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TRANSPORTATION SYSTEM DEVELOPMENT PLAN

CHICAGO AREA TRANSPORTATION STUDY

2000

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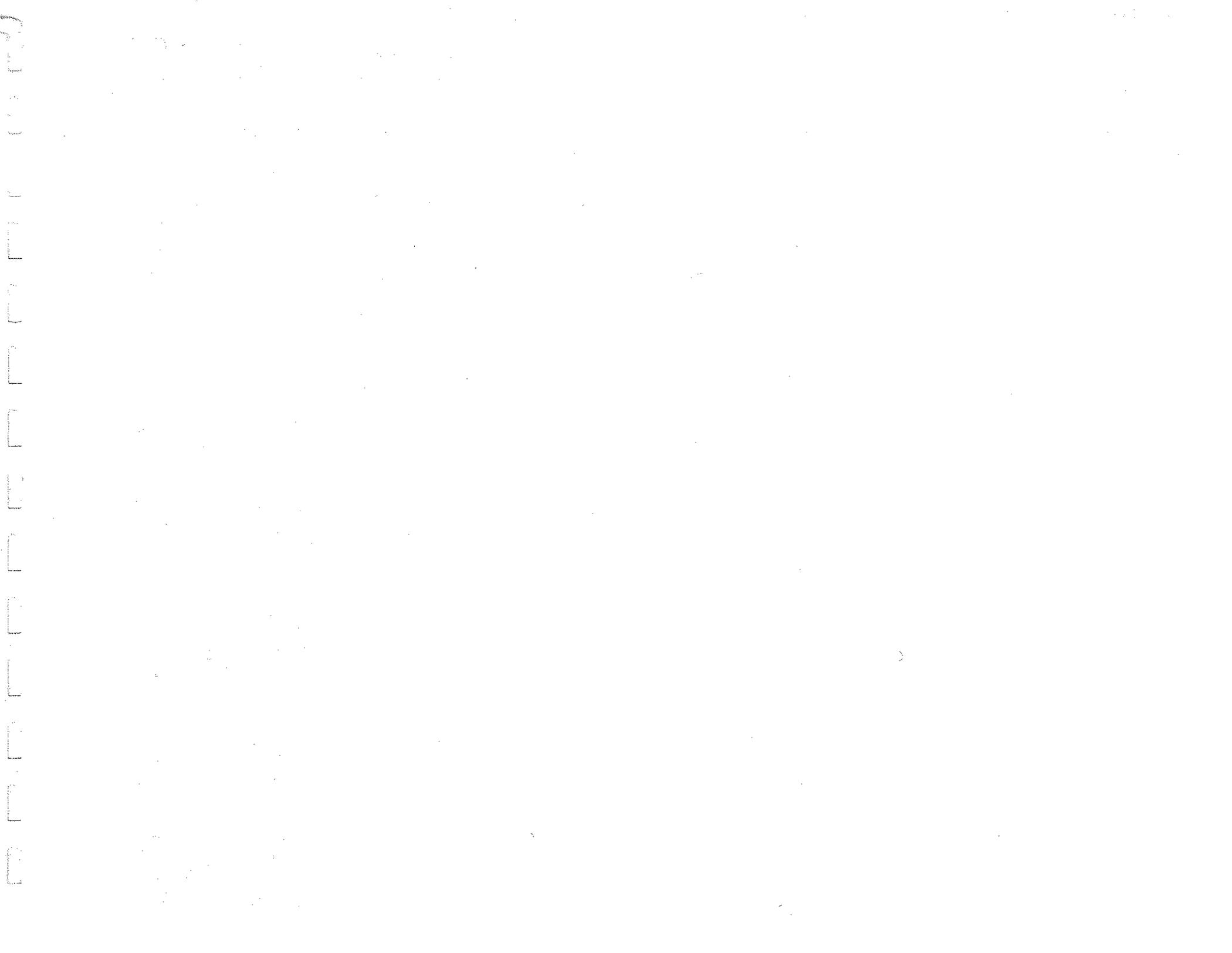
2000

TRANSPORTATION SYSTEM DEVELOPMENT PLAN

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

(This publication is a reprint of the plan document originally published in 1980 incorporating the results of the 1981 and 1983 plan updates.)

MAY 1984



To The Elected Public Officials and Citizens
of the Northeast Illinois Region.

We take pleasure in presenting a summary description of the Year 2000 Transportation System Development Plan for the six county Northeastern, Illinois Region. The report presents a multimodal plan description, estimates of anticipated revenues and costs, and a summary of the plan making process. The plan has been endorsed by the Policy Committee of the Chicago Area Transportation Study (CATS), and the Regional Transportation Authority (RTA) and adopted by the Northeastern Illinois Planning Commission (NIPC).

The purpose of the Year 2000 Transportation System Development Plan is to guide the investment of transportation funds over the coming twenty years. The forecasts of socio-economic activity and other assumptions used in developing the plan will be continuously monitored and corrected as necessary. Future uncertainties regarding energy and financial resources require that these particular areas be closely watched. This monitoring activity will be used during the annual plan review process and will serve as the basis of any future updates of the plan.

We respectfully recommend that the Year 2000 Transportation System Development Plan be considered in preparing your investment decisions. We seek your continuous comments and recommendations for maintaining and improving the transportation system for our area.

Respectfully submitted,



John D. Kramer
Chairman
Policy Committee - CATS



CHICAGO AREA TRANSPORTATION STUDY
POLICY COMMITTEE

R E S O L U T I O N

A RESOLUTION ENDORSING THE 1983 UPDATE OF THE YEAR 2000 TRANSPORTATION SYSTEM DEVELOPMENT PLAN

WHEREAS, the Policy Committee of the Chicago Area Transportation Study endorsed the Year 2000 Transportation System Development Plan on September 4, 1980; and the 1981 Update on December 17, 1981; and

WHEREAS, the Year 2000 Transportation System Development Plan, describing policies, strategies and facilities formulated in accordance with the requirements of 23 U.S.C 134 and Section 8 of the UMT Act, is the product required by 23 U.S.C 450.110 (a); and

WHEREAS, the Policy Committee agrees on the importance of maintaining a current regional transportation plan to serve as a guide for investment decisions; and

WHEREAS, the Policy Committee as part of its review of the Plan has reviewed the Plan to ensure that it reflects the concerns of the governmental units, the planning agencies, the CATS Council of Mayors and the operating agencies; and

WHEREAS, the Northeastern Illinois Planning Commission has also reviewed the Plan, and adopted the revisions in the 1983 Update.

NOW, THEREFORE BE IT RESOLVED THAT:

The Policy Committee of the Chicago Area Transportation Study accepts and reaffirms its endorsement of the Year 2000 Transportation System Development Plan including the revisions in the attached 1983 Update.

The above and foregoing Resolution is hereby adopted this 13th day of October, 1983.


Jerome R. Butler
Vice Chairman, CATS Policy Committee


Aristide E. Biciunas
Secretary, CATS Policy Committee



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I. INTRODUCTION

Transportation is one of the more important services that governments provide for their citizens. Without an adequate transportation system, we could not take advantage of many opportunities to improve our quality of life, and we would certainly experience a much lower standard of living. Unfortunately, the provision of good transportation service is expensive, and funds are limited. Therefore, it is important that we plan our future transportation improvements so that we have the best system possible within this constraint. The major improvements necessary require a substantial lead time for implementation and thus must be delineated well in advance of the desired completion date. Transportation services need to be mutually supportive and coordinated with overall regional objectives to yield optimum results. The impacts of transportation decisions reach far into the future and can have both positive and negative consequences to many aspects of community life. These conditions establish the need for a multimodal long range transportation plan.

The first regional transportation plan was published by CATS in 1962. This highway and transit plan had a target year of 1980 and covered Cook County and a portion of DuPage County. Three smaller subregional planning studies followed in 1969, the Fox River Valley Transportation Study, the Joliet Area Transportation Study and the Lake County Transportation Study. In 1971 CATS' original plans and proposals generated by these subregional studies and the City of Chicago's Comprehensive Plan were combined into an Interim Plan covering the six county area. Then a full six county area planning effort culminated with the 1995 Transportation System Plan adopted in 1974. Since that time this plan, with subsequent updates, has served as the official regional transportation plan. The Year 2000 Transportation System Development Plan represents a thorough and complete reevaluation of the long range transportation needs of the six county Chicago Metropolitan Area and replaces the 1995 Plan.

The Year 2000 Plan was prepared by the staff of the Chicago Area Transportation Study in close cooperation with the CATS Work Program Committee. The Plan developed through this coordinated process provides a generalized guide for efficient development of the regional transportation system. Because the Plan recognizes the need to preserve existing facilities, over 60 percent of the capital resources available are planned for maintaining and upgrading the existing system. The proposed facilities contained in the plan document must not be construed as recommending precise alignments or specifications. Rather, they indicate corridors where a major new facility will either relieve existing problems or increase the available transportation supply for anticipated future need. Before a facility contained in the Year 2000 Plan is constructed it must be subjected to detailed corridor and engineering studies by the agencies responsible for implementing such an improvement. In general, the implementing agency does not necessarily now own, have rights to, or possess consent of the owner of any right-of-way needed. This is true even in the case where the owner of the right-of-way is a member of or is represented on the policy boards endorsing this Plan.

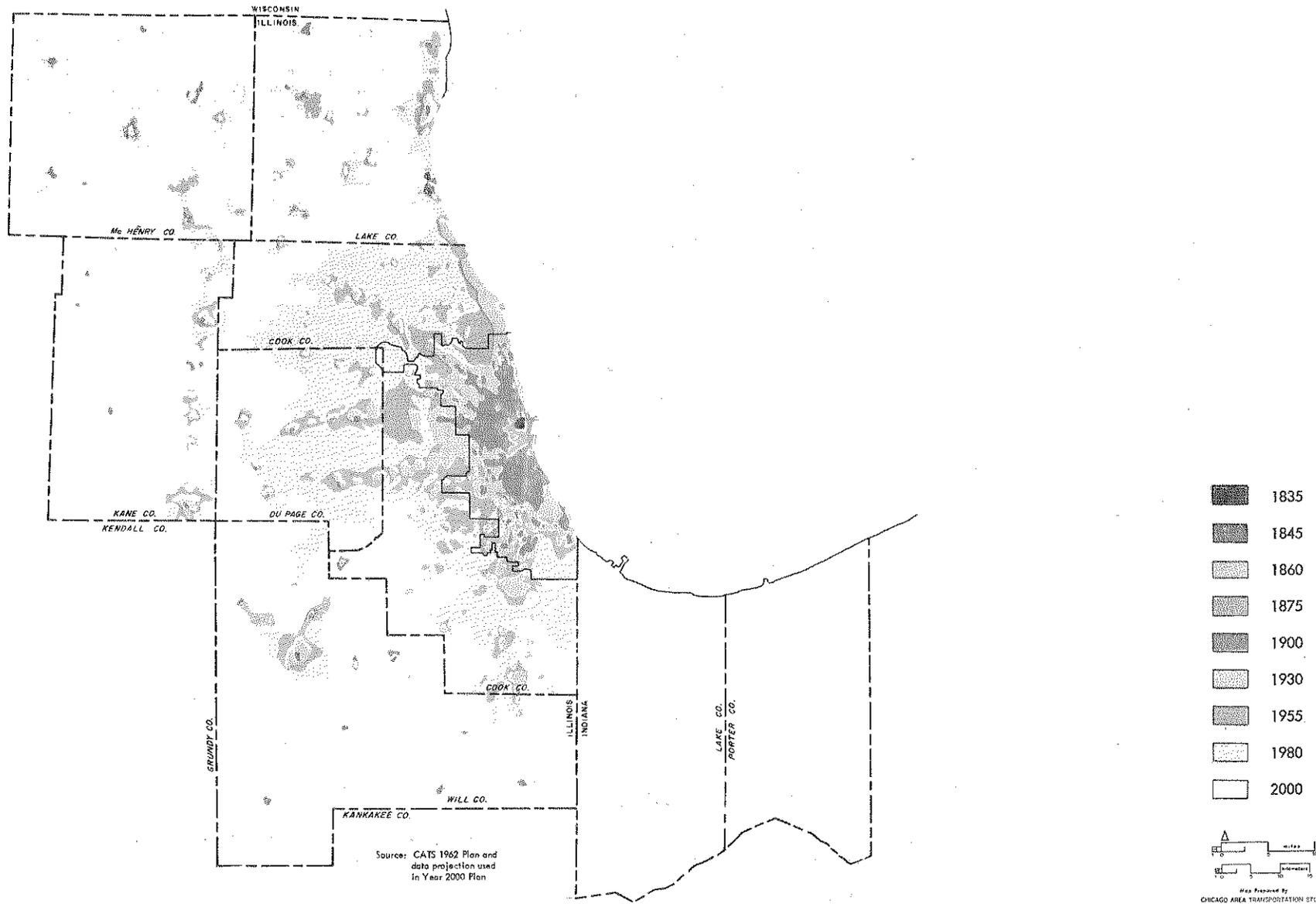
Recently, the Burnham Freeway was dedesignated from the Interstate System. This action frees approximately two billion dollars for transportation projects in the first few years of the plan period; however, funds for large scale capital projects will become increasingly scarce over the long run, as maintenance will be stressed. Some of the major projects recommended in the plan are in the proposed Interstate Transfer Program and will be implemented in the next few years. Those major projects not in that program may not be constructed until near the end of the twenty-year period of the plan.

Planning Environment

In the years since the 1995 Plan was adopted, several issues have either grown in importance or have been clarified, and some changes have occurred in the planning environment. These changes, taken together, have significantly altered expectations of what a regional transportation plan should do. Some of these factors are:

1. Transportation funding assistance has been inadequate to keep pace with inflation in the last several years. The combination of slow growth in funds and rapid inflation of costs has led to a situation in which little money is available for major transportation improvements once needed maintenance and operating costs are covered. Specifically, it looked more and more certain that the 1995 Plan could not be realized due to this constraint. The Year 2000 Plan was prepared with constant concern for the need to minimize capital costs while providing adequate service to people and businesses in the region.
2. An increasing concern over possible energy shortages in the future, particularly regarding motor fuel, has emerged. It is not possible to predict what the future fuel supply situation will be, although such a prediction would obviously be very useful in preparing a transportation plan. In order to address the energy issue, the final stages of the plan evaluation process used two different future energy scenarios, testing each alternative against both a "high" and a "low" energy availability condition.
3. In 1976, the Northeastern Illinois Planning Commission (NIPC) adopted a new regional Comprehensive General Plan (CGP). This was followed in 1978 by several functional plans, including a Land Use Plan. One important aspect of this Land Use Plan is its emphasis on future development in existing urban areas rather than geographical expansion of the urban area. Figure 1 shows that the expansion of urbanization in the next 20 years is expected to be much less than in the past. The Year 2000 Plan has been developed to contribute to the achievement of the goals of the comprehensive plan and is consistent with the land use and other functional plans.
4. The 1995 Plan was based on population, employment and land use forecasts first prepared by NIPC in 1968. This called for a northeastern Illinois population of

Figure 1 REGIONAL GROWTH PATTERNS - 1835 to 2000



approximately 10.5 million by 2000. Monitoring of regional demographic and economic trends made it clear by the mid 1970s that this forecast was too high. NIPC lowered its population forecasts for 2000 to 9.2 million in 1974 and to 9.0 million in 1976. In 1977, the Illinois Bureau of the Budget published a forecast of just under 8 million persons for 2000, some 2.5 million less than the forecasts on which the 1995 Plan was based. In order to be in conformance with the Governor's office planning directives, the forecasts that were used as an input to the Plan were generated by factoring NIPC's small area results into conformance with the Bureau of the Budget's county level projections. The resulting Year 2000 forecasts are summarized in Table 1.

Several additional issues were important in the development of the Year 2000 Plan. The impact on air quality was important in evaluating alternative plans. Concern for the public transportation needs of the mobility-limited, and the costs that will be necessary to meet these needs, was a factor in the transit planning work. The viability of improved transportation system management as an alternative to major capital investment was considered, too. By addressing these concerns, the Year 2000 Plan has been made an effective and relevant guide for regional transportation investment decisions in the coming years.

Policy Framework

This section presents the framework within which long range transportation plans are to be developed in northeastern Illinois. The framework consists of a series of policies and objectives which serve to guide the continuing process of plan development and evaluation. In addition to meeting travel demand, transportation systems have significant effects on the physical and socioeconomic characteristics of the areas they serve. Transportation planning must therefore be guided, not only by transportation objectives (such as providing a safe, economical and efficient transportation system which is maintained in good quality condition); but also by the need to enhance the social, economic and environmental conditions of northeastern Illinois.

Public decisions always require a balancing of different goals. In the case of transportation, the public officials who make the decisions are well aware that this balancing act is difficult, but essential. The goal of providing a high quality transportation system must be constantly balanced against the goal of minimizing public expenditures and taxes. Similarly, the goal of quality transportation must also be balanced against the effects a particular project might have on neighboring homeowners.

These policies not only provide a framework for plan development, but they are also used in decisionmaking on plan implementation. The decision to implement a project (include it in the short range program) by local communities, Council of Mayors, the State of Illinois, or the regional transportation agencies, should be based on an assessment of whether a project is consistent with the long range transportation planning framework. Likewise, the design, environmental assessment, and regional clearinghouse review (A-95) stages of plan implementation should use the framework presented here to review projects.

Table 1

YEAR 2000 FORECASTS

	<u>Year 2000</u> <u>Plan</u> (1978)	<u>NIPC</u> (1976)	<u>BOB</u> (1977)
HOUSEHOLD			
Cook	2,180,752	2,180,752	2,257,375
DuPage	301,729	327,233	287,395
Kane	158,468	143,526	166,988
Lake	230,963	232,534	219,870
McHenry	78,906	78,732	83,056
Will	192,233	179,169	202,472
Region	3,143,051	3,141,946	3,217,156
POPULATION			
Cook	5,540,739	6,115,620	5,277,647
DuPage	903,611	989,716	860,969
Kane	434,161	434,161	448,899
Lake	642,250	705,731	611,725
McHenry	239,220	240,071	227,703
Will	563,366	563,356	553,356
Region	8,323,347	9,048,655	7,980,299
EMPLOYMENT			
Cook	3,140,803	3,311,761	3,112,422
DuPage	251,954	348,637	243,429
Kane	137,353	151,146	136,907
Lake	180,239	235,533	178,999
McHenry	54,949	54,112	54,341
Will	107,436	126,686	107,187
Region	3,872,734	4,227,875	3,833,285

In any complete and realistic plan, policies and objectives will sometimes compete with one another. The framework presented below should, therefore, not be viewed as a rigid set of rules that are applied strictly in all situations. Rather, they are guidelines by which plan components can be individually reviewed to determine if they meet both local and regional needs prior to an implementation decision.

The policies are not designed to over-emphasize one mode of transportation over another. The selection of a particular mode of transportation varies from locality to locality. The analysis of any given area should consider all modes of transportation and all methods of efficiently managing the transportation system.

The choice of solution to be implemented should be the most cost-effective for the area in question and the decisionmaking process should include all affected units of local government.

Transportation Planning Policies

General

- o Give first priority to the preservation of the region's existing transportation system and to the maximization of its people and freight carrying capacity.
- o Provide citizens and business users with safe, economical, and efficient transportation service in response to their needs.
- o Provide transportation service that enhances the economic, environmental, and social conditions in the region.
- o Encourage the development of diversified and integrated transportation systems that provide opportunities for interchange between transportation modes and between different services of the same mode.
- o Maintain the high accessibility of the Chicago Central Business District.
- o Assure that capital and operating expenditures are equitably distributed throughout the region.
- o Coordinate transportation plans with the provision of utilities and municipal services in areas designated for development and redevelopment in municipal, county, and regional plans.
- o Provide cost-effective alternatives to private auto travel in already developed areas, major activity centers, and areas designated for urban densities in municipal, county, and regional plans.

Land Use in Support of Transportation

- o Foster the development of land use patterns in the vicinity of interchanges that are consistent with adjacent municipal plans and compatible with the functions of expressways and interchanges.
- o Encourage the location of intensive commercial, industrial, institutional, and recreational uses adjacent to existing or programmed mass transit service.
- o Encourage the location of multiple family residential complexes in areas within one-half mile of existing or programmed mass transit service.

Social

- o Promote transportation systems that effectively consider the travel needs of mobility-limited persons.
- o Assure that a high level of transportation services is available to the economically disadvantaged.

Economic

- o Enhance the Chicago region's position as a major hub of national and international passenger and freight travel.
- o Promote transportation improvements which help to retain existing businesses and encourage the attraction of new business enterprises to the region.

Environmental

- o Develop a transportation system that uses energy efficiently, and is adaptable in response to possible energy shortages.
- o Encourage development patterns which reduce demand for energy by:
 - promotion of a transportation and communication system designed to minimize the travel distance for person and goods movement and to use the most energy efficient system;
 - encouragement of appropriate mix of land uses designed to minimize the need to travel.
- o Promote long term improvement in air quality by encouraging land development patterns which will reduce auto-dependence and increase mass transit usage, and by implementing cost-effective transportation control measures.

- o Encourage the preservation of prime agricultural lands.
- o Coordinate open space plans and transportation facilities planning (for highways, public transportation and facilities for special users) in order to maximize accessibility to recreation and leisure time opportunities.

Many of the above policies were used to guide the development of plan alternatives and evaluation of those alternatives during the planning process. Measures were developed for those objectives that could be quantified; they are listed in Table 2. Each alternative plan was simulated with anticipated Year-2000 travel, and the values for these measures were calculated. Additionally, each proposed project in the alternatives was evaluated against the goals and objectives from other regional plans. Measures such as environmentally sensitive features in the right-of-way, service provided to older communities and developing areas, and access to developments of regional importance and major recreational facilities were used. The results of these analyses were used in the alternatives evaluation and plan selection processes.

Table 2

QUANTITATIVE SYSTEM MEASURES FOR OBJECTIVES

Objective: Provide citizens and business users with safe, economical and efficient transportation service in response to their needs.

Measures:

- Average travel time per trip.
- Average user cost per trip.
- Index of accessibility to employment.
- Highway accident costs.
- Vehicle miles of travel exceeding Level of Service "D" on highway system.

Objective: Provide transportation service that enhances the social, economic and environmental conditions in the region.

Measures:

- Total pollutant emissions by type (hydrocarbons, carbon monoxide, nitrogen oxides).
- Number of potential violation sites of carbon monoxide air quality standards.

Objective: Assure that a high level of transportation service is available to the economically disadvantaged.

Measure:

- Ratio of average trip travel time of low and moderate income areas to the regional average.

Objective: Develop a transportation system that uses energy efficiently and is adaptable in response to possible energy shortages.

Measures:

- Fuel consumption on highway network.
- Households within reasonable access distance of fixed rail service.
- Jobs within reasonable access distance of fixed rail service.

Objective: Provide a real choice of transportation modes to all segments of society.

Measure:

- Average trip time for all trips made if auto mode was generally not available for long haul trip making.

Objective: Maintain the high accessibility of the Chicago Central Business District.

Measure:

- Average travel time of all households in the region to the Chicago Central Business District.

Plan Implementation

Even in the Year 2000 most of the region's travel will occur on facilities that are in place today. In a few cases complete replacement of a deteriorated structure will prove to be cost effective, but in most instances maintenance and rehabilitation of existing facilities will be the most efficient alternative. Preservation of the investment in the existing system is a governing aspect of the Plan. In addition to maintaining the existing system, every effort to get maximum utilization out of it needs to be made if scarce public funds are to be conserved. The strategies used to achieve this goal have been formally outlined in a series of Transportation System Management reports issued in the last several years. These reports describe how the region intends to use the existing system in conjunction with certain operational policies and practices, as well as some low cost minor modifications to existing facilities, to insure maximum efficiency in the use of existing transportation resources.

The first step in implementing the Plan is the development of a five-year Transportation Improvement Program (TIP) and its Annual Element. This document, produced annually, lists the transportation improvements to be implemented in the next five years with an Annual Element indicating those projects to be implemented during the next year. The TIP is developed under the direction of CATS, as Metropolitan Planning Organization, in cooperation

with project implementors and the Northeastern Illinois Planning Commission (NIPC), the regional comprehensive planning agency. The key implementing agencies are the State of Illinois, the Regional Transportation Authority (RTA), the six county governments, the City of Chicago, the Chicago Transit Authority (CTA), and the more than 260 suburban municipal governments acting through regional councils of mayors.

Implementors develop project proposals as candidates for inclusion in the TIP. The projects are screened on technical performance and economic bases, as well as reviewed for their consistency with regional plans. The program is constrained by available financial resources, so only those projects that best contribute to the short and long term needs of the region are ultimately included in the TIP. After a project is included in the TIP, the implementor is then responsible for construction of the facility and putting it into service.

Each major proposed transportation facility recommended in this Plan will first require a detailed implementation study. This implementation study better defines a project by dealing with such topics as mode determination, exact alignment, operational considerations, environmental impacts and construction staging. The study is carried out by the project implementor in cooperation with other involved transportation agencies and local officials. After the study is completed the project is ready for detailed design and then actual implementation.

Critical Plan Assumptions

Producing any plan to cover a twenty year period necessitates making numerous assumptions about the future. Some of these assumptions are critical to the outcome of the planning process, and all have a certain amount of uncertainty associated with them. In the development of this plan the most critical assumptions concerned availability of financial and energy resources.

A forecast of financial resources for the transit and highway modes was prepared to guide plan development. This forecast took an optimistic view in that it assumed a reversal of the trend of the last few years; declining resources for transportation. Instead the forecast assumed that a renewed recognition of the importance of transportation would result in a modest growth in real dollar terms for transportation funding. This growth is vitally needed to provide the transportation service necessary for the overall well-being of the region, and thus, the Plan not only assumes but advocates growth in transportation funding. If future financial resources are not as great as assumed, the Plan would, of course, have to be scaled back.

Alternative energy cost and supply futures were considered in the development of the Plan. Analysis revealed that with certain modest travel behavior adjustments and more fuel efficient vehicles, the Year 2000 could see the region requiring as little as one-half the motor vehicle fuel that is presently used. Under this condition the Plan was judged to remain useful and valid. However, more extreme energy shortages could develop; this would invalidate the premise on which the Plan is based and necessitate a substantial reworking of the Plan.

Air Quality Considerations

The analysis work for the development of the Plan indicated that long term compliance with National Ambient Air Quality Standards would be achieved. This finding was largely the result of federally mandated vehicle emissions standards for future new vehicles. However, in the short term before enough of the new lower emission vehicles are integrated into the fleet, the Northeastern Illinois area will continue to experience local carbon monoxide standard violations and an ozone problem contributed to by hydrocarbon emissions. The Federal Clean Air Act requires that the State Implementation Plan include implementation of transportation control measures necessary for attainment and maintenance of standards for those areas that did not meet the air quality standards by 1982. The Northeastern Illinois area is such an area.

The Year 2000 Transportation System Development Plan supports a number of transportation control measures as being overall beneficial measures as well as specifically aiding in improving air quality. In Chapter II the future development of the transit system in general and new major facilities in particular are discussed. As stated in that chapter "the plan seeks to optimize use of the existing transit system and to increase its capacity within the constraints of the financial capabilities of the region." The effect of improved public transit is greater public transit ridership and less auto use and emissions. The Plan also supports traffic flow improvements as discussed in Chapter III. Traffic flow improvements reduce emissions by increasing speed and reducing idling in traffic. Funding to carry out the public transit and traffic flow improvements are included in the Plan under the categories Transit - New Facilities and Highway - Capacity Improvements as shown in Table 6 of Chapter VI.

In addition, operations strategies such as ride sharing promotion, bicycle use and promotion, and alternative work schedules are consistent with the objectives of the Plan. Although these operational strategies are non capital intensive, they serve to attenuate the expected increase in system deficiency that will occur without their implementation. As such, non capital intensive transportation measures are considered as important "maintenance" activities which will serve the region where system deficiencies are expected to be significant and where cost considerations preclude the use of capital projects in meeting this need.

The region forecasts that a major portion of available funding will be for maintenance and upgrading of the existing transit and highway systems. A portion of this money is anticipated to be used to fund non capital intensive transportation measures that will be implemented to decrease system deficiencies and improve air quality.

II. TRANSIT SYSTEM PLAN

The Year 2000 Transportation System Development Plan places special emphasis on improving the transit service in the region. The transit component of the plan seeks to optimize the use of the existing transit system and to increase its capacity within the constraints of the financial capabilities of the region.

It is recognized that future energy availability will play a large role in determining the importance of transit in the years ahead. The plan development process considered the impact of energy availability in arriving at the recommendations for transit and highway development. The Plan recommends that serious consideration be given to near term implementation of some of the fixed rail facilities (rapid transit and commuter rail). If the energy situation worsens in the coming years and necessitates greater reliance on public transit, and if additional funding becomes available, the implementation of the proposed fixed rail projects could be accelerated. If funding is available bus service could be significantly expanded in terms of service and coverage, in response to energy shortages. However, it should be understood that the facilities recommended in this section are viable and justified even without a deterioration in the national energy situation. An explicit premise of the plan development work was that only those facilities that constituted a cost effective investment in a range of future energy availability situations were to be included in the Plan. This approach guarantees that scarce public funds available for transportation will be wisely spent even in the face of future uncertainties.

The rapid transit and commuter rail lines form the skeleton of the transit system. These fixed rail lines are the long haul, high capacity portion of the transit system. Because they have great impact on the surrounding communities in which they are located, need a separate right-of-way, and are generally costly to construct, they require careful planning and long lead times for construction. The bus component (including both fixed route and paratransit service) is also important but more flexible. The key roles of bus service are as local trip carriers and feeders to long haul fixed rail lines. The ubiquitous highway system throughout most of the region gives greater flexibility to the location of bus service because it can share right-of-way with other vehicle traffic. This characteristic of the bus system allows modifications to the system over relatively short time frames and obviates the importance of detailed long range bus route planning.

Rapid Transit

The Plan recommends that as a first priority all existing rapid transit service should be retained. In most cases, over the next twenty years the major capital expenditures that will be required are for maintenance of structures and replacement of some rolling stock. However, some of the rapid transit system's structures will be in need of extensive rehabilitation

before the Year 2000. The Loop elevated structure, as well as portions of the Ravenswood and Jackson Park-Englewood lines, are in this category. The Plan includes proposed new lakefront rapid transit lines both north and south of the Chicago CBD. More detailed corridor studies for these proposals will determine if they could serve as replacements for portions of existing lines. The Riverbank Line is included as a Central Area distribution system to be supplemental to the Loop 'L,' which is to be retained. Alternatives analysis for this line will take into account all potential Central Area distributor alignments.

All the rapid transit projects listed below, with the exception of the O'Hare Extension, are subject to further investigation. Alternatives analyses and detailed corridor studies will determine specific mode and exact alignment. In addition, they will also investigate the feasibility of staging the implementation of the larger projects by constructing them in viable and useable segments. A map of the rapid transit plan is presented in Figure 2.

O'Hare Extension - from Jefferson Park to O'Hare Airport via the Kennedy Expressway median. This project is nearing completion as of the date of this plan document.

Skokie Swift Extension - from the present terminus at Dempster Street to the Old Orchard Shopping Center area via abandoned North Shore Railroad right-of-way.

Dan Ryan Extensions - from the present terminus at 95th Street southeast along the median of the Calumet Expressway to 103rd Street; and from the 95th Street terminal southwest along the I-57 median and ICG Blue Island branch rail right-of-way to Vermont Street in Blue Island. The corridor study for these lines will determine the feasibility of implementing one or both lines, particularly in light of potential impacts on Rock Island ridership. (Note: ICG commuter service on the Blue Island branch would likely be discontinued if the southwest extension were implemented.)

Southwest Line - from the south end of the Central Area southwest to Cicero Avenue, then south along Cicero Avenue to the Ford City Shopping Center.

North Lakefront Line - from the North Michigan Avenue area at Grand Avenue, north along the lake to the vicinity of either Diversey or Belmont Avenue with a connection to the Howard/Ravenswood right-of-way. In the future, this line could be extended further north either as a replacement for the Ravenswood line or as a new line continuing north along the lakefront.

South Lakefront Line - from Grand Avenue south along the east side of the Central Area to 95th Street and South Chicago Avenue via ICG rail right-of-way and Conrail right-of-way. The corridor study for this line would determine whether it should function as a new rapid transit service, a replacement for the south side elevated structure, or a rapid transit type service by ICG trains along the in-city (main line to Kensington) portion of the ICG commuter service. As part of staged implementation, the Conrail portion of this proposed line could be built first and connected to the existing south side elevated structure.

Riverbank line - using rail right-of-way west from Navy Pier along the Chicago River then turning south to run on the west side of the south branch, serving commuter rail stations, to the Pilsen community where provision for easy transfer to the Southwest Line could be made. A detailed implementation study will consider the impact on existing railroad operations and capacity.

Dan Ryan/State Street Subway Connection - allows Dan Ryan trains to leave their existing alignment south of 18th Street and make the transition to the State Street subway tunnel near Roosevelt Road. The connection of Howard and Dan Ryan services will better balance north and south side demand resulting in increased operational efficiency and a higher level of service to more riders.

Commuter Rail

The commuter rail component is depicted in Figure 3. All the Mass Transportation Corridors shown correspond to existing rail rights-of-way. The simulation results and local input received during the TSD process have indicated that the corridors listed below show potential for commuter rail service; however, all corridors are subject to alternatives analysis for final determination of mode and alignment and cost effectiveness.

Gurnee Extension - an extension of the Milwaukee Road north line service from Rondout to Gurnee giving access to a more conveniently located yard facility.

Monee Extension - an extension of ICG (electric) service from Park Forest South to Monee.

Soo Line - from Mundelein in Lake County to Des Plaines in Cook County along existing Soo Line rail right-of-way. The parallel alignment of this line with the FAP 432 highway corridor indicates that, in an alternatives analysis of each, the interrelationships with the other mode must be assessed and, where present, be duly taken into account.

Elgin-Elmhurst - along existing ICG rail right-of-way between Elgin in Kane County and Elmhurst in DuPage County.

ICG (GMO) and Norfolk & Western service improvements - These two commuter lines will have significant improvements to track and support facilities in addition to increases in fleet size, so that the level of service provided can be improved. Service would then be comparable to that currently provided on other existing suburban commuter lines.

Service Curtailment -

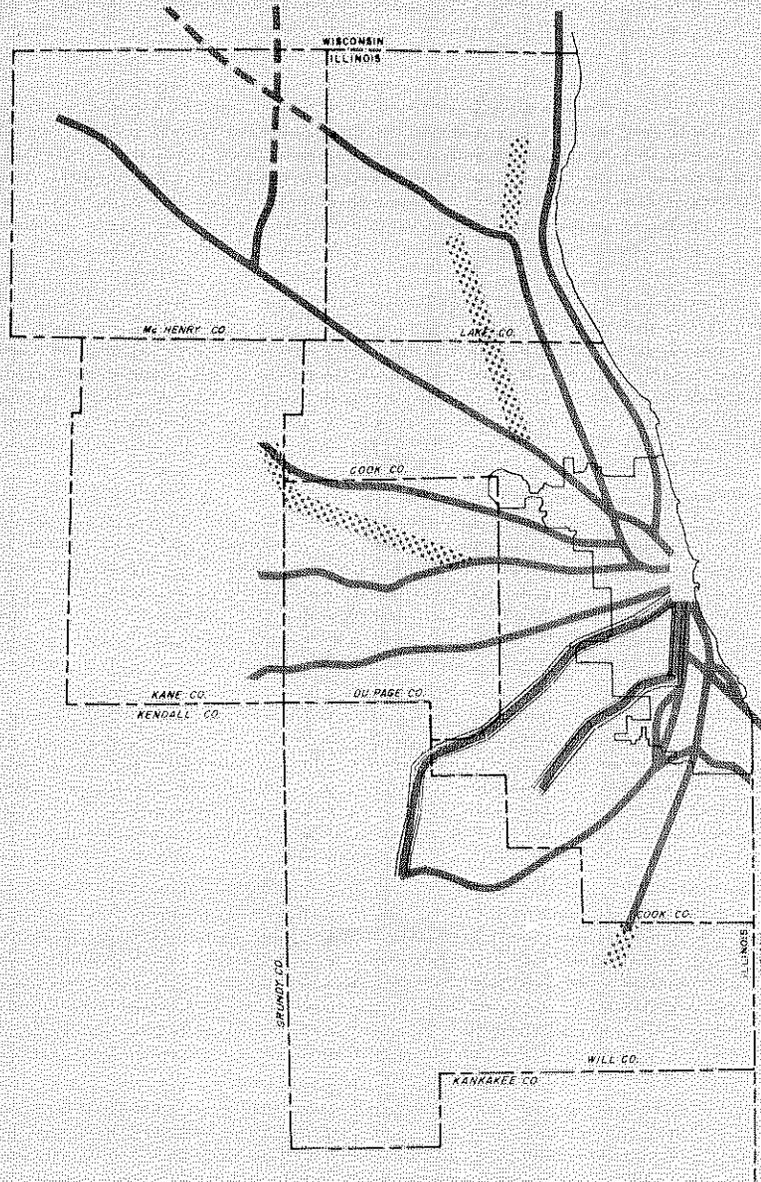
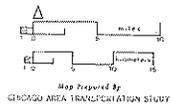
1. Milwaukee Road north line west of Fox Lake.
2. Crystal Lake spur on the Chicago and North Western Northwest Line north of McHenry.

Figure-2 YEAR 2000 RAPID TRANSIT SYSTEM



Figure 3 YEAR 2000 COMMUTER RAIL SYSTEM

-  EXISTING COMMUTER RAIL
-  MASS TRANSPORTATION CORRIDOR
-  SUBSTANTIALLY IMPROVED SERVICE
-  SERVICE CURTAILMENT



The existing rail right-of-way between McHenry and Richmond will be preserved should future growth in this area warrant reintroduction of commuter rail service. In general, abandoned rail rights-of-way should be examined by regional and local planning agencies for other potential public uses. A final hearing will be held before final determination is made to implement the decision to abandon service on either line. The curtailment of commuter rail service in these two areas will be offset by enhanced bus service offering greater flexibility and service area coverage.

Bus

Expansion of the region's bus system has occurred at a fast rate in the last five years. Nearly all of the inner suburban area and the denser outlying suburbs have some bus service. The expansion of bus service in the next twenty years will depend to some extent on the scarcity of fuel for motor vehicles. If energy availability remains at current levels, an approximate twenty-five percent increase in the suburban bus fleet would be desirable based on results of the travel demand simulations performed as a part of the plan development process. If motor fuel becomes even scarcer, further increases in suburban and city bus fleet sizes would be necessary. However, because of operating expenses additional buses should not be put in service until demand warrants.

Of course, changes will continually be made in bus routings and service frequencies to accommodate local shifts in demand. Additionally, implementation of the proposed rapid transit lines will allow reductions on some bus lines and cause other lines to be modified to provide feeder service. These modifications can best be made by the transit operators on an annual basis as they monitor demand and service balance.

Circumferential Travel and Reverse Commuting

The major transit facilities proposed in the Plan are mainly radially oriented to the Chicago Central Business District. This situation results from the technical analysis performed in plan development rather than a prior assumption. Major facilities are only planned where sufficient travel demands will exist to warrant such high capacity high cost facilities. The travel demand modelling process used considered all types of travel demand including circumferential travel and reverse commuting. The analysis did not indicate any circumferential corridor in the City of Chicago or the suburban area which would have the level of demand necessary to justify a major transit facility within the next twenty years.

Also, no major transit facility could be justified solely on the basis of reverse commuting although many of the proposed facilities would accommodate substantial reverse travel. For example, the O'Hare extension rapid transit line will provide transportation for workers living in Chicago to employment at or near O'Hare Field. Finally, studies are currently underway to identify low cost means of serving circumferential travel and reverse commuting utilizing existing transit services as much as possible.

Transit Support Facilities

Ease of transferring between lines and between modes is important to the provision of good transit service. Consolidated, well designed transfer points that facilitate quick and convenient transfers should be encouraged. Where appropriate park-n-ride and kiss-n-ride facilities should be considered as an integral part of a good intermodal transferring system.

Pedestrian access to transit facilities is also important. In areas with high volumes of pedestrian travel, weather protected separate rights-of-way for pedestrians should be considered. In the Chicago CBD a pedestrian way connection between the west side commuter rail stations and the central and east sides of the CBD would be valuable.

Mobility Limited Planning

During 1979 and 1980 a major effort in planning for the needs of the disabled took place in this region. The effort culminated in a Transition Plan which was completed in late 1980. The Plan complied with the federal regulations then in effect. In July 1981 the federal regulations governing transportation for the disabled were significantly changed. The new regulations contained less detailed requirements and dropped the role of the Transition Plan. Although the federal mandate was dropped this Transition Plan remains a useful guide to improving transportation for the disabled. Although no agency is bound by the Transition Plan, a general agreement on using it as a guide for programming projects to aid the disabled is shared by all involved agencies.

The Transition Plan recognized that mainstreaming disabled persons into society is a desirable goal. However, it was recognized that many disabled persons would not be able to use regular public transit even if extensive accessibility improvements were made. The Mobility Limited Advisory Committee with the transit operators developed a "local option" plan to meet these needs. In consideration of the paramount importance of increased mobility the plan incorporates both fixed system accessibility and special service. For a description of the plan see "Summary Description of the Section 504 Transition Plan for the Northeastern Illinois region," CATS, December 1980.

III. HIGHWAY SYSTEM PLAN

The highway system carries the vast majority of person trip travel and is an important part of the freight movement system. This dominant role in transportation is expected to continue for the next twenty years. The only factor that might have the potential to seriously erode this importance is energy availability for highway vehicles. In the plan development process a low energy availability future scenario was considered, and all proposed projects were evaluated against it. The results indicated that some expansion of the highway system is justifiable and desirable within the possible range of envisioned energy shortages.

Major Facilities

The first priority, with regard to major facilities, is maintaining the existing expressway system in a state of good repair. This emphasis on maintenance is vitally necessary to preserve the strong backbone of the road system that the present expressway system represents. New expressways are planned only where future traffic will exceed the capacity of the road system and where an expressway is judged as the best solution. The amount of new expressway construction is much less than that contained in the 1995 Plan. Changes in the region's growth rate as well as land use and environmental concerns have necessitated this reduction. In several instances expressway corridors contained in the 1995 Plan are now indicated as corridors of access control. This designation indicates that some type of access control facility is still being considered but that nonexpressway options are to be given preference in the near term. The ultimate design of the facilities in access controlled corridors will be determined by a detailed corridor study. Possible alternatives include: modifying existing roads to control access and increase capacity; or constructing a new facility initially at a lower design standard than an expressway that could be upgraded to expressway standards if needed. The width of the line designating an access control corridor on the map in no way defines the limits to the geographical area in which possible alternatives are to be considered.

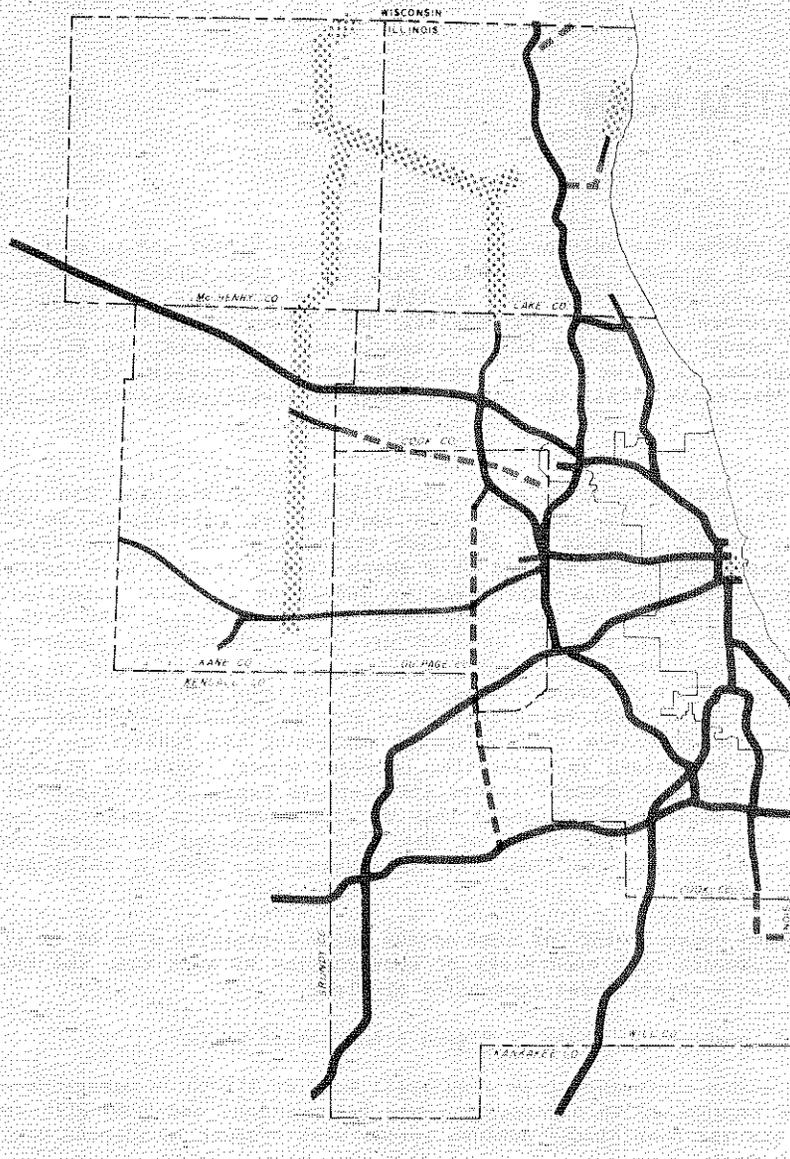
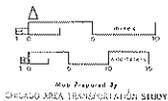
It is recognized that construction of some of the major facilities will be in stages. In such cases the Plan recommends that each stage of construction be such that the segments are functional and do not cause severe local congestion problems.

The major facility component is shown in Figure 4 and listed below:

Lake-Will South (FAP 431) -- new expressway from Army Trail Road at Ill 53 in DuPage County to I-80 in Will County. The segment of this proposed route between I-55 and I-80 will require an investigation of land use and development pattern issues with respect to adopted regional, county and local plans.

Figure 4 YEAR 2000 HIGHWAY SYSTEM

-  EXISTING INTERSTATE ROUTE
-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR-ACCESS CONTROL



Richmond-Waukegan (FAP 420) - a fully controlled access right-of-way from U.S. 12 at the Wisconsin State line in McHenry County to U.S. 12 in Lake County with the specific improvement to be determined as the result of an evaluation of the Final Environmental Impact Statement now being processed. The two improvement options are as follows:

1. A fully controlled access roadway with a limited number of access points along the final FAP 420 alignment, as accepted by the Federal Highway Administration.
2. Upgrading selected segments of the existing arterial highway system in the FAP 420 corridor.

The design standards, including the number of lanes to be initially constructed, will be based upon the results of the McHenry County Subregional Transportation Study and further research. The route would continue east through Lake County as a fully controlled access right-of-way having an initial two lane construction with a limited number of intersections, all at grade and signalized, until its terminus at Almond Road and existing Ill 120.

Lake-Will North (FAP 432) - an expressway from the present terminus of Ill 53 at Dundee Road in Cook County to Lake Cook Road; then continuing northward as a broad corridor with full access control through Lake County to terminate at the proposed Richmond-Waukegan expressway.

Elgin-O'Hare (FAP 426) - a new expressway from US 20 east of Elgin in Cook County to Irving Park Road south of O'Hare airport.

Lakefront (FAP 437) - a fully controlled access right-of-way having an initial two lane construction with a limited number of intersections, all at grade and signalized, from Wadsworth Road along the lakefront to Greenwood Avenue in Waukegan where it becomes an expressway that continues south and west to terminate at I-94 just north of Ill 137.

South Loop Distributor - a network of new access roads from the Dan Ryan near Cermak Road, north to Congress Street in the Chicago CBD to help relieve congestion on the Dan Ryan Bridge and be compatible with the South Loop New Town development project.

Ill 31/Randall Road - an upgrading of Ill 31 south from the Richmond-Waukegan (FAP 420) to near the McHenry/Kane border where a new connection will be built to Randall Road. From this point south Randall Road would also be upgraded to terminate at existing Ill 31 south of Aurora.

Wisconsin and Indiana Connectors - In recognition of and in order to be compatible with the long range transportation plans of bordering regions, this plan contains possible interfaces with expressways proposed in Wisconsin and Indiana. These segments are between I-94 and the Wisconsin state line and the present terminus of the Calumet Expressway to the Indiana state line. Inclusion of these connections implies no commitment by any agency or government unit within Illinois to supply financial assistance for their construction.

Arterials

The arterial road system accommodates more of the travel needs of area residents than any other component of the transportation system. The large investment in existing arterials will be protected with an emphasis on maintenance. Some expansion in the capacity of the arterial system will also be necessary to relieve present or future congestion problems.

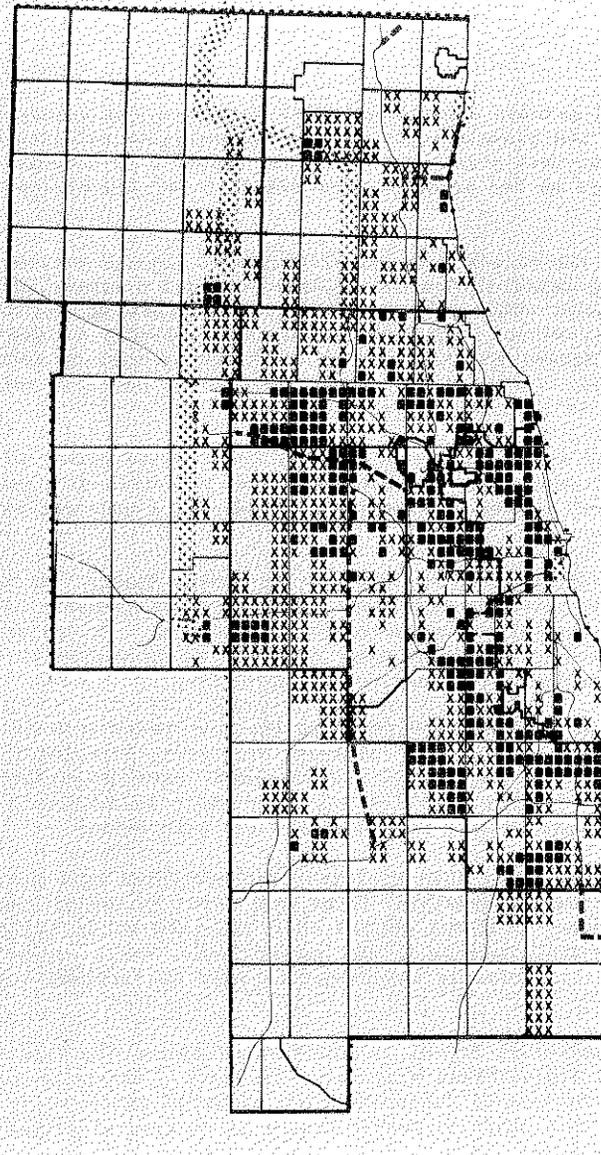
In order to have a safe and efficient arterial system the capacity of the roads must be sufficient to handle anticipated traffic volumes. For this Plan the adequacy of the arterial system to handle projected traffic was measured by the capacity deficiency method. The capacity of a road was taken as the traffic that could be accommodated at level of service "D": a condition in which vehicle traffic density is great, maneuverability is somewhat restricted, and speeds are about half of free flow conditions. If the traffic on a road exceeds this capacity the number of excess vehicles multiplied by the length of road constitutes the excess vehicle miles of travel or capacity deficiency.

It would be highly desirable if all roads were to operate at a level of service "D" or better; then the excess vehicle miles of travel would be zero and there would be no capacity deficiencies. However, in order to achieve this condition in the Year 2000 the present arterial system would have to be greatly expanded. Figure 5 depicts on a regional map the capacity deficiencies that would exist in the Year 2000 if no capacity changes were made to the existing arterial system but the major facilities (both highway and transit) proposed in this Plan were in place. Figures 6-14 show these same deficiencies on subregional maps. The roads shown on these maps are those roads expected to serve as arterials in the Year 2000. Deficiencies are summed for all roads in an area, and the resultant shading is a depiction of the degree of capacity deficiency for that area.

The total capacity deficiency for the Year 2000 would be 675,000 excess vehicle miles of travel under the conditions described. With the expected financial resources for arterial capacity improvements, this can be reduced to about 575,000. In order to efficiently utilize limited funds the Plan recommends that significant arterial capacity projects be limited to the deficient areas as depicted by the shadings on the map. The map thus constitutes a guide for the placement of future arterial capacity improvements.

More specific arterial plans are developed at the subregional level through locally initiated studies. DuPage and McHenry Counties have adopted Transportation Plans consistent with the major facilities in this Plan. For more detailed information refer to the DuPage County Transportation Plan and the McHenry County Transportation Plan. The North Shore Council of Mayors initiated a transportation study in 1981. A product of this study will be an arterial plan for the North Shore region.

Figure 5 YEAR 2000 ARTERIAL DEFICIENCIES - SIX COUNTY REGION



EXCESS ARTERIAL VMT PER SQUARE MILE

- 199 OR LESS
- x 200 - 599
- 600 OR MORE

Areas of Concern

During the plan development process several arterial problem areas across the region were emphasized by local officials and planning agencies as deserving of detailed consideration. In some of these cases the regional planning process was not able to adequately address all aspects of the situation. Cited on the arterial maps (Figs. 6-14) and discussed in this section are these areas of concern.

The 1995 Plan contained the Fox Valley Freeway, which passed through northwestern Will County. The proposed freeway, among other things, would have provided a connection from Will County to the Fox Valley area and also would have provided another crossing over the Chicago Sanitary and Ship Canal/Des Plaines River. This freeway is not included in the Year 2000 Plan. Another means of enhancing access to this part of Will County must be found if this area is to develop as locally wished. The Plan does not recommend any specific solution, but does clearly indicate this corridor as needing special attention.

In northeast Kane County and southeast McHenry County the limited number of Fox River crossings cause current congestion problems, and there is the potential for more serious future problems. Refer to the McHenry County Transportation Study for a more detailed look at this problem in McHenry County.

Route 83 is the major north-south route through eastern DuPage County. At present the road is of varying widths and access control conditions. The thirteen communities bordering the facility have a vital interest in future improvements to the road. In conjunction with the DuPage County Transportation Study a detailed study of Route 83 is underway, which will result in a plan for future improvements to the road.

Access to and egress from the Kennedy Expressway on the near north side of Chicago is via the one way couple of Ohio and Ontario Streets. Although originally intended as a temporary configuration, changing plans have forced this arrangement into a permanent state. Traffic flow in this corridor needs further detailed study in order to develop a long term solution that enables traffic to be handled in a more adequate and safe manner.

North Lake Shore Drive running along Lake Michigan is a congested rush hour route to and from downtown Chicago. In past years reversible lanes were used to increase peak direction capacity in rush hours. Accident problems caused this practice to be halted. Also, other safety problems exist on this road because of the narrow lanes, sharp curves and short access ramps. The city of Chicago is currently investigating ways to increase the capacity and safety of the road.

In northern DuPage County east-west travel is expected to exceed the capacity of the road system even with the proposed Elgin-O'Hare expressway in place. Expansion of arterial capacity is limited by roadside developments including many cases in which major arterials pass through residential areas. If this area of DuPage County is to grow as planned, a solution to this problem will have to be found.

Figure 6 YEAR 2000 ARTERIAL DEFICIENCIES - CITY OF CHICAGO

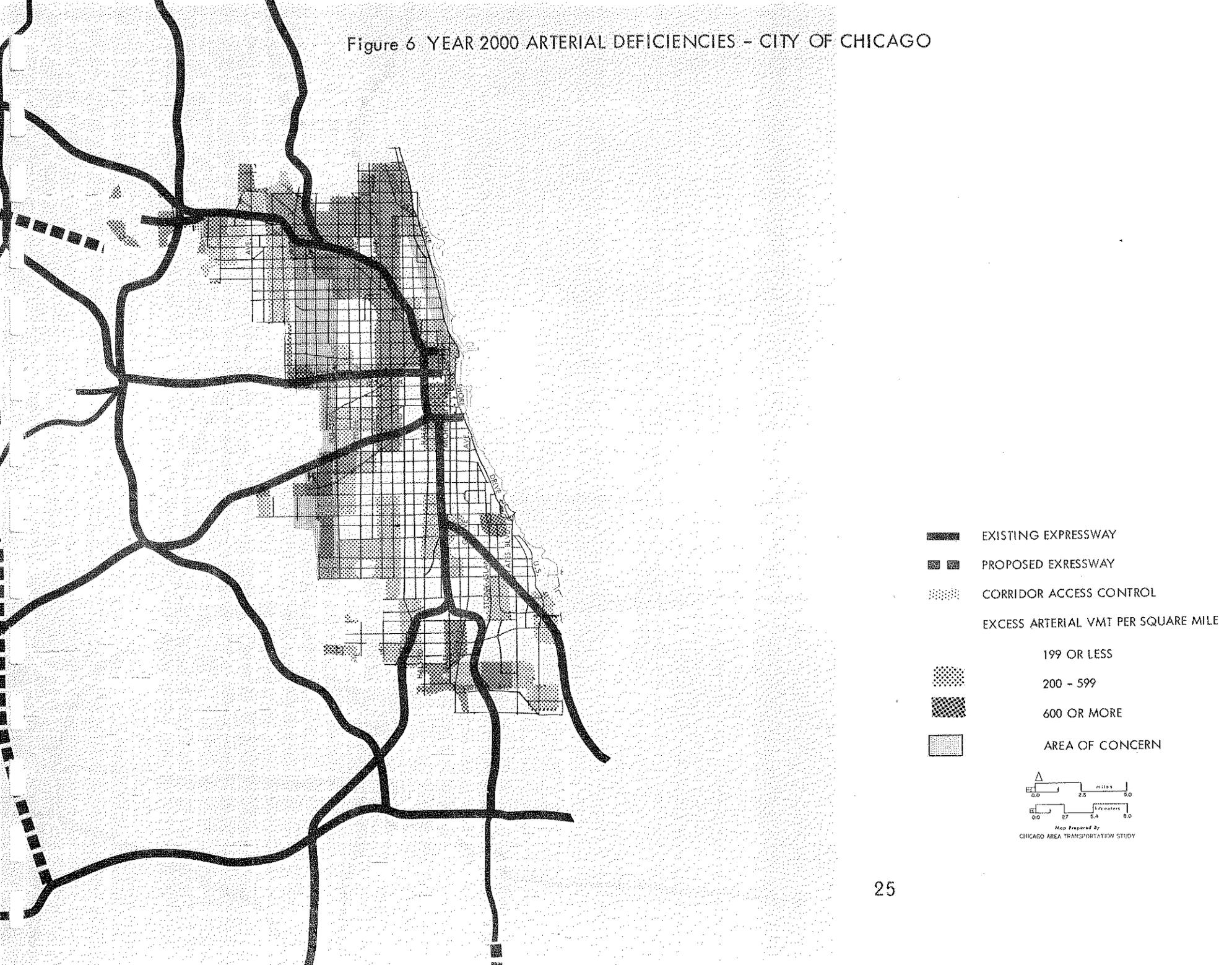
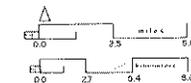


Figure 8 YEAR 2000 ARTERIAL DEFICIENCIES - NORTH CENTRAL AND CENTRAL COUNCIL AREAS



-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR ACCESS CONTROL
- EXCESS ARTERIAL VMT PER SQUARE MILE
 -  199 OR LESS
 -  200 - 599
 -  600 OR MORE
-  AREA OF CONCERN



Map Prepared By
CHICAGO AREA TRANSPORTATION STUDY

Figure 9 YEAR 2000 ARTERIAL DEFICIENCIES - SOUTHWEST AND SOUTH COUNCIL AREAS

-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR ACCESS CONTROL
-  EXCESS ARTERIAL VMT PER SQUARE MILE
-  199 OR LESS
-  200 - 599
-  600 OR MORE
-  AREA OF CONCERN

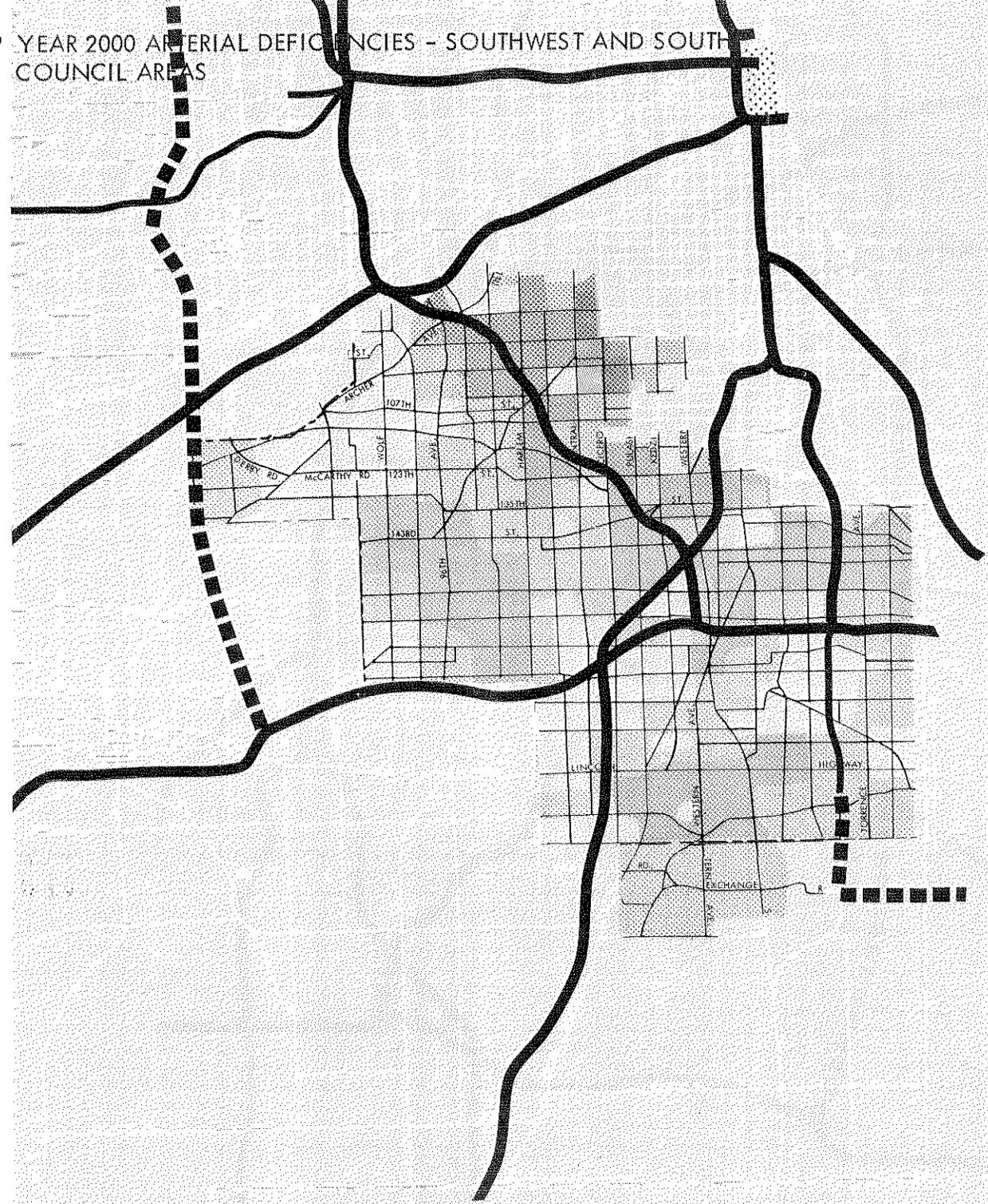
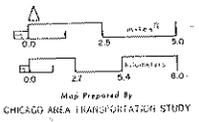
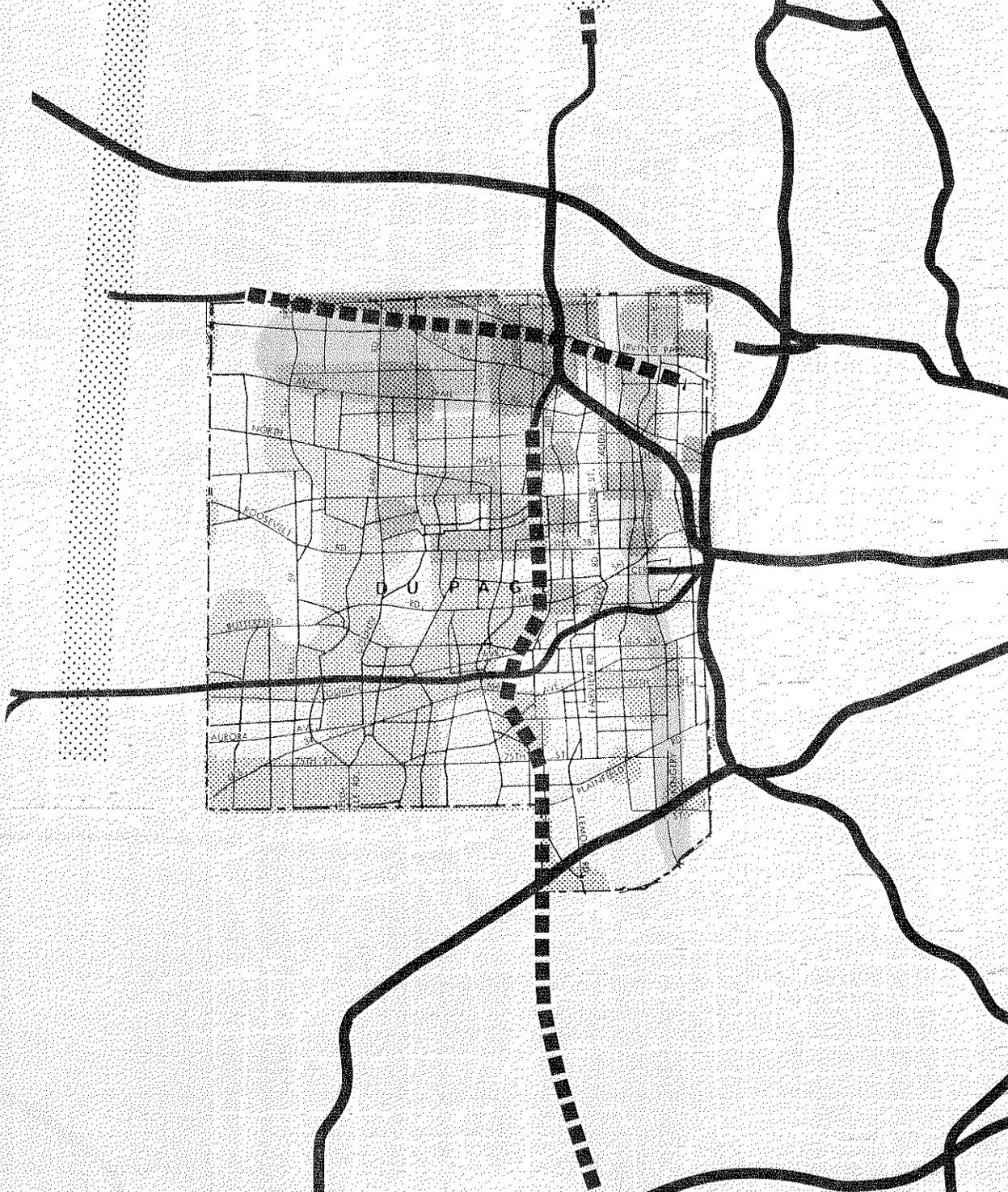


Figure 10: YEAR 2000 ARTERIAL DEFICIENCIES - DU PAGE COUNTY



-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR ACCESS CONTROL
- EXCESS ARTERIAL VMT PER SQUARE MILE
 -  199 OR LESS
 -  200 - 599
 -  600 OR MORE
 -  AREA OF CONCERN

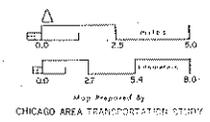
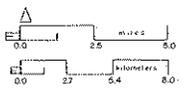


Figure 11 YEAR 2000 ARTERIAL DEFICIENCIES - KANE COUNTY

-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR ACCESS CONTROL
- EXCESS ARTERIAL VMT PER SQUARE MILE
 -  199 OR LESS
 -  200 - 599
 -  600 OR MORE
 -  AREA OF CONCERN



Map Prepared By
CHICAGO AREA TRANSPORTATION STUDY

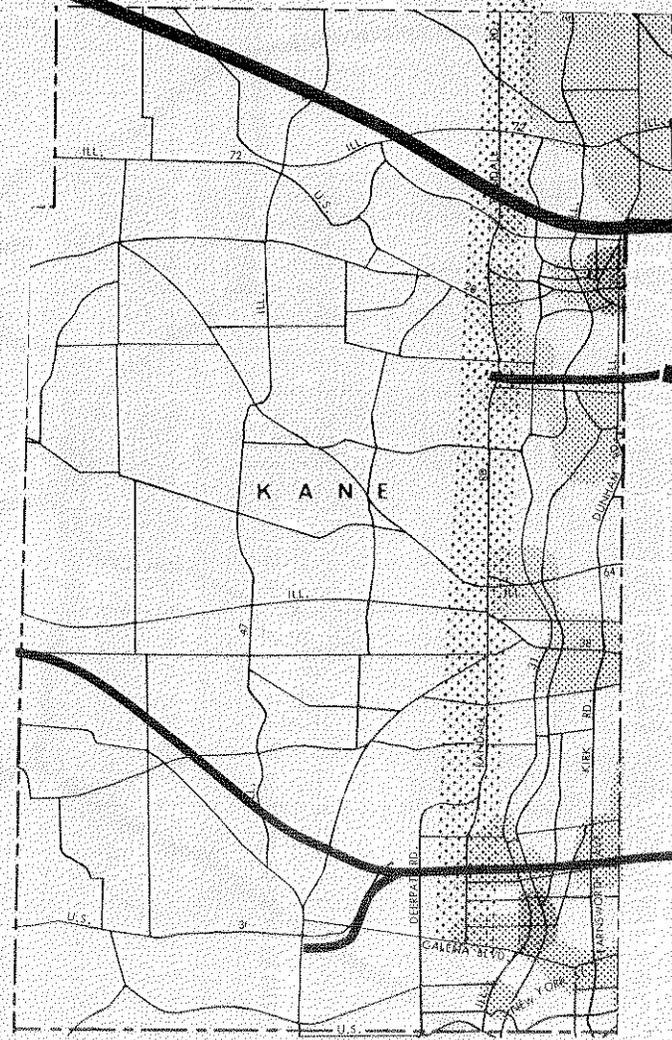
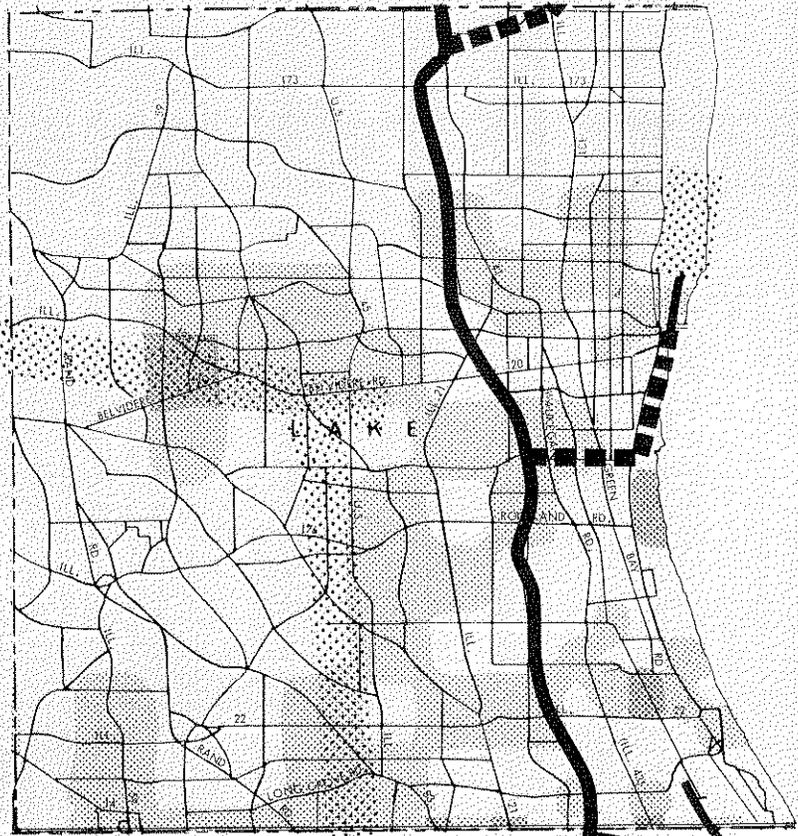


Figure 12 YEAR 2000 ARTERIAL DEFICIENCIES - LAKE COUNTY



-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR ACCESS CONTROL
- EXCESS ARTERIAL VMT PER SQUARE MILE
 -  199 OR LESS
 -  200 - 599
 -  600 OR MORE
 -  AREA OF CONCERN

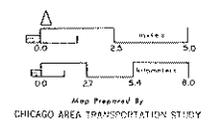


Figure 13 YEAR 2000 ARTERIAL DEFICIENCIES - McHENRY COUNTY

-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR ACCESS CONTROL
- EXCESS ARTERIAL VMT PER SQUARE MILE
-  199 OR LESS
-  200 - 599
-  600 OR MORE
-  AREA OF CONCERN

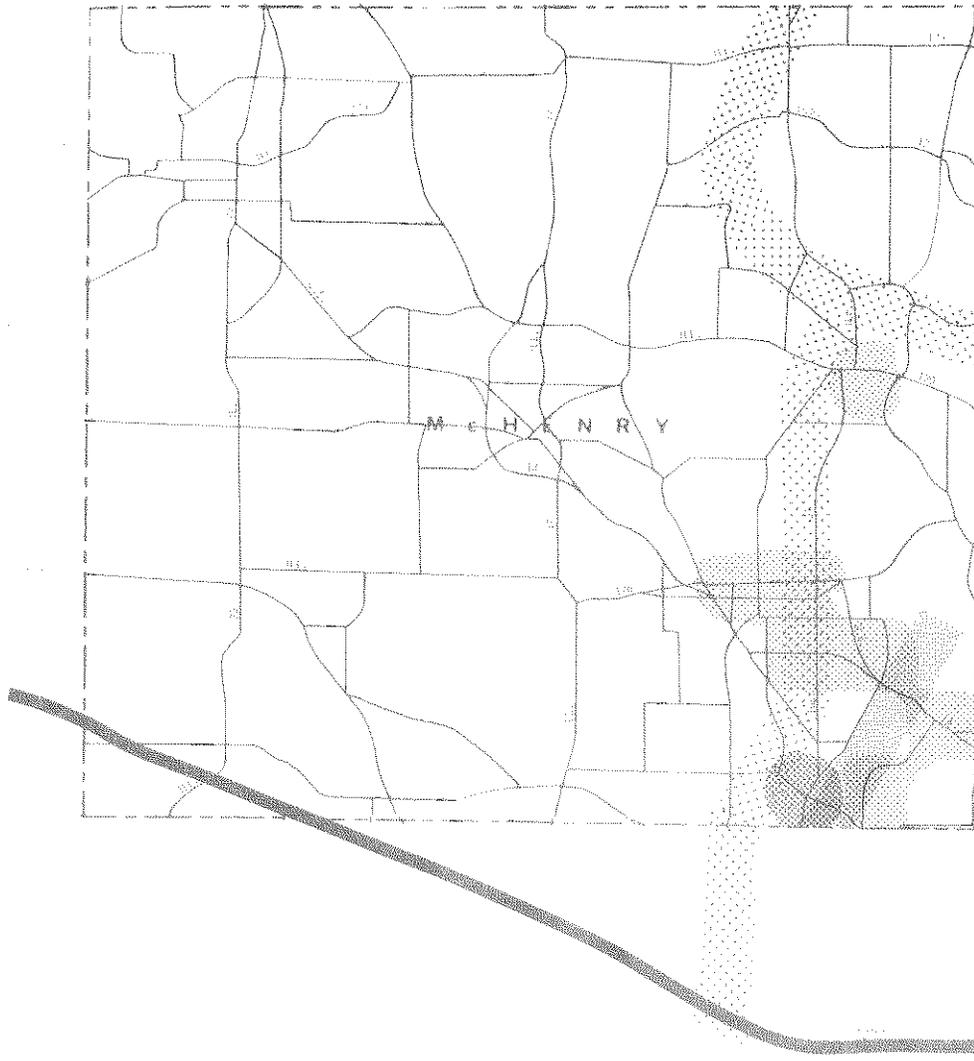
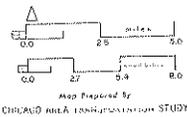
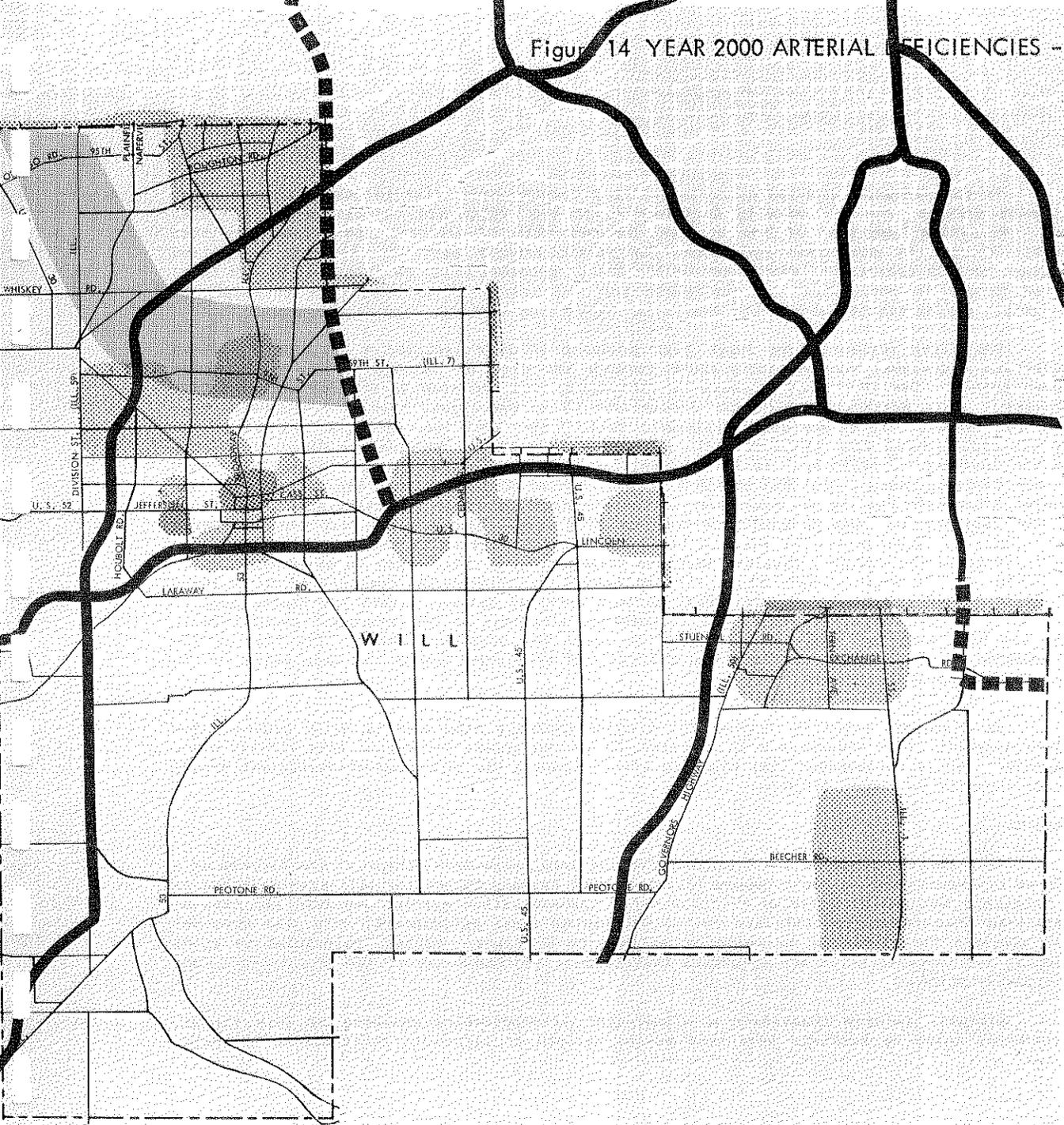
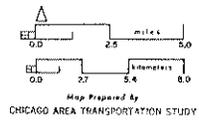


Figure 14 YEAR 2000 ARTERIAL EFFICIENCIES - WILL COUNTY



-  EXISTING EXPRESSWAY
-  PROPOSED EXPRESSWAY
-  CORRIDOR ACCESS CONTROL
- EXCESS ARTERIAL VMT PER SQUARE MILE
 -  199 OR LESS
 -  200 - 599
 -  600 OR MORE
 -  AREA OF CONCERN



In the panhandle portion of northwest Cook County, especially in the Schaumburg area, the most serious arterial capacity deficiencies in the region are forecasted for the year 2000. Extensive expansion of the arterial network will be necessary to accommodate this traffic along with additional provisions for public transit service. Although congestion problems in this area exist today, many of the future problems will be generated by the forecasted growth in population and employment for the area. It thus will be necessary to adequately expand the transportation supply in conjunction with the land development.

The first regional long range plan produced in 1962 included a proposed Crosstown Interstate Expressway running north-south through the city of Chicago in the vicinity of Cicero Avenue. The 1995 Plan produced in 1974 designated the area as a "high accessibility corridor." This designation left the possibility of an expressway open, but indicated that other options were to be seriously explored. In 1977 the north leg of the proposed expressway was redesignated from the Interstate System by an agreement between the Mayor of Chicago and the Governor of Illinois. In 1979 a similar action was taken for the south leg. Both actions freed up money to be used on other transportation projects within the region. Without federal interstate funding an expressway in the Crosstown Corridor is financially impossible, and the facility has been dropped from the Year 2000 Plan. However, the Plan does recommend that extensive improvements be made to the transportation system in the Crosstown Corridor. Particularly in the southern section, improved transportation is the key to an economic revitalization of the area. Improvements will be needed to increase the capacity of north-south arterials in the corridor. An additional through arterial between Cicero and Harlem Avenues also would be desirable. Finally, the recommended alignment of the southwest rapid transit line has been modified from the 1995 Plan to serve the corridor better. The line is now recommended to extend radially from the Chicago CBD to Cicero Avenue and then south to the Ford City Shopping Center area.

As discussed later in Chapter IV, a major capacity expansion is being proposed for O'Hare Airport. This expansion will increase the ground access demands of this already major generator. It is recommended that planning efforts ensure the provision of sufficient ground access capacity to O'Hare Airport.

Bicycles

This section presents the framework for the long range development of the bicycle as a mode of transportation in northeastern Illinois. The primary thrust for this consideration is to integrate the use of bicycles into the total transportation system. Because the type of activities that accomplish this are in the purview of local governments, this plan does not list specific facilities to be built or actions to be taken. Rather, principles to guide planning and implementation are presented that promote increased use of the bicycle as a mode of transportation.

Bikeways already constitute a significant transportation resource in this region. Six-hundred miles of bikeways have been built, striped or signed in northeastern Illinois.

Forty communities have provided some type of bike routing system. Figure 15 shows the communities with bike-route systems and the major existing and proposed bikeways in the six-county region. More specific bikeway plans are developed at the local and subregional level through locally initiated studies (e.g., the Lake, Will, and DuPage counties' bikeway plans). Please refer to the local plans for more detail. Bicycling as a transportation alternative is not only healthful and economical for an individual but contributes to the overall community, as well. Energy resources are saved and air pollution is avoided.

Over the years, the methods developed to promote bicycle use have varied from constructing bikeways physically separated from vehicular traffic (bike paths) to using roadway design techniques that are not prohibitive to bicycle use (bicycle-safe storm drain grates, for example). The separate bike path was once seen as a panacea, but is now viewed appropriate in some circumstances while inappropriate in others. The approach which has grown in popularity recently is to accommodate the use of bicycles within normal vehicular flow patterns. The assumption for this solution is best stated by the American Association of State Highway and Transportation Officials in their Guide for Development of New Bicycle Facilities 1981, which reads "To varying extents, bicycles will be ridden on all highways where they are permitted." A key premise of this plan is to promote a comprehensive approach to encouraging bicycle use. Therefore, this plan also extends to other activities such as proper bicycle use education, enforcement of the Bicycle Rules of the Road laws, and the provision of support facilities such as bicycle lockers or racks.

In short, this is a framework plan that is designed to guide local planning and implementation so that the use of bicycles can be integrated into the total transportation system in a cost-effective manner. State, regional, and local policies should be modified to reflect this need for integration, and bicycle planning efforts at all levels should be coordinated so that consistent design and traffic management strategies are used whenever possible. The following principles should be used to coordinate the integration of bicycle use with the further development of our highway and public transportation systems and to guide the development of new bicycle routes and facilities. For a detailed presentation of bicycle transportation planning guidelines, see Bicycle Transportation Guidelines for Local Officials (NIPC, 1983).

General Transportation Principles

- o Bicycle travel should be recognized as a small but integral part of the transportation system.
- o All new highways, except those where bicycles will be legally prohibited, should be designed and constructed under the assumption that they will be used by bicyclists. Therefore care must be taken to ensure that bicycle hazards are not built into the route.
- o When a road is scheduled for major reconstruction or regular maintenance, the potential for improved bicycle use should be considered.

- o Facility design and planning should be consistent with the 1981 AASHTO guidelines and efforts should be made toward design consistency and system continuity within this region.
- o Planning and operating agencies should include bicycle usage in manual roadway traffic counts to facilitate planning efforts.
- o A review of potential bicycle transportation corridors should be made and, if right-of-way in a high demand corridor becomes available, it should be preserved.
- o Neighboring communities should plan bike routes so they connect with each other and provide continuous routes.
- o Promote proper bicycle use education and enforcement of Bicycle Rules of the Road laws.

Principles for Roadways and Parking

- o Special attention should be given to providing bicycle access to important trip generators such as transit stations, central business districts, employment centers, schools, colleges, parks, and recreational centers, if a demand potential exists.
- o On-road bikeways should be planned to provide direct alternatives to more heavily used roads; to more safely integrate bicycle and automobile traffic by means of striping, signing, and intersection management; and to add directional information concerning destination and distance when traffic control of modal mix is needed and sufficient width is available.
- o Sidewalks should not be designated as bikeways unless no alternative exists; neither should sidewalks be prohibited from bicycle use, except where conflicts with pedestrians are frequent.
- o Two-way bikeways adjacent to one side of the road should not be constructed or designated.
- o When it is agreed that a bikeway should be part of the improvements to a given roadway, engineering and construction of the bikeway should be concurrent with the road improvement.
- o Roadways designated as bike routes should be considered for priority status when programming routine and major maintenance including street cleaning, patching of potholes, and resurfacing.
- o Local parking ordinances should consider including provisions for bicycle parking in all new developments and public buildings.
- o Promote the provision of support facilities such as bicycle lockers or bicycle racks, especially those that allow locking of wheel and frame.

Principles for Public Transportation

- o Bicycle parking should be provided or upgraded whenever a public transit station is improved.
- o Consideration should be given to carrying bicycles on commuter railroads, especially at non-peak hours.
- o Consideration should be given to experimenting with new techniques to encourage bicycle use.

IV. INTERCITY TRANSPORTATION AND AIRPORT SYSTEM PLAN

Intercity Transportation

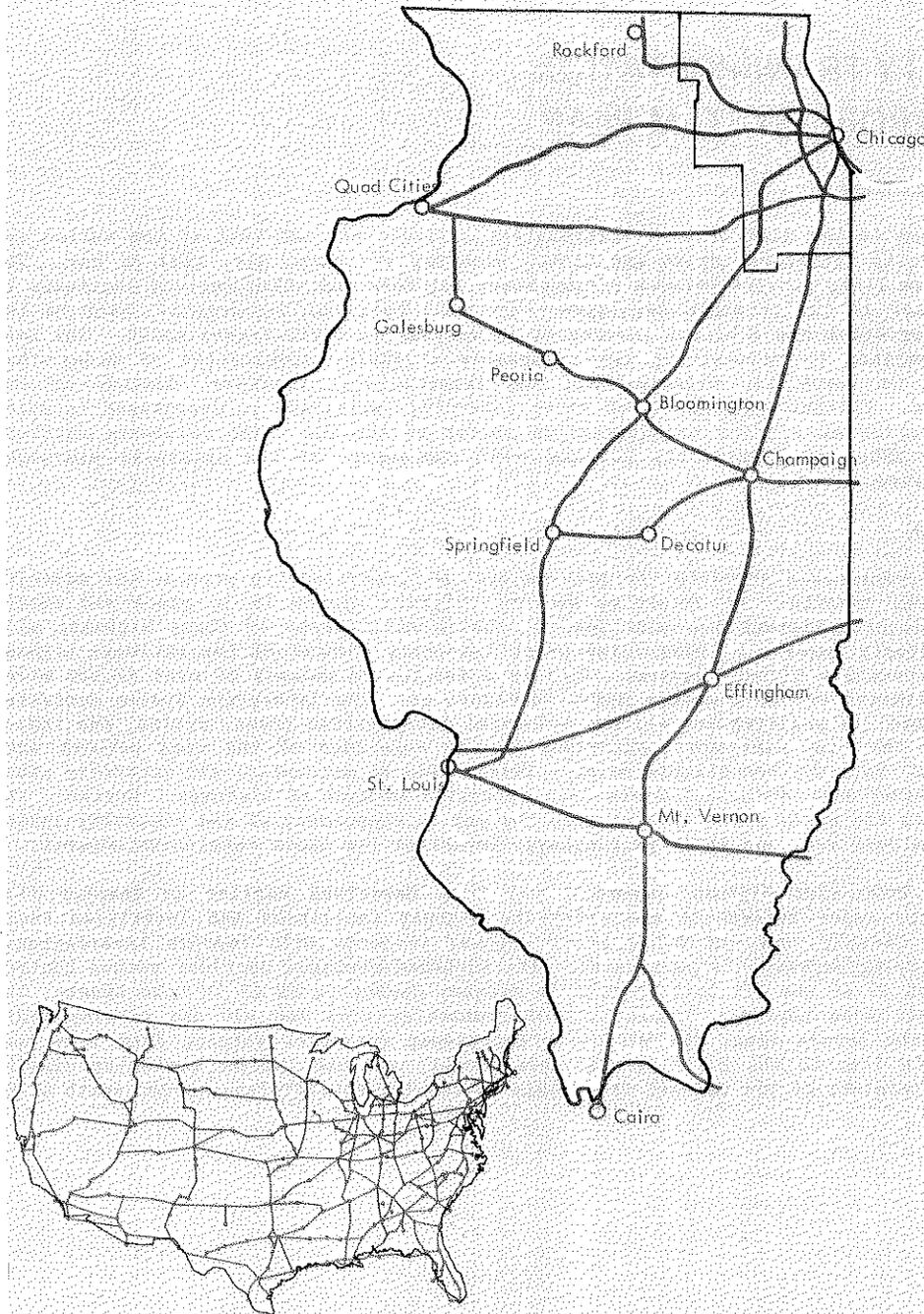
This system is the link between northeastern Illinois and the rest of the nation and the world. Intercity travelers arrive and depart each day via auto, air, rail or bus. The accessibility these links provide between northeastern Illinois and other regions continues to be a crucial factor in the economic development and well-being of the region. Each of the intercity passenger modes has inherent advantages in serving specific travel needs. The Year 2000 Plan is committed to maintaining the remarkably extensive combination of modes that currently exists to serve the interregional and international transport demands of the region's residents. Further development of these intercity facilities is encouraged to allow Chicago's continuation as a major transportation center of the U.S. The following sections will examine the auto, air, intercity bus and rail components of the intercity passenger transportation system.

Automobile/Highway

Under any reasonable scenario the private auto will continue to provide the majority of intercity travel service. An extensive national highway system is in place and should continue to be adequate through the plan period, though maintenance of these highways will become an increasingly important issue. The major intercity element of the national highway network is the Interstate Highway System. This is a designated network of over 42,500 miles of high design, limited access highways shown in Figure 16. The Interstate System connects, by as direct a route as practicable, all the principal metropolitan areas, cities, and industrial centers in the U.S. Through connections to the remainder of the road network auto access is provided to every conceivable point. Today, over 86 percent of all intercity passenger miles of travel are accomplished via this extensive network of highways. Further, the automobile provides the major means of access to the public components of the intercity system for urban/suburban dwellers, and it is particularly important for their rural counterparts.

The Year 2000 Plan Highway Component has been described earlier in Chapter III. Figure 4 shows the major interstate and intercity highway facilities and identifies these recommendations. Clearly, each of these major highway projects will improve interregional auto access to varying degrees, in particular: the Richmond-Waukegan corridor access control (FAP 420), from US 12 at the Wisconsin border in McHenry County to US 12 in Lake County; the Illinois 31/Randall Road corridor access control connecting with FAP 420 and running south along Ill 31 to the Aurora area; the Wisconsin Expressway connector running from I-94 just south of the state line to the Illinois/Wisconsin border; and the Indiana connector running from the present terminus of the Calumet Expressway to the Illinois/Indiana border south of US 30.

Figure 16 INTERCITY PASSENGER SYSTEM : AUTO



INTERSTATE HIGHWAY

Map Prepared By
CHICAGO AREA TRANSPORTATION STUDY

Commercial Air Service

Air travel accounts for nearly 11 percent of all intercity passenger miles in the United States. Commercial air service should continue to increase its modal share particularly in the long distance market. The best way to accommodate growth and expand the air system is a complex problem of aircraft, airports, and air traffic control systems. Obviously the best quality service is nonstop, direct flight, but this can be justified only between fairly large cities. Smaller cities must consolidate air demand at transfer hubs such as Chicago. Figure 17 is a map of the major commercial airports.

An important element in the commercial air system is the provision by the airlines of scheduled service between defined points at published fares and times. These carriers can be categorized as either domestic trunk lines (long distance, national), flag (international), regional, or commuter. Scheduled air service in northeastern Illinois is provided at three airports in Chicago: O'Hare, Midway and Meigs. International, trunk, regional and commuter services are currently offered at O'Hare, with regional service at Midway, and commuter service provided at Meigs. O'Hare handles about 99 percent of the intercity air passenger service available in the region. About half its passengers originate within the Chicago-Gary metropolitan area with the other half consisting of connecting or transfer traffic. Like other major hub airports O'Hare is already operating near capacity. The O'Hare-Midway Master Plan Study conducted by the city of Chicago examines the future development needs for commercial aviation in the Chicago area.

Chicago's role as a major aviation hub is vital to the economy of the region. In order to maintain this position expansion of commercial aviation capacity is necessary. The Plan encourages such expansion but stresses this expansion must not be accomplished at the expense of degrading the environmental conditions of the communities surrounding the airports.

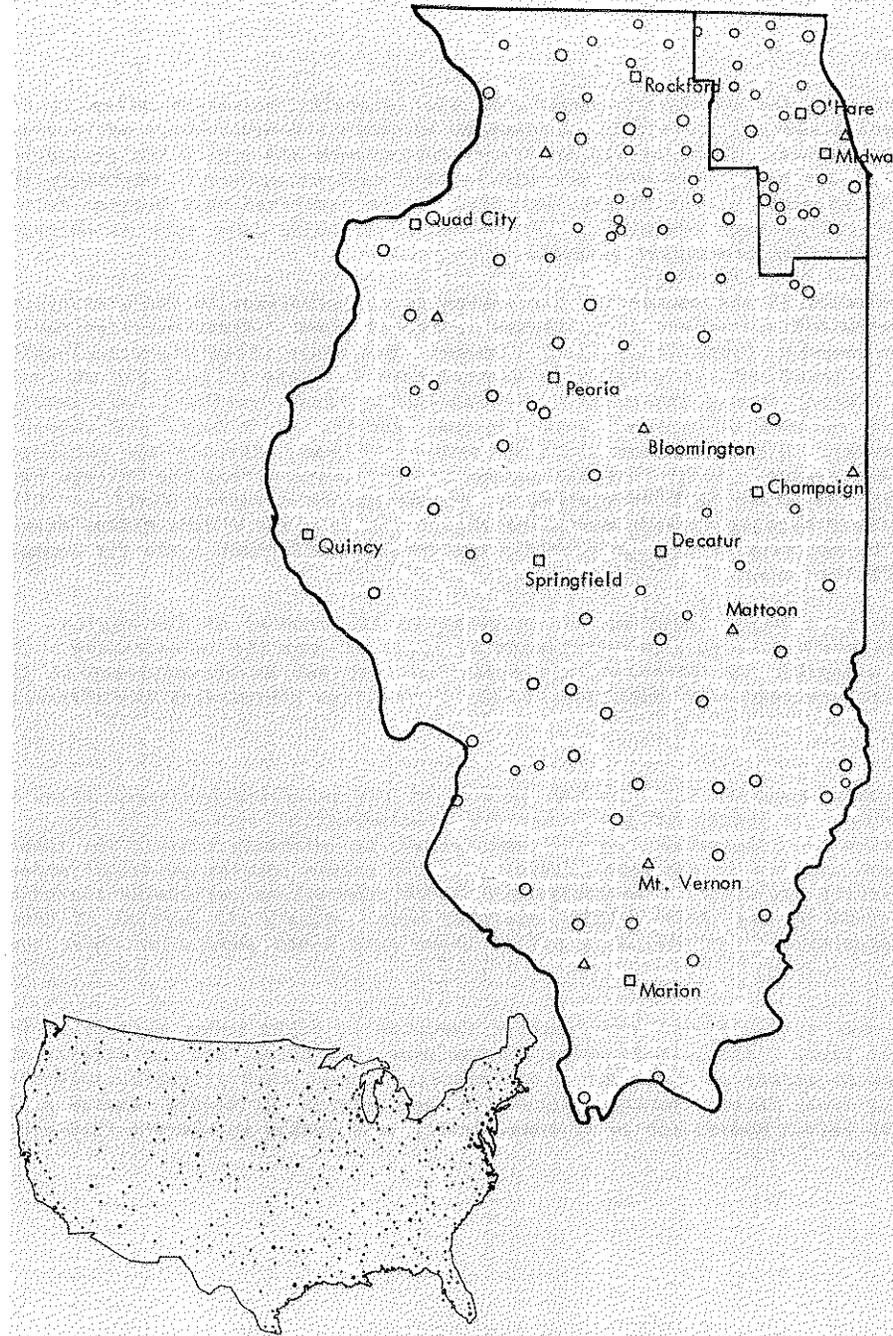
Intercity Bus Service

Although this mode accounts for only two percent of the intercity passenger miles it is an extremely important component of the intercity transportation system. It serves a segment of the population that otherwise may not have access to intercity travel. The interstate and intercity bus industry is the most extensive of the common carrier passenger modes. (See Figure 18.) Intercity bus connects approximately 15,000 communities nationwide including 1,000 that are not served by any other public intercity mode. Ninety-six percent of towns with 2,500 to 5,000 population, and virtually all of these over 5,000 population, have some intercity bus service.

Intercity bus has a significant distribution function to other modes especially for those who live in small towns. Also, it is primarily the poor, the young, and the elderly who cannot afford, or have no access to other means of intercity travel that patronize intercity bus with its generally lower fares. Further, intercity bus service is highly energy efficient, it is one of the safest modes, and it is considerably less costly to operate than other

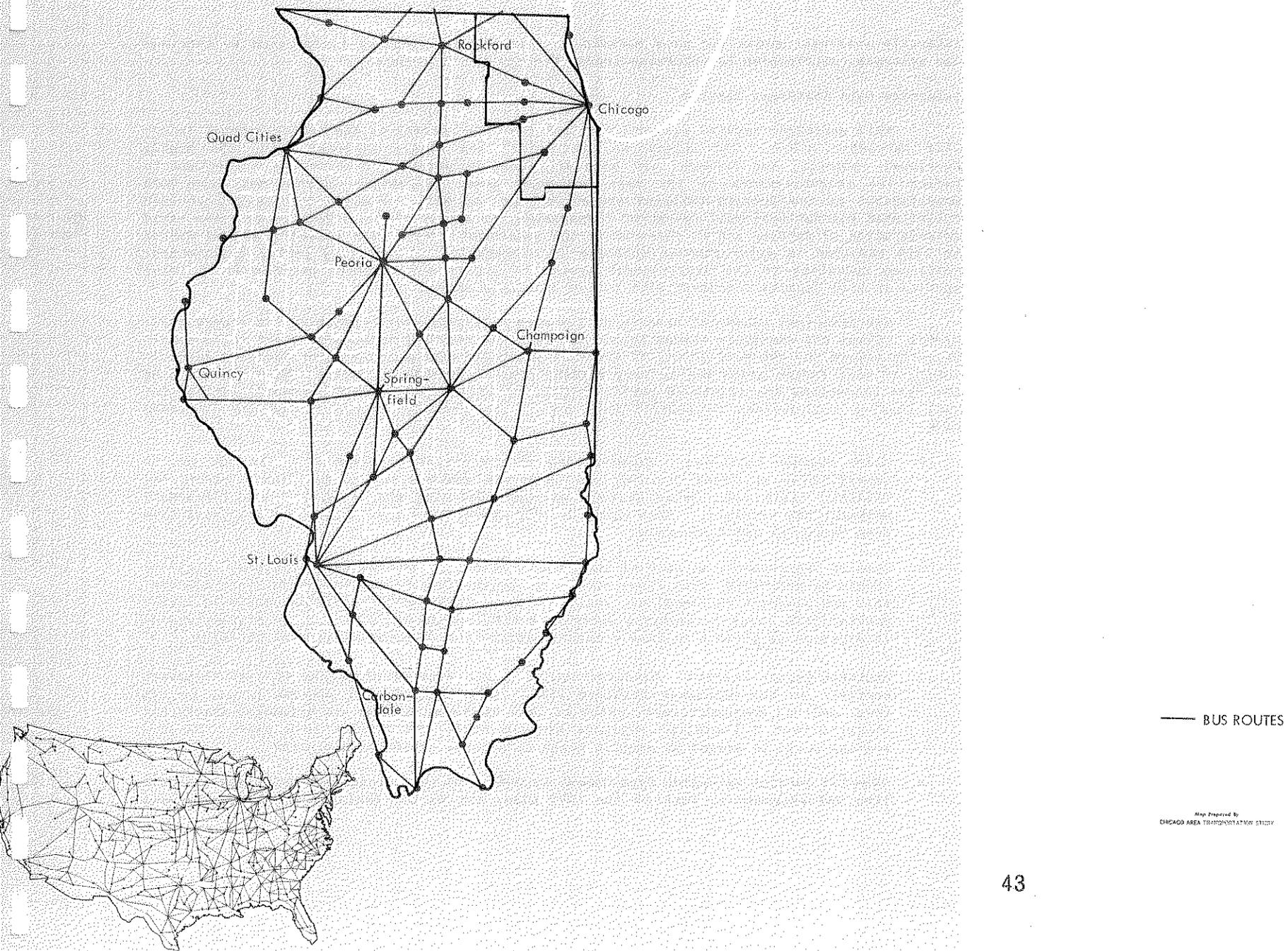
Figure 17 INTERCITY PASSENGER SYSTEM : COMMERCIAL AIR

- AIR CARRIER
- △ COMMUTER
- GENERAL AVIATION-PUBLIC
- GENERAL AVIATION-PRIVATE
- LARGE HUBS
- OTHERS



Map Prepared by
CHICAGO AREA TRANSPORTATION STUDY

Figure 18 INTERCITY PASSENGER SYSTEM : BUS



intercity passenger modes for many markets.. This private industry is expected to continue its valuable contribution to intercity travel through the Year 2000.

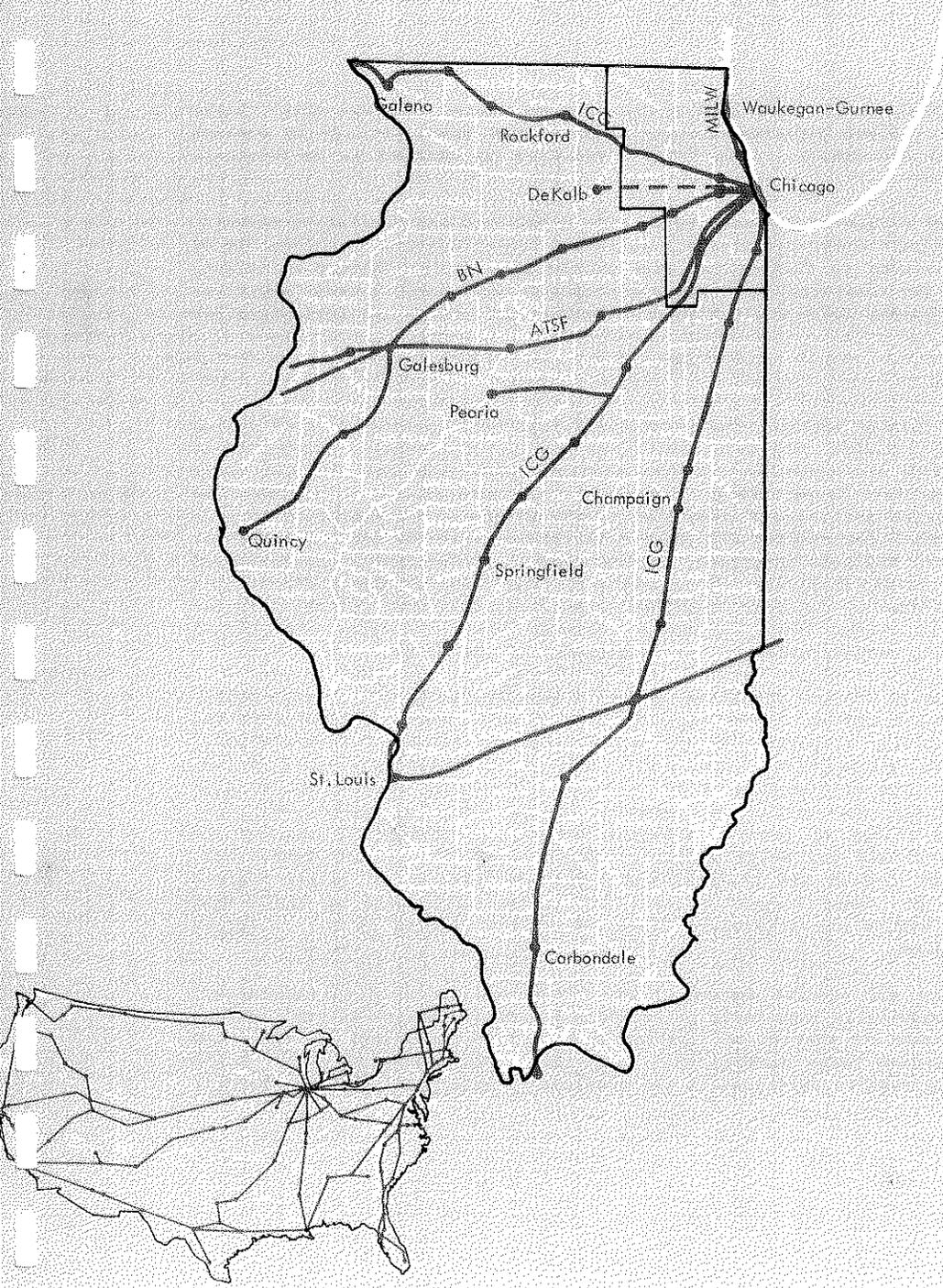
Intercity Rail Passenger Service

Rail passenger service accounts for less than one percent of the nation's total intercity passenger miles. The ubiquitous, economical and highly personal auto, the highly developed intercity bus network, and high speed modern aviation services have combined to reduce the attractiveness of the rail passenger mode. Passenger service has long been unprofitable to the private railroad companies, and the Rail Passenger Service Act of 1970 established the National Rail Passenger Corporation, or Amtrak, in an effort to halt the rapid deterioration of service and to rationalize the passenger system. The establishment of Amtrak in 1970 resulted in major planned cutbacks in service, which were only partly implemented. Continued reduction of the overextended system is likely with efforts being made to focus service in high density corridors with better ridership prospects.

The principal potential benefit of a modern rail passenger network is its energy efficiency. Given the uncertain energy future the role of rail for intercity travel could significantly expand by the year 2000. If the rail passenger system ceases completely, a reinstatement to meet future needs may be very difficult and extremely expensive. With that in mind the Plan recommends the continued public support of this mode. Specific recommendations for rail service improvements to benefit this region are shown in Figure 19 and are discussed here.

1. Union Station Connector. Construction of connecting trackage from the ICG to the Conrail Line at Grand Crossing (on Chicago's south side) to facilitate moving the "Illini" train into Union Station without requiring the awkward backup-turnaround movement now necessary. This maneuver adds approximately 30 minutes to the train time from Champaign and Carbondale.
2. Station improvements at each of the seven stations in northeastern Illinois. Stations should be renovated with local public and private sector participation into comfortable and pleasant surroundings, scaled to use. Intermodal facilities should be incorporated into these renovations where feasible. Improvement of station attractiveness is expected to yield long term ridership gains that will reduce service deficits.
3. Waukegan-Gurnee Station. Construction of a new station along the Chicago-Milwaukee corridor on the Milwaukee Railroad line. This station will provide access to the Great America Amusement Park, which is located one mile from the Milwaukee tracks and attracts over 2.5 million visitors between April and October each year. The new station would be served by shuttle buses to provide convenient transfer.
4. Commuter service extension from Geneva to DeKalb on the Chicago and North Western west line was proposed as part of the 1995 plan, but is not included in the recommended

Figure 19 INTERCITY PASSENGER SYSTEM : RAIL



— EXISTING RAIL
— PROPOSED RAIL

Map Prepared By
CHICAGO AREA TRANSPORTATION STUDY

commuter rail component of the Year 2000 plan. However, great interest still exists in Kane County for a local noncommuter type service (one train per day or weekend only) between Geneva and DeKalb. This local service is recommended as an intercity rail service.

These recommendations recognize the need to provide a balanced transportation service. As the price of private transportation, particularly petroleum fuels, continues to rise, it is important to develop alternatives to further reliance on the automobile. Energy efficient, environmentally sound, fast and convenient rail passenger service will make a major contribution towards system balance in the short haul, high density corridors where its advantages are greatest.

Regional Airport System Plan

This section of the chapter presents the recommended Year 2000 Regional Airport System Plan (RASP) for northeastern Illinois. The aviation system services three major categories of users. Most familiar to the air traveler are the airlines providing certificated route services which include domestic trunk, flag, regional, supplemental (nonscheduled) and commuter airlines for passenger service and scheduled cargo service. The second major user group is general aviation, which encompasses all other aviation services including nonscheduled air taxi and air charter, business/corporate, instructional and personal or recreational use. The final user group is the military, which operates from Glenview Naval Air Station and, to a limited degree, O'Hare. The Year 2000 RASP concentrates on the general aviation system, though the obviously strong interrelationship between the air carrier and general aviation users is an important consideration in the development of the plan.

The Year 2000 RASP would provide continued aviation services primarily through utilization of the existing airport system. Some capacity improvements would be needed at the region's air carrier and commuter airports. As the world's busiest airport O'Hare obviously has a crucial role in the future composition and development of the region's airport system. O'Hare will continue to function as the primary air carrier hub airport serving the Chicago region, which will necessitate substantial improvements in the areas of noise reduction, corporate business aviation relief at general aviation reliever airports, air carrier and commuter airline relief at Midway and Meigs airports, phasing out of military operations, better ground access by both highway and transit, and continued improvement in air traffic control procedures. These and other airport related issues are dealt with in the O'Hare Midway Master Plan Study. O'Hare was previously discussed in the section on the intercity passenger transportation system.

Because of increasing air carrier demand in the region and the lack of convenient, financially feasible, environmentally acceptable sites for a third air carrier airport, Midway must be recommended for maximum air carrier utilization of up to 400 operations per day. Low fare service in short to medium range markets will help revitalize Midway Airport. To be successful such service will require solutions to the problems of auto parking at the termin-

al, access from the Loop, environmental impact, and displacement of general aviation aircraft and operations. The most obvious general aviation alternatives to Midway are Lewis-Lockport, Clow, and Crestwood-Howell airports. Of these Crestwood-Howell is privately owned and likely to close within the plan period, and Lewis-Lockport is already near capacity.

New construction is called for only to replace the existing Joliet Municipal and possibly Elgin airport. Public acquisition of seven existing privately owned airports is recommended including, in approximate order of priority, Pal-Waukee, Crystal Lake, Frankfort, Campbell's, Lewis-Lockport, Clow, and Elgin. Improvement of existing publicly owned facilities is recommended at DuPage, Aurora, Lansing, and Waukegan. The remaining airports in the region are not recommended for change either because of local resistance, lack of available space, or because the airport is small and on the region's fringe. The recommendations for the airports are presented in Table 3 and are shown in Figure 20.

These recommendations require further study and refinement through the individual airport master planning process. Some airports have only recently completed master plans while others are currently in progress. In each case compatibility between the individual airport plans and the regional system plan must be insured. Implementation of these recommendations is critical, however, if the region is to continue to benefit from a viable aviation system.

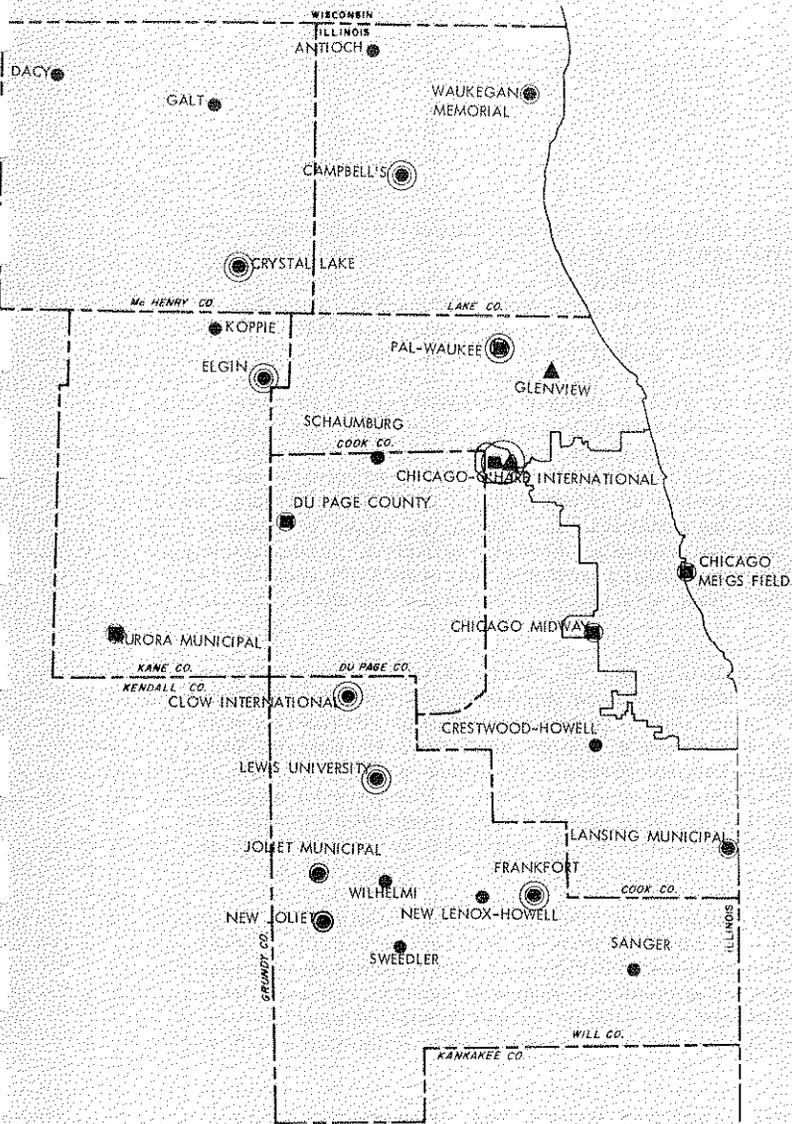
Table 3

YEAR 2000 REGIONAL AIRPORT SYSTEM PLAN RECOMMENDATIONS

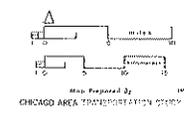
Airport	Public Purchase	Extended Length of Main Runway	Instrument Landing System	Crosswind Runway	Touch & Go Runway	Taxiway	Apron
Meigs			X				
Aurora		5,500	X		(X)	X	X
Campbell's	X	3,900		X		X	X
Clow Int'l	X	3,900		X		X	X
Crystal Lake	X	3,900		X		X	X
DuPage County		5,000			X	X	X
Elgin	X	3,900		X		X	X
Frankfort	X	3,900		X		X	X
Joliet (new airport)	X	4,500	(X)	X		X	X
Lansing		3,400				X	X
Lewis-Lockport	X	3,900	(X)	X	X	X	X
Pal-Waukee	X					X	X
Waukegan		6,000	X		(X)	X	X

Note: X indicates improvement is recommended.
 (X) indicates improvement is recommended only if demand warrants it.

Figure 20 YEAR 2000 REGIONAL AIRPORT SYSTEM : GENERAL AVIATION



- AIRPORT FACILITY WITHOUT CONTROL TOWER
- AIRPORT FACILITY WITH CONTROL TOWER
- ▲ MILITARY AIRPORT
- CURRENTLY PUBLICLY OWNED
- ◎ RECOMMENDED FOR PUBLIC ACQUISITION



V. FREIGHT SYSTEM PLAN

The production of goods and services in response to market demand is dependent upon freight transportation to assemble raw materials and distribute finished products. The movement of these goods and services is a large-scale, intense activity that is vital to the national economy as well as the urban components of that economy. Each year the cost of moving goods on national transportation arteries amounts to approximately 8 percent of the gross national product (G.N.P.), or at present values, over \$204 billion per year.

A look at urban goods movement presents us with a another perspective on the freight industry. The cost of urban goods movement is substantially greater than intercity truck, rail, air, or water expenditures individually and is almost as large as all intercity freight transport combined. Its importance is reflected in its impact on regional economies and on metropolitan transportation networks. As the economies of urban areas expand and develop, so too will the business of collecting and distributing commodities. Realizing this, transportation planners have attempted to research and analyze regional freight systems. Incorporating urban goods movement into the urban transportation planning process can result in significant improvements in the transportation system and can create corresponding benefits to the community.

To obtain a perspective on the local significance of urban freight transportation, Table 4 is presented. This data indicates the role played by each mode of freight transport in the interregional movement of goods into, out of, and through the Chicago Production Area. The total of 985 million tons carried by all modes has grown by more than 67 percent since 1965. As a freight transportation hub, Chicago has no rivals. No other production area in the nation handles as much freight as the Chicago metropolitan area. In order to maintain this preeminent position as a freight transportation hub, the Chicago region must direct new freight facility investments into programs and projects which continue to attract freight traffic and stimulate economic growth.

Chicago's economic strength rests in large part on its continuing role as the transportation hub of the midwest. For many years the dominant hub of the nation's rail network, Chicago in the late 1950's gained prominence in the areas of highway, air, and water transportation as well. This period saw the development of a modern expressway system, the completion of the St. Lawrence Seaway, and the construction of O'Hare International Airport. As a result, Chicago became an important link in the nation's shipping lanes, Interstate highway system, and air lanes.

These transportation developments have paced the growth and progress of Chicago's regional economy. The region's complex of transportation arteries annually move over 100 tons

of goods per resident and its transportation industries continue to provide employment to thousands of people throughout the metropolitan area. Urban goods movement has been and will continue to be a major factor shaping Chicago's economic growth. Its strategic geographic location and extensive transportation infrastructure can act as the biggest tools the region has to achieve its economic development goals.

In developing this plan an attempt has been made to research those areas where the region's freight industry can optimally make improvements and investments to attract traffic and move it most efficiently. Guidelines for these investments have been developed which weigh such diverse elements as private transport interests, government's role in transportation, land use development, and overall regional goals.

TABLE 4

FREIGHT TONNAGE

Freight Tonnage Originating in the Chicago Production Area* and
Destined to the Chicago Production Area by Mode for all Commodities - 1977

Mode	Freight Tons Originating in Chicago	Freight Tons Destined to Chicago	Total Tons
Air	299,602	218,090	517,692
Pipeline	177,926,840	93,807,609	217,734,449
Rail	111,902,150	83,577,307	195,479,457
Truck	224,676,238	149,251,824	373,928,062
Water	19,842,410	26,723,411	46,565,821
Other	60,201,103	37,056,683	97,257,786
Total	594,848,343	390,634,924	985,483,267

*Chicago Production Area includes Cook, DuPage, Kane, Lake, McHenry, and Will counties in Illinois and Lake and Porter counties in Indiana.

General Goals & Objectives

The general goals and objectives describe the desirable characteristics of a regional freight transportation system. Attainment of these objectives will depend on more detailed project planning, special studies on selected topics, and operating procedure development.

GOAL 1: A Transportation System Which Meets Regional Needs for Moving Goods

- Objective 1A. Provide transportation accessibility to areas of commodity trip generation such as industrial parks.
- Objective 1B. Provide transportation services to meet increased demand during peak periods.
- Objective 1C. Provide a transportation network which is designed to optimize intermodal accessibility.
- Objective 1D. The users of the intercity and intracity freight transportation networks should have a choice of modes.

GOAL 2: A Freight Transportation System Which Is Operationally Viable

- Objective 2A. Increase the coordination of physical facilities between modes and within each mode.
- Objective 2B. Minimize physical conflicts and congestion within the transportation system.
- Objective 2C. Maximize the efficiency and reliability of the freight transportation system.

GOAL 3: A Freight Transportation System Which Promotes Innovation and the Safe, Efficient Functioning of Each Mode to the Aid of Carriers, Shippers, and the Region as a Whole

- Objective 3A. Promote a system which insures safety and security for the users and the community.
- Objective 3B. Develop coordinated public/private research and planning for freight system improvements.

GOAL 4: A Freight Transportation System Which Minimizes Negative Environmental Effects and Encourages Desirable Regional Growth and Optimum Use of Resources

- Objective 4A. A freight system which supports the regional land-use plan.

Objective 4B. A freight system which minimizes social and economic disruption of existing land use patterns and minimizes negative air quality impacts.

Objective 4C. A freight system which equalizes user fees to the social cost of providing services.

Multimodal Freight Concepts

The following freight concepts and subsequent recommendations represent the specific objectives and strategies of the freight plan.

MOTOR CARRIER FREIGHT CONCEPTS

- 1) Establish a regional preferential truck route system of selected major arterials and all freeways. This network would be designated for heavy truck traffic with proper design and maintenance standards. Heavy truck use of nondesignated routes would be restricted to local access only.
- 2) Develop a truck terminal cluster system that is compatible with the preferential truck route system. Encourage implementation of the cluster concept through incentives such as infrastructure provision.
- 3) Implement new commercial zone expansion criteria to allow for more rational commercial zone expansion. New zonal boundaries would be set at the county rather than municipal level. Expansion would be encouraged to county boundaries if municipalities within that county are included in the current commercial zone.
- 4) Identify locations of severe truck traffic congestion and truck access restrictions throughout the region. Develop and evaluate alternatives to ease congestion and access problems at these locations.
- 5) Identify Chicago CBD locations which restrict truck access and result in freight and passenger service conflicts. Develop and promote capital and operational improvements to maximize truck circulation and service access and to minimize interference with auto and pedestrian traffic in the CBD. Evaluate the long-term prospects of utilizing the Loop's extensive subterranean freight tunnel system for growing package express movements.

RAIL FREIGHT CONCEPTS

- 1) Encourage grade separation of rail-highway crossings at high density intersections and improve crossing protection at all crossings.
- 2) Encourage the development of a consolidated network of designated high speed, grade separated strategic intercity freight lines supported by a comprehensive urbanized area

switching line system. Provide railroads with technical assistance in developing this network.

- 3) Improve the efficiency of Chicago's intermodal transportation operations by providing facilities to expedite the interchange of traffic between rail yards.
- 4) Promote the electrification of railroad right-of-way where feasible.
- 5) Provide a forum for railroads and shippers to discuss rail abandonment alternatives.

WATERBORNE FREIGHT CONCEPTS

- 1) Encourage and promote commercial waterborne transportation on appropriate segments of Chicago's inland waterway system.
- 2) Develop and maintain rail and motor carrier access to Chicago Regional Port District and Indiana Port Commission facilities to promote intermodal coordination.
- 3) Identify methods to reduce or eliminate clearance restrictions over the Chicago Sanitary and Ship Canal at the Santa Fe Ship Canal Railroad Bridge crossing.
- 4) Develop and maintain port facilities to accommodate the transfer of cargoes between barges and inland carriers and between barges and deep-draft vessels.
- 5) Maintain confined disposal facilities to accommodate the materials dredged from Chicago waterways to maintain depths.
- 6) Encourage and promote dialogue between rail and motor carriers and port officials regarding the need for reduced, preferential rates to and from Chicago and Burns Harbor port facilities.

AIR FREIGHT CONCEPTS

- 1) Increase the capacity of the region's air cargo facilities to accommodate expanded air freight traffic.
- 2) Improve airport ground access systems to increase truck access to cargo areas. The costs and benefits of multiple access points should be investigated.
- 3) Promote the development of a foreign trade zone at O'Hare International Airport.

Proposals & Recommendations:

Motor Carrier Network

Increasing the efficiency of the motor carrier freight system is a primary goal of the Chicago region in its efforts to promote economic growth. Thirty-eight percent of all freight tons originating in the Chicago region is handled by the truck mode and other freight modes are becoming increasingly dependent upon trucking as intermodal traffic continues to grow. Chicago has evolved as the nation's major trucking center with over 2,400 for-hire motor carriers located in the six county region. The region's motor freight network is characterized by a proliferation of truck terminals which act as interfaces between inter-regional line hauls and intraregional distribution. Within Chicago, more than 70 percent of all truck miles are of the intra-urban type, with both origins and destinations found within the Chicago Commercial Zone (CCZ). For all of these reasons, motor carriers are a key part of the regional freight transportation network.

The concepts presented in this plan for trucking focus on several strategies to improve the efficiency of the system: truck route channelization, for-hire terminals clustering, commercial zone expansion, and CBD truck access and circulation improvements. The best estimates available leave little doubt that freight movement by truck will increase in the next several years, that a greater percentage of motor freight movement will be handled by larger, heavier trucks, and that the types of system improvements suggested in this plan will have a positive impact on those motor freight movements.

Truck route channelization would be accomplished through the development of a regional preferential truck route system of selected major arterials and all freeways. Heavy truck movements would be channelized along a series of well-defined corridors. Highways within these corridors would be upgraded to enable them to carry the increased heavy truck traffic.

CATS, through the application of a motor freight planning model has simulated a preferential truck corridor system on its regional sketch planning network. The simulation results suggest that a preferential routing system for medium and/or heavy trucks is a feasible and sensible planning strategy for the Chicago region. The preferential truck corridor system designated on the sketch network is only a representation of general corridors within which truck route designation would be appropriate. However, as the model is later refined and a simulation is performed on the CATS zone network more detailed information on specific routes would be provided.

The criteria to be followed in setting up a preferential truck route system are listed below:

- 1) Connections to major freight facilities such as truck terminals, warehouses, and freight forwarding and consolidating facilities.
- 2) Connections to major freight producing zones (trip generation areas) as identified in the motor freight planning model.

- 3) Connections to all of the region's highly freight accessible zones as identified in the motor freight planning model.
- 4) Adequate underpass clearance along the identified routes.

The potential benefits of setting up such a truck route system would be operational, environmental, and financial. Auto/truck traffic interactions would be minimized through the channelization of truck volumes over the designated routes. The negative environmental impacts associated with heavy truck traffic in inappropriate areas such as residential neighborhoods would be reduced. Limited street maintenance and reconstruction funds could be maximized by targeting the funds to the designated truck routes. Maintenance costs on non-designated streets would be reduced. Finally, the concentration of transportation flows would improve urban goods movement efficiencies by designating larger, more effective transportation facilities.

Once a preferential truck route network is designated the information could be presented in a format similar to the Illinois Highway Map. This map would identify the preferential truck routes throughout the region as well as locations of inadequate underpass clearances and other information useful to truckers. This "Chicago Trucker's Map" would provide truckers with a practical tool to make their trip through the Chicago region more efficient and safe. Development of the system and preparation of the map should be implemented in the 1980's. During the interim period between system planning and implementation, CATS should work closely with local trucking companies to identify locations of severe truck traffic congestion and truck access restrictions throughout the region. Alternatives to ease congestion and access problems at these locations should be developed and evaluated.

The suggested Chicago system plan would encourage the clustering of for-hire motor freight terminals throughout the region. The development of these terminal clusters would be encouraged through infrastructure provision and other incentives to be identified with the aid of local municipal officials. The terminal system would be compatible with the network of preferential truck routes and conform as closely as possible to existing terminal development patterns.

There are 24 suggested prime areas for terminal clusters. The criteria for selection of these sites include:

- 1) Areas of greatest access to Interstates and primary arterials.
- 2) Closest proximity to trucking service demands; notably manufacturing and industrial land use.
- 3) Areas of greatest interlining opportunities due to their proximity to other carriers.

- 4) Best connectivity to the major freight service demands throughout the system.
- 5) Low congested truck travel times.
- 6) Locations with currently high terminal activity.

The potential benefits associated with the spatial clustering of terminals into the suggested locations are economic, environmental and operational. The concentration of truck terminals would increase interlining opportunities among carriers. Clusters could be used to stimulate future industrial park development by attracting motor carrier customers to particular sites. Some of the recommended peripheral locations would help reduce currently high central area traffic congestion and promote a more efficient utilization of the region's highway network. Auto/truck traffic interactions could also be reduced and negative environmental impacts minimized.

Local municipalities in cooperation with highway planners and trucking companies would identify specific locations for development of motor carrier terminals, public warehouse facilities, and related industrial park uses. Where these types of facilities are clustered together, traffic signals, turning channels, and possibly short length expressway access ramps could be provided. Carriers would be discouraged from locating new facilities in areas not designated as clusters. All terminal locations would be linked to the expressway system and to adjacent clusters by way of the preferential truck route network. See Figures 21 and 22.

Another component of the motor freight plan is the expansion of the Chicago Commercial Zone boundary. Within the CCZ interstate shipments and carriers operating solely within the zone are exempt from Interstate Commerce Commission regulations. The zone is also useful as a uniform rate territory. The last major expansion of the Chicago zone occurred in 1977 in recognition of changed commercial and industrial locations.

Through the implementation of new zone expansion criteria, the CCZ would expand outward to the county boundaries rather than the piecemeal expansion which presently occurs as individual municipalities are added. Hence the entire six county area should be included in the CCZ.

The suggested expansion will allow for greater competition in the urban goods movement market by including recommended terminal cluster areas in the regulation free zone. The continued suburbanization of commercial and industrial establishments will be complimented by the new truck terminal developments which will then provide for shipper access to all interstate common carriers serving the urbanized area.

Industrial park and truck terminal developments within the expanded zone should be planned carefully with proper consideration for the negative environmental impacts of such developments. Consistency with the regional land use plan must be assured to avoid the problems associated with suburban sprawl.

Figure 21 YEAR 2000 MOTOR CARRIER FREIGHT SYSTEM*

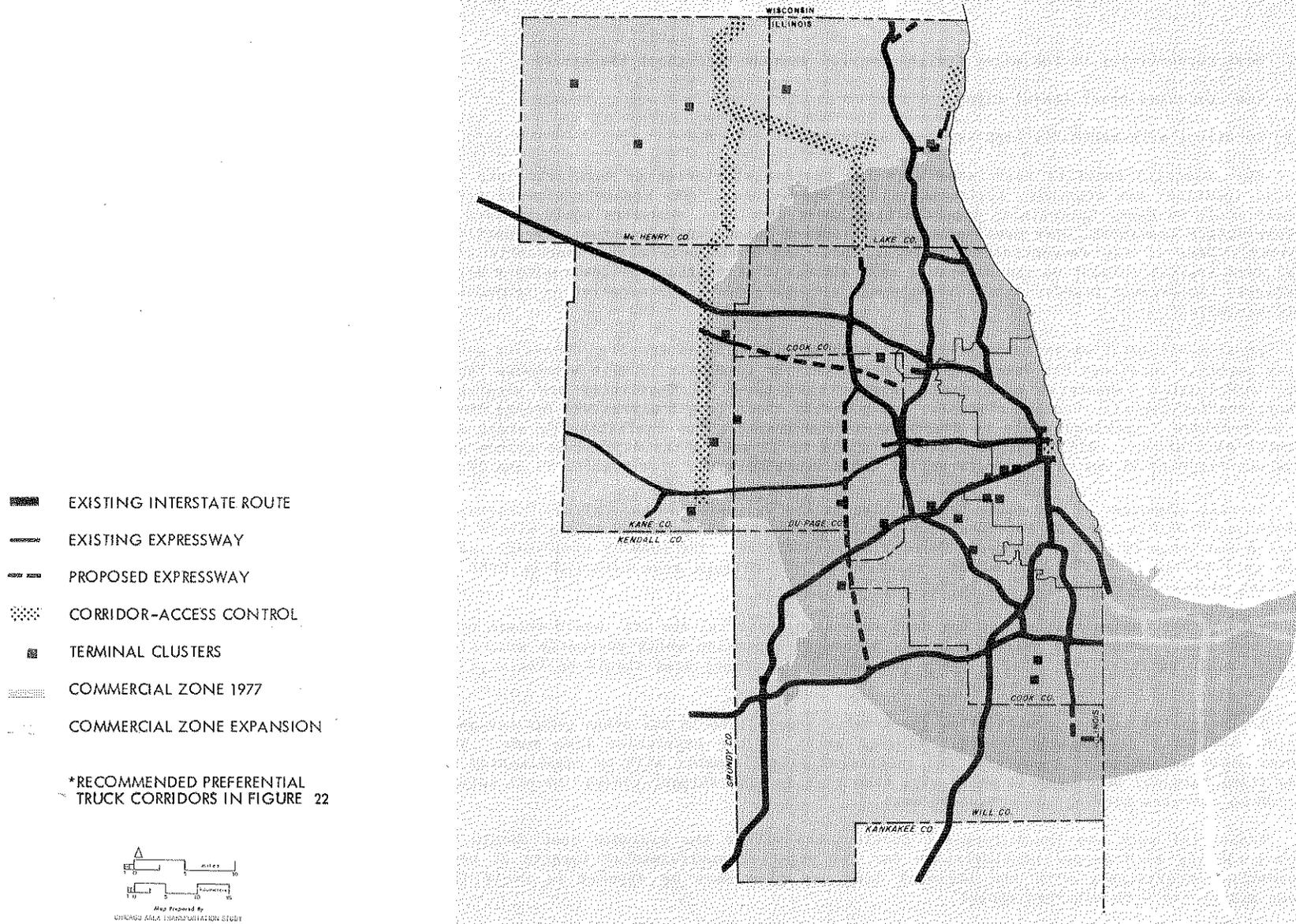
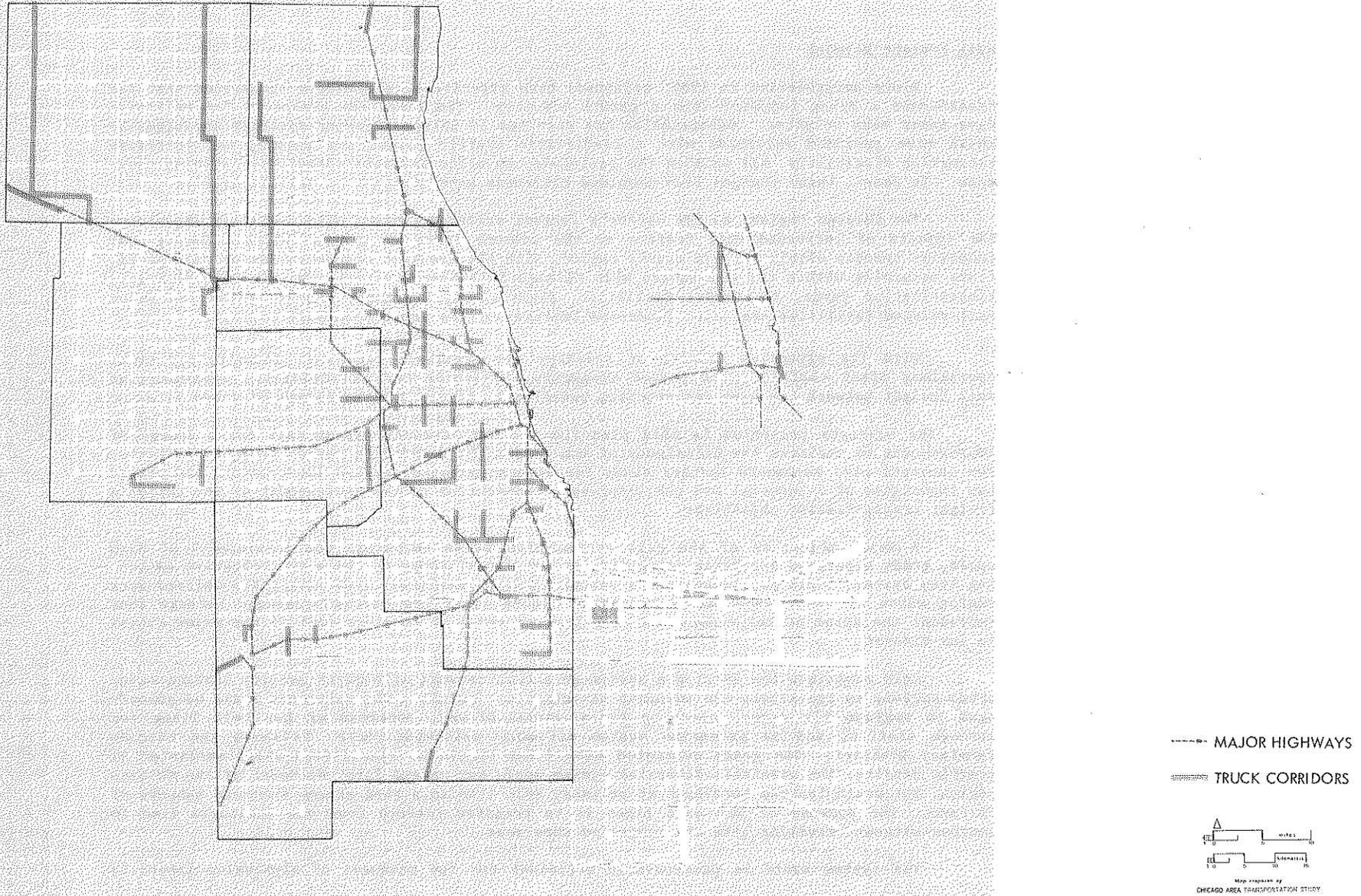


Figure 22 PREFERENTIAL TRUCK CORRIDORS
As depicted on the Sketch Planning Network



Rail Freight Network

Since deregulation in 1980, railroads have experienced a dramatic turnaround that has transformed a dying industry into a growth industry. The long-term prospects for railroads have never been brighter. Deregulation has resulted in shipper/carrier contract arrangements which have provided railroads with a predictable traffic volume and income, and increased ratemaking flexibility has enabled the railroads to offer shippers competitive pricing packages. In short, these changes have provided railroads with new ways to solicit traffic.

The Chicago region, as the nation's largest railroad center, will certainly experience the impacts of increased rail traffic as the economy improves in the future. Twenty-four companies operate within the six county region, with the greatest concentration of rail operations occurring within the 400 square mile Chicago Switching District. Within this district, classification yards, intermodal facilities, right-of-way trackage, storage yards and other rail-related facilities are major landscape features of the urban transport complex.

With its extensive network of trackage and terminals, the rail industry's freight operations often conflict with person movements. Planning for an efficient, nondisruptive rail freight network can have far-reaching beneficial effects on many facets of urban life.

The concepts presented in this plan for the rail freight system call for a number of improvements to maximize the efficiency of the system while reducing person freight conflicts. The concepts also recommend further study for several proposed system improvements and stress the importance of intermodal and public/private cooperation to the achievement of the region's freight transportation objectives.

A major objective of the rail system plan is to encourage the development of high speed, grade separated strategic intercity freight lines supported by a comprehensive switching line system. CATS has identified a set of existing railroad lines within the Chicago-Gary region which it deems especially important. These lines are called strategic because they represent the spine of the midwestern rail network and link together each of the major cities in the midwest.

CATS envisions the strategic system as a rail network of highest quality linking major urban regions to facilitate the movement of intercity freight. The railroads would be encouraged to upgrade six major intercity radial-rights-of-way, portions of two belt lines for through traffic, and an extensive system of major switching routes to serve the Chicago Terminal District. The grade separated main lines should be electrified where warranted by traffic density. The strategic intercity system would not extend into the heart of the Chicago region, but would instead terminate at an inner belt line in a ring around the near suburbs of Chicago. The purpose of the belt lines is to transfer traffic from one strategic line to another without traveling into the congested core area.

The system would be particularly efficient for the movement of high-value intercity

freight. Long-range implementation of such a system is justified based on general trends showing increases in high-value TOFC/COFC freight shipments and on the fact that rail lines in the Chicago region seem to be holding their own with regard to traffic density during the current recession. Potential benefits include: improved transit time and car utilization resulting in economies in operating costs, complete elimination of grade crossing blockage and safety hazards, and a reduction in air pollution levels on those routes selected for electrification.

As noted above, rail electrification is suggested as part of the development of strategic lines. Those lines carrying the highest traffic density would be electrified first and the remaining lines would be prioritized according to gross ton miles carried. It should be noted, however, that electrification requires great initial capital expense that may serve as a deterrent to its implementation. In addition to the positive air quality impacts anticipated as a result of this improvement, significant energy savings could also be expected as a result of the switch to electricity from diesel fuel.

Cooperation among public planning agencies, local academic institutions, and the private carriers may result in the development of innovative proposals to plan and design an improved regional rail network, and will be essential to the eventual implementation of the suggested system. CATS would provide railroads with technical assistance in developing the proposed rail network. Implementation of the system is envisioned by the year 2000.

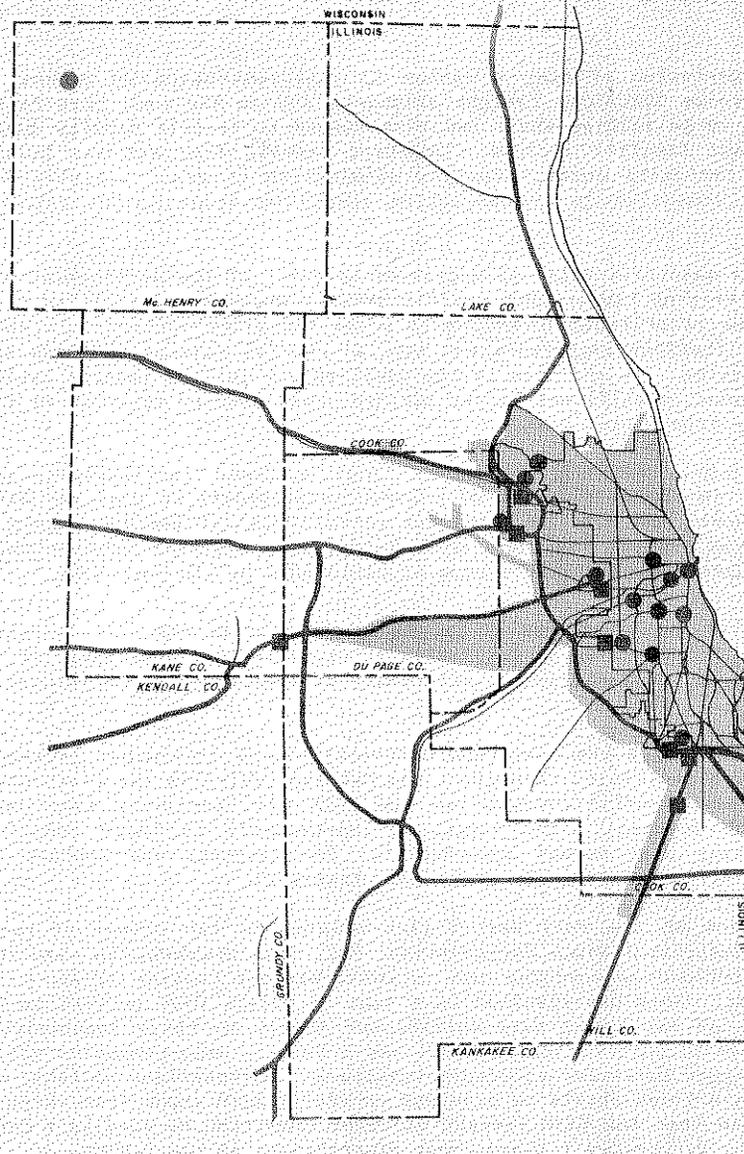
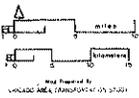
Recognizing the increasing importance of intermodal traffic to the rail industry, the rail system plan recommends the provision of facilities to expedite the interchange of traffic between intermodal terminals and to maximize the efficiency of operations at intermodal interchange points.

This freight plan encourages the continued consolidation of intermodal terminals and envisions a network of 14 such facilities throughout the Chicago region in the year 2000. The projected growth in intermodal traffic between now and 2000 will certainly have important impacts on regional freight movement. The suggested improvements to these complimentary intermodal exchange facilities will expand opportunities for shippers and improve freight system efficiency as this traffic continues to grow. See Figure 23.

Another recommendation of the rail system plan relates to the effect of rail line abandonments on Chicago industries. Since deregulation, rail line abandonments are increasing due to streamlined abandonment procedures and railroad mergers causing larger railroads to trim duplicate facilities. This has resulted in a loss of direct rail service to certain businesses and communities and has had a very detrimental effect on those industries which depend on rail transportation to move their products. As a result, many companies are forced to either relocate or pay higher rates for alternate transport. Alternatives to total discontinuance of service on certain lines should be examined carefully with input from shippers and railroads. It is recommended that the CATS Freight Advisory Committee be used as a forum for the railroads and shippers to discuss rail abandonment alternatives in the region.

Figure 23 YEAR 2000 RAIL AND INTERMODAL FREIGHT SYSTEM

- SWITCHING LINES
- STRATEGIC LINES
- PRIMARY CLASSIFICATION YARDS
- INTERMODAL YARDS
- △ MAJOR RAIL-HIGHWAY GRADE CROSSING IMPROVEMENTS
- ▨ TERMINAL DISTRICT



Waterway and Harbor Network

Chicago serves as a waterway interface in the movement of traffic bound for both foreign and domestic markets. It is a terminus for two distinct waterway systems, both of which utilize the local canals, rivers and harbors. The two systems are the Great Lakes St. Lawrence Seaway, and the Internal Waterways. Waterborne commerce for the Port of Chicago connecting the two systems, totaled 32.9 million tons in 1980 ranking Chicago 7th in total tonnage among the major U.S. Seaway ports and 1st in tons of inbound and outbound general cargo.

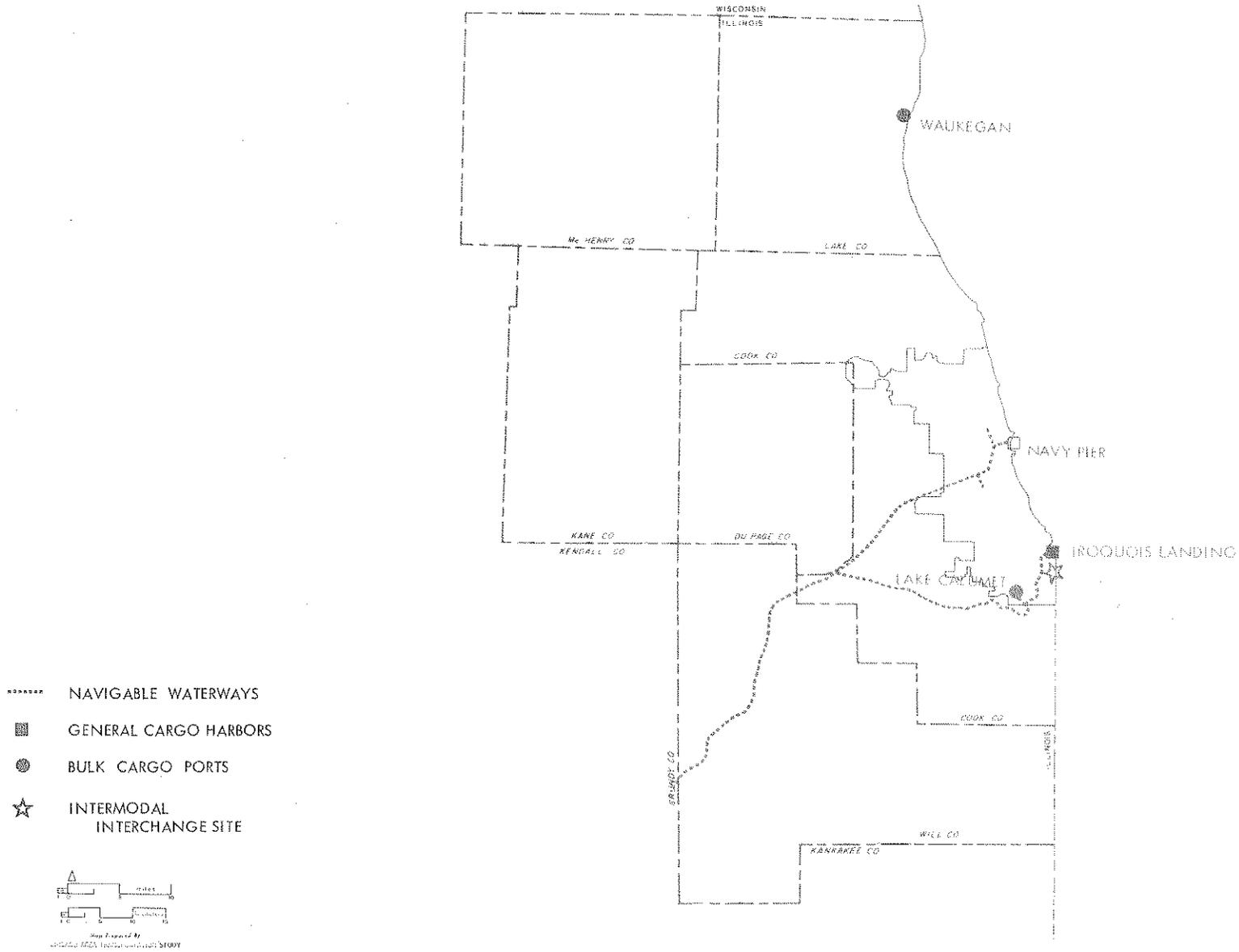
The waterborne freight plan for this complex system is designed to promote commercial water transportation, improve coordination within the mode and between modes, and to reduce conflicts with other modes. Several concepts are presented in an effort to encourage greater use of the Ports of Chicago and Indiana and to improve overall waterway system efficiency. See Figure 24.

Commercial waterborne transportation would be encouraged on appropriate segments of Chicago's 41 miles of rivers and canals. Except for the Des Plaines River, the North Shore Channel and the Chicago River north of Addison Street, all waterway segments are commercially navigable. This waterway system serves as an important transportation artery and should be viewed as an invaluable resource for economic development and transportation innovation. Maritime traffic on this system would be actively promoted through the coordinated efforts of all agencies responsible for planning, maintenance, and improvements on the various waterway segments. Disruptions to vehicle and pedestrian traffic crossing the navigable segments of the waterway should be minimized through strict adherence to applicable Coast Guard regulations relating to bridge operations during peak person travel hours. All waterborne freight improvements should be checked for consistency with the environmental and commercial transportation policies contained in the Chicago Waterways Study, plans for the Illinois and Michigan Canal National Heritage Corridor, and other regional waterway and harbor plans.

The second concept presented in the water system plan focuses on operational strategies and capital improvements to maintain sufficient rail and motor carrier access to Chicago's regional port facilities. Rail and street access problems and facilities in need of improvement should be identified in the vicinity of major port facilities in an effort to remove constraints on the multimodal movement of goods at these locations and promote intermodal coordination.

Particular attention should be given to the Iroquois Landing cargo facility. Low viaduct clearance in the vicinity of this facility presents a severe access problem for trucks distributing goods to and from the highly industrialized area surrounding the site, and forces many truckers to follow circuitous routes to access Iroquois Landing. The problem of inadequate rail access at Iroquois Landing also needs to be investigated. At present the facility is served by only two railroads - the EJ&E and the Short Line. Neither of these lines carries any substantial container traffic. To promote efficient intermodal exchange it would seem

Figure 24 YEAR 2000 WATERWAY AND HARBOR FREIGHT SYSTEM



more logical to have this facility served directly by a railroad which carries substantial container traffic. Improved rail and truck access to Iroquois Landing for container and general cargo traffic moving between the port and inland points is essential to encourage multimodal use of this major developing waterborne freight facility.

As access improvements are implemented and intermodal traffic grows, Chicago area ports will require expanded facilities to expedite the transfer of freight from one mode to another and from one waterway system to another. It is recommended that port facilities be developed and maintained to accommodate the transfer of cargoes between barges and inland carriers and between barges and deep-draft vessels. Projected traffic increases between lake-front harbors and inland waterways will require substantial investments in new infrastructure if the waterborne freight network is to remain competitive with other modes.

The Chicago Sanitary and Ship Canal is a heavily used water corridor through southwest Cook County. Connections are made with the Chicago River on the north and the Cal-Sag Channel near its south end. As the primary link between the Illinois River and the City of Chicago, unrestricted passage for barge traffic on this facility must be maintained. One problem area which has been identified by barge lines using the waterway is the Santa Fe Ship Canal Railroad Bridge crossing at Lemont. Prior to 1945 this railroad bridge was moveable. The bridge was lifted as needed for the passage of barges and other vessels on the ship canal. For over 30 years however, this bridge has not been moveable and presents a serious clearance restriction to barges using the canal.

Petroleum products, coal and building materials account for nearly 65 percent of all Sanitary and Ship Canal traffic and major petroleum depots, electric generating plants, and sand and gravel yards line the channel as a result. Recognizing the importance of this traffic to Chicago area industries, CATS should work closely with other planning agencies, the Santa Fe Railroad, and the multitude of barge operators using the canal to identify methods to reduce or eliminate the clearance restriction over the ship canal at the railroad bridge crossing.

Air Freight Network

The air cargo segment of the freight transportation industry is expected to continue growing through the year 2000. Deregulation and the current economic situation have combined to create an atmosphere in which the air freight industry has become competitive with other modes. Deregulation has made it easier for new carriers and freight forwarders to enter the air cargo business and the kind of rate cutting permitted under deregulation has attracted shippers. The depressed economy has led to a consolidation of company distribution points throughout the nation which has made transportation by air seem very attractive. These factors and others have given industry representatives confidence that air cargo business will be booming in the near future.

Within the region over 40 carriers offer air cargo services in scheduled passenger

aircraft. Nearly 20 air cargo airlines offer exclusive cargo services including the rapidly growing small package express airlines. In addition, many air freight forwarders provide consolidation and connecting services for air shippers. The majority of this activity occurs at and around O'Hare International Airport.

The efficient movement of goods via air demands facilities that can interchange a high volume of freight between aircraft, terminal, and other modes of the regional freight network. Most airports in the Chicago area are not equipped for this type of activity. Only O'Hare and Midway airports carry significant air freight traffic. These two airports handle over 99 percent of the regional air cargo.

The concerns of the regional air freight industry center around the ability of this region's major air cargo facilities to handle expanded quantities of freight. Recognizing these and other air carrier concerns, the City of Chicago has recently completed the master plan for future development of O'Hare Airport. The plan focused on the constraints limiting O'Hare's capacity to accommodate anticipated future aviation demand including the growing demand for air cargo services. These constraints were identified as: 1) the number and size of gates; 2) the available terminal space; and 3) the ground access and traffic circulation systems supporting the airport. The master plan consists of three phases - phase 1 of which is already under construction. Phases 2 and 3 include the relocation and redevelopment of the cargo facilities at O'Hare. The present facilities at O'Hare have become taxed and the latest proposal in the O'Hare Development Program calls for the redevelopment of a new "cargo city" in the southwest corner of the airport with facilities capable of handling the doubling or tripling of demand. The new cargo complex would include new postal processing facilities and would be accessible off Irving Park Road.

In order to efficiently handle increased air freight traffic, facilities at O'Hare will have to expand as planned in phases 2 and 3 of the master plan. It is recommended that O'Hare, as well as Midway and other smaller airports increase the capacity of their air cargo facilities to accommodate the projected expansion of air freight traffic in the future.

As mentioned previously, one of the major factors constraining future growth at O'Hare is the existing ground access system. Highway access will be an extremely important factor in the planned cargo complex developments, as the air cargo industry is increasingly dependent on trucks to service expanding air express operations. It is recommended that airport ground access systems be improved to increase truck access to cargo areas. Direct access from adjacent expressways should be studied, and the expansion of nearby truck terminals considered, as access improvements are planned. The costs and benefits of multiple access points to the cargo complex should also be investigated. These studies should occur during the 1980's.

A final component of the air freight plan is the support and promotion of a foreign trade zone at O'Hare International Airport. A foreign trade zone is a secured area legally

outside the nation's customs territory. Its primary purpose is to attract and promote international trade and commerce. These zones are normally located in or near a customs port of entry such as O'Hare.

The establishment of a foreign trade zone at O'Hare, or an area adjacent to and including a portion of the airport, is highly recommended. The many exporters, importers, customs brokers and freight forwarders clustered in the O'Hare area as well as companies engaged in assembling, sorting, or manufacturing foreign or domestic merchandise would find such a designation beneficial.

The benefits of foreign trade zone establishment at O'Hare are 1) goods in the zone are not subject to any U.S. duty or excise tax, 2) goods may be exported from the zone free of duty and tax, 3) it enables importers to pay the lowest possible duty on merchandise which is manipulated within the zone. As a result, the zone would attract greater international trade. Although already a leader in exports and international trade, the Chicago region could use the economic boost that trade zone establishment would provide.

VI. FINANCIAL CONSIDERATIONS

Transit and Highway Components

In order to develop fiscally responsible transit and highway plans, forecasts of financial resources were prepared. Over the last several years growth of traditional revenue sources has slowed while inflation has greatly increased construction costs. The result is that the real dollar value of capital available for transportation improvements has declined. The forecast used to prepare this Plan assumes that a reversal of this situation will develop in the years ahead. It is assumed as the overall negative impacts of the declines in the recent past become known, a greater proportion of public funds will be channeled to transportation. This assumption, of course, makes the forecast optimistic, and thus it can be viewed as a realistic upper limit on what can be achieved. The Plan's cost meets the forecasted resources available. As such, the Plan is a guide for utilizing these constrained financial resources to provide the best possible transportation system for the future. At the same time the region's transportation program should be considered as a worthy candidate for additional public funding because the forecasted resources will fall short of what is necessary to solve all the region's transportation problems. The first portion of this section describes the financial forecast used. The latter portion details the cost associated with the transit and highway plans.

This is a forecast of federally assisted programs supporting the transit and highway modes in northeastern Illinois. It is expected that the major source of funds for transportation will continue to be the federal aid programs. Data for the first three years (1980-1982) of the forecast were taken from authorizations in the Surface Transportation Assistance Act of 1978. Forecasts beyond 1982 are extrapolated from the average annual program authorization in the Act projected into the future with certain modifications. The total national funding for transit programs was assumed to experience real growth of two percent per year from 1983 to 2000. This is based on the assumption of real growth in federal government revenues of at least three to four percent and of Congress deeming transit worthy of a moderate share of this growth. The national totals for highway programs are assumed to experience a real growth rate of one percent per year from 1983 to 2000. This is based on the same assumptions of federal revenue growth as was used in the case of transit; however, it seems likely that transit funding could grow more quickly than highway funding due to energy and environmental issues attaining increased influence. After national totals were forecasted, the region's share was calculated based on established formulas or historical patterns.

Depending on the particular program the federal share for a transportation project can range from 50 to 90 percent of the total cost. The remainder, termed local match, is provided by the sponsors of the project. It was assumed that there will always be sufficient local

funds to meet the matching requirements for federal grants. This assumption will require growth in nonfederal funds for transportation, necessitating consideration of additional state-local funding measures.

In 1979 dollars a total of \$15,428 million is forecasted to be available between 1980 and the year 2000. This total includes \$10,325 million of funds generally associated with transit projects and \$5,103 million for highway related work. Of the transit total, \$4,546 million is expected to be used for operating subsidies and would not be available for capital projects, leaving \$5,779 million for capital projects.

Table 5 presents a detailed breakdown of the source of the forecasted funds. Individual program estimates are separated out in this exhibit to provide some insight into the nature of the total financial forecasts. However, it is important to keep in mind that while the forecasts were prepared at the level of detail depicted in the table, the reliability of the forecast increases with greater aggregation. Also, the specific institutional mechanisms used to distribute transportation funds could change causing shifts of funds between listed programs or new programs without substantially altering the overall federal resource commitment to transportation. Thus, in the plan development process the modal totals were the most heavily relied upon.

The cost for implementing the transit and highway components of the Plan are presented in Table 6. All costs were estimated in 1979 dollars and can thus be directly compared to the forecasted funds.

Out of the \$5,779 million for capital expenditures forecasted for transit, \$3,775 million (65 per cent) will be needed to maintain and upgrade the existing system. This cost includes rolling stock replacement and the capital cost of maintaining and upgrading to good operating condition track, stations, structures, yards, garages and other support facilities and equipment. A total of \$120 million was included to meet accessibility requirements for the mobility limited.

The cost of the major transit facilities (those depicted in Figures 2 and 3) are \$1,548 million for rapid transit and \$279 million for commuter rail. These figures include the cost of all additional rolling stock needed to operate the new service. The \$177 million for buses represents the amount available for expanding the bus fleet size and is over and above the periodic replacement of buses in the existing fleet.

For highways a total of \$3,200 million (63 percent of forecasted highway funds) has been reserved for periodic resurfacing, structural renewal, and all the other capital costs associated with maintaining and upgrading the roads to good operating condition. This leaves a total of \$1,903 million to expand the capacity of the system. The Plan recommends that the facilities depicted in Figure 4 be constructed for a cost of \$1,186 million and that \$717 million be spent on capacity expansion projects on the arterial system.

Table 5

FORECAST OF FUNDS TO IMPLEMENT TRANSIT AND HIGHWAY COMPONENTS OF PLAN
(millions of 1979 dollars)

Program	Federal Grant	Local Match	Total
TRANSIT CAPITAL			
Rapid Transit	3220	805	4025
Bus	491	123	614
Miscellaneous	65	16	81
*FAU & Interstate Transfer	<u>900</u>	<u>159</u>	<u>1059</u>
Total Transit Cap.	4676	1103	5779
TRANSIT OPERATING			
Basic	2208	2208	4416
Miscellaneous	<u>65</u>	<u>65</u>	<u>130</u>
Total Transit Oper.	2273	2273	4546
Total Transit	6949	3376	10325
HIGHWAYS			
FAP & FAS	1518	417	1935
Bridges	500	125	625
Safety & RR Crossing	205	59	264
FAI-RRR (Interstate Rehab)	106	30	136
*FAU & Interstate Transfer	<u>1759</u>	<u>384</u>	<u>3143</u>
Total Highways	4088	1015	5103
TOTALS	11037	4391	15428

*Note: The FAU & Interstate Transfer category constitutes funding that is locally discretionary between the transit and highway modes. The split between modes shown here is for planning purposes.

Table 6

CAPITAL COST OF THE TRANSIT AND HIGHWAY COMPONENTS
(millions of 1979 dollars)

TRANSIT		
Maintenance and Upgrading Existing System		3775
New Facilities		
Commuter Rail	279	
Rapid Transit	1548	
Bus	<u>177</u>	
Total New Facilities	2004	<u>2004</u>
TOTAL TRANSIT		5779
HIGHWAY		
Maintenance and Upgrading Existing System		3200
System Expansion		
New Major Facilities	1186	
Capacity Improvements on Existing System	<u>717</u>	
Total System Expansion	1903	<u>1903</u>
TOTAL HIGHWAY		5103

Intercity Transportation and Airport System Plan

As this component of the plan is tied to a national purview, it is not possible to delineate the financial considerations in the detailed fashion of the last section. The following is a general discussion of financial issues for each element of this component of the Plan.

Automobile/Highway: The major new investments in highway facilities in the region have been described in Chapter III. The financial aspects of that highway component are

described in the previous section. Nationally, the Interstate Highway System is virtually all in place. Future financial concerns involve maintenance and the reconstruction of the older segments.

Commercial Air Service: The O'Hare-Midway Master Plan Study is examining future development needs at both airports. The total cost of recommended improvements is approximately 1.1 billion in 1982 dollars.

Intercity Bus: The intercity bus industry receives no direct governmental financial assistance. It operates wholly as a private enterprise system competing with other modes, and, where routes overlap, one company competes with another. Fare adjustments maintain financial viability.

Intercity Rail Passenger Service: Rail passenger service today is heavily dependent on government support. Almost every route is losing money, though service on some routes has been substantially upgraded. The fare structure returns less than 50 percent of system expenses, and Amtrak requires heavy federal operating subsidies. Illinois' own rail passenger program is one of the most extensive in the nation, as it supports five Amtrak trains per day under Section 403(b) of the National Rail Passenger Service Act of 1970. The deficits of such a service are shared equally between the state and Amtrak. The capital cost of the four proposed improvements cited in Chapter IV and shown in Figure 19 is 15 million 1979 dollars.

Regional Airport System Plan (general aviation): Full implementation of these recommendations would result in a regional airport system consisting of at least 15 publicly owned, public use airports by the Year 2000. This publicly owned core system would have sufficient capacity to handle 80 percent of the region's future based aircraft and could accommodate over three-fourths of the expected operations. In 1979, the total cost of implementation was estimated at \$135 million. This cost would be spread over the 20 year period of the plan and includes \$79 million in land costs and \$56 million in facility improvement costs. Much of the improvement costs are required to bring the privately owned airports into conformance with FAA standards, which apply to publicly owned facilities. The majority of these proposals are eligible for federal airport development funds. These are provided through the Airport Development Aid Program Trust Fund from user charges on commercial air passengers, aviation fuel and other aviation related use taxes. Public acquisition and facility improvement costs could then be shared by federal, state, and local governments. However, full implementation of this plan component depends on significant increases in the region's share of federal funds.

Freight System Plan

Evaluation of the problems and benefits apparent with each mode is discussed in Chapter V. The nature of this component does not lend itself to assigning costs.

VII. PLANNING PROCESS

The Year 2000 Planning Process published in July 1982 presents a detailed narrative of the entire process including the role of public participation, an explanation of the organizational framework and a complete documentation of the technical evaluation of the alternatives. The following sections present a summary of the planning process.

Overview

The staff efforts on the development of the Plan were coordinated by a subcommittee of the CATS Work Program Committee (WPC), the Transportation System Development (TSD) subcommittee. This TSD subcommittee consisted of representatives of Illinois DOT, NIPC, RTA, Cook County, Lake County, City of Chicago, CTA and CATS. TSD subcommittee meetings were, however, open to all members of the WPC, and other members did frequently attend and participate in the discussions. Also, the subcommittee reported regularly to the WPC, and all major decisions were approved by the WPC. The subcommittee was in existence for the 18 month duration of the plan development process, which began in the fall of 1978. One of the subcommittee's principal tasks was to integrate the technical and public participation aspects of the plan development work.

The initial technical analysis included evaluating the impact of future travel on the existing transportation system and forecasting financial resources available for improving the system. From these efforts four test alternatives, termed A, B, C, and D, were developed. A technical performance evaluation of these four alternatives was performed using the procedures described in the publication "Year 2000 Transportation System Plan Methods and Models." Alternatives were also evaluated against the policies of the Regional Comprehensive Plan and checked for consistency with the other functional plans. A public review of the alternatives was simultaneously conducted during the technical evaluation. This public participation is discussed in the next section.

Based on the public review and the evaluations, a set of major projects were identified as potential candidates for inclusion in the Plan. These projects were cast into two alternatives E and F, which were approved for review and evaluation by the WPC and a NIPC subcommittee. The alternatives were evaluated in the same manner as the first set of alternatives with the addition of an extensive analysis of energy impacts on plan performance.

By July 1979 a general consensus was developing on the major highway and transit facilities for the suburban area. The CATS staff technical work on the plan was also completed, and the results were sent to the Policy Committee. At that time the Illinois General Assembly

was considering transportation funding options, and the Burnham Interstate dedesignation was being initiated. Action on the Plan was halted until the results of these important initiatives could become finalized and accounted for in the planning process. In late October the process began again, and the major changes resulting from the policy decisions over the summer were reflected in the recommended plan, which was evaluated and adjusted by the TSD subcommittee.

At the January 29, 1980 WPC meeting the major facilities recommended by the TSD subcommittee was approved and passed on to the Policy Committee. At the February 21, 1980 CATS Policy Committee Meeting an Executive Summary was endorsed, and the staff was directed to prepare a plan document for public and official review. After this review the plan document, which included the previously updated aviation component and updated intercity and freight components, was submitted to the Policy Committee for final endorsement at the 1980 summer Policy Committee meeting.

Public and Local Official Involvement

Planners in large metropolitan areas must address several audiences or publics. Reaching the technical and planning communities is, to a certain extent, built into the system. Reaching the general public and the hundreds of elected officials in an area such as northeastern Illinois requires particular effort. In developing this plan two series of public meetings were conducted to solicit public input.

The first series, 30 sessions held during January, February and March of 1979, involved informational presentations in slide show format on the long range planning process in general and particular projects being considered for inclusion in the Plan. At least one meeting was held in each of the five collar counties. In Cook County a meeting with each of the six regional councils of mayors was conducted and a general public meeting was held in Chicago. The meetings were publicized in several ways. First, a regular council meeting announcement, including an agenda, was sent to member communities and to organizations, media, and residents who have attended previous meetings. A general press release, "Planning Transportation for the Year 2000," describing the subject and inviting public involvement, was sent to newspapers and radios covering each council area; a final paragraph was attached giving specific meeting information. Finally, in many cases individual council chairmen or county officials issued personal invitations to groups or persons thought to have an interest in future transportation developments. All meetings were open for comments by anyone in attendance.

Comments obtained during this first round of meetings were considered along with technical evaluations in arriving at two Year 2000 Plan alternatives labelled E and F. These alternatives were presented to local officials and the general public in a second series of meetings throughout the region in spring 1979. Elected officials representing each of the region's over 260 municipalities were individually contacted. Again the press was used to publicize the effort. A press release, "Energy, Funding and Transportation," was distributed

to media outlets in the region together with project lists and maps showing the two plan alternatives. The release included meeting dates and a brief background discussion. Local media were called with specific information on meeting times and locations.

During May 1980 a draft of the complete Plan was reviewed publicly. The draft was sent to transportation and planning agencies and the chief elected official of each of the municipalities within the region. Local media (including over one hundred and fifty community and ethnic newspapers) and civic organizations (including over two hundred and fifty local community organizations) were informed of the draft Plan and invited to a special CATS open house to discuss and comment on the Plan. Also, four public hearings on the Plan were held by NIPC. These formal hearings were also well publicized throughout the region. The result of this public participation effort was a public response that was very valuable in the refinement of this Plan document. A list of all the public meetings held during Plan development is presented in Table 7.

During the entire planning process media coverage played an important role by informing the public of the planning effort. On various occasions the major metropolitan daily newspapers carried general stories on the Plan development including lists of projects and maps. Local newspapers often focused their coverage on issues affecting their areas. Numerous interviews with CATS staff and staff of other participating agencies were aired over various radio stations. Also, several radio talk shows were devoted to the Plan. Television coverage included brief news show features as well as a half hour talk show focusing on the draft Plan.

The great amount of public exposure during the entire process through both the meetings and the media allowed the key issues affecting the Plan to be publicly debated. The public response was gratifying and provided a valuable contribution to the production of this Plan.

Updates

In 1981 an update of the Plan took place with the principal thrust of providing an explicit policy framework component for the Plan. The policy framework section produced in this update ensured complete consistency between the Comprehensive General Plan, the other functional plans such as the "Regional Land Use Policy Plan" and the "Regional Open Space and Recreational Policy Plan," and the Year 2000 Transportation System Development Plan. Other more minor changes to the Plan also resulted from the 1981 update work.

In 1983 another update to the Plan was made. This update included a major revision to the Freight System Plan chapter with the aid of the Freight Advisory Committee which consisted of representatives from all modes of freight transportation providers, users and involved government agencies. The 1983 update also included the addition of a bicycle system plan component.

Table 7

YEAR 2000 PLANNING PROCESS LIST OF PUBLIC MEETINGS
(Date, Group, and Location)

First Round

1/11/79 NIPC - PPD Committee: NIPC offices Chicago
 1/11/79 McHenry Regional Planning Commission: Woodstock
 1/26/79 Lake County Highway and Planning Departments: Libertyville
 1/30/79 Lake County: Waukegan*
 1/31/79 Central Region Council of Mayors: Western Springs*
 2/1/79 Joliet Urbanized Area Council of Mayors: Lockport*
 2/2/79 Regionwide general public: NIPC offices Chicago*
 2/6/79 North Shore Council of Mayors: Northfield*
 2/8/79 Northwest Municipal Conference Transportation Committee:
 Mount Prospect*
 2/9/79 Will County Highway Committee of the County Board:
 Will County Highway Department offices
 2/13/79 Transit Carriers Coordinating Committee: CATS Conference Room
 2/14/79 DuPage Mayors and Managers Association Transportation
 Committee: Oakbrook
 2/14/79 Will County: Joliet*
 2/15/79 Trust Luncheon: Downtown Chicago*
 2/20/79 Chicago Association of Commerce & Industry: Downtown Chicago
 2/21/79 McHenry County: Woodstock*
 2/23/79 Southwest Council of Mayors: Evergreen Park*
 3/1/79 Kane County: Geneva*
 3/7/79 Lake Urbanized Area: Libertyville*
 3/12/79 South Regional Council of Mayors Transportation Committee: Steger*
 3/13/79 North Central Council of Mayors: Broadview*
 3/13/79 Lockport Planning Commission: Lockport
 3/22/79 Round Lake Beach Area: Round Lake Beach
 3/27/79 Barrington Area COG: Barrington

Second Round

6/4/79 Will County: Joliet*
 6/5/79 Lake County: Waukegan*
 6/7/79 Regionwide general public: NIPC office Chicago*
 6/7/79 NTRPC Commissioner: Hammond
 6/9/79 NIPC Assembly of Mayors (display): Rosemont
 6/13/79 DuPage County: Wheaton*
 6/14/79 RTA Board: Chicago
 6/14/79 McHenry County: Woodstock*
 6/15/79 Kane County: Geneva*
 6/26/79 Will County Highway Committee of the County Board:
 Will County Highway Department offices

Final Round

5/20/80 NIPC Public Hearing: Frankfort*
 5/21/80 NIPC Public Hearing: NIPC Offices Chicago*
 5/21/80 NIPC Public Hearing: Glen Ellyn*
 5/22/80 NIPC Public Hearing: Fox Lake*
 5/29/80 Open House: CATS Offices Chicago*

*NOTE:

All meetings were open to the public. Those with an asterisk were well publicized with the public specifically invited through press releases and other means.

Each of the update efforts was guided by the CATS Work Program Committee and the NIPC Planning and Policy Development Committee. The updates were subject to Council of Mayor review and public review including formal public hearings held by NIPC. Both updates were endorsed by the CATS Policy Committee and adopted by NIPC. The results of these updates are included in this document.

Future Activities

The Year 2000 Transportation System Development Plan has been reviewed by the Northwestern Indiana Regional Planning Commission (NIRPC), the Southeastern Wisconsin Regional Planning Commission (SEWRPC) and the Illinois-Indiana Bi-State Regional Planning Commission. In the near future the Northwestern Indiana Regional Planning Commission will be completing a year 2000 transportation plan for its area of responsibility. There will be close liaison between CATS and NIRPC in order to assure that the plans and transportation facilities are fully coordinated.

No viable transportation plan is static; the planning process must allow modifications to any approved plan as the planning environment changes. This plan has been updated twice and will undergo a major review in 1985 or 1986. As subregional and project specific implementation studies are completed the Plan will be further detailed. Future reports will also record progress in implementing the plan. However, during the next few years there are two major issues areas that have the potential of radically altering the planning environment. Depending on the resolution of these issues major changes may be necessary in the Plan. The issue areas identified as possessing this potential are:

The transit and highway components of the Plan are based on the financial forecasts discussed in Chapter VI. These forecasts assumed a reversal of the trend toward declining real dollar expenditures for transportation. This reversal will require changes at both the state and national levels in the mechanisms for funding transportation. If no change occurs (i.e., funding remains dependent upon relatively constant per gallon gasoline taxes and transit fares) then the absolute dollars for transportation will decline slightly. With inflation at high levels the real dollars would drastically decline. The Plan then would have to be substantially modified. The financial situation will be closely monitored annually and the Plan revised accordingly.

Alternative energy supply futures including a scenario with high motor fuel prices and low availability were considered in the plan development process. Projects were selected for inclusion in the Plan partly based on their ability to perform well in a variety of future energy conditions. As a great deal of uncertainty exists at this time about future energy price and availability this approach was judged the most prudent. However, if the energy situation is clarified in such a way that a more definitive idea about the future energy situation emerges then the Plan will be reassessed. This would be particularly important if severe shortages were expected.

Resolution of these issue areas has financial implications. Indeed, most of the current concerns regarding transportation center on questions of financial support. The monitoring of the financial situation will be a critical factor in future plan updates. The last several years has seen a decline in real dollars for transportation improvements. Over the long run transportation expenditures have, however, proven a good investment, enabling the region to achieve a high level of economic development. Recognition of the importance of transportation to the well-being of the region will insure adequate future funding and assure that northeastern Illinois will remain the transportation hub of the nation.

References

- Chicago Area Transportation Study, Final Report, Volume III: Transportation Plan, 1962
- Chicago Area Transportation Study, Network Sensitive Mode Choice Models: A Two Stage Approach to Mode Choice Modelling for Use in Preparing Year 2000 Transportation System Development Plan, June 1978
- Chicago Area Transportation Study, A Report on the Chicago Regional Freight System Plan, July 1983
- Chicago Area Transportation Study, Transportation Plan for the Mobility Limited, The Section 504 Transition Plan for the Northeastern Illinois Region, December 1980
- Chicago Area Transportation Study, Year 2000 Planning Process, July 1982
- Chicago Area Transportation Study, Year 2000 Regional Airport System Plan: Summary and Recommendations, February 1980
- Chicago Area Transportation Study, Year 2000 System Plan Methods and Models: Travel Forecasting Process, April 1979
- Chicago Area Transportation Study and Lake Porter County Regional Transportation and 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 (updated and republished March 1976)
- City of Chicago, Department of Development and Planning, The Comprehensive Plan of Chicago, 1966
- Fox River Valley Transportation Study, Volume II - Recommended Street and Highway Improvement Plan, January 1969
- Joliet Area Transportation Study, Volume 2 - Forecasts and Plan Preparation, October 1969
- Lake County Transportation Study, Preparation of a Transportation Plan for Lake County, Illinois, August 1969
- Northeastern Illinois Planning Commission, Comprehensive General Plan for the Development of the Northeastern Illinois Counties Area, August 1977



The Chicago Area Transportation Study (CATS) is the Metropolitan Planning Organization (MPO) for northeastern Illinois. Designated by the Governor of Illinois to be responsible, in cooperation with the state, for carrying out the planning provisions of the federal highway and mass transportation acts, CATS has a study area which covers the Illinois counties of Cook, DuPage, Kane, Lake, McHenry and Will.

CATS is sponsored and directed by a Policy Committee whose members represent the State of Illinois, City of Chicago, the six counties, suburban municipalities, regional agencies, transit operators, Illinois State Toll Highway Authority and the Federal Highway and Urban Mass Transportation Administrations.

Assisting the Policy Committee in carrying out the responsibilities of the MPO are the Council of Mayors and the Work Program Committee. The Council of Mayors, organized into suburban regional councils and the City of Chicago, provides a direct link with the area's more than 260 municipalities. Each of the suburban councils and the City of Chicago is responsible for recommending local transportation improvements in its area. The Work Program Committee is a standing body which oversees technical aspects of CATS work activities and advises on regional transportation issues. This group is supported by technical committees in the functional areas of transit carrier coordination, rail freight, air quality, transportation for the mobility limited, aviation, planning and transportation operations.

CATS was organized in 1955 with initial sponsorship and financing from a Policy Committee made up of the State of Illinois, Cook County and the City of Chicago in cooperation with the U.S. Bureau of Public Roads. Under the Federal Aid Highway Act of 1967, and by agreement among the sponsoring CATS agencies, activities were expanded to include comprehensive continuing and cooperative transportation planning for the Chicago urbanized area. The study area was expanded in 1967 to include all of the six counties of northeastern Illinois.

As MPO, CATS has the lead responsibility for preparing and endorsing the following products:

- 1) Long range Transportation Plan; 2) Five-year Transportation Improvement Program; 3) Annual Element for transportation investment; 4) implementation studies in support of engineering and construction activities; 5) Unified Work Program for transportation planning.

CATS fulfills these responsibilities cooperatively with the Policy Committee agencies, as well as other regional and local planning agencies.

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