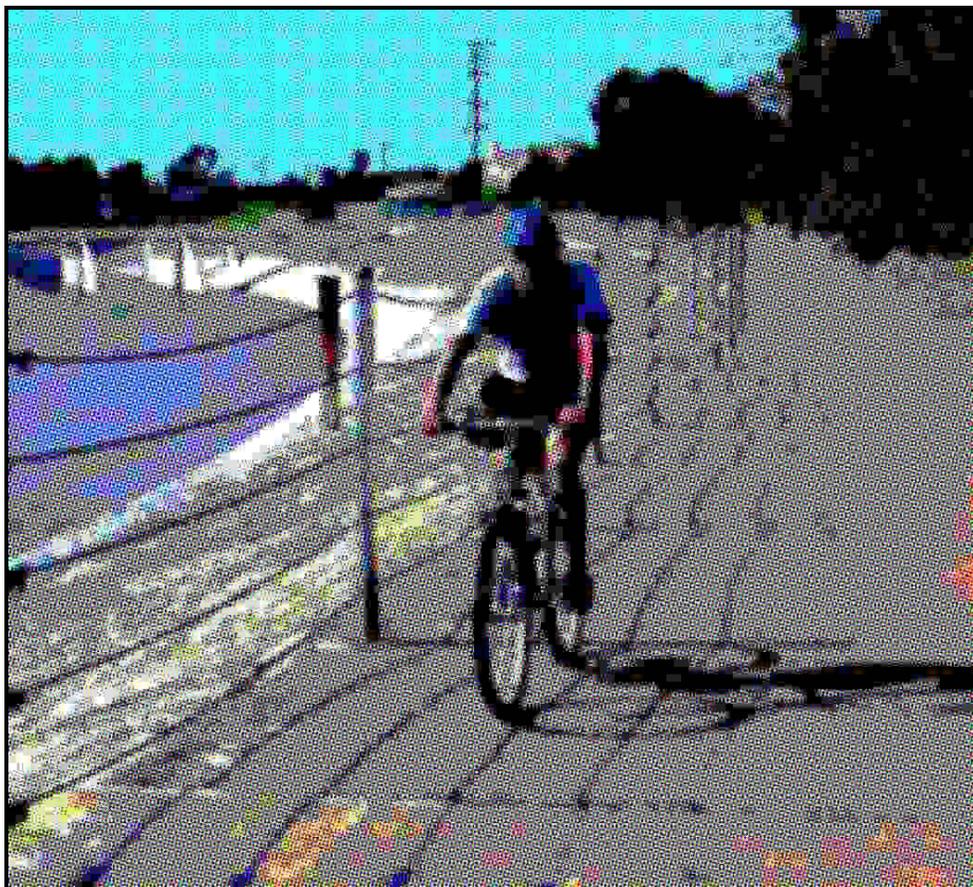**ALPES**

Active Living Policy and Environmental Studies Program

Neighborhood Predictors of Urban Trail Use

Survey of Trail Use: Trail Count

TRAIL COUNT
FORM & INSTRUCTIONS

Contents

Figures

Acknowledgements

Preparation

This manual was prepared by Jason Byrne for the ALPES *Neighborhood Predictors of Urban Trail Use project*.

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Further information

Research for the report was undertaken as a part of the ongoing investigations of the IPR at the University of Southern California pertaining to the connections between urban environments and public health. For more information on the program please write to:

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On the cover: Cyclist on Ballona Creek urban trail, California.

Section 1   Purpose of the manual

The purpose of this manual is to provide trail use counters with information necessary to perform a successful count of the number and type of users of the urban recreational trails selected for this study. This trail count process is a component of a broader study – the *Neighborhood Predictors of Urban Trail Use* study. The count will furnish information on the character of the users of urban trails, which will then feed into the broader study investigating the connections between urban trail use and the health of people living near urban trails. Carefully following the directions provided in this manual will enable objective assessment of trail users.

The trail count process entails counting users, identifying the activities they engage in and recording their sex and age. The trail count will provide a good estimate of the volume of trail users and types of user activities for each trail segment. Up to 30 segments for each trail will be randomly sampled for completion of trail counts over a five day period at each trail – three weekdays and two weekend days. Trail counts will be undertaken concurrently at all three trails, to enable comparison between trails and to account for variations in seasonality. Data will be collected from dawn to dusk. A sample of adults will then be identified from neighborhoods within one mile of the trail for more detailed investigation. Personal identities of trail users will not be identified during the trail count process.

The study

The Neighborhood Predictors of Urban Trail Use study has been designed to measure the impact of urban multiple use trails upon the fitness of residents living within neighborhoods adjacent to trails that run through major cities in the United States. This component of the study is examining the character of the trail users.

Three urban multiple use trails have been chosen in accordance with specific criteria. The trails are the Chicago Lakefront Trail, the White Rock Lake Trail in Dallas, and he San Gabriel River Trail in Los Angeles. The selection criteria specified that the trails must be between 15 and 20 miles in length, must traverse a variety of urban settings, must be located within a metropolitan statistical area, and must be sealed, multiple use trails. Following a short-listing of candidate trails, four additional criteria were used to narrow the list of candidates - trail governance, climate, urban form and demographics. Following characterization of the trails, a trained team of trail auditors will conduct an assessment of the trails to characterize the trail environment. This will provide essential information for this component of the study – the trail count.

The urban trail that you are going to assess has been carefully chosen to meet with four specific criteria: trail governance, climate, urban form and demographics. The trail selection team has selected trails that fall under the jurisdiction of the same level of governance for the entire trail (e.g. trails managed by the National Park Service are Federally managed trails whereas trails managed by the County of Los Angeles are municipally managed trails i.e. managed by the local state). Those trails that are fragmented by a mix of administrative jurisdictions have been avoided, to eliminate governance as a variable affecting trail use. The trails have been selected to encompass the spectrum of US climates – from warm, through temperate to cold. Moreover, the

trails have also been selected from major US cities with varying levels of urban density. The idea is to compare trail use across a range of residential densities. Finally, the trails have been selected to encompass a broad socio-demographic range of potential users. Thus the trails that are to be investigated pass through neighborhoods characterized by a mix of whites, Latinos and African-Americans.

Trail segments

The trails have been divided into half-mile segments for the purpose of trail assessment. Approximately 45 – 60 miles of trail will be assessed between May and October of 2004. The purpose of segmenting the trails is to make data collection easier and to provide greater detail on the trails that accounts for local variations in land use, topography, vegetation and the like.

Section 2   Guidelines

Before setting out to the trail, it is important to make sure that you completely familiarize yourself with the trail count form (***see Appendix 1***). This will ensure that you complete the form correctly so that the data are meaningful to further analysis. Failure to complete the form correctly will compromise the integrity of the results and harm the validity of the study.

CHECKLIST OF MATERIALS FOR THE COUNT

Please check ☑ to make sure that you have the following materials before you leave to undertake the trail assessment. Tick the boxes provided on this checklist to indicate that you have the required material.

☐   **Maps** of trail and trail segment.

☐   Trail count **forms**.

☐   **Clip board** – you will be provided with a clipboard.

☐   **Pens** – you will be provided with spare pens.

☐   **Identification** - you will be provided with identification.

☐   **Water** and food.

☐   Comfortable **shoes**.

☐   Warm clothing and **raincoat**.

☐   **Sunscreen**, hat and insect repellant.

Directions for getting to the trail

As a trained trail counter, you will already have been assigned a trail segment on which to undertake the trail count. You will have been provided with a package of material including this manual and some items identified on the above checklist.

On the days that you have to undertake the trail count you will need to walk to the segment number to which you have been assigned, as indicated on the map and highlighted on the trail by either a flag or on the trail itself in florescent paint. Remember, this trail count will last for most of the day, so be prepared to spend several hours at a time when you will be concentrating on people using the trail. Always keep your identification handy, and show it to trail users who may ask you for identification. Provide Institutional Review Board (IRB) information to trail users as requested. You will be given enough copies of this information to hand out to any trails users that may approach you and ask what you are doing.

At the beginning of each day, set out early so that you arrive at your trail segment on time. Bring plenty of food and water. You may also wish to take warm clothing for the morning and evening portions of the day. Walk along the trail, using the map provided to

guide you. Locate the trail segment number to which you have been assigned by identifying it on the map, and then walking to the corresponding markings on the trail, which has been pre-marked for you to find easily.

Placement on the trail

When you arrive at the designated trail segment, set yourself up in a position where you have a clear view of the trail, but where you will not obstruct trail users (*see Fig. 1*). Remember, we do not want to scare trail users or behave in such a way that they will alter their normal trail use activities. You **MUST** wear the volunteers USC clothing that we have provided to you, and carry your identification at all times. It is extremely important that you do not block, obstruct or otherwise interfere with trail users. We suggest that you position yourself at about 8 ft back from the trail where you will be visible to trail users, but will not hinder their use of the trail. You should take a fold out chair or blanket to sit on. You may also be required to carry some refreshments to offer trail users if they stop to inquire about what it is that you are doing.
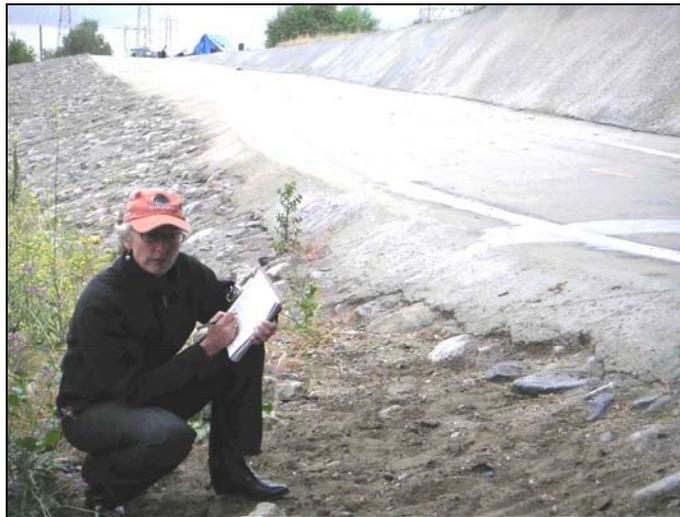
Figure 1 – Minimum distance from the trail

Completing the count form – general overview

It is very important to ensure that you correctly and completely fill out the trail count form. Doing so will ensure that the results are meaningful and usable. Practice using the count form prior to going out on the trail, and ask any questions that you may have about the form or the counting process prior to undertaking the trail count.

The following information must be legibly recorded on the top of the count form in the space indicated as 'OFFICE USE ONLY':

1. Trail counter identification - name and number;

2. Date – the date of the day that you undertake the trail count;

3. Start time – the time of day that you actually start counting on the trail segment to which you have been assigned;

4. Finish time – the time of day that you actually stop counting on the trail segment to which you have been assigned;

5. Trail name & number – the name and number of the trail that you are working on;

6. Trail segment number – the segment number to which you have been assigned.

You will see that a space has been provided for GPS coordinates on the form. The trail count supervisor will come by during the day you are counting, and will check to make sure that you are at the correct coordinates. They will fill in this space on your form after confirming that you are at the correct trail segment.

Detailed guidelines for completing the trail count form

As can be seen, considerable thought has been invested in preparing the research design for the overall study. It is therefore very important that the trail count form is completed carefully and correctly. Following is a set of rules that must be strictly adhere to when completing the form:

Rules

Maps   Maps have been provided which show the entire trail, and the segment that each trail assessor will be responsible for auditing. Both maps will be required for completing the trail assessment.

Start and end points   Each trail segment will have a clearly demarcated start and end point, both on the maps and on the trail. You must assess only that trail segment to which you have been assigned.

Timing   You must complete the section to which you are assigned in the time allotted for completing the trail count. This trail has already undergone preliminary assessment and the trail selection team has factored in the necessary time for you to complete the count.

How to record your answers correctly

❖ Please make sure that you complete the forms in blue or black pen. Pencil is not acceptable as it can be accidentally erased and data will be lost.

❖ Please use the codes that appear on the reverse of the trail count data form to fill in the form.

❖ If in doubt about the correct age category, round down to the lower category.

❖ Include any additional information that you may think is relevant on the reverse side of the audit form. This could include events such as "a sudden rainstorm" or "an emergency that blocked the trail".

❖ At the end of the segment, please ensure that you tally the count for the various categories in the space provided, and makes sure that your answers are clear and legible (*see example 1 below*).

❖ Promptly deliver the paperwork to the team supervisor for checking and processing. This will give you a chance to raise any questions or concerns that you may have.

❖ If you accidentally enter the wrong code, clearly cross out the incorrect code and enter the correct one in the next available cell (*see examples 2 & 3 below*).

Figure 2 - Example 1: Correct entry

Type	Insert appropriate codes below ⬇					Total
Walkers	F/1	F/4	M/3	F/3	M/2	**5**
Walkers with pets	F/4	M/1	M/1	M/2		4
Joggers / runners	F/1	F/2	F/2	M/4	F/4	5
Cyclists	M/4	M/4	F/3			2
Total users	**16**					

Tally entries

Figure 3 - Example 2: Mistake in entry

Type	Insert appropriate codes below ⬇				
Walkers	F/1	F/4	M/3	F/3	M/2
Walkers with pets	F/4	M/1	M/1	M/2	
Joggers / runners	F/1	F/2	F/2	M/4	F/4
Cyclists	M/4	M/4	F/3		

Wrong code

Figure 4 - Example 3: Corrected entry

Type	Insert appropriate codes below ⬇				
Walkers	F/1	F/4	M/3	F/3	M/2
Walkers with pets	F/4	M/1	M/1	~~M/2~~	F/2
Joggers / runners	F/1	F/2	F/2	M/4	F/4
Cyclists	M/4	M/4	F/3		

Corrected code

Section 3   Detailed instructions

Part A – Trail use activities

    The purpose of the trail count exercise is to capture data on both the total number of users and the types of users – the activities they engage in, their sex and their age. This section pertains to the component of the trail count form that identifies trail use activities (*see Fig. 4*). It is important to distinguish carefully between the different types of trail users.
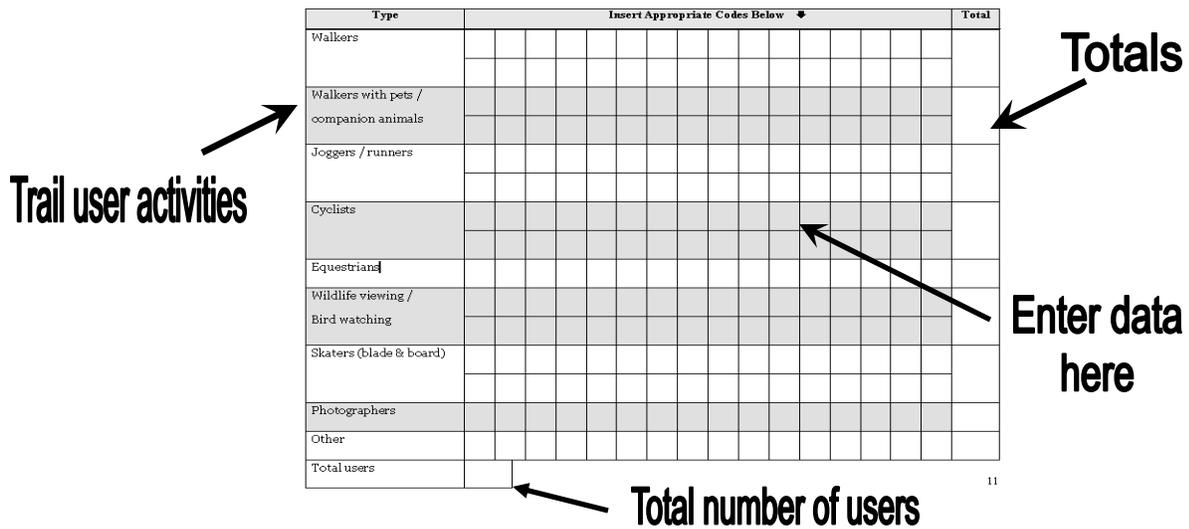
Figure 5 – Trail count data form

<u>Walkers</u>: trail users who are walking along the trail, including hikers.

<u>Walkers with pets</u>*:* trail users who are walking along the trail with their pets or companion animals (e.g. dog, pot bellied pig, parrot), with the exception of people riding horses, who must be recorded under the user category 'equestrians'.

<u>Joggers / runners</u>: trail users who are jogging or running along the trail specifically for the purpose of exercise.

<u>Cyclists</u>: people who are riding non-motorized bicycles or tricycles.

<u>Equestrians</u>: trail users who are riding horses along the trail.

<u>Wildlife viewing / bird watching</u>: people who are on the trail to view wildlife or birds. Look for clues such as binoculars, bird field guides, Audubon apparel etc.

<u>Skaters </u>: this category refers to people on roller-skates, skateboards or in-line skates.

<u>Photographers</u>: people who are out on the trail taking photographs. Look for hand-held digital cameras or SLR cameras. This category includes people with video cameras.

<u>Commuters</u> : People wearing work uniforms or displaying signs of being on their way to a workplace.

<u>Other</u>: Any other trail user who does not fall into one of the above categories.

Part B - Counting procedures

There are a few useful points to consider when deciding where to position yourself when counting trail users, and how to count the users. This is especially important for very busy trails such as the Chicago Lakefront Trail. Expect trail users to move past you at varying rates of speed, and in different group sizes. The following instructions provide guidance as to how to best count users.

❖ Position yourself back from the trail. ***Figure 1*** depicts a trail counter positioned quite close to the trail, due to space constraints where the land dropped off quite steeply behind the trail counter. This figure depicts the absolute minimum distance that a counter should be set back from the trail. In most situations you will have ample room to position yourself at least six to eight feet (6 – 8 ft.) back from the trail. This way you will not threaten or intimidate people using the trail. It is important to remember that your presence on the trail should not make trail users modify their behavior in ways that would vary from their normal patterns of trail use.

❖ On a steeper section of trail, position yourself upslope. This will mean that trail users, especially cyclists, will have to slow down as they approach you, giving you more time to identify their sex and age.

❖ For shady sections of trail, position yourself away from deep shade, such as underpasses or under thick tree canopies. This will give you better lighting for identifying trail users features, and will make you less of a threat to trail users.

❖ In a large group of trail users, count the faster moving users first. This will give you time to enter the data and then go back to the slower users to confirm their age and sex characteristics.

❖ Another useful rule is to count the person furthest away from you – on the outside of the trail, then move back towards the people closer to you. This way you can have time to catch the closer person.

❖ Insofar as cyclists are concerned, somebody walking with a bike is still a cyclist. The same applies to skateboarders.

❖ With people in wheelchairs, count them as other. People pushing wheelchairs are walkers.

❖ People pushing strollers are walkers if they are obviously on the trail for exercise. This can get a little tricky as some people will not be dressed in exercise clothes, but will still be using the trail for this purpose. If in doubt, count as a walker.

❖ Do not count babies in strollers as trail users.

❖ Finally, if in doubt whether an individual is a trail user or not, count them as a trail user.

Part C - Codes

In addition to identifying the type of user activities that are occurring on the trail, we want to capture data on the characteristics of the users – specifically sex and age. To make things easier for entering data into the form, you need to be able to recognize the following data codes.

❖ The <u>sex</u> of the responded is to be recorded as either <u>male</u> (**M**) or <u>female</u> (**F**).

❖ The <u>age</u> of the responded is to be selected from one of the following four categories:

<u>Category 1</u>: trail users aged less than 18 years of age;

<u>Category 2</u>: trail users aged between 18 years and 39 years old;

<u>Category 3</u>: trail users aged between 40 and 64 years old;

<u>Category 4</u>: trail users aged over 65 years of age.

❖ They are to be entered into the cells provided in the data form by first recording the code for sex with either a capital '**F**' or an upper-case '**M**' and then the appropriate numerical age code (e.g.) F4 or M2.

❖ If in doubt about a trail user's age, round down to the lower age category rather than the upper age category.

Please take time to familiarize yourself with these codes. If you have any questions about these codes or any other part if the trail count form or procedure, please ask the trail count supervisor immediately.

Thank you. Once you have completed the trail count, please read back carefully over your form, checking to see that you have completed all questions, and that the answers you provided are clear and legible. Once you have completed the form, please return it to the trail count supervisor.

Appendix 1: Trail Count Data Form

USC

TRAIL COUNT DATA FORM

Appendix 1: Data Form

Trail number ☐   Trail segment ☐

GPS COORDINATES : _____

Instructions Use the codes below to count the number and type of trail users you see.

Example

Walkers	F/1	F/4	M/3	F/3	M/2								
Hikers	F/4	M/1	M/1	M/2									
Joggers	F/1	F/2	F/2	M/4	F/4								
Cyclists	M/4	M/4	F/3										

EXAMPLE ONLY

IMPORTANT NOTE: If you can't identify the type of user, count them under "walker".

Codes

Gender: Choose from the following   Male   = M   Female = F

Age :   Choose from the following: **Category 1 = <18**

Category 2 = 18 to 39

Category 3 = 40 to 64

Category 4 = 65+

Form on other side of page

Type	Insert Appropriate Codes Below ⬇																	Total
Walkers																		
Walkers with pets / companion animals																		
Joggers / runners																		
Cyclists																		
Equestrians																		
Wildlife / bird viewing																		
Photographers																		
Skaters (blade & board)																		
Commuters																		
Other																		
Total users																		

Type	Insert Appropriate Codes Below ⬇																			Total

Please use the blank lines above to carry over numbers from previous page. Indicate user under column headed 'type'.