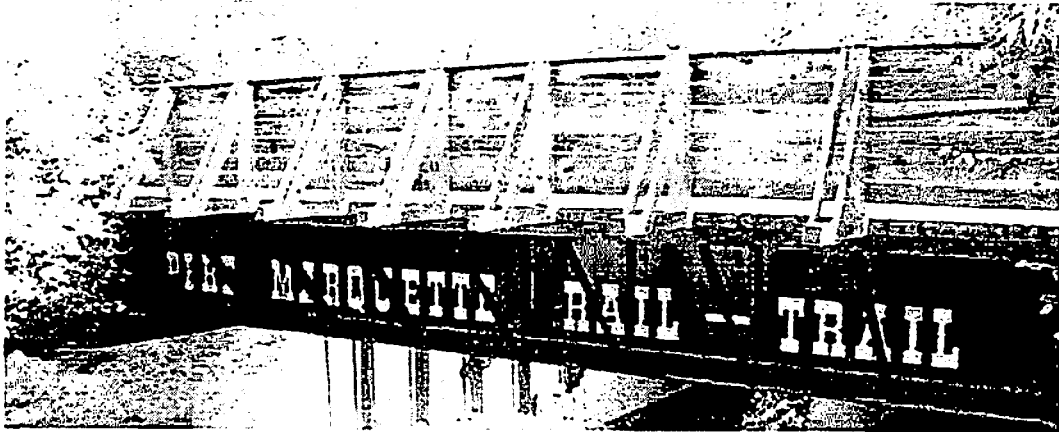


Research Report Executive Summaries

A Case Study Measuring Economic and Community Benefits of Michigan's Pere Marquette Rail-Trail



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This case study of Michigan's Pere Marquette Rail-Trail provides a comprehensive view of the benefits that individuals, communities, and businesses receive from residents and tourists using a linear trail as a transportation, exercise and recreation facility. This reports compiles the executive summaries from each of the research reports that have been completed as part of this case study. Copies for each of the reports can be downloaded as a PDF file from the following web site:
www.prr.msu.edu/trails/pere_marquette_rail.htm

The following studies are included:

1999 Michigander Bike Ride and its Participants: A Focus on Midland County's Pere Marquette Rail-Trail

1999 Midwest Tandem Rally and its Participants: A Focus on Midland County's Pere Marquette Rail-Trail

Midland County Nearby Businesses and Adjacent Residential Landowners' Attitudes Towards and Use of the Pere Marquette Rail-Trail in Michigan

Nearby Businesses and Adjacent Residential Landowners to the Isabella Extension of the Pere Marquette Rail-Trail

2000 Midland County Recreation Needs Assessment

2000 Midland County Recreation Needs Assessment: The Pere Marquette Rail-Trail

Use and Users of the Pere Marquette Rail-Trail in Midland County Michigan

Midland County Travel Information Inquirers and Tourists: A Focus on the Pere Marquette Rail-Trail

Measuring and Monitoring Trail Use: A Nationwide Survey of State and Federal Trail Managers

Funding for this project came from the Michigan Department of Transportation, through the 1998 Intermodal Surface Transportation Act and State of Michigan; Michigan Agricultural Experiment Station; Rivers and Trails Conservation Assistance Program, National Park Service; Rails-to-Trails Conservancy, Michigan Chapter; the Midland Foundation; and The Conservation Fund. Other support and assistance was provided by the Michigan Department of Natural Resources, Midland County Parks and Recreation Department, and The League of Michigan Bicyclists.

1999 Michigander Bike Ride and Its Participants: A Focus on Midland County's Pere Marquette Rail-Trail

By

Christine Vogt, Ph.D., Charles Nelson, Ph.D., Daniel Stynes, Ph.D., Joseph Fridgen, Ph.D.

The purpose of studying the Michigander Bike Ride was to better understand the character of events on rail-trails, particularly the Pere Marquette. Toward that end, a sample of participants in the 1999 event were mailed a four-page questionnaire which asked about their past experience with the Michigander, nature of the 1999 ride, spending during the trip, general bicycling activities, and demographics. Of the 1,811 registered participants, 276 were 18 years or younger and not mailed a survey. Of the remaining 1,535 riders, 600 adults were randomly selected and mailed a questionnaire. A 71 percent response rate was achieved, yielding 424 complete questionnaires.

The highlights of the results include the following:

- Michigander participants are primarily from households without children (60%). Two adult households without children are most common (34%), followed by households comprised of two adults and children (33%), and single adult households (15%). The most frequent age group is 41 to 50 years old (38%), followed by 31 to 40 years old (24%) and 51 to 60 years old (20%). The sample is almost equally split between men and women. The participants predominantly reside in Michigan (95%), mostly from the Detroit metropolitan area. Almost three-quarters of the participants work full-time (72%) and eight percent are retired. Forty-six percent of the participants are from households with annual income of \$80,000 or greater.
- Most Michigander participants ride less than once a week (62%) and 42 percent have ridden less than six years. On average, rider households own 3.5 bikes or 1.4 bikes per person. It is more common for riders to own mountain bikes than road bikes.
- Participants most prefer riding on paved trails (59%), followed by unpaved trails (28%). However, participants find themselves riding most often on paved roads (51%), followed by paved trails (26%) and unpaved trails (14%).
- Top motives for bicycling by Michigander participants are to promote health, exercise, enjoy nature, be outside and to relax. Social reasons such as being with others, spending free time, and to be by one's self are less important. Training for events or transportation are important bicycling motives for only a small segment of Michigander participants.
- While most participants (83%) had never ridden on the Pere Marquette Rail-Trail before this year's Michigander, 58 percent had previously ridden in the Michigander. Three-quarters of the Michigander participants had ridden in one or more bike events in the past five years.
- The Michigander event was the dominant reason among respondents for their trip to mid-Michigan (99% main purpose). Fifty-eight percent of the respondents rode in the two-day event between Clare and Midland, thirty-four percent rode in the six-day trip (Midland to South Haven), and seven percent rode in the full seven-day trip (Clare to Midland to South Haven). Including the Pere Marquette Rail-Trail in the Michigander itinerary had a positive influence in gaining the participation of almost half (48%) of the riders.

- The majority of the respondents (91%) participants had another rider with them. Forty-nine percent of the riders had a friend ride with them in the event and 61 percent of the riders had one or more family members ride in the event.
- Bicyclists and their travel parties spent \$207,000 in conjunction with the Michigander. \$104,000 was spent before or after the event in the state of Michigan and \$103,000 was spent during the event (not including the event fee). On a trip basis, travel parties spent about \$233 on the trip, excluding the fees associated with the event. Michigander participants generated approximately 500 hotel room nights.
- Michigander participants spent about \$748 in 1998 on bicycling. On average, \$302 is spent on bikes and \$180 on event registrations. Smaller amounts are spent on bike repairs, clothes, racks, books, and memberships.
- Michigander participants gave a very high rating to the condition of the Pere Marquette Rail-Trail with 82 percent rating the trail "very good" and 13 percent rating it as "good." The Michigander event received a "very good" rating from 54 percent of the respondents and a "good" rating from 36 percent.
- When asked whether they would return to ride the Pere Marquette Rail-Trail or visit Midland County, 79 percent of the Michigander participants said they are "extremely or quite likely" to ride the Rail-Trail again. Seventy-seven percent of the participants are "extremely or quite likely" to visit the county again.
- When asked what they enjoyed about the 1999 Michigander event, participants were most likely to cite the Pere Marquette Rail-Trail, the stay at Northwood University, the organization of the entire event and the social exchange between riders. The most common concerns were the weather conditions (rain, heat), muddy trail conditions, long lines for food, undesirable sleeping conditions, crowded or unclean restrooms, and nonpaved trails and road shoulders.
- Michigander participants were asked to express their desires for bicycling opportunities and trails in Michigan. Many indicated the need for more trails, particularly paved trails. They would also like to see more interconnection of trails and better promotion of trails. However, many also stated their opposition to charging fees for trail use.

*Submitted by Michigan State University
 Department of Park, Recreation and Tourism Resources
 March, 2000*

1999 Midwest Tandem Rally and Its Participants: A Focus on Midland County's Pere Marquette Rail-Trail

By

Christine Vogt, Ph.D., Charles Nelson, Ph.D., Daniel Stynes, Ph.D., Joseph Fridgen, Ph.D.

The purpose of studying the Midwest Tandem Rally was to better understand the character of events on rail-trails, particularly the Pere Marquette. Toward that end, a sample of participants in the 1999 event were mailed a four-page questionnaire which asked about their past experience with the Rally, nature of the 1999 ride, spending during the trip, general bicycling activities, and demographics. Of the 550 teams who registered, a total of 1,100 individual names were provided as participants in the Rally. From this list of 1,100 names, we randomly selected 600 names to send the questionnaire. Seventy-five percent of the questionnaires were returned yielding 452 participants to study. Based on calculations of travel and spending parties, we believe that 93% of all of the tandem teams are represented in the returned surveys.

The highlights of the results include the following:

- Tandem Rally participants are primarily from households without children (74%). Two adult households without children are most common (68%), followed by households with two adults and children (23%). Most participants (65%) work full-time and 17% are retired. Household incomes are primarily in the upper income bracket (51% earned \$80,000 or more before taxes in 1998).
- The Midwest Tandem Rally attracted participants from 28 states and Canada. Participants came from as far as Alaska and California. Michigan residents represent the largest group (26%), followed by individuals from Illinois (15%) and Indiana (14%), and Ohio (12%).
- Most Tandem participants ride their bicycle on trails as a recreational activity only a few times a year (44%). Thirty percent of the respondents ride either every day, a couple times a week, or at least once a week. Sixty-five percent have been riding on roads and trails for recreation for more than ten years. Twelve percent indicated being relatively new (5 years or less) to bike riding.
- On average, households of Rally participants own 5.8 bikes or 2.5 bikes per person. It is more common for tandem riders to own a tandem bike, followed by a road bike and a mountain bike.
- Tandem participants most prefer riding on paved roads (56%), followed by paved trails (40%). Participants find themselves most often riding on paved roads (86%). Only ten percent reported riding most often on paved trails.
- Top bicycling motives for Tandem Rally participants are to exercise, promote health, be outside, enjoy nature and to relax. Social reasons like being with others, spending free time, or being by one's self are less important. Training for events or transportation are important bicycling motives for only a small segment of Tandem Rally participants.
- Tandem Rally participants are most likely to be members of a local bicycle organization (66%). Approximately a quarter of the respondents indicated being a member of either the Leagues of American Bicyclists or Rails-to-Trails Conservancy.

- While most participants (91%) had never ridden on the Pere Marquette Rail-Trail before the Midwest Tandem Rally, 73% had previously ridden in the Rally with close to half riding in 1998. Almost everyone had ridden in some type of bike event in the past five years with 30% participating in more than 15 events over the past 5 years.
- The Midwest Tandem Rally was the dominant reason for their trip to Michigan (99% main purpose). Including the Pere Marquette Rail-Trail in the Rally had a positive influence in gaining the participation of 39% of the participants.
- Over half (54%) of the Tandem participants rode for two days in the event and an additional 42% rode three or four days. Almost everyone (98%) stayed overnight with 44% staying at a nonhost hotel, 39% staying at the host hotel, 14% camping, and 5% staying with friends/family.
- Majority of the respondents had another rider with them including 97% riding with another family member and 19% riding with a friend. Only 4% of the respondents had a nonrider with them on the trip.
- Midwest Tandem Rally participants and their travel parties spent \$260,000 in conjunction with the Rally. \$218,000 was spent during the Rally and \$42,000 before or after. On a trip basis, travel parties spent \$566 on the trip, which included \$474 of spending during the event and \$92 of spending before or after the event. Approximately 1,100 room nights were generated in the local area.
- Rally participants spent an average of \$2,500 in 1998 on bicycling. Of this, \$1,438 was spent on bikes, \$310 on event registrations, and \$230 on bike repair and maintenance. Smaller amounts of spending occurred on clothes, vehicle racks, books, and memberships.
- Very high marks were given to the condition of the Pere Marquette Rail-Trail with 91% rating the trail "very good" and another 8% rating it "good." The Tandem Rally also received high marks with 71% rating "very good" and 27% rating as "good."
- When asked whether Tandem participants would return to the Pere Marquette Rail-Trail or visit Midland County, 45% said they are "extremely or quite likely" to ride the Pere Marquette again and 49% were likely to revisit Midland County.
- When asked what they enjoyed about the 1999 Michigander event, participants were most likely to cite the Pere Marquette Rail-Trail, the event route, Midland County as the setting, the Labor Day weather conditions, and the organization of the event including the volunteers and workers. The most common concerns were the distance of the host hotel to the start of the daily rides, the traffic conditions on some of the roads included in the event, the use of a mass and remote start, and poor maps and route assistance.
- Tandem participants were also asked to express their desires for bicycling opportunities and trails in Michigan. Many indicated that they like paved bike trails particularly long and wide ones, trails with amenities like bathrooms and signs, and that trails are free to use. Many indicated the need for developing more paved trails, improving trail information and promotions, and more interconnection of trails.

Nearby Businesses and Adjacent Residential Landowners to the Isabella County Extension of the Pere Marquette Rail-Trail

By

Christine Vogt, Ph.D., Charles Nelson, Ph.D, and Joseph Fridgen, Ph.D.

The main purpose of studying nearby businesses and adjacent residential landowners was to better understand the level of support for the extension of the Pere Marquette Rail-Trail prior to its construction. Further, it was to establish a baseline against which to assess support for the trail after construction and once operating. Another purpose was to begin to understand how, when and why individuals and families who have relatively easy access to the trail might use the linear park.

Toward that end, censuses of all adjacent residents and nearby businesses to the corridor where the rail-trail will be constructed were mailed a questionnaire. Surveying occurred in April and May of 2000. Businesses were mailed a four-page questionnaire and residents an eight-page questionnaire. Businesses and residents also received a personalized letter and business reply envelope with the survey. Reminder postcards and a second mailing of the survey were also used to garner a strong response. Six of the nine businesses (67%) and 26 of the 42 residential landowners (62%) responded.

The highlights of the results include the following:

- **Businesses located near the rail-trail were either light industrial or retail. They ranged from 3 to 70 full-time employees and 0 to 40 part-time employees. Five of the six businesses were adjacent to the trail and one business was "near" the trail. Each company's main building was on average 64 yards from the trail. Businesses were at their location for 23 years on average. Non-commercial residents living adjacent to the rail-trail were primarily single-family homes and family owned agricultural land. On average, residential houses were 394 yards from the trail. Sixty percent of the residents will have a full view of the trail, 24 percent will have a partial view, and 16 percent won't be able to see the trail from their house with trees leafed out. Residents lived on average 32 years in this location and 80 percent purchased their property when the railroad was operating. Fifty percent of the residents were retired and 75 percent of the households did not have children. The most common (42%) pre-tax income bracket for residents was between \$20,000 and \$40,000.**
- **All the businesses knew about the upcoming trail, while 92% of the residents did. The top information source for initially learning about the trail was word-of-mouth for both businesses and residents, followed by the newspaper and township newsletter. No business or resident indicated that a park and recreation commission meeting or another public meeting introduced them to the trail. Businesses seemed more informed about the trail as 50 percent rated their level of knowledge as "moderately informed" compared to residents who were more likely to have selected "minimally informed." Residents were asked if they had questions about the trail and many questions were posed including: "how will the trail be patrolled by law enforcement?" "Will the trail area be cleaned regularly and trash removed?" "Will the trail's cost raise taxes?" and "will the trail be used late in the evening?"**

- Half of the businesses have attended meetings about the rail-trail and one businesses was involved in the fund raising effort. One resident was involved as a township representative at trail-related meetings and two residents were once members of the Pere Marquette Rail-Trail Friends organization. Once the trail is built, residents expressed they are only slightly interested in volunteering and would be most willing to help with birdhouses along the trail or at an annual cleanup day.
- Five of the 26 residents who responded to the survey have used the Midland County portion of the Pere Marquette Rail-Trail and only one resident had used another rail-trail in the state of Michigan. Businesses estimated that their employees would be most likely to use the trail after work, rather than before work or during breaks.
- At the time this survey was completed, businesses were more supportive of the new trail than residents. Businesses, however, are concerned about the safety of trail users and any potential liability at driveway crossings. Residents were "neutral" in their support for the rail-trail in Isabella County, however, a majority of the residents were "very supportive" that the trail was being designated as nonmotorized use only. Residents segmented into three levels of support: supportive and viewed the trail as a positive place for children to recreate, neutral, or unsupportive and would rather have the land under their family's control. Residents also had concerns about safety, litter, trespass and aesthetic changes. Businesses were evenly distributed on their rating of a rail-trail compared to an abandoned railroad right-of-way, whereas residents were more likely to rate the rail-trail as "much worse" or "neutral" compared to the abandoned railroad right-of-way.
- Businesses viewed the influence of the rail-trail as most positive for the nearby community, whereas residents viewed the greatest positive influence at the county level.

*Submitted by Michigan State University
Department of Park, Recreation and Tourism Resources
September 2000*



2000 Midland County Recreation Needs Assessment


By

Charles Nelson, Ph.D., Christine Vogt, Ph.D., Afke Van der woud, Brian Valentine, & Joel Lynch, Ph.D.

This recreation needs assessment for Midland County is based on a mail questionnaire sent to a representative sample of 672 registered voters. Researchers from the Department of Park, Recreation and Tourism Resources at Michigan State University conducted the study under contract with Midland County. The survey had 380 (56.5%) respondents and provides clear direction for the Midland County Parks and Recreation Commission as they update their county park master plan for the next five years.

Key highlights of the study include:

- Midland County residents are motivated by a wide variety of factors to participate in outdoor recreation. Those rated most important were being outside, fun and enjoyment, relaxation and enjoying nature.
- Midland County residents are active in outdoor recreation in Midland County, with walking/hiking, relaxing, scenic driving, picnicking and nature study the five most commonly done activities.
- Ninety-three percent of Midland County households are familiar with one or more Midland County Park, with Sanford Lake and the Pere Marquette Rail-Trail the most familiar. The most visited Midland County Park is the Pere Marquette Rail-Trail.
- The five most common recreational activities in Midland County Parks are walking/hiking, relaxing, picnicking, paved trail biking and scenic driving.
- The attributes of Midland County Parks with the highest performance ratings are the beauty of the parks, safety and security, abundance of nature, cleanliness and quality of facilities. These were rated from “very good” (highest possible rating) to “OK” by more than 94% of County residents. All other attributes were rated from “very good” to “OK” by more than 91% of the County’s residents.
- Residents generally support the acquisition of additional parkland, with the strongest support for acquiring more land to conserve river shorelines. Ten percent were not in favor of additional land acquisition for County Parks.
- Residents expressed support for the most potential facility developments in parks. The five receiving the most support for additional development were picnic areas, picnic shelters, multiple purpose non-motorized trails, shoreline access and environmental education/nature interpretation facilities.



*Submitted by Michigan State University
Department of Park, Recreation and Tourism Resources
December 2000*

2000 Midland County Recreation Needs Assessment: The Pere Marquette Rail – Trail

By

Afke Van der woud, Christine Vogt, Ph.D., Charles Nelson, Ph.D., Brian Valentine, & Joel Lynch, Ph.D.

- The findings in this study indicate the Rail-Trail is well liked and used throughout the whole year by Midland County residents. Two-thirds of Midland County residents used the trail in the past 12 months. The most frequently used sections are closest to the City of Midland. Residents report using the trail during all seasons, however, summer is the most popular season.
- Use patterns of those who used PMRT are similar for respondents and other members of their household. Approximately half of the users visit the trail once a month or more frequently and the other half use the trail a few times per year. The most common activities users engage in are walking, biking and roller-blading.
- Most of the Midland County residents who use the trail reported improved health conditions because of activities done along the trail. Initiating and increasing fitness was the most common health improvement.
- The majority of respondents were informed about the PMRT at the time of its design and construction. However, very few attended the PMRT planning meetings and were involved in the development and maintenance of the trail.
- Although, support for the Rail-Trail was low during the trail planning, design, and construction process, it is high for the trail as it is today. In general residents indicate the Rail-Trail has positively influenced their lives and community.

*Submitted by Michigan State University
Department of Park, Recreation, and Tourism Resources
April 2001*

Midland County Nearby Businesses and Adjacent Residential Landowners' Attitudes Towards and Use of the Pere Marquette Rail-Trail in Michigan

By

Christine Vogt, Ph.D., Afke Van der Woud, Joel Lynch, Ph.D and Charles Nelson, Ph.D.

The purpose of studying nearby businesses and adjacent residents was twofold. The first was to characterize the type and location of adjacent properties and to better understand the knowledge, involvement, and usage of the rail-trail by people who have relatively easy access to it. The second purpose was to assess residents perceptions about the maintenance of the Pere Marquette Rail-Trail (PMRT) and its influence on their and the county's quality of life.

All nearby businesses and adjacent residents of the PMRT in Midland County were initially mailed a questionnaire in April 2000. Businesses were mailed a four-page questionnaire and residents an eight-page questionnaire. Businesses and residents also received a personalized letter and business reply envelope with the survey. Reminder postcards and a second mailing of the survey in May 2000 were also used to encourage participation of non-respondents. Eighty-six of the 142 businesses (60.6%) and 157 of the 277 residential landowners (56.7%) completed the questionnaire.

- Most businesses located near the rail-trail were either consumer services or retail. Individual businesses employed up to 10,000 full-time employees and 3,000 part-time employees. Approximately one-third of the businesses were adjacent to the trail and two-thirds were "near" the trail. Each company's main building was on average 200 yards from the trail. Businesses had been at their location for 24 years on average. Residents living adjacent to the rail-trail owned primarily single-family homes. On average, residential houses were 100 yards from the trail. Fifty-four percent of the residents have a full view of the trail, 37 percent have a partial view, and 8 percent are not able to see the trail from their house. Residents lived on average 20 years in this location and most purchased their property when the railroad was operating. Most of the residents were either retired or employed full-time. Approximately half of the households did not have children. The most common pre-tax income brackets for residents were more than \$60,000 (26%) and between \$20,000 and \$40,000 (23%). The most common reasons to recreate outdoors for residents were for fun and enjoyment and to enjoy nature.
- Businesses rated themselves better informed about the design and construction of the trail than residents did. Sixty percent of the businesses indicated they were either fully or moderately informed compared to 40 percent of residents. Compared to residents, there were a slightly higher proportion of businesses involved in the planning meetings of the trail during 1990-1994. Also, proportionally more businesses were involved in the development and maintenance of the rail-trail than residents. Fifteen percent of businesses were current members of the Friends of the Pere Marquette Rail-Trail, while 5 percent of residents were members.
- Businesses indicated the rail-trail was used more after work than before work or during breaks. After work activities most commonly reported were biking, walking, running and in-line skating. During breaks employees were most likely to walk the rail-trail. Approximately 80 percent of residents indicated that at least one person in their household used the PMRT. The most commonly reported reasons for using the rail-trail were to exercise or improve their health. In half of the households, at least one person used the rail-trail either daily or weekly.

- Businesses were more supportive of the idea of a rail-trail before it was built than residents. Both businesses and residents had mixed feelings about planning/decision and construction processes, though businesses were slightly more positive. Results suggest nearby businesses and adjacent residents reported increased support for the rail-trail once it was completed.
- Businesses viewed the influence of the rail-trail as very positive for both the community and the county as a whole. Businesses were more neutral about the influence of the trail on their neighborhoods and employees. Overall, residents rated the influence of the trail less positively than businesses. Residents thought the trail had the most positive influence on the county, followed by the community. Many residents indicated the rail-trail has had little effect on the quality of their neighborhoods. The majority of businesses and residents believed the trail made no difference in the value of their property and the speed at which it would sell. However, more than a quarter of residents (28%) felt the trail would reduce selling time. Eighty percent of businesses and 70 percent of residents felt the rail-trail was a better situation than the abandoned railroad right-of-way. Only 2 percent of businesses and 12 percent of residents felt the rail-trail was worse use of the land.
- Eighty-two percent of residents rated the overall maintenance of the trail as good or very good. In terms of specific management aspects, 66 percent rated removal of trash as good or very good. Sixty-five percent rated sense of safety and security as good, and 62 percent rated the privacy of trailside residents as good. The majority of residents indicated that key changes of quality of life from to the trail were related to increases in recreation opportunities, community pride, personal enjoyment, health and fitness, having a non-motorized transportation route available, and community revitalization. A minority group of residents reported the trail had a negative influence. Thirty-two percent of residents noted an increase in noise. Other concerns raised were illegal motor vehicle activity, loitering, unleashed and roaming pets, discourteous users, and trespassing.

*Submitted by Michigan State University
Department of Park, Recreation and Tourism Resources
January 2002*

Midland County Travel Information Inquirers and Tourists: A Focus on the Pere Marquette Rail-Trail

By

Afke Van der woud, Christine Vogt, Ph.D., Charles Nelson, Ph.D, & Joel Lynch, Ph.D.

The purpose of studying travel information inquirers and tourists is to better understand the usage of the Pere Marquette Rail Trail (PMRT) by individuals and groups who live outside of Midland County, to gather their interests and opinions about the rail-trail, and to estimate the economic benefits of their visits to Midland County. This study was an addition to an on-site study of PMRT users that was conducted during 2000 and 2001. Two surveys were conducted to study the impacts of rail-trail related tourism. First, a study of rail-trail users who lived outside Midland County (N=139) was conducted as part of the PMRT users study, herein referred to as *intercepted tourists*. Second, a study of individuals requesting information from the Midland County Convention and Visitors Bureau over the past three years, herein referred to as *travel inquirers* (N=271), was conducted. The mail surveys were similar for both samples, asking questions about their experience with Midland County, the Pere Marquette Rail-Trail, related trip spending, and demographic attributes. Sixty-five percent (N=90) of the *intercepted tourists* and 45% (N=114) of the *travel inquirers* completed and returned surveys.

Highlights of the study results include the following:

- The majority of *travel inquirers* requested information about Midland County because they were planning a trip to the county or to update their information about the county. The type of information most frequently requested was about county attractions and the Pere Marquette Rail-Trail. Most *travel inquirers* reported receiving the requested information. The information about the attractions and the PMRT was rated as most helpful for planning a trip to Midland County.
- The majority of *travel inquirers* had visited Midland County at some time, most of which did so after receiving the information they requested. Approximately one-third of *travel inquirers* visited the PMRT. During their most recent visit both *travel inquirers* and *intercepted tourists* were most likely to use the PMRT for one day. *Travel inquirers* were most likely to first learn about the PMRT from the Midland County Convention and Visitors Bureau or their web site and *intercepted tourists* were most likely to first learn about the rail-trail by means of word-of-mouth from friends and relatives.
- Both *travel inquirers* who had visited the trail and *intercepted tourists* found the design features to be the primary attraction. The most common activity engaged in on the PMRT was bicycling for both the *travel inquirers* and *intercepted tourists*. Most *travel inquirers* and *intercepted tourists* indicated the PMRT had a lot of influence on their decision to visit Midland County. For the majority of *travel inquirers* who visited the rail-trail and *intercepted tourists*, the PMRT was the primary purpose of their trip. Items best liked about the rail-trail and most frequently reported by *travel inquirers* and *intercepted tourists* were the design of the trail and the high level of maintenance performed on the PMRT. Approximately one-quarter of *travel inquirers* who visited the rail-trail and little more than half of the *intercepted tourists* reported some dislikes with regards to the rail-trail. The item least liked by both was the lack of amenities along the PMRT, including bathrooms and drinking fountains. Eight out of ten *travel inquirers* who visited the PMRT and approximately two-thirds of the *intercepted tourists* visited businesses along its length. The types of businesses most frequently visited were restaurants and convenience stores.

- Approximately two-thirds of *travel inquirers* who visited Midland County stayed overnight, compared to one-fifth of *intercepted tourists* who stayed overnight. On average the *intercepted tourists* spent more nights (5.6 nights) in the county than *travel inquirers* (2.7 nights). *Travel inquirers* staying overnight were most likely to stay in a hotel or motel and *intercepted tourists* were equally likely to stay in a hotel/motel or with friends and relatives. *Travel inquirers* were likely to spend more money than *intercepted tourists*.
- Both *travel inquirers* and *intercepted tourists* were most likely to come from two-adult households or two-adult households with children. The average age of adults in the households of *travel inquirers* was 45 years and *intercepted tourists* was 46 years. Most *travel inquirers* and *intercepted tourists* were employed full-time. The reported annual household income before taxes for most *travel inquirers* and *intercepted tourists* fell between forty and sixty thousand dollars.

*Submitted by Michigan State University
Department of Park, Recreation, and Tourism Resources
January 2002*

Use and Users of the Pere Marquette Rail-Trail in Midland County Michigan

By

Charles Nelson, Ph.D., Joel Lynch, Ph.D., Christine Vogt, Ph.D., and Afke van der Woud

Introduction

This study quantified spring, summer, and early fall visits to the Pere Marquette Rail-Trail (PMRT) in Midland County by section of the trail, type of use, timing of use and type of user group. A visit is defined as one person using one section of the PMRT for any portion of a day. Besides the output measure of visits, it also assesses outcomes of the trail experience in terms of visitor motivation and satisfaction. Finally, it provides a methodology that others can effectively use to assess rail-trail use and users.

Methods

Observations

To estimate visits, observations were made on selected days and times during April through September 2000 and 2001 from intercept points in each rail-trail section. Observations are done in four hour periods designed to be representative of a time of the day (morning, midday and afternoon/early evening) and day of the week. The counts are then extrapolated to represent all days and times within the study timeframe (April - September) for each trail segment. Finally, use estimates are segmented based on the type of trail use, weekend or weekday, and adult or children.

Survey

A one-page self-administered survey was distributed once every 10 minutes to a trail user passing the intercept point during each observation period. This intercept-elicited information concerning motivation for trail use, frequency of use on an annual basis, time of use, trail section(s) used, level of satisfaction with current experience and demographic information.

Results

Use Estimates

The two sections in the City of Midland (Tridge to Emerson and Emerson to Dublin Ave.), which cover the three miles of the 22-mile trail in Midland County, accounted for 51 percent of the estimated 178 thousand visits annually during April through September across the five PMRT sections in Midland County. The other three sections outside of the Midland City limits (Dublin Ave. to Sanford, Sanford to North Bradley and North Bradley to Coleman) accounted for 49 percent of the visits.

On weekends (Saturday - Sunday), the sections outside the Midland City limits accounted for 54 percent of weekend visits, while sections inside the City limits accounted for 46 percent. During the week (Monday - Friday), sections outside the Midland City limits accounted for 55 percent of visits, while sections outside the Midland City limits had 45 percent of visits. For all sections, weekdays accounted for 61 percent of visits and weekend days for 39 percent.

Bicycling comprised the most visits by type of trail use in every section. For all sections combined bicycling was 54 percent of visits, walking/running 23 percent, in-line skating 22 percent, and 1 percent for other uses such as fishing access and use of mechanical conveyances for those with mobility impairments. A smaller proportion of visits involved bicycling inside the Midland City limits than in the sections outside the limits through Coleman. Children accounted for 24 percent of trail visits and adults for 76 percent.

Survey Results

Of the 942 adults intercepted on the trail, 710 (75%) completed the survey. Seventy-seven percent resided and/or worked in Midland County and 23 percent were tourists. However, on weekends, almost one-third (31%) were tourists. About half (54%) of visits involved use of a trailhead parking area with the rest accessing the rail-trail from surface streets, sidewalks or adjacent property. Four percent of the visits involved persons with "an impairment that significantly impacted their ability to perform major life functions," defining a disabled person under the Americans with Disabilities Act.

The typical rail-trail user spent about 2 hours on the trail per use, with users on weekends staying about 2.3 hours and weekday users about 1.7 hours. Almost two-thirds of trail users (61%) cited exercise as their primary reason for trail use, with 35 percent reporting recreation and 3 percent reporting transportation. On weekends, the proportion primarily using the trail for recreation was higher than during the week, while the proportion of exercise and transportation uses was lower.

Trail users were highly satisfied with their experience as 97 percent rated their experience as satisfied and 3% as neutral or dissatisfied. Sources of dissatisfaction were glassphalt stretches (which have been paved over with regular asphalt since the study), potholes and desire for more bathrooms and drinking fountains along the trail.

Weighting to control for bias due to frequency of visit, the typical trail user had 15 visits to the trail in the past 12 months, with an average of 7.2 during summer (June - August), 4.0 in the spring (March - May), 3.1 in fall (September - November) and 0.7 during winter (December - February). During winter months the rail-trail is only plowed within the Midland City limits and no grooming is done of snow-covered trail outside the Midland City limits.

Conclusion

Use of the PMRT is extensive, with an estimated 178 thousand section visits from April through September. The trail serves County residents and visitors, providing satisfying experiences for bicyclists, in-line skaters, walkers and runners. Exercise and recreation are the primary motivations for use. Ninety-seven percent of users are satisfied with their trail experiences. The three percent not satisfied were concerned about glassphalt sections (now gone after repaving), potholes (which demand continual repair) and a desire for more restroom/drinking fountain facilities. Crowding was not noted as a problem, indicating additional capacity for use.

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Measuring and Monitoring Trail Use: A Nationwide Survey of State and Federal Trail Managers

By

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The Department of Park, Recreation and Tourism Resources at Michigan State University, cooperating with the Michigan Department of Transportation and others, launched a multi-year case study on the benefits of the Pere Marquette Rail-Trail located in mid-Michigan. A component of the research project was to examine the relevancy of mechanical and electronic counting devices in estimating and monitoring trail use. To assist with that effort a mail survey was conducted with state and federal trail managers across the United States. The goal of this study was to better understand the extent of trail use monitoring and to assess the application of mechanical and electronic counting devices in trail planning and management.

Surveys were mailed to 169 state trail administrators or bicyclist coordinators and 175 federal trail managers from the USDA Forest Service and USBI Bureau of Land Management. Seventy-two state-level trail administrators/coordinators (42% response rate) and 104 federal-level trail managers (59% response rate) returned a completed survey. Data collection occurred in late spring and early summer of 2001.

The following highlights emerged from this research:

- Forty percent of state trail managers and 73% of federal trail managers reported that visitor use data were collected in the past five years on one or more of the trails they managed. Those who were not able to implement such studies, overwhelmingly cited inadequate funds or staff as the main barrier.
- For over 70% of both state and federal trail managers; the most commonly cited reason for collecting these data was to aid in future planning and capital development. Budget development or grant justification, marketing and visitor satisfaction, and agency policy were also important reasons, but at slightly different levels between state and federal trail managers.
- Observations at parking lots or on trails and mechanical/electronic counting devices were most often the methods used to monitor visitors use in the past five years by both state and federal trail managers. Of those agencies that use mechanical/electronic-counting devices, infrared sensors were the most frequently used. However, many trail managers considered them to be somewhat ineffective.
- Both state and federal trail managers nearly unanimously agreed that gathering trail use data will be increasingly important in the future. They also noted that GIS is a valuable tool in trail planning and management.

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