

CONVERTING ABANDONED RAILROADS TO RECREATION USE IN ISABELLA AND MIDLAND COUNTIES: A COMPARISON OF RESIDENTS AND BUSINESSES ADJACENT TO A RAIL-TRAIL

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Abstract:

Converting abandoned railroad corridors to recreational trails often generates opposition from adjacent residents. Opposition can arise during the planning process of establishing the trail. However, concerns about abandoned railroads being converted to trails are often misconceptions. Once a park is developed these concerns often disappear. This research examined the differences in adjacent residents' and nearby businesses' perceptions and support for the Pere Marquette Rail-Trail (PMRT) located in Michigan's Midland and Isabella Counties. In Midland the trail is seven to eight years old, while in Isabella, the trail was being planned with construction scheduled shortly after the study. Many Midland County residents and businesses held more negative views similar to their Isabella counterparts during the development phase. However, the results suggest the experience of Midland County residents with the rail-trail once established reshaped their opinions towards greater acceptance. These and other distinctions are outlined in this paper.

Introduction

Converting abandoned railroad corridors to recreational trails often generates opposition from adjacent residents. Opposition can arise because of the process that is used to establish the trail or because of

the perceived consequences of the trail. Research on this subject typically describes resident attitudes at a single point in time. Moore, Graefe & Gitelson (1994), described trail-related problems experienced by landowners and attitudes of landowners living near rail-trails. They found that current satisfaction levels with a trail were related to the initial attitudes of adjacent landowners. Parker and Moore (1999) found there were differences in the attitudes of adjacent landowners to a proposed trail, caused by how the residents had first learned about the trail. Both, Parker and Moore (1999), and Kaylen, Bhullar, Vaught and Brashler (1993) suggest concerns about abandoned railroads being converted to trails are often misconceptions. Once a trail is developed concerns are reduced and might even disappear. Turco, Gallagher and Lee (1998) suggest that adjacent residents who receive benefits from rail-trails are likely to perceive the system positively and be supportive, however, those who do not receive benefits, or who believe that the cost associated with trails outweigh the benefits, are more likely to perceive a rail-trail negatively.

Our research examined the differences in adjacent residents' and nearby businesses' perceptions and support for the Pere Marquette Rail-Trail (PMRT) not at a single point in time, but at two different stages of its development. The Midland County segment of the PMRT was completed in 1993. The Isabella County segment of the trail was completed in August of 2001. We studied residents and businesses in Midland and Isabella counties in 1999 and 16 months before the Isabella segment was completed in 2001 (Figure 1).

The objective of our study was to compare attitudes of adjacent residents and businesses along the existing segment of the PMRT in Midland County to those situated along an abandoned segment awaiting construction in the adjoining Isabella County. Comparing groups in different stages of trail development may provide a better understanding of the attitudes toward this type of land use conversion and allow park and recreation managers to better design and manage rail-trails, so that nearby residents' and business' interests are addressed.

The research focused on two main questions:

- 1) What are residents' and businesses' perceptions of the PMRT in different stages of its development?
- 2) How has support of residents and businesses changed in the different stages of the PMRT's development?

Background

This study of nearby businesses and adjacent residential landowners is part of a larger, multi-year case study examining the usage and benefits of the PMRT located in Midland and Isabella counties. The objectives of this project were: 1) to evaluate the

economic, social and community benefits; 2) to provide benchmarks to government agencies on trail use and benefits; 3) to investigate new trail monitoring technologies; and 4) to provide outreach products to assist Michigan communities in rail-trail planning and implementation. The project was funded largely by the Michigan Department of Transportation, through the 1998 Inter-modal Surface Transportation Act and the State of Michigan, as well as the Michigan Agricultural Experiment Station.

The Midland County segment of the PMRT begins in the City of Midland and traverses the County for 22 miles before entering Isabella County. It was developed in four sections over a four-year period beginning in 1992. The City of Midland three-mile segment is paved to a width of 12 feet and 14 feet elsewhere in the County. It is open only to non-motorized activities, primarily bicycling, walking/running and in-line skating. Beyond linking the communities of Midland, Sanford, North Bradley, and Coleman, the PMRT also connects a number of city and County parks and recreation facilities, as well as numerous businesses.

The extension of the PMRT from Midland County into Isabella County begins at the eastern Isabella County line, just west of Coleman. The Midland County segment of the rail-trail ended in the center of Coleman and Midland County Parks received a grant to complete the Midland County portion of the trail to the western Midland County line. When this study was conducted Isabella County Parks was planning to construct its eight-mile segment of the trail from the eastern outskirts of Clare to the Midland County line, connecting with the existing and newest Midland County segment. In August 2001, the rail-trail extension of six miles in Isabella County was finished.

Methods

The data gathered in this study were collected by a mail survey in Spring 2000 from a census of businesses and residents in Midland and Isabella Counties. Businesses were near or adjacent to the trail and residents were private, non-commercial ownerships adjacent. Resident names and addresses were obtained from local tax assessor offices using property tax records and plat maps. Business names and addresses were obtained through phonebooks and on-site enumeration.

Two survey instruments were developed for the samples. The nearby business survey was four-pages and the adjacent resident survey was eight-pages. A personalized cover letter and postage paid envelope was mailed along with the survey instrument. The first mailing was April 18, 2000. A follow-up reminder and/or thank you postcard was mailed on April 26, 2000. Two weeks after the postcard mailing, a second survey mailing was sent to all those who had not yet responded.

Of the 142 Midland County businesses that were mailed a survey, 86 returned a completed survey resulting in a 61 percent response rate. Of the 283 Midland County adjacent resident names and addresses, six were returned as undeliverable and 157 (57%) returned a completed survey. Of the nine Isabella County businesses that were mailed a survey, six returned a completed survey resulting in a 67 percent response rate. Of the fifty-one adjacent Isabella County resident names and addresses, nine letters were returned as undeliverable and 26 completed surveys were returned. A 62 percent response rate was achieved for the Isabella County adjacent resident survey.

Although questions were alike for residents and businesses in both counties, Midland County residents and businesses were also asked to reflect on the PMRT when it was being developed in 1993.

Results

Resident and Business Characteristics

The setting of the PMRT segment in Midland County is more urban and suburban as compared to the more rural setting of the segment in Isabella County. The type of residential ownership in Midland County was predominantly single family on small and large lots, while in Isabella County it was half agricultural and half single family. The average distance of the residences from the trail was larger in Isabella County than in Midland County.

Residents in Midland County had occupied their properties for a fewer years than Isabella County residents (Table 1). There were more households with children and less retirees in Midland than there were in Isabella County.

The Midland County businesses were mostly service or retail oriented and half of the Isabella County businesses were light industrial, while the other half were service or retail (Table 2). Midland County business properties were located further from the trail than Isabella County business properties.

Table 1 Selected Resident Characteristics

Characteristic	Midland County (n=157)	Isabella County (n=26)
Agriculture land	6%	54%
Average years property occupied	20 years	32 years
Households with children	35%	25%
Retirees	37%	50%
Average distance of home to trail	218 yards	375 yards

Table 2 Selected Business Characteristics

Characteristic	Midland County (n=87)	Isabella County (n=6)
Consumer services & retail	75%	50%
Light industrial	8%	50%
Non-profit	8%	-
Other	10%	-
Average years property occupied	24 years	23 years
Number of employees	Range: 1-10000	Range: 3-70
Average distance of business buildings from trail	333 yards	65 yards

Perceptions

When asked what the influence of the PMRT was (Midland County) or would be (Isabella County) on their county, community, family and self, Midland County residents were much more positive about the influence than Isabella County residents were (Table 3).

Businesses in both Midland and Isabella County were more positive about the influence of the rail-trail than residents were. When asked what the influence of the rail-trail was or would be on their County, community and employees, Midland County businesses were more positive than Isabella County businesses (Table 4).

In terms of overall satisfaction, Midland County residents were more satisfied with the PMRT than Isabella County residents (Table 5). Seventy-six percent of Midland County residents were satisfied as compared to 28 percent of Isabella County residents.

Seventy-two percent of Midland County residents thought the PMRT was better than the abandoned railroad right-of-way, compared to 35 percent of the Isabella residents. Businesses in both Midland County and Isabella County were slightly more satisfied than residents in both counties (Table 6). Eighty-one percent of midland County businesses and 50 percent of Isabella businesses thought that the PMRT was better than the abandoned railroad right-of way (Table 6).

For those residents who were dissatisfied, key concerns in Midland County were loss of wildlife and habitat, increasing number of people and noise, loss of privacy and increase of trespassing. Isabella County residents voiced similar concerns about the planned trail, along with concerns about trash, litter and crime.

Table 3 Adjacent Residents Perceived Influence of the PMRT(a)

	Midland County*			Isabella County**		
	Negative	Neutral	Positive	Negative	Neutral	Positive
County	1%	13%	86%	31%	27%	42%
Community	2	14	84	35	23	42
Family	10	27	63	34	35	31
Own life	14	25	61	35	42	23

(a) Influence rated on a scale of 1=very negative, 2=moderately negative, 3=neutral, 4=moderately positive, 5=highly positive. 1 and 2 = negative in table, 3= neutral, 4 and 5 = positive

* Trail existed 8 years in Midland County

**Trail did not exist in Isabella County yet

Table 4 Nearby Businesses Perceived Influence of the PMRT(a)

	Midland County*			Isabella County**		
	Negative	Neutral	Positive	Negative	Neutral	Positive
County	1%	8%	91%	0%	33%	67%
Community	1	7	92	0	33	67
Employees	1	43	56	0	50	50

(a) Influence rated on a scale of 1=very negative, 2=moderately negative, 3=neutral, 4=moderately positive, 5=highly positive. 1 and 2 = negative in table, 3= neutral, 4 and 5 = positive

* Trail existed 8 years in Midland County

**Trail did not exist in Isabella County yet

Table 5 Adjacent Residents' Satisfaction with the PMRT(a)

	Midland County*	Isabella County**
Satisfied with PMRT	76%	28%
Neutral	12	32
Dissatisfied with PMRT	12	40
PMRT better than abandoned railroad right-of-way	72%	35%
Neutral	16	30
PMRT worse than abandoned railroad right-of-way	12	35

(a) Satisfaction rated by scale of 1-5 where 1=very dissatisfied, 2=moderately dissatisfied, 3=neutral, 4=moderately satisfied, 5=very satisfied. In table 1 and 2=dissatisfied, 3=neutral, 4 and 5=satisfied.

Better/worse rated by scale of 1-5 where 1=much worse, 2=moderately worse, 3=neutral, 4=moderately better, 5=much better. In table 1 and 2=worse, 3=neutral, 4 and 5=better.

* Trail existed 8 years in Midland County

**Trail did not exist in Isabella County yet, asked about perception of what the future next to the trail will be like

Table 6 Nearby businesses' satisfaction with the PMRT(a)

	Midland County*	Isabella County**
Satisfied with PMRT	78%	40%
Neutral	20	20
Dissatisfied with PMRT	2	40
PMRT better than abandoned railroad right-of-way	81%	50%
Neutral	17	17
PMRT worse than abandoned railroad right of way	2	33

(a) Satisfaction rated by scale of 1-5 where 1=very dissatisfied, 2=moderately dissatisfied, 3=neutral, 4=moderately satisfied, 5=very satisfied. In table 1 and 2=dissatisfied, 3=neutral, 4 and 5=satisfied.

Better/worse rated by scale of 1-5 where 1=much worse, 2=moderately worse, 3=neutral, 4=moderately better, 5=much better. In table 1 and 2=worse, 3=neutral, 4 and 5=better.

* Trail existed 8 years in Midland County

**Trail did not exist in Isabella County yet; asked about perception of what the future next to the trail will be like

Support

Both businesses and residents rated the rail-trail concept across various stages of the PMRT's development, construction, initial completion, and current status. About half of adjacent Midland County residents were supportive of the idea of the PMRT before it was built compared to 19 percent of adjacent Isabella County residents (Table 7). In Midland County support among residents sagged in the planning process to increase again after the trail was completed, to 75 percent of the residents supporting the trail as it is today. Isabella County residents' support increased slightly in the planning process.

Isabella businesses were initially supportive of the trail (Table 8). Again support sagged both among Midland and Isabella County businesses in the planning process, to increase again after the trail was built in Midland County.

Businesses rated themselves as better informed about and involved with the PMRT than residents in both Midland and Isabella counties (Table 9 and 10). Midland County residents rated themselves as better informed and more involved with the trail than Isabella residents did, whereas businesses in both counties rated themselves about equally informed about and involved with the trail.

Businesses were more supportive in general. Two-thirds of Midland County businesses and 83 percent of

Table 7 Adjacent Residents' Support for the PMRT(a)

Stage in trail development	Midland County	Isabella County
Idea of trail before it was built	49%*	19%
Trail planning process	35*	23
Trail after it was built	61*	No data
Trail today	75	No data

(a) Support rated by scale of 1-5 with 1=very opposed, 2=moderately opposed, 3=neutral, 4=moderately supportive, 5=very supportive. Support is rating of 4 or 5.

* Trail existed 8 years in Midland County; residents were asked to recall their support in the different stages

**Support for existing trail in Midland County

Table 8 Nearby Businesses' Support for the PMRT(a)

Stage in development	Midland County	Isabella County
Idea of trail before it was built	68%*	83%
Trail planning process	52*	40
Trail after it was built	77*	No data
Trail today	84	No data

(a) Support rated by scale of 1-5 with 1=very opposed, 2=moderately opposed, 3=neutral, 4=moderately supportive, 5=very supportive. Support is rating of 4 or 5.

* Trail existed 8 years in Midland County; businesses were asked to recall their support in the different stages

**Support for existing trail in Midland County

Table 9 Adjacent Residents' Knowledge of and Involvement with the PMRT

	Midland County	Isabella County
Informed about construction and design	40%	23%
Attended planning meetings	10	Not asked
Involved in trail development	7	4
Members of the "Friends of the PMRT"	5	0

Table 10 Nearby Businesses' Knowledge of and Involvement with the PMRT

	Midland County	Isabella County
Informed about construction and design	60%	67%
Attended planning meetings	14	50
Involved in Trail development	16	17
Members of the "Friends of the PMRT"	15	0

Discussion and Conclusions

In Midland County, the PMRT adjoins the property of 277 non-corporate owners (primarily residences) and is near to 142 businesses. Many in these ownerships have seen an active railroad degrade into an abandoned industrial corridor and then be converted to an active rail-trail providing a paved surface for walking, running, bicycling, and in-line skating as well as connecting Coleman, North Bradley, Sanford and Midland by a non-motorized park and transportation system. The extension of the PMRT through the northwest corner of Isabella County is designed to provide recreational and transportation opportunities for County residents and visitors, particularly a long distance bicycling opportunity.

Findings of this study show that Midland County residents and businesses are more positive and satisfied with their existing portion of the PMRT than Isabella residents and businesses with a planned

extension of the trail. However, the experience in Midland County suggests that once the trail is established there, positive interactions and community benefits reshape the perceptions of residents and businesses about the rail-trail. It is especially noteworthy that both nearby businesses and adjacent residents in Midland County recognize that the trail is a county and community asset, even more than an asset for their employees and families. This awareness of assets beyond their family and neighborhood demonstrates a strong sense of community associated with trails.

In Isabella County, among businesses there is more support or neutrality than opposition to the proposed trail. Concerns focus primarily on safety of trail users and liability for businesses at driveway crossings. Most current nearby Isabella businesses are located in an industrial park and do not have a service function that will relate directly to trail users as customers.

However, their support focuses on the trail being a community improvement, serving the recreational and fitness needs of their employees and attracting visitors to the local area. For adjacent residents in Isabella County, three distinct groups of opinions are evident. One-third of the respondents see the trail as an improvement over the existing abandoned industrial corridor. Another third were neutral and a final third were negative.

Support for the PMRT among Midland County residents and businesses increased as the development of the PMRT reached its completion and after it opened in 1993, suggesting first-hand information about the trail and the performance of key management tasks leads to more confidence in the rail-trail concept. Two-thirds of the nearby businesses and half of the adjacent residents in Midland County were supportive of the trail concept prior to construction. That support sagged during the planning and construction process. This may be due to relatively few (15 percent of businesses and 5 percent of residents) being actively involved during this phase. However, once the trail was built and officially opened support surpassed initial concept levels, as first hand knowledge of the trail was easy to obtain. It is especially revealing that today, almost a decade after the construction of the first section of the trail (City of Midland) support has risen to 84 percent of nearby businesses and 76 percent of residents. As managers have performed key management tasks, such as, surface maintenance, trash removal, litter cleanup and law enforcement patrol, nearby businesses and residents have gained confidence in the site and the rail-trail concept.

Based on this census of adjacent residents and nearby businesses in Isabella County the development of the PMRT segment there has engendered a wide variety of public opinion. These opinions range from strongly supportive of the concept, construction and implementation of the trail to opposed to it at all phases.

The PMRT is a park with hundreds of neighbors, each important. It is vital to address concerns in a way that enhances the recreational experiences of trail users, while protecting the rights of neighbors. Improved vegetative screening, rapid response to complaints concerning illegal activity such as motorized use and trespassing, positive education, and reinforcement of appropriate trail use and trail etiquette can continue to improve neighbor support for this highly regarded trail. Disregarding these now relatively small concerns in Midland County can allow them to grow into significant problems, threatening the substantial support and goodwill of neighbors. In Isabella County after the trail is constructed, efforts should be made to encourage residents, employees of local businesses, and visitors to use the trail. Messages that promote enjoying nature, health benefits and relaxation would be positive for motivating adjacent residents. Special attention by managers, users and law enforcement

should be made to insure that concerns nearby owners expressed about litter, crime, trespass, etc. don't materialize and are dealt with proactively. Over time, the goal would be that a majority of the adjacent residents and businesses would be strong supporters, users and stewards of the rail-trail, just as they are in adjacent Midland County.

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