# The Impacts of Rail-Trails A Study of Users and Nearby Property Owners from Three Trails In cooperation with: Conducted by:

The Pennsylvania

State University

U.S. Department of the Interior

Rivers & Trails Conservation Program

National Park Service

## THE IMPACTS OF RAIL-TRAILS: A STUDY OF THE USERS AND PROPERTY OWNERS FROM THREE TRAILS

BY

## RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM NATIONAL PARK SERVICE WASHINGTON, D.C.

#### IN COOPERATION WITH

## LEISURE STUDIES PROGRAM SCHOOL OF HOTEL, RESTAURANT AND RECREATION MANAGEMENT THE PENNSYLVANIA STATE UNIVERSITY (COOPERATIVE AGREEMENT #CA-0765-9-8001)

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**AUTHORS:** 

ROGER L. MOORE
ALAN R. GRAEFE
RICHARD J. GITELSON
ELIZABETH PORTER

#### **EXECUTIVE SUMMARY**

#### **Background and Methods**

This Impacts of Rail-Trails study was the first extensive study to examine the benefits and impacts of rail-trails and the first, to our knowledge, to systematically examine both the trail users and nearby property owners of the same trails. It was a cooperative effort of the National Park Service and Penn State University carried out in 1990 and 1991. It's purpose was to furnish information to assist in the planning, development, and management of rail-trails, public recreation trails constructed on the beds of unused railroads rights-of-way. The study's objectives were to: 1) Explore the benefits of rail-trails to their surrounding communities and measure the total direct economic impact of trail use; 2) Examine what effects rail-trails have on adjacent and nearby property values; 3) Determine the types and extent of trail-related problems, if any, experienced by trail neighbors; and 4) Develop a profile of rail-trail users. This report summarizes the study's methods and findings.

A sample of three diverse rail-trails from across the U.S. was studied: The Heritage Trail, a 26-mile trail surfaced in crushed limestone which traverses rural farmland in eastern Iowa; the St. Marks Trail, a 16-mile paved trail beginning in the outskirts of Tallahassee, Florida and passing through small communities and forests nearly to the Gulf of Mexico; and the Lafayette/Moraga Trail, a 7.6-mile paved trail 25 miles east of San Francisco, California which travels almost exclusively through developed suburban areas. At the time of the study, the Heritage Trail was eight years old, the St. Marks two, and the Lafayette/Moraga was fourteen years old.

Users were systematically surveyed and counted on each trail from March, 1990 through February, 1991 and were then sent follow-up

mail surveys. A sample of residential landowners owning property immediately adjacent to the trails and a sample of those owning property within one-quarter mile of the trails (one-half mile in Iowa) were also surveyed by mail, and real estate professionals in communities along the trails were interviewed by phone. Usable mail surveys were obtained from 1,705 trail users and 663 property owners, and interviews with 71 realtors and appraisers were conducted. Major findings from the analysis of these responses and counts are summarized at the conclusion of this executive summary.

#### **Study Findings**

#### Trail Users and Use

- 1) Demographically, the samples of railtrail users were much like the populations of the communities through which the trails passed.
- 2) The study trails were quite heavily used, with most users living nearby and visiting frequently. This pattern was most pronounced on the suburban Lafayette/Moraga Trail.
- 3) The study did not find a "typical" mix of activities that might be expected on rail-trails. Although bicycling and walking were the most common activities on all the study trails, they occurred in very different proportions on each.
- 4) Having no motorized vehicles allowed was the most desirable trail characteristic expressed by the users of each trail. Other important characteristics were: natural surroundings, quiet settings, safe road crossings, smooth trail surfaces, and good maintenance.

5) Users reported no serious complaints with any of the trails. Insufficient drinking water and restroom facilities were the biggest concerns overall, with rough trail surfaces and reckless behavior of other users reported as problems on the Lafayette/Moraga Trail.

#### Economic Benefits of Rail-Trails

- 1) Use of the sample trails generated significant levels of economic activity. These economic benefits were from two major sources: total trip-related expenditures and additional expenditures made by users on durable goods related to their trail activities.
- 2) Users spent an average of \$9.21, \$11.02, and \$3.97 per person per day as a result of their trail visits to the Heritage, St. Marks, and Lafayette/Moraga Trails, respectively. This resulted in a total annual economic impact of over \$1.2 million in each case. Expenditures on durable goods generated an additional \$130 to \$250 per user annually depending on the trail.
- 3) The amount of "new money" brought into the local trail county(s) by trail visitors from outside the county(s) was \$630,000, \$400,000 and \$294,000 annually for the Heritage, St. Marks, and Lafayette/Moraga Trails, respectively.
- 4) Restaurant and auto-related expenditures were the largest categories of trip-related expenses and visitors that spent at least one night in the local area were the biggest spenders. Equipment (such as bicycles) was the largest category of durable expenditure.

#### Landowner and Property Characteristics

1) Property size and distance from homes to trail varied from trail to trail as expected with the largest properties and distances between homes and the trail occurring along the rural Heritage

Trail and the smallest properties and those closest to the trail occurring along the suburban Lafayette/Moraga. Relatedly, it was far more likely for a landowner's property to be severed by the Heritage Trail than by the other two.

2) The vast majority of landowners were trail users and visited the trails frequently.

#### Problems Experienced by Landowners

- 1) Overall, trail neighbors had experienced relatively few problems as a result of the trails during the past twelve months, but the types and frequencies of these problems varied from trail to trail.
- 2) The problems reported by the most landowners were: unleashed and roaming pets, illegal motor vehicle use, and litter on or near their property. The problems that were most likely to have increased for adjacent owners since the opening of the trail were: noise from the trail, loss of privacy, and illegal motor vehicle use.
- 3) The majority of owners reported that there had been no increase in problems since the trails had been established, that living near the trails was better than they had expected it to be, and that living near the trails was better than living near the unused railroad lines before the trails were constructed. Although owners along the Heritage Trail were the least positive and those along the Lafayette/Moraga the most positive, the majority sampled along each trail was satisfied with having the trail as a neighbor.

#### Rail-Trails' Effects on Property Values

1) Landowners along all three trails reported that their proximity to the trails had not adversely affected the desirability or values of their properties, and along the suburban Lafayette/Moraga Trail, the majority of owners felt the

presence of the trail would make their properties sell more easily and at increased values.

- 2) Of those who purchased property along the trails after the trails had been constructed, the majority reported that the trails either had no effect on the property's appeal or added to its appeal.
- 3) The vast majority of real estate professionals interviewed felt the trails had no negative effect on property sales and no effect on property values adjacent to or near the trails. However, those who felt the trails increased property values outnumbered those reporting decreased values. This positive effect was most pronounced on the Lafayette/Moraga Trail and for nearby, as opposed to adjacent, property.

#### Other Benefits of Rail-Trails

1) Trail users and landowners alike reported that the trails benefited their communities in many ways. Health and fitness and recreation opportunities were considered to be the most important benefits of the trails by the landowners. The trail users felt the trails were most important in providing health and fitness, aesthetic beauty, and undeveloped open space.

#### **Study Conclusions and Implications**

1) Rail-trails can provide a wide range of benefits to users, local landowners, and trail communities. They are not single use, single benefit resources. Residents and visitors enjoy the benefits of trail use, aesthetic beauty, protected open space, and in some instances higher property resale values, while local communities enjoy bolstered economies and increased community pride among other benefits. These benefits should be presented as a package when discussing the merits of rail-trails with the diverse constituencies affected by proposed trails.

- 2) Levels of economic impact varied considerably across the three study trails. This was due principally to the fact that the Lafayette/ Moraga Trail was used almost exclusively for short trips by nearby residents while the other two trails attracted more visitors from beyond the local neighborhoods. If economic benefits are an important community objective, marketing efforts should be developed aimed at attracting out-of-town visitors and getting many of them to make overnight stays.
- 3) The study rail-trails were found to have a dedicated core of users who visited frequently and were committed to "their" trails. This finding represents an opportunity for managers of existing trails and planners of new trails to tap into a potentially rich source of trail supporters and volunteers for assistance on a number of appropriate planning and management activities.
- 4) Although negative aspects of living adjacent to rail-trails were reported by some landowners, the rates of occurrence and seriousness of problems were relatively low and advantages of living near the trails were reported as well. This finding should be encouraging to trail planners and advocates. While all existing and potential problems need to be identified and addressed quickly, trail planners and advocates should not be timid about presenting the positive impacts of rail-trails to landowners along the proposed trails and putting them in contact with their peers along existing trails.

#### Summary and Comparison of the Study Trails

	Heritage	St. Mark's	Lafayette/Moraga
Description			
· Length, miles	26	16	7.6
Surface	Compacted limestone	Asphalt paved	Asphalt paved
Year established	1982	1988	1976
Nearest Metropolitan Area	Dubuque, IA	Tallahassee, FL	"East Bay" Metropolitan Area
Population	62,000	82,000	2 million in the
Distance from trail	2 miles	Begins at city outskirts	metropolitan area
Fee charged	\$5/year or \$1/visit	\$0	<b>\$</b> 0
Operating agency	Dubuque County Conservation Board	Florida Department of Natural Resources	East Bay Regional Park District
Trail landscape	Open farmland to rocky, wooded river valley	Small towns and undeveloped forest land	Developed suburban areas
Trail User Survey			
• Survey response (%)	89	71	83
Usable surveys	329	600	776
Calculated yearly (visits)	135,000	170,000	400,000
• Major uses (%)			
- Bicycling	ά5	81	20
- Walking	29	9	63
- Jogging	3	4	12
Male/Female (%)	56/44	51/49	43/57
Mean age (years)	46	38	50
• Income, under \$40,000 (%)	55	56	21
College graduates (%)	40	66	68
• Race, white (%)	બ્ર	93	94
• Reporting a disability (%)	7	7	7
Trail visits in last year			
(median)	7	10	100
Miles from home (median)	7	8	1.5
• % who lived 20 miles or			
more from trail	31	18	4
• Time spent on trail (average			
minutes)	150	141	68
Adjacent/Nearby			
Landowner Survey			
<ul> <li>Survey response (%)</li> </ul>	75	58	71
Usable surveys	107	226	330
• Male/female (%)	<u>54/46</u>	41/59	56/44
Mean age (years)	50	53	54
Average distance from home			800
to trail (feet)	2434	1822	890
Land owned (average acres)	101	6	0.5
• % with properties severed by	l		
trail	20	2	0
Trail used by household	1 55		1 00
member in last year (%)	×	76	99
Days used by household in			l ,,,
last year (average)	47	67	141
Trail Benefits			
<ul> <li>Highest benefits perceived by</li> </ul>	Health and fitness	Health and fitness	Health and fitness
trail users	Aesthetic beauty	Aesthetic beauty	Aesthetic beauty
	Preserving open space	Preserving open space	Preserving open space
	- I I COCI VIII ODEII SDALE		
· · · · · · · · · · · · · · · ·	Community pride	Recreation opportunities	Community pride
	Community pride	Recreation opportunities	
Highest benefits perceived by landowners			Community pride     Health and fitness     Recreation opportunities

#### Summary and Comparison of the Study Trails (Continued)

	Heritage	St. Mark's	Lafayette/Moraga
	1101111100	JL MAKS	-mayout/1410raga
Trail User Perceptions  Most important trail characteristics	No motorized vehicles     Good maintenance     Natural surroundings	No motorized vehicles     Good maintenance     Natural surroundings	No motorized vehicles     Natural surroundings     Quiet settings
Trail characteristics per- ceived as problems	Lack of drinking water     Lack of restrooms     Rough trail surface	Lack of drinking water Lack of restrooms Lack of services	Lack of drinking water     Rough trail surface     Reckless behavior of users     Lack of restrooms
Landowner Perceptions  Landowner's personal support for trail when proposed  Very supportive (%)  Very opposed (%)  Attitude about living near trail now compared to initial	17 39	47 7	37 7
reaction - Much better (%) - Much worse (%)	27 2	33 5 .	28 1
Current satisfaction with trail     Very satisfied (%)     Very dissatisfied (%)	27 15	47 11	54 6
Most commonly reported problems (% of all owners reporting)	Illegal motor vehicle use (39)     Cars parked on/near property     (24)     Litter (21)	Illegal motor vehicle use (39)     Litter (21)     Loitering on/near property (20)	<ul> <li>Unleashed/roaming pets (43)</li> <li>Noise from trail (27)</li> <li>Litter (27)</li> </ul>
Most frequently occurring problems (average times in last year for all owners)	Illegal motor vehicle use (2.1) Litter (2.1) Cars parked on/near property (2.0)	<ul> <li>Cars parked on/near property (5.1)</li> <li>Loss of privacy (3.9)</li> <li>Illegal motor vehicle use (3.0)</li> </ul>	<ul> <li>Dog manure on/near property (8.8)</li> <li>Cars parked on/near property (6.5)</li> <li>Noise from trail (6.0)</li> </ul>
Problems that have decreased or not changed since before trail opened (% of adjacent owners reporting improvement or no change)  Problems most likely to have	<ul> <li>Dog manure (100)</li> <li>Burglary (94)</li> <li>Animals harassed (94)</li> <li>Users ask to use phone, bathroom, etc. (94)</li> <li>Drainage problems (94)</li> </ul>	<ul> <li>Vandalism (95)</li> <li>Burglary (95)</li> <li>Rude users (94)</li> <li>Users ask to use phone, bathroom, etc. (93)</li> </ul>	<ul> <li>Animals harassed (96)</li> <li>Burglary (96)</li> <li>Users ask to use phone, bathroom, etc. (96)</li> <li>Trespassing (95)</li> <li>Illegal motor vehicle use (95)</li> </ul>
increased since before trail opened (% of adjacent owners reporting more of a problem now)	<ul> <li>Loss of privacy (38)</li> <li>Illegal motor vehicle use (32)</li> <li>Cars parked on/near property (25)</li> <li>Noise from trail (24)</li> </ul>	<ul> <li>Illegal motor vehicle use (35)</li> <li>Loss of privacy (23)</li> <li>Noise from trail (21)</li> <li>Litter (19)</li> </ul>	<ul> <li>Noise from trail (36)</li> <li>Loitering on/near property (30)</li> <li>Loss of privacy (25)</li> <li>Cars parked on/near property (17)</li> </ul>
Economic Impact	60.01		*2.07
<ul> <li>Average trip expenditure</li> <li>(\$ per person per day)</li> <li>Total trips/year</li> </ul>	\$9.21 135,000	\$11.02 170,000	\$3.97 400,000
<ul> <li>Total annual expenditures by users</li> </ul>	<b>\$</b> 1,243,350	\$1,873,400	\$1,588,000

#### Summary and Comparison of the Study Trails (Continued)

1	Heritage	St. Mark's	Lafayette/Moraga
Additional Trip Expenditure			
Information			
Accommodations used by			
overnight visitors			
- Hotel/Motel (%)	53	28	0
- Friends/Relatives (%)	24	39	100
- Campground (%)	15	14	0
Major direct expenditures			ĺ
made by all visitors (average			
S/person/day)	44.00		40.50
- Restaurants	\$2.99	\$3.94	\$0.78
- Gas and oil	2.08	3.72	1.33
- Lodging	1.46	0.44	0.28
% of direct expenditures			ł
made in county(s) trail is		40	4.
located in	66	42	41
Major direct expenditures			l
made in county by visitors to county (\$/person/day)			
	<b>\$</b> 5.21	\$4.70	\$1.34
- Restaurants - Gas and oil	<b>2.14</b>	2.42	0.82
- Cas and on - Lodging	2.56	1.98	0.00
- Retail purchases	1.36	2.27	3.37
Average total expenditures	150		1 35,
made in trail county(s) by			
visitors to county (\$/person/			
	<b>\$</b> 13.22	\$15.18	\$6.86
1 -3,		•	
Expenditures on Durable Goods			
Average amount spent in last			
year within the county that			
was influenced by trail			
existence (S)			
- Equipment—bikes, etc.	\$ 68.67	\$127.05	<b>\$</b> 41.25
- Accessories	21.88	34.87	19.75
- Clothing	21.25	28.25	48.80
- Other	7.67	5.35	3.69
, ,	<b>\$</b> 119.47	\$195.52	<b>\$</b> 113.49
Total amount spent in last			
year that was influenced by	e177 00	£050.64	\$120.CO
trail existence (average per person)	\$173.99	\$250.64	\$132.69
Effect on Real Estate			
Adjacent owner's opinion	İ		
about effect of trail on resale			
value			
	73	74	44
` '	14	16	53
Real estate professionals		ł	
	20	25	26
• Realtors' and appraisers'		1	1
conclusion about effect of the		1	1
trail on adjacent residential		l	1
property	į.	1	•
	82	80	52
` ,	12	20	24

#### Acknowledgments

This study could not have been completed without the help of many groups and individuals. The East Bay Regional Park District, Florida Department of Natural Resources. Dubuque County Conservation Commission, and the nonprofit Heritage Trail Incorporated provided exceptional support through the entire effort. Their assistance, both on the trails and administratively, made the formidable task of collecting data for an entire year possible. We want to thank our contacts and their superiors in each of these organizations for their willingness to commit their organizations to this study. Thank-you to Steve Fiala and Sharon Saffas of the East Bay Regional Park District; Mary Anne Koos, Mike Diehl, and Cliff Maxwell of the Florida DNR; and Bob Walton and Carol Freund of the Dubuque County Conservation Board, and Doug Cheever and Art Roche of Heritage Trail Incorporated. We are equally grateful to the following individuals who commented on the initial draft of this report: Douglas Cheever, Iowa Rails-to-Trails: Heritage Trail, Inc.; Karen-Lee Ryan, Rails-to-Trails Conservancy; Paul Gobster, U.S. Forest Service; Robert Walton, Dubuque Co. Conservation Board; Stuart Macdonald, Colorado State Parks; Andy Clarke, Bicycle Federation of America; Sharon Saffas, East Bay Regional Park District; Alan Gerrell, Florida Department of Natural Resources; Bill King, Orinda, California; Duane Holmes, National Park Service; Art Roche, Heritage Trail, Inc.; Susan Harris, National Park Service; Attila Bality, National Park Service; Mary Anne Koos, Florida Department of Natural Resources; Merle Van Horne, National Park Service; David Lange, National Park Service; David Wood, National Park Service; Barbara Baca, National Park Service; and John Cornelison, American Trails. Special thanks go to Doug Cheever who conceived and prepared the summary table included in the Executive Summary. We would also like to thank the Rails-to-Trails Conservancy for use of the maps inset in Figures II-1, II-2, and II-3.

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