

FY 1998 Proposed Rail Improvement Program



Illinois Department
of Transportation

**FISCAL YEAR 1998
PROPOSED RAIL IMPROVEMENT
PROGRAM**

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**ILLINOIS DEPARTMENT OF TRANSPORTATION
FISCAL YEAR 1998**

**RAIL FREIGHT IMPROVEMENT
AND
INTERCITY RAIL PASSENGER PROGRAM**

PREFACE

The Illinois Department of Transportation has, in the past, published its Rail Program yearly, and its Rail Plan as needs dictate. The department has combined both documents into one. This new document, as with those Programs and Plans that have preceded it, will present the major issues affecting rail freight and passenger service in the state.

For those interested in reviewing the rail plan amendments which have been published since the Fiscal Year 1997 Rail Program Supplement, please send your request to the Illinois Department of Transportation, Attention: Chief, Bureau of Railroads, Room 302, 2300 South Dirksen Parkway, Springfield, Illinois, 62764.

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INTRODUCTION

The problems and opportunities facing Illinois' rail system reflect the broad, nationwide changes that have affected the rail industry as a whole. Over the years, the railroad industry has made dramatic strides in its attempt to generate an adequate return on investment -- not without a cost to the public, however. Many miles of track have been abandoned, and mergers, oftentimes "mega-mergers", have become commonplace. Railroad employees have been displaced, rail-using industries have been forced to divert to less economical transportation alternatives or to cease business entirely, and growth and expansion opportunities for "rust-belt" communities have been lost. On the upside, however, many Illinois businesses have been able to capitalize upon the benefits related to system consolidations, such as transportation cost savings through more efficient single-line routings, better equipment supply through equipment pooling, and enhanced business opportunities due to greater marketing and operating coordination.

During the past few years, Illinois has witnessed the consummation of several railroad mergers. In February of 1995, the Union Pacific (UP) acquired the Chicago and North Western (CNW), effectively creating a major western carrier system approximately 22,600 miles in length. In August of 1995, the Burlington Northern (BN) and Atchison, Topeka and Santa Fe (ATSF) merged, exceeding the size of the UP/CNW combination by approximately 6,400 miles. Shortly after, and in reaction to the BNSF merger, the UP fully consolidated with the CNW (costing 900 Illinois railroad jobs). By July 3, 1996, UP was given authority to merge with Southern Pacific (SP). This latter transaction created a system over 34,000 miles in length. Within the same time frame, the Illinois Central (IC) acquired the Chicago, Central and Pacific (CCP). Illinois is now watching three additional mergers unfold: as of March of this year, Conrail (CR) shareholders voted to allow CSX Transportation (CSXT) and Norfolk Southern (NS) to divide and acquire CR's eastern rail Network. In addition, Illinois is witnessing the pending sales of Canadian Pacific's (CPRS) former Soo lines to the Iowa, Illinois, Minnesota & Missouri Rail Link (I&M), and of the Gateway Western (GWWR) and Gateway Eastern Railways' (GWWE) lines to the Kansas City Southern (KCS). Within a two-year period, the number of Class I

western railroads have been reduced from four to two, and the number of Class I eastern carriers soon may be reduced from three to two.

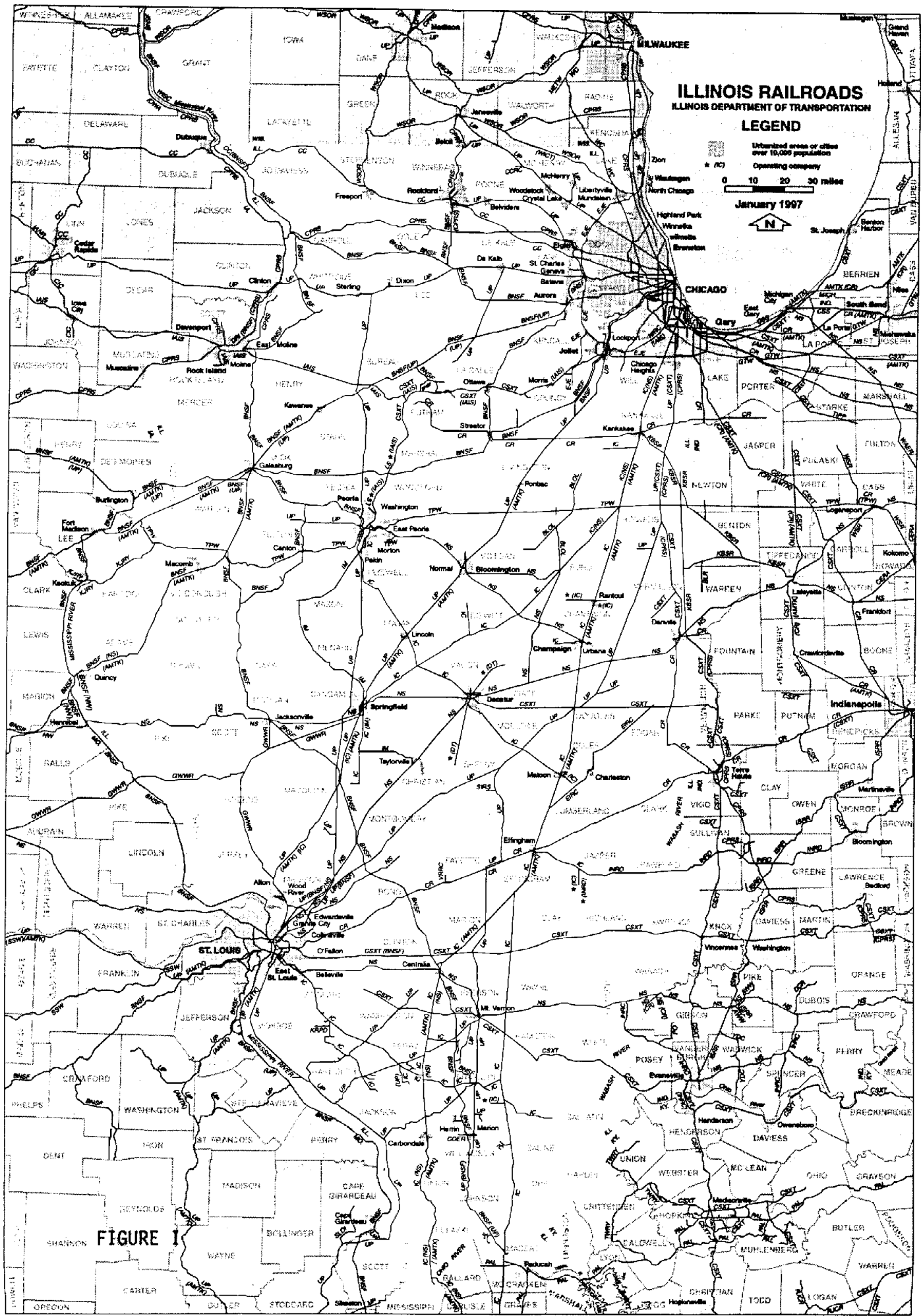
The rail passenger network has not remained untouched during this tumultuous time. Indeed, due to decreased federal funding, Amtrak, in its attempt to achieve self-sufficiency by the year 2000, has had to scale back its operations through service reductions and route eliminations. Illinois, as with the other eleven states that subsidize Amtrak service, has increased state subsidy support to avoid drastic changes in service. During this period, moreover, the department has continued to develop plans for high speed rail for Illinois. A significant portion of these efforts has been directed toward grade crossing safety issues, a component that is important from both rail freight and rail passenger perspectives.

The narrative that follows presents the department's proposed Rail Freight, Rail Passenger and High Speed Rail Improvement programs. It also provides a discussion of the department's overall rail planning process.

ILLINOIS RAILROAD SYSTEM

Rail System

Unlike highways, waterways and airways, the rail system in Illinois is primarily privately owned by a number of corporate entities. With a combined route mileage of approximately 7,900 miles (shortlines, regionals and major interstate railroads), Illinois ranks second only to Texas. By virtue of its Midwestern location, Illinois is served by carrier systems that extend to the East, West and Gulf coasts as well as to Canada and Mexico. (The orientation of all rail lines in the state is shown on Figure 1.) Illinois is a significant gateway or interchange point among railroads serving either eastern or western states, with Chicago and East St. Louis being principal rail gateways. As shown on Table 1, the seven largest railroads of the 44 operating railroads in existence in Illinois operate approximately 92 percent of the state's total route miles.



ILLINOIS RAILROADS
ILLINOIS DEPARTMENT OF TRANSPORTATION

LEGEND

Unauthorized areas or cities over 10,000 population
Operating company

0 10 20 30 miles

January 1997



FIGURE 1

Table 1
Illinois' Largest Railroad Systems
As Of Spring 1997

	<u>Route Miles Operated</u>	<u>Percent of State System</u>
Union Pacific	1,940	24.6
Burlington Northern Santa Fe	1,378	17.4
Illinois Central	1,212	15.3
Norfolk Southern Railway Co.	1,066	13.5
CSXT Corporation	655	8.3
CP Rail System	576	7.3
Consolidated Rail Corporation	<u>452</u>	<u>5.7</u>
Total:	7,279	92.1

In total, there are 44 railroad companies operating within Illinois. Of these, Class I railroads account for nine, regional railroads for six, locals for ten and switching and terminals for 19. A "Class I" railroad is one which earns greater than \$253.7 million in annual operating revenue. A "regional" railroad generally operates at least 350 miles of track and a "local" railroad generally operates under 350 miles. "Switching" or "terminal" railroads are primarily non-line-haul carriers and perform switching and/or terminal services for other railroads. Railroad employment in Illinois is 6.8% (13,295 jobs) of the total U.S. railroad employment. This is 31% less railroad employment in Illinois than in 1991. Illinois still has more employees than any other state, however, indicating that the industry contraction is nationwide.

Density and Rail Line Status

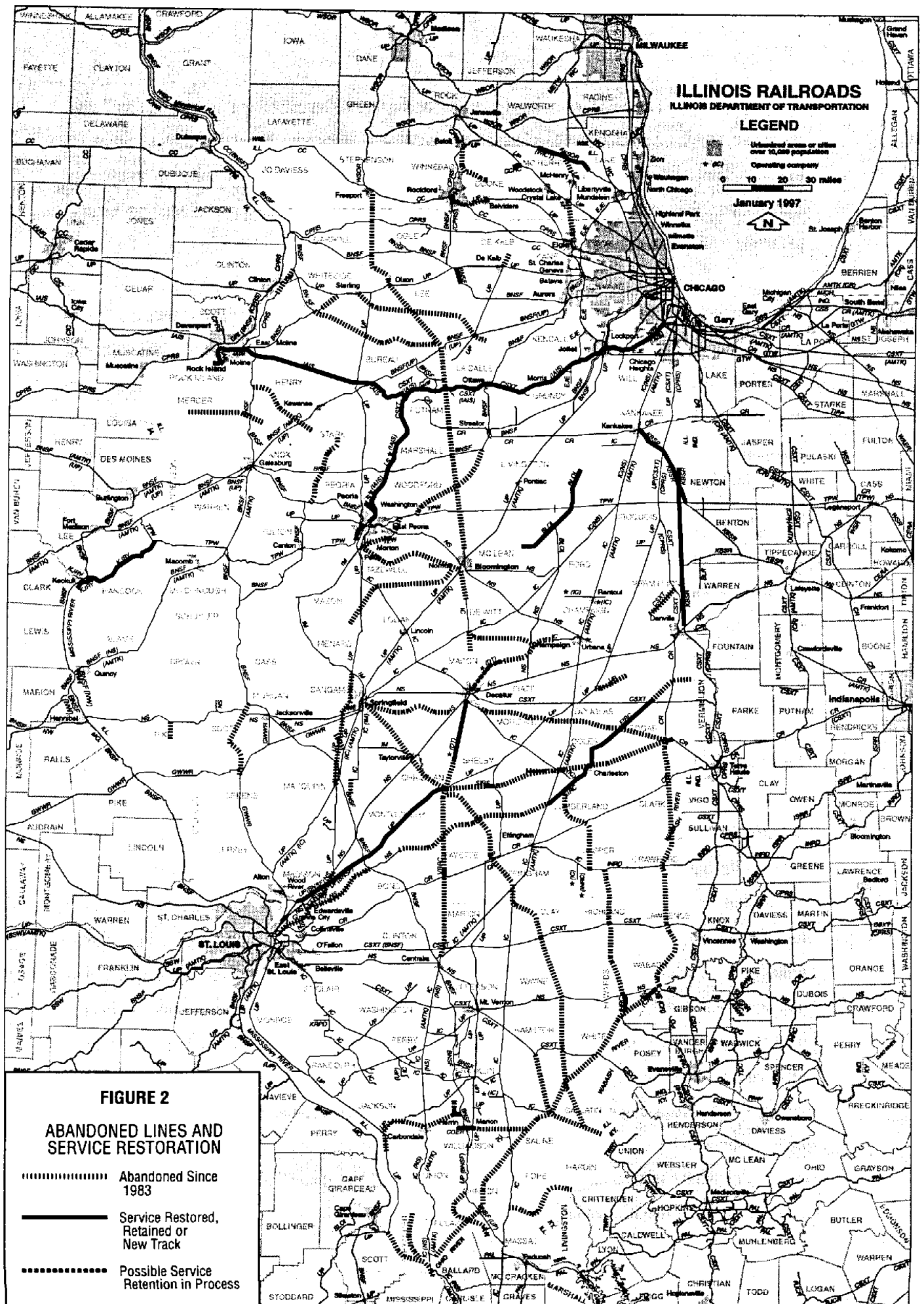
This section provides rail line specific data used by the department to determine immediate and future needs of the state in the rail planning process. Traffic densities, line abandonments (granted, pending and potential), along with service restoration progress, are detailed within this section.

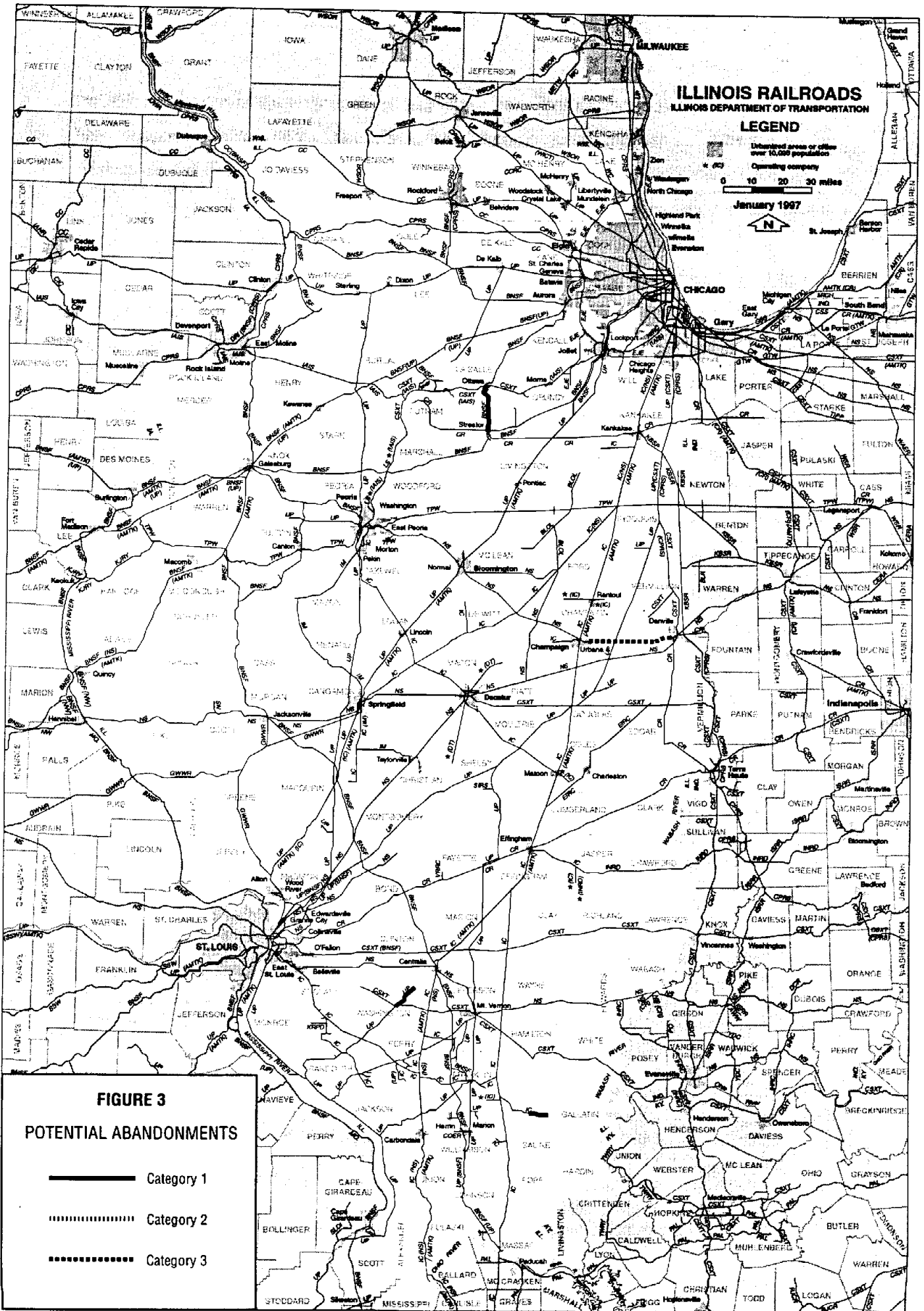
Illinois has approximately 7,900 route-miles of track (excluding yard tracks and sidings), of which approximately one-fifth is categorized as light-density. Light-density lines are those that carry under five million gross tons of freight traffic per

mile annually. These lower volume lines are also referred to as "branchlines" and generally serve agricultural businesses in rural areas or industrial firms in urbanized areas. The higher density lines, which make up the balance of Illinois' rail network, carry over five million gross tons of freight per mile annually and are generally referred to as "mainlines."

As it strives to achieve an improved rate of return, the rail industry will continue to rid itself of unprofitable lines and to consolidate through mergers. Likewise, deregulation has made abandonment authority easier to obtain. (On the other hand, deregulation has resulted in fewer actual abandonments through encouraging the formation of shortlines to take over service.) Since 1976, over 3,000 miles have been abandoned in Illinois. After a rail line has been abandoned, a shipper may be forced to go out of business, or change to other modes in order to continue in business. The latter, in many instances, has meant an increase in transportation costs. Abandonment of rail lines in Illinois will continue in the future largely due to railroad consolidation proceedings. At present, approximately 74 miles of rail line in the state have been categorized as pending or potential abandonments, or lines for which abandonment exemptions have been filed.

The loss of direct rail service has a profound effect on business and communities. In cases where a business is in a highly competitive market environment or has a marginal operation, the loss of rail service may force the firm to either close or greatly reduce its operations due to the increased costs of trucking. For some businesses, particularly grain elevators, the loss of rail service may result in the loss of a market due to greatly increased transportation costs. It has also been found that an elevator shifting to truck from rail will pay farmers 5-7 cents/bushel less for their grain, to account for their own higher transportation costs. That 5 cents/bushel is often greater than the farmers' profit margin. In either case, the local community often must bear the resulting increases in unemployment and reductions in disposable income. Figure 2 depicts those lines abandoned since January 1, 1983, the lines on which service has been retained, and those on which an effort is being made to restore or retain viable rail freight services. Table 2 (on page 9) and Figure 3 includes current data on the status of line abandonments in Illinois.





The department recognizes the importance of an adequately balanced transportation system for the movement of commodities to market. Without an adequate rail system for the movement of these products, highways in Illinois will be congested and highway deterioration will increase at a more rapid rate.

Rail Line Abandonment Status and Categories

Line status includes several different categories which are used by the Surface Transportation Board (STB). Under new rules established by the STB and made effective January 23, 1997, railroads must file a System Diagram Map (SDM), or a system narrative in the case of a Class III railroad, with the STB and the Department of Transportation. These SDMs or system narratives provide abandonment category and termini information. Under the new rules, a STB abandonment decision must be made four months after an abandonment application is filed. With respect to abandonments under the exemption process, no changes have been addressed by the new STB rules. Exemption requests, then, if not contested, may be granted within 30 days of the abandonment notice publication.

Railroads have been, and still are, required to place lines into one of five categories, as described below:

Category 1 are lines anticipated for abandonment within three years of the filing of the system diagram map. This designation means that a railroad is determining the line's contribution to the rail system (i.e., revenues vs. costs), but believes abandonment to be likely. Nearly all rail lines move from Category 1 to Category 3. A rail line may stay in Category 1 as little as 2 months or up to several years.

Category 2 are lines that a railroad is studying for future abandonment. A line in Category 2 usually does not remain at this status for several years and must be put into Category 1 prior to filing an abandonment application. A railroad usually determines to either move the line to Category 1 or remove the Category 2 designation altogether, if they intend to keep it in their system.

Category 3 are lines for which abandonment or discontinuance application are pending. Sixty days must pass after a line is in Category 1 on the system diagram map before a railroad can place a line in Category 3. Likewise, each rail user must be notified via a local newspaper. This notification or "Notice of Intent" to abandon must also be sent to state rail agencies, the STB and shippers. If no protests are filed, the STB must issue a certificate of abandonment or discontinuance of service within four months of the abandonment filing.

Category 4 lines are operated under subsidy. With the expiration of federal funding eligibility for subsidies on September 30, 1981, all federal subsidies were discontinued. Some states continued to offer subsidies after this time.

Category 5 and all other lines. Lines in this category are considered viable by the railroads at the time of the filing of the System Diagram Map. A line in Category 5 can be filed in Category 1 or 2 within the same year only if the railroad files an amended system diagram map.

Table 2

SUMMARY OF ILLINOIS RAIL LINE STATUS
(Miles of trackage)

Railroad	Category 1	Category 2	Category 3	Total Miles
BNSF	16.92	--	--	16.92
CR	--	--	24.50	24.50
UP	7.00	--	2.80	9.80
IC	7.10	--	--	7.10
IHRC	--	--	8.40	8.40
CPRS	1.04	--	--	1.04
EJE	6.16	--	--	6.16
TOTAL	38.22		35.70	73.92

*Total railroad route mileage in Illinois is approximately 7,900. These pending or potential abandonments represent 1 percent of the total.

Traffic Density

Figures 4 and 5 depict the most current information available on density for all railroads in Illinois. For the most part the information is based upon 1996 data.

ILLINOIS RAILROADS
ILLINOIS DEPARTMENT OF TRANSPORTATION

LEGEND

Unshaded areas or cities
over 10,000 population
Operating company
0 10 20 30 miles
January 1967

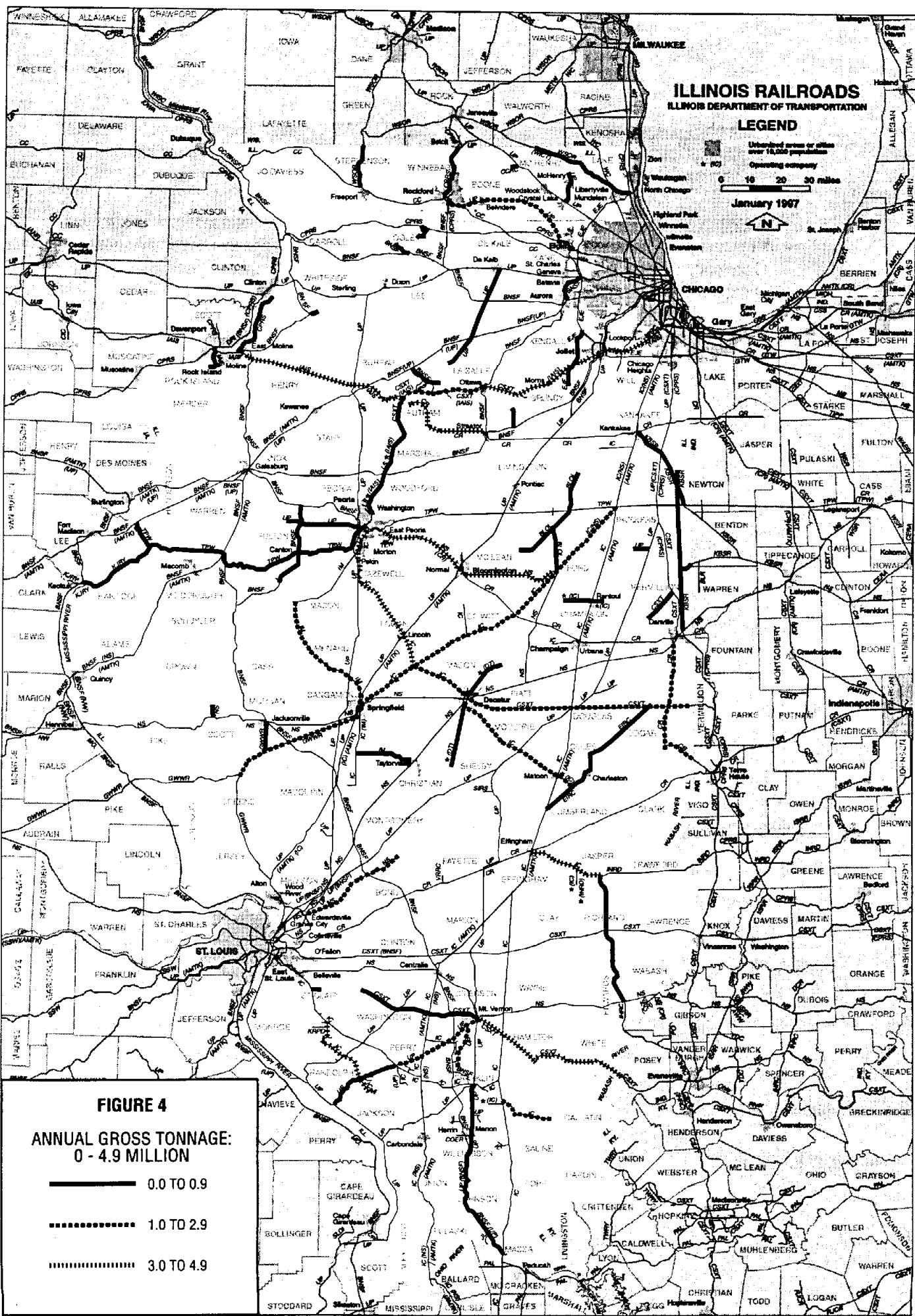
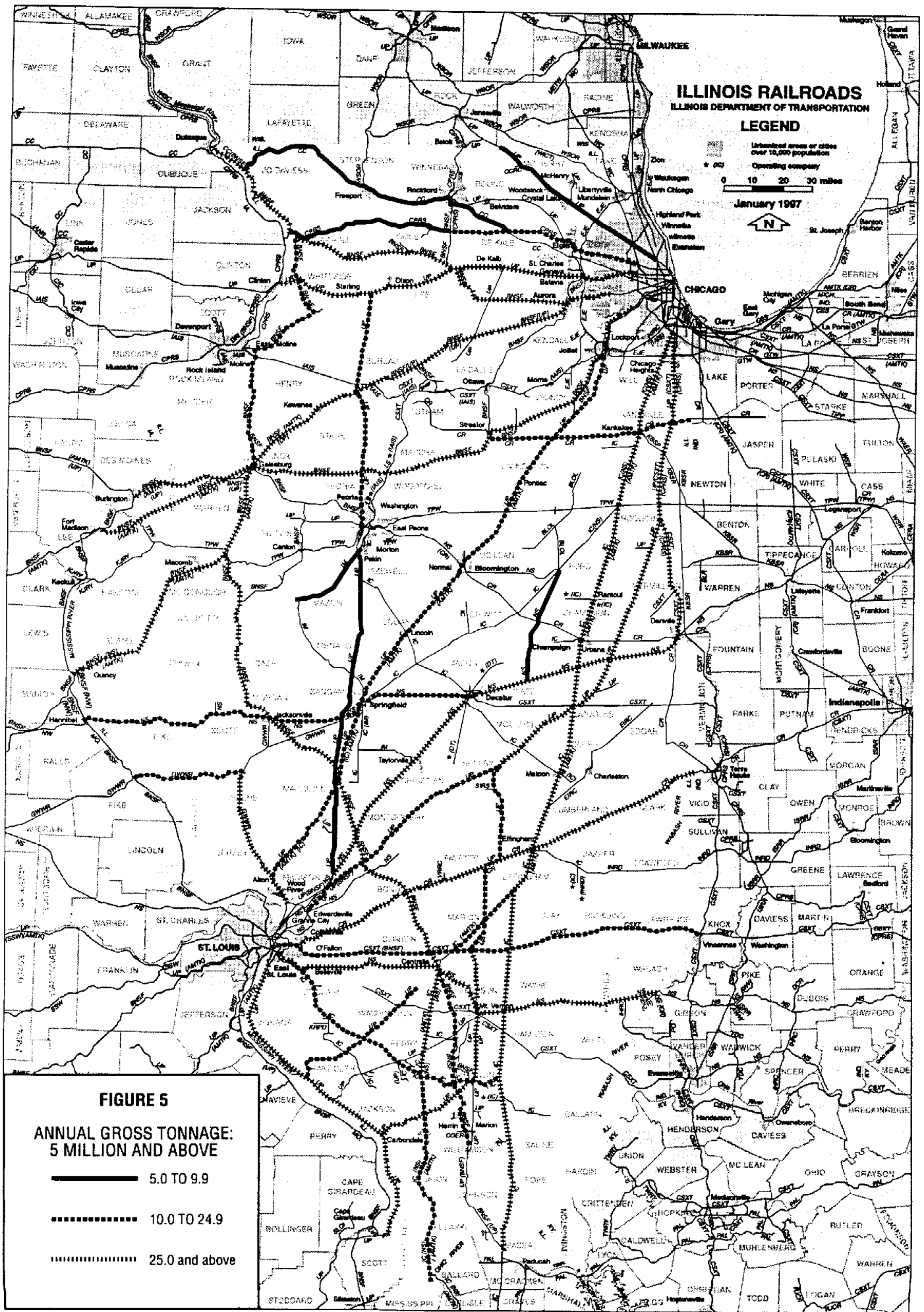


FIGURE 4

**ANNUAL GROSS TONNAGE:
0 - 4.9 MILLION**

- 0.0 TO 0.9
- - - - - 1.0 TO 2.9
- 3.0 TO 4.9



RAIL FREIGHT PROGRAM

The state's role in addressing rail freight service needs is to channel government funds to projects that achieve statewide economic and rail freight service goals. The Rail Freight program is helping businesses by retaining and creating jobs through the construction of new and improved rail freight service facilities. The program provides the state with the leverage to draw together different parties with various needs to solve a shared transportation problem. In this way, state funds will leverage private investment for greater economic benefits to shippers, railroads and communities in Illinois.

The department prefers to loan rather than grant funds whenever possible. To that end, the General Assembly enacted legislation establishing two revolving loan funds: the Rail Freight Loan Repayment Fund for federal loan funds and the State Loan Repayment Fund for state loan funds. Loan repayments are recycled for new projects.

Fiscal Year 1998 Program

The Fiscal Year 1998 Rail Freight Program is funded from three sources:

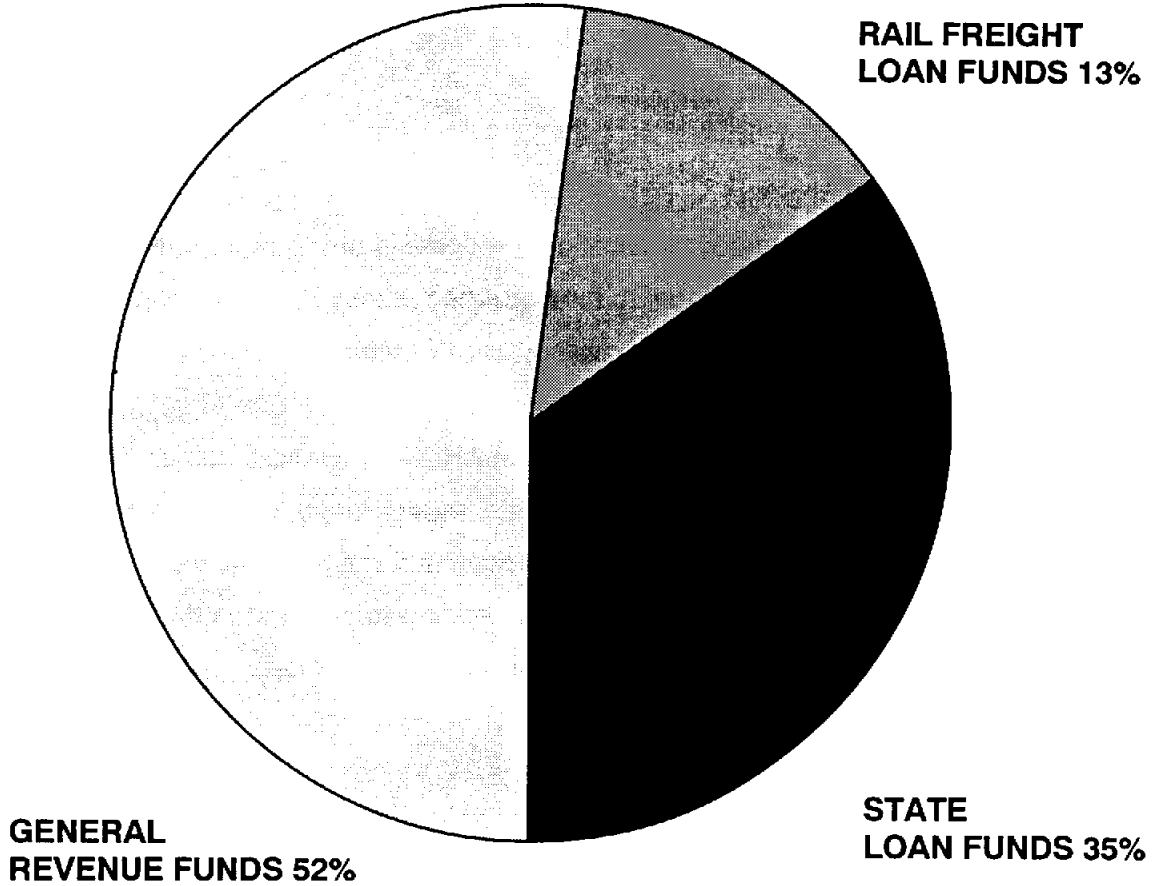
- State General Revenue Funds (GRF).
- Rail Freight Loan Repayment Fund. The state has the opportunity to reuse federal funds that are loaned and then repaid to the state. The state places the federal share in an interest-bearing account (Rail Freight Loan Fund) and loans or grants these funds for eligible projects. A 30 percent state match is required from the state GRF.
- The State Loan Repayment Fund. The state also has the opportunity to reuse state funds that are loaned and then repaid to the state. The repayments are placed in an interest-bearing account (State Loan Repayment Fund), and are loaned or granted for eligible projects.

The funding for Fiscal Year 1998 is shown below and on the next page.

• General Revenue Funds	\$3,021,000
• Rail Freight Loan Repayment Fund	750,000
• State Rail Freight Loan Repayment Fund	<u>2,030,000</u>
Total Freight Program	\$5,801,000

FY1998 Rail Funding Sources

RAIL FREIGHT PROGRAM • \$5,801,000



The program for Fiscal Year 1998 is listed on Table 3, which identifies project investment, the number of industries that will directly benefit, and the number of jobs saved or created. The state and federal statutory requirements for rail service investments mandate the department to analyze and quantify the benefits and costs associated with a project. Generally, only two options are analyzed: to invest funds in rehabilitation or new construction, and no investment. The department must demonstrate that the benefits exceed the costs before a project is deemed eligible. Although these projects meet eligibility criteria, priorities may change which could delay or alter project funding.

Table 4 lists projects that were placed under contract in Fiscal Year 1997, but will not be completed until Fiscal Year 1998. Figure 6 on page 17 shows the statewide location for all improvement projects.

Future Rail Freight Projects

Because the project request/qualification process is an on-going exercise and because it is the department's goal to fund qualified projects expeditiously in order to realize their economic, public and transportation benefits, it is not possible to list specific projects under consideration for funding beyond those listed in Table 3. An average of \$5.8 million per year is requested for qualified projects (projects completed, currently under contract and in the contract negotiation stage). Due to the current strong economy, the number and magnitude of highly desirable rail freight projects being requested is on the increase. Adding to demand is the fact that the trend by the rail industry to abandon unprofitable lines is continuing, and new regional and local railroads will be formed as a result of restructuring.

**TABLE 3
FISCAL YEAR 1998
TENTATIVE PROJECTS**

<u>Project</u>		<u>State/Federal Investment (\$000)</u>	<u>Industries Benefiting</u>	<u>Private & Other Leveraged (\$000)</u>	<u>Loan or Grant</u>	<u>Jobs Saved/ Created</u>	<u>Project Description</u>
<u>Location</u>	<u>Owner/ Operator</u>						
Kankakee	IND/IC	\$450	1	46,000	L	35	Construct additional 1,500' rail line to serve major expansion of existing chemical plant.
Granite City	GWR	1,533	1	--	G/L	NA	Install welded rail on 6 mi. of existing rail line increasing speed, safety and reducing train as well as highway crossing delay.
Calumet	BRC	2,520	2	--	L	10	Rehabilitate 34,000' of main and yard trackage to permit rail transport of major coal movement.
Harvey	CN	1,298	2	3,202	L	12	Construct 6,000' of new main track with appropriate signalization together with a two mile consolidation of parallel rail routes to eliminate public grade crossings, reduce traffic delay and retained public crossings and provide efficient international rail access to a new intermodal terminal.
Totals		\$5,801	6	\$49,202		57	

**TABLE 4
PROJECTS UNDER CONSTRUCTION OR PENDING**

Project		State/Federal Investment (\$000)	Industries Benefiting	Private & Other Leveraged (\$000)	Loan or Grant	Jobs Saved/ Created	Project Description
Location	Owner/ Operator						
Crest Hill	IND./EJ&E	\$290	3	\$1,000	L	6	Construct 1,900' of rail line to serve rail/barge facility.
Sauget	IND./UP	1,000	3	1,600	B/L	16	Construct high capacity conveyor system at rail/barge facility.
North Chicago	IND./EJ&E	100	1	35	G	5	Construct 250' of rail line to serve scrap paper warehouse.
Allen	Elev/NS	1,400	*	500	L	4	Construct 5,600' of rail capacity of accommodate unit shipments.
Galesville	Elev/NS	400	*	--	L	2	Construct 3,700' of rail capacity to accommodate unit shipments.
Harvey	IND./IC	1,600	2	14,800	L	50	Rehabilitate/construct 1,650' of intraplant rail line.
Madison	IND./UP	450	1	300	L	44	Rehabilitate 5,500' and construct 4,300' of rail line to serve railcar remanufacturing facility.
Totals		\$5,240	10	18,235		127	

*Grain elevator expansion projects benefit the elevator and an unspecified number of area farmers using that elevator.

Fiscal Year 1998 Rail Freight Improvement Projects



Figure 6

RAIL PASSENGER PROGRAM

During the past two years, the structure of the Rail Passenger program changed considerably due to declining federal support for Amtrak. The change resulted in Illinois shouldering more of the costs associated with continuing its existing service.

In the past, Illinois contributed 65% of the operating loss of each train, with Amtrak paying the remainder. However, this figure included only the costs directly attributed to a particular train's operation, while fixed costs and overhead expenses were allocated to Amtrak's "system cost". In its efforts to address the phasing out of federal subsidy, Amtrak redistributed its system cost among all trains. This change resulted in an increase in the annual subsidy for Illinois state-supported trains from the usual \$3 million to \$6.5 million in Fiscal Year 1997, with further increases expected in succeeding years.

Cost reduction strategies implemented to help preserve state service included the elimination in June 1996 of the train called the Loop, which served the Chicago to Springfield market. In addition, fare increases were imposed and communities with service were enlisted to participate in cost sharing arrangements for their respective station operations.

As Amtrak continued to re-engineer the corporation, it became apparent that the future of state-supported service was in jeopardy if states had to pay the fully allocated cost associated with their service. Illinois, for example, faced the need for an \$18 million dollar subsidy by the year 2000 to maintain most of its service. To reduce this burden, Amtrak again rationalized its service and re-examined its relationship with the state.

In January 1997, a new fixed-price three-year agreement was reached with Amtrak to continue operating state-supported trains in Illinois. The agreement (pending annual appropriations from the Illinois General Assembly) will maintain service on the Chicago to Carbondale, Chicago to Quincy and Chicago to St. Louis corridors at a cost of \$7 million in Fiscal Year 1998, \$7.5 million in Fiscal Year 1999 and \$7.95

million in Fiscal Year 2000. The agreement contains performance standards that will require Amtrak to pay a \$2,700 penalty each time a train is more than a half-hour late departing from its point of origin. The contract that the department has entered into with Amtrak is the first of its kind and will be a basis for future contracts with other states. The department is also expected to enter into a similar agreement with the state of Wisconsin and Amtrak for continuation of service on the Chicago to Milwaukee corridor, with Illinois' share (25% of the combined Illinois-Wisconsin share) expected to be about \$1 million annually.

Operating Support

The multi-year agreement allows for a continuation of program objectives which are to provide a convenient, comfortable, and reliable alternative for travel within the state at reasonable cost and to increase public awareness of the service to maximize ridership and minimize state expenditure.

For State Fiscal Year 1997 the department received \$6.5 million from the General Revenue Fund (GRF) to finance the operation of three daily round trips to downstate Illinois and provide a portion of the cost of the Chicago-Milwaukee service. With the expectation that federal funds for rail passenger service would be phased out over the next three to five years, Amtrak and the department developed a plan for preserving the core of the state sponsored service. For Fiscal Year 1998 the department is seeking \$8.0 million from the GRF to operate the state sponsored intercity rail passenger system. The particular trains subsidized are:

- The **State House** serves primarily business, government and student travel between Chicago and St. Louis. In 1996 more than 76,000 passengers rode between the termini and stops in Summit, Joliet, Dwight, Pontiac, Bloomington-Normal, Lincoln, Springfield, Carlinville and Alton. Although the corridor also has two other daily Amtrak system trains, neither is convenient for business travelers.

- The *Illini*, originating in Chicago, serves the communities of Homewood, Kankakee, Gilman, Rantoul, Champaign, Mattoon, Effingham, Centralia, DuQuoin and Carbondale. It carried over 84,000 passengers in 1996, including many students attending the universities in Urbana, Charleston and Carbondale. In addition, many business travelers rely on the *Illini* for access to Chicago. The Amtrak system train called the City of New Orleans also serves this corridor.
- The *Illinois Zephyr*, operating from Chicago to Quincy, carried about 76,000 riders in 1996 to/from stops in LaGrange, Naperville, Plano, Mendota, Princeton, Kewanee, Galesburg, Macomb and Quincy. Many students from the Chicago area rely on the *Zephyr* for transportation to schools and colleges in western Illinois. Since there is no bus or air service within the corridor area, the train also accommodates a good deal of business travel. LaGrange, Naperville, Princeton, Kewanee and Galesburg are also served by the Amtrak system train called the California Zephyr, while Galesburg also has service from the Southwest Chief.
- The *Hiawatha Service*, out of Chicago, provides six daily round-trips between Chicago and Milwaukee which carried 277,000 riders in 1996. The 90-mile trip takes just over an hour and the train is an ideal mode for business and leisure travelers bound for Chicago's Loop. Illinois pays 25% of the state share for the service.

Marketing

A major element of the marketing program involves informing the public of the availability and advantages of the state's Amtrak service. The primary goal is to increase ridership, thereby maximizing revenues and improving Amtrak's overall financial standing.

The department has no separate Amtrak advertising budget. The cost of the advertising is a general operating expense included in Amtrak's fixed price operating agreement with Illinois. Paid advertising is primarily by newspaper and radio. These ads are placed in most Illinois cities served by Amtrak and focus on travel to Chicago. In addition, the department develops public service announcements, flyers, brochures and other promotional materials that are printed in-house

The department's statewide sales efforts are another major component of its marketing responsibilities. Sales visits to travel agents are important because these

agents sell a significant share of Amtrak tickets in the smaller communities, particularly those without staffed stations. Sales efforts extend beyond the cities with Amtrak stations to communities within about a thirty-mile service area radius as well. Visits are made to chambers of commerce, units of government, colleges, major employers, banks, activity centers, etc. All are requested to display promotional materials and to urge their constituents to use Amtrak for business and recreational travel.

To enhance the program, the department is developing Amtrak corridor coalitions composed of representatives from the communities served along each route. These coalitions are meant to strengthen Amtrak's position in the various communities it serves and give the communities a stronger role in ensuring continued rail passenger service to their cities.

Capital Improvement Program

The state will continue its program of addressing station maintenance needs, safety repairs, energy conservation and other capital improvements. In the past, this work has been conducted on a shared-cost basis with Amtrak and some support from local communities. However, in view of the limitation on Amtrak's resources, the larger share of future projects will likely be assumed by the state. Local investment in capital projects will become more important as Amtrak's share decreases. Figure 7 on page 22 shows Amtrak and state-supported passenger service routes throughout the state, as well as stations included in the capital program.

The Capital Improvement Program for Fiscal Year 1998 proposes improvements at an estimated cost of \$1,050,000. The state share (\$312,500) will be funded from General Revenue Funds. It should be noted that a number of projects originally planned for 1996 and 1997 will be completed in 1998, as several were deferred pending decisions about the future of the Rail Passenger Program. These projects include major rehabilitations at Mendota and Princeton, and the construction of accommodations for passenger rail service in the Champaign-Urbana intermodal transportation center. The improvement projects for Fiscal Year 1998 are identified on page 23.

AMTRAK RAIL PASSENGER ROUTES

June, 1997

Routes subject to change

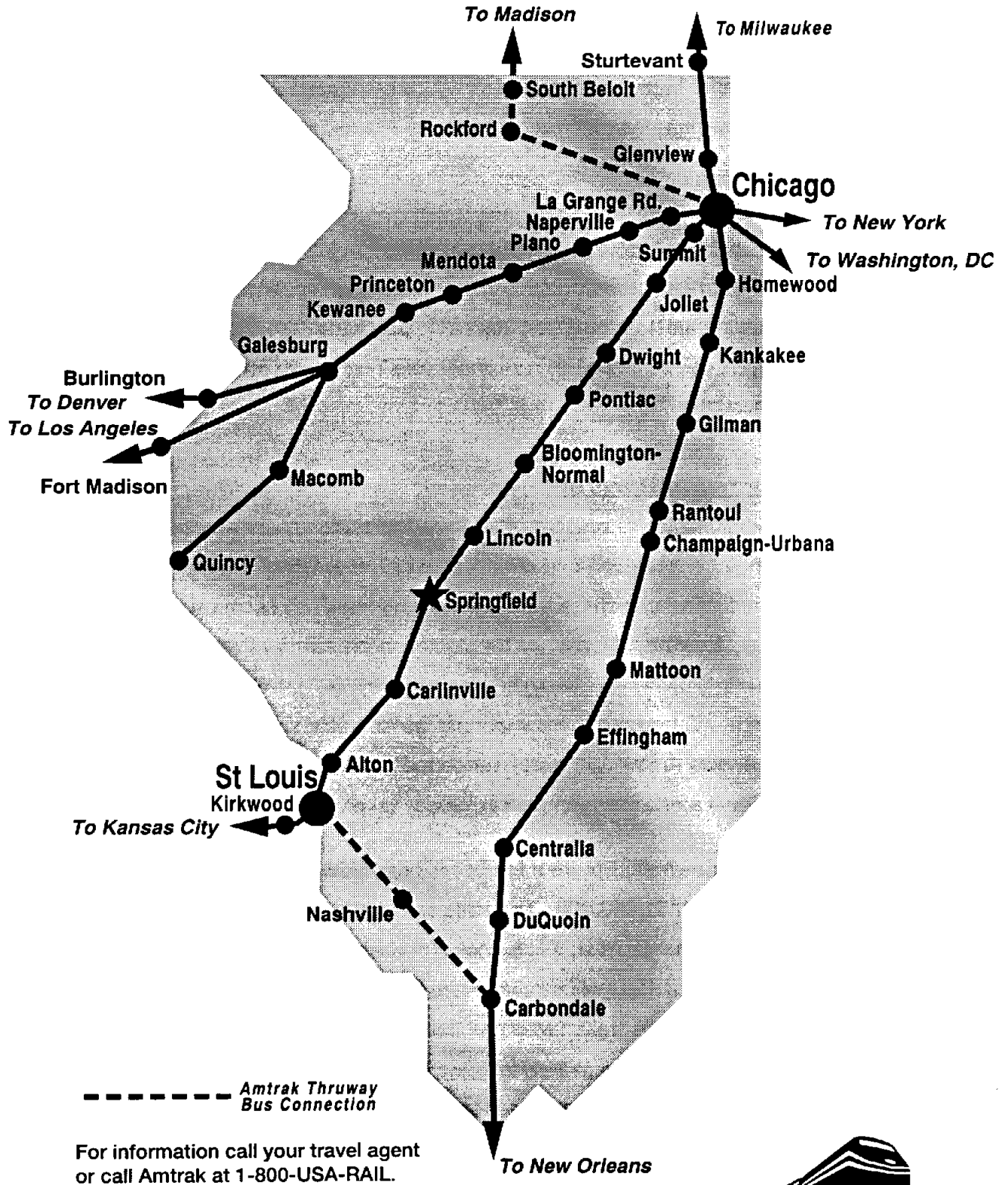


FIGURE 7

TABLE 5
FISCAL YEAR 1998 CAPITAL IMPROVEMENT PROJECTS

Corridor/Station	Project Description	Total Cost	State	Amtrak
Chicago-Carbondale				
Homewood	Interior painting and repairs	\$ 10,000	\$ 5,000	\$ 5,000
Kankakee	Install automatic locks and a security system	\$ 10,000	\$ 5,000	\$ 5,000
Effingham	Install platform lighting, improve parking and add signage	\$ 30,000	\$ 15,000	\$ 15,000
Carbondale	Interior repairs and painting and improve signage	\$ 15,000	\$ 7,500	\$ 7,500
Corridor Total		\$ 65,000	\$ 32,500	\$ 32,500
Chicago-St. Louis				
Summit	Install platform shelter	\$ 5,000	\$ 2,500	\$ 2,500
Dwight	Improve lighting and signage, and construct lift enclosure	\$ 20,000	\$ 10,000	\$ 10,000
Pontiac	Improve lighting and signage, and construct lift enclosure	\$ 20,000	\$ 10,000	\$ 10,000
Lincoln	Install security system, shelter repairs and improve lighting	\$ 15,000	\$ 7,500	\$ 7,500
Springfield	Improve signage	\$ 5,000	\$ 2,500	\$ 2,500
Carlinville	Install security system and overlay platform	\$ 15,000	\$ 7,500	\$ 7,500
Corridor Total		\$ 80,000	\$ 40,000	\$ 40,000
Chicago-Quincy				
Mendota	Construct lift enclosure	\$ 5,000	\$ 2,500	\$ 2,500
Galesburg	Improve signage	\$ 5,000	\$ 2,500	\$ 2,500
Macomb	Improve lighting and signage and rehabilitate platform	\$ 25,000	\$ 12,500	\$ 12,500
Quincy	Add parking	\$ 20,000	\$ 10,000	\$ 10,000
Corridor Total		\$ 55,000	\$ 27,500	\$ 27,500
Chicago-Milwaukee				
Chicago	Convert F-40 locomotives for push-pull service	<u>\$ 850,000</u>	<u>\$ 212,500</u>	<u>\$ 637,500*</u>
TOTAL PROGRAM -FY 1998		\$1,050,000	\$ 312,500	\$ 737,500

* State of Wisconsin's share \$637,500

HIGH SPEED RAIL

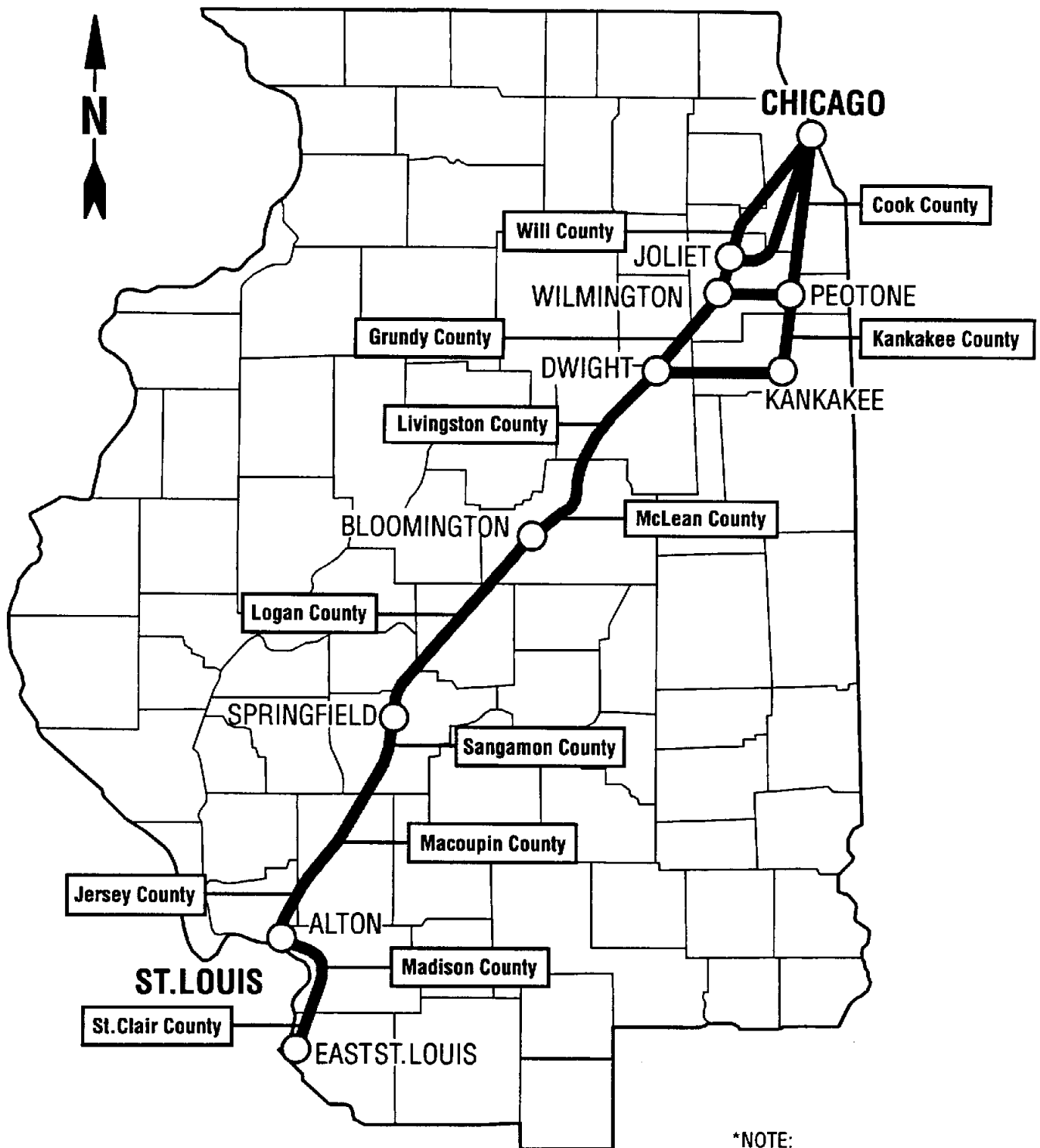
The Chicago to St. Louis corridor was designated as a high speed rail corridor under the federal Intermodal Surface Transportation Efficiency Act (ISTEA) in 1992. In May 1994, the state published a report entitled, *Chicago-St. Louis High Speed Rail Financial and Implementation Plan*. This report indicated that high speed rail (HSR) can be developed and operated with minimal new public funding. By upgrading existing track shared with freight trains, achieving passenger train speeds up to 125 miles per hour is a realistic goal. The department believes that development of high speed rail between Chicago and St. Louis would offer travelers an attractive alternative to highway travel while bringing environmental benefits and energy savings.

As part of the Chicago-St. Louis high speed rail study, the department is evaluating four alternative alignments in the Chicago-St. Louis corridor for HSR operation, as shown on Figure 8. One of the alignments is the current Chicago-St. Louis Amtrak route. Two of the alignments would provide access to the proposed South Suburban Airport site near Peotone, and one alignment would utilize the Metra Rock Island District line between Chicago and Joliet. One of the alternative alignments includes a "Green Grass" segment. The Green Grass segment would require construction of approximately 20 miles of new main track, between Wilmington and Peotone. Otherwise, all the potential alignments would utilize existing track.

Environmental Impact Statement

The department is currently in the process of preparing an environmental impact statement (EIS) for the Chicago-St. Louis corridor. The EIS process began in February 1995. A draft EIS is expected to be published in 1998. Following a review by state and federal agencies, and a thorough public involvement process with public hearings and evaluation of all comments received, a draft Final EIS would be delivered to the department. For Fiscal Year 1998 the department is requesting \$125,000 in GRF appropriation to match \$125,000 in federal funds to continue the EIS process. Following completion of the EIS, the next step would be for the department to oversee the technical preparations for implementing the service.

Chicago-St. Louis High Speed Rail Project (Project Area)



*NOTE:
Not to scale

FIGURE 8

System engineering and design, preparation of equipment specifications and financing arrangements are required to continue development of high speed rail passenger operation in the Chicago-St. Louis corridor.

Advanced Train Control

The department has also been awarded \$7,000,000 in federal grant funds to develop an advanced train control system (ATCS) in a portion of the Chicago-St. Louis corridor. An ATCS is a critical component of high speed rail development in a corridor such as Chicago-St. Louis, where slower moving freight trains and high speed passenger trains would share the same right-of-way. The department selected a 110 mile segment between Springfield and Dwight to demonstrate the project. Due to changes in the private railroad's priorities, the department is currently in the process of reviewing other segments along the corridor to install the system. Development and implementation of the ATCS is estimated to take approximately five years. ATCS offers enhanced train dispatch capability, which in turn provides more efficient and safe train operations, an essential element in the development of high speed passenger operations.

For Fiscal Year 1998 the department is requesting a \$500,000 GRF appropriation to match \$1,000,000 in federal funds for this project. The additional \$1,000,000 in federal funds will increase the total federal share to \$8,000,000. These funds will be used to develop, install, and test an advanced train control and communication system in the Chicago-St. Louis corridor.

Rail-Rail Crossing Improvements

One of the problems encountered by high speed trains on existing rail trackage are rail-rail grade crossings "Diamonds". Diamonds are a significant source of train delays and slow orders, as well as maintenance problems. The intersection of two rail tracks is a demanding physical environment. As a result, it is quite difficult to maintain any given track class through a diamond. When higher speeds dictate even tighter tolerances on trackwork geometry, diamonds will be a major source of delays, maintenance expense, and the potential for derailments.

There are 17 diamonds on the Chicago and St. Louis corridor, with each of these diamonds theoretically capable of 40-60 mph operation. Many are limited to lower speeds far more often than they are operated at timetable speed. More than half are actually the maintenance responsibility of the crossing railroad, which could prove awkward in keeping these maintained to an acceptable speed for high speed rail service.

The department is requesting FRA funds to conduct a research project into rail-rail grade crossings, diamond construction, and diamond maintenance issues. It is proposed that a three-step research project be utilized, with a literature search and review first. A design phase would then follow, where the issues would be scoped and decisions made on the details of the demonstration projects. The demonstration phase would see up to five diamonds reconstructed on the Chicago-St. Louis corridor. This project would be enormously valuable not only to the Chicago-St. Louis corridor, but to all the other current and future high speed corridors as well as to the freight railroad industry.

The department is requesting \$600,000 in GRF appropriation to match a request of \$2,500,000 in Federal High Speed Ground Transportation Technology Demonstration Funds, to determine if it is feasible to develop and install new rail-rail at-grade crossings (diamonds), to allow trains to cross safely at normal track speed.

Vehicle Arresting Barrier

The department is using Federal Section 1010 funds to demonstrate new grade crossing warning system technologies. A vehicle arresting barrier (VAB) system will be installed at three locations to test the applicability of the system to rail/highway grade crossings. The VAB system has been used in various highway applications to prevent vehicles from entering dangerous situations. Most recently, the department included a VAB system as part of the reversible lane traffic redirection and access control system for the Kennedy Expressway reconstruction project. The idea behind using the VAB system at grade crossings stems from the need to develop new protection devices which could guarantee non-intrusion of a vehicle at existing grade

crossings on high speed rail corridors. The VAB system could also be considered as a lower-cost alternative to grade separations.

The department has been awarded \$4,400,000 in federal demonstration funds and is preparing for the deployment and testing of the prototype VAB system at the three sites, with work beginning in May 1997. The sites are at T.R. 35A, 3.03 miles south of Chenoa in McLean County; U.S. 136 in McLean also in McLean County; and Hawthorne Street in Hartford, Madison County. These crossings were selected as test sites because they will provide a range of vehicle types and traffic conditions with which to test the VAB systems. The T.R. 35A crossing will allow the department to test the system with rural and farm equipment traffic. The U.S. 136 and Hawthorne Street crossings will allow testing of the VAB's with a high percentage of urban and tractor-trailer traffic.

An 18-month demonstration period is planned, including mechanical equipment and human factors evaluations. An impact detection system will be included as part of the technology demonstrations. The detection system will allow for a videotape record to be made whenever one of the VAB systems is activated. For emergency purposes an electronic signal will be sent to the local police authority and the VAB system maintenance contractor to alert them of a vehicle arrestment. This detection system will help the department analyze the performance of the VAB system.

East St. Louis Track Project

The department was awarded a \$3,000,000 grant from the Federal Railroad Administration (FRA) to rebuild and signalize tracks in the East St. Louis area. This project along with other track improvements from East St. Louis to Granite City, funded jointly by two freight railroads and the department, will shorten the current Amtrak route and cut travel time by approximately 20 minutes. It will ultimately benefit the proposed high speed rail service. The project is a small but important incremental step toward the development of the high speed rail corridor. The project is currently being reviewed by the new owner of one of the freight railroads.

The demonstration project is intended to address a "bottleneck" segment along an existing shared passenger/freight route. This initial effort will involve adapting facilities designed and built for freight trains, and currently used by Amtrak, to high speed operations. The project will demonstrate a remedy to a typical problem of slow travel times along the approaches to stations within congested metropolitan areas. In addition, the project will demonstrate benefit not only for incremental high speed rail development, but also for current Amtrak passenger service.

ILLINOIS RAILROADS AND ABBREVIATIONS

<u>Railroad</u>	<u>Abbreviation</u>
Alton & Southern Railway	ALS
Belt Railway Company of Chicago	BRC
Bloomer Shippers Connecting Railroad Co.	BLOL
Burlington Northern Santa Fe	BNSF
Chicago, Central & Pacific Railroad	CC
Chicago-Chemung Railroad Co.	CCRC
Chicago & Western Indiana Railroad	CWI
Chicago Heights Terminal Transfer Railroad	CHTT
Chicago Rail Link ^{1/}	CRL
Chicago Short Line Railway	CSL
Chicago, South Shore & South Bend Railroad ^{2/}	CSS
Chicago, West Pullman & Southern Railroad	CWP
Consolidated Rail Corporation (Conrail)	CR
CP Rail System	CPRS
Crab Orchard & Egyptian Railroad	COER
CSX Transportation, Inc. ^{3/}	CSXT
Eastern Illinois Railroad Co.	EIRC
East St. Louis Junction Railroad	EJR
Elgin, Joliet & Eastern Railway	EJE
Gateway Western Railroad	GWWR
Illinois Central Railroad	IC
Illinois Midland Railroad, Inc.	I&M
Indiana Harbor Belt Railroad	IHB
Indiana Hi-Rail Corp.	IHRC
Indiana Railroad	INRD
Iowa Interstate Railroad, Ltd.	IAIS
Joppa and Eastern Railroad	JE
Kankakee, Beaverville & Southern Railroad	KBSR
Kaskaskia Regional Port District Railroad	KPRD
Keokuk Junction Railway	KJRY
Lincoln and Southern Railroad Company	L&S*
Manufacturers' Railway	MRS
Manufacturers Junction Railway	MJ
Norfolk Southern Railway Co. ^{4/}	NS*
Peoria and Pekin Union Railway	PPU
Peoria, Peoria Heights & Western Railroad	PPW
Shawnee Terminal Railway Company	STR
Shelbyville Industrial Rail Spur	SIRS
Toledo, Peoria and Western Railway Corp.	TPW
Terminal Railroad Association of St. Louis	TTRA
Union Pacific Railroad ^{5/}	UP
Vandalia Railroad Company	VRR
Wisconsin & Calumet Railroad	WICT
Wisconsin Central Ltd. ^{6/}	WC

* These corporations do not operate lines in the state, but own the land and track over which various railroads operate, or own out-of-service lines.

^{1/} Purchased by CWP.

^{2/} The Northern Indiana Commuter Transportation District (NICTD) owns and operates passenger service over some of the lines of the CSS.

^{3/} CSX Transportation in Illinois encompasses the lines and operations of the former Seaboard System Railroad (owner of the LN) and B&O.

^{4/} Lines formerly shown as NW and SOU

^{5/} Union Pacific Railroad incorporates lines and operation of the Missouri Pacific Railroad, the Chicago North Western, the SPCSL Corporation, Southern Pacific Railroad, and the Saint Louis Southwestern.

^{6/} Purchased by Illinois Central