

# Indiana Trails Study

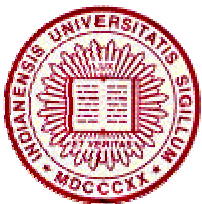
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## PENNSY RAIL TRAIL GREENFIELD, IN

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December, 2001



**EPPL*e*'Y**  
INDIANA UNIVERSITY

Eppley Institute for Parks & Public Lands  
School of Health, Physical Education & Recreation  
HPER 133, Indiana University  
Bloomington, IN 47405



A c k n o w l e d g e m e n t s

# **Pennsy Rail Trail Report Indiana Trails Study**

A Study of the Pennsy Rail Trail in Greenfield, Indiana

Funded by

Indiana Department of Transportation  
Indiana Department of Natural Resources  
National Park Service  
Rivers, Trails and Conservation Assistance Program

Completed by



**Indiana University**

Epley Institute for Parks & Public Lands  
Indiana University Bloomington

Center for Urban Policy & the Environment  
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## Indiana Trails Study

### City of Greenfield Parks and Recreation

The Indiana Trails Study could not have been accomplished without the support and cooperation of leaders and staff from the local trail organizations that participated in the study. The following individuals served as the primary contacts and provided assistance to the Trail Study Team and played an important role in facilitating the completion of this study:

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Bob Bogigian	President	Park Board
Susan Billings	Member	Park Board
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The following individuals provided guidance and review on the Indiana Trails Study Group as representatives of State and Federal agencies, including the Indiana Department of Transportation, Indiana Department of Natural Resources, National Park Service's Rivers, Trails and Conservation Assistance Program, Indiana Department of Commerce and Indiana Governor's Council on Physical Fitness

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## Background

Trail development has become a strong focus of quality of life proponents in regional and community development. Prompted by the rail trail trend of the 1970's and rooted in the bedrock planning ideas of Fredrick Law Olmsted, the connection of people to places through linear parks is an important part of urban development, transportation planning, historic preservation, open space preservation, and neighborhood development.

The development of multi-purpose pedestrian, biking and multi-modal trails, in connection with development of greenways, has become an increasingly popular alternative for the use of public funds across the country. In many communities, trails serve as a stimulus to recreation, physical activity and alternative transportation, and enhance quality of life. Trail development has been emphasized at the federal and state level as a means of alternative transportation, commercial recreation, tourism and business development, community building and health promotion in local communities. Trends point to the use of trails as a growing and preferred recreation activity, and many successful trail developments can be identified across the country.

However, the values of trail proponents sometimes conflict with adjacent landowners' preferences, or others who oppose trail development. Trail opponents sometimes claim that trails promote criminal activity, devalue neighboring property, and are unneeded in the community. While research conducted in many places in the country, generally, has not confirmed opponents' charges, some opponents continue to dismiss the results of national studies.

Because of concerns expressed by trail critics in Indiana, the Eppley Institute for Parks and Public Lands at Indiana University proposed to conduct a comprehensive survey of trails in six (6) Indiana communities. Funding and support for the research study was received from the Indiana Department of Transportation (INDOT), Indiana Department of Natural Resources (IDNR), and the National Park Service (NPS) in late spring 2000 and research was initiated in June 2000. The research was designed to measure various impacts of trails in the six cities, including the Pennsy Rail Trail in Greenfield.

## Purpose of the Study

The Indiana Trails Study included analyses of trail use, effects of trails on neighboring property, and economic impacts to determine negative and positive factors arising from trail development and trail conversion in Indiana. The six trails eventually selected for the Indiana Trails Study included trails in urban, suburban and rural places:

- Monon Trail, Indianapolis, representing urban trail development
- Prairie Duneland Trail, Portage, representing suburban trail development
- Cardinal Greenway Trail, Muncie, representing rural trail development
- Penssy Rail Trail, Greenfield, representing rural trail development
- Maple City Greenway Trail, Goshen, representing suburban trail development
- Rivergreenway Trails, Fort Wayne representing urban trail development

The objectives of this project were to determine: 1) recreational trail use; 2) who is using the trails, how the trails are used, how the trails are accessed and most frequently used; 3) opinions regarding management--such issues as safety, security, maintenance, signage, responsiveness to complaints/questions, and problems; 4) the effects of a trail on neighboring property including property value, damage, vandalism, and the salability of the property; and 5) the underlying attitudes toward trail development.



## **Characteristics of Greenfield and the Pennsy Trail Area**

Greenfield is the seat of government for Hancock County, Indiana. Located geographically in the center of Hancock County, Greenfield is just 15 miles east of Indianapolis and is served by several major highways: I-70, U.S. 40, and State Road 9.

Early settlers built along the two creeks that flow south through Center Township, which includes Greenfield. The first businesses were small gristmills for grinding corn and wheat for settlers. The town of Greenfield was founded in 1826 and was the birthplace of the famous writer, James Whitcomb Riley.

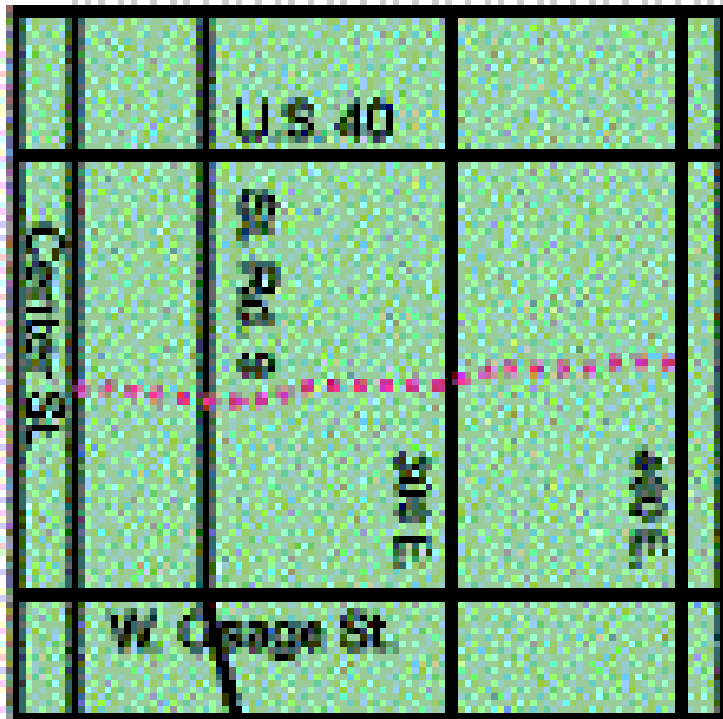
U.S. 40, the National Road, was built through Hancock County around 1835. It was heavily traveled by wagon trains going west and livestock going to Cincinnati. In 1853, the first steam railroad was completed by the Indiana Central Railroad at the south edge of Greenfield. The railroad became part of the Pennsylvania Railroad System and later the Penn-Central. These tracks were removed in the 1980s and later converted into the Pennsy Trail.

The greatest single period of growth began in 1887 when natural gas was discovered in the area. Greenfield was a boomtown for 20 years, with the founding of manufacturing plants and other industries. Today, Greenfield represents the best of both worlds blending its small-town atmosphere with managed growth as part of the greater Indianapolis metropolitan area. The population of Greenfield, 14,600 in the 2000 census, has continued to grow steadily, in part because Hancock County is the sixth fastest growing county in the state of Indiana.

## **History of Greenfield Pennsy Rail Trail**

The Pennsy Trail, a linear park, is the result of a "Rails to Trails" project that took place in 1998. The Trail is 3 miles long, paved 12' wide asphalt, with eight access points, and is non-segmented, but does cross over roads. 200 users per week during warm months and 50 users per week in the off-season participate in walking, jogging, biking, rollerblading, and skateboarding on the trail. The Amenities include restrooms, benches at four different locations. Historical markers are located along the trail. It is located 1 block South of US 40. The trail begins at Center Street and travels east to 400 East.

## Map of Greenfield Pennsy Rail Trail



## Methodology

A number of research methodologies were used to complete the research for the Indiana Trails Study. The methods included:

- Counts of trail users
- Survey of trail users through intercepts at trail heads
- Survey of adjacent property owners, trail neighbors as they are called, through mail survey

Trail counts were conducted using infrared trail counters placed at various locations on each trail throughout the months of September, and October. The infrared trail counters were installed on utility poles or trees in an alignment that allowed trail users of all types (walker, bicyclists, joggers, runners, in-line skaters, etc.) to “break” the infrared light beam projected from a transmission unit to a receiving unit. Every time a user crossed in front of the transmission unit, the infrared light beam was broken, thus causing the receiving unit to record the date and time of the “event”. One (1) infrared reflective counter was used in Greenfield with downloadable data capacity of 8,000 events recorded by date and time. Staff downloaded data from the counter throughout the study months.

Since the infrared trail counter technology was relatively new, the number of events recorded by the counters was validated in a study conducted by Dr. Greg Lindsey, Research Director for the Indiana Trails Study, on the Monon Trail in Indianapolis. By observing trail users at the trail counter location, recording date, time and number of trail users, Dr. Lindsey and his students were able to compare the actual number of trail users with those recorded by the infrared counter unit. This related study found that the infrared trail counter undercounted trail users by approximately 15%.

Survey of trail users was completed through intercepts/stops of trail users during *one week each* in July and August; in four locations (L<sup>1</sup>-L<sup>4</sup> in the following table) on each trail over 3 periods in a day. The intercept survey was designed as a two-stage survey where every *nth* adult user was asked if they would participate in a short interview followed up by a more extensive mail survey. Stop rotations on each trail were scheduled as below.

Time	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Sun.
7-11 a.m.	L <sup>1</sup>	L <sup>4</sup>	L <sup>3</sup>	L <sup>2</sup>	L <sup>1</sup>	L <sup>1</sup> L <sup>2</sup> L <sup>3</sup> L <sup>4</sup>	L <sup>1</sup> L <sup>2</sup> L <sup>3</sup> L <sup>4</sup>
11 a.m. – 3 p.m.	L <sup>2</sup>	L <sup>1</sup>	L <sup>4</sup>	L <sup>3</sup>	L <sup>2</sup>	L <sup>1</sup> L <sup>2</sup> L <sup>3</sup> L <sup>4</sup>	L <sup>1</sup> L <sup>2</sup> L <sup>3</sup> L <sup>4</sup>
3-7 p.m.	L <sup>3</sup>	L <sup>2</sup>	L <sup>1</sup>	L <sup>4</sup>	L <sup>3</sup>	L <sup>1</sup> L <sup>2</sup> L <sup>3</sup> L <sup>4</sup>	L <sup>1</sup> L <sup>2</sup> L <sup>3</sup> L <sup>4</sup>

The intercept protocol used in this method was to stop every *nth* adult and ask subject to participate in short 3-minute survey with follow-up mail survey. The follow-up survey was a 16-page booklet with a self addressed-business reply-mailing panel on the back panel that allowed participating trail users to return the survey to the Eppley Institute for Parks and Public Lands by U.S. mail. Reminder cards and a second mailing of the survey to non-respondents were undertaken to increase response rate to the follow-up survey.

Trail neighbors were mailed a survey asking them to reflect on management issues and their experiences with the trails in their area. Trail neighbors were identified using an agency’s pre-existing neighbor list updated as necessary.

Reminder cards and a second mailing of the survey to non-respondents were undertaken to increase response rate to the trail neighbor survey.

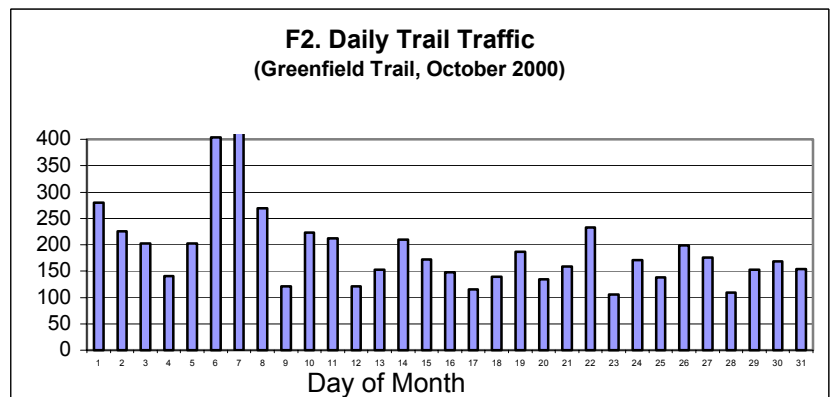
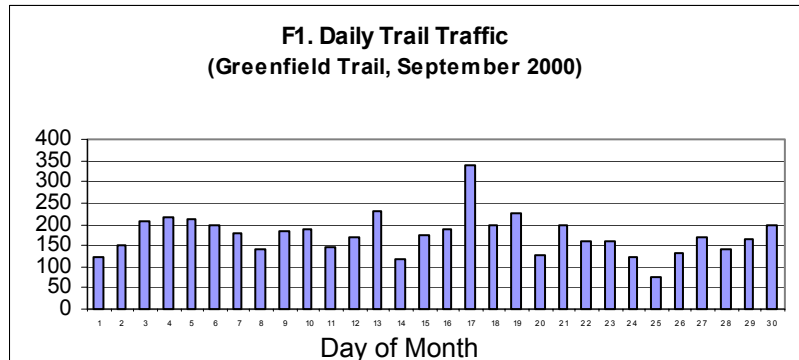
## Trail Counts

Estimates of total traffic on the Pennsy Rail-trail in Greenfield in September and October 2000 are 5,218 and 6,108 respectively. These estimates are adjusted counts of the total number of users that went past the counter, not estimates of the number of different user-visits or separate trips to the trail.

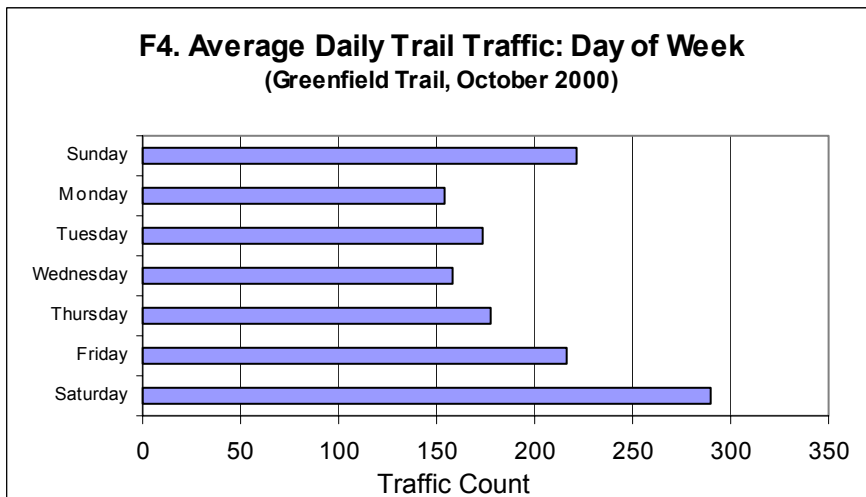
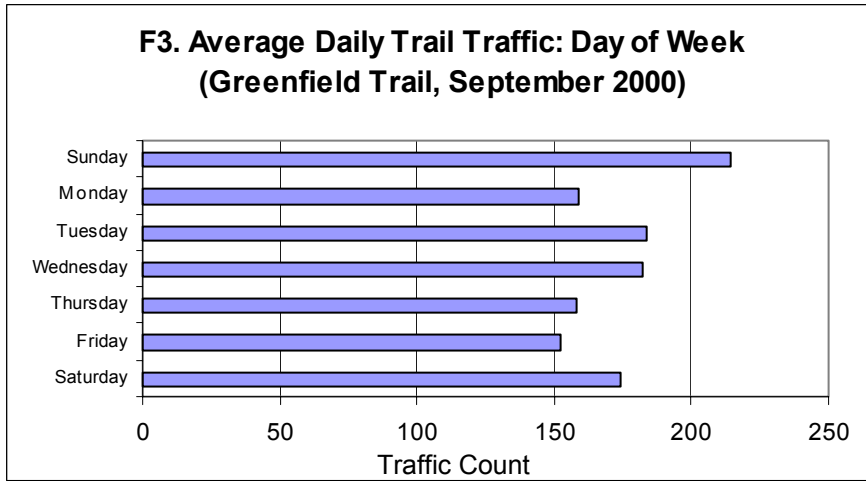
Estimates of the number of different users-visits to the trail are not available, but a crude approximation is that the number of user visits is approximately equal to half of the total traffic. This approximation assumes that each user passed the counter twice. Although it is likely that some users passed the counter more than twice and that other users passed it only once, information for making a better estimate of the number of different visits is not available. The number of different users would be less than the number of user-visits because many users make multiple trips during a month or week.

### Daily Trail Traffic

Figures F1 and F2 show trail use on 60 days in September and October. Estimated daily trail traffic varied by a factor of about five in September and six in October. Daily traffic in September ranged from a low of only 76 on Monday, September 25 to a high of 340 on Sunday, September 17. The range of daily traffic in October was from a low of 106 on Monday, October 23 to a high of 684 on Saturday, October 7.



Although analyses of the causes of variability are beyond the scope of this study, the variability in daily traffic generally can be accounted for by user preferences, weather, and other factors.



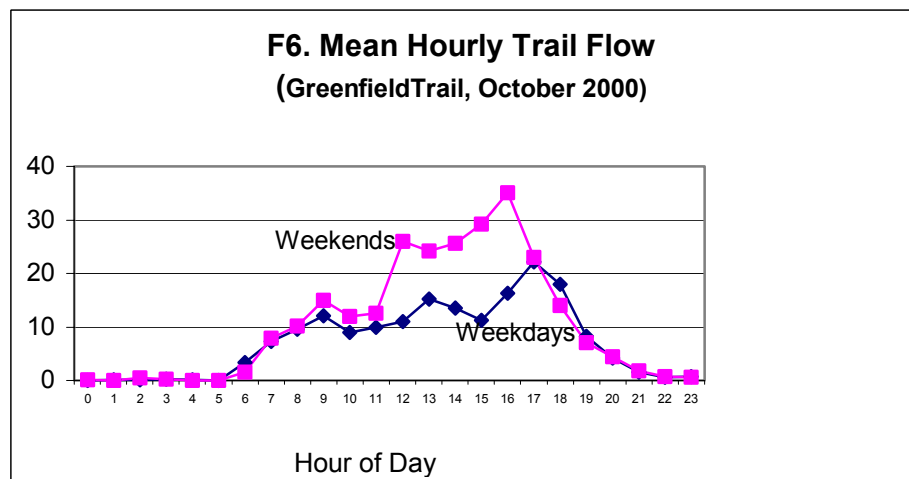
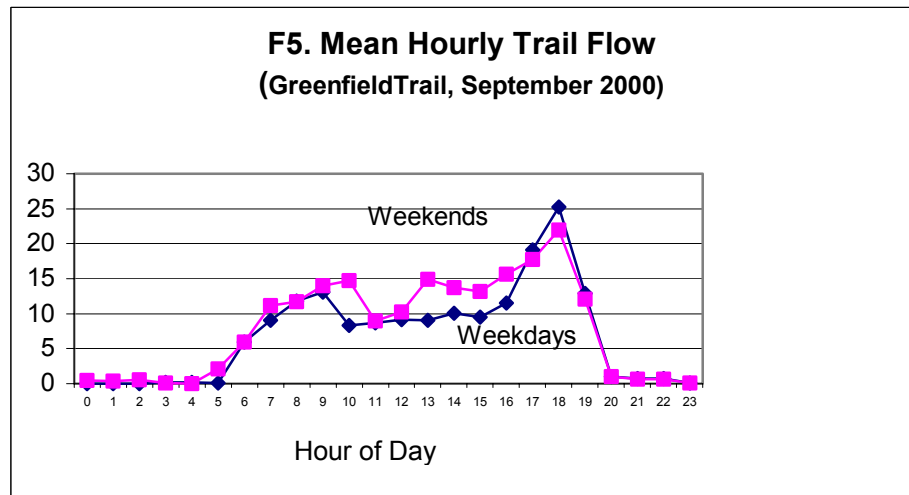
Figures F3 and F4 present average daily traffic for the Pennsy Rail-trail for September and October 2000. In September, average daily traffic varied by a factor of approximately 1.4, ranging from a low of 152 on Fridays to a high on Sundays of 214. Average daily traffic in October varied by a factor of 1.9, ranging from a low of 154 on Mondays to a high on Saturday of 290. Average daily trail traffic was highest on Sundays in September and on Saturdays in October and the other weekend days had second highest average traffic. Average weekday traffic was higher in the beginning of the week on Mondays, Tuesdays, and Wednesdays than on Thursdays and Fridays in September. A reverse pattern was found in October with traffic on Thursdays and Friday higher than the beginning of the week.

### Hourly Trail Traffic

In general, average hourly trail traffic followed different patterns on weekends and weekdays (Figures F5-F6). On weekends, average hourly trail traffic in September increased steadily from about 5:00 a.m. until 11:00 a.m., fluctuated around the first peak and reached the highest in early evenings, between 6:00 p.m. and 7:00 p.m., then declined rapidly. In October, trail traffic on weekends started one hour later than in September and the average hourly traffic increased up to the peak between 5:00 p.m. and 6:00 p.m., then declined gradually. In September and October, peak average hourly use accounted for 11.5 percent and 13.9 percent, respectively, of average weekend use.

On weekdays, average hourly trail traffic leveled off by about 10:00 a.m. to 11:00 a.m. in September and October, remained relatively constant until late afternoons, peaked in early evenings between 6:00 p.m. and 7:00 p.m. in September and 4:00 p.m. and 5:00 p.m. in October, and then dropped off rapidly.

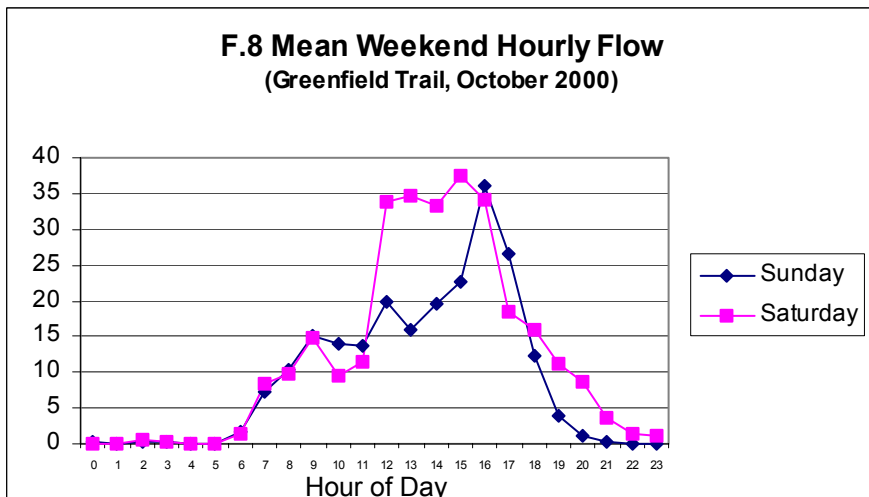
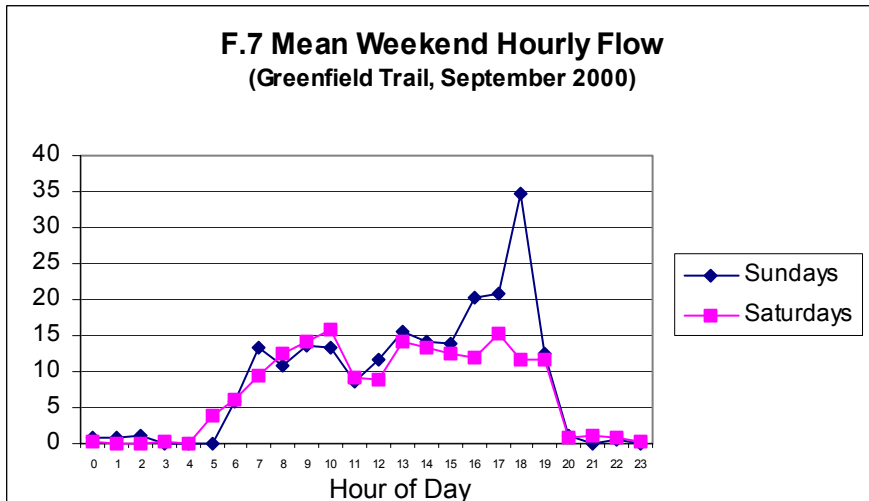
Trail traffic varied consistently by hour of day as well as day of week (Figures F5-F10). This analysis examines first differences in weekend and weekday traffic, with traffic averaged by hour for weekends and weekdays separately. Next, differences among weekend days (i.e., Saturdays and Sundays) and the days of the work-week are examined.



These patterns reflect users' work schedules: weekend hourly use is more evenly spread throughout the day because fewer users are at work. Weekday hourly use peaked in later afternoon/early evening following the workday and accounted for 15 percent in September and 12.5 percent in October, respectively of average weekday use.

*Weekend Traffic*

Weekend patterns of average hourly use differed on Saturdays and Sundays (F7 and F8). Overall use was higher on Sundays in September but on Saturdays in October. Hourly traffic on Sunday mornings was lower than hourly traffic on Saturday mornings; and conversely, afternoon traffic was much higher on Sundays than Saturdays in September. In October, hourly traffic on Saturdays remained higher than hourly traffic on Sundays until late afternoons, and after about 6:00 p.m.

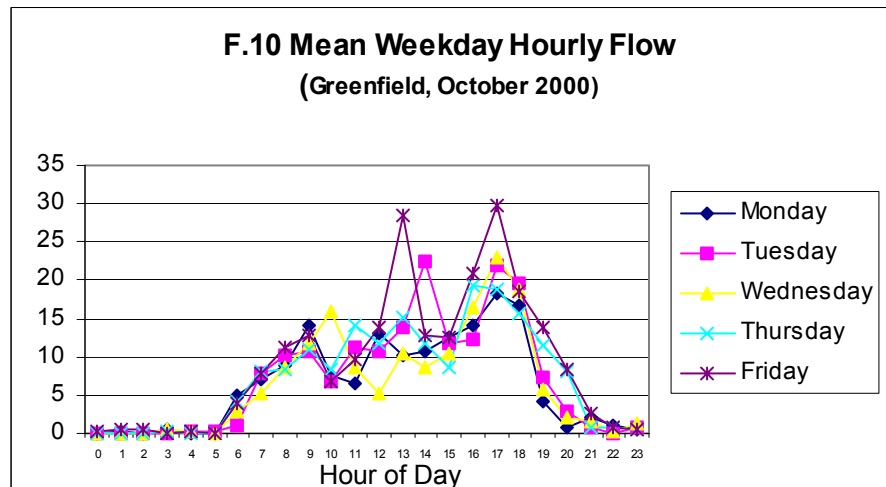
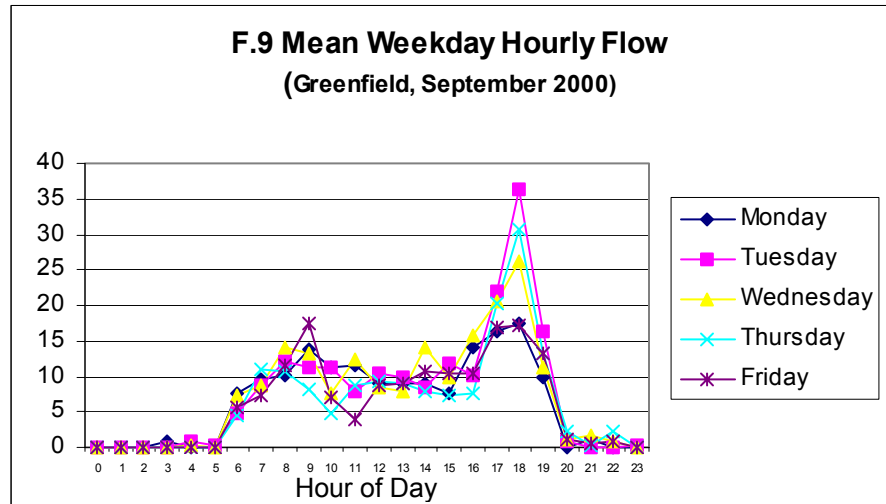




### Weekday Hourly Traffic

On weekdays, patterns of average hourly use were similar, although there was variation in peak hours (F9 and F10). In general, hourly traffic was relatively constant during the day, peaking in late afternoons or early evenings. The peak average hourly traffic occurred between 6:00 and 7:00 p.m. in September and between 5:00 and 6:00 p.m. in October for all weekdays.

The highest traffic recorded for a single hour on weekends was 74 in September and 108 in October, or approximately 1 to 2 persons per minute. The highest traffic recorded for a single hour on weekdays was 69 in September and 78 in October, or approximately 1 to 2 persons per minute.



In sum, counts show consistent patterns of use, with use higher in September than in October and higher on weekends than on weekdays. Peak use on weekends and weekdays occurs at different times: in the mid to late afternoons on weekends and in the late afternoon or early evening on weekdays. Additional analyses of the effects of weather on patterns on use would help to explain variations that have been identified.

## Intercept Surveys

The following tables represent responses from those individuals who were “intercepted” on the Pennsy Trail. Subjects were randomly selected at various locations during a 15-hour day, over a 7-day week for 2 weeks in July and August 2000. 170 trail users were intercepted on the Pennsy Trail and agreed to be surveyed.

*Survey Question: What did you do on the trail today?*

**Table 1: Trail Activity**

Activity	Percentage
Walk	53.9
Bicycle	24.6
Run/Jog	14.4
Skate	7.2

More than 50% of people intercepted on the Pennsy Rail Trail were walkers.

*Survey Question: How did you get to the trail today?*

**Table 2: Travel to Trail**

Travel Method	Percentage
Drive	60.5
Walk	19.2
Bicycle	19.2
Run	1.2

More than 60% of people intercepted drove to the trail. A large proportion of people intercepted either walked or bicycled to the trail.

Survey Question: How long did it take you to get to the trail?

**Table 3: Time to Trail**

Time to Trail (minutes)	Percentage
0-10	83.7%
11-20	12.7%
21-40	1.8%
41-60	0%
61-90	1.2%
Over 90	0.6%

The majority (83.7%) of trail users were within ten minutes of the trail. The mean time for travel was 10.58 minutes with the maximum time being 500 minutes and the minimum time being less than 1 minute, which indicates the respondent was a trail neighbor.

Survey Question: How many miles do you estimate it is from your home to where you entered the trail today?

**Table 4: Distance from Home to Trail**

Distance to trail (miles)	Percentage
0-1	49.1%
2-4	23.4%
5-8	10.7%
9-12	10.2%
13-15	0%
16-20	1.7%
21-30	1.2%
31-50	0.6%
51-80	0%
Over 80	2.4%

More than 72% of trail users are within 5 miles of the trail. The mean mileage for users was 15.07 miles. The maximum number of miles was 722, and the minimum was 0.

*Survey Question: How much time did/will you spend on the trail today?*

77% spent an hour or less on the trail. The mean time on the trail was about 56.6 minutes. The minimum time on the trail was 2 minutes, and the maximum time was 600 minutes.

**Table 5: Time spent on Trail**

<b>Time on Trail (minutes)</b>	<b>Percentage</b>
<b>0-30</b>	34.7
<b>31-60</b>	42.3
<b>61-90</b>	8.1
<b>91-120</b>	5.7
<b>121-150</b>	0.0
<b>151-180</b>	0.0
<b>Over 180</b>	1.8

*Survey Question: Approximately how many miles will/did you cover on the trail today?*

A majority of users covered between 0-5 miles on the trail.

**Table 6: Miles Covered on the Trail**

<b>Miles Covered</b>	<b>Percentage</b>
<b>0-2</b>	43.4
<b>3-5</b>	47.5
<b>6-8</b>	9.1

*Statistical Question: Did the respondent enter and exit the trail at the same location?*

**Table 7: Were The Entrance and Exit At The Same Location**

<b>Entrance = Exit</b>	<b>Percentage</b>
<b>Yes</b>	89.2
<b>No</b>	10.8

Nearly 90% of the users entered and exited the trail at the same location.

*Survey Question: Did or will you combine you visit to the trail with trips to other places?*

**Table 8: Combined Visit with other places**

<b>Combined Visits</b>	<b>Percentage</b>
<b>No</b>	62
<b>Yes</b>	38
<b>Personal</b>	14.9
<b>Dining</b>	13.7
<b>Shopping</b>	13.1
<b>Business</b>	7.4

Users of the trail more often do not combine the use of the trail with other places as indicated by the 62% of no responses. Those who do combine their visit with other places are most likely to combine use of the trail with dining, shopping or other personal uses.

*Survey Question: How many people in your group on the trail today are from each of the following age categories?*

**Table 9: Group Age Categories**

Age	# of People Reported
Less than 15	22
16 to 25	29
26 to 35	33
36 to 45	41
46 to 55	50
56 to 65	20
Over 66	17

Users of the trail are fairly evenly grouped in the 16-55 year old ranges.

*Survey Question: Is today the first time you used the trail?*

**Table 10: First Time Use**

First Time	Percentage
No	85.1
Yes	10.3

85.1% of the users have used the trail before the day of the intercepts.

*Survey Question: What was the main purpose of your visit to the trail?*

**Table 11: Main Purpose of Visit**

Visit Purpose	Percentage
Health/Exercise	79.0
Recreation	18.6
Commute	1.2
Other	1.2

The majority of users (79%) indicated that health/exercise was the main purpose for visiting the trail.

*Survey Question: What was the other purpose of your visit to the trail?*

**Table 12: Other Purpose of Visit**

Visit Other Purpose	Percentage
Health/Exercise	66.7
Recreation	29.6
Dining, shopping, business	3.7

The majority of users (66.7%) who indicated multiple reasons for visiting the trail cited health/exercise as the other reason for visiting the trail.

*Survey Question: Do you (walk/run/cycle/skate) more now because this trail exists?*

**Table 13: Walk/Run/Cycle/Skate More**

Walk/Run/Cycle/Skate More	Percentage
Yes	74.1
No	25.3

People walk/run/cycle/skate more because the trail exists.



*Survey Question: If you (walk/run/cycle/skate) more now because the trail exists, about how many minutes per week do you (walk/run/cycle/skate) because this trail exists.*

**Table 14: Minutes Spent (walk/run/cycle/skate) Each Week Because of Trail**

Minutes Spent	Percentage
0-60	23.2
61-120	27.7
121-180	26.8
181-240	8.9
241-300	3.6
301-360	2.7
361-420	5.3
421-480	0.9
481-540	0.0
541-600	0.9
Over 600	0.0

Over 50% of users are typically on the trail between 1 minute and 120 minutes.

*Survey Question: If yes, did you (walk/run/cycle/skate) at all before the trail was created?*

**Table 15: Active Before Trail Creation**

Active Before Trail	Percentage
Yes	82.2
No	17.8

The majority of users surveyed were active before the trail was created.

*Survey Question: What is your age?*

**Table 16: Grouped Age of Intercept Respondents**

Grouped Age	Percentage
Less 15	0.0
16-25	16.1
26-35	16.8
36-45	21.8
46-55	26.7
56-65	9.3
Over 66	8.1

The average age for users on the trail is about 43 years with over 65% of the distribution between 26-55 years of age.

*Survey Question: Gender of Respondent?*

**Table 17: Respondent Gender**

Gender	Percentage
Female	50.3
Male	49.7

Trail use appears to be equally distributed between genders.

*Survey Question: Race/Ethnicity?*

**Table 18: Respondent Race/Ethnicity**

<b>Ethnicity</b>	<b>Percentage</b>
<b>Caucasian</b>	98.2
<b>Hispanic</b>	0.6
<b>Black</b>	0.6
<b>Not Sure</b>	0.6
<b>Asian</b>	0.0
<b>Other</b>	0.0

The majority of users are Caucasian.

*Survey Question: What type of use did the surveyor observe from the user?*

**Table 19: Observed User Activity**

<b>Observed Activity</b>	<b>Percentage</b>
<b>Walk</b>	52.2
<b>Bicycle</b>	25.2
<b>Run/jog</b>	13.8
<b>Fish</b>	6.3
<b>Skate</b>	2.5

The majority of users are walkers.

Survey Question: Time of Day survey administered?

**Table 20: Time of Day Survey Administered**

Grouped Time	Percentage
6-9 AM	22.2
9-12 AM	35.3
12-3 PM	18.6
3-6 PM	18.0
6-9 PM	6.0

The survey was administered to a fairly consistent number of trail users between the hours of 6am and 6pm.

### Summary and Implications – Intercept Surveys

Trail user activities observed and indicated as type of activity engaged in by respondents are almost identical in Percentage.

A significant finding in the trail intercept survey for the Pennsy Trail, is the large percentages of trail users who are active now because of the trail’s creation (17.8%), and who utilize the trail for combined purposes (38%) such as exercise and other personal uses, or recreation and dining.

Based on intercept responses, proximity to the trail was a decisive factor in trail use with roughly 75% of Pennsy Trail users being within 10 minutes or 5 miles of the trail. Nearly 90% of trail users surveyed entered and exited the trail at the same location.

A large number of trail users who were surveyed utilized the trail for health/exercise (79%) and recreation (18.6%) purposes. Those trail users who did start to participate in their chosen activity because of trail construction (17.8%) and are more active in their chosen activity after trail construction (74.1%), added approximately 2.5 hours more activity time to their schedule per week.

## Follow-Up Survey

### *Trail User Characteristics*

The following tables indicate the responses from those trail users who were intercepted and indicated they would complete a more detailed survey. If a trail user responded favorably to the request to complete additional survey questions during their intercept interview, they were provided with a longer, more detailed survey and asked to return it to the Eppley Institute via business reply mail.

*Survey Question: What were you doing on the trail the day you were interviewed?*

Again, trail users who responded indicated their activity preferences were walking or bicycling on the day of the interview. The percentage of activities participated in closely approximates the percentages of all trail users who were intercepted.

**Table 21: Activity On Day of Interview**

Activity	Percentage
Walking	58.6
Bicycle	21.4
Skating	8.6
Run/jog	8.6
Horse Riding	1.4
Other	1.4

Survey Question: How did you find out about this trail?

**Table 22: How did you find out about this trail?**

How Found	Percentage
Newspaper	56.3
Word of Mouth	16.9
Relatives	7.0
Friends	4.2
Don't Remember	4.2
Happened On It	4.2
College	4.2
Neighbor	2.8

The majority of respondents found out about the trail through the newspaper, while 30.9% of respondents learned of the trail through friends, family, neighbors, or some other non-specific word of mouth source.

*Survey Question: If the trail had not been available the day you were interviewed, what would you have done?*

Responses to this question overwhelmingly indicate that trail users were committed to some level of activity with or without the Pennsy Trail.

**Table 23: Activity Participated in if No Trail Available**

No Trail Available	Percentage
Participated in same activity	87.1
Done Something Different	12.9

*Survey Question: Participated in the same activity somewhere else, if so where?*

The majority of users would have continued participating in an activity on streets and sidewalks if the trail had not been available

**Table 24: Participated in the Same Activity Elsewhere**

Other Location	Percentage
Street/Sidewalks	98.3
Another Trail	1.7
Gym/Rec. Center	0.0
Stay Home	0.0

*Survey Question: Was your visit to this trail part of an overnight trip?*

None of the users surveyed used the trail as part of an overnight visit.

**Table 25: Stayed Overnight**

Stayed Overnight	Percentage
No	100
Yes	0

*Survey Question: Was visiting this trail one of the reasons for visiting this city?*

**Table 26: Trail Reason For Visiting City**

Trail Reason	Percentage
No	100

*Survey Question: On about how many different days did you visit this trail during the past 12 months?*

**Table 27: Trail Visitor Days**

Visitor Days	Percentage
0-10	21.0
11-20	7.5
21-30	4.5
31-40	3
41-50	14.9
51-60	1.5
61-70	3.0
71-100	17.9
101-120	6.0
121-150	11.9
151-200	3.0
201-300	1.5
>300	4.5

None of the users who stayed overnight indicated that the trail was the reason for the visit.

The average number of visitor days per year is 80 days. Half the users reported 41-50 user visits or more.



*Survey Question: Rate your skill level as a participant in the trail activity that you prefer?*

**Table 28: Skill Level of Primary Activity**

Skill Level	Percentage
Intermediate	57.3
Expert	27.9
Novice	14.7

85.2% of trail users consider their activity skill level to be either intermediate or expert.

*Survey Question: How important is this activity to you?*

**Table 29: Importance of Activity**

Importance	Percentage
Not at all important	1.4
Less important	1.4
Somewhat important	2.9
Neither Less or more important	7.2
Somewhat more important	23.2
More important	30.4
Extremely important	33.3

A majority of users (86.9%) consider the activity for which they use the trail important to them, 33.3% considered their activity extremely important.

*Survey Question: How important is this trail to your participation in this activity?*

**Table 30: Importance of Trail to Activity**

Importance of Trail	Percentage
Not at all important	1.4
Less important	2.9
Somewhat important	7.2
Neither Less or more important	15.9
Somewhat more important	23.2
More important	24.6
Extremely important	24.6

72.4% of respondents indicated the trail was important to their chosen activity, with 24.6% of the responding trail users indicating the trail was extremely important to their participation in their preferred activity.

## Summary and Implications – Follow Up Surveys

Follow up mail surveys of trail users on the Greenfield Pennsy Trail closely reflect the activity and user characteristics found in the intercept surveys, including activity preferences. Notably, 87.1% of all respondents indicated they would participate in the same activity whether or not a trail was provided to them with the streets/sidewalks of the community serving as a secondary site for this activity.

Trail users in Greenfield indicated a fairly advanced skill level with 85.2% of the respondents considering themselves to possess either intermediate or expert skill levels. This skill level is apparently reflected in the number of trail visitor days, 80 days annually on average, for respondents. With 26.9% of users reporting they used the trail in excess of at least 100 days in the past year.

None of the trail users surveyed were using the trail as part of an overnight or tourism experience to Greenfield. This is reflective of the fact that over 85% of the respondents learned of the trail through the newspaper or some form of word of mouth publicity such as friends, family or neighbors.

Finally, it is important to note that the trail was seen by trail users as a very important part of an active lifestyle. Roughly 80% of all respondents indicated their chosen activity was of significant importance to them, and that the trail was as important to their continued participation.

In conclusion, trail users are very committed to use of the Pennsy Trail, and see it as an important part of their participation in their chosen activity. The vast majority of trail users surveyed were apparently local residents who felt the trail was very important to their activity level and continued participation.

*Trail User Attitudes and Lifestyles*

*Survey Question: Overall, how satisfied are you with this trail?*

**Table 31: Satisfaction With Trail**

Level of Satisfaction	Percentage
Very Unsatisfied	0.0
Somewhat Unsatisfied	0.0
Neither Less or More Satisfied	10.0
Somewhat Satisfied	35.7
Very Satisfied	44.3
It's Perfect	10.0

Respondents are overwhelmingly satisfied with the Pennsy Trail with 90% indicating some level of satisfaction. None of the respondents indicated they were unsatisfied.

*Survey Question: Has using this trail affected your view of the area or city?*

**Table 32: View of City Affected By Trail**

View of City	Percentage
Yes	61.8
No	38.2
Much less favorable	1.5
Less favorable	1.5
More favorable	58.8
Much more favorable	38.2

61.8% of trail users indicated the trail affected their view of the area/city. Practically all of these respondents found the trail to positively affect their view of the area/city.

Survey Question: *I would prefer to spend more time here if I could.*

**Table 33: Desire To Spend More Time**

More Time	Percentage
Strongly disagree	0.0
Disagree less	0.0
Somewhat disagree	2.9
Neither agree nor disagree	21.4
Somewhat agree	28.6
Agree more	20.0
Strongly Agree	27.1

Over 75% of trail users surveyed indicated they would spend more time on the trail if possible.

Survey Question: *The time I spend here could just as easily be spent somewhere else.*

**Table 34: Respondent Opinion Toward Utilizing Time Spent on Trail Elsewhere**

Time Spent Elsewhere	Percentage
Strongly disagree	11.1
Disagree less	9.7
Somewhat disagree	27.8
Neither disagree nor agree	25.0
Somewhat agree	13.9
Agree more	5.6
Strongly Agree	6.9

48.6% of respondents agreed their time could not just as easily be spent somewhere else.

Survey Question: *A major reason I now live where I do is that this trail is nearby.*

**Table 35: Trail User Opinion On The Trail As A Major Reason For Location Of Domicile**

Live Here for Trail	Percentage
Strongly disagree	52.2
Disagree less	11.9
Somewhat disagree	13.4
Neither disagree or agree	14.9
Somewhat agree	3.0
Agree more	1.5
Strongly Agree	3.0

7.5% of trail users indicated the trail was a factor in choosing their current residence, while the trail was not a factor for 77.5%. The remaining 14.9% of the respondents did not agree or disagree that the trail was a factor in determining their place of residence.

Survey Question: *I am very attached to this trail.*

**Table 36: Trail Users Indicating Their Attachment to The Pennsy Trail**

Attached to Trail	Percentage
Strongly disagree	2.9
Disagree less	10.1
Somewhat disagree	11.6
Neither disagree or agree	29.0
Somewhat agree	23.2
Agree more	13.0
Strongly Agree	10.1

Trail users indicated some degree of attachment to the Pennsy Trail with 46.3% of respondents stating they are attached to the trail at some level.

*Survey Question: I find that a lot of my life is organized around this trail.*

**Table 37: Trail Users Indicating That Their Life Is Organized Around the Trail**

The majority (60%) of trail users responding disagreed in some form with the statement that their life was organized around the trail. While 11.5% of trail users responding indicated their lives were organized around the trail.

Organized Around Trail	Percentage
Strongly disagree	29.0
Disagree less	18.8
Somewhat disagree	14.5
Neither disagree or agree	26.1
Somewhat agree	4.3
Agree more	5.8
Strongly Agree	1.4

*Survey Question: No other trail can compare with this one.*

**Table 38: Trail Users Opinion Toward Pennsy Trail in Comparison to Other Trails**

15.7% responded that no trail can compare to the Pennsy Trail.

Trail Compares	Percentage
Strongly disagree	25.0
Disagree less	15.6
Somewhat disagree	9.4
Neither disagree or agree	34.4
Somewhat agree	6.3
Agree more	3.1
Strongly Agree	6.3

## Summary and Implications --- Follow Up Surveys

### Trail User Attitudes and Lifestyles

Pennsy Trail users overwhelmingly indicated they were satisfied with the trail and that their view of Greenfield, as a city or community, was positively affected by the trail. Over 60% of trail users indicated this high level of satisfaction and positive view of the area making their overall attitude toward the community more favorable.

Trail users were enthusiastic about their desire to spend more time on the trail. 75% of responding trail users indicating some degree of desire to spend more time on the trail with over 48.6% of the respondents indicating the time spent on the trail was important. This enthusiasm is somewhat reflected with 46.8% of the trail users responding to the follow-up survey indicating they are attached, to some degree, to the Pennsy Trail.

The Pennsy Trail was a factor in organizing about 11.5% of trail users' lives, although the majority of trail users responding either disagreed with this concept or were neutral. In addition, over 75% of the trail users indicated that trail location did not affect their current choice for residential location.

In conclusion, Pennsy Trail users are overwhelmingly satisfied with the trail and it positively affects trail users' attitudes toward the community and their lifestyles.



*Trail User Satisfaction and Benefit Opinions*

*Survey Question: Indicate how important the following issues are to you with a 1 being not at all important and 7 being extremely important.*

*Not At All Important*

*Extremely Important*

1            2            3            4            5            6            7

**Table 39: Trail User Ratings of Issues By Importance**

By and large trail users responding to the survey indicated that most of the factors at the right were important.

A mean rating of 4 would be neutral, with higher mean ratings being more important, and lower mean ratings being less important.

<b>Issue</b>	<b>Mean</b>	<b>Importance</b>	<b>Rating</b>
<b>Personal safety</b>	1 Not At All	<b>6.28</b>	7 Extremely
<b>Safe road/stream intersections</b>	1 Not At All	<b>6.03</b>	7 Extremely
<b>Trail vandalism</b>	1 Not At All	<b>6.00</b>	7 Extremely
<b>Trail Maintenance</b>	1 Not At All	<b>5.93</b>	7 Extremely
<b>Reckless behavior of trail users</b>	1 Not At All	<b>5.74</b>	7 Extremely
<b>Drinking water and toilet facilities</b>	1 Not At All	<b>5.53</b>	7 Extremely
<b>Quiet settings</b>	1 Not At All	<b>5.49</b>	7 Extremely
<b>Natural surroundings</b>	1 Not At All	<b>5.46</b>	7 Extremely
<b>Adequate access points</b>	1 Not At All	<b>5.42</b>	7 Extremely
<b>Adequate ranger/safety patrols</b>	1 Not At All	<b>5.28</b>	7 Extremely
<b>Proximity to home/office</b>	1 Not At All	<b>5.03</b>	7 Extremely
<b>Parking facilities</b>	1 Not At All	<b>5.00</b>	7 Extremely
<b>Rough trail surface</b>	1 Not At All	<b>4.99</b>	7 Extremely
<b>Narrow trail width</b>	1 Not At All	<b>4.99</b>	7 Extremely
<b>Maps, signs, and trail information</b>	1 Not At All	<b>4.65</b>	7 Extremely
<b>Crowded conditions, congestion</b>	1 Not At All	<b>4.51</b>	7 Extremely
<b>Historic points of interest</b>	1 Not At All	<b>3.92</b>	7 Extremely

Survey Question: Indicate how satisfied you are with the trail and its management. Indicate how satisfied you are with the following issues with a 1 being not at all satisfied and 7 being extremely satisfied.

Not At All Satisfied Extremely Satisfied

1      2      3      4      5      6      7

**Table 40: Trail User Ratings of Issues By Satisfaction**

Issue	Mean Satisfaction Rating		
<b>Crowded conditions, congestion</b>	1 Not At All	<b>5.98</b>	7 Extremely
<b>Rough trail surface</b>	1 Not At All	<b>5.92</b>	7 Extremely
<b>Natural surroundings</b>	1 Not At All	<b>5.92</b>	7 Extremely
<b>Quiet settings</b>	1 Not At All	<b>5.91</b>	7 Extremely
<b>Narrow trail width</b>	1 Not At All	<b>5.83</b>	7 Extremely
<b>Proximity to home/office</b>	1 Not At All	<b>5.75</b>	7 Extremely
<b>Adequate access points</b>	1 Not At All	<b>5.71</b>	7 Extremely
<b>Parking facilities</b>	1 Not At All	<b>5.66</b>	7 Extremely
<b>Reckless behavior of trail users</b>	1 Not At All	<b>5.59</b>	7 Extremely
<b>Trail Maintenance</b>	1 Not At All	<b>5.45</b>	7 Extremely
<b>Maps, signs, and trail information</b>	1 Not At All	<b>5.38</b>	7 Extremely
<b>Historic points of interest</b>	1 Not At All	<b>5.31</b>	7 Extremely
<b>Safe road/stream intersections</b>	1 Not At All	<b>5.17</b>	7 Extremely
<b>Trail vandalism</b>	1 Not At All	<b>5.08</b>	7 Extremely
<b>Personal safety</b>	1 Not At All	<b>4.79</b>	7 Extremely
<b>Adequate ranger/safety patrols</b>	1 Not At All	<b>4.02</b>	7 Extremely
<b>Drinking water and toilet facilities</b>	1 Not At All	<b>3.33</b>	7 Extremely

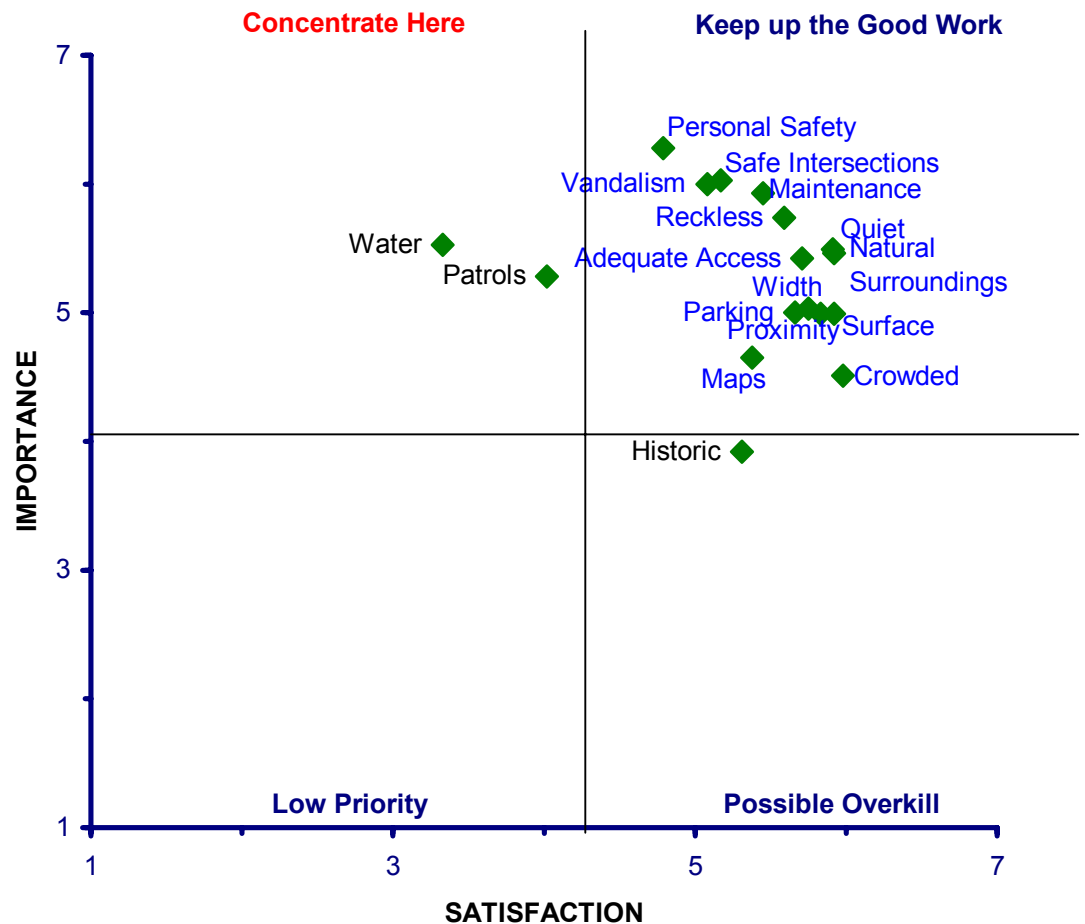
By and large trail users responding to the survey indicated that all of the factors at the left were satisfactory on the Pennsy Trail. The lowest rated factors were drinking water and toilet facilities, adequate ranger/safety patrols and perceived personal safety.

A mean rating of 4 would be neutral, with higher mean ratings being more satisfactory, and lower mean ratings being less satisfactory.

**Chart 1: A Comparison of Importance and Satisfaction Factors on the Greenfield Pennsy Rail Trail**

**Importance-Satisfaction Comparison For Pennsy Trail**

The chart at the right displays the combined mean scores for trail importance and satisfaction factors on a 2-axis grid.



**Analysis Notes**

Importance/Performance (I/P) analysis provides organizations with a "snapshot" of how important various factors are to clients or customers, and how well the organization is performing. In this case, the I/P analysis modified terms slightly to measure trail user ratings of importance and satisfaction with various factors along the Cardinal Greenway Trail.

Significant findings of concern would be identified in this I/P analysis if any of the plotted mean values of importance and satisfaction from Tables 39 and 40 were located in the upper left hand quadrant of this chart; the "Concentrate Here" labeled quadrant. Mean values plotted in this quadrant would basically be defined as important to trail users, and rated as a less than satisfying aspect of the trail. The issues of most concern appear to be the availability of drinking water and toilet facilities and safety patrols.

Survey Question: Please rank the importance of the following public benefits with 1 being not important and 7 being extremely important.

**Table 41: Trail Users Mean Rating of The Importance of Public Benefits of the Pennsy Rail Trail**

Public Benefits	Rating						
	1	2	3	4	5	6	7
Preserving Open Space	Not Important						Extremely Important
	1	2	3	4	5	6	7
					5.32		
Aesthetic Beauty	Not Important						Extremely Important
	1	2	3	4	5	6	7
					5.20		
Community Pride	Not Important						Extremely Important
	1	2	3	4	5	6	7
					5.51		
Tourism & Business Development	Not Important						Extremely Important
	1	2	3	4	5	6	7
				4.22			
Alternative Transportation	Not Important						Extremely Important
	1	2	3	4	5	6	7
			3.44				
Health and Fitness	Not Important						Extremely Important
	1	2	3	4	5	6	7
						6.51	
Access for Disabled Persons	Not Important						Extremely Important
	1	2	3	4	5	6	7
					5.48		
Public Recreation	Not Important						Extremely Important
	1	2	3	4	5	6	7
					5.81		
Nature Education	Not Important						Extremely Important
	1	2	3	4	5	6	7
					5.29		

## Summary and Implications ---- Follow Up Surveys

### Trail User Satisfaction and Benefit Opinions

Respondents to the Pennsy Trail user follow up survey indicated an overall satisfaction with the trail. Importance/Performance (I/P) analysis of various factors indicated that trail users were overwhelmingly pleased with the trail. Two issues of concern were the availability of toilet facilities and drinking water and safety patrols.

The highest-ranking satisfaction factors for the Pennsy Trail included trail maintenance, the trail surface and width, its natural surroundings, quiet setting, and lack of congestion on the trail.

The most important factors for the Pennsy Trail and its management included the perceived personal safety of trail users, safe road and stream intersections, the prevention of trail vandalism, trail maintenance, and the prevention of reckless behavior by trail users.

Historic points of interest and trail information were the least important factors to trail users falling below the average expressed interest of respondents. The lack of importance in the latter factor, trail information, may be reflective of the Pennsy Trail's relatively short length.

Finally, trail users indicated an understanding of the greater public benefits of greenways and trail development. Those greater public benefits of significant importance as expressed by trail users included positive impacts to health and fitness, preserving open space, public recreation and community pride.

In conclusion, Pennsy Trail users expressed a high level of satisfaction with the important factors they found in trails and greenways, including those expressed factors that are of greater public benefit.

*Trail User Problem/Safety Concerns*

*Survey Question: Which one item listed above do you feel is the most important problem on the trail?*

**Table 42: Percentage of Trail Users Indicating The Most Important Problem On The Pennsy Rail Trail**

<b>Problem</b>	<b>Percentage</b>
<b>Water fountains/toilets</b>	36.2
<b>Safety</b>	24.1
<b>Ranger patrols</b>	10.3
<b>Safe road intersection</b>	10.3
<b>Vandalism</b>	5.2
<b>Reckless behavior</b>	3.4
<b>Width</b>	3.4
<b>Maintenance</b>	1.7
<b>No problems</b>	1.7
<b>Access/Proximity</b>	1.7
<b>Congestion</b>	1.7
<b>Signage</b>	0.3

It would appear that most people feel that a lack of water and toilets and perceived personal safety are the biggest problems.

*Survey Question: Have you ever experienced any problems with other people on the trail?*

**Table 43: Percentage of Trail Users Experiencing Problems with Other People**

Users generally are not experiencing problems with other users on the trail.

Experienced Problems	Percentage
No	94.3
Yes	5.7

*Survey Question: What types of trail users have you observed causing problems?*

**Table 44: Percentage of User Types Causing Problems**

All of the respondents, who indicated they had problems with other people on the trail, indicated they had observed trail users who were on bikes causing problems for other users.

Problem Activity	Percentage
Bikes	5.6
Dog Walkers	1.4
Walkers	0.0
Runners	0.0
Skaters	0.0

*Survey Question: Type of problems caused by trail user?*

**Table 45: Percentage of Trail Users Observing Specific Types of Problems**

Problem Type	Percentage
Not Courteous	5.6
Blocking the Trail	1.4
Interfering	1.4
Too Fast	0.0
Too Slow	0.0

All of the respondents, who indicated they had problems with other users, felt like the problems they experienced involved trail users who were not being courteous.

*Survey Question: Were there other types of problems with trail users?*

**Table 46: Other Problems**

Other Problem Occurring	Percentage
No	100
Yes	0

No users indicated that they were having other problems.



Survey Question: How serious is the problem?

**Table 47: Seriousness of Problems**

Seriousness	Percentage
Not too serious	50.0
Minor/Not serious	25.0
Serious	25.0
No opinion	0.0
Not sure	0.0
Very Serious	0.0

75% of those respondents reporting a problem indicated the problems were serious or not too serious.

Survey Question: Have you considered not using the trail anymore because of these problems?

**Table 48: Percentage Of Trail Users Who Considered Stopping Use Because of Problems?**

Stop Use	Percentage
No	75.0
Yes	25.0

While 75% of the respondents experiencing problems consider the problems on the trail to be somewhat serious, the majority of users have not considered the problems on the trail serious enough to discontinue trail use.

Survey Question: What is your opinion on trail congestion and crowding?

**Table 49: Trail User Opinion on Trail Congestion and Crowding**

Opinion	Percentage
Not Sure	4.2
Not Congested At All	95.8
Congested	0.0
Very Congested	0.0

95.8% of trail users responding indicated the trail is not congested at all.

Survey Question: Are there enough restrooms on the trail?

**Table 50: Trail User Opinion on The Number of Restrooms On Trail**

Adequate Restrooms	Percentage
No	92.5
Yes	7.5

92.5% of trail users feel there are not enough restrooms along the trail.

Survey Question: How safe do you feel while on the trail?

**Table 51: Trail User Opinion On Safety Of Trail**

Safe	Percentage
Safe	64.3
Very safe	20.0
Unsafe	10.0
Not sure	4.3
Very unsafe	1.4

Almost 85% of trail users indicate a feeling of safety, to some degree, while on the trail. About 11.4% of trail users expressed an opinion that the trail was unsafe or very unsafe.

Survey Question: Do you have any suggestions on what could be done to make you feel safer?

**Table 52: Suggestions To Improve Trail Safety**

Safety Suggestions	Percentage
Bike patrols	55.6
Call boxes/lighting	33.3
Access points	11.1

Although most responding trail users indicated they feel safe on the Pennsy Trail, a significant percentage of respondents indicated that bike patrols, lights and phones would increase their feelings of safety on the trail.

## Summary and Implications --- Follow Up Surveys

### Trail User Problems/Safety Opinions

Generally speaking, trail users found very few problems with the Pennsy Trail. Only 5.7% of the trail users completing the follow up survey indicated they had experienced a problem. A fairly high percentage of responding trail users indicated they felt that lack of water and toilets and perceived personal safety were the most important problems on the trail. However, while these problems were reported, 75% of all respondents indicated they would not stop using the Pennsy Trail as a result of these problems.

Trail users overwhelmingly indicated the trail was safe, and not congested. The most popular trail safety improvement suggested was the addition of bike patrols, lights and phones to the Pennsy Trail.

Trail User Economic Factors

Survey Question: *If you drove to the trail, did you pay for parking?*

**Table 53: Percentage of Trail Users Who Did Not Have To Pay to Park**

Pay	Percentage
No	100.0

Survey Question: *Would you be willing to pay a fee for an annual pass for next year?*

**Table 54: Percentage of Trail Users Who Are Willing to Pay User Fee**

Pay User Fee	Percentage
No	72.9
Yes	27.1

Survey Question: *If yes, how much would you be willing to pay?*

**Table 55: Annual Fee Supported by Trail Users indicating Their Willingness to Pay For Trail Use**

Amount	Percentage
5-10\$	73.7
11-20\$	10.5
21-30\$	10.5
50 or more	5.3

All of the respondents who answered this question indicated that they did not pay to park.

A majority of the responding trail users indicated they would not be willing to pay a user fee for access to the Pennsy Trail.

Of those trail users indicating they would be willing to pay a trail use fee, almost three-fourths would be willing to pay between \$5 –10 annually.

*Survey Question: If no, what is the primary reason you would not pay a user fee?*

**Table 56: Why Trail Users Would Not Pay Annual User Fee**

About 70% would not be willing to pay a fee for an annual pass to use the trail. 82.6% of those trail users indicated they think taxes should cover the cost of using the trail.

Reason	Percentage
Taxes should pay	82.6
Costs to much already	6.5
Will be able to use it anyway	6.5
Am too poor	4.3

*Survey Question: What type of expenses did you have related to trail use?*

**Table 57: Trail User Expenses Related to Trail Use and Group Participation, If Any**

Almost 70% of responding trail users paid their own expenses related to trail use but did not pay expenses of other trail users.

Trail Expenses	Percentage
I paid all of my own expenses - no one else's	69.8
I was part of a group that had no expenses	25.6
I was part of a group that shared expenses	4.7
Someone else paid all of my expenses	0.0

*Survey Question: Estimated amount of money spent in relation to the trail on the day surveyed and during the past 12 months.*

**Table 58: Average Trail User Expenditures For Trail Use On Day of Intercept and For Annual Use**

<b>Expenditure Category</b>	<b>Average \$ Spent on Day of Survey</b>	<b>Average \$ Spent on Annual Trail Use</b>
<b>Equipment (bikes, skates, trailers)</b>	\$0.00	\$250.00
<b>Clothing</b>	\$0.00	\$110.83
<b>Food/Beverage in Restaurants</b>	\$8.50	\$63.57
<b>Transportation Costs</b>	\$2.00	\$40.00
<b>Accessories</b>	\$0.00	\$40.00
<b>Membership Subscriptions</b>	\$0.00	\$22.50
<b>Supplies (film, groceries, etc.)</b>	\$0.00	\$20.00
<b>Lodging, Motel, Camping, Cabins</b>	\$0.00	\$0.00
<b>Entertainment &amp; Attractions</b>	\$0.00	\$0.00
<b>Books, guides, maps</b>	\$0.00	\$0.00
<b>Totals</b>	\$10.50	\$546.90

Only about 10 trail users responded to this survey question. Annual expenditures averaged \$546.90 per respondent. Some of these expenditures are likely to be local to the Greenfield area, creating some economic activity in the community.

## Summary and Implications – Follow Up Surveys

### Trail User Economic Factors

Economic issues related to Pennsy Trail use included trail user willingness to pay for trail use, rationales for fee decisions, and trail related expenditures.

Generally speaking Pennsy Trail users did not pay for parking, nor were they willing to pay a trail use fee. Most of those responding trail users who indicated they would be willing to pay a use fees were willing to pay between \$5 and \$20 annually. Approximately 80% of responding trail users who said they would not pay a trail use fee felt that taxes should pay for the cost of trail maintenance and other costs.

Only a small number of respondents reported expenditures related to trail use. Among these users, expenditures related to trail use averaged about \$546 annually, but it is unclear whether these expenditures pertain only to the Pennsy Rail trail use. Because of the small number of responses, reliable estimates of the value cannot be developed.

*Trail User Demographics*

*Survey Question: Do you have a disability or handicap?*

**Table 59: Percentage of Trail Users Indicating A Disability**

Disabled	Percentage
No	94.2
Yes	5.8

*Survey Question: If yes, what is your disability?*

**Table 60: Type of Disability Reported by Disabled Trail Users**

Disability	Percentage
Hearing Impaired	50.0
Other Disability	50.0

*Survey Question: To what race or ethnic group do you belong?*

**Table 61: Trail User Reported Ethnicity**

Ethnicity	Percentage
White not Hispanic	100.0
American Indian/Alaska Native	0.0
Black not Hispanic	0.0
Hispanic	0.0

5.8% of responding trail users have a disability, the nature of which is hearing impairment or some other disability.

All trail users responding to the follow-up survey were white, non-Hispanic.



*Survey Question: What is the highest educational level that you have attained?*

**Table 62: Completed Education Level As Reported By Trail Users**

Education	Percentage
Grade/Elementary	1.4
Some high school	4.3
High school	43.5
Some tech school	4.3
Some college	13.0
College graduate	15.9
Master's	10.1
Doctoral	7.2

The majority of responding trail users (50.5%) have had some technical school or college education, with 33.2% having a college degree or an advanced college degree.

*Survey Question: What is your present or most recent occupation?*

**Table 63: Trail User Reported Occupation**

Occupation	Percentage
Homemaker/Retired	40.4
Industry/Technology/Trades	17.3
Business/Clerical/Mgmt	15.4
Health Human	11.5
Education	3.8
Sales	3.8
Science	1.9
Attorney	1.9
Food Service	1.9
Student	1.9

Individuals in the fields of Industry/Technology/Trade, Health/Human Services and Homemaker/Retired are the most frequent responding trail users.

*Survey Question: Which of the following best describes your total household income in 1999?*

**Table 64: Trail User Income Level by Percentage**

Income	Percentage
< 20,000	7.0
20-39,000	26.3
40-59,000	22.8
60-79,000	22.8
> 80,000	21.1

The income of responding trail users is fairly evenly dispersed in the ranges between \$20,000-\$80,000+.

## Summary and Implications – Follow Up Surveys

### Trail User Demographics

Responding trail users in Greenfield were from a wide variety of trades and occupations reflective of Greenfield's economy. Generally, trail users described themselves as white, non-Hispanic, college educated users earning between \$20,000 and \$80,000+ annually.

A small percentage of trail users reported themselves as disabled, with hearing impairment and other disabilities being the most common disabilities.

## Trail Neighbor Survey Results

The following tables indicate the responses from trail neighbors as defined by the Greenfield Park and Recreation Department. The trail neighbor population represents those individuals who have property that borders along the Pennsy Trail (which includes parks and open space and is often larger than the trail right-of-way) as found in the Hancock County Clerk’s Office. The mailing list was developed and used for the purpose of notifying trail neighbors about the potential development of the Pennsy Trail.

All trail neighbors were mailed a survey, with a cover letter, requesting their participation. The survey was designed so that the back cover contained a business reply-mailing panel and neighbors could place an enclosed sticker on the survey and drop it in any U.S. Postal Service mailbox after completion. Follow-up reminder postcards were sent to all trail users approximately 2 ½ weeks after the original mailing. A reminder mailing of another survey and cover letter was sent to those trail neighbors who did not respond to the original mailing and reminder post card. Of 27 trail neighbors, 10 eventually returned the survey resulting in a response rate of 37%.

The Trail Neighbor Survey was divided up into various topical sections. In the **first section**, trail neighbors were asked about their property and its relationship to the trail.

*Survey Question: Where is the trail in relation to your property?*

**Table 65: Trail Relationship to Property**

Location	Percentage
Trail runs along edge of property	80.0
Trail is near but not touching property	20.0
The trail runs through my property	0.0
Don’t Know	0.0

20% of adjacent property is near but not touching the trail. The trail runs along the edge of another 80% of adjacent properties.

Survey Question: *About how large is your property?*

**Table 66: Percent of Neighbor Property Size In Acres**

Acres	Percentage
.10-.25	0.0
.25-.50	0.0
.50-.75	0.0
.75-1.0	12.5
1.1-2.0	25.0
2.1-4.0	25.0
>4.0	37.5

The majority of property adjacent to the Pennsy Trail is over 1 acre in size. The average size of neighboring properties is 3 acres.

Survey Question: *How is your property used?*

**Table 67: Neighboring Property Use**

Property Use	Percentage
Commercial	88.9
Cropland	11.1
Residential	0.0
Pasture	0.0
Undeveloped	0.0

Neighboring property is used primarily for commercial purposes.

*Survey Question: Is there a single family home on your property?*

**Table 68: Percent of Trail Neighbors Using Property For Single Family Home**

Single Family	Percentage
No	100.0
Yes	0.0

*Survey Question: Which of the following most accurately describes how you use this house?*

**Table 69: Percent of Trail Neighbors Using Dwelling as Principle Residence**

How Used	Percentage
Principle residence	0.0
Rental	0.0
Second Home	0.0
Unoccupied	0.0

A majority of the adjacent property is commercial. There is no single family dwelling on any of the responding trail neighbors' property.

*Survey Question: How far is the residence from the nearest part of the trail?*

**Table 70: Distance from Trail**

*No Values were indicated for distance from trail.*

## Summary and Implication – Trail Neighbor Survey

### Trail Neighbor Property Characteristics

Pennsy Trail neighboring properties were largely commercial lots, about 3 acres in size, and used primarily for commercial purposes.

In **Section 2** of the trail neighbor survey, trail neighbors were asked how they felt about the potential public benefits of the trail. The question asked the respondents to rate their opinion of the benefits based upon a seven-point scale with 1 being “not at all important” to 7 being “extremely important.”

*Survey Question: How important are these public benefits?*

*Not At All Important* *Extremely Important*

1            2            3            4            5            6            7

**Table 71: Trail Neighbor Rating of the Importance of Public Benefits of the Pennsy Rail Trail**

Trail neighbors rated public recreation, access for disabled persons, health and fitness, and aesthetic beauty as the most important public benefits of the Pennsy Trail.

Issue	Mean Importance Rating		
Public Recreation	1 Not At All	<b>6.20</b>	7 Extremely
Access For Disabled Persons	1 Not At All	<b>5.80</b>	7 Extremely
Health & Fitness	1 Not At All	<b>5.70</b>	7 Extremely
Aesthetic Beauty	1 Not At All	<b>5.30</b>	7 Extremely
Community Pride	1 Not At All	<b>5.10</b>	7 Extremely
Preserving Open space	1 Not At All	<b>4.50</b>	7 Extremely
Nature Education	1 Not At All	<b>4.50</b>	7 Extremely
Tourism & Business Development	1 Not At All	<b>4.10</b>	7 Extremely
Alternative Transportation	1 Not At All	<b>3.30</b>	7 Extremely

In **Section 3** of the trail neighbor survey, trail neighbors were asked how satisfied they felt about specific trail management issues, on a seven-point scale with 1 being “not at all satisfied” to 7 being “extremely satisfied”.

Survey Question: Overall, how satisfied are you with...

Not At All Satisfied Extremely Satisfied  
 1      2      3      4      5      6      7

**Table 72: Trail Neighbor Satisfaction With The Trail and Trail Management Issues**

Issue		Mean Satisfaction	Rating
Maintenance of the trail	1 Not At All	<b>5.20</b>	7 Extremely
Natural surroundings of the trail	1 Not At All	<b>5.00</b>	7 Extremely
Trail as an Neighbor	1 Not At All	<b>4.60</b>	7 Extremely
Agency responsiveness to reported problems	1 Not At All	<b>4.56</b>	7 Extremely
Ranger/Safety patrols	1 Not At All	<b>4.50</b>	7 Extremely
Parking facilities for trail users	1 Not At All	<b>4.00</b>	7 Extremely

Responding trail neighbors expressed greater satisfaction for having the trail as a neighbor, agency responsiveness to problems and the maintenance of the trail. However, none of the trail and trail management issues were rated as extremely satisfactory by trail neighbors in Greenfield.

Survey Question: When you first found out that there was going to be a trail near your property, how did you feel about the idea?

**Table 73: Trail Neighbor Initial Attitude Toward Trail**

Feeling	Percentage
Neither less or more opposed to	37.5
More opposed to	25.0
Somewhat opposed to	12.5
Somewhat supportive of	12.5
More supportive of	12.5
Very opposed to	0.0
Very supportive of	0.0

The majority of responding trail neighbors' initial attitudes toward the trail were either neutral or opposed to the trail.



*Survey Question: Would you say that living near the trail is better or worse than expected, when compared to your first reaction?*

**Table 74: Current Trail Neighbor Attitudes Toward Trail Compared With First Reaction**

Neighbor Attitude	Percentage
Much worse than expected	0.0
Worse than expected	12.5
Somewhat worse than expected	0.0
Neither more or less than expected	25.0
Somewhat better than expected	37.5
Better than expected	25.0
Much better than expected	0.0

More than 62% of responding adjacent property owners indicated being near the trail is better than expected.

*Survey Question: How do you feel the trail has affected the quality of your neighborhood?*

**Table 75: Trail Neighbor Attitude on Trail Effect On Neighborhood Quality**

Quality Affect	Percentage
Reduced quality	0.0
Lowered quality	0.0
Somewhat lowered quality	0.0
Neither reduced or improved quality	12.5
Somewhat improved quality	50.0
Added to quality	37.5
Improved quality	0.0

87.5% of respondents indicated the trail resulted in some level of improvement in neighborhood quality.

## Summary and Implications – Trail Neighbor Survey

### Trail Neighbor Attitudes Toward Pennsy Trail

Trail neighbors expressed an overall positive attitude toward the Pennsy Trail with 87.5% of trail neighbors expressing the opinion that the trail improved the quality of their neighborhood. More than 62% of all trail neighbors responding indicated that their attitude toward the Pennsy Trail was better than expected.

These levels of approval are nearly opposite to those indicated as initial attitudes toward the trail as expressed by trail neighbors. Initial attitudes toward the trail indicated by responding trail neighbors showed that 37.5% of them were opposed to the trail to some degree and the same percentage were neutral in their initial attitude. More than 87% of responding trail neighbors expressed the attitude that the trail has improved neighborhood quality of life, indicating that initial reaction to the Pennsy Trail has been reversed.

Trail neighbors' ratings of public benefits of the Pennsy Trail were similar to those of trail users. Preservation of open space, aesthetic beauty, health and fitness, public recreation and community pride were top rated public benefits to trail neighbors. These same benefits were also the top rated benefits by trail users.

Trail neighbors generally reported satisfaction with the Pennsy Trail, and expressed most satisfaction with having the trail as a neighbor and the trail maintenance. Trail neighbors expressed lower levels of satisfaction with parking facilities.

**Section 4** of the survey was designed to determine how trail neighbors felt that their property values have been affected by the trail.

*Survey Question: How do you think that being near the trail has affected resale value of this property?*

The majority of trail neighbors responding indicated the trail has had no effect on the resale value of their property. None of the respondents indicated they felt the trail had increased the resale value of their property, while 10% felt the trail had lowered their property value.

**Table 76: Neighbor Opinion on the Effect of the Trail on Resale Value of Their Property**

Effect	Percentage
Trail has had no effect on resale value	90.0
Trail has lowered the resale value	10.0
Trail has increased resale value	0.0

*Survey Question: By what percent do you think being near the trail has raised or lowered the value of this property?*

**Table 77: Neighbor Opinion of Effect on Resale Value**

Percentage Effect	Percentage
.1-3%	0.0
3.1-5%	0.0
5.1-8%	0.0
8.1-10%	0.0
10.1-15%	0.0
Greater than 15%	100.0

10% of respondents felt the trail had an effect on their property value. Of those 10%, all of them thought the effect was more than 15%.

*Survey Question: If you were to try to sell this property, do you think being near the trail will make it harder or easier to sell?*

**Table 78: Trail Neighbor Opinion on Salability of Property Due to Proximity to Trail**

Salability	Percentage
Much easier to sell	0.0
More easy to sell	0.0
Somewhat easier to sell	0.0
Neither easier or harder to sell	90.0
Somewhat less easier to sell	0.0
Less easier to sell	0.0
Much harder to sell	10.0

The opinion of responding adjacent property owners is that proximity of their property to the trail will make it neither easier nor harder to sell the property.

In the next section, **Section 5**, trail neighbors were asked if the trail affected their decision to purchase the property. Respondents were only asked to respond to this question based upon whether or not they had purchased the property after the trail was opened. The date of the trail opening was provided with the survey.

*Survey Question: How did the presence of the trail affect your decision to buy property?*

**Table 79: Affect of Trail on Decision to Purchase Property**

Trail Presence	Percentage
Reduced appeal	0.0
Neither more or less appealing	0.0
Somewhat more appealing	0.0
More appealing	0.0
Added to appeal	0.0

None of the responding trail neighbors had purchased their property after construction of the Pennsy Trail.

## Summary and Implications – Trail Neighbor Survey

### Trail Neighbor Property Value and Resale Opinions

The majority of the trail neighbors responding indicated the Pennsy Trail has had no effect on the resale value of their property. 10% of respondents felt the trail had lowered their property value, and this 10% felt the effect was greater than 15% of the resale value.

Trail neighbors generally felt that the trail's proximity to their property would have no effect on their ability to sell their property with 90% of the neighbors indicating support for this concept. 10% of responding trail neighbors indicated proximity to the trail would negatively affect ability to sell their property.

In **Section 6**, trail neighbors were asked if their opinions regarding the trail have changed since the trail opened and the public began to use the trail. The trail neighbors rated problems using a 7-point scale with 1 being “less of a problem” and 7 being “more of a problem.”

*Survey Question: Indicate your opinion regarding trail changes since it was opened to the public.*

**Table 80: Opinions of Problems Associated with Trail Users**

<b>Problem</b>	<b>Mean Problem</b>	<b>Level Rating</b>
<b>Vandalism</b>	1 Less	<b>4.88</b> 7 More
<b>Burglary</b>	1 Less	<b>4.25</b> 7 More
<b>Unleashed/ roaming pets</b>	1 Less	<b>4.13</b> 7 More
<b>Cars Parking</b>	1 Less	<b>4.00</b> 7 More
<b>Discourteous/ rude users</b>	1 Less	<b>3.88</b> 7 More
<b>Asking to use Bathroom, phone</b>	1 Less	<b>3.75</b> 7 More
<b>Loitering</b>	1 Less	<b>3.63</b> 7 More
<b>Litter</b>	1 Less	<b>3.62</b> 7 More
<b>Trespassing</b>	1 Less	<b>3.62</b> 7 More
<b>Dog Manure</b>	1 Less	<b>3.62</b> 7 More
<b>Fruits/vegetables picked</b>	1 Less	<b>3.50</b> 7 More
<b>Noise</b>	1 Less	<b>3.38</b> 7 More
<b>Lack of Privacy</b>	1 Less	<b>3.25</b> 7 More
<b>Illegal vehicles</b>	1 Less	<b>3.00</b> 7 More
<b>Animal Harassment</b>	1 Less	<b>2.75</b> 7 More
<b>Lack of maintenance</b>	1 Less	<b>2.38</b> 7 More

Trail neighbors indicate an overall decrease in problems from the time the trail opened.

In this specific case, Greenfield trail neighbors indicated a reduction in problems with animal harassment, illegal vehicles and lack of maintenance since the trail was opened to the public.

In **Section 7** of the trail neighbor survey, adjacent property owners were asked what problems they may have experienced in the past year.

*Survey Question: Indicate if you have experienced the following problems in the last year.*

**Table 81: Number of Trail Neighbors Reporting Specific Problems Occurred In Past Year**

Problem	No. Of Neighbors Reporting
Illegal Vehicles	3
Littering	0
Unleashed Pets	1
Trespassing	2
Noise from trail	2
Loitering	1
Vandalism	2
Harass Animals	0
Rude Users	1
Privacy	0
Burglary	4
Illegal Parking	1
Maintenance	0
Dog Manure	0
Request phone	1
Crops damaged	0
Drainage	2

Trail neighbors indicated that some problems do occur on the adjacent trail. The most frequently occurring problems reported by different trail neighbors were requests to use the phone, vandalism and burglary.

## **Summary and Implications – Trail Neighbor Survey**

### **Trail Neighbor Attitude Toward Trail, and Reported Problems**

Problems associated with the Pennsy Trail were reported by trail neighbors to include all generally known problem issues. Generally, trail neighbors in Greenfield indicated that problems were either at the same level of problem as before trail development, or less of a problem after trail development, including animal harassment, illegal vehicles and lack of maintenance to the public property and a host of other problems. This trend is probably reflective of the effect park development has on vacant, unused greenspace as documented by other agencies.

It should be noted that an increase in requests to use the phone, vandalism and burglary were reported as significant problem trends by trail neighbors.

These consistently reported problems might help focus City of Greenfield's response to neighbors' concerns in their management of the Pennsy Trail.



In **Section 8**, trail neighbors were asked to provide information about themselves and their households in order to assist in better understanding the issues affecting them.

*Survey Question: Did you use the trail at least once during the past 12 months?*

**Table 82: Percentage of Trail Neighbors Who Used The Pennsy Trail in Past 12 Months**

A majority of trail neighbors (70%) responding to the survey indicated they had used the trail at least once in the past 12 months.

Used Trail	Percentage
Yes	70.0
No	30.0

*Survey Question: If yes, on average how many days/week did you use the trail in winter/Spring/Summer/Fall?*

**Table 83: Average Number of Days/Week Trail Neighbors Use Trail By Season**

The average number of days that neighbors utilize the trail each week varies slightly between spring and summer, with a drop off in use in the fall and winter months.

Season of Year	Average No. Days Used
Summer	2.57
Spring	2.14
Fall	1.86
Winter	1.67

*Survey Question: How many members of your household from each of the following age categories have used the trail during the last 12 months and what was the purpose of use?*

**Table 84: Trail Use by Age Category and Purpose**

<i>Age Group</i>	<i>Number In Age Category</i>	<i>Primary Purpose of Use</i>
<b>12 &amp; Under</b>	0.0	
<b>13 to 18</b>	2	Recreation
<b>19 to 24</b>	0.0	
<b>25 to 44</b>	2	Recreation
<b>45 to 65</b>	0.0	
<b>Over 66</b>	1	Recreation

Recreation was primary purpose of trail use by responding trail neighbors.

Survey Question: What is your gender?

**Table 85: Gender of Trail Neighbor Survey Respondents**

<i>Gender</i>	<i>Percentage</i>
<i>Male</i>	90.0
<i>Female</i>	10.0

Survey Question: What is your age?

**Table 86: Grouped Age Categories of Trail Neighbor Survey Respondents**

<i>Grouped Ages</i>	<i>Percentage</i>
<i>25-35</i>	0.0
<i>36-45</i>	44.4
<i>46-55</i>	44.5
<i>56-65</i>	0.0
<i>66-75</i>	11.1
<i>76-85</i>	0.0
<i>Over 85</i>	0.0

Most trail neighbor survey respondents were between 36-55 years of age. The average age of the trail neighbor survey respondent was 50 years.

## Summary and Implications --- Trail Neighbor Survey

### Trail Neighbor Attributes and Respondent Demographics

Trail neighbors indicated they were likely to use the trails with 70% of them indicating they had used the trail at least once in the past year. Trail neighbors reported a high trail use level with the spring and summer time period being the highest use level at between 2 and 3 days of use every week (approximately 115 days of use annually). Trail neighbors reported use of the trail by a variety of age groups with recreation being the primary trail use purpose.

Trail neighbors responding to the survey were mostly males and on average were 50 years old.

## Conclusions

The preceding findings summarize information analyzed from the Pennsy Trail study conducted in July – October 2000 in Greenfield, Indiana. The study was intended to provide a broad analysis of trail use, trail management and land use issues in order to enhance knowledge and understanding of how the trail is used, and perceived by patrons, the community and neighboring land owners. These matters are important to the effective operation and management of the Pennsy Trail in Greenfield as well as similar trails and agencies in Indiana. Funding and State planning agencies, INDOT and IDNR will rely, in part, on the Greenfield Pennsy Trail Study to chart directions in funding and development of trail systems in other communities.

A review of summary and implication information for the Pennsy Trail Study suggests specific conclusions and recommendations regarding trail users, trail management and trail neighbors. Based on the data analysis, the following conclusions can be made:

- 1) Trail traffic on the Pennsy trail averages 5000 counts per month in the fall season with peak hour use in September between 4-6pm, and varying between 1-6pm in October regardless of the day of week.
- 2) Trail users are predominantly white, middle-aged and divided almost equally by gender.
- 3) A large proportion of trail users have become more active because of the creation of the trail. Generally, trail users viewed the trail as an important part of an active lifestyle.
- 4) Proximity to the trail appears to be an important factor in trail use with the vast majority of users living within 10 minutes or 5 miles of the trail.
- 5) Pennsy trail users overall are satisfied with the trail. It positively affects their view of Greenfield as a community and their quality of life.
- 6) Trail users expressed a high level of satisfaction with the public benefits provided by the trail, such as preservation of open space, natural surroundings, health and recreation.

- 7) Trail users, in general, experienced few problems on the trail and felt safe. Feelings of personal safety, however, could be increased with the addition of bike patrols, lights and phones.
- 8) Most trail users are not willing to pay a user fee to use the trail. A small number of users reported moderate expenditures on equipment, accessories and other goods and services related to trail usage.
- 9) Pennsy trail users represent a wide variety of trades and occupations.

*Because there were only 27 trail neighbors in Greenfield, only 10 of whom responded to the survey, and because all of these trail neighbors represented owners of commercial properties, the conclusions drawn based on the trail neighbor survey have little statistical significance. They are not necessarily representative of the entire sample, and definitely not representative of an entire community. With those facts in mind, it must be noted that, in general, the responses received from the Greenfield trail neighbors were very similar to responses received from trail neighbors from the other five cities in this study, except for the fact that trail neighbors in Greenfield are commercial property owners and the other five cities represented residential property owners. In summary, the following conclusions should not be weighted too heavily, but should be viewed as representing general trends in a select group.*

- 10) Pennsy trail neighbors generally have a positive attitude toward the trail and feel it has improved the quality of their neighborhood.
- 11) Trail neighbors were satisfied with the public benefits provided by the trail.
- 12) Trail neighbors are supportive of the trail and feel it has had neither a positive nor negative effect on the value and salability of their property.
- 13) In general, problems experienced by trail neighbors have decreased since development of the trail for public use.
- 14) The majority of trail neighbors are also trail users. Trail neighbors use the trail approximately 2.5 days per week, especially during spring, summer.