2017 Indiana Trails Study

Summary Report

Measuring the Health, Economic, and Community Impacts of Trails in Indiana

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INDIANA UNIVERSITY

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INDIANA UNIVERSITY
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Bloomington

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Sponsors

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Northwestern Indiana Regional Planning Commission

Indiana University School of Public Health-Bloomington

Greenways Foundation of Indiana

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Advisory Group
The following individuals provided guidance and review for the Indiana Trails Study as representatives of Federal, State, and local agencies and non-profit organizations.

Mitch Barloga- Northwestern Indiana Regional Planning Commission

Karen Bohn- Greenways Foundation of Indiana

Bob Bronson- Indiana Department of Natural Resources

Angie Pool- Cardinal Greenways, Inc.

Dawn Ritchie- City of Fort Wayne Public Works

Rory Robinson- National Park Service

Yvette Rollins- Greenways Foundation of Indiana

Trail Partners/Participating Local Agencies
The following individuals serve as primary contacts for their respective trails. We thank them for their support and assistance.

Erie-Lackawanna Trail- Mitch Barloga, Northwestern Indiana Regional Planning Commission

Pumpkinvine Nature Trail- Jim Bare, Friends of the Pumpkinvine Nature Trail

Fort Wayne Rivergreenway- Dawn Ritchie, City of Fort Wayne Public Works

Division Cardinal Greenway- Angie Pool, Cardinal Greenways, Inc.

Nickel Plate Trail- Mike Keupper, Nickel Plate Trail, Inc.

Monon Trail (Carmel)- Michael Allen, Carmel Clay Parks and Recreation

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B-Line Trail- Paula McDevitt, Bloomington Parks and Recreation

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Background

Multiuse trails are a popular feature of communities and regions across the country as they provide environmental, health and benefits to communities and users. In Indiana, a Trails Advisory Board was established by the director of Indiana Department of National Resource (DNR) in June 1994 (DNR, n.d.), in order to make recommendations regarding planning for and implementing a multiuse trail system and to allow Indiana to apply for funding from the federal Recreational Trails Program.

The majority (approximately 1,500 miles of bicycle/pedestrian trails) of Indiana trails are built with a mix of state and federal funding with local match or contributing funding. The funding has resulted in development of more than 3,500 miles of public multipurpose trails, all of which contribute to the Indiana State Trails Plan's current goal of providing a trail within five miles of every Hoosier by the year 2020 (DNR, 2017). This level of trail access coverage increased from 70% in 2006 to 94.4% in 2017 (DNR, 2017).

The commitment of Indiana state government and local communities to build, operate, and maintain trails is significant. The benefits of the policy and implementation of a state-wide trail system are often stated based on evaluation, comments, and research on a national level. Indiana is unique in that it began a state-wide study in 2000, the first Indiana Trails Study, which described findings from a 6-trail study utilizing trail traffic data, surveys of trail users, surveys of trail neighbors, and a review of other relevant studies. The first Indiana Trails Study found significant value and benefits to trails in Indiana and was cited frequently in the state and nationally.

The 2017 Indiana Trails Study, suggested in part to replicate the 2000-2001 study by Indiana trail advocates, uses these methods along with surveys of a control group of non-trail users in order to gather updated data on the trails, including trail use levels; trail management practices; trail users, non-users, and neighbors' opinions; and data related to trails' impact on public health and state and local economies. Specifically, the 2017 study's methods included:

- Traffic (user) counts collected via trail counters at select trail segments
- Online surveys (or paper-mail surveys upon request) of both trail users and a control group of trail non-users
- Online surveys of trail-adjacent property owners (that is, "trail neighbors")
- Review of recent research and trail-related studies

Figure 1: Trailhead Shelter on the Erie Lackawanna Trail

Study Methods

Selection of Participant Trails

One of the important components of the trail studies has been the selection of trails to be studied. This process used similar criteria in 2001 and 2017 to gain a geographic and setting variety. This important component of the research method allows for randomness in trail selection accentuated by random participant selection by trailhead, day of the week, and time, ensuring randomness in the study sample. For the 2017 Indiana Trails Study, nine trails were originally selected to gain a wide population from which to sample. However, only eight trail agencies eventually participated. Other criteria considered when selecting which trails to participate included:

- Distribution of trails among urban, suburban, and rural trails with an equal mix of each desired
    - Urban defined as areas of dense residential, commercial, or industrial. Includes medium to larger city centers.
    - Suburban defined as areas of average density of single family homes and light retail commercial.
    - Rural defines as residential areas of at least one acre on average, farmland, or open range or forest.
- Trail contributes to a statewide mix of trail types and uses
- Participation in the 2001 Indiana Trails Study
- Ability and willingness of the organization to participate fully based on:
    - Length of time the agency has been in existence
    - Functioning Board of Directors or agency support
    - Available paid staff or the ability to generate a volunteer staff for data collection
    - Number of volunteers available
    - Length of time volunteer network has been in existence
- Agency access to trail counters
- Ability to provide a list of neighboring properties visually abutting or within 150 feet of the trail for trail neighbor survey
- Distribution of trails in 3 sections of Indiana- North, Central, and South

These criteria were not individually defined by a minimum standard. Each potential trail was evaluated based on its fit within the framework of the set of criteria as a whole.

Trail	Setting	State Location	Length	Partner
Erie-Lackawanna	Urban	North	17.7 miles	Friends Group
Pumpkinvine	Rural	North	17.6 miles	Friends Group
Rivergreenway	Urban	North	24 miles	City Agency
Nickel Plate	Rural	Central	35.4 miles	Friends Group
Cardinal Greenway	Rural & Suburban	Central	62 miles	Friends Group
Monon-Indy & Carmel	Urban-Suburban	Central	19.7 miles	City Agency
People Trail	Suburban	South	15.7 miles	City Agency
B-Line	Urban	South	7.5 miles	City Agency

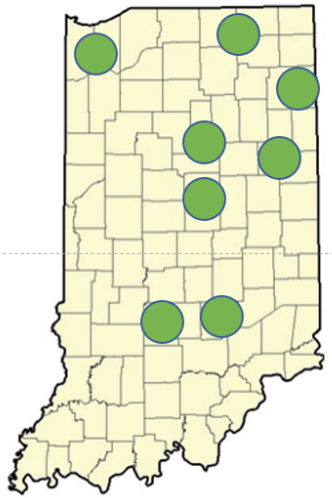

Figure 2: Location of Indiana Trails Study Participating Trails

Trail Advisory Committee

The nine trails included in the study were chosen after review by the 2017 Indiana Trails Study Advisory Committee. As with the 2001 Indiana Trails Study, a group of subject matter experts was selected to advise the research project team. The committee is made up of trail experts from across the state and greater Midwest:

- Mitch Barloga, Northwest Indiana Regional Planning Commission
- Bob Bronson, Indiana Department of Natural Resources
- Karen Bohn, Greenways Foundation of Indiana
- Angie Pool, Cardinal Greenways
- Dawn Ritchie, Fort Wayne Parks and Recreation
- Rory Robinson, National Park Service
- Yvette Rollins, Greenways Foundation of Indiana

Trail Use Counts

"Trail counts" refers to the number of users on a trail during a specific timeframe. For the 2017 Indiana Trails Study, trail counters were placed at various locations on each participating trail, from April through October. Factors considered when placing trail counters include:

- Locations: Trail counter locations were determined in consultation with the local agency responsible for the trail. Wherever practical, trail segments where traffic counters are deployed are at or near survey sites.
- Counters: Each participating agency was asked to provide trail counters. Not all agencies had access to infrared counters resulting in possible variation in counter type. All but two participating agencies already had or were planning to place counters on the trails identified for study. The remaining two agencies used counters supplied by the research team.
- Data collection: Local agency staff and volunteers would download data from the counters throughout the study months. All counter data was sent to the research team for analysis

A review of trail counter data was complete in December 2017 and it is being analyzed and further hypothesized in a separate report. The research team anticipated that the trail count will validate the following conclusions from the 2001 Indiana Trails Study – which were:

- Average weekend use exceeds average weekday use
- Peak daily use for weekdays is at 5:00 p.m. or 6:00 p.m.
- Peak daily use for weekends varies more but peaks in the mid-afternoon to early evening
- Peak hourly use is 11% to 14% of average daily use

Trail User Survey Selection

In order to recruit survey participants for the study, trained volunteers from the trail management agency were stationed at specified trailheads at specified times and days to distribute study information including the link to the online trail survey. Trail non-users were recruited for comparison. Non-users were sampled from locations such as grocery stores or other common public places located away from corresponding trails. To encourage participation, non-user survey participants received an incentive of a $5 gift card once they completed the survey. Note that the volunteers canvassed the survey location by giving survey information and participation request cards to all individuals at the location during the date and time specified.

The researchers assumed that trail use levels varied by location, even for individual trails. In response, recruitments were completed during four one-week periods throughout the study in various locations and at various times of day on each trail between April and October. Factors considered when selecting trailheads included:

- Location: Popular trailheads were selected in order to intercept users when starting or ending trail use. Control group locations were sites away from the trail that are frequently used by a cross-section of community residents and include sites such as grocery stores or libraries.

Figure 3: Trail Survey Location on B-Line Trail

- Survey Number: The target number of trail user survey responses depends on the populations of participating communities but should be enough to achieve a 95% confidence interval.

The research protocol also calls for a possible follow-up survey after one year (and as time and funding becoming available) in order to examine change over time.

Trail Neighbor Survey

Trail neighbors were mailed an invitation to take an online survey to reflect on management issues, their experiences with the trails in their area, and the trails' perceived effects on property values and/or any business activity.

Each trail location was asked to provide an electronic list of trail neighbors as a condition of participation in the study. Participating trail agencies used GIS or other methods such as existing mailing lists to develop a trail neighbors list based on:

- Trail abutment (line of sight or within 150' of trail)
- Located within ½ mile of a trail user survey location.

The survey invitations were sent using a modified Dillman technique in which letters with the survey invitation were sent to all property owners on the trail partner supplied mailings lists during the first week of September with a follow-up letter and invitation approximately three weeks later.

The research team sought to determine if the Trail Neighbor Survey would validate the findings from the 2001 Trails Study about trail neighbors including:

- A majority of trail neighbors reported either no effect or a positive effect on property value and ease of selling property adjacent to a trail.
- A large majority of trail neighbors felt the trail was a better neighbor than expected and improved the neighborhood.
- Trail neighbors are heavy users of the trail itself, reporting two to three days of trail use per week on average.
- 70-95% of all trail neighbors reported using the trail during the 12 months prior to the survey.
- Trail neighbors are most dissatisfied with a lack of safety patrols and parking problems in the vicinity of their property.
- Those trail neighbors responding to the survey indicated illegal vehicle use and unleashed pets roaming along the trail as the most common problems.

Figure 4: Ft. Wayne Rivergreenway at Ewing St.

Table 1 shows the overall schedule for the 2017 Indiana Trails Study. The multi-method data collection process is complex, requiring active management of deliverables and process.

Table 1: Timeline Summary

	February	March	April	May	June	July	August	September	October-December	April 2018	May 2018
Surveys	Draft survey instruments	Finalize surveys	First survey period		Second survey period		Third survey period		Final survey period		
Trail agencies	Meet with agencies; orient them on volunteer recruitment, survey protocol, and study details	Create training material for agencies and volunteers	Complete training								
Trail neighbor surveys	Complete draft trail neighbor survey		Finalize, validate trail neighbor survey	Compile trail neighbor mailing lists		Mail trail neighbor survey invitations; prelim data analysis	Mail second round of trail neighbor surveys				
Trail counters		Confirm trail counter protocol with trail agencies		Confirm trail counters in place at all trails					Collect trail counter data from all trails		
Data analysis			Build data analysis models and protocol	Complete prelim data analysis from first survey period	Complete prelim data analysis from second survey period			Complete data analysis from third survey period	Begin final data analysis on surveys, trail neighbor surveys, counter data	Complete data analysis	
Reports						Issue interim report			Begin drafting reports	Draft report complete	Issue final reports

Trail Use Results

Primary Trail Activity

Table 2 illustrates the primary activity reported by trail users. Preliminary survey results show that biking (52%) is the most popular activity, with walking (29%) and running or jogging (19%) rounding out the top three. **This is a shift from the 2001** study which indicated that walking was 41% of users' preferred activity, followed closely by biking (39%) and running or jogging a distant third (13%). This likely mirrors the increase in bicycling in the U.S., which has more than doubled since 2001 (League of American Bicyclists, 2015). Another notable change in activity is the decline of skating. In 2001, almost 6% of trail users said that their primary activity was skating while in the present study, only two respondents have indicated that they mainly skate or skateboard. This reflects the downward trend in skating and skateboarding in the U.S. since 2006 (Statista, 2017).

A striking exception to average use is seen on the Columbus People Trail. Fifty-seven percent report that walking is their primary activity and only 27% primarily bike. The three rural trails- Pumpkinvine, Nickel Plate, and Cardinal see the highest levels of biking as the primary use with 72%, 59%, and 66% respectively.

Figure 5: Bikers on the Pumpkinvine Nature Trail

Table 2: What type of activity do you mostly do on the trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Walk	Count	80	33	62	17	14	86	23	46	45
	%	**27%**	**16%**	**33%**	**23%**	**21.5%**	**31%**	**32%**	**57%**	**29%**
Run/Jog	Count	57	23	40	13	8	67	19	13	30
	%	**19%**	**11.5%**	**21.5%**	**18%**	**12.5%**	**24.5%**	**26.5%**	**16%**	**19%**
Bike	Count	162	146	83	43	43	125	26	22	81
	%	**54%**	**72%**	**45%**	**59%**	**66%**	**45%**	**36%**	**27%**	**52%**
Skate	Count	0	0	0	0	0	1	1	0	0.25
	%	**0%**	**0%**	**0%**	**0%**	**0%**	**0.5%**	**1.5%**	**0%**	**0.2%**
Horseback Riding	Count	0	0	0	0	0	0	2	0	0.25
	%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**2.5%**	**0%**	**0.2%**
Bird Watching	Count	0	1	0	0	0	0	0	0	0.15
	%	**0%**	**0.5%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0.1%**
People Watching	Count	0	0	1	0	0	0	1	0	0.25
	%	**0%**	**0%**	**0.5%**	**0%**	**0%**	**0%**	**1.5%**	**0%**	**0.2%**
Total=1258		299	203	186	73	65	279	72	81	

Trail Use Levels

As seen in Table 3, 2017 trail users are staying on trails longer, averaging nearly nine miles travelled during their primary activity (compared with seven miles in 2001) and with 17% of trail users on the trail for more than 20 miles. This increase corresponds with the increase in the number of bikers. This echoes the hopes and strategy of trail health advocates for more active living by the population of Indiana.

Table 3: Average Distance, Time, and Days per Week of Primary Activity

	Erie Lackawanna Trail	Pumpkinvine Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Average Miles Performed	10.5	12.5	8.5	12.5	11.5	9.5	7	5.5	9.5
Average Minutes/ Session	72	84	71	93	77	68	58	56	72
Average Days/ Week	4	3	4	4	4.5	3.5	3	4	3.5

Fifty-five percent of survey respondents reported participating in a second activity on the trail. Tables 4 and 5 show that walking, biking, and running/jogging were again the top three responses with walking being the most common secondary activity. Users spent an average of two days a week on those activities, averaging 71-minute sessions and more than four miles of distance.

Figure 6: Monon Trail in Carmel

Secondary Trail Activity

Table 4 and 5 shows that trail users average 2 days per week on the trail and 63 minutes per session doing their secondary activity, more than their frequency of use (previously 1.6 days) but with little change to their average minutes per session (previously 53) reported in 2001.

An interesting correlation can be seen between the primary activity of trail users and the distance and time that they spend on the trail. Trails with more bike use see users on the trail for longer distances and longer periods of time.

Table 4: What is the second activity you do on the trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Walk	Count	76	39	41	14	10	64	18	16	35
	%	**41.5%**	**44%**	**39%**	**35%**	**44%**	**39%**	**39%**	**37%**	**40%**
Run/Jog	Count	21	22	22	7	3	33	9	4	15
	%	**11.5%**	**24.5%**	**21%**	**17.5%**	**13%**	**20%**	**19.5%**	**9%**	**17.5%**
Bike	Count	75	24	36	16	9	62	15	22	32
	%	**41%**	**27%**	**34%**	**40%**	**39%**	**38%**	**32.5%**	**50%**	**37%**
Skate	Count	3	0	0	1	0	0	0	0	0.5
	%	**1.5%**	**0%**	**0%**	**2.5%**	**0%**	**0%**	**0%**	**0%**	**0.5%**
Horseback Riding	Count	0	0	0	0	1	0	0	0	0.1
	%	**0%**	**0%**	**0%**	**0%**	**4%**	**0%**	**0%**	**0%**	**0.1%**
Bird Watching	Count	3	4	3	0	0	2	0	1	2
	%	**1.5%**	**4.5%**	**3%**	**0%**	**0%**	**1%**	**0%**	**2%**	**2%**
People Watching	Count	5	0	3	2	0	4	4	1	2.5
	%	**3%**	**0%**	**3%**	**5%**	**0%**	**2%**	**9%**	**2%**	**2.9%**
Total=695		183	89	105	40	23	165	46	44	

Table 5: Distance, Time, and Days per Week of Second Activity

	Erie Lackawanna Trail	Pumpkinvine Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Average Miles Performed	6.5	5.5	6	7.5	7	6.5	5	6.5	6.5
Average Minutes/Session	52	53	54.5	60	69	50	43	50	52
Average Days/Week	2	1.5	2	1.5	1.5	1.5	2	2	2

Trail User Access Patterns

Tables 6-8 display where trail users come from, how they get to trails, and how far they travel to use them. The vast majority of people (86%) report they come from home to use their trail. Trail users in Columbus are more likely to use the trail after work (17%) While 92% of Cardinal Greenway's users travel from home.

Driving is the primary method of getting to trails (46% of users), followed by bicycling at 31%. Notably, in 2001, 58% of people drove to trails while only 30% biked. Previously, 20% walked to trails compared to 23% in 2017. This shift away from driving could reflect users' increased participation in active living or public transportation. It may also be indicative of an increase in the number of trails available, reducing the need for people to drive to access them.

The average distance traveled to get to a trail is 2.4 miles, up from 1.5 miles in 2001. The three rural trails, Pumpkinvine, Nickel Plate, and Cardinal, were, not surprisingly, at the top end of the scale with an average of 3 miles each (distance to access them from most participants). Fifteen percent of users traveled more than 7 miles to reach a trail, important to note when considering the potential of trails to draw tourists.

Table 6: On most days, where do you usually come from to get to the trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Work	Count	25	17	23	8	5	34	11	13	17
	%	**8.5%**	**8.5%**	**12.5%**	**11%**	**8%**	**12%**	**15%**	**17%**	**11%**
Home	Count	265	181	160	64	59	238	54	62	135
	%	**88.5%**	**89.5%**	**87%**	**88%**	**92%**	**86%**	**75%**	**79%**	**87%**
School	Count	1	1	0	0	0	0	2	1	0.5
	%	**0.5%**	**0.5%**	**0%**	**0%**	**0%**	**0%**	**3%**	**1%**	**0.5%**
After a meal	Count	4	0	0	0	0	1	3	0	1
	%	**1.5%**	**0%**	**0%**	**0%**	**0%**	**0.5%**	**4%**	**0%**	**1%**
Another setting	Count	2	3	1	1	0	4	2	2	2
	%	**1%**	**1.5%**	**0.5%**	**1%**	**0%**	**1.5%**	**3%**	**3%**	**1.5%**
Total=1248		297	202	184	73	64	277	72	78	

Table 7: On most days how do you get to the trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Walk	Count	70	29	59	16	10	52	17	29	35
	%	**24.5%**	**14.5%**	**32%**	**22%**	**15.5%**	**18.5%**	**24%**	**38%**	**22.5%**
Drive	Count	112	101	73	41	39	143	35	31	72
	%	**38%**	**50%**	**40%**	**56%**	**61%**	**51.5%**	**49%**	**40%**	**46%**
Bicycle	Count	114	70	52	16	14	83	19	17	48
	%	**38.5%**	**35%**	**28%**	**22%**	**22%**	**30%**	**26.5%**	**22%**	**31%**
Bus/public transportation	Count	0	0	0	0	0	0	1	0	0.1
	%	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**1.5%**	**0%**	**0.1%**
Ride with family/friends	Count	0	1	0	0	1	0	0	0	0.25
	%	**0%**	**0.5%**	**0%**	**0%**	**1.5%**	**0%**	**0%**	**0%**	**0.2%**
Total=1246		296	201	184	73	64	278	72	77	

Table 8: How far do you travel to use the trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
<1 mile	Count	116	45	87	20	18	84	25	40	55
	%	**39%**	**22%**	**47%**	**27.5%**	**28%**	**30%**	**35%**	**52%**	**35%**
1-3 miles	Count	93	65	50	15	11	79	25	22	45
	%	**31%**	**32%**	**27%**	**20.5%**	**17%**	**28.5%**	**35%**	**29%**	**29%**
3.1-5 miles	Count	34	24	27	10	11	52	10	6	22
	%	**11.5%**	**12%**	**15%**	**14%**	**17%**	**19%**	**14%**	**8%**	**14%**
5.1-7 miles	Count	21	16	6	7	5	29	8	5	12
	%	**7%**	**8%**	**3%**	**10%**	**8%**	**10.5%**	**11%**	**6.5%**	**8%**
>7 miles	Count	34	52	14	21	19	33	4	4	23
	%	**11.5%**	**26%**	**8%**	**29%**	**30%**	**12%**	**6%**	**5%**	**14.5%**
Total=1246		298	202	184	73	64	277	72	77	

Social Aspects of Trail Use

Tables 9 and 10 illustrate social aspects associated with trail use. A majority of trail users (52%) report they are alone when they are on the trail. The Cardinal Greenway was the most "social" trail with over 59% using the trail with other people and was the only trail where the majority of users were not alone. This may relate to bicycling, the most common trail activity on the Cardinal, which sometimes is done in large groups. Of those who are with others, a slight majority (51%) are with family (spouse/partners or children). The rest are mostly with friends or exercise partners.

Table 9: While on the trail do you usually use it…

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
With others	Count	137	98	83	35	38	125	35	39	74
	%	**46%**	**49%**	**45%**	**48%**	**59.5%**	**45%**	**48.5%**	**50%**	**47%**
Alone	Count	160	103	101	38	26	152	37	39	82
	%	**54%**	**51%**	**55%**	**52%**	**40.5%**	**55%**	**51.5%**	**50%**	**53%**
Total=1245		297	201	184	73	64	277	72	78	

Figure 7: Shelter on the Nickel Plate Trail in Peru

Table 10: Who do you usually use the trail with?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Spouse/Partner	Count	55	54	35	14	17	55	16	16	33
	%	**40%**	**55%**	**43%**	**41%**	**45%**	**45.5%**	**47%**	**44%**	**45%**
Exercise Partners	Count	24	6	13	7	3	18	8	1	10
	%	**17.5%**	**6%**	**16%**	**20%**	**8%**	**15%**	**23.5%**	**3%**	**14%**
Children	Count	7	2	5	1	2	2	0	3	3
	%	**5%**	**2%**	**6%**	**3%**	**5%**	**2%**	**0%**	**8%**	**4%**
Children	Count	6	1	1	3	1	6	0	0	2
	%	**4.5%**	**1%**	**1%**	**9%**	**3%**	**5%**	**0%**	**0%**	**3%**
Coworker	Count	2	0	2	0	0	3	0	3	1.5
	%	**1.5%**	**0%**	**2.5%**	**0%**	**0%**	**2.5%**	**0%**	**8%**	**2%**
Friend(s)	Count	20	19	18	5	8	18	5	9	13
	%	**14.5%**	**19%**	**22%**	**15%**	**21%**	**15%**	**14.5%**	**25%**	**17.5%**
Other family members/relatives	Count	4	3	0	1	0	9	2	2	2.5
	%	**3%**	**3%**	**0%**	**3%**	**0%**	**7.5%**	**6%**	**6%**	**3.5%**
Walk/Run club	Count	1	0	1	1	2	1	0	0	1
	%	**0.5%**	**0%**	**1%**	**3%**	**5%**	**1%**	**0%**	**0%**	**1%**
Mix of family & friends	Count	18	14	7	2	5	9	3	2	7.5
	%	**13%**	**14%**	**8.5%**	**6%**	**13%**	**7.5%**	**9%**	**6%**	**10%**
Total=581		137	99	82	34	38	121	34	36	

Trail Use Times

Table 11 shows that, as expected, the most popular times for trail use on every trail are morning and mid-afternoon. This finding replicates the general findings of the 2001 Trail Study.

Table 11: What time of day do you usually use the trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
5-8 AM	Count	39	12	25	8	14	20	4	8	16
	%	**13%**	**6%**	**14%**	**12%**	**22%**	**7%**	**6%**	**11%**	**10.5%**
8-11 AM	Count	71	58	54	26	17	69	23	18	42
	%	**24%**	**30%**	**29.5%**	**36.5%**	**27%**	**26%**	**32%**	**24%**	**27.5%**
11 AM- 2 PM	Count	60	42	36	13	11	56	11	12	30
	%	**20%**	**21.5%**	**19.5%**	**18%**	**17%**	**21%**	**15%**	**16%**	**20%**
2-6 PM	Count	85	54	44	13	13	74	19	16	40
	%	**29%**	**27.5%**	**24%**	**18%**	**21%**	**27.5%**	**26%**	**21%**	**26%**
After 6 PM	Count	41	29	24	11	8	50	15	21	25
	%	**14%**	**15%**	**13%**	**15.5%**	**13%**	**18.5%**	**21%**	**28%**	**16%**
Total=1225		296	195	183	71	63	269	72	75	

Figure 8: Columbus People Trail at Hamilton Center

Reasons for using trails

As seen in Table 12, the top reason for trail use, by far, is physical activity, ranging from a reported 60% of trail study participants in Bloomington to a high of 68% of trail participants on the Erie-Lackawanna. Health-related reasons—physical activity, stress reduction, and health issues—make up a combined 72% of primary trail usage motivation.

Recreation and related motivation—including walking the dog and aesthetics (i.e., natural beauty)—drove 23% of usage, while 5% of trail users primarily use their trail for transportation. Not surprisingly, the three rural trails- Pumpkinvine, Nickel Plate, and Cardinal- were the least used for transportation, while the urban trails, B-Line and Monon, were most heavily used for transportation.

Use of trails for both exercise and transportation have increased since 2001 when 68% of primary use was for health/exercise and only 2% of respondents used their trail for transportation. Pure recreational use of the trail is lower than the 2001 Trails Study reported 28%.

Table 12: What is the primary reason you use this trail instead of other facilities

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Physical Activity	Count	201	124	114	45	39	165	44	46	97
	%	**68%**	**62.5%**	**63%**	**65%**	**64%**	**61%**	**60%**	**61%**	**63.5%**
Recreation	Count	30	41	23	9	9	39	5	8	20.5
	%	**10%**	**21%**	**13%**	**13%**	**15%**	**14.5%**	**7%**	**11%**	**13.5%**
Transportation	Count	15	3	8	2	0	23	6	5	7.5
	%	**5%**	**1.5%**	**4.5%**	**3%**	**0%**	**8.5%**	**8%**	**7%**	**5%**
Walk Dog	Count	19	3	7	5	4	13	3	4	7
	%	**6.5%**	**1.5%**	**4%**	**7%**	**6.5%**	**5%**	**4%**	**5%**	**5%**
Stress Reduction	Count	13	12	14	6	2	16	9	8	10
	%	**4.5%**	**6%**	**8%**	**9%**	**3%**	**6%**	**12%**	**11%**	**6.5%**
Health Issues	Count	8	2	3	0	3	5	0	2	3
	%	**2.5%**	**1%**	**2%**	**0%**	**5%**	**2%**	**0%**	**3%**	**2%**
Aesthetics	Count	10	13	12	2	4	11	6	2	7.5
	%	**3.5%**	**6.5%**	**6.5%**	**3%**	**6.5%**	**4%**	**8%**	**3%**	**5%**
Total=1226		296	198	181	69	61	272	73	75	

Trail Value Preferences

When asked why trail users chose to use a trail rather than another exercise or recreation facility, Tables 13-19 show that trail users value outdoor experiences (outdoor environment and scenery), along with accessibility, low (or no) cost of access, and a convenient location. In other words, people enjoy exercising outdoors and will do so when the barriers of access and cost are lowered or removed.

Table 13: Please rate each of the following reasons for why you use this trail instead of other facilities: Scenery

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	1	0	4	2	2	0	1	0	1.5
	%	**0.5%**	**0%**	**2%**	**2.5%**	**3%**	**0%**	**1.5%**	**0%**	**1%**
Somewhat Important	Count	15	6	6	1	4	16	6	5	7.5
	%	**5%**	**3%**	**3.5%**	**1.5%**	**6%**	**6%**	**8.5%**	**7%**	**5%**
Important	Count	78	29	26	10	12	45	9	15	28
	%	**26.5%**	**14.5%**	**14.5%**	**14%**	**19%**	**17%**	**12.5%**	**21%**	**18.5%**
Quite Important	Count	90	63	71	24	25	92	26	19	51
	%	**31%**	**32%**	**39%**	**34%**	**39.5%**	**34%**	**36.5%**	**27%**	**34%**
Most Important	Count	107	100	75	34	20	115	29	32	64
	%	**37%**	**50.5%**	**41%**	**48%**	**31.5%**	**43%**	**41%**	**45%**	**42%**
Total=1216		291	198	182	71	63	268	71	71	

Table 14: Please rate each of the following reasons for why you use this trail instead of other facilities: Access

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	2	3	5	2	1	2	4	3	3
	%	**1%**	**1.5%**	**3%**	**3%**	**1.5%**	**1%**	**6%**	**4%**	**2%**
Somewhat Important	Count	9	9	5	2	2	10	3	2	5
	%	**3%**	**4.5%**	**3%**	**3%**	**3%**	**4%**	**4%**	**3%**	**3.5%**
Important	Count	38	19	25	3	9	16	6	6	15
	%	**13%**	**10%**	**14%**	**4%**	**14%**	**6%**	**9%**	**8%**	**10%**
Quite Important	Count	53	46	32	22	13	56	18	16	32
	%	**19%**	**23.5%**	**18%**	**31%**	**21%**	**21%**	**26%**	**22%**	**21.5%**
Most Important	Count	182	118	110	42	38	183	39	46	95
	%	**64%**	**60.5%**	**62%**	**59%**	**60.5%**	**68.5%**	**56%**	**63%**	**63%**
Total=1201		284	195	177	71	63	267	70	73	

Table 15: Please rate each of the following reasons for why you use this trail instead of other facilities: Terrain

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	12	8	6	2	1	9	6	3	6
	%	**4%**	**4.5%**	**3.5%**	**3%**	**2%**	**3.5%**	**9%**	**4%**	**4%**
Somewhat Important	Count	24	16	14	7	8	14	10	12	13
	%	**8.5%**	**8.5%**	**8%**	**10%**	**13%**	**5.5%**	**15.5%**	**16%**	**9%**
Important	Count	49	29	40	11	14	49	9	13	27
	%	**17.5%**	**15%**	**24%**	**16%**	**23%**	**19.5%**	**13.5%**	**18%**	**18.5%**
Quite Important	Count	91	70	50	19	15	65	19	18	43.5
	%	**32.5%**	**37%**	**30%**	**27.5%**	**25%**	**25.5%**	**29%**	**25%**	**30%**
Most Important	Count	105	66	58	30	22	118	22	27	56
	%	**37.5%**	**35%**	**34.5%**	**43.5%**	**37%**	**46%**	**33%**	**37%**	**38.5%**
Total=1162		281	189	168	69	60	255	66	73	

Table 16: Please rate each of the following reasons for why you use this trail instead of other facilities: Convenience

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	3	5	4	0	0	3	5	1	2.5
	%	**1%**	**2.5%**	**2%**	**0%**	**0%**	**1%**	**7%**	**1.5%**	**2%**
Somewhat Important	Count	9	14	1	6	10	11	7	3	7.5
	%	**3%**	**7%**	**0.5%**	**8.5%**	**16%**	**4%**	**10%**	**4%**	**5%**
Important	Count	35	23	25	11	17	35	10	6	20.5
	%	**12.5%**	**12%**	**14%**	**16%**	**27%**	**131%**	**14.5%**	**8%**	**13.5%**
Quite Important	Count	81	50	46	19	9	73	11	16	38
	%	**28.5%**	**26%**	**26%**	**27%**	**14%**	**272%**	**16%**	**21.5%**	**25.5%**
Most Important	Count	155	98	103	34	27	146	36	48	81
	%	**55%**	**51.5%**	**57.5%**	**48.5%**	**43%**	**54.5%**	**52.5%**	**65%**	**54%**
Total=1197		283	190	179	70	63	268	69	74	

Table 17: Please rate each of the following reasons for why you use this trail instead of other facilities: Friendly Atmosphere

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	14	11	9	3	4	14	4	6	8
	%	**5%**	**6%**	**5%**	**4.5%**	**7%**	**5.5%**	**6%**	**8.5%**	**6%**
Somewhat Important	Count	30	30	20	9	10	40	10	6	19.5
	%	**11%**	**16%**	**12%**	**13.5%**	**17.5%**	**16%**	**16%**	**8.5%**	**14%**
Important	Count	79	37	48	18	16	58	21	23	37.5
	%	**29.5%**	**20%**	**28%**	**27%**	**28%**	**23%**	**33%**	**32.5%**	**26.5%**
Quite Important	Count	66	49	48	17	17	71	15	20	37.5
	%	**25%**	**26.5%**	**28%**	**26%**	**30%**	**28%**	**24%**	**28%**	**26.5%**
Most Important	Count	79	58	46	19	10	69	13	16	38
	%	**29.5%**	**31.5%**	**27%**	**29%**	**17.5%**	**27.5%**	**21%**	**22.5%**	**27%**
Total=1134		268	185	171	66	57	252	63	71	

Table 18: Please rate each of the following reasons for why you use this trail instead of other facilities: Outdoor (Environment/Access to Nature)

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	1	4	1	2	0	2	1	1	1.5
	%	**0.5%**	**2.1%**	**0.5%**	**3%**	**0%**	**0.5%**	**1.5%**	**1.5%**	**1%**
Somewhat Important	Count	3	4	7	0	4	5	5	0	4
	%	**1%**	**2%**	**4%**	**0%**	**6.5%**	**2%**	**7%**	**0%**	**2.5%**
Important	Count	32	12	14	1	4	25	6	11	13
	%	**11%**	**6%**	**8%**	**1.5%**	**6.5%**	**9.5%**	**8.5%**	**14.5%**	**8.5%**
Quite Important	Count	71	43	49	20	17	74	18	10	38
	%	**24.5%**	**22.5%**	**27.5%**	**28%**	**27.5%**	**27.5%**	**25.5%**	**13.5%**	**25%**
Most Important	Count	184	129	107	48	37	163	40	52	95
	%	**63%**	**67.5%**	**60%**	**67.5%**	**59.5%**	**60.5%**	**57%**	**70.5%**	**63%**
Total=1208		291	192	178	71	62	269	70	74	

Table 19: Please rate each of the following reasons for why you use this trail instead of other facilities: Accessible Features

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	7	5	10	3	0	6	5	9	5.5
	%	**2.5%**	**3%**	**6%**	**4%**	**0%**	**2%**	**8%**	**12%**	**4%**
Somewhat Important	Count	18	11	14	2	4	18	5	9	10
	%	**6.5%**	**6%**	**8%**	**3%**	**7%**	**7%**	**8%**	**12%**	**7%**
Important	Count	54	41	38	9	13	46	9	14	28
	%	**19%**	**22%**	**22.5%**	**13%**	**22%**	**17.5%**	**14%**	**20%**	**19%**
Quite Important	Count	91	53	52	27	15	77	26	16	45
	%	**32.5%**	**29%**	**31%**	**39%**	**26%**	**29.5%**	**41%**	**22%**	**31%**
Most Important	Count	110	74	55	29	27	114	18	25	56.5
	%	**39.5%**	**40%**	**32.5%**	**41%**	**46%**	**44%**	**29%**	**34%**	**39%**
Total=1160		280	184	169	70	59	261	63	73	

Trail User Concerns

The biggest concerns trail users have relating to trails (as seen in Tables 20 through 33) are trail maintenance and access to facilities such as restrooms and water fountains. 18% of respondents on average indicated these as their primary concerns. Safety and congestion on the trail (11% each) were the next two concerns reported by trail users. In fact, the top two concerns are the two most common concerns on every trail except the B-Line in Bloomington where safety was rated well above the other trails at 18.5%, followed by congestion (14.5%). This may be related in some ways to two unique characteristics of the B-Line Trail; it is the only trail of the eight (8) in the study to have night lighting for its entire length and is most centrally located. In 2001, the top concerns were the availability of restrooms and drinking fountains and adequate safety patrols.

Figure 9: Monon Trail Bridge on the White River in Indianapolis

Table 20: Please rate the level of concern you may have for each item regarding the trail: Safety

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	29	34	19	6	10	20	11	5	17
	%	**11%**	**20%**	**12%**	**9%**	**17%**	**8.5%**	**17%**	**7.5%**	**12%**
Somewhat Important	Count	35	24	32	13	5	35	14	14	21.5
	%	**13%**	**13.5%**	**19%**	**20%**	**8.5%**	**15%**	**21%**	**21%**	**15.5%**
Important	Count	54	37	32	16	13	50	11	16	28.5
	%	**20.5%**	**21%**	**19%**	**24%**	**22%**	**21%**	**17%**	**24%**	**21%**
Quite Important	Count	55	24	37	9	8	51	8	7	25
	%	**21%**	**13.5%**	**22%**	**14%**	**13.5%**	**21.5%**	**12%**	**10.5%**	**18%**
Most Important	Count	91	56	47	22	23	81	22	25	46
	%	**34.5%**	**32%**	**28%**	**33%**	**39%**	**34%**	**33%**	**37%**	**33.5%**
Total=1102		264	175	167	66	59	237	66	67	

Table 21: Please rate the level of concern you may have for each item regarding the trail: Parking (Lack of, Cost)

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	61	52	41	15	14	44	18	18	33
	%	**28.5%**	**33.5%**	**31%**	**27%**	**28.5%**	**22%**	**34%**	**31%**	**29%**
Somewhat Important	Count	49	31	39	14	10	43	12	14	26.5
	%	**23%**	**19.5%**	**30%**	**25.5%**	**20.5%**	**22%**	**23%**	**24.5%**	**23%**
Important	Count	40	18	22	9	16	46	7	12	21
	%	**18.5%**	**11.5%**	**17%**	**16.5%**	**33%**	**23%**	**13%**	**20.5%**	**18.5%**
Quite Important	Count	31	25	20	8	3	41	10	5	18
	%	**14.5%**	**16%**	**15%**	**14.5%**	**6%**	**21%**	**19%**	**8.5%**	**15.5%**
Most Important	Count	34	31	9	9	6	23	6	9	16
	%	**15.5%**	**19.5%**	**7%**	**16.5%**	**12%**	**12%**	**11%**	**15.5%**	**14%**
Total=916		215	157	131	55	49	197	53	58	

Table 22: Please rate the level of concern you may have for each item regarding the trail: Accessibility

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	35	33	23	9	11	36	19	6	21.5
	%	**14.5%**	**20%**	**15.5%**	**16%**	**20.5%**	**16%**	**31%**	**9.5%**	**17%**
Somewhat Important	Count	21	25	20	12	7	29	10	9	16.5
	%	**8.5%**	**15%**	**13.5%**	**21.5%**	**13%**	**13%**	**16.5%**	**14%**	**13%**
Important	Count	38	31	32	10	11	37	7	11	22
	%	**16%**	**18.5%**	**22%**	**18%**	**20.5%**	**16.5%**	**11.5%**	**17.5%**	**17.5%**
Quite Important	Count	67	42	29	17	13	58	11	15	31.5
	%	**28%**	**25%**	**20%**	**30.5%**	**24%**	**26%**	**18%**	**24%**	**25%**
Most Important	Count	80	36	43	8	12	64	14	22	35
	%	**33%**	**21.5%**	**29%**	**14%**	**22%**	**28.5%**	**23%**	**35%**	**27.5%**
Total=1014		241	167	147	56	54	224	61	63	

Table 23: Please rate the level of concern you may have for each item regarding the trail: Location

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	31	36	19	9	8	33	16	5	20
	%	**13%**	**21.5%**	**13%**	**15%**	**15%**	**15%**	**25.5%**	**8%**	**15.5%**
Somewhat Important	Count	16	25	15	9	7	16	6	7	12.5
	%	**7%**	**15%**	**10.5%**	**15%**	**13%**	**7%**	**9.5%**	**11%**	**10%**
Important	Count	34	25	20	7	12	38	13	10	20
	%	**14%**	**15%**	**14%**	**12%**	**23%**	**17%**	**20.5%**	**16%**	**15.5%**
Quite Important	Count	69	35	39	18	7	61	12	18	32.5
	%	**29%**	**21%**	**27%**	**31%**	**13%**	**27%**	**19%**	**29%**	**25.5%**
Most Important	Count	93	46	51	16	19	77	16	22	42.5
	%	**38%**	**27.5%**	**35.5%**	**27%**	**36%**	**34%**	**25.5%**	**36%**	**33.5%**
Total=1017		243	167	144	59	53	225	63	62	

Table 24: Please rate the level of concern you may have for each item regarding the trail: Facilities (Restrooms, Water Fountains etc.)

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	23	25	17	8	5	23	8	6	14.5
	%	**9%**	**15%**	**11%**	**14%**	**9.5%**	**10%**	**13%**	**9%**	**11%**
Somewhat Important	Count	46	38	27	10	11	38	12	13	24.5
	%	**18%**	**22%**	**17%**	**18%**	**20.5%**	**16%**	**20%**	**20%**	**18.5%**
Important	Count	78	48	49	15	19	67	19	21	39.5
	%	**30.5%**	**28%**	**32%**	**27%**	**35%**	**29%**	**31%**	**33%**	**30.5%**
Quite Important	Count	53	29	33	11	13	59	12	12	28
	%	**21%**	**17%**	**21%**	**19.5%**	**24%**	**26%**	**20%**	**19%**	**21%**
Most Important	Count	55	31	30	12	6	43	10	12	25
	%	**21.5%**	**18%**	**19%**	**21.5%**	**11%**	**19%**	**16%**	**19%**	**19%**
Total=1048		255	171	156	56	54	230	61	64	

Table 25: Please rate the level of concern you may have for each item regarding the trail: Maintenance

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	17	24	19	10	5	21	9	4	13.5
	%	**7%**	**14%**	**12%**	**16%**	**9.5%**	**9%**	**15%**	**6%**	**10.5%**
Somewhat Important	Count	23	21	15	13	6	27	10	5	15
	%	**9%**	**12.5%**	**10%**	**20%**	**11%**	**12%**	**16%**	**8%**	**11.5%**
Important	Count	58	35	31	11	10	63	15	16	30
	%	**23%**	**20.5%**	**20%**	**17%**	**19%**	**27%**	**24.5%**	**25%**	**23%**
Quite Important	Count	64	48	46	14	18	64	15	22	36.5
	%	**25%**	**28%**	**30%**	**22%**	**34%**	**28%**	**24.5%**	**34%**	**27.5%**
Most Important	Count	92	43	43	16	14	56	12	18	37
	%	**36%**	**25%**	**28%**	**25%**	**26.5%**	**24%**	**20%**	**28%**	**28%**
Total=1054		254	171	154	64	53	231	61	65	

Table 26: Please rate the level of concern you may have for each item regarding the trail: Space/Congestion on the Trail

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	31	34	22	14	9	13	14	5	18
	%	**13%**	**21%**	**14.5%**	**25.5%**	**18%**	**5.5%**	**24%**	**9%**	**14%**
Somewhat Important	Count	35	38	25	12	13	45	13	13	24.5
	%	**14.5%**	**23%**	**16.5%**	**22%**	**26%**	**19%**	**22%**	**24%**	**19.5%**
Important	Count	73	37	52	9	11	59	12	20	34
	%	**30.5%**	**22%**	**34.5%**	**16.5%**	**22%**	**25%**	**21%**	**36%**	**27%**
Quite Important	Count	65	29	34	15	10	72	7	7	30
	%	**27.5%**	**17%**	**22%**	**27%**	**20%**	**30.5%**	**12%**	**13%**	**23.5%**
Most Important	Count	35	29	19	5	7	46	12	10	20.5
	%	**14.5%**	**17%**	**12.5%**	**9%**	**14%**	**19.5%**	**21%**	**18%**	**16%**
Total=1012		239	167	152	55	50	235	58	55	

Table 27: Please rate the level of concern you may have for each item regarding the trail: Fear of Injury

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	54	50	45	15	17	54	17	15	33.5
	%	**26%**	**32.5%**	**34 %**	**32%**	**37%**	**27%**	**35.5%**	**26.5%**	**30%**
Somewhat Important	Count	52	51	31	8	10	64	11	16	30.5
	%	**25%**	**33.5%**	**23.5%**	**17%**	**21.5%**	**32%**	**23%**	**28%**	**27.5%**
Important	Count	52	24	27	11	11	43	10	16	24
	%	**25%**	**15.5%**	**20.5%**	**23.5%**	**24%**	**21.5%**	**21%**	**28%**	**22%**
Quite Important	Count	26	15	14	9	5	28	6	3	13
	%	**13%**	**10%**	**10.5%**	**19%**	**11%**	**14%**	**12.5%**	**5.5%**	**12%**
Most Important	Count	22	13	14	4	3	11	4	7	10
	%	**1%**	**8.5%**	**10.5%**	**8.5%**	**6.5%**	**5.5%**	**8%**	**12%**	**9%**
Total=889		206	153	131	47	46	200	48	57	

Table 28: Please rate the level of concern you may have for each item regarding the trail: Bikers/Skaters Going Too Fast

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	52	61	45	17	13	38	22	16	33
	%	**26%**	**42%**	**34%**	**34%**	**30%**	**18.5%**	**47%**	**28.5%**	**30%**
Somewhat Important	Count	63	38	27	13	17	57	7	16	30
	%	**31%**	**26%**	**20.5%**	**26%**	**39.5%**	**27.5%**	**15%**	**28.5%**	**27%**
Important	Count	45	27	31	10	11	52	6	15	24.5
	%	**22%**	**18.5%**	**23.5%**	**20%**	**25.5%**	**25%**	**13%**	**27%**	**22.5%**
Quite Important	Count	19	11	16	5	2	35	5	6	12.5
	%	**9.5%**	**7.5%**	**12%**	**10%**	**5%**	**17%**	**11%**	**10.5%**	**11%**
Most Important	Count	23	9	13	5	0	25	7	3	10.5
	%	**11.5%**	**6%**	**10%**	**10%**	**0%**	**12%**	**15%**	**5.5%**	**10%**
Total=884		202	146	132	50	43	207	47	56	

Table 29: Please rate the level of concern you may have for each item regarding the trail: Police Presence

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	49	59	38	14	18	34	17	13	30
	%	**24%**	**40%**	**27%**	**30.5%**	**37%**	**17%**	**35.5%**	**22.5%**	**27%**
Somewhat Important	Count	53	37	32	16	13	53	10	13	28.5
	%	**26%**	**25%**	**23%**	**35%**	**27%**	**27%**	**21%**	**22.5%**	**25.5%**
Important	Count	50	35	37	5	14	63	12	22	30
	%	**24.5%**	**23%**	**27%**	**11%**	**29%**	**32%**	**25%**	**38%**	**27%**
Quite Important	Count	27	7	16	8	2	29	6	6	12.5%
	%	**13%**	**5%**	**11.5%**	**17%**	**4%**	**15%**	**12.5%**	**10%**	**11.5%**
Most Important	Count	26	10	16	3	1	18	3	4	10
	%	**12.5%**	**7%**	**11.5%**	**6.5%**	**2%**	**9%**	**6%**	**7%**	**9%**
Total=890		205	148	139	46	48	197	48	58	

Table 30: Please rate the level of concern you may have for each item regarding the trail: Adequate Signage

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	45	42	36	14	6	44	21	11	27.5
	%	**22%**	**28%**	**26.5%**	**30.5%**	**15%**	**23%**	**43%**	**20%**	**25.5%**
Somewhat Important	Count	47	42	33	10	12	50	12	11	27
	%	**23%**	**28%**	**24%**	**22%**	**30%**	**26%**	**24.5%**	**20%**	**25%**
Important	Count	66	44	31	13	14	57	9	21	32
	%	**32.5%**	**29%**	**23%**	**28%**	**35%**	**30%**	**18.5%**	**38%**	**29.5%**
Quite Important	Count	26	16	27	6	6	30	5	8	15.5
	%	**13%**	**10.5%**	**20%**	**13%**	**15%**	**16%**	**10%**	**14.5%**	**14%**
Most Important	Count	19	7	9	3	2	9	2	4	7
	%	**9.5%**	**4.5%**	**6.5%**	**6.5%**	**5%**	**5%**	**4%**	**7.5%**	**6%**
Total=871		203	151	136	46	40	190	49	55	

Table 31: Please rate the level of concern you may have for each item regarding the trail: Visibility/Distance of Mile Markers

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	46	47	33	11	8	42	17	13	27
	%	**22%**	**31%**	**24%**	**22%**	**18%**	**22%**	**32.%**	**24%**	**24.5%**
Somewhat Important	Count	56	35	38	14	13	42	12	15	28
	%	**26%**	**23%**	**28%**	**28.5%**	**29.5%**	**22%**	**22.5%**	**28%**	**25%**
Important	Count	54	33	37	12	12	53	13	9	28
	%	**25%**	**22%**	**27%**	**24.5%**	**27%**	**28%**	**24.5%**	**16.5%**	**25%**
Quite Important	Count	30	25	18	6	6	31	6	10	16.5
	%	**14%**	**17%**	**13%**	**12%**	**13.5%**	**16%**	**11.5%**	**18.5%**	**15%**
Most Important	Count	27	11	11	6	5	23	5	7	12
	%	**13%**	**7%**	**8%**	**12%**	**11%**	**12%**	**9.5%**	**13%**	**10.5%**
Total=893		213	151	137	49	44	191	53	54	

Table 32: Please rate the level of concern you may have for each item regarding the trail: Unleashed Pets

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	44	50	39	10	15	41	18	13	29
	%	**20.5%**	**33%**	**29%**	**20%**	**30.5%**	**20%**	**34%**	**24%**	**25%**
Somewhat Important	Count	42	36	31	10	11	47	6	16	25
	%	**19.5%**	**23.5%**	**23%**	**20%**	**22.5%**	**23%**	**11%**	**29.5%**	**22%**
Important	Count	53	25	30	13	10	43	9	7	24
	%	**24.5%**	**16.5%**	**22%**	**26%**	**20.5%**	**21%**	**17%**	**13%**	**21%**
Quite Important	Count	29	18	18	9	4	35	10	11	17
	%	**13.5%**	**12%**	**13%**	**18%**	**8%**	**17%**	**19%**	**20.5%**	**14.5%**
Most Important	Count	48	23	17	8	9	40	10	7	20
	%	**22%**	**15%**	**13%**	**16%**	**18.5%**	**19.5%**	**19%**	**13%**	**17.5%**
Total=915		216	152	135	50	49	206	53	54	

Table 33: Please rate the level of concern you may have for each item regarding the trail: Wild Animals

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Least Important	Count	83	70	56	15	17	75	21	25	45
	%	**44%**	**50.5%**	**50%**	**32%**	**42.5%**	**43%**	**46.5%**	**51%**	**45.5%**
Somewhat Important	Count	47	39	32	17	16	46	10	11	27
	%	**25%**	**28%**	**28.5%**	**36%**	**40%**	**26.5%**	**22.5%**	**23%**	**27.5%**
Important	Count	38	23	14	11	3	28	7	6	16
	%	**20%**	**16.5%**	**12.5%**	**23%**	**7.5%**	**16%**	**15.5%**	**12%**	**16.5%**
Quite Important	Count	9	2	5	2	2	14	2	5	5
	%	**5%**	**1.5%**	**4.5%**	**4%**	**5%**	**8%**	**4.5%**	**10%**	**5%**
Most Important	Count	12	5	5	2	2	11	5	2	5.5
	%	**6%**	**3.5%**	**4.5%**	**4%**	**5%**	**6.5%**	**11%**	**4%**	**5.5%**
Total=795		189	139	112	47	40	174	45	49	

Table 34: What concerns you most about the trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Lack of Safety	Count	23	14	18	6	7	32	13	10	15.5
	%	**8.5%**	**8%**	**11%**	**9.5%**	**12%**	**12.5%**	**18.5%**	**13.5%**	**11%**
Parking (Lack of, Cost)	Count	5	5	0	3	2	4	3	3	3
	%	**2%**	**3%**	**0%**	**4.5%**	**3.5%**	**1.5%**	**4.5%**	**4%**	**2%**
Accessibility of the Trail	Count	15	10	10	2	1	15	2	2	7
	%	**5.5%**	**6%**	**6%**	**3%**	**1.5%**	**6%**	**3%**	**2.5%**	**5%**
Location	Count	10	11	8	7	4	15	7	5	8.5
	%	**3.5%**	**6.5%**	**5%**	**11%**	**7%**	**6%**	**10%**	**7%**	**6%**
Facilities	Count	52	38	31	19	10	30	12	16	26
	%	**19%**	**22%**	**19.5%**	**29.5%**	**17%**	**12%**	**17%**	**22%**	**18.5%**
Maintenance	Count	76	27	30	11	12	34	7	15	26.5
	%	**28%**	**15.5%**	**19%**	**17.%**	**20.5%**	**13%**	**10%**	**20.5%**	**19%**
Space/Congestion	Count	17	16	18	2	1	54	10	6	15.5
	%	**6%**	**9.5%**	**11.%**	**3%**	**1.5%**	**21%**	**14.5%**	**8%**	**11%**
Fear of Injury	Count	2	3	4	2	1	2	0	0	2
	%	**0.5%**	**1.5%**	**2.5%**	**3%**	**1.5%**	**1%**	**0%**	**0%**	**1%**
Bikers/Skaters Going Fast	Count	24	18	11	3	4	41	0	5	13
	%	**9%**	**10.5%**	**7%**	**4.5%**	**7%**	**16%**	**0%**	**7%**	**9.5%**
No Police Patrols	Count	12	5	13	1	4	13	6	1	7
	%	**4.5%**	**3%**	**8%**	**1.5%**	**7%**	**5%**	**8.5%**	**1.5%**	**5%**
Adequate Signage	Count	6	1	3	0	0	1	4	1	2
	%	**2%**	**0.5%**	**2%**	**0%**	**0%**	**0.5%**	**5.5%**	**1.5%**	**1.5%**
Visibility of Distance	Count	2	2	5	0	0	4	1	4	2
	%	**0.5%**	**1%**	**3%**	**0%**	**0%**	**1.5%**	**1.5%**	**5.5%**	**1.5%**
Unleashed Pets	Count	22	18	7	7	8	8	3	5	10
	%	**8%**	**10.5%**	**4.5%**	**11%**	**13.5%**	**3%**	**4.5%**	**7%**	**7%**
Wild Animals	Count	5	4	2	1	5	2	2	0	3
	%	**2%**	**2.5%**	**1%**	**1.5%**	**8.5%**	**1%**	**3%**	**0%**	**2%**
Total=1125		172	160	64	59	255	70	73	1	

Active Living (Exercise) Impact

Trails have been promoted as significant assets in promotion of active living (e.g. physical activity). The 2017 Indiana Trails Study seemed to validate this benefit in terms of motivating people to exercise, as seen in Tables 35-37. In table 35, forty percent of trail users reported they did not exercise regularly before having access to a trail. The availability of trails has seen its biggest impact on active living in Bloomington where 47% of trail users said that they did not exercise regularly before having access to the trail followed closely by Columbus (46%) and Erie-Lackawanna (45%).

Table 35: Did you exercise regularly (three or more times per week for 20 minutes per session) before using a trail?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Yes	Count	162	131	98	51	40	178	39	44	93
	%	**55%**	**65%**	**53%**	**70%**	**62.5%**	**65%**	**54%**	**54%**	**59.5%**
No	Count	134	70	86	22	24	97	34	37	63
	%	**45%**	**35%**	**47%**	**30%**	**37.5%**	**35%**	**47%**	**46%**	**40.5%**
Total=1248		296	201	184	73	64	275	73	81	

Trail User Increased Activity

The impact of trails on active living is confirmed in Table 36 which shows a self-reported significant increase in the amount of exercise among trail users. Sixty-seven percent of trail users indicated an increase in their activity levels since beginning to use a trail, with 71% of respondents indicating that their level of activity increased by more than 25%. The largest average increase in exercise levels, 36%, was seen in Bloomington. All trails showed an average increase in exercise levels of at least 25% by people who exercise more now than they did before they access to the trail.

Figure 10: Trailhead Under Construction on the Columbus People Trail

Table 36: Since beginning to use a trail, has the amount of exercise that you do...

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Increased	Count	217	119	132	45	44	186	44	52	105
	%	**73%**	**59%**	**71%**	**61%**	**68.5%**	**67%**	**60%**	**64%**	**67%**
Decreased	Count	4	0	1	2	1	4	1	1	2
	%	**1.5%**	**0%**	**0.5%**	**3%**	**1.5%**	**1%**	**1.5%**	**1%**	**1%**
	Why?	Time Limit, Health Issues, Job Conflicts		Time Limit	Health Issues	Health Issues	Older Adults, Health Issues		Time Limit	
Do not Know	Count	4	7	3	0	0	8	0	1	3
	%	**1.5%**	**3%**	**1.5%**	**0%**	**0%**	**3%**	**0%**	**1%**	**2%**
Stayed the Same	Count	74	77	50	26	19	80	28	27	48
	%	**24%**	**38%**	**27%**	**36%**	**30%**	**29%**	**38.5%**	**34%**	**30%**
Total=1258		299	203	186	73	64	278	73	81	

Table 37: Since using the trail, approximately how much has your exercise increased?

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
<25%	Count	52	34	32	13	13	46	15	13	27
	%	**25%**	**30%**	**25%**	**30%**	**30%**	**26%**	**36%**	**27%**	**27%**
26-50%	Count	72	47	44	18	14	66	13	22	37
	%	**34%**	**42%**	**35%**	**42%**	**33%**	**37%**	**31%**	**46%**	**37%**
50-75%	Count	36	19	21	5	10	29	5	6	16.5
	%	**17%**	**17%**	**16.5%**	**12%**	**23%**	**16%**	**12%**	**12%**	**16%**
76-100%	Count	31	8	18	3	4	25	2	7	12
	%	**15%**	**7%**	**14%**	**7%**	**9%**	**14%**	**5%**	**15%**	**12%**
>100%	Count	20	4	12	4	2	14	7	0	8
	%	**9%**	**4%**	**9.5%**	**9%**	**5%**	**8%**	**17%**	**0%**	**8%**
Total=1259		211	112	127	43	43	180	42	48	

Economic Impact of Trails

To gauge the economic impact of trails, users were asked about their spending on certain items related to trail use and their travel to and from the trail. Table 38 illustrates the significant economic impact of trails.

Trail users statewide spent a reported average of $47.30 each on the day they were surveyed on trail use. This ranges from a high of $77.40 by Monon Trail users to a low of $19.90 in Columbus. While daily expenditure is interesting as a snapshot, it is not as reliable as annual spending to measure economic impact because daily spending may be skewed by the purchases of "big ticket" items by a relatively small number of people or may be influenced by weather or local events that encourage or discourage trail use on a given day.

Annual spending is more useful as a picture of the economic impact of trails on their communities. **Trail users in the study report spending an average of $3,564 per year** on trail-related expenditures. The highest annual average came from the Cardinal Greenway with $4,528 per user per year. Significantly boosting that average was Cardinal's users spending on food and beverage at $2,690, far more than any other trail in the study and somewhat anomalous considering that Cardinal ranked near the lower end in almost every other category. As with daily spending, Columbus also has the lowest annual average at $2,493. The lower averages in Columbus, coupled with the People Trail's high percentage of users whose primary activity was walking, could reflect the trail's routing primarily through residential neighborhoods and without a significant retail presence near survey sites.

Comparing the results from Columbus with the B-Line in Bloomington and the Monon, where there are heavy retail environments at or near the trail and heavier spending on food and beverage, communities may be able to see a stronger economic impact from trail be routing them as close to retail business zones as possible and encouraging retail development near trails, bringing trail users and beneficiary businesses closer together. With $1678 spent on food and beverages statewide, almost $1000 on transportation, and the large number of people traveling longer distances to use trails (as shown in Table 8), trails may be proving their value as tourism draws and as economic engine.

Figure 11: Trail Map of the Pumpkinvine in Abshire Park, Goshen

Table 38: For the items listed below, please indicate your amount spent on the day you used the trail and also your estimated annual spending

	Average Dollars, Spent On	Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
DAILY	Bikes	$14.00	$2.00	$4.50	$4.50	$4.50	$48.00	$30.00	$0.50	$18.00
	Skates	$0	$0	$0	$0	$2.50	$0.10	$0	$0	$0.10
	Clothing	$2.00	$5.00	$4.00	$2.00	$1.00	$5.00	$13.00	$4.00	$4.50
	Shoes	$7.00	$4.00	$7.50	$7.50	$0.50	$11.00	$10.00	$4.00	$7.50
	Food	$10.00	$10.00	$14.00	$8.00	$15.50	$9.00	$31.00	$8.00	$12.00
	Maps	$0.20	$0.05	$0	$0	$4.50	$0.30	$0	$0.40	$0.50
	Transportation	$4.00	$5.00	$6.00	$2.00	$10.00	$4.00	$3.00	$3.00	$4.50
	Parking	$0.20	$0	$0.05	$0	$3.00	$0	$0.20	$0	$0.20
	Total (by Trail)	$37.40	$26.05	$36.05	$24.00	$41.50	$77.40	$88.20	$19.90	$47.30
ANNUAL	Bikes	$369	$300	$183	$260	$299	$388	$289	$110	$307
	Skates	$3	$1	$2	$9	$4	$5	$3	$0	$5
	Clothing	$378	$227	$278	$294	$214	$408	$414	$246	$331
	Shoes	$229	$147	$166	$167	$145	$233	$170	$121	$191
	Food	$1795	$1297	$1573	$1534	$2690	$1768	$1794	$1169	$1678
	Maps	$30	$35	$46	$28	$53	$69	$16	$32	$42
	Transportation	$847	$1165	$786	$870	$1075	$1187	$746	$790	$970
	Parking	$45	$17	$29	$36	$48	$49	$58	$25	$40
	Total (by Trail)	$3696	$3189	$3063	$3198	$4528	$4107	$3500	$2493	$3564

Table 38 note: Daily averages are rounded to the nearest $.50. If an average is less than $.50, it is rounded to the nearest $.10. Annual averages are rounded to the nearest whole dollar.

Trail User Demographics

Trail User Demographics: Age

The average age of trail users has increased since the 2001 study. In 2017, 64% of trail users were 46 or older, as shown in Table 39. 43% of respondents were in the same age range in the 2001 study. In contrast, the number of 26-45 year-old users has dropped from 41% to 30%. This shift likely indicates that aging populations have more access to trails and are more informed about the health benefits of exercise rather than younger people using trails less.

Columbus and Bloomington trail users are significantly younger than user of other trails with 23.5% and 25.5%, respectively, in the 26-35 age bracket- almost double the state average. Interestingly, the trails with the oldest average population were the rural trails- Pumpkinvine, (40 y.o), Nickel Plate (40.5 y.o.), and Cardinal (39, y.o.)

Table 39: Age

Years		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
18-25	Count	10	10	14	3	2	24	3	3	9
	%	**3.5%**	**5.5%**	**8%**	**4%**	**3%**	**90%**	**4%**	**4%**	**6%**
26-35	Count	30	18	26	7	3	36	18	17	19.5
	%	**10.5%**	**9.5%**	**15%**	**10%**	**5%**	**13.5%**	**25.5%**	**23.5%**	**13%**
36-45	Count	49	23	32	12	13	41	10	11	24
	%	**17%**	**12%**	**18.5%**	**17%**	**21%**	**15.5%**	**14%**	**15%**	**16%**
46-65	Count	136	81	79	31	26	123	28	31	67
	%	**47%**	**43%**	**45.5%**	**44%**	**42%**	**46%**	**39.5%**	**42.5%**	**45%**
≥65	Count	64	56	23	18	18	43	12	11	31
	%	**22%**	**30%**	**13%**	**25%**	**29%**	**16%**	**17%**	**15%**	**20%**
Total=1194		289	188	174	71	62	267	71	73	

Trail User Demographics: Gender

Table 40 shows that, on average, more males use trails than females based on the survey, though Columbus and Monon trail users were almost evenly split. The overall percentage difference is significant, especially when the 2001 survey found similar results with 44% of reported users being female.

Table 40: Gender

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Male	Count	157	109	105	44	35	137	41	37	83
	%	**55%**	**58%**	**60%**	**64%**	**56%**	**51.5%**	**59%**	**51%**	**56%**
Female	Count	127	78	67	23	28	129	29	36	65
	%	**44%**	**42%**	**39%**	**33%**	**44%**	**48.5%**	**41%**	**49%**	**43.5%**
Missing	Count	3	0	1	2	0	0	0	0	1
	%	**1%**	**0%**	**1%**	**3%**	**0%**	**0%**	**0%**	**0%**	**0.5%**
Total=1190		287	187	173	69	63	266	70	73	

Trail User Demographics: Race/Ethnic Origin

Much like the Indiana Trails Study 2001, the 2017 Study reflected Indiana's race/ethnic origin makeup. Although largely used by individuals of white race, Hispanic-Latino trail users represented 3% of all trail users in 2017 in comparison to 1.5% in the 2001 Study. This 100% growth exceeds Indiana's 82+% growth in the Hispanic Latino population since 2000. Columbus, once again, is an outlier in demographics with whites making up only 78% of it's users while 9.5% are Asians. No other trail in the study reports more than 1.5% of users being Asian.

Table 41: Race/Ethnic origin

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
White	Count	264	175	160	66	62	244	66	57	137
	%	**91%**	**94.5%**	**92%**	**94%**	**98.5%**	**92%**	**95%**	**78%**	**91.9%**
African American	Count	1	2	2	0	0	8	0	3	2
	%	**0.5%**	**1%**	**1%**	**0%**	**0%**	**3%**	**0%**	**4%**	**1%**
American Indian/ Alaska Native	Count	1	0	0	0	0	1	0	0	0.25
	%	**0.5%**	**0%**	**0%**	**0%**	**0%**	**0.5%**	**0%**	**0%**	**0.1%**
Asian	Count	2	1	1	0	0	1	1	7	2
	%	**1%**	**0.5%**	**0.5%**	**0%**	**0%**	**0.5%**	**1.5%**	**9.5%**	**1%**
Hispanic or Latino	Count	9	6	8	1	0	6	2	2	4
	%	**3%**	**3%**	**5%**	**1.5%**	**0%**	**2%**	**3%**	**3%**	**3%**
Declined to answer	Count	13	2	3	3	1	6	1	4	4
	%	**4%**	**1%**	**1.5%**	**4.5%**	**1.5%**	**2%**	**1.5%**	**5.5%**	**3%**
Total=1190		290	186	174	70	63	66	70	73	

Trail User Demographics: Marital Status

Table 42 displays the marital status of trail users which indicates a significant percentage of married-domestic partnership users.

Table 42: Marital status

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Single	Count	52	19	45	9	8	56	18	9	27
	%	**18%**	**10%**	**26%**	**13%**	**13%**	**21%**	**26.5%**	**12%**	**18%**
Married, Domestic partnership	Count	206	144	113	55	46	189	45	51	106
	%	**71%**	**79%**	**66%**	**77%**	**74%**	**72%**	**66%**	**71%**	**72%**
Widowed	Count	8	2	1	2	1	3	1	4	3
	%	**3%**	**1%**	**1%**	**3%**	**2%**	**1%**	**1.5%**	**6%**	**2%**
Divorced	Count	19	16	13	5	7	16	3	7	11
	%	**7%**	**9%**	**7%**	**7%**	**11%**	**6%**	**4.5%**	**10%**	**7.5%**
Separated	Count	3	2	0	0	0	0	1	1	1
	%	**1%**	**1%**	**0%**	**0%**	**0%**	**0%**	**1.5%**	**1%**	**0.5%**
Total=1190		288	183	172	71	62	264	68	72	

Trail User Demographics: Employment Status

Employment status of trail users as reported reflects significant use by retirees with almost a quarter of users indicating they were retired. Logically, one would expect the use level with approximately 20% of all Indiana residents being retired (IU Web, Incontext, Page 1). Notably the more rural trails had the highest percent of retired trail users. As could also be expected, the B-Line Trail, had the highest percent of student trail users.

Table 43: Employment status

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Homemaker	Count	8	8	3	3	2	10	0	4	5
	%	**3%**	**4%**	**2%**	**4%**	**3%**	**4%**	**0%**	**5.5%**	**3%**
Self-employed	Count	25	15	19	12	4	22	12	7	14.5
	%	**9%**	**8%**	**11%**	**17%**	**6%**	**8%**	**17%**	**9.5%**	**10%**
Student	Count	9	4	6	1	2	15	7	1	5.5
	%	**3%**	**2%**	**4%**	**1%**	**3%**	**6%**	**10%**	**1%**	**4%**
Employed for wages	Count	156	96	107	33	32	159	42	48	84
	%	**54%**	**52%**	**62%**	**46%**	**51%**	**60%**	**59%**	**66%**	**56.5%**
Retired	Count	78	61	35	19	22	56	10	11	36.5
	%	**27%**	**33%**	**20%**	**28%**	**35%**	**20%**	**14%**	**15%**	**24.5%**
Not employed	Count	5	1	2	2	1	5	0	0	2
	%	**2%**	**0.5%**	**1%**	**3%**	**2%**	**2%**	**0%**	**0%**	**1%**
Declined to answer	Count	8	1	0	1	0	0	0	2	2
	%	**3%**	**0.5%**	**0%**	**1%**	**0%**	**0%**	**0%**	**2.7%**	**1%**
Total=1190		289	186	172	71	63	267	71	73	

Trail User Demographics: Education Attainment

As with the 2001 Indiana Trails Study, trail users in the 2017 Indiana Trails Study reported a high level of educational attainment from High School degree to graduate degrees, regardless of trail location and setting.

Table 44: Educational attainment

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
Eighth grade or less	Count	5	4	0	0	0	0	0	0	1
	%	**2%**	**2%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**1%**
High school or GED	Count	46	26	38	12	7	28	6	10	22
	%	**16%**	**15%**	**22%**	**17%**	**11%**	**11%**	**9%**	**14%**	**14.5%**
Technical school	Count	26	10	9	13	5	11	3	1	10
	%	**9%**	**6%**	**5%**	**18%**	**8%**	**4%**	**4%**	**1%**	**6.5%**
College graduate	Count	110	74	66	18	21	113	32	26	57.5
	%	**38%**	**41%**	**38%**	**25%**	**34%**	**43%**	**46%**	**36%**	**39%**
Graduate school	Count	67	44	42	15	19	81	19	24	39
	%	**23%**	**24%**	**24%**	**22%**	**31%**	**30%**	**27%**	**33%**	**26%**
Professional degree	Count	29	18	18	12	10	26	10	9	16.5
	%	**10%**	**10%**	**10%**	**17%**	**16%**	**10%**	**14%**	**13%**	**11%**
Declined to answer	Count	7	4	1	1	0	6	0	2	2.5
	%	**2%**	**2%**	**1%**	**1%**	**0%**	**2%**	**0%**	**3%**	**2%**
Total=1190		290	180	174	71	62	265	70	72	

Trail User Demographics: Household Income

Table 45 displays 2017 Indiana Trails Study trail user income. Further analysis of this factor may show a high proportion of high income trail users (the 2001 Trails Study generally found the same conclusion) than the general population as the 2016 Indiana Median Income was $50,344 in 2016 (U.S. Census Bureau, n.d.) which fits within the largest percentage of 2017 trail users by income.

Table 45: Household Income Level

		Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response
<$10,000	Count	6	1	6	2	2	2	4	0	3
	%	**2%**	**1%**	**4%**	**3%**	**4%**	**1%**	**6%**	**0%**	**2%**
$10-38,000	Count	26	18	28	5	10	9	8	7	14
	%	**10%**	**10.5%**	**17.5%**	**7.5%**	**18%**	**4%**	**12%**	**10%**	**10%**
$38,001- 91,000	Count	97	81	65	33	24	104	27	27	57
	%	**36.5%**	**47%**	**40.5%**	**49%**	**43%**	**42%**	**39%**	**40%**	**41.5%**
$91,001-190,000	Count	104	61	45	18	15	93	25	28	49
	%	**39%**	**35.5%**	**28%**	**27%**	**26%**	**38%**	**37%**	**42%**	**35.5%**
>$190,000	Count	33	11	16	9	5	39	4	5	15
	%	**12.5%**	**6%**	**10%**	**13.5%**	**9%**	**15%**	**6%**	**8%**	**11%**
Total=1190		266	172	160	67	56	247	68	67	

Trail Counters

Figure 12: Monon Trail in Indianapolis

All trails participating in the study were asked to place counters on their trails to collect data on trail usage. The preferred counter locations were at or near the trailheads or stations where study volunteers who were recruiting trail users to take the study survey were located in order to most closely correspond counter data with survey data. Most trails were able to place counters in these locations but some were not. Bloomington (B-Line Trail), for example, uses a type of counter that is embedded in the pavement of the trail and was not able to move it near volunteer stations. The counter on the Nickel Plate Trail was placed on the Wabash River Bridge because that location was the most supportive of counter installation but volunteers were not stationed on the bridge.

Trail partners were asked to supply counter data to the study team for the duration of survey recruitment- April 3 through October 8. Not all trails, for various reasons, were able to do that. Two trails, Pumpkinvine and Nickel Plate, did not have their own counters and were not able to acquire them, so the study team installed counters at those locations in early July. Some trails have counters installed year-round and supplied counts for the complete months of April and October and others were not able to place counters during the entire requested time frame. Other maintenance issues left gaps in the counts at various times.

The data table (Table 46) reflects the differences in the counter data that the trail partners were able to supply. All numbers are for complete months except where noted.

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. Mechanical trail counters are also known to consistently undercount due to various types of physical challenges. Errors include people with backpacks or swinging arms being counted multiple times (Shoji, et. al., 2008), walkers in groups or closely spaced in relation to other walkers being undercounted (Turner, et. al., 2007), fast moving bicycles not being detected (Turner, et. al., 2007), and counter breakdown or malfunction.

Trail counter data is being reported as shown on the counters and not adj usted for any users who may have passed multiple times or any potential counter variations.

The highest counts, by far, were at the 3rd Street location of the B-Line Trail in Bloomington at an average of 45,540 users from April through September. The next highest trail count comes from the 91st Street Trailhead of the Monon Trail with 17,542 from April through October. The count at the B-line seems unusually high when compared to other trails in the study but that could be explained by the counter's close proximity to the Monroe Convention Center, with foot traffic to and from events there raising counts. Another counter approximately a mile and a half south of

downtown which was removed in May due to construction registered a significantly lower count, important in confirming the Convention Center's effect on the downtown counter. The B-Line is also the only trail in the study that goes directly through an urban downtown.

Table 46: Monthly Trail Use Counts

Trail	Counter Location	April	May	June	July	August	September	October	Total count (by Trail)
Erie-Lackawanna	Crown Point	8,475	10,017	12,127	11,054	10,488	9,672	7,817 (10/1-10/27)	69,650
	Highland	10,319	11,588	16,173	17,813	14,866	10,458	6,607 (10/1-10/27)	87834,
Pumpkinvine	Abshire Park				9,371 (7/6-7/31)	6,629 (8/1-8/19)			16,000
Ft. Wayne Rivergreenway	Foster Park	9,594	10,833	13,423	7,134 (7/1-7/19)	8,334	7,487	2,975 (10/1-10/12)	59,780
	Spy Run/Confluence	3,887	5,379	8,445	7,729	6,501	4,982		36,923
Nickel Plate	Wabash River Bridge				2,527 (7/6-7/31)	2,587	2,253	1,882	9,249
Cardinal Greenway	400 N.	210 (4/26-4/30)	3,187	3,368	2,629 (7/1-7/24)	1,571 (8/14-8/31)	2,333 (9/1-9/24)		13,298
Monon	10th St.	11,083	12,512	13,940	15,462	15,467	14,197	11,383	94,044
	91st St.	18,918	18,904	20,698	22,944	21,734	21,156	15,986	140,340
	106th St			28,006	28,637	29,547	24,065		79,684
	Rhorer Rd.			24,280	25,667	26,128	22,602		
B-Line	3rd Street (Convention Center)	40,331 (4/3-4/30)	41,195	49,933	40,959	48,405	43,947	14,469 (10/1-10/12)	273,239
	Country Club Ln. (Removed on 5/10)	17,440	4,019 (5/1-5/10)						21,459
Columbus People Trail	Mill Race								6,313
	Lincoln Park								10,864
	Parkside								7,252

Health Factors

Data from both trail users and non-users were collected to compare the health impacts of trail use on trail users. Trail users reported significant health benefits. Among those benefits (Tables 47 and 48), trail users reported:

- less trouble sleeping,
- being less tired upon waking
- being less sleepy throughout the day,
- less physical pain,
- fewer headaches,
- and less worry, sadness, and anger compared to those who don't use trails.

In fact, **the trail group rated them as in better health, or at least the same, in every category measured on every trail over non-trail users.**

Trail users also rate their overall level of health more highly (Table 49) than people who do not use trails. This holds true on every trail surveyed.

Figure 13: Biking in the Countryside on the Pumpkinvine

Table 47: Health Factors: Sleep

Average Days per Week	Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response	Non-trail users
Difficulty Falling Asleep	2	1.5	2	2	1.5	2	1.5	1.5	1.5	2
Wake up Too Early	2.5	2.5	2	2	1.5	2.5	2.5	2	2	3
Using Hypnotic Meds	1	1	1	0.5	1	1	1	1	1	1.5
Falling Asleep during Day	1.5	1.5	1	1	1	1.5	2	1	1.5	2
Feeling Tired upon Wake up	3	2.5	2.5	2.5	2.5	3	3	2.5	2.5	3.5
Snoring	3	2.5	2.5	2.5	2.5	3	2.5	2.5	2.5	3
Mid-sleep Awakening	4	3.5	3.5	4	4	3.5	3.5	3.5	3.5	4
Headache on Awakening	0.5	0.5	0.5	0.5	0.5	1	0.5	1	0.5	1.5
Excessive Daytime Sleepy	1.5	1.5	1.5	1	1	1.5	2	2	1.5	2.5
Excessive Movement in Sleep	2	1.5	1.5	1.5	1.5	1.5	1.5	2	1.5	2.5

Table 48: Health Factors: Mental and Physical

Average Days per Week	Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response	Non-trail users
No Energy to Get Things Done	1	1	1.5	1.5	1	1.5	1.5	1.5	1.5	2.5
Experience Sadness	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2
Experience Worry	2.5	2	2.5	2.5	2	2.5	2.5	2.5	2.5	3
Experience Anger	1.5	1.5	1.5	1	1	1.5	1.5	1.5	1.5	2
Experience Physical Pain	2.5	2.5	2	2.5	3	2	1.5	2	2.5	3

Table 49: Rate Your Health and Wellness (0-10)

	Erie Lackawanna Trail	Pumpkinvine Nature Trail	Fort Wayne Rivergreenway	Nickel Plate Trail	Cardinal Greenway	Monon Trail	B-Line Trail	Columbus People Trail	Average Statewide Response	Non-trail users
Average Score (0- 10)	7.7	7.7	7.6	7.6	7.6	7.5	7.8	7.2	7.6	6.5

Trail Neighbor Survey

Adjacent property owners are an important stakeholder group with respect to trail management. Since trail use may have a direct impact on their home or business, property values, and business activity, their perceptions and opinions of the impact of the trail on them is highly valuable information for trail managers.

The 2001 Indiana Trails Study completed a similar survey of trail neighbors as was implemented in 2017. There are some differences in the two surveys, and comparisons made wherever possible to measure changes in the 16 year span. The 2001 study complied data for each trail separately while the 2017 study surveyed trail neighbors as a single statewide group. This means that comparisons between the two study results will be made on a global basis instead of trail-by-trail. In addition to surveying residential property owners, the 2017 Trail Neighbor survey included businesses. Trails are increasingly being viewed as economic drivers and many businesses have intentionally located their operations near trails both to appeal to trail users and to offer proximity to the trail as an amenity for their employees. There was no inclusion of questions targeted at businesses in the 2001 trail neighbor survey while the 2017 Indiana Trails Study sought to understand the impact of trails on business activity.

Figure 14: Monon Trail Bridge in Indianapolis

Methodology

The Trail Neighbor Survey focused on properties within 150' of the trail and within up to a half-mile from the trailheads where volunteers inviting trail users to take the Trails Study survey were stationed. Properties on the survey mailing list included residential properties and apparent retail or office businesses. Excluded from the mailing were utilities, schools, churches, and other government-owned properties.

664 surveys were mailed to listed property owners with a reminder postcard sent 14 days later. 78 surveys were returned undeliverable. 114 property owners (20% of delivered surveys) completed the survey.

Trail Neighbor Property Description

When asked where the trail was in relation to their property (Table 50), the majority of property owners responded that the trail was near their property but not touching it (58%) while 40% said the trail runs along the edge of their property. In 2001, most respondents indicated that the trail ran along the edge of their property. An increase in the number and mileage of trails in the state may explain the difference. Of 114 completed Trail Neighbor surveys, 84% indicated that their property was residential (Table 51).12 (11%) indicated that their property is a business and 5% answered Other- mostly non-profit organizations.

Table 50: Trail in Relation to Property

	Count	Percent
The trail runs through my property	2	**2**
The trail runs along the edge of my property	44	**40**
The trail runs near my property but not touching it	63	**58**
Total	109	**100**

Table 51: Property Use

	Count	Percent
Residential	91	**84**
Business, Commercial or Retail	12	**11**
Other	5	**5**
Total	108	**100**

Tables 52 and 53 show that, of respondents who indicated that their property was residential, 91% said that there is a single-family home on the property and almost all of those were owner-occupied. One single family home was rented to tenants. In 2001, the most common use of trail neighbors' properties was also single-family, principle residence.

Table 52: Single Family Home on Property

	Count	Percent
Yes	83	**91**
No	8	**8**
Total	91	**100**

Table 53: Use of Property with Home

	Count	Percent
It is my principle residence	82	**99**
I rent it to a tenant	1	**1**
Total	83	**100**

Trail Neighbor Business Activity

Twelve survey respondents indicated that their property contained a business. The most common type of business (42%) was Office/Industrial/Manufacturing. The remainder were a combination of retail establishments including restaurant, grocery, gift, clothing, or other retail. 83% (10) of these businesses were in existence when the trail was built while the other 2 were established after the trail was built (Table 54).

Table 54: Business Type

	Count	Percent
Restaurant	2	**17**
Grocery	2	**17**
Retail (Gifts, clothing, other goods, etc.)	2	**17**
Office/Industrial/Manufacturing	5	**42**
Other: Veterinary Clinic	1	**8**
Total	12	**100**

Table 55: Business Existed Prior to Trail Construction

	Count	Percent
Yes	10	**83**
No	2	**17**
Total	12	**100**

Figure 15: Trailside Restaurant Window on the B-Line Trail

Despite the fact that none of the businesses answering the survey indicated that they target trail users as a primary source of customers, 60% of those whose businesses existed before the trail was built said they have seen an increase in sales, anywhere from 1% to 100%, since the trail was built while none of them have experienced a decrease in sales. These businesses believe that, on average, 15% of their customers are trail users. This should bode well for convincing businesses along trail routes and proposed trail routes that the trail will likely be good for business. Tables 56-59 display the data relating to business activity along Indiana Trails Study Trails.

Table 56: Business Target Trail Users

	Count	Percent
Yes	0	**0**
No	12	**100**
Total	12	**100**

Table 57: Percentage of Annual Sales Increase

	Count	Percent
1	1	**20**
5	1	**20**
10	1	**20**
25	1	**20**
100	1	**20**
Total	5	**100**

Table 58: Business Change Since Trail Construction

	Count	Percent
Sales have decreased	0	**0**
Sales have increased	6	**60**
Not sure/Not applicable	4	**40**
Total	10	**100**

Table 59: Percentage of Customers are Trail Users

	Count	Percent
0	3	**30**
5	1	**10**
10	3	**30**
20	1	**10**
30	1	**10**
40	1	**10**
Total	10	**100**

Trail Neighbor Property Values

Trail neighbors were asked for their views on the effect of the trail on their property values and their ability to resell their property. These views turn out to be almost universally positive, even more positive than they were in 2001.

As reported in the survey, 96% of the trail neighbors felt that the trail had either a positive or neutral effect on the resale value of their property (Table 60). This is an increase from the 2001 Trails Study where 91% of respondents felt that the trail increased the value of their property.

Tables 61 and 62 show the expected decrease and increase in property values. Most property owners (68%) expecting an increase in values see a modest increase of up to 8 percent in value. 32% expect more that 8 percent with 15% of trail neighbors optimistically anticipating an increase of at least 15 percent in the value of their property due to proximity to the trail.

When asked if they felt their property would be easier or harder to sell because of the trail, 95% said they felt the property would be either easier or no harder to sell, as shown in Table 63, up from the 88% reported in the 2001 Indiana Trails Study.

Table 60: Resale Value of Property Affected

	Count	Percent
The trail has lowered the resale value	3	**4**
The trail has increased the resale value	55	**66**
The trail has had no effect on the resale value	25	**30**
Total	114	**100**

Table 61: Negative Affect on Resale Value

	Count	Percent
3-5	1	**33**
5-8	1	**33**
Greater than 15	1	**33**
Total	3	**100**

Table 62: Positive Affect on Resale Value

	Count	Percent
0-3	17	**31**
3-5	14	**26**
5-8	6	**11**
8-10	3	**6**
10-15	6	**11**
>15	8	**15**
Total	54	**100**

Table 63: Sale of Property Hurt or Enhanced by Trail Proximity

	Count	Percent
Much Harder	2	**2**
Harder	2	**2**
Somewhat Harder	2	**2**
Neutral	15	**14**
Somewhat Easier	21	**20**
Easier	22	**21**
Much Easier	42	**20**
Total	106	**100**

Figure 16: Wabash River Bridge on Nickel Plate Trail

Trail Neighbor: Trail Use Patterns

Trails are popular and convenient for the neighboring property owners. 83% reported that they used the trail within the past month, in Table 64, compared with 81% in the 2001 Indiana Trails Study with Table 65 showing seasonal use of the trail by neighbors. While the number of neighbors using the trail was comparable across all seasons, trail neighbors using the trail 3 or more days a week was highest in the fall (85%), followed by summer (81%) and spring (73%), with the majority (60%) of winter users only on the trail for only 1 or 2 days per week. In the 2001 Trails Study, summer was the most popular usage time for trail neighbors, followed by spring and fall (approximately equal), then winter.

Table 64: Neighbor Trail Use Reported

	Count	Percent
Yes	67	**83**
No	14	**17**
Total	81	**100**

Table 65: Reported Activity of Trail Neighbor Using Trail in Past Year

Season	# of Days	Count	Percent
Spring (Mar. to May)	**6-7 days**	22	**34**
	3-5 days	25	**39**
	1-2 days	17	**27**
	Total	64	**100**
Summer (June to Aug.)	**6-7 days**	23	**36**
	3-5 days	29	**45**
	1-2 days	12	**19**
	Total	64	**100**
Fall (Sept to Nov.)	**6-7 days**	24	**37**
	3-5 days	31	**48**
	1-2 days	10	**15**
	Total	65	**100**
Winter (Dec. to Feb.)	**6-7 days**	12	**21**
	3-5 days	11	**19**
	1-2 days	35	**60**
	Total	58	**100**

Table 66 shows that walking (71%), biking (15%), and running or jogging (14%) are the most popular activities for trail neighbors. By contrast, trail user surveys indicate the same top three activities but with biking ranking first at 52% followed by walking (29%), and running/jogging (19%). The convenience of having the trail close to properties seems to encourage trail neighbors to walk, while those travelling some distance to use the trail tend to engage in more vigorous exercise.

Table 66: Trail Neighbor: Primary Activity on Trail

	Count	Percent
Walking	47	**71**
Running/Jogging	9	**14**
Biking	10	**15**
Total	66	**100**

Trail neighbors also indicate that they do other activities on the trail besides their primary activity (Table 67). Biking, Walking, and Running/Jogging were again the three most frequent of these secondary activities followed by People Watching, Skating or Skateboarding, Bird Watching, and Horseback Riding.

Table 67: Trail Neighbor: Other Activities on Trail

	Count	Percent
Walking	25	**23**
Running/Jogging	18	**16**
Biking	45	**41**
Skating/Skateboarding	3	**3**
Horseback Riding	1	**1**
Bird Watching	2	**2**
People Watching	12	**11**
None	5	**4**
Total	111	**100**

Trail Neighbor: Age and Activity Reported

Table 68 details trail neighbors who use the trail by age and by use. The most frequent users are between the ages of 45 and 65 (35%) followed by 25 to 44 (30%). Trails are least used by 12 to 18 and 19 to 24 year-old neighbors at a combined 14 percent.

The most common primary usage by trail neighbors is for recreation (57%) followed by health (33%). This is in stark contrast to trail users who were surveyed. 72% of trail users (as seen in Table 12) said that physical activity and health reasons were primary reason for using the trail while only 23% said that recreation was the main driver of their trail use. This likely corresponds with the differences between biking and walking among overall trail users and trail neighbors.

Trail neighbors are twice as likely to use the trail for commuting (10%) than overall users (5%) with users in the 25-44 age range leading the way. 20% of that age group uses the trail primarily for commuting. Ease of access is clearly a factor for trail neighbors who commute on the trail.

Table 68:Trail Neighbor: Use by Age and Activity During Past 12 Months

Age Category	Purpose of Trip	Count	Percent
12 Year Old and Under	Recreation	17	**70**
	Health	4	**17**
	Commute	3	**13**
Total		24	**14**
12 to 18 Years	Recreation	11	**69**
	Health	4	**25**
	Commute	1	**6**
Total		16	**8**
19 to 24 years	Recreation	6	**60**
	Health	4	**40**
	Commute	0	**0**
Total		10	**6**
25 to 44 Years	Recreation	22	**49**
	Health	14	**31**
	Commute	9	**20**
Total		45	**30**
45 to 65 Years	Recreation	34	**59**
	Health	22	**38**
	Commute	2	**3**
Total		58	**35**
65 Years and Older	Recreation	6	**43**
	Health	7	**50**
	Commute	1	**7**
Total		14	**8**

Trail Neighbor: Living Near the Trail

Trail neighbors were asked about their level of satisfaction with having the trail as a neighbor and about various management issues. The vast majority were at least somewhat satisfied about every aspect of trail management as reported in the survey.

Overall, trail neighbors are very happy living next to their trail with 92% reporting somewhat, very, or extremely satisfied with having the trail as a neighbor, as shown in Table 69. This is similar to the 2001 Indiana Trails Study when the average answer was "Satisfied" (point 5 on a 7 point scale).

Table 69: Trail Neighbor: Satisfaction with Trail as a Neighbor

	Count	Percent
Extremely dissatisfied	4	**4**
Dissatisfied	4	**4**
Somewhat Satisfied	18	**17**
Satisfied	25	**24**
Extremely Satisfied	55	**52**
Total	106	**100**

Tables 70-74 show that the most common areas of dissatisfaction with trails were with the lack of presence of safety patrols (28%), inadequate parking facilities for trail users (16%), and agency responsiveness to reported problems (15%). These top three concerns match the top three concerns from 2001. Table 70 focused on the managing organization's responsiveness to reported problems.

Table 70: Trail Neighbor: Satisfaction with Agency Responsiveness

	Count	Percent
Extremely dissatisfied	5	**5**
Dissatisfied	9	**10**
Somewhat Satisfied	37	**40**
Satisfied	21	**23**
Extremely Satisfied	21	**23**
Total	93	**100**

Table 71: Trail Neighbor: Satisfaction with Safety/ranger Patrols

	Count	Percent
Extremely dissatisfied	7	**8**
Dissatisfied	19	**21**
Somewhat Satisfied	34	**37**
Satisfied	16	**17**
Extremely Satisfied	16	**17**
Total	92	**100**

Table 72: Trail Neighbor: Satisfaction with Natural Surroundings of the Trail

	Count	Percent
Extremely dissatisfied	4	**4**
Dissatisfied	8	**8**
Somewhat Satisfied	25	**24**
Satisfied	37	**36**
Extremely Satisfied	29	**28**
Total	103	**100**

Table 73: Trail Neighbor: Satisfaction with Parking Facilities for Trail Users

	Count	Percent
Extremely dissatisfied	8	**8**
Dissatisfied	8	**8**
Somewhat Satisfied	33	**34**
Satisfied	28	**29**
Extremely Satisfied	21	**21**
Total	98	**100**

Table 74: Trail Neighbor: Satisfaction with Maintenance of the Trail

	Count	Percent
Extremely dissatisfied	2	**2**
Dissatisfied	8	**8**
Somewhat Satisfied	19	**18**
Satisfied	45	**44**
Extremely Satisfied	29	**28**
Total	103	**100**

Trail Neighbor: Effect of Trail on Purchase

The presence of a trail or plans to build a trail nearby can influence potential buyers to be either more likely or less likely to purchase a piece of property. When asked if they purchased their property before the trail was built, 62% of property owners indicated that the trail did not exist at the time of purchase (Table 75). Of the property owners who already owned their property when the trail was built, 98% were supportive of the trail being built, as shown in Table 76. Further, of those property owners, 100% are supportive of the trail now that it has been built (Table 77).

Table 75: Trail Neighbor: Property before the Trail was Built

	Count	Percent
Yes	40	**38**
No	64	**62**
Total	104	**100**

Table 76: Trail Neighbor: Reaction to Initial Idea of Trail Construction

	Count	Percent
Not at all supportive	0	**0**
Not supportive	1	**2**
Somewhat supportive	14	**25**
Supportive	10	**18**
Very supportive of the trail	30	**55**
Total	55	**100**

Table 77:Trail Neighbor: Support for Trail after Construction

	Count	Percent
Not at all supportive	0	**0**
Not supportive	0	**0**
Somewhat supportive	7	**11**
Supportive	15	**25**
Very supportive of the trail	39	**64**
Total	61	**100**

Tables 78 and 79 illustrate that expectations of trail neighbors about living near the trail are being met and exceeded. 97% of respondents said that living near the trail was what they expected or better. 56% responded that living next to the trail was what they expected while another 41% said that it was either somewhat or much better. In 2001, approximately 61% of trail neighbors said that living next to the trail was better than they expected. It may appear that satisfaction levels have dropped but trails have become much more common than they were in 2017 and their impacts are much more well known. With only 3% of neighbors expressing dissatisfaction, it is clear that trails are popular with neighboring property owners.

Similar results are seen when asking trail neighbors about the effect of the trail on the quality of their respective neighborhoods. A full 97% said that the neighborhood was improved or about the same. 54% indicated improvement, down from 69% in 2001 but, again, trails are much more common than they were in 2001 and many people are used to having them nearby.

Table 78: Trail Neighbor: Initial Reaction to Living or Operating Near Trail Compared to Today

Number of occurrences in last week	Count	Percent
Much worse	2	**2**
Worse	1	**1**
About the same	57	**56**
Better	20	**20**
Much better	21	**21**
Total	101	**100**

Table 79: Trail Neighbor: Trail Effect on Quality of Neighborhood

	Count	Percent
Much worse	1	**1**
Worse	2	**2**
About the same	45	**43**
Better	30	**29**
Much better	26	**25**
Total	104	**100**

Trail Neighbor: Trail Management Concerns

As popular as trails are with immediate neighbors, there are still important issues and concerns that trail neighbors have. These issues vary from trail to trail but some common themes emerged. In the 2001 Indiana Trails Study, the most common problems that trail neighbors reported included illegal vehicle use on the trail, littering, unleashed pets, and noise from the trail.

Those issues remain among the top concerns reported in 2017. Tables 80-95 show what trail neighbors report as the most frequent problems they experience. The most commonly reported problem is litter from the trail, with 60% of trail neighbors indicating that they experience this at least occasionally. 49% of neighbors think loitering on or near their property occurs at least occasionally, 34% are concerned about illegal vehicle use and 32% have experienced both dog manure on their property and noise from the trail at least occasionally.

Fortunately, concerns about property damage, including vandalism, crop or garden damage, and burglary are among least commonly experienced problems with 97% saying that crop or vegetable damage and 87% saying that vandalism and burglary happen infrequently or never. For 11 of the 16 potential problems, at least a majority of trail neighbors report "This is never a problem".

Table 80: Observed Illegal Vehicle/Motorcycle/ATV Use

	Count	Percent
This is never a problem	50	**48**
This happens rarely	19	**18**
This happens occasionally	34	**32**
This happens frequently	2	**2**
This happens daily	0	**0**
Total	105	**100**

Table 81: Observed Litter On or Near Property

	Count	Percent
This is never a problem	19	**18**
This happens rarely	24	**23**
This happens occasionally	37	**35**
This happens frequently	15	**14**
This happens daily	10	**10**
Total	105	**100**

Table 82: Observed Loitering One or Near Trail

	Count	Percent
This is never a problem	33	**31**
This happens rarely	20	**19**
This happens occasionally	27	**26**
This happens frequently	13	**12**
This happens daily	12	**11**
Total	105	**100**

Table 83: Observed Trespassing on Property

	Count	Percent
This is never a problem	51	**48**
This happens rarely	22	**21**
This happens occasionally	21	**20**
This happens frequently	8	**8**
This happens daily	3	**3**
Total	105	**100**

Table 84: Observed Trail Users Harassing Pets/Animals

	Count	Percent
This is never a problem	86	**83**
This happens rarely	10	**10**
This happens occasionally	6	**6**
This happens frequently	1	**1**
This happens daily	0	**0**
Total	103	**100**

Table 85: Observed Vandalism on Property

	Count	Percent
This is never a problem	68	**65**
This happens rarely	23	**22**
This happens occasionally	10	**9**
This happens frequently	3	**3**
This happens daily	1	**1**
Total	105	**100**

Table 86: Observed Cars Illegally Parked on Property

	Count	Percent
This is never a problem	65	**62**
This happens rarely	14	**13**
This happens occasionally	17	**16**
This happens frequently	4	**4**
This happens daily	5	**5**
Total	105	**100**

Table 87: Observed Dog Manure on Property

	Count	Percent
This is never a problem	53	**50**
This happens rarely	18	**17**
This happens occasionally	26	**25**
This happens frequently	4	**4**
This happens daily	4	**4**
Total	105	**100**

Table 88 Fruits/Vegetables/Crops Picked or Damaged

	Count	Percent
This is never a problem	95	**90**
This happens rarely	7	**7**
This happens occasionally	3	**3**
This happens frequently	0	**0**
This happens daily	0	**0**
Total	105	**100**

Table 89: Users Request Bathroom, Phone, etc.

	Count	Percent
This is never a problem	93	**89**
This happens rarely	6	**6**
This happens occasionally	3	**3**
This happens frequently	1	**1**
This happens daily	2	**2**
Total	105	**100**

Table 90: Observed Unleashed or Roaming Pets

	Count	Percent
This is never a problem	55	**52**
This happens rarely	26	**25**
This happens occasionally	17	**16**
This happens frequently	4	**4**
This happens daily	3	**3**
Total	105	**100**

Table 91: Observed Noise from Trail Users

	Count	Percent
This is never a problem	45	**44**
This happens rarely	25	**24**
This happens occasionally	22	**21**
This happens frequently	9	**9**
This happens daily	2	**2**
Total	103	**100**

Table 92: Observed Burglary of Property

	Count	Percent
This is never a problem	82	**78**
This happens rarely	9	**9**
This happens occasionally	10	**10**
This happens frequently	2	**2**
This happens daily	2	**2**
Total	105	**100**

Table 93: Observed Discourteous or Rude Trail Users

	Count	Percent
This is never a problem	54	**51**
This happens rarely	24	**23**
This happens occasionally	23	**22**
This happens frequently	2	**2**
This happens daily	2	**2**
Total	105	**100**

Table 94: Observed Lack of Trail Maintenance

	Count	Percent
This is never a problem	52	**50**
This happens rarely	29	**28**
This happens occasionally	18	**11**
This happens frequently	5	**5**
This happens daily	0	**0**
Total	104	**100**

Table 95: Experienced Lack of Privacy

	Count	Percent
This is never a problem	56	**53**
This happens rarely	25	**24**
This happens occasionally	12	**11**
This happens frequently	5	**5**
This happens daily	7	**7**
Total	105	**100**

Table 96: Report Other Trail Use Problems

Other Problems		Count	Percent
Loud people after dark (n=1), Not Enough Parking for Trail Users (n=1), Other people telling me how to use my property (n=1), Possible collision with bike riders (n=1), Sitting on the b-line hills (n=1), Swastikas (n=1), Trail not finished yet (n=1)	This is never a problem	6	46
	This happens rarely	1	8
	This happens occasionally	0	0
	This happens frequently	4	31
	This happens daily	2	15
	Total	13	100

Trail Neighbor: Reported Benefits

Trail neighbors are also perceptive of the overall public benefits of trails. When asked to rate the importance of a series of potential benefits of having the trail to the community at large, the most important perceived benefits were varied in nature but similar to the results from the 2001 Indiana Trails Study. Tables 97-106 show how trail neighbors view these benefits.

In 2001, the top public benefits rated as Extremely Important were the preservation of open space, promotion of health and exercise, aesthetic beauty, community pride, and accessibility for people with disabilities. These top five remain unchanged for the 2017 Indiana Trails Study. The promotion of health and exercise was rated as Extremely Important by 61% and at least Somewhat Important by 94% of trail neighbors. Aesthetic beauty is Extremely Important to 60% and at least Somewhat Important to 91%; community pride is Extremely Important to 55% and at least Somewhat Important to 92%; preservation of open space is Extremely Important to 53% and at least Somewhat Important to 89%; and accessibility is Extremely Important and at least Somewhat Important to 91% to trail neighbors.

Table 97: Rating of Preservation of Undeveloped Open Space

	Count	Percent
Don't see any benefit	4	4
Not at all important	6	6
Slightly Important	1	1
Somewhat Important	14	14
Important	22	22
Extremely Important	54	53
Total	101	100

Table 98: Rating of Aesthetic Beauty as a Benefit

	Count	Percent
Don't see any benefit	4	4
Not at all important	3	3
Slightly Important	2	2
Somewhat Important	8	8
Important	23	23
Extremely Important	61	60
Total	101	100

Table 99: Rating of Community Pride as a Benefit

	Count	Percent
Don't see any benefit	3	**3**
Not at all important	3	**3**
Slightly Important	5	**5**
Somewhat Important	16	**16**
Important	18	**18**
Extremely Important	56	**55**
Total	101	**100**

Table 100: Rating of Traffic Reduction/Alternative Transportation as a Benefit

	Count	Percent
Don't see any benefit	8	**8**
Not at all important	6	**6**
Slightly Important	12	**12**
Somewhat Important	22	**22**
Important	21	**21**
Extremely Important	31	**31**
Total	100	**100**

Table 101: Rating of Tourism Development as a Benefit

	Count	Percent
Don't see any benefit	3	**3**
Not at all important	7	**7**
Slightly Important	7	**7**
Somewhat Important	28	**27**
Important	19	**19**
Extremely Important	38	**37**
Total	102	**100**

Table 102: Rating of Promotion of Exercise and Health as a Benefit

	Count	Percent
Don't see any benefit	2	**2**
Not at all important	4	**4**
Slightly Important	2	**2**
Somewhat Important	8	**8**
Important	24	**23**
Extremely Important	63	**61**
Total	103	**100**

Table 103: Rating of Accessibility for People with Disabilities as a Benefit

	Count	Percent
Don't see any benefit	2	**2**
Not at all important	4	**4**
Slightly Important	5	**5**
Somewhat Important	19	**19**
Important	23	**23**
Extremely Important	48	**48**
Total	101	**100**

Table 104: Rating of Nature/Environmental Education as a Benefit

	Count	Percent
Don't see any benefit	1	**1**
Not at all important	5	**5**
Slightly Important	8	**8**
Somewhat Important	25	**25**
Important	27	**27**
Extremely Important	35	**35**
Total	101	**100**

Table 105: Rating of Social Interaction (Gathering with Friends, etc.) as a Benefit

	Count	Percent
Don't see any benefit	1	**1**
Not at all important	5	**5**
Slightly Important	8	**8**
Somewhat Important	25	**25**
Important	27	**27**
Extremely Important	35	**35**
Total	101	**100**

Table 106: Rating of Nature Activities (Bird Watching, etc,) as a Benefit

	Count	Percent
Don't see any benefit	3	**3**
Not at all important	7	**7**
Slightly Important	11	**11**
Somewhat Important	24	**23**
Important	27	**26**
Extremely Important	30	**30**
Total	102	**100**

Figure 17: Spring snow on Cardinal Trail

Trail Neighbor Conclusions

The Trail Neighbor survey provides important data for determining the impact of trails on nearby property owners and neighborhoods and should inform trail managers and planners on how to route, manage, and maintain trails and how to engage trail neighbors to ensure not only their support but their use.

Trail neighbors tend to be heavy users of trails but use them differently from the general public. Trail neighbors walk more and use the trails for recreation and commuting more while the overall trail user group bikes more and uses trails for exercise and health reasons.

Neighbors are also very supportive of trails, even more so after they are built than in the planning stages. They view trails as positive influences on the quality of their neighborhoods and overall communities and expect increases in their property values and the ease of selling their property because of proximity to the trail.

Trail neighbors also have legitimate concerns about trail users and trail management. Littering, loitering, and noise are among the most commonly indicated problems and trail neighbors would like to see more safety patrols, better control of parking for trail users, and better response from managing agencies when problems are reported.

Conclusions

The 2017 Indiana Trails Study is an important follow up to the groundbreaking 2001 Indiana Trails Study. In the intervening 16 years, the miles of developed, operating trails throughout the state have more than tripled and trails are becoming not only much more common but desired and demanded by residents in communities of all sizes.

The 2017 study confirms finding from the 2001 Indiana Trails Study, documents changes in the behavior and attitudes of trail users and trail neighbors and add critical data collection regarding health behaviors and economic impacts of trails. Trails have significant impacts on individual and public health, physical activity and exercise habits, and add value in many ways to communities who build them.

While the trails in the study show many similarities across much of the data collected, there are differences that illustrate the unique characteristics of each community and trail. As such, the conclusions drawn from this study should be viewed in a broad context.

The amount of data collected through three different surveys and trail counters from eight locations across the state over a six-month period is extraordinary. The research team sincerely thanks the dozens of volunteers and participating trail partner managing agencies and friends' groups that assisted with the study.

This study was constructed not only to build on the 2001 Indiana Trails Study but to facilitate further research that continues to track the changes and impacts made by the development of trail networks well into the future. This research was also conducted to continue to inform trail planners and managers about the most important issues that they should be considering.

Recommendations

Recommendation #1- Trail designers, managers, and operators should focus on adding safety features such as additional safety patrols and better lighting to control trail conflicts and nuisance issues like littering and noise.

While crime is rarely reported as a problem on trails, conflicts can arise when bikers travel too fast in disregard of walkers and joggers. This problem may continue to increase since, as indicated by the trail user surveys, bike use is on the rise. Both trail users and trail neighbors report problems such as littering, excessive noise, and graffiti. Additional safety patrols can enforce speed limits and mitigate conflicts between bikers and other users. Both patrols and more lighting can discourage inconsiderate or destructive behavior and create a safer trail environment.

Recommendation #2- Ensure that trail operators provide for good quality maintenance and provide adequate facilities such as drinking fountains and restrooms.

Figure 18: Interpretive Panel on the Erie Lackawanna Trail

Trail maintenance and access to facilities were identified by trail users as their top two concerns and trail maintenance issues are also of concern to trail neighbors. Proper maintenance and amenities make the trail both more pleasant and safer to use, reducing potential injuries and liability, and attracting more people to the trail.

Recommendation #3- Trail managers should engage with both the public and trail neighbors to keep them informed of safety plans and of the benefits of trails and utilize data that confirms that trails are safe and provide benefits to communities that build them.

Public support for trail development can be difficult to gain, particularly from people whose property may be directly impacted by the construction of a new trail. As shown in both the 2001 and 2017 Indiana Trails Studies, property owners are more supportive- almost universally supportive- of the trails that run adjacent to or near their property and more so after a trail has been built than before. Trails are also proven to be safe environments, offer significant health benefits, have positive impacts on the value of nearby property, and are economic generators for their communities. Armed with data from studies such as the Indiana Trails Study and plans to mitigate concerns that adjacent property owners and the community at large have, trail planners should be able to better engage community residents and build support.

Recommendation #4- Trail planners and managers should maximize exposure for trail users to natural scenery and pleasant outdoor experiences, even on urban trails.

The data is clear that the most popular reasons why trail users are active on trails instead of using other exercise or recreation facilities is because of their access to nature and the outdoors. Planting trees, developing wetland areas that attract birds and other wildlife, and routing trails through or past preserved natural areas are all important, not only for creating a cleaner environment, but for encouraging and rewarding trail use.

Recommendation #5- Trails should be purposefully routed through or near residential neighborhoods.

As the Indiana Trails Study and many other studies have shown, physical activity is increased when neighborhood residents have access to trails (Richardson, Pearce, Mitchell, & Kingham, 2013). Over 80% of respondents in the Trail Neighbor survey indicated that they use their neighboring trail, confirming that those who live in close proximity to and have easy access to trails are more likely to use them. Sometimes trail corridors are available that are convenient but planners of community trail networks should also intentionally seek out trail routes because of their effectiveness as well.

Recommendation #6- Trails should be purposefully routed through or near lower socioeconomic neighborhoods.

Demographic data collected both the 2001 and 2017 Indiana Trails Study (and many other studies) show that trail users tend to be of higher socioeconomic status. Residents of lower socioeconomic neighborhoods tend to be less active, typically have less access to recreation facilities, and avoid outdoor physical activity because of perceptions about safety (Wilson, et. al., 2004) than residents of middle and higher socio-economic neighborhoods. They also are less trusting of government and participate less in civic processes making them less likely to ask or lobby for amenities like recreation facilities (Nath, 2012, Bartels, 2003). Access to well-lighted, well-patrolled trails improves access, physical activity, and health levels in these neighborhoods. Enough data exists to support this that civic leaders should be intentional about including lower socioeconomic neighborhoods in trail and recreation planning.

Recommendation #7- Trails should be routed to connect residential and business districts and retail development along trails should be encouraged.

With an average expenditure of almost $3600 per trail user on trail related expenses, the economic benefits of trails to a community are clear. Connecting residents and business and encouraging business growth along trail corridors can only increase the economic benefits that trails provide. Given the fact that a fairly low number of trail users use the trail for commuting, trail planners should examine their trail networks to ensure that community residents are able to take trails to where they want to go, either for work or for shopping and entertainment.

Recommendation #8- Community leaders and trail planners should more actively promote trails as tourism vehicles and route trails past or near existing or potential tourism attractions.

Much of the spending on by trail users, as evidenced by the relatively high amount of spending on transportation (including lodging) to and from trails, is done by tourists and other visitors. The 2017 Indiana Trails Study measured increases in biking on trails, longer distances and more time spent on trail visits, as well the number of users travelling longer distances to use the studied trails- suggesting that people are travelling specifically to use a particular trail- and a significant amount of spending by trail users. Planning future trail networks that take visitors to known and future attractions and promotion of trail networks to tourists should encourage these numbers to increase even further, creating a significant economic impact from tourism.

Recommendation #9- Local trail managers should regularly conduct their own research into trail usage to better understand usage patterns, trail management concerns, the impacts of trails on their communities.

There is a growing body of research, including the 2017 Indiana Trails Study, to support the impact and benefits of trails. This research, however, should be taken in aggregate and should be a starting point for local trail managers. While 'global' views of trail benefits and issues are helpful, every community trail is unique. Local trail managers should conduct their own research on a regular basis to determine local usage patterns, needs, preferences, and concerns, not only to better determine how to plan and manage their trail networks, but to understand how to engage their communities to maximize support of trail development. Both the 2001 and the 2017 Indiana Trails Studies were conducted in conjunction with local trail management agencies using local volunteers to help collect data. These studies should help establish a model for other local agencies to follow in conducting their own research.

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