

CHAPTER III

METHODOLOGY

RESEARCH INTENT

The purpose of this study is to document the changes in adjacent landowner perception about converted railroad trails. The main focus is placed on comparing current owner attitudes with their concerns before trail development. Some of the factors that impact adjacent property are examined, such as crime and property valuation. Supporting information is gathered from professionals in their field of knowledge. Groups contacted include trail managers, conservation officers, law enforcement agents, county commissioners, appraisers from city and county offices, and real estate agents.

This research is an indepth study of two selected trails, rather than a random selection of the total 158 rail-trails in the United States. This approach is employed because of the restraints of available time and resources, and the difficulty in identifying all landowners adjacent to the potential trail sites. Due to this focus, the conclusions drawn about the sites in this study may not reflect the conditions in all trails across the country.

The following activities were completed in order to obtain the results for this study:

1. Selection of two study sites based on information gathered from rail-trails in four north-central states.
2. The research of the physical characteristics and historical background of the two sites.
3. Development of owner questionnaire and cover letter, and interview forms for the professionals.
4. Approval of questionnaire and cover letter by the Human Subjects Committee.
5. Pretesting of questionnaire and subsequent revisions.
6. Identification of adjacent landowners and professionals from both trails.
7. Random selection of landowners to be contacted in the survey.
8. Sending advance notification which explains the study, to the selected landowners.
9. Conducting the phone survey of owners and professionals.
10. Sending follow-up questionnaires to owners who were not contacted by phone.
11. Transferring information from questionnaires to coding sheets for input into the computer.
12. Interpretation and analysis of data from the computer.

OPERATIONAL DEFINITIONS

In order to clarify the information presented in this study, the following definitions will apply:

Abandoned Railroad Right-of-Way (ROW) - A ROW which has received approval for abandonment by the Interstate Commerce Commission, the federal court, or any other governmental agency having jurisdiction over railroad property.

Converted Railroad Trail or Rail-Trail - An abandoned railroad right-of-way which was acquired and developed as a recreational or multi-purpose trail.

Small Residential - Private property less than 3.5 acres which is used primarily as a place of residence.

Large Residential - Private property 3.5 to 36 acres which is used primarily as a place of residence but may also include some farmland or a commercial business.

Commercial - Private property which is used in the buying, selling, or production of goods or services excluding farming.

Farmland - Private property which is used for cropland or pasture, but may also be used as a place of residence.

Landowner - Owner, renter, or manager of private property, church land, homeowner association, or a school district.

SITE SELECTION

The site selection process is based on information gathered about rail-trails in four north-central states: Iowa, Illinois, Wisconsin, and Minnesota. These states offered several advantages. As indicated in Figure 2.4, about one-third of all rail-trails are located in this area. In addition, many of these trails have been established for a number of years. Also available are state and local agencies with active rail-trail programs. And finally, this region is close and accessible for easier data collection.

The selection of two sites in Minnesota, the Root River and the Luce Line Trails, is based on the following criteria:

1. Developed trails in current use which are converted from abandoned railroad rights-of-way.
2. Trails that are adjacent to various types of land usage such as suburban, agricultural, commercial, and scenic rural areas.
3. The willingness of the Minnesota Department of Natural Resources (DNR) to provide resources in the completion of the study.

4. Documentation of the opposition or the concern of landowners previous to trail conversion. In the case of the Root River Trail, a study on landowner attitudes had been completed prior to its development.

BACKGROUND OF TRAIL SITES

This section describes the physical characteristics and the historical background of the two trails. Both trails are rather distinctive and represent an opportunity for comparison.

Root River Trail

Physical Description. The Root River Trail is located in an unglaciated area of southeastern Minnesota in Fillmore and Houston Counties (Fig. 3.1 Root River Trail Location Map). The 35-mile trail, which parallels limestone bluffs along the Root River and Watson Creek, offer a variety of visual experiences. The trail passes through the rolling uplands, the transition zone between upland and valley, and the valley floor environment (Fig. 3.2 Rolling Farmland; Fig. 3.3 Trail Along River; Fig. 3.4 Railroad Grade Cut). Portions of Richard J. Dorer Memorial Hardwood Forest along with Lost Lake State Game Refuge are adjacent to the right-of-way. The Root River Trail is one of the most scenic routes in Minnesota (Minnesota DNR, 1979-1980, 1987).

Although the railroad ROW was purchased by the state eight years ago, only 11 miles from Lanesboro to Fountain have a paved surface. The portion east of Lanesboro is under construction and should be completed in late fall of 1988 (Paulson, 1988). Because the eastern section has encountered fewer users, this study will be limited to the western 11-mile section (Fig. 3.5 Root River Trail Survey Area). This includes the downtown businesses in Lanesboro that are adjacent to the paved trail.

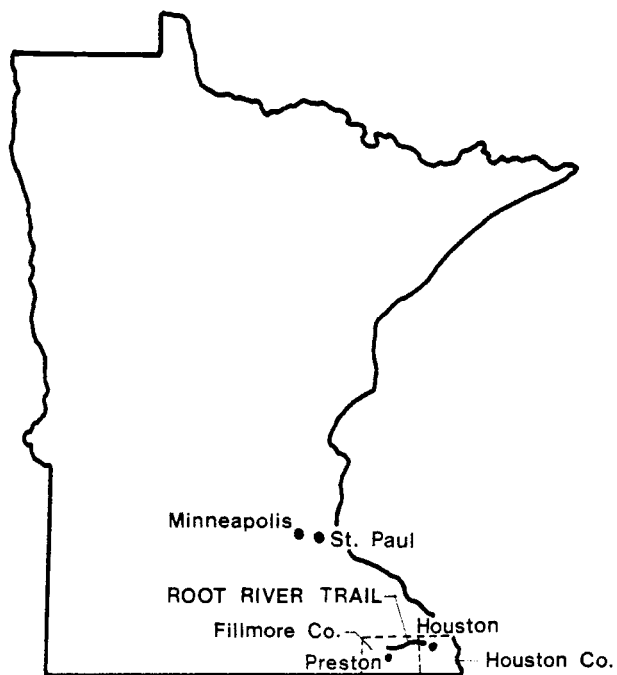


Figure 3.1 Root River Trail Location Map Location of Root River Trail in southeastern Minnesota (Generated from Minnesota DNR, 1987).



Figure 3.2 Rolling Farmland Agricultural land along the western end of the Root River Trail near Fountain.



Figure 3.3 Trail Along River Scenic trail following the South Branch of the Root River between Lanesboro and Fountain.



Figure 3.4 Railroad Grade Cut Old railroad grade cut near Lanesboro on the Root River Trail.

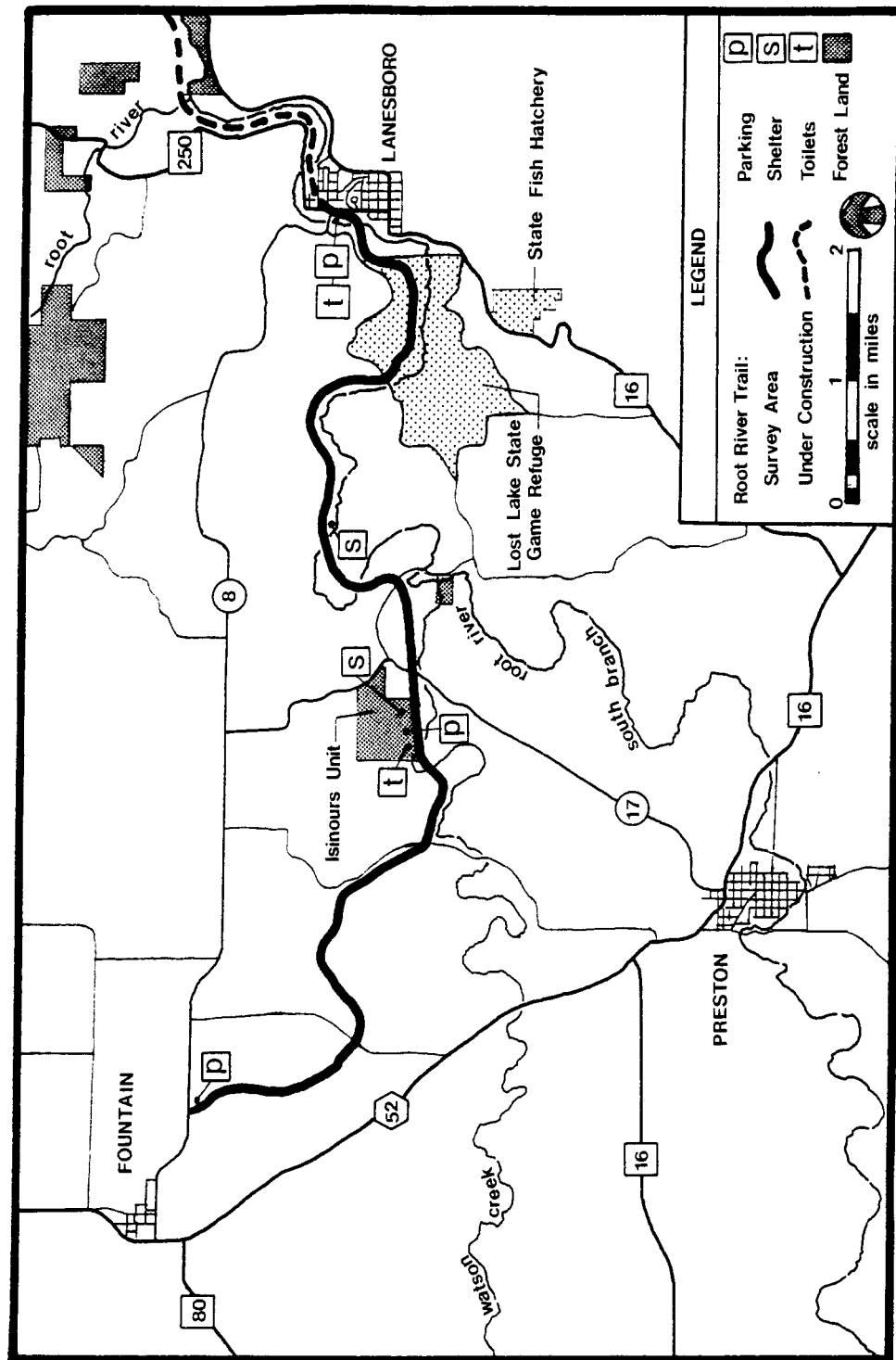
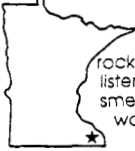


Figure 3.5 Root River Trail Survey Area Survey Area of the Root River Trail from Lanesboro to near Fountain (Generated from Minnesota DNR, 1987).

The headquarters for the Root River Trail is located in historic Lanesboro, a small agricultural based community of 900. Although tourism has not reached its potential, it is a small, but growing industry. Several buildings in town are listed on the National Register of Historic Places. The Lanesboro Community Club and several local businesses promote the trail and other recreational opportunities as an attraction for drawing visitors (Fig. 3.6 Bed & Breakfasts; Fig. 3.7 Lanesboro Brochure) (Historic Bluff Country Bed & Breakfast Association) (Lanesboro Community Club).

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Historic Bluff Country**




It's life
in the slow lane,
rocking on a porch,
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You'll enjoy an unique B&B experience in Southeastern Minnesota's Historic Bluff Country... fishing for trout or bass in our many streams, biking or hiking on one of the winding trails, canoeing, sight-seeing, or antiquing. Tour the countryside, or go underground in either of the two caves open to the public.

Step back in time with an Amish tour, or visit any of Historic Bluff Country's many museums (Steam Engines, Laura Ingalls Wilder Site, History Centre).

In one of these Historic Bluff Country B&B's you're sure to find the accommodations to fit your needs--from a country cottage with outdoor privy to a modern farm home, from art nouveau to Victorian splendor.

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LOCATED ON ROOT RIVER & TRAIL**



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Carrolton Country Cottage is the place for people favoring a relaxed back-to-basics lifestyle. Return to nature in this 1800's cottage for the experience of outdoor plumbing, outdoor privy, and outdoor fun!

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CARROLTON COUNTRY COTTAGE**
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IF NO ANSWER - CALL AGAIN LATER
INNKEEPERS: CHARLES and GLORIA RUEN
OPEN ALL YEAR



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INN**

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*Breakfast with us
Excellent dining in area*

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Lanesboro, MN 55949
Phone (507) 467-2158
Gene, Mary and Kirsten Mensing
Proprietors

Figure 3.6 Bed & Breakfasts Advertizing for two Lanesboro Bed & Breakfasts that promote the scenic area and the Root River Trail (Historic Bluff Country Bed & Breakfast Association).

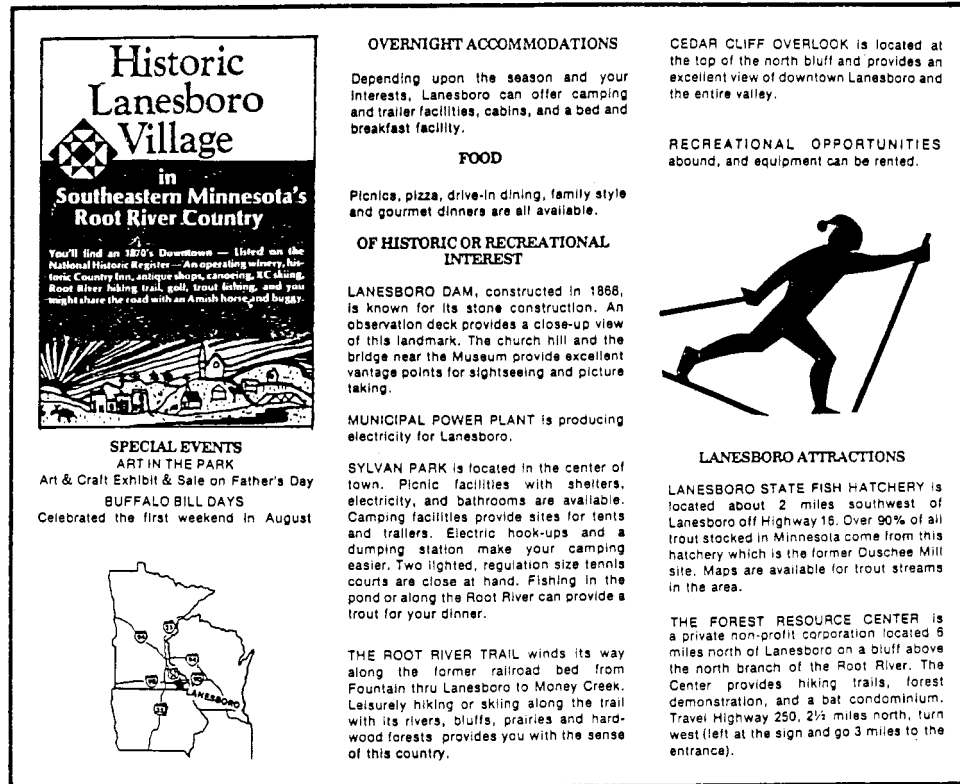


Figure 3.7 Lanesboro Brochure Brochure describing the sightseeing attractions and the recreation opportunities in the historic Lanesboro area (Lanesboro Community Club).

Historical Perspective. The abandoned railroad right-of-way and the scenic quality of the valley have historic significance for the Root River Trail and the Village of Lanesboro (Fig. 3.8 1879 Lanesboro, Fig. 3.9 Historic Main Street). The Southern Minnesota Railroad was completed through Lanesboro in 1868, the same year the town was incorporated. As in many other communities in the mid-west at that time, the railroad was the main line of communication with the outside world. One locomotive, named the "Pusher" was stationed in Lanesboro to help trains out of the valley and onto the prairie (Drake, 1969).

The Lanesboro Townsite Company, formed in New York to build the new village, had visions that it would become a great resort area. The first building constructed in Lanesboro was a large three story stone hotel to house the expected visitors. A canopy was extended from the hotel to the depot area, so that the guests could be protected from the weather (Fig. 3.10 Locomotive and Hotel). A two-mile human-made lake on the Root River along with the natural beauty of the area, plus fishing and hunting opportunities, were expected to draw many tourists (Fig. 3.11 Root River Valley). These dreams were ended when the hotel was totally destroyed by fire in the early 1880's (Drake, 1969). With the historic and scenic elements of Lanesboro, the valley, and the railroad right-of-way, the trail offers a unique experience.

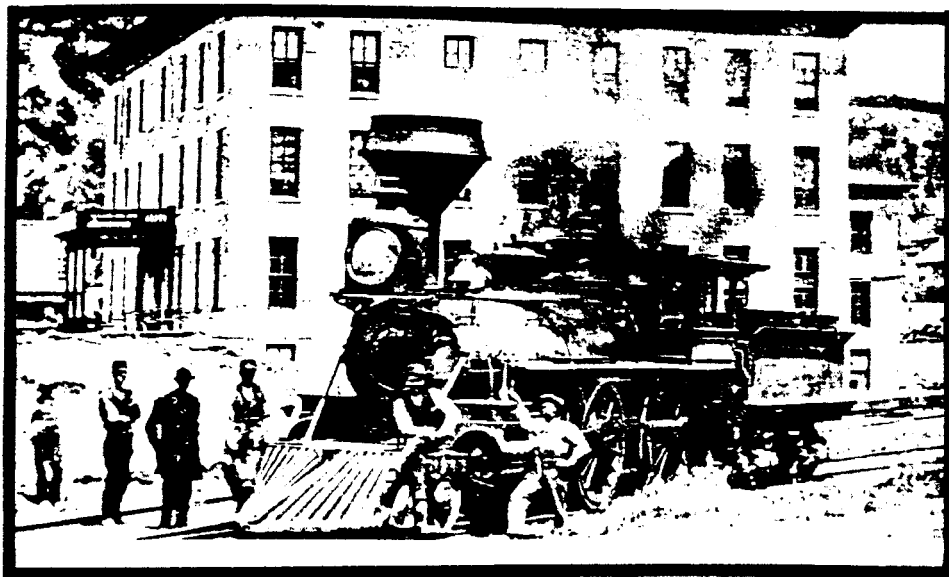


Figure 3.10 Locomotive and Hotel Train locomotive in front of the three story stone hotel in Lanesboro before the turn of the century (Drake, 1969).

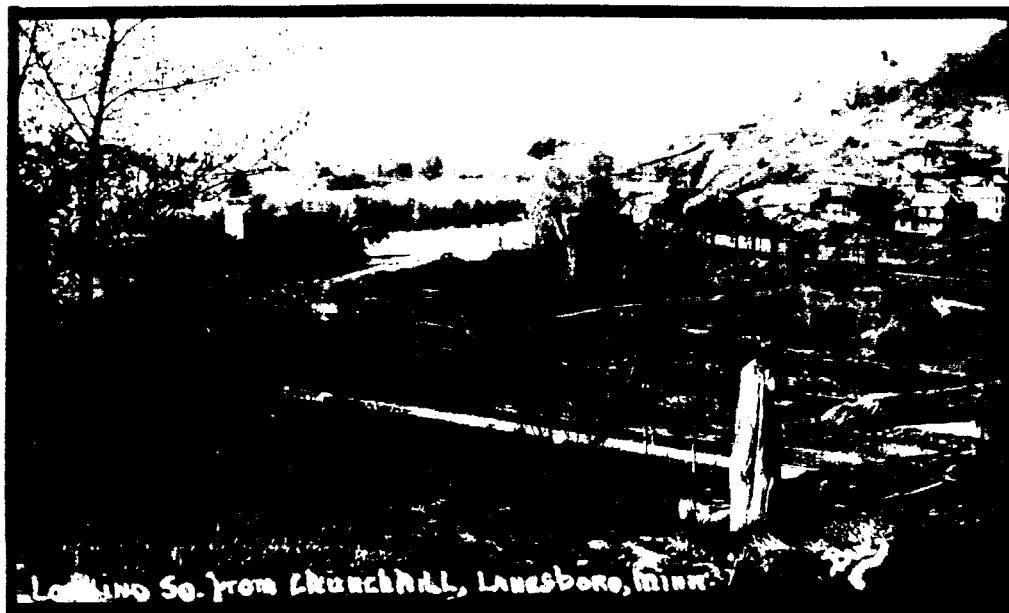


Figure 3.11 Root River Valley Historic view of the railroad and stone dam and falls in the Root River Valley south of Lanesboro (Reproduced Post Card by Bue, Studio Antiques, Lanesboro).

Conversion Process. In 1979, the Chicago, Milwaukee, St. Paul and Pacific Railroad abandoned a 100-mile stretch from the Mississippi River to Ramsey Junction, a point five miles north of Austin. This included a 50-mile track through the Root River Valley. Controversy over the Minnesota DNR's attempt to purchase and develop the right-of-way, resulted in the Milwaukee Road Corridor Study and a public hearing on the proposed acquisition. This study, completed in January of 1980, consisted of nine technical appendices, a social and physical inventory, and a summary of alternative analyses and recommendations. Issues covered included the impact of the trail on adjacent land, local law enforcement problems, and the need for additional trail recreation (Minnesota DNR, RRSTMP).

As part of the social and physical inventory, a survey of adjacent landowners was completed by the private consultants, John and Michele Genereux, Consulting and Research in the Social Sciences. An attempt was made to contact all owners along the Milwaukee Road ROW from Spring Valley to a point east of Hokah, a distance of about 60 miles (Fig. 3.12 1979 Survey Area). About 184 landowners were interviewed by phone or in person between August 7-20, 1979. As part of the study, the DNR staff surveyed a sample of randomly selected landowners along the Heartland, Douglas, and Elroy-Sparta Trails (Fig. 3.13 DNR Trail Location Map). The private consultants compared these results from the trails with the findings from the Milwaukee Road survey (Genereux, 1979).

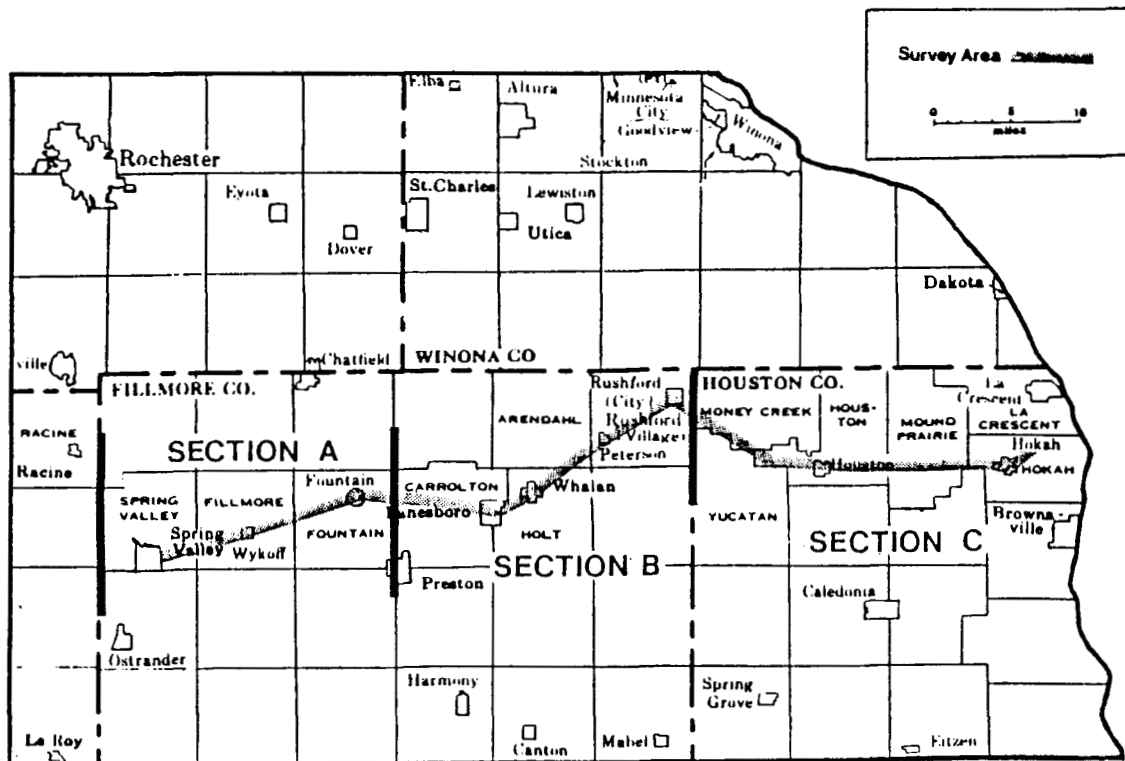


Figure 3.12 1979 Survey Area Survey area along the Milwaukee Road ROW (Genereux, 1979).



Figure 3.13 DNR Trail Location Map Location of the Milwaukee Road ROW and the Heartland, Douglas, and Elroy-Sparta Trails (Minnesota DNR, 1979-1980).

Some of the findings from the two surveys include the following statements (Genereux, 1979):

1. Three-fourths of the respondents are opposed to developing the Root River Trail. Although varying in some areas, both rural and urban landowners generally oppose this project.
2. Types of land use along the Milwaukee Road ROW include:

25% Urban (towns)	60% Rural, farm
2% State-owned	12% Rural, non-farm
3. Most of the owners (88%) in the Milwaukee Road survey would purchase the right-of-way adjacent to their property, if the price was right.
4. A majority of the landowners (68%) do not trust the DNR to maintain the proposed Root River Trail.

5. Landowners in the Milwaukee Road survey anticipate more problems than have been experienced by the owners along the Heartland, Douglas, and Elroy-Sparta Trails. This is more evident on issues such as: vandalism, fence maintenance, trail management, local use of trail, and economic benefits of trails. (Table 3.1 Owner Responses in DNR Study).
6. Analyzing data on a township basis, indicates that owners between Lanesboro and Rushford may be less inclined to strongly oppose negotiating with the DNR about the trail. A majority of these owners oppose this project, but they have fewer land use problems than other sections along the ROW.

According to the report, the problems stated by landowners adjacent to the three existing trails, are concerns rather than actual, negative experiences. Anticipated problems of landowners along the Milwaukee Road right-of-way are based on their mistrust of the DNR and the belief that the trail will exasperate the existing railroad related problems. Many landowners feel that the right-of-way should be considered for farmland before any other types of uses (Genereux, 1979). Although the comparison between the existing and the proposed trails are interesting, trails have individual character and changes in landowner attitudes over time are difficult to anticipate.

In another section of the social and physical inventory, the DNR staff interviewed over the phone law enforcement agents along the Heartland, Douglas, and Elroy-Sparta Trails. The sheriffs had received only a small number of complaints about the trails and none were serious in nature (Minnesota DNR, 1979-1980).

The result of the Milwaukee Road Corridor Study was a recommendation that the DNR acquire 35 miles of the right-of-way from Fountain to Money Creek Woods east of Rushford and a five-mile section near Hokah. The public hearings held in Rushford in March of 1980,

STATEMENTS	AREA	% IN AGREEMENT
"ROW should be kept for railroad"	Milwaukee Road: Segments A & C Segment B Urban	63% 48% 44%
"Loss of railroad service has hurt the community"	Minnesota Trails: Sparta-Elroy:	20% 26%
"If there were a trail in this area, local people would use it"	Milwaukee Road: Segments A & C Segment B Urban	32% 38% 38%
"Local people use and enjoy this trail"	Minnesota Trails: Sparta-Elroy:	95% 78%
"If a trail were built, it wouldn't be long before my land would be full of weeds"	Milwaukee Road: Segments A & C Segment B Urban	53% 38% 49%
"DNR does an excellent job of weed control"	Minnesota Trails: Sparta-Elroy:	52% 41%
"DNR could be trusted to manage a trail"	Milwaukee Road: Segments A & C Segment B Urban	10% 14% 27%
"DNR does an excellent job of managing the trail"	Minnesota Trails: Sparta-Elroy:	90% 67%
"I trust the DNR to maintain fences"	Milwaukee Road: Segments A & C Segment B Urban	10% 19% 8%
"DNR keeps up its end of the bargain about fencing"	Minnesota Trails: Sparta-Elroy:	46% 72%
"The trail would mean more vandalism and other crimes"	Milwaukee Road: Segments A & C Segment B Urban	87% 68% 69%
"Trail users steal"	Minnesota Trails: Sparta-Elroy:	3% 6%
"Summer users trespass"	Minnesota Trails: Sparta-Elroy:	5% 33%
"Winter users trespass"	Minnesota Trails: Sparta-Elroy:	30% 39%
"DNR patrols the trail enough to control users"	Minnesota Trails: Sparta-Elroy:	52% 54%
"A trail would be a bonus for local business"	Milwaukee Road: Segments A & C Segment B Urban	16% 14% 16%
"Having a trail has benefited the local economy"	Minnesota Trails: Sparta-Elroy:	69% 72%

Table 3.1 Owner Responses in DNR Study Comparison of landowner responses between the Milwaukee Road and the DNR Trails (Genereux, 1979).

generated a Report of the Hearing Examiner to the DNR Commissioner (Minnesota DNR, RRSTMP). During the hearings, the following individuals or groups which have a bearing on this study, stated their opposition to the trail (OHESM, 1980):

1. Nine landowners between Fountain and Lanesboro
2. Houston County Commissioner representing the Association of Minnesota Counties, District Nine (11 southeastern counties)
3. Fillmore County Sheriff - Expressed concern about potential problems rather than opposition to the trail.

The following groups supported the trail:

1. Lanesboro Community Club
2. Lanesboro City Council - The council supported the trail in writing, but did not testify at the hearings (Blomer, 1988).

The Commissioner of Natural Resources, authorized by the Legislature in 1979, to determine the acquisition of the Root River Right-of-Way, decided in April of 1980 to proceed with the purchase of 49 miles. Fifteen miles near Austin was established as a State Scientific and Natural Area and 35 miles of the most scenic distance was set aside for the Root River Trail (Minnesota DNR, RRSTMP).

The controversy over the proposed Root River Trail initiated several groups interested in either promoting or defeating the trail (Minnesota DNR, RRSTMP).

Trail Alliances from Lanesboro, Houston, and Austin, testified in favor of the trail at the public hearings.

The Citizens Right to Purchase Property, Inc consisted mostly of adjacent landowners opposed to the trail and supported their acquisition of the right-of-way for personal use.

Lanesboro Community Club which existed prior to trail acquisition, supported the trail.

Lanesboro Trail Club was formed in 1982 after the acquisition in order to represent the trail users in the Lanesboro area.

Luce Line Trail

Physical Description. The Luce Line Trail ROW, located in central Minnesota, extends from Plymouth, a Minneapolis suburb, west to Clara City, a distance of 97 miles (Fig. 3.14 Luce Line Trail Location Map). A hard pack limestone surface has been placed on the first 30 miles to Winsted. The remainder of the trail to the west has been cleared and surfaced graded (Minnesota DNR, 1986).

For this study, only the eastern 19-mile section from Plymouth to Watertown, is included in the survey (Fig. 3.15 Luce Line Trail Survey Area). Land use along this section ranges from residential in Wayzata and Orono to farmland in Carver and western Hennepin Counties (Fig. 3.16 Residential Area; Fig. 3.17 Estate Lot; Fig. 3.18 Farmland By Trail).

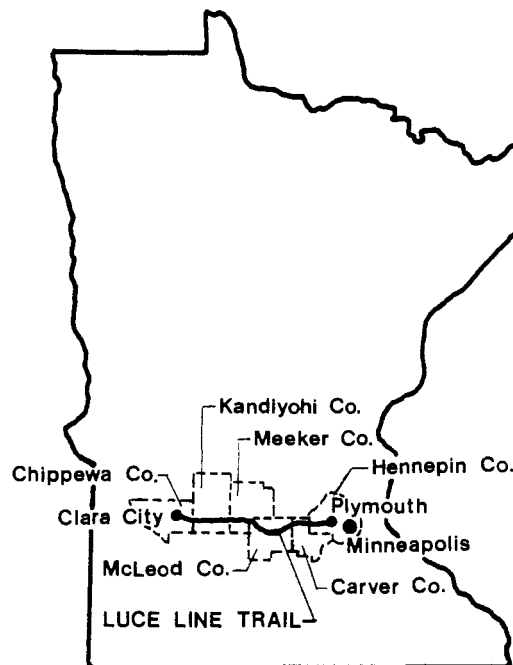


Figure 3.14 Luce Line Trail Location Map Location of Luce Line Trail from Plymouth to Clara City in central Minnesota (Generated from Minnesota DNR, 1986).

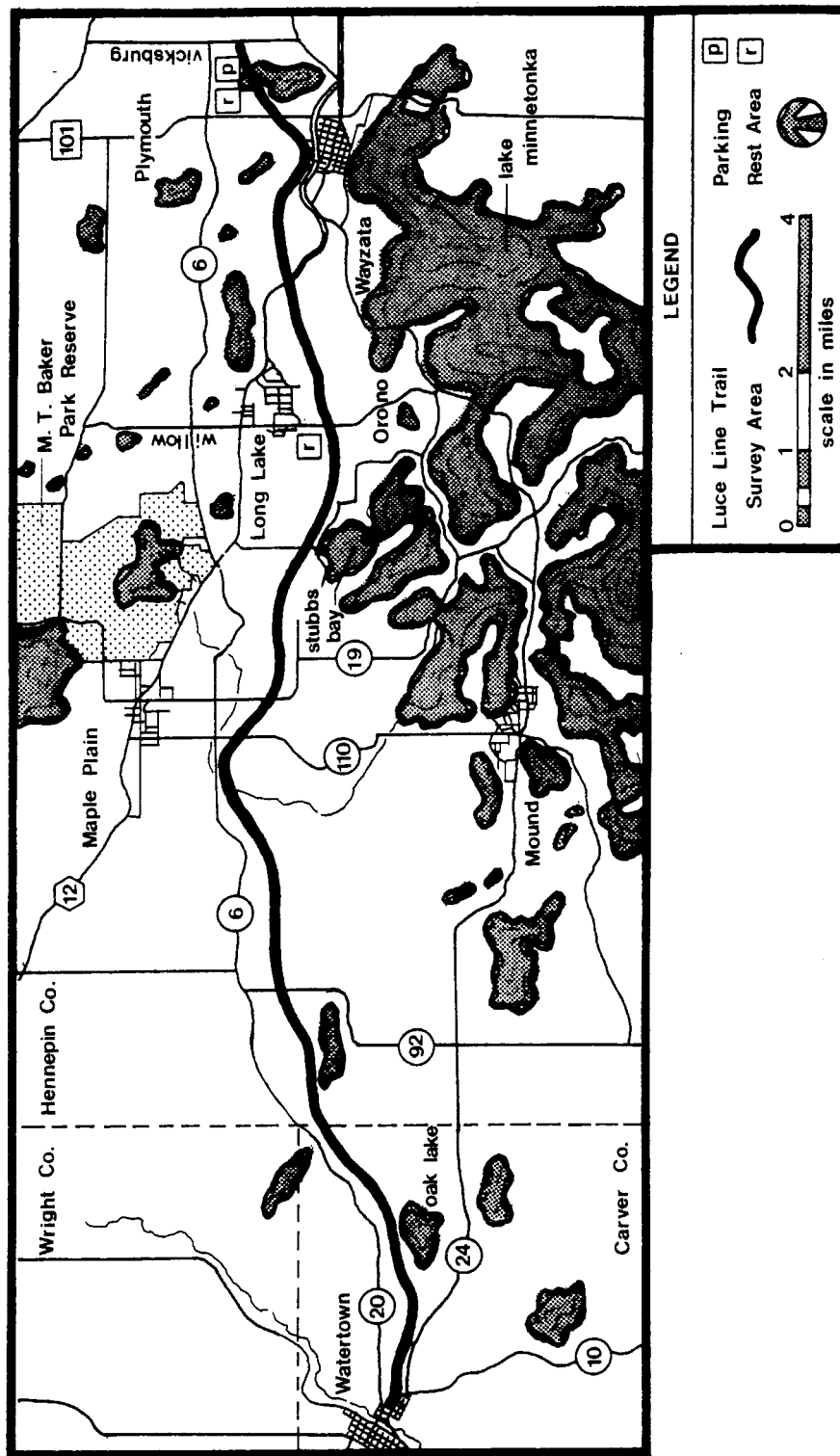


Figure 3.15 Luce Line Trail Survey Area Survey area of the Luce Line Trail from Plymouth to Watertown (Generated from Minnesota DNR, 1986).

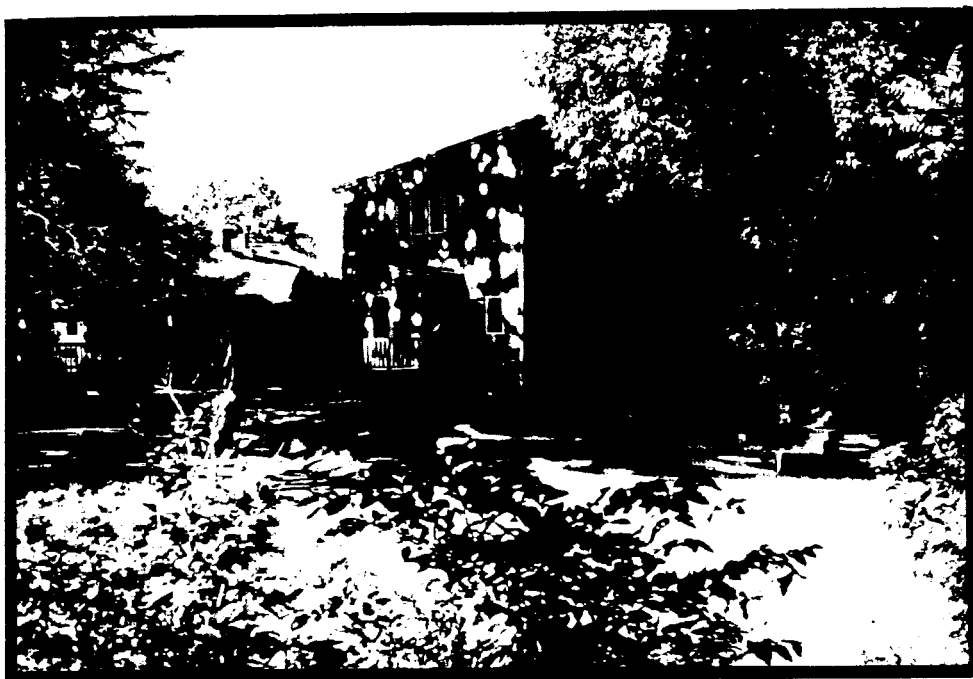


Figure 3.16 Residential Area Suburban residential area near Stubbs Bay along the Luce Line Trail.



Figure 3.17 Estate Lot Large residential house located on an estate lot by the Luce Line Trail at Orono.



Figure 3.18 Farmland Near Trail Agricultural land along the Luce Line Trail in western Hennepin County.

The physical land features are also varied in the survey area. Positioned along the Luce Line Trail are lakes, woods, creeks, marshes, and tamarack swamps (Fig. 3.19 Woods Along Trail; Fig. 3.20 Oak Lake). Many of these water features are scattered throughout the residential areas. The topography for the most part is flat on the eastern section and becomes slightly rolling in the central and western portions of the survey area from Orono to Watertown.

Several bridges and underpasses traverse the major roads, railroad tracks, and water features. Most of the minor roads are crossed on-grade, but stop signs are posted on the trail for the safety of the users (Fig. 3.21 Road Bridge; Fig. 3.22 Trail Crossing).



Figure 3.19 Woods Along Trail The Luce Line Trail passing through a wooded area in western Hennepin County.



Figure 3.20 Oak Lake View of Oak Lake from the Luce Line Trail near Watertown in Carver County.



Figure 3.21 Road Bridge Carver Co Rd 10 crossing the Luce Line Trail at Watertown.



Figure 3.22 Trail Crossing On-grade trail crossing at Old Long Lake Road near Wayzata. Trail users yield to the street traffic at these intersections.

The Luce Line is one of the most heavily used trails in the state. As shown in Fig. 3.23 Use of Minnesota Trails, monitoring of this trail from 1981-84 indicates approximately 54,000 user occasions during each summer. This is the same as the combined use on the Heartland, Sakatah Singing Hills, and the Douglas State Trails for this period (Minnesota DNR, 1984). Surveys in recent years indicate the number of user occasions during the summer has increased to 70,000 plus on the first 30 miles (Schmidt, 1988).

Use of Existing Trails

The DNR has monitored summer use on four state trails through on-site counting and surveys of users. Two trails, the Luce Line which runs from suburban Minneapolis to Winsted, and the Heartland which connects Park Rapids and Walker in northern Minnesota, have been monitored since the summer of 1980. The other two, the Sakatah Singing Hills which connects Faribault and Mankato, and the Douglas just outside of Rochester, have been monitored since the summer of 1981.

The preliminary findings of the monitoring program show that during the summer:

- approximately 54,000 user occasions took place on the Luce Line State Trail;
- approximately 37,000 user occasions took place on the Heartland State Trail;
- approximately 5,000 user occasions took place on the Sakatah Singing Hills State Trail;
- approximately 13,000 user occasions took place on the Douglas State Trail;
- approximately 58 percent of all summer use was by bicyclists.

Figure 3.23 Use of Minnesota Trails Preliminary findings of a monitoring program on the summer use of four state trails in Minnesota (Minnesota DNR, 1984).

Historical Perspective. The Luce Line Trail takes its name from W. L. Luce and the railway line he started in 1902. This line, which ran from Minneapolis to Brookings, South Dakota, eventually became known as the Luce Electric Short Line Railway. Because of financial problems in 1927, the line was terminated in Gluek, Minnesota. The Chicago and Northwestern Railroad eventually purchased and owned the right-of-way until its abandonment in 1971 (Minnesota DNR, 1986).

Conversion Process. In 1973, the Minnesota Legislature authorized the Commissioner of Natural Resources to establish, develop, maintain, and operate the Luce Line Trail. Before acquisition of any land could take place, the commissioner was required to develop a management program and conduct public hearings on this proposed program. Included in this plan were sections on fencing to protect the adjacent landowners and on maintenance for a litter free trail (Minnesota DNR, 1973).

Public hearings were conducted at six communities along the trail from September 20 to November 15, 1973. The purpose of the hearings were to inform and receive feedback from the public on the management program. It was not intended as a forum to debate the issue of the existence and creation of the trail. Conclusions drawn from the recordings of the first two hearings held in Orono and Watertown apply to this study (Minnesota DNR, 1973).

1. About 50% of the 31 speakers at the Orono Hearing stated their opposition to either snowmobiles or motorcycles on the trail. Many were vocal in stating current problems of trespassing and noise associated with motor vehicles in the abandoned right-of-way. Some questioned the DNR's ability to police the trail when local law enforcement agencies did not control the problem. Participants were concerned with the uses and the abuses of the proposed trail. Some individuals expressed opposition to snowmobiles at the Watertown Hearing, but it was not as vocal.

Conclusions may be drawn that opposition to motor vehicles may reflect some opposition to the trail itself, although no one stated that fact.

2. Four out of 58 speakers at the two hearings stated their approval of the proposed trail. Based on the types of questions asked during the hearings, other individuals supported the trail, especially at the Orono Hearing.
3. Approximately 20% of the speakers at the two hearings stated their support of snowmobiles on the proposed trail. It is assumed they supported the creation of the trail.
4. Opposition to the trail was more evident at the Watertown Hearing. Several questions challenged the creation of the trail. One asked if severe opposition were encountered at all the meetings, would the trail be developed? Another felt that rural Carver County was supporting the recreation for urban Hennepin County. Others questioned the expense of the trail, gaps in the right-of-way through several communities, adverse possession by some landowners, and the intentions of the state to condemn additional land along the right-of-way. And finally, one person asking about the increase in taxes due to the "amenity" of living next to the trail stated, "...we bought it (land next to a lake) for privacy and paid dearly for it and now we'll pay dearly for that privacy to be invaded..."
5. Based on the types of questions asked at both hearings, several individuals were uncommitted and simply wanted to know how their property was going to be affected.

Most of the opposition to the trail occurred west of Watertown. At the third hearing in Silver Lake, a trail advocate stated that 90% of the people attending the hearing were opposed to the trail. This opposition was based in the belief that big government was infringing on the rights of adjacent landowners and that most of the right-of-way could be converted to productive farmland (Schmidt, 1988) (Minnesota DNR, 1973) (Kern, 1977).

A majority of the right-of-way from Plymouth to Clara City was purchased in 1974-75 and was designated as a trail in 1976. Sections of the trail through some of the communities, have been purchased in later

years. At the present time, the right-of-way west of Cosmos is in doubt and may be sold back to the adjacent landowners (Collins, 1988) (Minnesota DNR, 1986).

Opposition to motorized vehicles and other concerns expressed at the Orono Hearings in 1973 was a result of unregulated use along the abandoned right-of-way prior to DNR control. But in 1982, after six years of use along the completed 30 mile stretch, many residents were satisfied with the outcome. Richard Sterner of Winsted who was originally opposed to the trail states... "The people I talk to who live along the trail are quite pleased. I had mixed emotions prior to this time, but I've changed my mind completely." Wayzata Mayor Bill Humphrey said, "A few people spoke up (prior to trail development) and said they didn't want people running adjacent to their backyards. But I haven't heard much the last few years. I think most people enjoy it." Kermit Eisinger said that before the trail was developed, there were problems with noise and litter. "But once it was fully developed...I think it's been pretty well used as it was intended to be," he stated (Appendix H: Newspaper Articles) (Brackin, 1982:22).

Many landowners west of Winsted are still opposed to the trail. Recreation supporters believe that their attitudes would change if the trail was completed with a limestone surface. Other trail proponents state that farmer attitudes will be difficult to change as long as they think the trail hurts them financially (Brackin, 1982).

DEVELOPMENT OF QUESTIONNAIRE / INTERVIEW FORMS

The data for this study was collected by using the telephone survey method. There are several reasons for employing this technique.

First, according to Dillman (1978), the telephone survey approach was an acceptable method for gathering research information. Second, the Minnesota Department of Natural Resources in St. Paul offered the use of office space and a telephone WATS line. Third, the speed of data collection with a telephone survey was desirable. And finally, due to a limited testing population on one of the trails, a high response rate was needed for the study. The telephone survey offered the best option for contacting more participants.

The landowner questionnaire and the interview forms are based on four sources of information. First, the landowner questionnaire and the transcript of the telephone surveys with law enforcement agents from the Milwaukee Road Corridor Study (Minnesota DNR, 1979-1980). Second, the trail neighbor and trail user questionnaires from the study at the East Bay Regional Park District, Oakland, California (EBRPD, 1978). Third, the questionnaire of residents and real estate agents from the study on the Burke-Gilman Trail (Seattle Engineering Department, 1986). And finally, the examples of cover letters and questionnaires in Mail and Telephone Surveys: The Total Design Method (1978) by Dillman.

After development of the landowner questionnaire, the instrument was pretested in an interview format first on Dennis Law, Professor of Landscape Architecture at Kansas State University. Professor Law was selected because of his ownership of property adjacent to a proposed trail in Manhattan, Kansas. The questionnaire was revised and was submitted along with an advance letter to the College of Architecture and Design's Human Subject Committee for approval. After some revisions, approval was granted and the questionnaire was pretested by

phone on five landowners adjacent to the Douglas and Heartland Trails in Minnesota. - Names of the landowners were obtained from the Minnesota DNR in connection with a previous study. After minor revisions the questionnaire was ready for data collection (Appendix B: Landowner Questionnaire - Telephone Survey; Appendix D: Human Subjects Committee Approval).

The interview forms for the professionals were also developed, but were not pretested or submitted to the Human Subjects Committee. The information gathered from these professionals on the issues of trail desirability, crime, and adjacent property valuation, are considered public knowledge and within the scope of their duties (Appendix G: Interview Forms).

DATA COLLECTION

Charlie Regnier, Research Analyst with the Minnesota DNR, compiled a list of landowners along the two trails. Owner names from the Root River were gathered from the Fillmore County Atlas and Plat Book 1983-85 and from Deborah Erickson, Assistant Clerk for Lanesboro. Names from the Luce Line Trail were compiled from the 1984 Carver County Atlas Plat Book and from the tax rolls at the Hennepin County Government Center. For Hennepin County, half section maps were used to obtain section, township, range, quarter-quarter, and property identification numbers for the adjacent property. These numbers were entered into a computer terminal and the names and addresses were recorded (Appendix E: Owner Identification Process). Additional names and phone numbers were compiled from the Milwaukee Corridor Study and from four phone books: the Ace, Rochester, Contel and Minneapolis Directories.

This process identified 31 private landowners along the Root River and 227 names from the Luce Line. Public land owned by the state, county, or city were eliminated with the exception of school districts. Landowners, renters, and managers of private land, church property, school districts, private country clubs, or property held by companies, partnerships, or homeowner associations were included in the list. Only one person for each property was to be surveyed. Participants owning more than one piece of property were interview only once.

Due to the number of names, the entire Root River list was included in the survey, but it was decided to use only 27.5% of the owners along the Luce Line. Names were selected randomly using the computer. Each name on the list was designated a number from 1 to 227. The sort function on Lotus 1-2-3 randomly sorted this list of numbers. The first 62 number/names (27.5%) were selected for the survey.

The advance letter was sent to 84 of the total 93 names (Appendix A: Advance Letter). Nine addresses were not identified from the available sources. It was anticipated that these addresses and phone numbers would be obtained during the survey from neighboring landowners. The purpose of the advance letter was to inform the subjects of the survey and its goals and to increase participation in the study.

The bulk of the survey was conducted by phone in the offices of the Minnesota DNR, St. Paul during the week of April 11-16, 1988. Some of the calls were made the following week from Manhattan, Kansas. Most of the phone calls were placed from 9:00 am to 9:00 pm. Participants not able to talk during the initial contact were called at a later prearranged time. Nine landowners who were not reached by phone were

sent a cover letter and a questionnaire which was approved through the Human Subjects Committee. The participants were requested to return the questionnaire within two weeks. The survey of landowners was completed on May 10, 1988 (Appendix C: Cover Letter & Landowner Questionnaire-Mail Survey; Appendix D: Human Subjects Committee Approval).

This process identified, 23 on the Root River and 60 on the Luce Line, as actual landowners adjacent to the trail (Table 3.2 Landowners Surveyed). Seventy-four of these owners agreed to participate in the survey, which is an 89% response rate for both trails. The final result is 91% of all landowners on the Root River and 23.5% of all landowners on the Luce Line were surveyed.

A total of 28 professionals were selected for the inquiry. This selection was based on two considerations:

1. The professional's job responsibilities and knowledge of the trail.
2. The professional's area of jurisdiction or representation included all or parts of the trail.

LANDOWNERS IN SURVEY	ROOT RIVER TRAIL	LUCE LINE TRAIL	BOTH TRAILS
Number of Landowners Contacted:	23	60	83
Number of Owners Participating:	21	53	74
Percent of Owners Participating:	91%	88%	89%
Total Percent of Owners Surveyed along each trail:	91%	23.5%	-

Table 3.2 Landowners Participating in Survey

The DNR staff assisted in identifying the seven trail managers and conservation officers assigned to the Root River and Luce Line Trails. The eight law enforcement jurisdictions and the names of the police representatives were gathered from phone books, the DNR staff, and other police personnel. Law enforcement agents who participated in the inquiry included a sheriff, a captain, police chiefs, and officers. The staff at the county courthouses helped to identify the three county commissioners that represented the districts affected by the trails. The names of five appraisers from county or city departments were obtained through the local administrative offices. Five real estate agents were selected from phone books based on their proximity to the trail and information gathered from other professionals.

The inquiry was conducted in April and October of 1988. The two trail managers were interviewed in person at the Minnesota DNR offices in Rochester and St. Paul. The other 26 professionals were contacted by phone from St. Paul and from Manhattan, Kansas.

ANALYSIS OF THE DATA

After the owner survey process was completed, the information from the questionnaire was transferred to coding sheets. The survey required 114 columns of data or two - 80 column wide coding sheets. Each participant was assigned a number to protect their anonymity and for ease of tabulation. In addition, every answer was also represented by a numeric designation which was one to four columns wide. One line of data represented all the information from one questionnaire.

The raw data from the coding sheets was entered through a computer terminal into a file in the Harris System. John Boyer, Professor of

Statistics at Kansas State University, programmed the data into the University based SAS program. The output was recorded in chart form indicating the numbers and percentages of various population's responses to each question. The results of the study were ready for analysis.

LIMITATIONS OF THE STUDY

This study represents the attitudes of landowners on a section of two trails in Minnesota. This does not necessarily reflect the attitudes of all landowners adjacent to trails in Minnesota or in the rest of the country. Each trail has an individual character and changes in landowner attitudes are sometimes difficult to anticipate. But general conclusions may be drawn from these results.

Although the Root River Trail right-of-way has been owned by the state for eight years, only 11 out of the total 35 miles have been paved. This study is limited to the paved section of the trail, and that distance has been surfaced only in the last two years. Use of the trail has not reached its peak, and the full impact may not be felt. Additional time may be needed for owners to experience all the benefits and disadvantages. Previous research compiled on the Root River eight years ago, surveyed the entire 60 miles of abandoned track, as compared with this studies shorter distance. Comparisons between the two study's may be difficult.

Only the first 19 miles were surveyed on the Luce Line Trail. This study may not represent landowner attitudes on the western portion of the trail, where past opposition was greater.

Participants were asked to recall their attitudes before the construction of the trail, 8 to 14 years ago. For this study, it is

assumed that the respondents are truthful and can accurately remember their past opinions. Several points help to strengthen this assumption:

1. Only landowners who owned property adjacent to the trail before conversion, are asked about their past concerns.
2. These owners were directly affected by the proposed trail and most had strong feelings. Recall was easier.
3. Past concerns of owners are confirmed in hearing testimony, newspaper articles, and in interviews with professionals.
4. This survey documents landowner attitudes and beliefs and not the precise factual account.

In addition, this study also assumes the participant understood the questions and answered correctly. Efforts were made to minimize this problem. The questionnaire was pretested for clarity and organization. Most owners received an advance letter explaining the study. The telephone survey approach allowed participants an opportunity to ask questions and avoid confusion. And the participants also had the option of refusing to answer any or all questions.

With the phone survey method, it is possible that personal contact with the interviewer may influence some respondents. Again, measures were taken to minimize the problem. A standard script was followed throughout the survey and the interviews were conducted in a consistent, neutral manner. No attempt was made to sway any participants opinion. In addition, the pretesting of the questionnaire also helped to eliminate leading questions.

The landowners, who were not contacted by phone, received a cover letter and questionnaire through the mail. Although the survey was the same, these participants may respond differently. But this number only represents 5% of the total respondents.

The time of year the survey is conducted, may influence some respondents. This survey was taken in mid-April, which is before heavy summer use, but after winter user conflicts. Respondents may recall winter problems or benefits over summer time use.

And finally, this study reflects the current attitudes and beliefs of landowners. These opinions may change over time, especially if their concerns are not realized, or if new or existing problems increase.