

SUMMARY DESCRIPTION 1995 TRANSPORTATION SYSTEM PLAN

CHICAGO AREA TRANSPORTATION STUDY
NORTHWESTERN INDIANA REGIONAL PLANNING COMMISSION

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**SUMMARY DESCRIPTION
1995 TRANSPORTATION
SYSTEM PLAN**

CHICAGO AREA TRANSPORTATION STUDY
300 WEST ADAMS STREET CHICAGO, ILLINOIS 60606

NORTHWESTERN INDIANA REGIONAL PLANNING COMMISSION
8149 KENNEDY AVENUE HIGHLAND, INDIANA 46322

NOVEMBER 1974

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To the Elected Public Officials and Citizens
of the Northeastern Illinois and the Northwestern Indiana Region:

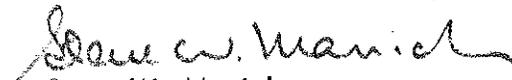
We take pleasure in presenting a summary description of the 1995 Transportation System Plan for the Chicago - Northwestern Indiana Region. The report presents in general terms a multimodal plan description, cost estimates of the plan and a summary of the plan making process.

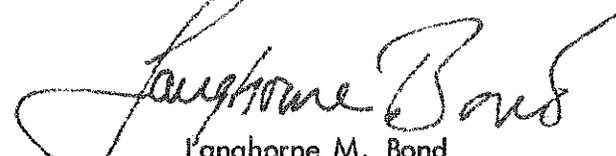
The 1995 Transportation System Plan has been officially recognized by the region's two transportation agencies. The Chicago Area Transportation Study has formally adopted it. The Northwestern Indiana Regional Planning Commission has adopted the Transit and Highway System portions.

The 1995 Transportation System Plan has also been adopted by the Northeastern Illinois Planning Commission and is being considered for adoption by other public bodies. Following these adoptions an implementation program of the 1995 Transportation System Plan will be presented. Any comments you may have, which will assist us in preparing the implementation program or future revisions of the plan, would be greatly appreciated.

We respectfully recommend that the 1995 Transportation System Plan be reviewed and considered for adoption by appropriate governmental authorities as the region's transportation plan. If you have any questions, please contact our offices.

Respectfully submitted,


Steve W. Manich,
Chairman
NIRPC


Langhorne M. Bond
Chairman
Policy Committee - CATS

CHICAGO AREA TRANSPORTATION STUDY
ADOPTION RESOLUTION

June 21, 1974

WHEREAS it is necessary to the economic and social well-being of Northeastern Illinois and Northwestern Indiana to provide a safe and efficient transportation system;

WHEREAS in order to provide such a transportation system and to insure that the maximum benefit is derived from expenditure of available federal, state and local funds a long-range plan is necessary and desirable;

WHEREAS the Policy Board, Council, and Commissions represented by the Chicago Area Transportation Study, The City of Chicago, the Northeastern Illinois Planning Commission, and the Northwestern Indiana Regional Planning Commission agree on the importance of maintaining an up-to-date Regional Transportation Plan as a guide for programming decisions regarding the operation, maintenance, and improvement of transportation in the Northeastern Illinois - Northwestern Indiana Metropolitan Area;

WHEREAS the U.S. Code requires a comprehensive transportation plan for the Metropolitan Area, developed through a continuous, cooperative effort, to qualify for federal participation in transportation programs; and

WHEREAS the staffs of the four Regional Planning Agencies have jointly analyzed regional transportation needs and agree on the elements of the Regional Transportation System necessary to meet 1995 transportation needs.

BE IT RESOLVED THAT: The Policy Committee of the Chicago Area Transportation Study on this day of June 21, 1974 accepts and adopts the recommended 1995 Transportation System Plan as illustrated in the attached maps as the current Regional Transportation Plan.

NORTHWESTERN INDIANA REGIONAL PLANNING COMMISSION
ADOPTION RESOLUTION

November 27, 1974

IT IS KNOWN THAT:

A safe, efficient, and resource-conserving transportation system is needed for the social, economic and environmental well-being of all citizens in Northwestern Indiana; and

The Regional Planning Act, as enacted by the General Assembly of the State of Indiana, directs the Commission to prepare and adopt by resolution a regional comprehensive plan and program including, as a minimum, land use, transportation, community facilities, and regional objectives, goals and standards elements; and

The Commission has set forth, as necessary and desirable, to establish and maintain a regional, comprehensive planning process, to maintain qualification for federal grants, to coordinate the Region's development, to provide technical services to local units of government, and to help solve regional problems within the requirements of the Federal Highway Act of 1962, as amended, the Urban Mass Transit Act of 1964, as amended, the Mass Transportation Act of 1970, the Housing Acts of 1954, 1961, 1965 and 1968, the Airport and Airways Development Act of 1970, the Rail Reorganization Act of 1973, and other pertinent federal, state and local legislation requiring such cooperative, comprehensive and continuing planning programs; and

The Plan has been prepared through a comprehensive, multimodal planning process including the consideration of social, economic, environmental, transportation service, and comprehensive goals as forecasted and formulated to the Year 1995; and

The Plan was developed cooperatively in such a manner that decisions herein are reflective and responsive to concerns and desires of the Region's governmental authorities and its citizens, the Indiana State Highway Commission and other appropriate State of Indiana Agencies, the appropriate Federal Agencies, and Illinois public bodies, including the Chicago Area Transportation Study, the City of Chicago, the Northeastern Illinois Planning Commission and the Illinois Department of Transportation.

THEREFORE, BE IT RESOLVED THAT, the Northwestern Indiana Regional Planning Commission, on the 27th day of November, 1974:

Adopts, by Resolution, the 1995 Transportation System Plan Highway and Public Transportation Subsystems, as described herein as the "Northwestern Indiana Regional 1995 Transportation System Plan" to insure systematic, rational, and maximum beneficial decisions on the expenditure of federal, state and local funds; and

The Aviation and Freight Subsystems are shown herein as a proposal developed for discussion by concerned parties, and that until these subsystems are analyzed comprehensively and cooperatively, any decisions related to these systems will require detailed, individual analysis by the Commission; and

Agrees that there is an importance of maintaining a current transportation plan and program through a cooperative process that is reflective of changing growth patterns, reevaluated comprehensive plans on both the regional and local levels, revised travel forecasts, reappraised long-range environmental, social, and economic concerns, and improved, viable, transportation technology.



TABLE OF CONTENTS

Page

I	Introduction	1
II	Goals and Objectives	2
III	Transit System Plan	3
IV	Highway System Plan	8
V	Airport System Plan	15
VI	Freight System Plan	19
VII	Cost of the 1995 Plan	24
VIII	The 1995 Plan Making Process	26

LIST OF FIGURES

4	Figure 1	Transit and Corridor of High Accessibility System
7	Figure 2	Accessibility to 1995 Jobs via 1995 Transit System
7	Figure 3	Accessibility to 1995 Jobs via Existing Transit System
10	Figure 4	Freeway and Corridor of High Accessibility System
12	Figure 5	Arterial System
14	Figure 6	Accessibility to 1995 Jobs via 1995 Highway System
14	Figure 7	Accessibility to 1995 Jobs via Existing Highway System
16	Figure 8	Airport System
20	Figure 9	Rail Freight and Waterway System

Figure 10	Truck Freight and Intermodal Yard (Piggyback) System	Page 21
Figure 11	Energy Corridor System	22
Figure 12	Transportation Plan Making Process Flow Chart	27
Figure 13	1995 Distribution of Person Trip Demand	29

LIST OF TABLES

Table 1	Existing and Recommended Addition of Daily Seat-Miles of Transit Service	6
Table 2	Improvements in Hourly Capacity as Implied in the Highway Component of the 1995 Transportation Plan	9
Table 3	Public Costs of the 1995 Transportation System Plan	24
Table 4	Preliminary Population Forecasts	28



INTRODUCTION

Everyone needs transportation. All of our activities are scattered over large areas requiring an efficient transportation system. Unfortunately, some of the roads and railroad tracks are deteriorating. The commuter trains, buses and subway cars cannot be maintained and improved with revenue from fares alone. General aviation airports are being subdivided. The freight system is overextended and is becoming more difficult to operate under current tax and regulatory constraints. These problems as well as the related environmental and energy problems, will be compounding over the next 20 years as the region grows and the facilities deteriorate.

people deserve a better
transportation system

The Chicago Area Transportation Study (CATS) and the Northwestern Indiana Regional Planning Commission (NIRPC)¹ with the assistance of the Department of Development and Planning of the City of Chicago (DDP) and the Northeastern Illinois Planning Commission (NIPC), prepared the 1995 Transportation System Plan for the purpose of providing a better transportation system for the more than three million citizens of the eight county north-eastern Illinois - northwestern Indiana region. The purpose of this report is to present a summary of this plan.

The 1995 Transportation System Plan provides a rational basis for the transportation decisions necessary to reduce current deficiencies and provide for future growth. The plan is intended to provide a generalized guide rather than recommendations for exact locational alignments or detailed design specifications for transportation facilities. These alignments or specifications will result from the appropriate feasibility, corridor, master plan and/or design studies to be conducted at a later date by the agencies responsible for implementing the plan.

guide for investment

The 1995 Transportation System Plan has been adopted by the CATS, NIRPC and NIPC after legal public hearings and deliberations. Accordingly, this plan qualifies the region for receipt of federal transportation funds. The plan will be updated annually. The next annual update is scheduled following detailed review by the CATS Council of Mayors and other official groups. Furthermore, the plan will be completely reevaluated within five years.

The 1995 Transportation System Plan replaces the Regional Transportation Interim Plan and Program adopted in 1971. The Interim Plan was a combination of plans adopted in segments by the Chicago Area Transportation Study, the Fox Valley Transportation Study, the Joliet Area Transportation Study, the Lake County (Illinois) Transportation Study and the Lake-Porter Indiana Regional Transportation and Planning Commission. The Interim Plan, being a composite of five separate and semi-independent efforts suffered from two basic shortcomings. The plan was developed from separate forecasts of population, employment, and land use. Correspondingly, the sum of these subregional forecasts exceeded a reasonable forecast for the region as a whole. In addition, the Interim Plan was developed solely as a transportation plan, not as a transportation component of a coordinated comprehensive plan for the future development of this region as is the case with the 1995 Transportation System Plan.

replaces interim plan

¹ Formerly the Lake-Porter Regional Transportation and Planning Commission.

GOALS AND OBJECTIVES

The 1995 Transportation System Plan is a coordinated multimodal plan for the improvement of transportation facilities. The modal components of this plan are:

TRANSIT SYSTEM - commuter railroad, rapid transit, bus

HIGHWAY SYSTEM - freeways, arterials

AIRPORT SYSTEM - commercial and general aviation, intercity ground passenger transportation

FREIGHT SYSTEM - rail, water, truck, energy corridors

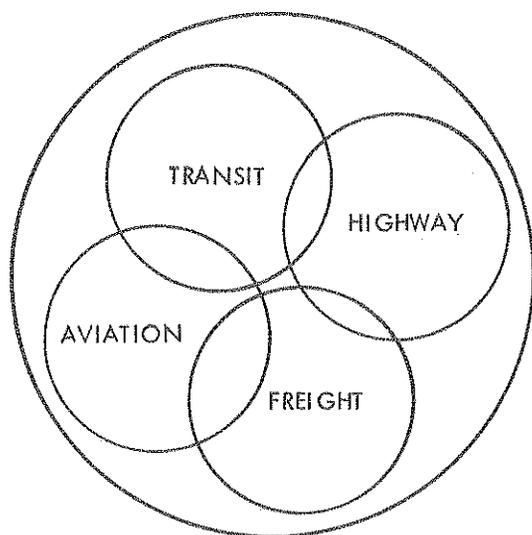
The 1995 Transportation System Plan reflects all the goals and policies contained in the following regional comprehensive plans:

1. The Comprehensive Plan of Chicago, Department of Development and Planning, City of Chicago, December, 1966.
2. The Comprehensive General Plan for the Development of the Northeastern Illinois Counties Area, Northeastern Illinois Planning Commission, April 19, 1968.
3. A Comprehensive Plan for the Lake-Porter Region, Indiana, Lake-Porter Regional Transportation and Planning Commission, October, 1970.

In addition to the goals, policies and assumptions implied in these regional plans, the 1995 Transportation System Plan attempts to achieve the following objectives.

- Provide citizens with accessibility in response to their needs.
- Support the land use and functional plans, policies and forecasts developed by the regional comprehensive planning agencies.
- Minimize social and economic disruptions of existing land uses and activities.
- Maintain the high accessibility of the Chicago Central Business District.
- Increase the accessibility of low and moderate income families to jobs and services.
- Reduce accidents and ensure public safety.
- Reduce pollution (air, water and land use) and minimize disruption to the physical (including visual) environment.
- Coordinate transfers between modes to optimize accessibility and provide real choice of transportation modes to all segments of society.

Conservation of energy and the provision of special services to the handicapped and elderly are additional objectives of the plan. The attainment of the objectives will require detailed studies.



transportation goals

transportation objectives

TRANSIT SYSTEM PLAN

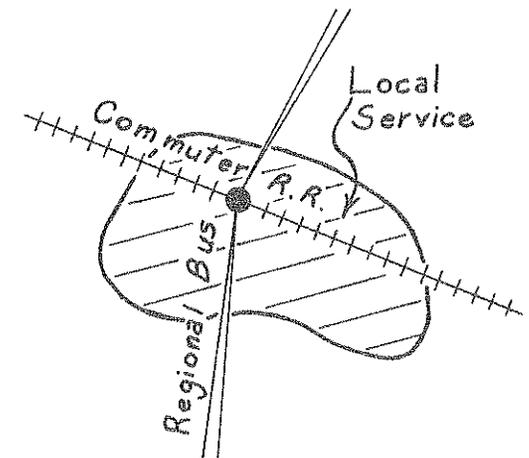
The 1995 Transportation System Plan places special emphasis on expanding and improving the transit service in this region. The transit component of the plan seeks to optimize the use of the existing transit system and increase its capacity within the constraints of the financial capabilities of the region. The proposed transit network configuration and the listing of the recommended changes to the existing transit network are shown in Figure 1.

The transit system includes the following components:

1. Commuter Rail: This component is composed of the commuter railroads currently serving the region as reflected in Figure 1. Only minor extensions in the network configuration have been recommended for this component. However, the recommended plan implies an increase of equipment and level of service approximating 30 percent or 4.5 million seat-miles daily. These improvements will be achieved through the purchase of new equipment and upgrading of tracks.
2. Rapid Transit: This network is defined as the rail system currently being operated by the Chicago Transit Authority. The 1995 System Plan includes recommendations for major additions within the City of Chicago and further extensions of the existing network into suburban Cook and DuPage Counties. Approximately 7.1 million seat-miles daily will have been added to this network, 5.9 million within the City of Chicago and 1.2 million within suburban Cook.
3. Regional Bus: The regional bus system provides express service connecting suburban centers with each other and with other components of the transit system. This service is not intended to provide local service but will interconnect with it. The regional bus is a new concept in transportation for this region, however it is similar in nature to intercity bus service (e.g., Greyhound Bus) with local suburban stops.
4. Local Bus: Local bus service is recommended for all areas where the person trip destination densities will exceed 5,000 persquare mile. Figure 1 shows the area with existing local bus service and the areas forecasted to become sufficiently developed to consider local bus service by 1995. The actual areas to which local bus service is to be provided are those which do in fact reach a level of development to support such service. The determination of the specific type of service will have to be undertaken by the Regional Transit Authority (RTA) and the local communities.
5. Transportation Centers: This plan component serves to maximize the coordination of the various modes. The transportation centers are to be located at a station site where transfer demand within or between modes is high. They are intended to increase the efficiency of the system and enhance the convenience to users. Figure 1 shows the location of the new transportation centers. The plan assumes the continuation of the Chicago Loop as the major transportation center in the region.
6. Corridor of High Accessibility: Cicero Avenue and North Avenue are designated as corridors of high accessibility. There is a major person and vehicle movement in these corridors which can apparently be accommodated only by providing a facility or a combination of facilities with a very high capacity. The need for the facilities is defined; the solution and course of action is still unidentified.

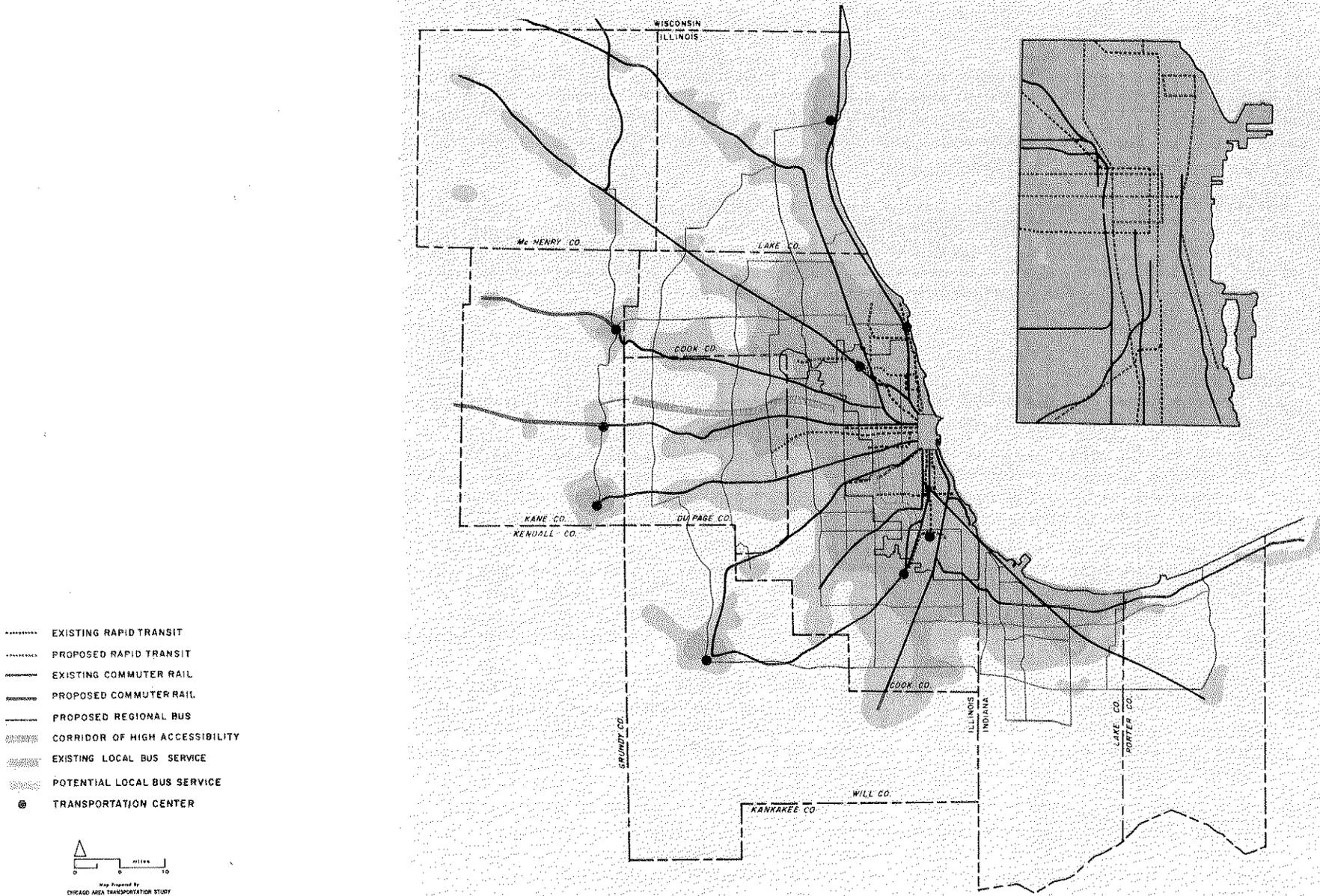
optimize:
utilization expansion

activity centers
regional bus



transportation center

Figure 1 TRANSIT AND CORRIDOR OF HIGH ACCESSIBILITY SYSTEM



COMMUTER RAIL NETWORK

Eliminations:

Illinois Central Gulf - Blue Island Branch

Additions:

None

Extensions:

Milwaukee Road from Elgin to Hampshire

Illinois Central Gulf from Richton Park to Monee

The Chicago and North Western from Geneva to DeKalb

RAPID TRANSIT NETWORK

Eliminations:

None

Additions:

Subway from Harlem Avenue to Franklin Street Connector via Archer Avenue

Rapid Transit from Skokie Swift Terminal to Jefferson Park

Subway from Jefferson Park to Chicago CBD via Lawrence Avenue, east-west leg of Ravenswood to Wilson, Sheridan Road and Lake Shore Drive Corridor

Subway - Central Area Loop and Distributor

Extensions:

Milwaukee Service from Jefferson Park to O'Hare

Dan Ryan "B" Service from 95th Street to Blue Island, Illinois via I-57 and ICG Blue Island Branch

Dan Ryan "A" Service from 95th Street to 103rd Street via Calumet Expressway

Englewood Service to Midway Airport

Congress Service from Des Plaines Avenue to Ill. 83

Skokie Swift Service to Old Orchard at Golf Road

REGIONAL BUS

Eliminations:

None

Additions:

Between 95th, the Dan Ryan Rapid Transit and I-80 via 95th Street and Torrence Avenue

Between Whiting and Dyer via Calumet Avenue

Between Whiting and Crown Point via Indianapolis Boulevard and SR. 8

Between Whiting and Crown Point via Cline Avenue Expressway and SR. 8

Between Gary and Crown Point via Broadway and North Avenue

Between the Indiana Dunes National Lakeshore and Merrillville via Ind. 51

Between Portage and Valparaiso via Ind. 49

Between East Chicago and Gary via Ind. 12

Between Highland and Glen Park via Ridge Road

Between Crystal Lake and Aurora via Ill. 176, Ill. 25 and Ill. 31

Between Joliet and Valparaiso via U.S. 30

Between Libertyville and Joliet via Ill. 63, Ill. 59, Ogden Avenue, Washington Street and Ill. 53

Between Highland Park and Lemont via Central Avenue, Ill. 43, Ill. 68, Ill. 53, I-55, and Lemont Road

Between Mount Prospect and Clarendon Hills via Ill. 83

Between Waukegan and Calumet City via Ill. 120, U.S. 45, 143rd Street and Ill. 83

Between O'Hare Rapid Transit and Worth via Harlem Avenue

Between the Cicero Corridor of High Accessibility at 79th Street and U.S. 30 via Cicero Avenue

Between Evanston and Elgin via Ill. 58

Between U.S. 45 and Cicero Corridor of High Accessibility at 79th Street via 79th Street

Between U.S. 45 and the Dan Ryan rapid transit at 95th Street via 95th Street

Between Hazel Crest and Port Chester via Ind. 80 and Ind. 49

Between Lawrence Avenue rapid transit and Cicero Corridor of High Accessibility at 79th Street via Western Avenue

Extensions:

None

TRANSPORTATION CENTERS

Eliminations:

None

Additions:

Waukegan

Evanston

Blue Island

103rd Street

Elgin

Geneva

Aurora

Joliet

Jefferson Park

CORRIDOR OF HIGH ACCESSIBILITY

Eliminations:

None

Additions:

Cicero Avenue Corridor

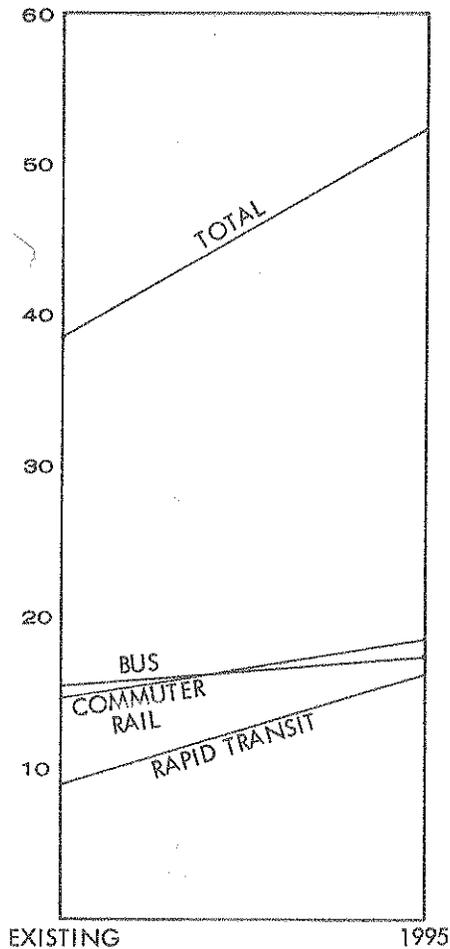
North Avenue Corridor from Fox River to First Avenue

Extensions:

None

NOTE:

All plan components are generalized. Specific locations for the components will result from the appropriate feasibility, corridor, alignment, master plan and/or design studies which are subject to future public hearings.



GROWTH IN SEAT-MILES

(All Figures in 000's)

The complete transit system as recommended provides for approximately 13.7 million additional daily seat-miles of supply, which represents an increase in service of approximately 35 percent over the existing network. Of the additional seat-miles, 48 percent occurred in the City of Chicago, 11 percent in the Indiana counties and 41 percent in the Illinois suburban counties. The greatest single increase occurs in the rapid transit system (52 percent). The commuter rail network is increased by 33 percent and the regional bus system 15 percent. The suburban Illinois and Indiana counties received 90 percent of the increase in service of the commuter rail and regional bus networks. No estimates for local buses were made. The increased use of commuter rail will require measures that ensure public safety and minimize friction between freight and passenger traffic that utilize the same route. Table I shows the distribution of the existing and the proposed additions to the seat-miles of each transit component by suburban county and the City of Chicago.

TABLE I
Existing and Recommended Addition of Daily Seat-Miles of Transit Service*
(All Figures Are in Thousands)

	Bus		Rapid Transit		Commuter Rail		Total	
	Existing	1995 Plan						
City of Chicago	12,557	12,762	8,187	14,086	6,008	6,473	26,752	33,321
Suburban Cook	1,864	2,469	1,012	2,018	3,417	4,921	6,293	9,408
DuPage	92	394	0	194	1,438	1,728	1,530	2,316
Kane	162	272	0	0	273	539	435	811
Lake (Illinois)	69	182	0	0	1,197	1,700	1,266	1,882
McHenry	31	56	0	0	586	781	617	837
Will	154	254	0	0	308	733	462	987
Lake (Indiana)	537	949	0	0	510	1,004	1,047	1,953
Porter (Indiana)	4	119	0	0	207	629	211	748
TOTAL	15,470	17,457	9,199	16,298	13,944	18,508	38,613	52,263

* excluding corridors of high accessibility and extensions of local suburban bus service.

The 1995 Transportation System Plan significantly improved the accessibility to jobs via the transit system. The accessibility to jobs is defined as the number of jobs available within 60 minutes of a place of residence via the transit network. Figure 2 shows the accessibility to jobs in 1995 after the completion of the recommended transit network. Figure 3 shows the accessibility to jobs in 1995 if no improvements are made to the existing transit network and service.

The most striking improvements in transit accessibility to jobs is that offered to the residents of the City of Chicago, especially those residing near the Central Business District, the West, the Northwest, the far South and Southwest sectors of the City. The northeast part of DuPage County, south Lake County (Illinois), south Cook County and north Lake County (Indiana) will also experience improvements in terms of accessibility to jobs.

Figure 2 ACCESSIBILITY TO 1995 JOBS VIA 1995 TRANSIT SYSTEM

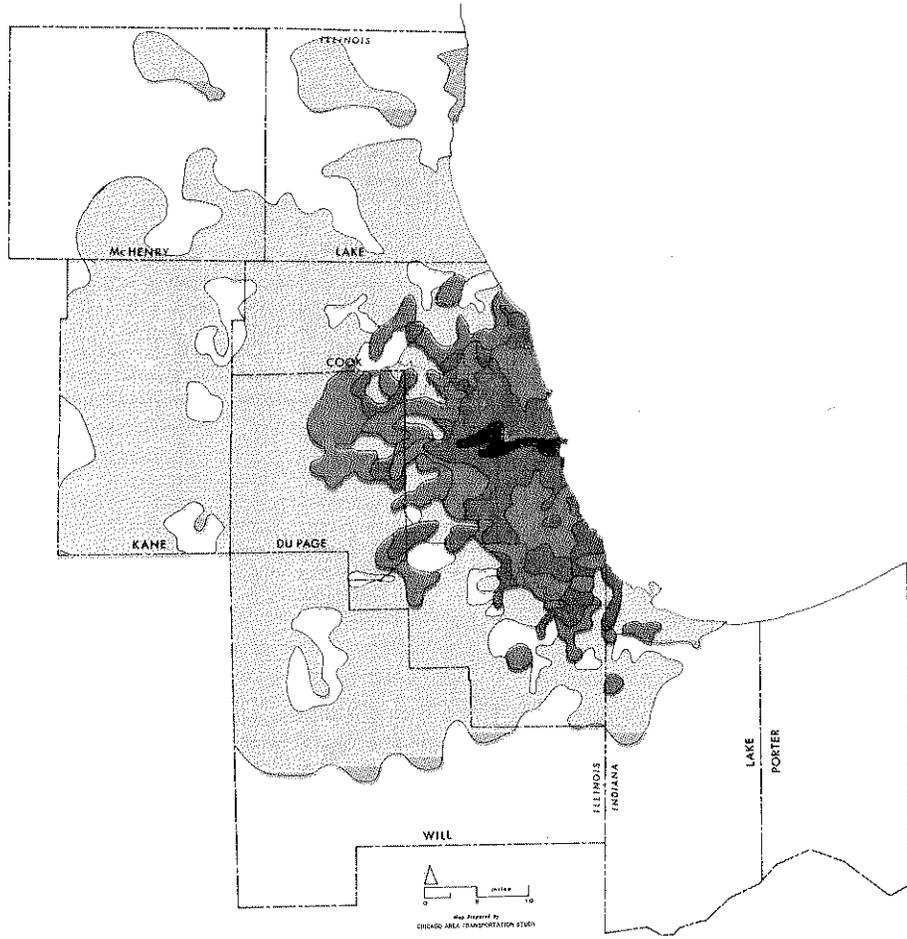
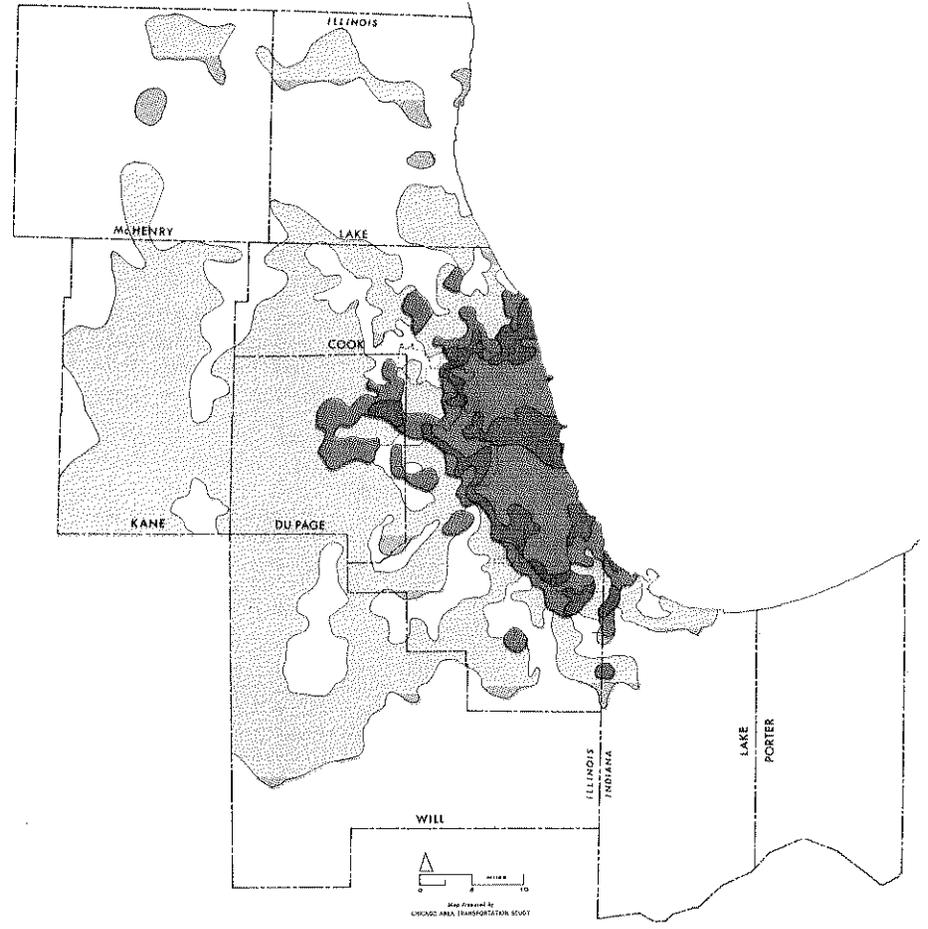
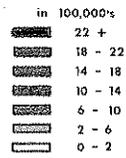


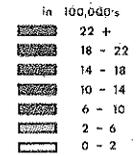
Figure 3 ACCESSIBILITY TO 1995 JOBS VIA EXISTING TRANSIT SYSTEM



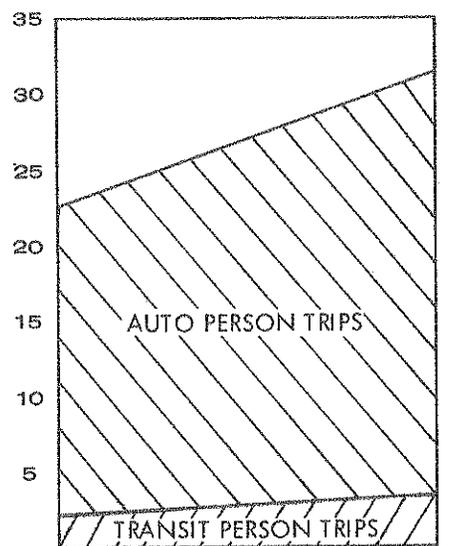
1995 WORK TRIP ENDS WITHIN 60 MINUTES



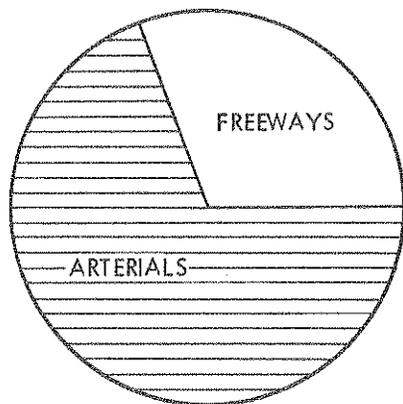
1995 WORK TRIP ENDS WITHIN 60 MINUTES



HIGHWAY SYSTEM PLAN



EXISTING 1995
DISTRIBUTION OF PERSON TRIPS
TO TRANSIT AND HIGHWAY MODES
(All Figures in 000,000)



1995 VEHICLE MILES
Freeways Approximately 29 Percent
Arterials Approximately 71 Percent

The highway system is intended to increase the capacity and improve the quality of the freeway and arterial networks. The highway component of the 1995 Transportation System Plan is designed to relieve existing and future congestion on existing freeways and arterials. New freeways and arterials are planned only where future traffic will greatly exceed the capacity of the existing highway system or where the highway segments are needed to provide continuity. The highway system plan recognizes the need to design freeways and arterials with special facilities for bikeways where appropriate and provided such bikeways are compatible with the transportation objectives. The specific locations and design of these bikeways should be reflective of the demand as generated by local or regional recreational studies. The highway network is composed of the following components:

1. **Arterials:** The arterial component of the 1995 Transportation System Plan is shown in Figure 5. A total of approximately 4,000 road segments in Illinois and 800 road segments in Indiana are designated for improvement in this network. These improvements, generally on existing right-of-way, will increase the capacity of the system by 26 percent, to provide adequate level of service without needlessly adding freeways. Most of the increase in the arterial capacity occurs in the City of Chicago, suburban Cook and DuPage Counties. These three areas account for approximately 58 percent of the regional increase in arterial capacity.

The total increase in the hourly capacity for the entire highway component, with the exception of the high accessibility corridors, is estimated to be 5.2 million vehicle miles of travel. This represents an increase of 30 percent over the existing capacity. This increase in capacity compares with a 48 percent increase in future population. Improvements in the arterial system account for more than 60 percent of the increase in the capacity of the system. Table 2 shows the existing and additional capacity on the networks.

2. **Freeways:** This network offers increased opportunities for circumferential travel around the urban area. The recommended freeway system is composed of freeways from the tested alternative networks which consistently produced high simulated traffic volumes and whose construction was deemed practical. Some of the freeway links are included in the network because these links represent viable transportation service for certain areas of the region and provide network continuity. In the planning process it was assumed the existing toll roads would be free by 1995, however, proposed freeways may be constructed as toll roads.

3. Corridors of High Accessibility: These same corridors have been discussed in the transit component of the 1995 Transportation System Plan (see page 5). Extremely heavy levels of demand were generated on these corridors. Consequences in terms of social and environmental impact have been identified for the various recommended alternatives within these corridors. In order to accommodate the high vehicle travel demand anticipated in the corridors, alternative solutions must be reevaluated. The 1995 Transportation System Plan does not recommend any specific solution to this dilemma, but offers two additional alternatives for public discussion:

- Provide alternatives for vehicle travel that disaggregate total demand and disperse such travel more evenly over a large area.
- Provide highway facilities designed for specialized components of the total vehicle travel demand (e.g., truck only, long trip travel, etc.) and spread the balance of the demand over existing or new routes outside of the corridor.

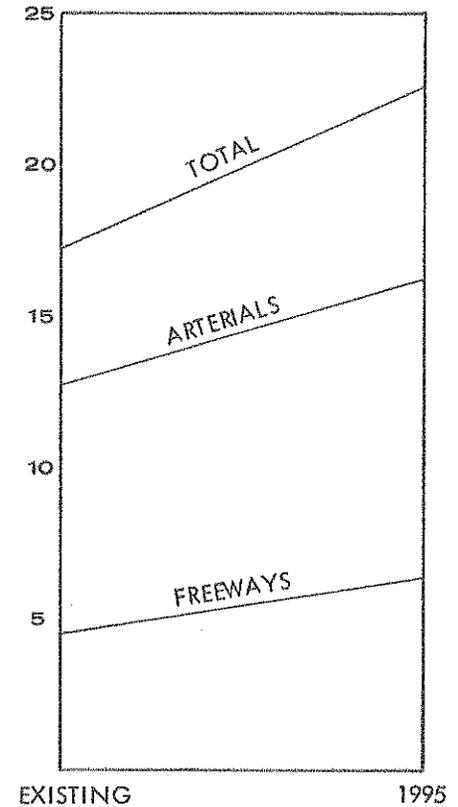
TABLE 2

Improvements in Hourly Capacity as Implied in the Highway Component of the 1995 Transportation Plan
Exclusive of the High Accessibility Corridors
(All Figures Are in Thousands of Vehicle Miles)

	Freeways		Arterials		Total	
	Existing	1995 Plan	Existing	1995 Plan	Existing	1995 Plan
City of Chicago	863	879	2,237	2,697	3,100	3,576
Suburban Cook	1,368	1,512	2,584	3,589	3,952	5,101
DuPage	291	672	939	1,384	1,230	2,056
Kane	275	374	992	1,201	1,267	1,575
Lake (Illinois)	276	785	1,136	1,453	1,412	2,238
McHenry	63	305	1,030	1,334	1,093	1,639
Will	585	971	1,626	1,795	2,211	2,766
Lake (Indiana)	549	706	1,266	1,454	1,815	2,160
Porter	244	244	967	1,167	1,211	1,411
TOTAL	4,514	6,448	12,777	16,074	17,291	22,522

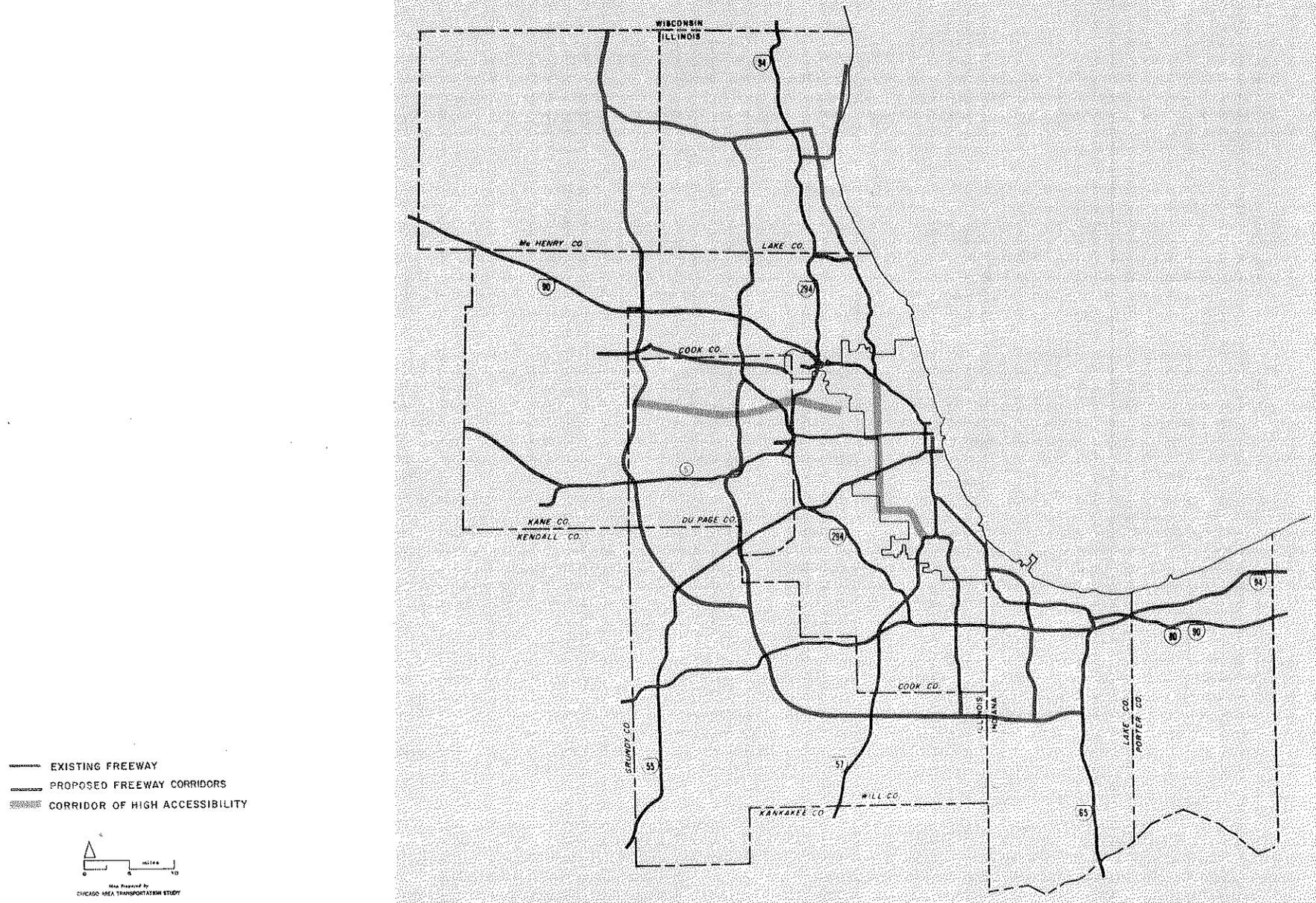
In addition to increased hourly capacity, the highway component increased the accessibility to jobs, shopping opportunities and recreational facilities. Figures 6 and 7 show accessibility to jobs via the 1995 highway network and the existing highway network respectively.

In contrast to the transit system, the existing highway system provides the best accessibility to jobs for the residents of western Cook and eastern DuPage. The 1995 highway system expands the existing areas with very high accessibility to jobs, rather than creating similar new ones.



INCREASE IN SYSTEM CAPACITY
(All Figures in 000's Vehicle Miles)

Figure 4 FREEWAY AND CORRIDOR OF HIGH ACCESSIBILITY SYSTEM



FREEWAY SYSTEM

Eliminations:

None

Additions:

Cline Avenue - SR912

Elgin - O'Hare

- a. Between Fox River Valley and Ill. 53
- b. Between Ill. 53 and O'Hare vicinity (Hardship and Protective Buying of Right-of-Way)

Fox River Valley

- a. Between I-90 and I-55
- b. Between I-90 and proposed Richmond - Waukegan (Hardship and Protective Buying of Right-of-Way)
- c. Between I-55 and proposed Lake-Will (South) (Hardship and Protective Buying of Right-of-Way)

Franklin Street Connector

Lake Front

- a. Between I-94 and Zion

Lake - Will

Richmond - Waukegan

South Suburban

- a. Between I-57 and I-65 (Indiana)
- b. Between I-80 and I-57 (Hardship and Protective Buying of Right-of-Way)

U. S. 41

CORRIDOR OF HIGH ACCESSIBILITY

Cicero Avenue Corridor

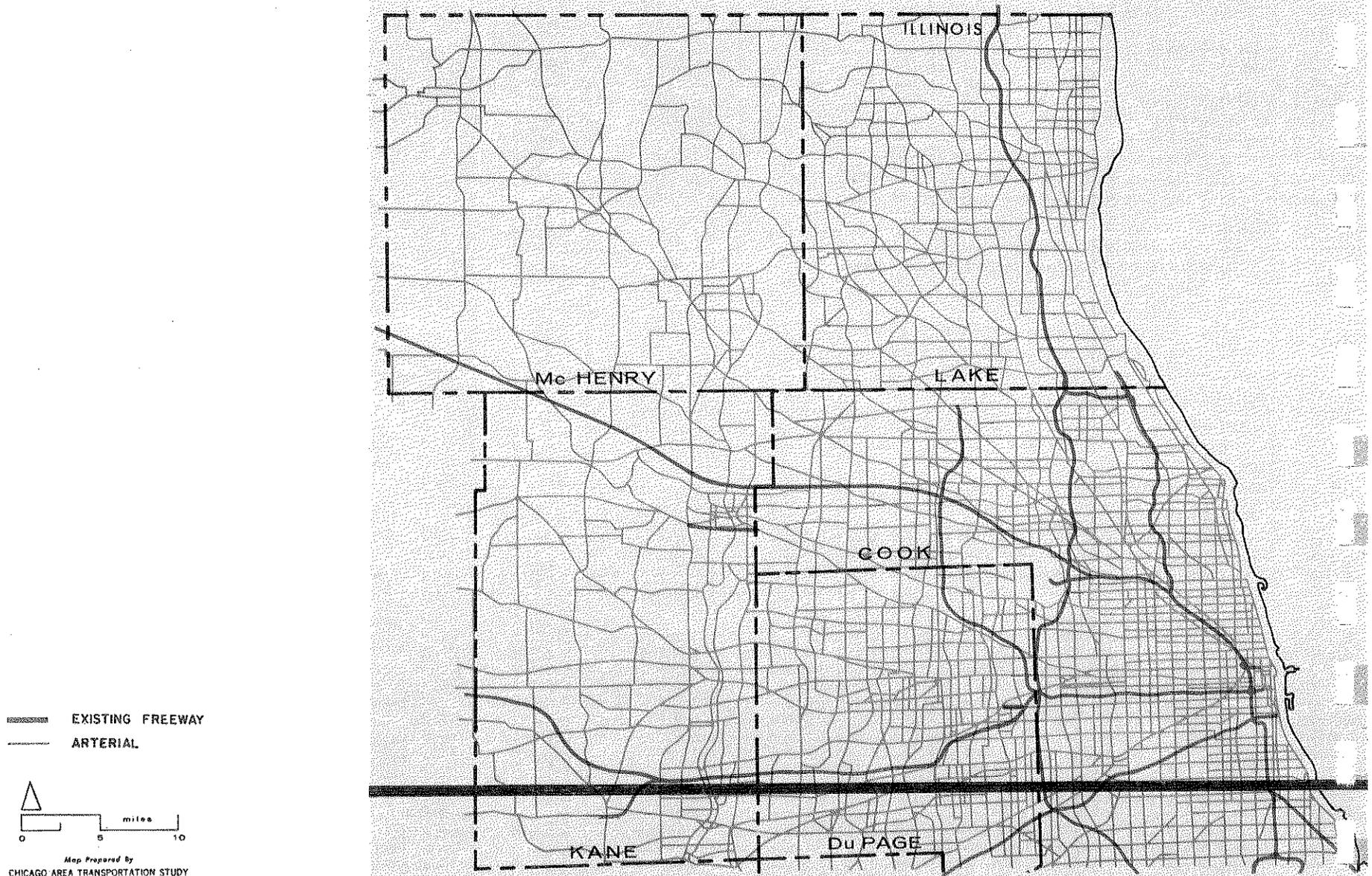
North Avenue Corridor

- a. Between Fox River and 1st Avenue

NOTE:

All plan components are generalized. Specific locations for the components will result from the appropriate feasibility, corridor, alignment, master plan and/or design studies which are subject to future public hearings.

Figure 5 ARTERIAL SYSTEM



EXISTING FREEWAY
ARTERIAL



Map Prepared By
CHICAGO AREA TRANSPORTATION STUDY

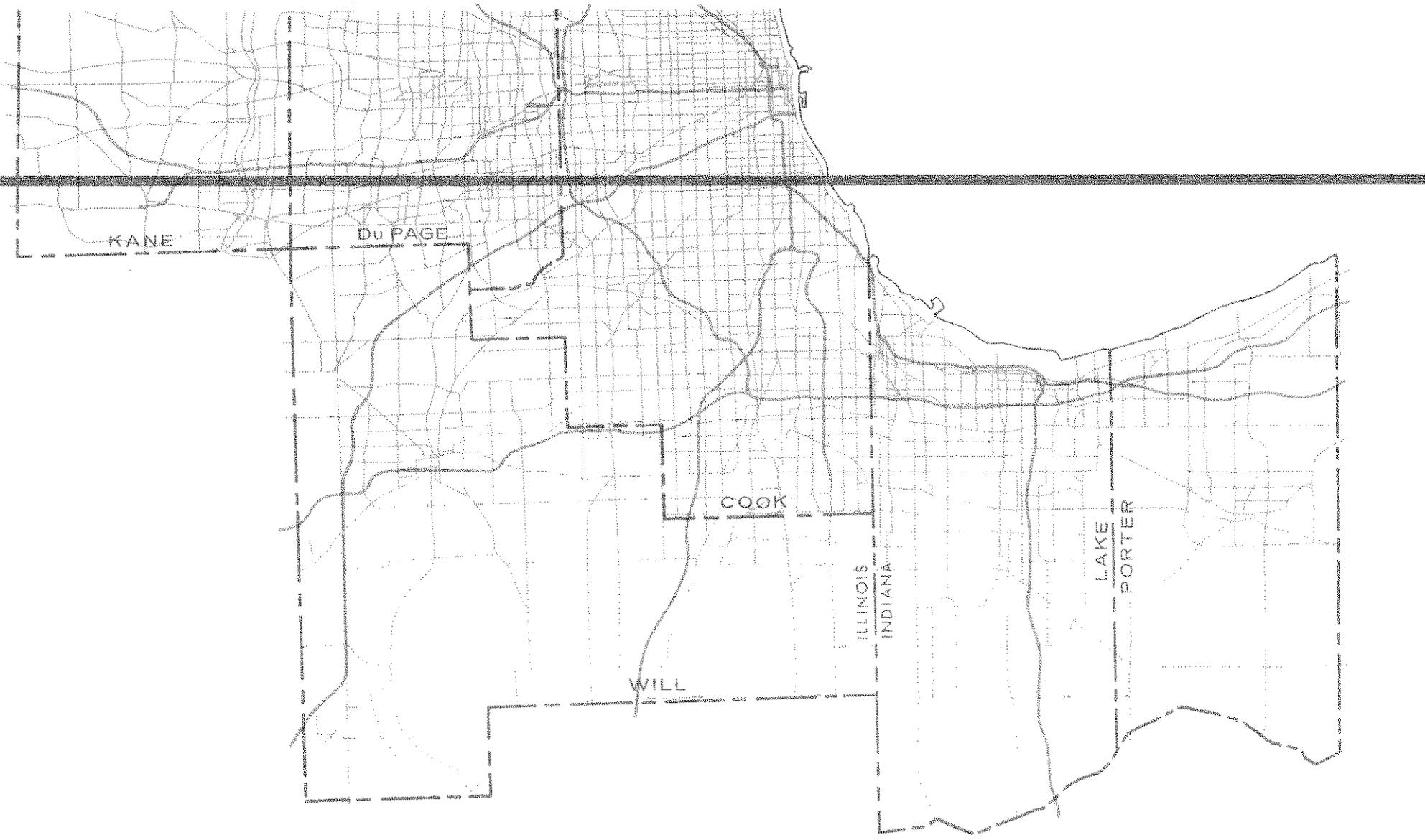
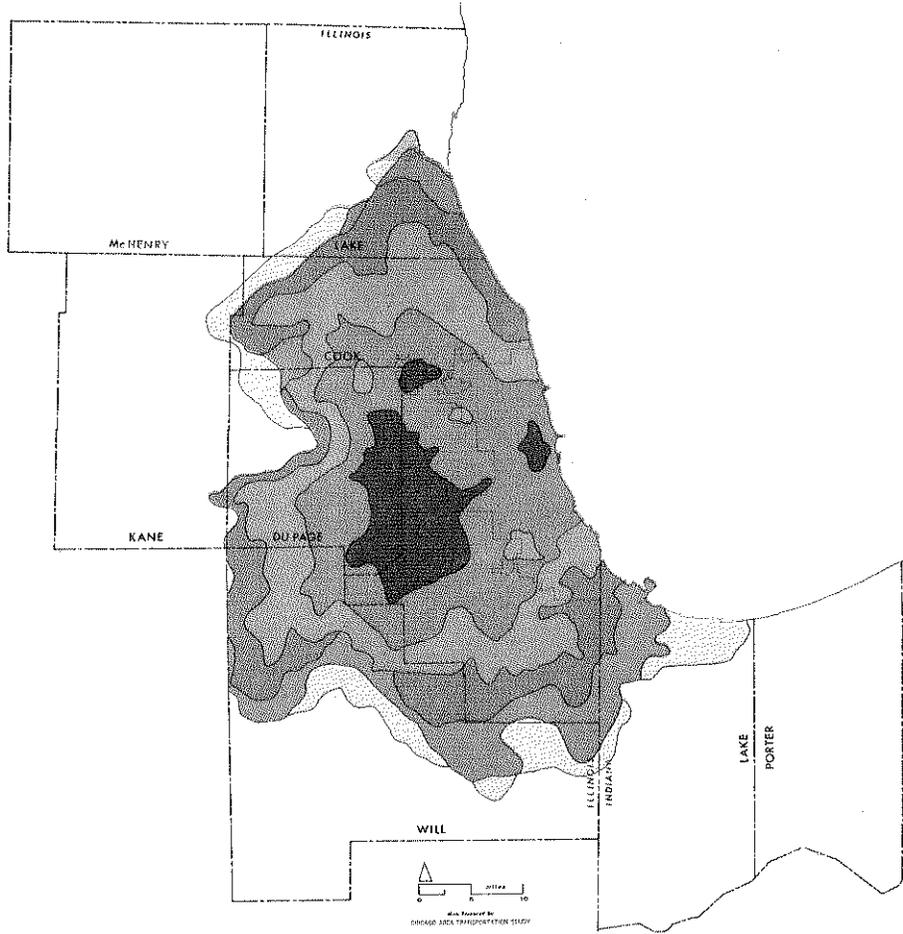


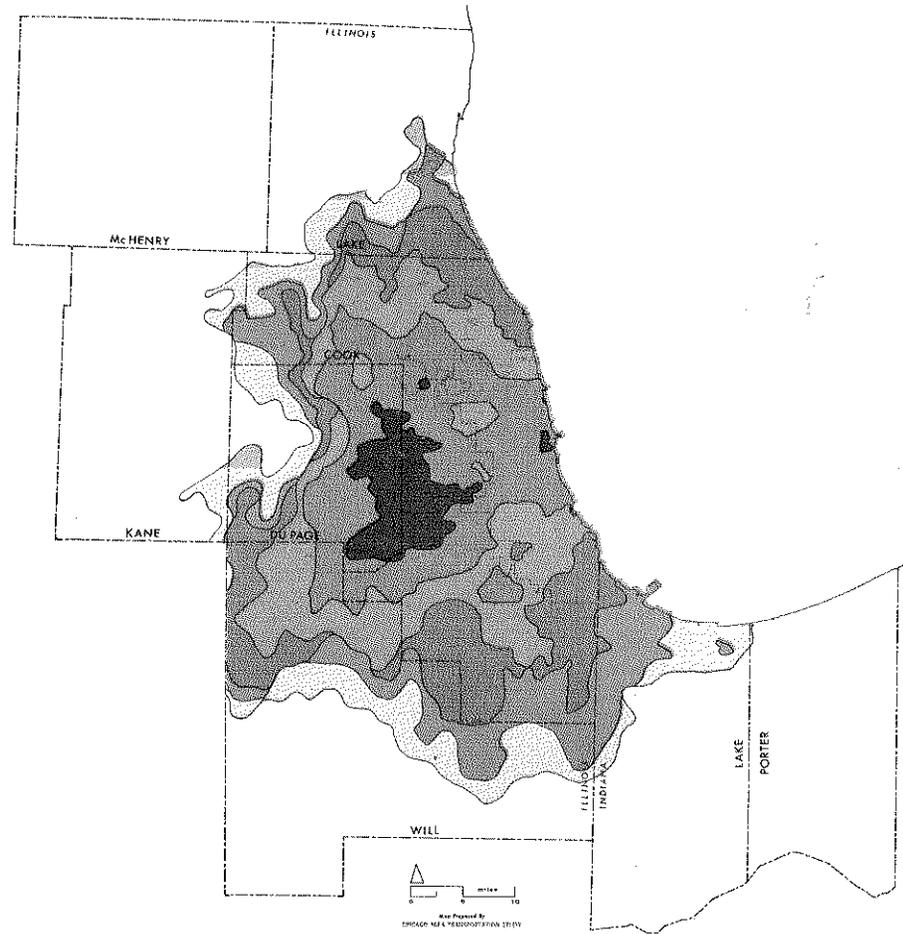
Figure 6 ACCESSIBILITY TO 1995 JOBS VIA 1995 HIGHWAY SYSTEM



1995 WORK TRIP ENDS WITHIN 60 MINUTES
in 100,000's

	38 +
	34 - 38
	30 - 34
	26 - 30
	22 - 26
	18 - 22
	0 - 18

Figure 7 ACCESSIBILITY TO 1995 JOBS VIA EXISTING HIGHWAY SYSTEM



1995 WORK TRIP ENDS WITHIN 60 MINUTES
in 100,000's

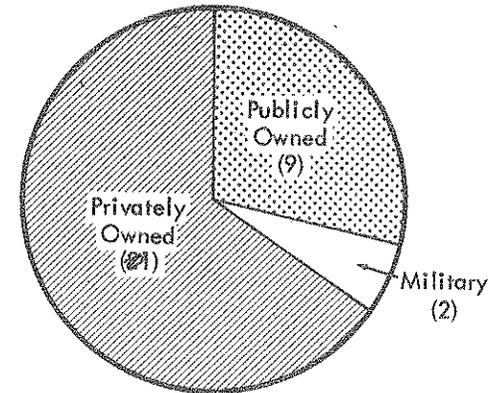
	38 +
	34 - 38
	30 - 34
	26 - 30
	22 - 26
	18 - 22
	0 - 18

AIRPORT SYSTEM PLAN

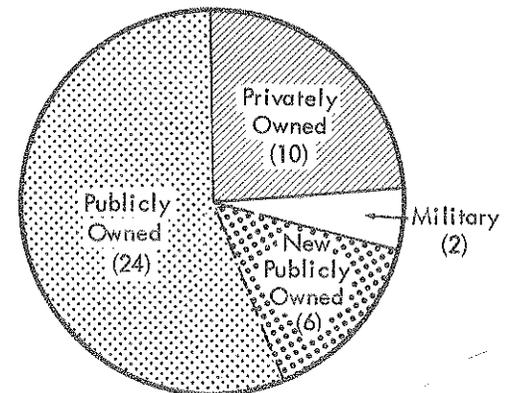
The recommended airport system plan is designed to meet the demand of air carrier and general aviation aircraft operations with a minimum of airport-to-airport conflict. The emphasis of these recommendations is on the provision of adequate general aviation reliever airports for the Chicago-Northwestern Indiana Region. The proposed plan stresses the retention and expansion of existing airports rather than construction of large numbers of new airports. It has been assumed that the two existing military airports, Glenview Naval Air Station and Ft. Sheridan-Haley Army Airfield, will remain in operation as all-military facilities throughout the plan period. Changes in the status of the military airports will have a significant impact upon the recommended airport system plan.

Figure 8 presents the airport segment of the 1995 Transportation System Plan. The components of the airport plan are:

1. Air Carrier Airports: The plan recommends improvements to increase the efficiency and improve ground access to the two air carrier airports identified in the region: Chicago O'Hare International and Chicago-Midway. Furthermore, it places special emphasis on the need for increasing the utilization of Midway Airport by the air carrier airlines. No independent studies were undertaken during the 1995 transportation plan making process to determine the need for a third regional air carrier airport. Instead, the 1995 Transportation System Plan accepts, until further studies are completed, the findings of the March, 1973 report, Northeastern Illinois Airports Requirement Study, prepared by Ralph M. Parsons Company in cooperation with Clark-Dietz Associates. This report recommends "locating, procuring and setting aside a site for possible use as an (new air carrier) airport".
2. Intercity Ground Passenger Transportation: Considerable relief to air carrier airline services can be provided by short range (up to 300 miles) ground transportation service. Correspondingly, one important policy recommendation of the airport plan is to provide investment in intercity ground passenger transportation, such as Amtrak or bus, to supplement the passenger service of air carrier airlines.
3. Publicly Owned, General Aviation Airports: The retention of general aviation airports, where economically feasible and in agreement with social and environmental constraints, is the objective of this airport system plan component. At present, there are more than 3,100 general aviation aircraft in this region. The Federal Aviation Administration has forecast an average increase of 75 percent in the number of general aviation aircraft operations by 1985.

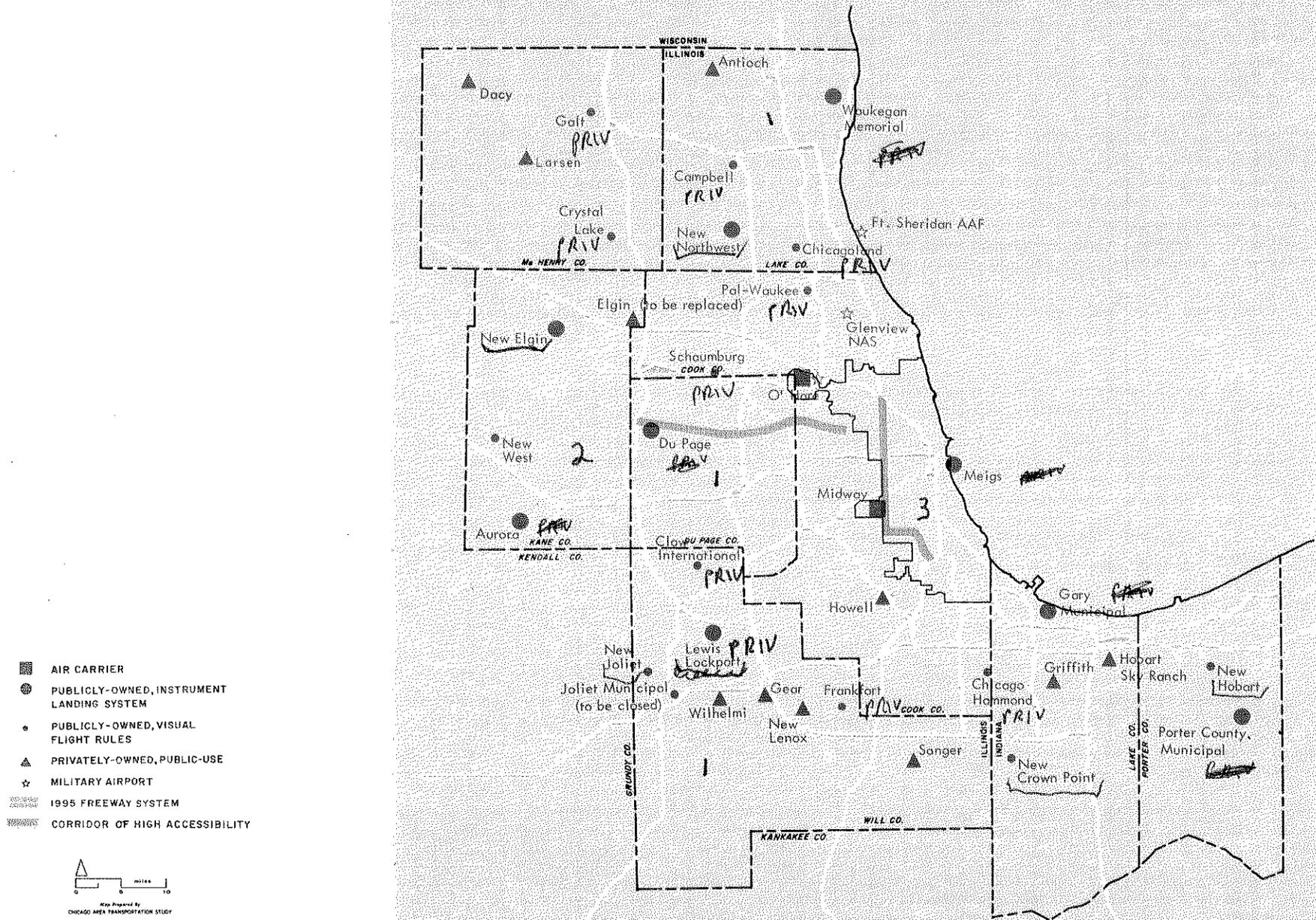


1974 EXISTING AIRPORT SYSTEM
(30 PUBLIC USE AIRPORTS)

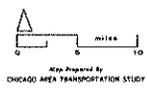


1995 PROPOSED AIRPORT SYSTEM
(34 PUBLIC USE AIRPORTS)

Figure 8 AIRPORT SYSTEM



- AIR CARRIER
- PUBLICLY-OWNED, INSTRUMENT LANDING SYSTEM
- PUBLICLY-OWNED, VISUAL FLIGHT RULES
- PRIVATELY-OWNED, PUBLIC-USE
- MILITARY AIRPORT
- 1995 FREEWAY SYSTEM
- CORRIDOR OF HIGH ACCESSIBILITY



AIR CARRIER AIRPORTS

Chicago - Midway
Chicago - O'Hare International

PUBLICLY OWNED GENERAL AVIATION AIRPORTS

A. Instrument Landing System Airports

1. Eliminations:
None
2. Expansion or Improvement of Presently Publicly Owned Airports:
Aurora Municipal
Chicago Meigs Field
DuPage County
Gary Municipal
Porter County Municipal
Waukegan Memorial
3. Acquisition of Presently Privately Owned Airports:
Lewis - Lockport
4. New Public ILS Airports:
Northwest
Elgin

B. Visual Flight Rules Airports

1. Elimination:
Joliet Municipal
2. Expansion and Improvement of Existing Publicly Owned Airports:
None
3. Acquisition of Presently Privately Owned Airports:
Campbell Pal-Waukeee
Chicago - Hammond Schaumburg
Chicagoland
Clow International
Crystal Lake
Frankfort
Galt

4. New Public VFR Airports:
Crown Point
Hobart
Joliet
West

PRIVATELY OWNED AIRPORTS

- A. Eliminations:
None
- B. Existing:
Antioch
Dacy
Elgin
Gear - New Lenox
Griffith
Hobart Sky Ranch
Howell - Crestwood
Howell - New Lenox
Larsen
Sanger
Wilhelmi
- C. New:
None

MILITARY

- A. Eliminations:
None
- B. Existing:
Naval Air Station - Glenview
Ft. Sheridan - Haley Army Airfield
Chicago - O'Hare International
- C. New:
None

NOTE:

All plan components are generalized. Specific locations for the components will result from the appropriate feasibility, corridor, alignment, master plan and/or design studies which are subject to future public hearings.

preserve and expand
existing airports

ensure compatibility with
publicly owned airports

no new RLA's

enforce compatible zoning

In order to provide an airport system which will be able to handle the general aviation demand, significant steps must be taken to preserve and expand existing airports as well as build several new ones. These steps will require increased public awareness of, and involvement in, community airport problems. The plan recommends the public acquisition of 10 general aviation airports which are currently in private ownership to prevent their subdivision and redevelopment for other urban land uses. The plan also recommends the construction of six new general aviation airports. The new airport sites shown in Elgin and Joliet are to be replacements for existing airports. In the event that master planning studies show either of the existing sites preferable to a new site, such results would not be incompatible with the intent of the regional plan. The publicly owned general aviation airports are classified into two categories: Instrument Landing System Airports (Public ILS) for all weather use and Visual Flight Rules Airports (Public VFR) for good weather use and limited instrument use. Associated with each category is a standard runway length, 5,400 feet for Public ILS and 3,800 feet for Public VFR.

4. Privately Owned, Public Use Airports: The plan identifies ten privately owned, public use airports to remain in private ownership. These ten airports are recognized as second priority airports whose survival will depend on their ability to provide service under market conditions. Future demand and land use developments may force the reconsideration of these airports as potential publicly owned airports. It should be pointed out that any new privately owned, public use airport sites must be considered carefully to ensure compatibility with the publicly owned airports proposed in this plan.
5. Restricted Landing Areas (RLA's): While they are not shown on the map, these privately owned, private use airports have become an airspace and land use problem in many parts of the region. A moratorium on the granting of further RLA operating certificates is recommended until the impact of these facilities can be fully identified.
6. Land Use and Height Restriction Zoning: As a means of protecting increased public investment in the airport system, compatible land use and height restriction zoning is recommended. Enforcement would reduce the adverse environmental impact of general aviation airports. It is suggested that model airport zoning ordinances be prepared as a guide for local jurisdictions.

FREIGHT SYSTEM PLAN

The freight system component of the 1995 Transportation System Plan recommends extensive changes in government and industry practices relating to commodity movements. The plan calls for an equalization in government treatment of the various modes through policy, legislative, and regulatory changes.

The overriding objective of the freight component is the consolidation of right-of-way and terminal facilities of the existing freight system, streamlining the present overextended system to one which is both economically and operationally viable. A viable freight system is essential to the economy of this region. The consolidation is accomplished through both the concentration of freight activity in specific localized sites and the joint use of physical facilities. The freight plan emphasizes the need for complementary intermodal exchanges, i.e., terminals to exchange freight between trucks and rail, rail and waterborne systems, etc. The plan recognizes that each mode has certain inherent advantages that should be exploited to the benefit of the public.

The 1995 Transportation System Plan is the first plan for the Chicago area which embodies a comprehensive regional plan for freight. Accordingly, this freight system plan should be viewed as a preliminary plan. The Interim Transportation Plan presented composite proposals as developed by the members of the freight system industry. Given this change of emphasis from proposed carrier improvements, the freight component must be reviewed carefully. It is hoped that the public discussion, which this proposal is intended to activate, will provide the basis for a more complete and representative plan in the future. This discussion should include the implications of the policies (both private and public) necessary to implement this freight system. These discussions complemented with the collection of detailed data on commodity movements, which is currently lacking, will provide the basis for the preparation of more detailed freight plans. Figures 9, 10 and 11 present the freight system plan. The modal components of this plan are:

1. Rail Freight: The proposed rail freight plan requires major changes in institutional and operational mechanisms. As shown in Figure 9, the plan recommends that rail freight will be handled by a system of 21 high speed strategic lines. These lines would be completely grade separated and designed for maximum speeds of 80 to 100 mph in nonurbanized areas. These lines together with the switching lines total 1,434 miles of right-of-way. Maintenance and development plans would be implemented to encourage the use and development of this rail system.

Since it would not be practical to maintain all branch lines at this high standard, other existing lines not designated as high speed strategic lines, yet serving shippers and municipalities, could be maintained by the existing carriers, by shipper railroads or by local governments. If a route is no longer useful it could be abandoned, the land being used for another urban use.

change government and industry practices

consolidation

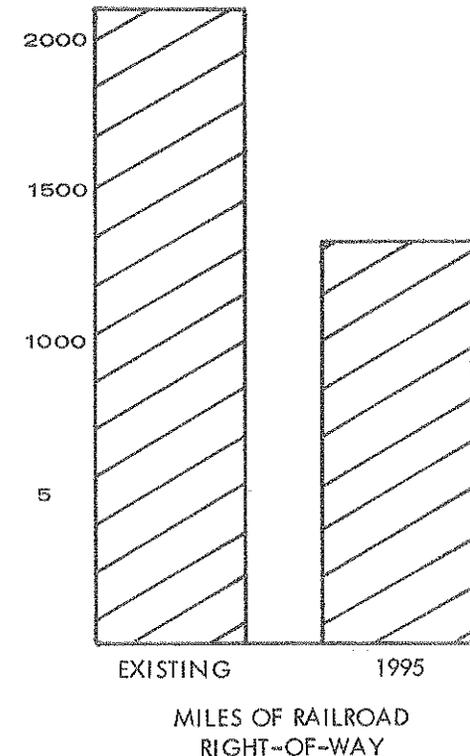
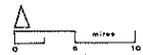
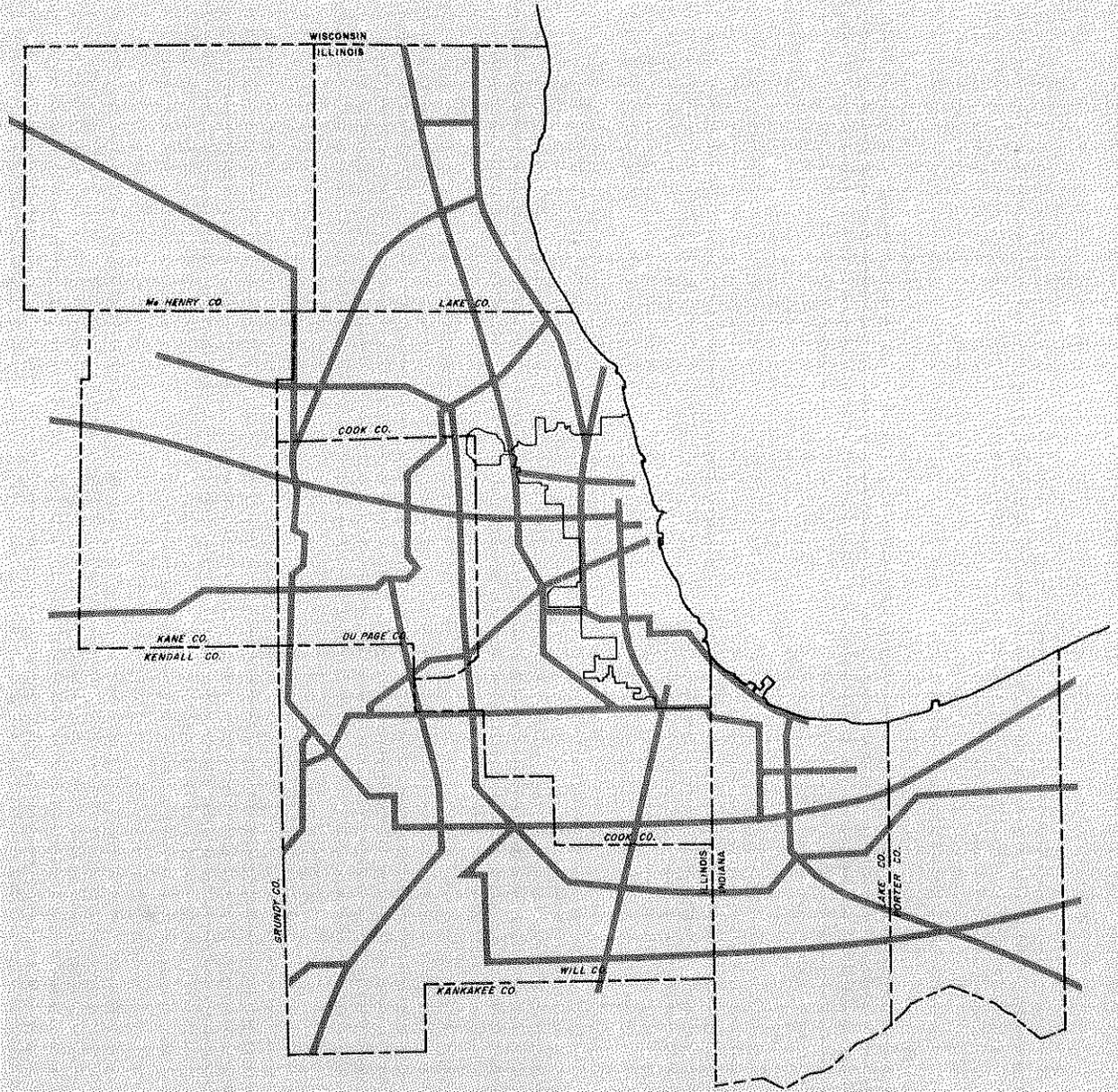


Figure 11 ENERGY CORRIDOR SYSTEM

 ENERGY CORRIDOR



Map Prepared by
CHICAGO AREA TRANSPORTATION STUDY



The plan recommends the development of a consolidated terminal structure accounting for three levels of yard functions. Primary and secondary yards would be coordinated to handle inbound and outbound rail carloads from intercity freight arrival to final delivery to the shippers. The third level, the industrial yard, would meet the switching requirements for concentrated, industrial activity. No new terminal sites would be necessary; however, major improvements would be made at many sites to enable reduction in the number of facilities. Any abandoned land could be reused as industrial, recreational or other urban use.

encourage recreational
use of waterways

2. Waterways: The waterway component of the freight system plan contains two major recommendations. First, the plan recommends reducing commercial navigation on the Chicago River and its branches, relieving congestion and allowing more intensive recreational use of these waterways. Second, the plan specifies the consolidation of all general cargo traffic at a new port facility, Illiana Harbor, which will be located at the mouth of the Calumet River. These recommendations conform with the goals and policies of the City of Chicago, Northeastern Illinois Planning Commission and Northwestern Indiana Regional Planning Commission. Other recommendations of the plan are shown in Figure 9.

3. Truck Freight: The truck freight plan designates 1,484 miles of arterial roads and the 1995 freeway network as preferred truck routes. These routes will be designed to handle double combination trailers. Heavy truck traffic on routes not designated as preferred routes is to be restricted to local access only.

preferential truck routes

The plan recommends the consolidation of truck terminals, public warehouses, and freight forwarders into 37 clusters located near the preferential truck routes. This pattern is developing today but would be reinforced through zoning. These clusters will be provided with access that features turning channels, signalization, and construction standards capable of handling double trailer combinations. The plan also includes nine rail-truck intermodal (piggyback) yards.

In addition to these recommendations the truck freight plan proposes that the boundaries of the Chicago Commercial Zone be expanded to include the entire eight county region. Furthermore, local governmental units are encouraged to incorporate requirements for off-street loading facilities into their zoning and building codes for all new commercial and industrial buildings.

expand chicago
commercial zone

4. Energy Corridors: The plan recognizes the continuing need for a network of energy corridors. The plan recommends 884 miles of radial and circumferential energy corridors designated for future pipeline and high voltage electric transmission lines. The continuing expansion of land development in the region dictates that right-of-way be allocated in such a way that transmission facilities will be able to maintain service to the region with minimum consumption of land and reduction of adverse environmental impact.

joint use of right of way

COST OF THE 1995 PLAN

TABLE 3

The implementation of the 1995 Transportation System Plan will require the expenditure of \$14.7 billion dollars of public funds over the next 20-year period. This cost is estimated in 1973 dollars, assuming 1973 costs of construction, equipment and land. It includes the total cost of land acquisition, construction and equipment purchase for the completion of the proposed system. The designated figure also includes the cost of upgrading the existing system to the standards assumed by the plan as well as the cost of maintenance and operation of the transportation system which is not offset by direct user fees. These costs are higher than other annual expenditure rates for transportation during the last few years. The cost of the transit system, including the cost of the non-autopassenger flow in the corridors of high accessibility, accounts for 40 percent of the total cost. The average annual cost of the transit system is approximately four times the annual expenditure of the last eight years. The cost of the freeway system, including the cost of the vehicle flow in the corridors of high accessibility, is estimated at 26 percent of the total cost. The average annual cost of the highway system is approximately twice the annual expenditure of the last eight years. The arterial, freight and aviation systems account for 19 percent, 12 percent and 3 percent of the total system, respectively.

The distribution of assignable costs by county closely reflects the distribution of population in 1970 and 1995. The exceptions are the two rural counties of McHenry and Will whose share of the cost of the transportation system is slightly higher than their share of the existing or future population. Lake County, Indiana, represents the opposite condition. Within Cook County, 80 percent of the cost of the transportation system is assigned to the City of Chicago.

Table 3 summarizes the cost of the transportation system plan by mode and category of expenditure within each mode for each county and the City of Chicago. Costs of the freight system and the site acquisition for the third air carrier airport could not be assigned to specific counties; hence, these costs appear in the total column only.

The 1995 Transportation System Plan does not assign funding priorities to the various components of the plan or individual projects. However, the establishment of these priorities is essential and will be developed as part of the 20 year incremental development program and the five year development program for transit, highways and aviation systems.

Modal Cost Category
Transit and Corridors of High Accessibility *
Renewal and Upgrading-Existing System
New System *
Operations and Maintenance (Deficit Only)
Total
Freeway and Corridors of High Accessibility *
Reconstruction-Existing System
New System **
Maintenance
Total
Arterials
Total (Upgrading and Maintenance)
Aviation
Reconstruction and Capital Improvement-Existing
Air Carrier Airport Site Acquisition-Third Air Carrier
Airport (site unknown) Public Acquisition and Development-
Existing General Aviation General Aviation System
Total (Includes Costs Assignable to Counties Only)
Freight
Public Acquisition & Upgrading-Existing System
New System
Maintenance (Deficit Only)
Total
Total 1995 Transportation System Plan
Total Cost-Assignable to Counties
Total Cost-Non-assignable to Counties
Grand Totals
Percent Distribution of Assignable Costs to Counties

Public Costs of the 1995 Transportation System Plan (All Figures Are in Millions of 1973 Dollars)

City of Chicago	Suburban Cook	DuPage	Kane	Lake	McHenry	Will	Subtotal Illinois Counties	Lake (Indiana)	Porter (Indiana)	Subtotal Indiana Counties	Grand Total
765.6	258.1	92.3	20.4	53.9	27.8	21.8	1,239.9	30.0	7.2	37.2	1,277.1
3,159.6	150.3	50.3	14.4	7.1	1.5	12.4	3,395.6	5.5	1.9	7.4	3,403.0
916.5	169.0	27.3	10.4	22.2	10.9	10.9	1,167.2	28.9	4.0	32.9	1,200.1
4,841.7	577.4	169.9	45.2	83.2	40.2	45.1	5,802.7	64.4	13.1	77.5	5,880.2
130.4	231.6	124.4	67.9	124.4	67.9	192.3	938.9	147.0	45.2	192.2	1,131.1
1,014.0	84.5	256.5	33.0	314.5	99.5	207.0	2,009.0	245.0	0	245.0	2,254.0
63.2	112.2	60.3	32.9	60.3	32.9	93.2	455.0	71.2	21.9	93.1	548.1
1,207.6	428.3	441.2	133.8	499.2	200.3	492.5	3,402.9	463.2	67.1	530.3	3,933.2
342.6	453.5	200.1	277.1	268.9	290.8	441.7	2,274.7	241.5	227.8	469.3	2,744.0
95.0	0	0	0	0	0	0	95.0	0	0	0	95.0
-	-	-	-	-	site location unspecified		(no assignable costs)	-	-	-	160.0
1.1	17.6	17.0	14.2	19.4	5.2	16.5	91.0	4.0	4.1	8.1	99.1
0	0	0	13.3	7.3	0	9.2	29.8	4.8	4.4	9.2	39.0
96.1	17.6	17.0	27.5	26.7	5.2	25.7	215.8	8.8	8.5	17.3	233.1
-	-	-	-	no assignable costs		-	-	-	-	-	1,511.0
-	-	-	-	no assignable costs		-	-	-	-	-	129.0
-	-	-	-	no assignable costs		-	-	-	-	-	135.0
-	-	-	-	no assignable costs		-	-	-	-	-	1,775.0
6,488.0	1,476.8	828.2	483.6	878.0	536.5	1,005.0	11,696.1	777.9	316.5	1,094.4	12,790.5
-	-	-	-	-	-	-	-	-	-	-	1,935.0
-	-	-	-	-	-	-	-	-	-	-	14,725.5
50.7	11.6	6.5	3.8	6.8	4.2	7.8	91.4	6.1	2.5	8.6	100.0

* The non-auto passenger flow cost of the corridors of high accessibility is included in this category.
 ** The higher cost alternative accommodating the vehicle flow in the corridors of high accessibility is included in this category.
 The lower cost alternative is roughly estimated at \$240 million; however, this cost needs further study before it can be finalized.

THE 1995 PLAN MAKING PROCESS

interagency
coordinated effort

The plan making process has been long and complex, involving four agencies with overlapping geographic and functional jurisdictions. Four regional planning agencies, CATS, DDP, NIPC and NIRPC, participated in the preparation of this plan and coordinated their activities at both the policy and staff levels. Specific work tasks for the development of this transportation system plan were identified and implemented through the mechanism of the Unified Regional Planning Program which coordinates the planning activities of the four regional planning agencies.

Figure 12 shows the major work components of the 1995 Transportation System Plan and the responsible agency. The significance of comprehensive planning in the development of transportation plans and the specific comprehensive plans used as a guide for the 1995 Transportation System Plan was discussed in "Goals and Objectives", page 2 of this report. The other major work components of the transportation plan making process are described below.

It should be noted that the process delineated in the following sections has been used in the preparation of the transit and highway components of the 1995 Transportation System Plan. The approach for the preparation of the aviation and freight components was similar. However, data necessary to conduct such quantified analyses for the aviation and freight plan components was not available. Therefore, these system plans are more conceptual in nature. They will be further detailed as additional studies are completed.

1. Demographic, Economic and Land-Use Forecasts

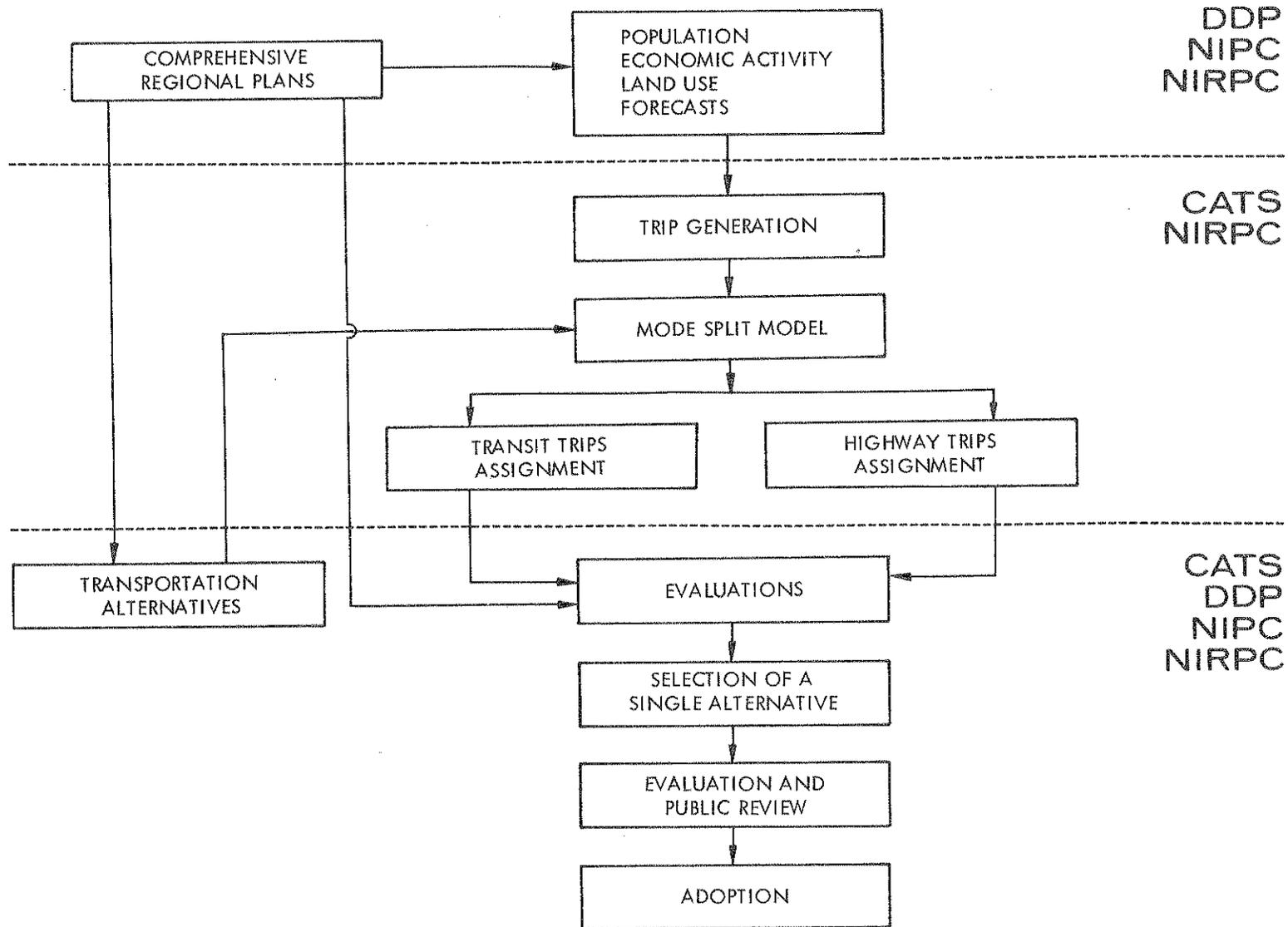
activity forecasts reflect
comprehensive plans

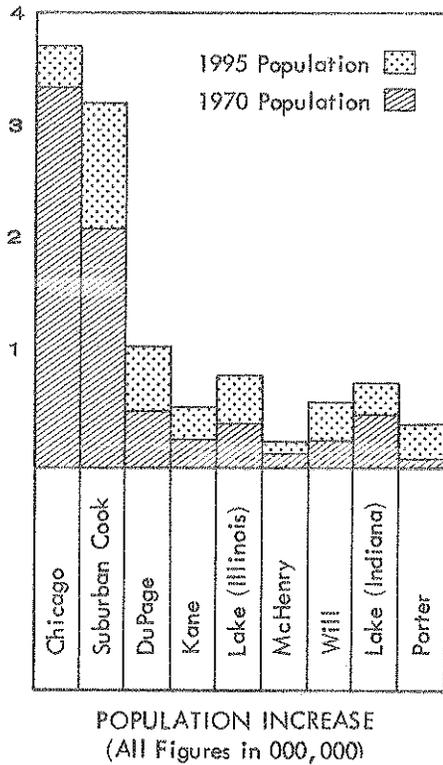
The demographic, economic, and land-use forecasts are basic fundamentals of the comprehensive plans for the region. The DDP prepared the necessary forecast data for the areas within the city limits; NIPC developed forecasts for suburban northeastern Illinois; the forecast data for northwest Indiana was completed by NIRPC. This data represents a direct quantification of the goals and policies of the comprehensive plans as constrained by the economic potential of the region and influenced by market forces. Table 4 summarizes the population forecasts used in the development of the 1995 Transportation System Plan.

In addition to population forecasts, the comprehensive planning agencies developed forecasts of population characteristics, land-uses, employment, and density distribution for the 4,600 square mile zones in the eight county region.

The 1995 Transportation System Plan provides the necessary transportation services and facilities for the forecasted population and economic activities. Consequently, this plan can be seen as an integral part of the regional comprehensive plans. Furthermore, its implementation can be viewed as strategy for the actual implementation of the comprehensive plans.

Figure 12 TRANSPORTATION PLAN MAKING PROCESS FLOW CHART





activity forecasts
determine travel demand

TABLE 4

Preliminary Population Forecasts

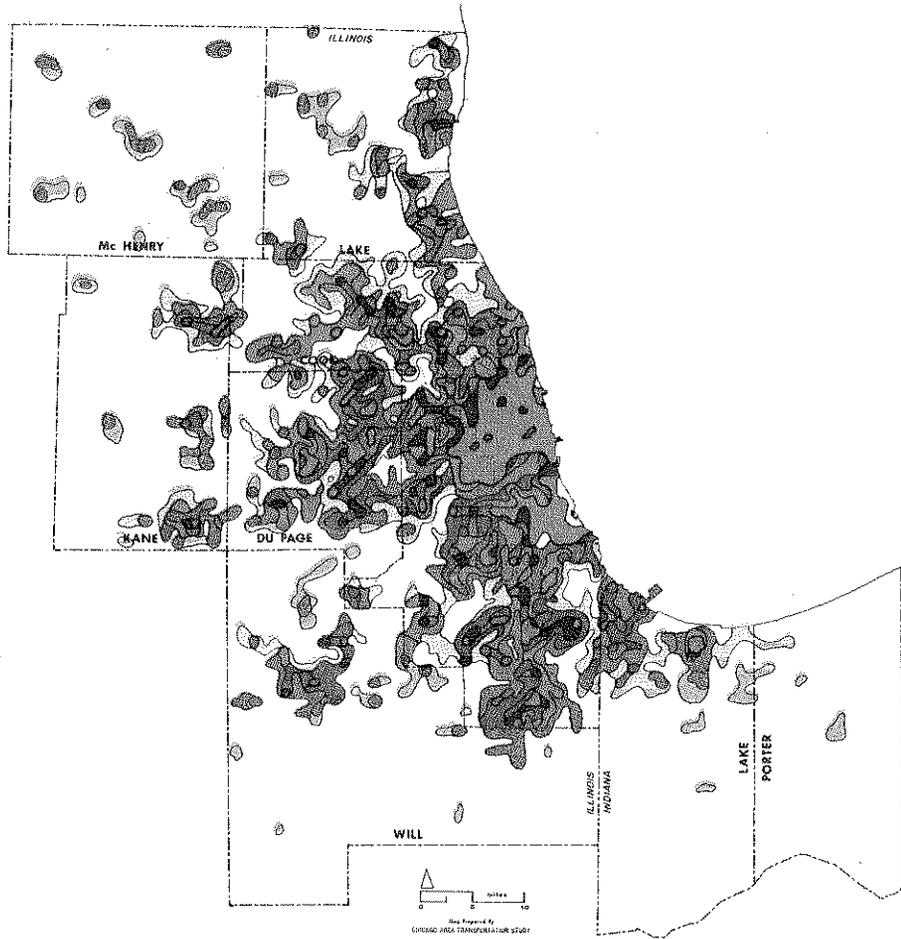
AREA	1960	1970	1975	1985	1995
City of Chicago	3,550,404	3,366,957	3,591,900	3,646,000	3,697,600
Suburban Cook	1,579,321	2,125,412	2,390,500	2,843,900	3,267,300
DuPage	313,459	491,882	572,000	839,000	1,064,500
Kane	208,246	251,005	293,600	371,900	512,000
Lake	293,656	382,638	472,000	611,000	828,800
McHenry	84,210	111,555	121,700	165,600	240,300
Will	191,617	249,498	288,300	397,600	589,500
Northeastern Illinois Total	6,220,913	6,978,947	7,730,000	8,875,000	10,200,000
Lake (Indiana)	513,269	546,253	581,500	663,500	757,500
Porter (Indiana)	60,279	87,114	121,500	200,500	295,500
Northwestern Indiana Total	573,548	633,367	703,000	864,000	1,053,000
Chicago - Northwest Indiana Total	6,794,461	7,612,314	8,433,000	9,739,000	11,253,000

2. Trip Generation

The person trips used in preparing the highway and transit components were created from the forecast land use, population and economic activities using trip rates developed from the CATS/NIRPC origin-destination surveys of 1970 to 1971 and preceding subregional studies. The trip generation of distinctive areas such as the Chicago Central Business District, O'Hare and Midway Airports, and major suburban shopping centers was computed using special rates based on selected surveys taken by CATS.

Figure 13 shows the 1995 distribution of person trip demand. Note the relationship of the most concentrated areas of trips to the concept of development corridors as shown in the region's comprehensive plans.

Figure 13 1995 DISTRIBUTION OF PERSON TRIP DEMAND



TRIPS PER SQUARE MILE

in 1000's

[Darkest shading]	35 +
[Dark shading]	30 - 35
[Medium-dark shading]	25 - 30
[Medium shading]	20 - 25
[Medium-light shading]	15 - 20
[Light shading]	10 - 15
[Very light shading]	5 - 10
[White]	0 - 5

distinct plan concepts

3. Development of Transportation Alternatives

Prior to the selection and finalization of the 1995 Transportation System Plan, six multimodal transportation alternatives were prepared, tested and evaluated. Each alternative offered a distinct plan concept enabling various social, environmental, functional and economic evaluations to produce distinguishing results. The six alternatives were the Interim Plan, the existing network and four additional plan alternatives (A, B, C and D) representing separate levels of capital investment for each of the plan systems. Plans A, B, C and D represented various complementary bimodal pairings of highway and transit networks.

The Interim Plan depicted the most expansive highway network. Consequently, the highway network presented in alternatives A - D represented lesser levels of completion of the Interim Plan. With each reduction in the proposed highway network for these four alternatives, the proposed transit system plans were augmented. The capacity of the recommended system was less than the capacity of the Interim Plan due to the greater population and economic activities initially forecast and used for the Interim Plan which have since been reduced. The Interim Plan was tested against the new forecasts.

Four alternative aviation plans were formulated and evaluated. These alternatives were: the existing system, the Interim Plan and two alternatives representing two options of public investment in airports. Both of these investment levels were lower than that indicated in the Interim Plan.

Four alternative freight plans were considered. The Interim Plan and the existing system constituted two alternatives even though the two systems were very similar. The third alternative represented minor modification to the existing system; the fourth alternative represented major modification to the existing freight system.

4. Mode Split

The new CATS network sensitive mode split model was employed in testing the various alternative plans and the final 1995 Transportation System Plan. This network sensitive model assigned the generated trips to either the transit or the highway network. The assignment was done on the basis of network configuration, related costs, and travel speeds as well as on the socio-economic characteristics of the population. The choice of mode for future travelers was assumed to be dependent on the same variables and weights that were exhibited in the 1970/1971 Home Interview Survey.

5. Trip Distribution and Assignment

The mode split process provides the number and type of trips by travel mode. The trip distribution process provides the additional information of where the trip, generated in any specific area, will be going. The 1995 Plan distribution process utilized information on trip lengths for each type, as derived from travel surveys.

From the distribution process, the trip assignment process allocates the zone-to-zone trips to specific highway or transit links. The assignments yield simulated traffic volumes on each highway network link

mode split
network sensitive

and the number of passengers using each transit (including bus) line. These volumes provide the basis for the functional, economic and social evaluation of the alternative transportation proposals.

6. Evaluation

Several evaluation techniques were used in testing the proposed network alternatives to thoroughly examine all relevant impacts of these regional transportation plans.

The performance evaluation of the mass transit and highway networks compared the expected levels of demand with the designated capacity of each given link of the specific network being tested. Additional evaluation criteria were derived from other measured system characteristics, such as total costs, travel times, accident rates, and levels of pollution emissions generated by the tested networks. Special evaluations were conducted to determine the relative change in demand corresponding to variations in transit user costs.

In a multimodal transportation system, there exist numerous relationships and interactions between and within each of the modes. These system interrelationships were examined and evaluated. The regional impact of the proposed alternatives on the existing community and land uses was determined. Specific transportation goals and objectives were associated with direct measures that could be used to indicate the degree to which a system objective was met by each of the alternative networks. The alternative networks were presented for public review and scrutiny at several subregional meetings. Public comments were solicited through the use of questionnaires which were later tabulated and analyzed.

On the basis of these evaluations and reviews, the various alternative plans were reduced to one composite plan. The composite plan underwent similar evaluation prior to its finalization as the recommended 1995 Transportation System Plan.

7. Future Planning Steps

The plan adopted by the two regional transportation agencies is now being reviewed by other agencies in the eight county area. It has been discussed at public hearings and adopted by the Northeastern Illinois Planning Commission and the Northwestern Indiana Regional Planning Commission. The plan will be presented to the Regional Council of Mayors for review, revision and adoption. A long-range development program identifying the projects to be constructed during each ten-year increment of the plan period will be prepared. Short range programs will be developed annually for the first five-year period of the plan's horizon year, 1995. These programs will assign funding priorities to the various projects identified in this plan.

No plan is static, therefore the planning process must allow modifications to any approved plan as demographic forecasts change, new concepts emerge or as implementation actions occur. The 1995 Transportation System Plan will be updated annually. Work on the 2000 Year System Plan has already been initiated. It will be available within the next few years.

performance

public review

one composite plan

8. Plan Implementation

In northeastern Illinois the key agencies for implementing the 1995 Transportation System Plan are the State of Illinois, the six county governments, the City of Chicago and the more than 250 suburban municipal governments. It is expected that the Regional Transportation Authority (RTA) will be playing a key role in implementing the transit component of the plan, once this Authority is fully constituted and staffed. In northwestern Indiana the plan will be implemented by the State of Indiana, the two county governments and the 29 municipalities.

For an effective implementation program, the efforts of these public agencies need to be coordinated with those of the private transit carriers, the airport operators and the freight carriers. The cooperation of the private railroads, truck and waterborne carriers is essential for the implementation and further development of the freight component of the 1995 Transportation System Plan.

In northeastern Illinois, the Chicago Area Transportation Study, a research arm of the transportation implementing agencies, will be responsible for developing the five year transportation programs setting forth the priorities for the implementation of the projects listed in the plan. In northwestern Indiana, the Northwestern Indiana Regional Planning Commission will be responsible for preparing and adopting the five year transportation programs for the two Indiana counties. As in northeastern Illinois, the programs will be developed in cooperation with the local governments and private carriers. The views of regional planning and implementing agencies, private carriers and public representatives will be sought as part of the Transportation Development Program process and its subsequent required adoption by NIRPC and NIPC. The first Transportation Development Program is for the period 1975-1979. It is through the continuing cooperation and actions of these public and private groups that the plan will become a reality, providing the needed transportation services for the citizens of the region.

REFERENCES

- Behrens, John W. "Concepts for Future Freight Networks." CATS Research News. Vol. 14, No. 1. July 1972.
- Blaze, James Robert and Thorne, Nancy. "Problems of Goods Movement in a Regional Context." CATS Research News. Vol. 13, No. 1. July 1971.
- Blaze, James Robert and Halagera, Raymond T. and Miller, Mark. "The Urban Transportation Planning Approach to Urban Goods Movement." CATS Research News. Vol. 15, No. 4. December 1973.
- Brugman, Edward L. "Large Scale Traffic Simulation Models Used by the Chicago Area Transportation Study." CATS Research News. Vol. 15, No. 3. July 1973.
- City of Chicago. Chicago 21-A Plan for the Central Area Communities. September 1973.
- Chicago Central Area Committee. "Chicago 21-Blueprint for Progress." Chicago Central Area Committee News. Vol. 3, No. 2. August 1973.
- Chicago Area Transportation Study. "Alternative Transportation Plans." October 1972. (Review Copy)
- Chicago Area Transportation Study. "CATS Network Sensitive Mode Split Model User Manual." March 1974.
- Chicago Area Transportation Study. Final Report, Volume I: Survey Findings. 1959.
- Chicago Area Transportation Study. Final Report, Volume II: Data Projections. 1960.
- Chicago Area Transportation Study. Final Report, Volume III: Transportation Plan. 1962.
- Chicago Area Transportation Study. The Five Trip End Transit Model: A Description of its Theory and Development. November 1972.
- Chicago Area Transportation Study. Functional and Intermodal Evaluation of Alternatives for a 1995 Transportation System in the Chicago-Gary Region. June 1973.
- Chicago Area Transportation Study. Recommendation for the Chicago Area Freight System for 1995. February 1974.
- Chicago Area Transportation Study. "1995 Transportation Alternatives To Be Tested." March 1974.
- Chicago Area Transportation Study and Lake-Porter County Regional Transportation & Planning Commission. Evaluation Process for 1995 Airport System Plan Alternatives. September 1973.
- Chicago Area Transportation Study and Lake-Porter County Regional Transportation & Planning Commission. Interim Aviation Plan. January 1973.
- Chicago Area Transportation Study and Lake-Porter County Regional Transportation & Planning Commission. Regional Transportation Interim Plan and Program. March 1971.
- Chicago Area Transportation Study and Northwestern Indiana Regional Planning Commission. 1995 Transportation System Plan. June 1974.
- Chicago Area Transportation Study and Northwestern Indiana Regional Planning Commission. Technical Evaluation of the Recommended 1995 Transportation System in the Chicago-Gary Region. May 1974.
- Department of Development and Planning, City of Chicago. The Comprehensive Plan of Chicago. December 1966.
- Eash, Ronald W. "Economic Techniques for Evaluating Mutually Exclusive Alternatives." CATS Research News. Vol. 13, No. 1. July 1971.
- Eash, Ronald W. "Summary of the CATS Work with the Center for Environmental Studies at Argonne National Laboratory." CATS Research News. Vol. 15, No. 1. February 1973.
- Fox River Valley Transportation Study. Volume I-Background, Analysis and General Recommendations and Volume II-Recommended Street and Highway Improvement Plan. January 1969.

- Halagera, Raymond T. and Johnson, Carol. "The Potential Benefits of Railroad Facility Consolidation." CATS Research News. Vol. 15, No. 1. February 1973.
- Indiana Department of Commerce, Bureau of Planning. State of Indiana Aviation Plan. 1972.
- Joliet Area Transportation Study. Summary Report, Volume 1 Inventory and Analysis, Volume 2 Forecasts and Plan Preparation. October 1969.
- Lake County Transportation Study. Preparation of a Transportation Plan for Lake County, Illinois. August 1969.
- Lake-Porter County Regional Transportation and Planning Commission. Comprehensive Plan for the Lake-Porter Region, Indiana. October 1970.
- Lake-Porter County Regional Transportation and Planning Commission. Mass Transit Alternative Conceptual Plans. September 1972.
- Lake-Porter County Regional Transportation and Planning Commission. Guidelines for Growth in the Lake-Porter Region. October 1970.
- Lake-Porter County Regional Transportation and Planning Commission. Forecast Phase. October 1970.
- NewMyer, David A. "The Market for a Proposed Public-Use General Aviation Airport in Kendall County." CATS Research News. Vol. 15, No. 2. May 1973.
- Northeastern Illinois Planning Commission. Comprehensive General Plan for the Development of the Northeastern Areas. April 1968.
- Northeastern Illinois Planning Commission. Methodological Research for Evaluating Alternative Transportation Plan. February 1973.
- Northeastern Illinois Planning Commission. NIPC Conceptual Alternative Transportation Plans. November 1972.
- Northeastern Illinois Planning Commission. "NIPC Planning Paper #10." 1969.
- Northwestern Indiana Regional Planning Commission. Public Review and Adoption of 1995 Plan. October 1974.
- Northwestern Indiana Regional Planning Commission. Impact of 1995 Plans on Northwest Indiana. October 1974.
- Regional Transportation Planning Board.¹ Alternative Plans Formulation; Technical Report #1. July 1972.
- Regional Transportation Planning Board. The Changing Nature of Transportation (A Look Toward the Future). 1973.
- Regional Transportation Planning Board. Descriptive Details of the 1985 Transit and Freeway Alternatives. May 1973.
- Regional Transportation Planning Board. Evaluation: 1995 Highway-Public Transportation Networks.
- Regional Transportation Planning Board. Preliminary Report #1, Chicago-Gary Regional Mass Transportation Study. February 1972.
- Regional Transportation Planning Board. Preliminary Report #2, Chicago-Gary Regional Mass Transportation Study. January 1973.
- Regional Transportation Planning Board. Public Transportation in the Regional Transportation Planning Process.
- Ryan, Eugene V. "Pollution Emission Modelling at the CATS." CATS Research News. Vol. 16, No. 1. March 1974.
- Seibert, Charles B. "Restricted Landing Areas in the Chicago Metropolitan Region." CATS Research News. Vol. 15, No. 1. February 1973.

¹ RTPB - Coordinating group of CATS, NIRPC, NIPC, DDP.

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