MONON STUDY

Impact of Abandonment and Potential Future Use

GENERAL ANALYSIS

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MONON
THE HOOSIER LINE

THE MONON LINE RAIL ABANDONMENT:

IMPACTS AND POTENTIAL FUTURE USE

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By

Dr. Clinton V. Oster, Jr.
Transportation Research Center
School of Public and Environmental Affairs
Indiana University

With Contributions By:

Wendy Green
Robin Miles-McLean

and

Dr. Roger Stough
School of Public and Environmental Affairs
Indiana University

With Contributions By:

Tony Dignan

and

Gregory Gammons
Gammons and Associates

and

Lynne Freedmeyer
Geographics

Consulting Engineers:

Reid, Quebe, Allison, Wilcox & Associates, Inc.
Indianapolis, Indiana

In Cooperation With:

WILLIAM - LYNN - JAMES, INC.
P.O. Box 2772
Indianapolis, Indiana
U.S.A. 46206-2772

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The Interstate Commerce Commission approved the Seaboard System Railroad's request to abandon the Monon rail line between Indianapolis and Frankfort, Indiana in May, 1985. Shortly thereafter, the Seaboard terminated freight service on this section of the Monon line. The purpose of this report is to assess the economic impact of the Seaboard abandonment and termination of service. The report also examines and evaluates possible alternative uses of the line.

An analysis of the freight potential of the line found that freight service would be extremely unlikely to generate sufficient revenues to operate the line profitably. Profitable operation of the line would include recovering the cost of acquisition of the right-of-way and rehabilitation of the track. Freight service is, therefore, unlikely to be able to cover any costs beyond operating costs even under very favorable circumstances.

An analysis of the tourist excursion potential of the line found somewhat more favorable conditions. Tourist excursions could probably cover operating costs. Under very favorable conditions, excursions could probably cover the costs of purchasing the right-of-way. However, even under very favorable conditions, it is unlikely that excursions could cover a significant proportion of the needed track rehabilitation cost.

When the line is envisioned as supporting both freight and excursion uses the joint operations are likely to be able to cover

only operating costs and the acquisition of the right-of-way even under the most favorable conditions. Joint operation and use of the line is extremely unlikely to be able to cover track rehabilitation costs in addition to the other costs.

An analysis of the potential use of the Monon corridor for commuter passenger service found that the current population size, population density and travel patterns in the region are not likely to be able to support a mass transit use of the Monon right-of-way in the area. It may be, however, that population growth will increase to a level where the corridor may be required for commuter transportation purposes in the future.

An analysis of current land uses along the Marion County portion of the right-of-way found that several alternative uses of the right-of-way are feasible including: recreation; road transportation; industrial development; and reversion to the owners along the right-of-way. Recreation utilization of the right-of-way or reversion to adjacent owners appears to be the most appropriate use from Broad Ripple north to 96th Street. From Broad Ripple to 42nd Street, a mix of recreation and road transportation (a commercial access) utilization of the right-of-way, appear to be appropriate uses. The opportunity for the property to revert to the owners along this stretch is a possibility also. North of 38th Street to 42nd Street it is recommended that the land be turned over to the adjacent Indiana State Fairgrounds. Below the Fairgrounds, there is an opportunity to utilize the existing right-of-way for industrial development. This use could begin below Sutherland Avenue where the Monon and Norfolk and Western right-of-ways come together to about

22nd Street. Segments of the right-of-way both north and south of this area could conceivably be used for road transportation to connect the area with the interstate highway system.

If the abandoned right-of-way is devoted to purely private sector activities, it would, in all probability, eventually revert back to the adjacent owners for non-transportation uses. Reversion may not, however, be as attractive as would seen to be the case. There will be significant costs to the adjacent owners associated with improvement of the existing right-of-way so that it satisfies zoning and property codes in the City of Indianapolis.

In considering the impacts of the elimination of freight service on the line, it was determined that there would be minimal adverse impacts. Removal or elimination of freight service would not have a major adverse impact either on the existing shippers or on employment in communities located along the line. It would, however, have some negative impact for owners along the line if the land reverted to them as they would have significant land improvement costs.

The chief argument for public sector participation in acquisition of the right-of-way is to preserve it for future transportation needs as Indianapolis and Hamilton County continue to develop. This can be accomplished by acquiring the right-of-way and land banking the right-of-way into different use activities on a temporary or interim basis as described above.

If the public sector participates in the acquisition of the line, then serious consideration should be given to the establish-

ment of a management framework for overseeing the intermediate term (10-20 years) use of the right-of-way and protecting its future use for transportation purposes. One conceivable framework for this would be the establishment of a port authority which is possible under Indiana state law. Another approach would be to establish a special commission to acquire and manage the use of the right-of-way.

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INTRODUCTION

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INTRODUCTION

On December 28, 1983, Seaboard System Railroad Inc. (Seaboard) informed the Interstate Commerce Commission (ICC) of its intent to abandon a section of the Monon line between Delphi and Indianapolis, Indiana. Before the official application to abandon could be filed January 27, 1984, shippers on the line filed a protest of the abandonment.[1] Several communities along the line voiced similar concerns that the line offered an important transportation option to current and future industries. During the abandonment process, Seaboard modified their filing to include the track from south of Frankfort to Indianapolis. The ICC granted the request and Seaboard officially terminated service on the line in May 1985. The purpose of this report is to assess the economic impact of the Seaboard abandonment and to explore possible alternative uses of the line.

Areas of Potential Impact. The abandonment has the potential to affect each of the ten communities along the line.[2] Approximately 25 shippers between Frankfort and Indianapolis used the rail service during the three years before abandonment. During the first 9 months of 1983, the last year for which data is available, 970 cars moved between Frankfort and Indianapolis. As will be discussed in detail in Chapter II, the shippers who remain on the line south of Frankfort in 1985 and who relied solely on Seaboard for rail service shipped 403 cars in 1983. Demand for rail service may increase with the growth of these industries, or with the establishment of new manufacturers along the line. The line has also been

used for various excursion trips, such as the annual Fairtrain, sponsored by the Indiana Transportation Museum. Lastly, this line represents a potentially valuable transportation corridor which could be important to both the City of Indianapolis and the State, in meeting future transportation needs.

Objectives of the Study. This study's purpose is to assess the impact of the Seaboard abandonment and to explore the feasibility of continued freight service as well as the potential for passenger excursion trips along the line. Because this section of the line has generated a low volume of freight traffic over the past few years, its future use will be considered in a multiple use environment so as to spread some of the fixed costs over two or more activities. For example, while the line may not be viable for any single purpose, it may be more economically viable if used for both freight and excursion service, or freight, excursion trips, and commuting.

The Abandonment Process. When Seaboard submitted the initial application for abandonment on January 27, 1984, it wished to abandon the line from Delphi, Indiana to Indianapolis. Seaboard later amended this request when it signed an agreement with the Staley Corporation in Frankfort, Indiana, a major shipper of soybean oil. Staley agreed to utilize Seaboard rail service for a specific period of time if Seaboard agreed not to abandon the northern section of the line. Thus Seaboard requested permission to abandon the line from Milepost 137, just south of Frankfort and south of the Staley plant, to Milepost 180 in Indianapolis.

Seaboard's right to abandon service relieves Seaboard of the obligation of providing freight service along the line. Moreover, Seaboard could if it wished remove the track, sidings, and other material for use elsewhere or for salvage and Seaboard could sell the portions of the right-of-way to which it held fee-simple title (i.e. land Seaboard actually owns). However, the right to abandon does not force Seaboard to take any of these steps. It could instead, lease the track to someone else to provide service or even resume service itself.

The abandonment process has not been without protest. Individual shippers, as well as the Monon Shippers Association, have filed official protests both with the ICC and in the courts. Other interested parties include the United Transportation Union, the Save the Monon Committee, and the Indiana Transportation Museum. In addition, State and local government officials have an obvious interest in the outcome of the abandonment process, and the role rail service might play in the economic development of central Indiana.

After considering the concerns voiced by the protestors, the ICC approved abandonment on March 19, 1985, although Seaboard did not terminate service until May 15, 1985 because of last minute appeals. Shippers on the line were without rail service between the middle of May to October. In October Seaboard signed a short-term agreement with the Monon Shippers Association, which resumed services. The Shippers Association has signed a contract with Indiana Hi-Rail, a short line railroad, to provide freight service. The lease is for the use of the track and right-of-way from Sheridan,

Indiana (Milepost 155) to Indianapolis (Milepost 180). As part of the leasing agreement, all pending appeals protesting the abandonment have been dropped.

History of the Monon Line. The Monon Line itself is part of the Hoosier State's history. The Ohio River was the source of the first public transportation to Indiana at a time when interior development of the territory was simply speculation, but highly desired. James Brooks of New Albany was the initial promoter of the railroad which became the Monon Route. Under Brooks' leadership, the New Albany & Salem Railroad was incorporated July 8, 1847. It was initially constructed to Michigan City, crossing drainage lines rather than following them, and was opened to the public July 4, 1854 at a cost of $6,000,000 with a length of 287 miles. The Monon was the first railroad to cross Indiana from south to north.

In 1857 the road was renamed Louisville New Albany & Chicago; new construction provided an entry to Louisville, and various constructions and mergers worked towards a Chicago entry. In 1881 the extensions were completed from Indianapolis through Monon to Rensselear and Dyer; entry to Chicago was obtained in 1884 over the Chicago & Western Indiana Railroad.

Louisville New Albany & Chicago was forced into bankruptcy during the bank panic of 1893, and reorganized as the Chicago Indianapolis & Louisville Railroad in 1897. It continued to operate and serve the Hoosier state under that corporate title until forced into receivership in 1933 by generally depressed business conditions.

In May of 1946, C.I. & L. was reorganized again as the Monon Railroad, "The Hoosier Line", this reorganization accomplishing a financial re-arrangement while not providing physical improvements. Under railroad President John W. Barriger, a service-oriented operation was inaugurated, and improvements were made to way and structures. Steam power was supplanted by new diesels, and old rolling stock was retired in favor of new passenger and freight cars.

Beginning in the early fifties, a rehabilitation program was conducted along the Monon's northern access route to Chicago. This rehabilitation program was completed in 1957. The segment between Monon Indiana and Indianapolis, which is the focus of this report, was upgraded to provide for better passenger service and to encourage new traffic.

In 1971, the Monon was merged into Louisville & Nashville; L&N in turn became a part of Family lines; and is now a part of Seaboard Systems Railroads. The Seaboard Systems Railroad has elected to abandon the line, with the abandonment being effective in August of 1985.

The segment of the Monon Line under study runs from Frankfort, Indiana to Indianapolis, Indiana. During the late forties and fifties the line's physical plant was transformed by infusions of capital into a high speed, high performance railroad passenger line. Its present condition owes much to the high maintenance standards of the 1950's. Nineteen-fifty seven was the last date of overhaul on the line.

The line is primarily single track with passing sidings located approximately five miles apart. Present maintenance (FRA Class II standards) permits 25 mph train speeds, and the operation of equipment with a gross weight of 263,000 lbs.

Until 1970 the Monon entered Union Station. This connection was severed during the construction of I-70 when the bridge over 10th Street was not replaced. Today the route begins at 22nd Street in Indianapolis and operates northward in Marion County past the Indiana State Fair Grounds at 38th Street, then through Broad Ripple. Entering Hamilton County the railroad serves the communities of Carmel, Westfield, Horton and Sheridan, then curves northwest to Frankfort, 28 miles from Westfield.

In Summary. Designed in the 1840's, the Monon Line appears to have been a uneconomical decision from the very beginning. Initially, the original segment of the line was to provide a transportation link between water borne commerce on the Ohio River system and the Great Lakes. Just after the line's inception, rail began to emerge as the primary form of shipment in the United States. No thought to a role in a nationwide rail system was given in laying out the Monon, so that the tracks all run north-south with no east-west connections.

Even as a water linkage line, the Monon was poorly designed. Instead of situating the southern terminal directly on the waterfront in New Albany, the freight house, passenger station and general office were built five blocks away. Thus, most freight on the line required some use of horse drayage to get it from the

waterfront to the line. Rather than make Chicago the northern terminal, the founders of the line chose Michigan City as the access to the Great Lakes. The choice of Michigan City made the line difficult to operate as a passenger line once it became apparent that carrying people, not freight, would be the Monon's best chance at success.

The second segment of the line between Indianapolis and Chicago, began operation in 1883 (see Figure I-1). By this time it had become clear that the rails, not ships would provide most freight service in the region. As a north-south line the Monon had become best suited for passenger service, particularly the Indianapolis to Chicago segment, which is the focus of this report. The Monon continued to haul both freight and passengers with few major changes until 1971 when it merged with the Louisville & Nashville in hopes of remaining profitable. The line was later acquired by Seaboard, a unit of CSX. This acquisition made the line redundant within the CSX system because it ran parallel to CSX main line coming out of Chicago.

Characteristics of the Region. The portion of the Monon line covered in this abandonment application runs north and south through central Indiana, in Carroll, Clinton, Boone, Hamilton and Marion Counties, the heart of central Indiana's economic zone. Delphi, in the north, lies in Carroll County, Frankfort in Clinton County, and Indianapolis in Marion County. Indianapolis, the State Capital, is the largest metropolitan area in Indiana. Except for Indianapolis, the area remains predominantly rural. From 1970 to 1980, only the city of Carmel has experienced significant population changes.

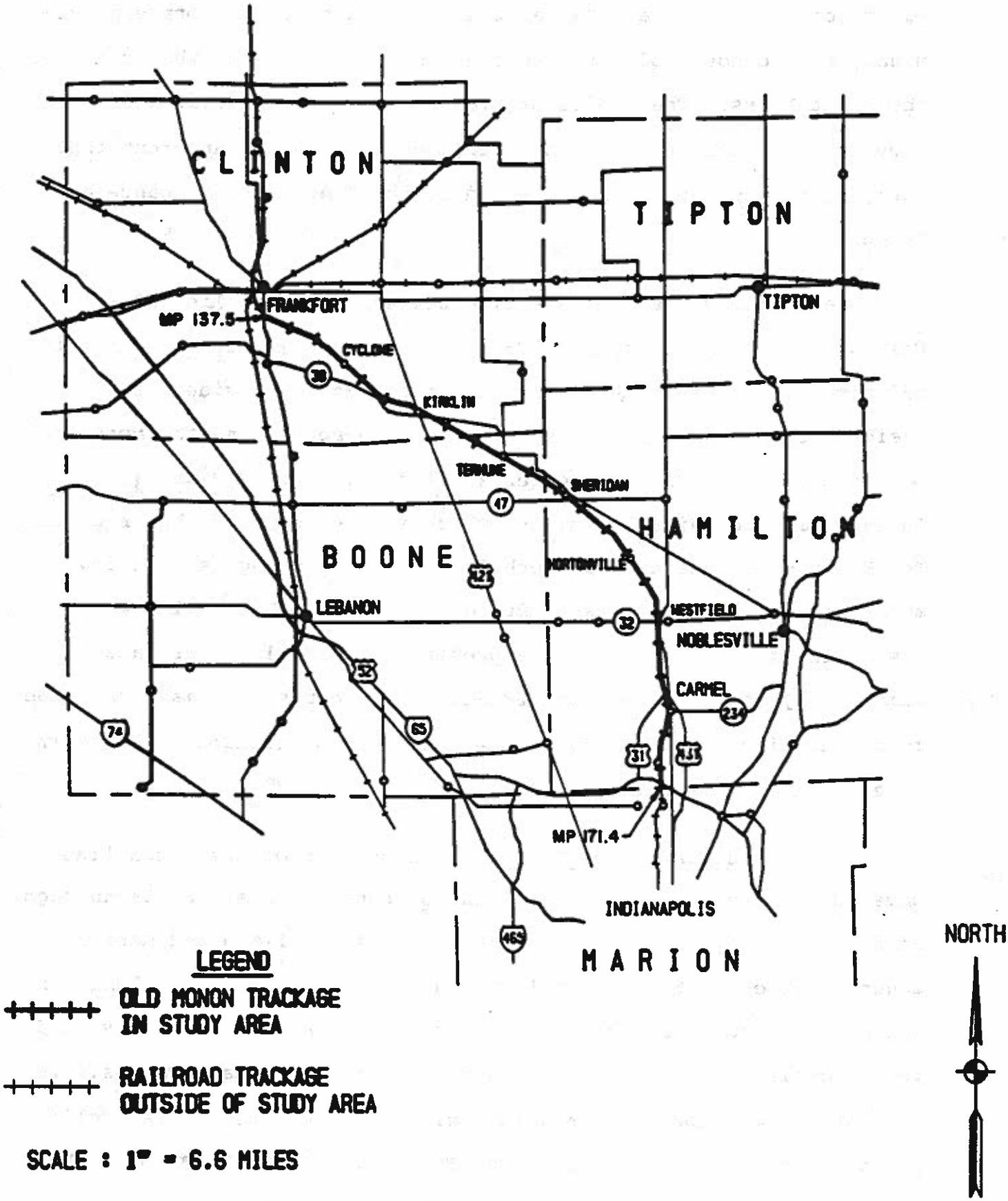

Figure I-1

STUDY AREA

Situated just north of Indianapolis in Hamilton County, Carmel had a 173% increase in population during the past decade, as it became primarily an affluent bedroom community for Indianapolis.

In all the counties, except Marion, agriculture accounts for the major land use, with corn as the predominant crop. With capital intensive modern farming techniques, however, agriculture does not represent the largest employer. On the whole, the counties through which the line runs have had an unemployment rate lower than the state average but also a rate of growth in employment lower than the state average since the late 1960's. More than one-third of the labor force of the region is employed in manufacturing (a rate much higher than the national average) which indicates that the region has been slow to adjust to the nationwide economy's shift to service industries.

Of the cities on the portion of the line covered in the initial application for abandonment, Frankfort and Indianapolis were the largest users of Seaboard services. As mentioned earlier, Seaboard chose to continue service at Frankfort and points further north, so that of those cities remaining on the abandoned line, the Indianapolis SMSA is the heaviest user.

CHAPTER II
ANALYSIS OF FREIGHT POTENTIAL

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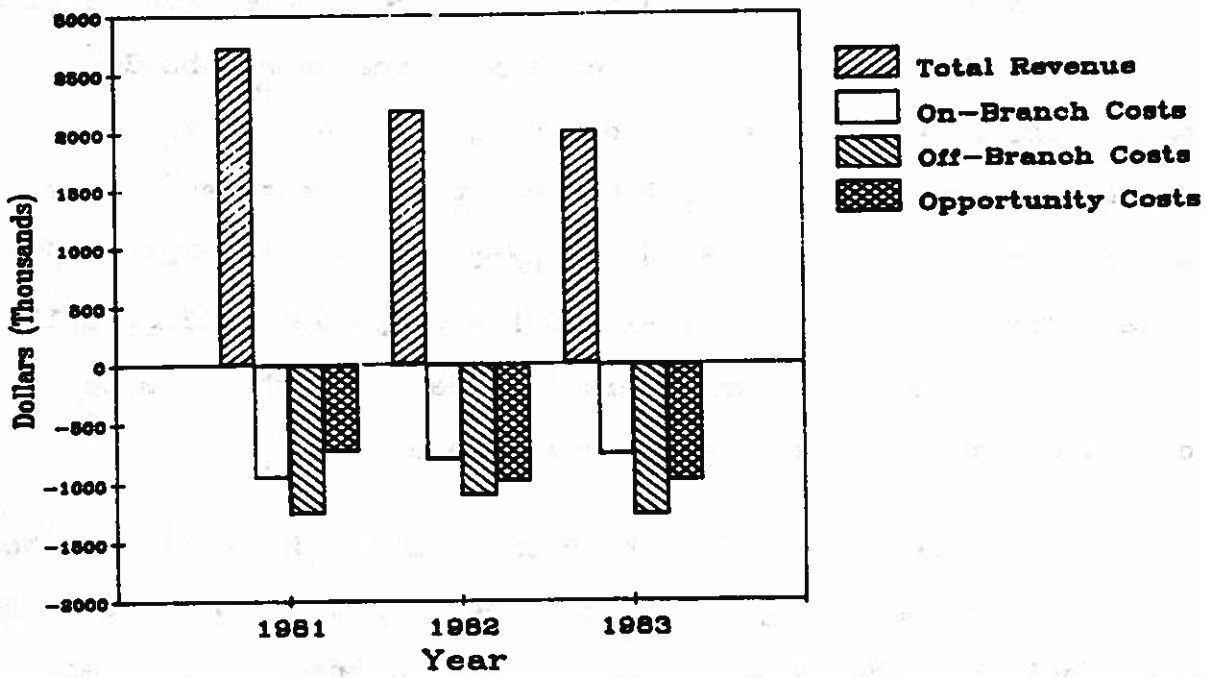
Seaboard's Experience. Seaboard's proposal for abandonment of the line was based on its contention that the line was unprofitable and that continued operation would be an unreasonable burden. Seaboard presented revenue and cost data for the line from Indianapolis to Delphi for 1981 through the first three quarters of 1983 as part of the ICC abandonment proceedings. Summaries of these data are presented in Table II-1 and are displayed in Figure II-1. The data for 1983 have been pro-rated to a 12-month basis to facilitate comparison with the earlier data.

As can be readily seen in both the table and the figure, total revenue declined steadily throughout the period without a commensurate decline in costs either on or off the branch. The result was a pattern of increasing losses.

It is typical of the railroad industry, and indeed not unusual in other transportation industries, that falling revenues from a falling volume of traffic are not accompanied by a drop in costs of similar magnitude. Adding cars to a train can easily result in a proportional increase in revenue but usually adds very little to the cost of running the train. By the same token, as revenue declines with falling traffic, there are very few cost savings unless fewer trains are operated. Even then, the cost savings may not be proportional to the reduction in the number of trains because of labor work rules and other operational considerations.

Figure II-1

COSTS AND REVENUES FOR SEABOARD OPERATIONS 1981-1983



1983 DATA HAVE BEEN CONVERTED TO A 12-MONTH BASIS

Table II-1

Costs and Revenues for Seaboard Operations

1981-1983

	1981	1982	1983
Total Revenues	2,740,438	2,195,272	2,019,591
On-Branch Costs	954,250	811,965	772,851
Off-Branch Costs	1,250,084	1,102,782	1,266,723
Opportunity Costs	740,277	988,514	988,809
Net	-204,173	-707,989	-1,008,792

Note: 1983 data have been adjusted to a 12-month period.

Source: Exhibit 1 (Corrected) from Interstate Commerce Commission Docket No. AB-55 (Sub-No. 94)

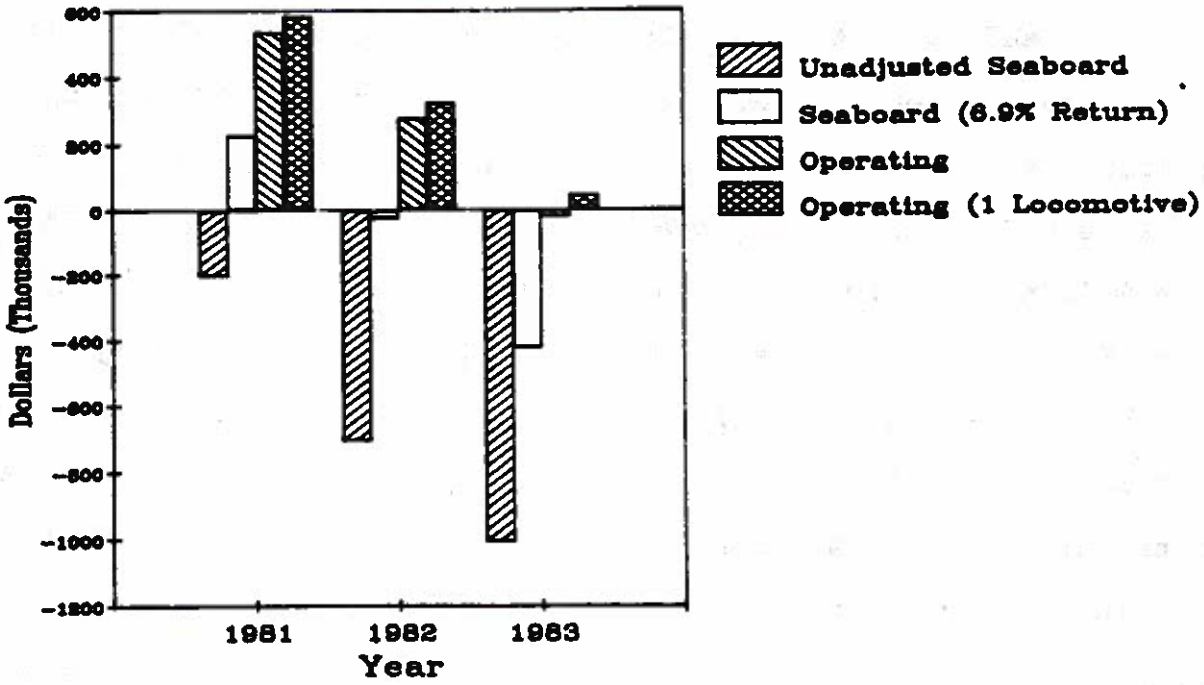
Seaboard's losses are shown in Table II-2 and displayed in Figure II-2. The "unadjusted" Seaboard losses, that is those presented by Seaboard in the abandonment proceeding, are dramatic and increased rapidly over the period. However, those losses can give a misleading picture of the actual profitability of the line. A major cost element in Seaboard's submission to the ICC was the "opportunity cost" of the line. By opportunity cost, Seaboard meant the value of the land along the right-of-way that Seaboard held in fee simple title (i.e. the land Seaboard owned) plus the salvage value of the rail and ties.[1] The rationale behind including opportunity cost was that if Seaboard were able to abandon the line, it could sell the land, rails, and ties and earn a return on those assets that were unavailable so long as those assets were devoted to providing service on the line.

In principle, of course, inclusion of the opportunity cost of these assets is reasonable and appropriate but in this particular case, Seaboard's calculation of annual loss from the opportunity cost is "optimistic" to say the least. Seaboard calculated the annual opportunity cost by applying the rate of return the ICC would have allowed Seaboard to earn to an estimated value of the land, rails, and ties. These allowed rates of return were 16.7 percent, 22.3 percent, and 16.73 percent respectively for 1981, 1982, and 1983.

While the ICC would have allowed these rates had Seaboard been able to earn them, Seaboard was unable to earn rates nearly this high on its other operations. Indeed, for the 1971 through 1979

Figure II-2

SEABOARD PROFIT AND LOSS
DELPHI TO INDIANAPOLIS LINE SEGMENT
1981—1983



1983 DATA HAVE BEEN CONVERTED TO A 12-MONTH BASIS

Table II-2

Seaboard Profit and Loss

Delphi to Indianapolis Line Segment

1981-1983

(Thousands of Dollars Per Year)

	1981	1982	1983
Unadjusted Seaboard	-204	-708	-1009
Seaboard (6.9% return)	203	-25	-428
Operating	536	281	-20
Operating (1 Locomotive)	587	325	47

Note: 1983 data have been adjusted to a 12-month period.

Source: Derived from Exhibit 1 (Corrected) from Interstate Commerce Commission Docket No. AB-55 (Sub-No. 94)

period, Seaboard's average rate of return was only 6.9 percent per year -- a figure somewhat above average for the railroad industry but far below the rates used in the abandonment proceeding. Applying this average rate of return to the land and salvageable material results in far lower losses, as the table and figure indicate. Indeed, Seaboard actually earned a profit on the line in 1981 under this assumption.

Even the 6.9 percent rate of return may overstate the losses, due to the way the value of the land was estimated. The question of land values can be put aside for the moment by removing considerations of opportunity cost and calculating an "operating profit". The operating profits (or losses) presented in this report are not true operating profits in the normal sense because they include allowances for the capital costs of the rolling stock (locomotives, freight cars, etc.). As can be seen in the figure and table, under this measure operating losses were not experienced until 1983 and even then they were nearly in a break-even situation. Moreover, because of operational considerations, Seaboard operated on this branch using two locomotives. For the volume of traffic observed on the line during the period, the branch line could be operated with only a single locomotive. The estimated operating profit with one locomotive is also presented and this assumption results in operating profits in all three years.

While Seaboard's treatment of opportunity cost may have overstated the losses, it remains the case that revenues were declining throughout the period. Figure II-3 and Table II-3 present the Seaboard data for the total number of cars shipped (originating

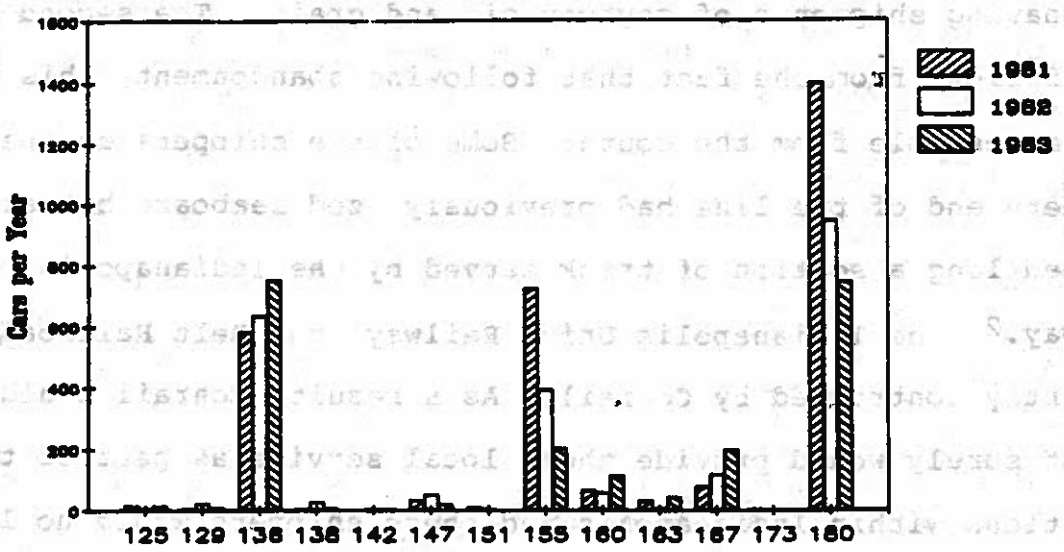
traffic plus terminating traffic) at each point along the track. The principal loss of traffic occurred in Indianapolis as the result of the Indianapolis Newspaper, Inc. (Star News) moving their newsprint warehouse from a location served by the Monon Line to another location. Another apparent loss of traffic was in Sheridan where fertilizer shipments from International Mineral and Chemical Corporation (IMC) declined. Even with these losses, however, over 2,000 cars per year appear in the Seaboard data to have moved on the line in 1983 (on a pro-rated basis).

Remaining Freight Potential. Again, the data from Seaboard's submission to the ICC give a misleading picture of the potential remaining traffic on the line. First, the fertilizer shipments to and from Sheridan (Milepost 155) are severely overstated. Sheridan was used as a convenient billing point by IMC and Seaboard. The actual shipments were delivered in small quantities to a wide variety of destinations throughout the midwest. Rather than keep track of each individual car and bill separately for each shipment, Sheridan was chosen as a representative average destination and all shipments were billed as if they had been taken to Sheridan. However, virtually none of these cars were actually transported to Sheridan or even along this branch line.

A second reason the data in Figure II-3 overstates the remaining traffic that might be available to another operator of the line stems from two implications of the change of abandonment to the section of track from Indianapolis to a point just south of Frankfort. First, that traffic at Frankfort and points to the north

Figure II-3

TRENDS IN RAIL SHIPMENTS
UNADJUSTED SEABOARD DATA
1981-1983



1983 DATA HAVE BEEN CONVERTED TO A 12-MONTH BASIS

Table II-3

Trends in Rail Shipments

Unadjusted Seaboard Data

Originating and Terminating Traffic

1981-1983

(Number of Cars Per Year)

Community	Mile Post	1981 Cars	1982 Cars	1983 Cars
Rossville	125	17	8	17
Cambria	129	6	9	12
Frankfort	136	585	639	756
McBrides	138	6	31	8
Cyclone	142	0	1	1
Kirklin	147	36	55	23
Terhune	151	12	6	0
Sheridan	155	729	396	205
Horton	160	70	62	116
Westfield	163	34	9	47
Carmel	167	84	122	200
Nora	173	6	0	0
Indianapolis	180	1403	952	752
Total		2988	2308	2137

Note: 1983 data have been adjusted to a 12-month period.

Source: Derived from Exhibit 4 from Interstate Commerce Commission Docket No. AB-55 (Sub-No. 94).

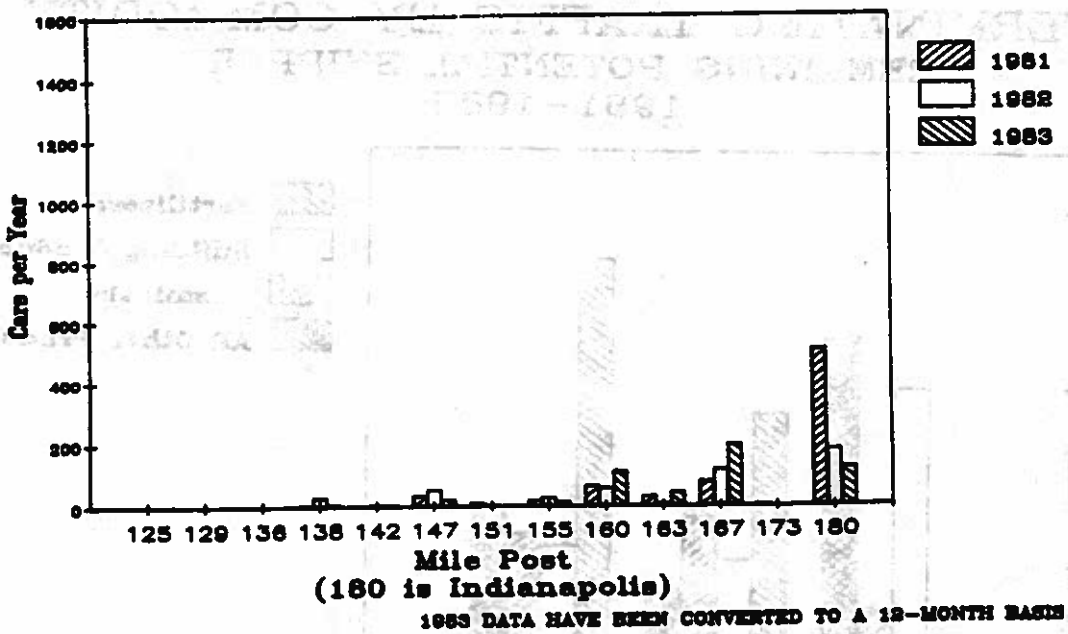
will continue to be carried by Seaboard. This traffic is primarily originating shipments of soybean oil and grain. The second implication follows from the fact that following abandonment, this track is only accessible from the south. Some of the shippers at the southern end of the line had previously used Seaboard but are located long a section of track served by the Indianapolis Union Railway.[2] The Indianapolis Union Railway (the Belt Railroad) is currently controlled by Conrail. As a result, Conrail could and almost surely would provide their local service as part of their operations within Indianapolis and these shippers would no longer need service from Seaboard or a successor railroad.[3]

Figure II-4 and Table II-4 present the trends in rail shipments for the shippers remaining on the line. Traffic to the Star News, the "false" shipments involving IMC, traffic to and from shippers with direct access to Conrail, and traffic at Frankfort and points further north have been removed in this figure and table. On average the shipments in Table II-4 are less than 25 percent of those shown in Table II-3. Moreover, even among the remaining shippers, the trend in total traffic is down during the 1981 to 1983 period. Only at Carmel do shipments increase steadily throughout the period.

To examine further the freight potential along the line, originating and terminating shipments should be considered separately. Figure II-5 and Table II-5 break down traffic terminating at points along the line into major commodity groups. Of the four major groups -- fertilizers, building products, chemicals, and all others -- only fertilizers show a steady increase in shipments

Figure II-4

TRENDS IN RAIL SHIPMENTS
REMAINING POTENTIAL SHIPPERS
1981-1983



1983 DATA HAVE BEEN CONVERTED TO A 12-MONTH BASIS

Table II-4

Trends in Rail Shipments

Remaining Potential Shippers

Originating and Terminating Traffic

1981-1983

(Number of Cars Per Year)

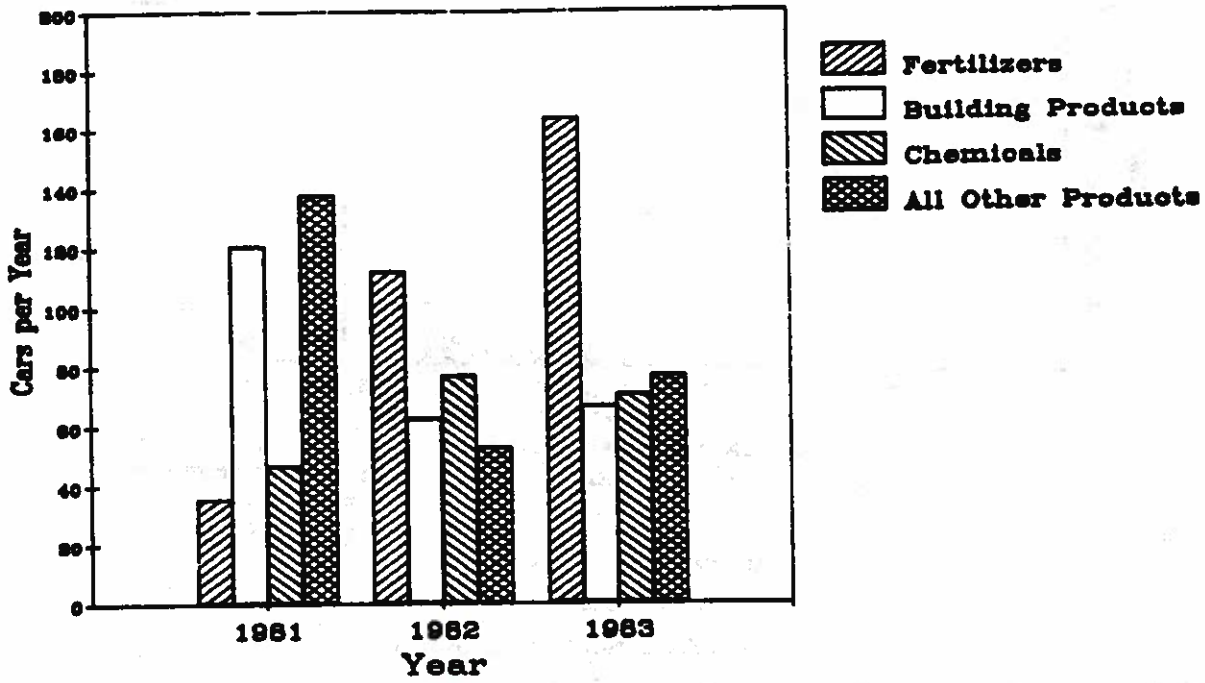
Community	Mile Post	1981 Cars	1982 Cars	1983 Cars
McBrides	138	6	31	8
Cyclone	142	0	1	1
Kirklin	147	36	55	23
Terhune	151	12	6	0
Sheridan	155	22	30	16
Horton	160	70	62	116
Westfield	163	34	9	47
Carmel	167	84	122	200
Nora	173	6	0	0
Indianapolis	180	512	185	127
Total		782	501	538

Note: 1983 data have been adjusted to a 12-month period. The data have been adjusted for IMC false movements, Conrail shipments and relocation of the Star News warehouse.

Source: Derived from Exhibits 4 & 5 from Interstate Commerce Commission Docket No. AB-55 (Sub-No. 94).

Figure II-5

TERMINATING TRAFFIC BY COMMODITY
REMAINING POTENTIAL SHIPPERS
1981-1983



1983 DATA HAVE BEEN CONVERTED TO A 12-MONTH BASIS

Table II-5

Terminating Traffic by Commodity

Remaining Potential Shippers

1981-1983

(Number of Cars Per Year)

Commodity	1981 Cars	1982 Cars	1983 Cars
Fertilizers	36	112	164
Lumber and Building Products	121	63	67
Chemicals	47	77	71
All Others	138	53	77

(Building Products include: Beams, iron or steel, Flat Boards, Brick, Logs, Lumber, Plywood, Pulpboard, Wooden Shingles. Chemicals include plastic resins. All Others include: Metal products, Paper products, Food products, Coke and coal, and Agricultural Products.)

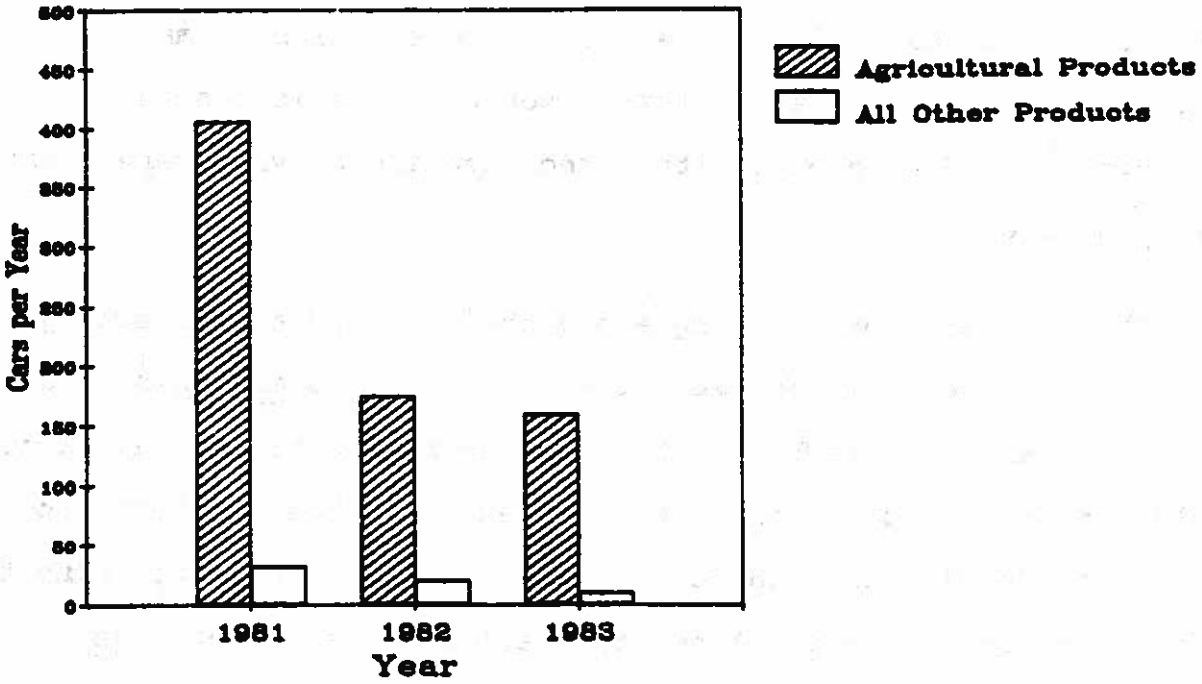
throughout the period. Even fertilizers represent only a (pro-rated) 164 cars per year in 1983. The potential for large increases in fertilizer shipments by rail would seen limited since little additional farmland is likely to be brought into production along the line and it is unlikely that there will be a major increase in the intensity of fertilizer use in this region. The remaining commodity groups either declined steadily or were essentially stable.

The shipments originating along the line are almost solely grain, as Figure II-6 and Table II-6 indicate. Grain shipments have declined sharply since 1981. The decline is due to several factors including increased use of truck shipments to local markets, to other rail facilities, and to barge facilities. In addition to the grain elevators along the line, the region is served by other elevators located within easy trucking distance of other rail lines.

Comparison with National Trends. The mix of commodities shipped along this section of the Monon Line differs markedly from that shipped by rail nationally. In particular, as Figure II-7 and Table II-7 demonstrate, coal, the most important rail commodity at the national level is notably absent from the Monon. As a result, both farm products and chemicals are in a sense overrepresented. The absence of coal is significant since coal has been a major growth area for rail shipments during the last 10 years. Other areas of growth in rail shipments, such as fresh produce recently exempted from ICC rate regulation, are also absent from the commodities moving on the Monon. Indeed, as Figure II-8 and Table II-8

Figure II-6

ORIGINATING TRAFFIC BY COMMODITY
REMAINING POTENTIAL SHIPPERS
1981-1983



1983 DATA HAVE BEEN CONVERTED TO A 12-MONTH BASIS

Table II-6

Originating Traffic by Commodity

Remaining Potential Shippers

1981-1983

(Number of Cars Per Year)

Commodity	1981 Cars	1983 Cars	1983 Cars
Agricultural Products	407	175	160
All Others	33	21	11

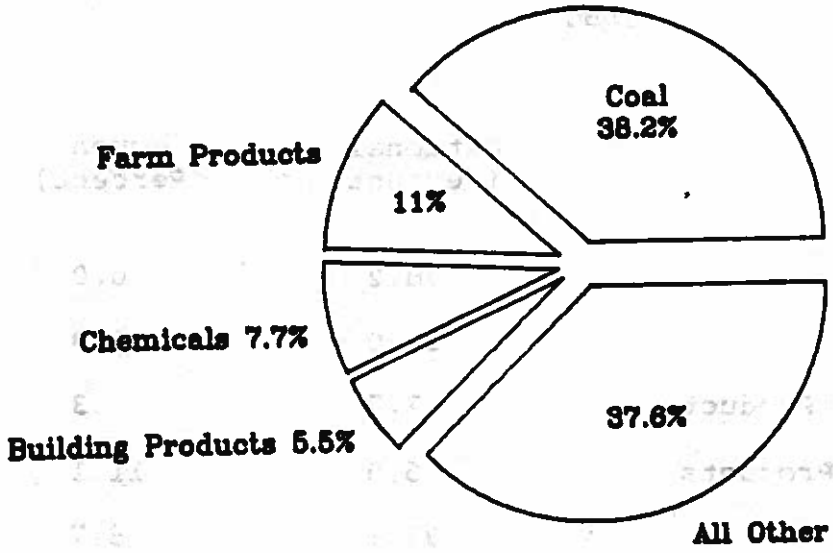
(Agricultural Products include: Corn, Corn oil, Glover Meal, Gluten Meal Feed, Grain, Hominy Feed, Soybean feed, Soybean Hulls, Soybean oil, Soybean meal, and Wheat middlings. All Other products include: Paper products, Coke and Coal, Food Products, Lumber and building products, fertilizers, and metal products.)

Note: 1983 data have been adjusted to a 12-month period.

Source: Derived from Exhibits 4 & 5 from Interstate Commerce Commission Docket No. AB-55 (Sub-No. 94).

Figure II-7a

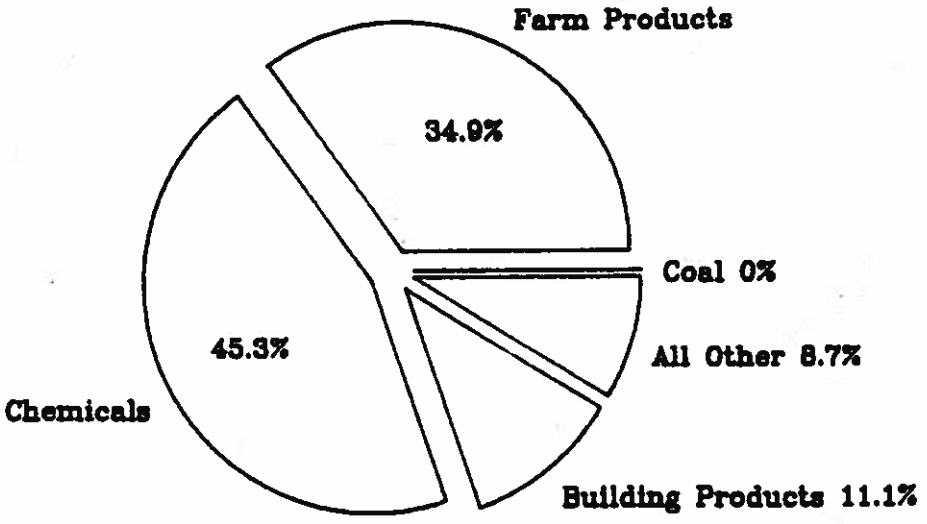
COMPARISON OF COMMODITY MIX
NATIONAL MIX OF RAIL SHIPMENTS
1983



National

Figure II-7b

COMPARISON OF COMMODITY MIX
MIX OF SHIPMENTS ON THE MONON LINE
1983



Monon Line

Table II-7

Comparison of Commodity Mix

National Rail Shipments Versus Abandoned Monon Line Shipments

1983

Commodity	National (Percent)	Monon (Percent)
Coal	38.2	0.0
Farm Products	11.0	34.9
Chemicals and Allied Products	7.7	45.3
Lumber and Building Products	5.5	11.1
All Others	37.6	8.7

Source: Railroad Ten-Year Trends - 1984 edition, Table III-C-7, "Rail distribution of Tonnage and Revenues Amoung Major Commodity Groups - 1983" and derived from Exhibits 4 & 5 Interstate Commerce Commission Docket No. AB-55 (Sub-No. 94).

Figure II-8

RAIL TRAFFIC BY SELECTED COMMODITY
NATIONAL TRENDS
1981-1983

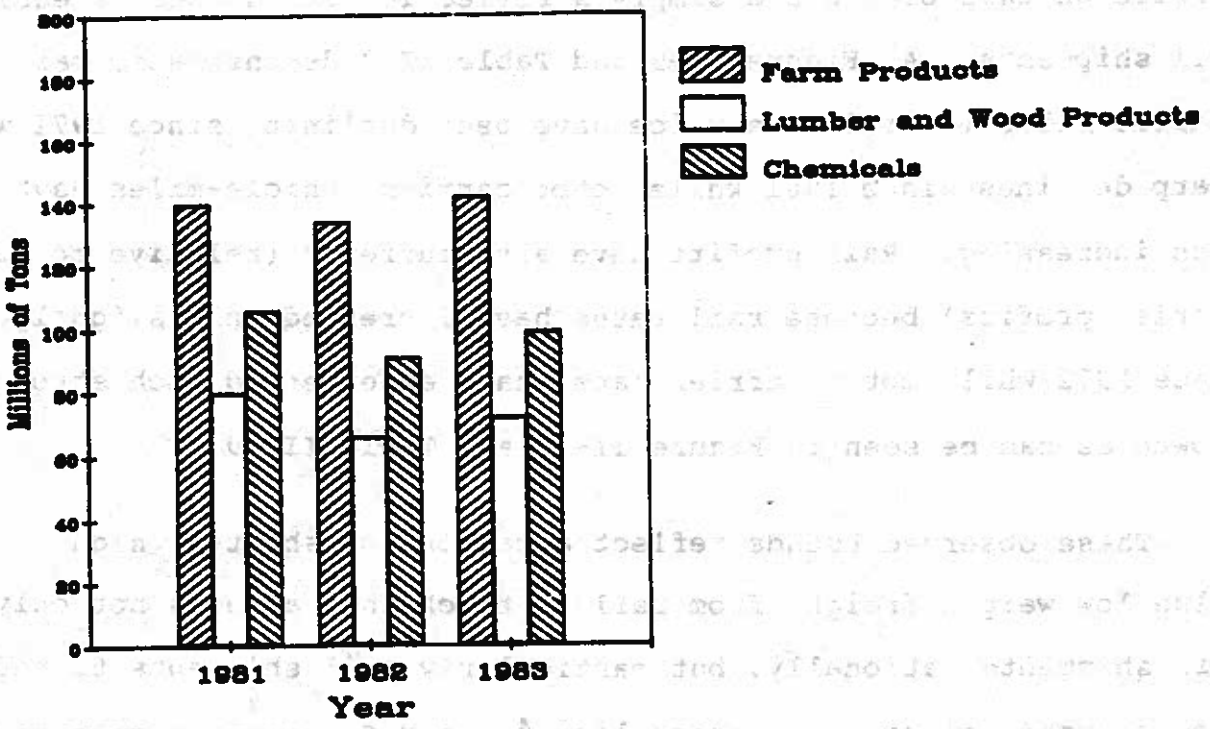


Table II-8

National Commodity Trends Shipped by Rail

1981-1983

(Millions of Tons Originated)

	1981	1982	1983
Farm Products	140	134	142
Lumber and Building Products	80	66	72
Chemicals	106	91	99

Source: "Railroad Ten-Year Trends - 1984 Edition," Table III-C-6

demonstrate, the principal commodities shipped on the Monon have not shown growth in shipment by rail at the national level.

In large part, of course, the falling traffic and declining profits on this branch are simply a reflection of national trends in rail shipments. As Figure II-9 and Table II-9 demonstrate, rail vehicle-miles in freight service have been declining since 1972 with sharp declines since 1981 while motor carrier vehicle-miles have been increasing. Rail profits have also suffered (relative to motor carrier profits) because rail rates have increased only slightly since 1972 while motor carrier rates have experienced much stronger growth as can be seen in Figure II-10 and Table II-10.

These observed trends reflect a continuing shift of high value/low weight freight from rail to truck that affects not only rail shipments nationally, but particularly rail shipments to and from shippers along this branch line.[4] As U.S. manufacturers have shifted toward producing more high valued goods and have diversified into a broader range of products, high interest rates have made it expensive to hold large inventories, either of inputs or of finished products. For many small and medium sized businesses (of the type located along the Monon), the cost savings possible from lower rates of shipments by rail are more than outweighed by the higher inventory holding costs of the larger quantities necessary for rail shipments.[5] The ability of trucks to provide quicker response time to orders gives further advantage to trucks in keeping inventory

Figure II-9

INDEX OF RAIL AND MOTOR CARRIER VEHICLE-MILES 1972-1982

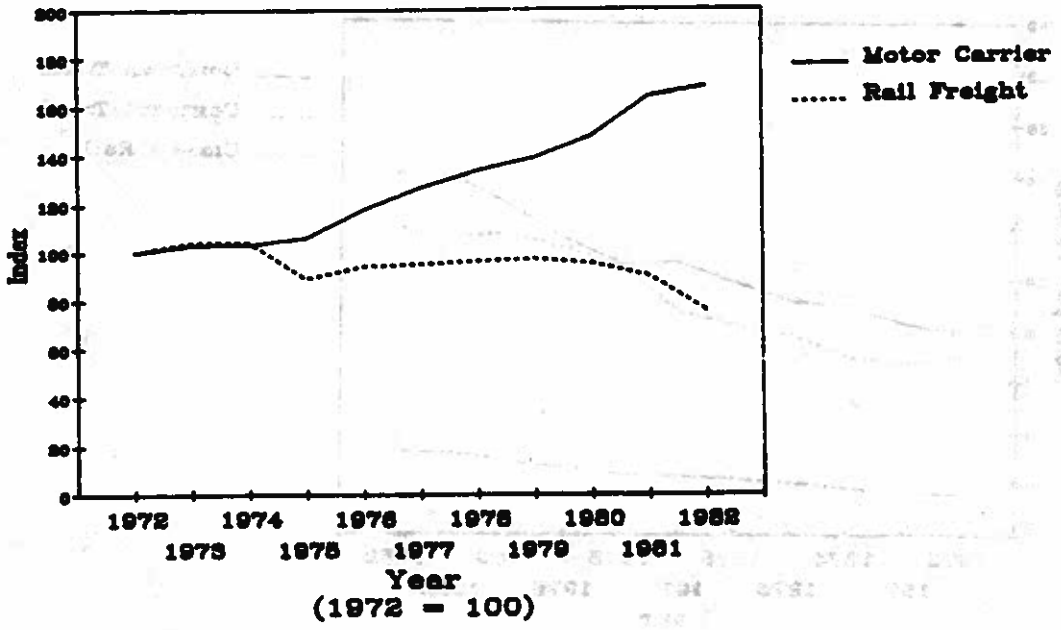


Table II-9

Index of Rail and Motor Carrier Vehicle-Miles

1972-1982

(1972 = 100)

	Motor Carrier	Rail
1972	100	100
1973	103	104
1974	103	104
1975	106	89
1976	118	94
1977	127	95
1978	134	96
1979	139	97
1980	148	95
1981	164	90
1982	168	76

Source: "National Transportation Statistics; Annual Report, August, 1984," U.S. Department of Transportation, Research and Special Programs Administration, Transportation Systems Center, Table 5. Vehicle -Miles, 1972-1982, p.60. (DOT-TSC-RSPA-84-3).

Figure II-10

AVERAGE FREIGHT REVENUE PER TON-MILE 1972-1982

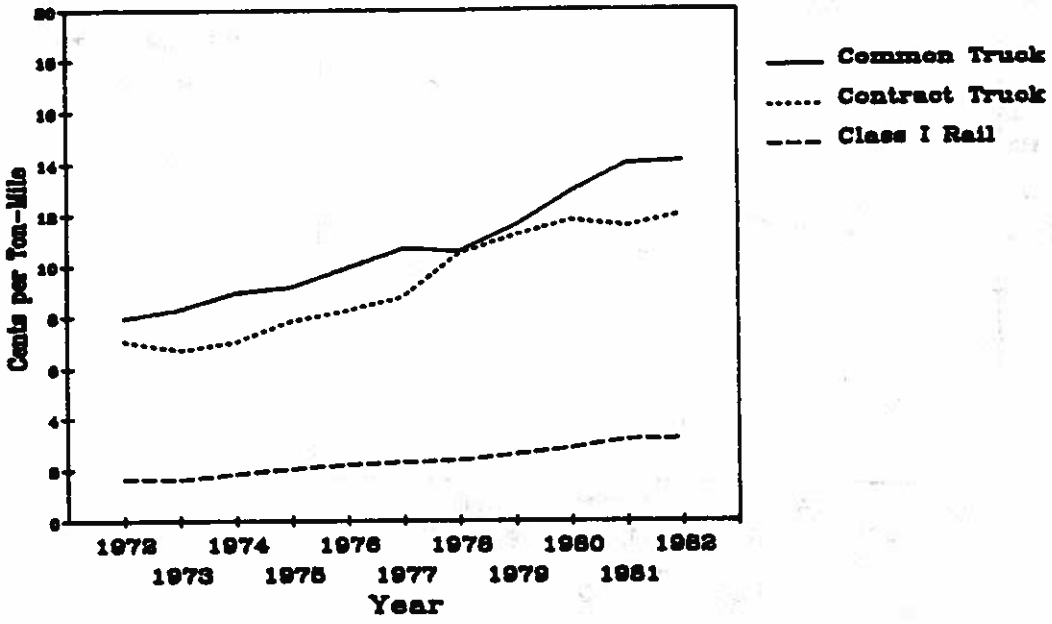


Table II-10

Average Freight Revenue

Cents Per Ton-Mile

1972-1982

Year	Common Truck	Contract Truck	Class I Rail
1972	7.97	6.72	1.62
1973	8.31	6.72	1.62
1974	8.97	7.04	1.85
1975	9.17	7.85	2.04
1976	9.94	8.25	2.20
1977	10.69	8.80	2.29
1978	10.57	10.50	2.36
1979	11.59	11.19	2.60
1980	12.91	11.78	2.85
1981	13.98	11.55	3.18
1982	14.09	12.03	3.21

Source: "National Transportation Statistics: Annual Report, August, 1984," US Department of Transportation, Research and Special Programs Administration, Transportation Systems Center p.54, Table 2.

costs down. In addition, the regulatory reform of motor carriers in 1980 has given trucking companies more flexibility in tailoring their service to shippers' needs. It is only in high weight/low value commodities such as coal or in commodities where regulatory restrictions had hampered rail service that rail retains a competitive advantage over motor carriers.

These factors have contributed to railroads' decisions to seek abandonment of many sections of track throughout the country. The recent abandonment activity has, however, even more basic underlying causes. Most of the rail lines in this country were built before 1910 and, indeed, the nation's track mileage peaked in 1916 and has declined since the 1920's. Thus, virtually all of the nation's rail system was put in place to respond to a much different spatial distribution of economic activity than now, and in an era of far fewer and far different freight transportation alternatives. Moreover, much of the track was not even economically feasible when built, but rather was built with considerable public subsidy on the speculation it would stimulate economic development -- a hope that was seldom fulfilled.

An analysis of the railroad industry's profitability indicates that as late as the mid-1970's about half of the nation's trackage was operated by railroads characterized as either "unlikely to be viable" or "financial problems likely".[6] (Seaboard, incidentally was on the border between "unlikely to be viable" and "marginally viable".) The best hope for survival for most of these railroads was to shed themselves of unprofitable or marginally profitable operations as quickly as feasible.

The Potential for Short Line Operations - General Analysis. As Class I railroads have abandoned unprofitable trackage in response to the changing economics of rail service or to changing business plans, small entrepreneurial railroads, known as short line railroads, have emerged to seek profits where the larger railroads found losses. The short lines typically have the important advantage of lower operating costs largely because of less restrictive work rules and often lower wage rates. Many short line railroads are not unionized, but even those with unions are less burdened by a legacy of restrictive work rules than the larger railroads. Many short line railroads also have lower capital costs through the purchase of used rather than new equipment. The result is a lower cost, more flexible rail operation that can often better tailor its service to shippers' needs than could the Class I railroad. A short line can sometimes use these advantages to compete successfully with trucking competition in situations where a larger railroad could not.

While short line railroads have on occasion been successful in taking over and operating abandoned branch lines and while they have often captured the imagination of the media, there are drawbacks to short line operations that can be an impediment to success. One of the difficulties a large railroad has in operating a low volume branch line is integrating the cars into main line operations. It simply may not be worth stopping a large main line train or altering its operation to add or take off only a few cars. Since a short line has to interline the cars to the mainline operations of a larger carrier, the integration problem remains no matter who

operates the branch line.

Short line operators and their supporters can hope for substantial increases in future traffic on a branch line, but it seems unlikely that the larger railroad would have abandoned the line if significant future increases were a likely prospect. Moreover, a short line's reliability can be hampered by the cumulative effects of deferred maintenance. In the period leading up to abandonment by the large railroad, maintenance expenditures are likely to have been much lower than if the railroad had not anticipated possible abandonment. This forced the short line operator to expend more capital on maintenance in the first year of operation.

Short line railroads are also not immune to the difficulties inherent in most other small businesses including a small management staff and undercapitalization. While a smaller management staff keeps costs lower, it also means each manager must be expert in a broader range of duties, a difficult task particularly for relatively inexperienced managers. The undercapitalization typical of many small businesses increases the risk of inadequate resources to harsh weather, unanticipated business setbacks, or emergencies. The result of these problems is that while there are success stories among the ranks of short line railroads, there are also many bankruptcies.[7]

Reliable estimates of short line costs to operate a particular section of track are difficult to obtain. Some information is available from existing short line operations throughout the country but each situation is unique and the cost experience on one line may not be directly transferable to another. For the abandoned line

from Indianapolis to Sheridan, Seaboard has provided its estimate of typical short line costs of operation. Seaboard's estimates were used as a base for the model of short line costs developed in this report, but its costs were modified extensively based on conversations with other short line operators and based on several assumptions unique to this line.

Table II-11 and Figure II-11 summarize the short line cost estimates used in the analyses that follow. The first column in the table contains the original Seaboard Short Line cost estimate for an operation between Indianapolis and Sheridan serving 1,000 cars per year. The second column contains the Seaboard estimate modified in two ways based on conversations with other short line operators. First, the locomotive costs are amortized over five years at 10 percent annual interest instead of over 10 years at 14 percent as in Seaboard's original estimate. Second, the hourly fuel consumption was adjusted to 15 gallons per hour rather than 8 gallons per hour as in the original.

The third column describes a minimum cost short line operation that serves as the base for the analyses presented below. The most important difference is that this short line is operating in a shared-use environment where the costs of labor and maintenance of way (maintaining the track, ties, switches, roadbed, etc.) are split evenly between freight operations and excursion train operations (see Chapter 3). Such shared use should not present an insurmountable scheduling problem since freight demand is assumed to support only once a week service. In addition, only one locomotive is required;[8] only three employees are assumed needed to operate the

Figure II-11

SHORT LINE OPERATING COST SUMMARY
(Based on an Annual Volume of 1,000 Cars)

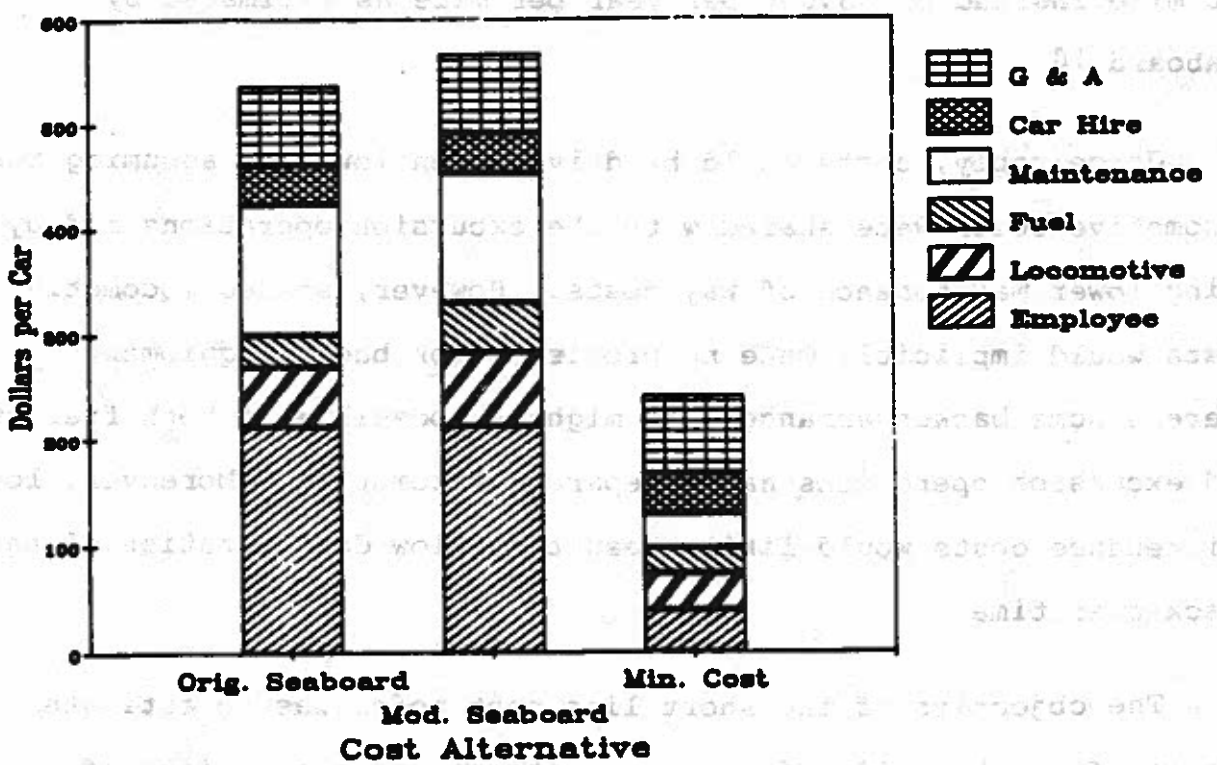


Table II-11

Short Line Operating Cost Summary

Cost Per Car With 1,000 Cars Per Year

	Original Seaboard	Modified Seaboard	Min. Cost Short Line
Employee	212.8	212.8	39.2
Mechanical			
Amortization	24.9	37.9	18.9
Maintenance	32.0	32.0	16.0
Fuel	30.0	46.8	23.4
Maintenance of Way	125.0	125.0	31.3
Car Hire	37.8	37.8	37.8
General & Administrative	75.0	75.0	75.0
Total	537.5	567.3	241.6

Source: Letter of September 18, 1985 from John M. Gibson, Jr. Manager-Plant Rationalization-Shortlines, Seaboard System Railroad.

freight service with a single locomotive instead of the seven employees specified by Seaboard for dual locomotive operation;[9] and total maintenance of way expenses are assumed to be $2,500 per year per mile instead of $5,000 per year per mile as estimated by Seaboard.[10]

Conceivably, costs could be driven even lower by assuming the locomotive costs were shared with the excursion operations and by using lower maintenance of way costs. However, shared locomotive costs would implicitly make no provision for backup equipment whereas some backup arrangements might be possible if both freight and excursion operations had a separate locomotive. Moreover, lower maintenance costs would likely result in slow deterioration of the track over time.

The objective of the short line cost model was to estimate profits from short line freight operations under a variety of assumptions about operating costs, costs to rehabilitate the track, costs to purchase the right-of-way, and revenues. Perhaps the largest area of uncertainty is the volume of freight traffic that can be expected on the line. Thus, the approach taken is to use the model to calculate the break-even traffic volumes under three scenarios:

(1) covering operating (plus rolling stock) costs, (2) operating costs plus the costs to rehabilitate the track, and (3) operating costs, plus rehabilitation costs, plus costs to purchase the land from Seaboard. Both the rehabilitation costs and the land purchase

costs are assumed to be split evenly between freight and excursion operations.[11]

The track rehabilitation costs were estimated by Reid, Quebe, Allison, Wilcox & Associates, Inc. (RQAW) for the track between 96th Street in Indianapolis and Frankfort, Indiana. Track rehabilitation costs for the track between 16th Street and 96th Street were based on information in a 1984 report prepared by Howard, Needles, Tammen & Bergendoff (HNTB) in 1984. The RQAW rehabilitation cost estimates used for this analysis were based on short line railroad costs which were lower than the conventional railroad costs used by HNTB. Conventional railroad costs for FRA Class 2 standards (25 mile an hour maximum) were about 58 percent greater than short line costs. Thus, the HNTB costs were adjusted downward to be consistent with the RQAW short line cost estimates.

The value of the fee simple land was taken from a valuation analysis conducted for Seaboard by Richard E. Nicols Associates, Inc. as part of the abandonment proceedings. The salvage value of the track etc. was taken from Seaboard's estimates contained in the abandonment proceedings. Seaboard's salvage value estimates were cross checked against other sources and were found to be reasonable.

Another area of uncertainty is the revenue a short line operator might expect for the movement of each car. The data Seaboard provided to the ICC in the abandonment hearings made no attempt to apportion revenue between services provided on this branch line (on-branch services). On-branch revenue can be estimated, however, by apportioning Seaboard's reported revenue between on-branch and

off-branch operations in proportion to on-branch and off-branch costs. For 1983, the year of the most recent data, such an apportionment yields a revenue estimate of $391.10 per car. Conversations with short line operators suggest that this revenue is reasonable, but also reveal that short line revenue per car can vary between as low as $100 for some goods and as high as $1,000 for hazardous materials.

Figure II-12 presents a sensitivity analysis of the traffic volumes that would be required to break even for different revenue per car assumptions. Three different revenue per car numbers are tested: $250, $391, and $600. At the base rate of $391 per car, it requires 577 cars to cover operating costs, 1,672 cars to cover operating costs plus the freight share of track rehabilitation costs, and 2,172 cars to cover these costs plus the freight share (50 percent) of purchasing the line. These figures are contained in Table II-12 under the Conservative Scenario. Under this scenario given past levels of freight shipments by the remaining shippers on the line, a short line freight operation might make a very small operating profit, but the prospects of also covering its share of rehabilitation costs seem remote. Moreover, it seems extremely unlikely that such an operation could make a profit and cover its share of the purchase price of the corridor, even in a shared-use environment.

Figure II-12
BREAK-EVEN TRAFFIC VOLUMES
IMPACTS OF CHANGING REVENUES

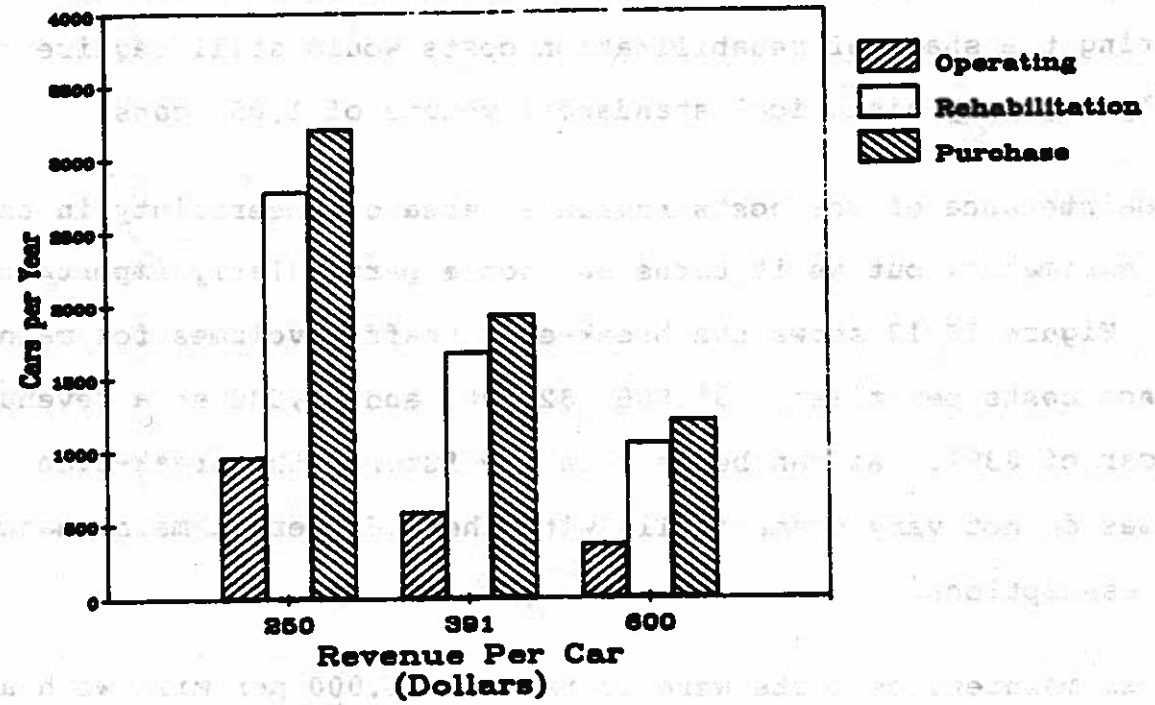


Table II-12

Break-Even Traffic Volumes

Alternative Future Scenarios

Conservative Scenario:
Maintenance = $2,500 per mile
Revenue = $391.1 per car

Cars	Operating	W/Rehabilitation	W/Purchase
577	0.1	-670.2	-976.7
1672	231.4	0.1	-105.7
2172	247.5	46.8	0.0

Optimistic Scenario:
Maintenance = $1,000 per mile
Revenue = $600 per car
Rehabilitation Costs Reduced by 25 percent

Cars	Operating	W/Rehabilitation	W/Purchase
330	1.5	-877.5	-1151.3
845	343.2	0.0	-107.0
1006	378.3	89.9	0.1

Source: text.

The prospects look even dimmer if the average revenue per car falls to $250. If however, the revenue per car were to reach $600, then an operating profit could be generated with only 363 cars, but covering the share of rehabilitation costs would still require the fairly high (by historical standards) volume of 1,051 cars.

Maintenance of way costs remain an area of uncertainty in these cost estimates, but as it turns out not a particularly important one. Figure II-13 shows the break-even traffic volumes for maintenance costs per mile of $1,000, $2,500, and $5,000 at a revenue per car of $391. As can be seen in the future, the break-even volumes do not vary dramatically with these different maintenance cost assumptions.

If maintenance costs were to fall to $1,000 per mile with a revenue of $600, and if rehabilitation costs were 25 percent lower than estimated by RQAW, an operating profit could be generated at 330 cars, the freight share of rehabilitation costs could be covered at 845 cars, and the land could be purchased at 1,006 cars as the Optimistic Scenario in Table II-12 reveals. (Note that several other combinations of maintenance and revenue assumptions are displayed in Table II-13.) As a point of reference, the highest number of cars on the line from Sheridan to Indianapolis by the remaining shippers was 728 in 1981 (see Table II-4), whereas on a 12-month basis in 1983 only 506 cars moved.

Figure II-13
BREAK-EVEN TRAFFIC VOLUMES IMPACTS OF DIFFERENT ANNUAL TRACK MAINTENANCE COSTS

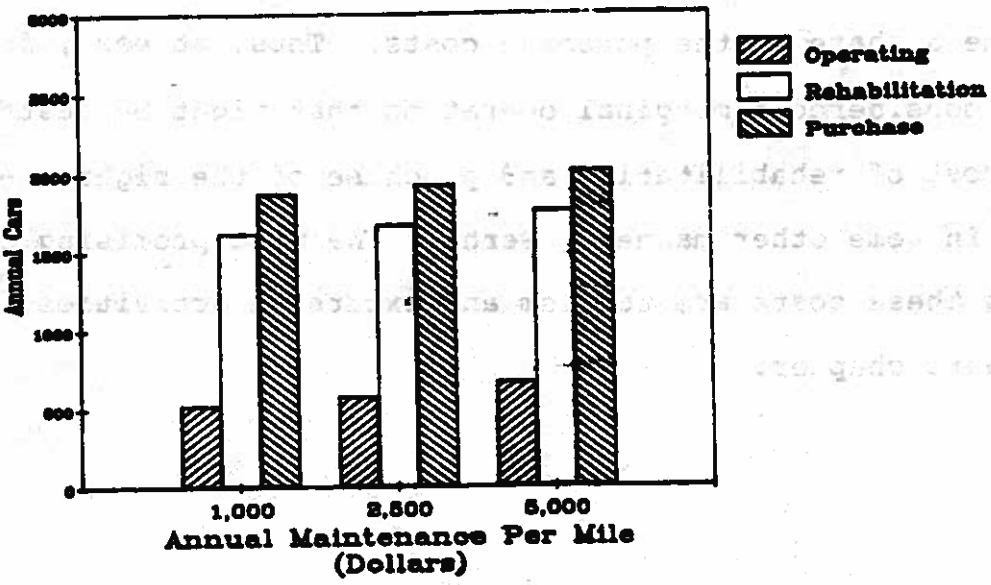


Table II-13

Break-Even Traffic Volumes

Additional Future Scenarios

Maintenance = $1,000 per mile
Revenue = $391.1 per car

Cars	Operating	W/Rehabilitation	W/Purchase
524	0.2	-737.9	-910.4
1619	239.0	0.1	-55.7
1874	254.6	48.2	0.0

Maintenance = $2,500 per mile
Revenue = $250 per car

961	0.1	-402.3	496.3
2783	139.0	0.0	-32.5
3209	148.7	28.2	0.0

Maintenance = $2,500 per mile
Revenue = $600 per car

363	0.8	-1064.6	-1313.6
1051	368.3	0.3	-85.7
1212	394.1	75.0	0.4

Maintenance = $1,000 per mile
Revenue = $600 per car

330	1.5	-170.5	-1444.3
1017	380.3	0.0	-88.9
1178	405.1	76.8	0.1

Maintenance = $5,000 per mile
Revenue = $391.1 per car

666	0.4	-580.3	-716.0
1760	219.8	0.0	-51.3
2016	236.7	44.9	0.0

In summary, under favorable circumstances it might be possible for a freight operation to cover its operating costs, but it is extremely unlikely that freight traffic would reach a sufficient level that even half of the rehabilitation costs could be covered, let alone a share of the purchase costs. Thus, at best, freight must be considered a marginal operation that might be sustained only if the cost of rehabilitation and purchase of the right-of-way were covered in some other manner. Perhaps the most promising option for covering these costs are tourism and excursion activities, the topic of the next chapter.

CHAPTER III

ANALYSIS OF TOURISM AND EXCURSION POTENTIAL

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ANALYSIS OF TOURISM AND EXCURSION POTENTIAL

This chapter reports the results of a market analysis of a possible Monon Line excursion program. The objective is to determine excursion trip visitation levels to each proposed load center or attraction. Projections are prepared for visits by Indianapolis area residents for the period 1985 to 2010. Next, projections are prepared for visitors from outside the Indianapolis area. These projections provide a basis for estimating visitation levels to each load center or attraction capable of serving as an excursion origin or destination. The visitation projections, in turn, are used as inputs in projecting costs and revenues for possible components of a Monon Line excursion program.

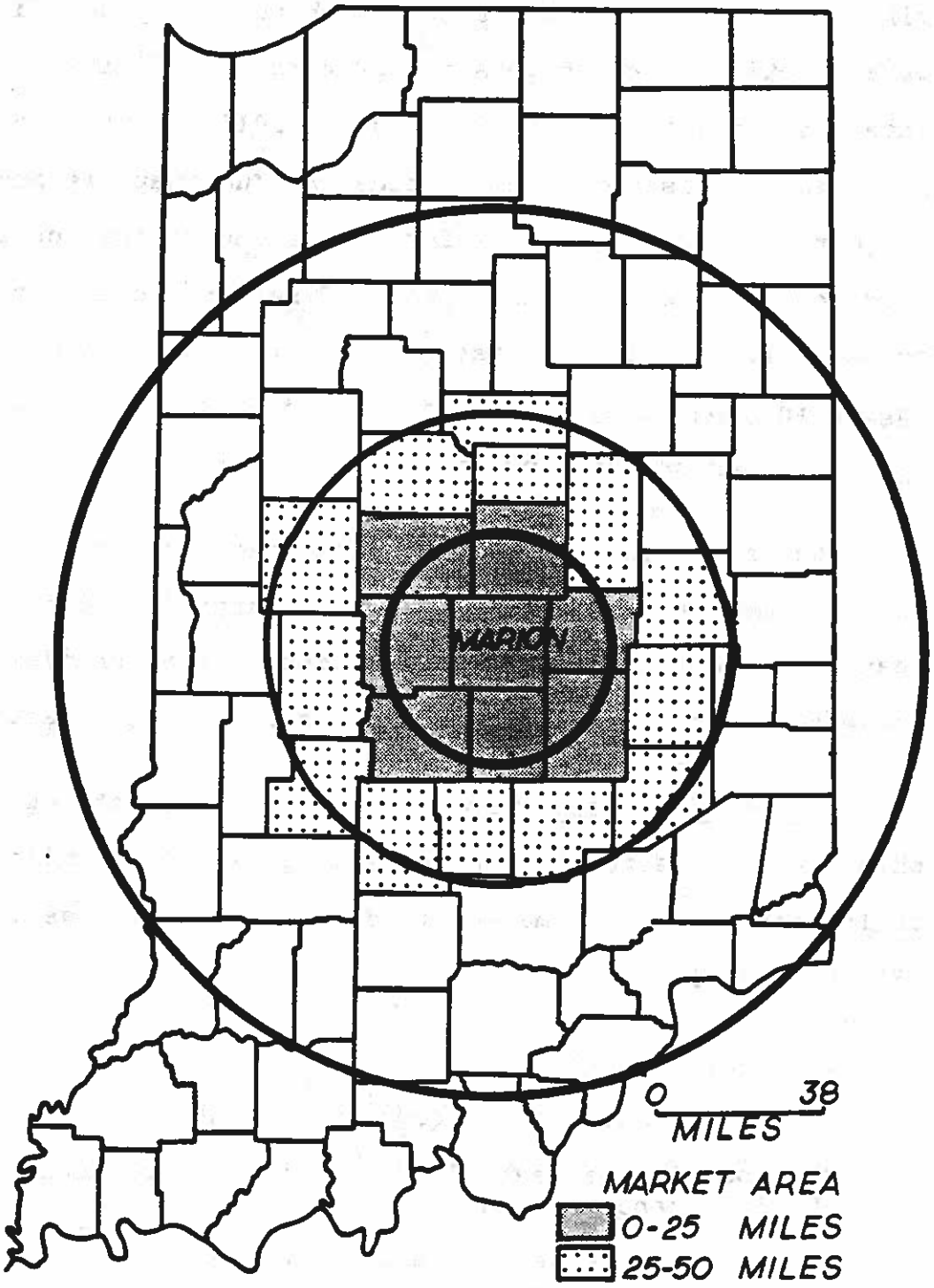
The projections developed here extend to the year 2010. Given such a time horizon, they should be interpreted cautiously since they are conditional on a continuation of past trends and since many presently unforeseeable factors may affect the projections.

The Resident Population. The term "resident population" in this analysis is the population living within 100 miles of the center of Indianapolis. The market is divided into four geographic areas (Figure III-1):

1. Marion County;
2. The surrounding metropolitan counties;
3. Counties between 25 and 50 miles of the center of Indianapolis; and
4. Counties between 51 and 100 miles.[1]

Figure III-1

INDIANAPOLIS RESIDENT MARKET AREAS



Marion County and the contiguous metropolitan counties are referred to as the "primary market area". The remaining counties comprise the "secondary market area".

Data and Growth Assumptions. The major source of data for the resident market population projections is the 1983 edition of Indiana County Population Projections prepared, by county, for each fifth year from 1985 through 2020 by the Indiana University School of Business, Division of Research.

Examination of this data as illustrated in Table III-1 shows relatively modest growth for each market area. Of particular note are the projections for Marion County which show a persistent slight decline in population up to 2005, with a reversal of this trend after 2005.

The Indiana county population projections (School of Business, Indiana University, 1983) are made at 5 year intervals from 1985 to 2010. For the purposes of this analysis, the projections are converted to a yearly basis by assuming that growth (or decline) over each 5-year period is evenly distributed across the intervening years. The complete set of yearly projections for each market area is presented in Table III-2.

The Visitor Population. A "visitor" is defined here as a person whose trip originates outside the resident market area. Conventionally, the visitor population is divided into two broad categories, convention delegates and tourists. Table III-3 shows

Table III-1

Average Annual Growth Rates by Market Area, 1985-2010

Time Period	Marion County	Metro Cos.	25-50 Miles	51-100 Miles	Total
		MARKET AREA			
1985-1990	-0.12	+1.34	+0.31	+0.30	+0.34
1990-1995	-0.15	+1.10	+0.31	+0.30	+0.31
1995-2000	-0.16	+0.89	+0.26	+0.25	+0.25
2000-2005	-0.06	+0.68	+0.23	+0.22	+0.23
2005-2010	+0.03	+0.38	+0.20	+0.18	+0.19
1985-2010	-0.09	+0.92	+0.26	+0.25	+0.26

Source: Indiana County Population Projections, Division of Research, Indiana University School of Business, 1983.

Table III-2

Population Projections by Market Area, 1985-2010

MARKET AREAS

Year	Marion County	Metro Cos.	25-50 Miles	51-100 Miles	Total
1985	753,500	431,400	865,000	1,536,100	3,586,600
1986	752,560	437,160	868,260	1,540,740	3,598,720
1987	751,620	442,920	870,920	1,545,380	3,610,840
1988	750,680	448,680	873,580	1,550,020	3,622,960
1989	749,740	454,440	876,240	1,554,660	3,635,080
1990	748,800	460,200	878,900	1,559,300	3,647,200
1991	747,660	465,260	881,600	1,563,920	3,658,440
1992	746,520	470,320	884,300	1,568,540	3,669,680
1993	745,380	475,380	887,000	1,573,160	3,680,920
1994	744,240	480,440	889,700	1,577,780	3,692,160
1995	743,100	485,500	892,400	1,582,400	3,703,400
1996	741,880	489,840	894,740	1,586,300	3,712,760
1997	740,660	494,180	897,080	1,590,200	3,722,120
1998	739,440	498,520	899,420	1,594,100	3,731,480
1999	738,220	502,860	901,760	1,598,000	3,740,840
2000	737,000	507,200	904,100	1,601,900	3,750,200
2001	736,540	510,640	906,160	1,605,460	3,758,800
2002	736,080	514,080	908,220	1,609,020	3,767,400
2003	735,620	517,520	910,280	1,612,580	3,776,000
2004	735,160	520,960	912,340	1,616,140	3,784,600
2005	734,700	524,400	914,400	1,619,700	3,793,200
2006	734,940	526,380	916,240	1,622,680	3,800,240
2007	735,180	528,360	918,080	1,625,660	3,807,280
2008	735,420	530,340	919,920	1,628,640	3,814,320
2009	735,660	532,320	921,760	1,631,620	3,821,360
2010	735,900	534,300	923,600	1,634,600	3,828,400

Source: 1985, 1990, 1995, 2000, 2005, and 2010 - See Table 1. Remaining years-interpolated, as described in text..

historic and projected levels of visitorship to the Indianapolis area. An examination of the original source of this data shows that these figures include some trips by persons living in the resident market area. To avoid double-counting, an alternative assessment of visitorship levels to Indianapolis was developed. Utilizing hotel occupancy rates prepared by Laventhol and Horwath (1984-1985) for the Indianapolis Convention and Visitor Bureau and the methodology described in Appendix I, estimates of visitors staying at Indianapolis hotels and motels by month, for the period 1982 to 1985, have been prepared. The estimates are presented in Table III-4. Undoubtedly, the estimates include some people living within the resident market area and as much are somewhat inflated. However, the estimates also ignore visitors staying with local residents, as well as visitors who pass through or stop in Indianapolis but do not stay overnight. To that extent, visitorship may be underestimated so that these sources of error may largely cancel each other out. Unfortunately, the data underlying Table III-4 are insufficient to estimate visitorship by type of visitor.

Current growth in convention delegates is about 2 percent per year nationally. This rate probably understates the growth being experienced by the Indianapolis area, particularly since the area has only recently begun to "take off" as a convention center and new facilities are being added to the current stock. Thus, at the minimum, growth of 2 percent per year in total visitorship up to 1990 can be expected. Beyond that period zero growth is projected.

Table III-3

Historic and Projected Visitors to Indianapolis

1978-1988

Year	Delegates	Tourists	Total
1978	367,260	2,917,670	3,284,930
1979	526,445	3,225,750	3,752,200
1980	561,600	3,290,750	3,852,350
1981	598,045	3,465,750	4,063,800
1982	632,200	3,815,850	4,448,050
1983	606,800	4,085,150	4,751,950
1984*	694,785	4,290,150	4,984,940
1985*	736,475	4,487,000	5,223,480
1986**	801,000	4,900,000	5,701,000
1987**	824,000	6,100,000	6,924,000
1988**	862,000	7,200,000	8,062,000

* An Estimate
** A Projection

Source: Indiana Convention and Visitors Association

Table III-4

Estimated Non-Resident Visitors to Indianapolis

by month, 1982 to 1984

Month	1982	1983	1984	1985	Average
Jan	99,451	99,451	100,231	98,671	99,450
Feb	100,571	88,594	109,202	107,616	101,500
March	127,532	119,147	125,777	133,187	126,410
April	122,474	122,286	117,945	142,478	126,300
May	125,387	130,067	145,472	160,487	140,350
June	113,982	119,078	126,626	136,816	124,130
July	126,752	117,945	125,682	n.a.	123,460
August	123,827	135,137	129,482	n.a.	129,480
Sept	109,453	115,801	110,955	n.a.	112,070
Oct	117,782	123,607	140,597	n.a.	127,330
Nov	99,263	113,416	118,134	n.a.	110,270
Dec	80,926	85,606	80,731	n.a.	82,420
Total	1,347,340	1,370,135	1,430,834	n.a.	1,403,170

Source: See Appendix B

White River Park (WRP). Excursions are assumed to run, at least initially, from Union Station with a shuttle link to a WRP terminus. Excursions originating from Union Station[2] will be an additional attraction to the WRP complex. To project attendance by resident and visitor populations, capture rates are estimated by market area and population type. A "capture rate" is defined here as the expected number of visits to an attraction per amount of population per time period. Capture rates are often expressed as a percent of the population. Once a capture rate has been estimated for a market segment, it can then be applied to the projected population of that segment to get a projection of that segment's attendance. Such projections are, of course, conditional on the capture rate remaining stable over time.

Capture Rates for White River Park. Table III-5 shows capture rates which have been utilized in other studies and for a variety of other attractions. As can be seen, there is considerable variation in the rates, depending on the definition of the market area, the type of attraction, and the method of estimation. None of these rates, including those applied to proposed Indianapolis attractions, have been estimated from data directly based on the behavior of the Indianapolis resident market. Capture rates for the Indiana State Fair, shown in Table III-6, are based on a survey of visitors to this event in 1985. Details of the computation of the rates are presented in Appendix IV.

Table III-5

Market Capture Rates Utilized in Selected Reports

Attraction	Market Type	Capture Rate Percent	Source
Historic Theme Park (a)	Resident		
	0-1 Hr. Drive	23.00	(1)
	1-2 Hr. Drive	11.02	
	Visitor-Tourist	9.99	
	Convention Delegates	2.67	
	All	6.45	
Indiana Gardens (a)	Resident		
	0-30 mins. Drive	36.00	(2)
	31-60 mins. Drive	28.00	
	61-120 mins. Drive	18.00	
	Visitor-Tourist	8.00	
	Pass Thrus	2.00	
Indiana Tower	Resident		
	0-20 miles	8.00	(3)
	26-100 miles	1.00	
	Visitor	10.00	
Seattle Center (All Attractions) (b)	Resident-King's Co.	80.00	(4)
Center House, Seattle (b)	Resident-King's Co.	30.00	(4)
Water World, Denver (b)	Resident	5.80	(4)
	Visitor	0.30	
Wild Wave, Salt Lake City (b)	Resident	6.90	(4)
	Visitor	0.10	

key: (a) = a proposed facility (b) = an existing facility

Sources: (1) Indiana Theme Park Feasibility Analysis, LARC, 1985.
(2) State of Indiana White River Park Market and Economic Analysis Summary Report, Hammer, Siler, George Assocs. (HSGA), Aug. 15, 1981.
(3) Market and Economic Feasibility Analysis, Indiana Tower, HSGA, Oct. 1981.
(4) Research Finding of Selected Urban Entertainment Centers and Parks, HSGA, Dec. 1980.

Table III- 6

Capture Rates Estimated From the State Fair Survey

	MARKET AREA			
	Marion Co.	Metro Cos.	25-50 Miles	51-100 Miles
Proportion of Residents Visiting the State Fair	.272	.221	.153	.110
Average Frequency of Number of Visits	1.604	1.447	1.434	1.330
Capture Rate Percent	43.6	32.0	22.0	14.7

Source: See Text

The data and the derived rates have several advantages over rates from other studies:

*Rates can be estimated for the particular market areas shown in Figure III-1.

*The proportion of each market area population attending the fair can be separated from the average frequency of visits by those attending. This is important because repeat visitation may vary significantly among the different market areas due to proximity or other differences.

*The rates are based on sample data from Indiana for an Indianapolis attraction.

There are, however, some limitations associated with the utilization of this data and the derived rates for this analysis:

*The State Fair is a two-week long attraction, whereas the WRP complex would make its attractions available throughout the summer months.

*Many of the attractions at the State Fair have special appeal to particular subpopulations.

These factors suggest that the behavior of the resident population with respect to WRP attractions may differ from their behavior with respect to the State Fair. In particular, the average frequency of visits shown in Table III-6 may be too high with respect to WRP. Table III-7 shows projected resident population visitorship levels using capture rates estimated from the State Fair data. Table III-8 shows projections based on capture rates utilized in Hammer, Siler, George Associate's (HSGA) analysis of potential attendance at WRP (Table III-5). The projections in Table III-8 assume that HSGA's driving time zones of 31-60 minutes and 61-120 minutes correspond to the 25-50 mile and 51-100 mile zones used in this report. Interestingly, the HSGA rates yield higher levels of visitorship than the rates from the State Fair data. The higher

Table III-7

Projected Visitors to WRP IN. Gardens 1988-2010:
Capture Rates Estimated From Fair Survey

Year	Marion County	Metro Cos.	25-50 Miles	51-100 Miles	Total
Capture Rate	(.436)	(.320)	(.220)	(.147)	
1988	327,296	143,578	192,188	227,853	890,920
1989	326,887	145,421	192,773	228,535	893,620
1990	326,477	147,264	193,358	229,217	896,320
1991	325,980	148,883	193,952	229,896	898,710
1992	325,483	150,502	194,546	230,575	901,110
1993	324,986	152,122	195,140	231,255	903,500
1994	324,489	153,741	195,734	231,934	905,900
1995	323,992	155,360	196,328	232,613	908,290
1996	323,460	156,749	196,843	233,186	910,240
1997	322,928	158,138	197,358	233,759	912,180
1998	322,396	159,526	197,872	234,333	914,130
1999	321,864	160,915	198,387	234,906	916,070
2000	321,332	162,304	198,902	235,479	918,020
2001	321,131	163,405	199,355	236,003	919,890
2002	320,931	164,506	199,808	236,526	921,771
2003	320,720	165,606	200,262	237,049	923,650
2004	320,530	166,707	200,715	237,573	925,520
2005	320,329	167,808	201,168	238,096	927,400
2006	320,434	168,442	201,573	238,534	928,980
2007	320,538	169,075	201,978	238,972	930,560
2008	320,643	169,709	202,382	239,410	932,140
2009	320,748	170,342	202,787	239,848	933,730
2010	320,852	170,976	203,192	240,286	935,310

Table III-8

Projected Visitors to WRP IN Gardens 1988-2010:
Capture Rates Estimated From HSGA Survey

Year	Marion County	Metro Cos.	25-50 Miles	51-100 Miles	Total
Origin Capture Rate	.360	.320	.280	.180	
1988	270,245	143,578	244,602	279,004	937,430
1989	269,906	145,421	245,347	279,839	940,510
1990	269,468	147,264	246,092	280,674	943,600
1991	269,158	148,883	246,848	281,506	946,400
1992	268,747	150,502	247,604	282,337	949,190
1993	268,337	152,122	248,360	283,169	951,990
1994	267,926	153,741	249,116	284,000	954,780
1995	267,516	155,360	249,872	284,832	957,580
1996	267,077	156,749	250,527	285,534	959,890
1997	266,638	158,138	251,182	286,236	962,190
1998	266,198	159,526	251,838	286,938	964,500
1999	265,759	160,915	252,493	287,640	966,810
2000	265,320	162,304	253,148	288,342	969,110
2001	265,154	163,405	253,725	288,983	971,270
2002	264,989	164,506	254,302	289,624	973,420
2003	264,823	165,606	254,878	290,264	975,570
2004	264,658	166,707	255,455	290,905	977,730
2005	264,492	167,808	256,032	291,546	979,880
2006	264,578	168,442	256,547	292,082	981,650
2007	264,665	169,075	257,062	292,619	983,420
2008	264,751	169,709	257,578	293,155	985,190
2009	264,838	170,342	258,093	293,692	986,960
2010	264,924	170,976	258,608	294,228	988,740

levels occur largely because the HSGA study assumes a flatter distance decay effect than suggested by the State Fair data. In other words, HSGA's capture rates decline more slowly with increasing distance from Indianapolis.

The disadvantages of the State Fair data coupled with the relatively flat distance decay effect assumed by HSGA suggest an intermediate set of capture rates using two additional ad hoc assumptions: (1) the proportions of residents visiting the State Fair adequately reflect the propensity of the market area residents to visit Indiana Gardens; and (2) the average frequency of visits by market area shown in Table III-6 should be modified downward as follows because the WRP attraction will have less appeal to special interest groups that are likely to repeat their visit.

Marion Co.:	1.604 to 1.3
Metro Cos.:	1.447 to 1.1
25-50 miles:	1.434 to 1.0
51-100 miles:	1.330 to 1.0

These adjustments when applied to the projections shown in Table III-2, yield the attendance projections shown in Table III-9.

Information concerning the visitor population is much more sparse than for the resident population. In this case, HSGA's visitor capture rates are used in projecting attendance at WRP but with a much lower base population. The HSGA analysis assumes a visitor capture rate of 8 percent applied only to visitors arriving between the months of April and September. Table III-10 summarizes the projections of total attendance at WRP for both the visitor and resident populations.

Table III-9

Projected Visitors Originating in the Resident Market Area to WRP's Indiana Gardens, 1988-2010

Year	Marion County	Metro Cos.	25-50 Miles	51-100 Miles	Total
Origin Capture Rate	.353	.243	.153	.110	
1988	264,990	109,029	133,658	172,052	679,730
1989	264,658	110,429	134,065	172,567	681,720
1990	264,326	111,829	134,472	173,082	683,710
1991	263,924	113,058	134,885	173,595	685,460
1992	263,522	114,288	135,298	174,108	687,220
1993	263,119	115,517	135,711	174,621	688,970
1994	262,717	116,747	136,124	175,134	690,720
1995	262,314	117,977	136,537	175,646	692,470
1996	261,884	119,031	136,895	176,079	693,890
1997	261,453	120,086	137,253	176,513	695,300
1998	261,022	121,140	137,611	176,945	696,720
1999	260,592	122,195	137,969	177,378	698,130
2000	260,161	123,250	138,327	177,811	699,550
2001	259,999	124,086	138,642	178,206	700,930
2002	259,836	124,921	138,958	178,601	702,320
2003	259,674	125,757	139,273	178,996	703,700
2004	259,511	126,593	139,588	179,392	705,080
2005	259,349	127,429	139,903	179,787	706,470
2006	259,434	127,910	140,185	180,117	707,650
2007	259,519	128,391	140,466	180,448	708,830
2008	259,603	128,873	140,748	180,779	710,000
2009	259,688	129,354	141,029	181,110	711,180
2010	259,773	129,835	141,311	181,441	712,360

Table III-10

Summary of Attendance Projections for WRPs
Indiana Gardens, 1988 to 2010

Year	Total Attendance		
	Resident	Visitor	All
1988	679,730	61,670	741,400
1989	681,720	62,910	744,630
1990	683,710	64,160	747,870
1991	685,460	64,160	749,630
1992	687,220	64,160	751,380
1993	688,970	64,160	753,130
1994	690,720	64,160	754,890
1995	692,470	64,160	756,640
1996	693,890	64,160	758,050
1997	695,300	64,160	759,470
1998	696,720	64,160	760,880
1999	698,130	64,160	762,300
2000	699,550	64,160	763,710
2001	700,930	64,160	765,100
2002	702,320	64,160	766,480
2003	703,700	64,160	767,860
2004	705,080	64,160	769,250
2005	706,470	64,160	770,630
2006	707,650	64,160	771,810
2007	708,830	64,160	772,990
2008	710,000	64,160	774,170
2009	711,180	64,160	775,350
2010	712,360	64,160	776,520

Source: See Text

The State Fair. In projecting attendance by the resident and non-resident populations at the State Fair, the same basic procedures are used as for White River Park (Appendix V). In projecting attendance by people from outside the Indianapolis area, it is assumed that: the ratio of resident market area attendees to non-resident market area attendees in 1985 (the year of the survey) will hold constant over the projection period. The ratio, estimated from 1985 State Fair Survey data is 0.058, or almost 6 percent (Appendix V). The projections for the State Fair are shown in Table III-11.

Indiana Theme Park. The proposed Theme Park would be located outside of Indianapolis just a few miles to the northeast.[3] Due to its proposed location, the market areas are redefined as shown in Figure III-2.

The capture rates applied to the resident population were derived from the State Fair survey. Specifically, the proportions shown in Table III-6 are assumed to represent the propensity of the resident market area populations to visit the Theme Park. The average frequency of visits for each market area is assumed to be 1.0. The projections are shown in Table III-12, along with the capture rates. The rates used for Table III-12 are almost identical to the capture rates in the recently conducted feasibility study of the proposed Theme Park by Leisure and Recreation Concepts, Inc., 1985.

Table III-11

Projected Attendance at the Indiana State Fair,

1986-2010

Year	Resident	Visitor	Total
1986			986,870
1987			939,730
1988	890,920	51,670	942,590
1989	893,620	51,830	945,440
1990	896,320	51,990	948,300
1991	898,710	52,130	950,840
1992	901,110	52,260	953,370
1993	903,500	52,400	908,740
1994	905,900	52,540	958,440
1995	908,290	52,680	960,970
1996	910,240	52,790	963,030
1997	912,180	52,910	965,090
1998	914,130	53,020	967,150
1999	916,070	53,130	969,200
2000	918,070	53,250	972,140
2001	919,890	53,350	975,130
2002	921,770	53,460	975,230
2003	923,650	53,570	977,220
2004	925,520	53,680	979,200
2005	927,400	53,790	981,190
2006	928,980	53,880	982,860
2007	930,560	53,970	984,540
2008	932,140	54,060	986,210
2009	933,730	54,160	987,880
2010	935,310	54,250	989,560

Source: See Text

Figure III-2

PROPOSED INDIANA THEME PARK RESIDENT MARKET AREA

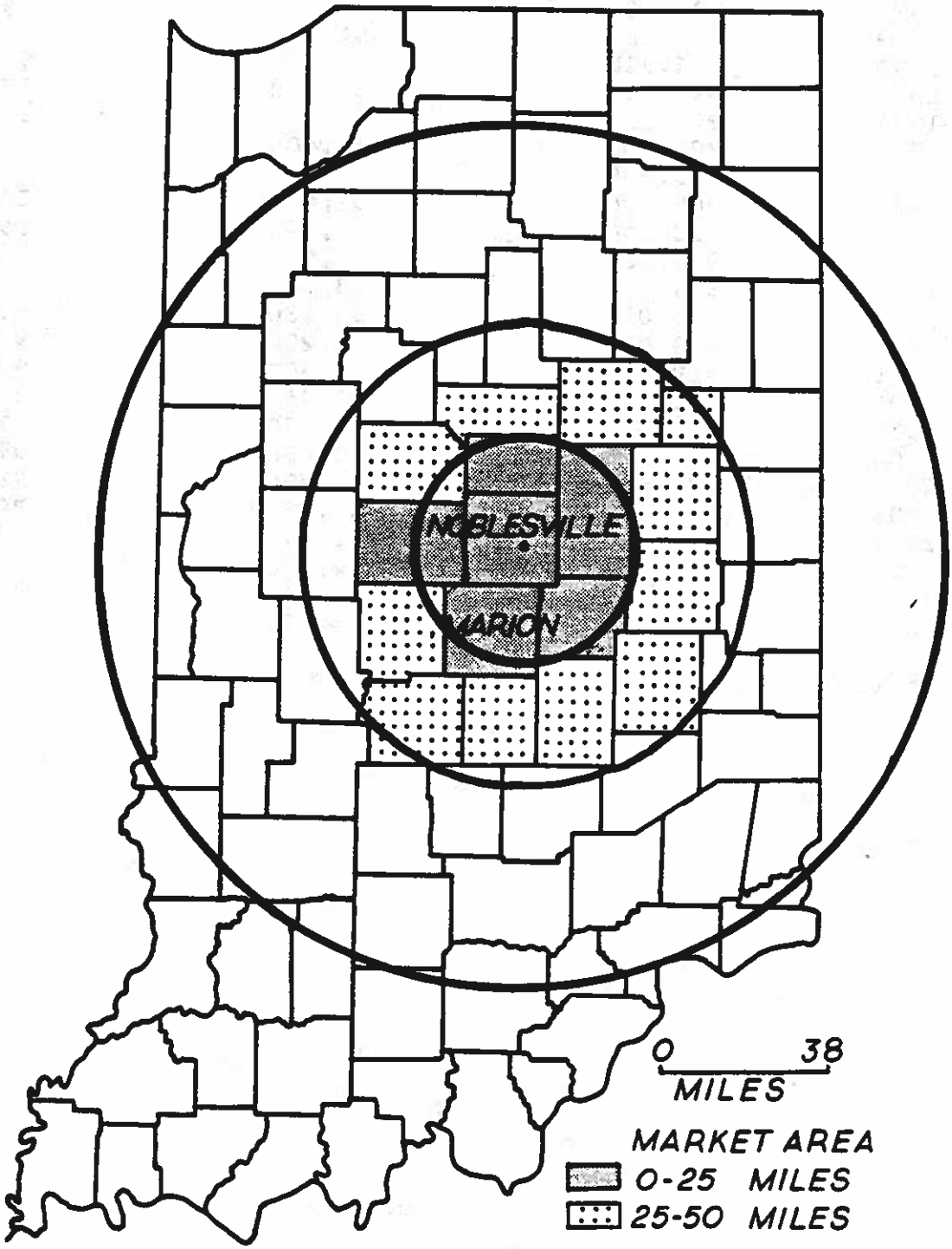


Table III-12

Projected Visitors to the Proposed Theme Park
Originating In the Resident Market Area, 1988-2010

Year	0-25 Miles	25-50 Miles	51-100 Miles	Total
Origin Capture Rate	.250	.153	.111	
1988	292,820	105,320	193,290	591,420
1989	293,570	105,590	194,170	593,320
1999	294,330	105,860	195,040	595,230
1991	294,920	106,150	195,880	596,940
1992	295,520	106,460	196,720	588,660
1993	296,110	196,720	197,560	600,380
1994	296,710	107,000	198,390	602,100
1995	297,300	107,280	199,230	603,820
1996	297,760	107,530	199,950	605,230
1997	298,210	107,770	200,660	606,640
1998	298,670	198,010	201,380	608,080
1999	299,120	198,250	202,090	609,460
2000	299,580	108,490	202,810	610,870
2001	300,060	108,690	203,430	612,190
2002	300,550	108,900	204,060	613,500
2003	301,030	109,100	204,690	614,820
2004	301,520	109,300	205,320	616,130
2005	302,000	109,500	205,940	617,440
2006	302,420	109,620	206,510	618,540
2007	302,830	109,730	207,070	619,630
2008	303,250	109,840	207,630	620,720
2009	303,660	109,960	208,200	621,810
2010	304,080	110,070	208,760	622,900

The projection of visitors utilizes the same population and growth assumptions described earlier and assumes a capture rate of 8 percent -- the rate used by HSGA for Indiana Gardens and somewhat less than the rate of 8.97 percent used by LARC in its feasibility study of the Theme Park. The projections for both the visitor and resident populations are shown in Table III-13.

Market For Excursions to Colts Games. The Colts excursion would originate at Carmel and terminate at Union Station, with a possible stop at the State Fairgrounds. The Colts generally play 8 regular season games with average attendance of about 60,000 -- about 480,000 roundtrips per year. If it is assumed that the vast majority of these trips originate within the resident market area, the 1985 population of the area of 3,586,600 implies a capture rate of about 0.151. Unfortunately, there are no data on how this average capture rate is distributed over the market area. The Fair Survey rates shown in Table III-6 do provide an approximation of the rate at which capture rates decline with distance from the center of Indianapolis. A methodology for estimating capture rates by market area using this data is described in Appendix VI. The derived Colt's games capture rates are:

Market Area	Estimated 1985 Capture Rate	Estimated 1985 Share of Total
Marion County	.267	.373
Metro Counties	.196	.157
25-50 Miles	.135	.216
51-100 Miles	.090	.256
Total		1.002

Table III-13

Summary of Projections for the Proposed Theme Park

1988-2010

Year	Total Attendance		
	Resident	Visitor	All
1988	591,420	64,220	655,640
1989	593,320	65,500	658,830
1990	595,230	66,810	662,040
1991	546,940	60,810	663,760
1992	598,660	66,810	665,470
1993	600,380	66,810	667,190
1994	602,100	66,810	668,910
1995	603,820	66,810	670,630
1996	605,230	66,810	672,040
1997	606,640	66,810	673,450
1998	608,050	66,810	674,860
1999	609,460	66,810	676,280
2000	610,870	66,810	677,690
2001	612,190	66,810	679,000
2002	613,500	66,810	680,310
2003	614,820	66,810	681,630
2004	616,130	66,810	682,940
2005	617,440	66,810	684,260
2006	618,540	66,810	685,350
2007	619,630	66,810	686,440
2008	620,720	66,810	687,530
2009	621,810	66,810	688,620
2010	622,900	66,810	689,710

The market for excursions to Colt's games is projected as follows. First, the market area for trips is defined as a 20 mile radius around the Carmel terminal with the area truncated at the State Fairgrounds, as described in Figure III-3. The market area is comprised of:

County	Capture Rate
Hamilton County	.196
1/3 of Marion County	.267
Tipton County	.135
Madison County	.135
Boone County	.196

Since there is a limited seating capacity at Colt's games, it is inappropriate to simply apply the derived capture rates to the projected population. Thus, in projecting attendance at Colts games originating in the excursion market area, the estimated market area shares for 1985 are assumed to remain constant over time, as is the spatial distribution of Colts games attendees. These assumptions result in the projections shown in Table III-14. The projection methodology appears in Appendix V.

Union Station. One proposed use of the Monon Line, a restaurant train originating at Union Station, is best viewed as a downtown attraction competing with other restaurants. The appropriate resident market area is the metropolitan area, i.e., Indianapolis and the surrounding counties with an appeal primarily to upper and upper-middle income residents. The 1980 Census provides

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Figure III-3

MARKET AREA FOR EXCURSIONS
TO COLTS GAMES.

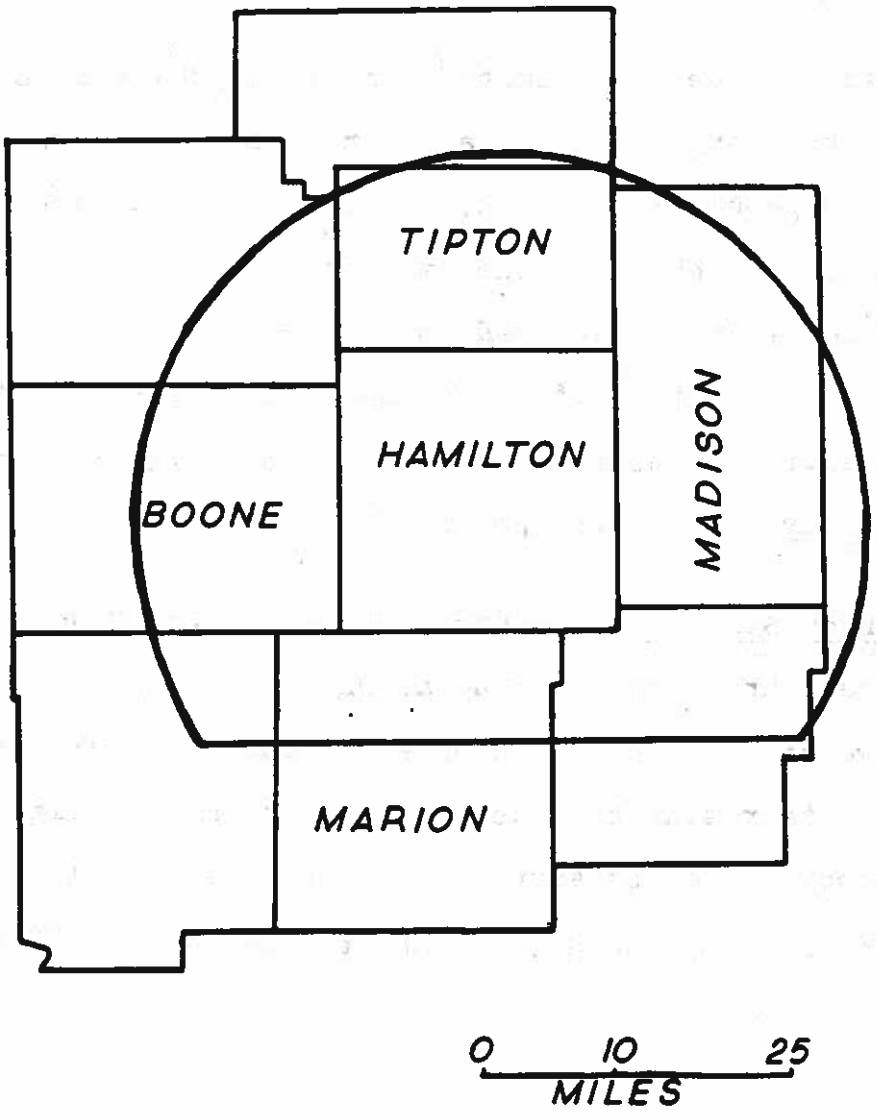


Table III-14

Projected Trips to Colts Games

By Residents in Colts Train Market Area

YEAR	TRIPS
1988	89,380
1989	89,420
1990	89,460
1991	89,500
1992	89,540
1993	89,570
1994	89,610
1995	89,680
1996	89,710
1997	89,740
1998	89,770
1990	89,800
2000	89,830
2001	89,850
2002	89,870
2003	89,880
2004	89,910
2005	89,930
2006	89,940
2007	89,950
2008	89,960
2009	89,970
2010	89,980

detailed information on the distribution of income within the resident market area as shown in Table III-15. For projection purposes, the following assumptions are made: (1) the percentage distribution of income among households will remain stable over the projection period; (2) the market for the restaurant train is the top half of the income distribution comprised of households earning an income in excess of the median household income. Table III-16 shows the resulting projections for the restaurant train market. The projection methodology is described in Appendix V.

Revenue and Cost Projections for Monon Line Excursions. This analysis examines revenues and costs of proposed excursion lines. First, cost and revenue data for a sample of existing excursion lines are reviewed. The sampled lines are approximately of the scale envisioned for the Monon Line Excursion.

The remainder of the analyses are organized by excursion program. The first program analyzed is the proposed excursion involving WRP and a restaurant train originating at the Union Station. The marginal impact on costs and revenues of additional routes are then evaluated. The analysis does not consider potential scheduling problems, but none of the excursions are so frequent as to be likely to pose difficulty for the others or for freight movement as discussed in Chapter II.

Table III-17 presents a summary of cost and revenue data for four existing excursion lines. Each line has annual ridership in excess of 95,000, suggesting a threshold of about that amount for a viable excursion program.

Table III-15

Income Distributions for the Indianapolis SMSA, 1980

Income Group ($)	Marion Number of Households	%	Metro Counties Number of Households	%	Total Number of Households	%
0-5000	33,325	11.7	10,587	7.9	43,912	10.5
5000-7499	20,210	7.1	7,452	5.6	27,662	6.6
7500-9999	21,857	7.7	7,651	5.7	29,508	7.0
10000-14999	45,084	15.8	16,898	12.7	61,982	14.8
15000-19999	43,190	15.1	18,538	14.0	61,828	14.8
20000-24999	37,009	13.0	19,688	14.7	56,697	13.5
25000-34999	47,654	16.7	29,520	22.1	77,174	18.4
35000-49999	25,724	9.0	15,819	11.9	41,543	9.9
50000+	11,041	3.9	7,227	5.4	18,268	4.4
Total	285,094	100.0	133,480	100.0	418,574	99.9
Median	17,400		22,642*			
Mean	20,446		23,657			

* (average over 7 counties)

Source: U.S. Bureau of Census, General Social and Economic Characteristics , Indiana (1980), Table 180.

Table III-16

Projected Market Populations for the Restaurant Train

1988-2010

	Market:		
Year	Marion	Metro Cos.	Visitors
1988	375,340	224,340	1,578,520
1989	374,870	227,220	1,608,050
1990	374,400	230,100	1,640,210
1991	373,830	232,630	1,640,210
1992	373,260	235,160	1,640,210
1993	372,690	237,690	1,640,210
1994	372,120	240,220	1,640,210
1995	371,550	242,750	1,640,210
1996	370,940	244,920	1,640,210
1997	370,330	247,090	1,640,210
1998	369,720	249,260	1,640,210
1999	369,110	251,430	1,640,210
2000	368,500	253,600	1,640,210
2001	368,270	255,320	1,640,210
2002	358,040	257,040	1,640,210
2003	367,810	258,750	1,640,210
2004	367,580	260,480	1,640,210
2005	367,350	262,200	1,640,210
2006	367,470	263,190	1,640,210
2007	367,590	264,180	1,640,210
2008	367,710	265,170	1,640,210
2009	367,830	266,160	1,640,210
2010	367,950	267,150	1,640,210

Table III-17

Summary of Operating Expenses for Existing Excursion Lines

Line Cost Item	Steamtown Scranton PA (b)	Valley Railroad, Essex CT.	Strasbourg RR, PA	Conway Scenic RR, NH
Marketing	150,000	100,000	130,000	30,000
Insurance	75,000	50,000	75,000	25,000
Track Maintenance	0	46,000	NA	50,000(d)
Car Maintenance	5,000/car	10,000(d)	100,000(d)	25,000(d)
Locomotive Maintenance	NA	8,000(d)	70,000(d)	50,000(d)
Administrative Labor	NA	60,000(e)	200,000(g)	35,000(i)
Train Labor	NA(c)	40,000(e)	77,000(h)	100,000(j)
Fuel	NA	32,000	40,000	25,000
Various	NA	54,000	308,000	10,000
Total	700,000	400,000	1,000,000	350,000
Ridership	140,000	120,000	300,000	95,000
Cost/Rider	5.00	3.33	3.33	3.70

Notes:

a) Each of the lines surveyed uses steam locomotives. Diesel locomotives cost significantly less to run.
b) The figures for this RR are estimates for 1985.
c) Standard crew includes: conductor, engineer, fireman, two trainmen, concessionaire
d) Includes labor
e) Includes: Office manager, reservationist, general manager
f) Includes: Engineer, conductor, fireman, trainman (occasional)
g) Includes: President, VP (administration), VP (operational)
h) Includes: Engineer, fireman, conductor, 2 trainmen
i) Includes: President
j) Includes: Engineer, conductor, 1-2 trainmen, office and contracted labor

Table III-18 presents selected operating characteristics of the lines surveyed. Each line covers a route somewhat less than that available for Monon Line excursions so that track maintenance costs for the Monon might well be higher than the total costs indicated in Table III-17. The line with operating characteristics closest to those envisioned for the Monon WRP excursion is Steamtown in Scranton, Pennsylvania. Its total cost and revenue structure are therefore used as a guide. It should be noted that the average fare on this line will be about $7.50 in 1986. A more detailed discussion and review of other excursion lines appears in Appendix III-E.

White River Park (WRP) and Restaurant Train Excursions. The WRP and restaurant train excursions are treated jointly because both excursions are proposed to originate at Union Station; maintenance expenses could be shared between the two ventures; and the marginal costs of a restaurant train would not be high.

For WRP, excursions are assumed to run from May through September, though additional trips could be scheduled for holidays and special events. The restaurant train operation is assumed to run 5 evenings a week for 48 weeks per year.

Excursion Costs and Revenues. Two types of costs must be covered by those using the line for excursions: (1) costs shared with freight service; and (2) costs that are not shared. As described in Chapter II, there are 4 types of shared costs: (1) labor; (2) track maintenance; (3) track rehabilitation; and (4) land acquisition. These costs are to be shared equally (on a 50-50 basis)

Table III-18

Operating Characteristics of Selected Excursion Lines

Line Cost Item	Steamtown Scranton PA	Valley Railroad, Essex Ct.	Strasbourg RR, PA	Conway Scenic RR, NH
Length of Ride				
Miles	26	10	9	11
Hours	1.25	0.92	0.75	0.92
Fare - Adults	6.00(a)	5.95(b)	4.00	4.50
Children	3.50	2.95	2.00	2.50(c)
Seniors	4.50			
Locomotives	2	2	5	6
Cars	NA	NA	NA	NA
Schedule:				
Season	May-Oct	Year-Round	March-Dec	June-Oct(d)
Number of Trips	410	510	NA	520
Ave. Riders/Trip	341	235	NA	183
Cost/Trip($)	1707	784	NA	673
Cost/Pass/Trip($)	5.00	3.34	NA	3.70
Comments:	Departs from DLW RR Station. Hilton located there. Link to collection of Locomotives	Links with River Cruise. Display of RR cars, etc. in yard.	Links with display, museum toy train museum.	

Notes: a) Group rates available
b) Group of 25 or more, reduced rates
c) Children under 4 free, group rates available
d) Very limited winter schedule

between the two uses. The excursions, however, will use trackage between Union Station and 22nd Street (about 3 miles) and will, as a consequence, be required to cover all of the maintenance costs for this additional segment. This additional maintenance cost could vary between $3,000 and $7,500 per year depending upon the maintenance cost assumption ($1,000 per mile or $2,500 per mile).

The costs that are not shared with freight usage include other capital costs such as acquisition of rolling stock, locomotives, and the initial refurbishment of cars, and operating costs. Estimates of these costs for both a minimum start-up and a maximum rolling stock plan (Table III-19) appear in Table III-20. Table III-20 presents estimated annual current costs, in 1985 dollars, associated with the WRP and restaurant excursion trains. These estimates are based on a cost analysis of other operating excursion lines (Appendix VII). Additional current costs arising under the maximum rolling stock plan appear under amortization and maintenance in Table III-20. All other costs are the same for both the minimum and maximum plans.

Two parameters must be considered to project revenues: capture rates and average fares. As discussed earlier, lack of appropriate data prevents the empirical estimation of capture rates for these types of excursions. Thus the demand projections are based on a range of reasonable assumptions concerning capture rates for each type of excursion.

Table III-19

Minimum and Maximum Rolling Stock Plans for WRP and Restaurant Train Excursions: Seating Capacities and Maximum Capture Rates

Plan:	Minimum	Maximum
WRP Excursion Train		
#cars	10	15
Maximum Capacity/trip	576	864
Program:		
(i) 2 trips/day, 150 days		
Maximum Possible Riders	172,800	259,200
Implied WRP Capture Rate (1988)	23%	35%
(ii) 3 trips/day, 150 days		
Maximum Possible Riders	259,200	388,800
Implied Market Capture Rate (1988)	35%	52%
Restaurant Excursion Train		
#Cars	6	10
Maximum Capacity/Trip	240	384
Program:		
1 Trip/Day, 240 days		
Maximum Possible Riders	57,600	92,160
Implied Market Capture Rate (1988)	2.6%	4.2%

Table III-20

Operating Cost Summary for WRP Excursions and the Restaurant Train ($000's)

Plan		Minimum	Maximum
1.	Employee	$ 117.6	$ 117.6
2.	Cars		
	a) Amortization	152.3	295.1
	b) Maintenance	80.0	155.0
3.	Locomotives		
	a) Amortization	42.8	42.8
	b) Maintenance	30.0	30.0
4.	Fuel	80.0	80.0
5.	Maintenance of Way	38.8	38.8
6.	General & Administrative		
	a) Employee	76.0	76.0
	b) Miscellaneous	100.0	100.0
7.	Insurance	170.0	170.0
8.	Marketing	100.0	100.0
9.	Total	$987.5	$1,205.3

Notes for Table 20:

1. 1 1/2 crews at $78,400 per crew
2. a) Min. plan - $960,000 amortized at 10% over 10 years
   Max. plan - $2,030,000 amortized at 10% over 10 years
   b) Min plan - 16 cars @ $5,000 per year
   Max. plan - 31 cars @ $5,000 per year
3. a) $270,000 amortized at 10% over 10 years
   b) 3 locomotives @ $10,000 per year
4. WRP: 2-3 trips/day, May to September
   Restaurant Train: 1 trip/day, 5 days a week, 48 weeks
5. 25 miles @ ($2,500/2) per mile +
   3 miles @ $2,500/mile
6. a) 1 president/PR @ $30,000
   1 office manager @ $20,000
   2 secretarial @ $13,000
   b) various expenses

The demand by visitors to WRP for excursion trips was projected under three assumptions concerning the capture rates: 0.10, 0.15, and 0.20. These projections are presented in Table III-21. The methodology is described in Appendix V.

For a capture rate of 0.15, demand exceeds 100,000 trips, the threshold observed for successful excursion ventures suggested by the survey of existing excursion operations. A demand in excess of 100,000 trips seems reasonable assuming appropriate marketing strategies and an efficient operation. Analysis of other existing operations suggests an average fare of between $6 and $8. In estimating revenues, $7.50 was used as the average fare. Revenues are projected using the methodology described in Appendix V.

Demand for the restaurant train was estimated in a similar way to that adopted for WRP, i.e., a reasonable range of capture rates is assumed (Appendix V for the methodology used in making demand projections). The projections are shown in Table III-22 along with the capture rates assumed. The assumed fare is $10 per person for a trip on the restaurant train. Costs and revenues for food service accrue to the caterers.

The Potential for Tourist Excursion Line Operations. The excursion line most similar to the one that we would anticipate developing in Indianapolis is called Steamtown, located in Scranton, Pennsylvania. A detailed review and description of a sample of existing excursion lines appears in Chapter IV. This line operates

Table III-21

Projected Demand for Excursions From WRP

Year	Capture Rate .10	.15	.20
1988	74,140	111,210	148,280
1989	74,460	111,690	148,930
1990	74,790	112,180	149,580
1991	74,960	112,440	149,930
1992	75,140	112,710	150,280
1993	75,310	112,970	150,620
1994	75,490	113,230	150,970
1995	75,660	113,500	151,330
1996	75,810	113,710	151,610
1997	75,950	113,920	151,890
1998	76,090	114,130	152,180
1999	76,230	114,350	152,460
2000	76,370	114,560	152,740
2001	76,510	114,770	153,020
2002	76,650	114,970	153,300
2003	76,790	115,180	153,570
2004	76,930	115,390	153,850
2005	77,060	115,600	154,130
2006	77,180	115,770	154,360
2007	77,300	115,950	154,600
2008	77,420	116,130	154,830
2009	77,540	116,300	155,070
2010	77,650	116,480	155,300

Table III-22

Projected Demand for Restaurant Train
Originating at Union Station

Year / Capture Rate	0.92	2.0	2.5
1988	12,760	30,210	36,030
1989	12,930	30,610	36,500
1990	13,100	31,010	36,990
1991	13,100	31,010	36,980
1992	13,110	31,010	36,980
1993	13,120	31,010	36,970
1994	13,120	31,010	36,970
1995	13,130	31,010	36,960
1996	13,140	31,000	36,960
1997	13,140	31,000	36,950
1998	13,150	30,990	36,940
1999	13,150	30,990	36,930
2000	13,150	30,980	36,930
2001	13,160	30,990	36,930
2002	13,170	30,990	36,930
2003	13,170	30,990	36,930
2004	13,180	31,000	36,930
2005	13,190	31,000	36,940
2006	13,190	31,010	36,940
2007	13,200	31,010	36,950
2008	13,200	31,030	36,960
2009	13,210	31,030	36,970
2010	13,220	31,040	36,980

as a joint attraction with an adjacent railroad museum. It has ridership of approximately 100,000 passengers per year and operates over about a 5 month period. Steamtown is similar to the excursions that may develop in Indianapolis insofar as the Indianapolis excursion will depend upon the nearby White River Park development as a load center. White River Park will house the City's new zoo and a variety of other attractions and is expected to have attendance of 800,000 to 1,000,000 per year. The Scranton based Steamtown experience has been for it to develop as a supplement and compliment to the existing load center -- the railroad museum.

The objective of the excursion cost and revenue analysis is to estimate potential profit under a variety of assumptions about operating costs, costs to rehabilitate the track, costs to purchase the right-of-way, rolling stock costs, and restaurant excursion capture rates and revenues. Depending upon the restaurant train's level of success, it can be a significant revenue contributor in a cost sharing scenario with the White River Park Excursion.

Unlike the freight analysis, unit revenues have been held constant for the analysis of the profitability of excursions. Revenues were varied in the cost analysis for freight usage because of uncertainty about their likely future levels. With excursions, however, a survey of existing operations showed that fares varied only from about $4.00 to $8.00. The excursion revenue rates used in the analysis were set at a modestly high level compared to other existing excursions: $7.50 for the White River Park Excursion and $10.00 (in addition to the cost of the meal) for the restaurant excursion. Fares were set toward the high end of the range because

the trackage available on the Monon (28 miles) is longer than that used by existing excursions.

Perhaps the largest area of uncertainty for the excursion analysis is the capture rate for the White River Park excursions, and therefore, the number of White River Park excursion passengers. As a consequence, the approach taken was to use the cost analysis presented above to calculate break-even traffic volumes under the same three scenarios considered in the freight analysis: (1) covering operating (plus rolling stock costs); (2) covering operating costs plus the cost to rehabilitate the track; and (3) covering operating costs, plus rehabilitation costs, and plus costs to purchase the land from Seaboard. As discussed above in the freight analysis, both the rehabilitation costs and the land purchase costs are assumed to be shared evenly by the freight and excursion operations. A detailed description of the break-even analysis methodology appears in Appendix III.

Table III-23 presents a sensitivity analysis of break-even traffic passenger volumes to different assumptions about maintenance costs, rolling stock costs, capture rates for the restaurant train, and rehabilitation costs. Under the conservative scenario (which includes assumptions that the track will be maintained to the maximum, the maximum rolling stock plan will be implemented, the track will be totally rehabilitated, and the line will be purchased and that the restaurant train will have a relatively low market capture rate of 1 percent) it would take over 135,000 passengers on the White River Park excursion to cover operating costs, Ridership needed to cover operating cost plus rehabilitation and purchase

Table III-23

Break-Even Analysis for Excursion Passenger Levels

Alternative Future Scenarios
($000's)

Conservative Scenario:
Maintenance = $2,500 per mile
Maximum Rolling Stock Plan
1 Percent Capture Rate for Restaurant Train

WRP: #Riders	Operating Cost	W/Rehabilitation Cost	W/Purchase Cost
135299	0.0	-386.8	-477.2
188285	386.8	0.0	- 90.4
200669	477.2	90.4	0.0
(27.1%)*			

Optimistic Scenario:
Maintenance = $1,000 per mile
Minimum Rolling Stock Plan
2 Percent Capture Rate for Restaurant Train
Rehabilitation Costs Reduced by 25 Percent

WRP: #Riders	Operating Cost	W/Rehabilitation Cost	W/Purchase Cost
72460 (9.8%)	0.0	-290.1	-380.5
112200 (15.1%)	290.1	0.0	- 90.4
124584 (16.8%)	380.5	90.4	0.0

*Breakeven capture rates.

costs is about 200,000. Under this scenario considering the performance of other existing excursions it might be possible for a White River Park Excursion to break-even or make a small operating profit, but the prospects of covering rehabilitation costs and generating a profit seem remote. Moreover, much as was the case for the freight analysis, it seems extremely unlikely that a White River Park excursion even when coupled with a restaurant train excursion could cover its share of the purchase price of the corridor.

Under the more optimistic scenario with the less restrictive assumptions, the profitability of an excursion operation seems more likely. Under this set of assumptions (minimum track maintenance, minimum rolling stock acquisition, track rehabilitation costs reduced 25 percent, and a restaurant train capture rate of 2 percent) it would take about 72,000 riders to cover operating costs. It is probable, if these assumptions are satisfied, that a fairly large operating profit could be generated in light of the experience of other excursion lines. Moreover, if the assumptions of this scenario could be met, it is possible that not only operating costs but rehabilitation costs and right-of-way purchase costs might be covered by the operation of the excursion. If the White River Park excursion could generate ridership of about 125,000 persons per year, then the excursion operation could cover its share of the rehabilitation and purchase costs as well as its operating costs. This ridership figure drops to about 115,000 if the existing Fairtrain excursion is assumed to be included in the package. It is possible with an appropriate marketing plan and a carefully managed operation that a ridership of between 115,000 and 125,000 passengers

per year could be generated.[4]

The critical question then is whether the assumptions of the optimistic scenario can be satisfied. It will require a carefully developed and implemented marketing plan that is well integrated across at least three or four excursions (WRP, restaurant train, Fairtrain, and perhaps a Colts train) for the optimistic scenario to be realized. Furthermore, the WRP excursion as well as the others will have to consistently achieve this level of ridership over a 30-year period if the excursion portion of rehabilitation and right-of-way costs are to be covered. It should be noted that this must occur in a region where market growth may be relatively flat. In short, the optimistic assumptions will be difficult to satisfy over the time period of the project. Finally, it is important to note that the optimistic scenario assumes minimal track rehabilitation and track maintenance. It is possible, therefore, that the latter part of the project period under this scenario could witness serious trackage problems.

The break-even analysis was reconstructed in a benefit cost framework. The results of the benefit cost analysis appear in Appendix II. These results are consistent with the findings of the break-even analysis.

Additional scenarios that fall in between the conservative and optimistic scenarios are presented in Table III-24. It should be noted that by varying the revenue rate per passenger, additional scenarios could be created. It is unlikely that these scenarios would lead to a more optimistic prognosis as the fares used in the

analyses are already relatively high compared to existing excursion operations. Thus, only under the most optimistic conditions would it be possible for the excursion use of the line to cover its operating costs plus its share of the rehabilitation, and right-of-way purchase costs. It is unlikely that the optimistic conditions can be satisfied in the near term future.

Table III-24
Break-Even Analysis for WRP Excursions and the
Restaurant Train (Year = 1988)

Minimum Rolling Stock Plan
Maintenance = $2,500 per mile
Revenue: WRP Excustion - $7.30 per rider
Restaurant Train - $10.00 per rider
Restaurant Train Capture Rate = 2% of total market
Number of riders = 43524

Full Track Rehabilitation Costs = 75.5% of capacity

Implied Capture Rate(%)	WRP Number of Riders	Operating Cost	W/Rehabilitation Cost	W/Purchase Cost
10.2	75,652	0.0	-386.8	-477.2
17.4	128,638	386.8	0.0	- 90.4
19.0	141,017	477.2	90.4	0.0

Maximum Rolling Stock Plan
Maintenance = $2,500 per mile
Revenue: WRP Excursion - $7.30 per rider
Restaurant Train - $10.00 per rider
Restaurant Train Capture Rate = 2% of total market
Number of riders = 43524
= 47.2% of capacity

Full Track Rehabilitation costs reduced by 25 percent

Implied Capture Rate(%)	WRP Number of Riders	Operating Cost	W/Rehabilitation Cost	W/Purchase Cost
14.2	105,488	0.0	-386.8	-477.2
21.4	158,474	386.8	0.0	- 90.4
23.0	170,858	477.2	90.4	0.0

Maximum Rolling Stock Plan
Maintenance = $2,500 per mile
Revenue: WRP Excursion - $7.30 per rider
Restaurant Train - $10.00 per rider
Restaurant Train Capture Rate = 2% of total market
Number of riders = 43524
= 47.2% of capacity

Track Rehabilitation costs reduced by 25 percent

Implied Capture Rate(%)	WRP Number of Riders	Operating Cost	W/Rehabilitation Cost	W/Purchase Cost
13.8	102,296	0.0	-290.1	-380.5
19.2	142,036	290.1	0.0	- 90.4
20.8	154,419	-380.5	- 90.4	0.0

Maximum Rolling Stock Plan
Maintenance = $2,500 per mile
Revenue: WRP Excursion - $7.30 per rider
Restaurant Train - $10.00 per rider
Restaurant Train Capture Rate = 3.2% of total market
Number of riders = 69,581
= 75.5% of capacity

Full Track Rehabilitation costs

Implied Capture Rate(%)	WRP Number of Riders	Operating Cost	W/Rehabilitation Cost	W/Purchase Cost
9.4	69,793	0.0	-386.8	-477.2
16.6	122,780	386.8	0.0	- 90.4
18.2	135,163	477.2	90.4	0.0

Minimum Rolling Stock Plan
Maintenance = $2,500 per mile
Revenue: WRP Excursion - $7.30 per rider
Restaurant Train - $10.00 per rider
Restaurant Train Capture Rate = 1.0% of total market
Number of riders = 21,762
= 38.0% of capacity

Full Track Rehabilitation costs

Implied Capture Rate(%)	WRP Number of Riders	Operating Cost	W/Rehabilitation Cost	W/Purchase Cost
14.2	105,463	0.0	-386.8	-477.2
21.4	158,449	386.8	0.0	- 90.4
23.0	170,833	477.2	90.4	0.0

CHAPTER IV
ASSESSMENT OF EXISTING EXCURSION TRAIN OPERATIONS

CHAPTER IV

ASSESSMENT OF EXISTING EXCURSION TRAIN OPERATIONS

INTRODUCTION

Part of the focus of the Monon Impact Study was to assess existing excursion train operations. The Study Group initiated a survey of existing excursion train operations to assess whether or not a similar type operation could be developed for the Monon. The survey included two excursion train operations in Indiana, and a representative sampling of five excursion train operations located in the Midwest and Northeast. An effort was made to select excursion operations which had characteristics which paralleled those likely to be found in Indianapolis. Two of the five excursion operations were included in a list prepared by the Indiana Transportation Museum as potential models for their excursion program. The Indiana excursion operations include:

1. French Lick, West Baden & Southern R.R.
   (French Lick, Indiana)
2. Whitewater Valley Railroad
   (Connersville, Indiana)

The out of state excursion operations include:

1. Black River & Western Railroad
   (Ringoes, New Jersey)
2. Conway Scenic Railroad
   (North Conway, New Hampshire)
3. Steamtown
   (Scranton, Pennsylvania)
4. Strasburg Railroad
   (Strasburg, Pennsylvania)

5. Valley Railroad
(Essex, Connecticut)

EXCURSIONS

A number of general characteristics were identified from the survey. Annual ridership in Indiana for the French Lick Railroad and Whitewater Valley Railroad was approximately 30,000 persons. Outside of Indiana, the annual ridership ranged from approximately 50,000 persons for a professionally run mixed freight and passenger operation in west central New Jersey to 125,000 persons for a passenger-only operation in Connecticut, with one excursion, company Strasburg, having an annual ridership of 300,000 persons.

The seating capacity of all of the excursions ranged from 300 to 500 seats, with 400 seats being the most common number. The distance of the excursion ranged from 10-15 miles, or 20-25 miles. The length of time of the excursion ranged between 1 and 1½ hours. The adult ticket price ranged from $4.00-$6.00 (the price of a movie ticket). The coaches used for the excursions were for the most part open window coaches with varying degrees of refurbishment and historical authenticity. Both steam and diesel locomotives were used for motive power with steam locomotives being the most common.

The survey results indicated that short term excursions of 45 minutes or less had to be well marketed and packaged to be economically feasible. There appeared to be a correlation between the density of other tourist activity in the area and the success of individual properties. A greater return to investment can be derived from longer excursions which are pre-booked than selling

open tickets on limited short term excursions. This assures that enough seats are presold to cover the variable operating costs. Since variable costs are a small percentage of costs in comparison to fixed costs, most companies regard any operation which generates income to positively affect the bottom line.

ECONOMIC POTENTIAL OF EXCURSION OPERATIONS

The survey revealed that a ridership of around 100,000 to 150,000 persons was often necessary where passenger traffic was the sole source of revenue to support an adequate administrative staff to run a professional excursion operation. The most successful excursion operations had a relatively long season, and ran a number of short trips per day which reduced customer waiting time between trips. Ticket prices tended to be about the same cost as a movie ticket, and like them are trending upward from the $4.00-$6.00 range to the $6.00-$8.00 range. The primary factor to attracting ridership for an excursion operation was to tie the excursion operation to other tourist attractions. Steam locomotives were the most common motive power but diesel locomotives are more economical to operate and less subject to breakdown.

Based on these factors, there appears to be the potential for a successful excursion operation in Indianapolis. The Union Station, Hoosier Dome-Convention Center, and White River Park complex have the potential of attracting the substantial number of visitors and tourists which provides the bases for a successful excursion operation. Union Station provides a dramatic historic backdrop to such an excursion operation. It should be noted that the initial capital

costs of rail car refurbishment and track upgrading represent substantial costs that are not likely to be covered by revenues in the short term. One alternative to improve the cost to revenue balance would be to employ the substantial investment in locomotives and rolling stock presently owned by the Indiana Transportation Museum.

ASSESSMENT OF EXISTING EXCURSION TRAINS

FRENCH LICK, WEST BADEN & SOUTHERN RR. (Standard Gauge)
Post Office Box 150
French Lick, IN 47432

Location: Trains depart from the old Monon railroad passenger station in French Lick. The site is located on State Route 56 in the southwest part of the State, about an hour's drive from Louisville.

Ride: A 20-mile, 1-3/4 hour round trip between the resort town of French Lick and Cuzco, site of Patoka Lake. The train traverses wooded Indiana limestone country and passes through one of the State's longest railroad tunnels. Trolley make a 2-mile trip from French Lick to West Baden and return. (Freight is not run on the railroad.)

Total Years in Operation: 7 years.

Schedule: Train operates Saturdays and Sundays from April 6 through December 1, as well as May 27, July 4 and September 2, 1985. Train leaves at 10:00 a.m., 1:00 p.m., and 4:00 p.m., E.S.T.

Fare: Adults, $6.00; Children under 12, $3.00; under 3, free. (Group rates for 15 or more persons are Adults, $5.00; Children under 12, $2.00.)

Total Average Annual Ridership: 28-32,000 persons.

Locomotives: #97, 2-6-0, Baldwin (1925), ex-Mobile & Gulf R.R. #1, #4, Alco diesels, ex-Algers, Winslow & Western RR #5, Ploymouth gas-mechanical, ex-Cincinnati Milacron #646, dieselized ex-Cincinnati & Lake Erie freight motor 80-ton center-cab diesel, General Electric (1947).

Trolleys: #313, Porto, Portugal streetcar (1930). #68, Philadelphia & West Chester Traction Co. interurban car, Brill (1926).

Train: Erie and Rock Island coaches, Erie snack-bar car.

Maximum Seating Capacity: 400 seats.

Displays: The French Lick, West Baden & Southern RR is operated by the Indiana Railway Museum. The Group owns 41 pieces of railway equipment.

Facility Amenities: Refreshments, Gift Shop, Membership.

Comments: Marketing program includes brochures, newspaper ads and TV spots. Historic spa nearby.

WHITEWATER VALLEY R.R. (Standard Gauge)
Post Office Box 406
Connersville, IN 47331

Location: Trains leave from depot on State Route 121 in Connersville.

Ride: The 32-mile round trip on Indiana's longest and most scenic steam-powered railroad takes 5 hours, including a 2-hour layover at Metamora. The route runs along the old Whitewater Canal from Connersville to Metamora and return. At Metamora, a Caboose Train offers a half-hour, 4-mile round trip. (Freight is run on the line by the short line Hi-Rail Corporation. The excursion train leases from the short line railroad.)

Total Years in Operation: 12 years.

Schedule: Saturdays and Sundays, May 4 through November 3. Train departs Connersville at 12:00 p.m. Metamora Caboose Train makes several runs starting at 11:30 a.m. (E.S.T.). Train also operates May 27, July 4 and September 2. Christmas runs on November 29-30, December 1, 6-8, 13-15, 1985.

Fare: Connersville to Metamora, round trip: Adults, $7.50; Children, $3.50. One-way: Adults, $6.50; Children, $3.00.

Total Average Annual Ridership: 26-30,000.

Locomotives: #100, 2-6-2, Baldwin (1919), ex-Florida Saw Mill Co. 36, 0-6-0, Baldwin (1907), ex-East Broad Top R.R. #25, diesel-electric switcher, Lima-Hamilton (1951), ex-Cincinnati Union Terminal. 1931 Plymouth gas switcher.

Train: Coaches from Erie R.R., Rock Island, B&O, Chicago & North Western. B&O cabooses.

Maximum Seating Capacity: 1,000 seats. (Average seating capacity 300-400 seats.)

Displays: #3, 2-truck Heisler locomotive at Connersville. A museum at the Connersville depot contains railroad displays.

Facility Amenities: Refreshments, Gift Shop, Picnic lunches may be eaten aboard the train, Memberships.

Comments: Marketing program based on distribution of brochures. State run historic grist mill and canal nearby.

BLACK RIVER & WESTERN R.R. (Standard Gauge)
Post Office Box 200
Ringoes, NJ 08551

Location: Ringoes depot is located on County Route 579, 3/4 mile from the junction of Highways 202 and 31. At Flemington, the depot is in the center of town nearby Liberty Village.

Ride: The train trip takes 1 hour and runs from Ringoes to Flemington and returns. Running on a former branch of the Pennsylvania R.R., the traveler passes through New Jersey farm country. Passengers may board the train at either Ringoes or Flemington. (Freight and Excursion trains both run by the short line railroad.)

Total Years in Operation: 21 years.

Schedule: Saturdays, Sundays and Holidays, April 20 to December 1.

Leave Ringoes: 10:45, 12:15, 1:45, 3:15, 4:45

Leave Flemington: 11:30, 1:00, 2:30, 4:00, 5:30

Tuesdays through Fridays, July through Labor Day:

Leave Ringoes: 12:30, 1:30, 2:30, 3:30

Leave Flemington: 1:00, 2:00, 3:00, 4:00

Fare: Round trip: Adults, $5.00; Children (5-12), $3.00; Children (3-4), $1.00; under 3 free. (Group rates for 25 or more persons are Adults, $4.00; Children (5-12), $2.00.)

Total Annual Average Ridership: 40-50,000 persons.

Locomotives: #60, 2-8-0, Alco (1937), ex-Great Western Ry.

Train: Coaches and combine from the Jersey Central and Lackawanna R.R., and two open excursion cars.

Maximum Seating Capacity: 350-400 persons.

Displays: At Flemington, there are shops and outlet stores adjacent to the B.R. & W. depot.

Facility Amenities: Refreshments, Gift Shop, Picnic Area.

Comments: Marketing program consists of brochures and a few newspaper ads.

CONWAY SCENIC RAILROAD, INC. (Standard Gauge)
Post Office Box 947
North Conway, NH 03860

Location: The depot faces the village park in North Conway, a resort town on Routes 16 and 302 in New Hampshire's Mount Washington Valley.

Ride: An 11-mile, 55-minute round trip from North Conway to Conway over trackage first laid down in 1872. The train travels through farmlands in the Saco River Valley with views of forests and mountains. (The railroad just runs excursion trains.)

Total Years in Operation: 12 years.

Schedule: Daily operation, June 8 through October 20. Weekends, May 4 to June 2 plus Memorial Day. Trains depart at 11:00 a.m., 1:00, 2:30 and 4:00 p.m. "Sunset Special" departs at 7:00 p.m., Tuesdays, Wednesdays, Thursdays, and Saturdays during July and August. Annual Railfan's Day, Saturday, September 14, 1985. Winter trips, November 29, 30, and December 1, at 1:30 p.m.

Fare: Adults, $4.50; Children, $2.50; under 4 free. Group rates available. (Group rates for 25 or more persons $.50 off the regular adult and child prices.)

Total Average Annual Ridership: 95,000 persons.

Locomotives: #47, 0-6-0, Baldwin (1920), ex-Reader R.R., #501, 2-8-0, Alco (1910), ex-Main Central R.R., #15, 44-ton diesel,

General Electric (1945), ex-Main Central, #1055, SI4 diesel, Alco-G.E. (1950), ex-Portland Terminal R.R., #4266, F-7 diesel, E.M.D. (1949), ex-Boston 7 & Maine.

Train: Coaches and open observation cars.

Maximum Seating Capacity: 310-400 seats.

Displays: A museum of railroad memorabilia is located within the ornate 111 year-old passenger depot. An old-time roundhouse and operating turntable highlight the railroad yard which also features many pieces of railroad rolling stock on display. The facilities of Conway Scenic R.R. are in the National Register of Historic places.

Facility Amenities: Refreshments, Gift Shop, Picnic Area.

Comments: Marketing is done through an area tourist promotion association.

STEAMTOWN, USA (Standard Gauge)
Post Office Box 5250
Scranton, PA 18505

Location: Trains depart from the former Delaware, Lackawanna & Western R.R. station in Scranton. The extensively renovated building is now the Hilton at Lackawanna Station Hotel. The location is at 700 Lackawanna Avenue at Exit 53 of Interstate 81.

Ride: A 26-mile, 1 1/4 hour round trip from the station in downtown Scranton to Moscow, PA and return. This was formerly the main-line of the Lackawanna R.R. (The City of Scranton purchased the line. At this point, only excursion trains run on it.)

Total Years in Operation: 1st year in this location (previously in Vermont).

Locomotives: #2317, 4-6-2, Montreal (1923), ex-Canadian Pacific Ry., #1246, 4-6-2, Montreal (1946), ex-Canadian Pacific Ry.

Train: Open and closed window coaches, baggage car.

Maximum Seating Capacity: 520 seats.

Displays: The famous Steamtown collection of locomotives has been moved to its new location on a 40-acre site in Scranton. The former shops and yards on the DL & WRR serve as the setting for this extensive display. Engines on display include a Union Pacific "Big Boy", a Reading T-1, and many smaller locomotives. Most of the engines will be arranged around a large turntable as work on the site progresses. (The museum is under construction, will open 1986.)

Facility Amenities: Refreshments, Gift Shop, Picnic Area.

Comments: Marketing program includes brochures, newspaper and magazine ads, trains leave from the $13 million dollar renovated station which includes a Hilton Hotel. In the future, will have a related transportation museum.

STRASBURG RAILROAD (Standard Gauge)
Post Office Box 96
Strasburg, PA 17579

Location: Strasburg Railroad is located on Route 741 in the Pennsylvania Dutch country, a short distance from Lancaster, PA.

Ride: A 9-mile, 45-minute round trip from Strasburg to Paradise. The train travels through the Pennsylvania countryside, and turns around adjacent to the electrified main line of Amtrak and Conrail. (The Strasburg Railroad is a short line railroad that runs both freight and excursion trains on the line.)

Total Years in Operation: 26 years.

Schedule: Weekends, mid-March through mid-December. Daily, May through October. Number of trips per day varies with the season

from 4 to 14. During July and August, two trains operate providing half-hourly service.

Fare: Adults, $4.00; Children, $2.00. (Group rates for 25 or more persons are approximately $1.00 off the regular rates for adults and children.)

Total Average Annual Ridership: 300,000 persons.

Locomotives: #31, 0-6-0, Baldwin (1908), ex-Canadian National, #89, 2-6-0, Canadian (1910), ex-Canadian National, #90, 2-10-0, Baldwin (1924), ex-Great Western Ry., #1223, 4-4-0, Juniata (1906), #7002, 4-4-2, Juniata (1902), both leased from the Railroad Museum of Pennsylvania.

Train: Open platform wooden combine and coaches. "Hello Dolly" open observation cars.

Maximum Seating Capacity: There are two train runs, one with a seating capacity of 500 persons and the other with a seating capacity of 380 persons.

Displays: The Strasburg R.R. is one of the oldest and busiest of the steam tourists railroads in the country. A large collection of historic cars and locomotives are on display. The Railroad Museum of Pennsylvania, adjacent to Strasburg, displays an extensive collection of railroad equipment.

Facility Amenities: Refreshments, Gift Shop, Picnic Area, and Restaurant.

Comments: Marketing program includes brochures, newspaper and magazine ads. Marketing is done as a part of an area wide advertising program. There is a railroad museum next to the excursion line.

VALLEY RAILROAD COMPANY (Standard Gauge)
Railroad Avenue
Essex, CT 06426

Location: Trains depart from depot at Essex, just west of Exit 3 of Conn. Rt. 9. The site is 4 miles north of the Connecticut Turnpike, use Exit 69.

Ride: A 10-mile, 55-minute round trip over a former New Haven branch line. The ride passes through the New England countryside to Chester, CT. At Deep River a connection is made with river boats for a scenic excursion on the Connecticut River. (The State of Connecticut owns the track and the excursion train leases it. There is no separate freight operation.)

Total Years in Operation: 13 years.

Schedule: Spring - May 4 to June 12, Saturdays and Sundays and May 27, 4 trains from 11:45 a.m. to 4:00 p.m. Also Wednesdays at 2:00 p.m. Summer - June 15 to September 2, Saturdays, Sundays and Holidays, 6 trains from 10:30 a.m. to 5:15 p.m. Weekdays, 5 trains from 10:30 a.m. to 4:00 p.m. Fall - September 3 to October 27, daily except Mondays and Fridays, 4 trains from 11:45 a.m. to 4:00 p.m. Also runs Monday, October 14. Winter - (no boat service) - November 29, December 6, 13, 18-20, 2 trains at 6:00 and 7:30 p.m.; November 30, December 1, 7-8, 14-15, 21-22, 5 trains from 1:00 to 7:00 p.m. Spring, Summer and Fall, all but last train connect with Riverboat Cruise. Amtrak connection available at Old Saybrook.

Fare: Adults, $5.95; Children (3-11), $2.95. Additional charge for Riverboat. Groups of 25 or more, reduced rates. (Group rates available, but depend on the size and type of group.)

Total Average Annual Ridership: 120,000 persons.

Locomotives: #97, 2-8-0, Alco (1926), ex-Birmingham & Southeastern, #40, 2-8-2, Alco (1920), ex-Aberdeen & Rockfish R.R.

Train: Open platform steel combine and coaches. Pullman parlor car Wallingford.

Maximum Seating Capacity: 400 seats.

Displays: There are a great many railroad cars in the Essex yards including an authentic 1920's era freight train, a Cotton Belt passenger/caboose and a unique double-ended snowplow. Locomotive #148, 4-6-2 "Samuel Freeman" now under restoration. The historical exhibit car of the Connecticut Valley Railroad Museum open most weekends.

Facility Amenities: Refreshments, Gift Shop, Picnic Area, and Free Parking.

Comments: Marketing program includes brochures, newspaper and magazine ads and radio spots, riverboat connection, third largest tourist attraction in Connecticut.

INDIANAPOLIS AND STEAMTOWN COMPARISON

As a follow-up to the initial excursion survey, an on-site visit was made to the excursion train operation which came the closest in matching the conditions present in Indianapolis. This excursion train operation was Steamtown, located in Scranton, Pennsylvania.

On various development projects, Indianapolis has a history of observing both the problems and successes of other communities first, and then developing a project which improves upon the origi-

nal models. It is with this in mind, that a review of Scranton and Steamtown was conducted.

THE COMMUNITIES

A comparison of the communities of Scranton and Indianapolis presents a number of significant differences and many similarities. Some of the differences include the fact that Scranton is a hill town whose original industry was coal mining, while Indianapolis is a flat land city whose original industry was agriculture. Scranton's population is made up of a number of strong ethnic groups while Indianapolis' population is more homogeneous. Over the past 50 years Scranton experienced a steady population decline, losing over a third of its total population during the period, while Indianapolis has experienced a gradual increase in population. Scranton has a city population of around 90,000 persons, and a metropolitan area population of around 230,000 persons, less than one-sixth the size of the Indianapolis metropolitan area. Scranton remains primarily an industrial city, while Indianapolis has a more diversified economy.

The similarities between the communities revolve around the economic development programs that each community has developed in part to counter a threatened or declining manufacturing base. In the 1970's both communities suffered from the lack of a positive image. With the election in 1981 of a new dynamic Mayor, James B. McNulty, a new program of economic development was launched. This effort began with the revitalization of the city's downtown area. A highly qualified historic preservation director was hired from out

of state to manage the program, and Community Development Block Grant funds which had been dispersed into scattered neighborhood projects, were now concentrated in the city's downtown area in highly visible "impact projects". The Mayor observed the heavy traffic on the nearby interstate highway which connected Scranton to Philadelphia, New York City, Boston, and Montreal, and instituted a city directed tourism development program to diversity Scranton's economy and to encourage tourists on their way to someplace else, to stop and visit Scranton.

The initial tourism projects included the development of a publicly owned ski resort and the restoration of the Lackawanna Train Station. Urban Development Action Grant funds, Community Development Block Grant funds, and other local, state, and federal monies were used to fund these projects. The restoration of the train station was a joint public sector/private sector effort between the City of Scranton and Hilton hotel chain. The restoration of the train station led to a city and state effort to attract Steamtown, a steam train museum and excursion operation, from its home in Vermont to Scranton. With the success of this effort, the City is now planning on building an 11 million dollar convention and meeting center to be located next to the train station, and a 30 million dollar theme park which will include the Steamtown collection and will also be located adjacent to the station.

Indianapolis has followed a similar plan of development, but on an even grander scale. Indianapolis in the late 1970's was troubled by its image and a decline in manufacturing jobs. Indianapolis also has had a dynamic Mayor who in conjunction with other community

leaders, set a new course for the City which included a revitalization of the downtown area and the development of major projects to attract tourists and conventions. As in Scranton, one of these projects was the restoration of a train station along with the development of a hotel. While the train renovation in Scranton cost around 13 million dollars, the renovation of the Indianapolis Union Station will cost around 56 million dollars. Other projects in Indianapolis have included world class athletic facilities, the Hoosier Dome, and the planned White River Park and Indianapolis Zoo attractions.

THE MUSEUM

Of the excursion operations surveyed, Steamtown offered a model which comes closest to what might be developed in Indianapolis. Steamtown was brought to Scranton in support of a community tourist and visitor attraction program, and specifically to enhance a renovated train station. In its first year of operation in its new location, the excursion train carried over 125,000 passengers. Steamtown is run by a not-for-profit foundation but the general manager acknowledged that certain aspects of the operation may be run as for profit entities in the future.

Steamtown has a five year goal of increasing visitor levels to 400,000 to 500,000 persons annually. It is felt that these numbers are attainable if the excursion train can be linked to other nearby tourist destination points. Besides the train station, a 30 million family theme park, and an 11 million dollar meeting center are being developed in conjunction with the train excursion operation. (The conceptual plan for the family theme park in Scranton was developed

by Barry Howard, who has worked with the Indiana Transportation Museum on the use of exhibit space at Union Station.) At its maturity the excursion train itself will consist of a 576 passenger train made up of eight open window coaches (these coaches come from the same source and are identical to those owned by the Indiana Transportation Museum) and a steam engine as motive power. The train will make three or more trips a day during an extended spring through fall season. The trackage that the train runs on is owned by the City of Scranton and is 13 miles long. There is additional trackage nearby, some of which has been purchased by the county, that may be used at some future date for other excursion runs.

Motive Power. Because of the focus of their collection, the staff members of Steamtown had little choice but to use a steam locomotive as the motive power for their excursion train. Steam locomotives are expensive to maintain and operate. When one of the antique steam locomotives breaks down, replacement parts are hard to find and manufacturers of replacement parts are concerned over warranties. At the peak of the 1985 season, Steamtown's primary steam locomotive broke down necessitating the suspension of excursion operations for a number of days. It was agreed that though less dramatic, the use of diesel locomotives for motive power for reasons of energy efficiency, ease of repair, and reduced pollution, is the preferred choice for the intensive use given a locomotive in an excursion operation.

Capital Cost of Track and Train. In the case of Steamtown, the track was purchased and is maintained by the City of Scranton. Private donations from businesses and individuals provided addi-

tional funds for the refurbishment of the excursion train. It was felt that once attendance levels rise sufficiently, ticket revenues can cover the costs of operating the excursion train and possibly generate a return. The initial capital cost of the track and train may not be recovered by fare revenues alone. Various ways to cover initial capital costs include the use of government funds, private donations, private equity, and developing additional profit centers.

Dinner Train. Steamtown does not run a dinner train at this time, though various groups have had food catered on the train. It was felt that the dinner train should be a separate train from the standard excursion train. The reason for this is that it is very inefficient to modify passenger coaches for the serving of food. It was felt that a better strategy would be to create a separate dinner train which could have tables rather than benches and would include specially modified cars for the preparation and serving of food. The model for this type of train is the Star Clipper of Osage, Iowa. The Star Clipper operates seven days a week on a three hour, thirty mile round trip, and consists of a car used for food preparation and serving positioned between two dining cars that hold a total of 142 persons. Rather than a dinner train, Steamtown has worked out a number of package arrangements with the Hilton, located at the train station, which combines a meal or special form of entertainment such as a dance, with an excursion run.

Destination Points. It has already been mentioned that Scranton is developing a major destination point which includes the train station, Steamtown, a meeting center, and a major family theme park. The excursion train leaves the train station at Scranton and

goes for 13 miles to Moscow, Pennsylvania. The staff of Steamtown have just begun to make plans for some sort of destination activity in Moscow. This approach has historical precedent where a train or interurban company would include an amusement park at that end of the line which would otherwise be little traveled in order to encourage an increase in overall ridership. An excursion operation is enhanced by having other destination activities nearby, particularly those which can tie in with the excursion operation. This enhancement is maximized where there are destination activities at both ends of the excursion run.

Administrative Staff. The six person administrative staff of Steamtown includes a general manager, a director of development, a director of media relations and public information, a director of finance, an office manager, and a director of volunteer services. The qualifications of the administrative staff are heavily weighted towards finance and business management experience. The offices of Steamtown are located in the basement level of the train station. The operations are computerized.

Attendance and Revenues. To have an economically viable excursion train operation, enough revenues have to be generated to cover the cost of the administrative and other staff, the operation of the train, and the ongoing maintenance of train and track. At Steamtown it has taken an attendance of around 100,000 to 125,000 persons to cover the first year budget of around $750,000. It is felt that these attendance and budget figures are near the minimum required at Steamtown to cover the various costs of the excursion train opera-

tion. Steamtown has not as yet developed additional profit centers such as the sale of food and gift items.

Steamtown discovered in their first season that if their ticket prices were too modest, the excursion operation was strained by the large number of people in attendance. For 1986, Steamtown plans to raise its price so that the average ticket price (including those for children and senior citizens) is around $7.00. A non-discounted adult ticket will be around $9.50. The purpose for the higher prices is as much to control attendance levels as it is to raise revenues. The staff of Steamtown also discovered in their first year of operation that the fluctuations in day to day, and week to week attendance resulted in some problems of scheduling and operational efficiency. In 1986, more emphasis will be placed on booked excursions to level out attendance.

PUBLIC SECTOR/PRIVATE SECTOR PARTICIPATION

In 1983, Steamtown, a museum and excursión train, had come to realize that its remote location was not drawing enough people to support the operation and maintenance of its growing collection of train equipment. Reluctantly, the Board of Steamtown began the search for a new location. It was during this time that a syndicated columnist ran a story about Steamtown and suggested that Scranton would be a good place for Steamtown to relocate to. This was news to Scranton, but the idea stuck and began to grow under the urging of Scranton's Mayor, James B. McNulty.

In late 1983, the Chamber of Commerce became involved and began to activate its "United Way" network for a special fund raising cam-

paign for Steamtown. Over $1,300,000 was raised primarily from corporate sources. An additional $400,000 was raised from small and large private donations. This $1,700,000 was given to Steamtown to:

1. Retire Steamtown's existing $200,000 debt.
2. Provide funds for the move from Vermont to Scranton.
3. Provide funds for car refurbishment and initial operating costs.

In addition to these funds, the City of Scranton used $721,000 of Community Development funds to purchase 13 miles of abandoned Conrail trackage and an additional $300,000 of Slum and Blight funds to purchase a 40-acre downtown site which includes the old Lackawanna train yards. (The use of Community Development funds for the purchase of the abandoned railroad is currently being contested by the regional HUD office.) The State of Pennsylvania also contributed $120,000 of State recreation funds towards the project. To summarize, the City of Scranton provided government funds to secure trackage for the excursion and a site for the museum, while private donations were used for car refurbishment, moving costs, and initial operating expenses.

Next to the proposed site for the Steamtown Museum is the old Lackawanna Station. Parallel to the efforts to bring Steamtown to Scranton, Community Development funds, Historic Preservation funds, and Industrial Revenue Bonds were used to support the private sector refurbishment of the station which now houses a 150 room Hilton Hotel. The Lackawanna Station is the starting point for the train excursion.

Scranton is a city of 88,000 people. Steamtown is a major project for Scranton in tourist development which is seen as a spur for the enhancement of other cultural assets and which is seen as a part of a larger industrial development strategy. It seems clear that both the City and private sector of Scranton realize that additional monies may need to be raised at some point, until such time as Steamtown is fully established and operated profitably. Scranton appears to have made both the initial and longer term commitments necessary to insure that Steamtown is a success.

CHAPTER V
COMMUTER RAIL ASSESSMENT

CHAPTER V

COMMUTER RAIL ASSESSMENT OF THE MONON LINE

The purpose of this chapter is to assess the potential utilization of the Monon Line for commuter purposes. The Monon as it passes from Union Station through the north central part of Indianapolis passes through the highest growth part of the region. Growth in the northern part of this region (Carmel area) has been about 140 percent[1] in the last 10 years. As this trend continues, there is growing concern about how this population can gain efficient access to the central part of the downtown Indianapolis region in the future.

At one point, there were plans for an Interstate link to pass through the northeast sector of the Metropolitan region connecting this sector to the center of the city. This link was intended to provide ready access to the evolving communities in the north and northeast side of the region. However, plans for developing this link have not been implemented. Consequently, there is no major plan to provide interstate highway type express access to the downtown area for this high growth population region. The Monon right-of-way becomes, therefore, a significant possible opportunity for linking the downtown area with the outlying region. The right-of-way could be used for mass transit using bus, light rail, guided bus ways, or railbus. The right-of-way is of insufficient width to support the development of a high speed four-lane highway connection to downtown Indianapolis. Widening the right-of-way presents severe public acceptance problems along several sections.

The right-of-way will support at best two lanes if it converted to a road for bus rapid transit use.

HNTB is currently under contract to the City of Indianapolis to do an assessment of possible utilization of the Monon Line as well as other arteries in the northeast sector of the city that could be used to accommodate future traffic demand. The HNTB report has not yet been released and, therefore, was not available for the Monon study. In light of the scope of their effort which involves the evaluation of alternative ways of providing access to the interior of the city, commuter potential on the line has been treated somewhat more sparingly in this report. Clearly, when the HNTB results are available, probably in mid-1987, a detailed evaluation and analysis of the options (hopefully including light rail alternatives) will exist. This study had neither the time nor the resources at its disposal to duplicate the HNTB study nor would it have been sensible to do so given the prior commitment of resources to HNTB.

What is clear from the initial findings of this report is that the freight and tourism utilizations of the Monon Line will be insufficient in producing revenue to make the line profitable. Therefore, any commuter application that the HNTB identifies will call for the utilization of public sector funding. When the costs of the freight service and tourism service are combined with the cost of a commuter rail service, these costs make private sector utilization of the line extremely unlikely. The public sector will clearly have to bear the higher development costs of bringing the track up to commuter standards as well as the long term operation of

this service. Federal support for such programs has been diminishing. This would leave the costs of the commuter project solely on local government.

Two alternative modes of commuter transportation that could be more cost efficient than the light rail option are the development of the Monon Line into a guided busway, or the utilization of the existing rail for a limited railbus service. Each of these alternatives have limitations.

One of the objectives of the RQAW engineering analysis of the Monon Line was to examine the feasibility of utilizing the line for guided buses. This option is explained in more detail in RQAW report.[2] In sum, the attractiveness of the guided bus way system is that it would allow buses the flexibility needed to pick up passengers at either end of the express line as would be the case with conventional buses which would enhance the ridership potential in areas like the northern Indianapolis Metropolitan region where residential densities are low and highly dispersed. However, the further advantage of guided buses (over manually operated vehicles) of reduced headways would not seem applicable for the likely ridership volumes. The chief disadvantage of the guided bus way system is the high costs required to prepare the right-of-way for this use. This cost would seem prohibitive at about $7,800,000, particularly since it does not include the capital costs of acquiring buses and required guideway equipment that would be needed to operate on the line. In short, the guided bus way option, at least in the short term, is too expensive to be seriously considered. Light rail service like that provided on the Lake Shore

Line in northern Indiana is even more expensive for the probable passenger volumes expected in the near future.

One possible option in the intermediate future that might be utilized on the Monon would be railbus. Railbuses, manufactured in England by British Leyland, are available for about $400,000. They are currently operating on several lines in Great Britain and in a demonstration operation in New Hampshire.[3] It is conceivable, therefore, that the Monon Line could provide commuter rail service via the utilization of railbuses. The main problem is that the track would have to be rehabilitated at a cost of several million dollars if railbuses were to run at a speed much above 25 or 30 m.p.h. As noted in Chapters 2 and 3, the cost of rehabilitating the trackage to support 25 m.p.h. service would be at a minimum of $7,000,000. Moreover, since the right-of-way contains only a single line, a logistical problem exists in coordinating the main passenger runs with the largely empty backhauls. Finally, this option would require an intermodel transfer of patrons from off line buses or automobiles and, therefore, could not be as easily integrated into the existing traffic system. This, of course, is a major drawback to the rapid transit use of the right-of-way by any mode other than bus. (Figure V-1, Figure V-2)

The only conceivable option for utilizing the existing line for commuter services would be to implement a Railbus operation. A Railbus might be implemented at a relatively low cost compared to the extensive capital investment for the other passenger options. Even with the railbus option, it is unlikely that the load potential in this area would be sufficient to support any type of commuter

service in the short to intermediate future. However, in the longer term (e.g., 10-15 years from now), it is conceivable that commuter traffic may fruitfully utilize this line. It may, as a consequence, in the intermediate future, be of value to consider setting up at least for demonstration purposes a Railbus option on the Monon Line. Such an experimental project could provide information on whether sufficient loads could be generated in the Indianapolis area which in turn could provide useful information for the adoption of this type of service on a grander scale on off-line segments in Indianapolis as well as in other U.S. metropolitan areas.

In summary, any use of the line for commuter transit will involve significant capital costs to improve the right-of-way and to acquire rolling stock and associated equipment. Given the population densities in the north part of Indianapolis today and those expected 10-15 years from now, it is very unlikely that any commuter system that cannot operate both off as well as on the line will be too expensive. As a consequence, if this line is used for commuter sometime in the next 15-20 years, it will almost without reservation, be a system using buses or Railbuses that can be effectively integrated into the existing road based transportation system. This option will not, however, be inexpensive as extensive capital improvements will be required in either case. In the case of Railbus pavement, bridge reconstruction, and guideway (including switching equipment) will be required. If the right-of-way is to be used by conventional buses, pavement and bridge reconstruction will be required.

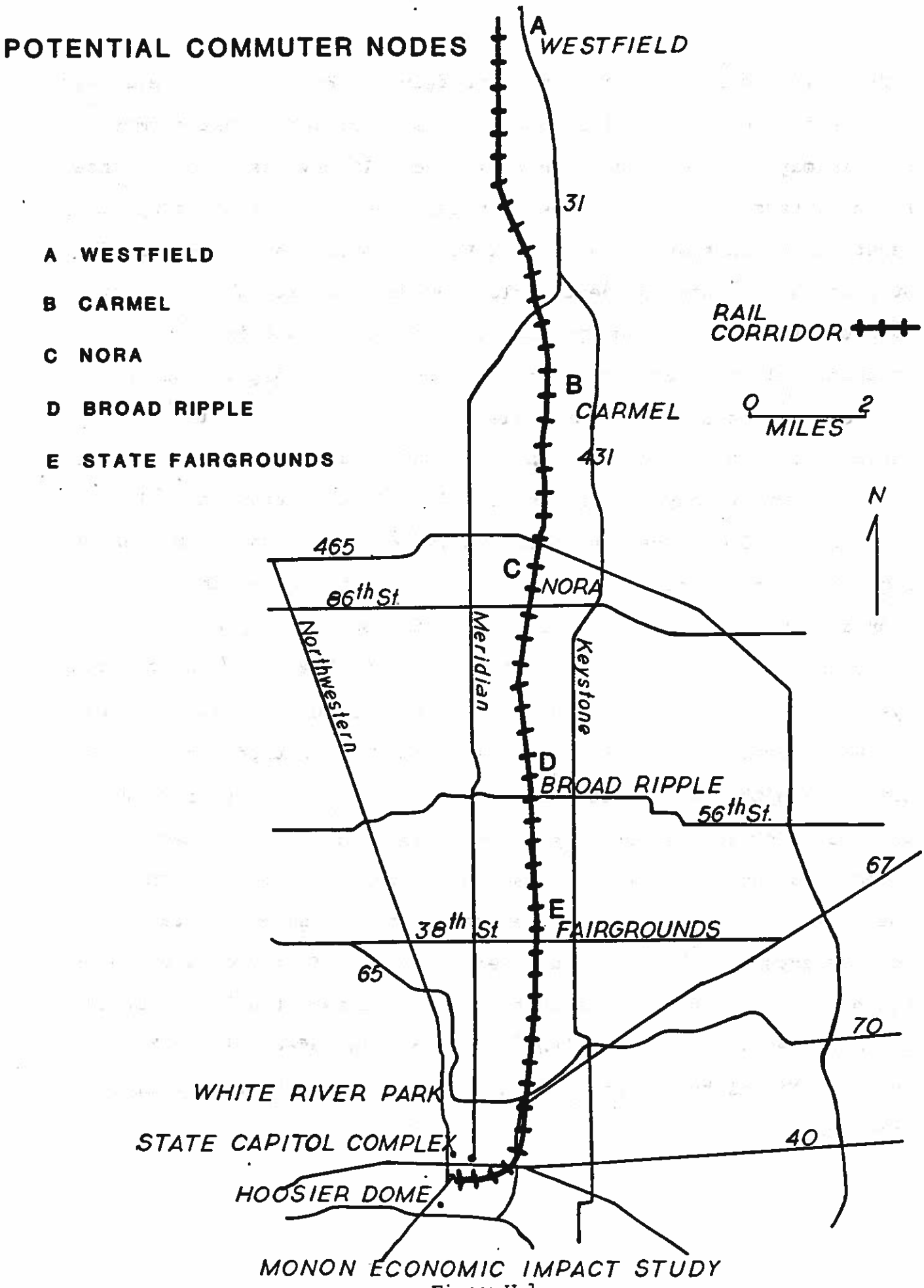

POTENTIAL COMMUTER NODES
A WESTFIELD
B CARMEL
C NORA
D BROAD RIPPLE
E STATE FAIRGROUNDS
A WESTFIELD
31
RAIL CORRIDOR
B CARMEL
0 2 MILES
431
N
465
C NORA
86th St.
Northwestern
Meridian
Keystone
D BROAD RIPPLE
56th St.
67
E FAIRGROUNDS
38th St
65
70
WHITE RIVER PARK
STATE CAPITOL COMPLEX
40
HOOSIER DOME
MONON ECONOMIC IMPACT STUDY

Figure V-1

POTENTIAL COMMUTER NODES

F UNION STATION

G REGIONAL CENTER

1.STATE CAPITOL COMPLEX

2.IUPUI

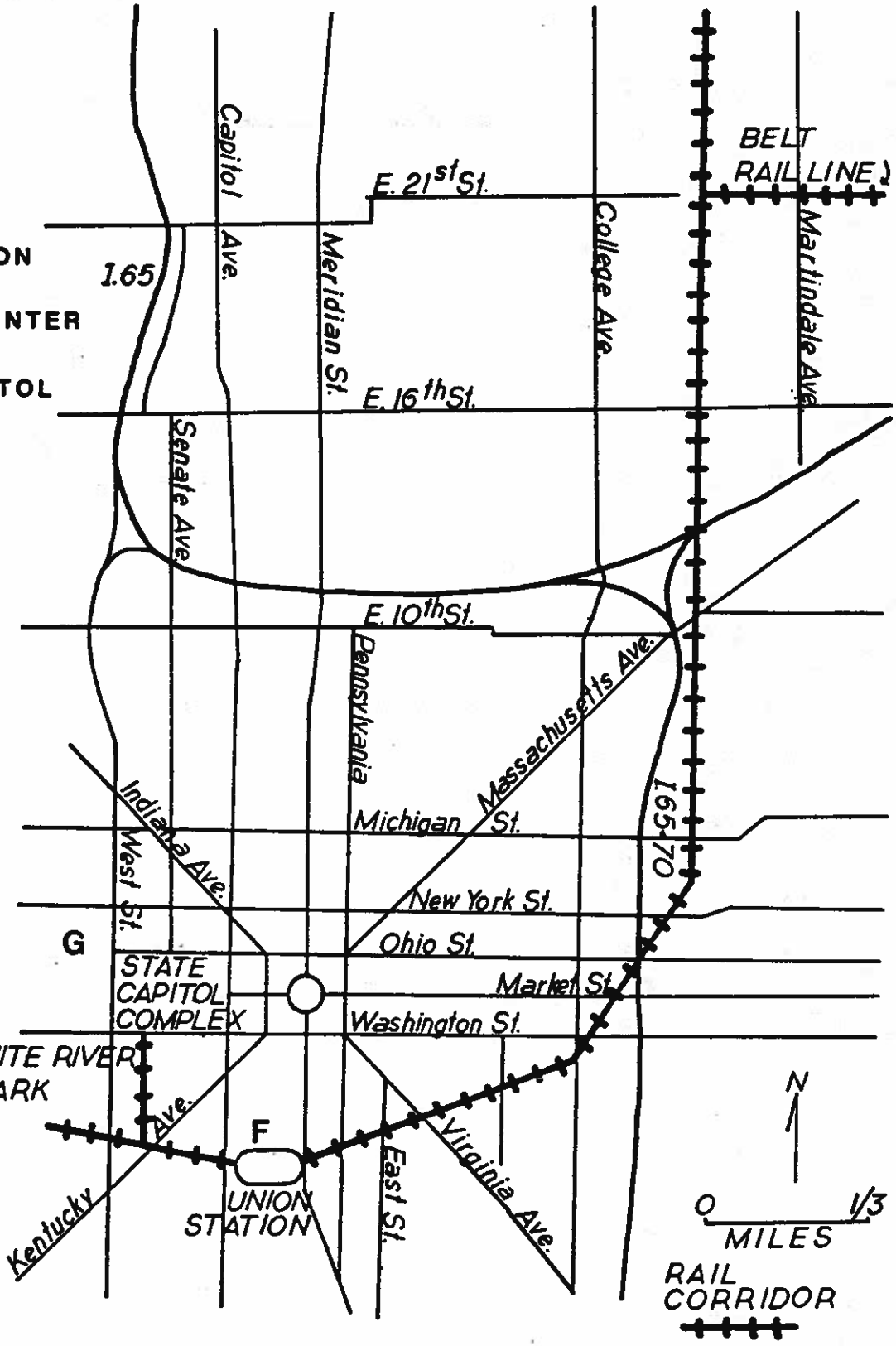


Figure V-2

CHAPTER VI
LAND VALUES

CHAPTER VI

LAND VALUES ALONG THE CORRIDOR

In its application for abandonment, Seaboard estimated the value of the 172 parcels of land for which it held fee simple title at $1,388,000. This value was based on an assessment by Richard E. Nicols Associates, Inc., a firm experienced in real estate appraisal. Of the 172 parcels, 87 lie along the section of the line between Sheridan and Indianapolis. The appraised value of the 121.51 acres in these parcels is $1,107,500 with an average price per acre of over $9,100. The method of appraisal was to select a value per acre from transactions involving "comparable" land in the vicinity of the parcel. A range of comparable land values was presented and a value was selected for each parcel.

The approach of basing an assessment on comparable values is, of course, reasonable and methodologically sound. However, as applied to these parcels of land in this particular case, it suffers from two major drawbacks. First, little or no account was taken of the size, shape, and physical location of the parcels with respect to adjacent land. Second, no account was taken of the condition of the parcels following removal of the track and ties. Specifically, no allowance was made for grading or removal of the ballast.

As might be expected, most of the parcels are small. The average parcel size is 1.4 acres with 38 of the 87 parcels less than one acre and 23 of the parcels less than one half acre. The distributions of parcel sizes are displayed in Figure VI-1 for

Indianapolis to the Marion County Line and in Figure VI-2 for the Marion County Line to Sheridan.

Not only are the parcels small, but of more concern they are of a particular shape. The assessment characterized them as "long and narrow" which, while accurate may understate the case. While the corridor varies in its width, in most places it is between 65 feet and 70 feet wide. Moreover, many of the parcels are only 33 feet in width (half the right-of-way). Where Seaboard owns both halves of the right-of-way, presumably the parcels could be paired to make a 66 foot wide lot. The lots are thus unusually shaped; for example a one acre lot would have the dimensions 33 feet by 1,320 feet (one quarter mile). The shape would clearly limit their possible uses. Indeed, in most cases the lots would seem of little use to anyone other than the adjacent land owners.

In light of these factors, the values assigned to the parcels are disturbingly high. For example, in 45 of the 87 parcels the value per acre assigned to the parcel was higher than the minimum price per acre cited by the appraiser for comparable land. Figure VI-3 shows the distribution of the ratio of the price per acre to the minimum comparable price per acre. Moreover, the comparable land was in parcels much larger and more conventionally shaped than the parcels in the corridor.

An obvious adjustment to the values assigned by the appraiser would be to limit the price per acre to no higher than the minimum comparable price. Such an adjustment would lower the total value of

FIGURE VI-1

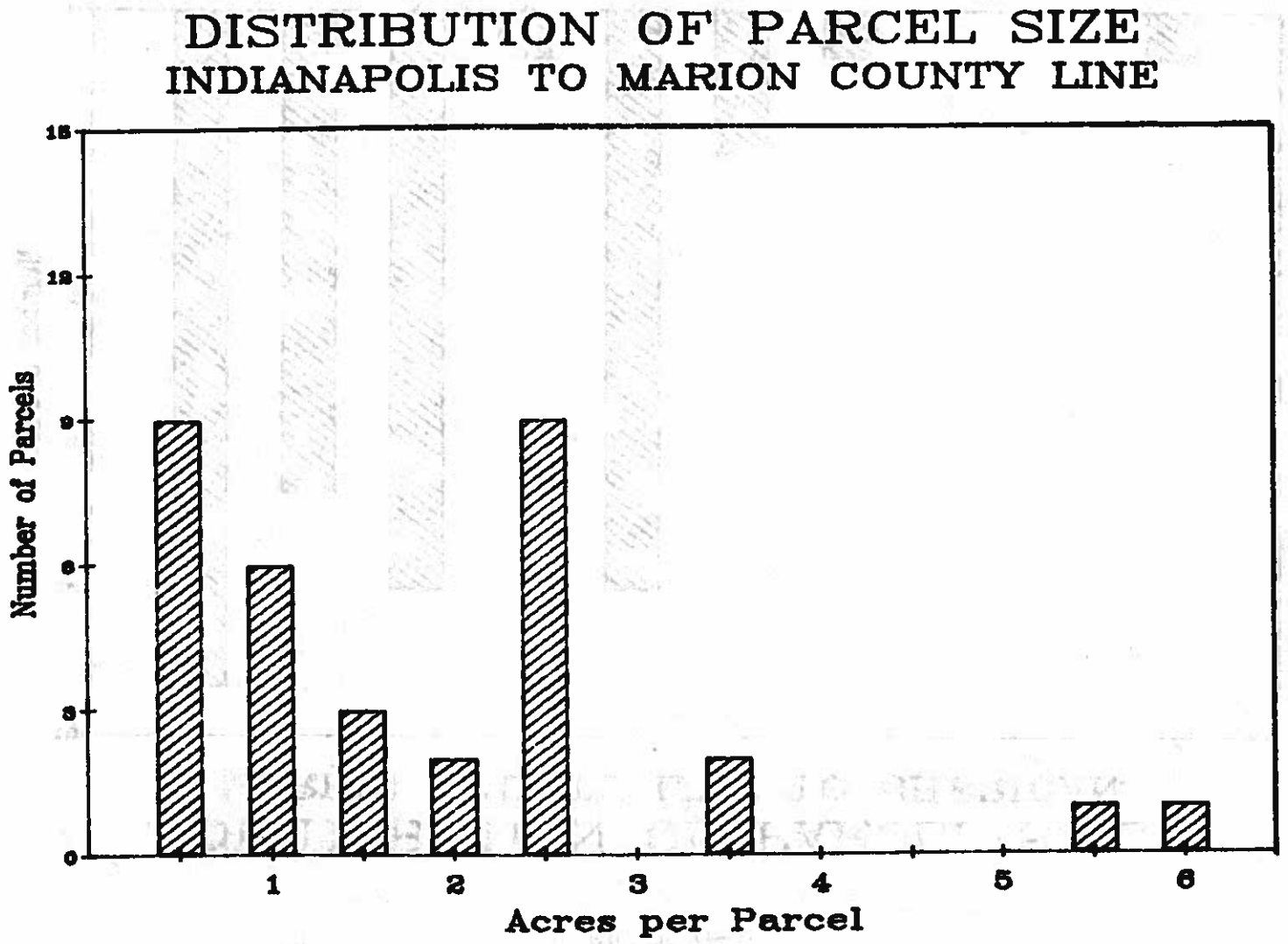

DISTRIBUTION OF PARCEL SIZE
INDIANAPOLIS TO MARION COUNTY LINE
Number of Parcels
15
12
9
6
3
0
1
2
3
4
5
6
Acres per Parcel

FIGURE VI-2

DISTRIBUTION OF PARCEL SIZE
MARION COUNTY LINE TO SHERIDAN

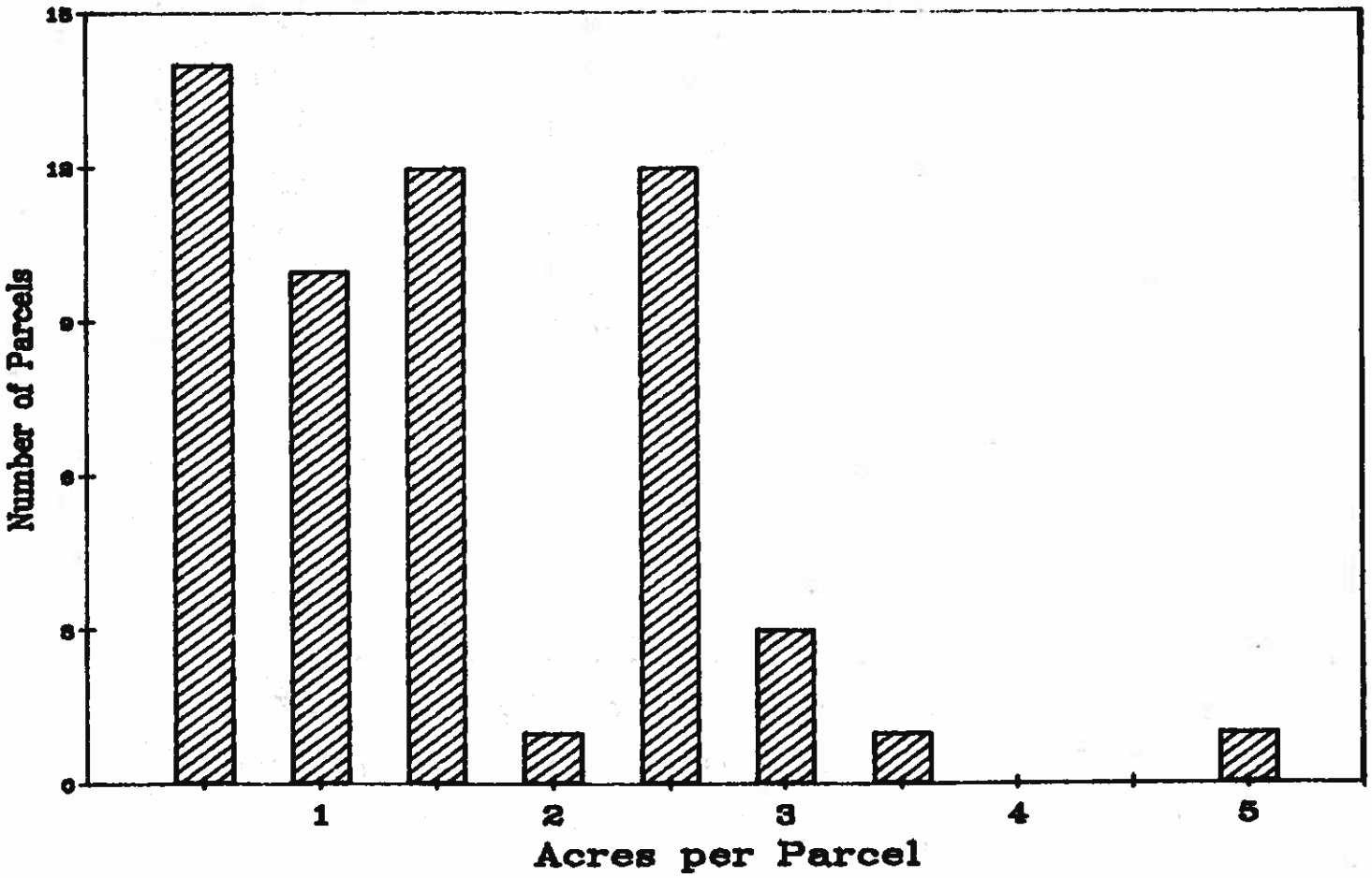
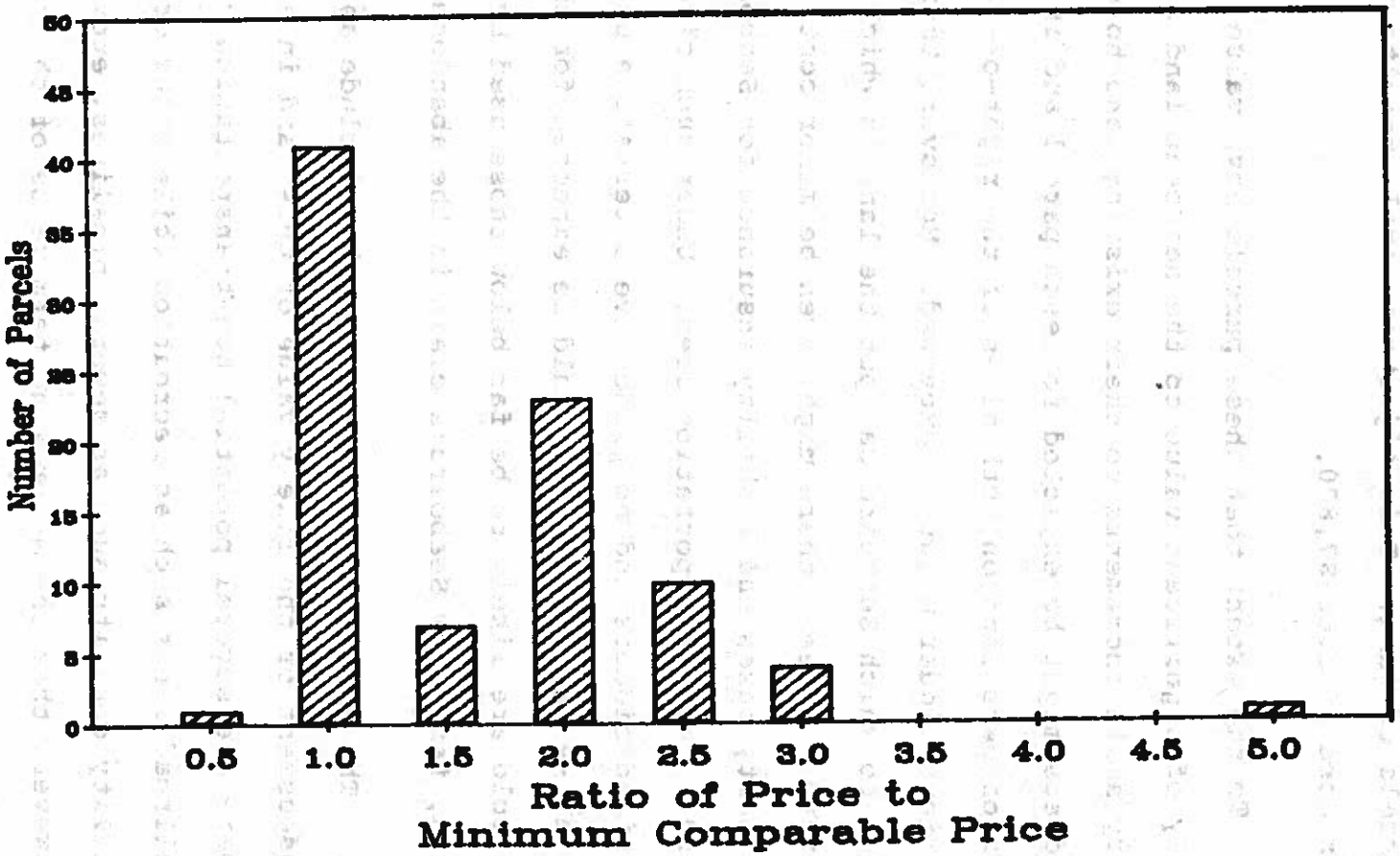


FIGURE VI-3

DISTRIBUTION OF THE RATIO OF PRICE TO MINIMUM COMPARABLE PRICE
INDIANAPOLIS TO SHERIDAN



Seaboard's land to $952,100. Even this adjustment takes no explicit account of the sizes, shapes, or locations of the parcels nor does it take account of the transactions costs of the sale of 87 separate parcels of land. This adjustment still results in an average price per acre of over $7,800.

To the extent that these parcels have value, they are likely only of significant value to the adjacent land owners and only as very small increments to their existing land holdings. At most two bidders might be expected for each parcel and in many cases the same person owns land on both sides of the right-of-way so that only one serious bidder might be expected. Moreover, there are no obvious uses to which Seaboard can put the land in which income could be earned. Indeed, there might even be minor continuing expenses for property taxes and liability insurance for Seaboard to hold this land in non-transportation uses. Under such circumstances -- limited bidders and no productive alternative uses by the existing owner -- the prices that could be expected for the land were it to be sold are likely to be far below those used by the appraiser and thus, far below Seaboard's claim in the abandonment proceedings.

The scope of this study does not include an independent assessment of the likely value of this land in alternative uses. There are several potential non-transportation uses for abandoned railroad lines such as recreation (bike paths or jogging trails) or utility conduits such as sewers, pipelines, etc. It seems clear, however, that the major long term value of the right-of-way is in its possible use for transportation.

Nevertheless, in the course of the study, no examples were found of the sale of abandoned railroad parcels at prices per acre of even one-tenth the average price resulting from even the minimum value adjustment reported above. With all of these factors considered, it seem highly unlikely that the eventual sale of these parcels would net Seaboard in excess of $100,000 and the figure could well be much lower.

CHAPTER VII
ALTERNATIVE USE

CHAPTER VII

LAND USE POSSIBILITIES FOR SECTIONS ALONG THE MONON

INTRODUCTION

This chapter summarizes an analysis of possible uses of the Monon right-of-way within the City of Indianapolis, Indiana. The analysis sections the right-of-way into 14 parts. A brief description of each of the 14 segments is provided including a specification of the width of the right-of-way and a discussion of possible uses of the right-of-way. A general map of the sectioned right-of-way is presented, as well as individual sketch maps of each section. The sketch maps of the individual sections include brief descriptions of possible usage of the right-of-way.

DISCUSSION

Within Marion County, the Monon Railroad extends from Hamilton County (96th Street), Indiana to Union Station in downtown Indianapolis. It runs through a variety of different neighborhoods which reflect the economic, physical and social composition of Indianapolis. (Figure VII-1)

As presented above, Section A runs from 96th Street to 91st Street. This neighborhood is characterized as residential with a mixture of different kinds of housing stock. An apartment complex and a single-family subdivision border the Monon. The easement is 66 feet wide at this point: wide enough to accommodate a road.

MONON RAILROAD (Marion Co.)

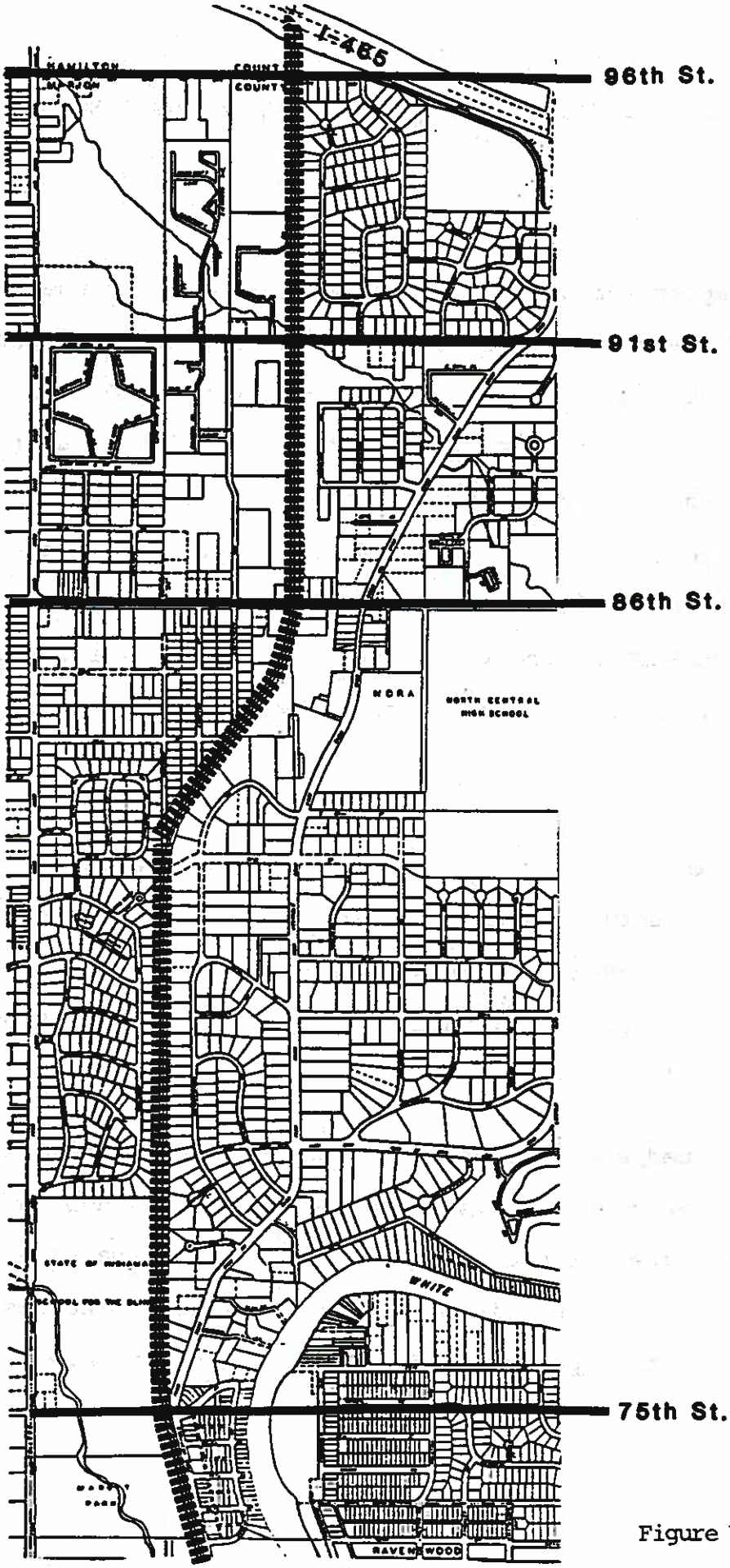


Figure VII-1

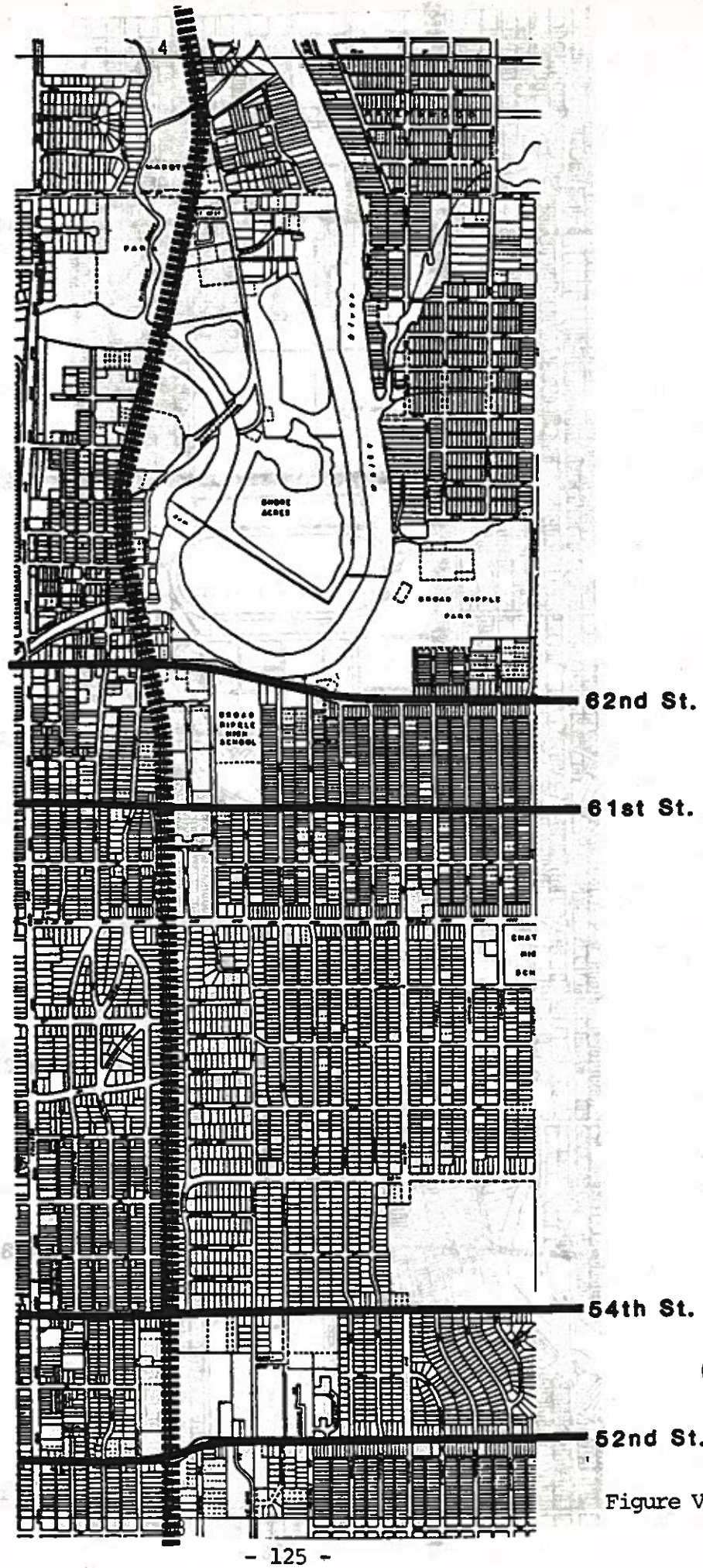


Figure VII-1 (Cont'd)

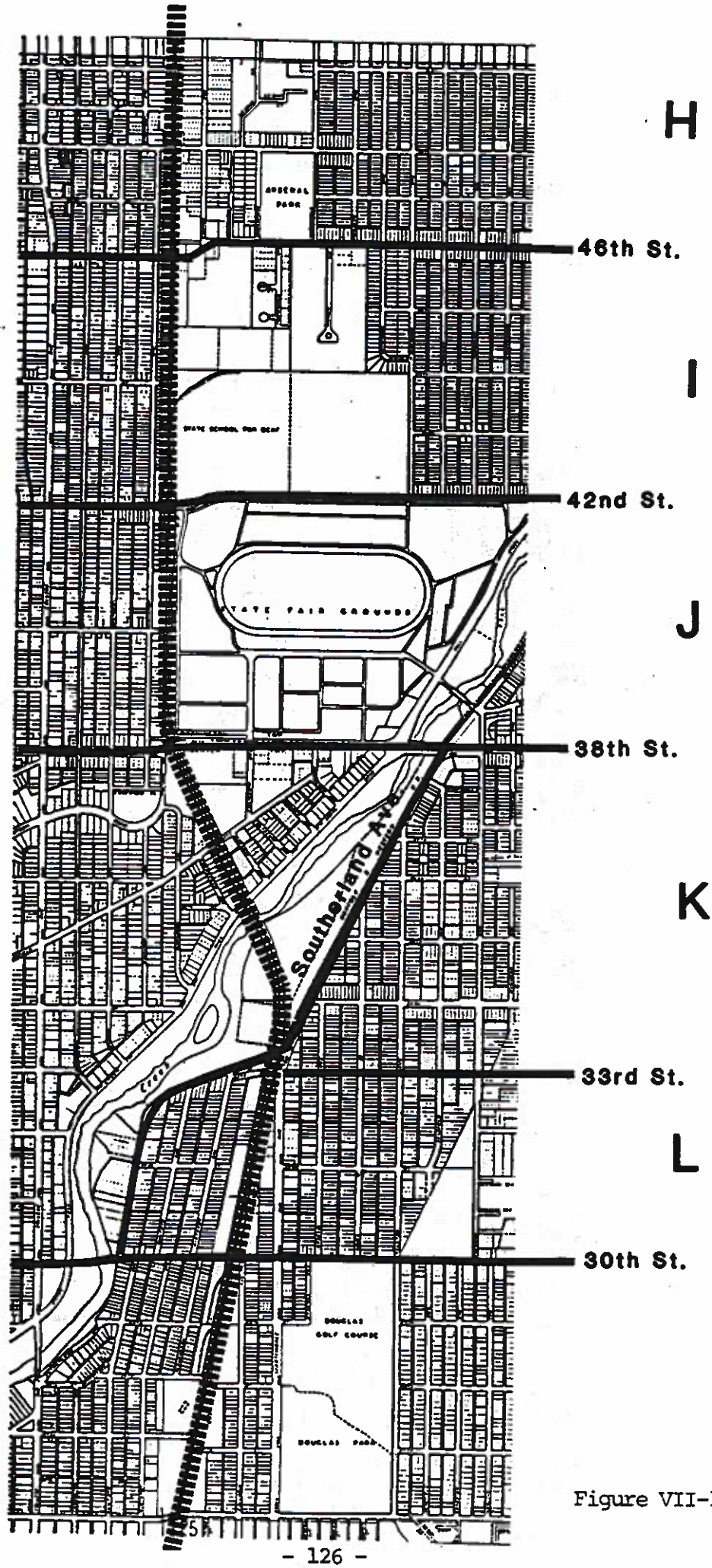


Figure VII-1 (Cont'd)

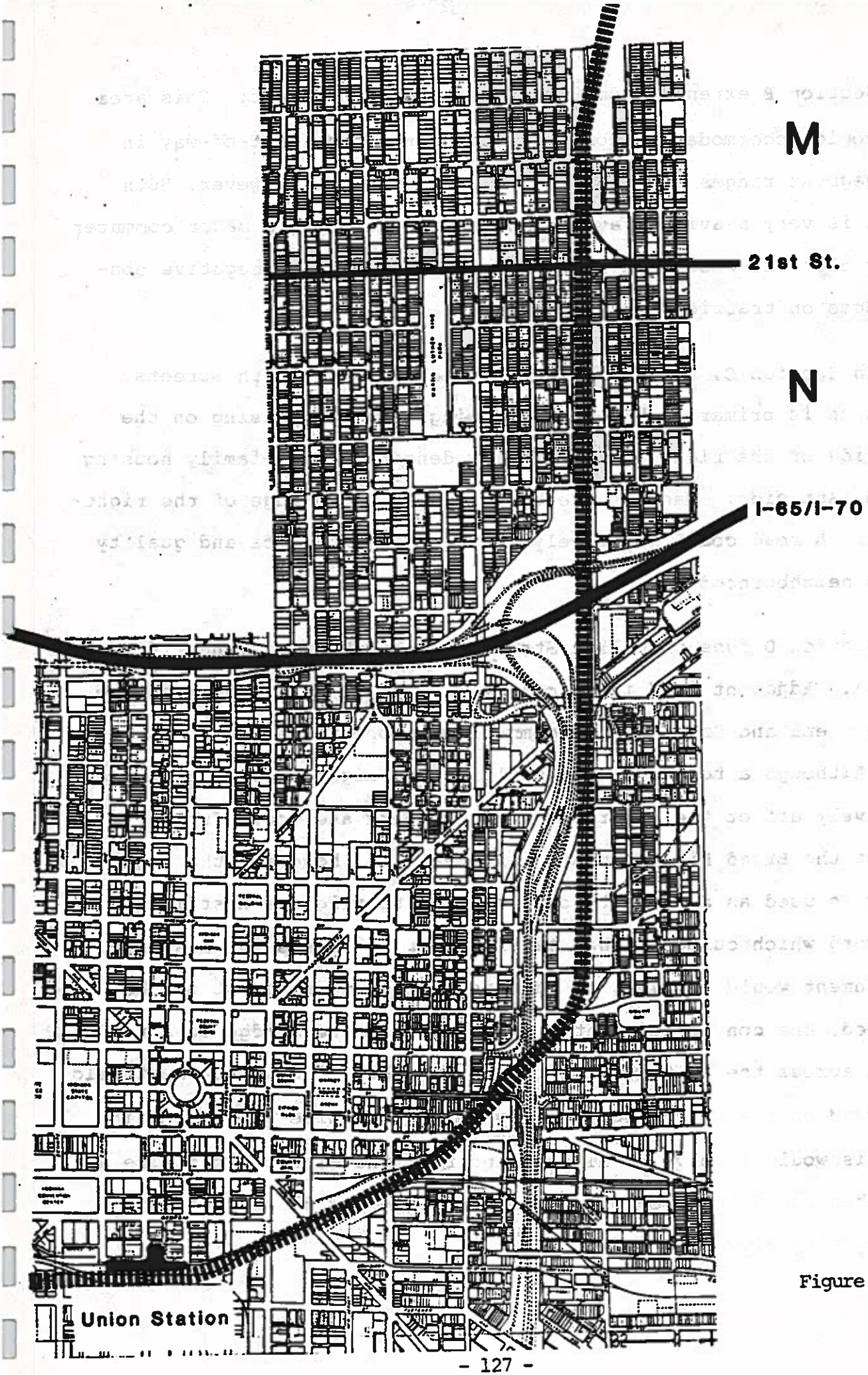


Figure VII-1 (Cont'd)

Section B extends from 91st Street to 86th Street. This area also could accommodate a commuter road since the right-of-way in this segment ranges from 66 feet to 99 feet wide. However, 86th Street is very heavily traveled and the location of a major commuter artery close to Westfield Boulevard could have major negative consequences on traffic flow and safety.

In Section C, the Monon runs between 86th and 75th Streets. This area is primarily high density single-family housing on the west side of the right-of-way and low density single-family housing on the east side. Many of the backyards abut the edge of the right-of-way. A road could negatively affect the aesthetics and quality of the neighborhood.

Section D runs from 75th Street to Broad Ripple Avenue (63rd Street). Adjacent land is primarily devoted to Marott Park on the northern end and Broad Ripple commercial property on the southern end. Although a road could be built on the right-of-way, it would negatively affect the environment of the park and would further congest the Broad Ripple commercial area. If, however, the right-of-way is used as a road it could be used to relocate Westfield Boulevard which currently has several near 90° bends in this area. Realignment would involve, in addition to the development of the road bed, the conversion of the existing railroad bridge to a road bridge across the White River. It is possible to relocate Westfield Boulevard on the Monon right-of-way below the White River crossing but this would involve obtaining land from the site of Ford Wire and even then would involve considerable engineering finesse to improve the existing flow of traffic.

Sections E and F are comprised of high density single-family housing extending from Broad Ripple through the Forest Hills addition (54th Street). Although the easement is 66 feet at this juncture, the concept of a road raises numerous safety issues.

This strip (96th to 54th Streets), though, does present other opportunities. Physical fitness is a growing concern among the age cohorts residing along this stretch. A bicycle/jogging path is, therefore, a possible alternative. Since this strip runs through residential and park areas, a linear but more general recreation strip may be viable.

The area from 38th Street to 54th Street represents the "old suburbia" of Indianapolis. This strip is bordered by older commercial and industrial outlets as well as by some old, rundown housing. Since the right-of-way is 34 feet in some places a major road would not be possible. The Indiana State Fairgrounds runs along the lower part of this section. The right-of-way and the surrounding neighborhood could, therefore, be viewed as an expansion possibility for the State Fairgrounds.

The right-of-way south of 38th Street is in an older, less affluent portion of the city. Some housing deterioration and older vacant buildings are common. The area is also perceived as an unsafe neighborhood by many. Yet it presents some of the most interesting possibilities along the line. This area would be ideal for a major inner-city industrial park, especially between Fall Creek and 22nd Street, since the right-of-way is wide. Also, the Norfolk & Western track (merging with the Monon at Sutherland) may

be abandoned. As a consequence, this area could be used to link the downtown with I-69. Since the Monon intersects 38th Street close to Fall Creek Parkway, it could be used to help create a future northeast artery.

If the right-of-way from south of Fall Creek to about 22nd Street is to be developed into a major industrial park, it will be necessary to provide efficient access to the interstate highway system. This can occur in several ways. Access could be developed by constructing a road on the right-of-way from 22nd Street south to I-70 just below 15th Street. The right-of-way appears to be of sufficient width to allow the construction of such an artery. Some uncertainty exists concerning the status of the "ownership" of the right-of-way south of 22nd Street, however, this issue will have to be clarified if a public road is to be built on this part of the right-of-way.

Access could also be provided via 25th Street east to Keystone Avenue and then south to Interstate 70. While this is a possible route, 25th Street passes through residential neighborhoods and, therefore, new industrial park traffic might create a negative impact.

Currently, the possible industrial park site is served by the Monon and the Norfolk & Western railroads which pass directly through the site. It is also served at the south end by the Conrail line. If both the Monon and the Norfolk Western lines are abandoned, the area could still be served by Conrail.

A final issue of concern is associated with the possibility of letting the right-of-way revert to adjacent owners. As illustrated above, this is a viable option along some parts of the line. It is important to note that there would be some cost to the recipients of the right-of-way land. The land would be an increment to adjacent lots and, therefore, would be subject to real property tax assessment. The right-of-way would probably be stripped of rails and ties before reverting. However, the ballast and foundation material would still be in place and would have to be removed and landscaped (including drainage) to satisfy city building codes and zoning regulations. In some sections, for example, Forest Hills, the rail bed is elevated as much as 10 feet above the adjacent lots and would require, as a consequence, considerable effort to bring it into conformity with city code requirements. In short, if reversion is an option that is exercised, it is essential that the recipients of the land understand that the costs of acquisition may be quite extensive.

USE POTENTIAL OF THE PARTITIONED RIGHT-OF-WAY

A. 96th to 91st Streets

(Right-of-Way is 66 ft.)

This area is bounded by a subdivision on the east side and by an apartment complex on the west side of the tracks. The property lines of both developments are well away from the tracks.

Possible Uses: 1) Linear recreation
2) Road for commuter traffic

B. 91st to 86th Streets

(Right-of-way ranges from 66 ft. to 99 ft. The 99 ft. right-of-way exists for 750 ft. north 86th Street with 33 ft. on the west side and 63 feet on the east side of the line.)

A power relay station and the Nora Little League baseball diamond exist on the west side of the tracks, south of 91st Street. The Nora Plaza Shopping Center is south of this to 86th Street. On the east side of the tracks, undeveloped wooded lots exist with active light industrial and commercial use to 86th Street.

Possible Uses:
1) Offer land to adjacent property owners
2) Expansion of power relay station
3) Expand Little League area
4) Further commercial/industrial development for Nora Plaza and commercial properties located there
5) Use right-of-way near 86th Street to improve traffic circulation in the Nora commercial area

C. 86th to 75th Streets

(Right-of-Way is 66 ft.)

Commercial sites exist along 86th Street. South of the Westfield YMCA, the land is primarily residential with backyards adjacent the rail line which is elevated and, therefore, yields little right-of-way. The Indiana School for the Blind and an undeveloped parcel are located along 75th Street.

Possible Uses:
1) Access road to commercial/industrial sites along 86th and Westfield
2) More commercial use
3) Linear recreation linking Marott Park to the north side
4) Let right-of-way revert to property owners
5) Parking for Marott Park

D. 75th to 63rd Street (Broad Ripple Avenue)

(From 75th Street to 71st Street, the right-of-way varies from 66 ft. to 80 ft. It is 66 ft. from 71st Street to Coil Street; 80 ft. from Coil Street to the Canal; and 53 ft. to 20 ft. from the Canal to 63rd Street -- Broad Ripple Avenue.)

The Monon runs through Marott Park, which encompasses most of this segment. The Ford Wire Products company is alongside the line on Westfield as the line runs into Broad Ripple. White River and Williams Creek run through area.

Possible Uses:
1) Add to Marott Park
2) In Broad Ripple, establish a transition Park from business district to Marott Park
3) Build small shops on site in Broad Ripple
4) Start of north bound linear recreation strip
5) Use right-of-way from just below 75th Street to 63rd Street to relocate and, therefore, straighten Westfield Boulevard

E. 63rd Street (Broad Ripple Avenue) to 61st Street

(Right-of-Way is 66 ft.)

Commercial businesses border the Monon at Broad Ripple Avenue with new commercial office space and the School 80 condominiums located immediately behind this complex. South of this to 61st Street, apartments and single-family housing are the only uses adjacent the line with the exception of the Broad Ripple Lawn Equipment Company.

Possible Uses:
1) Parking for new offices and condominiums
2) Linear recreation park
3) Revert to adjacent property owners

F. 61st to 54th Street

(Right-of-Way is 66 ft.)

The neighborhood bordering the line in this area is an upper middle income neighborhood (Forest Hills) where backyards extend almost to the tracks. There is a small playground along the east side of the line.

Possible Uses:
1) Footpath park/linear recreation
2) Let right-of-way revert to adjacent property owners

G. 54th to 52nd Streets

(Right-of-Way varies from 55.75 ft. to 47 ft.)

Areas along the line are mostly commercial and industrial.

Possible Uses:
1) Access road to commercial and industrial sites
2) Expand industrial development
3) Raze area of old/vacant industrial buildings
4) Linear recreation
5) Shift high density power lines in the area to the Monon right-of-way
6) Let right-of-way revert to adjacent property owners

H. 52nd to 46th Streets

(Right-of-Way tapers off from 41.5 ft. to 34 ft. at 46th Street.)

This area has a mix of old warehouses and factories on the east side of the track and modest low-income housing on the west side.

Possible Uses:
1) Use right-of-way to develop a street
2) Let right-of-way revert to adjacent property owners
3) Use as an access road to existing industry

I. 46th to 42nd Streets

(From 46th Street to 44th Street the right-of-way is 34 ft. From 44th Street to 42nd Street the right-of-way opens up from 34 ft. to 40 ft.)

Along this segment of track, the east side has fenced in businesses and the Indiana School for the Deaf. The west side of the line has primarily residential use but a half used building occupied by American Building Systems also exists here.

Possible Uses:
1) Let right-of-way revert to adjacent property owners
2) Build access road for existing businesses
3) Use right-of-way for State Fairground expansion

J. 42nd to 38th Street

(Between 42nd Street and 41st Street, the right-of-way tapers off from 58.3 ft. to 40 ft. and between 41st Street and 38th Street, the right-of-way varies in width from 40 ft. up to 154 ft. at 38th Street.)

The State Fairgrounds is located on the east side of the tracks with older housing on the west side.

Possible Uses:
1) Give to State Fairground for
   - access road
   - loading/unloading area
   - expansion of power relay station
2) Let revert to adjacent property owners

K. 38th to Sutherland Avenue

(The right-of-way from 38th Street to just north of Fairfield Avenue is 80 ft. From Fairfield to 34th Street it is 100 ft. then tapers off to 55 ft. at Sutherland Avenue, where the Norfolk & Western Railroad merges with the Monon.)

This area houses the IUPUI-38th Street Campus, industry and a bridge over Fall Creek and Fall Creek Parkway.

Possible Uses:
1) Highway or street from 38th Street to downtown
2) Industrial expansion
3) Access road to existing businesses

L. Sutherland Avenue to 30th Street

(The Monon right-of-way is 40 ft. Note, however, that with the Norfolk & Western right-of-way, which joins with the Monon right-of-way in this section, there is a combined 80 ft. right-of-way.)

Land use in this area is mixed with industry, vacant industry sites and marginal housing. (Acorn Paper Co., a wrecking/scrap company, and a lumber company are the primary industrial activities.)

Possible Uses:
1) Industrial expansion
2) Raze area including some of residential neighborhood to the west and promote development by inner-city industrial park*
3) Access road to businesses
4) Revert to adjacent owners
5) Highway or street to downtown from 38th Street

* If this use is adopted, access to the interstate highway system will be critical. This issue and alternative access strategies are outlined below in the discussion section of this chapter.

M. 30th to 21st Street

(Between 30th Street and 28th Street the right-of-way is 50 ft. With the adjacent Norfolk & Western right-of-way, it is 90 ft. wide. At 28th Street the Monon Yards open the right-of-way up with a 450 ft. right-of-way that subsequently tapers down to 59.5 ft. at 24th Street. It changes to 26 ft. at 24th Street and tapers down to 24 ft. at the north side of 23rd Street. The right-of-way is 50 ft. at the south side of 23rd Street then opens up westward to 250 ft. onto 22nd Street. The right-of-way is 28 ft. from 22nd Street to 21st Street. The plat maps indicate that the Monon ends at 22nd Street where it feeds into the Belt Railroad.)

Deteriorated area (Monon Yards) with a large amount of land vacant. Norfolk and Southern and Conrail merge with the Monon right-of-way here.

Possible Uses:
1) Large inner-city industrial park
2) Highway or street downtown from 30th Street to provide interstate access to industrial park or from 38th Street to improve link to State Route 37

N. 21st to I-70

(Right-of-way between 21st Street and 11th Street ranges from 40 ft. up to 109 ft. and down to 62 ft. at 11th Street. At 10th Street it is 25 ft.)

Lower end of Monon Yard.

Possible Uses:
1) Part of industrial park
2) Industrial access road to/from I-70
3) Major highway from 38th Street to downtown

Section A: 96th to 91st

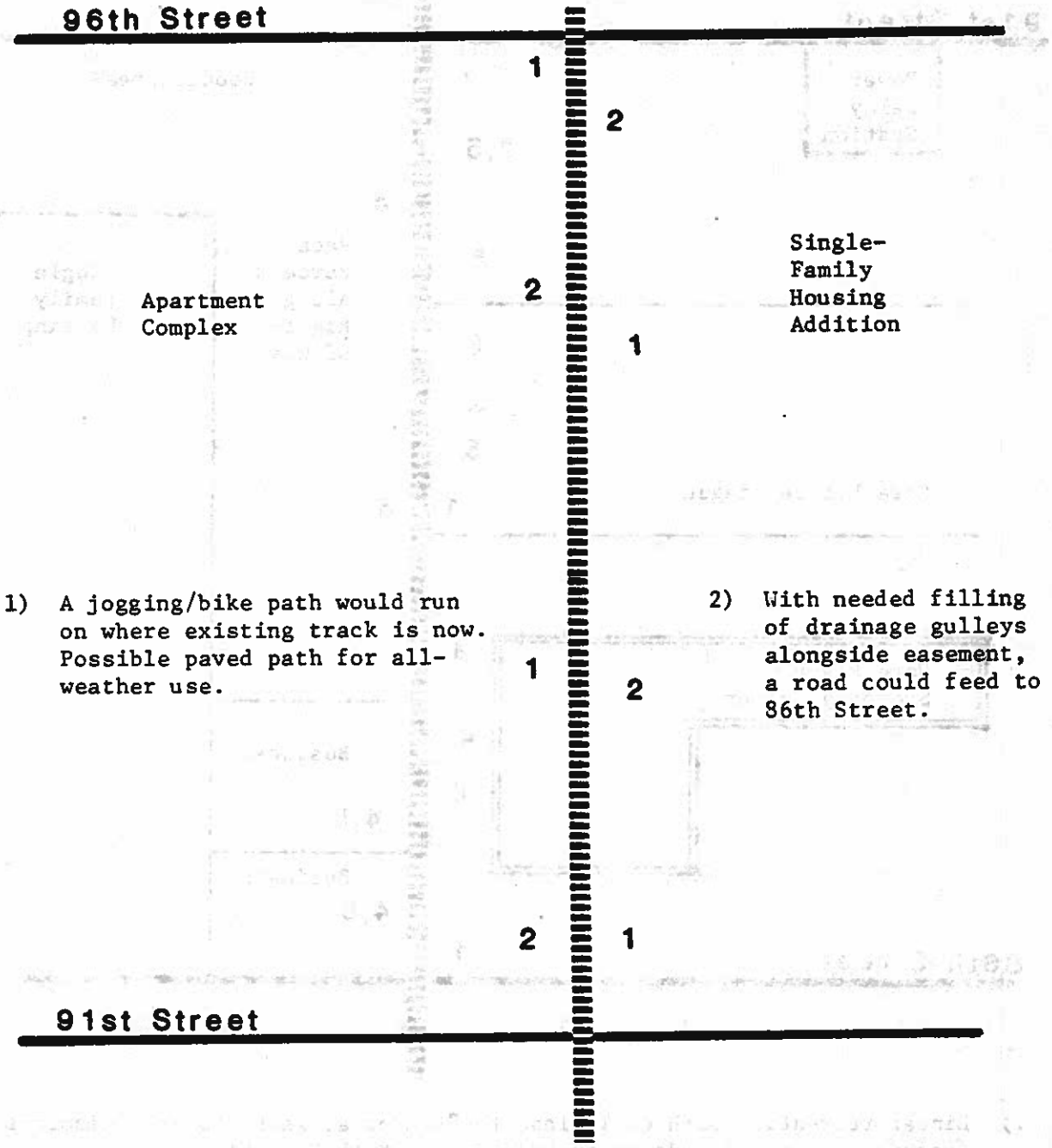
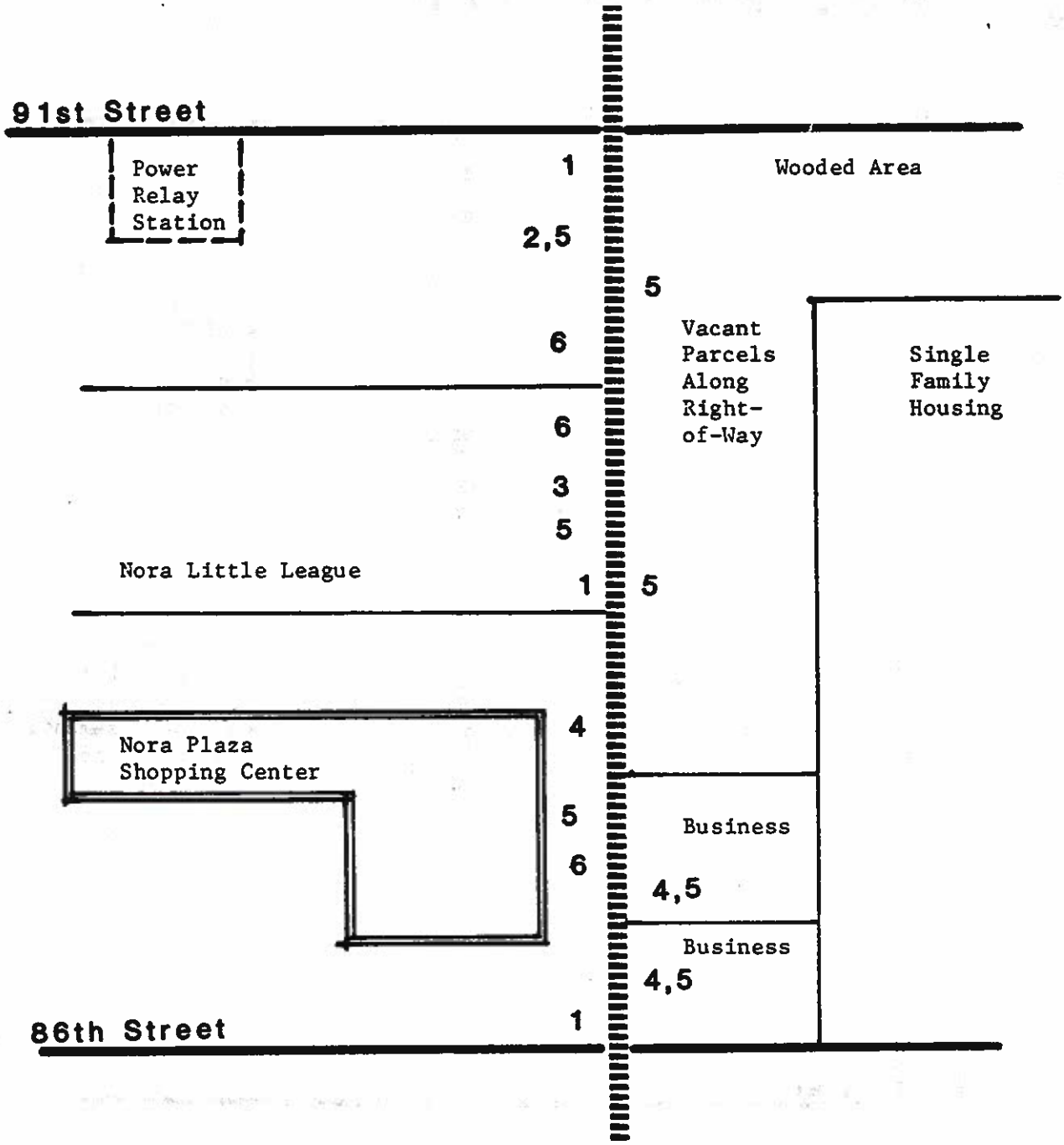


Figure VII-2

Section B: 91st to 86th



1) Linear recreation path could lead to 86th or at least to ball diamonds (possible overhead pedestrian bridge over 86th Street).

2) As northern county population grows, expanded energy demands require expanded electrical power demand. Thus, possible larger relay station needed.

3) Expand or upgrade Little League park (concession booth, stands, add playground equipment).

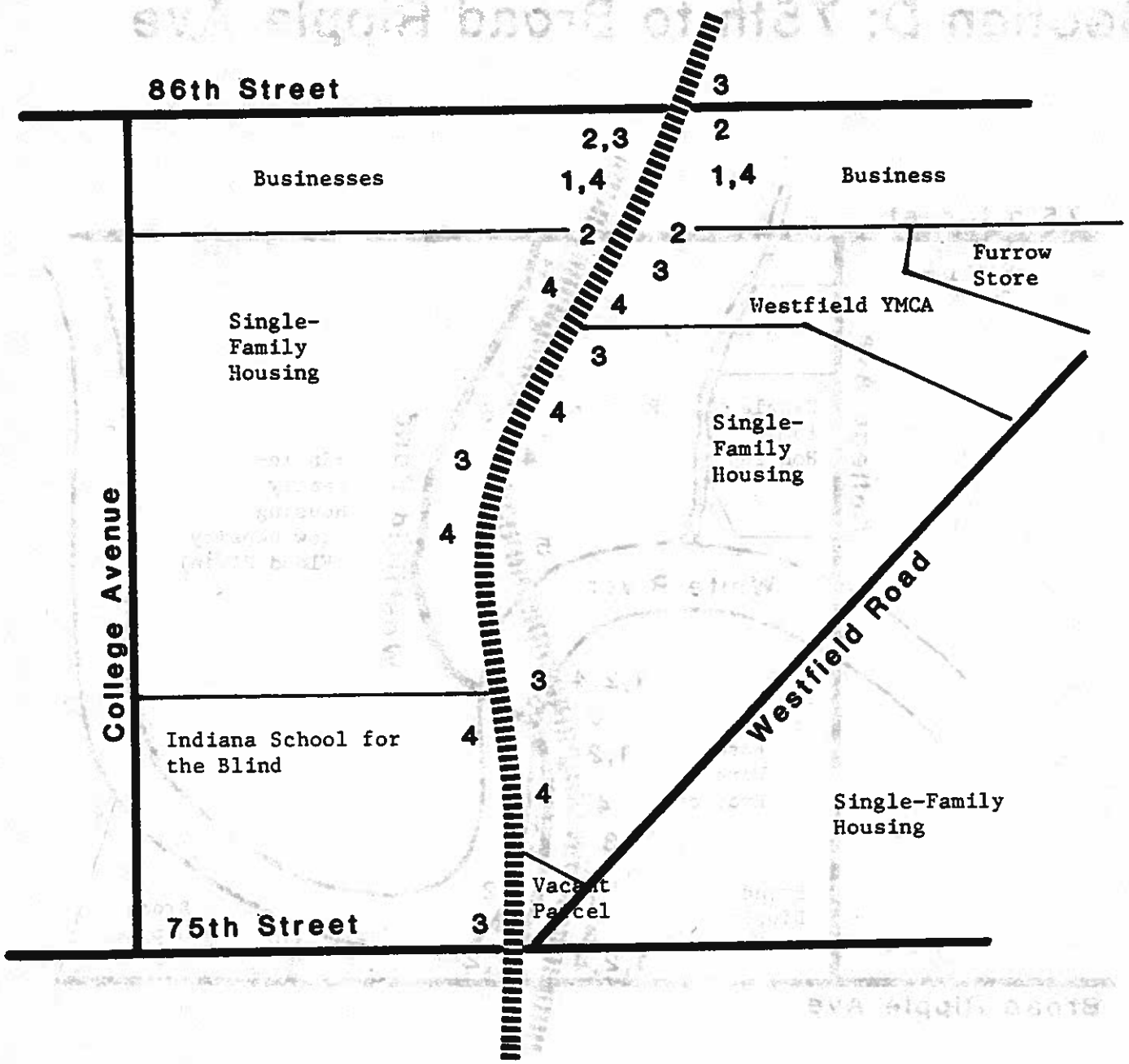
4) Allow businesses to expand parking availability or operations; allow new buildings to go up.

5) Give to adjacent property owners.

6) Allow road to 86th Street.

Figure VII-3

Section C: 86th to 75th



1) Access road to businesses.

2) On 86th Street, build commercial.

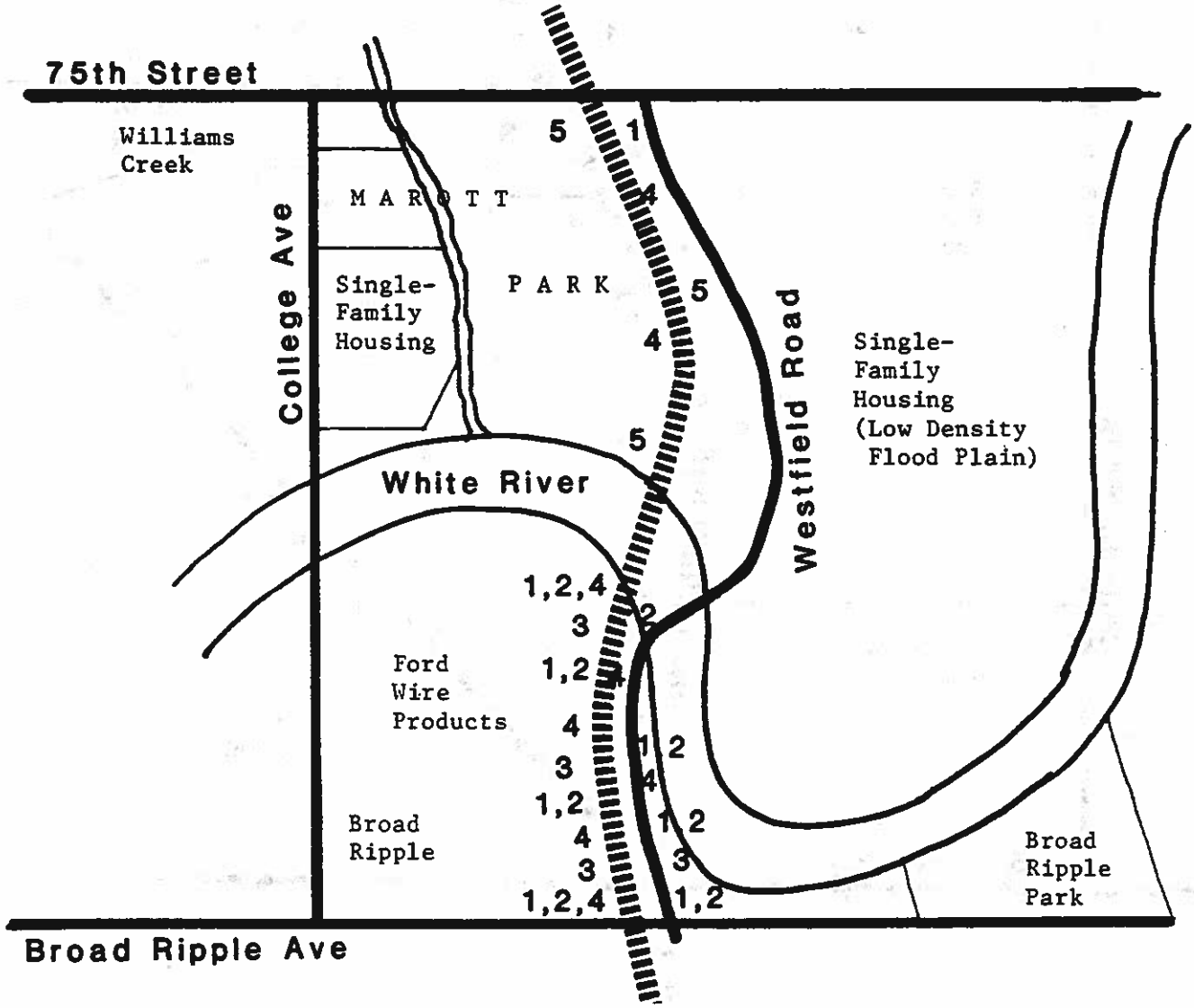
3) Linear recreation linking northern part of county to Marott Park (southside of 75th).

4) Revert to property owners.

5) Parking for Marott/linear recreation strip.

Figure VII-4

Section D: 75th to Broad Ripple Ave



1) Add to Marott Park.

2) Transition Park from business district to Marott Park.

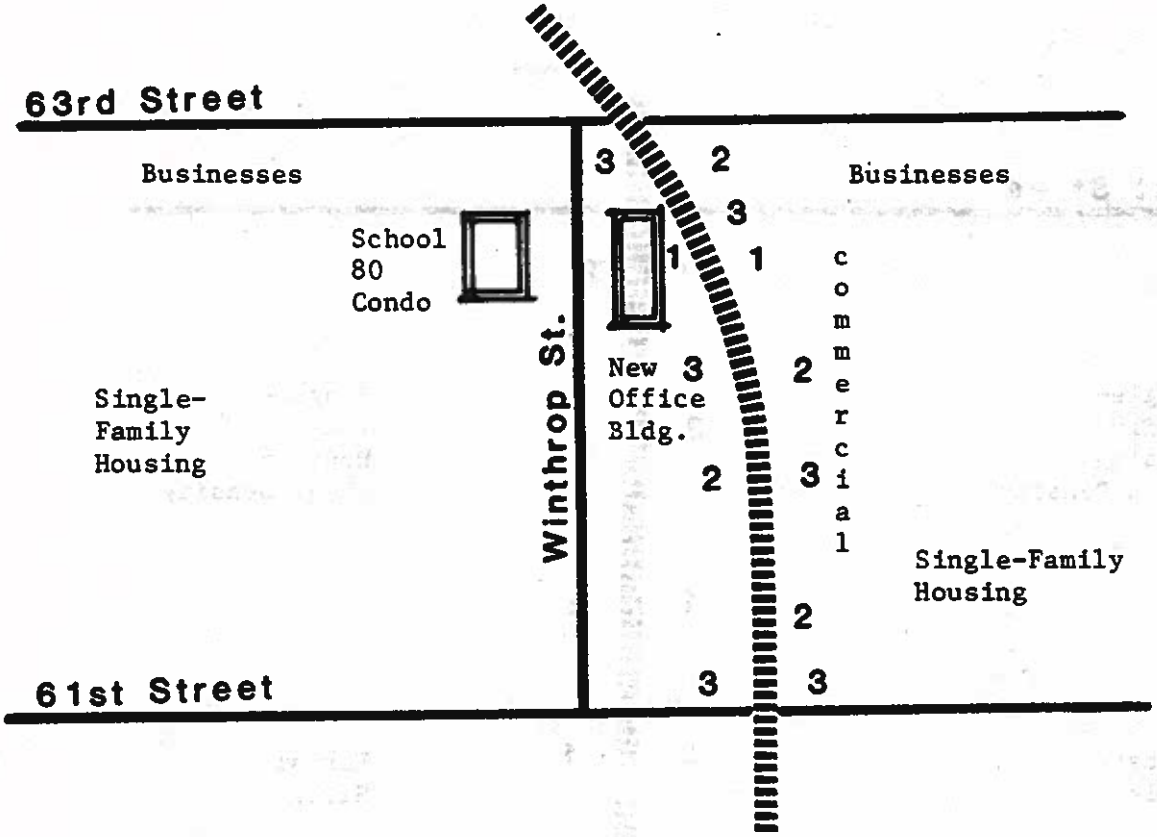
3) Build small shops in Broad Ripple.

4) Linear recreation path.

5) Revert to Marott Park.

Figure VII-5

Section E: 63rd to 61st



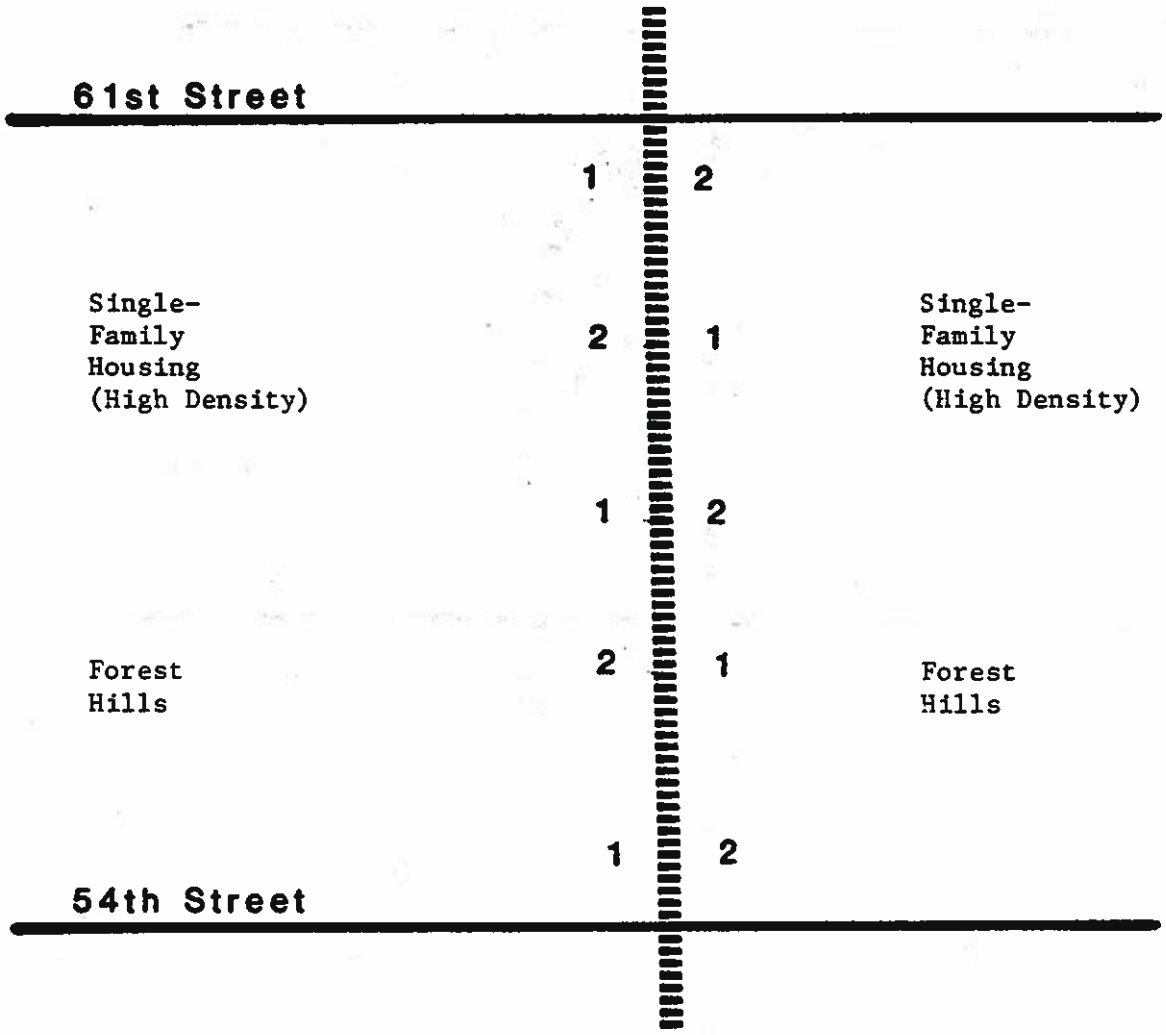
1) Parking for commercial/office/condo.

2) Linear recreation path.

3) Revert to adj. property owners.

Figure VII-6

Section F: 61st to 54th

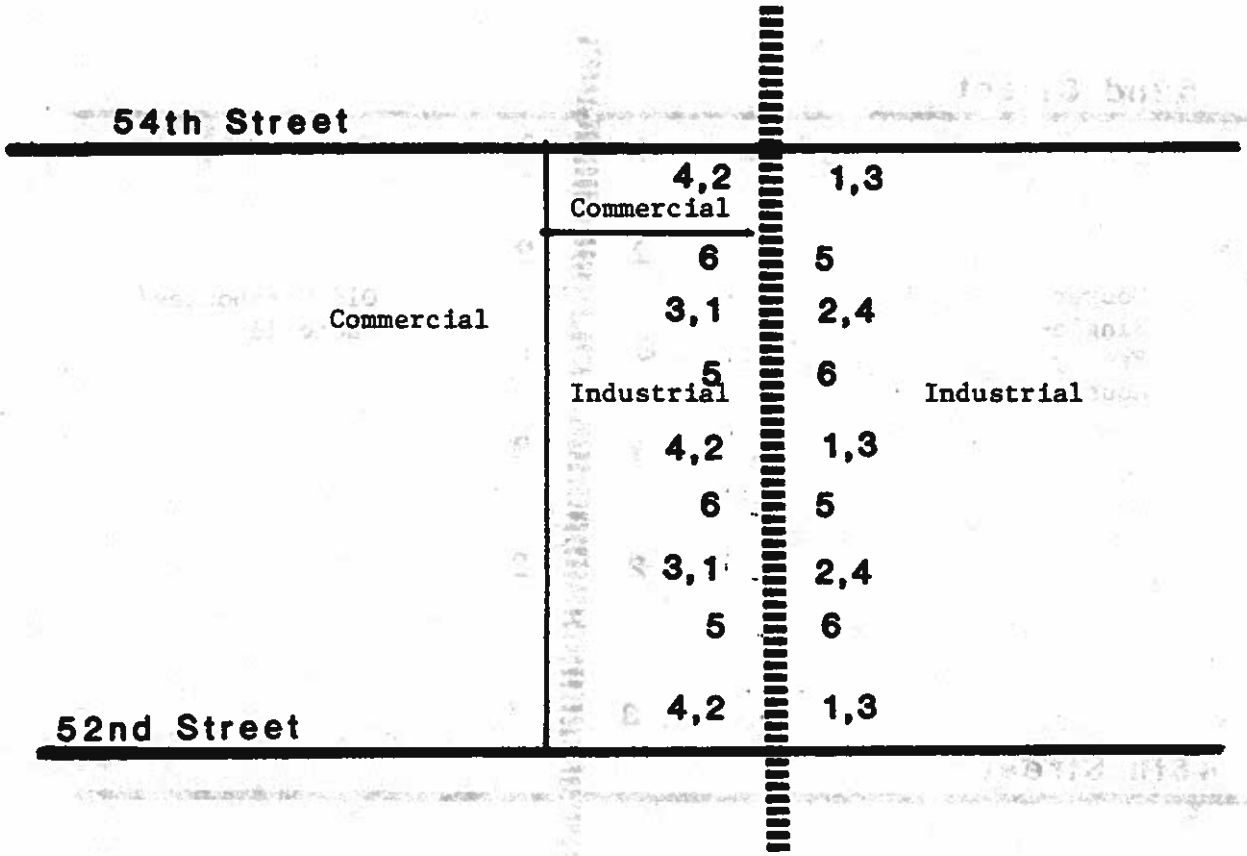


1) Linear recreation path.

2) Revert to adj. property owners.

Figure VII-7

Section G: 54th to 52nd



1) Access road to these businesses.

2) Expand industrial development.

3) Raze area of old/vacant buildings.

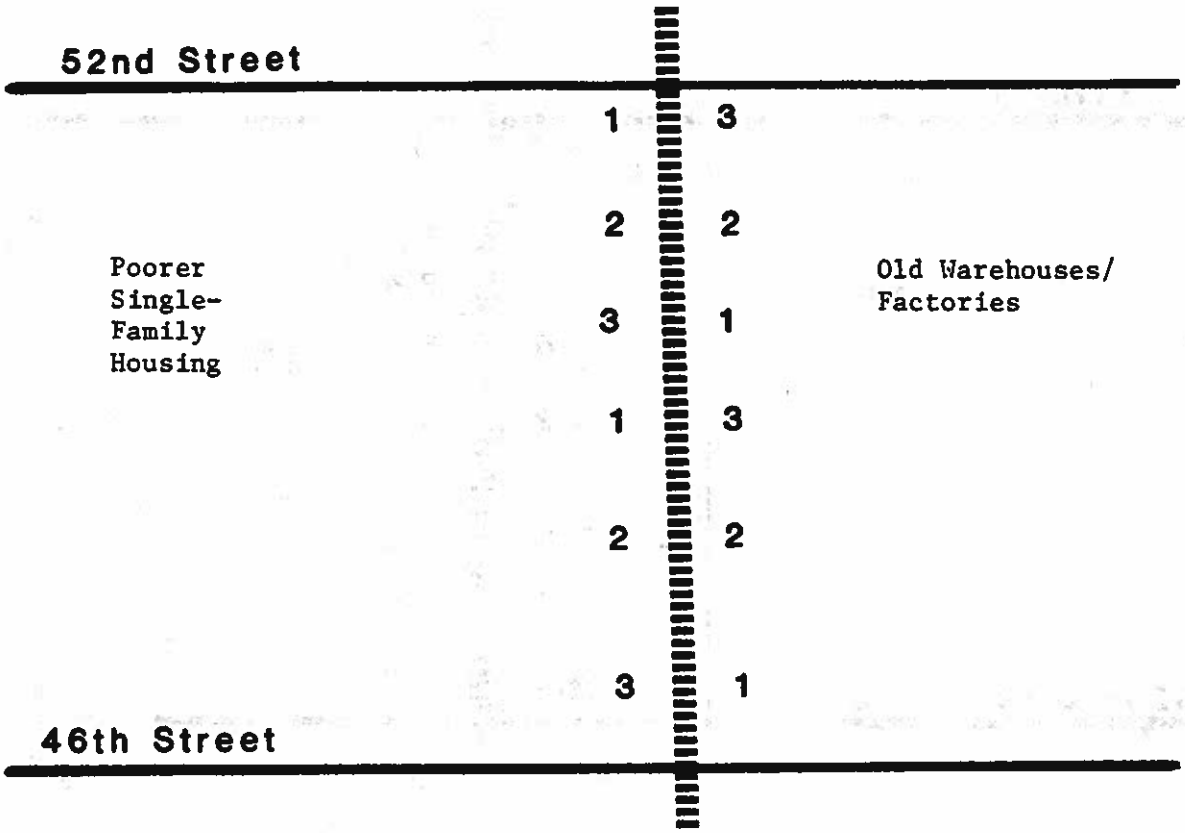
4) Linear recreation.

5) Shift high density power lines along Monon.

6) Revert to property owners.

Figure VII-8

Section H: 52nd to 46th



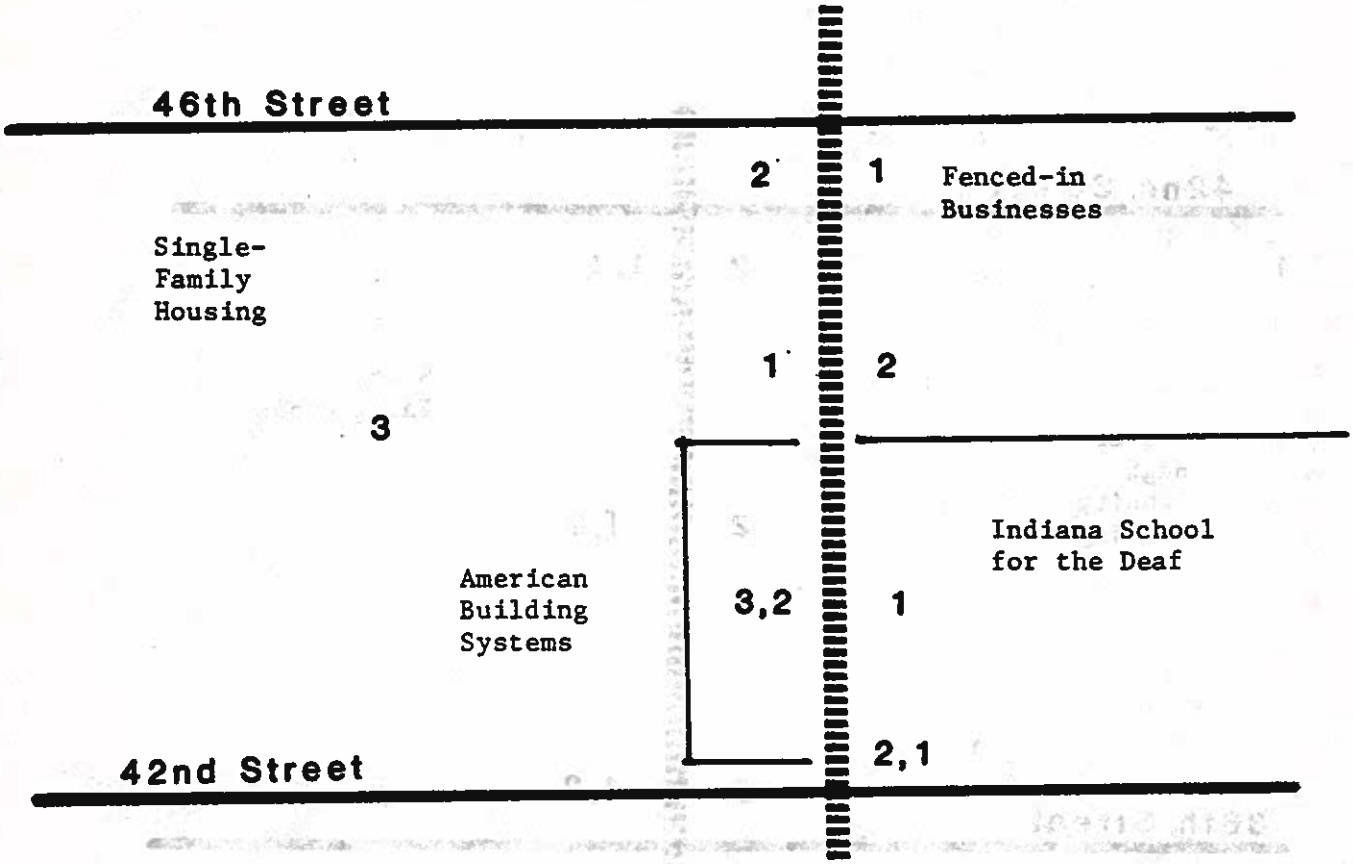
1) Develop a street.

2) Revert to adj. property owners.

3) Access road to industry.

Figure VII-9

Section I: 46th to 42nd



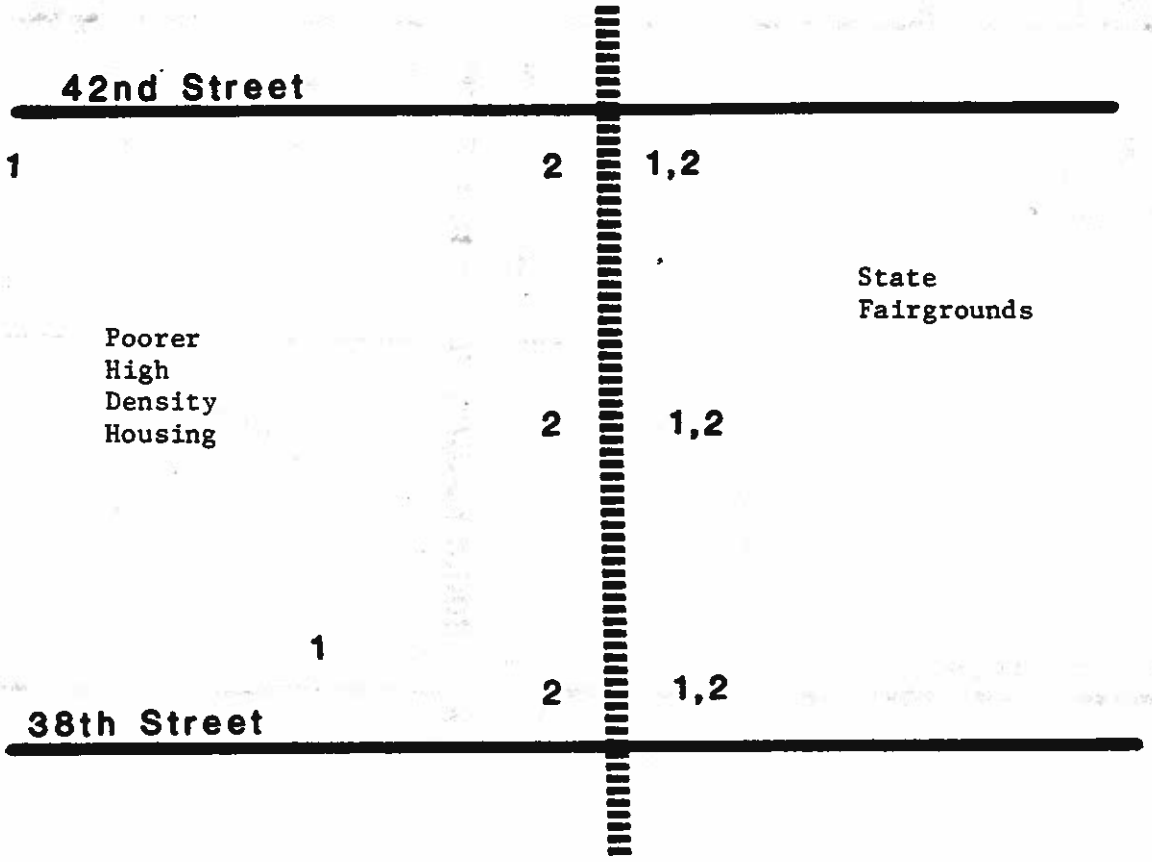
1) Revert to property owners.

2) Build access road for businesses.

3) Raze area for Fair expansion.

Figure VII-10

Section J: 42nd to 38th

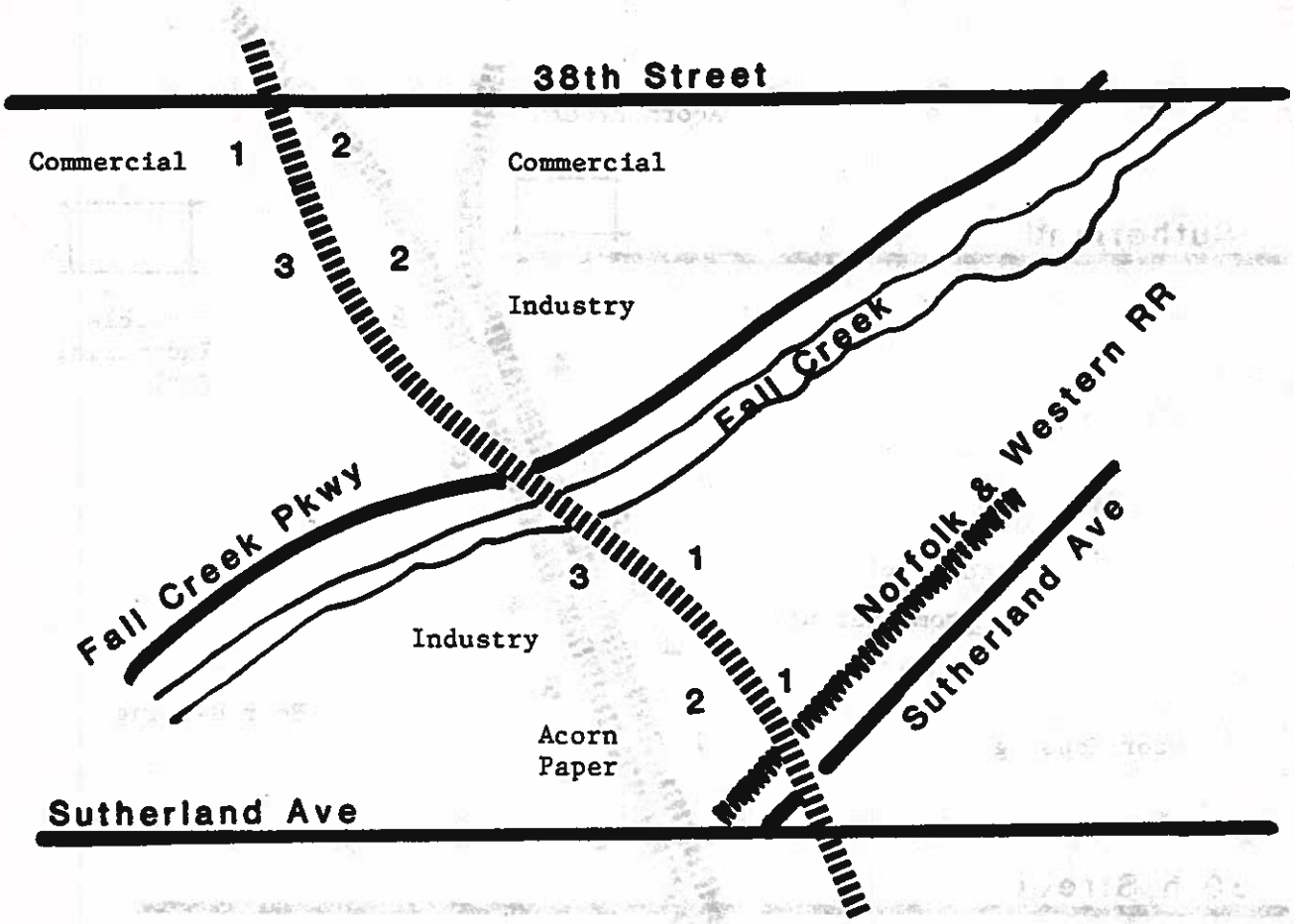


1) Give for State Fair expansion.

2) Revert to adj. property owners.

Figure VII-11

Section K: 38th to Sutherland



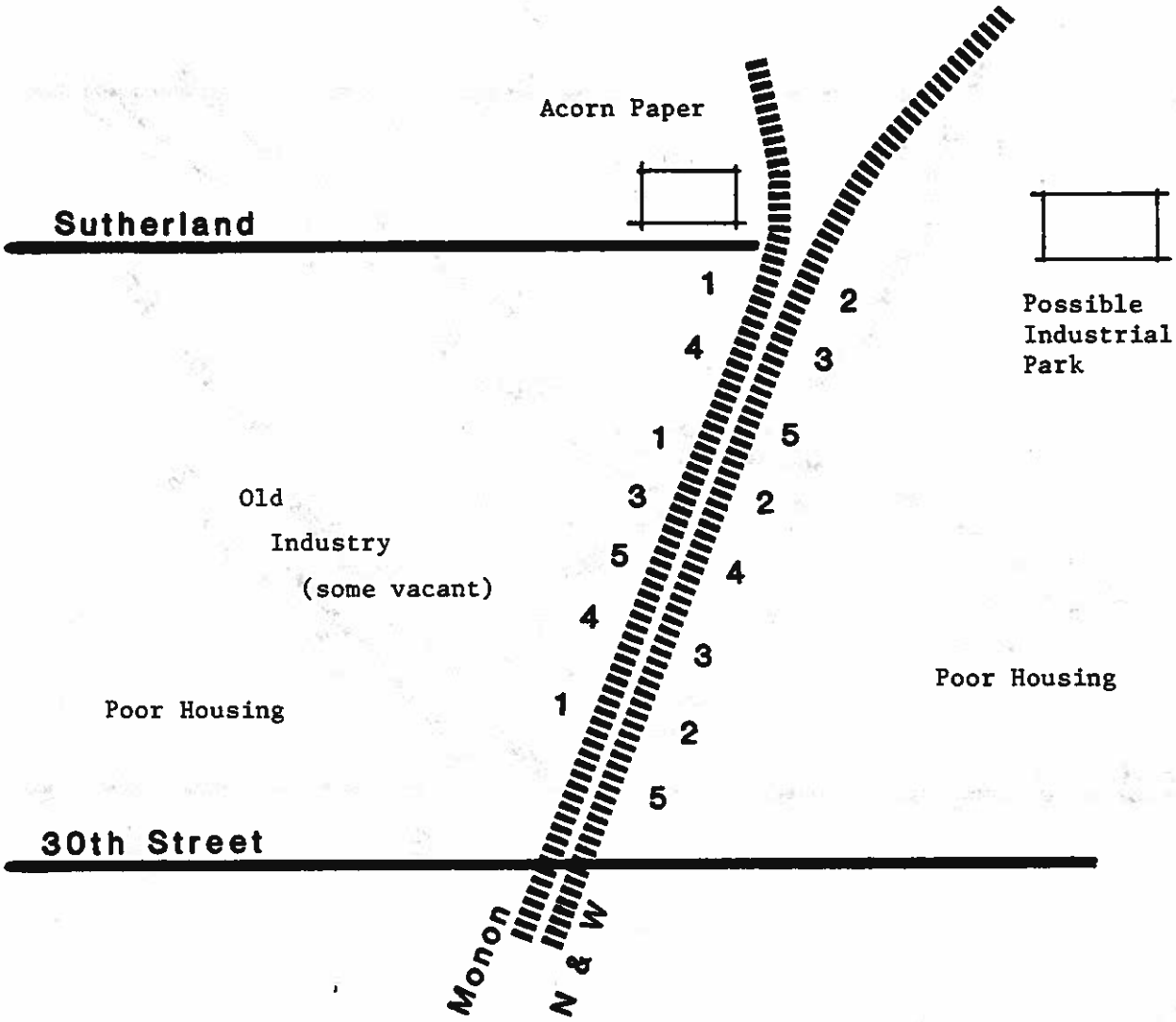
1) Road from downtown to 38th Street.

2) Industrial expansion.

3) Access road to existing businesses.

Figure VII-12

Section L: Sutherland to 30th



1) Industrial expansion.

2) Raze area to start inner-city industrial park.

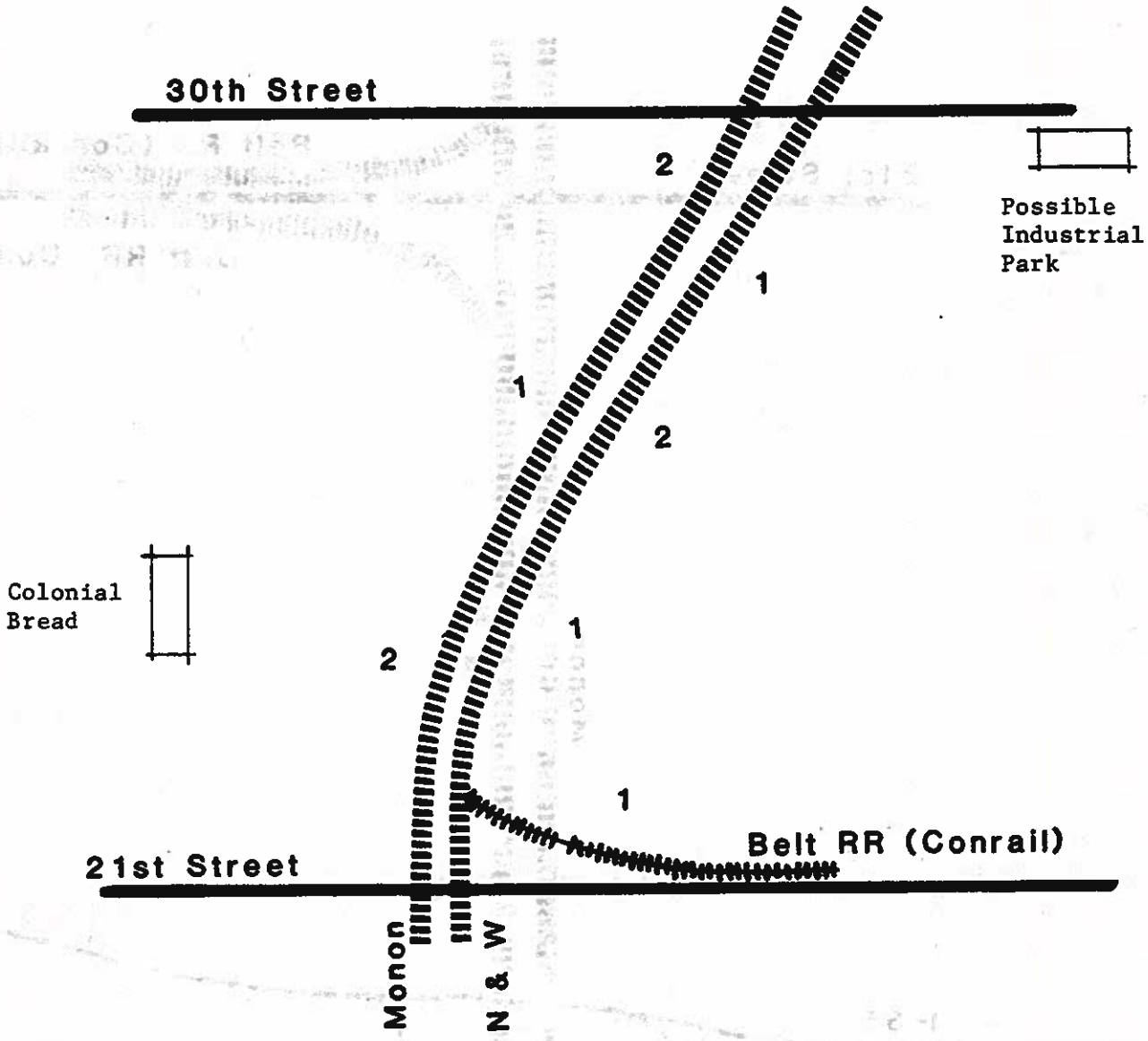
3) Access road for businesses.

4) Revert to adj. property owners.

5) Street to 38th Street.

Figure VII-13

Section M: 30th to 21st

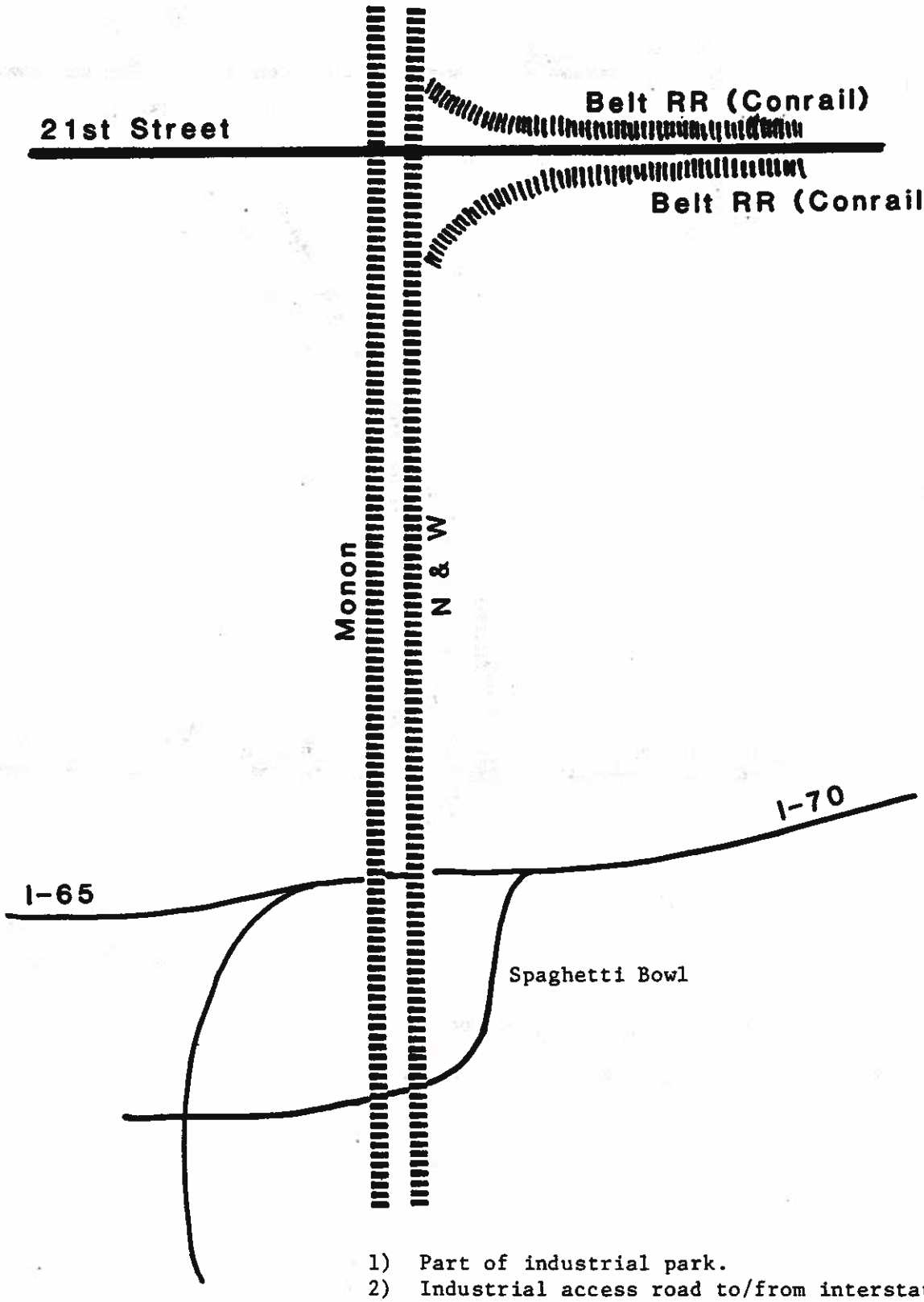


1) Large inner-city industrial park.

2) Highway to 38th Street from downtown.

Figure VII-14

Section N: 21st to I-70



1) Part of industrial park.
2) Industrial access road to/from interstate.
3) Highway to 38th Street from downtown.

Figure VII-15

SUMMARY RANGE OF POSSIBLE ALTERNATIVE USES OF THE MONON LINE

1. Linear recreation
2. Commuter traffic
3. Revert to property owners bounding the line
4. Parking for businesses next to line
5. For development (commercial and/or industrial)
6. Access roads
7. Parks
8. Industrial expansion around existing sites
9. For utility right-of-way, for example (high density power lines)
10. Expansion of State Fair Grounds
    - Access road for major loading area
    - Expansion of fair power station
    - New entryway for State Fair Grounds
11. Northbound expressway in/out of downtown
12. Inner-city industrial park
13. Industrial access road from I-70 to Monon railyard (30th Street)

CHAPTER VIII
LIMITS TO ALTERNATIVE USE

CHAPTER VIII

LIMITS TO ALTERNATIVE USE OF THE MONON CORRIDOR

INTRODUCTION

The Monon Economic Study's survey of land ownership based on the Nichols Appraisal concludes that portions of the Monon Line in the study area are held by Seaboard by way of an easement. This assessment brings to the forefront several legal issues which limit alternative use of the Monon rail corridor.

In the summer of 1985, these ownership issues were examined in the State Legislature by an Interim Study Committee on Abandoned Railroad Land. As a part of this effort, Dr. William Black of the Indiana University, Transportation Research Center, prepared a background report on railroad right-of-ways and property in Indiana. Dr. Black's report has not yet been released but a draft version is available from Indiana's Legislative Services.

LEGAL ISSUES

The land for the Monon Line, formally called the Louisville, New Albany, and Chicago Railroad, was acquired in the early 1880's with fee simple title being the dominant land conveyance instrument. A recent appraisal of the property ownership along the Monon Line conducted by the Monon Study Group showed that from Frankfort to Indianapolis, a majority of the land was held in fee simple, but that there were significant sections of the line which were acquired by easement only.

Indiana courts have generally construed rail land to have been acquired by easement unless it is clear that the land was acquired in fee simple title with no qualifications. If the railroad holds the land in fee simple, then it continues to own the land after rail use has ceased. If the land was acquired by way of an easement, the terms of the easement, as outlined in the deed, determine what happens upon abandonment, with the usual case being that the land reverts back to the original grantor of the easement or his successor.

Once a determination has been made as to whether the land was acquired in fee simple or by way of an easement, a determination must be made as to when abandonment has occurred. This is important because when abandonment has taken place, then rights retained under an easement may be extinguished. At the present time, there is no Indiana statute which clearly defines when abandonment has taken place.

Property abandonment should not be confused with the federal "Certificate of Abandonment" which a rail line must obtain from the I.C.C. before it can end service on a rail line. Though technically abandoned according to the rules and regulations of the I.C.C., rail service can still continue on such a line, and I.C.C. abandonment alone, has generally not been treated as sufficient to indicate that the potential for future rail service has ceased or the right-of-way extinguished.

ALTERNATIVE USES OF THE MONON RIGHT-OF-WAY

How the land for a rail line was originally acquired, and at what point abandonment takes place, relates directly to the rights of various interests to future use of the transportation corridor. Along with a right to lay track and run trains, the easement or fee simple interest in a transportation corridor has provided the basis for a rail line to allow for other uses of the easement such as the construction of utility and communication lines from which the railroad has derived revenue.

Once a rail line is abandoned and the easement extinguished, the future use of the transportation corridor for these other uses may be jeopardized, and the revenues from existing uses may revert, along with the land, back to the adjacent landowners. Dr. Black's Study, in its draft form, has made the recommendation that if the property is held by easement, that with abandonment, the land should be returned to the adjacent landowners through the use of a quitclaim deed. This recommendation has not been addressed by the draft legislation before the General Assembly.

The clear advantages to retaining railroad easements in one continuous corridor for future public use is the other side of this argument. In the case where a local or state government has wanted to use a transportation corridor as a bike path, hiking trail, or natural area, federal regulations promulgated under the National Trails System Act (See, 16 U.S.C. Section 1247 (d)) provide a means of transferring a railroad right-of-way to a state or local government, or private organization, for recreational use. However, these

regulations have not been court tested, and in Dr. Black's assessment, as outlined in his draft report, such regulations as currently written raise potential "taking" issues. Dr. Black's draft report recommends that the State not participate in the abandoned rail line re-use provisions of the National Trails System Act until such time as these issues are clarified.

ADAPTIVE RE-USE

Adaptive re-use of the Monon Corridor is legally limited by the above described property restraints. Careful consideration should be given to these legal issues in formulating any plan for adaptive re-use. Without a clear definition from the Legislature of when abandonment takes place, these legal limitations severely limit adaptive re-use of the corridor. A strict interpretation could be drawn that the land acquired by easement has little or no adaptive re-use except where the track is kept in place and the potential exists for renewed rail service.

LEGISLATIVE UPDATE

The findings of the Interim Study Committee on Railroad Abandonment are summarized in a report prepared by the Legislative Services Agency. Last session, Senate Bill 000396 was introduced to address several of the legal issues raised by the Legislative Services' draft report. It is anticipated that other bills addressing the special interests will also be introduced in the next session.

POLICY ALTERNATIVES

The Monon Study Report concludes that the Monon Corridor should be kept under public control for future alternative uses. The Corridor represents a fixed asset which could not be reassembled once lost.

Several alternative strategies need to be developed to assure that the Monon Corridor is preserved and does not revert back to adjacent property owners. These strategies must take into account the above discussions concerning abandonment and the potential for reversion and extinguishment of easement interests.

It is recommended that the City of Indianapolis, working closely with the State of Indiana, develop specific legislation designed to assure that the Monon Corridor is kept intact. The present legislation, as outlined in Senate Bill 000396 which was rejected by the General Assembly is inadequate for saving the Monon Corridor. Existing legislation such as the Port Authority, could be used for the preservation of the corridor, but is awkward. The City and State should move to develop a specific piece of legislation which empowers a governmental unit to preserve the Monon Corridor for future use.

CONCLUSION

In summary, adaptive re-use of the Monon Line for any other use except rail or light rail are limited by existing property law restraints. Adaptive re-use must keep the intent of the property or the future intent of the property for rail service.

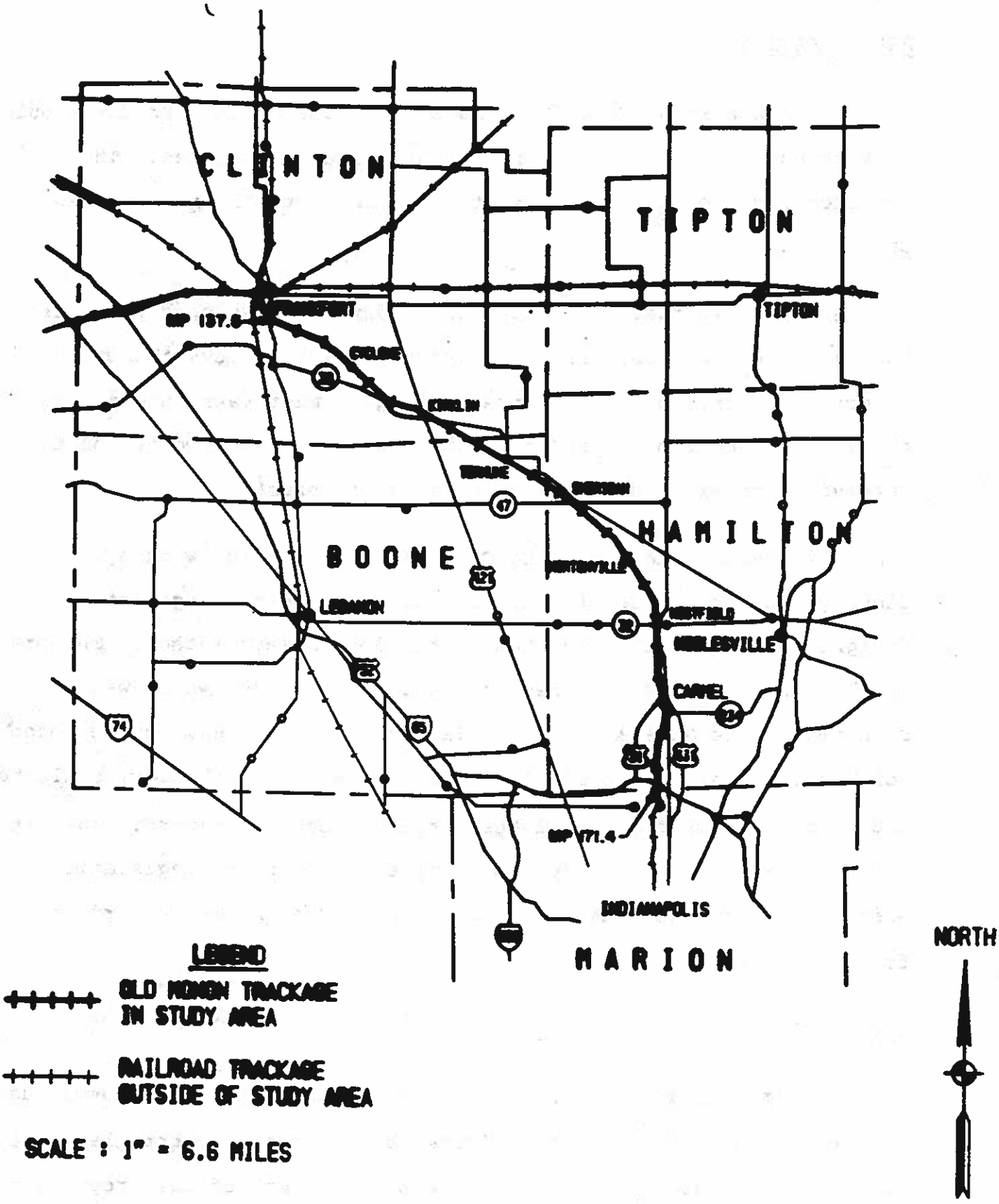


Figure VIII-1

STUDY AREA MAP

CHAPTER IX
INDIANA PORT AUTHORITIES

CHAPTER IX

INDIANA PORT AUTHORITIES AND RAILROADS

INTRODUCTION

In Indiana, separate state laws provide for the creation of ports and related infrastructure. The Indiana Port Commission Act provides for state owned ports, of which there are three in Indiana. The Indiana Port Authorities Act provides for municipal or county owned and operated port facilities. The Indiana Port Authorities Act is of interest to communities which are trying to preserve railroad property and continue railroad operations because of the following provision in the Act which addresses the subject of railroads:

8-10-5-8.1. Acquisition of Railroad Property and Rights-of-Way - Revenue Bonds - Extent of Powers. In addition to the other powers granted under this chapter, the port authority may contract for, accept, or otherwise acquire and maintain railroad property and rights-of-way, but said right-of-way may not exceed fifty (50) miles in length from point of origin. The port authority may accept and expend funding from any source, and may issue revenue bonds, for the construction, operation, and maintenance of the property and rights-of-way and the lease or purchase of all necessary equipment and appurtenances to successfully operate a railroad over the rights-of-way. The powers granted, and procedures provided for, by this chapter shall extend to any authority created pursuant to this chapter even though the railroad facilities will not serve a port of harbor.

Since the passage of this provision in 1977, it has been used by several communities, to preserve railroad property and operations.

LEGISLATIVE HISTORY

Interest in the Port Authority Act developed during the late 1950's when the state was preparing to become more active in the construction and operation of state owned ports. Some Indiana communities located along Lake Michigan and the Ohio River wanted to ensure that the state would not preempt the development of port facilities by local communities and wanted to ensure that existing community run port facilities could continue to operate. The original Port Authority Act was passed in 1959 and did not contain the railroad provision.

In the late 1970's, the railroad serving Madison, Indiana, was financially stressed. There was a need to find a way for local community to financially support the railroad should this become necessary. Madison legislators led the effort to have the Port Authority Act amended to permit for port authorities to own and operate a railroad. It was logical for Madison to try and amend this Act since their location on the Ohio River made them eligible for forming a port authority. In 1977, the Act was successfully amended to include the railroad provision. The language of the amendment allowed for the powers of the Port Authority Act to be used for railroad acquisition and operation even though the railroad did not serve a port or harbor. This opened up the use of the Act, to Indiana communities not located on a major body of water.

In the late 1970's and early 1980's, federal funds for local railroad service diminished, and state funding programs began to develop. In 1982 the State of Indiana enacted legislation to provide low interest loans to short line (ICC Class III) railroads and port authorities for the purposes of acquisition or rehabilitation. Called the Industrial Rail Service Loan Fund, it is the primary source of state funds to assist locally operated railroads. This legislation recognized port authorities and made them eligible for participation in the loan fund. In doing so, it reinforced the use by local communities of the Port Authority Act to acquire rail property, as well as be eligible for state funds to pay for the acquisition and rehabilitation of the railroad.

EXAMPLES OF PORT AUTHORITIES IN INDIANA

As of 1985, there are two port authorities in Indiana which own railroad property. They are:

1. City of Madison Port Authority, D/B/A The Madison Railroad - The Madison Railroad operates a line of 25.8 miles from North Vernon to Madison in Jennings and Jefferson Counties. The City acquired the line through a condemnation suit against Penn Central Corporation. Funds for the purchase of the condemned track came primarily from the State. The yearly operation of the Madison Railroad is subsidized by the City of Madison.

2. City of Auburn Port Authority - Located in Dekalb County, the City of Auburn Port Authority owns 1.4 miles of a former Chessie System branch line. Chessie continues to operate over and serve the line, treating it as an industrial siding. The City of Auburn Port Authority is an example of a port authority not located on a major body of water.

A third port authority is:

3. Shelby County Port Authority - The Shelby County Port Authority does not own railroad property but has acted as a conduit of state funds to rehabilitate the main rail line of the Conrail between Shelbyville and Lawrenceburg, Indiana, a distance of 57.6 miles. Conrail has abandoned this trackage but the rehabilitation project would reopen the line for service between Indianapolis and Cincinnati under the terms of a contract between Conrail and a local shippers group. The Shelby County Port Authority extends the use of port authorities to that of being primarily a financial conduit, rather than being the actual owner and operater of a railroad.

APPLICATION TO THE MONON LINE

The Port Authority Act is the legislation most used in Indiana for a local community or county to become actively involved in the acquisition and rehabilitation of a rail line. The formation of a port authority makes the acquired railroad eligible for both local and state monies. Should it become necessary, port authorities have successfully acquired a railroad right-of-way through a condemnation proceeding. A port authority can be the legal vehicle by which a municipality or county can work with various private sector interests in a joint private sector/public approach to the rehabilitation and operation of a railroad.

CHAPTER X
COMMUNITY IMPACT

CHAPTER X

COMMUNITY IMPACT SUMMARIES AND SHIFT SHARE ANALYSIS

INTRODUCTION

This chapter describes and evaluates the economic impact of the Monon Railroad on the communities of Frankfort, Sheridan, Westfield, Carmel and Indianapolis with regard to the abandonment process. The information from which this summary is prepared is taken from community profiles, manufacturer directories, various zoning and land use maps, and a series of personal visits and interviews with those persons who are most directly involved with industrial development in each of the communities. The communities are reviewed from the northernmost community to the southernmost community along the Monon Line.

ECONOMIC IMPACT

The overall economic impact of the abandonment of the Monon Railroad on the communities surveyed is felt to be of a limited impact in the short run. The initial findings are that the rail line has not been extensively used because of poor service by Seaboard. This has lessened the economic dependency of surrounding communities on the line.

In the long term, the loss of the line removes any future economic development potential for those prospects which would rely on railroad use. In the case of Frankfort, both the Seaboard Railroad and the Norfolk and Western Railroad continue to serve this com-

munity after the abandonment. A small number of industries located primarily in Westfield and Carmel will experience some disruption and possibly higher transportation cost, but alternative modes of transportation are available. Indianapolis will not be significantly affected. In the medium to long term, Westfield, and to a lesser extent Carmel, will potentially experience some negative economic impacts due to the lack of rail service.

The negative impact on Westfield is derived from the loss of future industrial development opportunities which will no longer be possible because of the loss of the rail link. It is hard to quantify this lost potential, yet it is reasonable to point out that without the railroad infrastructure, Westfield loses one of its geographical links into the national transportation network.

JOB IMPACT

In the short term, there will be no significant job losses attributable to the abandonment. The absence of the rail line may alter the mix of jobs because of the resulting change in the type of industries, but not the total number of jobs. No major employer indicated that they will be forced into a relocation decision or be forced into layoffs if rail service was discontinued.

In the long term, the initial impact, is the loss of the opportunity to develop potential jobs around the development of industries who are dependent on rail transportation service.

FRANKFORT

Community Description. Frankfort is located northwest of the Indianapolis SMSA. Frankfort is the County Seat of Clinton County and is the County's major population center. During the late 1970's, Frankfort experienced a period of economic turmoil with some plants closing and others changing ownership. Since that time, the City has had some new plants open or expand. Frankfort has sewer, water, and electric capacity; good transportation linkages by highway and rail to such communities as Kokomo, Lafayette and Indianapolis; and, as a County Seat, a higher level of community amenities than the smaller communities nearby.

Shippers. Potential shippers include A.E. Staley (now Archer Daniels Midland), Harmeson Mfg., Agmax, Frito-Lay, Inc., and Sun Chemical Corp. Agmax and Harmeson are located directly on the Monon Line. Of the potential shippers, Archer Daniels Midland shows the greatest promise for substantial future expansion. Of the five communities reviewed, Frankfort currently has three to four times the number of shipments of the other communities.

Industrial Parks. Frankfort zoning maps show industrial zoned land to the east, south and northeast of the City. The industrial zoned land to the south is located on the Monon but is farmland, below the grade of the railroad, and expensive to develop. The City, led by the Chamber of Commerce, is placing all its emphasis on a single industrial park located to the east of the City along State Road 28 and the Norfolk and Western Railroad. State Road 28 connects with I-65 to the east of the City, and the Norfolk and Western

connects to the Monon, west of the industrial park. The size and quality of this industrial park is the highest of the five communities reviewed. The industrial park is served by water and sewer, includes a small airport, has both bare ground and empty speculative buildings, and has a number of large companies including Frito-Lay, Sun Chemical and Archer Daniels Midland already located there.

Industrial Development Program. The Chamber of Commerce in the late 1970's formed a separately funded Economic Development Commission which, in turn, hired Fantus Corporation to evaluate Frankfort as a location for future industrial development and to suggest what industrial categories the City should be seeking. Following the completion of the Fantus Study, the City began actively marketing the City to those SIC codes which Fantus identified as being most likely to be attracted to Frankfort. This effort has been supported with money and technical assistance from the Indiana Department of Commerce. Wayne Hall, the director of this program, has been working with the City (mostly as a part of the Chamber of Commerce) on industrial development since the mid-1950's. The Fantus Study identified a few areas where the City could make further improvements such as in the expansion of the airport and the development of more hotel rooms, etc., and the Economic Development Commission has a specific implementation program for each of the problems identified, with most improvements scheduled for completion within the next two years. The Economic Development Commission has followed closely the recommendations of the Fantus Study. Of the five communities reviewed, only Indianapolis has a more active marketing program for new economic development along the Monon.

Economic Impact. The economic impact of the loss of the Monon Railroad will be marginal to none on Frankfort in the short term. After the abandonment, Frankfort will still be served by both the Seaboard Railroad and the Norfolk and Western Railroad. Because of this, the effect on job creation will be negligible. The effect in the medium to long term will depend on the potential of additional abandonments by railroads serving Frankfort.

Job Impact. The impact on job creation in Frankfort is marginal to none, given that rail service to the City will remain after the abandonment.

SHERIDAN

Community Description. Sheridan is a small community located northwest of Carmel and Westfield in Hamilton County. Sheridan has water and electric capacity, but limited sewage. Sheridan's amenities befit its size, but benefits by being within easy driving distance of Noblesville (the County Seat), and Indianapolis.

Shippers. There is a limited number of potential shippers which could be developed at Sheridan. The large number car counts to Sheridan were in actuality ghost cars. Sheridan has been used by Seaboard as a convenient billing location and has not generated significant traffic. During the present lease with Indiana Hi-Rail, no cars have been shipped to or from Sheridan.

Industrial Parks. Sheridan has some available industrially zoned land along the Monon Line but no fully developed industrial park. There is limited access to I-65 by way of State Road 47. water is available but sewer capacity is limited.

Industrial Development Program. Sheridan is a rural community. The Town has a planning commission and has formed an economic development corporation. The Town has developed an active industrial marketing program which is coordinated with the Indiana Department of Commerce.

Economic Impact. The short term impact of the abandonment of the Monon Line on Sheridan is negligible. In the medium and long term there may be some impact on economic growth given that the Monon Line provides the only primary industrial transportation access to this community.

Job Impact. The short term impact of the abandonment on jobs creation in Sheridan is marginal, with possibly some impact in the medium and long term.

Other Notes. The 23-acre Biddle Memorial Park which is a fully developed recreational area, is located at the southeast corner of town and bordering the Monon Line. This would be a possible passenger pick-up destination point for excursion trains.

WESTFIELD

Community Description. Westfield is located due north from Indianapolis and Carmel. With Morse Reservoir to the north, and Carmel and Indianapolis to the south, Westfield is located in the midst of some of the highest quality residential areas in the state. What amenities that Westfield lacks are made up by its nearness to Indianapolis, Carmel, and Noblesville. Westfield has sewer, water

and electrical capacity, and excellent highway and rail transportation linkages.

Shippers. Significant potential shippers include Truss Manufacturing, Inc., Samson Mid-West and Wickes Lumber. All these companies are located along the Monon Line. Westfield has demonstrated the highest level of rail shipment activity under the present interim lease.

Industrial Parks. Westfield zoning maps show industrial zoned land to the west of the Town running due west on State Road 32, and north/south along State Road 31 and the Monon Line. Westfield is located on State Road 31 directly between Kokomo and Indianapolis, two cities which are enjoying an economic resurgence. Westfield, among the five communities reviewed, has the largest amount of industrial zoned, but as yet undeveloped, acreage with direct access to the Monon Line. Though Westfield has attractively zoned industrial land, the Town is only beginning to develop this land into industrial parks. Frankfort, Indianapolis, and Carmel rank ahead of Westfield in this regard. The industrial zoned land does have access to water and sewers, and a small airport. Westfield has good access along State Road 32 to both I-65 and I-69. The Town has not developed speculative buildings to attract new industries.

Industrial Development Program. Westfield has a Planning Commission and Chamber of Commerce, but has not formed an independent Economic Development Commission to market the community. The Town has not commissioned independent consulting studies to analyze the Town's potential for specific types of industrial development.

The Town has not developed a specific marketing program for the purpose of attracting outside industries. In spite of this somewhat passive approach to economic development, the Town seems to be enjoying a steadily increasing success in attracting new industries to the community.

A few years ago, this might have been explained by the fact that Westfield was perceived as being less strict than other nearby communities in approving industrial projects.

Today, the more likely explanation for this growth is that the Town is located in an attractive development corridor between Kokomo and Indianapolis. Over the last two to three years, the Planning Commission has become more strict in its review of new businesses seeking to locate in Westfield, but the Planning Commission seems comfortable with land that it has zoned for industrial use and has a positive attitude toward substantial industrial expansion.

Economic Impact. The short term impact on Westfield from the abandonment of the Monon Line will be negligible, though a few industries will need to make adjustments in how their goods are transported. The medium and long term effects may be more significant. Westfield has the potential of industrial development similar to that of Frankfort. Available rail service could play an important part in this development. The loss of rail service will have an effect on the direction of industrial development in Westfield, though the overall economic impact is more difficult to measure.

Job Impact. The impact of abandonment on job creation is marginal in the short term. There may be some impact in the medium

and long term, with a change in the mix of jobs because of a different pattern of industrial development.

Other Notes. Because of the number of people who commute to Indianapolis to work from Noblesville, Westfield and Morse Reservoir, and the distance and driving time from these residential areas to downtown Indianapolis, Westfield is perhaps the prime location for passenger excursion pick-up for rail travel. A good location for this would be at the intersection of State Roads 31 and 32 and the Monon Railroad. There is at present no Monon Depot in Westfield.

CARMEL

Community Description. Carmel is located just north of Indianapolis. Over the past decade, Carmel has been one of the fastest growing communities in the State of Indiana. The City has a number of community amenities, but also benefits from being close to the amenities offered by the City of Indianapolis. Carmel has sewer, water, and electric capacity, and excellent highway and rail transportation linkages.

Shippers. Potential shippers include Woods Wire, International Minerals and Chemical Corp., Indiana Farm Bureau and Builders Lumber. All of these companies are located along the Monon Line. Of the five communities reviewed, Carmel ranks second in the number of shipments being made on the Monon Line.

Industrial Parks. Carmel/Clay Township zoning maps show industrial zoned land along Northwestern Avenue at the extreme

western edge of the township and in the center of Carmel along Range Line Road and the Monon Line. Carmel has a well developed industrial park adjacent to the Monon Line with available industrial sites. Just to the west of this park is a second park of 267 acres. This second industrial park is targeted for light industry and warehousing. A third industrial park located to the south of the first two, has been targeted for high technology. All of these industrial parks are surrounded by office, retail, and residential developments which place some limitations on what industries can be located there. The industrial zoned land does have access to sewer and water, and excellent transportation access to I-465. The City has not developed speculative buildings to attract new industries, but this activity may be carried out by private developers.

Industrial Development Program. During the 1970's Carmel/Clay Township was one of the fastest growing residential communities in the State. An emphasis of the community has been on developing a residential community of the highest quality with adequate related retail development. Office development is also of high priority and is oriented towards tenants that are branch offices of national corporations along with a few corporate headquarters. New industrial development has only recently been given a renewed emphasis.

Carmel has a Planning Commission and Chamber of Commerce, but has not formed an independent Economic Development Commission. The City has spent a large amount of time on its master plan. The City does not have an active marketing program for new industrial development, though private developers have had much marketing success in the office and retail areas. The City Planning Commission has been

active in establishing stringent requirements for new development within the community.

Economic Impact. The short term economic impact of the abandonment of the Monon Line is negligible, although a few industries will suffer some temporary disruption and will have to arrange for other transportation arrangements. In the medium and long term, the economic impact is likely to be marginal. Industrial development activity in Carmel appears to be much more oriented towards the highway system over rail. There has been some discussion of an alternative use for some of the land now part of the Monon right-of-way as a site for a new governmental center.

Job Impact. The impact of abandonment on job creation will be negligible in the short term. In the long term, Carmel if used as northern commuter point has the potential for developing future jobs around the Monon. The initial impact on job creation in the long term will hinge upon whether the line is used for commuting purposes.

Other Notes. Like Westfield, Carmel is far enough from downtown Indianapolis, and has a large enough commuter population, to potentially support a passenger pick-up area in the long term.

A limited precedent for this has been established by the Fairtrain, whose northern passenger pick-up areas has been in Carmel. The most likely area for a passenger pick-up area would be in the industrial zoned land in the center of Carmel, near to where the pick-up area was for the Fairtrain. New provisions would have

to be made for parking, however. There is at present no Monon Depot in Carmel.

INDIANAPOLIS

Community Description. Indianapolis is the largest city in Indiana and is the center of government for both Marion County and the State of Indiana. Indianapolis has carried out over the last decade a highly innovative "economics of amenity" development strategy which has led to the strengthening of local educational institutions, the rehabilitation of the City's downtown area, the enhancement of cultural amenities, and the development of various sports complexes which have established the City as a center for amateur and professional sports. The City has gained national attention as a progressive middle sized city with an attractive business climate.

Shippers. Potential shippers include Erbrich Foods, Anderson Lumber, Wooley Lumber, Carter Lee Lumber, Dunlap Paper and Indiana Veneer. All of these companies are located along the Monon Line or the Belt Line Railroad. Of the five communities reviewed, Indianapolis ranks third in the number of shipments made on the Monon Line.

Industrial Parks. Indianapolis zoning maps show industrial zoned land in Nora at 86th Street; in Broad Ripple at 62nd Street, at 54th Street and 46th Street; and between 34th Street and Washington Street. Much of this land is already fully developed with little room for future expansion. Some of the industrial zoned

land within the City's regional center is likely to be rezoned in time to a use other than industrial.

It should be noted however that between 22nd Street and 28th Street that Seaboard owns two industrial zoned five-acre parcels along the Monon Line which could be specifically marketed to a new rail oriented industrial client. Redevelopment of the site could provide a focus for a more general urban redevelopment of this area.

The emphasis on industrial park development in Indianapolis has been on parks oriented toward the airport and interstate highway system rather than rail lines. The industrial zoned land does have access to sewer and water, and good to excellent transportation access to the interstate highway system. An issue to be noted is that industries that have already located along the Monon Line may have difficulty moving to a new location to the City. With an active Monon Line, the opportunity might be created to rehabilitate some of the older industrial areas along the Monon Line and begin to rehabilitate some of the older industrial areas along the Monon Line and begin to market them to new industries.

Industrial Development Program. Indianapolis has a strong Chamber of Commerce, experienced Planning Department and Plan Commission; and an independent Economic Development Commission which has actively marketed the City to new industrial clients. The City has marketed itself as having a central location that lends itself to being a distribution center. Whether this line of marketing can be extended to rail distribution needs to be explored. The City's emphasis in the area of industrial development has been focused as

much on the expansion and retention of existing industries as it has been on the attraction of new industries. A retention and expansion program for industries located along the Monon Line may be as important as the attraction of new industries.

Economic Impact. The short term impact of the abandonment of the Monon Line on Indianapolis is negligible. The medium and long term impact is marginal when viewed simply from a freight aspect. There is significant economic potential for developing the line into a tourism and excursion line linked to White River Park and Union Station. This potential development, if undertaken, would have a positive impact on not only the Indianapolis economy, but the economy of the entire SMSA.

The probability of this sort of excursion/tourism line is viewed as extremely difficult in the short term. The principal long term economic impact the line would have on Indianapolis would be the development of a commuter service to the northern part of the SMSA. This would encourage a further shift in population to the northern part of the SMSA.

Job Impact. There is no significant job loss in the short or long term caused by the abandonment of the Monon Line. The only impact comes from future job creation. These future jobs would be grouped around potential commuter service and the development of an excursion line. Both of these possibilities are in the long term.

Other Notes. Possible commuter passenger pick-up points in Indianapolis include Broad Ripple, the State Fair Grounds and Union Station in downtown Indianapolis. The Monon Depots at Broad Ripple

and the State Fair Grounds still exist and are in good to excellent condition. The abandonment does bring to the forefront the need to secure the easement for future transportation needs in Indianapolis and the reassessment of using the abandoned right-of-way to develop a highway to link the northeast corridor of the City to the downtown.

COMMUNITY DEVELOPMENT OVERVIEW

This section deals primarily with future considerations that may be given by communities to various alternative land use implications that will occur depending on the ultimate utilization of the Monon Line (particularly in the metropolitan areas of Marion and southern Hamilton Counties). This study provides a base of information that can be used by the affected communities and private concerns to assist them in planning and decision making regarding the future of the Monon Line and the adjacent real estate.

Industrial Development. If the line is revitalized as a freight carrier, a combination of traditional and more innovative land development strategies may be applied in Westfield, Sheridan and Indianapolis. The older industrial sites that currently occupy primarily the southern portion of the line in Indianapolis may be viewed together with an active line as a linear industrial park. Some of these areas are in need of redevelopment and may be enhanced by exploring and implementing creative uses for the corridor combined with innovative development strategies. Enterprise zone designation is one of many concepts that may be appropriate for this inner city industrial redevelopment. Whether a railroad operation

is viable or not, the corridor may serve as a conduit to provide service to the otherwise isolated industrial sites. Roadway and utility development along the right-of-way are possible compatible or alternative uses that will need further study. The industrial development potential along the corridor will depend on these and other factors that can be considered more extensively in the future.

Commercial/Residential Development. As a commuter/tourism mode, the line could present a number of new land use opportunities to Carmel, Indianapolis and Westfield. After considering the basic economic and current land use factors and assuming that the commuter/tourist market exists, the corridor may be able to serve a number of existing and potential new commercial or residential developments.

Under strong public and private leadership, Indianapolis has developed into one of the United States most progressive cities. The Monon Line is a geographic link between the Hoosier Dome (Indianapolis NFL Colts and major conventions), Union Station, White River State Park (Indianapolis Zoo), Indianapolis Heliport, IUPUI, State Government Complex, Indiana State Fair Grounds, Broad Ripple Village, Nora area, Carmel, Westfield and Sheridan. Major retail development planned for the 146th Street area near Westfield as well as the planned Circle Center Mall in downtown Indianapolis are in close geographic proximity to the Monon Line. The Indiana Transportation Museum is also contemplating a new location with access to the line in Hamilton County.

The assumption that these developments could provide a market for commuter service in the corridor needs to be looked at further. Regional planning for growth and development in the area is ongoing and the Monon Line is being assessed by private developers and government agencies with regard to its positive or negative effects on various development activity. As is evident by the comprehensive participation in this study by private, governmental and public organizations, there is broad support for preserving the corridor (intact).

The danger is present however, in assuming that the needed density and future development activity will gravitate to transit stops along the line. This has been an area of concern to planners across the country and should be addressed in this case. To make rail transit cost effective, there must be an appropriate level of development along the line. Typically, American cities have not developed in large concentrations along a straight line. Super highway systems and computerized traffic signalization have improved automobile and bus mobility a great deal. Even so, a number of metropolitan areas in the United States are venturing into some form of commuter rail system. Most of them involve multi-billion dollar expenditures. Most of them also involve major federal subsidies and are justified by using the high volume, low cost per ride method. There is concern that Indianapolis does not have the type of potential market that would support such a system. The suburban north side of Indianapolis may be able to support a lower volume, high cost per ride however.

The opportunity to use older, renovated equipment on older, renovated or replaced trackage combined with modern control technology may exist in this case. The federal deficit reduction movement is gaining strength and further grants and subsidies for commuter rail systems are highly unlikely in the foreseeable future. For this reason, it is a widely accepted fact that any commuter/ tourism rail system will be self sustaining or it will not exist.

In Summary. Ongoing planning and exploration of what can be done with the Monon Line by local communities would be appropriate as the impact area continues to change. Whether a rail operation (freight, commuter or tourism) is viable or not, a change in land use trends and controls may be appropriate. The corridor itself may serve several uses as previously eluded to.

A. Utilities: Sewer, water, gas or other underground utility services could be built within the right-of-way to help serve the growing north side.

B. Road Systems: Parallel road systems could be explored to improve access to various segments along the corridor. These could serve industrial, commercial or neighborhood areas as appropriate.

C. Neighborhood Improvements: The right-of-way may also revert back to adjacent property owners where appropriate. This may be compatible with opportunities for linear recreation facilities such as jogging and bicycle trails.

One specific area of neighborhood concern is the Kessler Boulevard Overpass. The tressle serves adequately and safely for

rail service but creates a "bottleneck" on Kessler Boulevard due to its limited clearance. The issue will require careful assessment by the Indianapolis Department of Transportation regarding possible alternative solutions.

Community development opportunities along the corridor exist and they are varied. The business and community leaders of central Indiana are working toward an objective and creative assessment of these opportunities and there is time to assure that the public interest will have priority.

COMMUNITY SHIFT-SHARE ANALYSIS

Data presented in Table X-C.1 shows employment changes for counties through which the abandoned segment of the Monon Line runs. The period 1968-1983 was used for this analysis because 1968 was characterized by strong economic performance and 1983 was characterized by poor economic performance. In business cycle terms, employment changes were thus computed between peak and valley years which tends to attenuate extremely high estimates of change, e.g., those that might be obtained if change was computed from valley to peak years.

The data show that employment increases occurred in all counties as well as in the State of Indiana and the United States. Employment increases exceeded those for both the U.S. and Indiana in Marion, Hamilton and Clinton Counties. The largest percent of growth occurred in Hamilton County followed by that in Marion County. It is important to note that Hamilton County employment

Table X-C.1

Total Employment Change Between 1968 and 1983

Area	Employment 1968	Employment 1983	Percent Change
Boone County	6,576	8,163	24.13
Clinton County	5,565	8,253	48.30
Hamilton County	6,015	22,173	268.63
Marion County	247,681	383,556	54.86
Indiana	1,396,409	1,915,858	37.20
United States	56,348,479	74,297,252	31.85

increased by more than 268 percent over the study period which was an increase of about 16,000 jobs. The extremely high Hamilton County percentage growth was probably due to a spillover effect from the growth that took place in the large employment base in the adjacent Marion County.

A shift-share analysis was undertaken to provide deeper insight into changes that have occurred in the Monon study area. Below a brief description of shift-share analysis is presented. This is followed with an interpretation of the analysis and results for the Monon study area.

Employment changes for a specific industry in a given region or area may be viewed as arising from at least three different but important sources. First, changes in overall national employment may be treated as a reflection of business conditions. If, for example, national employment is increasing it will, to some extent, contribute to growth in specific industries and regions. The opposite effect would be translated by sluggish or declining national employment. Employment in an industry may be increasing or decreasing independently from national employment trends and, consequently, may be viewed as a second component affecting employment changes in an area. Finally, an area may have particular attributes that make it more or less attractive than other areas for a particular industry. Shift-share analysis is a procedure that apportions employment changes in a specific industry and area into these three component parts: (1) national; (2) industry, and (3) area share. Since the areas being compared in this study are primarily counties and the State of Indiana, this component is called the area share.

The area share is a reflection of how "competitive" a county or the State is in the specific industry being examined.

Data presented in Table X-C.2 show the results for the shift-share analysis for manufacturing (SIC's 19-39). The U.S. between 1968-1983 showed a 31.85 percent increase in total employment and a 6.6 percent increase in manufacturing employment. Manufacturing employment grew much more slowly than employment in general. This trend was accentuated in Indiana (19.3 percent decrease in manufacturing employment) reflecting its greater dependence upon manufacturing in the 1960's and, therefore, the greater adjustment Indiana made in the post industrial period. In 1968, 51.6 percent of Indiana's labor force was employed in manufacturing; in 1983 this percentage had decreased to 30.35 percent. While the Monon study area exhibits a similar pattern of adjustment in its northern part (Clinton and Boone Counties), the impact of this adjustment has not been so extreme in Marion and Hamilton Counties. However, the pattern is basically the same: all counties in the study area performed below the level of the U.S. as a whole in the area of manufacturing employment with the exception of Hamilton County. Hamilton County's relatively strong performance probably stems from an increase in suburban oriented industry that has "spilled" across the northern boundary of Marion County.

Data presented in Table X-C.3 show that Indiana as well as each of the Monon study area counties greatly increased their service sector employment. Clearly, much of the relative loss in manufacturing employment was compensated for with increases in service sector employment.

Table X-C.2

Employment Change in Manufacturing Between 1968 and 1983

Area (1)	Employment 1968 (2)	Employment 1983 (3)	Percent Change (4)	Employment Changes Related To: National Growth (5)	Industry Mix (6)	Area Share (7)	Total (8)
Boone Co.	1,723	1,583	(8.1)	549	(435)	(253)	(140)
Clinton Co.	3,152	3,064	(2.8)	1,004	(795)	(296)	(88)
Hamilton Co.	3,128	4,330	38.4	996	(790)	994	1202
Marion Co.	86,815	87,693	2.2	27,332	(21,668)	(3,776)	1887
Indiana	720,552	581,433	(19.3)	229,496	(181,939)	(186,623)	(139,119)
U.S. Mfg.	17,433,895	18,586,376	6.6				
U.S. Total	56,348,479	74,297,252	31.85				
Indiana Total	1,396,409	1,915,858	37.20				

Table X-C.3

Employment Change in Manufacturing Between 1968 and 1983

Area (1)	Employment 1968 (2)	Employment 1983 (3)	Percent Change (4)	Employment Changes Related To: National Growth (5)	Industry Mix (6)	Area Share (7)	Total (8)
Boone Co.	287	1,623	465.5	91	422	822	1336
Clinton Co.	172	1,093	535.5	55	253	613	921
Hamilton Co.	399	3,442	915.3	108	499	2,496	3,103
Marion Co.	24,980	79,201	217.1	7,956	36,758	9,517	54,231
Indiana	94,342	338,273	258.6	30,048	138,824	75,096	243,931
U.S. Mfg.	6,152,461	17,162,974	179.0				
U.S. Total	56,348,479	74,297,252	31.85				
Indiana Total	1,396,409	1,915,858	37.20				

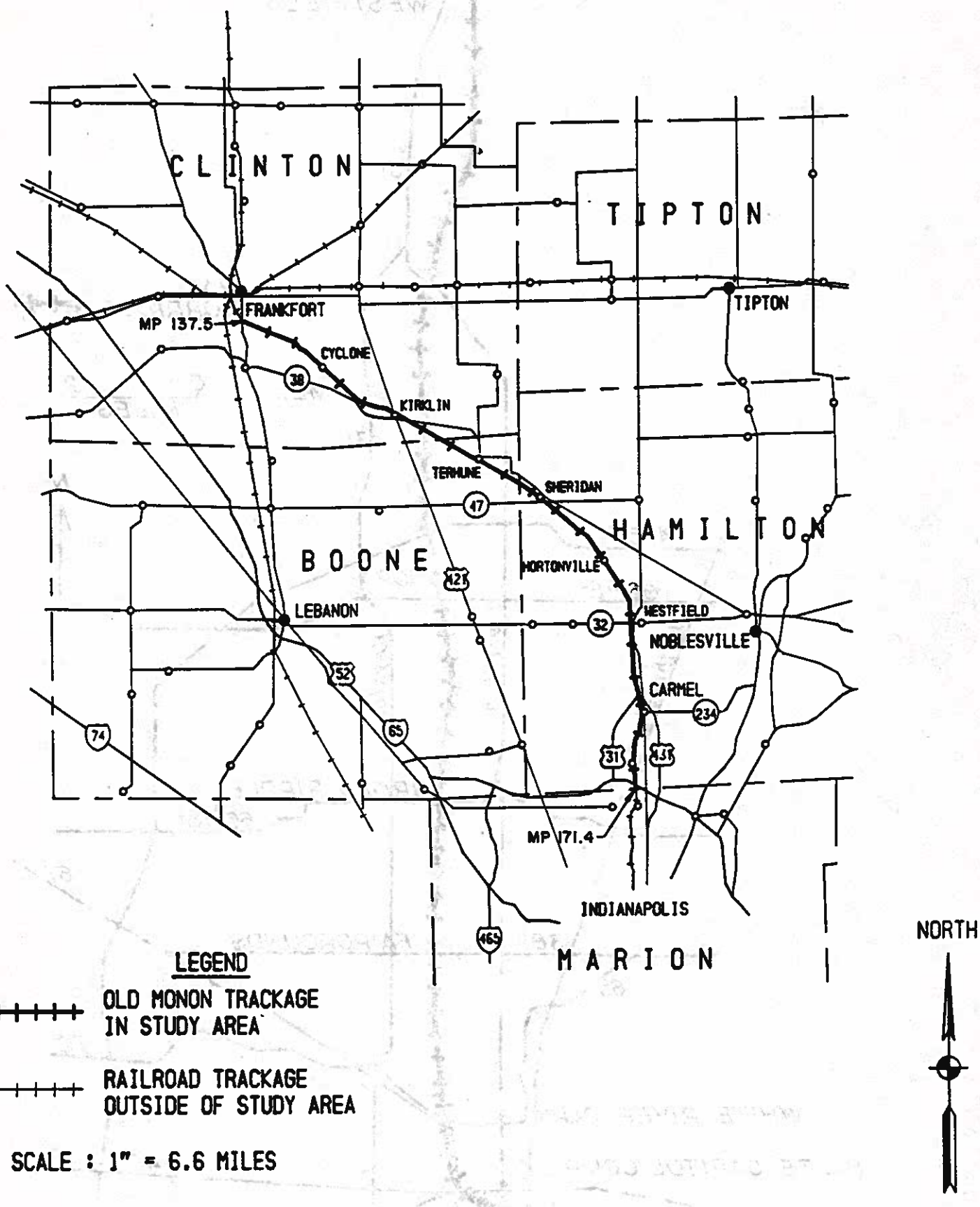


Figure X-1

STUDY AREA MAP

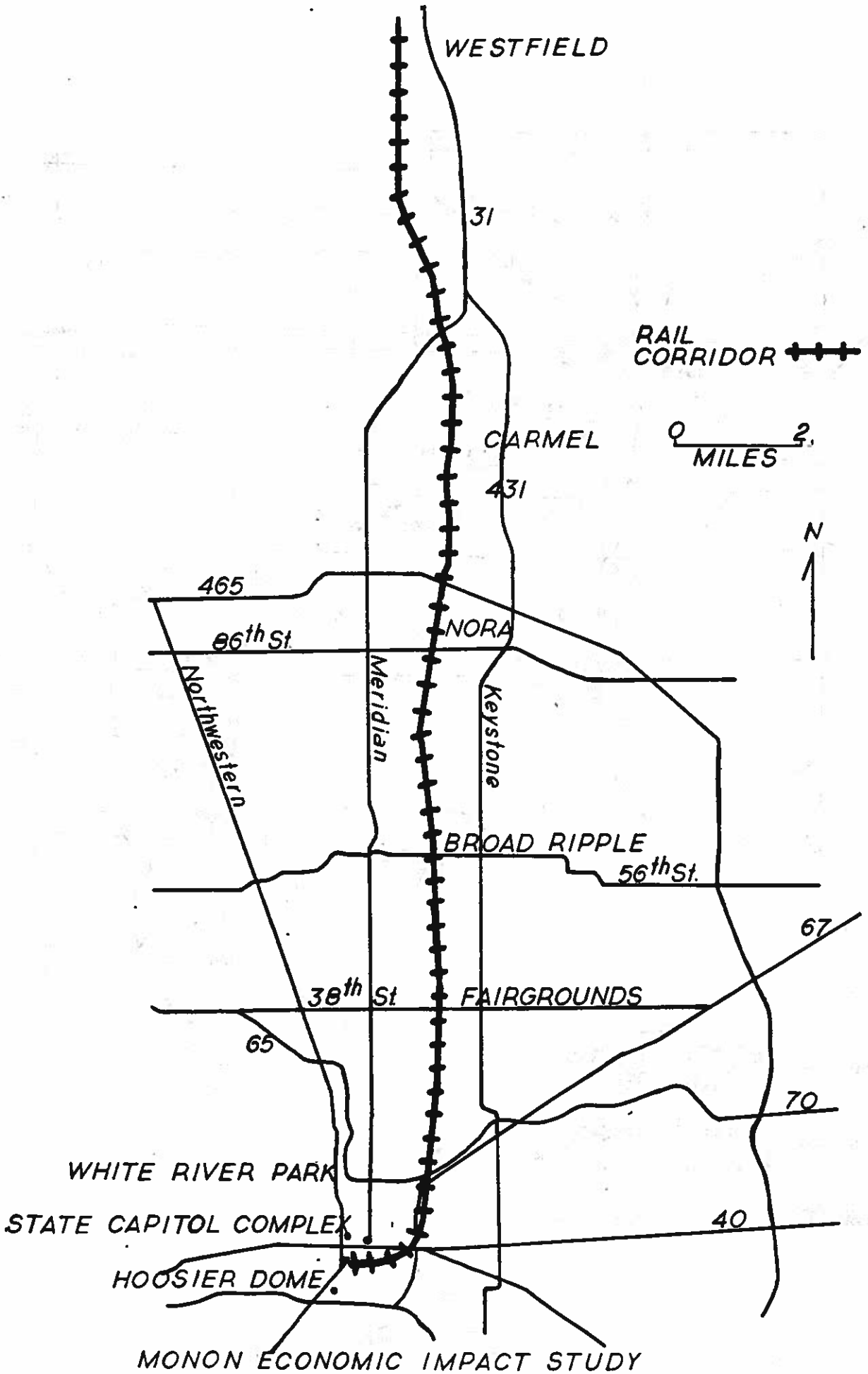

WESTFIELD
31
RAIL CORRIDOR
CARMEL
0 2
MILES
431
N
465
86th St
NORA
Northwestern
Meridian
Keystone
BROAD RIPPLE
56th St.
67
38th St
FAIRGROUNDS
65
70
WHITE RIVER PARK
STATE CAPITOL COMPLEX
40
HOOSIER DOME
MONON ECONOMIC IMPACT STUDY

Figure X-2

CHAPTER XI
RAILROAD MERGERS AND ACQUISITIONS

CHAPTER XI

RAILROAD MERGERS AND ACQUISITIONS

RAILROAD MERGERS AND ACQUISITIONS

Over the past decade, Indiana and the rest of the nation experienced an unprecedented number of mergers and acquisitions in the railroad industry. From 1975 to 1985, a majority of the rail lines in Indiana were merged with other railroads and/or changed ownership. Indiana is now dominated by three major rail corporations: Consolidated Rail Corporation (Conrail), Norfolk Southern Corporation (NS), and CSX Corporation (CSX). (Figure XI-1)

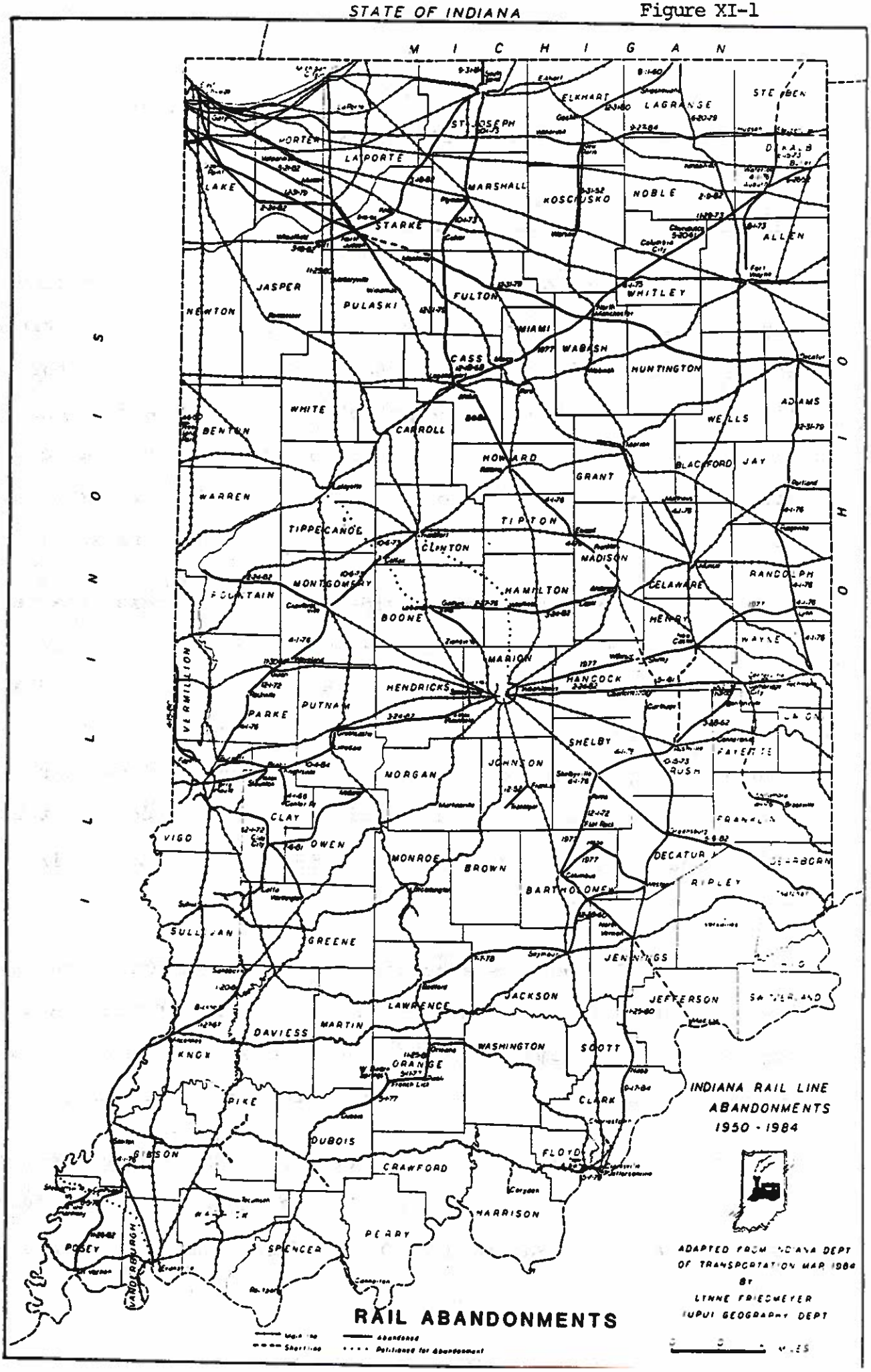
Conrail was formed in the mid-1970's by Congress as a response to the bankruptcy of a number of railroads operating in the northeast region of the country. The primary effect in Indiana was for the lines owned by the Penn Central Railroad to be transferred over to Conrail. Conrail is Indiana's largest rail carrier. It controls the Indianapolis Union Railway and 51 percent of the Indiana Harbor Belt. Conrail is now in the process of being sold to a private sector bidder.

Norfolk Southern is a holding company representing the 1982 consolidation of the Norfolk and Western Railway Company and the Southern Railway Company, both major carriers in Indiana. Norfolk Southern is one of the bidders trying to acquire Conrail.

CSX Corporation is a holding company representing the consolidation of the Chessie System, which owns and operates the former Baltimore and Ohio Railroad (B&O), and the former Chesapeake and

STATE OF INDIANA

Figure XI-1



Ohio Railway (C&O); and the Seaboard System, which owns and operates the former Louisville and Nashville Railway. The Chessie System and Seaboard System are both major carriers in the State. (Figure XI-2)

POTENTIAL EFFECTS OF A CONRAIL SALE

Conrail is the owner of the largest amount of railroad trackage in the Indianapolis Metropolitan area. Conrail tracks extend south from Indianapolis to Greencastle, Martinsville, Columbus, and Shelbyville; and north from Indianapolis to Crawfordsville, Lebanon, Lafayette, Frankfort, Kokomo, Anderson, and Muncie.

Because Conrail, through various acquisitions and mergers, has a majority of votes on Board of Managers and the Indianapolis Union Railway Company which operates the Belt Railroad, Conrail has a strong say in how rates are set for use of the Belt. There is some evidence that this situation has favored the operations of the dominant carrier, Conrail, at the expense of other carriers. See Indianapolis Union Railway Co. V. Baltimore and Ohio Railroad Co., 570 F. 2d 171 (7th Cir. 1978), in which a carrier unsuccessfully challenged a change in charges assessed for operations over the Belt Railroad, in which it was claimed that the rate change effectively reduced charges assessed on Conrail traffic and increased charges assessed on the traffic of other carriers.

Regardless of the present situation, the sale of Conrail along with the Belt Railroad to a private corporation could result in an even less favorable environment for the other rail carriers serving Indianapolis as well as for the businesses located on the Belt. Such a result could stand on its head the original purpose for the

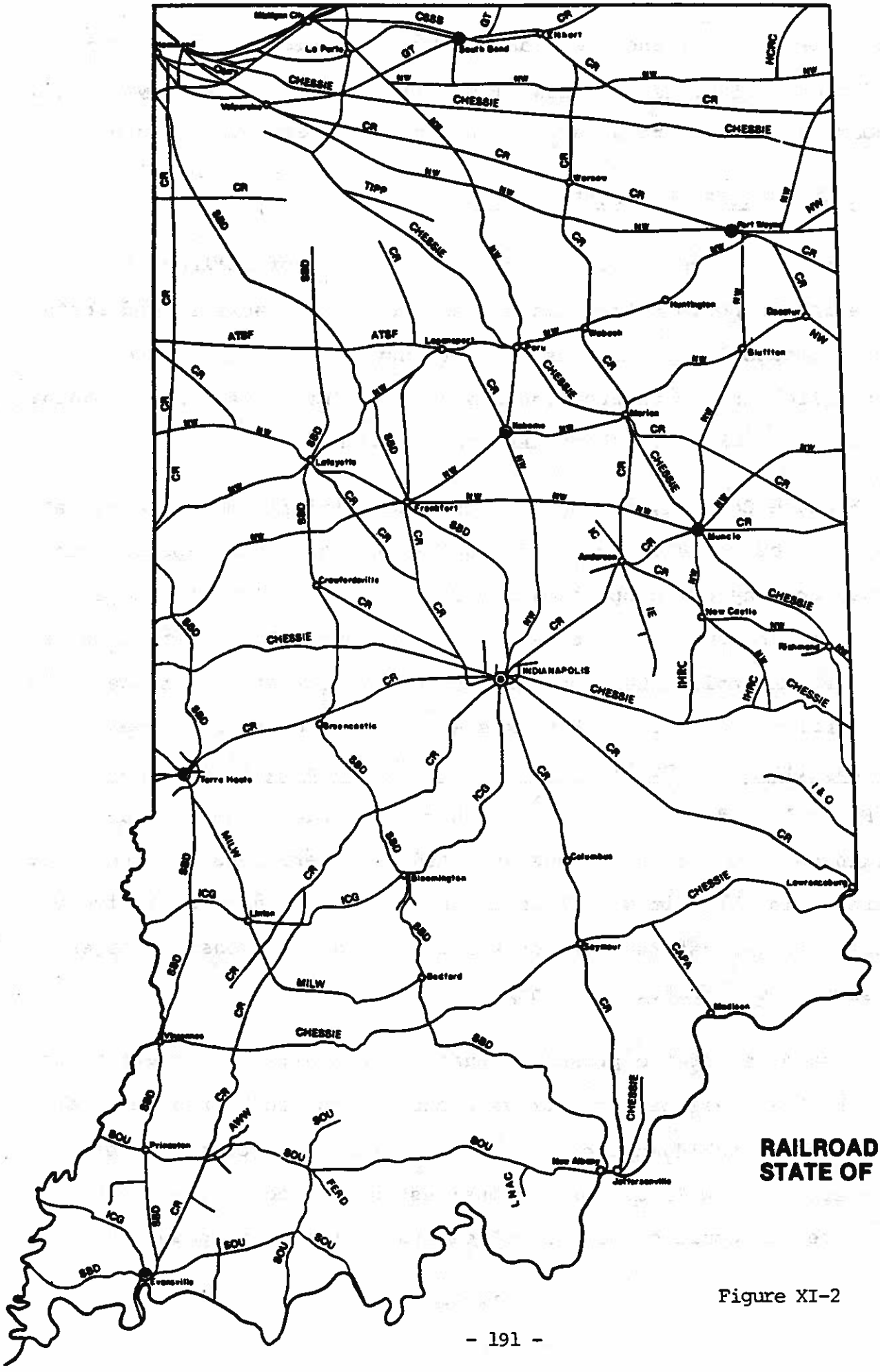

RAILROAD SYSTEMS
STATE OF INDIANA
INDIANAPOLIS
Fort Wayne
South Bend
Gary
Hammond
Michigan City
La Porte
Valparaiso
Warsaw
Huntington
Peru
Logansport
Kokomo
Marion
Muncie
Anderson
Lafayette
Frankfort
Crawfordsville
Greencastle
Terre Haute
New Castle
Richmond
Bloomington
Columbus
Seymour
Madison
Lawrenceburg
Jeffersonville
New Albany
Sedford
Linton
Princeton
Evansville
Vincennes
Tipp
CHESSIE
CR
NW
SBD
ATSF
MILW
ICG
IC
IE
I&O
CAPA
IHRC
NORC
CSSS
GT
SOU
AMW
FERD
LNAC

Figure XI-2

Belt Railroad, which was to be a neutral switching railroad for all carriers entering Indianapolis. An improvement in service and rate structures on the Belt Railroad could have a significant impact on the movement of rail traffic south on the Monon Line through Indianapolis.

APPLICATION TO THE MONON LINE

The study of the economic viability of the Monon Line cannot be done in a vacuum but must be placed in the context of the rapidly changing structure of the railroad industry and more specifically be evaluated in light of the changes which may take place in Indianapolis and Central Indiana if Conrail is sold. As was outlined in the previous section, the two most significant impacts of a Conrail sale are the prospect of another round of abandonments and rail consolidation in the region, and changes in the operation of the Belt Railroad. (Figure XI-3)

The potential value to Indianapolis and the region of the preservation of the Monon Line as an operating transportation corridor cannot be fully measured until after the sale of Conrail has taken place, and issues surrounding the operation of the Belt Railroad are resolved, and the potential impact of additional rail abandonments are taken into account.

Because of Conrail's presence in the Indianapolis market, the sale of Conrail, as is now planned, may have a significant impact upon rail service to Indianapolis and Central Indiana. Most of the Conrail lines feeding Indianapolis have low traffic densities, raising the potential of future rail abandonment as the purchaser of

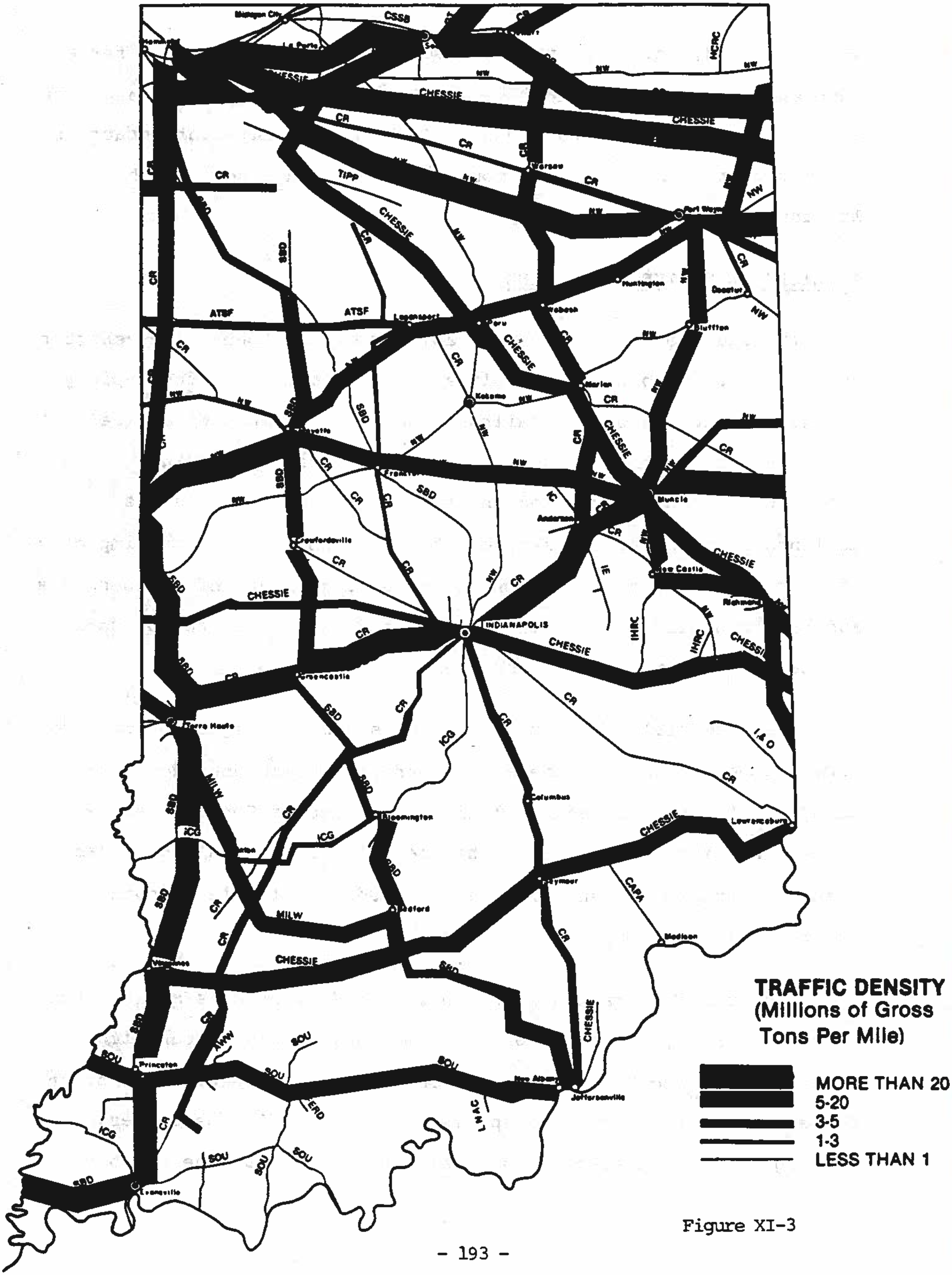

TRAFFIC DENSITY
(Millions of Gross
Tons Per Mile)
MORE THAN 20
5-20
3-5
1-3
LESS THAN 1
INDIANAPOLIS
CHESSIE
CSSB
CR
NW
SBD
ATSF
TIPP
ICG
MILW
SOU
CAPA
I & O
IHRC
LNAC
ERD
Terre Haute
Bloomington
Columbus
Princeton
Jeffersonville
New Albany
Lawrenceburg
Madison
Seymour
Bedford
Crawfordsville
Greencastle
Muncie
Anderson
New Castle
Richmond
Marion
Kokomo
Peru
Wabash
Huntington
Fort Wayne
Bluffton
Decatur
Warsaw
Logansport
Michigan City

Figure XI-3

Conrail attempts to put the railroad in a competitive position. In the case of a bidder for Conrail such as Norfolk Southern, abandonment of duplicating lines may become necessary. Short of the abandonment of entire lines, partial abandonment may occur, preventing shippers from direct access to Indianapolis, necessitating the taking of more costly and time consuming routes.

The full impact of a Conrail sale on rail service to the Indianapolis area and Central Indiana may not be known for a number of years, but based on the past record of abandonments in Indiana, one more round of rail consolidation can be expected. At present, there are three rail lines serving communities north of Indianapolis: a Conrail Line, a Norfolk Southern Line, and the Monon Line. If Norfolk Southern is the purchaser of Conrail, one or two of these north-south lines could be eliminated. Communities served primarily by rail lines having low density traffic such as Lebanon, Noblesville, Tipton, Frankfort, and Kokomo may be reduced to service by one carrier, or lose easy access to switching points such as Indianapolis in the aftermath of a Conrail sale.

During this period of anticipated transition, preservation of the trackage and rail service on the Monon Line may be of value to ensure continued service, offer competition, and provide access to Indianapolis for affected communities in this important agricultural and manufacturing region.

Another concern of a Conrail sale is its potential effect on the Belt Railroad. The Belt Railroad is a 14.73 mile track which encircles three-fourths of downtown Indianapolis. The Belt Railroad

serves a number of established Indianapolis companies and carries a significant percentage of the rail traffic originating in or destined to the Indianapolis market.

BELT RAILROAD (IURY)

The Monon Shippers Association's only interchange with the national railroad system is via the Indianapolis Union Railway. The study of the viability of both freight and passenger service on the Monon Line cannot be complete without recognition of the fact that the IURY will play a dominant role in the success or failure of the Monon Line.

The IURY is comprised of two physically separate parts; the Belt Line which encircles Indianapolis (except for the northwest side), and the Union tracks which serve Union Station. Although original ownership of the IURY was vested in five separate railroads, mergers have resulted in Conrail presently owning 100% of all outstanding stock of the IURY.

The IURY is operated by Conrail as a separate railroad and governed by a board of managers. The votes of the board of managers are allocated as follows:

Conrail	8
Chessie System	1½
Norfolk Southern	1
Illinois Central Gulf	1
Indiana Hi-Rail	1

Obviously Conrail has a majority of the votes, making its control of both operations and ownership complete. Despite court challenges by other railroads, Conrail has retained this control.

The examination of the feasibility of passenger service on the Monon Line must consider that the IURY controls all rail access to Union Station. Presently, the Union tracks see through trains of Conrail and Chessie. Amtrak operates on the Conrail trackage with Conrail dispatchers controlling all movements. The IURY establishes the fees for the use of these tracks serving Union Station.

Freight service is inseparably tied to the IURY with the only connection of the Monon Line being the Belt Line at 16th Street. The IURY operates from Hawthorne Yard (Conrail) to 16th Street on Tuesday, Thursday and Saturday.

Fees for the IURY are assessed based on a flat fee per car (approximately $8.00) plus a mileage rate. The mileage rate fluctuates widely each month and is derived by dividing the operating cost of the IURY by the car miles. This mileage fee ranges between $9 and $20 per mile and is not determinable until two months after the movement has taken place. One reason for the wide fluctuation is due to the IURY accounting procedure where major annual expenses that would accrue monthly under generally accepted accounting procedures are instead expensed by the IURY fees prior to the movement of a carload.

The present operational and pricing policies of the IURY impose severe restraints on the ability to generate additional rail bus business on the Monon Line. The tri-weekly service means that if a

car misses the IURY connection by one hour, it will take two or three additional days in transit. Despite the operation by Conrail and Chessie of multiple daily trains through Indianapolis, cars often spend 4 or 5 days within Indianapolis in transit between these carriers and Indiana Hi-Rail. The fluctuation in IURY fees distorts the transportation options of the Monon Line to favor interchange with the Norfolk Southern. IURY mileage between the Monon Line and NS is calculated as 0.02 miles, even though the cars physically must move approximately 2 miles. Thus, the fluctuation in the monthly rates amounts to only a few cents for NS Interchange, while interchange to other carriers (Chessie is next with a distance of over 4 miles) can easily amount to $40 to $100 per carload.

In conclusion, the options for both passenger and freight service on the Monon Line are limited by their dependence on the Indianapolis Union for connections.

CHAPTER XII
CONCLUSIONS

CHAPTER XII

CONCLUSIONS

The principal conclusion of this study is that the outlook for private sector uses of the abandoned Monon Line is not encouraging. Neither freight nor passenger excursion service are likely to be able to operate profitably without considerable subsidy. Moreover, even if these two uses share the line the outlook is not much brighter. While combined levels of freight and tourism demand to allow break-even operations on an operating cost basis are not beyond the realm of possibility, even these levels are in excess of the experience of recent years and require a combination of favorable assumptions. Even the most optimistic scenario does not envision private sector freight and tourism operations able to generate enough surplus of revenues over operating costs to pay for the rehabilitation of the track, let alone also pay for the acquisition of the land (even at a realistic price).

To be sure, circumstances could develop that would alter this conclusion. For example, one or more major manufacturing facilities dependent on rail could locate along the line as could a major tourist attraction that would be complemented by passenger rail access. But these possibilities hardly seem likely. Even if a major manufacturing facility sought a location in central Indiana, the Monon corridor is not the only option nor is it even the most attractive. There are many other locations with equal or superior access to rail that also have superior access to interstate highways. Moreover, highway access is at least as important to most

modern manufacturing operations as rail access and usually more important, particularly with recent emphasis on controlling inventory costs coupled with heightened competition from the motor carrier industry following the Motor Carrier Act of 1980.

With purely private sector transportation uses of the Monon corridor unlikely, the decision about the corridor's future is up to the public sector. There are only two major alternatives: (1) do nothing, and (2) acquire the corridor. There are, of course, several options under the second alternative.

The "do nothing" alternative would most likely result in the eventual sale of the land to the adjacent land owners. In the short run, there might be some attempts to maintain freight or excursion service but, as the preceding analyses make clear, the long run prospects for these services to be self supporting are not good.

The existing freight shippers on the line would bear most of the adverse impacts of this alternative. The availability of rail freight service benefits these shippers in several ways. First, in a few cases rail rates may be sufficiently less than motor carrier rates to overcome the added inventory costs of larger shipments so that rail shipment lowers the company's costs. Second, the availability of rail service may be an aid in negotiating lower truck rates, although competition among different trucking firms can be expected to give much the same result. Third, rail may permit the shipment of some commodities that are not feasible for truck shipment, although this factor is apparent with only one company, the Truss Manufacturing Company in Westfield. Finally, the availability

of rail may make it easier to access more markets in different regions of the country for grain shippers.

While these are important effects, none of the shippers interviewed in the course of the study indicated that the absence of rail shipping alternatives would threaten the financial viability of their businesses or would cause them to relocate elsewhere. Thus, it seems unlikely that there would be any adverse employment effects from the loss of rail in Marion, Hamilton, Boone, or Clinton counties or in any of the communities along the line.

If the loss of rail does not seriously affect the existing shippers, it will also not be likely to have a serious adverse affect on the communities along the line. The only potential loss is that companies requiring rail service would not be able to relocate in these communities. As pointed out earlier, however, companies for whom transportation links are critical are not likely to be attracted to most of these communities anyway because these communities have no comparative advantage in access to interstate highway over many other central Indiana sites.

Perhaps the biggest loss associated with the do nothing alternative is the loss of the corridor right-of-way for future transportation uses. While the commuting flows along this corridor and the costs of current technologies do not appear to justify mass transit alternatives at this time, future conditions may warrant a reassessment. In particular, continued population growth in the area served by the corridor coupled with continued development of downtown and energy conservation and environmental concerns about

increased auto travel may make added radial transportation capacity necessary in this portion of Indianapolis. Assembling a transportation corridor where none previously existed in a major metropolitan area has become a nearly impossible task. Were the Monon corridor preserved, however, the task of future transportation planners might be greatly eased.

Thus, the second major alternative is to acquire the corridor and a major argument in favor of the acquisition is the corridor's preservation for future transportation uses. A question with this alternative, however, is to what use the corridor might be put in the interim until these future transportation needs might materialize.

One option is to allow its use for freight and passenger excursion service without charge. (Any charge that would cover the cost of the land faces much the same problem of inadequate revenues as the purely private sector alternative.) Here, however, the prospects for long run freight and passenger excursion service are still not good. Such services would still have to cover the rehabilitation costs of the track. Recall from Chapter 2 that the rehabilitation costs are in excess of $7,000,000. As the earlier analyses demonstrated, these services would probably not generate sufficient revenues to pay for rehabilitation.

Thus, to maintain freight service and promote the development of passenger excursion service over the long run would require public sector funding for most, if not all, rehabilitation of the track. Moreover, a decision to purchase the corridor and retain

some sort of rail-based use would increase the cost of purchase. Without a rail-based use, Seaboard would be able to remove the rails and ties for salvage value, a value estimated at $1,153,000 for this section of the line. Were these materials not available for salvage, Seaboard would no doubt request compensation beyond just that for the land.

Should the corridor be acquired by the public sector there will be a question about what sort of an organization should be developed to manage it. Several options exist including the assignment of this responsibility to: (1) an agency such as the State Department of Natural Resources or the State Department of Transportation (depending upon its primary use); or (2) establishing an authority or commission at either the state or local level.

Opting for a state authority or commission would require a legislative act. A more easily accomplished alternative would be to form a port authority at the local level as a cooperative venture of the communities located along the line. Similar authorities have been established in Madison and Auburn, Indiana under the provisions of the Indiana Act. A description of this legislation and its utilization by Indiana communities appears in Chapter IX. The advantage of forming such an authority is that it would be easier to do than to form a state authority. Moreover, it would not force a state agency to assume operating responsibility for the corridor. Finally, since it would span much of two communities and maybe parts of three, providing commuter service at some future time through a port authority would not face the political boundary issue that

might hamper any attempt to expand the existing Indianapolis Metropolitan bus service above the Marion County Line.

In summary then, the public sector will likely have to take some action if this corridor is to be preserved since the prospects for private sector transportation uses of the abandoned Monon Line are not encouraging.

CHAPTER XIII
FOOTNOTES

FOOTNOTES

CHAPTER 1

1 Documents filed by Seaboard as part of the abandonment process are found in Interstate Commerce Commission Docket No. AB-55 (SUB-NO. 94).

2 Appendix I-A contains profiles of the major communities along the portion of the line abandoned by Seaboard.

CHAPTER 2

1 In addition to the land for which Seaboard held fee simple title, Seaboard had a variety of easements to use the other sections of the right-of-way for transportation uses.

2 Appendix II-A contains a detailed analysis of the track within Indianapolis, including this section.

3 Conrail operates the Indianapolis Union Railway which consists of two separate parts: the Belt Line which encircles Indianapolis (except for the northwest side), and the Union tracks serving Union Station. The Monon line connects to the Belt line at 16th Street and the Indianapolis Union Railway operates from Conrail's Hawthorne Yard to 16th Street.

4 See, for example, Donald V. Harper, Transportation in America, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978) Chapters 10 and 11.

5 In conversations with shippers located along the abandoned section of track, the need to reduce inventory costs was frequently cited as a major reason for switching from rail to motor carrier shipments. A second reason often cited was unreliable service from Seaboard.

6 For more details of the analysis, see Theodore E. Keeler, Railroads, Freight, and Public Policy, (Washington, D.C.: The Brookings Institution, 1983).

7 For an excellent discussion of potential pitfalls of short line operations see, James A. Schwinkendorf, "Short Line Operations From a Class I Railroad Prspective," Proceedings of the Transportation Research Forum, Volume XXVI, Number 1, November 1985. Mr. Schwinkendorf is Assistant Vice President, Operations Planning, The Milwaukee Road, Inc.

8 The result of cutting back to a single locomotive is that the amortization and maintenance costs of the locomotive as well as the fuel costs are reduced by 50 percent.

9 From conversations with short line operators, the annual salaries assumed for the employees were one at $22,000 and two at $17,000. Fringe benefit rates of 40 percent were then applied to these figures.

10 While some short lines operate at even lower maintenance of way expenses, most felt that $2,500 per year per mile was reasonable for long term maintenance of track that had been rehabilitated.

11 The rehabilitation costs were amortized over thirty years at a 10 percent annual rate of interest. The cost to purchase the land included compensating Seaboard for the salvage value of the track, etc., and was also amortized over thirty years but the interest rate used was 6.9 percent -- Seaboard's average corporate rate of return from 1971 through 1979.

CHAPTER III

1 The basic unit for which resident market data is available is the county. Thus, the market areas do not conform exactly to the 25, 50, and 100 mile lines. The decision rule employed for including or excluding a marginal county was whether or not the relevant market line included or excluded the county's major urban area.

2 Union Station, located about one-half mile from WRP and in the heart of the City is currently undergoing a $54 million renovation. With shuttle tie to WRP, Union Station could serve as an effective terminal for a Monon excursion program.

3 As described in Analysis of the Economic Feasibility of the Historic Amusement Foundation by Leisure and Recreation Concepts, Inc., May 1985.

4 There will probably be spillover effects to third parties (other businesses and individuals in the form of indirect benefits if the Monon excursion program is implemented. These are, however, difficult to estimate within the scope and resources available to this project. At the same time it is possible to identify these benefits in a qualitative way. First, the percolation of visitors expenditures on the excursion through the local economy could serve to increase employment in a vareity of sectors. Second, the excursion program should serve to make the attractions it is associated with (e.g., WRP, Fair, etc.) more attractive, thereby having a synergistic effect on the visitor attractiveness of Indianapolis. The possibility of achieving these types of

benefits motivated Scranton, PA to invest public funds in the development and acquisition of Steamtown (Appendix III-G).

CHAPTER VI

1 As reported in the U.S. Bureau of the Census, Census of Population, 1980, Vol. 1.

2 Reid, Quebe, Allison, Wilcox & Associates, Inc., Engineering Study Report for Monon Economic Impact Study, November, 1985.

3 As reported in "Railbus: A Hybrid seeks its niche," Railway Age, December 1980, pp. 32-34.