



Recreation Research:

Designing a Program to Estimate Use on the Appalachian Trail

Presented at the Hike-Inn, Amicalola Falls State Park
Saturday, October 26, 2007

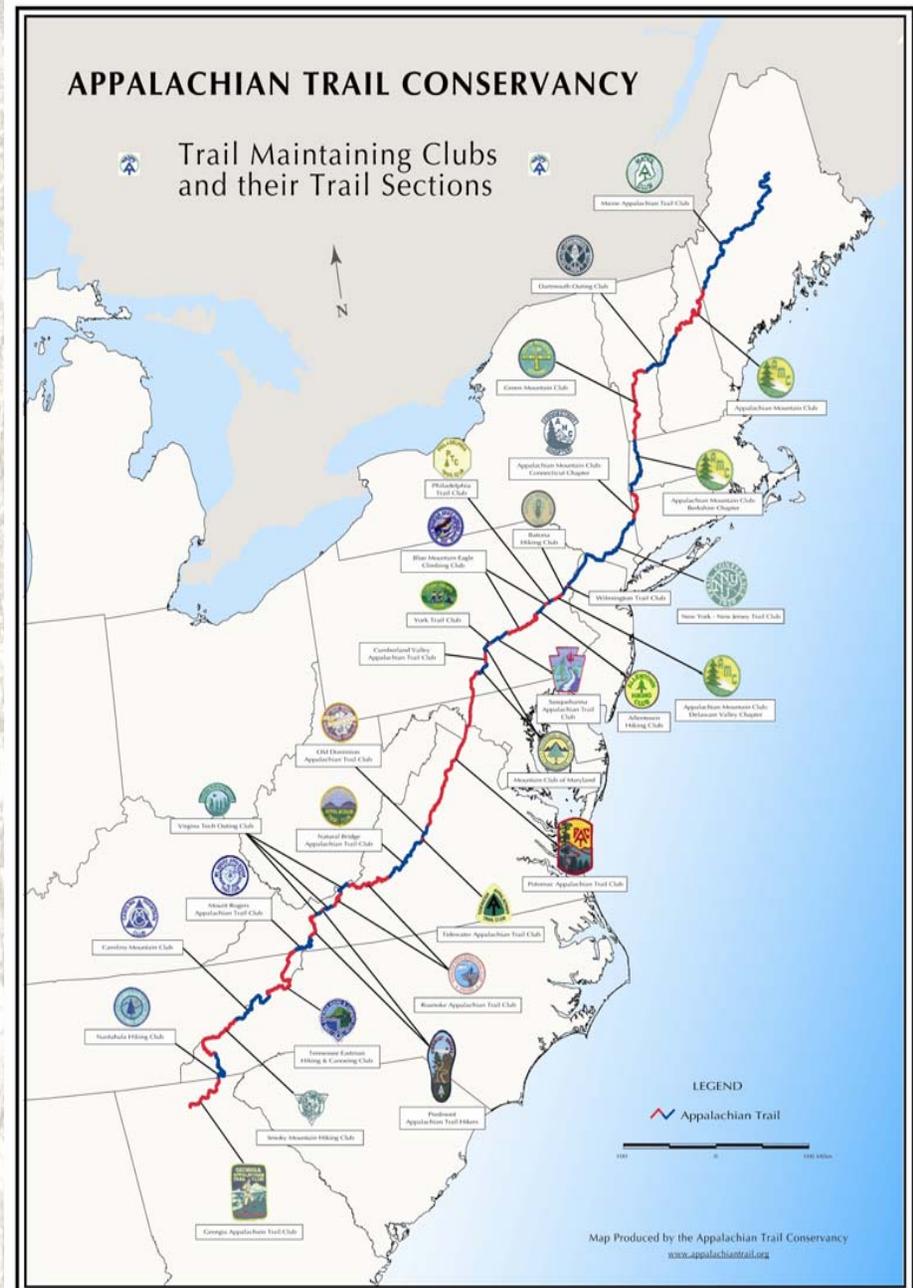
Study Team



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- Appalachian Trail Overview
- Problem
- Study Objective
- Design
- Products
- Implications



A.T. Overview

- 2,175 miles, crosses 14 states, 8 National Forests, 6 NPS units & about 72 state parks and forests
- NPS unit administratively supervised by Appalachian Trail Park Office



- Under ATC oversight, volunteer Trail clubs maintain Trail sections



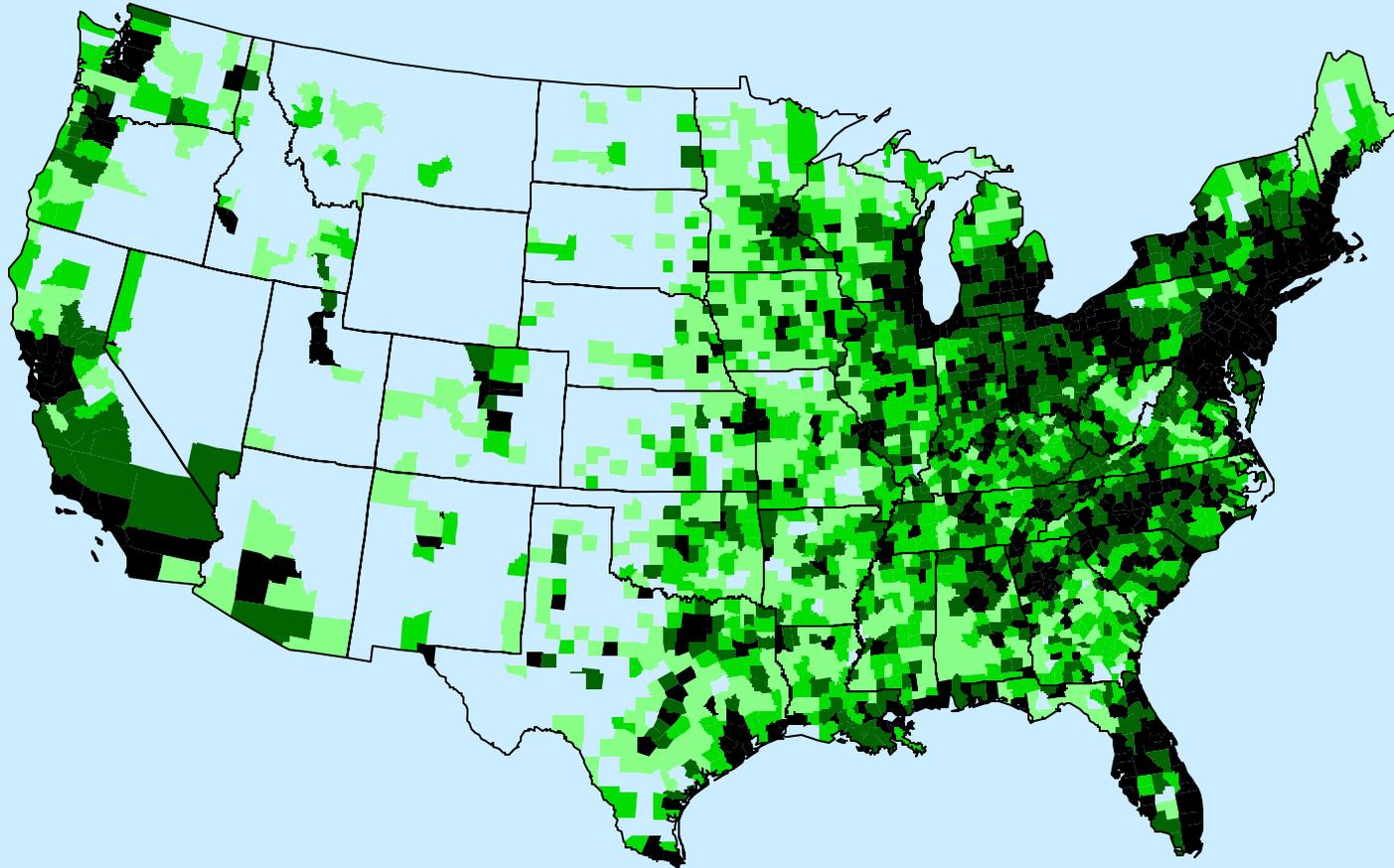
- Congressionally recognized National Scenic Trail
- Often referred to as the nation's most accessible National Park

Problem

- NPS unit with no methodology to count visitors
- \$150+ million spent to acquire protected lands, \$1.5 million invested annually
- Managers should be able to reasonably account for use
- Where to direct funding?
- Economic view- where is use & what are trends / patterns?
- GRPA safety measures
(Government Performance and Results Act)



U.S. Population Density by 2020



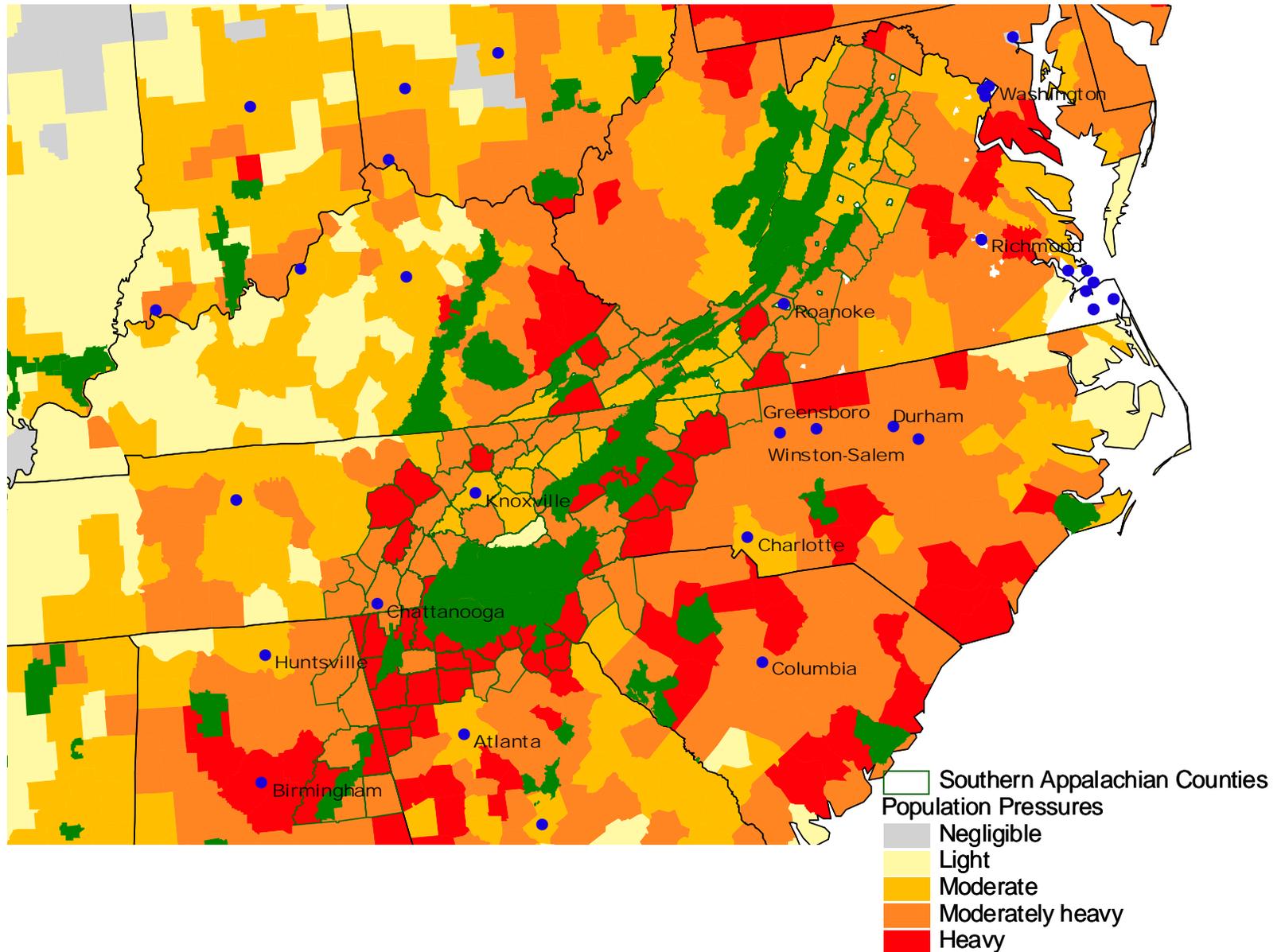
Persons Per Square Mile



Persons Per Square Mile by
Region and Conterminous U.S.

North	174.8
Pacific Coast	117.6
South	92.9
Rocky Mountains	16.4
Conterminous States	83.5

Future Forest Hotspots (2020) in the Southern Appalachians Population Pressures on Counties with Forests



Study Objective

To design and test a statistically valid method of collecting and reporting public use data for the Appalachian National Scenic Trail.



Design

1. ID Exit Sites, type

A.T. / Trail or road crossings (TR)

A.T. / Parking intersections (P)

NPS Statistician &
defendable design

USE

Multiple use sites (M)



Design

2. Classifying site day population

Knowledgeable area representatives:

a. Confirm / clarify / eliminate sites

b. estimate high, medium or low *existing* use levels at each exit site for *every* day of the calendar year.

(each) Exit site x 365 days = 365 "chips"

Design

Purpose is to accurately design a statistical program to produce a field interviewing calendar

High Med. Low

Parking



Trail / Road



Multiple



closed

Design

70	17394	8	16	2007	THURSDAY	840	TR	H
71	17395	8	17	2007	FRIDAY	849	P	H
72	17397	8	19	2007	SUNDAY	849	P	H
73	17397	8	19	2007	SUNDAY	836	P	M
74	17397	8	19	2007	SUNDAY	888	P	M
75	17398	8	20	2007	MONDAY	875	P	M
76	17398	8	20	2007	MONDAY	887	TR	L
77	17399	8	21	2007	TUESDAY	951	P	L

Field Interviewing Calendar

Sunday		Monday		Tuesday	
1-Jul	5	2-Jul	2	3-Jul	1
917	3 /CSP bridge tr./ M A	903	3/Old Forge Rd(3)/P P	840	2/Wash M Rd(40)/P A
819	1 /Weverton Rd /P A	811	1/ HF Shen St.(20)/S P		
836	1 / Dahlgren Ch. / P P				
810	1 / HF VC P lot / S A				
813	1/ HF Lower Town/M P				

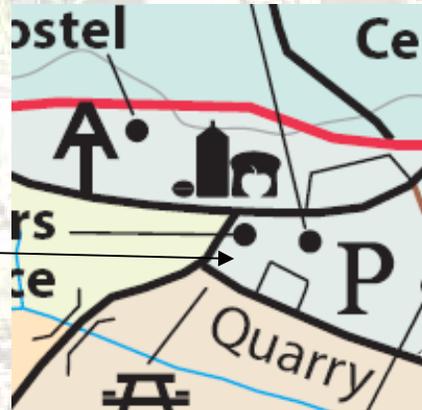
Design



ATC Assistance



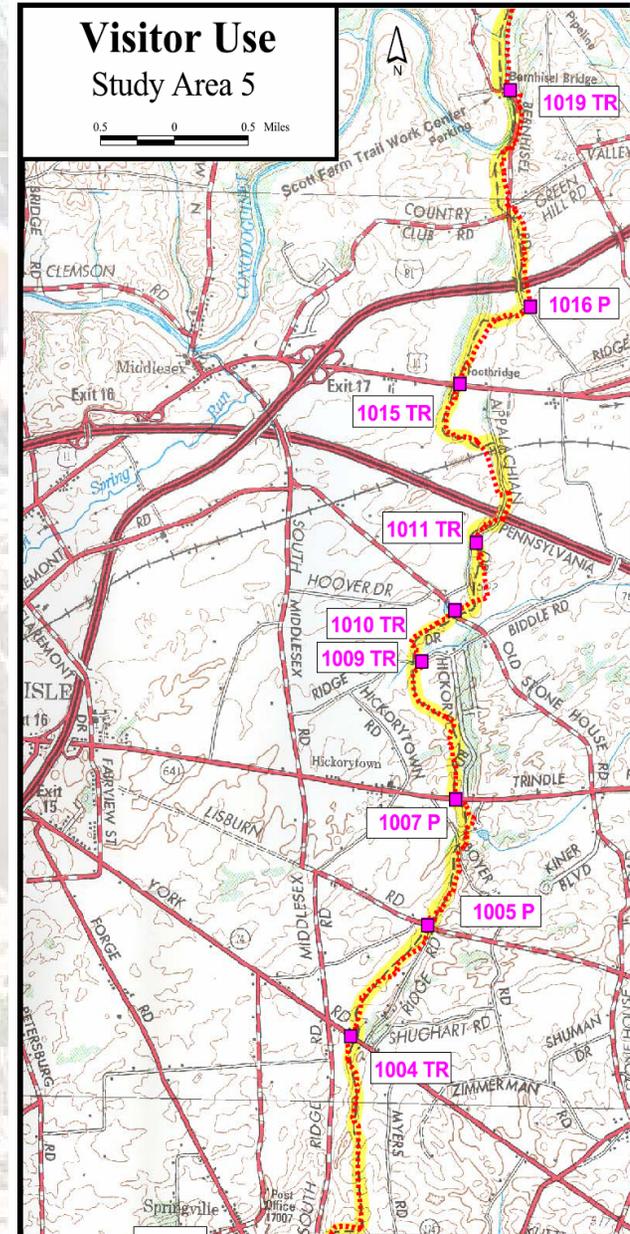
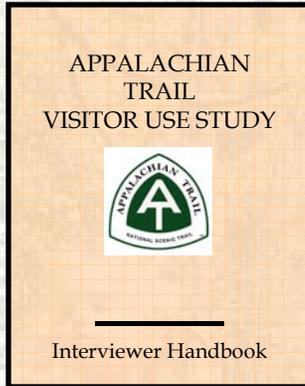
Field Review of Exit Sites



Site 954

Design

Volunteer Interviewers



Interviewing June 1 – Aug 14



Design

Questionnaire & Counting



NVUM / Appalachian Trail Visitor Use Study

OMB #0596-0110

Interviewer: _____

Date: ___ / ___ / 2007 Site # ___ Type ___ Site Name: _____

Q1: Hi. We are conducting a study for the National Park Service. Would you be willing to take a few minutes to participate in an interview?

_____ Yes (person agreed to be interviewed – read Introduction)

_____ No (did not agree to be interviewed – politely stop interview and visually obtain answers to Q 10, 11, 19)

If in group: I need to select just one of you to complete this interview. To make sure the survey is random, which of you had the most recent birthday and is 16 or older?" (Direct all questions to this person)

If at Special Site / M (Q1.5 only):

Q1.5:

Have you used the Appalachian Trail today?

_____ Yes

(continue to Q2)

_____ No

"We are only surveying people who are using the Appalachian Trail. Thank you for your time." (visually obtain Q 10, 11, 11,18,19 & 20)

Q2.

Is the A.T. your primary or secondary reason for visiting this area today?

Primary _____ Secondary _____

(continued...)

(Gary Monk, GATC)

Asheville, NC

Design

Classifying Site Days
for the entire Trail



Harpers Ferry, WV



Mt. Rogers Outfitters, Damascus, VA

Products

- In-depth classification of study area exit sites
- Classification of exit sites on the entire A.T.
- Pilot study area visitation estimates
- Preliminary trail-wide visitation estimates
- Tests of proxy measures (car counts, etc.)
- Statistical summary of pilot questionnaire
 - primary vs. secondary, male/female, daily distance, satisfaction, etc.

Implications

Questions?

