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# A RAIL TRANSPORTATION SERVICE PLAN FOR THE EAST TROY AREA

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Special acknowledgement is due Mr. Peter K. Riese, SEWRPC Senior Planner,  
Mr. William A. Heimlich, Planning Supervisor, Wisconsin Department of Transportation,  
District 2, and the firm of Howard Needles Tammen & Bergendoff for their  
contributions to the conduct of this study.

**COMMUNITY ASSISTANCE PLANNING REPORT  
NUMBER 20**

**A RAIL TRANSPORTATION SERVICE PLAN FOR THE EAST TROY AREA**

**VILLAGE OF EAST TROY  
WALWORTH COUNTY, WISCONSIN**

**SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION  
P. O. Box 769  
Old Courthouse  
916 N. East Avenue  
Waukesha, Wisconsin 53187**

The preparation of this report was financed through a planning grant from the Wisconsin Department of Transportation utilizing funds provided under the Railroad Revitalization and Regulatory Reform (4R) Act of 1976. This report is intended to constitute a project justification study for the Wisconsin Department of Transportation.

**September 1977**

**Inside Region \$1.50  
Outside Region \$3.00**

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# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

916 NO. EAST AVENUE

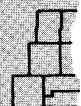
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September 28, 1977

Mr. Thomas J. Hart, Administrator  
Division of Planning  
Wisconsin Department of Transportation  
P. O. Box 7913  
Madison, Wisconsin 53707

Dear Mr. Hart:

On June 9, 1977, the Southeastern Wisconsin Regional Planning Commission entered into an agreement with the Wisconsin Department of Transportation for the preparation of a "project justification" under Section 8 of the Federal Railroad Revitalization and Regulatory Reform Act of 1976 for the Municipality of East Troy Wisconsin Railroad (METWRR), an electric switching railroad operating between the Village of East Troy in Walworth County and the Village of Mukwonago in Waukesha County. The Commission, pursuant to the terms of the agreement and with the assistance of an Advisory Committee consisting of state and local officials, shippers, railroad officials, and interested citizens, has now completed a special study of the METWRR.

The findings and recommendations of the study are set forth in this Commission Community Assistance Planning Report. The report is intended to provide all of the information necessary to permit your Department to submit a project justification in conjunction with the State Rail Plan to the Federal Railroad Administration except for the necessary statement as to the willingness and ability of the applicant to provide the funds necessary to match any requested federal grant. That statement will, of course, have to be provided by your Department in cooperation with the Village of East Troy, the owner of the railroad.

As required for the project justification, this report documents the condition of the railroad plant, equipment, and facilities; provides an economic and operational analysis of present and future freight service needs in the area served by the railroad; sets forth the characteristics of the shippers utilizing the railroad, together with data on the traffic generated by commodity type; analyzes the effects of potential abandonment on the transportation needs of the area and on the businesses served; estimates the future economic potential of the area and railroad, including, with respect to the latter, potential profitability and need for public or shipper subsidy; explores alternative means of providing the essential transportation services now provided by the railroad and the costs thereof, including the costs of rehabilitating the railroad; and recommends what appears to be the best course of action from among these alternatives for the provision of the necessary transportation service. After careful consideration of the information provided in this report and of the alternatives outlined therein, the Commission staff and Advisory Committee unanimously recommend that the means be found to continue railroad freight service to the Village by the METWRR, preferably under Village ownership. This will require rehabilitation of the railroad and the use of federal funds as authorized under Title 8 of the Railroad Revitalization and Regulatory Reform Act of 1976.

It should be noted that the Commission studies clearly document the vital importance of this railroad to the local economy and the very high economic losses that may be expected to be incurred should the railroad be abandoned, losses that can be avoided through the expenditure of a relatively modest amount of money for rehabilitation of the railroad. The potential economic losses are conservatively estimated at \$14.2 million per year against a total rehabilitation cost of only \$555,500.

The Regional Planning Commission is particularly appreciative of the assistance provided by employees of the Village of East Troy; the consulting firm of Howard Needles Tammen and Bergendoff; the Wisconsin Department of Transportation; and members of the Advisory Committee in the preparation of this report. The Commission stands ready to assist the Wisconsin Department of Transportation and the Village in implementing the recommendations contained herein.

Sincerely,

Kurt W. Bauer  
Executive Director

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## PROJECT IDENTIFICATION INFORMATION

This project justification study of the Municipality of East Troy Wisconsin Railroad has been prepared by the Southeastern Wisconsin Regional Planning Commission for the State of Wisconsin, Department of Transportation. The name of the applicant for financial assistance is the Village of East Troy. The name, title and address of the person to whom all correspondence should be directed is:

Kenneth W. Pluess  
President  
Village of East Troy  
Village Hall  
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(414) 642-5338

A copy of such correspondence that may be applicable should be directed to:

Kurt W. Bauer, P.E.  
Executive Director  
Southeastern Wisconsin  
Regional Planning Commission  
P. O. Box 769  
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## Chapter I

### INTRODUCTION

Planning for the improvement of an economically viable railroad system in the United States has taken on increased emphasis and awareness in the last few years as major events have caused increased concern about this mode of transportation. The enactment of the Regional Rail Reorganization Act of 1973 (3R Act) and the creation of Conrail from seven bankrupt railroads in the northeast and midwest became the first steps in dealing with problems confronting the railroad industry. In an effort to reduce the possibility of having this type of drastic action repeated in other areas of the country, the Railroad Revitalization and Regulatory Reform Act of 1976 (4R Act) was passed to aid railroads in averting the problems associated with railroad operations in the eastern United States.

In Wisconsin, the Department of Transportation (WisDOT) currently is engaged in a statewide railroad planning program within the framework of both the 3R and 4R Acts. As a part of this program WisDOT prepared the Wisconsin State Rail Plan August 1, 1976. Prepared as a requirement of the 4R Act, this plan identifies and evaluates specific light density (branch lines) within the State. The branch lines identified in this initial publication of the plan are those in which, during the short term, abandonment by the railroads is the most likely course of action.

As a part of the continuing railroad planning program in Wisconsin, WisDOT requested that regional planning commissions join in the planning process in an effort to assure adequate local response to this major transportation issue. In response to this request, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) adopted on April 11, 1977, a resolution indicating an intent to cooperate with WisDOT in a statewide railroad planning program. On the same date the SEWRPC submitted to WisDOT a memorandum report, Request for Consideration, Selected Light Density Rail Lines of Southeastern Wisconsin, which reviewed from a regional perspective the branch lines of southeastern Wisconsin identified in the August 1, 1976, state rail plan report. These lines were reviewed from the standpoint of service provided and were ranked in terms of their perceived importance to the social and economic health of communities within the Region. Of the

six lines discussed in that report, the line that ranked second in terms of overall socioeconomic importance was the railroad owned and operated by the Village of East Troy.

At the request of WisDOT, the SEWRPC on June 9, 1977, entered into an agreement with WisDOT to prepare a "project justification study" for the Municipality of East Troy Wisconsin Railroad (METWRR), one of seven such studies currently underway throughout the State. The preparation of this study was funded by the WisDOT, using planning funds obtained through the 4R Act. As outlined by WisDOT, a project justification study is a detailed analysis of the economic and physical characteristics of a rail line and its attendant service to communities within the State. The evaluation considers the alternatives available for a continuation of some form of freight service and provides the basis for a formal application for financial assistance. The primary objective of the study is to provide an informational base supporting a formal application to the Federal Railroad Administration (FRA) for financial assistance as outlined in the 4R Act. This report constitutes the formal response to that agreement.

The SEWRPC has become involved in the railroad planning process because of the recognized need to provide for a more balanced transportation system in the Region. The railroad system as it exists today is the end product of a system built to serve communities at a time when railroad usage was the primary means of transportation. Today, changing transportation modes and patterns have placed some portions of the railroad system in a position of being no longer economically feasible or justified in terms of the amount of traffic generated on the line versus the amount of money spent to keep the line in operation. It is important, therefore, to study not only individual lines but the entire interconnected system. Such a study is necessary in order to logically recommend and support a basic railroad system within the Region and to relate that system to a larger statewide system. The development of such a plan will provide the base for a logical program of support or defense in dealing with proposed changes in the present railroad network.

## THE STUDY AREA

The Municipality of East Troy Wisconsin Railroad (METWRR) is located in northeastern Walworth County and southwestern Waukesha County (see Map 1). Map 2 presents the specific location of the railroad and the relationship to shippers using the line. This line is 7.2 miles in length and connects the Village of East Troy with the main line of the Soo Line Railroad at the Village of Mukwonago. Map 1 also indicates the relationship of the METWRR to the remainder of the railroad system in the Region. The METWRR is unique in the Region and in Wisconsin as the only municipally owned and operated railroad, and one of only a few such operations in the entire United States. Population estimates for 1976 indicate a population of 2,231 for the Village of East Troy and 3,363 for the Village of Mukwonago. The geographical area served by the METWRR in northeastern Walworth County is a part of SEWRPC planning analysis area (PAA) 56. Planning analysis areas have been delineated for the entire seven-county Region and serve as a unit for allocating forecast population growth. PAA 56 is composed of the Towns of East Troy, Spring Prairie, and Troy and the Village of East Troy. In 1970, this



PAA had a population of 6,916. By the year 2000, the PAA population is expected to increase to 15,000, or nearly 117 percent. At this time active users of the service provided by the railroad are limited to industrial firms located in the Village of East Troy. With the forecast urban growth, however, it is possible that additional users of rail service could locate along the line.

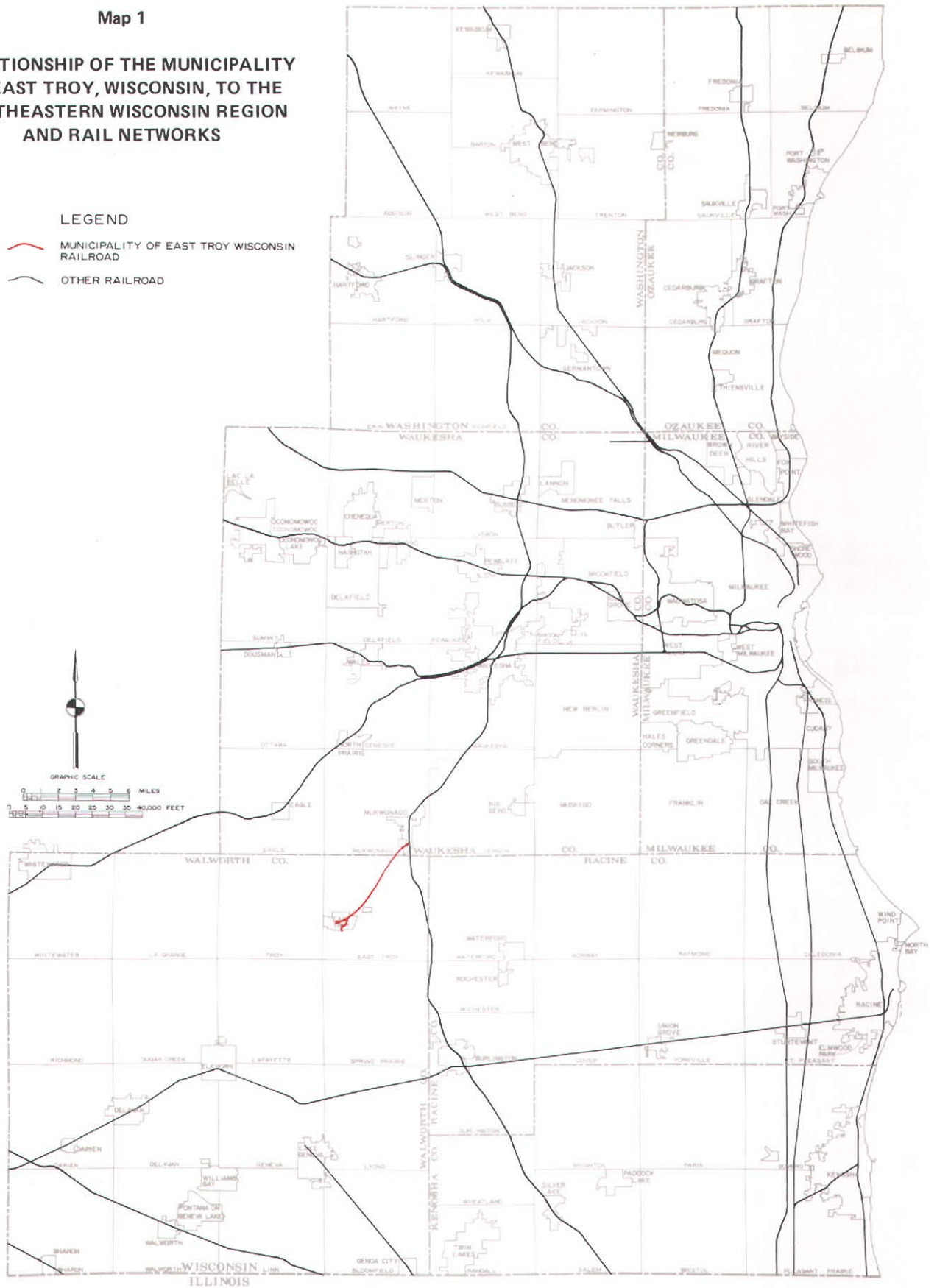
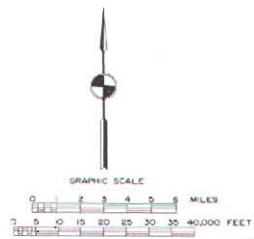
## STUDY PURPOSE

The purpose of the project justification study is to recommend to the WisDOT the best course of action regarding provision of an adequate level of freight transportation service to the areas presently served by the METWRR. The study also is intended to serve in evaluating the use of federal funds and, if necessary, to support a request for federal funds, in support of any necessary improvements, under the 4R Act if evaluation of all practicable alternatives leads to a determination that retention of railroad service is the most desirable method of providing freight service to the Village of East Troy and such retention requires federal assistance. The availability of federal funding under the 4R Act would be considered upon actual abandonment of the railroad.

Map 1

**RELATIONSHIP OF THE MUNICIPALITY  
OF EAST TROY, WISCONSIN, TO THE  
SOUTHEASTERN WISCONSIN REGION  
AND RAIL NETWORKS**

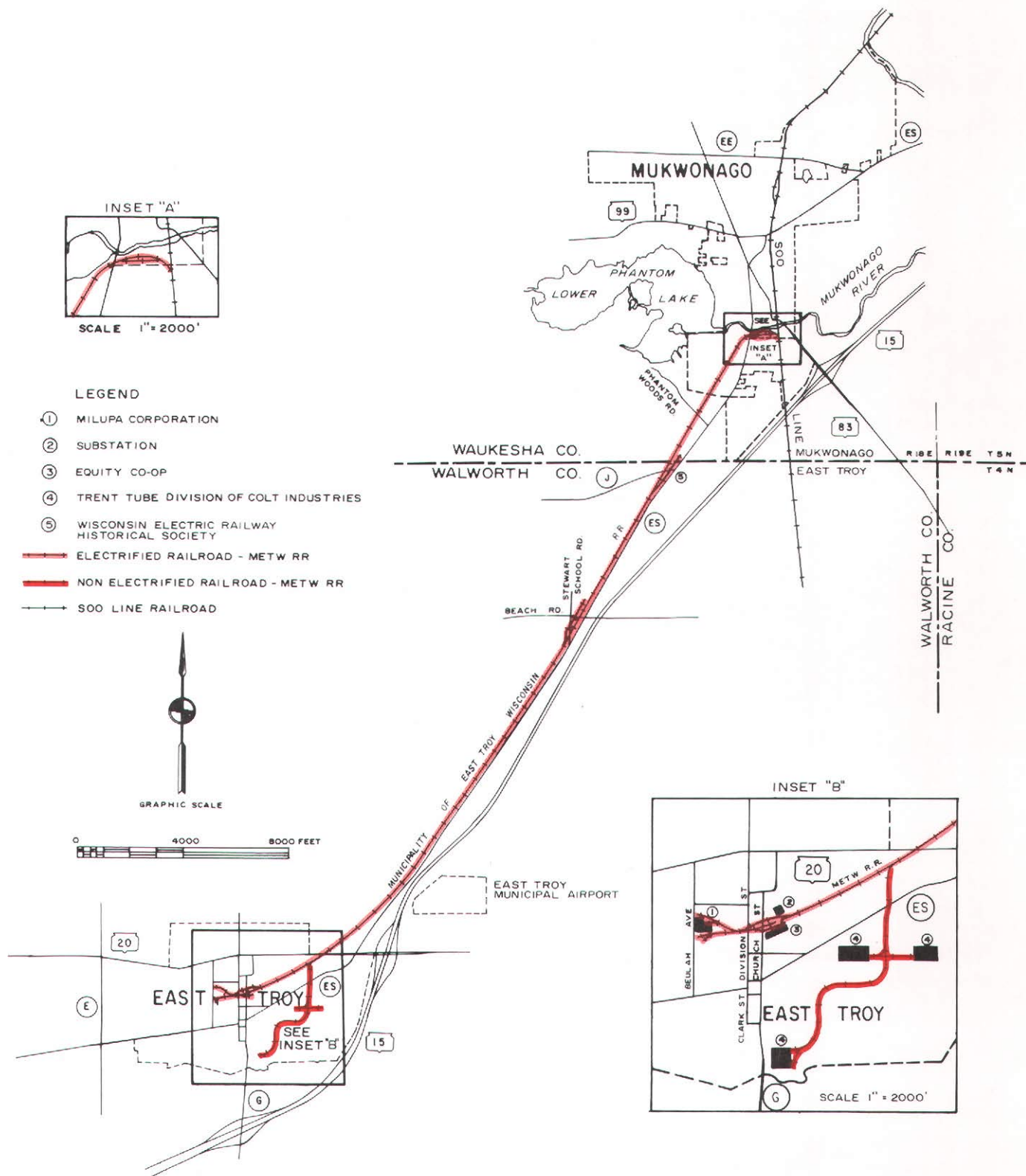
**LEGEND**  
 MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD  
 OTHER RAILROAD



Source: SEWRPC.

Map 2

TRACK CONFIGURATION OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD



Source: SEWRPC.



## Chapter II

### PROJECT IDENTIFICATION

#### HISTORY

The Village of East Troy has had railway service since December 13, 1907, when The Milwaukee Electric Railway & Light Company (TMER&L) completed its interurban line between the City of Milwaukee and the Village. East Troy was not intended to be the end of this line; further extensions were planned to the Cities of Elkhorn and Delavan; however, actual construction was never carried west of the Village. The line to East Troy was a part of the Muskego Lakes Division, and at St. Martin's Junction the route divided with one line running to East Troy and the other line running to the City of Burlington in western Racine County. Shortly after service was initiated, the route was designated as a U. S. Mail route and in 1915 freight service began, utilizing a connection with the Soo Line at the Village of Mukwonago.

At the height of its operation TMER&L operated over 250 miles of interurban service in southeastern Wisconsin. The economic impact of the depression, increased use of automobiles, and a forced separation of electric utilities from transportation services all combined to begin the process of abandonment of the interurban system. Since the Muskego Lakes Division included the most lightly used of all the lines in the system, the lines of that Division became the first candidates for abandonment. In May 1938 approval was given to abandon the line from St. Martin's Junction to the City of Burlington. In 1939 it was proposed to abandon the remainder of the Division west of Hales Corners. At one of the required hearings TMER&L made an offer to sell that portion of the line from the Village of Mukwonago to the Village of East Troy. A referendum vote was held in East Troy on the purchase, and passed; the Village acquired the line for \$10,000. The remainder of the line between Mukwonago and Hales Corners was abandoned the same year. Between 1939 and 1949 the line was leased back to The Milwaukee Electric Railway & Transportation Company (TMER&T) for operation. When this arrangement ended in 1949, the Village began its own operation of the railroad. For accounting purposes the METWRR is classified as an electric railroad, a carryover from the days of TMER&L operation.

This classification provides for simplified accounting practices not available to "steam" railroad operations, and can result in significant savings in administrative costs. The reason for Village acquisition of the line in 1939 is as valid today as it was then—the ability to continue to ship and receive freight from the connection with the Soo Line at Mukwonago.

#### PRESENT OPERATING CONDITIONS

The railroad presently provides all service with the use of a single diesel locomotive, although the overhead electrical system installed for the interurban operation is still in place. The change from electric to diesel operation came in 1969 when the Trent Tube Division of Colt Industries constructed a one-mile-long spur to serve a new plant and decided against electrification of the line.

The problems associated with operation of the railroad today stem mainly from the deteriorated condition of the right-of-way. In June 1975 an FRA Track Safety inspection was made, and the line failed to meet minimum Class I standards.<sup>1</sup> The railroad presently is operating with a speed restriction of six miles per hour, and a waiver on meeting Class I standards that expires on December 1, 1977.

Because of the existing condition of the right-of-way, movement of loaded cars is seasonally limited to one-at-a-time operation. Thus, if the Soo Line delivers two loaded cars at Mukwonago, two complete round trips, with attendant operating costs, are required to move the cars. This type of operation obviously is not in the best interest of the Village from a financial viewpoint.

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<sup>1</sup> Class I standards as defined by the FRA are a detailed set of engineering standards for road-bed construction and maintenance to allow for the safe passage of freight trains at 10 miles per hour and passenger trains at 15 miles per hour. There is a total of six classes, ranging from Class I, with minimum standards, to Class VI, providing for freight and passenger train operations at 110 miles per hour.

In addition to the principal operation of the railroad for freight movement, the Village has entered into an agreement with the Wisconsin Electric Railway Historical Society, Inc., (WERHS) for limited operation of restored electric interurban passenger equipment. Since the railroad has the only overhead electrical system still in place in Wisconsin, the opportunity for the Society represented an ideal situation. No serious conflict in traffic operation exists, since passenger service is limited to weekends when demand for freight service is light. As part of an agreement with WERHS, the Village receives a share of the gross revenue generated by operation of the passenger equipment. The electric power necessary for WERHS operations is purchased by the Village and sold to the Society on a demand basis.

### EXISTING ECONOMIC CONDITIONS

Operation of the railroad by the Village of East Troy is not meeting expenses. Revenues received from the movement of railroad traffic are less than the costs of operating the railroad. In order to meet this deficit, the Village as the railroad owner and the industries that use the railroad service have shared the required subsidy. Since 1962, the Village has used money from the general fund to help offset deficits produced by railroad opera-

tions. This figure was \$2,000 in 1962 and increased to a total of \$21,837 in 1974. Since 1969 shippers also have shared in the expense of meeting deficits produced by railroad operations. This money has been used in acquisition of the single diesel locomotive and other operating expenses. Since 1969 the shipper subsidy has totaled \$38,875.

It is apparent that the Village never assumed ownership of the railroad with the idea of making money from railroad operations but rather as a device to help retain the existing industries located in the community. The property taxes paid by the users of the rail service more than offset the tax dollars used to subsidize operations, in addition to providing employment for citizens of the community. The current problem remains that, while annual car loadings have remained fairly constant, the dollars generated from this function have not been able to keep pace with increased costs, particularly the maintenance of physical facilities. The major reason for increased maintenance costs is that the railroad is still operating over a 70-year-old facility in need of major repairs. Based on past Village and shipper policies and on current levels of financial support, it is anticipated that if the track is improved with 4R Act funds, funds would be provided at the local level to maintain the facility at costs less than now necessitated.

## Chapter III

### IDENTIFICATION OF ALTERNATIVES

#### INTRODUCTION

To identify a series of reasonable alternative means of providing the necessary transportation service for consideration in a rail justification study of this type is important both to assure that the full range of potential public and private actions is considered and to confine the scope to the practical limits of the resources reasonably expected to be available. Alternatives that do not reach this goal are unrealistic in terms of achieving an effective transportation system regardless of the mode involved. The alternatives identified and considered in this project justification study for the Municipality of East Troy Wisconsin Railroad (METWRR) are believed to be within the capability of the available resources of the various institutions involved and concerned with the future of transportation service to the Village of East Troy.

In reviewing the alternatives for continued provision of freight service to the Village of East Troy, the goal to be achieved is not unlike the one established by the Village when it acquired the railroad in 1939: protection of a significant portion of the local economy, both in terms of local tax base and employment opportunities, by the provision of a mode of freight transportation tailored to the needs of shippers in the community.

During the years prior to and after Village acquisition, the freight service provided by the railroad met the transportation needs of a specific number of users in East Troy. In certain commodity areas, changing transportation modes have reduced the necessity and in some cases replaced the necessity for rail service. In recent years, however, changes in company product mix in the Village have placed greater dependence on rail service regardless of the availability of alternative modes of service. When consideration is given to the alternatives for future freight service, thought must be given not only to the short-range impact of an alternative, but also the long-term implications concerning development of the economic base of the Village and surrounding areas.

#### ALTERNATIVES

It is apparent that, when considering the existing and future freight service needs of the shippers in the Village of East Troy, there are several feasible alternatives, including the present service system. The following alternatives appear to be the most practical in providing a continuing level of freight service to shippers in the Village of East Troy.

1. Village ownership with federal financial assistance—This alternative would continue the present ownership and operation by the Village but with federal financial assistance for the rehabilitation of the right-of-way and/or temporary operating assistance from the FRA. Use of FRA funds in this and any other of the following alternatives would require prior abandonment of the railroad.
2. Village ownership without federal financial assistance—This alternative would continue the present ownership and operation by the Village, with Village and/or shippers' funds used for the rehabilitation of the right-of-way.
3. Village ownership with or without federal financial assistance, but change in railroad classification—This alternative would continue present ownership and operation by the Village; the official designation of the line, however, would be changed from switching to short line in order to have a greater share in revenue received from product shipment.
4. Sale or lease of the METWRR to the Soo Line Railroad—This alternative would permit operation of Soo Line trains into the Village of East Troy, with rehabilitation of the right-of-way with or without federal financial assistance.
5. Sale or lease of the METWRR by the Village of East Troy to the Wisconsin Electric Railway Historical Society with federal financial assistance for the rehabilitation of the right-of-way.

6. Sale or lease of the METWRR by the Village of East Troy to the Geneva Lake Area Joint Transit Commission or a similar body with federal financial assistance for the rehabilitation of the right-of-way.
7. Sale or lease of the METWRR by the Village of East Troy to an association of local shippers with federal financial assistance for the rehabilitation of the right-of-way.
8. Sale or lease of the METWRR by the Village of East Troy to a short line operator with or without federal financial assistance for rehabilitation of the right-of-way.
9. Do nothing—This alternative would continue the present level of operation of the railroad with financial assistance from the Village and shippers to meet any future operating deficits.
10. Permanent abandonment of the METWRR—This alternative would permit complete abandonment of railroad service between the Soo Line connection at Mukwonago and the Village of East Troy. Alternative service on a temporary basis and landbanking the right-of-way for future railroad use could be provided with FRA assistance. The right-of-way could not be acquired for

nonrailroad purposes with FRA assistance. Alternative service on a temporary basis could be provided with FRA assistance and the right-of-way could be landbanked or developed for recreational trail purposes.

The foregoing alternatives appear to cover the full range of practical options available to the Village of East Troy to provide the required freight service. Under most of the alternatives, specifically numbers 1, 2, 3, 5, 6, 7, and 8, it is very possible that the railroad could be returned to a profitable status during the period of project eligibility.

In terms of abandonment, either forced by the FRA or as required for funding eligibility, partial abandonment rather than complete abandonment could be considered as an alternative. The existing physical characteristics of the line, however, do not lend themselves to partial abandonment as a practical alternative. The two existing and one proposed shipper are all concentrated at the extreme western end of the 7.2 mile line so that all but the last one-half mile of the railroad must be maintained if service is to be provided to every one of the shippers. Because of the practical implications of this physical configuration, partial abandonment was not considered a viable option.

Chapter V of this report expands upon and evaluates the 10 alternatives based upon current information concerning the operation of the Municipality of East Troy Wisconsin Railroad.

## Chapter IV

### INVENTORY AND ANALYSIS

#### INTRODUCTION

Proper consideration of alternatives to meet the existing and probable future freight transportation needs for the East Troy area requires the collection and analyses of data on the physical and economic characteristics of the railroad and data on the needs of the shippers using the service provided by the railroad. This chapter presents such data drawn from all known sources including, particularly, the Village of East Troy and the local shippers.

#### CONDITION OF RAIL PLANT, EQUIPMENT, AND FACILITIES

As previously indicated in Chapter III, the general physical condition of the entire railroad, both fixed facilities and operating equipment, is poor.

##### Right-of-Way

The right-of-way and related roadbed as they exist today represent, with only minor changes, the electric interurban railway facility as constructed by The Milwaukee Electric Railway and Light Company in 1907. The physical condition of the roadbed has deteriorated to a point where it seriously hinders efficient railroad operations. As noted previously in this report, a Federal Railroad Administration (FRA) track inspection conducted in 1975 found that the line did not meet Class I operating standards. The FRA track inspection records<sup>1</sup> for the METWRR indicate two basic areas in which the track structure of the railroad does not meet Class I safety standards. The report indicates that 50 percent of the rail joints were not supported by a sufficient number of nondefective ties. This condition was found to be so widespread that specific locations could not be cited. The second condition dealt with the distance between the centerline of nondefective ties. The maximum distance between the centerlines of nondefective ties observed was 30 feet without a defective tie. Due to numerous locations, it was not possible to list all defects; however,

40 percent of the line does not meet FRA requirements on the location of nondefective ties. A waiver has been received to operate the line at a reduced speed of 6 mph until December 1, 1977. For almost its entire length the line is operated on 70 and 80 pound-per-yard rail that was originally laid for interurban level service when car loading weights were much lighter than today. In many areas along the roadbed, ties are no longer visible at the surface of the grade, and ballast is apparently nonexistent. The generally deteriorated condition of the roadbed is caused by loss of ballast, poor drainage away from the track structure, and a lack of tie plates which has caused the rails to cut through the ties, thus making them useless in supporting loads placed on the rails. The combined effect of these factors has led to increased derailments with subsequent product damage, reduced running time, and reduced loading of cars, and requires extra train movements to handle the traffic. All of the factors have added significant costs to the operation of the railroad. Figures 1 and 2 represent typical sections of the roadbed in the summer of 1977.

During the summer of 1977, some maintenance work was done at major problem areas along the right-of-way between Mukwonago and East Troy. This work was not intended to upgrade the entire line to Class I standards since the limited resources available do not permit an operation of this scale. A federal Comprehensive Employment Training Act (CETA) work program, sponsored by Walworth County, and channeled through the Geneva Lake Area Joint Transit Commission, funded wages for a crew of approximately 15 workers supervised by METWRR employees. The material used in this maintenance effort, used ties, was provided by the Wisconsin Electric Railway Historical Society, (WERHS), and was obtained by WERHS from Wisconsin Electric Power Company track removal programs at electric power generation plants at Port Washington and St. Francis. The material was made available to the railroad by the WERHS which shares the use of the track with the METWRR.

The purpose of the program was to lay as many new ties and tie plates as available in an effort to abate the most serious impediments to operation.

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<sup>1</sup> *Federal Railroad Administration Track Inspection Report, June 20, 1975.*



Figure 1

**TRACK CONDITIONS OF THE  
MUNICIPALITY OF EAST TROY WISCONSIN  
RAILROAD—FACING EAST: JULY 1977**

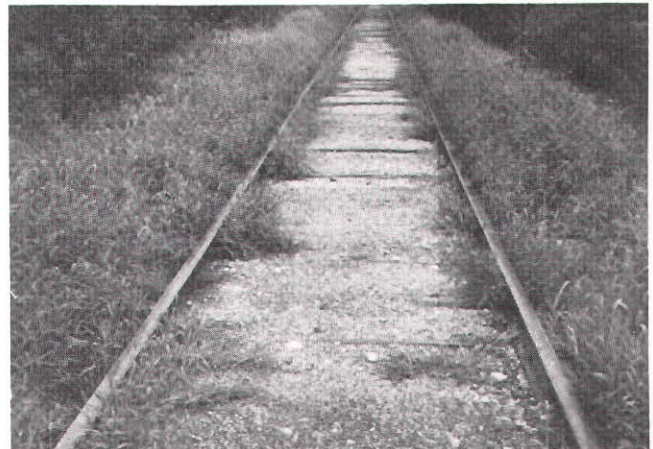


The general condition of the right-of-way and tracks of the Municipality of East Troy Wisconsin Railroad during the summer of 1977 is illustrated by this photograph which was taken looking east toward CTH J. In the foreground evidence of the 1977 tie replacement program may be seen.

*Source: SEWRPC.*

Figure 2

**TRACK CONDITIONS OF THE  
MUNICIPALITY OF EAST TROY WISCONSIN  
RAILROAD—FACING WEST: JULY 1977**



Ties are no longer even visible along sections of the right-of-way of the Municipality of East Troy Wisconsin Railroad, as shown by this photograph of the right-of-way taken in the summer of 1977 facing west near the Village limits of East Troy.

*Source: SEWRPC.*

As of September 1, 1977, approximately 2,000 ties with attendant tie plates and spikes have been used in the rehabilitation work. It is proposed that, before the end of the 1977 construction season, new ballast will be laid in the tie replacement areas. It is anticipated that this work will be sufficient to allow continued operation after the December 1, 1977, deadline established by the FRA and until a determination is made regarding future funding programs required to bring the entire line up to at least Class I standards.

#### Turnouts and Signals

There is a total of 15 turnouts used by this railroad including the turnout effecting the junction with the Soo Line Railroad Company (Soo Line). All of these switches are manually operated and their physical condition is poor.

No signal system is in use on the railroad. Since the railroad has operated only a single locomotive, a need for signals to accommodate more than one train on the line simultaneously has not existed. The operation of WERHS historic passenger equipment is limited to weekends, thereby eliminating

any potential conflicts with the weekday freight operations. When occasional midweek charter runs are made by museum equipment, special clearance is obtained from the METWRR.

#### Equipment

The amount of equipment available to operate the railroad is minimal, but adequate in relation to the function and operating practices of this line. The entire rolling stock of the METWRR consists of two locomotives, one diesel, and one electric. The electric locomotive has been a part of the railroad inventory since it was acquired from TMER&L at the time of abandonment of electric interurban service to Milwaukee in 1939. This locomotive provided continuous service until the Trent Tube Division of Colt Industries built a spur to its new plant in 1969. When the decision was made to not electrify this spur, the electric locomotive could no longer provide full service on the railroad. Therefore, since 1970 this locomotive has been retained in a standby status. The unit was constructed by TMER&L in Milwaukee in 1920 for freight service. Figure 3 is a photograph of the unit as it looks today.



The diesel locomotive is a 44-ton General Electric unit purchased as used in 1969 to meet the service demands presented when the Trent Tube spur was not electrified. At the present time, this locomotive needs extensive overhaul or replacement. In 1975, the Village obtained an estimate of \$49,265 to repair the engine. Figure 4 is a photograph of the unit as it exists today.

The railroad owns no other rolling stock, although it does have the use of a flat car owned by Trent Tube in maintenance work.

#### Facilities

When the Village acquired the railroad in 1939 from TMER&L, included as a part of the purchase was a substation in the Village of East Troy and three structures to carry automobile traffic over the railroad right-of-way.

The substation in East Troy was constructed in 1909 and is still used to convert purchased commercial power from AC to DC for use by the WERHS passenger train operations. The building also serves as the western terminus of the passenger line with a waiting room and attendant ticket sales and artifact display facilities. There is storage space within the building that the railroad utilizes for the storage of tools and other maintenance equipment.

The three vehicular structures are used to carry town roads across the right-of-way. These three structures are at Phantom Woods Road, Beach Road, and Stewart School Road. The Phantom Woods Road structure is located in the Town of Mukwonago, Waukesha County, while the other two structures are located in the Town of East Troy in Walworth County. All three structures have been examined by personnel from the Wisconsin Department of Transportation, District II Office in Waukesha, and found to be in poor condition. In addition to the three vehicular structures, there is a total of 19 grade crossings along the 7.2 mile length of the railroad. Of these grade crossings, 15 are public crossings and four are private crossings. The crossing at STH 20 is protected by automatic signals. The remaining 14 public crossings are marked only by crossbuck signs. The four private crossings are marked at the discretion of the owner. All of the public grade crossings are in good condition without need for major repair. All of the crossings are numbered according to FRA marking standards.

#### SHIPPER CHARACTERISTICS

At the present time the shipping needs of two firms make up the great majority of all traffic moved over the METWRR: The Trent Tube Divi-

Figure 3

**ELECTRIC LOCOMOTIVE M-15  
OF THE MUNICIPALITY OF EAST TROY  
WISCONSIN RAILROAD: JULY 1977**

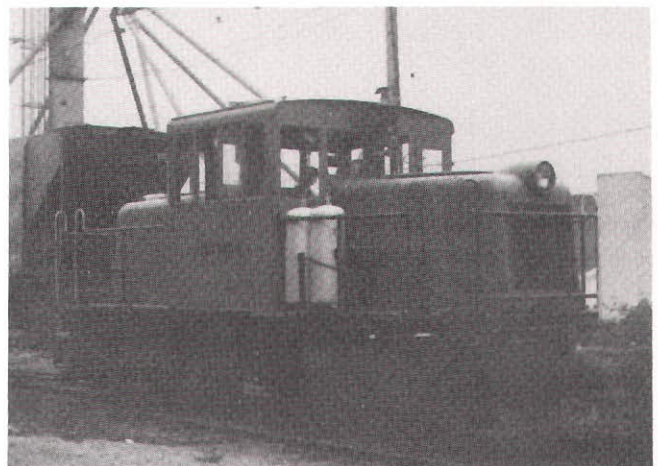


Electric locomotive M-15 is shown here in standby storage in the Village of East Troy. Between 1939 and 1969 this locomotive rated at 560 H.P. was used for all freight service.

Source: SEWRPC.

Figure 4

**DIESEL LOCOMOTIVE NO. 3  
OF THE MUNICIPALITY OF EAST TROY  
WISCONSIN RAILROAD: JULY 1977**



This 44-ton General Electric diesel locomotive currently is used for freight service on the Municipality of East Troy Wisconsin Railroad. The locomotive is rated at 300 H.P.

Source: SEWRPC.

sion of Colt Industries and the Equity Co-op, both located in the Village of East Troy. In previous years other shippers have used the service provided by the railroad but for one reason or another the service is no longer necessary. The rehabilitation of the right-of-way and a reduction in the local tariff would be positive steps that could be taken to recapture some of this traffic. Because of the volume of material required to make rail shipment economically possible and inability to receive the desired product mix by rail, the East Troy Lumber Company now finds it more cost-effective to receive building materials by truck. Baker Laboratories was at one time the largest user of the railroad in East Troy and the largest employer in the Village. Because of declining sales volume, this infant food producing facility was closed in 1975. The Baker Laboratories facility recently has been acquired by Milupa Corporation and the potential use of these laboratories and attendant need for railway freight service is discussed below.

#### Trent Tube, Division of Colt Industries

This firm, located in the Village of East Troy, manufactures a wide range of tubular products including stainless steel tubes used primarily in the construction of condensers for electric power generating plants throughout the country. Due to their length, shipment of the finished tubes is entirely dependent upon rail service.

Trent Tube is the largest employer in the Village with a total of 400 employees and an annual payroll of approximately \$5 million. Approximately 40 percent of the employees live in either the Village or Town of East Troy. In 1976, Trent Tube paid a property tax to the Village in excess of \$158,000, which represents about 18 percent of the total property tax collected by the Village.

At the present time, this firm is the largest user of the rail service provided by the METWRR. As previously stated, the primary finished product shipped is stainless steel condenser tubes. The manufacture of this product represents approximately 40 percent of the operation at the East Troy facilities. The standard railroad car used for this shipment is an 89-foot flat car. At certain times when product length exceeds the physical capacity of this type of car, a 40-foot idler car is used to accommodate the excess length. Table 1 sets forth loaded car usage by Trent Tube over the last four years. Fluctuations in the demand for railroad service by Trent Tube are evident from this table. In all cases, the changes in railroad car usage are beyond the control of the METWRR.

The change in annual car loadings of finished stainless steel tubes is related to general business conditions existing during the years covered by the table. Changes in the number of carloads of steel delivered to the plant in East Troy also are related to general business conditions. Delays in the receipt of steel from producers located near Pittsburgh, Pennsylvania, has been a problem, and it has not been uncommon for a shipment to take up to two weeks to travel between the producing mill and the Trent Tube plant. Most of the delay apparently occurs in getting the cars to and through the Chicago area. As a result of continuing problems of this type, Trent Tube has diverted most of its incoming steel shipment to truck delivery which, although a more costly method of moving the product, is more dependable in terms of delivery date. Because of the costs associated with the delays in rail shipment, truck transport has become cost competitive in this market. The firm has explored the possibility of routing steel shipments across Lake Michigan on the railroad car ferries to avoid delays in Chicago, however, the potential time savings were found to be not significant in relation to the time for truck service. Several trial shipments of steel have been timed to determine the exact location of delays between the mill and plant. If these problem areas can be corrected, Trent Tube would use rail service to a greater degree, thereby increasing traffic on the METWRR.

The lumber that is shipped inbound to Trent Tube is used for packaging of finished products, and the amount required is related directly to the scheduled shipment of stainless steel tubes.

#### Equity Co-op

This agricultural based organization maintains its headquarters in the Village of East Troy with additional facilities in the City of Elkhorn. The Co-op provides a full range of services to its farmer members in the agricultural areas of northern Walworth and southern Waukesha Counties. The Co-op has always depended upon rail service provided by METWRR at East Troy, although the volume of shipments has been more limited than that of some of the larger users of the METWRR service.

The Co-op employs approximately 40 people at its facilities with current total annual sales of \$6.7 million. In 1976, the Co-op paid a property tax to the Village of almost \$9,000, which represents about 1 percent of the total property tax collected by the Village.



Table 1

## RAILROAD CAR USAGE BY TRENT TUBE DIVISION, COLT INDUSTRIES

| Year           | Total Cars | Cars Outbound Loaded |                           | Cars Inbound Loaded |                           |
|----------------|------------|----------------------|---------------------------|---------------------|---------------------------|
|                |            | Number of Cars       | Load (millions of pounds) | Number of Cars      | Load (millions of pounds) |
| 1973           | 315        |                      |                           |                     |                           |
| Product        |            |                      |                           |                     |                           |
| Finished Tubes |            | 60                   | 3.3                       | --                  | --                        |
| Steel          |            | --                   | --                        | 225                 | 15.5                      |
| Lumber         |            | --                   | --                        | 30                  | 1.5                       |
| 1974           | 482        |                      |                           |                     |                           |
| Product        |            |                      |                           |                     |                           |
| Finished Tubes |            | 119                  | 7.2                       | --                  | --                        |
| Steel          |            | --                   | --                        | 333                 | 28.2                      |
| Lumber         |            | --                   | --                        | 30                  | 1.5                       |
| 1975           | 262        |                      |                           |                     |                           |
| Product        |            |                      |                           |                     |                           |
| Finished Tubes |            | 98                   | 5.6                       | --                  | --                        |
| Steel          |            | --                   | --                        | 134                 | 10.4                      |
| Lumber         |            | --                   | --                        | 30                  | 1.5                       |
| 1976           | 208        |                      |                           |                     |                           |
| Product        |            |                      |                           |                     |                           |
| Finished Tubes |            | 116 <sup>a</sup>     | 7.4                       | --                  | --                        |
| Steel          |            | --                   | --                        | 33                  | 3.0                       |
| Lumber         |            | --                   | --                        | 22                  | 1.1                       |

<sup>a</sup> Required 37 idler cars in addition to primary car.

Source: Traffic Department, Trent Tube Division, Colt Industries.

In terms of railway use, the inbound shipment of base products for the manufacture of agricultural fertilizer constitutes the bulk of material moved by rail by the Co-op. In recent years, the Co-op has erected special manufacturing and storage facilities for the production of liquid fertilizer. The product manufactured at this location is now marketed throughout southern Wisconsin, northern Illinois, and eastern Iowa. It is one of 35 such plants in the country and the only one in Wisconsin. The principal product used in this process is liquid phosphoric acid which is shipped in specially equipped 100-ton cars and must be maintained at specific "hot" temperatures. In terms of car usage, a total of 40 such cars was received this year and it is expected that 100 cars will be required

next year. The remainder of the cars used by the Co-op are for dry fertilizer products such as potash and nitrogen. Some small amounts of feed grains also are shipped inbound for local distribution. Like Trent Tube, certain portions of the Equity Co-op business are highly dependent on continued rail service. The liquid fertilizer business that now accounts for about one-third of the total dollar volume of the Co-op business cannot be maintained without rail service since the base ingredient of phosphoric acid must be delivered by specially equipped railroad cars. If rail service was not available in the Village, this manufacturing process would have to be abandoned or moved. While no records exist on specific commodities or tons received, Table 2 does indicate the number of

Table 2

## EQUITY CO-OP RAILROAD CAR USAGE: 1970-1976

| Year | Loaded Cars |
|------|-------------|
| 1970 | 122         |
| 1971 | 94          |
| 1972 | 87          |
| 1973 | 78          |
| 1974 | 51          |
| 1975 | 50          |
| 1976 | 66          |

Source: *Village of East Troy.*

loaded rail car shipments generated by the Co-op. With assurance of continued rail service, it is estimated that the number of loaded cars credited to the Co-op will increase in the coming years as indicated by the 100-car estimate for phosphoric acid in fiscal 1978.

#### Milupa Corporation

The facilities in the Village of East Troy currently owned by the Milupa Corporation were operated for many years as Baker Laboratories. The plant in the Village has been acquired for the future production of infant foods in dry cereal and liquid formula form. At this time, the firm is operating one plant in the State of New York while manufacturing equipment is being installed at the East Troy facility. In 1979-80, additional manufacturing space is planned to be added to the existing facilities in the Village.

Employment at the plant at this time is limited to several office and supervisory personnel; however, when the plant reaches full production, employment is estimated to range from 200-300 people. In 1976, the Milupa Corporation paid a property tax to the Village of almost \$13,000, representing 1 percent of the total property tax collected by the Village. This figure may be expected to increase with the addition of new facilities.

Again, as with the two shippers previously discussed, the Milupa Corporation desires to maintain railroad service. The railroad is expected to play a significant role in the shipping requirements of the firm. Corporation personnel have stated that, if rail service were not available, the firm would not have acquired the plant or, if service were to be abandoned before expansion and production are

started, such operation and production possibly would not proceed.<sup>2</sup>

When the plant is in full production within five years, it is anticipated that approximately 500 cars per year, divided between inbound and outbound movements, will be required. Inbound products are expected to include flour, sugar, oils, syrup, and perhaps packaging materials. Finished products outbound will include packaged dry cereal foods and liquid formula which will require insulated and temperature-controlled cars.

The three shippers discussed above constitute the current customers of the METWRR. Table 3, compiled from available railroad records, indicates the total traffic carried on the railroad.

During this short period of time, there have been obvious changes in shipping patterns. The base number of cars moved annually is approximately 320 cars per year. Instead of increasing the number of cars moved annually, as traffic picked up at Trent Tube, the final shipments were being made by Baker Laboratories, thereby maintaining the base level of cars moved.

#### The Wisconsin Electric Railway Historical Society, Inc.

One additional organization uses the railroad, although not as a shipper. The Wisconsin Electric Railway Historical Society (WERHS) utilizes the facilities of the railroad for the operation of restored historic electric railway equipment. The WERHS, which moved to its present location in 1972, is a nonstock, nonprofit, educational organization dedicated to maintaining and preserving the history of the electric railroad in Wisconsin.

As an integral part of the future of the METWRR, the WERHS has several long-range goals, including:

1. Construction of an electrical overhead system for the "Trent" branch so that the railroad can be returned to an entirely electric operation.
2. Improvement of the electric distribution system through installation of additional conversion equipment.

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<sup>2</sup>Interview with Robert J. Pekel, General Manager, July 7, 1977.

Table 3

## ANNUAL TRAFFIC MOVEMENT ON THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD: 1970-1976

| Year | Shipper    |              |                    |                  |               | Total |
|------|------------|--------------|--------------------|------------------|---------------|-------|
|      | Trent Tube | Equity Co-op | Baker Laboratories | East Troy Lumber | Miscellaneous |       |
| 1970 | 110        | 122          | 89                 | 18               | 6             | 345   |
| 1971 | 117        | 94           | 46                 | 10               | 8             | 335   |
| 1972 | 153        | 87           | 33                 | 8                | 1             | 282   |
| 1973 | 315        | 78           | 29                 | --               | 13            | 435   |
| 1974 | 482        | 51           | 22                 | --               | --            | 555   |
| 1975 | 262        | 50           | 4                  | --               | 5             | 321   |
| 1976 | 242        | 63           | --                 | --               | 1             | 306   |

Source: Village of East Troy.

3. Construction of shop facilities for the maintenance and restoration of electric passenger and freight equipment at an estimated cost of \$250,000.
4. Installation of automatic crossing signals at major grade crossings.
5. Continued renewal of overhead wire and track within the financial ability of the organization.

The WERHS recently has negotiated with the Village for a new five-year lease to operate over the railroad. Under the new lease agreement between the Village and the WERHS—entered into in August 1977 and expiring in August 1982—the Society agrees to pay all its own expenses including insurance, electric power, and maintenance of equipment, and frees the Village from any liability in terms of WERHS operations. The WERHS pays the railroad 25 percent of the gross fares up to \$50,000 that it receives for passenger operations between the terminal at East Troy and Phantom Woods Station located at the intersection of CTH J and CTH ES.

In 1976 the Society carried approximately 17,000 passengers during summer weekend operations at an average fare of \$2.25 per passenger. Accordingly, the Village share of the revenues based on the lease agreement should be \$9,563. Electrical power is provided through the original overhead distribution system installed for interurban car operation. The electrical power is converted from 440 AC to

600 DC at the Village-owned electrical substation facility constructed in East Troy by TMER&L in 1909.

The Society presently has a membership of 215, of whom 25 are available for the operation of equipment. The current investment in plant and rolling stock is estimated to be \$250,000. With the addition of more passenger equipment, the Society looks forward to carrying up to 50,000 passengers during the summer operating season, including special charters.

#### FINANCIAL CHARACTERISTICS

The Village of East Troy has operated the seven-mile section of railroad since 1949. During the first 10 years of operation after purchase by the Village in 1939, the Village leased the line back to TMER&T for operation. In 1949, this lease arrangement was terminated and the Village became the operator as well as the owner. Historic financial data for these early years of operation are no longer available, both because of changes in administration personnel in the Village and changes in the methods of accounting for revenue and expenditures. Since 1949, the Village Clerk has had the responsibility for maintaining an accurate financial statement of railroad for the Village Board.

The first year for which information concerning the financial characteristics about the operation of the railroad is still available is 1954. From 1954

through 1965, a summary statement indicating total revenues and expenditures was maintained by the Village. Table 4 presents this historical data.

Since at least 1954, the Village has maintained a separate fund account in order to accurately reflect expenditures for railroad operations. In the years in which a surplus was generated from revenues received, those funds were placed in the account to be carried forward for the next year's operations. The amount in this account reached a maximum of \$9,700 at the end of calendar year 1957, and the account generally was able to cover the operating deficits that were incurred from 1958 through 1962. In 1962 it became apparent to the Village Board that it was unlikely that sufficient revenue could be generated from traffic on the line to cover operating expenses. In that year, and for each year since 1962, the Village has met operating deficits when they occurred with funds appropriated from the general fund. From 1962 through 1976, this amount has totaled \$201,277, or an average of \$13,418 per year. In 1969, the shippers using the service provided by the METWRR began sharing in the cost of meeting the operating expenses of the roadbed.<sup>3</sup> From 1969 through 1976 the shippers contributed

a total of \$38,875, or an average of \$4,859 per year. Of this total, \$10,010 was for the purchase of the diesel locomotive, \$4,865 for electric conversion equipment, and \$24,000 to offset operating expenses. Table 5 presents a summary of these financial aspects of the METWRR operations.

It is important to remember, when reviewing the financial history of the railroad, that the METWRR is operated as a switching line and therefore only publishes a local tariff, and is not included in divisional rates. The revenue received by the railroad comes from two principal sources: the fixed switching fee established by the Soo Line on material moving to or from Mukwonago and the tariff established by the Village for car movement on the METWRR. For both of these figures, data are available only as far back as 1970, the same year for which annual car movement figures are available. Table 6 presents the historical switching fee and tariff structure for car movement on the METWRR.

The income received from the movement of cars is the main source of revenue for the railroad. Table 3 indicates the available data for annual car movement on the METWRR. Although increases in the shipper tariff and Soo Line switching fees have nevertheless resulted in increased revenues, the number of cars moved annually has decreased since 1975. This increase in revenue has come from the shipper, with an increase in tariff from \$6 inbound and \$7 outbound in 1970 to \$100 in 1977 per carload moved. Figure 5 presents graphically the pattern of railroad revenues and expenditures with and without the subsidies provided by the Village and the shippers.

## REVENUES

The years since 1954 for which records are available show several changes in the pattern by which the METWRR has generated operating revenue. The 10-year period from 1954 through 1963 always returned in excess of \$10,000 per year from the Soo Line switching fee as the major source of income. Since 1963, however, only in 1973 has

Table 4

### HISTORIC REVENUE AND EXPENDITURE DATA OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD: 1954-1965

| Year | Revenue  | Expenditures | Surplus<br>(Deficit) |
|------|----------|--------------|----------------------|
| 1954 | \$12,434 | \$12,004     | 430                  |
| 1955 | 13,745   | 12,004       | 1,741                |
| 1956 | 15,019   | 12,674       | 2,345                |
| 1957 | 16,177   | 13,039       | 3,138                |
| 1958 | 15,526   | 18,535       | (3,009)              |
| 1959 | 13,059   | 15,533       | (2,474)              |
| 1960 | 15,134   | 15,830       | (696)                |
| 1961 | 12,728   | 14,212       | (1,484)              |
| 1962 | 13,803   | 15,370       | (1,567)              |
| 1963 | 14,231   | 14,252       | (21)                 |
| 1964 | 21,897   | 21,455       | 442                  |
| 1965 | 15,634   | 15,658       | (24)                 |

NOTE: Data rounded to nearest dollar.

Source: Village of East Troy.

<sup>3</sup>Since 1969 Trent Tube, Equity Co-op, and Baker Laboratories have paid funds toward the purchase of the diesel locomotive, either at their full share or at a rate of \$10 per car. In 1975 and 1976 Trent Tube contributed \$15,000 and \$9,000, respectively, toward meeting railroad expenditures.

Table 5

## FINANCIAL SUMMARY FOR THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD: 1954-1976

| Year              | Balance from Previous Year | Village Subsidy | Other Subsidy Funds | Total Subsidy | Shipper Tariff     | Railroad Revenue    | Total Revenue | Expenditures | Operating Deficit With Subsidy | Operating Deficit Without Subsidy |
|-------------------|----------------------------|-----------------|---------------------|---------------|--------------------|---------------------|---------------|--------------|--------------------------------|-----------------------------------|
| 1954              | \$6,081                    | \$ --           | \$ --               | \$ --         | \$ --              | \$12,434            | \$12,434      | \$ --        | \$ --                          | \$ --                             |
| 1955              | --                         | --              | --                  | --            | --                 | 13,745              | 13,745        | 28,008       | --                             | 1,830                             |
| 1956              | 4,251                      | --              | --                  | --            | --                 | 15,019              | 15,019        | 12,674       | --                             | --                                |
| 1957              | 6,596                      | --              | --                  | --            | --                 | 16,177              | 16,177        | 13,039       | --                             | --                                |
| 1958              | 9,735                      | --              | --                  | --            | --                 | 15,526              | 15,526        | 18,535       | --                             | 3,010                             |
| 1959              | 6,725                      | --              | --                  | --            | --                 | 13,059              | 13,059        | 15,533       | --                             | 2,474                             |
| 1960              | 4,251                      | --              | --                  | --            | --                 | 15,134              | 15,134        | 15,830       | --                             | 696                               |
| 1961              | 3,556                      | --              | --                  | --            | --                 | 12,728              | 12,728        | 14,212       | --                             | 1,484                             |
| 1962              | 2,072                      | 2,000           | --                  | 2,000         | --                 | 11,803              | 13,803        | 15,370       | 1,567                          | 3,567                             |
| 1963              | 505                        | 4,000           | --                  | 4,000         | --                 | 10,231              | 14,231        | 14,252       | 21                             | 4,021                             |
| 1964              | 484                        | 12,500          | --                  | 12,500        | --                 | 9,397               | 21,897        | 21,455       | --                             | 12,058                            |
| 1965              | 926                        | 7,000           | --                  | 7,000         | --                 | 8,634               | 15,634        | 15,658       | 24                             | 7,024                             |
| 1966              | 901                        | 6,000           | --                  | 6,000         | --                 | 9,318               | 15,318        | 15,678       | 360                            | 6,360                             |
| 1967              | 541                        | 11,000          | --                  | 11,000        | --                 | 9,197               | 20,197        | 19,934       | --                             | 10,737                            |
| 1968              | 804                        | 15,100          | --                  | 15,000        | --                 | 8,707               | 23,807        | 20,093       | --                             | 11,385                            |
| 1969 <sup>a</sup> | 4,519                      | 28,238          | 9,115               | 37,353        | --                 | 9,306               | 46,659        | 44,163       | --                             | 34,858                            |
| 1970              | 7,014                      | 11,300          | 2,180               | 13,480        | 1,902 <sup>b</sup> | 9,820               | 23,300        | 28,088       | 4,788                          | 18,268                            |
| 1971              | 2,226                      | 13,000          | 1,260               | 14,260        | 2,251              | 12,193              | 26,453        | 28,057       | 1,604                          | 15,864                            |
| 1972              | 622                        | 19,500          | 1,320               | 20,820        | 2,274              | 12,939              | 33,759        | 34,734       | 975                            | 21,795                            |
| 1973              | (353)                      | 19,802          | 1,200               | 21,002        | 2,237              | 26,087              | 47,088        | 44,824       | --                             | 18,737                            |
| 1974              | 1,910                      | 21,837          | 190                 | 22,027        | 10,359             | 34,697              | 56,724        | 58,619       | 1,895                          | 23,922                            |
| 1975              | (15)                       | 15,000          | 15,110              | 30,110        | 16,312             | 28,108              | 58,218        | 57,516       | --                             | 29,408                            |
| 1976              | 687                        | 15,000          | 9,000               | 24,000        | 15,080             | 26,695 <sup>c</sup> | 50,695        | 45,246       | --                             | 18,551                            |

NOTE: (Deficit) Financial data rounded to nearest dollar.

<sup>a</sup> Purchase of diesel locomotive—\$17,250.

<sup>b</sup> Prior to 1970 no tariff revenue records available.

<sup>c</sup> Does not include 1976 payment from Wisconsin Electric Railway Historical Society.

Source: Village of East Troy and SEWRPC.

this payment exceeded \$10,000 per year. Since 1962, an ever increasing amount of operating revenue has come from other sources. While shippers have always paid to local tariff for METWRR car movement, records of the amounts so received are not available prior to 1970. This source of income, combined with shipper and Village subsidy payments, now accounts for the bulk of the revenue received by the railroad. Table 7 presents the major classifications of revenue received by the railroad.

## EXPENDITURES

Although revenues received by the railroad have increased from \$13,800 in 1962 to \$50,700 in 1976, this increase has been largely the result of

increased subsidies by the Village and shippers. While the increased revenues have been able to keep pace with the rising expenditures, the true revenues received from railroad operations have fallen far short of meeting operating expenses. Costs associated with operation of the railroad have increased steadily even with the minimum amount of labor and equipment involved in daily operations. Although financial data are available since 1954, no detailed breakdown of the total expenses is available until 1966.

The deterioration condition of the roadbed is one of the major problems facing the railroad today. A large expenditure of funds will be required if the roadbed is to be returned to a safe and efficient operable condition. The data on annual

Table 6

**SUMMARY OF FEES AND TARIFF CHARGES PER CARLOAD FOR THE  
MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD: 1970-1977**

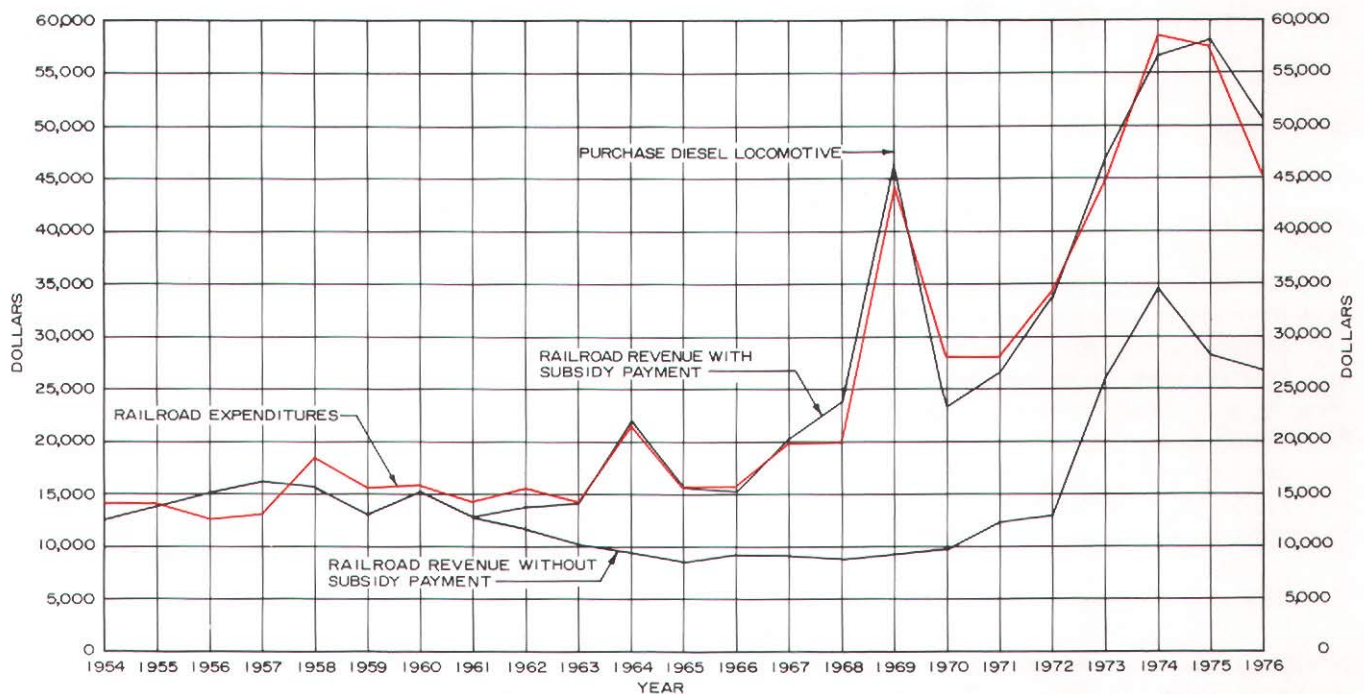
| Year              | Switching Fee Paid by Soo Line |                   | Shipper Tariff |          | Single Charge |
|-------------------|--------------------------------|-------------------|----------------|----------|---------------|
|                   | Inbound                        | Outbound          | Inbound        | Outbound |               |
| 1970              | \$21.41                        | \$19.41           | \$ 6.00        | \$ 7.00  | \$ --         |
|                   | Steel                          | Other Commodities |                |          |               |
| 1971 <sup>a</sup> | 27.41                          | 20.41             | 6.00           | 7.00     | --            |
| 1972              | 27.41                          | 20.41             | 6.00           | 7.00     | --            |
| 1973              | 27.41                          | 20.41             | 16.00          | 17.00    | --            |
| 1974              | 27.41                          | 20.41             | 16.00          | 17.00    | --            |
| 1975              | 27.41                          | 20.41             | --             | --       | 65.00         |
| 1976              | 31.52                          | 23.47             | --             | --       | 65.00         |
| 1977              | 31.52                          | 23.47             | --             | --       | 100.00        |

<sup>a</sup>Switching fee changed to steel and all other commodities regardless of direction.

Source: Village of East Troy.

Figure 5

**COMPARISON OF REVENUE AND EXPENDITURES OF THE  
MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD: 1954-1976**



Source: SEWRPC.

Table 7

## REVENUES OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD: 1954-1976

| Year | Soo Line Switching Payment | Demurrage        | Village Subsidy | Shipper Subsidy Diesel | Shipper Tariff | Share of Fares from Museum | Contribution from Industry | Miscellaneous <sup>a</sup> | Total Revenue |
|------|----------------------------|------------------|-----------------|------------------------|----------------|----------------------------|----------------------------|----------------------------|---------------|
| 1954 | \$12,164                   | \$ 147           | \$ --           | \$ --                  | \$ --          | \$ --                      | \$ --                      | \$ 123                     | \$12,434      |
| 1955 | 13,675                     | 70               | --              | --                     | --             | --                         | --                         | --                         | 13,745        |
| 1956 | 14,704                     | 74               | --              | --                     | --             | --                         | --                         | 241                        | 15,019        |
| 1957 | 16,003                     | 59               | --              | --                     | --             | --                         | --                         | 115                        | 16,177        |
| 1958 | 15,336                     | 90               | --              | --                     | --             | --                         | --                         | 100                        | 15,526        |
| 1959 | 12,817                     | 142 <sup>b</sup> | --              | --                     | --             | --                         | --                         | 100                        | 13,059        |
| 1960 | 14,185                     | 148              | --              | --                     | --             | --                         | --                         | 801                        | 15,134        |
| 1961 | 12,348                     | 280              | --              | --                     | --             | --                         | --                         | 100                        | 12,728        |
| 1962 | 11,531                     | 172              | 2,000           | --                     | --             | --                         | --                         | 100                        | 13,803        |
| 1963 | 10,001                     | 128              | 4,000           | --                     | --             | --                         | --                         | 102                        | 14,231        |
| 1964 | 8,797                      | 217              | 12,500          | --                     | --             | --                         | --                         | 383                        | 21,897        |
| 1965 | 8,295                      | 238              | 7,000           | --                     | --             | --                         | --                         | 100                        | 15,634        |
| 1966 | 8,593                      | 625              | 6,000           | --                     | --             | --                         | --                         | 100                        | 15,318        |
| 1967 | 8,613                      | 358              | 11,000          | --                     | --             | --                         | --                         | 226                        | 20,197        |
| 1968 | 7,817                      | 615              | 15,100          | --                     | --             | --                         | --                         | 375                        | 23,907        |
| 1969 | 6,960                      | 559              | 28,238          | 9,115                  | --             | --                         | --                         | 1,787                      | 46,659        |
| 1970 | 7,041                      | 545              | 11,000          | 2,180                  | 1,902          | --                         | --                         | 632                        | 23,300        |
| 1971 | 8,219                      | 817              | 13,000          | 1,260                  | 2,251          | --                         | --                         | 906                        | 26,453        |
| 1972 | 6,280                      | 600              | 19,500          | 1,320                  | 2,274          | 1,800                      | --                         | 1,985                      | 33,759        |
| 1973 | 10,698                     | 1,919            | 19,802          | 700                    | 2,237          | 5,285                      | --                         | 6,447                      | 47,088        |
| 1974 | 7,556                      | 810              | 21,837          | 190                    | 10,359         | 11,522                     | --                         | 4,450                      | 56,724        |
| 1975 | 6,711                      | 680              | 15,000          | 110                    | 16,312         | 1,144                      | 15,000                     | 3,261                      | 58,218        |
| 1976 | 8,291                      | 1,690            | 15,000          | --                     | 15,080         | -- <sup>c</sup>            | 9,000                      | 1,364                      | 50,695        |

<sup>a</sup> Includes sale of electricity, miscellaneous, rent, state highway funds.

<sup>b</sup> 1959—also sale of used rails.

<sup>c</sup> As of the date of this study, no payment made by the Wisconsin Electric Railway Historical Society.

Source: Village of East Troy and SEWRPC.

maintenance-of-way expenditures indicate why this large deferred maintenance liability has been incurred. The first entry for this classification is \$382 in 1966. There is no way of knowing if this figure represents expenditures for prior years; however, the current condition of the roadbed would suggest that it does. In the years following 1966, funds allocated for maintenance-of-ways have been steadily increased, but not to the amounts that could even have maintained the existing condition of the roadbed, much less rebuilt it. Some track rehabilitation has been performed by the WERHS as a part of its contract agreement with the Village; however, this work has not been sufficient to halt the continued deterioration of the roadbed and track structure. In addition, prior to 1974 labor and material charges

were lumped in this account; thus a true indication of the labor and of material costs involved cannot be presented.

Two other cost items also have increased at rates higher than the ability of the railroad to cover through revenue: operating labor and equipment expense. The labor figure, which includes fringe items of insurance and retirement, has had a dramatic increase, especially since 1974 when accounting practices were changed to reflect a true distribution of expenses. The equipment expense indicates in part the age and problems associated with operation of the 1945 diesel engine currently used by the railroad. Table 8 presents the major classifications of expenditures for the years for which information is available.

Table 8

## EXPENDITURES OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD: 1954-1976

| Year    | Labor  | Miscellaneous Expenses | Excess Detention Paid to Soo | Inspection and Equipment Expense | Maintenance of Ways | Other Expenses <sup>a</sup> | Total Expenditures |
|---------|--------|------------------------|------------------------------|----------------------------------|---------------------|-----------------------------|--------------------|
| 1954-55 | --     | --                     | --                           | --                               | --                  | --                          | \$28,008           |
| 1956    | --     | --                     | --                           | --                               | --                  | --                          | 12,674             |
| 1957    | --     | --                     | --                           | --                               | --                  | --                          | 13,039             |
| 1958    | --     | --                     | --                           | --                               | --                  | --                          | 18,535             |
| 1959    | --     | --                     | --                           | --                               | --                  | --                          | 15,533             |
| 1960    | --     | --                     | --                           | --                               | --                  | --                          | 15,830             |
| 1961    | --     | --                     | --                           | --                               | --                  | --                          | 14,212             |
| 1962    | --     | --                     | --                           | --                               | --                  | --                          | 15,370             |
| 1963    | --     | --                     | --                           | --                               | --                  | --                          | 14,252             |
| 1964    | --     | --                     | --                           | --                               | --                  | --                          | 21,455             |
| 1965    | --     | --                     | --                           | --                               | --                  | --                          | 15,658             |
| 1966    | 12,705 | 284                    | 357                          | 1,000                            | 382                 | 950                         | 15,678             |
| 1967    | 13,014 | 284                    | 399                          | 1,140                            | 3,419               | 1,678                       | 19,934             |
| 1968    | 13,635 | 283                    | 445                          | 1,241                            | 3,565               | 924                         | 20,093             |
| 1969    | 14,668 | 1,064                  | 450                          | 1,568                            | 6,973               | 19,440 <sup>b</sup>         | 44,163             |
| 1970    | 14,911 | 243                    | 188                          | 4,279                            | 2,921               | 5,546                       | 28,088             |
| 1971    | 16,077 | 333                    | 405                          | 3,207                            | 6,696               | 1,339                       | 28,057             |
| 1972    | 17,582 | 291                    | 690                          | 2,873                            | 10,836              | 2,462                       | 34,734             |
| 1973    | 16,756 | 909                    | 1,530                        | 10,622                           | 11,673              | 3,325                       | 44,824             |
| 1974    | 25,579 | 2,036                  | 3,621                        | 8,119                            | 14,017              | 5,247                       | 58,619             |
| 1975    | 29,834 | 2,266                  | 1,900                        | 6,852                            | 13,270              | 3,394                       | 57,516             |
| 1976    | 29,908 | 1,606                  | 2,025                        | 3,731                            | 526                 | 7,450                       | 45,246             |

NOTE: Financial data rounded to nearest dollar.

<sup>a</sup> Other expenses include repair of electrical system, purchase of electricity, supplies and maintenance, buildings and fixtures, and other.

<sup>b</sup> Purchase of diesel locomotive.

Source: Village of East Troy and SEWRPC.

In summary, it is apparent that the gap between revenues and expenditures will not be closed under a continuation of existing conditions. The condition of the roadbed is not conducive to an efficient operation that would be achieved through a roadbed rehabilitation program and a motive power reconstruction or replacement program. Annual car movements must either be increased to generate greater revenues, or increased public and private subsidy must be provided to fund the rehabilitation. A review of the fixed switching fee with the Soo Line might result in adjustments which could help reduce the subsidy to an acceptable level.

The first step in maintaining railroad service to the Village must be the rehabilitation of the roadbed. After this work has been completed, the railroad can operate in a far more efficient manner than today, and funds for maintenance-of-way can be logically budgeted annually to maintain the facilities in agreeable form.

#### PRESENT AND FUTURE FREIGHT SERVICE NEEDS

A discussion of freight service needs for shippers and service provided by the METWRR differs



from a discussion of service provided by a Class I railroad on a light density branch line. In the latter case, service problems usually occur from cutbacks in regularly scheduled service to meet a decreasing demand by shippers, while at the same time maintaining a high degree of service on main line operations. In the case of the METWRR, although the line may be considered light density in terms of yearly traffic totals, the problem concerns the entire railroad and not just traffic density and operation of a branch line. All traffic carried by the METWRR is generated in the Village of East Troy and no bridge traffic is carried since the line terminates in the Village without a connection to another railroad. Thus, the proper operating classification of this railroad is a switching line, interchanging with the Soo Line Railroad in the Village of Mukwonago for cars to be provided to the industries in the Village of East Troy.

The METWRR operates with a two-man crew five days per week, 52 weeks per year, on a demand basis for the shippers in the Village. Normal contact with the Soo Line is through a traveling traffic agent who handles requests for cars and notifies the METWRR train crew of incoming traffic. Cars delivered or picked up by the Soo Line at Mukwonago are handled by local freight service between Waukesha and points south along the Soo Line main line. Cars delivered by the Soo Line in the evening are picked up by the METWRR the next morning and spotted for the proper industrial user. Loaded cars or empties being returned to the Soo Line during the day are delivered to the interchange and picked up by the Soo Line in the evening. Thus, once a car reaches the interchange point, one-day service to the shippers is provided by the METWRR. A car loaded in the morning can be delivered to the interchange point in the afternoon and be on the Soo Line the same night. The operation, tailored to the specific needs of the shipper, provides a relatively high level and flexible service. Thus, what would be considered as only a switching function by a Class I railroad, subject to some degree of irregularity, becomes the main function for the METWRR with primary attention paid to the needs of the shippers.

At the present time all of the service required by the shippers, and within the scope of control by the METWRR is being performed by the railroad. There are, however, some factors in providing service that are beyond the direct control of the railroad under present conditions.

The existing deteriorated condition of the roadbed places some operating restraints on product shipment because track conditions will not allow loading to full car capacity. While speed is not a major factor in car movement, since the entire length of the line is only about seven miles, the amount of traffic that can be handled is restricted again by the deteriorated condition of the roadbed. Loaded cars are moved as single units in order to remove undue strain on the roadbed and decrease the likelihood of derailment and subsequent product damage. This operation, while marginally safe under existing conditions, substantially increases the operating costs while contributing no increase in revenue to the railroad operation. Rehabilitation of the roadbed would permit more efficient operation with an attendant reduction in operating costs.

The METWRR has no control over cars once they leave the relatively short line. As already noted, because of the failure of other lines to deliver loaded cars on time, the METWRR—and Soo Line for that matter—have lost revenues formerly received from the shipment of steel to the Trent Tube plant. This company now receives only 10 percent of its steel shipments by rail as opposed to three years ago when 80 percent was received by rail. To recapture this market, estimated at 175 carloads per year, through more competitive service would help reduce the present operating deficits.

The present fixed fee arrangement between the METWRR and the Soo Line for switching service, combined with the average number of cars moved in recent years, does not allow for a sufficient rate of revenue return without some form of subsidy. As previously stated, the Village of East Troy never acquired the railroad with the idea of receiving additional income, but rather as an investment in the future economic vitality of the community by assuring continued rail service to industrial firms located in the Village. Over the years the shippers gradually have become involved in the financial aspects of the railroad operations until today both the shippers and Village share in the responsibility of meeting annual deficits.

The present deteriorated condition of the roadbed and its related impact on the economic operations can be traced to several factors. The original rail line was constructed to rural electric interurban railway standards in 1907 and was not designed for

freight service of the type it now receives. The apparent lack of tieplates caused the rails to cut through the ties and make them virtually useless. These factors coupled with increasing drainage problems have caused additional deterioration of the roadbed. While the Village over the years has budgeted some money for maintenance purposes, it was not enough to halt the general deterioration of the roadbed. The Village is now faced with an extensive rebuilding program to bring the line up to Class I standards. Although local funds have been used to meet operating expenses, the revenues received from a fairly constant number of cars handled annually has not been sufficient to meet the increased costs of rebuilding the roadbed.

An example of the reasons for the deferred maintenance on the roadbed and a subsequent increase in operating costs can be seen by examining financial data obtained from the Village. During the period for which records are available, railroad revenue has approximately doubled from \$12,000 per year in 1954 to \$26,000 in 1976. However, during the same period, railroad operating costs have increased from \$12,000 to \$45,000 annually. The number of cars moved annually has remained fairly constant while operating costs have continued to increase.

Discussions with the three shippers regarding present and future service needs indicate that an increase in traffic can be anticipated if rail service is continued.<sup>4</sup> Trent Tube personnel look for a return to business levels of the early 1970's which would produce an increase in outbound shipments of finished products. If the current problems of shipping time of inbound steel can be reduced to an acceptable level below the current average of two weeks, a significant additional volume of traffic can be generated on the METWRR. At the present time, the ability to solve this problem is beyond the control of both the METWRR and the Soo Line.

The Equity Co-op looks forward to an increase in car usage in future years, primarily through an increase in inbound base fertilizer products. In the coming fiscal year, the Co-op expects to require 100 cars of phosphoric acid, which is double the

number of cars it used in 1975. If current problems with the roadbed can be overcome and a reduction made in the current METWRR tariff of \$100, the Co-op could be interested in the outbound shipment of grain products from a proposed new facility along the railroad.

The Milupa Corporation's future shipping needs have been discussed as a part of the shipper characteristics elsewhere in this chapter since it presently does not use the railroad. As indicated previously, it is anticipated that when full production is reached at this plant in five years, total railroad car usage would be approximately 500 cars annually, divided between inbound and outbound traffic.

Based on the estimates of these three users, without the addition of any other new business on the line, it is estimated that the METWRR, by the year 1981, could be moving approximately 1,000 cars annually. It is apparent that the approximately 300 cars moved in 1976 represent a base level of traffic for the railroad equal to 43 cars per mile per year. The movement of 1,000 cars would mean a traffic level of 143 cars per mile per year. Although a substantial increase in annual car movements over the volume handled today is projected, it is not anticipated that this increased level of traffic will require any increase in the permanent work force. It is likely, however, that the increased car movement, coupled with the present age of the existing motive power, will require the purchase of a new locomotive.

## FUTURE ECONOMIC POTENTIAL OF AREA

It is unlikely that there will be any significant change in the long-range economic base of the area served by the METWRR. According to statements by industrial users of the present rail service, the only drastic change in the local economy that would occur in the area would be the loss of rail service and the related shift of industries requiring rail service to other communities with rail service.

There is no fossil fuel production in this area of the Region and it is possible to state that there will be no such production during or after the project period. The underlying geologic formations prevalent in this area of Wisconsin have shown no tendency to bear and produce this type of product.

The area served by the METWRR is a part of an important agricultural production region in southeastern Wisconsin. Walworth County contains

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<sup>4</sup> Meeting with Robert J. Pekel, General Manager, Milupa Corporation, July 7, 1977, meeting with Richard M. Wohlenhaus, President, Equity Co-op, July 26, 1977, and meeting with Charles E. Heckman, Vice President, Administration, Trent Tube, July 26, 1977.

28 percent of all of the prime agricultural lands identified by the SEWRPC located within the Southeastern Wisconsin Region. The Equity Co-op, with facilities in two communities in Walworth County, is the largest user of the METWRR in terms of agriculturally related products shipped by rail. Dry and liquid base fertilizer products are shipped by rail to their facilities in the Village of East Troy for manufacturing and distribution. If rail service were no longer provided, only a portion of these base products could be shipped by truck, however, at an increase in costs which would be passed on to the farmer, eventually being reflected in higher food prices for the consumer.

Currently the largest user of the rail service provided by the METWRR is the Trent Tube Division of Colt Industries. The firm, for which the railroad provides the only feasible means of transporting its finished product, manufactures stainless steel tubing used in the construction of electric generating power plants. This industry, which has averaged shipments of 83 cars annually, would be forced to consider relocation of its large tube manufacturing facilities if rail service is not provided. With increasing national concern over all forms of energy production during the coming years, it seems likely that there will be increasing

demand for the type of products manufactured by this firm, and shipped by the METWRR.

The Milupa Corporation, which is currently renovating facilities for infant food manufacture in the Village will add significantly to the local economy when full production begins. In addition to adding a significant volume of traffic to the METWRR, the firm plans a \$5 million expansion to existing manufacturing facilities and will employ a work force in the range of 200-300 people. These workers, when added to the present employment of 400 people at Trent Tube, become a significant impact on a Village the size of East Troy.

In summary, it has been documented in this chapter that the railroad is in generally poor physical condition; however, the railroad provides a service that is important and necessary for a certain portion of the industrial base of the Village. The continued provision of rail service by the METWRR will aid in the improvement of the local economy by providing a necessary service to firms that employ local residents and pay a substantial amount of local property taxes.

The following chapter will review the alternatives for continuing freight service to the Village of East Troy.

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## Chapter V

### EVALUATION OF ALTERNATIVES

#### INTRODUCTION

To determine which of the alternative courses of action should be pursued to assure a continued level of freight transportation service to industrial firms in the Village of East Troy, it is necessary to evaluate each alternative against the objectives of meeting or exceeding the present level of service and reducing present operating deficits. The alternatives presented in this report represent a logical range of means by which freight service can continue to be provided to the East Troy area. Of a total of 10 alternatives outlined, nine provide for continued railway service at or better than the present service level while the tenth would provide freight service by a different mode. The alternatives as previously outlined include:

1. Village ownership and operation as a switching line with federal and local financial assistance.
2. Village ownership and operation as a switching line with local financial assistance.
3. Village ownership and operation as a short line.
4. Lease of the METWRR to the Soo Line.
5. Lease of the METWRR to The Wisconsin Electric Railway Historical Society.
6. Lease of the METWRR to the Geneva Lake Area Joint Transit Commission.
7. Lease of the METWRR to an association of local shippers.
8. Lease of the METWRR to a responsible short line operator.
9. Do-Nothing, continue present level of operation.

10. Permanent abandonment of the METWRR—temporary federal financial assistance to establish alternative shipping mode, land-bank right-of-way for future, and use as a recreational trail.

The purpose of this chapter is to evaluate each of these alternatives and to arrive at a recommendation for the best alternative for adoption and implementation. In the event that federal funding is recommended as a part of the alternative, prior abandonment of the railroad by the Village will be necessary as a requirement of the 4R Act.

#### REHABILITATION ESTIMATES

Eight of the 10 alternatives in this report, because of their emphasis on continued rail service, will require as a part of their evaluation an estimate of the cost of rehabilitating the roadbed and making related right-of-way improvements. The only two alternatives that do not require such cost estimates are the do-nothing and abandonment alternatives.

Previous sections of this report have documented the fact that the roadbed has deteriorated to the point where safe and efficient operation of railroad equipment is no longer possible. The FRA track inspection conducted in June 1975 found that the line did not meet the minimum Class I safe operating standards and ordered the line improved by December 1, 1977. If the railroad is to operate in a safe and efficient manner and if the operating restrictions currently enforced by the FRA are to be removed, then the entire line must be reconstructed to meet at least Class I standards. The railroad has received a temporary waiver of this FRA order until December 1, 1977, under which all train operations are limited to six miles per hour.

With assistance from the Geneva Lake Area Joint Transit Commission (GLAJTC) and The Wisconsin Electric Railway Historical Society (WERHS), the Village has taken some positive steps to meet the

FRA requirement that improvements be made to the line by December 1977. During the summer of 1977, a work program has been underway to improve specific areas of the line that have caused the greatest amount of operating difficulties. This program was not funded to bring the entire line up to Class I standards.

The consulting engineering firm of Howard Needles Tammen & Bergendoff (HNTB) was retained by the Commission to prepare an estimate of the cost of rehabilitation of the railroad to Class I standards. Because the exact extent of the current work program is unknown at this time, it was estimated that under that work approximately one mile of the total length of seven and two-tenths miles of railroad will be upgraded to Class I standards. The spur track to the Trent Tube facilities was not included in the estimate. The spur which was constructed in 1969 meets Class I standards. The estimate for rebuilding the roadbed for the balance

of the railroad was approximately \$537,000. Table 9, taken from the consultant report, details the estimate.

Based upon a field inspection of the railroad on July 14, 1977, the consultant report concluded that approximately 78 percent of the ties currently in place are not adequately supporting the track and subsequently the loads placed on them. Correction of this condition and installation of presently almost nonexistent ballast account for the two largest items in the reconstruction budget, about \$392,000, or about 90 percent of the direct costs. One of the contributing causes of the deterioration of the ties was the lack of tie plates to spread the load over the tie. This problem would be eliminated in the reconstruction program through the use of plates on every tie. Tie life would also be extended by placing at least two inches of a total of eight inches of new ballast beneath the tie, thereby facilitating drainage away from the road-

Table 9

RECONSTRUCTION COST ESTIMATES OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD

| Item                                      | Quantity                                  | Unit Price <sup>a</sup> | Cost                   |
|---|---|-------------------------|------------------------|
| Cross Ties . . . . .                      | 6.5 Miles at<br>1,200 Per Mile            | \$ 21.30                | \$166,140              |
| Tie Plates . . . . .                      | 15,600 Each                               | 1.25                    | 19,500                 |
| Spikes . . . . .                          | 100 Kegs                                  | 50.00                   | 5,000                  |
| Ballast . . . . .                         | 6.5 Miles at<br>2,500 Cubic Yard Per Mile | 13.89                   | 225,746                |
| Rehabilitate Turnouts . . . .             | 4 Each                                    | 1,800.00                | 7,200                  |
| Angle Bars and Bolts . . . .              | 200 Bars                                  | 18.00                   | 3,600                  |
| Replace Rail . . . . .                    | 1,000 Feet                                | 52.48                   | 5,248                  |
| Ditching . . . . .                        | Item                                      | --                      | 2,500                  |
| Clearing Crossing . . . . .               | Item                                      | --                      | 1,500                  |
| Subtotal                                  |   |                         | \$436,434              |
| 10 Percent Construction Contingencies     |   |                         | 43,600                 |
| 13 Percent Engineering Costs <sup>b</sup> |   |                         | 56,736                 |
| Total 1977 Cost                           |   |                         | \$536,770 <sup>c</sup> |

<sup>a</sup> Includes material and labor costs.

<sup>b</sup> Includes basic engineering services, surveys for design and construction, and services of fulltime project representative during construction.

<sup>c</sup> Does not include signal, crossing, or roadway repairs or any roadway signs, bridges, or structures.

Source: Howard Needles Tammen and Bergendoff.

bed and providing greater track and tie stability. The present rail used on the METWRR is 70- and 80-pound-per-yard rail and has been determined adequate for projected traffic volumes with the exception of approximately 1,000 lineal feet in need of replacement due to short lengths, end breaks, and splitting. The remainder of the items in the reconstruction estimate are self-explanatory and related to the major portions of the proposed improvement program.

After the line is reconstructed, a minimum of \$3,000 per mile per year should be set aside for maintenance-of-way costs in order to assure that the line does not again deteriorate to its present condition.

### STRUCTURE REHABILITATION

If rail operation is to be continued, then consideration must be given to improving the three structures used to carry roadway vehicular traffic over the railroad right-of-way. As previously indicated, a major problem associated with these structures is the lateral clearance between railroad cars and the vertical bridge supports. The two structures at Phantom Woods Road and Beach Road will continue to be required to accommodate roadway traffic movements. Because of duplication of railroad crossing facilities, however, the Stewart School Road structure can be removed and not replaced. Personnel from the Wisconsin Department of Transportation (WisDOT) District II office in Waukesha have evaluated the specific needs for each of these structures as a part of this study in order to eliminate the existing hazardous conditions.

Inspection of the structures by (WisDOT) personnel has determined that the primary problem associated with the structures is lateral clearance afforded by the vertical supporting columns adjacent to the railroad track. In each of the three structures these columns can be replaced and at the same time moved two feet farther away from the track. Table 10 represents the cost figures for replacement of the three structures and for rehabilitation, including movement and replacement of the supporting columns.

The vertical clearance provided by the structures currently does not meet recommended standards of 23 feet. Because of adjacent established highway grades, however, the clearance under the new structures would have to be maintained. These clearances range between 16.6 feet at Phantom Woods Road and 18.4 feet at Stewart School Road.

Since there is no statement at this time regarding the eligibility of bridge replacement or rehabilitation in the 4R Act, it is recommended that only the costs of replacing and moving the supporting columns be included when determining the amount of money required for rehabilitation of the railroad and related structures. This figure, as indicated in Table 10 is \$18,500.

The rehabilitation estimates in Table 10 include some concrete work on the deck structures, railing repair, and painting. These costs are estimated at \$7,500 for the two structures. It is recommended that the Stewart School Road structure be removed and not replaced. The removal cost is estimated at \$20,000. Funds for the removal can possibly be obtained through the Safer Off-System program.

Table 10

### STRUCTURE REPLACEMENT OR REPAIR COSTS OF ROADWAYS RELATED TO THE EAST TROY WISCONSIN RAILROAD

| Structure                   | Cost to<br>Replace Entire<br>Structure | Cost to<br>Replace Existing<br>Supporting Columns | Rehabilitation<br>Costs |
|-----------------------------|--|---|-------------------------|
| Phantom Woods Road . . .    | \$ 65,000                              | \$ 8,500  | \$4,500                 |
| Beach Road . . . . .        | 40,000                                 | 11,000  | 3,000                   |
| Stewart School Road . . . . | 115,000                                | --  | --                      |
| Total                       | \$220,000                              | \$18,500  | \$7,500                 |

Source: Wisconsin Department of Transportation.

This program provides funding up to 70 percent of the removal cost. Walworth County establishes the priority for this funding program, and the Village and Town of East Troy should work through the County Highway Committee to pursue this course of action. If federal funding is obtained, the local share for removal of this structure would be 30 percent or \$6,000, based on a total cost of \$20,000.

In summary, the local cost for the column replacement of the two structures would be covered by railroad operating revenue, while the \$7,500 for rehabilitation of the two structures and the \$6,000 for the local share of the structure removal at Stewart School Road would be covered as a normal highway expense for the Village and Town of East Troy.

#### ALTERNATIVE DESCRIPTION

Following is a description of each of the 10 identified alternatives available to the Village of East Troy for maintaining freight transportation service to the Village and immediate environs. In each of the alternatives that includes a reference to federal financial assistance, such reference is to the funding provisions of Title 8 of the Railroad Revitalization and Regulatory Reform Act of 1976.

#### ALTERNATIVE 1—VILLAGE OWNERSHIP WITH FEDERAL FINANCIAL ASSISTANCE

Under this Alternative, ownership and operation of a switching line by the Village of East Troy would be continued. Federal financial assistance under terms of the 4R Act for fiscal year 1978 is at an established rate of 90 percent federal and a 10 percent local share of eligible costs. However, the actual amount available for any fiscal year during the five-year project eligibility of the 4R Act depends upon the share that the State of Wisconsin receives from the FRA. Therefore, if and when the Village proceeds with the project, its share will be 10 percent of whatever amount is allocated plus the balance necessary to meet the total project cost. Based on previously discussed economic data, it is estimated that about \$555,500 in 1977 dollars will be required for rehabilitation of the right-of-way including roadbed, track structures, and related overhead structures, bringing the line up to Class I standards and removing existing safety hazards. This figure does not include the cost of removing the Stewart School Road structure, which involves a separate federal program.

|                                     |           |
|-------------------------------------|-----------|
| Rehabilitation of Railroad. . . . . | \$537,000 |
| Column Replacement,                 |           |
| Two Structures . . . . .            | 18,500    |
| Total Funds Required . . . . .      | 555,500   |

Since the status of State of Wisconsin participation in funding is uncertain at this time, the local share of the funds would have to be provided by the Village of East Troy.

Improvement of the right-of-way and roadbed will provide not only a safer operation but also a more efficient operation, especially in view of potential increases in car loadings on the line. The current practice of moving a single loaded car between the interchange with the Soo Line and industrial users in the Village could be discontinued with attendant savings in the direct operating expenses of labor, equipment, and fuel costs. This cost savings obviously is related also to train movements between the Village and the interchange point. The movement of true trains of cars would reduce operating costs while potential increased traffic would increase revenues. With the improvements recommended under this alternative and with an anticipated annual movement of 1,000 cars by 1981, the cost of movement may be expected to drop below \$100 per car compared to the approximate \$150 per car in 1976.

Shippers in the Village now receive a highly specialized level of service from the railroad. With the anticipated increase in car movements, especially with the addition of traffic from the Milupa Corporation facilities in the latter part of the five-year period, it may be desirable to establish a schedule for pick-up and delivery of cars. This would allow for the handling of the increased traffic in a more cost-efficient manner, while at the same time retaining the individualized service provided by a local switching line.

Under this Alternative, the agreement on the present fixed charge that the METWRR receives for switching service from the Soo Line at the interchange at Mukwonago would be reviewed. Since the METWRR operates as a switching line, the railroad receives a fixed charge for each car handled by the Soo Line. The Village has the primary responsibility for negotiating changes in the switching charge with the Soo Line. Generally, the increases in the fixed charge that have been approved by the Soo Line in the past were a part of nationwide rate changes in which the Soo Line shares a percentage of the increase with the METWRR as a switching charge.



If the Village is willing to undertake negotiations with the Soo Line in order to receive a more favorable distribution of available funds, it is suggested that the former retain the services of someone familiar with the rate process to insure that its requests are based on sound financial planning. Any plan put forward by the Village must be realistic for both the switching line and the connecting Class I railroad. The fixed charges for switching service in effect during the summer of 1977 call for a payment to the METWRR of \$31.52 for a carload of steel and \$23.47 for all other commodities or an average of \$27.00 per car. A change in the fixed charge for switching service approved by the Soo Line that will take effect on September 12, 1977, increases the switching charges for steel to \$36.25, and for all other commodities to \$26.99, or an average of \$32.00 per car.<sup>1</sup> In addition, there is a fixed switching charge of \$34.93 for pipe that is related to fabrication in transit and used for some products manufactured by Trent Tube. Based on this most recent

change, it is logical to expect that by 1979, as indicated in Tables 12 and 13, an average figure of \$35.00 per car is realistic. This figure was developed for planing purposes only, and any dollar increase that the Village can negotiate with the Soo Line will only enhance this method of generating additional income for the METWRR.

Table 11 represents estimated annual expenditures through 1981. This statement of expenditures considers that there are likely to be some increases in fuel and equipment expense associated with the projected increase in annual car usage by industries in the Village; however, to move these cars should not proportionally raise railroad expenditures.

Tables 12 and 13 represent two examples of estimated yearly revenues based on 1,000 and 700 loaded cars moved annually. The estimate of

<sup>1</sup>Discussion with Richard Piers, Manager of Rates, Soo Line Railroad, August 26, 1977.

Table 11

ANNUAL OPERATING EXPENDITURES OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD

| Year | Operating Expenditures <sup>a</sup> | Local Share <sup>b</sup> | Annual Maintenance Right-of-Way <sup>c</sup> | Purchase of Diesel <sup>d</sup> | Total Railroad Expenditures |
|------|-------------------------------------|--------------------------|--|---------------------------------|-----------------------------|
| 1974 | \$42,000                            | \$                       | \$14,000                                     | \$                              | \$56,000                    |
| 1975 | 43,000                              | --                       | 13,000                                       | --                              | 56,000                      |
| 1976 | 42,000                              | --                       | 1,000  | --                              | 43,000                      |
| 1977 | 43,000                              | --                       | 5,000 <sup>e</sup>                           | --                              | 48,000                      |
| 1978 | 43,000                              | 5,000                    | 10,000                                       | 10,000                          | 68,000                      |
| 1979 | 44,000                              | 5,000                    | 15,000                                       | 10,000                          | 74,000                      |
| 1980 | 44,000                              | 5,000                    | 20,000                                       | 10,000                          | 79,000                      |
| 1981 | 45,000                              | 5,000                    | 22,500                                       | 10,000                          | 82,500                      |

<sup>a</sup> Operating expenditures include wages, retirement, equipment expense, supplies, fuel, office costs, taxes, excess detention (demurrage) to the Soo Line, and miscellaneous expenses.

<sup>b</sup> Repayment of local share funds for rehabilitation of the railroad; however, does not include interest on bonds or loan. Assumes no credit for material in current work program.

<sup>c</sup> Establishment of a fund for annual maintenance-of-way costs.

<sup>d</sup> Establishment of a fund for the purchase of new motive power. Assume that this will be a used, rebuilt diesel engine.

<sup>e</sup> This figure does not include funds expended for 1977 rehabilitation work.

Source: SEWRPC.

Table 12

**ANNUAL OPERATING REVENUES OF THE MUNICIPALITY OF EAST TROY WISCONSIN  
RAILROAD UNDER ALTERNATIVE 1, BASED ON 1,000 CARS ANNUALLY BY 1981**

| Year | Number of Cars | Railroad Revenues              |                 |           |                        |                 |                                 |  | Subsidy Revenues |                 |                        | Total Railroad Revenues | Total Railroad Expenditures |
|------|----------------|--------------------------------|-----------------|-----------|------------------------|-----------------|---------------------------------|--|------------------|-----------------|------------------------|-------------------------|-----------------------------|
|      |                | From Soo Line Switching Charge |                 | Demurrage | Shipper Tariff (local) |                 | From Museum Passenger Operation | Total Revenues from Railroad Operation |                  |                 |                        |                         |                             |
|      |                | Total                          | Average         |           | Total                  | Tariff          |                                 |  |                  |                 |                        |                         |                             |
|      |                | Total                          | Average         |           | Total                  | Tariff          |                                 |  | Village Subsidy  | Shipper Subsidy | Total Subsidy Revenues |                         |                             |
| 1974 | 555            | \$ 7,500                       | 24 <sup>a</sup> | \$ 800    | \$10,300               | 17 <sup>b</sup> | \$11,500                        | \$30,100                               | \$21,800         | \$ 200          | \$22,000               | \$52,100                | \$56,000                    |
| 1975 | 321            | 6,700                          | 24              | 700       | 16,300                 | 65              | 1,100                           | 24,800                                 | 15,000           | 15,100          | 30,100                 | 54,900                  | 56,000                      |
| 1976 | 302            | 8,300                          | 27              | 1,700     | 15,000                 | 65              | --                              | 25,000                                 | 15,000           | 9,000           | 24,000                 | 49,000                  | 43,000                      |
| 1977 | 350            | 9,450                          | 27              | 1,000     | 35,000                 | 100             | 2,000                           | 47,450                                 | 15,000           | --              | 15,000                 | 62,450                  | 48,000                      |
| 1978 | 450            | 13,500                         | 30              | 1,000     | 40,000                 | 100             | 3,000                           | 57,500                                 | 12,000           | --              | 12,000                 | 69,500                  | 68,000                      |
| 1979 | 600            | 21,000                         | 35              | 1,500     | 48,000                 | 80              | 4,000                           | 74,500                                 | --               | --              | --                     | 74,500                  | 74,000                      |
| 1980 | 750            | 26,300                         | 35              | 2,000     | 48,800                 | 65              | 5,000                           | 82,100                                 | --               | --              | --                     | 82,100                  | 79,000                      |
| 1981 | 1,000          | 35,000                         | 35              | 3,000     | 40,000                 | 40              | 6,000                           | 84,000                                 | --               | --              | --                     | 84,000                  | 82,500                      |

NOTE: Table is based on constant 1977 dollars, rounded.

<sup>a</sup> Average switching charge with Soo Line.

<sup>b</sup> Amount of local shipper tariff used to determine revenue.

Source: SEWRPC.

Table 13

**ANNUAL OPERATING REVENUES OF THE MUNICIPALITY OF EAST TROY WISCONSIN  
RAILROAD UNDER ALTERNATIVE 1, BASED ON 700 CARS ANNUALLY BY 1981**

| Year | Number<br>or<br>Cars | Railroad Revenues                 |                    |                              |                           |                 |  |  | Subsidy Revenues |        |          | Total<br>Railroad<br>Revenues | Total<br>Railroad<br>Expenditures |
|------|----------------------|-----------------------------------|--------------------|------------------------------|---------------------------|-----------------|--|--|------------------|--------|----------|-------------------------------|-----------------------------------|
|      |                      | From Soo Line<br>Switching Charge |                    | Demurrage                    | Shipper Tariff<br>(local) |                 | From<br>Museum<br>Passenger<br>Operation | Total<br>Revenues<br>from<br>Railroad<br>Operation |                  |        |          |                               |                                   |
|      |                      |                                   |                    |                              | Total                     | Average         |  |  | Total            | Tariff |          |                               |                                   |
|      |                      | Village<br>Subsidy                | Shipper<br>Subsidy | Total<br>Subsidy<br>Revenues |                           |                 |  |  |                  |        |          |                               |                                   |
| 1974 | 555                  | \$ 7,500                          | 24 <sup>a</sup>    | \$ 800                       | \$10,300                  | 17 <sup>b</sup> | \$11,500                                 | \$30,100   | \$21,800         | \$ 200 | \$22,000 | \$52,100                      | \$56,000                          |
| 1975 | 321                  | 6,700                             | 24                 | 700                          | 16,300                    | 65              | 1,100                                    | 24,800   | 15,000           | 15,100 | 30,100   | 54,900                        | 56,000                            |
| 1976 | 301                  | 8,300                             | 27                 | 1,700                        | 15,000                    | 65              | --                                       | 25,000   | 15,000           | 9,000  | 24,000   | 49,000                        | 43,000                            |
| 1977 | 350                  | 9,450                             | 27                 | 1,000                        | 35,000                    | 100             | 2,000                                    | 47,450   | 15,000           | --     | 15,000   | 62,450                        | 48,000                            |
| 1978 | 400                  | 12,000                            | 30                 | 1,000                        | 40,000                    | 100             | 3,000                                    | 56,000   | 15,000           | --     | 15,000   | 71,000                        | 68,000                            |
| 1979 | 500                  | 17,500                            | 35                 | 1,500                        | 50,000                    | 100             | 4,000                                    | 73,000   | 1,000            | --     | 1,000    | 74,000                        | 74,000                            |
| 1980 | 600                  | 21,000                            | 35                 | 1,500                        | 54,000                    | 90              | 5,000                                    | 81,500   | --               | --     | --       | 81,500                        | 79,000                            |
| 1981 | 700                  | 28,000                            | 40                 | 2,000                        | 49,000                    | 70              | 6,000                                    | 85,000   | --               | --     | --       | 85,000                        | 82,500                            |

NOTE: Table is based on constant 1977 dollars, rounded.

<sup>a</sup> Average switching charge with Soo Line.

<sup>b</sup> Amount of local shipper tariff used to determine revenue.

Source: SEWRPC.

1,000 cars by 1981 was determined on the basis of Trent Tube and Equity Co-op returning to a movement of approximately 500 loaded cars annually plus an estimate of an additional 500 loaded cars annually when the Milupa Corporation facilities reach full production by 1980-1981. The estimate of 700 cars annually is based on slightly less optimistic forecasts or car movements for all three of the users of rail freight service. This level of increase in traffic could be handled by the railroad without any significant increase in operating costs. If car usage increases beyond 1,000 annually, additional operating costs may be incurred including personnel, fuel, and perhaps additional equipment costs. The foregoing estimates of car usage are based upon and directly related to business activity as projected by the three shippers currently using the railroad for product shipment. Changes in economic conditions and management decisions could, of course, result in significantly lower car usage. Trent Tube and Equity Co-op, however, do expect to increase their business, thus requiring an increase in the number of cars to about 500 per year. The key to moving between 700 and 1,000 cars annually by 1981 is the projected need by the Milupa Corporation. Attainment of production goals and use of railroad freight service by this firm are necessary if the projected volumes of 700 to 1,000 cars per year are to be achieved.

The estimate that sufficient revenue would be received to meet operating expenditures through 1981 is based on the following critical assumptions:

1. Annual car usage would increase as forecast to generate new revenue.
2. Movement of the increased number of cars must be cost-efficient as indicated in Table 12. If current operating practices are continued, costs will increase in direct proportion to the number of cars moved, thereby negating the increase in revenue.
3. The current (1977) agreement concerning fixed charge for switching service with the Soo Line will have been changed from an average of \$32.00 per car to an estimated \$35.00 per car.
4. Ridership totals for The Wisconsin Electric Railway Historical Society would increase modestly, returning an income of \$6,000 per year to the railroad based on a 1981 ridership of approximately 11,000 people.

Based on these assumptions, as indicated in Tables 12 and 13, it should be possible to generate a sufficient amount of revenue to cover operating expenses.

Two additional significant assumptions underlie Tables 12 and 13. It is assumed that the current local tariff charged to the shippers can be reduced over a period of time from \$100 to \$40 per car if traffic of 1,000 loaded cars per year can be generated; and from \$100 to \$70 per car if traffic of 700 loaded cars per year can be generated. It is further assumed that the subsidy payments made by the Village and the shippers would be eliminated over a five-year period. The attainment of these assumed conditions would be favorable not only to the shipper but to the Village since Village tax levies now used to support the railroad could be used for other public purposes.

The increased cost efficiency associated with operation of a rehabilitated railroad, combined with the additional revenue received from projected increases in freight traffic and a revision of the switching service charge with the Soo Line, should bring revenues into line with expenditures. If, because of changing national economic conditions, annual traffic volume should again decrease in the coming years as it did in 1975, the Village and shippers again would have to act in cooperation to meet any operating deficits that might occur.

#### ALTERNATIVE 2—VILLAGE OWNERSHIP WITH LOCAL FINANCIAL ASSISTANCE

Under this Alternative, ownership and operation of a switching line by the Village of East Troy would be continued. Federal financial assistance for rehabilitation of the roadbed and related structures would not be available, however, and the necessary improvements would be funded locally. The possibility of no outside financial assistance must be considered since there is no assurance that federal funds from Title 8 of the 4R Act will indeed be available for construction work in fiscal year 1978 or succeeding years.

The basic assumptions underlying Alternative 1 also underlie Alternative 2. In order for the railroad to continue operation, as well as to achieve safer and more efficient operation, it will be necessary to rebuild the roadbed and related structures. As previously indicated, to bring the line up to Class I standards and correct existing structure problems is estimated to cost about \$555,500 in 1977 dollars. This Alternative is based on the

assumption that the Village of East Troy and shippers using railroad service are willing to assume this financial responsibility. The financial data and assumptions made in Tables 11, 12, and 13 are valid for Alternative 2 except that all of the rehabilitation costs must be borne at the local level.

The most feasible means of generating sufficient money to cover the cost of physical rehabilitation of the railroad probably would be the issuance of general obligation bonds by the Village of East Troy. The cost of these bonds would be related to the credit rating of the Village and the interest rate available at the time of issue. By 1981 a debt retirement and interest payment of approximately \$48,000 per year could be covered through revenues generated by railroad operations if annual car movements reach at least 1,000 loaded cars per year and the local tariff was reduced to \$90 per car. Variations of this funding arrangement are possible, such as a continued Village subsidy and a reduction in the local tariff; however, the end result is that an additional \$48,000 in railroad revenue will be required to pay the principal and interest on the bonds over a 20-year period of time based on

a 6 percent interest rate. Table 14 is an example of railroad revenues needed to pay for the improvement program.

### ALTERNATIVE 3—CHANGE IN RAILROAD CLASSIFICATION FROM SWITCHING TO SHORT LINE

This Alternative would continue ownership and operation of the railroad by the Village of East Troy with or without federal financial assistance for the rehabilitation of the roadbed and related structures. The only difference between Alternative 3 and Alternatives 1 and 2 would be a change in railroad classification from a switching line to a short line. While the actual operation of the railroad would not change, changes would occur in revenue received and in expenditures for administrative costs.

As previously indicated in Table 6, the Soo Line now pays the Village a flat fee for all cars delivered or picked up at the interchange point in Mukwonago. This fixed charge currently averages about \$27 per car. If the Village would change the operating classification of the railroad from

Table 14

### ANNUAL OPERATING REVENUES OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD UNDER ALTERNATIVE 2, BASED ON 1,000 CARS ANNUALLY BY 1981

| Year | Number of Cars | Railroad Revenues              |                 |           |                        |                 |                                 |  | Subsidy Revenues |                 |                        | Total Railroad Revenues | Total Railroad Expenditures |
|------|----------------|--------------------------------|-----------------|-----------|------------------------|-----------------|---------------------------------|--|------------------|-----------------|------------------------|-------------------------|-----------------------------|
|      |                | From Soo Line Switching Charge |                 | Demurrage | Shipper Tariff (local) |                 | From Museum Passenger Operation | Total Revenues from Railroad Operation | Village Subsidy  | Shipper Subsidy | Total Subsidy Revenues |                         |                             |
|      |                | Total                          | Average         |           | Total                  | Tariff          |                                 |  |                  |                 |                        |                         |                             |
| 1974 | 555            | \$ 7,500                       | 24 <sup>a</sup> | \$ 800    | \$10,300               | 17 <sup>b</sup> | \$11,500                        | \$30,100                               | \$21,800         | \$ 200          | \$22,000               | \$52,100                | \$56,000                    |
| 1975 | 321            | 6,700                          | 24              | 700       | 16,300                 | 65              | 1,100                           | 24,800                                 | 15,000           | 15,100          | 30,100                 | 54,900                  | 56,000                      |
| 1976 | 302            | 8,300                          | 27              | 1,700     | 15,000                 | 65              | --                              | 25,000                                 | 15,000           | 9,000           | 24,000                 | 49,000                  | 43,000                      |
| 1977 | 350            | 9,450                          | 27              | 1,000     | 35,000                 | 100             | 2,000                           | 47,450                                 | 15,000           | --              | 15,000                 | 62,450                  | 48,000                      |
| 1978 | 450            | 13,500                         | 30              | 1,000     | 45,000                 | 100             | 3,000                           | 62,500                                 | 25,500           | 23,000          | 48,500                 | 111,000                 | 111,000 <sup>c</sup>        |
| 1979 | 600            | 21,000                         | 35              | 1,500     | 60,000                 | 100             | 4,000                           | 86,500                                 | 18,500           | 12,000          | 30,500                 | 117,000                 | 117,000                     |
| 1980 | 750            | 26,300                         | 35              | 2,000     | 75,000                 | 100             | 5,000                           | 108,300                                | 10,700           | 3,000           | 13,700                 | 122,000                 | 122,000                     |
| 1981 | 1,000          | 35,000                         | 35              | 3,000     | 90,000                 | 90              | 6,000                           | 134,000                                | --               | --              | --                     | 134,000                 | 125,500                     |

NOTE: Table is based on constant 1977 dollars, rounded.

<sup>a</sup> Average switching charge with the Soo Line.

<sup>b</sup> Amount of local shipper tariff used to determine revenue.

<sup>c</sup> All expenditure data are the same as Table 11. However, the annual \$5,000 local share has been delineated and repayment of \$48,000 annually has been included for total local funding of rehabilitation work.

Source: SEWRPC.

a switching to a short line operation, this action would eliminate the existing switching fee established with the Soo Line as well as the local tariff established by the METWRR.

For the Village to seriously consider a change in the classification of the railroad, a detailed study would have to be made of the advantages and disadvantages of such a change. As a minimum, this study must consider the increased management responsibility of rate establishment, billing, and records keeping, responsibility for damage claims and, above all, an estimate of increased revenue over the present method of operation. It must be clearly demonstrated that the rates established as an originating and terminating railroad moving the volume of traffic projected for the METWRR will be sufficient to meet all operating expenses including debt retirement and maintenance costs. One additional factor to consider in such a change is the degree of cooperation between the short line and the connecting Class I railroad, in this case the Soo Line. The present working relationship between the METWRR and the Soo Line apparently is cooperative; however, any major change that would significantly alter the revenue received by the Soo Line could have a negative impact on the degree of service received, thereby eliminating possible benefits of short line operation.

Since it has been demonstrated that it is possible to generate revenue in excess of expenditures as a switching line without local subsidy payments so long as annual car usage increases, careful attention should be paid to the net increase in revenue to be gained before any change in classification is authorized.

#### ALTERNATIVE 4—SALE OR LEASE OF THE METWRR TO THE SOO LINE

Under this Alternative, the railroad would be sold or leased by the Village to the Soo Line. This Alternative would eliminate any further operating involvement by the Village. However, in order to protect itself against unwanted abandonment by a new owner, the Village should consider only a lease rather than sale of the railroad. In this way, if a lessee were unable to operate the railroad for any reason, the Village could again assume the operating responsibilities, avoiding a loss in service. Therefore, for Alternative 4 and succeeding alternatives that discuss the possibility of a different operator, only a lease arrangement will be considered.

To determine the degree of interest by the Soo Line in this arrangement, the corporate office in Minneapolis was contacted by the Commission staff. Because of the small number of cars handled annually, the physical condition of the railroad, and the relatively high per car labor costs involved in the service, the Soo Line management indicated it would not be interested in providing direct service to the Village of East Troy. Because of the response from the Soo Line, this Alternative probably warrants no further consideration.

#### ALTERNATIVE 5—LEASE OF THE METWRR TO THE WISCONSIN ELECTRIC RAILWAY HISTORICAL SOCIETY

Under this Alternative, the railroad would be leased by the Village to The Wisconsin Electric Railway Historical Society (WERHS). This Alternative would eliminate any further operational involvement by the Village although ownership would be retained under the lease agreement.

The lease of the railroad to, and operation by, the WERHS should result in little variation from the estimated revenue and expenditure data presented under Alternative 1. The WERHS has recently entered into a new five-year lease with the Village for continued operation of its passenger equipment on the railroad. In order to keep this operation separate from the day-to-day operation of the freight service, it is recommended that this lease not be incorporated into the operating lease for the railroad. The WERHS should establish a separate corporation to operate the railroad, thereby protecting the tax-exempt status of its other operations.

A large number of variations could be considered in determining the terms of any lease arrangement, including: benefit to the lessee of the tax-exempt status of the Village owned right-of-way; share of payment to the Village of profits after meeting operating expenses; ability of the lessee to establish switching rates with the Soo Line and a local tariff that is equitable for the operator and the shipper; establishment of maintenance standards by the Village to ensure efficient service and to protect its investment in the railroad; and establishment of a series of operating standards to ensure an adequate level of service to the shippers.

Revenue and expenditure patterns should not vary greatly from those estimated for Alternative 1. The principal benefit to the Village as the present

owner and operator of the railroad would be two-fold: the Village would meet its primary objective of providing continued freight service to existing or future users of freight service while no longer being involved in the day-to-day operations of the railroad, and the Village would have some share in any future profits from railroad operations while not having to commit tax monies to meet any future operating deficits.

Since the WERHS presently operates electric passenger equipment over the railroad, electrification of the nonelectrified portions of the railroad and replacement of the present diesel locomotive with electric locomotives are possibilities. An estimated \$20,000 would be required to electrify the "Trent" branch of the line utilizing used materials. Much of the needed wire and supporting equipment that would be required to electrify the remainder of the railroad is now owned by the WERHS. There are five electric locomotives located at the museum that are in operating condition and could be used for freight train service. These locomotives were built by TMER&L and are 50-ton, 560-horsepower models that were last used in switching service at the electric power generating plants at Port Washington and St. Francis. These locomotives would require less annual maintenance than a diesel locomotive, can be operated as multiple units, and their use would eliminate the \$10,000 annual payment recommended for the purchase of a new (used) diesel locomotive. It is estimated that the cost of electric power to operate the freight service would be approximately \$2,000 annually, offsetting the price of diesel fuel that has averaged \$2,080 for the last three years. Under this operating arrangement, the railroad would continue to purchase electricity from the Village and convert from AC to DC current at the facilities located in the Village. Additional conversion equipment which the WERHS already owns could be installed near the museum so that the entire line would not have to be energized when only switching functions are underway in the Village. The WERHS assumes that personnel presently employed by the Village for railroad operations would be retained. In addition, the WERHS has some members who have experience in railroad freight movement that can be used as backup to the primary work force.

In summary, the lease of the METWRR to the WERHS has the benefit of possibly absolving the Village from any further responsibility for the operation of the railroad, while assuring

freight service to customers in the Village. A disadvantage would be that, as the number of cars moved annually over the line increases, the largest share of the profits generated by the increased traffic would go to the WERHS unless a clause in the lease allowed for a proportionately larger payment to the Village. Under this arrangement, the WERHS also would assume the responsibility of meeting any operating deficits.

#### ALTERNATIVE 6—LEASE OF THE METWRR TO THE GENEVA LAKE AREA JOINT TRANSIT COMMISSION

The lease of the METWRR to the Geneva Lake Area Joint Transit Commission (GLAJTC) would be similar to the lease arrangement under Alternative 5 except that ownership and operation would remain in public rather than private hands. This Alternative would be instituted only if necessary to satisfy the requirements of the 4R Act under which a third party is necessary as a funding pass-through agency. The principal benefit for the Village other than continued freight service to industrial firms in the Village of East Troy would be to spread any potential deficits of railroad operations over a larger tax base rather than having to pay all deficits out of tax revenue from the Village of East Troy. On the other hand, projected surplus revenues received after covering all railroad expenses would also be shared by all Commission members.

As indicated in Alternative 5, the same lease arrangements should be considered before entering into any lease with the GLAJTC. The operating revenues and expenses outlined in Alternative 1 should not change appreciably as a result of the lease of the railroad to a transit commission.

As under Alternative 8, a railroad car leasing program could be established as a means of raising revenue levels to meet or exceed operating deficits. Generally the benefits to be achieved through a car leasing program are related to the incentive per diem payments authorized by the Interstate Commerce Commission (ICC) combined with the regular per diem payments and the mileage rates earned by the cars when operated on other railroads. The extra or incentive per diem has been established primarily to raise necessary revenue to increase the national fleet of 50-foot box cars (XM cars) and 50-foot box cars with epoxy lining (XF cars). This incentive is paid on the XM cars from September through February while the

incentive for the XF cars is paid for the entire year. The money generated by the incentive per diem must be used for the manufacture of additional cars of the types earning the incentive per diem leaving the normal per diem rates available for debt service on car purchase and maintenance. Net dollars remaining after these payments can be used to meet railroad operating expenses, although it should be remembered that additional expenses will be incurred in administering such a program. There are financial gains in the form of benefits for investors in this program; however, this would not benefit the METWRR.

A variation of this alternative currently is being considered by the Village of East Troy. While not directly related to lease of the railroad to the GLAJTC, the latter organization has been involved in formulating the proposal. Negotiations entirely outside of the conduct of this study have been underway for the last six months between the Village and several national car leasing firms with the help of GLAJTC staff personnel and the knowledge of the Soo Line as the connecting railroad.

Under the terms of this proposal, the Village would "lease" its railroad markings to a firm for use on a number of standard box cars, the number in at least one negotiation totaling 300. The firm would purchase and maintain the box cars, receiving approximately \$20 per day from railroads at all times when the cars are in service. This amount will vary since it consists of current payments of per diem, incentive per diem, and mileage rates. Under the current lease proposal the firm would pay a negotiated amount to the Village. Under one of the negotiations, the amount discussed was approximately \$0.75 per day per car, or a total of about \$82,000 per year. The leasing firm would have the responsibility of keeping the cars assigned to shippers and the other administrative duties associated with the project. Under one of the negotiations, it was hoped that a significant number of the cars would be used by the paper industry in the Fox River Valley area of Wisconsin. It is highly unlikely that car utilization would be continuous throughout the year or from year to year, due to down time for required maintenance and fluctuating shipper needs. It is unknown at this point if car repair facilities are a part of the proposal for the METWRR but presumably storage of unused cars would be required on the METWRR.

This lease arrangement could provide a significant amount of additional revenue for the Village in excess of normal operating expenses. Tables in this

report, however, do not include an estimate of the amount of income from such a car leasing program because of many unknowns as well as uncertainties involved. In event that this proposal is approved and implemented, the implication of financial profitability of the railroad would negate the possibility of the use of federal 4R act funds for the rehabilitation of the railroad right-of-way. As previously indicated, this method of receiving additional income can apply to Alternatives 1, 2, 3, 5, 7, and 8 in addition to Alternative 6.

The cooperation of the Class I railroads is critical to the success of any car leasing program since the continual movement of the cars on "foreign" railroads is necessary to keep the cars from coming "home" to the METWRR. Because of the complexity of any car leasing program, full financial analysis is beyond the scope of this study. Absent such a full analysis, it can only be indicated that such a program, properly administered, could possibly provide additional revenue for the railroad and other projects administered by the GLAJTC.

In summary, this Alternative would retain rail freight service in the Village of East Troy, which has always been the objective of the Village. The major difference between Alternatives 5 and 6 is that in 5 the Village would have some share of excess revenue but have no responsibility for subsidy payments in the event of deficit operations. In Alternative 6, the share of extra revenue would be divided among all Commission members including the Village; however, deficit payments would also have to be met by Commission members, including the Village.

#### ALTERNATIVE 7—LEASE OF THE METWRR TO AN ASSOCIATION OF LOCAL SHIPPERS

Under this Alternative, the railroad would be leased by the Village to an organization formed by local shippers to operate the railroad. As is the case under Alternatives 5 and 6, the lease of the railroad for operating purposes would remove the Village from the day-to-day operations while retaining freight service to industrial firms in the Village. In this Alternative the capital needed for operation would be provided by the shippers in exchange for stock in the association that would lease the railroad. The amount of capital investment could be related directly to the amount of use that each shipper makes of the railroad. At the present time, there are two shippers actively using the service provided with a third scheduled for a significant volume of traffic in the near future.

The two current shippers were contacted regarding operation of the railroad. In both cases the indication was that they would explore the possibility in order to retain service only as a last resort. Both shippers indicated that their primary function was not to be in the railroad business; however, they would be willing to take over operations on temporary basis until a permanent solution could be found to continue service.<sup>2</sup>

Based on the preceding statement, no further consideration should probably be given to this Alternative unless no other alternative is found feasible to continuing rail freight service.

#### ALTERNATIVE 8—LEASE OF THE METWRR TO A RESPONSIBLE SHORT LINE OPERATOR

Under this Alternative, the railroad would be leased by the Village to a responsible short line operator. Of the five alternatives that discuss the lease of the METWRR, this is the most complex because of the number of variations that can be considered including the possibility that a private operator may wish to operate the railroad as a switching line rather than a short line.

There are two types of short line operations that are applicable for providing railroad service to the Village of East Troy: one is the traditional local railroad operation while the second is the lease of the railroad to a corporation whose primary interest is in leasing railroad cars. There are examples of the traditional short lines operating in Wisconsin today and successful short line operators may be looking for additional lines to add to their companies. This type of operation would provide rail service to the Village, with the added benefit of experienced personnel in management including the rate and tariff experience necessary to operate a short line. The present switching revenue and local tariff would be replaced by tariffs established by the short line operator. It is assumed that the railroad operator will establish the necessary rates to receive operating revenue, a function that the Village does not now perform since the railroad operates as a switching line.

The second type of short line operation is involved primarily in use of railroad car leasing to generate income. It is expected that if the Village is to enter

into an agreement for this type of operation that specified service levels be maintained for local shippers. The reason for this type of operation is the extra incentive per diem payments authorized by the ICC on standard 50-foot box cars (XM cars) for six months of the year and for the entire year on 50-foot box cars with epoxy lining (XF cars) as previously discussed in Alternative 6.

The usual operating practice is to place the cars in service with the markings of the short line, in this case METWRR, and to arrange to always have the cars in service on "foreign" railroads, never returning to the "home" railroad. In order to achieve full marketing potential for these cars, it is vital to have experienced personnel to arrange for the continual movement of the cars. The costs for this type of management experience must be added to the operating expense of the railroad, a cost that would be difficult for the Village to absorb on its own. The benefit to the Village would be the continuation of local rail service, with no risk associated in the railroad car leasing program. However, benefits in the form of increased revenue for the Village would only be achieved when the car leasing program reached better than approximately 95 percent utilization.

#### ALTERNATIVE 9—DO-NOTHING

This Alternative would continue the present ownership and operation of the railroad by the Village of East Troy. The major difference between this Alternative and Alternatives 1 and 2, which also recommend continued Village ownership and operation, is that no further action will be taken for the physical rehabilitation of the railroad and related structures. The right-of-way work program that is currently underway would constitute the major effort for the rehabilitation of the railroad.

The selection of this Alternative may very quickly lead to Alternative 10 which is abandonment of the railroad. This forced abandonment may be the only alternative for the Village after the next inspection of the railroad by Federal Railway Administration (FRA) track inspectors late in 1977. The railroad is currently operating under restrictions enforced by the FRA because of the deteriorated condition of the roadbed and related track structure. While the current work program has eliminated some of the worst operating areas along the line, it was not designed to bring the entire railroad up to at least Class I safety operating standards. If this work program is not

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<sup>2</sup> Meetings held with Trent Tube and Equity Co-op personnel on July 26, 1977.



combined with evidence of a firm commitment to rehabilitate the entire railroad, it is likely that when the operating restrictions expire on December 1, 1977, the FRA may embargo the railroad from further operation by the Village. This action will then be the first step in the formal abandonment of the railroad, ceasing all service to the Village of East Troy.

#### ALTERNATIVE 10—ABANDONMENT

Under this Alternative, the railroad would be formally abandoned by the Village of East Troy. During the period leading up to the last day of service, the Village would apply for federal financial assistance under the provisions of the 4R Act to establish alternative modes of freight service for shippers currently relying on railroad service. In the case of the railroad service provided to East Troy, it is not likely that a significant amount of traffic would be diverted to alternative modes. Based on current information, the following actions would likely take place:

1. Trent Tube—All steel shipments inbound will be diverted to truck. Since the lengthy tubes cannot be shipped outbound, this manufacturing process would probably be eliminated at the East Troy facility. Because the equipment used to manufacture the lengthy stainless steel tubes also is used for the manufacture of other products, these product lines probably would also have to be moved to other Trent manufacturing locations. The impact of the loss of rail service probably would affect a minimum of between 40 and 50 percent of the business by Trent Tube in East Troy with attendant undesirable effects on the local economy.
2. Equity Co-op—The fertilizer manufacturing facilities now located in East Troy which presently account for approximately one-third of the total sales of the Co-op would probably be moved to Mukwonago or Elkhorn where rail service could be provided by the Milwaukee Road. Plans for shipping grain by rail would be dropped or shifted to this location.
3. Milupa Corporation—As indicated previously, if rail service is not provided at East Troy, further work probably would not be undertaken to open manufacturing facilities in the Village.

4. Soo Line—The Soo Line would lose most of the revenue generated by the service it now provides to the METWRR.

In terms of the physical assets of the railroad, the Village can expect some financial return on its investment upon abandonment. The current salvage value of the ties, rail, spikes, plates, angle bars, bolts, and switch material is estimated at about \$60,000, not including labor for removal of the material, nor the value of electrical distribution system, or other equipment such as the two engines currently owned by the railroad. Based on an appraisal of the right-of-way by personnel of the Wisconsin Department of Transportation, Division II Office, Waukesha, it is estimated that the Village could expect to receive \$182,000 for the sale of the right-of-way.

Because of the intensive nature of recreational facilities in the area, it is likely that the right-of-way could be retained for recreational trail purposes. This action would have two purposes: first, it would provide for separate recreational trail facilities for hiking, bikes, and snowmobiles, separated from potential conflicts with vehicle traffic and, second, it could be a form of land banking the right-of-way for transportation purposes if in future years it is determined that a need exists for such a right-of-way.

Finally, the abandonment would force the movement of the WERHS to another location in Wisconsin or elsewhere, where they could continue their operations. There is no estimate of the amount of money required for such a move or if the WERHS would be able to afford such a move assuming an alternative location is available.

#### SUMMARY AND CONCLUSION

In summary, this chapter has presented an analysis of 10 alternatives for the future provision of freight service to industries located in the Village of East Troy. The purpose of this chapter has been to provide a common base upon which to evaluate the alternatives available and determine the best course of action for the Village of East Troy. Factors entering into the evaluation of alternatives have considered the cost of rehabilitation of the railroad, the cost of operation of the railroad including subsidy payments, the needs of the shippers and their projected traffic volumes, the need for railroad service that cannot be met by alternative modes, the lease of the operation of

the railroad, and alternative means of increasing revenue to the Village.

Based on review of each of the 10 alternatives and their individual ability to provide the necessary level of service, it is recommended that Alternative 1, which provides for continued ownership

and operation of the railroad by the Village with federal financial assistance under the provisions of the 4R Act, be selected as the best method of meeting the future freight service needs of the Village. Chapter VII will discuss the steps necessary to implement the recommended alternative.

## Chapter VI

### ABANDONMENT IMPACT

#### INTRODUCTION

The formal abandonment of the Municipality of East Troy Wisconsin Railroad (METWRR) freight service provided by that railroad to industrial users in the Village of East Troy area may be expected to have a major adverse primary impact on the economy of the local area and minimal secondary impact on the natural resource base of the area. The purpose of this chapter is to review those aspects of the abandonment of the railroad that may be expected to have the greatest impact within the service area of the railroad.

#### ECONOMIC IMPACT

The abandonment of the METWRR may be expected to have a major negative impact on the economy of the Village of East Troy and environs. It was because of the threat of abandonment in 1939 that the Village of East Troy utilized public funds for the purchase of the railroad from The Milwaukee Electric Railway and Light Company in order to preserve railroad freight service to the Village. Although car usage and traffic mix have changed over the years, the fact remains that a major portion of the local economy is dependent upon firms that require railroad freight service in order to continue their business in the Village of East Troy.

In order to determine the magnitude of the economic impact of the abandonment of the railroad, it is necessary to review the importance of each of the current users of the railroad service to the economy of the Village.

##### Trent Tube

Because of the type of products produced, approximately 40 percent of the annual production of this firm depends upon railroad freight service for shipment of finished products. It is estimated that, in total, approximately 50 percent of the production in the East Troy plant would have to be moved to other plants if the railroad were abandoned since equipment used to manufacture the lengthy stainless steel tubes is also used to manufacture other products. If as much as 50 percent

of the plant's operations had to be relocated, it probably would become economical to move the entire manufacturing operation out of East Troy.

Based on the assumption that for at least the short term, only one-half of the business would be relocated, the following impact can be expected if the railroad is abandoned:

1. The firm presently employs 400 people. A loss of one-half of the manufacturing facilities would mean a loss of at least 200 jobs. Currently, 40 percent of the firm's employees live in the Village or the Town of East Troy. Consequently, the local economy could be expected to incur a loss of about 80 jobs, and a related loss in direct annual income of about \$1,000,000.

In addition, Commission studies have shown that for every job in a basic industry within the Region, an additional 2.44 jobs are created in service industries. Thus the loss of Trent Tube employment may be expected to be accompanied by a loss of an additional 488 service jobs in the Region and a related loss of income of about \$3,900,000. If only 10 percent of this loss in service income would be incurred by the local economy, the loss in income would approximate \$390,000 per year.

2. The firm currently (1976) pays a property tax to the Village of approximately \$158,000. This annual tax payment could be expected to be reduced by 22 percent, or by \$35,000 annually, if the railroad were abandoned.
3. Workers who did not move out of the community, but found jobs in adjacent labor markets, would have to spend an increased amount of money in terms of added transportation costs to commute to their new place of employment. A large number of people leaving the community would have the effect of depressing the

housing market, reducing property tax income for the Village and reducing the level of shared taxes received from the State.

4. All inbound steel and lumber shipments to be used at the facilities remaining in East Troy would have to be delivered by truck, increasing fuel consumption and shipping costs for the firm.

If the railroad abandonment precipitated a decision to move all of the Trent Tube operations out of East Troy, the impact on the local economy would be far greater in terms of lost employment and tax base.

#### Equity Co-op

The Co-op may be expected to operate in the Village regardless of the loss of railway freight service. However, that portion of the Co-op business dealing with the manufacturing of liquid and dry agricultural fertilizer could be expected to be moved to either the Village of Mukwonago or the City of Elkhorn where the Co-op has land located adjacent to the Milwaukee Road tracks.

Based on the assumption that all of the Co-op facilities would remain in the Village of East Troy with the exception of the fertilizer manufacturing facilities, the following impact can be expected if the railroad is abandoned:

1. The Co-op presently employs 40 people at its facilities. Four of these people could be expected to be transferred if the fertilizer facilities are moved with a loss of about \$50,000 in direct annual income to the local economy. The loss of the four basic jobs in the community could be expected to be accompanied by a loss of 10 service jobs to regional economy and a related loss of income of \$81,000. If only 10 percent of this loss in service income would be incurred by the local economy, the loss in income would approximate \$8,100 per year.
2. The Co-op currently pays a property tax to the Village of approximately \$9,000. This annual tax could be expected to be reduced by about 22 percent, or about \$2,000 annually, if the railroad service were abandoned.
3. The Co-op is interested in developing a capacity for the shipment of grain products outbound from a proposed facility in

East Troy. The new plant, estimated to cost \$450,000 would not be built in the Village if railroad service were abandoned; thus the potential for additional employment and tax revenue would be "lost" to the community. It is estimated that three additional employees with a combined annual income of approximately \$31,500 in direct annual income will not be added to the local economy, and a related seven jobs in service industries and an annual income of \$57,000 not added to the regional economy. If only 10 percent of the potential is "lost" in service income at the local level, the loss would approximate \$8,100 annually. It is estimated that the "lost" tax on the proposed facility would be approximately \$8,000 annually.

#### Milupa Corporation

The Milupa Corporation is in the process of reopening and expanding the existing manufacturing facilities that were closed when Baker Laboratories ceased operations in the Village. Previous statements in this report indicated that if railroad freight service cannot be provided, further expansion of manufacturing facilities may be halted. The following impact can be expected if railroad freight service is abandoned:

1. The Corporation currently employs seven people at the East Troy plant. The jobs of these people will not be affected by the loss of rail service since the limited amount of manufactured products produced can be shipped by truck.
2. The loss of railroad service would have its principal impact on expansion plans and related full employment. It is estimated that about 250 jobs would be created with expansion and full production. The loss of these potential jobs would be attended by a loss of about \$2.7 million in direct annual income not added to the local economy. In addition, the creation of these jobs would affect service-related employment in the Region by approximately 600 jobs. Within the Region this means approximately \$4.8 million in annual service wages lost without the attendant increase in manufacturing employment. If only 10 percent of this "loss" in service income would be incurred by the local economy, the loss would approximate \$480,000 in service income not added at the local level.

3. The Milupa Corporation currently (1976) pays a property tax to the Village of approximately \$12,000. This figure will not change as a result of a loss of railroad freight service. The "loss" to the Village will occur from the taxes that would have been paid on the plant expansion, estimated at this time to cost approximately \$5,000,000. It is estimated that an annual tax "loss" of approximately \$90,000 would occur if the new facilities are not constructed.

The Wisconsin Electric Railway Historical Society  
Abandonment of the METWRR by the Village of East Troy will have an adverse effect on The Wisconsin Electric Railway Historical Society (WERHS) and its operations. A decision would have to be made quickly on a relocation of the entire operation since, once the tracks are removed, all of the rolling stock would have to be trucked away from the present location, a cost that would be difficult for the WERHS to afford. The current total investment of the WERHS in equipment and structures is estimated at \$250,000.

The lease arrangement between the WERHS and the Village provides that a percentage of the gross passenger fares received by WERHS annually are

to be paid to the Village for the use of the railroad. A conservative estimate of future revenue lost to the Village through relocation of the WERHS is \$6,000 by 1981. In addition to this direct loss, an undetermined amount of money spent by tourists coming to ride the historic electric trains will also be lost to the local economy.

The loss of the METWRR will more than likely mean the end of WERHS as an equipment-operating organization since the METWRR represents the last existing electrified railroad operation in the State of Wisconsin.

## SUMMARY

Although the negative economic impact of the abandonment of the METWRR on the local and regional economy cannot be precisely determined because of a number of intangible factors, a summary has been prepared based upon anticipated actions at the local level. Table 15 presents a summary of the economic impact associated with abandonment of the railroad.

In summary, an estimated total of 200 basic industry and 500 service jobs within the Region with a combined annual income of \$6,530,000

Table 15

### IMPACT ON THE LOCAL AND REGIONAL ECONOMY OF ABANDONMENT OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD

| Shipper/<br>Employer         | Basic<br>Industry<br>Jobs<br>Lost | Annual<br>Income   | Service<br>Jobs<br>Lost | Annual<br>Income   | Potential<br>Basic<br>Industry<br>Jobs<br>"Lost" | Annual<br>Income   | Potential<br>Service<br>Jobs<br>"Lost" | Annual<br>Income   | Village<br>Tax<br>Revenue<br>Lost | Potential<br>Tax<br>Revenue<br>"Lost" |
|------------------------------|-----------------------------------|--------------------|-------------------------|--------------------|--|--------------------|--|--------------------|-----------------------------------|---------------------------------------|
| Trent Tube                   |                                   |                    |                         |                    |  |                    |  |                    |                                   |                                       |
| Local <sup>a</sup> . . . . . | 80                                | \$1,000,000        | 48 <sup>b</sup>         | \$ 390,000         | --   | \$ --              | --                                     | \$ --              | \$35,000                          | \$ --                                 |
| Regional. . . . .            | 120 <sup>c</sup>                  | 1,500,000          | 440                     | 3,510,000          | --   | --                 | --                                     | --                 | --                                | --                                    |
| Equity Co-op                 |                                   |                    |                         |                    |  |                    |  |                    |                                   |                                       |
| Local . . . . .              | 4                                 | 50,000             | 1                       | 8,100              | 3  | 31,500             | 1                                      | 8,100              | 2,000                             | 8,000                                 |
| Regional. . . . .            | --                                | --                 | 9                       | 72,900             | --   | --                 | 6                                      | 48,672             | --                                | --                                    |
| Milupa Corporation           |                                   |                    |                         |                    |  |                    |  |                    |                                   |                                       |
| Local . . . . .              | --                                | --                 | --                      | --                 | 250  | 2,700,000          | 60                                     | 480,000            | --                                | 90,000                                |
| Regional. . . . .            | --                                | --                 | --                      | --                 | --   | --                 | 540                                    | 4,320,000          | --                                | --                                    |
| <b>Total</b>                 | <b>204<sup>c</sup></b>            | <b>\$2,550,000</b> | <b>498</b>              | <b>\$3,981,000</b> | <b>253</b>                                       | <b>\$2,731,500</b> | <b>607</b>                             | <b>\$4,856,772</b> | <b>\$37,000</b>                   | <b>\$98,000</b>                       |

<sup>a</sup> Area of impact.

<sup>b</sup> Based on estimated 10 percent impact at local level.

<sup>c</sup> Based on total layoff.

Source: SEWRPC.

will be directly affected by abandonment of the railroad while an estimated 250 basic industry jobs and 600 service-related jobs with an estimated combined annual income of \$7,600,000 will be "lost" without the expansion of industrial firms in the Village. It is estimated that, in addition to the direct impact of lost basic industry jobs, an impact of 10 percent of the lost service jobs would have a negative effect on the local economy estimated at \$878,000. The Village of East Troy can expect to lose approximately \$37,000 annually in tax revenue as the result of a reduction in plant facilities, while an additional \$98,000 will not be added to the local tax revenue income as the result of cancelled expansion plans.

## ENVIRONMENTAL IMPACT

Abandonment of the METWRR should have no great direct positive or negative impact on the environment. The short length of the line and the relatively small number of annual train operations preclude any significant change in the quality of the environment. Based on current conditions, the following assessment has been made regarding specific environmental impacts:

### Air Quality

There should be no appreciable change in the air quality of the area if the single diesel locomotive no longer operates over the railroad. Any replacement freight service would be handled by trucks using STH 15. The net increase of exhaust emission from these trucks will be negligible in relation to the amount of emissions generated by the existing traffic volumes on STH 15.

### Noise Pollution

The resulting change of substituting noise generated by increased truck traffic for the noise associated with the operation of a single diesel engine will produce no noticeable change in noise levels in the Village or environs. Noise related to railroad operations will cease in areas adjacent to the railroad, while the noise related to the operation of trucks will increase on the two streets leading from STH 15.

### Water Quality

The railroad has no direct relationship to any water areas that are adversely affected by the existing operation of the railroad or that would be improved from a water quality standpoint if the line were to be abandoned. For a substitution of service, no highway improvements are required that would affect the water quality of the area.

### Wildlife and Vegetation

The present alignment of the railroad between the Villages of Mukwonago and East Troy provides along its edge a barrier of vegetation that offers a habitat area for small animal species native to the area. The abandonment of the right-of-way and its possible use for a recreational trail should not adversely affect the native vegetation or the wildlife associated with the area.

In addition to the traditional environmental impacts there are additional factors to be considered in the overall framework of abandonment impact.

### Fuel Consumption

There will be a savings in diesel fuel consumption associated with discontinuation of the use of the diesel locomotive. This decrease in fuel usage would be offset, however, by the increased use of trucks necessary to haul the volume of freight traffic that can be transferred from rail to truck service. In addition, those employees whose jobs are affected by the loss of rail service but who choose to remain in the Village or Town of East Troy may be expected to use an increased amount of motor fuel if they must commute to new job markets.

### Highway Congestion

There should be no significant increase in highway congestion as a result of rail abandonment. The recent improvement of STH 15 to freeway standards provides adequate capacity for increased truck traffic and commuting trips by workers.

### Land Use

The abandonment of the METWRR should not greatly alter existing land use patterns. Use of the right-of-way as a multipurpose recreational trail would maintain existing development patterns. The portion of the right-of-way east at CTH ES in the Village of Mukwonago could be added to the present park, either as additional parkland or as an expansion of the existing parking lot. In the Village of East Troy the right-of-way could be used for streets or developed for compatible urban uses.

## SUMMARY AND CONCLUSION

It is apparent from the preceding discussion that the negative impact of abandoning the METWRR is far greater in terms of economics than it is in terms of environmental concerns. The environment will not be substantially changed with or

without the operation of the railroad; the financial implications of abandonment, however, would have a severe affect on the local and regional economy. At the local level an estimated \$1,050,000 in annual wages and \$37,000 in tax revenue would be the immediate loss, with another \$4,900,000 in annual wages and \$98,000 in annual tax revenue

lost because expansion plans would not be completed. The negative values, both short- and long-range, associated with the abandonment of the railroad are of such a magnitude that serious consideration of all of the other alternatives must be given prior to authorization of abandonment.

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## Chapter VII

### RECOMMENDED ALTERNATIVE AND IMPLEMENTATION

#### INTRODUCTION

Previous chapters of this report have discussed the existing physical condition of the Municipality of East Troy Wisconsin Railroad (METWRR), the essential service that the railroad provides to industrial firms in the Village of East Troy, and the range of alternatives available to the Village for the future provision of essential freight service. The purpose of this chapter is to describe the recommended alternative that best meets the objectives of providing continued freight service to the Village at present or better levels of service.

The 10 alternatives discussed in Chapter V in reality provide three basic choices for the Village concerning the future of railroad service:

1. Continued rail service with ownership and operation by the Village.
2. Continued rail service with lease of the railroad to a private operator.
3. Abandonment of the railroad.

Within the framework of these three basic choices, the 10 alternatives were structured to provide as broad a range of alternatives as possible in order to discuss the various ways in which the Village can resolve the transportation issue of continued freight service.

Based on analysis of the data presented in Chapter V, the first choice, "continued rail service with ownership and operation by the Village" may be defined as the most effective method of meeting the future freight service needs of the community. More specifically, Alternative 1, "continued Village ownership and operation of a switching line with federal financial assistance," as described in Chapter V, is the recommended course of action for the Village of East Troy. The following sections of this chapter will review the major points of the recommended alternative and the steps necessary to implement the recommendation.

#### RECOMMENDED ALTERNATIVE

The recommendation of this project justification report is that Alternative 1 provides the best opportunity for meeting the stated goal of providing freight service to industrial firms in the Village of East Troy at or exceeding the present service levels. The recommended alternative may be summarized as:

1. The continued provision of railroad freight service—The adverse impact on the local economy brought about by the abandonment of the railroad and the related negative impact on industries dependent upon railroad service, precludes the selection of an alternative that does not provide for continued railroad service.
2. The continued ownership and operation of the railroad by the Village—The Village of East Troy has demonstrated a high degree of community responsibility in providing a service that assures continued economic vitality for the Village and environs. Continued local control of the railroad assures that in the future service will not be undesirably altered or lost, as might be the case with an independent operator.
3. The continued operation of the railroad as a switching line—The economic analysis of existing and future operating costs, combined with projected revenues, indicates that the railroad can be expected to generate sufficient revenue as a switching line to cover operating expenses. The more complex and costly methods of alternative forms of railroad operation need not be incurred by the Village.
4. The use of federal financial assistance for rehabilitation of the railroad—The Railroad Revitalization and Regulatory Reform Act of 1976 (4R Act) provides for federal financial assistance for the rehabilitation of

freight lines. For the fiscal year 1978, the share of the required funding is 90 percent federal and 10 percent local. The proper use of these funds would restore the railroad to Class I operating condition, thus providing a sound base upon which the Village can continue to provide freight service to industrial firms in the Village of East Troy.

The selection and implementation of Alternative 1 will provide the Village of East Troy with a railroad that is physically capable of meeting the existing and projected traffic volumes of the shippers in the Village. The economic analysis prepared for this Alternative indicates that, as a result of recommended improvements in the roadbed and track combined with the traffic volumes projected by the shippers and an increase in the fixed charge for the switching service with the Soo Line, it will be possible to eliminate the Village subsidy, reduce the local tariff, and provide sufficient funds to maintain the right-of-way at Class I standards. Rehabilitation of the roadbed and track structure will also allow for safer and more efficient operation of The Wisconsin Electric Railway Historical Society's restored passenger equipment, thereby helping to assure the Village of a dependable source of additional income and continuing the policy of aiding in maintenance of the right-of-way by the WERHS.

## IMPLEMENTATION

Implementation of the recommended alternative will require the cooperation of several levels of government to ensure that the railroad reconstruction program proceeds beyond the planning stage.

The first step in implementation should be adoption of the project justification report and the recommendations therein by the Village Board of the Village of East Troy. The adopting resolution should include a statement of the willingness of the Village Board to provide the local share of funds required for the reconstruction program. Since the railroad is a publicly owned facility, the Village should schedule a public information meeting prior to adoption of the report, to inform citizens of the Village of the proposed improvements and the impact that the railroad has on the local economy.

This project justification study has been prepared by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) for the State of Wisconsin, Department of Transportation (WisDOT). In order

that the WisDOT is formally made aware of the official position of the Village of East Troy, a copy of the resolution adopting the report and related recommendations should be forwarded by the Village to the WisDOT.

The Village of East Troy and the WisDOT will have to coordinate their efforts in working within the limits of the legislative framework of the Railroad Revitalization and Regulatory Reform Act of 1976. The staff of the WisDOT Bureau of Transport Service, Division of Planning, will be helpful in determining the proper sequence of actions to be followed.

At this point it appears that the following steps should be taken in order to assure the Village of East Troy, as owner of the railroad, that it is eligible to receive the requested financial assistance:

1. The WisDOT should prepare a formal application for federal financial assistance for the rehabilitation of the METWRR following the guidelines of the 4R Act.
2. The Village should file with the Interstate Commerce Commission (ICC), and with the assistance of the WisDOT, a formal application for abandonment of the METWRR. This abandonment application must be filed since the 4R Act requires that a railroad be abandoned prior to receiving financial assistance.<sup>1</sup>

The above process appears to be the only practical way in which the Village and State can work within the framework of the present legislation. The process of applying for federal funds under provisions of the 4R Act has not previously been attempted in Wisconsin and therefore no experience with the process is available as a guide. Because of the lack of experience, it is essential that the WisDOT conduct a careful review of the legal aspects of the process before committing itself and the Village to a specific course of action. Any errors in this respect could lead to the loss of the railroad to the Village; therefore, sound legal guidance throughout the process is essential.

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<sup>1</sup> *The Village has taken the first step in this process by having its railroad listed on the national rail map as "anticipated subject of abandonment within three years."*

As part of the implementation process, it is recommended that the Village Board establish a Railroad Commission to oversee the operations of the METWRR. At the present time the Village has a Railroad Committee of the Village Board with a membership of four trustees, and a Citizens Advisory Committee consisting of five citizen members. While this has been a reasonably satisfactory arrangement, the establishment of a Commission would provide desired continuity in the management structure and opportunity for more direct participation in the management of the railroad by all local interests concerned and attendant broadening of the base for public support.

It is recommended that a nine-member Commission be established, responsible to the Village Board for final action in any matter pertaining to the railroad. The following is a suggested membership roster:

- 1 Chairman, Village President
- 2 Village Trustees
- 2 Shipper Representatives
- 3 Citizen Members
- 1 Representative from The Wisconsin Electric Railway Historical Society
- 9 Total Members

The appointment of the Village Trustees could be made by the Village Board while the other members, serving staggered three-year terms, could be appointed by the Village President subject to confirmation by the Village Board. The ordinance creating the Commission should establish the specific duties and functions of the Commission within the broader framework of authority over matters pertaining to operation of the railroad. The Commission duties should include but not necessarily be limited to:

1. Establishing an annual budget for railroad operations including the establishment of local tariffs, operating expenses, revenues, and long-range funding programs for equipment replacement and maintenance costs subject to approval by the Village Board;
2. Establishing a capital improvement program to assure that the annual maintenance-of-ways program has sufficient funds to keep the right-of-way within desired operating

limits, not below Class I operating standards, subject to approval by the Village Board;

3. Acting for the Village Board in matters pertaining to lease negotiations with The Wisconsin Electric Railway Historical Society, negotiations with the Soo Line in the fixed charge for the switching service at the interchange or other matters pertaining to the use of railroad property;
4. Authorizing the hiring of staff and employing of experts in railroad matters as may be necessary;
5. Printing and distributing an annual report to the Village Board of railroad operations for the preceding year's activity; and
6. Acting as the official liaison between the Village of East Troy and other units of government affected by railroad property, specifically the Town of East Troy, Town of Mukwonago, and Village of Mukwonago.

The Commission may adopt rules for the transaction of business and shall keep records of its resolutions, transactions, findings and determinations, which record shall be a public record.

## SUMMARY

Based on the evaluation of the information contained in this project justification study, it is the recommendation that Alternative 1, the continued ownership and operation of the railroad by the Village of East Troy with federal financial assistance for the rehabilitation of the right-of-way, be pursued as the most logical method of meeting the needs of the Village.

It is also recommended that the Village and the State work together to assure that funding provisions of the 4R Act are made available in an amount sufficient to achieve the objective of restoring the operating characteristics of the railroad to Class I standards.

The establishment of a Village Railroad Commission is suggested as a means of providing desirable continuity as well as broadened participation in overseeing the operation of the railroad.

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## Chapter VIII

### SUMMARY

#### INTRODUCTION

The Village of East Troy has owned the Municipality of East Troy Wisconsin Railroad (METWRR) since its purchase from The Milwaukee Electric Railway and Light Company (TMER&L) in 1939 and has operated the railroad since 1949. This operation represents the only publicly owned railroad in Wisconsin, and one of only a few in the United States. The railroad was purchased by the Village to avoid abandonment of railway freight service to industrial firms located in the Village, thereby protecting a sizable portion of the local economy both in terms of tax base and employment opportunities for citizens of the Village.

The METWRR is 7.2 miles in length, operated as a switching line in northeastern Walworth and southwestern Waukesha Counties between the Village of East Troy and a connection to the Soo Line Railroad at the Village of Mukwonago. The Wisconsin Electric Railway Historical Society (WERHS) leases a portion of the railroad for the operation of restored historical electric interurban railway passenger equipment.

#### PRESENT OPERATING CONDITIONS

Currently the major problem associated with the continued operation of the METWRR is the deteriorated condition of the right-of-way, primarily the roadbed and related track structure. In June 1975 a Federal Railroad Administration (FRA) track inspection found that the track did not meet Class I safety operating standards. A waiver, valid until December 1, 1977, allowed the continued operation of the railroad under a speed restriction of 6 mph. The waiver was granted in order to allow the Village time to improve the quality of roadbed and track structure. If the necessary improvements are not made to bring the entire railroad up to Class I standards, it is likely that the FRA will embargo the railroad, causing operations to cease.

#### EXISTING ECONOMIC CONDITIONS

The METWRR is operated as a switching line. Its only connection is with the national railroad system at the Village of Mukwonago through the Soo Line. The two primary sources of income from railroad operations are the fixed charge established for the switching service and a local tariff. Revenue collected from direct railroad operations has not been sufficient to meet increasing operating costs. Since 1962, the Village has used approximately \$201,000, or an average of \$13,500 per year of general tax revenue to offset expenses. Since 1969, the shippers have also shared in this responsibility by contributing a total of \$39,000, or an average of \$4,900 per year, including funds for the purchase of the single diesel locomotive presently used to operate the line. Figure 5 presents a graphic summary of historic revenues and expenditures for railroad operation.

#### ALTERNATIVE IDENTIFICATION

There are three basic alternatives that the Village can consider in attempting to continue to provide freight service:

1. Continued railroad service with ownership and operation by the Village.
2. Continued railroad service with ownership by the Village, but leased to an independent operator.
3. Abandonment of the railroad with future freight service provided by an alternative mode.

Within the framework of these three basic alternatives, the study has presented a total of 10 sub-alternatives that represent a logical range of choices for the continued provision of freight service at present levels of service or better and a reduction of present operating deficits.

## SHIPPER CHARACTERISTICS AND PROJECTED TRAFFIC VOLUME

Presently two firms located in the Village of East Troy account for the bulk of the traffic carried on the METWRR. The Trent Tube Division of Colt Industries manufactures stainless steel tubes that, because of length, must be shipped by rail. The principal commodity of the Equity Co-op shipped by rail is base materials used in the manufacture of liquid and dry agricultural fertilizer. The Milupa Corporation, which presently does not use railroad service, is in the process of remodeling and expanding an existing plant in the Village for the manufacture of infant foods. The Corporation expects to start using the railroad for the shipment of raw and finished products late in 1977.

Since 1970 annual traffic volume has averaged approximately 320 loaded cars per year discounting the two highest volume years of 1973 and 1974 when traffic volumes reached 435 and 555 loaded cars per year, respectively. Given trends in economic activity within the Village, improved service, and an effort to promote utilization of the railroad for both raw materials and finished products by all industries concerned, it

is estimated that by 1981 annual traffic volume handled by the METWRR could reach 700 to 1,000 cars annually.

## ESTIMATED REHABILITATION COSTS

For the Village to operate the railroad in a cost-efficient manner, remove the operating restrictions imposed by the FRA, and avoid federal embargo of the operation, it will be necessary to rehabilitate the roadbed and track structure to Class I operating standards. Table 16 sets forth the costs involved in the rehabilitation of the right-of-way and related structure improvements based upon optimum funding availability. It should be understood, however, that the State of Wisconsin may not receive a sufficient amount of funds from the FRA for fiscal year 1978 to allow for the full funding of the federal share in that or succeeding years, thereby increasing the degree of local responsibility. The potential funding provisions are based on the requirements of the 4R Act that for fiscal year 1978 provide 90 percent federal grants for such rehabilitation work. The structure removal program is based on a 70 percent federal, 30 percent local cost sharing under existing federal aid highway programs.

Table 16

### ESTIMATE OF REHABILITATION COSTS OF THE MUNICIPALITY OF EAST TROY WISCONSIN RAILROAD

| Recommended Improvement   | Federal Share <sup>a</sup> | Local Share <sup>b</sup> | Total Cost Estimate |
|---|----------------------------|--------------------------|---------------------|
| Rehabilitation of Right-of-Way,<br>Track Structure, and Roadbed . . . . . | \$483,300 <sup>c</sup>     | \$53,700                 | \$537,000           |
| Column Replacement, Two Structures. . . . .                               | 16,650 <sup>c</sup>        | 1,850                    | 18,500              |
| Structure Rehabilitation, Two Structures. . . . .                         | --                         | 7,500                    | 7,500               |
| Structure Removal, One Structure . . . . .                                | 14,000 <sup>d</sup>        | 6,000                    | 20,000              |
| Total Costs   | \$513,950                  | \$69,050                 | \$583,000           |

NOTE: Costs in terms of 1977 dollars, rounded.

<sup>a</sup> Based on optimum funding availability.

<sup>b</sup> If federal share is reduced because of funding limitations, local share must be increased proportionately.

<sup>c</sup> Federal Railroad Administration—4R Act.

<sup>d</sup> Federal Highway Administration—Safer Off-System Program.

Source: SEWRPC.

## RECOMMENDED ALTERNATIVE

Based upon an evaluation of the 10 alternatives considered, it is recommended that Alternative 1 be adopted as the best means of meeting the freight transportation needs of the Village of East Troy. The Alternative provides for the continued ownership and operation of a switching line by the Village of East Troy with the use of federal assistance funds as outlined in Table 16 to rehabilitate the line to Class I standards. More specifically, the recommended Alternative provides for: the rehabilitation of the roadbed and track structure to Class I operating standards; the replacement of support columns and structure rehabilitation at the Phantom Woods and Beach Road highway overpasses, and removal of the Stewart School Road structure.

Based on expected increased operating efficiency, increased traffic volume, a change in the fixed switching charge with the Soo Line, and stable income from the operations of The Wisconsin Electric Railway Historical Society, the Village should be able to operate the railroad without the further use of general tax revenue and shipper subsidy payments.

## ABANDONMENT IMPACT

The impact of abandonment of railroad service would be most severe on the economy. It is estimated that, as the result of abandonment of railroad service, approximately 200 basic industry and 500 service jobs would be lost with an attendant combined annual loss in income of about \$6.5 million. A potential of 250 basic industry and 600 service jobs with an annual income of about \$7.6 million would be "lost" through the abandonment of committed industrial expansion programs based upon continued railway freight service.

In addition, the Village can expect to lose approximately \$37,000 annually in tax revenue as the result of abandonment of plant facilities, while an additional \$98,000 will not be added to the local tax revenue income as the result of canceled industrial expansion plans.

There will be no substantial change in the natural environment as the result of either continued operation or abandonment of the railroad.

## IMPLEMENTATION

Implementation of the recommended Alternative will require the close cooperation of the Wisconsin Department of Transportation and the Village. The following steps are suggested for implementation of the recommended plan:

1. Prior to any action by the Village Board, a public information meeting should be held to outline the proposed future course of action.
2. The Wisconsin Department of Transportation (WisDOT) should prepare the formal application for financial assistance.
3. The Village should file with the Interstate Commerce Commission (ICC) the required abandonment application as a condition of receiving 4R Act funds (Title 8) from the FRA.

In order to avoid any possibly adverse effects on the continued operation of the railroad, the WisDOT should conduct a careful review of the legal aspects of the aforeoutlined process before committing itself and the Village to a specific course of action.

As a part of the plan recommendation, it is suggested that the Village establish a Railroad Commission. The purpose of this nine-member Commission would be to establish an annual budget for railroad operations, establish a capital improvement program for annual right-of-way expenses, act for the Village Board in lease negotiations with the Wisconsin Electric Railway Historical Society and fixed charge negotiations with the Soo Line, hire staff and employ railroad experts as necessary, print and distribute an annual report of railroad operations, and act as a liaison with other units of government affected by railroad operations.

## CONCLUSION

It has been demonstrated in this report that the Municipality of East Troy Wisconsin Railroad provides a highly valuable and necessary function in meeting the freight transportation needs of industrial firms in the Village of East Troy. The economic loss attendant to abandonment of this railroad would be extremely high, approximately

\$14.2 million per year, and would have a most severe negative impact on the local and regional economy. The estimated \$555,500 needed to rehabilitate the entire railroad so that it could continue to meet the freight transportation needs of the area is modest if not insignificant in comparison to the economic loss associated with abandoning the railroad.

The loss of the railroad would also deprive The Wisconsin Electric Railway Historical Society of the opportunity to operate restored electric interurban passenger equipment over the last remaining segment of the once vast electric interurban railway system that served southeastern

Wisconsin and shaped its development. Thus, one more cultural link with our past will be lost to future generations.

The Village of East Troy, its citizens, and industries have demonstrated a willingness and a commitment to take whatever steps are necessary at the local level to retain their connection to the national railroad system. The availability of funds under the Federal Railroad Revitalization and Regulatory Reform Act of 1976 would permit the Village to continue to operate this short but important railroad, while not imposing a severe financial burden on the local tax system that has supported the railroad since 1939.