

Multiuse Trails: Benefits and Concerns of Residents and Property Owners

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Abstract: Multiuse trail development has experienced rapid growth in the United States and many other countries. These trails are said to benefit local residents and stimulate economies, and in some cases are they are tourist attractions. Previous research explained many aspects of user dynamics and how trails benefit a community in general, but literature on the residents and property owners adjacent to trails is limited. However, this group is potentially affected more than other residents by trail development due to their proximity to the trail. Therefore, this exploratory case study focused on the benefits and concerns of those living and owning property adjacent to a trail. Many benefits commonly reported by general trail users were experienced by this study's sample; however, the additional benefits of convenience and access, scenic views, and an enhanced social life were also revealed. While numerous benefits were uncovered, few concerns were voiced and often very individualistic. Differences in benefits and concerns were noted between respondents when characteristics such as trail use, land use, and time of ownership were evaluated. Findings provide constructive information for trail planners, managers, land developers, residential real estate professionals, and urban/rural-focused researchers. DOI: [10.1061/\(ASCE\)UP.1943-5444.0000124](https://doi.org/10.1061/(ASCE)UP.1943-5444.0000124). © 2012 American Society of Civil Engineers.

CE Database subject headings: Urban areas; Planning; Recreation; Rural areas; Real estate properties; Owners.

Author keywords: Multiuse trails; Recreational planning and development; Urban and rural infrastructure; Quality of life.

Introduction

The need for recreational opportunities in nearby natural settings has increased as individuals have more demands on their time (Moore and Ross 1998), and multiuse trails provide an accessible venue to meet these needs. Although the term trail may refer to paths for specific uses such as hiking, biking, or horseback riding, this paper focuses on multiuse trails, sometimes called greenways, linear parks, or rails to trails when converted from abandoned railway beds. Unlike customary hiking trails found in more remote natural settings, multiuse trails are: (1) usually closer to urban population centers; (2) often paved (Lee et al. 2002); (3) wider than sidewalks or hiking trails (Lindsey and Nguyen 2004); and (4) more accessible to diverse populations, such as families, bicyclists, runners, skaters, parents with strollers, and wheelchair users (Shafer et al. 2000a).

Due to their positive health implications, recreational opportunities, economic development, and environmental conservation, multiuse trails (hereafter referred to as trails) are increasingly popular and have been referred to as corridors of benefits (Moore and Ross 1998). In 2011, the United States had 1,683 trails that provided 31,981 km for use, and Indiana had 43 trails for a total of

325 km (Rails-to-Trails Conservancy 2011). With the number of trails on the rise, the need for a deeper knowledge of trail systems is mounting. The deficiency in trail research is especially noticeable regarding residents and property owners adjacent to a trail (RPOs). Research on RPOs is scant, and the focus of this study is to identify the benefits and concerns that come with living or owning property adjacent to a trail. The RPOs can be very different from one another, and these differences may influence the benefits and concerns they experience. This article will review the current trail research highlighting the major topics and then discuss the importance of this study. The study location and methodology is presented next, followed by the findings and conclusion, including ideas for future research.

Review of Literature

Generally speaking, most trail research has focused on trail user dynamics (Lee et al. 2002; Troped et al. 2001). Research has explored a number of topics including physical fitness, economic health and benefits, commuting, and place attachment just to name a few.

Physical Fitness

The most common use of trails is for fitness and recreation (Lindsey and Nguyen 2004). Some trail users participated in their recreational activity simply because a trail existed nearby (Chancellor et al. 2008). This is similar to other trail studies, which found that activity levels increased in communities with trails that are primarily used for physical fitness (Gordon et al. 2004; Librett et al. 2006).

Economic Impact

Methods used in calculating the economic benefits of trails vary. With this caveat in mind, trails seemed to increase both the local

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Note. This manuscript was submitted on February 11, 2011; approved on February 29, 2012; published online on March 3, 2012. Discussion period open until May 1, 2013; separate discussions must be submitted for individual papers. This paper is part of the *Journal of Urban Planning and Development*, Vol. 138, No. 4, December 1, 2012. © ASCE, ISSN 0733-9488/2012/4-277-285/\$25.00.

tax base (Crompton and Nicholls 2006) and income of certain businesses (Bowker et al. 2007; Lindsey et al. 2004; Siderelis and Moore 1995) and decrease community health care costs (Wang et al. 2004).

Commuting

Trails used principally for commuting (bicycle or pedestrian) are generally not a main research focus (Lindsey et al. 2001; Shafer et al. 2000a; Southworth 2005). However, commuting on trails may have a positive influence on both individuals and communities. Commuting is environmentally friendly, aids in increasing resident physical fitness, and increases land use efficiency since the land is being used for multiple purposes (Shafer et al. 2000b; Southworth 2005).

Natural Environment

A trail's relationship to the natural environment has received very little attention. Although a trail's environment and users' appreciation level differs with each trail, the surrounding environment is often cited as a high source of satisfaction to users (Gobster 1995; Lee et al. 2002; Siderelis and Moore 1995). Studies have reported that living near a trail increased residents' quality of life perhaps due to the perception that trails improve an area's environment and beauty (Shafer et al. 2000a, b).

Place Attachment

Residents living closer to a trail tend to have higher attachment levels to the trail, and the frequency of use is positively correlated with greater place attachment (Moore and Scott 2003; Moore and Graefe 1994; Todd and Anderson 2005). Perception of benefits and place attachment (Todd and Anderson 2005) were found to be higher for users who connected an importance to a particular activity on the trail (Moore and Scott 2003). Moore and Scott (2003) noted that walkers, bikers, and runners had similar attachment levels, which were all higher than those of inline skaters.

Attitudes

It has been suggested that initial attitudes of RPOs can predict their future trail satisfaction (Moore et al. 1994). The announcement of a new trail commonly brings initial concerns to some RPOs (Kaylen et al. 1993), with most seeking further information on planning and management intentions, but often their attitudinal concerns are linked to the manner that they first heard about the trail plan (Parker and Moore 1998). However, Kaylen et al. (1993) found that most neighbors reported positive to neutral changes in attitudes between presurveys and postsurveys because they had become acquainted with trails and earlier concerns did not materialize.

Property Values and Salability

Literature on this topic is inconclusive as the effects of trails on property value range from no effect to increased value (Lindsey et al. 2004; Nicholls and Crompton 2005; Wolter et al. 2001). With regard to property value and salability, Crompton (2001) concluded that the buyer and the trail are the two most significant components. However, property salability was positively affected by a nearby trail (Crompton 2001; Lindsey et al. 2004; Wolter et al. 2001).

Trail Use

Walking, biking, running, and inline skating are common physical activities by trail users. Most trails are primarily used for physical fitness, and individuals concerned with fitness find trails more important than do other users (Librett et al. 2006). The RPOs are more likely to use a trail as an exercise venue than individuals living further from the trail (Librett et al. 2006; Pierce et al. 2006). Trail activities vary according to the physical characteristics and management of a trail (Shafer et al. 2000a). Lee et al. (2002) found that personal commitment to a specific trail activity can predict trail motivation or the desired benefit that users seek. The most important trail motivators are exercise, enjoyment, relaxation, environmental appreciation, independence, and solitude with implications that trail activities have a positive effect on family time, friendship, ability to exercise, and skill development (Lee et al. 2002).

Constraints to Trail Use

There are two main types of constraints to trail use: actual and perceived. Researchers have discovered that actual constraints may not be as important to overcome as perceived constraints (Brownson et al. 2000; Pierce et al. 2006). Other factors that can influence trail usage include vegetation, trail type, maintenance, management (Gobster 1995; Lindsey et al. 2006), and safety (Gordon et al. 2004; Luymes and Tamminga 1995; Troped et al. 2001).

Concerns of Living near a Trail

Concerns mentioned by RPOs often have to do with privacy, trespassing, and liability (Kaylen et al. 1993). The most frequent problems cited include cars parked on private property, unleashed dogs, dog waste on their property, and damage to property (Moore et al. 1994; Wolter et al. 2001). Studies suggest that many of these concerns are never realized (Kaylen et al. 1993; Moore et al. 1994; Parker and Moore 1998). Moore et al. (1994) suggested that trail officials should create relationships with RPOs before a trail is built and then continue the relationships to address and then limit problems.

Importance of the Study

This research may benefit the growing number of municipalities that are constructing and managing trails in the interest of increased public health, improved quality of life, and economic development. However, not all community residents are in favor of trails, particularly those who live near proposed trails. Community residents who feared loss of privacy and negative impacts from increased area traffic have stopped trail projects entirely (Smith 1997). Therefore, it is important to understand the benefits and concerns of those who own property and/or live adjacent to a trail in order to provide accurate information regarding a trail's effects on community residents.

Trail research has not been widely published in planning journals, and in a 2004 *Journal of Urban Planning and Development* article, Lindsey and Nguyen (2004) suggested that there is a dearth of trail data and that more information is needed to aid trail planners and developers. Beyond planning journals, few articles focus on RPOs and their relationship to adjacent trails.

Strategically, there is a need to distinguish RPOs from other community members as their proximity to a trail may mean they have a different relationship with a trail than individuals living further away (Gobster 1995). Some residents choose to live or work near public open spaces, such as trails, so it is important for them to

understand what owning property adjacent to a trail may mean as RPOs are more likely to be influenced by the trail than other residents (Librett et al. 2006). Therefore, this study seeks to identify and explain the benefits and concerns of those living or owning property adjacent to a trail. Research questions were designed to increase the understanding of benefits and concerns of RPOs: (1) what benefits and concerns do RPOs receive from the trail; and (2) do differences between RPOs affect their benefits and concerns? Differences referred to land use, i.e., residential or commercial; time of ownership, i.e., did they own the land before or after trail construction; the type of trail, e.g., paved or unpaved; their personal use of the trail; and the configuration of adjacent property.

Methodology and Study Location

A purposeful sample was used for this exploratory case study as subjects were selected due to their property's proximity to the Bloomington Rail Trail or the Clear Creek Trail in Bloomington, IN. The Bloomington Rail Trail, created in the early 1990s, is an unpaved 4.8 km former railway bed maintained by the city (see Fig. 1). The Bloomington Rail Trail is known for its shaded paths and dense surrounding growth, which are two reasons people often use it. Even before the trail was officially designated, many people used it for a variety of recreational activities. Because some of the adjacent land lies in a flood plain, portions are undeveloped, and property owners enjoy open natural views (see Figs. 2 and 3).

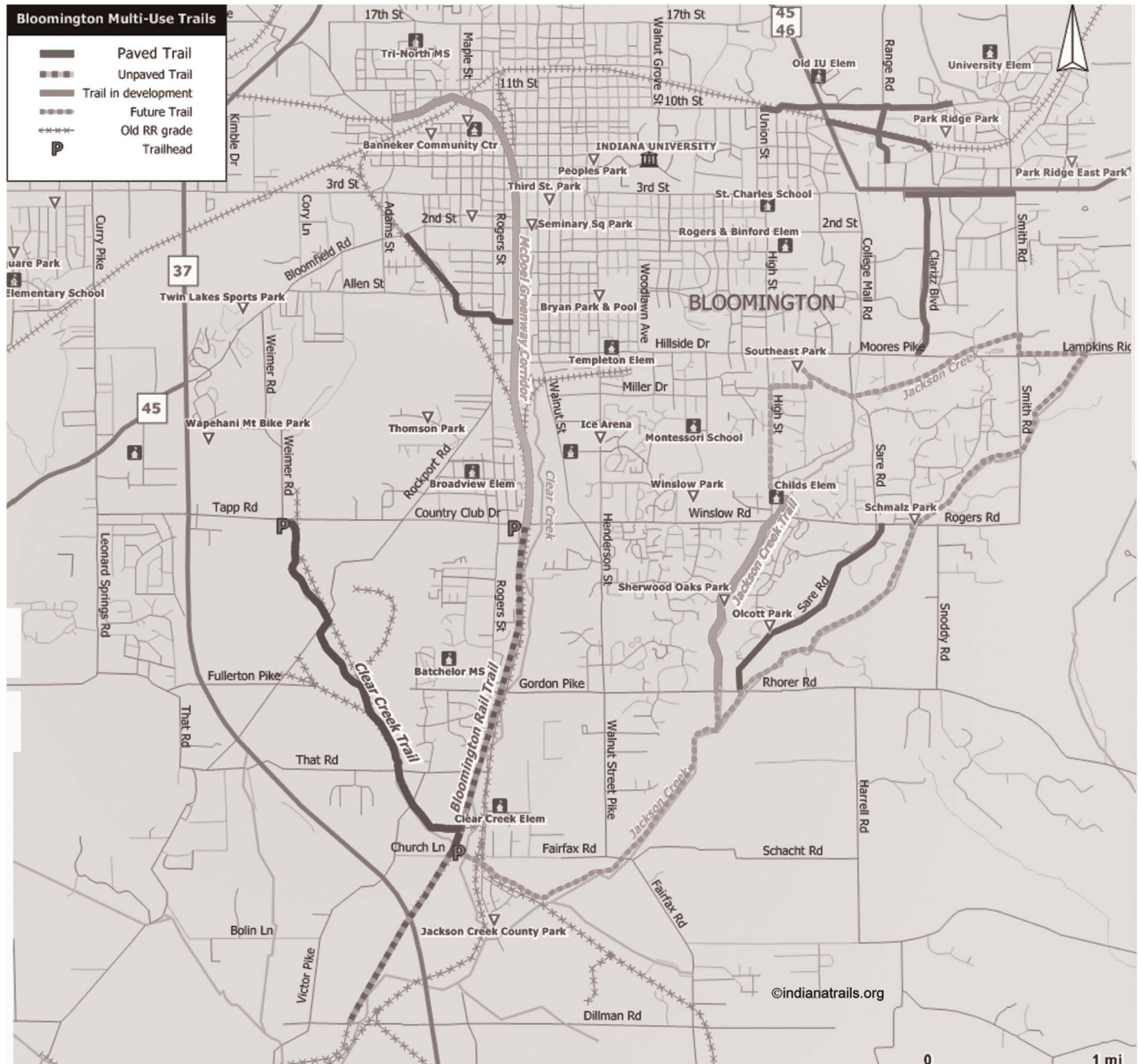


Fig. 1. Clear Creek Trail and Bloomington Rail Trail at time of study; map retrieved from http://www.indianatrails.org/main_map_files/bloomington.pdf used with permission from the Greenways Foundation

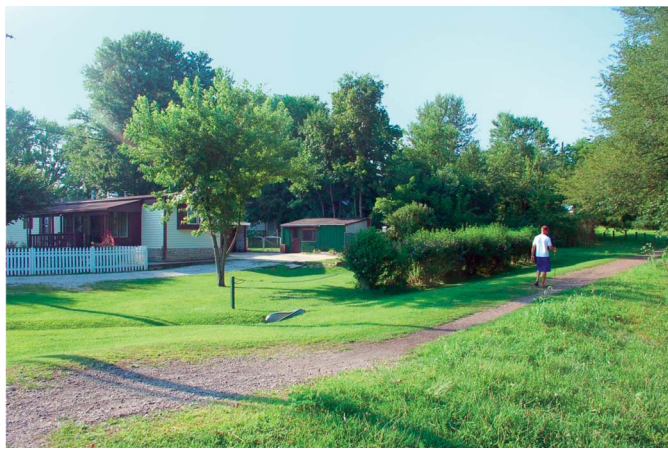


Fig. 2. Bloomington Rail Trail: residential property



Fig. 4. Clear Creek Trail: residential property



Fig. 3. Bloomington Rail Trail: commercial property

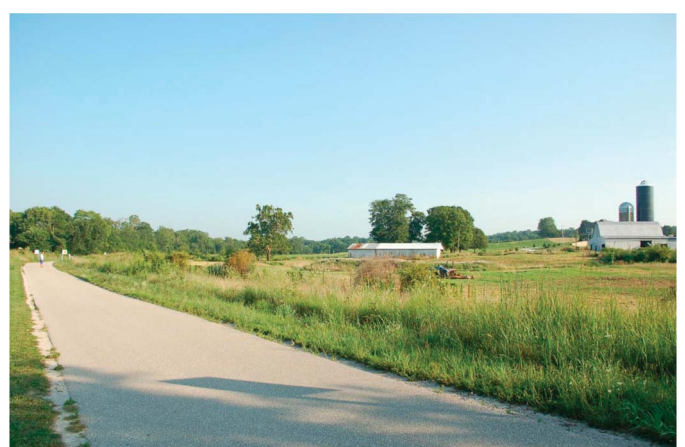


Fig. 5. Clear Creek Trail: commercial property

The Clear Creek Trail is considered an integrated utility greenway (Southworth 2005) because the 3.7 km of trail were constructed over a sewer line the city completed to facilitate residential development (see Fig. 1). This trail, finished in 2003, receives considerably more use and has many more amenities, including pavement, bathrooms, multiple access points with parking, trash cans, and benches. As with the Bloomington Rail Trail, many places along this path are in a flood plain so they are undeveloped, leaving open rural views (see Figs. 4 and 5). In addition, some land continues to be used for commercial agriculture and other businesses.

Approximately 67 private landowners (Lindsey and Nguyen 2004; Wolter et al. 2001) owned the roughly 140 lots that adjoined these trails. The landowners were identified using land ownership records available on the local municipality's website. Landowners with both publicly known addresses and telephone numbers were then contacted via postcard, followed by a telephone call. Consenting owners were then interviewed and data were collected until saturation was reached.

A total of 29 interviews were conducted with RPOs, and each interview was transcribed and coded in an ongoing process to find emerging themes from field notes, audio recordings, and/or video recordings based on participant consent. Three of these interviews were not used as upon further investigation, their properties were not actually adjacent to the trail. Of the 26 usable interviews,

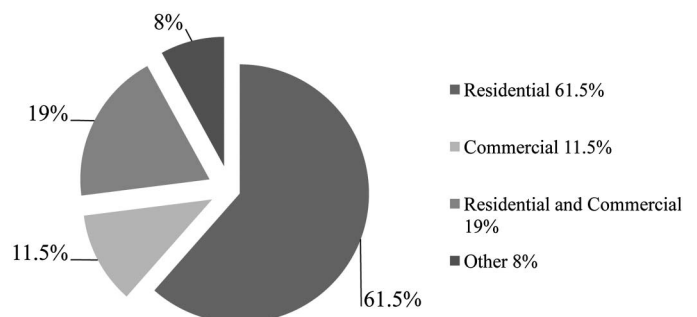


Fig. 6. Types of landowners interviewed

37 properties were represented. As illustrated in Fig. 6, most properties were residential, while Fig. 7 indicates that 50% of the interviews owned properties only adjacent to the Clear Creek Trail.

Demographically, most participants were Caucasian, and the vast majority of residents were married. There was a wide age range from young couples with young children to retirees. The RPO families were interviewed rather than individual family members so parceling out gender-related data was not possible. Respondents were grouped on four factors: (1) land use, i.e., residential (single

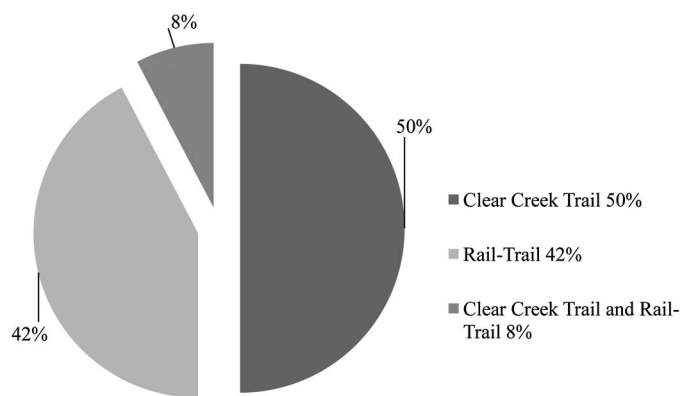


Fig. 7. Adjacent trail of those interviewed

family), commercial, and other (churches and nonprofit); (2) time of ownership, i.e., did they own the property before or after the trail was built; (3) type of trail they were adjacent to; and (4) their trail use. These factors were chosen due to their potential to affect the benefits and concerns of RPOs.

Findings

This section explains the 26 coded interviews regarding: (1) the benefits and concerns of RPOs as illustrated in Table 1; and (2) how differences in landownership and land use affected these benefits and concerns. Observed patterns will be discussed as well as implications for future research.

Benefits

Based upon a review of the literature, some benefits were expected, including physical fitness, property value and salability, and commuting. However, unanticipated benefits were revealed, including convenience and access, scenic views, buffer against development, and social aspects of the trail.

Convenience and Access

Convenience and access were found to be the most important benefits for RPOs as without them, they would not receive as many of the other benefits associated with actual trail use. Convenience is understood to be the opportunity to use the trail at any time, while access is the availability to reach the trail. Convenience and access

Table 1. Number of Interview Sessions that Mentioned Specific Benefits and Concerns

Topic	Number of interview sessions in which topic was mentioned
Benefits	
Convenience and access	16
Physical fitness	19
Property value and salability	8
Social benefits	8
Natural environment	9
Commuting	6
Recreational	2
Concerns	
Noise	1
Trespassing	1
High trail use	1
Dogs: being off leash/waste	3

are interrelated because often people want to participate in trail activities immediately and conveniently as opposed to driving to an access point.

Access to both trails is fairly restricted with limited to no public access points in most adjacent neighborhoods, and general community access is only available from major roads. It was observed in one newly developing neighborhood that most of the lots adjacent to the trail were developed, while across the street there were many available lots. A resident pointed out that due to a lack of neighborhood access points, being across the street would mean a drive to an access point (active young couple with small children, Clear Creek Trail).

Increasing public neighborhood access may decrease personal trespassing issues and reduce liability for those who allow access to the trail from their private property. Access from neighborhoods could also increase trail use and physical activity of all residents of a neighborhood, and not just for the few adjacent property owners. Safe, available, and convenient access to the trails was found to be very important and suggested often by respondents.

Convenience and access were reasons some respondents were willing to pay more for their adjacent lots. The specific distance of a home to the trail did not seem to matter as long residents had access to it. Gobster (1995) found that the proximity of a trail to someone's residence influenced how often he/she used the trail; however, this study's respondents indicated that access is more important than proximity.

Physical Fitness

Physical fitness was the most commonly articulated benefit of the trail itself. "[The] biggest benefit of the trail is the exercise . . . [it is] the only use of the trail for us" (a mother who did not like the trail, Bloomington Rail Trail). An active young couple with small children on the Clear Creek Trail also commented, "[The trail] motivates me to get out there [and exercise] . . . It's good motivation both from seeing the people, but it takes out a few barriers-time, and stuff like that, to get out there as well." Physical fitness was often the biggest change for owners in association with the trail. Consistent with their appreciation of convenience, a number of neighbors saw an increase in their activity levels because of the trail and believed their trail use would not be the same if they moved, thus acknowledging that living adjacent to the trail has made a significant difference in their exercise routine. One active retired couple along the Clear Creek Trail commented, "We're doing more exercising than we ever have . . . he'll come home and [want] to walk . . . rather [than] sit and watch TV . . . we'll go out and walk the trail because it's here." These findings are in line with other literature addressing trails and fitness (Chancellor et al. 2008; Lindsey and Nguyen 2004).

Property Value and Salability

A few respondents suggested that the trail might increase property values, while others thought property values were unaffected by trails. Some of the landowners along the Clear Creek Trail believed they paid more for their lot along the trail but were not sure this trend would continue once all the surrounding homes were built. These neighbors suggested that although they may not recoup the cost when they sell their home, the adjacent trail would enhance salability. One woman who lets other people access the trail from her property said, "Judging from the fact that a lot of my neighbors go through my yard to get to the trail, it's a big selling point" (mother and trail user, Clear Creek Trail). The potential increase in salability influenced how landowners believed they would market their property when selling it. Most thought they would post for sale signs near the trail and not just in front of their home. One owner said, "I think we would definitely have it in the listing that

it was adjacent to the trail because I think it would draw people" (mother of an active trail-using family, Clear Creek Trail).

Though most RPOs agreed that access to the trail was important to the salability of their property, comments regarding property value and salability were also related to the scenic views, natural environment, and location. One owner said, "I've got my view and the peace and the quiet" (grandparents and active users of the trail, Clear Creek Trail). The trail also provided a buffer zone against other developments or neighbors as one mother and trail user along the Clear Creek Trail explained: "What [the trail] does is it separates us from building, so you don't have a lot of neighborhood encroachment coming up.... it's a division with a pretty big gap." Crompton (2001) identified the presence of a trail as one of the two factors, the other being the buyer's wants, which seemed to increase the salability of property near a trail. These two factors were also consistently found in this study. Landowners, including nonresidential owners, were not sure if property value would increase, but the majority thought salability would.

Social Benefits

The social benefits of living on the trail were many and contributed to RPO quality of life through improved family relationships, increased friendships, and new neighborhood relationships. The trail was often cited as a great place for families to spend time together and talk. One mother and trail user of the Clear Creek Trail said, "We get to walk and bond together as a family... away from video games and iPods and whatever else can be distracting. It's a nice, quiet experience."

The trail was also a place for children to learn new skills and for family leisure. "We always have a blast when we take all the kids [and grandkids]... The kids love it. The kids absolutely love it" (grandparents and active users of the trail, Bloomington Rail Trail). One mother even found it a great way to save money: "Unlike going to the movies or out to have a meal, you can do it together as a family because the price is wonderful" (avid runner and user of the trail, Clear Creek and Bloomington Rail Trail). Unexpectedly, the trail was also found to benefit family visitors as they also wanted to walk the trail: "Yeah, we've gone out on walks. But it's usually when we have company, like out-of-town family" (couple who moved for trail access, Clear Creek Trail).

Other residents discussed that the trail was both a good neighborhood feature and good for the development and cohesion of the neighborhood. It provided a place for neighbors to meet, socialize, and foster a sense of community. Trail users would stop and socialize across the fence with RPOs who were out in their yard. This allowed neighbors to make new friends, some even referred to them as trail friends, or people that they only saw on the trail but who were now a part of their social life. Sometimes the trail was also a meeting venue for friends to gather or as a way to connect people. One couple with a business and home along the Bloomington Rail Trail explained that their kids used the trail to visit friends and that the trail filled a niche for kids due to the lack of sidewalks.

The social aspect of the trail proved much more significant than previous literature implied. People sought the trail for their own family time, to make new friends and connect with existing friends, and as a great venue for neighbors to converse. Residents that are not adjacent to a trail can experience many of these social benefits, but benefits seem to be intensified by being adjacent to the trail.

Natural Environment

The semirural location of the trails provided an opportunity for interaction with the natural environment, which, along with the social benefits, appeared to enhance the respondents' quality of life. This finding is in line with Shafer et al. (2000a) who found that the natural environment contributes to individuals having a higher quality

of life. A mother of an active trail-using family explained that her kids would dialogue and open up more on the trail where there were fewer electronic distractions.

Many people had a hard time recognizing the natural environment as a separate benefit, though it was often talked about within an interview. The RPOs found natural benefits from observing the creeks that flow beside both trails, seeing plants and animals, and experiencing the views associated with semirural open areas. Many mentioned enjoying this benefit themselves and also desiring it for their children. A mother, whose children are now grown, remarked how the trail was really an extension of their yard, and that her kids had enjoyed playing and exploring the natural area.

Moore and Ross (1998) suggested that trails support preservation, environmental education, and reduce the extent of natural phenomena such as flooding. The trails provided a fun, experiential, interactive learning environment for children. "So nature benefits. I think [the trail is] good exposure for the kids. And I always try to point things out that I notice... Oh look, we've got these out here; this kind of bird" (mother of an active trail-using family, Clear Creek Trail). Some of the business owners along the trail considered the natural environment an advantage. One business owner was considering adding a small coffee shop where people could sit and enjoy the scenery.

Commuting

Using the trail as a transportation route for bicycle or pedestrian commuting was not often mentioned. Both trails are on the outskirts of town and while they connect subdivisions, interviewees explained that currently neither trail connects to shopping, entertainment, or employment districts. One landowner looked forward to the future trail as a convenient way to access downtown activities and events by bicycle with her family, which would eliminate dealing with traffic. Shafer et al. (2000a) suggested that municipalities should be leery of making trails just for commuting purposes as other trail benefits and usage are more important to the community residents. This study confirms this idea with respect to RPOs.

Recreational

The RPOs reported a wide array of trail-related potential recreational activities, including dog walking, bicycling, and visiting friends. Other potential recreational activities on the nonpaved Bloomington Rail Trail included running, enjoying nature, horseback riding, and picking berries. The Clear Creek Trail offers all these activities except horseback riding. Because the Clear Creek Trail is paved, it also allows people to use scooters, strollers, skates, and other wheeled devices. This mix of recreational activities accommodated a greater number of users who had a variety of motivations for trail use, including physical fitness, social connections, and enjoying the outdoors.

Frequently, as was seen with nature benefits, respondents had a hard time separating recreational benefits from other benefits. It is hypothesized that respondents viewed recreation as a conduit to other benefits. For example, biking with the family was discussed as a form of family bonding but not recreation. Because individuals have more demands on their time, the need for recreational opportunities in close natural settings not only increases, as stated by Moore and Ross (1998), but it also shifts; recreation becomes a way to multitask. Thus, recreation is often a subbenefit that is received but not necessarily recognized.

Concerns

To fully comprehend the benefits RPOs receive, their concerns are also important to understand. Overall, few concerns were discovered, and the ones mentioned were not major issues. "No. All I see

is positives,” said one owner (mother and trail user, Clear Creek Trail); the majority of respondents shared her opinion.

One person’s concern was another person’s benefit. Regarding the number of people on a trail, some thought high trail use hindered privacy, while others thought it improved safety. Similarly, some respondents thought noise was a concern, while others thought it contributed to a safer environment. Some concerns were expressed as more of an annoyance than a source of real concern; for instance, some RPOs suggested that the trail was not mowed often enough. The most universal concern was dogs being off the leash and that many owners did not clean up their dog’s waste.

According to the respondents, very few trespassing, vandalism, or other types of public nuisances have occurred on the trail. One business owner stated, “We’ve had some, not necessarily vandalism, but we’ve had some things stolen. But I don’t think it’s any more prevalent because of the trail. Just normal” (business owner and nontrail user, Bloomington Rail Trail). Trespassing issues seemed to be related to the lack of neighborhood access to a trail. However, an increase in access points does concern some neighbors who fear that people would park in their neighborhoods or be more prone to trespass. Only one landowner, whose home was built prior to the trail, expressed adamant concerns with the trail. She felt it was unsafe, and it kept her continually on alert because people did trespass across her yard to access the Bloomington Rail Trail. In general, most people did not have problems or concerns with living adjacent to a trail, regardless of their level of trail use. However, the concerns documented were found to be very personal and often related to specific negative experiences.

Consistent with other studies, many RPOs had initial concerns with the trails but their fears of trespassing, litter, and noise were not realized (Kaylen et al. 1993; Moore et al. 1994; Parker and Moore 1998). The RPOs indicated that they were not personally informed about plans to build the trail, and most stated they learned about city plans from media sources as public participation forums were never conducted. Moore et al. (1994) suggested that city, park, and natural resource officials create relationships with RPOs to help limit and address problems. Sharing information can often help to bring understanding to even the biggest concerns like dog waste on the trail. Explanations, such as the scat often seen on the trail is from wild animals that live in the area, can often help to eliminate and foster understanding of concerns for RPOs.

Differences between RPOs

Originally, only two potential characteristic differences between RPOs were analyzed: property type and time of ownership. However, two additional variables emerged: (1) the specific trail; and (2) whether or not the RPO was a trail user. Differences in benefits and concerns were noted based upon these characteristics, but no noticeable differences emerged based upon demographics.

Property Type

Land use along the trails was primarily residential, with a few commercial establishments, including agricultural, and churches (see Fig. 6). Residential owners valued the trails more than business or other property landowners because of their use of the trail. The RPOs had common benefits even among nonusers as they found trails to be positive for them, their families, and the larger community.

Commercial properties were often not affected by the trail and owners were indifferent to the trail’s presence. One exception was a couple that owned a home and a horseback riding business along the trail. They believed the trail was great for their business as it offered free advertising even with no signs and a place to walk their horses. Both trails are considered semirural trails, and none of the businesses located near them catered to trail users or advertised

along the trail. Some thought the trail might increase salability of their properties but that would be highly dependent upon the type of business that would replace their own. Employees were not found to use the trail for commuting or exercise though often this information was not known to employers. Generally, for commercial properties, benefits and concerns were quite limited, most likely because of the more rural character of both trails and the nature of the businesses, which were mostly light industry.

Representatives of two churches were interviewed and explained that their members used the trail for fellowship activities. Generally, church representatives did not find any real benefits or concerns associated with neighboring trails. The churches, like some businesses, made it clear that trails may bring benefits to a whole community but are not equally valued by every RPO.

Time of Ownership

Time of ownership did have an effect on the benefits and concerns experienced by residential owners. Just over half of the respondents owned land before a trail was built. This group was usually excited about the benefits they would receive after the trail was completed. An active set of grandparents commented that they had been excited when they realized the trail was going to be adjacent to their backyard as it would motivate them to jog, walk, and bicycle.

Those who had lived along the old railroad line before the building of the trail found the Bloomington Rail Trail to be preferable to the train primarily because the trail was much quieter. Some long-time owners felt the trails were forced upon them, though after the trail was built, many did not have problems with the trail. This shift in attitudes was also reported by Kaylen et al. (1993) as concerns between presurveys and postsurveys diminished as respondents became acquainted with trails.

Most residents who purchased property after the trail was completed lived along the Clear Creek Trail and were frequent users of the trail. Many had concerns initially but those concerns never materialized. Families who built on the trail seemed to know and desire the benefits. Three families were found to have moved to their new homes specifically because of the trail. They were active families who had used trails before and wanted to live near the trail for convenience and access. Almost all postconstruction residential neighbors reflected the comments given by a respondent who said, “[We] bought the lot because it’s on the trail” (daily walker who moved for the trail, Clear Creek Trail). Most of those who bought their land after the trail was built thought the trail would be a bonus to their lot but it was not the deciding factor in buying.

Time of ownership did not affect the churches or commercial property. One business owner, a home developer along the Clear Creek Trail did not think the trail affected his business, the homes he would build, or his profits. In the end, pretrail and posttrail construction neighbors received the same benefit; nevertheless, these neighbors should be viewed separately when trying to address concerns as they are found to appreciate the trail for different reasons.

Trail Type

Differences between the two trails appeared to affect RPO benefits and concerns (see Fig. 7). For instance, landowners on the Bloomington Rail Trail appreciated the more natural feel and less traffic, while the others appreciated the more extensive amenities of the Clear Creek Trail. Though differences between the trails affected some RPO experiences, they also helped to validate benefits and concerns that were consistent to both sets of trail neighbors, such as access and increased physical activity.

Concerns also differed with the two trails and one group’s concerns were another group’s benefits. Before the Bloomington Rail Trail was converted from abandoned tracks, many people found safety to be a big concern, but establishing the trail helped to limit

unwanted activity, such as trespassing, and made landowners more willing to tolerate other concerns introduced by the trail. The Clear Creek Trail RPOs had a similar experience with the noise of users being a concern, while others thought the noise provided a feeling of safety. A trail can encourage use by its unique amenities and characteristics, but these were found to be very subjective and dependent on what the user is seeking. This information confirms findings reported by Shafer et al. (2000a).

Trail Use by RPOs

Trail users were very consistent regarding benefits and concerns, and they believed the benefits outweighed the concerns. Most non-users were not residential landowners, and their answers were much more varied, ranging from supportive to apathetic to opposed to the trails. One nontrail-using business owner did not understand why there would be opposition: "If somebody wants to ride bikes through here . . . or just look at the birds, you know, why would you want to keep somebody from doing that? But do I want to go . . . ? Hell no, I've got better things to do." For nonusers, the trails brought fewer benefits and concerns.

Property Configuration

Property configuration was taken into account to make sure that information gathered was related to the trail and not to the surrounding land in general. Guided grand tour questions were asked during the interview process concerning house distance from the trail, backyard developments, and fencing. Distance of a home to the trail did not seem to matter in relation to use or benefits.

"People have asked us, 'Doesn't that bother you that the trail is there?' And we said, 'Why should it? . . . it's not an extended visit by any means; they just drift by'" (grandparents and active users of the trail, Clear Creek Trail). This idea that people on the trail just kept moving was a common observation among many neighbors, and that fact made RPOs less influenced by trail users. Some even shared that they liked the opportunity the trail gave them to people-watch. An active young couple with small children who lived on the Clear Creek Trail said, "We get people-watching privileges, I guess. We can sit up here and see the town go by and also see our friends and talk over the fence, and stuff like that."

Properties, in most cases backyards, were found to sometimes affect benefits and concerns. There were hints that the trail might even affect how owners develop their property, such as with fences. Backyards were often viewed in many different ways. Some saw them as "a cut-through . . . We cut through the backyard to get to the trail" (mother of an active trail-using family, Clear Creek Trail), while others found the trail to be extensions of their yards. It was also suggested that backyards were more like front yards as a form of public display. One active young couple with small children on the Clear Creek Trail explained that since more people see their backyard they kept it nice and inviting as it was a reflection of their personality.

Some landowners liked the trail-related scenery and ease of access and thought a fence would impinge on these things, while others constructed fences. One landowner commented about her wire fence: "Anything else was going to be . . . a true barrier over there so we decided . . . as long as we are safe . . . it works just fine" (daily walker who moved for the trail, Clear Creek Trail). The set up of the backyard, and fencing were found to influence landowners' benefits and concerns.

Conclusion and Future Research

Although trail research is not new, there is little information on residents and property owners adjacent to trails yet they are an important population as they are potentially more affected by trails

than RPO living further from the trails. Lindsey and Nguyen (2004) suggested a need for more exploratory, qualitative trail studies, and this case study of RPOs increases the understanding of the RPO relationship to multiuse trails and identified a number of areas for future research.

In 2005, Gobster hypothesized that proximity to a trail determined how often a trail is used. However, the current study highlights that proximity also affects many other parts of the lifestyle of RPOs. Residents living adjacent to trails received many benefits from the trails, and the trails also affected resident behavior and their quality of life. For example, residents' landscaping, social time, interaction with neighbors, and habits morphed with the trail and were perceived overwhelmingly as positive. Of particular interest is the emphasis placed upon the role the trails played in the social life of RPOs. The trails enhanced the RPO social life with family, friends, and neighbors. This is another important component for trail managers and planners to consider and foster through trail planning. It is also an important marketing component for those selling property adjacent to trails.

Trail managers and planners must be aware of the important role RPOs play in the life of the trail. Input from adjacent landowners needs to be continually sought and information continually given to them. Unlike other nearby property owners, changes made to the area, including trail maintenance or lack of, affects residents adjacent to the trail. Understanding and working with these citizens will not only increase RPO satisfaction but also public and community affection for the trail.

Findings from this study have raised specific questions appropriate for future research. Perhaps surprisingly, not all RPOs were found to have easy access to the trail due to natural or artificial obstructions. Trail access for the general public has been a studied topic, but RPO access should be considered also and would be especially useful to trail planners and residential developers. Along these lines, understanding more about property configuration of land adjacent to the trail could benefit developers, planners, and homeowners who want to use the trail as a marketing tool for businesses or neighborhoods.

Regarding the RPOs themselves, this study highlighted that RPOs cannot be assumed to have the same opinions on trails based upon the fact they are adjacent to a trail. This study uncovered several differences that warrant future research. The findings indicated the importance of the natural environment provided by the trail to RPOs, and future research could focus on how to enhance this benefit further for other RPOs, nearby landowners, and trail users. For example an increase in benches and environmental education signage near key habitats could increase not only an individual's enjoyment, but also provide an environmental education opportunity. Additionally, employees of commercial enterprises located near the trail were found not to use the trail; however, if benches were placed near the establishments, employees could enjoy the natural setting during breaks or before and after work. Although bicycle commuting was not found to be important in this study, apparently due to a lack of linkages from the trails to significant work, shopping, and entertainment districts, as the number of trails increase, the topic will become more important.

Additional future research topics include economic development based not only on land values, but also on durable goods purchased for trail use, i.e., running shoes, bicycles, inline skates, and clothing. The RPOs stated that the trail increased their physical fitness and it would be useful to know how the trail contributes to the entire community's fitness level. Along similar lines, research regarding trails' integration into local public health systems would be insightful, especially as the United States battles health issues related to obesity.

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