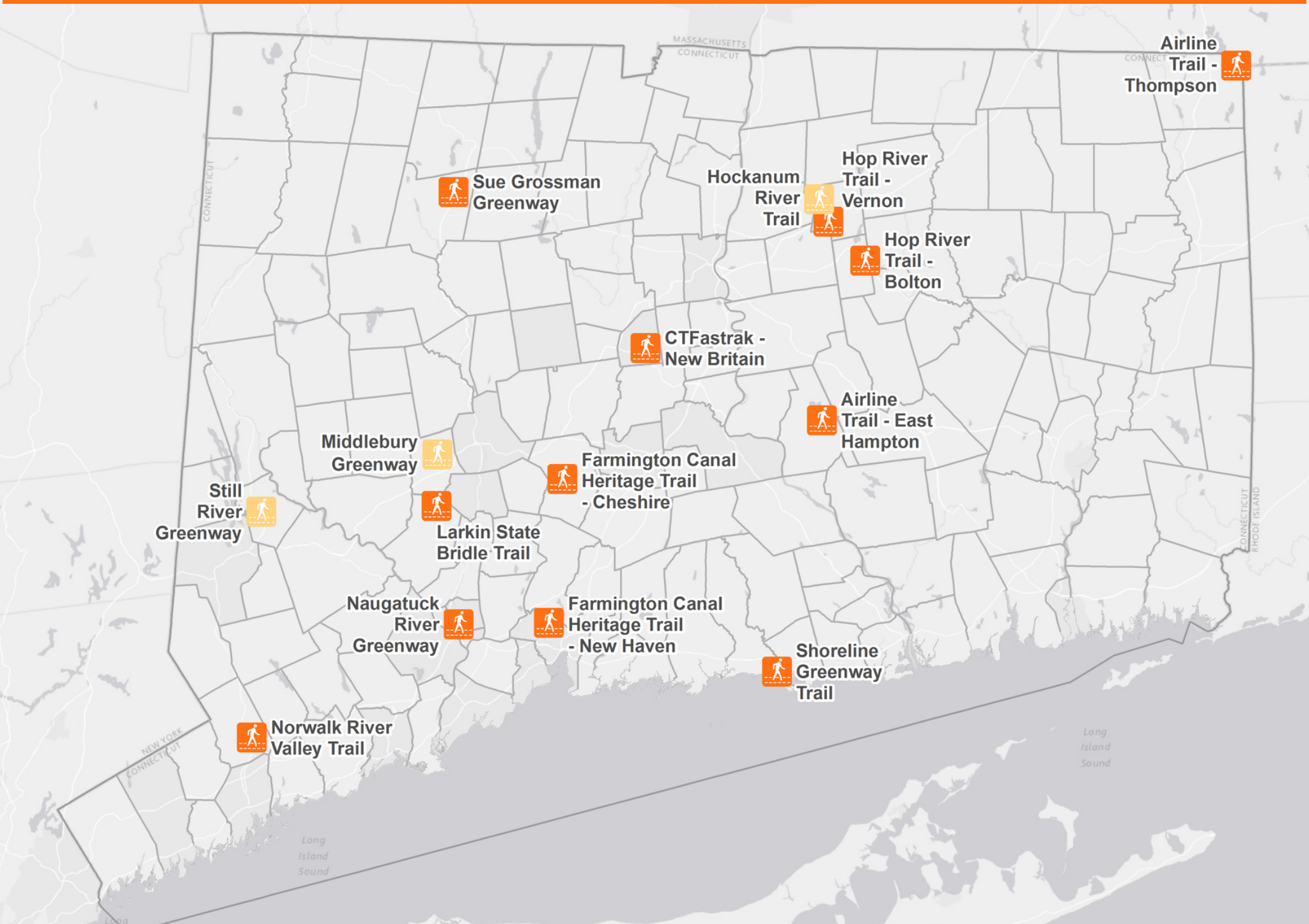


# TIMELINE



## CT Trail Census

# TRAIL LOCATIONS



Derby-North (Division Street)		Time																																			Hourly Total	Adjusted
Time	Day	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Hourly Total	Adjusted						
0:00		2	4	0	1	0	0	0	2	0	2	1	0	2	0	5	4	3	1	1	3	1	2	0	0	1	1	3	2		41	51						
1:00		0	1	1	1	0	2	0	0	1	2	0	1	1	0	15	1	3	0	0	1	0	0	1	0	1	2	0	0	0	35	41						
2:00		0	0	1	0	0	0	0	2	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	8	10							
3:00		0	0	0	1	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	8	10							
4:00		1	2	2	1	1	1	2	3	1	1	1	2	1	2	1	2	1	2	1	2	1	0	1	2	1	0	2	3	41	51							
5:00		9	4	1	14	7	9	5	10	3	4	6	15	12	10	13	3	4	0	2	8	10	8	7	3	12	12	14	16	221	274							
6:00		18	17	13	14	10	36	15	28	16	13	23	34	26	22	32	25	16	1	7	30	20	31	22	13	41	30	37	40	630	781							
7:00		48	7	43	37	5	40	29	53	45	39	46	30	45	42	40	58	36	15	4	32	43	51	56	50	35	27	38	39	1033	1281							
8:00		49	2	55	47	20	32	52	66	84	74	79	54	49	45	71	101	78	11	8	53	76	46	82	94	48	35	66	71	1548	1920							
9:00		64	52	94	48	18	61	56	86	114	93	77	64	79	60	70	93	95	24	8	66	75	61	93	110	53	21	86	51	1872	2321							
10:00		74	45	115	52	24	62	66	83	178	123	86	59	56	47	66	93	86	17	23	75	61	75	54	99	34	36	71	44	1904	2361							
11:00		82	35	107	62	42	55	61	83	158	117	132	68	51	39	55	78	79	21	17	78	64	69	81	85	21	42	46	48	1876	2326							
12:00		58	59	96	87	25	62	59	77	100	79	74	40	43	38	55	60	72	26	16	84	56	64	56	97	33	42	41	26	1625	2015							
13:00		47	69	86	58	22	65	66	72	117	60	83	19	42	40	37	48	42	28	13	81	57	42	69	95	34	36	34	43	1505	1866							
14:00		37	58	69	35	32	63	50	57	91	40	67	24	37	47	39	40	30	13	13	77	43	54	67	91	52	30	49	58	1364	1691							
15:00		55	58	64	35	46	61	52	62	88	62	36	47	38	41	49	44	25	11	10	69	58	53	61	90	47	56	40	65	1422	1763							
16:00		92	57	47	66	65	93	75	62	66	87	66	35	55	44	22	40	55	53	2	7	76	65	54	73	80	50	38	46	1571	1948							
17:00		117	63	66	79	63	101	82	75	78	82	74	64	78	71	20	50	38	6	10	11	107	84	68	94	122	58	72	1913	2372								
18:00		169	82	108	68	109	117	104	114	82	75	80	86	132	134	36	76	85	1	14	11	125	104	69	64	100	145	65	123	2476	3070							
19:00		135	62	52	99	70	131	64	79	80	78	94	69	123	103	78	84	66	3	13	20	128	94	84	79	64	161	100	110	2323	2881							
20:00		55	21	15	40	19	43	11	19	45	71	43	41	38	20	49	53	46	3	4	6	52	32	49	37	30	50	73	58	1023	1269							
21:00		3	7	3	9	2	6	4	9	15	8	11	6	3	6	13	7	1	0	3	9	8	9	9	4	15	8		188	233								
22:00		2	10	2	4	3	3	1	2	8	0	4	3	4	4	6	3	1	0	4	3	5	5	3	6	4	6		100	135								
23:00		0	1	0	5	2	0	0	3	1	1	5	3	1	3	3	1	2	1	0	2	2	1	0	1	3	5	1	1	48	60							
Daily Total		573	847	706	1117	826	746	890	876	1062	1398	1086	1020	891	868	658	867	951	640	213	186	1153	963	906	983	1221	954	724	951	506	24782							
Adjusted		711	1050	875	1385	1024	925	1104	1086	1317	1734	1347	1265	1105	1076	816	1075	1179	794	264	231	1430	1194	1123	1219	1514	1183	898	1179	627	30730							
High Temp		66	71	69	82	69	75	57	62	69	62	77	80	84	78	77	78	80	75	51	51	69	66	69	71	69	73	75	78	84								
Low Temp		42	41	51	62	55	53	44	42	48	37	42	55	60	62	60	55	59	51	46	46	44	48	50	53	46	55	62	55	64								
Precip		0	0	0.06	0.09	0	0.3	0	0	0	0	0	0	0	0	0.005	0	0	0	0	0.04	0.76	0.15	0	0	0	0.01	0.01	0	0.03								
Storm					x											x	x										x											

# What Will Be Collected?

## IR COUNTERS

### 12 COUNTERS

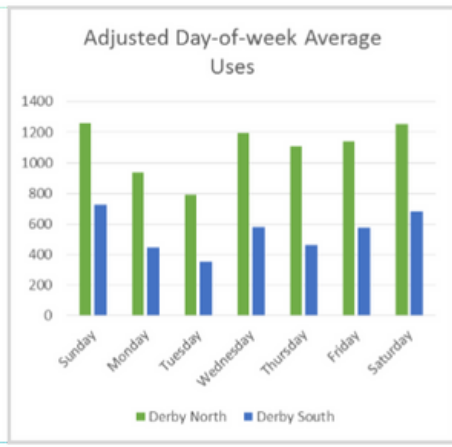
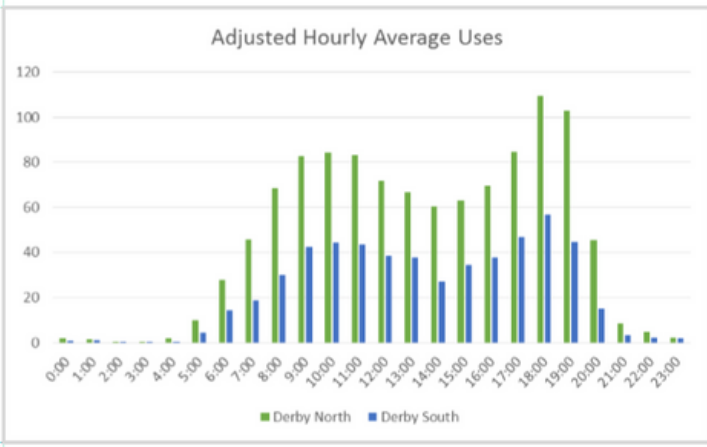
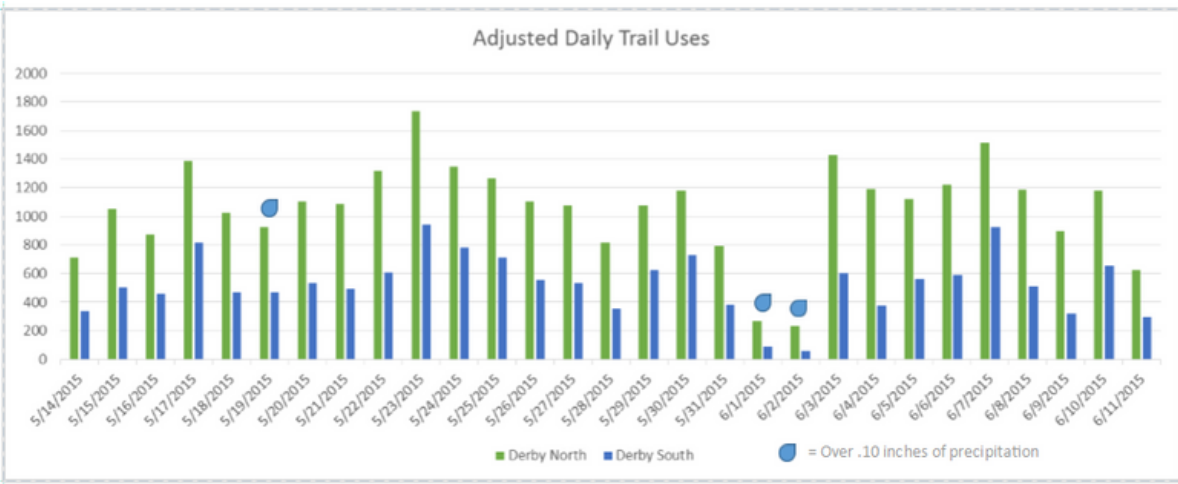
Will count number of trail uses per hour  
24 / 7 / 365

## USE PATTERNS

Hourly, Daily, Weekly, Monthly, Seasonal  
Impact of Weather  
Event Impacts

## COMPARISONS

Stone vs. Paved  
Is winter maintenance worth it?  
Before and after improvements  
Recreation vs. Transportation



# INFRARED TRAIL COUNTERS







# Trail Coordinator Responsibilities

## IR COUNTERS

### INSTALLATION

- Municipal Permission
- Notification of Parks/ Public Works
- In Person Training and Install Assistance



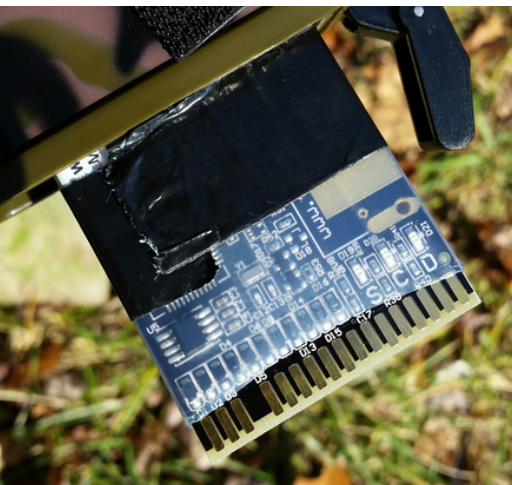
#### STANDARD SCREENLINE COUNT FORM

Name: \_\_\_\_\_ Location: \_\_\_\_\_  
 Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_  
 Weather: \_\_\_\_\_

Please fill in your name, count location, date, time period, and weather conditions (fair, rainy, very cold). Count all bicyclists and pedestrians crossing your screen line under the appropriate categories.

- Count for two hours in 15 minute increments.
- Count bicyclists who ride on the sidewalk.
- Count the number of people on the bicycle, not the number of bicycles.
- Pedestrians include people in wheelchairs or others using assistive devices, children in strollers, etc.
- People using equipment such as skateboards or rollerblades should be included in the "Other" category.

	Bicycles		Pedestrians		Others
	Female	Male	Female	Male	
00-:15					
15-:30					
30-:45					
45-1:00					
1:00-1:15					
1:15-1:30					
1:30-1:45					
1:45-2:00					
<b>Total</b>					



### MONITORING

- Occasional checks (2-weeks)
- Is it Working?
- Any Tampering or Vandalism?

### MANUAL COUNTS

- Two Hour Counts of Actual Trail Users
- For Counter Calibration
- Once Or Twice/ Quarter



What Will be  
Collected?

## SURVEYS

### ABOUT USERS

Zip code, Age, Income,  
Level of health

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### ABOUT USE

Mode of transport to the trail  
Primary activity  
Frequency of use  
Seasonal use  
Primary purpose for use

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### SPENDING DATA

Amount spent during visit

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### IMPROVEMENTS

What do people want?

Chart 5: Respondents by Age (n=374)

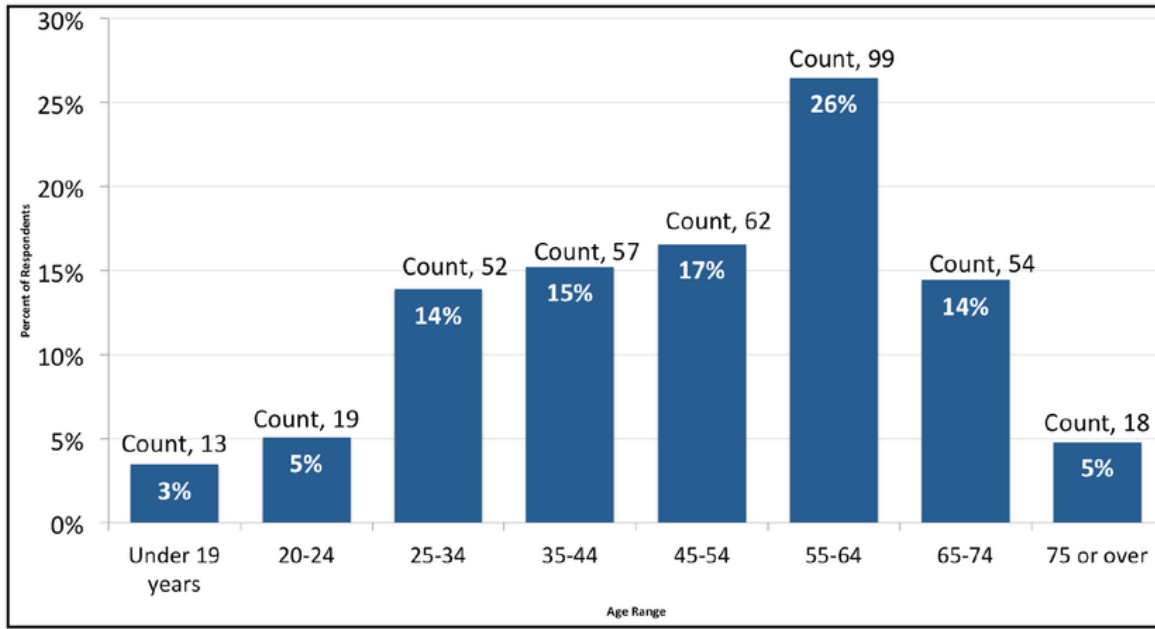
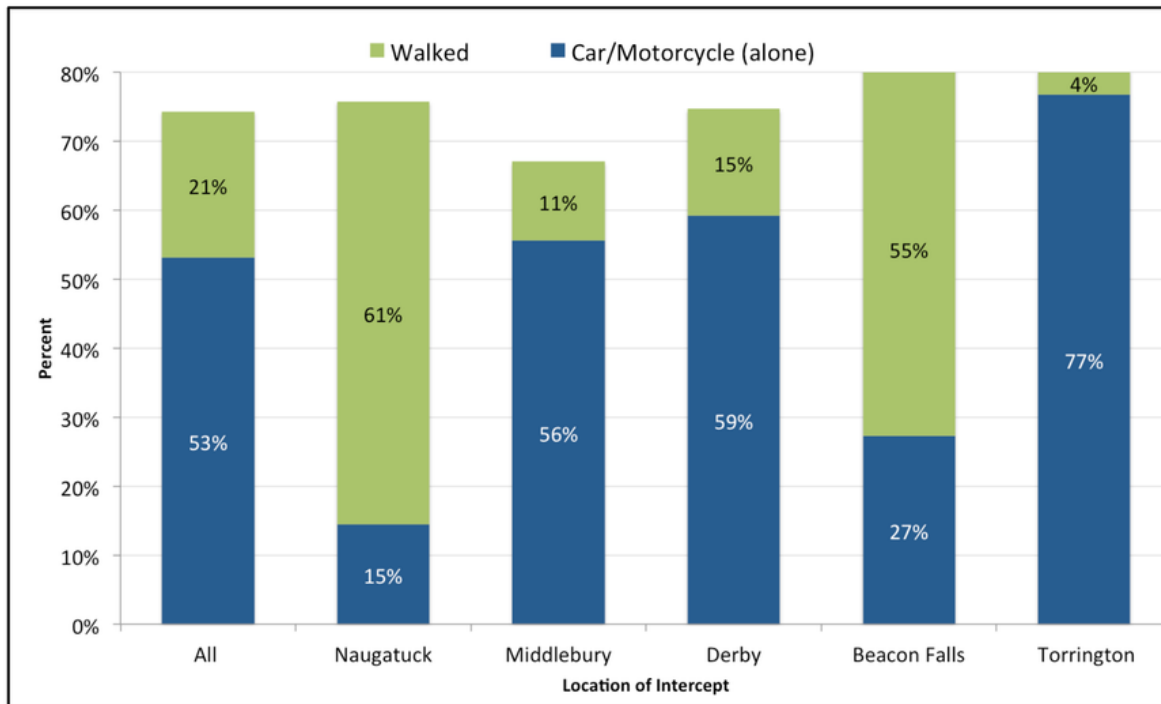


Chart 8: Method of Transportation to the Trail Single - Car Use & Walkers



# What Will be Collected?

## SURVEYS

### ABOUT USERS

Zip code, Age, Income,  
Level of health

### ABOUT USE

Mode of transport to the trail  
Primary activity  
Frequency of use  
Seasonal use  
Primary purpose for use

### SPENDING DATA

Amount spent during visit

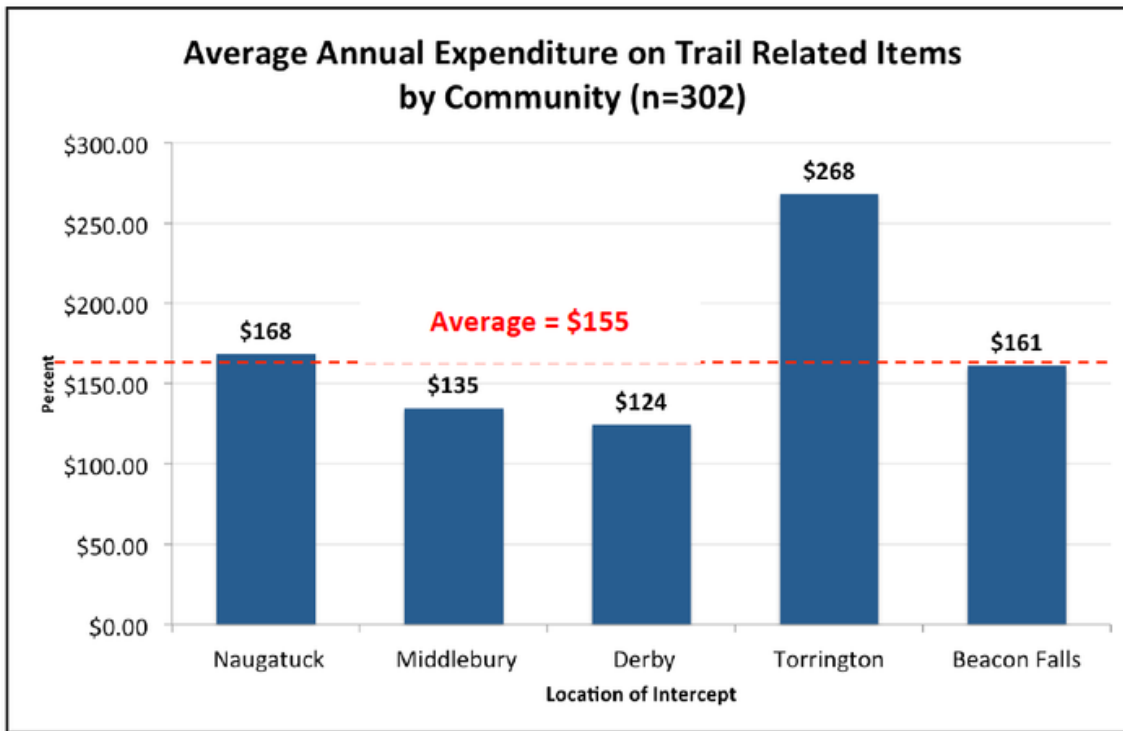
### IMPROVEMENTS

What do people want?

**Table 1: Average Distances Travelled in Home Zip Codes from Residence to Trailhead<sup>3</sup>**

	Home Zip Code	Square Miles	Average Distance of Resident to Trailhead
Naugatuck	06770	16.72	1.97
Middlebury	06762	17.41	2.01
Derby	06418	5.07	1.08
Beacon Falls	06403	9.67	1.50
Torrington	06790	41.57	3.10

**Chart 10: Average Annual Expenditure on Trail Related Items by Community (n=302)**



What Will be Collected?

## SURVEYS

### ABOUT USERS

Zip code, Age, Income,  
Level of health

### ABOUT USE

Mode of transport to the trail  
Primary activity  
Frequency of use  
Seasonal use  
Primary purpose for use

### SPENDING DATA

Amount spent during visit

### IMPROVEMENTS

What do people want?



## Greenway Trail User Survey

*None of the information gathered in this survey will be used to identify you individually. All data will be kept confidential and will be aggregated for our analysis.*

1. What is your home Zip Code? \_\_\_\_\_
2. How did you get to the trail today?
  - Car/Motorcycle (alone)
  - Car/Motorcycle (with someone else)
  - Public Transit (Bus/ Train)
  - Bicycle
  - Walked
  - Run/ Jog
  - Other \_\_\_\_\_
3. How often, on average, do you use this trail?
  - Daily
  - 3-5 times/ week
  - 1-2 times/ week
  - 2-4 times/ month
  - 1-2 times/ year
4. During which seasons do you generally use the trail? (select all that apply)
  - All Year
  - Summer
  - Fall
  - Winter
  - Spring

5. What is your primary purpose on the trail today? (select all that apply)
  - Exercise
  - Recreation
  - Travel to work
  - Travel to school
  - Travel to shopping
  - Tourism/ sightseeing
  - Other \_\_\_\_\_
6. About how much do you spend each year on goods or services related to your trail use? Include gear, clothing, equipment rental, repairs, auto accessories, etc.? \$ \_\_\_\_\_
7. On this visit, about how much will you spend on the following (whole dollars):
 

Beverages	\$ _____
Snacks (energy bars, etc)	\$ _____
Meals at a restaurant	\$ _____
Gas	\$ _____
Retail (gifts, clothing, etc)	\$ _____
Equipment rental	\$ _____
Lodging	\$ _____
Nearby activities (recreation/ amusements)	\$ _____
Other _____	\$ _____
8. Do you consider the trail an asset to the local community?
  - Yes
  - No
  - Not Sure

9. Do you feel that the trail has impacted property values in the area?
  - Yes - Positively
  - Yes - Negatively
  - No
  - Not Sure
10. If there was one thing you could improve about the trail, what would it be?
 

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11. What is your age range?
  - Under 19
  - 20-24
  - 25-34
  - 35-44
  - 45-54
  - 55-64
  - 65-74
  - 75 or over
12. What interval best represents your household income?
  - Under \$24,999
  - \$25,000 - \$49,999
  - \$50,000 - \$99,999
  - \$100,000 – \$199,999
  - Over \$200,000

## Trail Coordinator Responsibilities

### INTERCEPT SURVEYS

#### VOLUNTEER RECRUITMENT

Ensuring 3 volunteers available for  
each data collection time  
Notification of Parks/ Public Works



#### VOLUNTEER MANAGEMENT

Ensure volunteers participate in methods training  
Track volunteer hours



#### POINT OF CONTACT

Make sure volunteers have survey box  
Serve as local point of contact  
Ensure that paper surveys are  
collected/handled appropriately

Data collection weeks

May 13-21, 2017

September 16-24, 2017

Based on volunteer  
availability

Two hours of data  
collection on a weekday  
(Tuesday, Wednesday or  
Thursday) and  
two hours of data  
collection on a weekend  
(Saturday)

# VOLUNTEER TRAINING

## *Participants will learn:*

*Goals and purpose of the CT Trail Census, about data collection methods, where to find more information about CT trails*

- Infrared Counter Management
- Logistics for the day of survey data collection
- Standards for consent, confidentiality and information for participants
- How to complete the observed data section of the survey
- How to approach trail users - on foot, bicycle or horse
- How to aid those who request assistance completing the survey
- Checking surveys for completeness of data and tracking refusals
- What to do with completed surveys
- How the data will be used - how participants can access data
- Tracking your volunteer hours (Track it Forward)

**CT Trail Census**



# VOLUNTEER TRAINING

## *Training dates*

**Tuesday March 7, 2017, 4-6 pm**

Tolland County Extension Center  
24 Hyde Ave, Vernon, CT 06066

*Snow Date Tuesday March 14, 2017, 4-6 pm*

**Wednesday, March 8, 2017, 6-8 pm**

*New Haven County Extension Center*  
305 Skiff St, North Haven, CT 06473

*Snow date Wednesday March 15, 2017 6-8 pm*

**Saturday March 11, 2017, 9 am -11 am**

New Haven County Extension Center  
305 Skiff St, North Haven, CT 06473

**CT Trail Census**  
The logo for CT Trail Census features the text "CT Trail Census" in a bold, green, sans-serif font. Below the text is a thick, dark grey horizontal bar with a dashed yellow line running through its center.



# VOLUNTEER TRACKING

CT Trail Census

## Connecticut Trail Census

Log Hours

Charts

Event Sign-ups

Account

### Log Hours

Hours:

--Select Hour--

Date Volunteered: 

Nov

17

2016

Activity:

---Select Activity---

Volunteer:

Trail:

Notes:

Submit Time

### Timesheet

Date	Activity	Hours
11/13/16	IR Counter Work	3
11/11/16	IR Counter Work	2
Total		5

© 2016 Track it Forward

[About](#) | [Success Stories](#) | [Resources](#) | [Updates](#) | [Terms of Service](#) | [Support](#)  
Contact your Volunteer Organizer

## HOW WILL THE DATA BE USED?

*To build awareness and partnerships*

..."to focus fundraising efforts, provide information on where public awareness is strong and where more can be done, and expand our partnership base. Having valid information to make strategic decision with will make our planning and construction efforts more accurate and effective. "

**CT Trail Census**

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## HOW WILL THE DATA BE USED?

### *To advocate for trails*

"We feel that solid, specific evidence of the use and popularity of this trail, rather than anecdotal material, will help us to make a strong case for all the work we are doing to expand the network of trails and to link them to trails in our surrounding communities."

**CT Trail Census**

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## HOW WILL THE DATA BE USED?

*To make effective improvements*

"..to better the trail in these areas and add more user friendly equipment such as bike pumps, bike racks and fitness centers."



**CT Trail Census**

## HOW WILL THE DATA BE USED?

### *To improve community planning efforts*

".. Development of an effective maintenance plan by identifying short-term (yearly) and long-term tasks through forming synergies with both local and state organizations. "

"This data will not only help other communities with planning for their segments of the [trail], but will also be very helpful for current economic development and transportation work being done in [these communities]."

**CT Trail Census**

The logo for the CT Trail Census, featuring the text "CT Trail Census" in a bold, green, sans-serif font. Below the text is a dark grey horizontal bar with a dashed yellow line running through its center.

## HOW WILL THE DATA BE USED?

*To engage young people*

"...the data will provide a unique "teachable moment" for students in understanding the need for taking the public's feedback and analyzing the feasibility of implementing those suggestions with the current resources."

**CT Trail Census**

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## HOW WILL THE DATA BE USED?

*To support fundraising-grant efforts*

"...establish more credibility to our requests for resources (funding and equipment)." "We may be able to use the data in our application for bike friendly status."

**CT Trail Census**

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# HOW WILL THE DATA BE SHARED?

[www.clear.uconn.edu/projects/ct\\_trail\\_census/](http://www.clear.uconn.edu/projects/ct_trail_census/)

The screenshot shows the CLEAR website header with the UConn logo and navigation menu. The main content area features a sidebar with links for 'Connecticut Trail Census', 'About', 'Trail Sites', and 'Results'. The main content includes a title 'Connecticut Trail Census', a description of the program, a list of goals, and a section titled 'How it works' detailing the data collection process.

**UCONN** UNIVERSITY OF CONNECTICUT

COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

Center for Land Use Education and Research (CLEAR)

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## Connecticut Trail Census

*A statewide multi-use trail user study and volunteer data collection program*

About  
Trail Sites (coming soon!)  
Results (coming when we have some)

### Connecticut Trail Census

The Connecticut Trail Census is a statewide volunteer data collection program intended to inform a better understanding of multi-use trail use in the state of Connecticut and to make this important information available to trail user groups, administrators, government agencies and the general public. It is being funded by a CT DEEP Recreational Trails Grant.

#### Goals

- To understand who is using Connecticut's multi-use trails when, why and by what means.
- To educate trail user groups, administrators, state and local government agencies, and the general public about trails and their impacts.
- To obtain multi-year information about trail use, user demographics, economic impacts, and trail amenities for identification of patterns and trends.
- To promote active citizen participation in monitoring and understanding the value of trails.
- To encourage sound trail building and maintenance programs based on collected data.

#### How it works

Twelve trail sites in Connecticut will be selected. Beginning in Fall 2016, applicant teams representing these twelve trails will work closely with the project team. Selected trail groups/organizations will:

- Participate in volunteer trainings for infrared counter setup and data retrieval and survey data collection.
- Install and maintain infrared counters (provided), conduct manual calibration counts, and download data quarterly to determine how many and when people are using multi-use trails.
- Conduct Intercept surveys (face to face interactions with trail users involving a list of predetermined questions) to understand demographics of trail users including age, gender, location of residence, economic impacts, and needed trail amenities.
- Communicate the results of this data collection to constituents and partners.

UConn CLEAR will host the collected data and will disseminate the information freely and openly through interactive maps, data download or interactive data visualization tools.

Participating trails must be paved or stone dust multi-use trails. Trails will be prioritized based on: demonstrated ability to identify





# LONG TERM PROGRAM VISION

Self sufficient volunteer based data collection program

Annual benchmarking to understand how trail use changes over time

Data used for substantial statewide economic impact analysis

Research opportunities for comparison of trail users to the general population

More efficient use of existing resources

Better utilized and integrated trail systems

Improved economic opportunities and public health



BIKE

WALK

SMILE

**THANK YOU!**

AARON BUDRIS  
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