2020 REGIONAL TRANSPORTATION PLAN

DESTINATION 2020

CATS POLICY COMMITTEE

STATE
KIRK BROWN, Chairman
Secretary
Illinois Department of Transportation

REGIONAL
RICHARD BACIGALUPO
Executive Director
Representing Regional Transportation Authority

RAE RUPP SRCH
Commissioner
Representing Northeastern Illinois Planning Commission

LOCAL GOVERNMENTS
JEFFERY SCHIELKE
Mayor
City of Batavia
Representing CATS Council of Mayors

THOMAS R. WALKER, Vice Chairman
Commissioner
Chicago Department of Transportation
Representing City of Chicago

AL PRITCHETT
Chief Administrative Officer
Representing Cook County

CHUCK TOKARSKI
Director of Transportation
Representing DuPage County

JEFFREY DAILEY
Director of Transportation
Representing Kane County

ROBERT L. GREVER
County Board Chairman
Lake County

MICHAEL P. MAGNUSON
County Engineer
Representing McHenry County

SHELDON LATZ
Chief Highway Engineer
Representing Will County

TRANSPORTATION OPERATORS
FRANK KRUESI
President
Representing Chicago Transit Authority

MICHAEL W. PAYETTE
Vice President
Union Pacific Railroad
Representing Class I Railroad Companies

JEFFREY R. LADD
Chairman
Commuter Rail Board-Metra

JOHN D. RITA
South Suburban Mass Transit District
Representing Mass Transit Districts

JOHN McCARTHY
President, Continental Air Transport
Representing Private Transportation Providers

FLORENCE H. BOONE
Chairman
Suburban Bus Board-Pace

KESTUTIS P. SUSINSKAS
Chief Engineer
Representing Illinois State Toll Highway Authority

U.S.
RONALD C. MARSHALL
Division Administrator
Representing Federal Highway Administration

JOEL P. ETTINGER
Regional Administrator
Representing Federal Transit Administration

ARISTIDE E. BICIUNAS-Secretary
Executive Director
Chicago Area Transportation Study

CATS was formed in 1955 to develop the first comprehensive long-range transportation plan for the northeastern Illinois region. Since then the CATS Policy Committee has been designated by the governor of Illinois and northeastern Illinois local officials as the metropolitan planning organization (MPO) for the region. MPOs have been mandated by federal legislation to provide additional opportunities for public participation in transportation planning.

The Policy Committee is the metropolitan planning organization for northeastern Illinois. It plans, develops and maintains an affordable, safe and efficient transportation system for the region, and provides the forum through which local decision makers develop regional plans and programs.

The Work Program Committee reviews and makes recommendations to the Policy Committee on transportation matters presented to CATS and carries out any other duties the Policy Committee shall assign to it. It coordinates the activities of the committees, subcommittees and task forces reporting to the Work Program Committee.

This document was prepared by the Chicago Area Transportation Study sponsored by the agencies on the Policy Committee. The report has been financed in part by the U.S. Department of Transportation, Federal Highway Administration and the Federal Transit Administration and authorized by the State of Illinois.

DESTINATION 2020

2020 REGIONAL TRANSPORTATION PLAN

August 1998

Prepared by
Chicago Area Transportation Study
300 West Adams Street
Chicago, Illinois 60606
312. 793.3460
Fax 312.793.3481

Adopted by
Chicago Area Transportation Study
Northeastern Illinois Planning Commission

CHICAGO AREA TRANSPORTATION STUDY 300 West Adams Street Chicago, Illinois 60606 (312) 793-3456 Fax (312) 793-3481

TO ALL INTERESTED PARTIES:

The Chicago Area Transportation Study (CATS) has completed its sixth regional transportation plan for northeastern Illinois. The 2020 Regional Transportation Plan (RTP) continues the vision for our transportation system into the next century. The 2020 RTP was developed as part of the regional planning effort started with the first plan in 1962. The plan is a coordinated multimodal ground transportation system to maintain our existing transportation investments and serve our future travel needs through 2020. The plan is integrated with northeastern Illinois' land resource management strategies and air quality goals.

Significant social and economic changes have occurred in the region since that first 1962 plan. These changes have affected the demand for travel that the transportation system must serve. The transportation effects of these changes have contributed to increased trip lengths, traffic congestion and decreasing transit ridership. As a first step in its response to these new travel demands, the plan includes an extensive investigation of the interaction between transportation and land use. Finally, the plan addresses the fact that much of our system has been in place for decades and is in need of capital investment to bring it into a state of good repair.

The 2020 RTP is based on a set of seven goals and 39 objectives. These goals and objectives along with the 2020 population and employment forecasts and policy tools developed by the Northeastern Illinois Planning Commission provided the framework for the plan.

The 2020 RTP makes recommendations in 10 major areas based on an assessment of total system needs, growth forecasts and projected financial resources. In recognition of the high priority given to system maintenance, the plan assigns over 80 percent of projected resources to maintain highway and transit systems. The plan identifies 20 major capital improvements to expand the existing expressway and rail transit systems. The plan designates a 1,387 mile Strategic Regional Arterial System to supplement the expressway system for longer distance travel. The plan includes a new Strategic Regional Transit (SRT) System of integrated high capacity transit services and facilities to address the improvement needs of the existing system. The plan includes an expansion program of local suburban bus service to improve options in areas not covered by the SRT System. The plan includes five sets of policies and strategies for bicycles and pedestrian facilities, intermodal facilities, transportation management options, congestion reduction and the development of intelligent transportation system technologies. Finally, the plan includes a financial strategy and positive air quality analysis.

The recommendations included in the plan were developed through an extensive process involving elected and appointed officials, transportation professionals, transportation providers, private citizens and representatives of business, public interest and civic groups. The plan is fully consistent with federal rules guiding transportation and air quality planning and analysis.

The need to prepare a new transportation plan to guide our investment decisions for the next twenty years has been met. The growth forecasts and other assumptions in the plan will be continuously monitored and updated if necessary in three years.

We hope that government, business, interest groups and citizens within the region will take an active interest in the 2020 Regional Transportation Plan. We further hope that you will take the recommendations included in the plan into consideration in preparing your investment decisions. Finally, we look forward to your continued participation in and support of our efforts to maintain and improve the transportation system in northeastern Illinois.

Sincerely,

Kirk Brown
Chairman

CHICAGO AREA TRANSPORTATION STUDY
POLICY COMMITTEE

RESOLUTION
Number 97-06

A RESOLUTION APPROVING THE 2020 REGIONAL TRANSPORTATION PLAN FOR NORTHEASTERN ILLINOIS

WHEREAS, the Policy Committee of the Chicago Area Transportation Study (CATS) is the Metropolitan Planning Organization (MPO) for northeastern Illinois, designated by the Governor and northeastern Illinois local officials as being responsible, together with the state of Illinois, for carrying out the provisions of 23 U.S. Code 134 and 49 U.S. 5 3 03 -06 for six counties in northeastern Illinois and parts of Kendall County; and

WHEREAS, as the MPO, CATS is required to prepare a fiscally constrained, long range surface transportation plan; and

WHEREAS, CATS through the conduct of a continuing, comprehensive and coordinated transportation planning process consistent with metropolitan transportation planning rules, has prepared the 2020 Regional Transportation Plan (2020 RTP); and

WHEREAS, the Northeastern Illinois Planning Commission (NIPC) prepared two modified trends growth forecast scenarios for 2020 for use in the 2020 RTP. One scenario assumed that air carrier capacity would be provided through improvements to existing airports, O'Hare and Midway. The other scenario assumed that air service capacity would be provided through a combination of O'Hare, Midway and a new South Suburban Airport; and

WHEREAS, the 2020 RTP includes those projects, systems, policies and strategies needed under both scenarios; and

WHEREAS, the 2020 RTP recognizes the high priority of maintaining our existing transportation system in the short as well as long term; and

WHEREAS, the 2020 RTP recognizes that there are many unmet regional transportation system needs and that additional funds are necessary to meet these needs-, and

WHEREAS, the 2020 RTP conforms to the purposes of the State Implementation Plan (SIP) and Sections 174 and 176(c) and (d) of the Clean Air Act (42 U.S.C. 7504, 7506[c] and [d]); and

WHEREAS, public comment has been received and considered by the Policy Committee and consultation has been carried out with federal, state and local agencies, both according to the procedures outlined in 23 CFR Part 450 and 40 CFR Part 5 1.

NOW THEREFORE BE IT RESOLVED THAT, the Policy Committee approves the 2020 Regional Transportation Plan as the official transportation plan for the metropolitan area;

BE IT FURTHER RESOLVED THAT, efforts should be made to see that the projects, systems, policies and strategies in the 2020 RTP be implemented; and

BE IT FURTHER RESOLVED THAT, the Policy Committee believes that the region should take steps now to increase capital funding for transportation improvements in northeastern Illinois; and

BE IT FURTHER RESOLVED THAT, the Secretary of the Policy Committee is hereby authorized and directed to transmit certified copies of this resolution and document to the Governor of Illinois, and through the Illinois Department of Transportation, to the Regional Administrator of the Federal Highway Administration and the Regional Administrator of the Federal Transit Administration.

The above and foregoing resolution is hereby adopted this 13th day of November 1997.

Thomas R. Walker
Vice Chairman, CATS Policy Committee

Aristide E. Biciunas
Secretary, CATS Policy Committee

STATE OF ILLINOIS)
COUNTY OF COOK)

I, _____, do hereby certify that the above and foregoing Resolution consisting of two typewritten pages is a true and correct xerographic copy of the original Resolution adopted by the Policy Committee on November 13, 1997.

Janet Marie Daniel

"OFFICIAL SEAL"
JANET MARIE DANIEL
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 1/25/98

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF FIGURES cont.

Chapter

EXECUTIVE SUMMARY

The *2020 Regional Transportation Plan (RTP)* is the long-range guide for major investments in northeastern Illinois' multimodal ground transportation system. The *2020 RTP* recommends major projects, systems, policies and strategies designed to maintain our existing transportation investments and serve our future travel needs. Agencies responsible for operating and maintaining the transportation system will develop their plans and programs within the *2020 RTP*'s framework. The 2020 RTP is integrated with northeastern Illinois' land resource management strategies and air quality goals and meets federal transportation planning requirements.

The Chicago Area Transportation Study (CATS) developed the *2020 RTP* under the guidance of the Regional Transportation Plan Committee. The planning process involved state and local elected and appointed officials, professional staff from many units of local government, regional transportation providers, planners, private citizens, and representatives of business, public interest and civic groups. Public involvement was a critical element of the planning process and included special public access opportunities at key decision points.

An important early step in the process was the development of goals and objectives to guide plan development. The *2020 RTP* includes goals in seven areas: accessibility and mobility; transportation and land development; transportation system efficiency; environmental; economic; social; and financial. The seven goals are accompanied by 39 objectives, which are detailed in Chapter 3. The *2020 RTP's* recommendations are the result of balancing different and sometimes competing goals.

Current System and Regional Growth Forecasts

The northeastern Illinois region is currently home to over 7 million people and nearly 4 million jobs. The region's transportation system is mature, complex and far-reaching. An extensive system of interstate and arterial highways is complemented by the nation's second largest transit system. The region is also at the center of the nation's freight railroad network and serves as a major intermodal freight hub. The region's

The fact that much of the region's transportation system has been in place for decades, compounded by past funding shortfalls, results in a significant need for capital investment to bring the transportation system to a state of good repair.

The Northeastern Illinois Planning Commission (NIPC) developed the regional forecasts of population, household and employment. After establishing the initial regional forecasts, NIPC explored desirable development patterns and the feasibility of land use policies with regional leaders. Substantial attention was also given to the interaction between land use and transportation. The NIPC-endorsed forecasts were the product of this work. The *2020 RTP* was based on these forecasts. Strong regional growth is predicted for the next two decades, in contrast to the region's 1970 to 1990 experience. The region's population is forecast to grow to slightly over 9 million people by 2020 and employment is forecast to increase to nearly 5.4 million jobs. This will result in a significant increase in travel demand, with average daily trips forecast to grow by 25 percent to more than 22 million. Growth in auto vehicle miles of travel is predicted to continue to outpace regional population, household and employment growth.

At the beginning of the *2020 RTP* process it was recognized that the decision regarding whether to construct a third regional airport or to accommodate future air travel needs at O'Hare and Midway airports was not likely to be resolved before the plan's completion. To deal with this situation, two future airport scenarios were used. Both assumed that adequate air carrier capacity would be provided such that the economic development of the region would not be inhibited. One scenario assumed that all of the capacity would be provided through improvements at the existing airports, O'Hare and Midway. The other assumed that the proposed South Suburban Airport would be built and additional enplanements would be served by a combination of O'Hare, Midway and the South Suburban Airport. Air service capacity decision-making is not within the purview of the *2020 RTP*. Neither the feasibility nor the desirability of either airport scenario are addressed in the plan.

Different future distributions of population, households and employment were developed by NIPC for each airport scenario. Projects, systems, policies and strategies were chosen based on the requirement that

Financial Strategy

Projections of the funds expected to be available for transportation purposes and the costs associated with the existing system and the proposed expansions were developed. The projections of transportation revenues were based on traditional funding sources, such as gasoline and sales taxes, tolls and fares. These projections assume periodic funding increases will be enacted, as has historically been the case. Cost estimates include the costs of operating the existing system, the capital costs to repair, rebuild and replace elements of the existing system and the capital and operating costs of additions to the system.

The conclusion from the analysis of the revenue projections and the assessment of our transportation needs is that the region is not likely to have enough resources to accomplish the goal of bringing the entire system into a state of good repair and providing all the additional services the forecasted growth suggests the region will need. Many worthy projects were left out of the fiscally-constrained plan. Projected resources for other plan components were limited. In addition, significant unmet capital maintenance needs still remain for both the highway and transit systems.

Major Plan Components

Based on the assessment of total needs, projected financial resources and the high priority given to system maintenance, the *2020 RTP* includes 10 major plan components, a financial strategy and an air quality conformity analysis. The 10 components are:

- Over 80 percent of projected resources go to maintain the existing highway and transit systems;
- Twenty major capital improvements to expand the existing expressway system lane miles by 16 percent and the rail transit system vehicle miles by 14 percent;
- A designated 1,387 mile Strategic Regional Arterial System of roads, continued from the previous plan, to supplement the expressway system for longer distance subregional travel;
- A Strategic Regional Transit System (SRT) of integrated high capacity transit services and facilities to address the improvement needs of the existing system;
- A $50 million expansion program of local suburban bus service to improve travel options in developed and developing areas not covered by the SRT System;
- A set of five bicycle and pedestrian policies to improve and increase bicycle and pedestrian
- A set of six intermodal policies to identify and address the operational needs of the intermodal freight industry and to enhance the efficiency of intermodal transportation;
- A set of eleven transportation management strategies to reduce and more efficiently manage the demand for transportation facilities, systems and services, to improve the operation of the transportation system and to improve air quality;
- A set of congestion reduction strategies included in a separately adopted Congestion Management System Plan to lessen congestion and improve mobility and accessibility through multimodal solutions; and
- Support for the analysis and implementation of cost effective Intelligent Transportation Systems (ITS) technologies as tools to improve the safety and efficiency of the system.

While the *2020 RTP* was developed under the fiscal constraint requirements of federal rules, the plan does not ignore the total transportation needs of the region. The *2020 RTP* identifies additional projects which merit further study and additional improvements in all the other plan components.

Challenges

With the endorsement of the *2020 RTP*, the region must move forward on several major fronts:

- Aggressively pursue both short and long term increases in needed capital funds to avert a transportation crisis and meet the region's transportation needs;
- Advance plan components to implementation, whether they be major projects, systems, policies or strategies;
- Monitor the region's growth to ensure the plan stays abreast of the region's needs;
- Initiate feasibility studies for projects needed but not included in the *2020 RTP*; and
- Monitor the process to resolve the region's air service capacity needs.

The importance of new sources of capital funds for the entire transit and highway system cannot be overstated or overlooked. Success in bringing about the increases in existing programs assumed in the financial projections is necessary to avert a near term financial crisis and pay for the projects included in this plan. Over the longer term of the plan, funding increases over and above those contained in the financial projections must continue to be pursued to meet both our total capital maintenance needs and the additional transportation capacity needs generated by a growing region. Failure to secure additional resources risks a crisis due to a deterioration in our transportation

CHAPTER I
INTRODUCTION

Nearly twenty-two million trips are made every day in northeastern Illinois. The ground transportation system that serves these trips affects the lives of every person in a region with a population of over seven million people. A good transportation system supports the social, economic and environmental well-being of our citizens. The way we deal today with the issues of land development, accessibility, economic vitality, mobility and environmental protection will affect our quality of life for years to come. The provision of good transportation service, however, is expensive and financial resources are limited. Therefore, it is important that we plan our future major transportation improvements to ensure the best system possible with the financial resources expected to be available.

The *2020 Regional Transportation Plan (RTP)* is the sixth regional transportation plan for northeastern Illinois. The first plan was published by the Chicago Area Transportation Study (CATS) in 1962. That highway and transit plan had a horizon year of 1980 and covered Cook County and a portion of DuPage County. As the region grew, the regional plan was revised and its scope expanded in 1971, 1974, 1980 and 1989. Periodic updates of these plans occurred in intervening years. CATS' planning region has grown to include all of Cook, DuPage, Lake, McHenry, Kane and Will counties and a portion of northeastern Kendall County.

The *2020 RTP* is a coordinated multimodal ground transportation system plan to maintain our existing transportation investments and serve our future travel needs through 2020. The plan is integrated with northeastern Illinois' land resource management strategies and air quality goals.

The *2020 RTP* replaces the *2010 Transportation System Development Plan (TSD)*, adopted in 1989 and updated in 1993. The process to develop the *2020 RTP*, called *Destination 2020*, began in the fall of 1994 and was in response to three major issues:

- Changes in growth and development patterns had occurred since the original *2010 TSD* and its supporting forecasts were developed;
- The horizon year of our current official plan was less than twenty years away and there was a need
- There was a need to fully incorporate the directives of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

The *2020 RTP* was developed by CATS. CATS is directed by a Policy Committee which is the designated Metropolitan Planning Organization (MPO) for the northeastern Illinois region. The Policy Committee consists of policy level representatives of its member local governments, transportation operating agencies and planning agencies. CATS received technical assistance from all its member agencies throughout the *Destination 2020* process. In particular, CATS worked in close cooperation with the Northeastern Illinois Planning Commission (NIPC), the regional comprehensive planning agency. NIPC was responsible for the development of the population and employment forecasts CATS used for plan development and evaluation. NIPC and CATS also worked cooperatively on an extensive analysis of the relationship between transportation and land use in northeastern Illinois as an initial step in the development of the forecasts and regional transportation plan. CATS and NIPC, using a forecast allocation model called DRAM/EMPAL and the combined transportation models, conducted extensive tests of these transportation and land use interactions.

The *2020 RTP* includes major transportation projects, policies, systems and strategies necessary to serve the region's future travel needs, which are expected to grow significantly between now and 2020. The plan's assessment of the projected financial resources indicates that there will not be enough resources to substantially expand the transportation system. The vast majority of resources will be needed to keep pace with the capital maintenance needs of the existing system. These needs include repairing, rebuilding and replacing parts of the system. Hard choices were made to select the few new projects identified in the plan.

The *2020 RTP* is a guide for investments to meet our long-range transportation needs and strives to coordinate transportation with other regional goals. The endorsement of this plan by the MPO makes the region eligible to continue receiving federal transportation funds. The plan includes ways to complement the major new projects. The plan includes an emphasis on improvements to the existing arterial highway and transit systems. The plan also includes policies in support of bicycle and pedestrian transportation modes

The northeastern Illinois region does not meet the national air quality standards for ozone. The plan includes projects that will contribute to the reduction of volatile organic compounds, the substances that lead to ozone formation. The *2020 RTP* will accomplish this through proposed transit and highway projects, alternatives to auto travel through bicycle and pedestrian modes, a reduction in congestion through operational improvements, transportation management strategies and support for land use policies that will direct growth.

The CATS Work Program Committee established the RTP Committee to direct *Destination 2020*. The RTP Committee was assisted by several CATS committees, subcommittees and task forces and also established four working groups. A key component of *Destination 2020* was a significant increase from past planning efforts in the number of opportunities and the variety of methods for the public to learn about and be involved in the planning process.

Organization of the Plan

Chapter 2, **Public Involvement,** describes the public involvement strategies that were adopted for *Destination 2020*. Chapters 3 and 4, **Regional Planning and Policy Framework** and **Regional Trends and the Existing Transportation System**, describe the myriad of complex issues that are the foundation of the plan and the impacts of the forecasted growth on the existing transportation system.

Chapter 5, **2020 Regional Transportation Plan**, describes the components of the plan. The *2020 RTP* addresses the capital maintenance needs of the system more extensively than previous plans did. The plan attempts to quantify these needs more thoroughly by establishing a proposed funding level, approximately 80 percent of projected resources, that will be necessary to keep the system operating in a safe and usable condition. The plan does not identify specific capital maintenance projects. These projects are identified through the short-term Transportation Improvement Program (TIP) process.

The proposed transit and highway projects are delineated in this chapter. These projects will require about 15 percent of the projected financial resources. Rather, they identify corridors where a new project will relieve existing problems or serve future needs. The projects contained in the plan allow the implementation process to proceed. Corridor and project planning studies must be completed before implementing any major transportation investment. These studies must consider the land use and environmental impacts of the project. The *2020 RTP* encourages the establishment of corridor planning councils to participate in these studies. The development of the rest of the region's ground transportation system is dealt with in a more generalized and policy-based fashion.

The plan attempts to provide the guidance necessary to address regional issues and concerns, but recognizes that decisions on smaller scale projects should be made in a subregional or local planning context. In this vein, the plan continues the concept of a Strategic Regional Arterial (SRA) System. The system is slightly modified from the one first included in the *2010 TSD*; however, the system's purpose remains to supplement the expressway system in handling subregional travel. The SRA System is intended to provide a unified regional framework of arterials to address travel needs. The plan incorporates the recommendations from the completed detailed route studies conducted by the Illinois Department of Transportation. The success of this approach for arterials has led to the development in the *2020 RTP* of a similar system for public transit. The Strategic Regional Transit (SRT) System, a new component of the regional plan, is an integrated network of high capacity transit facilities and services that are vital to the region for mobility, congestion relief and economic development.

The *2020 RTP* also includes several other new or expanded components. The bicycle and pedestrian component includes policies to develop bicycling and walking as transportation modes. The intermodal component includes policies that support intermodal freight transportation, one of the region's major industries. The transportation management component includes support for strategies to reduce the demand for transportation facilities and improve the operation of the transportation system. The congestion management component includes not only specific strategies for reducing congestion, but also includes

The performance of the *2020 RTP* is assessed in Chapter 6, **Performance of the 2020 Regional Transportation Plan**. The forecasted growth between 1996 and 2020 in population (20%), households (23%) and employment (30%) in the region will result in increased travel. While responding to these additional travel demands, the plan must also contribute to reducing vehicle emissions, support regional goals and meet federal requirements. The improvement in the performance of the system, development of new technologies, creation of new revenues and changing growth patterns are just a few of the challenges that the region faces in future updates.

Chapter 7, **Financial Strategy,** outlines a projection of future revenues from existing sources. These projections do not represent budgetary commitments. It also identifies transportation funding needs, routine operating costs of the existing system and the estimated capital and operating costs of potential major projects. While the plan does not endorse any specific new funding sources, it does present potential traditional and innovative opportunities for the region to pursue.

The final chapter, 8, is **Plan Implementation**. Because most of the region's transportation resources over the next 20-25 years will be devoted to maintaining the current system, many of the major projects involve improving that system rather than building new facilities. It is more important than ever to monitor the implementation of these projects so the plan can respond quickly to changing conditions. Major investment studies for federally funded projects, other detailed corridor studies and the SRA studies should move forward, while the SRT studies should be initiated. All projects must be coordinated with system management strategies. The limited number of new projects included in the fiscally constrained plan may not be able to meet all our future transportation needs. The plan includes a list of corridors and projects for further study if additional resources become available or forecast development patterns change.

CHAPTER II
PUBLIC INVOLVEMENT

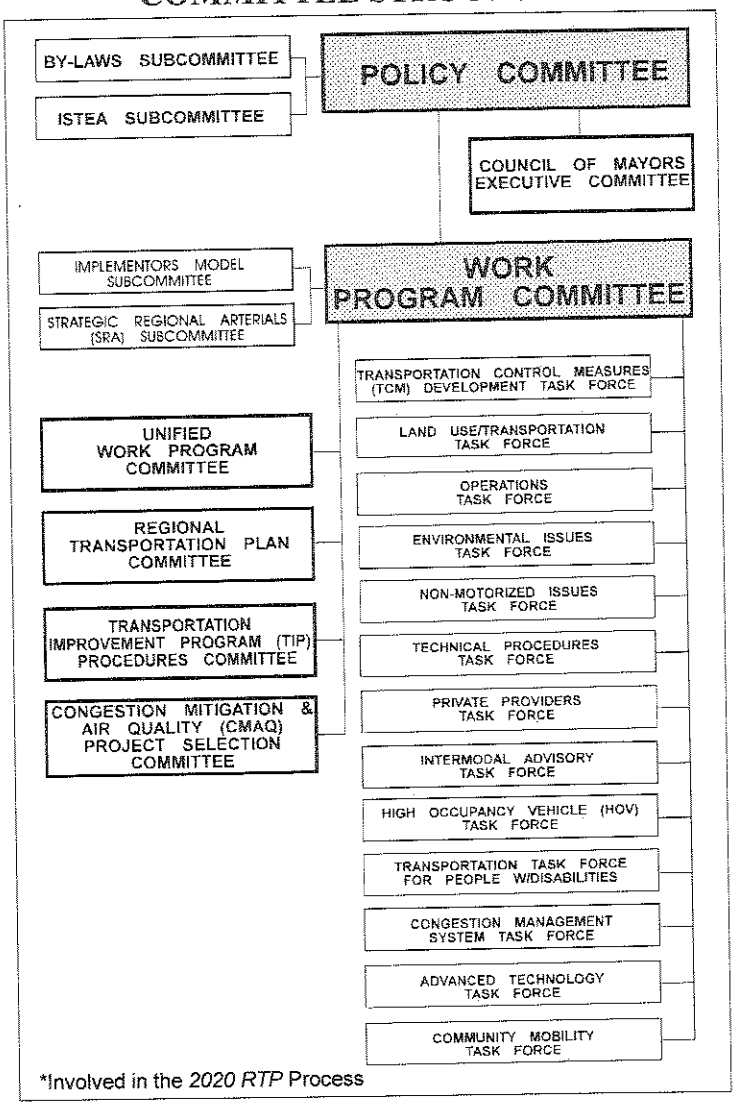
The goal of the *Destination 2020* public involvement process was to develop and support an early, full and effective exchange of information and ideas among all transportation stakeholders in northeastern Illinois, including full access to all key decisions. In order to ensure that all transportation consumers had an opportunity to participate in the development of the *2020 RTP*, the RTP Committee adopted the following seven strategies to promote the *Destination 2020* process:

- Public meetings and activities;
- *Destination 2020* newsletters;
- Articles for other organizations' newsletters;
- Speakers and presentations;
- Public service announcements;
- Media coverage; and
- Information hotline.

The RTP Committee implemented these strategies on several levels. The RTP Committee used the coordinated committee structure existing at CATS to involve appointed and elected officials, knowledgeable community leaders and interested citizens in specific components of the planning process. Figure 2.1 shows the committee structure and notes which ones had responsibilities for parts of the plan. The RTP Committee also established four working groups to coordinate key aspects of the plan. These working groups dealt with transit facilities, highway facilities, financial resources and public involvement. The Public Involvement Working Group was charged with developing strategies which were ultimately adopted by the RTP Committee. The RTP Committee authorized regional meetings and open houses for all interested parties at critical decision points in the process. The Northeastern Illinois Planning Commission (NIPC) participated in these meetings, discussing the population and employment forecasts it was preparing and the policy options dealing with future growth patterns in the region. In addition, the staffs of both CATS and NIPC made numerous presentations on the plan and forecast processes to various public agencies and special interest groups. Finally, the RTP Committee undertook an extensive public information dissemination program through a variety of media.

with plan development responsibilities were open to the public. Each meeting was listed on the CATS 24-hour meeting telephone hotline. Any interested party could be on the mailing list for these groups and receive meeting materials. Over the three year period 126 meetings were held by these groups.

FIGURE 2.1
CHICAGO AREA TRANSPORTATION STUDY COMMITTEE STRUCTURE



During the *Destination 2020* process, the RTP Committee held four sets of formal regional meetings and one set of thirteen public hearings, totaling forty-eight individual meetings. Meeting locations were accessible to people with disabilities and were served by public transportation. Each set of meetings was documented in a formal report which focused on the format used, locations and an evaluation of the meetings' purpose. These reports were used by the

Committee used to obtain feedback from attendees regarding their preferences and opinions on specific plan related issues. For more complex issues, such as goals and objectives development, the committee produced separate reports documenting how it used the public comments in its decisions. A list of the reports prepared is included in Appendix A[1].

Throughout the process the RTP Committee provided citizens with opportunities to express their views. Citizens were asked to provide written opinions through surveys about goals and objectives, transportation management strategies, funding priorities, revenue sources, forecast scenarios, policy tools to modify past growth trends and highway and transit projects. The results of these surveys are included in the public meeting reports. Even though the response rates were small, the surveys served as useful resource information to the RTP Committee during its deliberations. The NIPC commissioners also used these results as they developed the forecasts and refined the policy tools.

Citizens had the opportunity to offer regionally significant project, policy and system proposals through the call for proposals phase. The RTP Committee provided definitions of regionally significant actions to guide proposal submitters. All submitters received individual responses describing the disposition of their proposals. If a proposal was removed from consideration, the response listed the reasons supporting that action. The level 1 screening phase determined if proposals met regionally significant definitions, were within the scope of the *2020 RTP* or were similar or duplicative of other proposals. The level 1 report, *Destination 2020 Project Screening: Level 1,* describes how each proposal was considered and was sent to each submitter. Project proposals passing level 1 moved on for a more in-depth assessment in the level 2/2A screening phase. Level 2/2A screening was an evaluation of each project's implementability and relationship to transportation needs. The report, *Destination 2020 Evaluation: Level 2 and 2A,* documented the results of this phase. Since the final disposition of all proposals did not occur until the completion of the draft *2020 RTP*, a summary documenting the final action for each proposal was included in the *Destination 2020 Planning Process* report. The *Destination 2020* newsletter announced the completion and availability of all reports. Copies of these and all other *Destination 2020* reports were always available at public meetings.

In addition to the call for proposals, the *Destination 2020* process held two formal public comment periods. In March 1997, the RTP Committee released several major components of the plan for formal review. They were: the transit and highway projects; the Strategic Regional Arterial System; the Strategic Regional Transit System; local suburban bus expansion; and the financial analysis. The RTP Committee received over 300 comments. The committee reviewed and considered these comments as it developed the draft *2020 RTP*. The RTP Committee also provided written responses to each commentor and produced a formal report describing the comments and responses called *Summary of Public Comments Received at the March Public Meetings*. Specific changes in the draft *2020 RTP* as a result of these comments are described in the *Destination 2020 Planning Process* report.

The final formal public comment period was held from August 25th through October 7th. Thirteen public hearings and open houses were held during the comment period. 777 people attended the hearings and 1,666 individual pieces of testimony were received. The RTP Committee produced a report documenting the results of the thirteen public hearings. The public comment document included a description of the process used to inform the public about the hearings, the various opportunities to offer comments, the comments received and the responses.

Over the three year period the RTP Committee continually added names of individuals and organizations to its mailing list. At the initiation of the *Destination 2020* process, CATS developed a list of approximately 4,000 names of individuals, community and civic organizations, businesses and governmental entities that were thought to have an interest in transportation issues. The names on the list received all newsletters and notices of key milestones during *Destination 2020*. At the start of the final public hearings over 4,700 names were on the list.

The *Destination 2020 Planning Process* document and the individual reports include a more detailed discussion of the *Destination 2020* public involvement process, how public comment was sought and considered, and the roles, responsibilities and membership of each committee, subcommittee, task force and working group.

The completion of the *2020 RTP* does not end our public involvement activities. CATS will evaluate its overall public involvement process and modify it if necessary. CATS will continue making presentations on the plan and initiate an overall community education program on transportation issues. All citizens need to increase their understanding of factors that influence transportation decisions so they can participate more

[1] The development of the *2020 RTP* was a complex and lengthy process. CATS and NIPC prepared a number of separate documents describing major milestones and technical elements. These documents are summarized in a companion report.

CHAPTER III
REGIONAL PLANNING AND POLICY FRAMEWORK

Regional Airport Assumptions and Impacts

At the beginning of the *Destination 2020* process it was recognized that the decision on whether to construct a third regional airport or to accommodate future air travel needs at O'Hare and Midway airports was outside the scope of the *2020 RTP* and was not likely to be resolved before the completion of the plan. Thus, two future airport scenarios were used. Both assumed that adequate air carrier capacity would be provided so that the economic development of the region would not be inhibited. One scenario assumed that all of the capacity would be provided at the existing airports, O'Hare and Midway. The other assumed that the South Suburban Airport would be built and that additional enplanements would be served by a combination of O'Hare, Midway and the South Suburban Airport. The feasibility and desirability of either scenario were not addressed in the *2020 RTP.*

As discussed later in this chapter, different future distributions of households and employment were developed by NIPC for each airport scenario. The *2020 RTP* projects, systems, policies and strategies presented in Chapter 5 were chosen based on the requirement that they would be necessary in the future regardless of which airport scenario prevailed.

Regional Growth Policy and Forecasts

An essential component of transportation planning is the preparation of credible forecasts of population, households and employment. NIPC is responsible for preparing these forecasts for the six county area consisting of Cook, DuPage, Kane, Lake, McHenry and Will counties.

The central objective of NIPC's forecast program is to produce a forecast of the total number of people and jobs for the region and the distribution of these totals that is the **most likely**. In generating such forecasts, the commission believes that the actual future levels and distribution will be the result not only of countless private sector decisions but also of important government policy and investment actions. NIPC's *Strategic Plan for Land Resources Management* provides a guide to potential policy. But to what extent will these policies be implemented? Decisions about the need and location of additional [illegible] certainly will influence the distribution of jobs and housing. The locations and types of public investment in ground transportation will also be an important determinant. These questions of the influence of public policy and investment on the future are the reasons that:

- Substantial attention in the development of the transportation plan has been given to the interaction between land use and transportation;
- CATS and NIPC have worked to collaborate on the implementation of the combined transportation model with the DRAM/EMPAL (Disaggregated Residential Allocation Model/ Employment Allocation) model;
- With no pending resolution of the issue concerning the South Suburban Airport, two forecasts, both assuming the same overall level of air service capacity, have been prepared;
- NIPC has sought the advice of regional leaders concerning desirable patterns of land development and the feasibility of implementation tools; and
- NIPC went to local officials to reconcile preliminary forecasts with local growth plans.

Development of Regional Control Totals

The development of the forecasts began with the generation of region wide population, household and employment totals for forecast years out to 2020. In March 1994, NIPC determined that this region would grow to slightly over 9 million people (a 25% increase from 1990) and to about 5.3 million jobs (a 37% increase) by the year 2020 and that air service capacity needs would be met.

The regional employment forecasts were prepared first. A standard demographic forecast model was then used to generate a population appropriate to the employment level. The resulting age/race forecasts then became the basis for projections of household size, the population residing outside of households and the total number of households.

The regionwide employment forecasts were based on projections prepared by the Regional Economics Application Laboratory (REAL), a joint effort of the Federal Reserve Bank of Chicago and the University of Illinois at Urbana/Champaign. REAL developed and used CREIM, the Chicago Region Econometric Input/Output Model, to generate several alternative

projections. A forecast technical advisory committee, with representatives from the transportation planning community, the counties, city of Chicago, the suburban municipal associations, agencies of the state of Illinois, local banks and universities, reviewed these alternatives. The advisory committee then recommended the selection of an option assuming substantial gains in service sector productivity, an end to the historical decline in the region's share of overall national employment and no constraint due to air service capacity.

The associated population total was then determined by constructing general assumptions about labor force participation, long-term rates of unemployment, multiple job-holding and the net flow of commuting non-residents into the region. Long-term unemployment was assumed to be 6 percent; 5 percent of working residents were assumed to hold two jobs; 7.5 percent of the region's jobs were occupied by non-residents in 2020 (up from 2.5 percent in 1990). Labor force participation was assumed to increase only slightly with the most significant assumption being the continued participation of the baby boom population into their senior years.

The population by age, race and sex was developed using POPROJ, a demographic model. Birth rate and life expectancy assumptions were derived from the November, 1993 mid-range projections developed by the Bureau of the Census (Current Population Reports, P-25, No. 1104). In order to match the REAL employment forecasts, the large total annual net out-migration of population observed in the 1970s and 1980s became a slight net population in-migration over the forecast span.

Household projections were based on an assumption of substantial moderation in the decline in household size relative to past decades.

DRAM/EMPAL Model

The next steps in the process were the allocation of the regional totals to subregional forecast zones and, to facilitate the participation of municipalities in reviewing the forecasts, to assumed 2020 municipal jurisdictions. To accomplish this, CATS and NIPC collaborated on the coordinated implementation of two 376 zone sub-regional models. CATS used the combined transportation model to calculate travel costs, in response to a given transportation network and distribution of jobs and households. NIPC implemented the DRAM/EMPAL model which

In brief, the DRAM/EMPAL model first distributed employment on the basis of prior employment and household location, variables combined to measure employment attractiveness and travel costs. Household allocations began with the distribution of employees by place of work as determined in the first step, calculated the implied number of household heads by place of work and then distributed these household heads based on travel costs and residential attractiveness. Residential attractiveness was determined by land use variables such as available land, amount of land developed and developed for residential uses and by "quality of life" variables that were approximated by the income distribution of prior households.

Once the models were operational, three forecast scenarios were generated. They addressed three objectives. The first objective was to provide the *Destination 2020* process with socioeconomic files supporting the evaluation of transportation networks and the preparation of a recommended plan. The second objective was to provide the NIPC growth policy development process with information about the impacts of transportation investment, including airport development, on land use objectives, and a basis upon which to engage the region's leaders in a discussion about regional directions. The third objective was to provide NIPC with the basis for the discussion of municipal forecasts with local officials in the suburban region.

Initial Distribution of Households and Jobs

The first scenario assumed the development of the South Suburban Airport (SSA). It was not produced using DRAM/EMPAL but was derived from township level forecasts produced by consultants as part of the state of Illinois' study of the proposed airport. The other two scenarios were generated by the DRAM/EMPAL and combined models and assumed improvements to O'Hare and Midway airports. All three scenarios assumed that development would not take place on flood plains, in wetlands or on land designated for acquisition in NIPC's 1992 *Greenways Plan for Northeastern Illinois*. The Trends Scenario assumed a continuation of decentralizing land use trends, the expansion of air service capacity at existing airports and no additional investment in ground transportation beyond committed projects (primarily I-355 south to I-80). The Infill/Redevelopment Scenario assumed increased development densities around eight selected

by McHenry, Kane and Will counties, increased or stable levels of employment in older urban areas in the region and no additional investment in ground transportation beyond committed projects.

Preliminary forecasts developed from the scenarios and allocated to the surveyor quarter section level of geography (areas approximately equal to 160 acres), were provided to CATS during the late summer of 1996. These were used to forecast travel demand and support the evaluation of transportation projects and networks and the development of the draft *2020 RTP*.

Development of Policy Tools

These scenarios also served as a basis for workshops conducted by NIPC with regional leaders during the summer and fall of 1996. Regional policy guidance to the forecast process emerged from these and subsequent discussions, culminating in a December 1996 Commission Policy Statement. During the workshops the commission heard regional leaders indicate that trends toward the continuing decentralization of people and jobs in northeastern Illinois must be modified largely through policies that promote growth in strategic locations and not policies that constrain growth. A list of policy tools was considered by the regional leaders. These were divided into two general categories: (1) those tools with regional effects which would help moderate the rate of dispersed development and/or encourage reinvestment in mature communities; and (2) those tools with local effect which would promote planning and development supportive of congestion relief, environmental protection and prudent public investment in areas of new growth.

As a result of these meetings, on December 19, 1996, the Commission directed the staff to develop the final forecast alternatives under the assumption that the past trends of decentralized land use would be moderated. In setting this direction, the Commission found that:

> *while considerable future development can be expected to occur on land currently used for agriculture, it is the Commission's judgment that actions already underway or likely to be implemented will contribute to (1) substantial investment within existing communities, (2) increased redevelopment in communities which have experienced disinvestment, and (3) high*

NIPC therefore assumed that policy tools such as those listed below would be in widespread use in northeastern Illinois during the forecast period and would influence the development pattern of the region:

- Priority for funding to maintain the existing transportation system;
- Tax credits to rehabilitate older and historic buildings;
- Liability limits and tax credits to reclaim contaminated lands;
- Infrastructure grants to support redevelopment, infill and contiguous development;
- Increased focus of state and federal economic development programs in mature communities;
- Improved transportation between existing housing and job centers;
- Increased maintenance and restoration of wetlands and flood plains;
- Stormwater management plans for all parts of the region;
- NIPC model environmental ordinances to achieve environmental objectives;
- Site design regulations to achieve proper drainage and stormwater management;
- Implementation of the *Regional Greenways Plan;*
- Intergovernmental cooperation for good transportation project planning and implementation;
- Protect rights-of-way for adopted transportation projects;
- Preparation of joint subregional impact studies;
- SRA and transit oriented development and design to achieve mutually supportive land use and transportation systems;
- Wastewater facility expansion only when consistent with regional plans; and
- Incentives for more routine use of improved inter-local land use agreements.

Final Distribution of Households and Employment

The final forecasts also reflect the considerable

were sent to municipal officials for review. The quarter section results associated with each scenario were also provided to the counties for consideration. Information on local policies, ongoing development and expected future boundaries was collected during late 1996 by NIPC staff and early 1997 by DuPage County Development staff. After extensive discussions with the representatives of over 200 suburbs, and reconciliation to the Commission's December 1996 Policy Statement, a set of revised county, municipal, quarter section and forecast model zone results was compiled. These results became the foundation from which four forecast alternatives were constructed.

Final Forecast Scenarios

Four alternatives were needed to analyze the impact of airport alternatives and the construction of projects proposed in the *2020 RTP* on land use, the performance of the transportation system and air quality.

The first alternative, Existing Airport Improvements/ Base (EAI/Base) was the forecast derived directly from the participation of the counties and municipalities. These results were judged to be consistent with a distribution based on modification of land use trends, no South Suburban Airport and no expansion in ground transportation beyond committed projects.

The second alternative, South Suburban Airport/Base (SSA/Base), assumed the South Suburban Airport but no expansion in the ground transportation system beyond committed projects. The calculated impact of the South Suburban Airport was based on the fact that initial South Suburban Airport forecasts generated by state of Illinois consultants were developed by adjusting previous NIPC forecasts. The adjustment calculated for those previous forecasts was applied to the EAI/ Base alternative at the DRAM/EMPAL zone level to produce an alternative labeled SSA/Base. The comparison of the SSA/Base and EAI/Base alternatives suggest that building the additional airport will boost the growth of Will and south and southwest suburban Cook counties, and moderate the growth in jobs and people in Lake and McHenry counties and in jobs in northwest and west suburban Cook county. The impact on all other parts of the region is shown to be relatively minor.

The third alternative, identified as Existing Airport Improvements/RTP (EAI/RTP), was constructed to reflect the impact of building the transportation network was accomplished by running the DRAM/EMPAL model with the CATS combined model, once with travel cost assumptions based on only the existing and committed transportation network, and once with the projects built from the network proposed in the *2020 RTP*. The resulting differences in the distribution of people, households and jobs were applied to EAI/Base to produce EAI/RTP.

The fourth alternative reflected the impact on SSA/Base of the proposed *2020 RTP*. The adjustments described above were applied to produce an alternative labeled SSA/RTP.

The final forecast alternatives summarized in Figure 3.1 are based on the assumption of a moderation of decentralization trends, implementation of the projects proposed in the 2020 RTP and, based on continuing comments from county and municipal officials, reflect additional minor adjustments to the alternatives noted above. The only differences in the alternatives are the assumptions about where air service capacity is added within northeastern Illinois and the differential impact of these airport assumptions on the distribution of people and jobs. Both alternatives use the same regional total. If the projected growth in air service demand is not satisfied, the regional totals would be somewhat lower. Both alternatives forecast a moderation of past trends and show growth in the city of Chicago and many of the older suburbs. Both also show substantial growth in the newer suburban areas sustained not by abandonment of older communities but by regionwide expansion.

Land Use Impacts of the *2020 RTP*

A comparison of either one of the *2020 RTP* alternatives with its "no-build" or base counterpart demonstrates the forecasted impact of further investment in the region's transportation network. Building the projects tends to reduce the growth in the Cook County population, with the exception of northwest Cook County, while increasing the populations in McHenry and northern Lake counties. This result suggests that the addition of both highway and rail capacity serving the outer parts of the region enables people to continue to move their homes outward - the prevalent market pattern in the post-war era - while commuting to areas that are and will continue to be job-rich. This impact, however, is modest - a result that is not surprising given that the great majority of the region's transportation

FIGURE 3.1

NIPC POPULATION, HOUSEHOLD, AND EMPLOYMENT FORECASTS

Population

	1990 Census	2020 EAI[1]/ RTP	2020 SSA[2]/RTP
City of Chicago	2,783,726	3,005,338	2,917,196
Sub. Cook	2,321,341	2,586,771	2,629,402
Sub. DuPage	781,666	985,701	985,809
Kane	317,471	555,419	552,404
Lake	516,418	827,288	800,812
McHenry	183,241	361,413	353,156
Will	357,313	722,794	805,906
6-County Total	7,261,176	9,044,724	9,044,685

Households

	1990 Census	2020 EAI/RTP	2020 SSA/RTP
City of Chicago	1,025,174	1,151,692	1,120,883
Sub. Cook	854,314	982,016	996,785
Sub. DuPage	279,344	360,732	360,732
Kane	107,176	199,433	198,318
Lake	173,966	299,470	289,818
McHenry	62,940	131,741	128,725
Will	116,933	251,371	281,216
6-County Total	2,619,847	3,376,455	3,376,477

Employment

	1990 Census	2020 EAI/RTP	2020 SSA/RTP
City of Chicago	1,482,381	1,745,495	1,705,179
Sub. Cook	1,293,652	1,774,631	1,771,326
Sub. DuPage	530,322	815,178	815,217
Kane	145,205	223,040	213,943
Lake	228,606	392,481	353,754
McHenry	65,526	106,336	88,765
Will	99,393	223,179	332,310
6-County Total	3,845,085	5,280,340	5,280,494

[1] Existing Airport Improvements
[2]South Suburban Airport

The locations of jobs are not further decentralized by building additional highway and rail capacity. With these investments the job levels grow in Chicago, west and northwest Cook and southern Lake counties. Substantial job growth is also projected in McHenry, northern Lake, southern Cook and northwest Will counties but at a rate slightly less than when no new projects are constructed. The implication is that an improved ground transportation system makes it easier to meet labor and other transportation needs in existing locations and thus diminishes the incentives to relocate further out in the region. As with population and housing, the impact is modest.

in population and employment during the 1980s. Two general, but important, conclusions can be drawn. First, the differences among the alternatives are minor in comparison to the general level of growth forecasted for each of the subregions. Decisions about the transportation system are important but will not be the only determinant of the location of jobs and housing within northeastern Illinois. Second, this general level of growth is significantly different than the growth experienced in the 1980s, reinforcing the importance of efforts to moderate trends in order to achieve the forecasts for which the *2020 RTP* is designed.

Transportation Goals and Objectives

The development of the *2020 RTP* goals and objectives was a key step in the *Destination 2020* process. The goals are broad policy statements that describe the purpose of the plan. The objectives establish specific actions that support the goals. Together, the goals and objectives provide the policy framework for transportation decision-making.

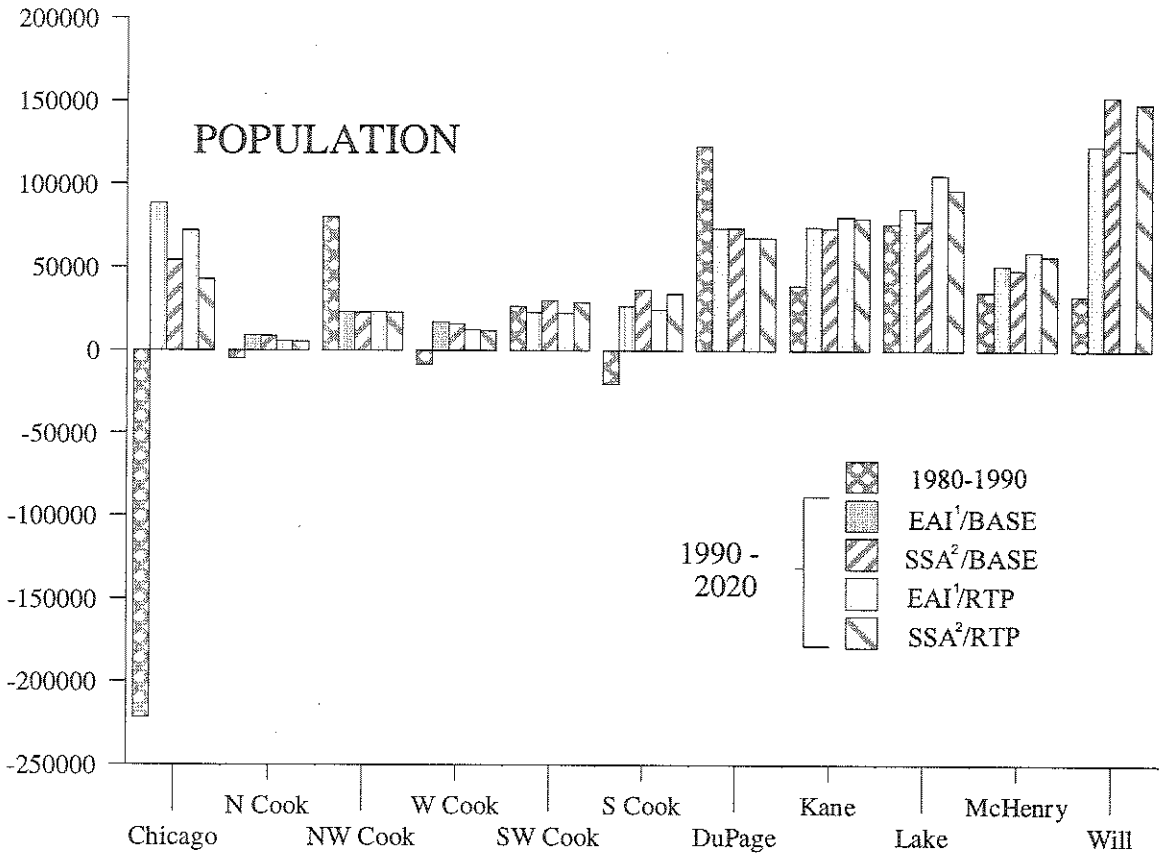
The vision of where we want to be in 2020 will help public and private decision makers make choices on transportation and land use matters. It is important that municipalities, counties and the state participate, along with the private sector and the general public, in the development of our regional vision so that the quality of life desired by citizens is reflected in the plan. These same public officials will be developing policies and taking actions at the local level to support the regional vision.

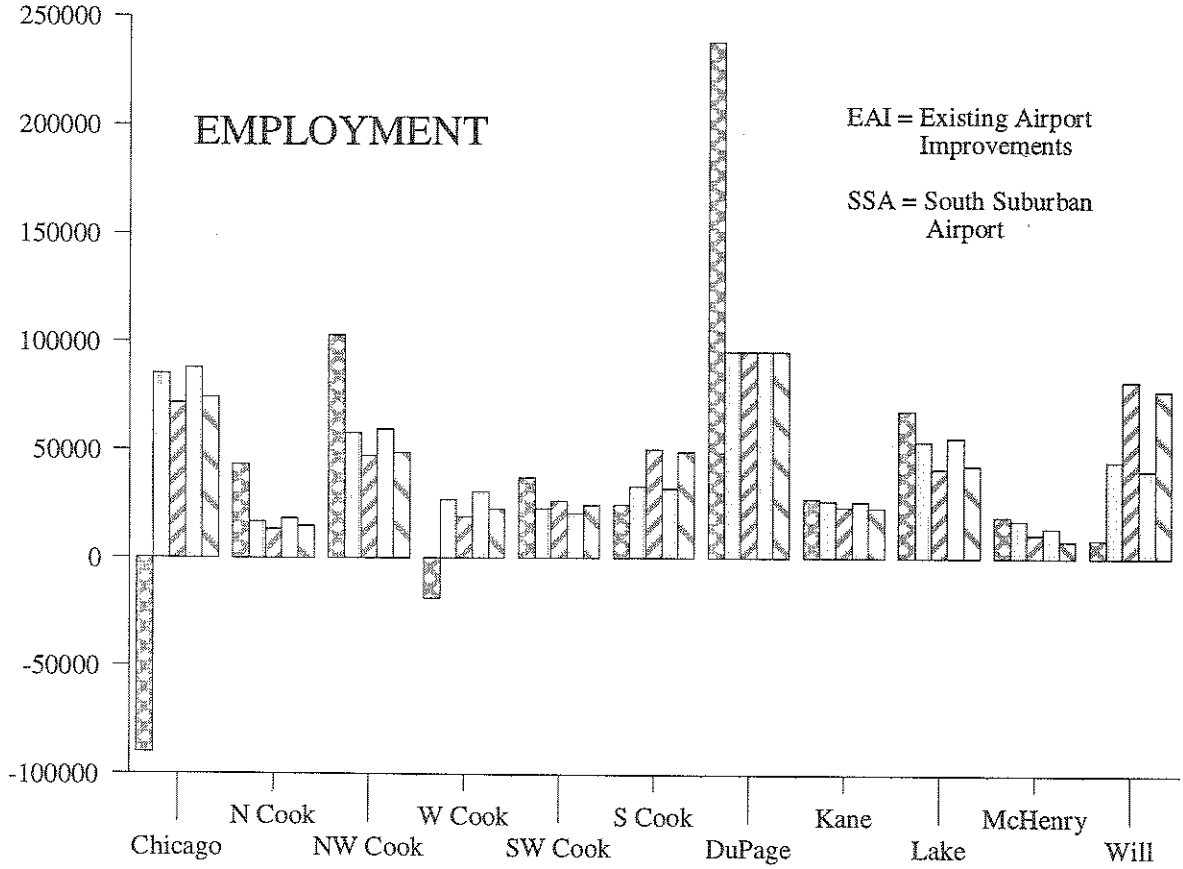
The overall vision for the plan promotes the development of a coordinated multimodal ground transportation system that is integrated with our land resource management strategies and air quality goals. The transportation strategy focuses on maintaining the existing system and establishing a balanced set of transportation improvements. This system includes increasing travel options for individuals, including travel by private auto, public transit, walking, bicycling and ridesharing. This system supports goods movement by identifying bottlenecks to efficient freight operations, encouraging needed improvements and promoting public-private partnerships.

The challenge is to develop a transportation system that provides efficient choices, improves access to

FIGURE 3.2

CHANGE PER DECADE





[1] Existing Airport Improvements

management strategies and contribute to the region's attainment of national air quality standards. The plan must balance the needs of older suburban communities, the central city and emerging suburbs, enhance the region's competitiveness and minimize negative social and environmental impacts.

Public decisions always require a balancing of different and competing goals. Public officials who make these tough decisions know that these trade-offs are ongoing and essential. It is important to remember that goals and objectives will at times compete with one another. The framework presented by the goals and objectives should be viewed by the public as a set of guidelines against which the total plan can be assessed. While individual projects contribute to the ability of the plan to meet these goals and objectives, and the project level information is useful in reviewing the projects, they should not be used to rank the projects against one another. The projects, systems, policies and strategies together create the plan.

The RTP Committee considered seven sources of information in developing the final goals and objectives. They were:

- Past CATS regional transportation plans;
- Sixteen ISTEA factors;
- Regional plans from other parts of the country;
- Recommendations from CATS task forces;
- Twelve meetings with business and community leaders;
- Focus group meetings with individual Policy Committee member agencies; and
- Public comment from public meetings.

The RTP Committee developed a set of draft goals and objectives based on an extensive review and consideration of the first six sources noted above. The committee sought public comments on these draft goals and objectives at a series of 13 regional meetings. The results of that outreach provided the seventh source. The final goals and objectives reflect the incorporation of the outreach results in the committee's deliberations.

The RTP Committee established seven goals and thirty-nine objectives to guide the development of the *2020 RTP*. No priority ranking is implied by their order of listing. Each goal has a set of related objectives. Figure

FIGURE 3.3

GOALS AND OBJECTIVES

ACCESSIBILITY AND MOBILITY

GOAL: *Provide an integrated and coordinated transportation system that maximizes accessibility and includes a variety of mobility options which serve the needs of residents and businesses in the region.*

OBJECTIVES

1. Develop and maintain the highway and transit systems in order to provide users with the greatest amount of accessibility and mobility.
2. Facilitate transfers among all transportation modes on existing and new facilities.
3. Improve access to transit, including expanded opportunities for auto, bicycle and pedestrian access.
4. Enhance the attractiveness of alternatives to Single Occupant Vehicle (SOV) travel.
5. Support the development and increased use of a coordinated network of bicycle and pedestrian transportation facilities.
6. Improve and expand transportation opportunities which serve long established travel patterns, such as the suburban-to-city commute, and new and changing travel patterns including city-to-suburb and suburb-to-suburb travel.
7. Improve transportation facilities important for the movement of goods, including those which provide access to intermodal freight facilities.

TRANSPORTATION AND LAND DEVELOPMENT

GOAL: *Provide a transportation system that supports existing and future patterns of land development as recommended by locally adopted landuseplan and the Northeastern Illinois Planning Commission's Strategic Plan for Land Resource Management, as reflected in the endorsed socioeconomic forecast.*

OBJECTIVES

8. Encourage compact and contiguous land development patterns, including redevelopment and infill development, along existing transportation corridors.
9. Encourage the balanced development of jobs and housing to reduce travel distances.
10. Encourage local governments to manage land development in coordination with the provision of transportation facilities and services.
11. Promote transportation right-of-way preservation through the coordination of transportation planning and land development activities.
12. Promote intergovernmental cooperation for the coordination of land use and transportation developments.
13. Facilitate the implementation of major system expansion projects through the use of intergovernmental agreements which promote consistent land resource and transportation system development standards.
14. Encourage local governments to consider land use regulations and development strategies that support transit oriented development and design.
15. Promote the planning and design of employment centers, commercial facilities and multi-use activity centers that allow for convenient and safe transit, bicycle, pedestrian, automobile and freight access and distribution.

TRANSPORTATION SYSTEM EFFICIENCY

GOAL: *Preserve the region's transportation system and maximize its people and goods carrying efficiency.*

OBJECTIVES

16. Reduce congestion and improve the efficiency of transportation facilities through the use of travel demand reduction, operation management and other appropriate strategies.
17. Enhance the operating condition of the transportation system in order to utilize its full people and goods carrying potential.
18. Bring the transportation system to a state of good repair in order to improve system reliability and safety and reduce operating costs.
19. Increase the effectiveness of the transportation system through the use of technological improvements to increase system efficiency and capacity.
20. Enhance the security of the traveling public and transported goods.

ENVIRONMENTAL

GOAL: *Provide a transportation system which is sensitive to the quality of the environment and enhances our natural resources.*

OBJECTIVES

21. Develop a transportation system that avoids or minimizes adverse impacts on environmentally sensitive areas, historic and cultural sites, greenways, agricultural land, recreational areas and other valuable natural resources.
22. Promote the development of a transportation system that contributes to meeting National Ambient Air Quality Standards (NAAQS), including the development and implementation of effective Transportation Control Measures (TCM).
23. Develop a transportation system that promotes energy efficiency.
24. Encourage the design of transportation facilities that minimize adverse noise and vibration impacts.
25. Encourage the design and landscaping of transportation rights-of-way to reduce maintenance costs, promote regional biodiversity, improve

FIGURE 3.3 cont.

26. Encourage the design and construction of transportation improvements in accordance with high environmental standards, such as those contained in the Northeastern Illinois Planning Commission's model ordinances regarding: a) soil erosion and sediment control; b) floodplain management; c) stormwater drainage and detention; and d) stream, lake and wetland protection.

ECONOMIC

GOAL: *Provide a transportation system which fosters economic development.*

OBJECTIVES

27. Develop a transportation system, including improved intermodal connections, that enhances the Chicago region's position as a major hub of national and international passenger travel and goods movement.
28. Develop transportation improvements that promote investment in, and revitalization of, existing communities.
29. Provide a transportation system that promotes economic growth, the retention of existing businesses and the attraction of new business to the region.
30. Provide a transportation system that accommodates and encourages tourism.

SOCIAL

GOAL: *Provide a transportation system which fosters social benefits.*

OBJECTIVES

31. Expand reasonably priced travel options for the economically disadvantaged and persons without access to automobiles.
32. Promote the development of a transportation system that improves travel opportunities for people with disabilities.
33. Improve access to the region's natural, historic, recreational and cultural resources.
34. Minimize neighborhood disruption associated with transportation improvements.
35. Provide a transportation system that serves all residents in their daily activities.

FINANCIAL

GOAL: *Provide for the development and preservation of a transportation system which meets the region's transportation needs, efficiently uses financial resources and is financially attainable.*

OBJECTIVES

36. Pursue all available opportunities, including innovative financing mechanisms, to fund the planning, design, construction, operation and maintenance of the region's transportation system.
37. Encourage cost effective operating policies and capital improvements.
38. Enhance opportunities for the private sector to participate in the provision of transportation facilities and services.
39. Aggressively pursue increases in federal and state transportation capital investment funds.

The goals and objectives provide a framework for evaluating transportation networks and individual projects and coordinating transportation with other metropolitan goals. The RTP Committee established 18 network measures to test the overall performance of the plan. The committee also established 14 project measures and 6 supplemental measures to test the performance of individual projects. A list of these measures and their supporting goals is shown in Chapter 6 where the performance of the plan is evaluated based on network measures and attainment of the seven goals.

CHAPTER IV
REGIONAL TRENDS AND THE EXISTING TRANSPORTATION SYSTEM

Geography

A mention of Chicago conjures images of towering office buildings in the historic Loop, bustling retail on North Michigan Avenue and the beaches of Lake Michigan. Others include O'Hare Airport, new suburban office parks along I-88, the farms in southern Will County or the town square in Woodstock. Neighborhoods vary from new residential loft districts just west and south of the Loop, the bungalow belt of Chicago's southwest side and mature inner-ring suburbs such as Brookfield and Skokie, to new single-family developments in Plainfield and Grayslake. The region's employees are as diverse as traders at the Chicago Board of Trade, auto workers on the South Side, hotel managers in Rosemont and farmers in Kane County. All of these images and lives are brought together under a single regional transportation system that has and will continue to help shape the Chicago region.

As early as 1673 Pere Marquette knew what the Pottawatomies already understood: the Chicago River, the Mississippi River and the Great Lakes watersheds are within a few miles of each other. The prairies to the west and the white pine forests to the north, refrigeration technology, the emergence of railroads, along with a team of impressive local boosters all played roles in the growth of Chicago as a major destination. Standing at the center of the Midwest, along the shores of Lake Michigan, Chicago's location has allowed its economy to thrive. From its early years as a center of shipping and railroads, to its recent growth spurred by the booming Midwestern economy, the region's comprehensive transportation system has allowed the region to meet changing transportation needs. The challenge for the regional transportation system is to serve varied interests in a region that stretches more than 80 miles north to south, 50 miles east to west and encompasses almost 3,800 square miles. The system must serve high-density employment centers like the

Growth and Development

From the region's first commuter rail suburb of Hyde Park to contemporary development in central Lake County along Metra's new North Central Service, transportation investments have played a role in shaping patterns of growth. Historically, Chicago has developed in a traditional urban model, with a strong urban core and suburbs stretching along radial transportation corridors. While suburbanization is popularly viewed as a post WWII phenomenon, suburban growth in northeastern Illinois occurred as early as the 1860s. The growth of railroad lines radiating west, north and south from Chicago created access to new communities. The railroads and real estate developers marketed the peaceful country life that was waiting for families along these rail corridors. By the 1890s, the ideal situation for a middle class businessman was to work downtown but commute to his suburban, country home.

The emergence of the car and the demand for housing after WWII contributed to changing the urban landscape in Chicago and all across the country. An aggressive statewide road building program, the start of the tollway system and the creation of the federal interstate highway system supported the suburbanization drive. In the ten years after the tollway and interstate systems were established, the region's urban expressway component was virtually completed.

As in many other cities in the United States, historic patterns of development have evolved into a more complex system where the central city is no longer the dominant destination for travel. Employment clusters have emerged in numerous suburban locations such as Schaumburg, Hoffman Estates and the I-88 corridor. Residential development has filled the gaps between historic radial transportation corridors and now stretches as far from the traditional core as southeastern McHenry County. Yet despite this continued suburban expansion, the city of Chicago has experienced a recent boom in residential construction. All of these changes in land use influence individual travel choices, while available transportation influences land uses.

Trends in the Metropolitan Area

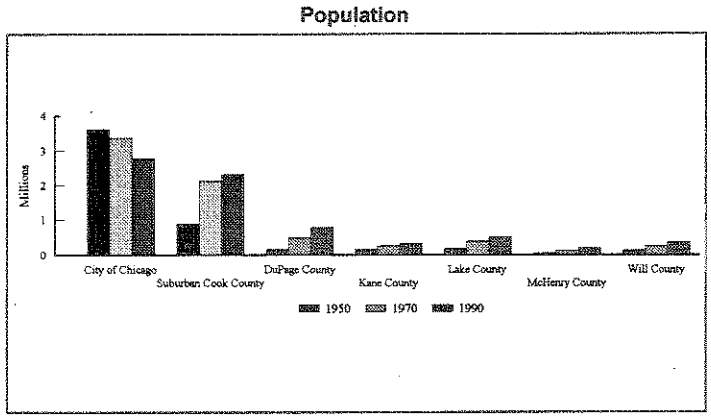
Population - Since 1950, most of the region's population growth has taken place in the suburbs. Population totals for 1950, 1970 and 1990, by county, are presented in Figure 4.1. Between 1950 and 1970, the six-county population grew by 35 percent, with suburban Cook County accounting for two-thirds of

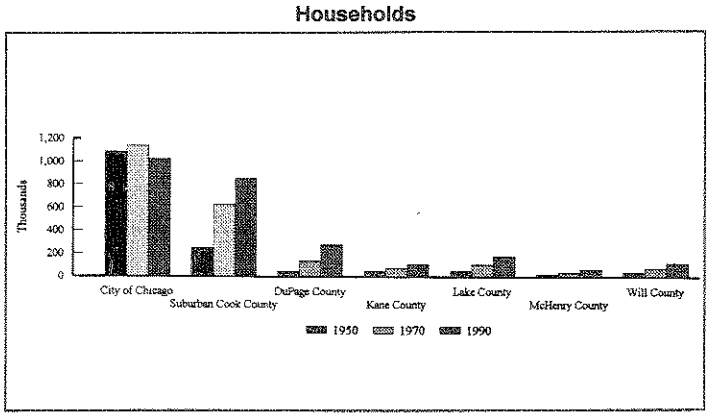
FIGURE 4.1

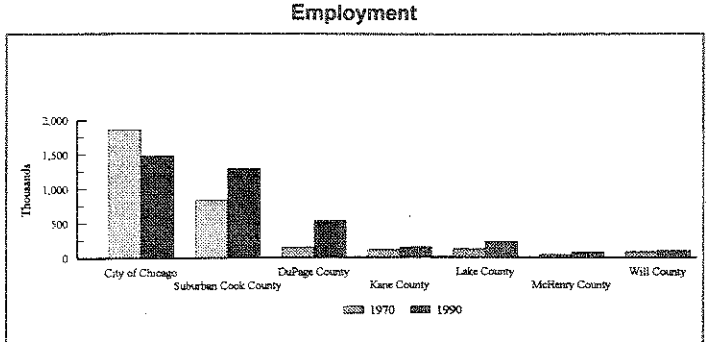
POPULATION, HOUSEHOLD AND EMPLOYMENT TRENDS

Numbers in thousands

	Population			Households			Employment	
	1950	1970	1990	1950	1970	1990	1970	1990
City of Chicago	3,621	3,369	2,784	1,088	1,138	1,025	1,864	1,482
Suburban Cook County	888	2,124	2,321	249	628	854	836	1,294
DuPage County	155	488	782	43	136	279	146	530
Kane County	179	383	516	47	103	174	116	229
Lake County	150	251	317	43	75	107	103	145
McHenry County	51	112	183	15	33	63	36	66
Will County	134	248	357	37	71	117	83	99
6-County Total	5,178	6,975	7,260	1,522	2,184	2,619	3,184	3,845







The region's population grew much more slowly from 1970-1990; only 285,000 people were added, or 4 percent. The growth in suburban Cook County slowed dramatically, while the collar counties' growth continued at almost the same rate. Combined, their population increased by 673,000, slightly more than the decrease in the city of Chicago.

Households - The average household size in the region has decreased from 3.3 in 1950, to 3.2 in 1970 and to 2.7 in 1990. Because of this, households have grown faster than population. Figure 4.1 shows county household totals for 1950, 1970 and 1990. Between 1950 and 1970, population grew by 35 percent, while households grew by 43 percent. The difference was more dramatic from 1970 to 1990, when population increased only four percent, but households jumped twenty percent.

The location of household growth generally followed the population growth.

Employment - Similar to population and household trends, suburban jurisdictions have led the region in employment growth since 1970. Figure 4.1 also includes employment totals by county for 1970 and 1990. The 21 percent employment growth during this period greatly outpaced the 4 percent population growth and nearly matched the 20 percent household growth. Increases were shown in all suburban areas, ranging from 250 percent in DuPage County to a relatively modest 20 percent in McHenry County. The city of Chicago posted a 25 percent decline.

Commuting Patterns - Changes in regional development have contributed to a rapid growth in suburb-to-suburb trips. At the same time, the demand for the traditional suburb-to-city trip has remained strong. This combination of travel patterns has added a new dimension to the challenge of serving regional travel needs. Between 1980 and 1990, the number of work trips destined for the suburbs increased 23 percent, while the region's total work trips increased just 9 percent. Cook County's northern suburbs, DuPage County, and Lake County all experienced a significant increase in the number of trips related to employment (see Figure 4.2), while the city of Chicago experienced a modest decline.

In addition to a shift in travel patterns, the individual choice of mode in the Chicago region has continued

FIGURE 4.2

DESTINATION OF WORK TRIPS

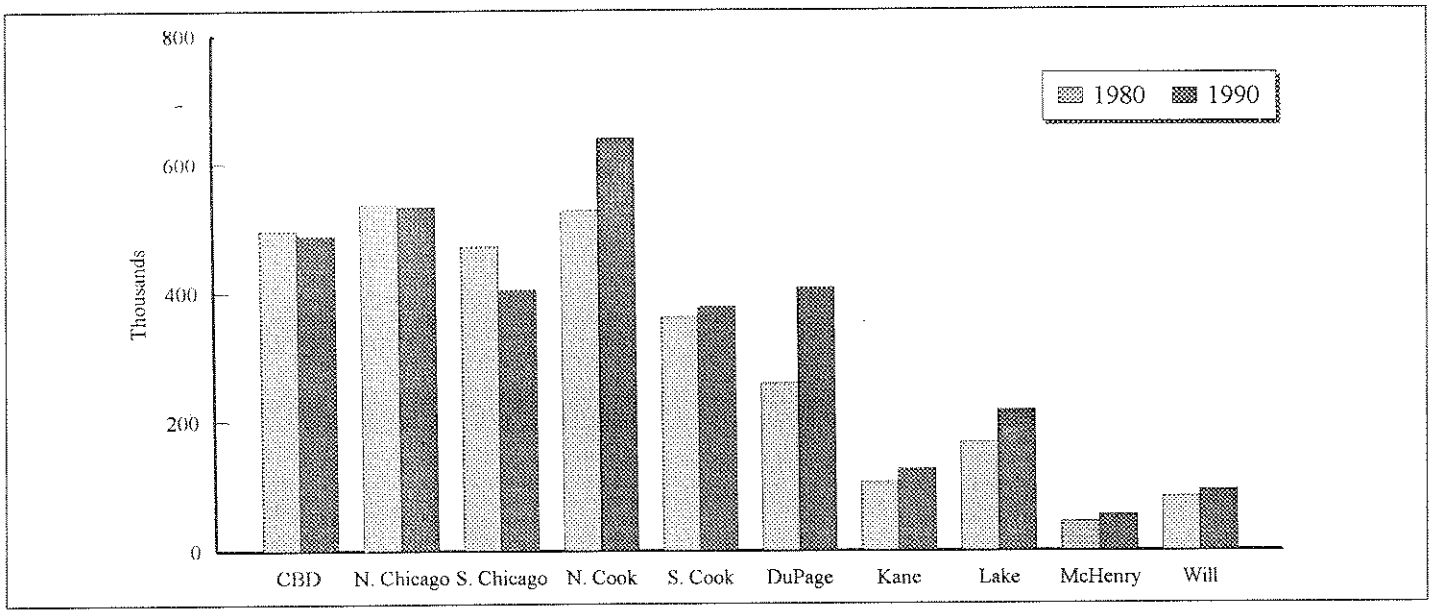


FIGURE 4.3

COMMUTING BY MODE

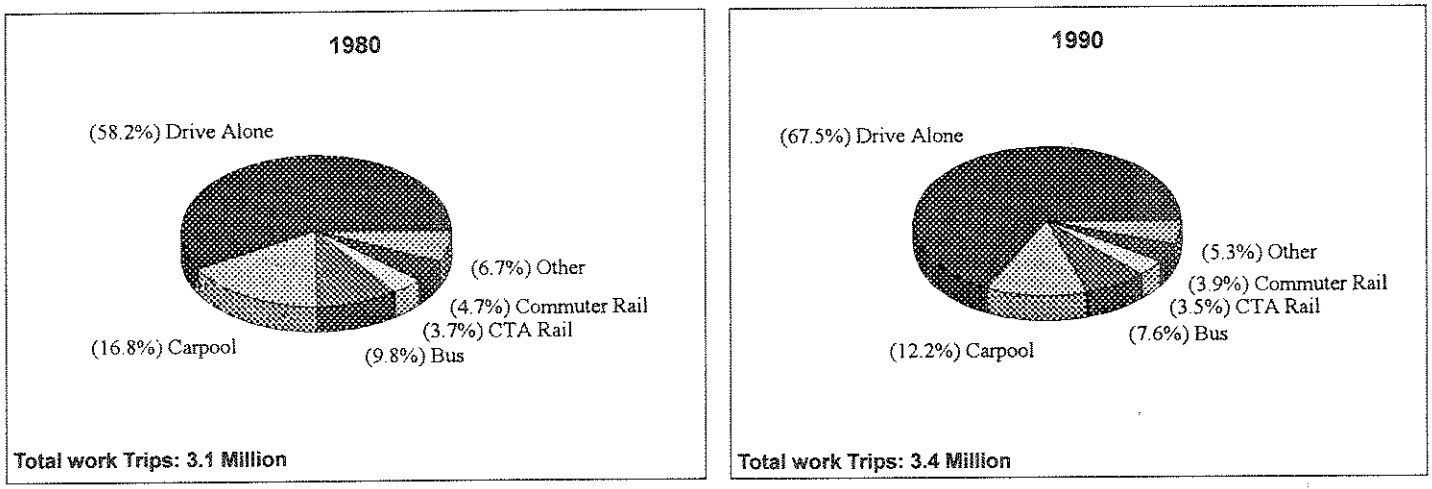
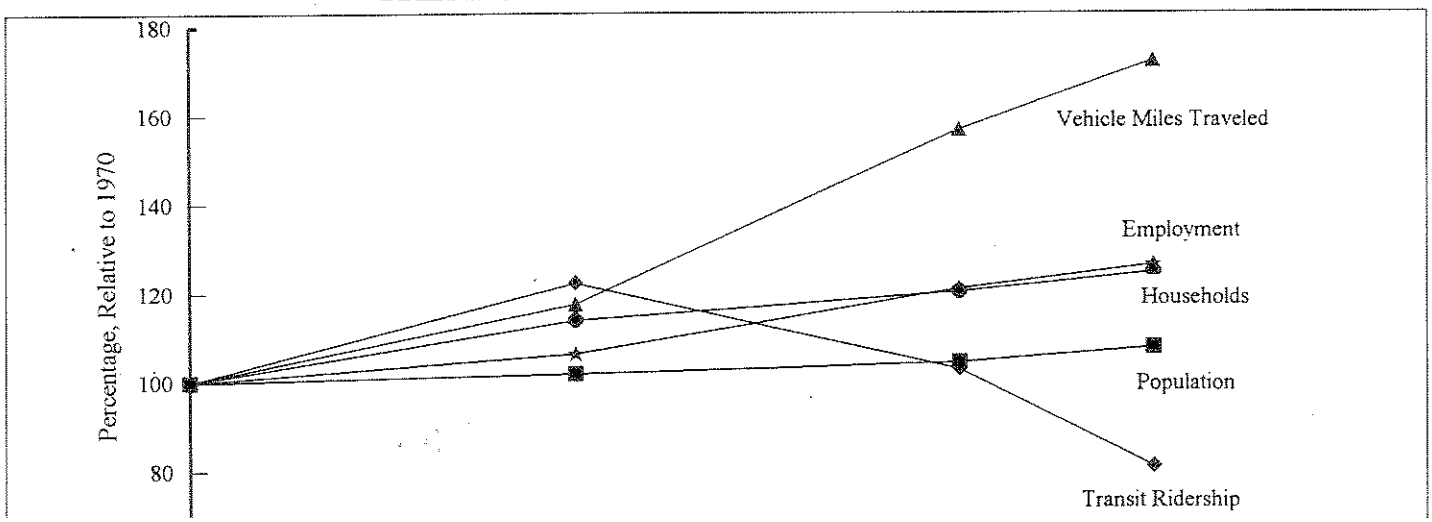


FIGURE 4.4

TRENDS IN TRANSIT AND HIGHWAY USE



number of single-occupant automobile trips has increased. In just ten years, between 1980 and 1990, the percentage of individuals driving alone to work increased from fifty-eight percent to sixty-eight percent (see Figure 4.3). Despite an increasing reliance on the automobile, the Chicago region still maintains the second lowest drive-alone to work rate among urban areas in the United States. Transit, carpooling and other modes continue to play a critical role in serving the region's transportation needs.

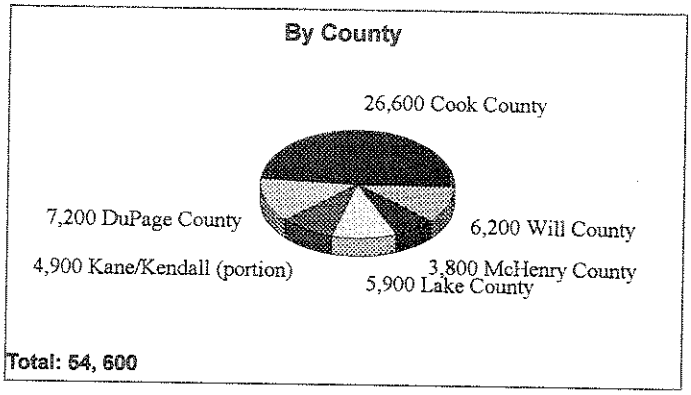
Transit and Highway Usage - Since 1970, the growth in vehicle miles of travel (VMT) has outpaced regional population, household and employment growth, while overall, transit ridership has dropped. Figure 4.4 compares the relative change in VMT and transit ridership to the population change for the 1970-1995 period. Both transit ridership and VMT grew by roughly 20 percent from 1970-1980, but the region's population increase was less than 2 percent, its household increase was 14 percent and its employment increase was 6 percent. In the subsequent 15 years, from 1980 to 1995, transit ridership decreased substantially. At the same time VMT was up 46 percent, while population increased only 6 percent, households increased 9 percent and employment increased 20 percent.

Aviation - Between 1950 and 1995, the number of airline passengers using the region's three commercial airports (O'Hare International, Midway and Meigs) increased 18-fold from just over 4 million to more than 77 million annually. The growth at O'Hare has been extraordinary with more than 67 million passengers by 1995, up from 5.7 million in 1960. Also of note is the recent "comeback" of Midway Airport. Its 9.9 million passengers in 1995 were substantially higher than its 1980 total of 1.3 million and only slightly below its 1959 total - when it was the world's busiest airport.

The Transportation System Today

Highway System - In 1995, private vehicles carried over 90 percent of the region's motorized trips - approximately 16 million person trips per day. The system consists of 54,200 lane miles of freeways and expressways, arterials and collectors and local streets. The region's lane miles are presented by county and functional class in Figure 4.5, while Figure 4.6 is a

FIGURE 4.5
HIGHWAY LANE MILES



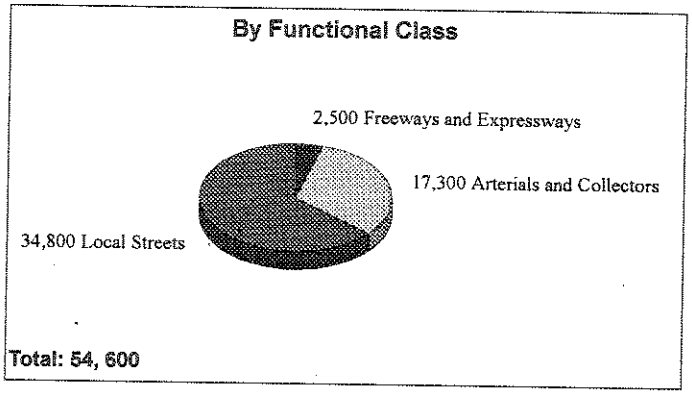


FIGURE 4.6
EXISTING HIGHWAY SYSTEM

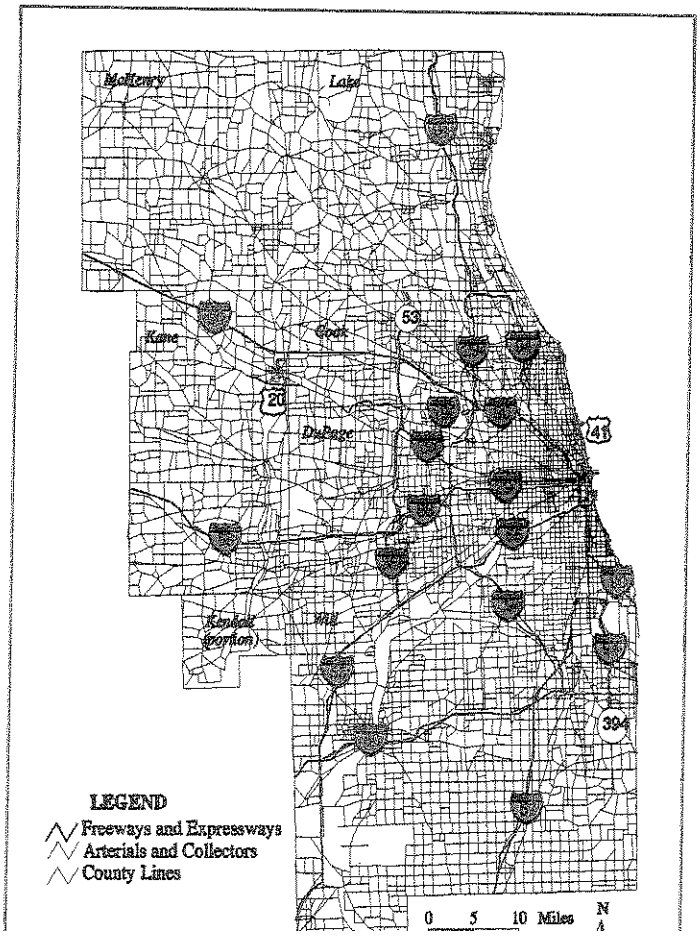
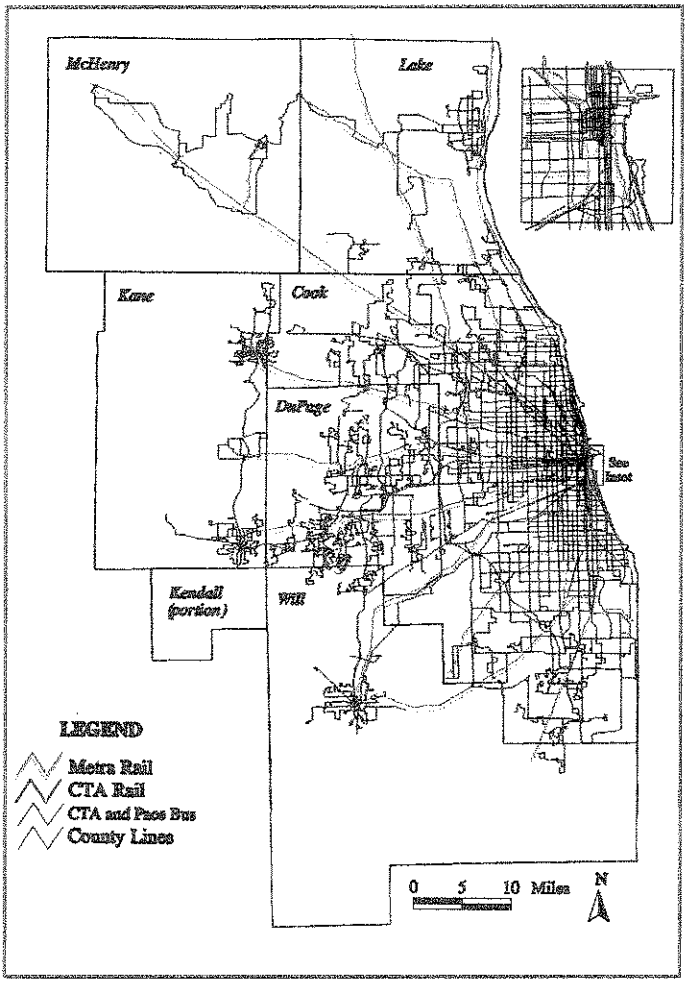


FIGURE 4.7

EXISTING TRANSIT SYSTEM



Approximately 188 of the Illinois State Toll Highway Authority's (ISTHA) 274 route miles are in the CATS planning region. This is 42 percent of the of the region's 449 freeway and expressway route miles. Of the remaining 58 percent, 56 percent are under the jurisdiction of the Illinois Department of Transportation and the City of Chicago's Skyway comprises 2 percent. Interstates that are part of the ISTHA system are I-294, I-88, I-355, I-90 west of O'Hare Airport, and I-94 in Lake County.

Existing Highway System Deficiencies - Between 1985 and 1995 vehicle miles of travel in the region increased by almost 40 percent, but the number of highway lane miles increased by only 5 percent. This trend has led to ever-increasing traffic congestion on the region's roadway system.

Due to funding constraints at the state, county and local levels, the highway system also has capital maintenance deficiencies which are explored in detail in Chapter 7, Financial Strategy.

Transit System - The Regional Transportation Authority (RTA) oversees the three service boards that provide transit service in the six-county area: the Chicago Transit Authority (CTA); the Metra Commuter Rail Division; and the Pace Suburban Bus Division. Major transit routes in the region are mapped in Figure 4.7. Combined, their operations constitute the second-largest rail and third-largest bus system in North America. Figure 4.8 shows annual vehicle revenue miles, with the CTA service split into bus and rapid rail. Additional 1996 operating characteristics are listed in Figure 4.9.

FIGURE 4.8

1995 TRANSIT SERVICE

Annual Vehicle Revenue Miles

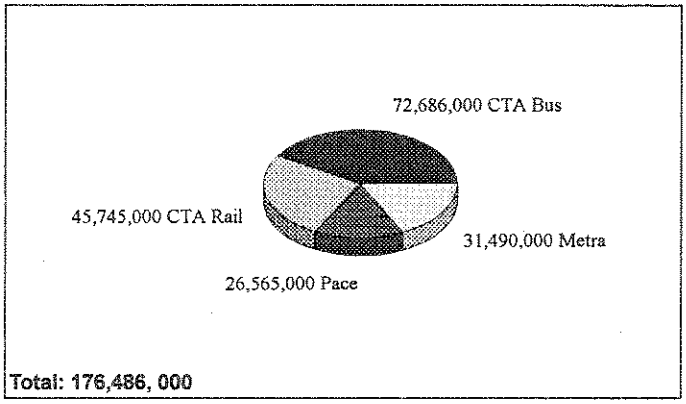


FIGURE 4.9

1996 TRANSIT OPERATING CHARACTERISTICS

	Routes Miles	Routes	Stations	Vehicles	Annual Riders
CTA Bus	2,020	139	n/a	2,035	302 million
CTA Rail	329	n/a	140	1,192	124 million
Metra	546	n/a	240	1,071	71 million
Pace	n/a	233	n/a	948	36 million
Total	2,895	372	380	5,246	533 million

Source: 1996 RTA Annual Report
Bus data is for fixed route and paratransit services.

Existing Transit System Deficiencies - Like the highway system, the transit system has both capacity and capital maintenance deficiencies. Several segments of the system, namely the CTA Brown Line and the Metra North Central and Southwest services, have physical constraints that prevent service increases to serve growing ridership.

Goods Movement - Facilities of all major freight modes (waterway, rail, trucking, pipeline and air) converge in northeastern Illinois, where they generate and service all aspects of local, regional, national and international

goods movement. The Intermodal Transportation section of Chapter 5 describes this system in detail; the following data provide a summary of the region's freight activity:

- An estimated 1,100 freight trains operate daily in the region, consisting of 36,000 railcars carrying 2.5 million tons of freight;
- Approximately 213,000 medium and heavy trucks are registered in the region, and trucks move almost 1.6 million tons of freight daily;
- The annual inland water freight volume is 22 million tons, and the annual Great Lakes tonnage is 3 million; and
- Approximately 3,700 tons of freight move through O'Hare Airport daily.

Airports - O'Hare is well-known as the "world's busiest airport," and Chicago's role as a major aviation hub is vital to the economy of the region. In addition to O'Hare, scheduled air service in northeastern Illinois is provided at Midway Airport and Meigs Field. In 1995 O'Hare accounted for 87 percent of the region's 77 million annual airline passengers, Midway for 13 percent and Meigs for less than 1 percent. Nearly all of the 5.8 million international passengers used O'Hare.

In addition to the three Chicago airports, nine general aviation airports serve the suburbs: Palwaukee (180,000 annual operations); DuPage (167,000); Aurora (126,000); Lewis University (92,000); Schaumburg (84,000); Waukegan (82,000); Lake-in-the-Hills (51,000); Lansing (43,000); and Joliet Park District (16,000).

Bicycle and Pedestrian - Unlike transit and highway planning, bicycle and pedestrian planning has historically received little attention on a regional scale. The following is some information on existing facilities and their usage:

- A 1995 NIPC inventory of bicycle facilities found 992 miles of existing and committed facilities;
- The 1990 CATS Household Travel Survey found that 13 percent of all trips are made by walking;
- The RTA Non-Motorized Access to Transit Study showed that walking constitutes 24 percent of trips to Metra stations and 44 percent of trips to CTA stations, while bicycling was less than 1 percent for both;
- The 1990 census found that 4 percent of work trips
- A 1995 Council of Mayors Trail Survey found that two-thirds of all travel on trails was destination-based as opposed to recreational.

Performance of the Existing System under 2020 Conditions

Chapter 3 presents a detailed discussion of the NIPC socioeconomic growth forecasts and the forecast scenarios used. This section discusses the impacts that the forecasted population, household and employment increases will have on the region's transportation system if no major improvements are made from now to 2020, beyond those already programmed. This deficiency analysis is based on travel simulations for 1996 (the RTP "baseline" year) and 2020 (the RTP "forecast" year).

Under both the Existing Airport Improvements and South Suburban Airport scenarios, NIPC forecasts that the 2020 regional population will be 9 million (a 20 percent increase from 1996), that employment will be 5.3 million (30 percent greater than in 1996) and that households will grow to 3.4 million (23 percent greater than in 1996). The additional travel demands generated by this growth will further strain the already congested roadway network. Figures 4.10 and 4.11 graph the baseline transportation system performance changes from 1996 to 2020 for the EAI/Base and SSA/Base scenarios; respectively, information from the graphs is summarized below:

- With only previously committed improvements to the system (a one percent increase in lane miles) vehicle miles traveled (VMT) are forecast to grow by 35 percent.
- Due to constrained roadway capacity, the VMT on congested roadways will grow even faster - by 60 percent, or close to twice the rate of VMT growth.
- With two-thirds of the population and household growth forecast to occur in the five collar counties, it is not surprising that the fifteen percent forecast increase in transit use is lower than the rate of population growth.
- The total time spent traveling is a measure which combines transit, auto and commercial vehicle travel. If only committed transportation improvements are made, this measure is forecast to jump 44 percent between 1996 and 2020 - twice the increase in population and households and 50 percent more than the increase in employment.

FIGURE 4.10

BASELINE SYSTEM, 2020 CONDITIONS

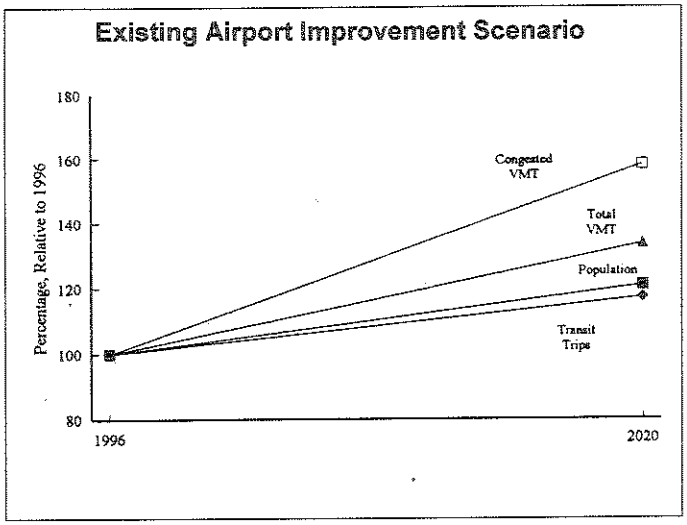
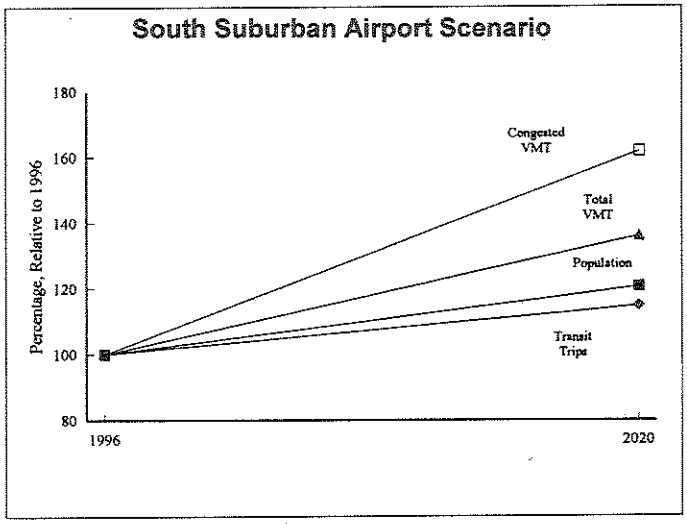


FIGURE 4.11

BASELINE SYSTEM, 2020 CONDITIONS



Note: Congested VMT is miles of travel occuring on roads carrying traffic volumes greater then their design capacity

The *Destination 2020* report *Alternatives Development: Deficiency Analysis* contains additional analyses of future regional development and travel patterns based on the preliminary NIPC 2020 socioeconomic forecasts.

Clearly, major transportation projects and policies must be implemented to mitigate the transportation congestion brought on by the forecasted population, household and employment growth in the region. The following chapters present the approaches that the 2020 RTP identifies to meet these needs.

CHAPTER V
2020 REGIONAL TRANSPORTATION PLAN

Chapter 4 discussed the serious deficiencies of the region's transportation system and the dramatic increases in transportation congestion that may occur if the forecasted growth is realized and transportation improvements are not made. The existing transportation system will require a significant level of investment in capital maintenance-type projects. This chapter describes the level of capital maintenance included in the plan and specifies new transportation projects, systems, policies and strategies that will address existing and future mobility needs. These plan components reflect what can be accomplished within the constraint of the financial projections.

Summary of the Plan Features

The 2020 Regional Transportation Plan (RTP) consists of the goals and objectives and forecasts discussed in Chapter 3, and the capital projects, system improvements, policies and strategies proposed for implementation by 2020. Since the vast majority of the projected resources expected to be available through 2020 are projected for the capital maintenance of the existing transportation system, the plan includes numerous policies and strategies and smaller capital projects that improve the efficiency of the system to maximize the benefits of the capital maintenance.

The major capital projects, system improvements, policies and strategies are as follows:

- Over 80 percent of the projected resources go to maintain the existing highway and transit systems in their current condition;
- Twenty major capital improvements to expand the existing expressway system lane miles by sixteen percent and the rail transit system vehicle miles by fourteen percent;
- A designated 1,387 mile Strategic Regional Arterial (SRA) System of roads to supplement the expressway system for longer distance subregional travel;
- A Strategic Regional Transit (SRT) System of integrated high capacity transit services and facilities to address the improvement needs of the existing system;
- A $50 million expansion program of local suburban bus service to improve travel options in developed and developing areas not served by the SRT
- A set of five bicycle and pedestrian policies to improve and increase bicycle and pedestrian transportation options and access to public transit;
- A set of six intermodal policies to identify and address the operational needs of the intermodal industry and to enhance the efficiency of intermodal freight transportation;
- A set of eleven transportation management strategies to reduce and more efficiently manage the demand for transportation facilities, systems and services and to improve the operation of the transportation system;
- A set of congestion reduction strategies included in a separately adopted Congestion Management System Plan to lessen congestion and improve mobility and accessibility through multimodal solutions; and
- Support for the analysis and implementation of cost effective Intelligent Transportation Systems (ITS) technologies as tools to improve the safety and efficiency of the system.

Plan components are described in detail in the following sections. Each is one piece of an overall framework for transportation improvements through 2020. The components work together to create the overall performance of the system and meet the regional goals and objectives. A detailed financial analysis of the plan is included in Chapter 7.

Capital Maintenance of the Existing System

The *2020 RTP* recognizes the maintenance, rehabilitation and preservation needs of our existing system. The term "capital maintenance" is used in the *2020 RTP* to include all maintenance activities that are not "routine maintenance." (The latter category includes activities such as snow removal, roadway patching and vehicle cleaning and repair.) Over 80 percent of the projected resources are devoted to the capital maintenance of the existing system. Capital maintenance projects protect the safety and efficiency of the system. Capital maintenance projects can also extend the useful life of existing facilities. At some point in the life of transportation facilities, capital maintenance activities involve major reconstruction. In northeastern Illinois our capital maintenance needs are extensive. The relative age of our highway system, the high traffic volumes and the high percentage of truck traffic (particularly on the expressway system) contribute to the backlog of roads and bridges in need of repair. The condition of the public transit system is

and past underinvestment will require a major effort to bring and maintain it in good operating condition. The rehabilitation of the CTA Green Line in 1996 was a positive step in this direction.

ISTEA places a strong emphasis on the capital maintenance of the existing transportation system. The *2020 RTP* continues the tradition in northeastern Illinois of recognizing and addressing the needs of the existing system. ISTEA planning factors require that the preservation of the existing system be "explicitly considered, analyzed as appropriate, and reflected in the planning process products." ISTEA also requires that the process "assess the capital investment and other measures necessary to preserve the existing transportation system... and make the most efficient use of existing transportation facilities to relieve vehicular congestion and enhance the mobility of people and goods."

The costs of bringing the transit and state-maintained highway systems to a fully renovated condition exceed projected funding. The transit operators and highway agencies are committed to maintaining the system in a safe and usable condition and seeking infusions of capital funds to renew and rebuild the system's infrastructure. The financial projections for 2020 show that historical and reasonable increases from current federal and state sources, if realized, will provide enough revenue to maintain the system at the current condition levels. The tollway gives the highest funding priority to the maintenance and operation of the system. Current tollway estimates indicate that enough resources will be available to meet expected tollway capital maintenance needs.

A number of factors and changing conditions could affect these estimates. Among these are the extent of deterioration of highways, bridges and facilities, changes in ridership or traffic volumes, vehicle composition and weather cycles. Actual capital maintenance needs, costs and funding are elements that are more appropriately established with greater accuracy during the five year TIP, capital program development cycles. Approximately $27.7 billion should be available for capital maintenance. Chapter 7 provides the detailed assessment of the capital

Transit and Highway Projects

The *2020 RTP* includes transit and highway infrastructure projects. The *2020 RTP* includes specific modal recommendations. However, each project must undergo detailed feasibility analyses. These analyses must evaluate all potential modal alternatives within the corridor. In addition, detailed environmental and design studies must be conducted and fiscal plans prepared.

Northeastern Illinois has one of the best and most extensive public transit systems in the country. Approximately 533 million trips are made on the system each year. In addition to the challenges mentioned earlier, the transit system must also help support economic development initiatives, reduce congestion, provide travel options, meet new market opportunities and help the region meet national air quality standards.

The existing commuter and rapid rail systems are focused on the Chicago Central Business District (CBD). The number and density of jobs in the CBD support the high level of transit. While the CBD is expected to grow by the year 2020 and will continue to be a major focus of travel, additional high growth markets are emerging. The reverse commute and the suburb-to-suburb travel markets are also growing and are not currently as well served by transit. In addition, while the Existing Airport Improvements and South Suburban Airport scenarios include a significant amount of infill and redevelopment, growth is expected to continue in the outlying portions of the region. The *2020 RTP* includes six major extensions or new transit facilities for the region to meet current and future demand. Projects are proposed to serve future markets, promote economic development and provide circumferential routes linking the numerous existing radial commuter and rapid rail services. Project-specific studies will be conducted to determine feasibility and detailed operating characteristics. The capital cost of these projects is approximately $2.168 billion.

The highway system in northeastern Illinois carries the vast majority of person travel and is vital to freight movement. Roads also provide right-of-way for buses, making highways an integral part of the public transit system. They serve the needs of recreational and tourist travel. New expressways are planned only where future traffic will exceed the capacity of the road system and where an expressway is judged as the preferred

lane highways, grade separated, with limited access via ramps. The *2020 RTP* includes three new expressways, ten lane addition projects on existing expressways, one new major interchange and one High-Occupancy-Vehicle (HOV) project. Where an expressway is identified in the plan, project-specific studies will assess feasibility and operating characteristics. The capital cost of these facilities is $2.935 billion.

Figure 5.1 shows the transit, highway and HOV projects included in the plan. Figure 5.2 includes the specific project name and description, length, cost and the forecasted users under both airport scenarios. An implementation schedule was developed only for the purpose of conformity analysis. The implementation schedule does not represent a prioritization of regional needs. The following provides a brief description of the transit and highway projects.

North Central Service Enhancements

This project provides for the addition of a second track on 36 miles of Metra's North Central Service which runs from Antioch to downtown Chicago, as well as capacity enhancements on the Milwaukee District West Line. The additional track will increase the recently-opened line's capacity, allowing for express trains, increased service frequency and the potential for reverse commute trains. The capacity enhancements on the Milwaukee District West Line will bring an existing third track between Franklin Park and the CBD up to commuter service standards and relocate platforms to permit effective use of the third track. The North Central Service Enhancements will improve the quality of transit service in portions of rapidly growing Lake and northwest Cook counties, with service to O'Hare Airport and downtown Chicago.

Outer Circumferential Commuter Rail Corridor (core segment)

This project calls for the introduction of new commuter rail service along approximately 50 miles of the 103-mile Elgin, Joliet, and Eastern Railway (EJ&E). This circumferential freight rail line runs in a semicircle through the Chicago suburbs approximately 35 miles from downtown Chicago. This project takes advantage of a unique ability to provide commuter rail service for the rapidly growing number of suburb-to-suburb travelers. It will also connect to existing Metra lines, providing riders the option of transferring between lines without traveling to downtown Chicago. A core segment will be selected for inclusion in the plan after

Mid-City Transitway

This project is a 22 mile rapid transit line connecting the Blue Line at Jefferson Park with the Red Line at 87th Street. Among its 20 stations will be transfer stations at the Green Line and Blue Line Congress and Douglas branches. The alignment will follow an existing north-south rail corridor just east of Cicero Avenue from the Jefferson Park station south to Ford City and an east-west corridor north of 79th Street between Ford City and the 87th Street station. This new rail service will improve the accessibility of Chicago and Cicero neighborhoods located along the line, and provide better connections to the major job centers near O'Hare and Midway airports. It will also enhance the connectivity of the entire CTA rail system by allowing for transfers between rail lines without requiring travel to downtown Chicago.

Orange Line Extension

This project consists of a two mile extension of the CTA Orange Line to Ford City at 76th Street. The current terminus is at Midway Airport and is served by many feeder buses from the south and west. The extension of this line to Ford City will move the terminus from the congested Midway Airport station, improving service for the significant number of transit riders using the feeder routes. Further, it will introduce rapid transit service to the Ford City complex and the neighborhoods south of Midway Airport.

Red Line Extension

This project is a six-mile extension of the CTA Red Line south from 95th Street along the Bishop Ford Freeway to 130th Street. The extension will relieve congestion at the 95th Street station by providing an alternative terminus for feeder buses currently using this station to connect to the Red Line. It will also substantially improve the quality of transit service on the far south side of Chicago. This improved service will assist the city of Chicago in its efforts to redevelop industrial areas adjacent to the line, particularly along Lake Calumet. The new terminal station at 130th Street will include a large park-and-ride facility.

South Suburban Commuter Rail Corridor

This project calls for the introduction of commuter rail service along the UP/CSX line from the LaSalle Street station in downtown Chicago to Beecher in Will County. This service will provide new, high-quality transit service from suburbs such as Dolton, South Holland, Chicago Heights and Crete to Chicago's downtown. It will greatly improve access to downtown

FIGURE 5.1

2020 RTP HIGHWAY AND TRANSIT PROJECTS

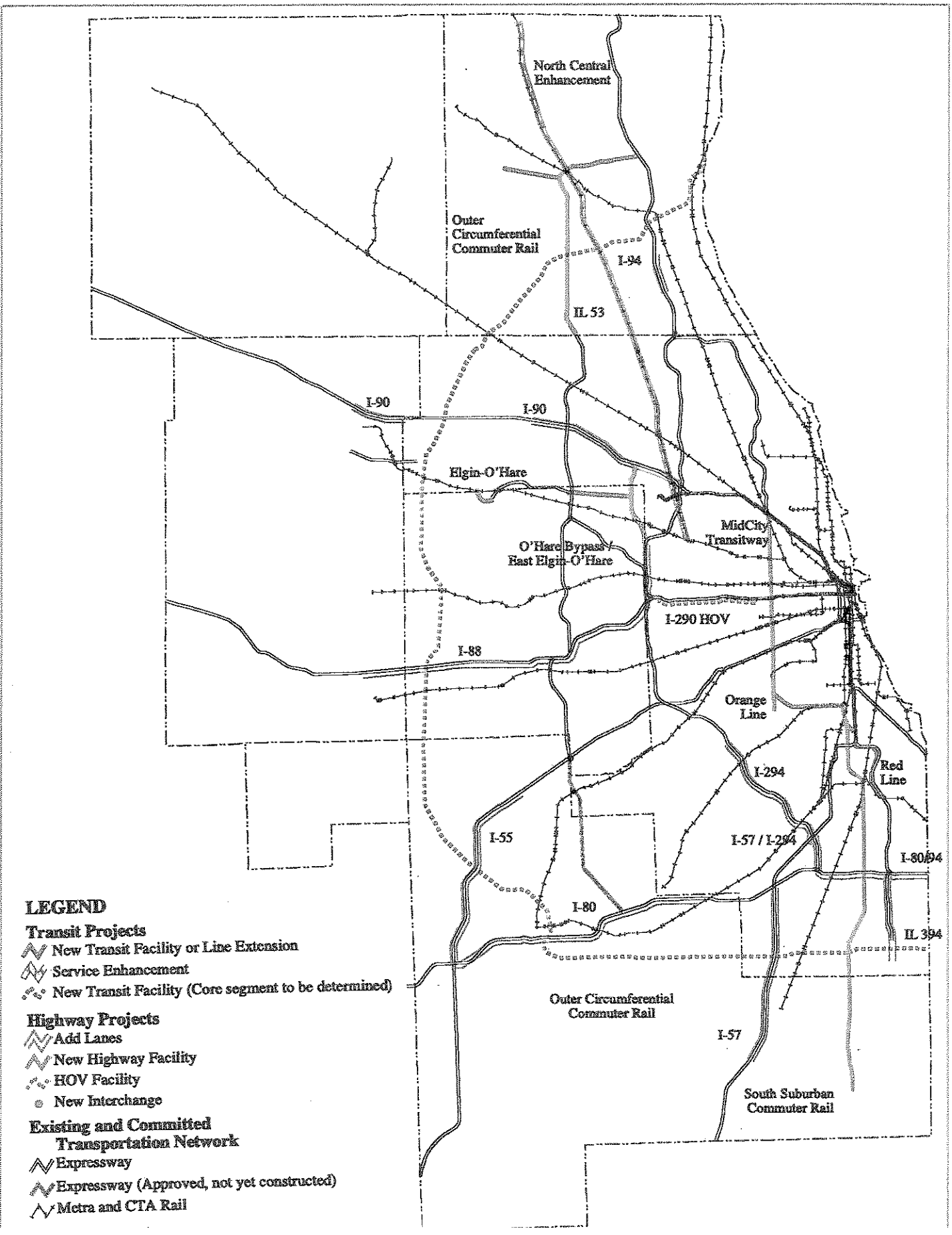


FIGURE 5.2

HIGHWAY AND TRANSIT PROJECTS

Project Name	Description	Length (miles)	Cost $1995 (millions)	2020 Weekday Users (1)	
				Existing Airports	SSA
North Central Service Enhancements	Additional track and improved service on the North Central Line	36	$310	7,800	7,700
Outer Circumferential Commuter Rail Corridor	New commuter rail service along approximately 50 miles of the EJ&E line in the Chicago suburbs	50	$225	3,900	3,800
Mid-City Transitway	New rail line b/w Jefferson Park (Blue Line) & 87th St. (Red Line)	22	$1,000	95,300	86,600
Orange Line Extension	Midway Airport to Ford City	2	$166	31,500	29,700
Red Line Extension	95th St. to 130th St. along I-94	6	$282	33,600	30,600
South Suburban Commuter Rail Corridor	New commuter rail service on the UP/CSX line from LaSalle St. Station to Beecher	38	$185	21,400	16,900
I-55 Add Lanes	Naperville Rd. to I-80	13	$49	69,000	68,000
IL 53 Extension	New six-lane tollway from Lake-Cook Rd. to I-94 and IL 120	23	$850	328,000	312,000
I-94 Add Lanes	IL 22 to IL 60	3	$30	55,000	55,000
I-90 Add Lanes	IL 25 to Randall Rd.	4	$40	57,000	57,000
I-90 Add-Lanes 2	(2)Add-lanes on I-90 from I-294 to Roselle Rd.	13 Add-Lane	$130	97,000	92,000
I-294 Add Lanes; O'Hare Bypass/East Elgin-O'Hare Extension (2)	Add-lanes on I-294 from the O'Hare Bypass to I-88; New bypass west of O'Hare Airport from I-90 to I-294; East extension of Elgin-O'Hare Expwy to O'Hare Bypass	13 New; 4 Add- Lane	$870	487,000	465,000
Elgin-O'Hare Expressway	West extension from Hanover Park to Streamwood	2	$62	75,000	77,000
I-88 Add Lanes	I-290 to IL 31	23	$250	129,000	130,000
I-294 Add Lanes	95th St. to IL 394	18	$180	93,000	93,000
I-80 Add Lanes	US 45 to I-55	20	$88	82,000	88,000
I-80/94 Add Lanes	I-94/IL 394 to Indiana State Line	3	$49	74,000	75,000
I-57 Add Lanes	I-80 to West Airport Access Rd.	13	$34	59,000	78,000
IL 394 Add Lanes	I-80/94 to Sauk Trail	6.5	$24	54,000	56,000
I-290 HOV Lanes	Austin Blvd. to I-88	7	$244	N/A	N/A
I-57 / I-294 Interchange	New interchange	N/A	$35	32,000	36,000

(1) Weekday users represent boardings for transit projects while for highway projects, it is the total number of vehicle equivalents using at least some portion of the facility.

(2) The I-90 Add-Lanes (I-294 to Randall Rd.) & I-294 Add-Lanes; O'Hare Bypass/East Elgin-O'Hare Extension proposals are included in the RTP as a single project. Cost and performance indicators are presented seperately.

I-55 Add Lanes, Naperville Road to I-80

The project calls for the widening of I-55 for thirteen miles from Naperville Road to I-80. The widening will increase the total number of lanes along this portion of I-55 from two to three in each direction and provide relief to growing congestion on I-55. It will provide needed roadway capacity in northwestern Will County, where rapid population growth is forecast to continue.

IL 53 Extension

This project is a new six lane tollway (three lanes in each direction) extending 23 miles from the terminus of IL 53 at Lake-Cook Road north to Grayslake, where it splits into a western spur ending at IL 120 and an eastern spur ending at I-94. The new tollway will help relieve congestion on many of Lake County's east-west and north-south arterials by providing a high capacity north-south highway facility. It will serve areas of central Lake County which are experiencing substantial increases in both employment and population, while improving the connection between Chicago's northern and western suburbs.

I-94 Add Lanes, IL 22 to IL 60

This project involves the widening of I-94 from IL 22 to IL 60 in Lake County. It will increase the number of lanes on I-94 from three to four in each direction. Together with the programmed I-94 widening south of IL 22 and an improvement to the Deerfield Road toll plaza, this project will provide needed highway capacity in a part of the region experiencing substantial increases in both population and employment.

I-90 Add Lanes, IL 25 to Randall Road

This project consists of the widening of I-90 from IL 25 to Randall Road. The widening will increase the total number of I-90 lanes crossing the Fox River from two to three in each direction, alleviating congestion. Further, this project will connect areas of Kane County forecast to substantially increase in population with major job centers in Schaumburg and Hoffman Estates.

I-90 Add Lanes, I-294 to Roselle Road
O'Hare Bypass / East Elgin-O'Hare Extension

These projects call for a complex of two new and two expanded highway facilities to serve transportation needs in the vicinity of O'Hare Airport and surrounding employment centers. The new facilities consist of a six lane (three in each direction) bypass west of O'Hare, an eastern extension of the Elgin-O'Hare Expressway to connect to the O'Hare Bypass and accommodations highway facilities include the widening of a four mile segment of I-294 from the O'Hare Bypass to I-88, which would increase the number of lanes from four to five in each direction, and the widening of a thirteen mile segment of I-90 from I-294 to Roselle Road, increasing the number of lanes from three to four in each direction. Socioeconomic projections for 2020 show continued employment growth in and near O'Hare Airport which will result in increasing congestion. Together, this series of improvements will enhance the road network around O'Hare Airport and allow this area to continue to thrive as a regional economic center.

Elgin-O'Hare Expressway, Hanover Park to Streamwood

This project calls for a two-mile western extension of the Elgin-O'Hare Expressway from its current terminus in Hanover Park to US 20 in Streamwood. Ultimately, this project is planned as three lanes in each direction. However, the total number of lanes may be staged to coincide with the widening of the existing Elgin-O'Hare Expressway, for which funding is currently unavailable. Together with other roadway improvements around O'Hare Airport, this project will provide Chicago's western suburbs with better access to the growing job base near the airport. It will also result in improved roadway operations in the immediate area by providing a better western terminus for the Elgin-O'Hare Expressway.

I-88 Add Lanes, I-290 to IL 31

This project calls for the addition of lanes on I-88 from I-290 to IL 31. The widening will increase the total number of lanes from three to four in each direction between I-290 and IL 59, four to five in each direction between the northbound and southbound I-355 ramps and two to three in each direction between IL 59 and IL 31. This project will help relieve congestion on I-88 and increase capacity in areas of DuPage County with substantial forecasted increases in both employment and population. Coupled with the I-290 HOV lanes, it will improve the accessibility of the regional employment centers in DuPage County to residents in other parts of the region.

I-294 Add Lanes, 95th Street to IL 394

This project consists of the widening of an 18 mile segment of I-294 from 95th Street to IL 394. The widening will increase the total number of lanes along

and will help relieve congestion while improving the accessibility of south suburban residents to major employment centers in western Cook and DuPage counties. I-294 was widened north of 95th Street in 1991.

I-80 Add Lanes, I-55 to US 45

This project calls for the addition of lanes along a 20 mile stretch of I-80 between US 45 and I-55. The widening will increase the number of lanes from two to three in each direction. It will help relieve congestion along this major truck route and serve the fast growing suburbs of New Lenox, Orland Park, Mokena and Frankfort.

I-80/I-94 Add Lanes, IL 394 to the Indiana State Line

This project involves the widening of I-80/I-94 for three miles between IL 394 and the Indiana state line. The widening will increase the number of lanes from three to four in each direction. This section of freeway currently handles traffic volumes well above its design capacity and frequently experiences heavy delays. It also carries the highest truck volumes in the region. The addition of lanes will alleviate some of this congestion, improve the safety of the roadway and help address the lack of highway connections across the state line.

I-57 Add Lanes, I-80 to the West Airport Access Road

This project calls for the widening of I-57 for thirteen miles between I-80 and the proposed South Suburban Airport west airport access road, south of Manhattan-Monee Road. The widening will increase the total number of lanes along this stretch of I-57 from two to three in each direction and serve the growing travel demand in southern Cook and eastern Will counties, as well as the proposed South Suburban Airport.

IL 394 Add Lanes, I-80/I-94 to Sauk Trail

This project consists of the widening of IL 394 for 6.5 miles between I-80/I-94 and Sauk Trail. The widening will increase the total number of lanes on IL 394 from two to three in each direction. This increase in capacity will help relieve congestion on IL 394 and parallel arterials and serve the population and employment growth in Chicago's far southern suburbs as well as provide additional highway access to the South Suburban Airport, if it is built.

I-290 HOV, Austin Boulevard to I-88

This project calls for the widening of I-290 between each direction for High Occupancy Vehicles (HOV). Currently, a lane imbalance exists on I-290 between the I-88/I-290/I-294 merge and Austin Boulevard. The I-88/I-290/I-294 bottleneck is one of the most serious in the region. The project will include the redesign of all the interchanges from the merge to Austin Boulevard. The number of lanes at the merge narrows from five to three and then increases to four at Austin Boulevard. The introduction of an HOV lane will address the imbalance while providing an incentive for carpooling to reduce the number of single-occupant vehicles using this corridor. This project will introduce the first HOV facility to the Chicago region and provide an opportunity to assess the potential to incorporate this concept into future highway improvement projects.

I-57/I-294 Interchange

This project is the addition of an interchange between I-57 and I-294. The interchange will allow access to northbound I-294 from eastbound I-57, and to westbound I-57 from southbound I-294. It will improve the connectivity of the south suburban highway system. The project will also divert traffic from I-294 and I-80 to I-57 and improve access to the growing DuPage County employment base for residents of the south suburbs.

Strategic Regional Arterial System

The 2010 Transportation System Development (TSD) Plan, adopted in 1989, recognized that it is not possible to accommodate all subregional long distance auto and commercial vehicle traffic on the freeway and tollway system. A Strategic Regional Arterial (SRA) System was developed to address these needs.

From a traffic perspective, the purpose of the strategic regional arterials will vary by where they are located. In existing, densely urbanized areas the system is mainly composed of existing routes with minimal expansion possibilities. The recommendations from individual studies made to date for these routes focus on improvements to relieve bottlenecks at intersections, provide alternatives to on-street parking and to improve low structural clearances. In developing parts of the region, expansions of existing roads, new construction and corridor traffic management strategies are recommended to accommodate growing traffic and serve major trip generators. The ability to preserve right-of-way for expansion, provide signal coordination, provide turn lanes, provide the

to control and restrict access are important considerations for these suburban arterials. In rural areas the system will facilitate through movement of traffic so as not to disrupt the character of the area. The ability to preserve right-of-way and control access would be used to minimize disruption and provide for future needs. The implementation of land development policies by local governments is a critical aspect of preserving the integrity of the strategic regional arterials in suburban and rural areas.

In older urban and suburban areas, the challenges focus on the existence of long established on-street parking along commercial strips, park lands and mature residential areas. The analyses of SRA routes in older urban and suburban areas include not only the economic and social impacts of proposed changes on existing land use and transportation patterns, but also on potential future redevelopment strategies and plans. In all cases and areas, the road design recommendations must be coordinated with the needs of public transit, bicycles and pedestrians.

There is no single design that will be appropriate for all designated roads or even roads within one category. The *SRA Design Concept Report* is a description of an optimal design for the three roadway classes: urban; suburban; and rural. The *SRA Design Concept Report* is to be considered as a general set of guidelines for use in each route study. Local conditions often make achievement of the optimal design infeasible. Each route has undergone or is currently undergoing a detailed study of feasible improvement options. Each study includes a panel of local elected officials and community representatives. The panels have encouraged participation by the general public as well. At the conclusion of each study a public hearing is held and a formal recommendation is released by IDOT.

The *2020 RTP* encourages local governments to develop local land use plans that address development issues along each route. Such land use plans can ensure that transportation facilities and land development strategies can evolve in a mutually supportive manner. While the *2020 RTP* recognizes that land use decisions are the responsibility of local officials, it encourages the use of intergovernmental planning efforts as a tool to effect SRA supportive land uses decisions.

From a funding perspective, a designated system of regional traffic funding needs from local congestion and access concerns. The *2020 RTP* assigns a high level of importance to SRA improvements and the capital maintenance of the designated system. However, it does not prioritize or identify specific improvements to individual SRA routes. That is done in the TIP, the region's agenda of surface transportation improvement projects to be implemented within the next five years.

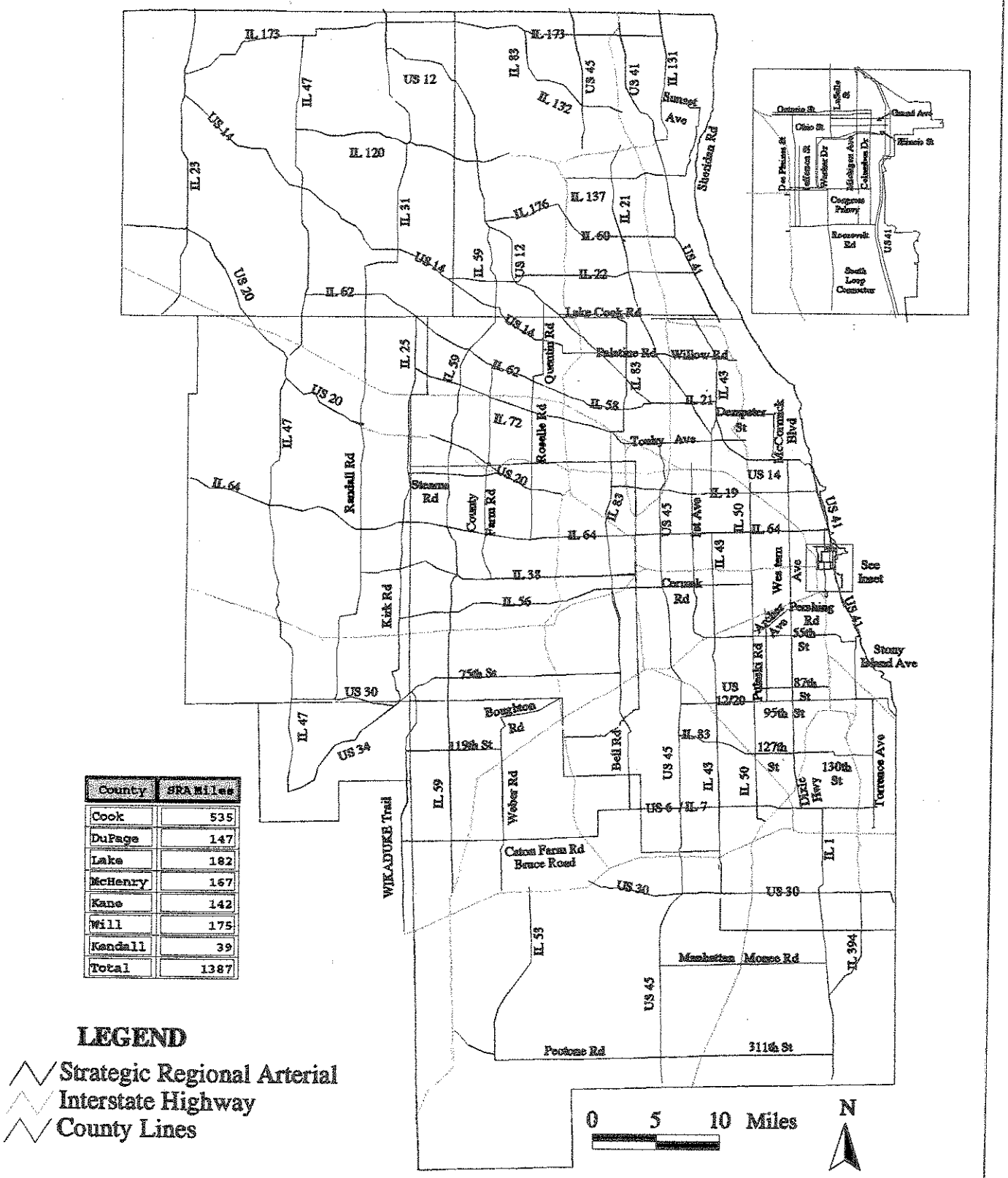
The SRA System that was developed for the 2010 TSD was based on existing road characteristics, previous studies and input from transportation agencies. Spacing guidelines were also developed. Spacing ranged from about three miles in the more densely developed areas to eight miles in the rural areas. The original spacing guidelines were based on 2010 densities. Areas were designated as urban if their 2010 household density was greater than five households per acre. Suburban densities were between one-half and five households per acre, and areas with less than one-half household per acre were designated as rural. The use of 2020 densities may reclassify some areas to a higher category. A reclassification was not undertaken as part of the *2020 RTP* since the policy assumptions for the new forecasts were not finalized until late in the planning process. A density reclassification of the region may be undertaken during the three year update period.

Subsequent studies of the original individual SRA routes, public comment on routes from the 2010 system and studies of proposed new routes have resulted in changes to the SRA System. The 1,387 route miles comprising the 2020 SRA System are shown in Figure 5.3 and in the route list in Figure 5.4. SRA routes or route segments that currently do not exist are shown in the mileage totals.

The 2020 SRA System includes changes in southern DuPage County. The shortage of strategic regional arterial system capacity in this area was recognized in the *2010 Transportation System Development Plan* and still exists. Illinois 59 cannot be expected to meet all the north-south subregional travel needs in this portion of the county. The *2020 RTP* directs the MPO staff to bring together DuPage County, DuPage Mayors and Managers Conference, affected municipalities and other transportation providers, as appropriate, to work together to attempt to find an acceptable set of routes to handle the subregional travel in southern DuPage County. The study should include an analysis of all

FIGURE 5.3

2020 STRATEGIC REGIONAL ARTERIAL SYSTEM



County	SRA Miles
Cook	535
DuPage	147
Lake	182
McHenry	167
Kane	142
Will	175
Kendall	39
Total	1387

LEGEND

- Strategic Regional Arterial
- Interstate Highway
- County Lines

FIGURE 5.4

2020 SRA ROUTE LISTING

ROAD	FROM	TO	COUNTY
1st Avenue / Cumberland	I-90	55th Street	Cook
57th Street	Lake Shore Drive	Cornell Drive	Cook
75th Street	IL 83	US 34	DuPage
87th Street	I-94	IL 50	Cook
119th Street	Weber Road	Wikaduke Trail	Will
127th Street / 130th Street	Torrence Avenue	US 45	Cook
167th Street	Cicero Avenue	I-57	Cook
311th Street / Wilmington Peotone Road	IL 1	I-55	Cook, Will
Algonquin Road / Huntley Road	IL 31	IL 47	McHenry
Archer Avenue	Pershing Road	IL 50	Cook
Bell Road / IL 171	IL 83	US 6	Cook, Will
Boughton Road / Naperville Road	I-355	Weber Road	Will
Caton Farm Rd / Bruce Rd / Cedar Rd	IL 7 / 159th Street	Wikaduke Trail	Will, Kendall
Cermak Road / 22nd Street	IL 50	IL 56	Cook, DuPage
Columbus Drive	Ontario Street	Lake Shore Drive	Cook
Congress Parkway	I-94	Columbus Drive	Cook
County Farm Rd / Barrington Rd / Jefferson St	IL 62	IL 38	Cook, DuPage
Dempster Street	McCormick Blvd	IL 43	Cook
Euclid Avenue	Quentin Road	Roselle Road	Cook
Garfield Blvd / 55th Street / Midway Plaisance	Lake Shore Drive	IL 171	Cook
IL 1 (Halsted)	US 6	Kankakee / Will Line	Cook, Will
IL 19 (Irving Park Road)	Lake Shore Drive	IL 83	Cook, DuPage
IL 21 (Milwaukee Avenue)	FAP 342	IL 43	Cook, Lake
IL 22	US 41	US 14	Lake, McHenry
IL 23	US 14	McHenry / DeKalb	McHenry
IL 25 / Kirk Rd / Dunham Rd / Farnsworth Rd	IL 62	US 34	Kane
IL 38 (Roosevelt Road) / Fabyan Parkway	I-294	Randall Road	DuPage
IL 43 (Harlem Avenue)	Lake Cook Road	IL 19	Cook
IL 43 (Harlem Avenue)	North Avenue	US 30	Cook, Will
IL 47	IL 173	IL 71	McHenry, Kane, Kendall
IL 50 (Cicero Avenue)	I-94	167th Street	Cook
IL 53	I-80	Wilmington Peotone Rd	Will
IL 56 (Butterfield Road)	Cermak Road	Kirk Road	DuPage, Kane
IL 58 (Golf Road)	IL 43	IL 62	Cook
IL 59	US 12	I-55	Cook, DuPage, Lake, Will
IL 60 (Townline Road)	US 41	IL 176	Lake
IL 62 (Algonquin Road)	IL 58	IL 31	Cook, Kane, McHenry
IL 64 (North Avenue) / LaSalle Drive	Lake Shore Drive	Kane / DeKalb Line	Cook, DuPage, Kane
IL 71	US 34	IL 47	Kendall
IL 72 (Higgins Road)	Touhy Avenue	IL 25	Cook, Kane
IL 83	IL 173	IL 132	Lake
IL 83	Lake Cook Road	Bell Road	Cook, DuPage, Will
IL 120	IL 131	FAP 342	Lake
IL 120 / Charles Road	IL 47	FAP 342	Lake, McHenry
IL 131 (Green Bay Road)	Wisconsin State Line	IL 120	Lake
IL 132 (Grand Avenue)	I-94	IL 83	Lake
IL 137 (Buckley Road)	Sheridan Road	Peterson Road	Lake
IL 173	IL 131	US 14	Lake, McHenry
IL 176	IL 60	US 12	Lake

FIGURE 5.4 cont.

2020 SRA ROUTE LISTING

ROAD	FROM	TO	COUNTY
Illinois / Grand Corridor	Lake Shore Drive	LaSalle Drive	Cook
Jefferson / Des Plaines Corridor	Ontario/Ohio	Roosevelt Road	Cook
Lake Cook Road	US 41	US 12	Cook, Lake
Lake Shore Dr / Cornell Dr / Stony Island	US 14	I-94	Cook
LaSalle Street	IL 64	Wacker Drive	Cook
Manhattan Monee Road	IL 1	US 45	Will
McCormick Blvd / Lincoln Avenue	Dempster Street	US 14	Cook
Michigan Avenue	Lake Shore Drive	Roosevelt Road	Cook
Ontario / Ohio Corridor	Fairbanks Court	I-90/94	Cook
Palatine Road / Willow Road	I-94	US 14	Cook
Pershing Road	I-94	Archer Avenue	Cook
Peterson Road	IL 137	FAP 342	Lake
Pulaski Road	US 12 / 20	I-55	Cook
Quentin Road	US 12	Euclid Avenue	Cook, Lake
Roosevelt Road	Lake Shore Drive	I-90/94	Cook
Roselle Road / Bloomingdale Road	Euclid Avenue	IL 64	Cook, DuPage
Sheridan Road	Sunset Road	Buckley Road	Lake
South Loop Connector	Congress @ Wacker	Cermak Road	Cook
Stearns Road	US 20	Dunham Road	DuPage, Kane
Stony Island Avenue	57th Street	I-94	Cook
Sunset Road	Sheridan Road	IL 131	Lake
Torrence Avenue	US 12 / 20	I-80	Cook
Touhy Avenue	I-94	IL 72	Cook
US 6 (159th Street)	Torrence Avenue	Cedar Road	Cook, Will
US 12 (Rand Road)	IL 31	IL 58	Cook, Lake, McHenry
US 12 / 20 (95th Street)	Indiana State Line	US 45	Cook
US 12 / IL 31 / Randall Road / Orchard Road	Wisconsin State Line	US 30	Kane, McHenry
US 14 (Northwest Highway)	Wisconsin State Line	Palatine Road	Cook, Lake, McHenry
US 14 (Caldwell Ave, Peterson Ave, Ridge Ave)	IL 43	Hollywood Avenue	Cook
US 20	US 20 Bypass (W)	McHenry / Boone Line	Kane, McHenry
US 20	I-355	US 20 Bypass (E)	DuPage, Cook
US 30	US 34	IL 47	Kane, Kendall
US 30 (Lincoln Highway)	Indiana State Line	I-80	Cook, Will
US 34 (Ogden Avenue)	75th Street	IL 71	DuPage, Kane, Kendall
US 41 (Skokie Highway)	I-94 (Tri-State)	I-94 (Edens)	Cook, Lake
US 45	Touhy Avenue	Kankakee / Will Line	Cook, Will
US 45	Wisconsin State Line	FAP 342	Lake
Wacker Drive	Lake Shore Drive	Congress Parkway	Cook
Weber Road / Larkin Avenue	Boughton Road	I-80	Will
Western Avenue / Dixie Highway	US 14	US 6	Cook
Wikaduke Trail	US 34	I-80	DuPage, Kendall, Will

The financial strategy presented in Chapter 7 projects that approximately $440 million should be available for 108 centerline miles of SRA capacity expansion through 2020. Approximately $4.1 billion for the capital maintenance of SRA routes is part of the overall capital maintenance category described in an earlier section of this chapter.

Strategic Regional Transit System

The Strategic Regional Transit (SRT) System is a new component for the regional plan in northeastern Illinois. The SRT System is an integrated network of existing high capacity commuter rail, rapid transit and bus services that are vital for mobility, congestion relief and economic development. It is also a mechanism for addressing improvements to the existing system, and permits the regional planning process to incorporate a wide range of improvements that would not otherwise be included, given the definitions of regionally significant actions. While their importance was acknowledged, a conscious decision was made to define operational and technological enhancements to individual routes and groups of routes as not regionally significant. Many of these improvements, taken individually, would be local in nature and impact, but as a whole could be substantial. In this regard the SRT System should be viewed as similar to the SRA System.

There are seven primary objectives for the SRT System:

- Identify improvements for each route;
- Identify and protect needed right-of-way;
- Ensure coordination among services and develop an integrated system;
- Improve access to the SRT System, including automobile, bicycle and pedestrian access;
- Improve interfaces with rail freight and highway traffic;
- Encourage and coordinate transit oriented development and design; and
- Identify and address potential economic, social and environmental considerations.

Based on the 2020 financial forecast and analysis, more than 80 percent of projected revenues are earmarked for the existing system. The SRT System's focus on smaller improvements and rail extension opportunities creates possibilities for transit providers to develop community support for transit investments and explore public/private partnerships on a more localized basis.

The SRT System also provides transit agencies the opportunity to give attention to the numerous operational improvements that could significantly improve the quality of transit service on selected routes and improve system efficiency.

The inclusion of transit services and facilities in the SRT System is based on the following four principles:

- Designation of the entire rail system;
- Designation of high ridership bus routes;
- Designation of new routes and support facilities to serve new markets; and
- Designation of spacing and connectivity criteria to ensure system integration.

The 2020 SRT System includes all the existing rapid rail and commuter rail lines and twelve potential extensions. Approximately one-third of the bus system, accounting for over two-thirds of the bus ridership, is included. A Central Area Transportation Program involving improvements such as busways and other priority treatments is also included in the SRT System. Twenty transportation centers or major park-n-ride facilities and seventeen new suburban express bus routes are also included. Figure 5.5 lists the types of improvements and enhancements that might be made to the SRT System.

FIGURE 5.5

POSSIBLE IMPROVEMENTS OR ENHANCEMENTS TO RAIL AND BUS FACILITIES

Rail Improvements and Enhancements

- Infill stations
- Access improvements
- Management systems
- Passenger amenities and information
- Platform extensions
- Operational improvements
- Grade separations Extensions

Bus Improvements and Enhancements

- Bus management systems
- Roadway priority treatments
- Staging area improvements
- Passenger amenities and information systems
- Transportation centers
- Transfer and parking facilities

Each route will undergo a detailed study similar to the SRA studies. The scope of these studies is described in Chapter 8.

The SRT System is an integrated component of the overall transit system including the facilities described in the **Transit and Highway Projects** section of this chapter. Figure 5.6 displays the SRT System.

The financial strategy presented in Chapter 7 projects that approximately $760 million should be available for SRT System improvements through 2020. Similar to the SRA System, not all the improvements proposed can be accomplished with this level of funding. For example, preliminary cost estimates for the rail extensions indicate that perhaps four could be implemented within the constraints of the plan.

Suburban Local Bus Expansion

The suburban local bus expansion component is intended to address the needs of that portion of the suburban bus network not included in the SRT System. The focus of the SRT System is on the high volume and high capacity elements of the existing system.

Suburban bus is an integral part of the transportation system serving northeastern Illinois. Even along lower ridership routes, suburban bus provides increased travel options and helps to meet important mobility needs. Further, these services are attractive investment options because they can respond quickly to changing development patterns and emerging local conditions. Planning for improvements to this portion of the system is another means of expanding and enhancing transit services. Enhancements are addressed by identifying opportunities to increase service along routes which are currently experiencing relatively low levels of ridership, but which are in areas that show the potential for increased demand. In a similar fashion, the expansion of service into new market areas is directed at those areas where forecasted growth indicates a relatively high potential demand. The increase in local bus service is one of the elements of the Pace *Comprehensive Operating Plan*. Figure 5.7 reflects those areas meeting the Pace density criteria for new local bus service. Based on Pace level of service criteria, the *Destination 2020* process identified thirty-four potential new routes by 2020. Given the funding constraints for the entire plan, 18 routes could be implemented by 2020.

The *2020 RTP* projects that $50 million should be

Bicycle and Pedestrian Transportation

In the *2010 TSD Plan Update*, the northeastern Illinois region recognized the emerging role of bicycling and walking as effective transportation modes. Bicycle and pedestrian modes can reduce traffic congestion, energy consumption and air pollution and generally contribute to an improved quality of life. The *2010 TSD Plan Update* recommended that the *2020 RTP* address the obstacles and opportunities for integrating bicycles and walking into the transportation system.

The *2020 RTP* includes a number of objectives specifically directed at bicycle and pedestrian transportation modes. These objectives focus on four key areas:

- Support bicycling and walking as effective transportation options;
- Reduce the number of short distance and single occupant auto trips;
- Improve bicycle and pedestrian access to transit; and
- Support the development of bicycle and pedestrian facilities.

Unlike transit and highway planning, planning for bicycle and pedestrian needs has historically received little attention in regional transportation plans. Inventories of existing facilities, travel and usage characteristics and needs and opportunities were limited. The Non-Motorized Issues Task Force undertook the task of developing a database for bicycle and pedestrian planning.

The foundation for the bicycle and pedestrian policies included in the *2020 RTP* comes from the extensive work of the local governments in the region. The city of Chicago, the suburban councils of mayors and the counties supervised and coordinated a number of planning activities in their respective areas. These activities included:

Facilities Inventory

In 1995, NIPC coordinated an inventory of designated bicycle and pedestrian facilities (existing, committed and proposed), gathered information on facility type (on-road and off-road), surface and width. There were 992 miles of existing and committed facilities and an additional 1,140 miles of proposed facilities. Figure 5.8 illustrates the existing and committed facilities

FIGURE 5.6

2020 STRATEGIC REGIONAL TRANSIT SYSTEM

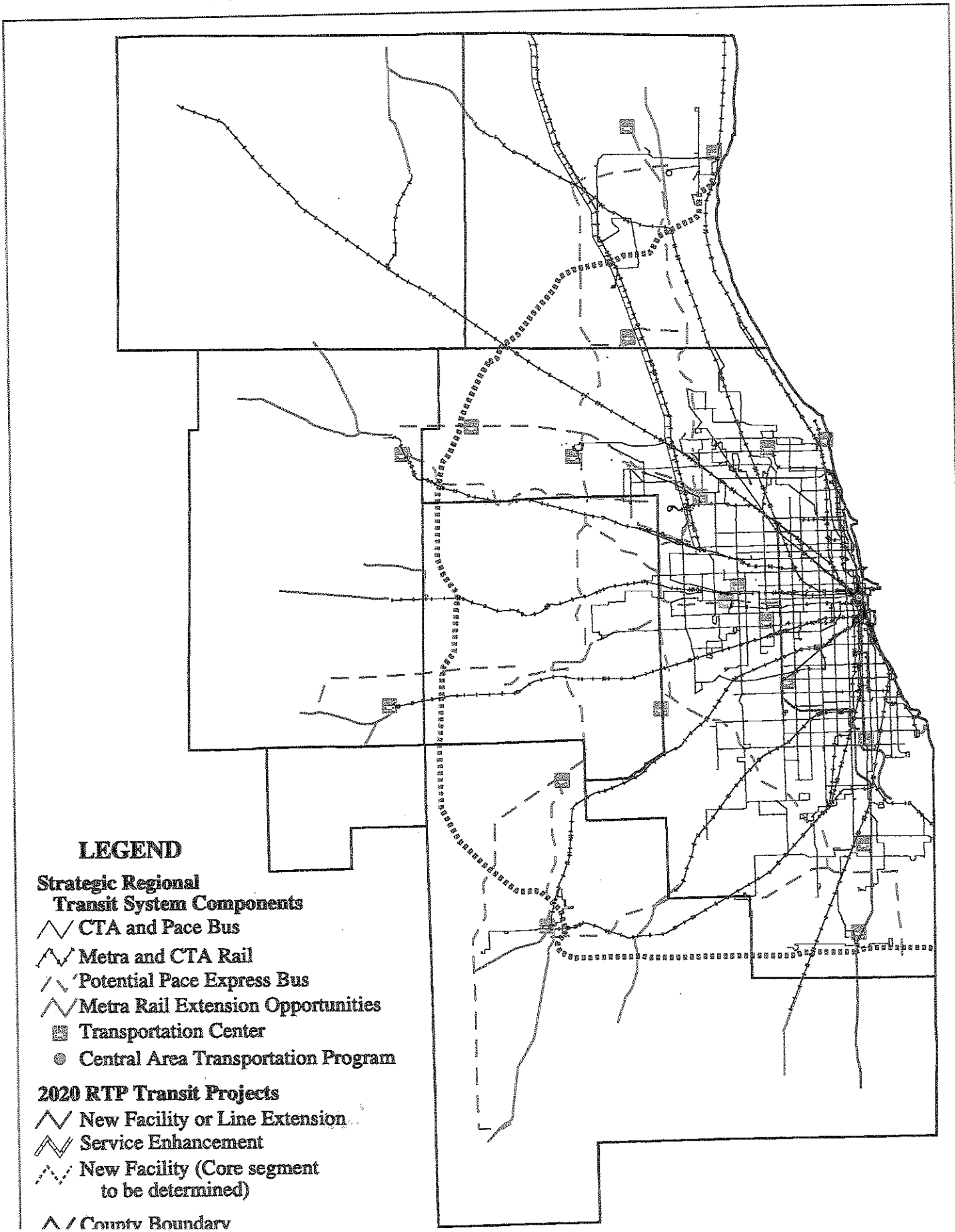


FIGURE 5.7

AREAS FOR POTENTIAL EXPANSION OF PACE BUS SERVICE

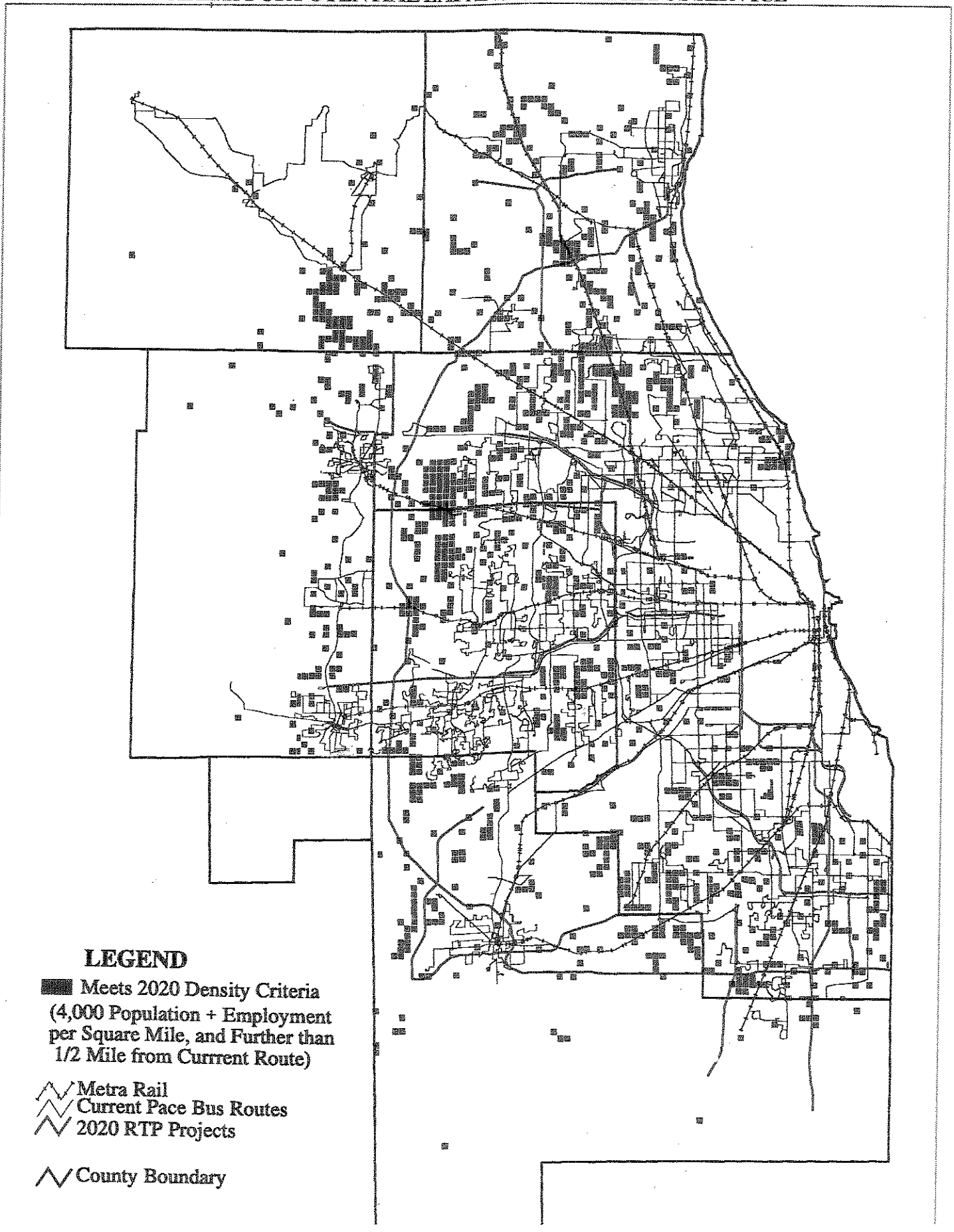
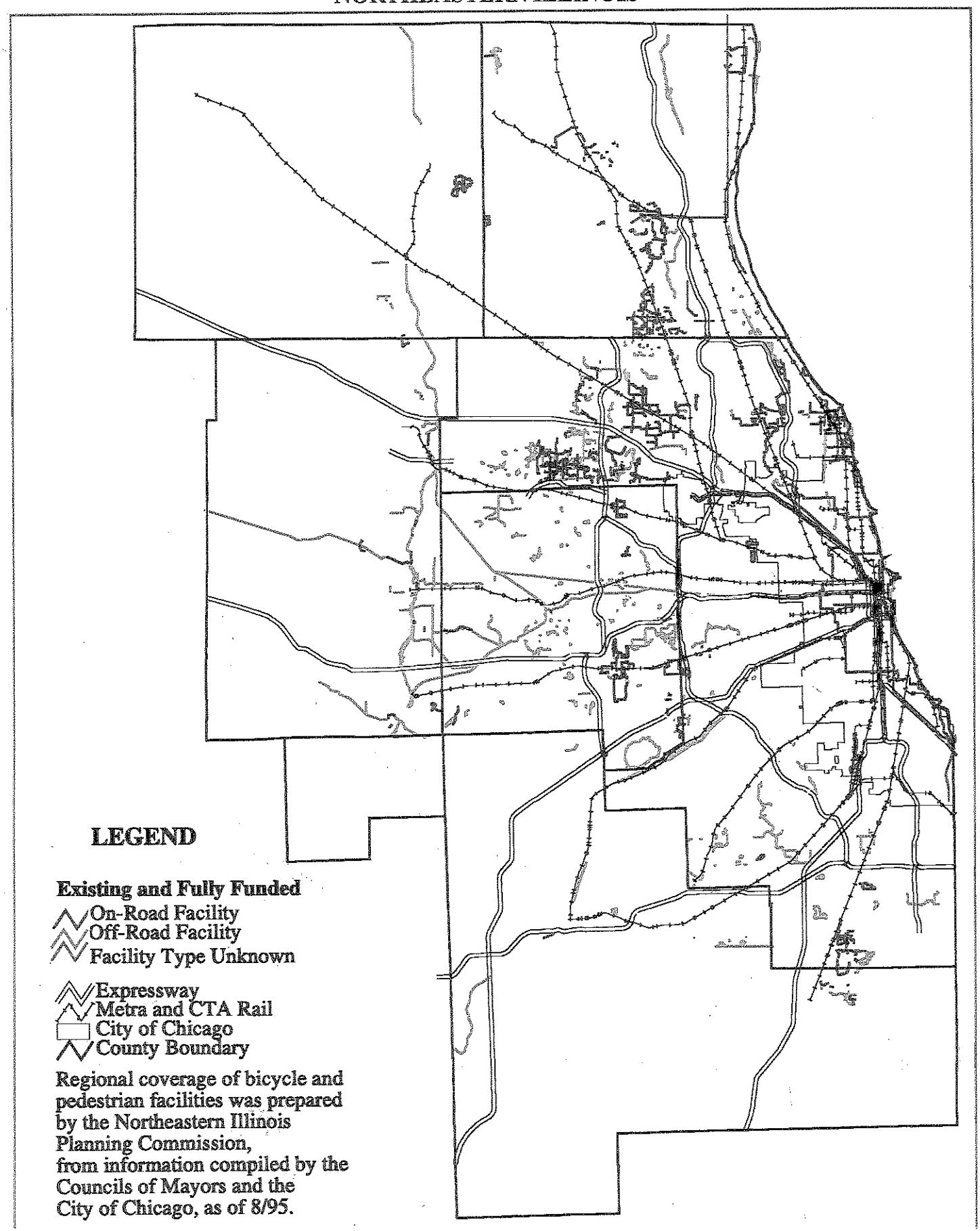


FIGURE 5.8

EXISTING AND FULLY FUNDED BICYCLE AND PEDESTRIAN FACILITIES IN NORTHEASTERN ILLINOIS



Bicycle Trip Conditions

Since a typical bicycle trip is likely to utilize designated facilities for only a part of a trip, the Councils of Mayors conducted an assessment of typical bicycle routes in the region. This effort examined conditions and obstacles on a sample set of 405 routes where bicycle trips were likely to occur. The analysis concluded that the most pervasive problems are roadway curb lane traffic volumes and widths on unavoidable arterial links. The analysis also concluded that local bicycle travel is discouraged by the lack of through routes. The analysis recommended strategies such as creating through routes, wider curb lanes and the provision of bicycle parking to improve bicycle travel.

Pedestrian and Bicycle Travel Data

The task force concluded that there is a lack of good travel data for bicycle and pedestrian modes and that the region should enhance its database. The CATS *1990 Household Travel Survey* shows that walking accounts for 13 percent of all trips. The 1990 Census shows that for work trips, 0.2 percent are made on bicycles and 4 percent are made by walking. The 1995 *Council of Mayors Trail Survey* found that two-thirds of all travel on suburban trails was destination based as opposed to recreational travel. Finally, the 1996 RTA *Non-Motorized Access to Transit Study* showed that walking constitutes 24 percent of trips to Metra stations and 44 percent of trips to CTA stations. Bicycling was less than one percent in both cases. This limited data suggests that there is significant room for increasing the share of these short trips made by bicycle or walking. Future data collection activities should focus on enhancing our ability to forecast future trip making and improve project selection.

Northeastern Illinois has not developed a detailed regional bicycle and pedestrian needs statement. However many of the subregional efforts have included lists of needs for facilities to connect communities, businesses and residences through subregional systems. Several subregions have developed criteria to evaluate and prioritize project proposals for funding. Several counties have developed bicycle and pedestrian components for their transportation plans. In addition, the Illinois Prairie Trail Authority and the Forest Preserve District of Cook County in cooperation with NIPC and the Open Lands Project recently prepared an updated *Northeastern Illinois Regional Greenways and Trail Plan*. A status of bicycle and pedestrian planning at the subregional level is reflected in Figure

FIGURE 5.9

STATUS OF BICYCLE AND PEDESTRIAN PLANNING IN NORTHEASTERN ILLINOIS

Subregion	Year	Bicycle Plan	Pedestrian Plan	Type of Plan: Policies	Type of Plan: Facilities
City of Chicago*	1994, 1997	Yes	Yes	Yes	Yes
Suburban Cook:					
North Shore/Northwest**	1995	Yes	No	Yes	Yes
North Central	1995	Yes	No	Yes	Yes
Central	1996	Yes	Yes	Yes	Yes
Southwest	1996	Yes	Yes	Yes	Yes
South	1996	Yes	Yes	Yes	Yes
DuPage County	1995	Yes	Yes	Yes	Yes
Kane County	1996	Yes	Yes	Yes	Yes
Lake County	1995	Yes	Yes	Yes	No
McHenry County	1996	Yes	No	Yes	Yes
Will County	1996	Yes	Yes	Yes	No
6-Counties***	1997	Yes	Yes	Yes	Yes

*The city of Chicago has three components to its bicycle plan. The first component, published in 1994, identifies goals. The second component, published in 1997, identifies potential off-street facilities. The third component, publication expected in 1998, identifies on-street facilities. The city is beginning an update of its downtown pedestrian count with an expected release date of 1998.

**The North Shore and Northwest subregions have a common non-motorized plan produced through the Northwest subregion.

***The Illinois Prairie Trail Authority and the Forest Preserve District of Cook County in cooperation with the Northeastern Illinois Planning Commission and the Open Lands Project developed a six county *Northeastern Illinois Greenways and Trail Plan* that includes a bicycle and pedestrian element.

In addition to the efforts at the county and subregional levels, the state has also enhanced the role of bicycle planning. In 1996, the Illinois Department of Transportation (IDOT) instituted a bicycle planning policy in its report, *Policies and Procedures for Accommodating Bicycle Travel in Highway Improvements.* In this policy statement IDOT recognizes the needs of bicyclists as highway users. The policy states that highway projects should accommodate bicycle travel when the route is part of a locally or regionally adopted bicycle plan or published map where feasible and practical.

2020 RTP Bicycle and Pedestrian Policies

In order to accommodate bicycle and pedestrian needs, the *2020 RTP* includes the following policies:

1. Encourage regional coordination and planning.
   - Accommodate safe, convenient bicycle and pedestrian travel in transportation and development decisions.
   - Incorporate consideration of bicycle and pedestrian accommodations into local and regional development review procedures.
   - Follow, where possible, nationally accepted or recommended design standards when designing or improving bicycle facilities to assure connectivity consistency and safety

2. Reduce missing bicycle and pedestrian links.
   - Complete links from residential areas to major trip generators, such as employment centers, retail centers, public transit stations and parks, so they are accessible by bicycle within three miles and by pedestrians within 1/2 mile.
   - Establish a process for identifying, prioritizing and developing short local links to improve the continuity of the local street system to facilitate bicycle and pedestrian travel.
3. Improve bicycle and pedestrian access to transit and highways.
   - Consider the specific access needs of bicyclists and pedestrians in arterial and collector project planning, especially on those routes that provide unique access to destinations or access across barriers.
   - Promote safe and convenient bicycle and pedestrian access to and from all transit and intermodal facilities, including consideration of parking, signs, lighting and maintenance.
   - Accommodate bicycles on transit, where feasible.
4. Improve connections between subregional and other networks.
   - Complete trails within the *Northeastern Illinois Regional Greenways and Trail Plan* and provide local connections to the regional greenways network.
   - Coordinate bicycle and pedestrian planning at all levels of government, particularly in the same geographic area.
5. Encourage trip diversions from the private auto.
   - Provide public education that promotes the benefits of bicycle and pedestrian travel as viable forms of transportation.
   - Encourage multi-use, clustered development that results in increased bicycle and pedestrian travel.
   - Give priority to bicycle and pedestrian projects in areas where there are a high number of short auto trips.

The *2010 TSD Plan Update* called for the development of a regional bicycle and pedestrian plan. The lack of good, comprehensive information on bicycle and pedestrian travel and the various stages of subregional bicycle and pedestrian planning has postponed the development of a facility specific regional plan. The subregional planning organizations agree that more in the next few years will be to complete subregional plans, identify critical missing links for a regional system, improve access to transit and promote bicycle and pedestrian modes. Bicycling and walking are also considered as one of eleven key transportation management strategies in the plan.

The *2020 RTP*, for the first time, includes a statement of intent to financially support bicycle and pedestrian transportation modes. Bicycle and pedestrian projects are constructed with a variety of local, state and federal transportation and non-transportation funds. From 1992 through 1997, approximately $60 million of ISTEA funds were programmed in northeastern Illinois for bicycle and pedestrian facilities from a variety of transportation programs. The financial component of the plan recommends that the region maintain a high level of funding for bicycle and pedestrian projects if funding projections are realized.

The financial strategy projects that approximately $175 million should be available for bicycle and pedestrian projects from the Enhancement and Congestion Mitigation and Air Quality programs. Beyond this projection, additional funding for bicycle and pedestrian facilities will come from local and state sources, non-transportation funds and as part of other projects such as highway capital maintenance.

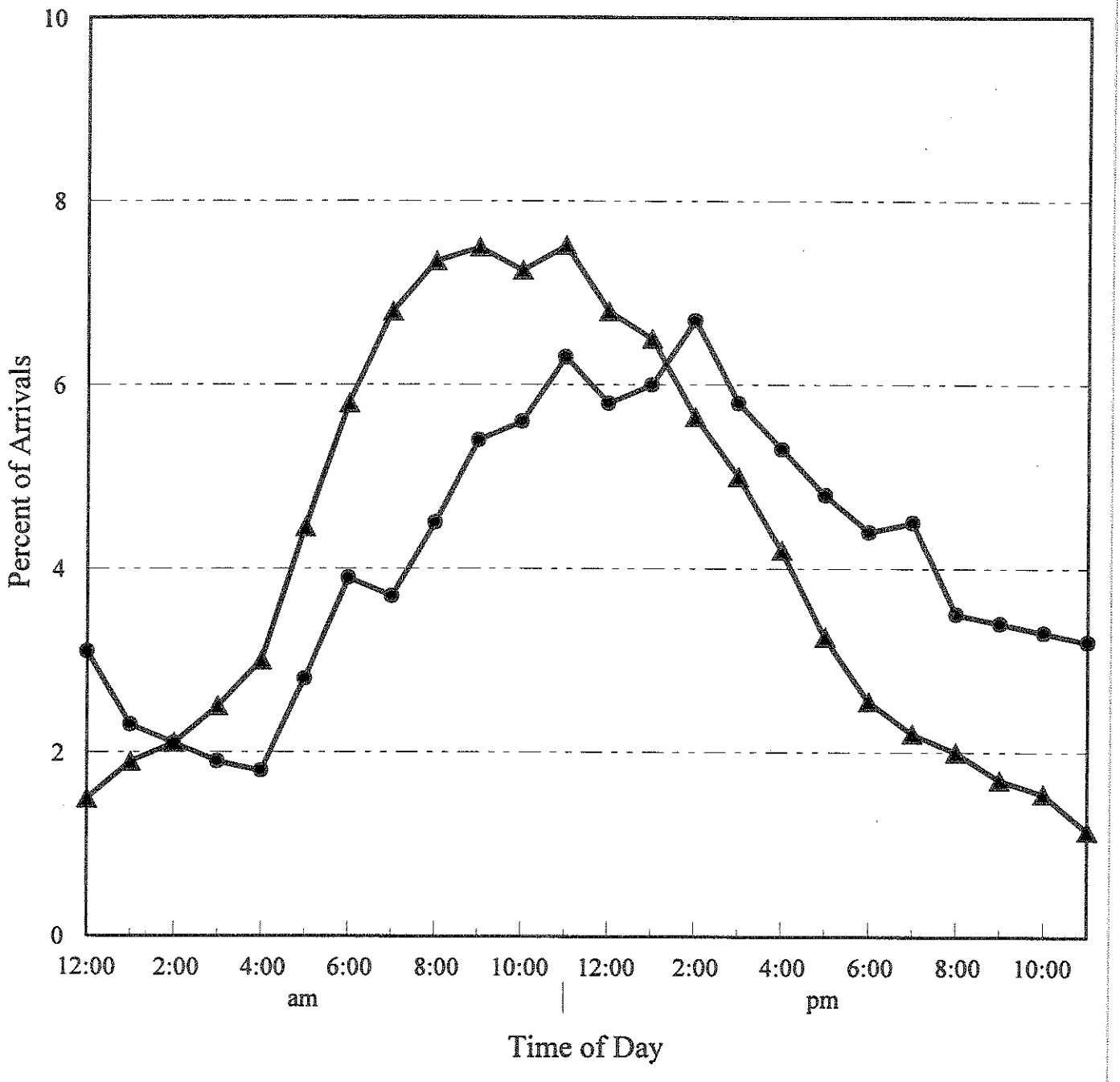
Intermodal Transportation

The northeastern Illinois region, with Chicago as its center, has been a transportation hub for a century and a half. The Chicago region is firmly established as a goods movement "load center" for the upper midwest and as a "gateway" for transcontinental and international movements. Facilities of all major freight transportation modes (waterway, rail, trucking, pipeline and air) converge in northeastern Illinois where they generate and service all aspects of local, regional, national and international goods movements.

Increasingly, commercial freight involves multiple modes with complex movement patterns requiring coordinated and cooperative intermodal logistics. Goods movement is largely a private sector business that is competitive, customer-driven and a 24-hour a day activity. Figure 5.10 shows the nature of truck movements in the region. Substantial elements of the transportation infrastructure which support intermodal freight operations are in the public domain. Often

FIGURE 5.10

TRUCK ACTIVITY BY TIME OF DAY IN NORTHEASTERN ILLINOIS



with public sector programming and investments. The *2020 RTP* addresses this investment discontinuity through regional policies which help coordinate private and public sector activities and benefit the long-term viability of the intermodal freight industry.

The intermodal freight industry is a significant piece of our economic profile. The industry accounted for approximately $8.7 billion or six percent of our gross regional product in 1996. The influence and impact of goods movement on the regional economy are extensive. Nearly 4.2 million tons of freight are moved daily in the region, excluding pipelines. Figure 5.11 describes the extent of intermodal freight operations in the region.

FIGURE 5.11

STATISTICAL DIGEST OF NORTHEAST ILLINOIS INTERMODAL FREIGHT ACTIVITY

MOTOR CARRIER INDUSTRY		
Number of registered trucks in region [1995] {all weights over 8,000 lbs. including IRP registrations}		212,775
Forecast of registered trucks [2020]		290,960
Number of daily truck trips in the region [1986] {all weights over 8,000 lbs.}		417,870
Forecast of daily truck trips in region [2020]		570,650
Estimated daily intermodal truck movements [1996]		14,200
Forecast of daily intermodal truck movements [2020]		28,260
Daily tonnage of freight moved in trucks [1996]		1,591,100
Daily tonnage of freight moved in trucks [2020]		2,267,300
RAIL INDUSTRY		
Annual intermodal lifts {trailers and containers} [1995]		4,617,200
Forecast of lifts [2020]		11,716,150
Daily train movements (total) [1996]		1,780
Intermodal	270 (15%)	
Manifest	200 (11%)	
Unit Trains	140 (8%)	
Passenger	670 (38%)	
Forecast daily trains [2020]		2,390
Daily cars moved through the Chicago Gateway (total)[1996]		37,500
Intermodal	13,400	
Manifest	22,900	
Unit Train Car	1,200	
Forecast of cars through the Gateway [2020]		67,000
Daily tonnage of freight moved by rail [1996]		2,460,000
Forecast of daily tonnage moved [2020]		4,375,200
AIR FREIGHT INDUSTRY		
Annual air cargo operations [1996] {O'Hare airport only}	domestic	16,340
	international	2,000
	TOTAL	18,340
Annual tonnage of air freight [1996] {O'Hare airport only}*	domestic	819,970
	international	542,340
	TOTAL	1,362,310
Percent of all air freight movements {O'Hare only} : 2.46%		
** O'Hare ranks 6th in domestic tonnage and ranks 11th internationally.*		
WATER FREIGHT INDUSTRY		
Annual tonnage of waterborne freight in region [1996]		5,850,000
Port of Chicago		5,350,000
Port of Waukegan		500,000

Twenty-eight major intermodal terminals qualify for status as intermodal connection sites in the National Highway System (NHS). Over thirty connector routes designated to provide high quality access to these major intermodal facilities. The connectors handle as many as 14,200 intermodal movements to and from rail yards each day, as well as significant additional truck traffic. There are also 89 miles of transit intermodal connectors identified in the system. Figure 5.12 identifies the intermodal connection sites in the region. Figure 5.13 shows a sample NHS connector and the four major transportation components of the intermodal industry: the national highway system; the mainline rail network; the waterway network; and the major airports.

These facilities and networks form the critically important intermodal freight transportation system serving the region and are the focus of the intermodal component of the *2020 RTP*.

Analysis of Intermodal Issues - Previous regional transportation plans have contained a freight transportation component which recognized the scale and scope of the intermodal freight industry in the region. The *2020 RTP* continues and expands this tradition through an enhanced outreach effort and the development of regional policies focused on intermodal freight operations and needs. The Intermodal Advisory Task Force provides a forum for representatives of the rail, truck, air freight and water carrier industries, as well as shippers, freight forwarders and other users to participate in the planning process. This forum ensures that the intermodal freight industry needs and issues are understood and considered in the context of the regional plan.

The task force conducted an outreach process to identify intermodal issues, constraints to efficient operations and improvement needs. The task force analyzed these needs and developed and evaluated options to address them with the public and private organizations involved in implementing solutions. The *2020 RTP* supports this outreach process and encourages the continued coordination between the industry and public implementors. The initial outreach identified 47 specific needs. The analysis and coordination process resulted in 11 projects being proposed or implemented. These projects were sent to the appropriate agency for consideration. This process of soliciting improvement needs from the industry and working cooperatively with implementors will continue and is expected to improve as industry and agency confidence in the process grows. Such public/private cooperation is the key to the successful implementation of the intermodal

FIGURE 5.12A

INTERMODAL CONNECTOR LISTING
(Freight)

Freight Connector Link	Link Limits		NHS Connection	City	Freight Facility Name	Operator
	From	To				
71st st	IL 43	Sayre **	IL 43	Bedford Park	Bedford Park	CSX Intermodal
West Frontage Road	IL 43	Entrance	IL 43	Bedford Park	Bedford Park	CSX Intermodal
East Frontage Road	IL 43	Entrance	IL 43	Bedford Park	Bedford Park	CSX Intermodal
119th St.	Wolcott	I-57	I-57	Blue Island	Iowa Interstate	Iowa Interstate
22nd St. (Cermak)	Archer Ave.	I - 90 / 94	I-90 / I-94	Chicago	26th St / UP	Union Pacific
Canal	25th St.	18th St.	I-90 / I-94	Chicago	26th St / UP	Union Pacific
Archer	Canal	22nd St. (Cermak)	I-90 / I-94	Chicago	26th St / UP	Union Pacific
18th St.	Canal	I - 90 / 94	I-90 / I-94	Chicago	26th St / UP	Union Pacific
51st St.	I-90 / I-94	Sheilds **	I-90 / I-94	Chicago	47th Yard	Conrail
State St.	59th St.	63rd St.	I-90 / I-94	Chicago	63rd Yard	Conrail
61st St.	State St.	Lafayette **	I-90 / I-94	Chicago	63rd Yard	Conrail
63rd St.	I-90 / I-94	Michigan	I-90 / I-94	Chicago	63rd Yard	Conrail
59th St.	I-90 / I-94	State St.	I-90 / I-94	Chicago	63rd Yard	Conrail
51st St.	St. Louis	Kedzie	Archer	Chicago	CN Lumber	Canadian National
47th St. *	Pulaski	I-90 / 94	I-55	Chicago	Corwith	BNSF
41st St.	Pulaski	Hamlin **	I-55	Chicago	Corwith	BNSF
Pulaski *	47th St.	I-55	I-55	Chicago	Corwith	BNSF
Kedzie Ave. *	I-55	51st St.	I-55	Chicago	Corwith	BNSF
Ashland Ave. *	I-290	47th St.	I-290	Chicago	Global One	Union Pacific
15th St.	Ashland	Entrance (Wood)	I-55 / I-290	Chicago	Global One	Union Pacific
Damen *	Blue Island	I-55	I-55	Chicago	IMX	Union Pacific
79th St *	Oakley	Cicero	Western	Chicago	Landers	Norfolk Southern
43rd St	Ashland Ave.	Damen **	I-55	Chicago	Railport	Canadian National
103rd St. *	Torrence Ave.	I-94	I-94	Chicago	Water Terminals 1	Cal. River Cluster
106th St. *	Torrence Ave.	Indianapolis Blvd.	Torrence	Chicago	Water Terminals 1	Cal. River Cluster
122nd St	Torrence Ave.	Stony Island	Torrence	Chicago	Water Terminals 2	Lake Cal. Cluster
Stony Island *	103rd St.	130th St.	I-94	Chicago	Water Terminals 2	Lake Cal. Cluster
100th St. *	Baltimore **	Ewing	Ewing	Chicago	Water Terminals 3	KCBX Cluster
Blue Island *	Western	Ashland	I-55	Chicago	Western Ave. BN	BNSF
State St.	US 30	Glengate **	US-30	Chicago Hts.	Auto-Transload	Union Pacific
26th St.	IL50/Ogden Ramp	Central **	IL 50	Cicero	Cicero/BN- CECO	BNSF
26th St.	IL 50	47th St. **	IL 50	Cicero	Cicero/CCP	CC & P
Sibley	Indiana	I-94	I-94	Dolton	Yard Center	Union Pacific
Williams Dr.	Belmont Ave.	Franklin Ave.	US-45	Franklin Park	Bensenville	CP Rail System
Belmont Ave.	US-45	Williams Dr.	US-45	Franklin Park	Bensenville	CP Rail System
Franklin Ave.	Williams Dr.	Wolf **	US-45	Franklin Park	Bensenville	CP Rail System
Center St.	159th St.	169th St. **	I-294/I80	Harvey	Moyer	Union Pacific
Il-1 (Halsted)	I-80	167th St	I-294/I-80	Harvey	Moyer	Illinois Central
167th St.	IL 1 (Halsted)	Center St.	I-294/I80	Harvey	Moyer	Wisconsin Central
75th St.	Santa Fe Dr.	I-294 ramps	I-294	Hodgkins	Hodgkins/Willow Springs	BNSF
Santa Fe Dr.	67th St.	75th St. **	US-45	Hodgkins	Hodgkins/Willow Springs	BNSF
67th St.	US-45	Santa Fe Dr.	US-45	Hodgkins	Hodgkins/Willow Springs	BNSF
Fort Hill Dr.	Entrance	Jefferson	IL 59	Naperville	Auto-Transload	BNSF
Jefferson	Fort Hill	IL 59	IL 59	Naperville	Auto-Transload	BNSF
Railroad Ave.	US-20 (Lake St.)	IL 64	IL 64	Northlake	Global Two	Union Pacific
US-20 (Lake St.)	IL 64	US-45	US-45 / IL 64	Northlake	Global Two	Union Pacific
Lawrence Ave. *	US-45	Michigan	US-45	Schiller Park	Schiller Park East	CP Rail System
25th St. *	Lawrence Ave.	IL 19	US-45 /IL 19	Schiller Park	Schiller Park West	CP Rail System

* These NHS Connectors serve multiple intermodal facilities. For a complete listing of intermodal facilities, please consult *Proposed Intermodal Connectors to the National Highway System for Northeastern Illinois, Version 2. March 1996.*

FIGURE 5.12B

INTERMODAL CONNECTOR LISTING

(Metra)

CTA Connector Link	Link Limits		NHS Connection	City	Passenger Facility Name	Operator
	From	To				
Arlington Heights Rd.	NW Hwy.	Palatine Rd.	Palatine Rd.	Arlington Heights	Arlington Heights	Metra
US 14	Wilke Rd.	IL 53	IL 53	Arlington Heights	Arlington Park	Metra
IL 31	Indian Trail	I-88	I-88	Aurora	Aurora	Metra
Indian Trail Rd.	IL 25	IL 31	I-88	Aurora	Aurora	Metra
IL 25	Spring Street	Indian Trail Road	I-88	Aurora	Aurora	Metra
Glacier Park Ave.	Access Rd.	IL 59	IL 59	Aurora	Route 59	Metra
Oak Ave.	West Bartlett Rd.	US 20	US 20	Bartlett	Bartlett	Metra
Lake Cook Rd.	Spring St.	US 14	US 14	Barrington	Barrington	Metra
Brainard	Station	Burnham	Torrence	Burnham	Hegewisch	Metra
Sibley	Burnham	Torrence	Torrence	Burnham	Hegewisch	Metra
Burnham	Brainard	Sibley	Torrence	Burnham	Hegewisch	Metra
111th St.	Prospect Ave	Western Ave.	Western Ave	Chicago	111th St.	Metra
Main St.	Williams St.	US 14	US 14	Crystal Lake	Crystal Lake	Metra
Deerfield Rd.	Park Ave.	US 41	US 41	Deerfield	Deerfield	Metra
Belmont	Warren Ave	US 34	US 34	Downers Grove	Belmont	Metra
Main St.	Burlington Ave.	75th St.	75th St.	Downers Grove	Main St. Downers	Metra
174th St.	Dixie Highway	Station	I-294	East Hazel Crest	Calumet	Metra
Dixie Hwy.	I-294	174th St.	I-294	East Hazel Crest	Calumet	Metra
Wood	174th St.	I-294	I-294	East Hazel Crest	Calumet	Metra
York Rd.	North Ave.	Station	IL 64	Elmhurst	Elmhurst	Metra
3rd St.	Crescent	Batavia Ave.	Fabyan Pkwy.	Geneva	Geneva	Metra
Batavia Ave.	3rd St.	Fabyan Pkwy.	Fabyan Pkwy.	Geneva	Geneva	Metra
Main St.	Crescent St.	IL 64	IL 64	Glen Ellyn	Glen Ellyn	Metra
Glenview Rd.	Harlen Ave	IL 43	IL 43	Glenview	Glenview	Metra
Lake St.	St. Paul Rd.	IL 120	IL 120	Grayslake	Grayslake	Metra
Sibley Blvd	Clinton	Dixie Hwy.	Dixie Hwy.	Harvey	147th St.	Metra
154th St.	Park Ave.	Dixie Hwy.	Dixie Hwy.	Harvey	Harvey	Metra
Walnut	First	Deerfield	US 41	Highland Park	Highland Park	Metra
Deerfield Rd.	Walnut	US 41	US 41	Highland Park	Highland Park	Metra
Old Elm	Telegraph	US 41	US 41	Lake Forest	Lake Forest	Metra
Burlington	Main St.	IL 53	I-88	Lisle	Lisle	Metra
IL 53	Burlington	I-88	I-88	Lisle	Lisle	Metra
Main St.	Front	Burlington Ave.	I-88	Lisle	Lisle	Metra
Main St.	St. Charles Rd.	IL 38	IL 38	Lombard	Lombard	Metra
Main Street	Front St.	US 30	US 30	Matteson	Matteson	Metra
147th St.	Waverly	IL 50	IL 50	Midlothian	Midlothian	Metra
191st St.	Frontage Rd.	US 45	US 45	Mokena	Hickory Creek	Metra
Hickory Creek Dr.	Station	Frontage Rd.	US 45	Mokena	Hickory Creek	Metra
Frontage Rd.	Hickory	191st St.	US 45	Mokena	Hickory Creek	Metra
Washington	North Ave.	75th St.	75th St.	Naperville	Naperville	Metra
N. Aurora Rd.	Fairway Dr.	IL 59	IL 59	Naperville	Route 59	Metra
Shermer Rd.	Walters	IL 43	IL 43	Northbrook	Northbrook	Metra
Smith St.	Wilson St.	US 14	US 14	Palatine	Palatine	Metra
Sauk Trail Rd.	Station	I - 57	I - 57	Richton Park	Richton Park	Metra
Roselle Rd.	Irving Park Rd.	Elgin-O'Hare	Elgin-O'Hare Expwy.	Roselle	Roselle	Metra
Irving Park Rd.	Ardmore	Roselle Rd.	Elgin-O'Hare Expwy.	Roselle	Roselle	Metra
IL 19	Springinsguth	Elgin O'Hare	Elgin-O'Hare Expwy.	Schaumburg	Schaumburg	Metra
Ryan Way	Travis	Station	US 20	Schaumburg	Schaumburg	Metra
Springinsguth	Station	IL 19	Elgin-O'Hare Expwy.	Schaumburg	Schaumburg	Metra
Travis Parkway	Gary Ave.	Ryan Way	US 20	Schaumburg	Schaumburg	Metra
Gary Ave.	US 20	Travis Parkway	US 20	Schaumburg	Schaumburg	Metra
80th Ave.	Station	191st Street	IL 43	Tinley Park	80th Ave.	Metra
191st St.	80th Ave.	IL 43	IL 43	Tinley Park	80th Ave.	Metra
South Street	Oak Park	IL 43	IL 43	Tinley Park	Tinley Park	Metra
Governors Highway	Station	Manhattan-Monee	I - 57	University Park	University Park	Metra
Manhattan-Monee Rd.	Governors Hwy.	I - 57	I - 57	University Park	University Park	Metra
St. Charles	Ardmore	IL 83	IL 83	Villa Park	Villa Park	Metra
Ardmore	St. Charles	Station	IL 83	Villa Park	Villa Park	Metra
				Westmont	Westmont	Metra

FIGURE 5.12C

INTERMODAL CONNECTOR LISTING
(Chicago Transit Authority and other Operators)

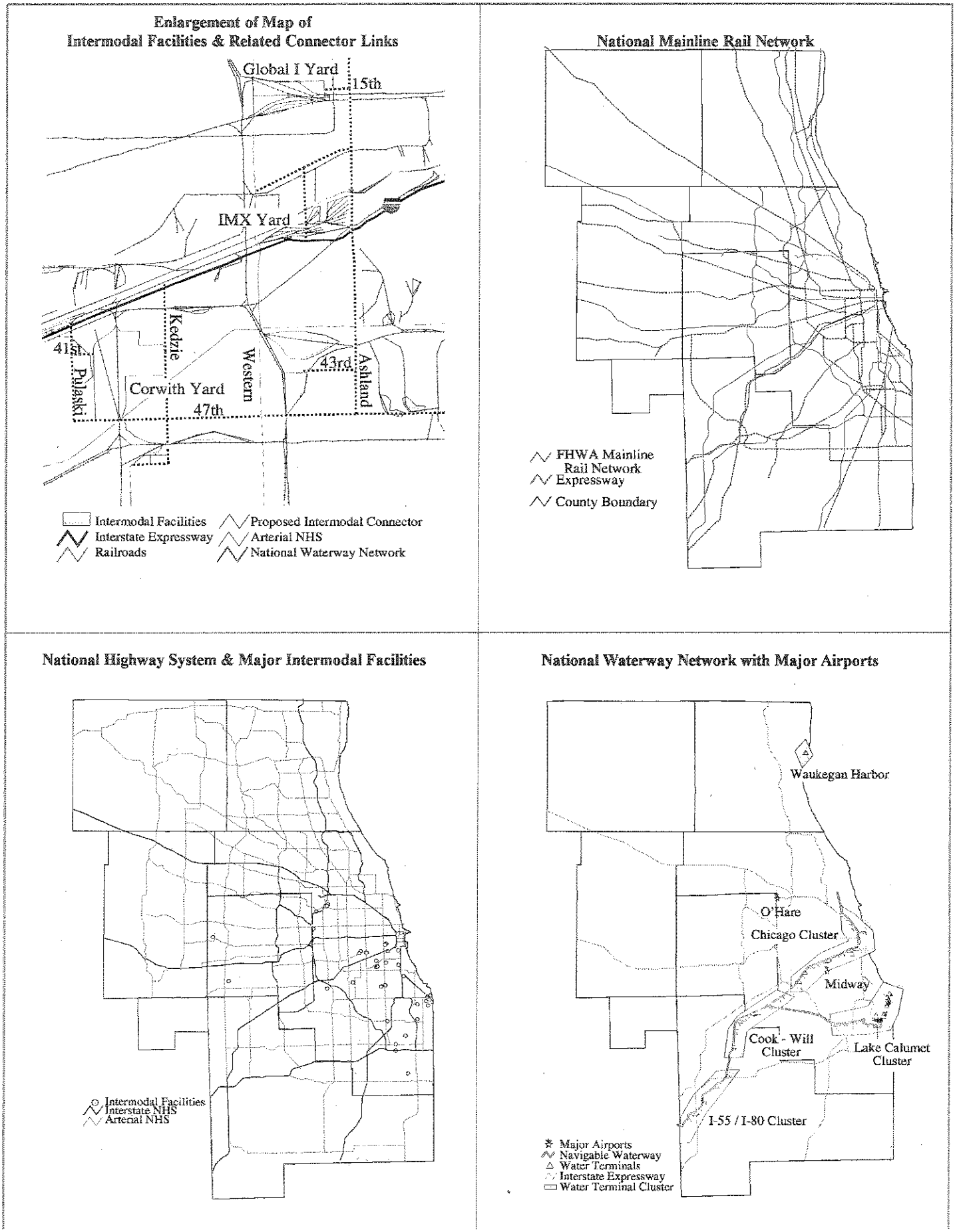
CTA Connector Link	Link Limits		NHS Connection	City	Passenger Facility Name	Operator
	From	To				
Marquette	Lafayette	Western	Western	Chicago	69th St.	CTA
79th St.	I-94	Western	Western	Chicago	79th St.	CTA
87th St.	I-94	Western	Western	Chicago	87th St.	CTA
Michigan	95th St.	127th St.	95th/127th St.	Chicago	95th St.	CTA
Belmont	Cicero	Kedzie	Cicero	Chicago	Belmont Blue Line	CTA
Belmont	Western	Clark	Western	Chicago	Belmont Red Line	CTA
Chicago	I-90/I-94	State	Western	Chicago	Chicago	CTA
Division	Clark	La Salle	La Salle	Chicago	Clark & Division	CTA
Clark	Lake	Congress	Congress	Chicago	Clark & Lake	CTA
Fullerton	Western	Lincoln	Western	Chicago	Fullerton	CTA
Des Plaines	Harrison	Roosevelt	Roosevelt	Chicago	Greyhound	Greyhound
Jefferson	Harrison	Roosevelt	Roosevelt	Chicago	Greyhound	Greyhound
Howard	Clark	Mc Cormick	Mc Cormick	Chicago	Howard	CTA
Milwaukee	Lawrence	Touhy	Touhy	Chicago	Jefferson Park	CTA
Sheridan	Devon	Loyola	Mc Cormick	Chicago	Loyola	CTA
Devon	Mc Cormick	Sheridan	Mc Cormick	Chicago	Loyola	CTA
Michigan *	Jackson	Madison	Wacker	Chicago	VanBuren	Downtown***
State *	Jackson	Wacker Dr.	Wacker	Chicago	Multiple Stations	Downtown***
Madison *	Clinton	Michigan	Wacker	Chicago	Olgilvie Transportation Center	Downtown***
Washington *	Clinton	Michigan	Wacker	Chicago	Olgilvie Transportation Center	Downtown***
Pulaski	Archer	Garfield	Garfield Blvd.	Chicago	Pulaski	CTA
Michigan *	Washington	Wacker	Wacker	Chicago	Randolph St.	Downtown***
State *	Grand	Ontario	Ontario	Chicago	State & Lake	CTA
Jackson *	Clinton	Michigan	Wacker	Chicago	Union Station	Downtown***
Adams *	Clinton	Michigan	Wacker	Chicago	Union Station	Downtown***
Broadway	Montrose	Wilson	Western	Chicago	Wilson	CTA
Montrose	Western	Broadway	Western	Chicago	Wilson	CTA
Des Plaines	CTA Park-Ride	Jackson	IL 43	Forest Park	Des Plaines	CTA
Jackson	Des Plaines	IL 43	IL 43	Forest Park	Des Plaines	CTA

* These NHS Connectors serve multiple intermodal facilities. For a complete listing of intermodal facilities, please consult *Proposed Intermodal Connectors to the National Highway System for Northeastern Illinois, Version 2. March 1996.*

*** "Downtown" Operators may include CTA, Amtrak, and/or Metra

FIGURE 5.13

INTERMODAL NETWORKS IN NORTHEASTERN ILLINOIS



ISTEA advocates strong intermodal and freight plans, programs, technical and research activities. Northeastern Illinois has made a substantial effort to meet the intermodal goals of ISTEA through operations analysis and planning activities of the task force. Two overarching objectives were identified for the intermodal component of the *2020 RTP* by this task force:

- Provide for the continued competitive position and economic health of the industry in the region; and
- Provide guidance for public investment and foster public/private partnerships which help direct resources in support of efficient and effective intermodal and freight operations.

2020 RTP Intermodal Policies - The results of the detailed analysis described above led to six specific system and policy statements for the intermodal component of the *2020 RTP*.

- Incorporate a regional network of major intermodal facilities which includes the NHS and its intermodal connectors, the Federal Highway Administration National Mainline Rail Network, the Corps of Engineers' National Waterway Network, the region's major intermodal air freight facilities and intermodal pipelines and terminals serving the region.
- Identify bottlenecks to the efficient operation of the intermodal freight industry and develop, evaluate and implement improvements needed to address these bottlenecks.
- Recognize the importance of the intermodal connectors as an integral part of the national highway system and note their importance by assigning priority to intermodal improvements.
- Identify and evaluate facilities and locations where actual or potential conflicts exist or may develop between freight transportation and other modes, and identify and implement strategies to minimize or mitigate such conflicts.
- Encourage public-private partnerships to address freight and intermodal needs and improvements.
- Afford equal consideration to critical intermodal needs including grade separations, clearances and intersections in the implementation and funding of the capital maintenance and system expansion projects undertaken to meet the efficiency and safety goals of the plan.

Transportation Management Strategies

Transportation management strategies are approaches that reduce and manage the demand for transportation projects. They also improve the operational characteristics of the transportation system. These strategies are designed to modify travel behavior and increase system efficiency without costly infrastructure improvements. A variety of transportation strategies are needed to meet the challenges we face today and will face in the future. Some of the major issues are as follows:

- Insufficient funds to meet system improvement needs;
- Increased construction costs for new roadway and transit facilities;
- Increased need to improve operational efficiency;
- Changes in travel patterns;
- Lower densities making traditional transit an inefficient option in many areas; and
- Need to reduce transportation related air pollution.

Transportation management strategies have been, and will continue to be, used in northeastern Illinois to address these issues. In addition, a transportation system that is sensitive to the environment and enhances our natural resources will improve our quality of life and promote economic development.

Transportation management strategies consist of three interrelated components: demand management; system management; and technology applications.

- Transportation demand management consists of strategies that manage the demand for transportation facilities by increasing transit share, decreasing tripmaking and lowering the overall growth in vehicle miles of travel, particularly single occupant vehicle trips.
- Transportation systems management consists of lower-cost capital projects and operational and institutional actions that improve the operating efficiency of facilities and services, enhance the quality of service and promote transit use.
- Intelligent transportation systems consist of the deployment and use of technologies to improve, manage and share information; provide for the integration of transportation services; provide for improved incident response systems; and provide other system management and operational improvements that enhance efficiency and safety.

Many specific strategies in these three categories have been implemented by the region's transit and highway agencies and through joint public/private initiatives. Some of the current efforts include the following programs.

- Transit Programs - The regional transit agencies are pursuing suburban transportation options such as vanpool programs, subscription bus and special event services, passenger amenities and facilities and bus management systems with signal preemption capabilities to improve travel time and service. They are also coordinating the implementation of a new fare medium, expanding park-n-ride facilities and analyzing additional commuter rail service to serve suburban travel, specifically suburb to suburb rail options. Transit agencies are actively pursuing joint venture opportunities such as Metra's rental car program and studying downtown parking policies and fee structures to encourage public transit use.
- Highway Programs - The Illinois State Toll Highway Authority (ISTHA) has initiated I-Pass, an automated toll collection system, to reduce traveler delays. The Illinois Department of Transportation (IDOT) has developed an expressway management system to enhance operations and provide traveler information. It is expanding the Emergency Traffic Patrol incident management system to improve safety and reduce delays from incidents and has implemented a signal coordination and timing program on the major arterial system. Finally, IDOT has built the region's first park-n-pool lot and is studying the potential for a regional network.
- Technology Programs - The Gary-Chicago-Milwaukee Intelligent Transportation System (ITS) Priority Corridor program has coordinated ITS applications between Wisconsin, Illinois and Indiana to achieve compatible and consistent transportation systems, incident management and information linkages.
- Voluntary Programs - The Partners for Clean Air have instituted a public education program called Ozone Action Days, to influence the use of transportation alternatives during critical pollution periods. Ozone Action Days are those days when ozone is predicted to reach unhealthy levels. The

The Selection of Strategies for Northeastern Illinois - The Transportation Control Measures (TCM) Task Force focused its attention on strategies which have the most potential to most effectively assist the region in meeting the *2020 RTP* goals and objectives. The task force developed and analyzed a list of fifteen transportation management strategies that promote changes in trip-making behavior, provide modal alternatives and improve system efficiency. The strategies shown in Figure 5.14 identified through the call for proposals phase of the *Destination 2020* process and proposals previously submitted to the TCM Task Force were used to develop comprehensive transportation management strategies for testing. These strategies were analyzed for regional applicability and feasibility to ensure the most effective

FIGURE 5.14

PROPOSALS REVIEWED BY THE TCM TASK FORCE

Title of Proposal	Description of Proposal
Region-wide parking fee	no description submitted
SOV parking fee for Metra parking	no description submitted
SOV parking space impact fee	no description submitted
Alternative work schedules and telecommuting	no description submitted
Ridesharing and commuting	no description submitted
Clean air information and	no description submitted
Congesting pricing on NE Illinois tollways & HOV lanes	System of tolls levied for peak times at $0.09 per mile on tollways and regional
Discounted and preferential HOV parking	HOV users would be charged discounted rate at all pay parking facilities and be provided preferential spaces at other parking facilities
Per Capita VMT growth criterion	Special allocation of STP funding for municipalities that reduce VMT growth
Regional parking space allotment trading program	Develop parking space cap and market mechanism for parking space allotments in the region
SOV offset provision	For any add capacity projects on roadways additional funding (10%) would be set aside for Illinois CMAQ
Regional TOD initiative	System of relatively compact, mixed use centers promoting non-SOV travel
Mileage-based vehicle registration fee	Revenues collected would correspond to a reduction in RTA sales tax and/or property taxes
Congestion reduction strategies	HOV lanes, park-n-ride, congestion pricing
Alternative transportation requirement	Similar to employee commute option
Peak Period Pricing and Car Pool Lanes on Toll Roads	Peak period tolls would be charged to discourage inefficient travel on congested toll roads, tolls would be

use of transportation resources. Two test scenarios were developed for testing during the level 3 screening phase. As stated previously in the plan, VMT was forecasted to increase by 35 percent and congested VMT by 60 percent if additional projects, policies and strategies beyond those currently programmed are not implemented. The role transportation management strategies could play in dealing with this potential problem needed to be assessed.

One scenario focused on increasing variable auto travel costs. This scenario increased real auto costs by 2¢ per mile in addition to inflation and could reflect an increase in motor fuel tax of between 30¢ and 40¢ per gallon over the planning period. A second scenario focused on increasing fixed auto costs and a package of demand management strategies which included some very aggressive strategies to increase auto occupancy and reduce demand for auto travel. This scenario included the following components:

- Enhanced regional rideshare program, higher level of employer participation and support for alternative modes, and cost based incentives of 50¢ to $1 per trip to reflect economic and time based incentives which produced an increase in average vehicle occupancy from 1.12 to 1.18;
- Increased bicycle and pedestrian environment factors to reflect an improved environment for bicycle and pedestrian tripmaking; and
- Increased auto fixed costs of 25¢ per trip which could reflect a $255 registration fee.

The results suggested that decreases in both VMT and congested VMT of between 3-6 percent and 1-4 percent respectively, might be possible if such measures were enacted. The RTP Committee, after serious consideration, determined that while large reductions in VMT might be gained, implementation of some of these measures may have required significant policy and legislative actions at all levels of state and local government. Because these policy and legislative actions are unlikely, the RTP Committee did not believe many of these strategies could be included in the plan. The RTP Committee does however believe that a thorough analysis of both the benefits and impacts of these measures should be carried out by the MPO staff before the three year plan update is conducted. These types of analyses are needed before support for

A mix of eleven transportation management strategies, operational improvements, applied technologies and capital improvements was selected by the RTP Committee for potential application in northeastern Illinois. Alternative levels of strategy implementation were identified and assessed in terms of requirements, costs, advantages and disadvantages. Institutional issues, behavioral impacts, system efficiency, economic implications and environmental impacts were also considered. The result of the evaluation was a mix of strategies which have the potential to contribute to a reduction in vehicle travel, improve system efficiency, improve traffic flow and increase transit ridership.

The *2020 RTP* includes eleven specific strategies for consideration and possible implementation by 2020. The singling out of these eleven strategies does not preclude the implementation of others. The *2020 RTP* encourages the continued pursuit of all transportation management strategies. Additional transportation management strategies will continue to be identified and investigated by the MPO and coordinated with the efforts of other public and private sector organizations. The MPO will serve as a regional forum for these investigations and in the development of an overall transportation management strategy for the region. The MPO will monitor the implementation of individual strategies and bring new concepts forward for regional consideration.

Transportation Management Strategies - The eleven strategies included in the plan come from all three areas of transportation management: system management; demand management; and technology applications. Each strategy description and level of implementation follow.

1. Traffic Signal Coordination

Signal interconnects contribute to reduced congestion, improved system efficiency and improved air quality due to increased speeds and reduced vehicle idling. Transit vehicles using arterials with these systems also benefit from improved speeds. The plan also gives high priority for signal timing programs and centralized signal control systems in central business districts and suburban activity centers. The plan strongly supports the consideration of signal interconnects and timing programs to enhance future operations of existing and new facilities.

Recommendation: Give high priority to signal interconnects as a component of every arterial rehabilitation, reconstruction and capacity addition

2. Rideshare Development

Carpooling participation nationally and in northeastern Illinois has been decreasing. The *2020 RTP* recognizes that incentives, regional campaigns and public awareness activities support increased participation. Complementary strategies that provide priority for high occupancy vehicles (HOVs) and facilitate expanded employee participation should be considered, encouraged and supported where appropriate.

Recommendation: The CATS Rideshare Services program should identify, evaluate and focus on effective methods to increase municipal participation and voluntary employer based programs.

3. Expanded Vanpool Programs

The Pace VIP and private vanpool programs are growing. Opportunities for increases in the use of vanpools are expected from continued suburban development, increases in reverse commuting and special initiatives associated with welfare reform. Vanpools reduce single occupant vehicle trips particularly in low density markets where traditional transit is inefficient.

Recommendation: Expand vanpool programs to meet current needs and to serve future demands.

4. Improvements to the Bicycle and Pedestrian Environment

The *2020 RTP* includes bicycle and pedestrian modes as a major plan component. The bicycle and pedestrian component discussed earlier in this chapter includes five areas of policy recommendations to increase bicycle and walking transportation options. The plan strongly supports the use of transportation funds for bicycle and pedestrian projects that serve utilitarian (such as work, school and shopping) travel needs. The plan also supports implementation policies to evaluate bicycle and pedestrian components of specific projects and to incorporate bicycle and pedestrian enhancements into these projects.

Recommendation: Maintain the current level of funding for bicycle and pedestrian improvements through 2020 should future authorizations continue from the ISTEA special programs.

5. Parking Management

The *2020 RTP* encourages study and implementation of parking space reduction options for commercial development particularly at worksites, or employer-based parking demand reduction programs such as cash-out parking. The Taxpayer Relief Act of 1997 paid parking subsidies. The development of the model ordinance should provide a design standard for high-occupancy vehicle parking and signage so that the program is consistent and recognizable to the public throughout the region. The plan recommends that CATS develop educational, informational and promotional materials; distribute them to municipalities and companies; and provide technical support to encourage priority parking, parking space reduction and parking demand-reduction programs. The plan supports a regional study of parking management techniques and encourages local implementation of strategies which address the importance of parking to the traveler in mode choice.

Recommendation: Develop a model ordinance for local municipal use to pursue priority parking for high- and multi-occupant vehicles.

6. Regional Park-n-Pool Network

Parking facilities for transit users are expanding in the region to provide access to public transportation and encourage its use. Several potential markets for park-n-pool facilities to serve and promote carpools and vanpools have also been identified. One park-n-pool facility is currently being constructed. Whereas park-n-ride facilities are associated with rail or fixed route bus transit, park-n-pool facilities may not initially be located near transit, though future transit including express bus service could be accommodated. The continuation of the IDOT policy to review park-n-pool market needs as part of roadway construction projects provides the building block for the development of a regional network and is consistent with the objectives of the Congestion Management System. The plan supports coordinated development of park-n-pool and transit-oriented park-n-ride facilities to provide both dedicated and shared facilities in the region.

Recommendation: Develop a regional park-n-pool network to meet identified demand.

7. High Occupancy Vehicle (HOV) Ramp By-pass Lanes

Metered ramps will be targeted for analysis in an effort to enhance travel time-savings for HOVs and transit. Carpools, vanpools and transit vehicles would be allowed to use the by-pass ramps and be given priority to proceed into the main traffic flow over single occupant vehicles. HOV by-pass lanes could be provided alone or they could be coordinated with HOV lanes such as those proposed for the Eisenhower

Recommendation: Conduct a study to evaluate the feasibility of HOV ramp by-pass lanes on the regional expressway system.

8. Bus Management System and Schedule Adherence

Use of these technologies will improve transit operations and services. Cost-effective enhancements to these systems can provide current status and schedule adherence capabilities and travel time information and route planning services to the customer. These systems support more efficient operations and enhance traveler choice by providing comparative travel time and schedule information. The plan supports continued development and implementation of cost-effective transit technologies that provide benefits to both the operator and the user.

Recommendation: Implement the Bus Emergency Communications System and Bus Service Management System and pursue Pace's Transit Vehicle Management System.

9. Advanced Traveler Information System and Advanced Transportation Management System

The plan supports the upgrades to the IDOT Transportation System Center and Communications Center. The center collects, processes and distributes current traffic, travel time and incident information to facilitate more efficient operation of the region's expressway system and to provide real time traffic and performance information to the user. The plan supports the Regional Transportation Authority (RTA) Traveler Information Center currently being considered for expansion. This center provides transit route, schedule, fare and other information for CTA, Pace and Metra services throughout the region. The plan supports the use of intelligent transportation systems (ITS) to improve system efficiency and traveler information dissemination. The plan also supports the continued operation and enhancement of the Emergency Traffic Patrol incident management system which provides critical response services to improve safety and reduce the impact of incidents on regional expressways.

The *2020 RTP* supports these efforts and promotes the integration of these systems with a multi-modal traveler information system to create a full-functioning data collection and information distribution network. This system will consist of advanced traveler information systems and advanced transportation management systems to provide real-time, multi-modal information day decisions. The plan supports continued development and implementation of cost-effective traveler information and transportation management technologies which provide benefits to both the operator and the user.

Recommendation: Continue operation and enhancement of the expressway management system and the regional transit information system.

10. Expanded I-Pass

With this system, tolls can be assessed to the owners of vehicles equipped with transponders, without a cash transaction, as the vehicle passes through the toll collection lane. I-Pass is currently in place in slightly less than half of all toll lanes. I-Pass has been further enhanced by creating I-Pass only lanes out of the automatic coin machine lanes closest to the median and allowing them passage for user vehicles at 15 MPH. I-Pass Express lanes that electronically collect tolls at 55 MPH will be installed at all barrier plazas on the North/South Tollway and in the future, at any new or reconstructed plazas. Eventually, all barrier plazas will have I-Pass only or I-Pass Express lanes. Another benefit on the I-Pass system will be a real time, traffic travel model, using transponders as blind probes. Further study of toll collection programs and market analyses will identify the most cost effective use of electronic toll collection technology for both the Tollway and the user.

Recommendation: Implement I-Pass and all future enhancements to the system.

11. Direct Transit Incentives

Expanded participation in the existing RTA transit check program could likely be achieved through increased marketing efforts. Under this program, employers subsidize their employees' commuting costs and receive a tax deduction in return. The plan supports such increases but acknowledges that this will be difficult without new revenue sources or reductions in other program areas. The plan supports changes in the federal tax credits for employers as a tool to increase employer participation rates. The plan also supports investigating the option of initiating a tax benefit program at the state level.

Recommendation: Increase the RTA's transit check program.

The *2020 RTP*, for the first time, includes not only a statement of intent to support transportation management strategies, but also identifies eleven

addition, the *2020 RTP* includes an intent to support these and other transportation management strategies financially. Transportation management strategies are funded by a variety of local, state and federal transportation and non-transportation programs and by private sector funds. It is difficult to calculate the actual expenditures for these strategies since they are generally included in capital operating and maintenance programs and as part of larger projects. From 1992 to 1997, it is estimated that over $200 million of ISTEA and other funds were programmed in northeastern Illinois for these eleven transportation management strategies with a significant portion of these dollars coming from Congestion Mitigation and Air Quality program funds. Another $200+ million is programmed to be spent on these transportation management strategies from 1998 to 2002. These projected expenditures do not explicitly appear in the financial component of the plan but are included in the capital maintenance, SRA and SRT components.

The *2020 RTP* supports the use of transportation management strategies as a means to get the most effective performance out of our transportation system. The plan anticipates that this level of expenditure will continue over the course of the plan if the funds are available and where the feasibility and planning analysis supported by the plan indicates that specific transportation management strategies are cost effective and applicable.

Congestion Management Strategies

The changing patterns of living and working in northeastern Illinois have significantly altered regional travel patterns. The rapid growth of suburban employment centers, the decline of job opportunities in the neighborhoods of Chicago, the decrease in household size and the increase in two-income households have contributed to radically changing commuting patterns. These changing patterns have placed an increased burden on a basically radial expressway network with by-pass components for longer distance travel. The transit system has also been strained. While serving the Chicago CBD effectively, it has had difficulty serving less dense areas. Extensive suburban growth has also created demands on our arterial roadways that were not foreseen when they were designed.

meant increased delays for individuals and costly losses in productivity for business.

During the development of the *2010 Transportation System Development (TSD) Plan* in 1988, the region's transportation agencies realized that the congestion problem was beyond the scope of any single agency, and in response they conceived Operation GreenLight. The Operation GreenLight program consisted of the following elements: planning studies; policies and procedures; research and demonstration projects; programming; implementation; and monitoring. The 1989 transportation funding package provided the funding for the development of innovative transit and highway programs.

As a result of the Operation GreenLight program, northeastern Illinois was well positioned to respond to the congestion management system (CMS) concept included in ISTEA. As part of the CATS 1995 committee restructuring, the Congestion Management System Task Force continued the work it had started in 1994 to carry out the ISTEA CMS directives. The task force established the following goals for the CMS:

- Lessen congestion on the region's transportation network through multimodal solutions with priority given to projects that provide alternatives to adding single occupant vehicle capacity;
- Improve the traveling public's mobility and accessibility to goods and services through multimodal choices, especially for the elderly, disabled and economically disadvantaged; and
- Improve the movement of goods on multiple modes and access to origins and destinations through consideration of multimodal solutions.

For the Chicago region, an emphasis has been placed on viewing congestion management as a process involving a number of connected activities, rather than as an isolated system. Furthermore, it was recognized that there are a significant number of existing programs and activities within the Chicago area that fall under the congestion management umbrella. These programs and activities are a solid foundation for the region's CMS.

The CATS Policy Committee adopted the CMS Plan for northeastern Illinois on October 9, 1997. The congestion management process is structured to include four primary components: system monitoring; strategy

System Monitoring - The CMS must have a process to obtain data that will be used to monitor the performance of the transportation system. This system is multimodal since it is not feasible to rely on a single transportation mode in mitigating the impacts of congestion. The monitoring program includes the identification of a network, establishment of performance measures, identification of data sources, development of a data management process and definition of a reporting procedure.

The designated northeastern Illinois CMS network includes all expressways, tollways and highways with a functional classification of arterial or higher. The network may be expanded or modified in the future if traffic conditions change.

Performance measures are included in the CMS to evaluate system performance and identify deficiencies. They are as follows:

- Travel time and travel speed;
- Volume-to-capacity ratio;
- Traffic density (expressways only);
- Intersection level of service;
- Duration of time delay at congested conditions;
- Percentage truck traffic;
- Percent of households and jobs within "X" miles of a bus route;
- Percent of households and jobs within "X" miles of a rail station;
- Percent of households and jobs within "X" miles of an expressway interchange;
- Transit system measures;
- Modal shares;
- Person throughput;
- Vehicle occupancy; and
- Incident measures.

There are a variety of data sources at CATS and the major transportation implementors that will be used to monitor the system. Several sources are the CATS travel time data, IDOT expressway surveillance, transit agency monitoring programs and the Council of Mayors perception surveys.

A periodic report will provide an inventory of congestion levels in the region. This report will monitor the system as well as provide performance and

Strategy Consideration - A key element of the CMS is the consideration of alternative strategies for relieving congestion and enhancing mobility. The northeastern Illinois CMS includes activities to provide guidance on these alternative strategies. The Congestion Management System includes a discussion of transportation management strategies and a commitment to the review and documentation of all reasonable alternatives to projects that add general purpose lane capacity.

As part of the Interim CMS, CATS and IDOT developed a procedure for identifying and evaluating travel demand reduction (TDR) strategies for application with roadway add-lane projects. The CATS staff perform reviews of add-lane projects to identify TDR opportunities. The results of these studies are companion reports to the environmental assessment documents for the project. This activity will be continued in the CMS.

The *CMS Alternatives Review Guidelines* document provides background on the requirements related to the consideration of alternatives, and outlines a suggested process for conducting a CMS alternatives review. These guidelines identify nine alternative strategies that are considered to be "reasonable." The guidelines indicate that other alternatives may also be considered. They do not define a specific approach or evaluation methodology, nor a reporting requirement.

To further promote the identification, assessment and implementation of alternatives, CATS, through the CMS Task Force, has developed a *Congestion Mitigation Handbook.* This handbook is intended to provide guidelines for identifying and analyzing strategies and conducting post-implementation evaluations. The handbook includes an overview of alternative strategies, detailed descriptions of individual strategies, a description of the TDR program and a discussion of approaches for evaluating strategies after they are implemented.

Based on the conclusions drawn from the system monitoring component, CATS, through the task force, will conduct preliminary corridor or subarea studies. The purpose of these studies will be to identify those strategies that appear most reasonable for a particular location. These strategies will be examined in more detail as part of subsequent studies such as a Phase I

Project Selection - The current programming process in northeastern Illinois meets the implementation scheduling requirements of ISTEA. The CMS will not replace the existing processes but rather will enhance them by instituting a systematic approach to the development and analysis of information useful in establishing the region's improvement program.

Effectiveness Evaluation - Evaluating the effectiveness of strategies after they have been implemented is important so that planners and implementors can determine if the strategies have had their expected impacts. The CMS monitoring program discussed earlier will be one part of this process. In addition, the SRA monitoring program, a tracking of system performance, and a similar monitoring program for the SRT System will supplement the CMS program. The CMS Task Force will oversee the development of evaluation study guidelines and the conduct of evaluation studies. CATS will maintain an inventory of evaluation information and conduct selected evaluation studies.

The CMS is not intended to replace existing processes. CMS activities will focus primarily on the relationship between the *2020 RTP* and TIP. Results of these monitoring, deficiency and alternatives analyses will be used in two primary areas: as information to feed into the three year plan update cycle; and as additional information to be used by programmers responsible for developing the annual TIP.

CHAPTER VI
PERFORMANCE OF THE 2020 REGIONAL TRANSPORTATION PLAN

Travel Demand Forecasts and System Performance

In order to quantify the *2020 RTP*'s responsiveness to 2020 travel needs, its projects and systems were tested through the process of travel demand modeling. Travel demand modeling is a method in which computer models are used to forecast a region's travel patterns and facility demands based on forecasts of future development patterns and transportation options.

Demand Model Inputs - Two inputs to the travel demand modeling process are socioeconomic forecasts and transportation networks. The socioeconomic forecasts are part of the foundation of travel demand analysis because they provide the information necessary to forecast the number of trips in the region. The transportation networks represent the characteristics of the regional transportation system including travel opportunities, levels of service and the costs of travel within the region.

Socioeconomic Forecasts - Using the DRAM/EMPAL model, NIPC developed four socioeconomic forecasts for use in the *2020 RTP* evaluation and air quality conformity analysis in May, 1997. These data reflect four distinct patterns of population and employment distribution in 2020, based on where demand for increased air travel will be met (by improving existing airports or at a new airport in the south suburbs) as well as the changes that might result from the implementation of the projects and systems recommended in the *2020 RTP*. These forecasts are referred to as the Existing Airport Improvements/Base (EAI/Base), Existing Airport Improvements/RTP (EAI/RTP), South Suburban Airport/Base (SSA/Base) and South Suburban Airport/RTP (SSA/RTP) forecasts. Refer to Chapter 3 for a discussion of the forecasts and how they were developed.

Transportation Networks - The foundation for the network performance evaluation was provided by the existing plus committed, or base, transportation networks, which were the same networks used as inputs to the air quality conformity analysis. For a discussion of conformity transportation network development, please refer to *Appendix A, Supplementary Tables for the Conformity Process in Northeastern Illinois*,

The *2020 RTP* network represents the regional transportation network after implementation of the plan. Included are: the transit and highway projects; improvements to the Strategic Regional Arterial (SRA) and Strategic Regional Transit (SRT) systems; and suburban local bus expansion. These components are discussed in Chapter 5.

Model Methodology - The data presented in the following sections were extracted from the air quality conformity runs for the *2020 RTP* and FY 98-02 Transportation Improvement Program. The modeling methodology is described in detail in the conformity document, *Appendix B, Travel Demand Modeling for the Conformity Process in Northeastern Illinois*, published in September, 1997. The only difference is that the daily highway network assignments were used in the *2020 RTP* evaluation instead of the time-of-day assignments required for the conformity analysis.

2020 RTP Evaluation Measures - Evaluation measures are the link between the *2020 RTP* policy framework, i.e., the goals and objectives, and the projects, systems, policies and strategies included in the plan.

FIGURE 6.1
NETWORK EVALUATION MEASURES

Measurement	RTP Goal Addressed
Vehicle Miles of Travel (VMT) Exceeding Level of Service "D"	System Efficiency
Total Auto and Transit Person Trips	Environmental
VMT on Congested Links	System Efficiency
Congested VMT as a Percentage of Total VMT	System Efficiency
Vehicle Hours of Delay (The difference between the time it takes to make all trips in 2020 and the time it would take to make those same trips in 1996, with 1996 levels of congestion.)	System Efficiency and Economic
Total VMT and Total Transit PMT	Environmental
Percent of Households Within 1 Hour of 50 percent of All Jobs by Auto or Transit	Social and Economic
Percent of All Households Located Within Zones with Less Than the Regional Average Income That Are Within 50 percent of All Jobs (within 1 Hour) by Public Transportation	Social and Economic
Total Time Spent Traveling for Commercial Vehicle, Total Vehicle and Transit Person Trips	System Efficiency and Economic
Total Person User Cost	System Efficiency and Economic
	Environmental

The network evaluation measures presented in Figure 6.1 distill the large quantities of information produced during the project and policy evaluation process, and focus attention on the information that provides the most insight into how well the plan addresses the region's transportation needs. Figure 6.2 presents

FIGURE 6.2
PROJECT LEVEL EVALUATION MEASURES

Measure	Source	*2020 RTP* Goal
Transportation		
Daily Volume (Highway) Passenger Boardings (Transit)	CATS	Accessibility and Mobility
VMT (Highway) PMT on Project (Transit)	CATS	Accessibility and Mobility
Capital Cost/Vehicle Mile (Highway) Capital Cost/Passenger Mile (Transit)	CATS	Financial/Project Efficiency
Capital Cost/Vehicle Trip (Highway) Capital Cost/Passenger Boarding (Transit)	CATS	Financial/Project Efficiency
Land Use		
Consistency With Local Plans	NIPC	Transportation and Land Development
Household and Employment in Corridor	NIPC	Social/Economic
Employment per Household	NIPC	Social/Economic
Percent of Project Within Sewer Service Area	NIPC	Transportation and Land Development
Percent of Low and Moderate Income Households in Project Corridor (based on 1990 data)	NIPC	Social/Economic
Acres of Vacant Land and Land Available for Redevelopment in Project Corridor (based on 1990 data)	NIPC	Social/Economic

transportation measures gauging the level of demand and cost effectiveness for each project under the two different regional development scenarios. The land use measures presented in the same figure extend the evaluation to include factors indicating the extent to which projects address social and economic goals. Figure 6.3 presents the supplemental measures of natural resources such as agricultural areas and water resources which may be impacted by the projects. These serve as supplemental measures because their general, corridor-level nature does not allow for direct comparisons between projects.

Network Evaluation Results - Figures 6.4 and 6.5 present network level results for the Existing Airport Improvements and South Suburban Airport scenarios, respectively. Implementation of the *2020 RTP* is

FIGURE 6.3
SUPPLEMENTAL PROJECT MEASURES

Resource Stewardship Objective Measures
Are there greenways intersecting or within 2 miles of the project area.
Acres of designated agricultural protection areas (as defined by NIPC *Strategic Plan for Land Resource Management)* within 2 miles of the project area.
Acres of water resources-floodplains, wetlands, lakes and streams within 2 miles of the project area.
Acres of natural areas from *Illinois Natural Areas Inventory* (1994) and nature preserves (1994) within 2 miles of the project area.
Acres of recreational areas (forest preserves, parks) within 2 miles of the project area.
Registered historic and cultural sites within 2 miles of the project area.

Note: These are natural and cultural resources that might be impacted by the project.

FIGURE 6.4
NETWORK RESULTS: EXISTING AIRPORT IMPROVEMENTS (EAI) SCENARIOS - DAILY STATISTICS

Socioeconomic File	1996	2020 EAI/Base	2020 EAI/RTP
Transportation Networks	Existing	Existing + Committed	Existing + Committed + RTP
Total Network VMT (000s VEq)	156,514	208,412	210,217
VMT on Congested Links (000s VEq)	105,977	166,649	166,137
Percent VMT on Congested Links	68	80	79
Increased Auto Vehicle Hours of Delay (in 000s)[1]	N/A	805	565
VMT Exceeding Level of Service "D" (in 000s)	32,620	60,632	58,472
Total Transit PMT (in 000s)	16,381	20,598	24,047
Total Auto Person Trips (in 000s)	16,413	20,621	20,521
Total Transit Person Trips (in 000s)	1,462	1,708	1,847
Percent of Households Within One Hour of 2.03 Million Jobs by[2]:			
Auto	86	77	79
Transit	45	62	64
Percent of Low Income Households Within 1 hour of 50 percent of all Jobs by Public Transportation[2]	67	68	71
Total Time Spent Traveling (000s of hours):			
Commercial Vehicles	648	1,085	1,031
Total Vehicles	4,003	5,955	5,725
Transit Riders	850	988	1,020
Total Person User Cost (1995 $000s)	20,668	26,092	26,562
Highway Fuel Consumption (000s of gallons)	7,541	10,434	10,348

[1] The difference between the time it takes to make all trips in 2020 and the time it would take to make those same trips in 1996, with 1996 levels of congestion. This cannot be calculated for 1996.
[2] The magnitude of this value differs from previous 2020 RTP work due to methodological changes

FIGURE 6.5
NETWORK RESULTS: SOUTH SUBURBAN AIRPORT (SSA) SCENARIOS - DAILY STATISTICS

Socioeconomic File	1996	2020 SSA/Base	2020 SSA/RTP
Transportation Networks	**Existing**	**Existing + Committed**	**Existing + Committed + RTP**
Total Network VMT (in 000s VEq)	156,514	212,872	213,227
VMT on Congested Links (in 000s VEq)	105,977	171,335	168,462
Percent VMT on Congested Links	68	80	79
Increased Auto Vehicle Hours of Delay (in 000s)[1]	N/A	867	544
VMT Exceeding Level of Service "D" (in 000s)	32,620	62,280	58,823
Total Transit PMT (in 000s)	16,381	20,607	23,820
Total Auto Person Trips (in 000s)	16,413	20,749	20,645
Total Transit Person Trips (in 000s)	1,462	1,678	1,807
Percent of Households Within One Hour of 2.03 Million Jobs by[2]:			
Auto	86	76	79
Transit	45	66	66
Percent of Low Income Households Within 1 hour of 2.03Million Jobs by Public Transportation[2].	67	72	72
Total Time Spent Traveling (000s of hours):			
Commercial Vehicles	648	1,086	1,021
Total Vehicles	4,003	6,047	5,728
Transit Riders	850	969	999
Total Person User Cost (1995 $000s)	20,668	26,560	26,700
Highway Fuel Consumption (000s of gallons)	7,541	10,688	10,443

[1] The difference between the time it takes to make all trips in 2020 and the time it would take to make those same trips in 1996, with 1996 levels of congestion. This cannot be calculated for 1996.
[2] The magnitude of this value differs from previous *2020 RTP* work due to methodological changes. A comparison to level 3 screening results is not valid. 2.03 million jobs represents 50 percent of total 1996 employment.

by comparing the 2020 build and the 2020 base scenarios, including:

- Due to increased accessibility, a slight (less than 1 percent) increase in network VMT is estimated with the implementation of the *2020 RTP*; at the same time a four to six percent decrease in vehicle miles of travel exceeding level of service "D" is estimated;
- Total auto person trips decline by 0.5 percent, and transit trips increase by 8 percent;
- A slight increase in network speeds with the *2020 RTP* produces a decrease in fuel consumption, in spite of increased VMT; and
- Implementation of the *2020 RTP* results in a higher level of auto accessibility to employment than the

Project Evaluation Results - Figures 6.6 and 6.7 present the daily performance measures for highway and transit projects (for a description of each project, please see Chapter 5). Highway results are presented in vehicle equivalents (VEq) where autos and light trucks are one VEq, medium trucks are two VEq and heavy trucks three VEq. Results indicate that:

- The new highway projects are forecasted to provide service to 1.7 million vehicle equivalents, traveling a total of approximately 10 million vehicle equivalent miles;
- Highway capital cost efficiencies range from $70-$530 per vehicle equivalent mile, with an average cost of $1,600 per vehicle equivalent served; and
- New *2020 RTP* transit facilities are expected to provide service to 180,000 - 190,000 riders traveling 1.3 to 1.5 million miles daily.

Figures 6.8 and 6.9 present the land use project measures for corridors extending two miles on either side of the projects.

Finally, Figures 6.10 and 6.11 present the supplemental project land use measures for the same project corridors extending two miles on either side of the project. These figures provide information on natural and cultural resources which might be impacted by the project. A complete description of the methodology used in the calculation of the land use measures is included in the report, *Land Use Objectives & Associated Measures for the Evaluation of the 2020 Regional Transportation Plan (RTP),* Northeastern Illinois Planning Commission, July 1997.

Air Quality Conformity Analysis Summary

The 1990 Clean Air Act Amendments (CAAA) establish health based standards for six major pollutants. Ground level ozone poses the greatest health risk to citizens of northeastern Illinois. Ground level ozone is a regional pollutant formed primarily by the reaction of two precursor pollutants, volatile organic compounds (VOCs) and oxides of nitrogen (NOx), in sunlight. Title I of the CAAA requires states to revise and submit State Implementation Plans (SIPs) for areas in non-attainment of the National Ambient Air Quality Standards (NAAQS) for ozone. The SIP is the state's guide to actions and strategies for attaining the NAAQS. The northeastern Illinois area is currently designated as a severe ozone non-attainment area. The

FIGURE 6.6

HIGHWAY PROJECT EVALUATION RESULTS

Project Description and Capital Cost in $000s	Entering Volume (000s Daily VEq)	Capital Cost/VEq ($/VEq)	VMT (000s Daily VEq)	Capital Cost/VMT ($/VMT)	*2020 RTP* Forecast
New Interchange, I-294 at I-57	32	1,080	—	—	EAI[1]
$35,000	36	960	—	—	SSA[2]
I-57 Add Lanes I-80 to West Airport Access Road	59	580	471	70	EAI
$34,000	78	440	781	40	SSA
I-55 Add Lanes, Naperville Rd. to I-80	69	710	683	70	EAI
$49,000	68	720	654	80	SSA
I-80 Add Lanes, US 45 to I-55	82	1,070	671	130	EAI
$88,000	88	1,000	716	120	SSA
I-94 (Tri-State Tollway) Add Lanes, IL 22 to IL 60	55	550	189	160	EAI
$30,000	55	550	189	160	SSA
I-90 (Northwest Tollway) Add Lanes, Randall Road to IL 25	57	700	183	220	EAI
$40,000	57	700	184	210	SSA
IL 394 (Calumet Expwy) Add Lanes, I-80 to Sauk Trail	54	450	230	100	EAI
$24,000	56	430	242	100	SSA
I-88 (E-W Tollway) Add Lanes, IL 31 to I-290	129	1,940	1,217	210	EAI
$250,000	130	1,930	1,516	170	SSA
I-294 Widening, IL 394 (to I-94) to 95th Street	93	1,930	832	220	EAI
$180,000	93	1,940	811	220	SSA
I-80 Add Lanes, I-94/IL 394 to Indiana Border	74	670	198	250	EAI
$49,000	75	660	203	240	SSA
IL 53 Extension, Lake-Cook Rd. to IL 120 and I-94	328	2,590	2,705	310	EAI
$850,000	312	2,800	2,598	330	SSA
Elgin-O'Hare Expwy Extension, Hanover Park to Streamwood	75	830	125	500	EAI
$62,000	77	800	129	480	SSA
I-90 (Northwest Tollway) Add Lanes, Roselle Road to I-294	97	1,340	544	240	EAI
$130,000	92	1,420	522	250	SSA
O'Hare Bypass to Elgin-O'Hare Expwy and I-90, with Access to Airport	487	1,790	1,824	480	EAI
$870,000	465	1,870	1,724	500	SSA

[1] Existing Airport Improvements
[2] South Suburban Airport

FIGURE 6.7

TRANSIT PROJECT EVALUATION RESULTS

Project Description and Capital Cost in $000s	Boardings	Capital Cost/ Boarding ($/Boarding)	Passenger Miles Traveled (PMT)	Capital Cost/ PMT ($/PMT)	*2020 RTP* Forecast
South Suburban Commuter Rail Corridor, LaSalle St. Station to Beecher	21,400	8,700	446,000	400	EAI[1]
$185,00	16,900	10,900	321,200	600	SSA[2]
North Central Service Enhancement, Antioch to Union Station	7,800	39,800	84,800	3,700	EAI
$310,000	7,700	40,100	84,600	3,700	SSA
Mid-City Transitway, O'Hare Blue Line/Jefferson Park Station to Dan Ryan Red Line/87th Street	95,300	10,500	749,500	1,300	EAI
$1,000,000	86,600	11,500	659,500	1,500	SSA
Dan Ryan Red Line Extension to 130th	33,600	8,400	148,500	1,900	EAI
$282,000	30,600	9,200	132,800	2,100	SSA
Midway Orange Line Extension to Ford City/76th St.	31,500	5,300	59,500	2,800	EAI
$166,000	29,700	5,600	56,100	3,000	SSA
Outer Circumferential Commuter Rail Corridor, (EJ&E) - Core Segment	3,900	57,800	34,000	6,600	EAI
$225,000	3,800	58,900	33,500	6,700	SSA

[1] Existing Airport Improvements
[2] South Suburban Airport

The CAAA require that CATS, as the MPO for northeastern Illinois, make a determination that the *2020 RTP* conforms to the SIP and that emissions, taken as a whole from the *2020 RTP* will not negatively impact the region's deadline to meet the NAAQS. Conformity to the SIP means that the *2020 RTP* will not: 1) cause any new violations of the NAAQS; 2) cause any worsening of existing violations; and 3) delay efforts to attain the NAAQS in a timely manner. Conformity is demonstrated when VOC emissions calculated for future years are equal to or less than those included in the SIP on-road mobile source budgets and the emissions calculated for the future year action (build) scenarios are less than the corresponding years' baseline (no-build) scenario.

The conformity test uses the four growth scenarios prepared for the *2020 RTP* as described in Chapter 3. Two growth forecasts were developed for each airport scenario. One forecast reflected the distribution of population and jobs without any new transportation improvements (referred to as the baseline scenario) and one reflected this distribution with the *2020 RTP* and the FY 98-02 TIP (referred to as the build scenario). Tests were made for four analysis years (2000, 2007 and *2020 RTP* projects expected to be operational by the analysis year.

It is important to note that this conformity analysis is only for the 2020 RTP and the FY 98-02 TIP. It does not consider the air quality impacts of expanded air travel capacity at O'Hare and Midway airports or the development of a South Suburban Airport. These impacts will be addressed as part of the planning efforts for the South Suburban Airport.

Figure 6.12 presents the VOC emissions calculated for each growth scenario. The emissions are reported as totals including both network and off-network emissions. Network totals are derived directly from the travel demand modeling process. Off-network emissions are comprised of emissions due to vehicular traffic on the local highway network not represented in the models and other emissions not included in the regional models. A more detailed description of these calculations is included in the conformity analysis documentation. As shown in Figure 6.12 the total for each scenario for each analysis year is lower than the 15 percent Rate of Progress SIP 1996 on-road mobile source budget total of 283.6 tons per day and lower in every action scenario than in the corresponding baseline

FIGURE 6.8

HIGHWAY PROJECT LAND USE EVALUATION RESULTS

Project Land Use (within 2 miles) Measures - Highway Corridors									
						Socioeconomic Information			
Project	1996 Consistency[1]	1995 Sewer Service	1990 Available Land (acres)	1990 Low Income Hhold	1990 Moderate Income Hholds	Households	Employment	Employ-ment/ Hhold	1990 and 2020 Forecast
I-94 (Tri-State Tollway) Add Lanes, IL 22 to IL 60	N/A	100%	5,000	5%	10%	6,000 10,000 9,000	18,000 34,000 27,000	2.87 3.41 2.81	1990 EAI[2] SSA[3]
I-90 (Northwest Tollway) Add Lanes, Randall Road to IL 25	N/A	100%	3,000	17%	33%	19,000 33,000 32,000	30,000 46,000 45,000	1.61 1.40 1.40	1990 EAI SSA
I-88 (E-W Tollway) Add Lanes, IL 31 to I-290	N/A	100%	13,000	13%	26%	103,000 129,000 129,000	261,000 389,000 387,000	2.55 3.02 3.00	1990 EAI SSA
I-55 Add Lanes, Naperville Rd. to I-80	N/A	90%	30,000	12%	23%	20,000 51,000 55,000	17,000 47,000 47,000	0.85 0.92 0.86	1990 EAI SSA
Elgin-O'Hare Expwy Extension, Hanover Park to Streamwood	N/A	100%	4,000	7%	18%	24,000 35,000 35,000	14,000 44,000 42,000	0.60 1.25 1.20	1990 EAI SSA
I-80 Add Lanes, US 45 to I-55	N/A	99%	30,000	24%	39%	43,000 66,000 67,000	47,000 77,000 83,000	1.09 1.16 1.23	1990 EAI SSA
I-80 Add Lanes, I-94/IL 394 to Indiana Border	N/A	100%	1,000	18%	35%	22,000 25,000 25,000	28,000 37,000 38,000	1.24 1.48 1.53	1990 EAI SSA
IL 394 (Calumet Expwy) Add Lanes, I-80 to Sauk Trail	N/A	100%	8,000	19%	34%	26,000 33,000 34,000	39,000 58,000 62,000	1.54 1.77 1.85	1990 EAI SSA
I-57 Add Lanes, I-80 to West Airport Access Road	N/A	70%	24,000	11%	26%	22,000 41,000 49,000	27,000 73,000 119,000	1.19 1.78 2.42	1990 EAI SSA
IL 53 Extension, Lake-Cook Rd. to IL 120 and I-94	N/A	100%	30,000	11%	24%	47,000 93,000 91,000	65,000 119,000 106,000	1.38 1.28 1.16	1990 EAI SSA
I-294 (Tri-State Tollway) Widening, IL 394 (to I-94) to 95th Street	N/A	100%	6,000	20%	39%	122,000 139,000 144,000	149,000 202,000 207,000	1.22 1.45 1.44	1990 EAI SSA
New Interchange, I-294 at I-57	N/A	100%	2,000	30%	48%	23,000 28,000 31,000	24,000 36,000 38,000	1.02 1.26 1.22	1990 EAI SSA
I-90 (Northwest Tollway) Add Lanes, Roselle Road to I-294	N/A	100%	3,000	13%	28%	88,000 94,000 94,000	302,000 468,000 417,000	3.43 5.00 4.43	1990 EAI SSA
O'Hare Bypass to Elgin-O'Hare Expwy and I-90, with Access to Airport	N/A	100%	3,000	14%	29%	91,000 98,000 98,000	308,000 437,000 393,000	3.58 4.44 4.00	1990 EAI SSA

[1] Information on consistency with local plans proved too sporadic to incorporate.
Source: *Land Use Objectives & Associated Measures for the Evaluation of the 2020 Regional Transportation Plan*, (Northeastern Illinois Planning Commission 7/97)
[2] Existing Airport Improvements
[3] South Suburban Airport

FIGURE 6.9

TRANSIT PROJECT LAND USE EVALUATION RESULTS

Project Land Use (within 2 miles) Measures - Transit Corridors										
						Socioeconomic Information				
Project	1996 Consistency[1]	1995 Sewer Service	1990 Available Land (Acres)	1990 Low Income Hhold	1990 Moderate Income Hholds	Households	Employment	Employ-ment/ Hhold	1990 and 2020 Forecast
North Central Service Enhancement, Antioch to Union Station	N/A	100%	28,000	13%	28%	164,000 226,000 220,000	341,000 538,000 462,000	2.08 2.44 2.10	1990 EAI[2] SSA[3]
Mid-City Transitway, O'Hare Blue Line/Jefferson Park Station to Dan Ryan Red Line/87th Street	N/A	100%	2,000	33%	52%	443,000 480,000 462,000	364,000 412,000 410,000	0.82 0.86 0.89	1990 EAI SSA
Dan Ryan, Red Line Extension to 130th	N/A	100%	3,000	31%	50%	90,000 102,000 102,000	51,000 60,000 63,000	0.57 0.59 0.61	1990 EAI SSA
Midway Orange Line Extension to Ford City/ 76th St.	N/A	100%	1,000	25%	42%	72,000 74,000 73,000	93,000 116,000 111,000	1.29 1.55 1.54	1990 EAI SSA
Outer Circumferential Commuter Rail Corridor (EJ&E) - Core Segment	N/A	100%	35,000	9%	20%	62,000 119,000 117,000	98,000 229,000 214,000	1.57 1.93 1.82	1990 EAI SSA
South Suburban Commuter Rail Corridor, LaSalle St. Station to Beecher	N/A	15%	28,000	34%	52%	202,000 230,000 235,000	134,000 181,000 214,000	0.66 0.79 0.91	1990 EAI SSA

[1] Information on consistency with local plans proved too sporadic to incorporate.
Source: *Land Use Objectives & Associated Measures for the Evaluation of the 2020 Regional Transportation Plan*, (Northeastern Illinois Planning Commission 7/97)
[2] Existing Airport Improvements
[3] South Suburban Airport

FIGURE 6.10

TRANSIT PROJECT SUPPLEMENTAL MEASURE RESULTS

Project Supplementary Land Use (within 2 miles) Measures Natural and Cultural Resources which Might Be Impacted by Transit Projects						
Project	1992 Greenways (Number intersecting and in corridor)	1994 Agricultural Protection Areas (Acres)	1990 Water Resources (Acres)	1993 Natural Areas (Acres)	1990 Recreational Areas (Acres)	1996 Historic and Cultural Sites (Number)
North Central Service Enhancement, Antioch to Union Station	7,3	0	14,593	2,666	14,792	1
Mid-City Transitway, O'Hare Blue Line/Jefferson Park Station to Dan Ryan Red Line/87th Street	3,4	0	305	0	4,216	18
Dan Ryan Red Line Extension to 130th	1,4	0	2,255	Lake Calumet	1,440	1
Midway Orange Line Extension to Ford City/76th St.	0,2	0	42	0	806	0
Outer Circumferential Commuter Rail Corridor (EJ&E) - Core Portion	19,12	0	9,633	2,350	20,243	5
South Suburban Commuter Rail Corridor, LaSalle St. Station to Beecher	5,2	15,477	2,705	4,359	11,361	3

FIGURE 6.12

CONFORMITY ANALYSIS RESULTS, TOTAL VOC EMISSIONS

Scenario	Base	RTP
2000	217.88	217.55
2007 Existing Airport Improvements	180.59	177.92
2007 South Suburban Airport	179.88	177.44
2015 Existing Airport Improvements	190.33	187.06
2015 South Suburban Airport	191.56	188.48
2020 Existing Airport Improvements	201.12	199.42
2020 South Suburban Airport	204.11	200.93

Plan Performance Monitoring

CATS is developing a performance monitoring system for the *2020 RTP*. The system is intended to measure the progress the plan is making toward achieving the regional transportation goals and objectives. Monitoring is a useful tool for policy makers to gauge whether the implementation of the various plan components is meeting the region's transportation needs.

The *2020 RTP* monitoring system includes both performance monitoring and implementation monitoring. **Plan implementation monitoring** tracks the progress of the region's transportation implementors in accomplishing projects and strategies. Plan implementation issues are discussed in Chapter 8. **Plan performance monitoring** evaluates how effective the implemented projects are in meeting travel needs. The collection and analysis of key data provide these effectiveness measures.

The northeastern Illinois performance monitoring system will include data from a variety of sources. It is not intended to replace existing efforts by individual agencies but rather to pull it all together. This analysis is a critical component for the three-year plan update process. Updates that occur between plan updates will rely to a great extent on these key indicators. Initially the plan performance monitoring system will focus on land development patterns, the environment, economic growth and transportation. These transportation indicators will rely on the congestion management system, intelligent transportation systems and performance measures based on the mobility of people and goods. These and other performance indicators will be produced for the *Annual Report on the Status of Transportation in Northeastern Illinois*.

Achievement of *2020 RTP* Goals and Objectives

The 2020 RTP contributes to the achievement of all seven regional transportation goals. In the context of limited financial resources, decisions on which policies and projects should be included in the 2020 RTP often require trade-offs between competing goals and objectives. The following section identifies and assesses the achievements of the plan toward meeting these goals and their 39 associated objectives as in Chapter 3.

Accessibility and Mobility

Goal: Provide an integrated and coordinated transportation system that maintains accessibility and includes a variety of mobility options which serve the needs of residents and businesses in the region.

The *2020 RTP* improves accessibility and mobility in the region through its significant support to all modes of travel. Approximately 80 percent of funds are allocated to the capital maintenance of the existing system and 10 percent to the improvement of the existing system, with the remaining 10 percent for new projects. While the focus of the *2020 RTP* is to maintain the existing highway and transit systems, it addresses the need for additional capacity with 20 major transportation projects. Further, the plan designates funding for a Strategic Regional Arterial (SRA) System, Strategic Regional Transit (SRT) System, suburban local bus expansion, and for the first time, a fully integrated bicycle and pedestrian component, all of which will improve regional mobility and accessibility.

The introduction of the 20 major projects and other components of the plan will also enhance the movement of freight in the region, indicated by a projected reduction in total vehicle hours of commercial travel. Projects such as the widening of I-80/I-94 and I-294 provide additional capacity to some of the region's most heavily traveled trucking corridors. In addition, the intermodal component specifically addresses freight movement with six policies designed to serve the needs of the industry.

Several performance measures were generated to assess the *2020 RTP*'s effectiveness in improving regional accessibility and mobility. It is important to note that the projected 25 percent increase in population and 37 percent increase in employment between 1990 and 2020 will contribute to a 25 percent increase in

implementation of the plan, regional congestion in 2020 will exceed that found under present conditions. However, goals and objectives established early in the planning process require that other measures in addition to congestion must be taken into consideration.

Performance measures for these goals provide an assessment of the plan's effective change over baseline conditions. In all cases, measures were calculated for both the baseline, or no-build, transportation network and the *2020 RTP* network. The observed change reflects the expected effects of plan implementation under 2020 conditions. These measures indicate that the *2020 RTP* is effective in reducing regional congestion, increasing transit ridership, and improving the efficiency of regional freight movement over no-build conditions. A comparison of the build networks, with the fully implemented *2020 RTP*, to the no-build networks, with only programmed improvements, yields the following projections for 2020:

- The total vehicle miles traveled (VMT) exceeding level of service "D" would be 4-6 percent less with the *2020 RTP* networks than with the base networks;
- The number of transit person trips would be 8 percent higher with the *2020 RTP* networks;
- The transit person miles traveled would be 16-17 percent higher with the *2020 RTP* networks;
- The number of auto person trips would be slightly lower with the *2020 RTP* networks;
- Due to a reduction in roadway congestion, the total daily hours of travel by commercial vehicles would be 5-6 percent lower with the *2020 RTP* networks, though the number of trips remain the same; and
- The 20 major plan projects are projected to serve more than 1.8 million daily users.

Transportation and Land Development

Goal: Provide a transportation system that supports existing and future patterns of land development as recommended by locally adopted land use plans and the Northeastern Illinois Planning Commission's Strategic Plan for Land Resource Management as reflected in the endorsed socioeconomic forecast.

NIPC's forecasts assume the implementation of regional policies to guide future growth. The *2020 RTP* is intended to provide a transportation system to adequately support forecasted changes in population, households and employment. NIPC and local government officials also evaluated the consistency of *RTP* is consistent with all local land use plans, this outreach process increased the awareness of plan projects among affected municipalities. Through local participation and continued outreach, local governments will have the opportunity to coordinate local land use decisions with planned transportation investments. Further studies associated with future transportation corridors will allow the continued participation of local governments.

The *2020 RTP*'s focus on existing infrastructure will encourage additional development along existing transportation corridors, while several new projects will address changing regional travel patterns. Fifteen of the twenty projects represent improvements to existing facilities. Despite a heavy investment in the existing system, several new projects such as the Outer Circumferential Commuter Rail Corridor (core segment) and suburban local bus expansion will serve the increasingly common suburb-to-suburb trip.

The designation of *2020 RTP* projects, the Strategic Regional Transit and Strategic Regional Arterial systems and the Corridors for Future Study all provide the authority for right-of-way preservation. This authority will encourage local governments to coordinate local land use decisions, while preserving the long-term opportunity for the region to implement transportation projects.

Transportation System Efficiency

Goal: Preserve the region's transportation system and maximize its people and goods carrying efficiency.

The *2020 RTP* is effective in both preserving the regional transportation system and enhancing its overall efficiency. Specifically, the 20 projects together with the transportation management strategies, SRT and SRA systems, and the bicycle and pedestrian component support an improvement to the regional system.

Several projects in the *2020 RTP* will provide specific improvements to the region's existing transit and highway systems. Specifically, the Outer Circumferential Commuter Rail Corridor (core segment) and Mid-City Transitway enhance the connectivity of the regional transit system by improving connections between existing lines outside of Chicago's CBD. Highway projects such as the Elgin-O'Hare Extension, the I-57/I-294 Interchange and the IL 53 Extension provide similar enhancements to the regional

Several components of the *2020 RTP* also address system efficiency. The transportation management strategies component calls for the introduction of available technology, such as signal coordination, I-Pass and advance traveler information systems, to improve operations. Other components, such as the SRT and SRA systems, call for improved connections within the respective systems.

Several network performance measures were generated to measure the effectiveness of the *2020 RTP* in improving system efficiency. Based on these measures, the *2020 RTP* is projected to reduce system congestion and vehicle delays. A comparison of the build networks, with the fully implemented *2020 RTP*, to the no-build networks, with only programmed improvements, yields the following projections for 2020:

- VMT exceeding level of service "D" would be 4-6 percent less with the build networks;
- The projection of total daily hours of travel by commercial vehicles would be 5-6 percent lower with the build networks, though the number of trips remains the same; and
- Daily fuel consumption would be 1-2 percent lower with the build networks.

Environmental

Goal: Provide a transportation system which is sensitive to the environment and enhances our natural resources.

The *2020 RTP* provides support to energy conscious transportation choices including bicycle and pedestrian travel, transit and reducing single-occupant automobile travel. In addition, the *2020 RTP* requires that projects undergo extensive study prior to implementation. These studies will focus on environmental issues specific to each project and provide local municipalities and citizens with further opportunity to influence transportation decisions.

Several network measures were created to assess the effectiveness of the *2020 RTP* in meeting the environmental goal. Overall, projections indicate that the *2020 RTP* is effective in reducing energy consumption and improving regional air quality. A comparison of the build networks, with the fully implemented *2020 RTP*, to the no-build networks, with only programmed improvements, yields the following 2020 projections:

- Daily fuel consumption would be 1-2 percent lower with the build networks;
- The number of person transit trips would be 8 percent higher with the build networks; and
- The *2020 RTP* reduces total emissions over baseline conditions.

Economic

Goal: Provide a transportation system which fosters economic development.

The *2020 RTP* will foster economic development in two primary ways: improving the efficiency of goods movement throughout the region; and increasing the accessibility of employers to potential employees. In addition, its success will rely on its ability to improve the transportation system in existing employment centers to allow continued economic expansion.

Many of the *2020 RTP* projects address the need for improved efficiency of goods movement. Specifically, capacity improvements such as the widening of I-80/I-94, I-55, I-294 and I-90 all serve major trucking routes. In addition, the intermodal component includes six specific policies designed to improve freight movement in the region.

The *2020 RTP* addresses the need for employers to remain accessible to a large employee base. Projects such as the IL 53 Extension and widening of I-88 and I-90 enhance the accessibility of growing employment centers. In addition, substantial improvements in and around the growing employment centers near O'Hare Airport and on transit lines and highway corridors serving Chicago's CBD will allow continued growth in these critical economic centers.

Several measures were developed to assess the success of the *2020 RTP* in meeting the goal of fostering economic development. The *2020 RTP* is projected to improve the movement of goods in the region and increase the accessibility of employees to workplaces. A comparison of the build networks, with the fully implemented *2020 RTP*, to the no-build networks, with only programmed improvements, yields the following 2020 projections:

- The percentage of households accessible to a majority of regional jobs via transit, within one hour, would increase from 62 percent to 64 percent with the build network versus the no-build network in the EAI scenario, and remain at approximately 66 percent of households with both networks in the SSA scenario;

- The percentage of households accessible to a majority of regional jobs via an automobile, within one hour, would increase from 68 percent to 71 percent with the build network versus the no-build network in the Existing Airport Improvements Scenario, and increase from 76 percent to 79 percent in the SSA scenario; and
- The total daily hours of travel by commercial vehicles would be 5-6 percent lower with the build networks, though the number of trips remain the same.

Social

Goal: Provide a transportation system which fosters social benefits.

The *2020 RTP* addresses social needs in the region by improving accessibility and mobility, particularly for those with limited access to automobiles. The *2020 RTP* expands the total service area of transit through the six transit projects, the SRT System and a commitment to suburban local bus expansion. Transit projects such as the South Suburban Commuter Rail Corridor, Outer Circumferential Commuter Rail Corridor (core segment), Mid-City Transitway, Red Line Extension and Orange Line Extension all improve transit service to neighborhoods now served by bus or in some cases, not at all.

The *2020 RTP* also improves the accessibility of growing employment centers, such as the I-88 corridor, Lake County and O'Hare Airport. Projects such as the IL 53 Extension, I-90 and I-88 widenings and I-290 HOV will improve travel times for persons traveling to many of these destination and enhance the overall accessibility of regional employment centers.

At a project level, the *2020 RTP* will encourage further study of specific projects prior to implementation. At this stage, citizens will have the opportunity to participate in project planning to ensure that projects minimize disruption to neighborhoods, while still providing needed transportation improvements.

Several network measures were generated to assess the effectiveness of the *2020 RTP* in meeting the goal of providing a transportation system which fosters social benefits. A comparison of the build networks, with the fully implemented *2020 RTP*, to the no-build networks, with only programmed improvements, yields the following 2020 projections:

- The transit person miles traveled would be 16-17 percent higher with the build networks;
- The percentage of low-income households accessible to 2.03 million regional jobs via transit, within one hour, would increase from 68 percent to 71 percent with the build network verses the no-build network in the EAI scenario and remain at approximately 72 percent with both networks in the SSA scenario; and
- The percentage of low-income households accessible to 2.03 million regional jobs via an automobile, within one hour, would increase from 81 percent in the no-build networks to 86 percent in the build networks.

Financial

Goal: Provide for the development and preservation of a transportation system which meets the region's transportation needs efficiently uses financial resources and is financially attainable.

The *2020 RTP* considers available financial resources in determining priorities for future transportation investments. Projections of anticipated revenue available for transportation through 2020 served as a guideline for future spending throughout the process. The *2020 RTP* also considered, in the selection of the transit and highway projects, the financial efficiency of proposals. The emphasis on maintaining and enhancing the existing system will also ensure its efficient operation.

The *2020 RTP* maintains some flexibility to meet unanticipated needs. For example the SRA and SRT systems will allow the implementation of smaller scale projects based on changes in regional needs. The Corridors for Future Study identify projects beyond projected financial resources should new resources become available. The *2020 RTP* also endorses further study of projects prior to implementation. During this stage, projects will undergo a system of evaluation and design studies which will consider specific ways to improve the financial efficiency of projects. In total, the plan successfully meets the financial goal with the following conclusions:

- The *2020 RTP* is fiscally constrained;
- More than 80 percent of the funds projected to be

- Flexibility is provided with the SRT System and SRA System to ensure efficient use of financial resources; and
- The Corridors for Further Study identify potential projects should additional resources become available.

ISTEA Sixteen Factors Summary

One of the important policy frameworks for the development of the *2020 Regional Transportation Plan* was established by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. ISTEA identified 16 planning factors that must be explicitly considered, analyzed as appropriate and reflected in every regional transportation plan. Consideration of the planning factors occurred at five levels of the planning process in northeastern Illinois: 1) MPO committee structure; 2) goals and objectives

FIGURE 6.13

THE CONSIDERATION OF THE SIXTEEN ISTEA FACTORS IN THE *2020 RTP*

ISTEA Factor	*2020 RTP* Consideration of the 16 ISTEA Factors
1.Preservation of existing transportation facilities and, where practical, ways to meet transportation needs by using existing transportation facilities more efficiently.	◦ CATS Committee Structure: The TCM Development Task Force developed the travel demand strategies incorporated into the *2020 RTP*, and the Advanced Technologies Task Force provided information on technologies that affect traffic movement. ◦ *2020 RTP* Goals and Objectives: The Transportation System Efficiency goal, with Objectives 16 through 19, and Financial goal, with Objective 37, listed in Chapter 3, incorporate this factor. ◦ Evaluation: The deficiency analysis identified the relative need for transportation improvements throughout the region. ◦ *2020 RTP* Components: Preservation and increasing the efficiency of the existing system are focal points of the SRA System, SRT System, transportation management strategies and financial strategy components of the plan. ◦ Other: Another method of using the existing network more efficiently is through the use of existing freight rail ROW for commuter rail.
2.The consistency of transportation planning with applicable Federal, State and local energy conservation programs, goals and objectives.	◦ CATS Committee Structure: The Policy Committee approves the *2020 RTP* and assures that it conforms with the State Implementation Plan. ◦ *2020 RTP* Goals and Objectives: The Environmental goal, with Objective 23, listed in Chapter 3, incorporates this factor. ◦ Evaluation: The fuel consumption and VMT measures used during the level 3 screening and the final plan evaluation quantify the success of the *2020 RTP* in addressing this factor. ◦ *2020 RTP* Components: The transit and highway projects, the bicycle and pedestrian transportation and the transportation management strategies components identify methods to reduce auto trips and congestion, which will assist in energy conservation.

FIGURE 6.13 cont.

ISTEA Factor	*2020 RTP* Consideration of the 16 ISTEA Factors
3. The need to relieve congestion and prevent congestion from occurring where it does not yet occur.	◦ CATS Committee Structure: The SRA Subcommittee oversees development of the SRA System. The CMS Task Force developed the congestion management component and the CMS Plan. The TCM Development Task Force developed the transportation management strategies for the *2020 RTP*. ◦ *2020 RTP* Goals and Objectives: Objective 16, associated with the Transportation System Efficiency goal, listed in Chapter 3, incorporates this factor. ◦ Evaluation: The deficiency analysis, using V/C ratios, evaluated levels of congestion. Measures used during the level 2/2A, level 3 and final analysis that addressed the issues of congestion included the V/C ratio, VMT in excess of level of service D and total time spent traveling. The land use/transportation integration analyses dealt with congestion issues. ◦ *2020 RTP* Components: The transit and highway projects, bicycle and pedestrian transportation, SRA System, SRT System and congestion management strategies components address ways to reduce congestion.
4.The likely effect of transportation policy decisions on land use and development and the consistency of transportation plans and programs with the provisions of all applicable short- and long-term land use and development plans.	◦ CATS Committee Structure: The Council of Mayors and the Land Use/Transportation Task Force provided input to the planning process regarding transportation and land development. The RTP Committee and the NIPC Policy/Forecast Committee coordinated their efforts in developing the region's socioeconomic forecasts. ◦ *2020 RTP* Goals and Objectives: The Transportation and Land Development goal and associated objectives, listed in Chapter 3, incorporate this factor. ◦ Evaluation: The DRAM/EMPAL model and the CATS combined model were used to evaluate the interaction between land use and transportation. Alternative land use scenarios reflecting different patterns of land use and development were used in the deficiency analysis, level 3 screening and the final analysis of plan performance. ◦ *2020 RTP* Components: The interaction between transportation and land use were considered throughout the development of the plan and are documented in the regional planning and policy framework component, land use and growth forecasts sections. ◦ Other: NIPC, which is the region's comprehensive land use planning agency, adopted 17 policy tools to support its forecasts and modify the trend toward suburban decentralization.
5.Programming of expenditures for transportation enhancement activities as required in [23 U.S.C.*] section 133.	◦ CATS Committee Structure: All transportation enhancement funds authorized during ISTEA were programmed by 1995, prior to the start of the development of the *2020 RTP*. CATS and NIPC participated in the enhancement project selection process by reviewing and recommending the project proposals. ◦ *2020 RTP* Goals and Objectives: Objectives 3, 5, 21, 25, 26 and 33 express support for continued funding of enhancement activities. ◦ *2020 RTP* Components: The bicycle and pedestrian transportation component although not a programming mechanism, establishes policies and direction for future investment in some of the transportation enhancement activities in the region.

FIGURE 6.13 cont.

ISTEA Factor	*2020 RTP* Consideration of the 16 ISTEA Factors
13. The overall social, economic, energy, and environmental effects of transportation decisions.	▪ CATS Committee Structure: The groups that addressed this factor included the Land Use/ Transportation Task Force, the Intermodal Advisory Task Force, the TCM Development Task Force and the RTP Committee. The twelve Councils of Mayors served as a resource on the effects of transportation decisions. ▪ *2020 RTP* Goals and Objectives: Objectives 4, 8, 9, 28, 29 and 30, listed in Chapter 3, incorporate this factor. ▪ Evaluation: The network and supplemental measures used during the level 3 screening and final plan evaluation quantified the issues raised by this factor. Project measures that incorporated the sentiment of this factor included the percentage of low income households, acres of vacant and redevelopable land available, employment per household and the number of households and employment in the project corridor. These measures also were used to evaluate environmental justice and welfare to work issues. Two other measures added during the final evaluation quantified the capital cost of auto and transit travel by trip and congestion expressed as vehicle or person hours of delay. ▪ *2020 RTP* Components: The *2020 RTP* documents the performance of the final plan, in the performance of the recommended transportation system component, and reflects the social, economic, environmental and energy effects of the plan for the region. ▪ Other: NIPC performs social, environmental and economic analyses of many growth issues including the projects and policies in the *2020 RTP*. The CATS Policy Committee has recently created a new Community Mobility Task Force to deal with access to jobs and other related mobility issues.
14. Methods to expand and enhance transit services and to increase the use of such services.	▪ CATS Committee Structure: The Transit Working Group provided the opportunity for the transit implementors to discuss a variety of transit related issues. The Transportation Task Force for People with Disabilities offers opportunity for transit users and providers to discuss ways to increase accessibility and the use of transit services. The Land Use/ Transportation Task Force and the Non-Motorized Issues Task Force have encouraged the use of transit supportive policies. ▪ *2020 RTP* Goals and Objectives: Objectives 1, 2, 3, 4, 14, 15, 31 and 37, listed in Chapter 3, address the policy directive of this factor. ▪ *2020 RTP* Components: The transit projects, discussed in the transit and highway projects component, will expand and enhance transit opportunities for the region's residents. The SRT System component identifies those existing transit facilities that are key to the mobility of the region's residents, and describes opportunities to enhance the existing system. ▪ Other: NIPC has a number of policy tools that are specifically concerned with enhancing and expanding transit opportunities.
15. Capital investments that would result in increased security in transit systems.	▪ CATS Committee Structure: The Transit Working Group provided the opportunity for the transit implementors to discuss a variety of transit related issues, including safety, with specific discussion included as part of the SRT. ▪ *2020 RTP* Goals and Objectives: Objectives 15, 18 and 20 address issues related to safety and security in the transportation system. ▪ *2020 RTP* Components: The SRT System component discusses operational and capital improvements to the transit system that increase and enhance the operating condition of transit. One of the transportation management strategies, discussed in the transportation management strategies component, supports the incorporation of a bus management system, which will enhance security for bus users. ▪ Other: The transit providers have projects in place that support increased security measures for their respective systems.
16. Recreational travel and tourism.	▪ CATS Committee Structure: Improvements to the transportation system affect both residents and visitors to the region. Therefore, any improvement made should benefit the region's recreational travelers and tourists. In addition to highways and transit, tourists and travelers to the region often rely on private transportation service providers for regional access. The Private Providers Task Force offers the opportunity for these providers to participate in the transportation planning process. Representatives from the private transportation industry are members of the RTP Committee, Work Program Committee and Policy Committee. ▪ *2020 RTP* Goals and Objectives: Objectives 30 and 33, listed in Chapter 3, incorporate this factor. ▪ Evaluation: The supplemental measures used during the evaluation of the *2020 RTP* considered recreation and tourism opportunities. ▪ *2020 RTP* Components: The transit and highway projects, SRA System, SRT System and bicycle and pedestrian transportation components will improve the accessibility of major recreation and tourism destinations in the region.

CHAPTER VII
FINANCIAL STRATEGY

Reliable projections of the funds expected to be available for transportation purposes and the costs expected to be incurred are essential to the development of a realistic and relevant regional transportation plan. The transportation planning tradition and practice in northeastern Illinois require fiscal constraint. The *2020 RTP* is constrained by these projections.

The RTP Committee decided early in the *Destination 2020* process that the funding assumptions in the plan would focus on existing sources. While new taxes, user based fees, private funding or other innovative programs might be needed, the committee believed the initial projections should be restricted to the programs currently in place or that are likely to be available. It is important to point out that while revenue projections are based on existing sources, these projections assume funding increases will be enacted periodically. There are three major assumptions regarding these increases that should be noted:

- State motor fuel taxes, vehicle registration fees and related sales taxes were assumed to increase in the future as they have increased historically;
- Sales tax revenue will increase proportional to NIPC forecasted household growth; and
- Federal funds will be the same as in current programs through 2001. After 2001, the 4.3¢ per gallon going for federal deficit reduction would be returned to the Highway Trust Fund. Finally, after 2013, the states will receive full funding from the trust fund.

If efforts are not made to increase transportation funding as historically has been done, resources will not be available for even the "constrained" list of projects.

While taking a necessarily cautious view of future revenues the plan considers **total transportation needs** and what the region must have to meet future travel demand. The plan identifies additional projects that merit further study, additional capital renewal needs and additional improvements in all the other plan components. The plan also identifies the existing tax and user fee based sources that could be modified as well as potential innovative funding sources that could

The conclusion from the analysis of the revenue projections and assessments of our transportation needs is that the region is not likely to have enough resources to accomplish the desired goal of bringing the entire system into a state of good repair and provide all the additional services that the forecasted growth suggests the region will need. The transportation operators will seek more capital funding from external sources to rebuild the existing system and accommodate forecasted growth.

Financial resources for operating, maintaining and expanding the transportation system come from federal, state and local sources. Federal funds are primarily derived from the federal tax on gasoline. The state derives its funds from a motor fuel tax, vehicle registration and license fees and sales taxes. The motor fuel tax provides its greatest source of revenue. The Illinois State Toll Highway Authority (ISTHA) generates revenue from tolls and can issue bonds for capital projects with the approval of the General Assembly and the ISTHA board of directors. The Regional Transportation Authority (RTA) derives revenue from fares, state assistance and a regional sales tax. Local sources of funds also include motor fuel taxes, vehicle fees, impact fees and property taxes.

Projecting the source of revenues and amount of funds available through 2020 is only half of the equation. Assessments of the costs to operate and routinely maintain the existing system, the capital costs to repair, rebuild and replace it (referred to as capital maintenance in the plan), the capital costs of additions to the system and the operating and routine maintenance costs for these new facilities are also required. The operation and routine maintenance of the existing system, the capital maintenance needs of the existing system and the proposed new facilities represent the first level of regional priorities in the plan.

The Illinois Department of Transportation (IDOT), the ISTHA and the transit agencies working through the RTA prepared estimates of their capital maintenance needs. These needs were developed by the agencies using information from their evaluations of current assets and condition rating data. These agencies also calculated the capital, operating and routine maintenance costs for all the new facilities. The agencies used current unit cost data to develop conceptual capital costs for transit and highway projects. Life-cycle costs, which estimate when minor

capital maintenance will be required, were used to make these conceptual cost calculations. Considering these costs, the RTP Committee made recommendations on the level of funding for each plan component.

Projected Resources

The first step to develop the *2020 RTP* financial strategy was the development of a projection of future revenues based on the existing sources of funds.

Transit

CATS made projections to 2020 for expected revenues and the daily operational costs of the RTA system as well as for capital maintenance. Historical data from 1989 to 1995 were adjusted to 1995 dollars based on the consumer price index. Forecasts were made in constant 1995 dollars of local, state and federal revenues to 2020 using a widely accepted forecasting technique. The RTA sales tax revenue forecasts reflected the NIPC forecasted growth in households. Implicit in the assumptions are the continuation and renewal of federal capital funding programs and replacement or renewal of state and local programs at similar constant dollar levels. The total capital revenues projected for transit are $12.7 billion through the year 2020. These projections are based on the current funding programs. Therefore $2.0 billion of this amount is restricted to "new start" type projects and cannot be used for capital maintenance. The amount available for transit capital maintenance was also reduced by $700 million, an amount consistent with the historical level of capital maintenance funds devoted to other expansion and enhancements such as rail extensions, new stations and bus expansion to serve growing markets. The financial strategy projects that an additional $760 million should be available for non-regionally significant SRT System expansion projects. This projection also assumes that transit operating costs for the existing system can be held at or slightly below the rate of inflation. The projection does not address the near-term operating funds issue nor the variations among RTA operating divisions.

Highways-ISTHA

The ISTHA projections of revenues, operating expenses and debt service are based on future travel demand since tolls provide approximately 89 percent of ISTHA revenue. Key assumptions are as follows:

- Continuation of existing toll schedule;
- No competing major limited access facility will be operating in any tollway corridor during the forecast period;
- Regional and national economy will remain generally stable;
- Land development and travel patterns will generally follow current assumptions and estimates; and
- Throughout the forecast period, motor fuel prices, adjusted for inflation, will remain consistent with current prices.

Based on these assumptions, ISTHA is projected to have $8.2 billion in revenues through the year 2020.

Highways-IDOT

IDOT developed the forecasts using a 25 year trendline of past gross state revenues and extending it out another 25 years. The result was deflated to 1995 using an assumed inflation factor of 2.6 percent through 2000 and 2 percent thereafter. Using trend lines permits the capture of all influences on the tax base. Federal funds were not trended, as historical figures have been erratic. Federal funds were assumed to be the same as in the current program through 2001. It was further assumed that after the federal budget is balanced, the 4.3¢ per gallon of gas tax currently used for deficit reduction will be returned to the Highway Trust Fund beginning in 2002, and from 2013 to 2020 states will receive full funding from the Fund. In fact, the President recently signed into law a tax bill which moved the 4.3¢ from deficit reduction and into the Highway Trust Fund. However, since there is no spending mechanism in place, these funds are unavailable for use so the above assumption remains valid. As in the past, northeastern Illinois is assumed to receive an average of 45 percent of statewide funding. The northeastern Illinois region should have $17.2 billion available through 2020.

Local

While the *2020 RTP* does not deal with local transportation decisions, ISTEA requires it to assess the ability of local jurisdictions to operate and maintain their systems. CATS staff forecasted local costs and revenues by multiplying 1995 values by 25 to estimate the amounts for the entire plan period. A check based on the assumption that motor fuel taxes provide a constant proportion of funds to these local jurisdictions showed that this approach was reasonable. Using published reports and a survey of municipalities, CATS estimated that local jurisdictions had $914 million in transportation resources available in 1995. Of this

million on improvements. Carrying these figures out 25 years results in approximately $22.9 billion through 2020. An estimate of future needs on the local highway system conducted by IDOT projected that these needs are significantly larger than projected resources.

Figure 7.1 summarizes the projected revenues.

FIGURE 7.1
PROJECTED SURFACE TRANSPORTATION REVENUES* 1996-2020
(billions of 1995 dollars)

Title 23/state highway capital revenues		$17.246
Transit capital revenues		12.7
capital maintenance/expansion	10.7	
capital expansion only	2.0	
Tollway revenue, new tolls		1.585
IDOT and local operating revenues		15.0
Tollway operating/capital revenues		8.2
Transit operating revenues		30.7
TOTAL		$85.431

*These projections are based on a set of assumptions regarding future federal, stateand local funding availability. There currently are no commitments regarding the actual receipt of these revenues.

Transportation System Needs

One of the goals of the *2020 RTP* is to *preserve the region's transportation system and maximize its people and goods carrying efficiency.* ISTEA also puts a high priority on maintaining and preserving the existing system. Transportation needs are divided into three categories: operating costs (general expenses such as snow removal, roadway patching and routine vehicle maintenance); capital maintenance (rehabilitation and preservation); and system expansion.

Operating Costs

Based on the operations of the 1995 transit system, operating costs are projected to be $30.7 billion over the plan period, which are matched by projected revenues. IDOT develops its operating budget on a statewide basis and divides it among its nine district offices and the central office. District 1, covering the northeastern Illinois region, has received about 24 percent of the statewide budget for each of the past two years. IDOT assumes this percentage will continue through the plan period. IDOT projects total operations to be $3.084 billion in 1995 dollars. ISTHA projects approximately $5.76 billion in 1995 dollars. These expenses are based on the assumptions stated earlier for tollway usage and tolls. The data collected in the survey of local jurisdictions indicates that about $475 million, or 52 percent of available transportation funding, is spent to operate the system, with the remainder spent on improvements. Extending this figure out by 25 years results in an expected operating cost of $11.9 billion.

As part of the evaluation of the *2020 RTP* transit and highway projects, the operating and routine maintenance costs for all the plan projects were estimated. Based on estimates of 1995 operating costs per lane mile, IDOT and ISTHA operating costs would increase by $22 million and $49 million respectively over the entire plan period if all the plan projects are implemented. These amounts when spread over the plan period are a relatively insignificant increase in the operating budgets of both agencies.

Operating costs for new transit services are expected to total $1.8 billion over the plan period. CTA and Metra provided estimates for expanded rail services during the proposal screening phase of the planning process. CATS calculated operating costs for expanded suburban bus and SRT rail services using cost data from the *1996 RTA Peer Review Analysis* and the *Future Agenda For Suburban Transportation* prepared by Metra and Pace.

Both the highway and transit operating costs calculations were based on the project implementation timing schedule included in the conformity analysis.

Operating revenue from new transit service is estimated to be about $800 million. This was calculated by multiplying the 1995 farebox revenue per trip by projected new trips, with ridership assumed to grow equally each year. This calculation was performed for both the base and action networks, with the difference being attributed to new services. Revenue from new ridership on existing services ($1.3 billion) is expected to more than cover the approximately $1 billion difference between the cost and revenue of new

Figure 7.2 summarizes the operating and the routine maintenance costs for the entire 2020 transportation system.

FIGURE 7.2
OPERATING COSTS FOR 2020 TRANSPORTATION SYSTEM
(billions of 1995 dollars)

Existing System (1996-2020)	
Highway operations/routine maintenance costs	$15.0
IDOT costs 3.1	
Local costs 11.9	
Tollway operating costs/debt service	5.8
Transit operating/routine maintenance costs	30.7
2020 RTP* (new projects)	
Highway operations/routine maintenance costs	.022
Tollway operating costs	.049
Tollway debt service	N/A
Transit operating and routine maintenance	1.8
Total	$53.371

* As implemented over the plan period.

Capital Maintenance

The three transit boards provided information on their total capital maintenance needs through the plan period. Approximately $15 billion would be required to bring the system to a state of good repair and maintain it at that level. Currently the transit system has a backlog of deferred capital maintenance needs. With the $10 billion in funding projected to be available for capital maintenance, the transit agencies will be able to maintain the system in a safe and usable condition. However this will result in the continuation of a backlog of unfunded capital maintenance needs.

IDOT has projected that it will take approximately $16.1 billion to maintain the entire federally eligible highway system at its current condition during the plan period. This level of funding would ensure that the number of centerline miles of deteriorated roads and the number of deteriorated bridges would not increase above current levels. Currently about 27 percent of the roads and 25 percent of the bridges in northeastern Illinois are in a deteriorated condition and in need of repair.

ISTHA projects that $1.6 billion will be needed through the plan period to rehabilitate and maintain the existing tollway system, including roadways, bridges, buildings and facilities. This includes $450 million for the systemwide installation of I-Pass toll collection and I-Pass Express lanes.

Capital Costs

Transportation implementors and CATS staff developed conceptual project capital costs. CATS provided implementors with unit cost information for recently completed highway and transit projects in the region. The unit cost information served as a reasonableness check for each project being considered. The capital costs include right-of-way, construction, rolling stock, design and engineering. The capital costs included for each plan component are based on the most current information available about the design, length and type of service to be provided. These conceptual costs are based on life cycle costs. Detailed feasibility and engineering studies may result in significant changes to the scope and cost of any transit or highway project or system component such as the SRA System or the suburban local bus expansion component. Future plan updates will revise capital cost data when necessary. Thirty-eight transit and highway projects were tested as part of the level 3 screening using the regional transportation models. These projects had a cost of approximately $12.3 billion in 1995 dollars.

Matching Needs and Revenues

The northeastern Illinois region, as well as the federal regulations, places a very high priority on the capital maintenance of the existing transportation system. The *2020 RTP* reflects the region's commitment to the existing system by allocating over 80 percent of projected resources to maintaining it. The plan projects the $16.1 billion needed to maintain the existing highway system at current levels. This equals 93 percent of available state highway capital resources. All of the $10 billion available for transit capital maintenance will be devoted to maintaining the existing transit system. The projections of future revenues are not great enough to fully renovate the transit system, however some renovation will occur. The existing tollway system will require $1.6 billion of its available $2.4 billion for capital maintenance. Approximately $800 million from existing sources should be available for capacity improvements.

The *2020 RTP* recognizes that expansion of the transportation system will be needed to serve the additional 1.8 million people and 1.5 million jobs forecasted for 2020. Operational improvements will increase the current system's capacity and other transportation management strategies will increase transit ridership and eliminate [illegible]

The *2020 RTP* makes specific resource projections for improvements to the SRA and SRT systems, suburban local bus expansion and bicycle and pedestrian transportation. The *2020 RTP* projects that $440 million, $760 million, $50 million and $175 million respectively should be available for these components. This allocation of resources to these components reflects their high priority.

The *2020 RTP* includes 20 transit and highway projects, totaling $5.1 billion. Those projects proposed for federal and state funding equal $2.718 billion. Approximately 11 percent of the federal and state resources will be needed to accomplish these projects. Seven projects are proposed for tollway funding. These projects total $2.385 billion. The tollway is projected to have over $800 million from existing toll revenue available for these projects. The *2020 RTP* projects that $1.585 billion in new bond proceeds will be needed. One element of the detailed feasibility studies for tollway projects is a financial assessment. This assessment includes an analysis of the funding sources for the project. The selection of a detailed funding proposal for tollway projects is beyond the scope of the *2020 RTP*.

The requirement to submit a fiscally constrained plan results in many worthy projects being left out of the *2020 RTP*. Funding increases for other plan components were not included. In addition, there are significant capital maintenance needs for both the highway and transit systems which are not fully funded. Increased capital funding is currently being pursued. These efforts seek both to replace exhausted funding programs and increase other capital streams. Capital funding increases must continue to be pursued throughout the plan period to meet the transportation needs of the region.

The importance of new sources of capital funds for the system as a whole, both highways and transit, can not be overstated. Success is necessary to avert a capital funding crisis in the near term. Over the horizon of this plan, securing additional transportation funding now may allow the region to match or exceed the plan's financial projections. This is essential: the plan's funding levels, though reasonably projected, will not fully meet either capital maintenance needs or the additional transportation capacity needs generated by a growing region. Exceeding the funding projections of the plan will be necessary to fully meet the region's inadequately prepare the public and policy makers for the inevitable choices which await this region, if not the entire state.

Finally, some projects may be needed after 2020. Because it takes a long time to implement projects, planning studies need to continue. The *2020 RTP* recognizes the need to continue studies on these additional projects and to preserve rights-of-way for construction when resources become available or post-2020. The *2020 RTP* projects that $25 million should be available to conduct feasibility studies and purchase strategic parcels of right-of-way in corridors threatened by new development.

Figure 7.3 reflects the breakdown of funding for the *2020 RTP* by funding source and use.

FIGURE 7.3

FUNDING THE 2020 REGIONAL TRANSPORTATION PLAN

(thousands 1995 dollars)

Projected Sources*		
Title 23/state highway resources		$17,246,000
Transit capital resources		12,700,000
capital maintenance	10,000,000	
capital expansion	2,700,000	
Tollway existing resources		2,400,000
Tollway, new tolls		1,585,000
TOTAL		$33,931,000
Investment Categories**		
Highway Capital Maintenance (including SRA System)		$16,056,000
Tollway Capital Maintenance		1,600,000
Transit Capital Maintenance (including SRT System)		10,000,000
Strategic Regional Arterial System (expansion only)		440,000
Strategic Regional Transit System (expansion only)		760,000
Improvements to Existing System		1,746,000
Transit Projects	758,000	
Highway Projects	988,000	
New Projects		3,357,000
Transit Projects	1,410,000	
Highway Projects	1,947,000	
Suburban Bus Expansion (beyond SRT System expansion)		50,000
Bicycle and Pedestrian Modes (transportation sources)***		175,000
Feasibility Studies, ROW for Corridors		25,000
TOTAL		$34,209,000

*These projections are based on a set of assumptions regarding future federal, stateand local funding sources. There currently are no commitments regarding the actual receipt of these resources.

**The estimate of transit project costs exceeds historical capital resource estimates by about $278 million. The estimates of project cost are based on conceptual costs. More detailed costs will be developed as part of project design and engineering studies. The RTP Committee determined that the difference between the projected resources and the conceptual costs was not significant.

***Bicycle and pedestrian projects that are part of larger highway projects and non-transportation

Potential Revenue Options

The *Destination 2020* process required a financial plan that demonstrated the consistency of proposed transportation investments with projected revenue. The financial plan compares the projected revenue from existing and proposed funding sources that can be reasonably expected to be available for transportation uses, and the projected costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan. The RTP Committee determined that due to the uncertainty of future funding, the focus of projections on existing funding programs and the conceptual nature of project costs, the difference between the projections and the cost of the plan were insignificant. The RTP Committee therefore concluded that the plan is fiscally constrained.

There are significant additional needs which must be addressed at some point. The RTA has stated that another $5 billion would be needed to bring the entire transit system to a state of "good repair" and IDOT acknowledges that the $16.1 billion earmarked for highway capital maintenance will keep the system at the current level of repair, but will not improve it. The plan also is able to earmark only enough funds to expand the capacity of the strategic regional arterials by 108 centerline miles. The level of suburban bus expansion and the SRT System improvements that can be accomplished are also limited. Additionally, some projects of potential benefit are not included in the plan due to financial restraints.

Funding Options

The financial analysis for the *2020 RTP* assumed increases in state and local revenues from highway sources to occur at about the same rate as they have in the past. For transit, the projections assumed continuation or replacement of capital funding programs at historical constant dollar levels. In both cases increases in these existing revenue sources could be made above the assumptions already included. It is also possible that some of these additional improvements could be paid for from sources other than the current funding sources (motor fuel tax, sales tax, vehicle registration, property tax, etc.). Such possible sources include tax increment financing (TIF), impact fees, use of rights-of-way as local match, sales of tax benefits, state infrastructure banks, public-private investments and congestion pricing. While transportation implementors have experimented with most of these techniques, there is insufficient

experience to enable a projection to be made of the level of funds that could be expected.

Tax increment financing has been used by a number of local governments and highway impact fees have been collected by DuPage County. The impact fee collected in DuPage County has ranged from a low of $2.2 million in 1991 to a high of $4.5 million in 1990. While the county has since repealed the fee, a number of home rule municipalities do and will likely continue to use this funding tool. Other innovative funding techniques have been used in Illinois. Right-of-way was used as local match in East St. Louis for the light rail Metro Link project. In 1995 and 1996 the CTA entered into sale and lease-back agreements on portions of its capital assets, transferring depreciation expense and the resulting tax reduction to a tax paying entity in return for a sales price greater than the lease obligations. These agreements are expected to generate $61 million, which is being used to finance CTA capital projects.

Another commonly cited innovation is the state infrastructure bank (SIB). Over the last several appropriation acts, Congress has approved funding for a pilot program for formation and capitalization. The SIB is designed to provide several types of financial assistance including interest subsidies, letters of credit, capital reserves for bond financing and construction loans. An example is Missouri which plans to hold funds to cover debt service reserve requirements. In 1985 Illinois passed an act establishing a Public Infrastructure Loan and Grant Program, administered by the state Department of Commerce and Community Affairs. The purpose of the program is to foster improved business or new business opportunities in the state. Improvements are geared to a variety of capital improvements such as roads, bridges and transit capital facilities. The essential precondition is business retention, development or expansion.

Other innovative financing tools have generally assisted in accelerating project implementation. These innovations are flexible match, soft match, tapered match and shared resources. Flexible match has allowed the use of donated resources by utilizing private investments in public-private partnerships as part of the non-federal matching requirements. Soft match involves developing credits on toll revenue expenditures. The credits are used toward the non-federal share of current federal-aid projects. The credits are arrived at by the state passing a maintenance of

a continuing commitment to non-federal transportation investment over a three year period. Tapered match allows for a variable match over the life of a project. The federal share is increased in the early stages with local funding increasing in the latter stages. Finally, shared resources has been principally used with the intelligent transportation systems. Private donations of communication technology have been granted in exchange for access to public right-of-way.

Another financing technique is termed pricing. Under this concept a fee or tax is initiated which would be aimed at reducing private auto travel or modifying the time of travel. The tax generated is then directed at making improvements aimed at reducing congestion. Most proposals have centered on toll bridges. Some of the methods to implement such a strategy are through smog fees, high occupancy toll lanes, excise fees and vehicle use fees.

Innovative funding strategies are likely to have appeal only for localized areas or specific projects. Systemwide needs such as transit and highway capital maintenance are less feasible candidates for such strategies. Increases in existing tax and user fee structures are more likely sources for these improvements, especially those that are perceived as being directly tied to a transportation service.

The *2020 RTP* supports any funding strategy that can gain the support of affected citizens and appropriate legislative bodies. The *2020 RTP* encourages project implementors and supporters to pursue all possible strategies to implement plan projects or actions.

CHAPTER VIII
PLAN IMPLEMENTATION

The *2020 RTP* provides the framework for achieving the region's transportation goals and objectives. The plan proposes needed new projects and improvements to the existing system. It also proposes transportation management and congestion management strategies to ensure that the existing system is used efficiently. The plan includes strategies and investments in projects that can reduce auto trips and improve the accessibility to public transit. The plan is not realized until the financial resources needed to accomplish it become available and the projects, systems, policies and strategies are implemented.

Plan implementation is monitored by tracking how the various regional, state and local agencies are working to accomplish specific projects, strategies or services. Plan implementation differs from **plan performance** monitoring in that the latter measures the effectiveness of the implementation actions. This chapter outlines some of the issues associated with implementation and some the steps needed to make the *2020 RTP* a reality.

Plan Implementation Priorities

The *2020 RTP* must include an implementation schedule for the plan components as part of the air quality analysis. This schedule must coincide with the analysis years set out by the federal CAAA. The task of identifying these schedules is very difficult for large projects because they take many years to implement and can easily be delayed. The process is no easier for smaller projects because they often occur in response to unforeseen events. A schedule developed for the *2020 RTP* air quality conformity analysis was based on the best information available from implementors on the status of major projects, on a general assessment by staff of the rate of population and employment growth for each analysis year and a steady flow of funding through 2020. A more detailed study of population and employment growth rates will be conducted as part of the individual feasibility studies. For the plan components that use conformity placeholders to represent potential improvements for the air quality analysis, the projects selected do not indicate an implementation priority but rather a level of investment. A discussion of each placeholder methodology is included in the detailed documentation

The actual implementation schedules for all projects in the *2020 RTP* are developed through the Transportation Improvement Program (TIP) process. The TIP is the region's five-year capital program of surface transportation projects. The TIP lists projects by year for each of the five years. The TIP includes: all federally funded projects, including federal capital and operating assistance; all regionally significant projects requiring Federal Highway Administration or Federal Transit Administration approval; and for informational and air quality analysis purposes, all regionally significant projects to be funded with non-federal funds.

The TIP is the multi-jurisdictional communication and public information tool for the region. It helps both the transportation community and the general public track the use of local, state, and federal transportation funds. The TIP also facilitates the regional transportation needs assessment and decision making process. Thus, the TIP assists MPO members, other transportation implementors and planning organizations in establishing a transportation program that reflects the goals of the *2020 RTP*.

Two key elements of plan implementation will be the tracking of development patterns and revenues. If actual growth patterns are different from the assumptions included in the 2020 population, household and employment forecasts, the need for a specific project or strategy could change.

Since no plan or growth forecast is fixed, both will need periodic review and adjustment. The *2020 RTP* will be reviewed every three years and updated, consistent with current federal requirements. The growth forecasts will be reviewed on this same schedule and revised if necessary. This update cycle along with ongoing data collection and project development monitoring will provide the framework for adjusting project priorities.

Major Project Planning Studies

Major capital investments will require a series of detailed studies before funds are programmed for their implementation. For projects seeking federal funds, ISTEA requires that Major Investment Studies (MIS) be conducted. While not requiring a designated MIS, non-federally funded major facilities will undergo

These corridor planning studies, whether they be MIS or not, are intended to be cooperative efforts between implementing agencies and state, regional, county and local agencies. The implementing agency initiates the corridor planning study and defines the detailed scope of work. While the *2020 RTP* may have identified a need for a transit or highway project, the corridor planning study will confirm that need and provide the basis for a more detailed consideration of alternate solutions before a final decision is made. The corridor studies will also provide opportunities for more extensive and localized public participation.

The *2020 RTP* includes some projects that clearly will require a corridor study. Major corridor studies may not be needed for all projects.

The *2020 RTP* recommends that the MPO process be used to review the need and approach for major corridor studies. The fact that the CATS Policy Committee includes all the major project implementors makes it a reasonable forum for these discussions. The appropriate implementing agency will bring a preliminary recommendation on the need for and scope of a major corridor study to the Policy Committee before significant work is started.

The *2020 RTP* recommends that corridor planning studies include the following elements:

- Consideration of appropriate adopted plans and policies of all affected governments;
- Following federal environmental protection standards in the study and implementation of all facilities;
- Participation with local agencies in the development of an appropriate process to consider land use planning issues that involves all agencies with land use and zoning authority in a planning corridor defined by the affected local governments;
- Development of a public participation process that provides access to all citizens throughout the planning process; and
- Encouragement of the formation of an advisory committee consisting of impacted local agencies and communities to review and comment on proposed environmental mitigation and monitoring

SRA Design Studies

The SRA design studies were initiated after the endorsement of the *2010 TSD Plan* in 1989. IDOT selected a consultant to develop an *SRA Design Concept Report*. The report has gone through revisions since it was originally prepared and will be updated in the future as needed. While the *SRA Design Concept Report* includes an ideal set of recommendations, it is only a guideline and there is no one single design that is appropriate for all designated routes; local conditions often make achievement of the optimal design infeasible. IDOT divided the routes into five original subsets and has funded detailed design studies for each route. As proposed additions were made to the system, IDOT funded a sixth subset of studies. The objectives of the individual SRA design studies are:

- Determine the needed roadway and signalization improvements;
- Examine ways to enhance public transportation;
- Identify and protect critical rights-of-way;
- Manage access to SRA routes to improve traffic flow;
- Coordinate land use and development projects with transportation improvements;
- Accommodate necessary bicycle and pedestrian travel in the SRA corridors; and
- Identify potential environmental concerns.

Additions resulting from the endorsement of the *2020 RTP* may trigger the need for additional route studies. IDOT has completed many of the studies and released formal recommendations. The status of each route study included in the *2010 TSD* is shown in Figure 8.1.

The *2020 RTP* does not specify or prioritize specific improvements to individual SRA routes. That is done in the TIP, the region's agenda of surface transportation improvement projects to be implemented within the next five years.

In order for these strategic arterials to perform their envisioned functions, the *2020 RTP* encourages local land use authorities to develop or modify land use plans along these routes that recognize the specific route recommendations.

SRT Design Studies

The RTA and the three service boards, will conduct detailed studies of each SRT route and facility included

FIGURE 8.1

STATUS OF STRATEGIC REGIONAL ARTERIAL STUDIES

Subset 1		Public Hearing Target Date
101 Michigan Avenue	Final Report, March 1993	Complete
102 Ohio/Ontario Streets, Grand Avenue/Illinois Street	Final Report, March 1993	Complete
103 US 30	Final Report, May 1993	Complete
104 Orchard/Randall/IL 31	Final Report, April 1993	Complete
105 IL 59	Final Report, May 1993	Complete
106 IL 21 (Milwaukee Avenue)	Final Report, May 1993	Complete
107 Palatine/Willow Roads	Final Report, April 1993	Complete
108 Lake Cook Road	Final Report, May 1993	Complete
109 IL 64 (North Avenue)	No Report	Complete
110 US 12/20, 87th Street	Final Report, April 1993	Complete
Subset 2		
201 US 41	Final Report, June 1994	Complete
202 US 12 (Rand Road)	Final Report, November 1994	Complete
203 US 45	Final Report, February 1995	Complete
204 Mannheim Road/US 45	Final Report, May 1995	Complete
205 IL 22	Final Report, April 1993	Complete
206 Barrington Road/County Farm Road	Final Report, September 1993	Complete
207 Naper/Weber/Larkin	Final Report, March 1995	Complete
208 Western Avenue/Dixie Highway	Final Report, September 1993	Complete
209 IL 19 (Irving Park Road) - Eastern Section	Final Report, March 1994	Complete
210 Archer Avenue/Pershing Road	Final Report, September 1994	Complete
211 US 14	Final Report, April 1993	Complete
212 75th Street/US 30/US 34	Final Report, July 1993	Complete
213 IL 137 / Peterson Road	Final Report, April 1996	Complete
Subset 3		
301 Cumberland Avenue/First Avenue	Final Report, April 1995	Complete
302 IL 43 (Harlem Avenue / Waukegan Road)	Final Report, April 1996	Complete
303 IL 47	Final Report, August 1995	Complete
304 IL 83, Bell Road	Final Report, January 1996	Complete
305 IL 173	Final Report, April 1994	Complete
306 US 6/IL 7, Caton Farm Road/Bruce Road, Cedar Road	Final Report, February 1995	Complete
308 US 14	Final Report, November 1996	Complete
309 Lake Shore Drive / Stony Island Avenue	Final Report, May 1996	Complete
Subset 4		
401 IL 25/Dunham/Kirk/Farnsworth	Draft Report, May 1997	Complete
402 IL 23	Final Report, July 1996	Complete
403 IL 83 / IL 132	Final Report, January 1997	Complete
404 Downtown Chicago Routes	Draft Report, May 1997	Complete
405 IL 56 / Cermak Road	Final Report, November 1996	Complete
406 Peotone Road	Draft Report, October 1996	Complete
407 IL 83/127th Street/130th Street	Advisory Panel 1 Report, September 1995	11/97
408 55th Street Corridor	Draft Report, December 1996	Complete
409 Torrence Avenue	Draft Report, November 1996	Complete
410 Algonquin Road/IL 62	Geometric Design Submittal, October 1996	12/97
411 Dempster Street / McCormick Boulevard / Lincoln Avenue	Draft Report, June 1997	Complete
412 Ogden Avenue / Cermak Road	Cermak Alternate Submittal, July 1995	Complete
413 IL 137 / Sheridan Road / Greenwood Avenue	Wrap Up Report, November 1996	Complete
414 Roselle Road Corridor	Advisory Panel 1 Report, January 1996	12/97
Subset 5		
501 Fabyan Prakway / IL 38	Draft Report, July 1997	Complete
502 IL 1 (Halsted), IL 394 (Calumet Expressway)	No Report	4/98
503 IL 72 (Higgins)/Touhy	No Report	3/98
504 IL 72/US 20	No Report	3/98
505 IL 59	Alternatives/Design Concept Draft Report	12/97
506 US 20/IL 23 (State)/IL 176	No Report	3/98
507 Stearns Road	Alternatives/Design Concept Draft Report, January 1997	12/97
508 IL 53	Alternatives/Design Concept Draft Report, December 1996	2/98
509 Pulaski, Wilson/IL 50 (Cicero)/167th	No Report	4/98
510 Charles/IL 120 (Belvidere)	No Report	1/98
511 IL 19 - Western Section	Draft Report, June 1997	Complete
512 IL 176 (Wauconda/Ivanhoe)/IL 60-83/IL 60 (Townline)	No Report	Complete
513 IL 47 / IL 71 / US 34	Alternatives/Design Concept Draft Report, February 1997	12/97
WIKADUKE Routes		
Heggs/Eola/WIKADUKE Trail	No Report	3/98
Caton Farm Road	No Report	3/98
119th Street/127th Street	No Report	3/98
95th Street/Boughton Road	No Report	3/98

ones conducted for the SRA System and should identify:

- Opportunities to coordinate land use planning and development with SRT System improvements;
- Any rights-of-way needing protection;
- Opportunities for intergovernmental cooperation;
- Potential environmental impacts; and
- Public concerns.

The studies will result in recommendations for short and long range improvements to the routes included in the designated system. Potential bus route and facility recommendations are likely to include those which will improve market share on current services and establish transit in select new markets. Elements that might be included in each study are bus management systems, roadway priority treatments, staging areas, passenger amenities and information systems, transportation centers and transfer and parking facilities. For the rail facilities and services, recommendations might include infill stations, access improvements, management systems, passenger amenities and information systems, platform extensions, operational improvements and grade separations. The twelve potential rail extensions will also be studied.

Similar to the SRA System, the funding available for SRT projects will not be sufficient to implement all the recommendations that will likely result from the studies. The studies will provide useful information so more informed decisions can be made when specific funding choices must be made. The route studies may provide a method to obtain local support for specific recommendations and public/private funding partnership opportunities.

The RTA has received FY98 funding through the Unified Work Program to initiate studies once the *2020 RTP* is endorsed.

Implementation of the Intermodal Component

The continuation of the efforts established during the development of the intermodal component of the plan will ensure that intermodal freight needs are given equal and fair consideration in the TIP five-year capital programming process. Such a comprehensive process will contribute to the long-term viability of the intermodal industry in northeastern Illinois. Continuity is critical to the relationships that are the hallmark of a public/private partnership based on mutual interests. Such partnerships can result in the implementation of specific projects and strategies.

This process must include consideration of the intermodal impacts of projects that may be driven by other needs. It must also provide direct and meaningful opportunity for private operator involvement and public sector responsiveness to issues driven by and focused on intermodal freight needs. The Intermodal Advisory Task Force provides the structure to identify, develop, fund and implement critical projects to improve intermodal and freight transportation efficiency.

Implementation of Transportation Management Strategies

The implementation of transportation management strategies is a coordinated effort among all implementors including state, regional and local governments and agencies and the private sector. This coordination is critical to the effectiveness and ultimate success of transportation management. The benefits achieved from transportation management strategies are enhanced when developed and implemented with other transportation projects and capital investments. Implementation of a complementary mix of strategies from the *2020 RTP*, the TIP, the Congestion Management System, the Gary-Chicago-Milwaukee ITS Priority Corridor Program and the regional Strategic Early Deployment Plan is necessary to support regional mobility and economic vitality.

Implementation efforts include the scheduling and prioritization of projects within the regional planning process so that construction or implementation phases are coordinated and the greatest benefits are realized. Short-term and long-term implementation studies will be identified and undertaken. Transportation management strategies are eligible for funding under nearly all current transportation programs. Efforts resulting from these and other appropriate funding and financing methods will contribute to the attainment of air quality standards and the control and reduction of urban congestion in northeastern Illinois.

Many transportation management strategies can be identified as Transportation Control Measures (TCMs) in support of the region's efforts to achieve the national ambient air quality standard for ozone. As a severe ozone non-attainment area under the Clean Air Act, northeastern Illinois is committed to establishing actions to reach attainment. To date, several

transportation management strategies have been designated as TCMs. Three submittals to the Illinois Environmental Protection Agency have been made to reduce emissions from mobile sources. The transportation management strategies identified as TCMs in these submittals include: bicycle and pedestrian projects; commuter parking lot projects; rail expansion; land use and development guidelines; transit oriented design; transit station reconstruction and rehabilitation; diversified regional centers; vanpool and carpool initiatives; transit system, facility and service expansion and operational improvement; traffic flow improvements; access management; and direct freeway access ramp projects. The expected benefits in reductions of volatile organic compounds, precursors to ozone formation, estimated from these TCMs totaled 3.63 tons per day. The mix of transportation management strategies identified in the *2020 RTP* are expected to result in further emissions reductions and will contribute to improving air quality in the region.

Community Planning

There are transportation issues and improvements that are not within the scope of the *2020 RTP*. The *Destination 2020* process reflects the fact that local and subregional transportation issues and problems are best addressed through a more localized planning process. Given the size and complexity of the region, the *2020 RTP* cannot adequately address the many local issues and concerns that affect specific communities and neighborhoods throughout northeastern Illinois. The regional planning process does, however, recognize the impact of regional travel patterns and transportation improvements on these small areas.

Local planning efforts undertaken within the framework provided by the projects, systems, policies and strategies presented in the *2020 RTP* are encouraged to address the impacts of travel on local area congestion and mobility. The *2020 RTP* provides guidance through the goals and objectives for these community planning efforts. For example, the impetus for corridor planning councils (CPC) came during the development of the *2010 TSD Plan*. Since then a number of councils have been formed to address subregional and local planning and development issues associated with major transportation improvement projects. The results of these CPC efforts provide input to the development of county and subregional transportation plans.

In a similar fashion county and community planning local problems within that context. Examples of such efforts include the development of county transportation plans as well as community area planning in the city of Chicago. These planning efforts can help coordinate improvements in the *2020 RTP* with local initiatives addressing improvements to county and municipal roads, bicycle and pedestrian facilities, traffic flow and distribution patterns, pedestrian-vehicle conflicts, bridges and transit services. Local community issues and concerns are also key elements in the planning for improvements to *2020 RTP* components such as the SRA System, the SRT System and bicycle and pedestrian transportation. The recognition of community issues and concerns that evolve from such efforts has in the past, and will continue in the future, to play an important role in regional transportation planning.

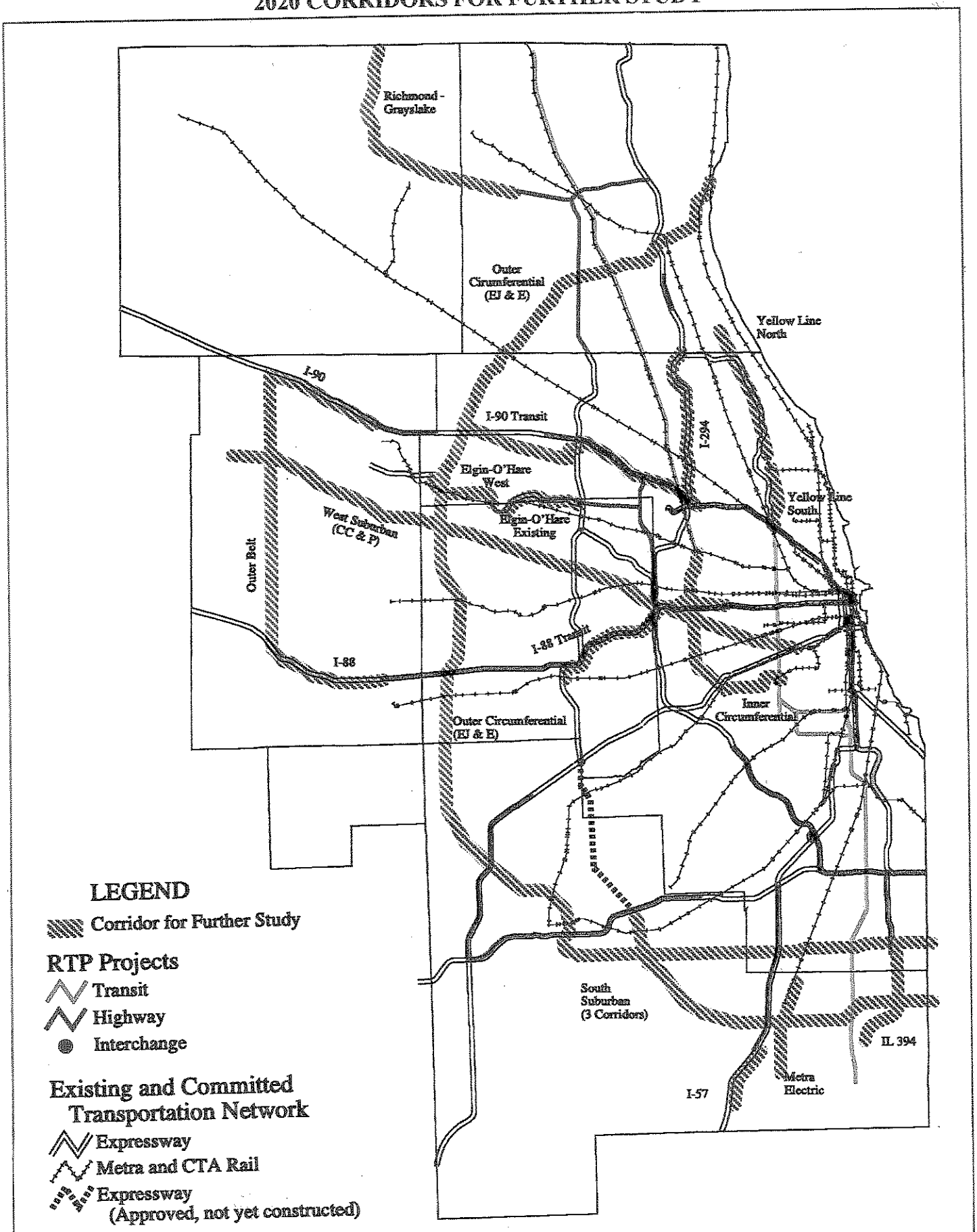
Corridors for Further Study

The 20 Corridors for Further Study (CFS) designated in this section were evaluated in level 3 screening, but are not being recommended for construction by 2020 based on one or more of three general reasons: 1) lack of the anticipated financial resources to construct the project; 2) forecasted travel demand does not indicate a need for the project prior to 2020; or 3) physical constraints exist that bring into question the feasibility of the project. It is the clear intention of the plan that the CFS, presented in Figure 8.2 and discussed below, are not *2020 RTP* projects endorsed for implementation at this time. These facilities were not included in the final *2020 RTP* evaluation and air quality conformity analysis.

Changes in 2020 development patterns, a feasible alignment or a change in available funding could make the future implementation of transportation improvements in these corridors desirable. Any change in status would require a formal plan amendment. The intention of the CFS designation is to encourage detailed, multi-modal studies such as MIS and environmental studies to help determine the need for these facilities and to preserve the option of construction through protective and hardship right-of-way purchases. This will allow the region choices for future transportation investments in the face of continuing development. While agencies can conduct preliminary engineering studies for these projects, they cannot obtain final federal environmental approval.

FIGURE 8.2

2020 CORRIDORS FOR FURTHER STUDY



development along the corridor. Agencies conducting these studies are encouraged to form or participate in corridor planning councils as a means to involve local decision-makers and help the impacted municipalities prepare for the changes that the construction of a project, or even the designation of an alignment, may bring.

I-294 Corridor, I-90 to Deerfield Road Toll Plaza

This segment of I-294 is currently congested. However, since all anticipated funding through 2020 has already been allocated, this project has been identified as a Corridor for Further Study. I-294 south of I-90 was widened in 1991. I-94 from the Deerfield Road Toll Plaza north to IL 22 is programmed to be widened as part of the reconfiguration of the toll plaza.

Outer Circumferential Corridor (non-core segment)

Metra is studying the physical feasibility of implementing commuter rail service on the Elgin, Joliet and Eastern Railway (EJ&E). Approximately one-half of the project, the core segment, has been selected as a plan project. Due to funding constraints, the other half has been designated a Corridor for Further Study. The core segment will be identified after Metra has completed its studies.

Elgin - O'Hare Existing Corridor, I-290 to Hanover Park

The Elgin - O'Hare Expressway opened in 1993 as a four-lane facility but is already experiencing congestion. This will likely increase when the East Elgin-O'Hare Extension plan project is constructed, but funding is not currently available for improvements to the existing facility.

Elgin-O'Hare Far West Corridor, Streamwood to Elgin

This corridor would connect the Elgin-O'Hare West Extension (Hanover Park to Streamwood) plan project with the US-20 Bypass southeast of Elgin, supplementing existing US 20.

Inner Circumferential Corridor, Franklin Park to Midway Airport

Metra is currently studying the feasibility of implementing commuter rail service on the Indiana Harbor Belt and/or Belt Railway Company freight lines. The northern terminus would be the existing North

I-90/Northwest Corridor

An RTA led feasibility study of high capacity transit service options will be conducted in this corridor. The corridor stretches from the O'Hare/Rosemont area to Schaumburg and beyond to Hoffman Estates. Improvements in this corridor could increase mobility throughout the northwest suburbs as well as accessibility between the suburbs and the city of Chicago. Since this corridor traverses mostly developed areas and does not follow an existing right-of-way an acceptable alignment may be difficult to identify. For these reasons and because of strong local support for transit investments in this corridor, a feasibility study will be conducted. The *Destination 2020* process evaluated an alignment which ran from the CTA Blue Line River Road station, along I-90 to IL 53, where it jogged south to IL 72, then followed IL 72 northwest to the EJ&E commuter rail line.

Yellow Line North Corridor, Skokie Terminal to Highland Park

This corridor follows the old North Shore right-of-way, now owned by the Union Pacific, north from the current Dempster Street terminal of the Yellow Line (Skokie Swift). This corridor should be studied in conjunction with the Yellow Line South Corridor.

Yellow Line South Corridor, Skokie Terminal to Blue Line Montrose station

This corridor would connect the Blue and Yellow Lines via an abandoned rail right-of-way, part of which is used by ComEd.

South Suburban West Corridor, I-80 to I-57

This part of the South Suburban Corridor starts at I-80 east of New Lenox where the proposed southern extension of I-355 would end and extends the circumferential corridor southeast to I-57. ISTHA is currently conducting a study, with the objective of selecting and recording a corridor location.

South Suburban Central Corridor, I-57 to IL 394

A right-of-way for this corridor is identified in IDOT's Environmental Assessment and Master Plan for the South Suburban Airport (SSA). It would provide a direct connection into the SSA and with the other

South Suburban East Corridor, IL 394 to the Indiana Border

A facility in this location could provide congestion relief to I-80/I-94 and would be a much-needed new connection across the State Line. Preliminary coordination discussions have been held with the northwestern Indiana planning agencies about this corridor extending eastward to I-65, or possibly US 421. Indiana officials have agreed to participate in further discussions and on-going studies regarding this proposal.

Metra Electric Corridor, University Park to the South Suburban Airport

Metra is studying alternative alignments for extending the Electric line to serve the South Suburban Airport directly. The Illinois Central tracks south of University Park may also be selected as the preferred corridor for the Chicago to St. Louis high-speed rail service.

I-57 Corridor, West Airport Access Road to Peotone Road

This corridor would extend the I-57 add lanes plan project another five miles to the existing Peotone Road exit. Its need is dependent upon residential and commercial development associated with the South Suburban Airport.

IL 394 Corridor, Sauk Trail to IL 1

This corridor is a further extension of the IL 394 add-lanes project selected as a plan project. If constructed, the east SSA entrance will be at the corridor's southern terminus, providing access to the air cargo facilities.

Richmond-Grayslake Corridor

This corridor connects the western terminus of the IL 53 Extension plan project to the US 12 freeway in Wisconsin. IDOT has recorded a centerline for this corridor, but it bisects the Volo Bog State Natural Area; new studies will need to be undertaken to identify an alignment with less severe environmental impacts.

Outer Belt Corridor, I-90 to I-88

IDOT is currently examining potential corridors between the DeKalb County line and IL-47 to serve long-distance, north-south travel and preserve needed right-of-way. Given the agricultural nature of this corridor, future studies will need to pay special attention to any proposed project's consistency with the *2020 Kane County Land Resource Management Plan.*

I-88 Corridor, IL 31 to the Outer Belt Corridor

This ten-mile long corridor connects the I-88 add lanes plan project to the Outer Belt Corridor. Judging by the 2020 development forecasts, the improvement will be warranted within the plan horizon only if a project is developed in the Outer Belt Corridor.

I-90 Corridor, Randall Road to the Outer Belt Corridor

This corridor extends the I-90 add lanes plan project approximately seven miles to northern terminus of the Outer Belt Corridor. Like the I-88 corridor, its justification is tied to the Outer Belt Corridor.

West Suburban Corridor, Union Station to Burlington

Metra will soon begin studying the feasibility of commuter rail service on the Chicago, Central & Pacific freight line. This service could be run as a shuttle between Burlington and the UP West line in Elmhurst, or continue to Union Station on the Heritage Corridor tracks.

I-88 Transit Corridor, Forest Park Terminal to the Burlington Northern Santa Fe I-355 station

This corridor extends west from the Blue line Congress terminal in Forest Park along an abandoned rail right-of-way to Mannheim Road, then along I-290/I-88 and Cermak Road/Butterfield Road to the programmed BNSF station at I-355. Much of the corridor would require either new right-of-way or adding to existing road rights-of-way.

APPENDIX A
DOCUMENTS RELATED TO THE *2020 RTP*

Public Involvement

The 2020 Regional Transportation Planning Process, (March 1995).
This booklet provides an introduction to the *Destination 2020* regional transportation planning process. It briefly discusses some of the issues to be addressed during the planning process, e.g., changing travel patterns and growth in non-work travel. These issues are highlighted through the use of profiles that illustrate how some individuals meet their mobility needs.

Public Involvement Strategies for the 2020 Regional Transportation Plan, (April 1995).
This brochure provides an overview of the actions that CATS' staff took to ensure public participation during the *Destination 2020* regional transportation planning process. These efforts included newsletters, presentations, public service announcements, media coverage and a CATS' event information phone line. Also included is a preview of the public involvement meetings and a preliminary Regional Transportation Plan (RTP) schedule.

Destination 2020 Newsletter, (Summer 1995).
This edition of the *Destination 2020* newsletter provides an introduction to the transportation planning process in the northeastern Illinois region. Issues addressed in this newsletter include: the CATS committees involved in the *2020 RTP* process; federal guidelines; the 2010 Transportation System Development Plan; socioeconomic forecasts; and public involvement.

Public Involvement: Community Issues and Concerns, (August 1995).
This publication presents documentation on the leader meetings held during April 1995. The objective of these meetings was to preview the *Destination 2020* process with community leaders and to have participants identify strengths and weaknesses of the region's transportation system. Included in the report are conclusions, detailed results and a full listing of the strengths and weakness identified by participants. Copies of the presentation materials used during these

Destination 2020 Newsletter, (Fall 1995).
This edition of the *Destination 2020* newsletter was an introduction and invitation to a series of 13 open house meetings that were held during December 1995. The newsletter provides an overview of the meetings and introduces the draft goals and objectives, the definitions of regionally significant actions and the call for proposals. An update on the socioeconomic forecast process is also included.

Public Involvement: Public Meeting I, (March 1996).
This report documents the December 1995 public participation event held as part of the *Destination 2020 RTP* process. The focus of these meetings was the status of transportation planning in northeastern Illinois, the preparation of the 2020 socioeconomic forecasts and the opportunity to review and comment on the draft goals and objectives. Participants were given surveys to complete regarding the goals and objectives, the socioeconomic forecasts and the meeting format. Participants were also able to submit proposals, for transportation improvements, as part of the *Destination 2020* call for proposals. Included in the report are the results of the surveys and documentation of the actions taken to publicize the meetings

Destination 2020 Newsletter, (Summer 1996).
This edition of the *Destination 2020* newsletter summarizes the development of the goals and objectives, the call for proposals and presents the final goals and objectives. It also includes updates on the proposal screening and socioeconomic forecast processes as well as a section with answers to some frequently asked questions regarding the *2020 RTP*.

Destination 2020 Newsletter, (Fall 1996).
This edition of the *Destination 2020* newsletter served as an invitation to the November 1996 public involvement meetings. It also provides an update on the *Destination 2020* process. Summaries are presented for the following planning activities: deficiency analysis; level 1 and 2 screening; financial analysis; and the development of the Strategic Regional Transit (SRT) System. In addition, maps that depict the Northeastern Illinois Planning Commission (NIPC) socioeconomic forecasts and the test transportation networks that were used in the level 3 screening are presented. Also highlighted are the activities of task forces and subcommittees involved in *Destination 2020* and a section that answers frequently asked questions

Projected Transportation System Revenues and Expenses, (September 1997).
This report details the projected revenues and expenditures for the region's transportation system. Included in this report, developed by the Financial Resources Working Group of the RTP Committee, are discussions of funding sources, projected resources and operating costs and system rehabilitation needs. This report explores the topic of additional funding possibilities. Also included is a description of forecasting techniques and several tables listing the projected revenues and expenditures by fiscal year and funding source.

Destination 2020 Planning Process, (August 1997).
This publication documents the efforts undertaken as part of *Destination 2020* to produce the *2020 RTP.* Included are sections on consultation, public involvement, ISTEA factors and regional planning and policy framework. Also covered are the deficiency analysis, the regional transportation plan components and the regional financial strategy. The publication concludes by discussing the performance of the recommended transportation system and summarizing how the plan meets air quality conformity standards.

Related *2020 RTP* Documents

Interim CMS, (October 1993).
This publication presents the Interim Congestion Management System (CMS) for the northeastern Illinois area as required by the ISTEA. This document demonstrates that the region is in compliance with ISTEA regulations as is necessary before the region can secure funds for additional single occupancy vehicle capacity, e.g., the building of add lane projects. Included in the document is an introduction to the requirements of the CMS and a description of the self-certified transportation planning process, the transportation planning process, the National Environmental Policy Act process and state and MPO commitments. Additionally, a discussion of the various regional transportation management strategies, i.e. Operation GreenLight, is included. The document also presents a table that lists all the add-lane road projects subject to the interim CMS.

Congestion Management Systems for Northeastern Illinois , (October 1997).
This publication is the Congestion Management Systems (CMS) for northeastern Illinois required by of the metropolitan planning process. This publication provides background information on CMS regulations and an overview of CMS. Also included are discussions on system monitoring, strategy considerations, project selection and implementation, effectiveness evaluation and the roles and responsibilities of CMS implementation. The CATS Policy Committee adopted the CMS Plan for northeastern Illinois on October 9, 1997.

Intermodal Documents

Freight Movements and Urban Congestion in the Chicago Area, (March 1991).
This report summarizes CATS outreach effort as a part of Operation GreenLight to solicit freight industry input and recommendations regarding intermodal bottlenecks. A survey was used to collect industry input and background information including specific instances of needed capital improvements such as intersection signalization, improved turning radius, bridge and viaduct reconstruction and at grade rail crossing improvements.

Guidelines for Identifying NHS Connections to Major Intermodal Terminals, (April 1995).
This memorandum provides the FHWA guidelines for a criteria-based approach to identify connectors to major intermodal freight and passenger terminals. It describes the historical evolution of the National Highway System (NHS) and the development of the guidelines and presents a detailed format for documentation procedures.

Proposed Intermodal Connectors to the NHS for Northeastern Illinois, Version 2, (March 1996).
This report describes the development of the proposed intermodal connectors to the NHS. It identifies major intermodal facilities which qualify for connectors and contains data on the level of intermodal activity at these facilities and site-specific map exhibits for each terminal or station. Operations analysis of the facility is provided which indicates its need for a connector.

Using Geographic Information Systems for Intermodal Planning: NHS Connectors and Intermodal Inventory Development with Intermodal Facilities Inventory, Version 2, CATS Working Paper 96-05 (April 1996).
This working paper describes the Intermodal Facilities Inventory Geographic Information System (IFIGIS) developed to document the facilities serving the region. It also discusses data sources, and the review process

Evaluation of the Canadian Pacific Rail System's CMAQ Project, CATS Working Paper 97-01, (January 1997).
This working paper summarizes the process leading to CMAQ funding for a portion of the Canadian Pacific Rail Revised Operating Plan. It presents technical analysis of the benefits associated with this project. This project, a public/private partnership, produced both operational efficiencies to the railroad and public benefits in air quality and congestion.

An Analysis of Intermodal Improvement Needs in the Northeast Illinois Region, CATS Working Paper 97-02, (February 1997).
This working paper describes the intermodal improvement needs solicitation to the intermodal and freight industries, local governments and other interested parties. The project applications received as a result of this effort were grouped and analyzed to identify the issue and improvement options. This report also documents the status of each of the needs.

Study of Truck Volumes & Percentages On Marked Routes in Northeast Illinois, CATS Working Paper 97-07, (June 1997).
This working paper provides statistical data on the truck volumes (expressed in vehicle equivalents) on 521 links on the regional highway system.

Statistical Summary of the Intermodal Freight Industry in Northeastern Illinois, CATS Working Paper 97-03, (July 1997).
This working paper summarizes the analysis of the value of the freight and intermodal industry to the regional economy. The report contains draft text of the proposed intermodal policies and a statistical profile of the industry.

Socioeconomic Forecast Preparation

NIPC Approach to Forecasts and the Incorporation of Regional Growth Policy, 2020 Forecast Staff Paper No. 2, Northeastern Illinois Planning Commission, November 1991).
This paper addresses the incorporation of changes to the socioeconomic forecast models. It discusses the usage of market forces as well as the regional and local growth policies in the preparation of forecasts that are realistic and likely to be supported by those involved

Regional Economic Issues, Federal Reserve Bank of Chicago, (November 27, 1992).
This is a working paper on regional economic forecasts. It deals with continuing research in the usage of input-output tables in both static and econometric models. In this paper three different specifications of input-output tables and their impacts are discussed.

Spatial Distribution of Employment in Northeastern Illinois 1990, Northeastern Illinois Planning Commission, (June 1993).
This paper describes the methodology used to estimate eleven categories of 1990 employment in the six counties of northeastern Illinois. It also summarizes employment by county and township and provides a comparison with 1980 and 1985 estimates.

1990 Land Use in Northeastern Illinois Counties, Minor Civil Divisions and Chicago Community Areas, Northeastern Illinois Planning Commission, (June 1995).
This report describes the development of the 1990 land use inventory and compares it to earlier ones. It also describes land use categories and summarizes them by county and township for the six county area. The first two pages provide a description of summary results by subregion.

Alternative Futures for Northeastern Illinois, Northeastern Illinois Planning Commission, (June 1996).
This document was prepared for the regional workshop on future development patterns in northeastern Illinois. The workshop attendees were presented with three computer-simulated alternative futures along with the assumptions used to create them. The three scenarios were: 1) Trends (assuming existing patterns of development); 2) South Suburban Airport (assumes building of a third airport); and 3) Redevelopment and Infill (redeveloping mature communities). Input from attendees was sought regarding these three different scenarios of growth and a consensus was sought as to a desirable future. Their recommendations directly impacted the spatial distribution of the 2020 forecasts of population, households and employment.

Report on Workshop 1, A Preferred Development Pattern in Northeastern Illinois, Northeastern Illinois Planning Commission, (July 1996).
This report deals with the response of the workshop

in northeastern Illinois. It includes the feedback questionnaire results. Based on the public response, a scenario combining Infill and Trends, with judicious planning, won majority support.

Tools to Modify Trends, Northeastern Illinois Planning Commission, (September 1996).
This document deals with actions or tools which would be needed if we were to dissociate with the Trends scenario. It includes actions for 1) modifying trends, 2) providing for Infill and 3) supporting good planning and development implementation. This paper also discusses the acceptability of various tools.

Summary of Workshop 2, Tools to modify Trends in Northeastern Illinois, Northeastern Illinois Planning Commission, (September 6, 1996).
This paper describes the survey results to modify Trends. In addition to listing questionnaire responses, it describes the four tools for Trends modification which received a favorable response from the majority of participants. These tools stress job accessibility and maintenance of existing transportation system, among others.

Transportation Management Strategies

Report on Proposed Transit Vehicle Management System, (July 1994).
This report describes a proposed Transit Vehicle Management System for Pace, the suburban bus division of the RTA. System components, benefits achieved from system implementation and cost estimates are described in this document.

Preliminary Evaluations of TCM Proposals, Working Paper 94-08, (August 9, 1994).
This working paper summarizes the development and analysis of transportation management strategies that could be implemented to reduce pollution generated by mobile sources. The TCMs analyzed in this paper were recommended for inclusion in the 1994 Attainment State Implementation Plan. Preliminary volatile organic material emission reduction estimates, implementation factors and requirements for application are summarized in this document.

Intelligent Transportation Systems, Strategic Early Deployment Plan (SEDP) for Northeastern Illinois: Scope of Work, (July 1995).
This report identifies transportation issues, problems and opportunities in northeastern Illinois. A general identifies the status of the Intelligent Transportation System (ITS) and advanced technology projects in northeastern Illinois, is presented in the document. Goals, objectives and the organizational structure for the management of the SEDP study as well as regional ITS opportunities are established in this report.

Recommended Pricing and Demand Management Inputs for RTP Tests: Memorandum from the TCM Development Task Force to the RTP Committee, (December 19, 1996).
This memorandum describes the specifications developed for the pricing scenario and the demand management scenario to be tested as part of the *2020 RTP* analysis. These scenarios were developed for analysis with the "trend forecasts" and the "existing plus committed network". The regional policy assumptions that these scenarios were based upon are summarized in this document.

Summary of the Pricing and Demand Management Scenario Test Results: Memorandum from David Zavattero to the TCM Development Task Force and RTP Committee, (January 22, 1997).
This memorandum summarizes the results obtained from the analysis of the pricing scenario (test scenario 7) and the demand management scenario (test scenario 8) using the CATS regional model. An overview of the scenarios and the transportation, economic and policy implications of the results are discussed in this document.

Gary-Chicago-Milwaukee (GCM) ITS Priority Corridor: Draft Program Plan Update, (April 1997).
This plan update outlines the 20 year plan for the implementation of ITS projects and technologies in the tri-state region. Detailed project descriptions, short-term budget needs and implementation timeframes are highlighted in the document. A detailed implementation graphic illustrates the interrelationships between projects and state systems.

Trip Table Processing for TDM Model Analysis, Draft Working Paper, (May 1997).
This working paper describes the methodology developed by the CATS Operations Analysis staff to process regional travel model trip tables for use in the FHWA TDM Model. The actions taken to compress the 1,600 by 1,600 traffic analysis zone matrix to a new 313 zone compressed matrix are outlined in this document. The paper also summarizes the method used to generate the TDM-based average vehicle occupancy

Analysis of Potential Transportation Management Strategies for the 2020 Regional Transportation Plan, Technical Document (June 10, 1997).
This document summarizes the analysis of eleven transportation management strategies for the transportation management component of the *2020 RTP*. Descriptive summaries highlight strategy objectives and identify the assumptions used to calculate costs and levels of implementation. The assumptions and methodologies used to calculate benefits derived from the application of each strategy are outlined. The benefits achieved from the implementation of various levels of strategy implementation include reductions in volatile organic compound emissions, vehicular trips and vehicle miles of travel.

Promotion of Non-Motorized Travel for Future Use: A Methodology for Reflecting Regional Land Use Policies in the CATS Transportation Models, Draft Working Paper, (August 1997).
This working paper discusses the methods used to calculate and apply a change in the PEF variable to the CATS regional model. The estimated change in the PEF reflected regional and local land use policies promoting development trends conducive to pedestrian and other modes of non-motorized travel. This paper details the assumptions and methodologies used to calculate a new set of PEF values for the year 2020 and identifies the effect these values exhibited in the CATS regional model.

Application of FHWA TDM Model for Strategy Analysis: 2020 RTP, Draft Working Paper, (August 1997).
This working paper describes the analysis of selected transportation management strategies for the *2020 RTP* using the FHWA Travel Demand Model. The model predicts the effectiveness of strategies on VMT, person and vehicle trips, mode share, vehicle occupancy and vehicle miles of travel. The model calibration process, regional data applications, selection of variables and benefit results are outlined in the document.

Bicycle and Pedestrian Transportation

Bicycle and Pedestrian Planning In Northeastern Illinois: Summary Report of the Non-Motorized Issues Task Force, Northeastern Illinois Planning Commission (1996).
This report details all work completed by the Non-Motorized Issues Task Force during the development

Priority Travel Zone Analysis, Northeastern Illinois Planning Commission (1996).
This report documents the methodology, results and policy conclusions from the analysis. This research was completed during the spring and summer of 1995, and was prepared by the Chicagoland Bicycle Federation, under contract to the Northeastern Illinois Planning Commission. This report is published in *Bicycle and Pedestrian Planning In Northeastern Illinois: Summary Report of the Non-Motorized Issues Task Force.*

Analysis of the 1995 Bicycle Survey of Suburban Bike Trails, Chicago Area Transportation Study (1996).
Completed in the summer of 1995, this survey details bicycle and pedestrian use and reasons for use on 20 percent of the region's suburban trails.

Enhancing Public Transportation and Non-Motorized Modes' Performance in the Regional Transportation Planning Models, Chicago Area Transportation Study (1996).
The paper discusses opportunities within the regional transportation modeling process to adjust model inputs to account for the impacts of bicycle and pedestrian improvement projects.

Bicycles on Transit: Peer Review Analysis, Regional Transportation Authority (1995).
This report studied peer commuter rail, rapid transit and bus service provider's arrangements for permitting bicycles on board transit vehicles. Excerpts from this report appear in *Bicycle and Pedestrian Planning In Northeastern Illinois: Summary Report of the Non-Motorized Issues Task Force.*

Non-Motorized Access to Transit, Regional Transportation Authority (1996).
This report analyzed existing transit survey statistics regarding mode of access and included original survey research work to support the development of a model to predict the change in transit station access mode due to bicycle and pedestrian improvements. Excerpts from this report appear in *Bicycle and Pedestrian Planning In Northeastern Illinois: Summary Report*

Sub-regional Bicycle and Pedestrian Plans.
Sub-regional plans have been prepared by: McHenry County, DuPage County, city of Chicago, Northwest Municipal Conference, North Central Regional Council, West Central Municipal Conference, South Suburban Mayors and Managers Association, and the SouthWest Regional Council. Bicycle components have been incorporated into the Kane County Transportation Plan and the Will County Land Resource Management Plan.

Final Version of Policies and Procedures for Accommodating Bicycles in Highway Improvements, Illinois Department of Transportation (1995).
This memorandum provides IDOT's policies and procedures related to the provision of bicycle accommodations on federal-aid and state-funded projects, and federal and state participation in the cost of these accommodations and projects.

APPENDIX B
GLOSSARY

2010 Transportation System Development (TSD) Plan Update: The first update of the 2010 TSD Plan originally endorsed in 1989. The impetus for this update was the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) that required all regional transportation plans to meet certain requirements by October 1993. To meet these requirements a new chapter on the ISTEA planning factors was added and the chapters on transportation demand and system management and financial considerations were revised.

Action Scenario: As used in travel demand forecasting, the combination of the existing plus committed (E+C) transportation network, planned transportation improvements beyond those in the E+C network and socioeconomic forecasts for a given analysis year. (Also see **Base Scenario**.)

Average Vehicle Occupancy (AVO): The total number of people making auto trips divided by the total number of auto trips.

Base Scenario: As used in travel demand forecasting, the combination of the existing plus committed (E+C) transportation network and socioeconomic forecasts for a given analysis year. (Also see **Action Scenario**.)

Call For Proposals (CFP): The request for suggestions, made to all members of the northeastern Illinois community, for transportation project, system and policy improvements to be considered during the *Destination 2020* regional transportation planning process.

CBD: Central Business District. Usually used in reference to the city of Chicago.

CDOT: Chicago Department of Transportation.

Chicago Area Transportation Study (CATS): The public agency that provides staff support to the Metropolitan Planning Organization (MPO) for northeastern Illinois, i.e., the CATS Policy Committee.

Chicago Region Econometric Input/Output Model (CREIM): An employment forecasting model developed by the Regional Economics Application Labora-

Chicago Transit Authority (CTA): The division of the Regional Transportation Authority (RTA) responsible for the day-to-day operations and planning for the rapid transit and bus systems serving the city of Chicago and near in suburbs.

Clean Air Act Amendments (CAAA) of 1990: Federal environmental legislation that establishes strategies to achieve and maintain national ambient air quality standards.

Conformity: The requirement, established by the CAAA of 1990, that metropolitan plans and programs be consistent with the State Implementation Plan (SIP). (Also see **State Implementation Plan**.)

Congestion Mitigation and Air Quality Improvement Program (CMAQ): A category of funding established under ISTEA for Transportation Control Measures (TCM) and other programs and projects designed to help meet ambient air quality goals set forth in the State Implementation Plan (SIP).

Consultation: Required by CAAA, consultation between the MPO, affected state and federal agency representatives assists local and state decision making by providing a forum for all affected federal, state and local agencies to discuss and resolve important issues or potential conflicts. Discussions and resolutions arrived at through consultation assist in determining the conformity of metropolitan transportation plans and projects with the State implementation Plan (SIP). *Destination 2020* has also used this forum to resolve issues related to meeting ISTEA metropolitan planning rules.

Corridors for Further Study: Project proposals that are not plan projects, are of a lower priority than plan projects and are not eligible for implementation. They are, however, included in the plan document due to continuing interest in their potential to address regional transportation needs. Inclusion in this category will allow further evaluation of their potential to continue and allow for protective and hardship ROW acquisition. While agencies can conduct preliminary engineering studies for these projects, they cannot obtain federal environmental approval.

Council of Mayors (COM): An assembly that includes the mayors and presidents of all municipalities in northeastern Illinois joined together for the purpose of providing municipal input to the regional transpor-

Deficiency Analysis: This analysis, which was conducted during the alternatives development phase of *Destination 2020*, presented comparisons of regional development and travel patterns between 1990 and 2020. (Also see **Deficiency Index**.)

Deficiency Index: A measure, developed during the deficiency analysis, that was used to indicate the relative need for transportation improvements among townships. The index was constructed with data representing levels of development, trip making associated with that development, and the ability of the arterial system to adequately serve these trips.

***Destination 2020*:** The name given to the process of developing a new regional transportation plan for northeastern Illinois.

Disaggregated Residential Allocation Model/Employment Allocation Model (DRAM/EMPAL): A land use planning model that, based on patterns of accessibility and relative attractiveness, forecasts where new development will occur and, consequently, the future distribution of households and employment.

FHWA (Comsis) TDM Model: A model that estimates the impacts of transportation demand management strategies.

FHWA: Federal Highway Administration.

Financial Constraint: ISTEA requires that a financial plan be prepared as part of the regional transportation planning process. The plan must demonstrate that the region can reasonably expect to fund the improvements called for in the plan and sustain the system to the planning horizon.

Financial Resources Working Group (FRWG): The working group, established by the Regional Transportation Plan Committee, and assigned the task of developing the financial forecasts for the 2020 RTP. Members include: CDOT; the COM; DuPage County (to represent the counties); FHWA; FTA; IDOT-OPP; ISTHA; RTA; the Civic Federation; the Infrastructure Technology Institute of Northwestern University; the Metropolitan Planning Council (the previous three as public interest groups); Harris Trust and Savings Bank; the Federal Reserve Bank; and the Illinois Government Finance Officers (the last three to represent the fi

FTA: Federal Transit Administration, formally the Urban Mass Transportation Administration.

High Occupancy Vehicle (HOV): Vehicles with one or more passengers. Examples of HOVs include buses, taxis and carpools.

Highway Performance Monitoring System (HPMS): A national highway transportation database and analytical simulation system that includes information on all public roads and serves highway data and analytical needs at the national level.

Highway Working Group (HWG): The working group, established by the Regional Transportation Plan Committee, with the responsibility of advising the RTP Committee on issues involving highway projects, systems and policies considered for the 2020 RTP. Members include: Cook County (to represent the counties); the COM; CDOT; IDOT-District 1; and ISTHA.

Home Based Other (HBO): A trip originating at home and destined to a place other than work.

Home Based Work (HBW): A trip originating at home and destined for a work location.

HTWG: The Highway and Transit Working Groups.

IDOT-District 1: The IDOT district office that is responsible for the six county northeastern Illinois region that includes the counties of: Cook; Lake; McHenry; Kane; DuPage; and Will.

IDOT-DPT: Illinois Department of Transportation-Division of Public Transportation.

IDOT-OPP: Illinois Department of Transportation-Office of Planning and Programming.

IDOT: The Illinois Department of Transportation.

IEPA: Illinois Environmental Protection Agency.

Intelligent Transportation Systems (ITS): Consists of the coordinated use of technologies to improve, manage and share information; provide for the integration of transportation services; provide for improved incident response systems; and provide other system

Intermodal: Planning and infrastructure that reflects a focus on connectivity between modes as a means of facilitating linked tripmaking. It emphasizes connection, choices, coordination and cooperation.

Intermodal Connector: Highway links that connect major passenger and freight intermodal facilities to the National Highway System (NHS) based on guidelines established by the FHWA.

Intermodal Advisory Task Force (IMATF): The group, established by the CATS WPC, that includes among its responsibilities developing recommendations to the RTP Committee regarding the intermodal portion of the 2020 RTP. Members include: Cook County; CDOT; IDOT-District 1; IDOT-OPP; Cushing Trucking and Miken Cartage, Inc. (to represent the trucking companies); the Beltway Railway Company of Chicago; Norfolk Southern Corporation, Burlington Northern/Santa Fe Railway, and Union Pacific Rail Road (the previous three to represent railroad companies); S.T.A.R. Transportation (to represent freight forwarding companies); the Intermodal Association of America and Illinois Transportation Association (as intermodal associations); Illinois International Port District (to represent marine operators); and Greenbrier Intermodal (to represent business, commerce and manufacturing groups).

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA): The federal legislation that established the current requirements for regional transportation planning and programming.

I-PASS: The electronic toll collection system used by ISTHA.

ISTHA: Illinois State Toll Highway Authority.

Land Use/Transportation Task Force: A task force established by the CATS WPC, with NIPC a facilitator, that among its responsibilities includes developing recommendations for the land use/ transportation portion of the 2020 RTP. The task force is staffed by CATS and NIPC. Members include: IDOT; COM (11 representatives); RTA; CDOT; city of Chicago Department of Planning and Development; Cook County; DuPage County; CTA; Metra; Pace; Metropolitan Planning Council; Center for Neighborhood Technology; Sierra Club; Openlands Project; Real Estate Consortium; Builders, Owners &

Level 1 Screening: The initial screening of all proposals received during the *Destination 2020* call for proposals. This screening determined whether or not proposals were regionally significant and within the scope of the 2020 RTP. In addition, similar or identical proposals were grouped with a single placeholder proposal. Proposals that passed level 1 either went on to level 2 screening or were referred to the appropriate subcommittee, working group or task force for their consideration.

Level 2/2A Screening: The second screening of proposed highway, transit, HOV and regional interchange project proposals undertaken as part of *Destination 2020*. This screening was based on a technical analysis of transportation system performance, the regional need for transportation improvements and the potential for a project's implementation. Projects that passed level 2/2A screening would be tested using the CATS travel demand forecasting models during level 3 screening.

Level 3 Screening: The final *Destination 2020* screening level. Level 3 screening had two objectives. The first was to provide information on the performance of the proposed transit, highway, HOV and interchange projects that had passed the level 2 screening. This information was to aid in the decision making process regarding the selection of projects for the *2020 RTP*. The second was to generate network level information that could be used to gauge the impact of three different socioeconomic forecasts as well as transportation demand management and pricing strategies on regional travel.

Life-Cycle Cost Analysis: An economic evaluation of all current and future costs associated with investment alternatives.

Metra: The division of the RTA responsible for the day-to-day operations and planning for the commuter rail system serving the northeastern Illinois region.

Metropolitan Planning Organization (MPO): A federally mandated government agency, designated by state and local officials as being responsible for long-range transportation planning and programming for a metropolitan area.

Multimodal: Planning or infrastructure that reflects consideration of more than one mode to serve transportation needs in an area.

NHS: National Highway System.

NIPC Cassandra Model: An employment and population forecasting model used by the Northeastern Illinois Planning Commission (NIPC) during the early 1970's.

Non-Home Based (NHB): A trip that neither starts nor ends at home.

Non-Motorized Issues Task Force (NMITF): A task force established by the CATS WPC. The responsibilities of this group include evaluating bicycle and pedestrian issues and recommending a bicycle and pedestrian component to the RTP Committee for inclusion in the 2020 RTP. Members include: CDOT; the COM; CTA; DuPage County (to represent the counties); Forest Preserve District of Cook County; Metra; Pace; RTA; the Chicagoland Bicycle Federation, League of Illinois Bicyclists and Openlands Project (to represent user/advocate groups); and OWP&P Architects (to represent public interest groups).

Northeastern Illinois Planning Commission (NIPC): The comprehensive land use planning agency for the northeastern Illinois region.

Northwestern Indiana Regional Planning Commission (NIRPC): The Metropolitan Planning Organization (MPO) for the northwestern Indiana region.

Pace: The division of the RTA responsible for the day-to-day operations and planning for the suburban bus system serving the northeastern Illinois region.

Placeholder: A project designated to reflect the operational benefits of levels of investment in plan categories where the plan does not include specific projects. These representative placeholders have been identified only for the purposes of determining air quality conformity. .

Policy Committee: The CATS Policy Committee is the MPO for northeastern Illinois as designated by the governor and local elected officials. Members include: IDOT; COM; RTA; NIPC; CDOT; Cook County; DuPage County; Kane County; Lake County; McHenry County; Will County; CTA; Railroad Companies (Class

Public Involvement Working Group: The working group, established by the RTP Committee, to provide recommendations to the RTP Committee on the public involvement strategies for the *Destination 2020* planning process. Members include: CDOT; the COM; IDOT-OPP; NIPC; RTA; Center for Neighborhood Technology; Illinois Alliance for Aging; AAA - Chicago Motor Club; Mid-America Institute on Poverty; and the Northbrook Chamber of Commerce (the last five to represent public interest or user/advocate groups).

Regional Economics Application Laboratory (REAL): A joint effort of the Federal Reserve Bank of Chicago and the University of Illinois at Urbana/ Champaign to develop employment forecasts.

Regional Transportation Authority (RTA): The public agency with long range planning and financial oversight responsibility for the CTA, Metra and Pace.

Regional Transportation Plan (RTP): The long-range (20-25 year) multi-modal transportation plan that documents the projects, policies, systems and strategies needed to meet the surface transportation needs of the region. Included in the plan is a financial component that demonstrates that the plan is financially constrained and an air quality conformity analysis.

Regional Transportation Plan Committee: The committee, established by the CATS WPC, for the purpose of directing the development of the RTP. Members include: Alpha School Bus Company (to represent private transportation providers); CDOT; the COM; IDOT; ISTHA; Lake County DOT (to represent counties); NIPC; and the RTA.

Right-Of-Way (ROW): The land needed for the construction and operation of a transportation facility.

Single Occupancy Vehicle (SOV): A vehicle having only a single occupant, i.e., the driver.

Socioeconomic Forecasts: Forecasts of population, households and employment prepared by NIPC for the *Destination 2020* process. These files describe how the region is expected to develop between now and 2020. These files also provide critical input to the travel

South Suburban Airport (SSA): A proposed third major airport in the northeastern Illinois region at a south suburban site near Peotone in southern Will County.

Strategic Regional Arterial (SRA) System: A 1,387 mile network of high-design roadways intended to supplement the freeway system in handling subregional long distance travel.

SRA Subcommittee: A subcommittee of the CATS WPC responsible for evaluating issues and making recommendations to the RTP Committee regarding the arterial component of the 2020 RTP. Members include: CDOT; the COM; IDOT-District 1; IDOT-DPT; RTA;and Kane and Will counties (to represent counties).

State Implementation Plan (SIP): The statewide plan for achieving national ambient air quality standards as mandated by the CAAA of 1991.

Strategic Regional Transit (SRT) System: A network of high capacity transit facilities and services that are vital to the northeastern Illinois region for mobility, congestion relief and economic development.

Supplemental Arterial System (SAS): A concept, put forward during the *Destination 2020* call for proposals (CFP), for a network of arterials to support the SRA System. The development of the system was later dropped during the level 1 screening as not being regionally significant.

Transit Orientated Development (TOD): A development of high density mixed land use that utilizes a transit facility as a focal point and thereby seeks to encourage the use of public transit.

Transit Working Group (TWG): The working group, established by the Regional Transportation Plan Committee, with the responsibility of advising the RTP Committee on issues involving transit projects, systems and policies being considered for the *2020 RTP*. Members include: Alpha School Bus Company (to represent private providers); Amtrak; CDOT; the COM; CTA; IDOT-DPT; Kane County (to represent counties); Metra; Pace; RTA; and Prairie Stone TMA (as a public

Transportation Control Measure (TCM): An action or measure designed to reduce vehicle emissions or concentrations of air pollutants from transportation sources through improvements to vehicular flow or by reducing the number of vehicle trips.

Transportation Control Measures (TCM) Development Task Force: The task force, established by the CATS WPC, with the responsibility of evaluating and recommending TCM strategies for the 2020 RTP. Members include: CDOT; the COM; IDOT; IEPA; Lake County (to represent counties); NIPC; RTA; TMA of Lake-Cook and Illinois Manufactures Association (to represent business interests); Chicago Lung Association and the Sierra Club (to represent environmental interests); and the Center for Neighborhood Technology, AAA - Chicago Motor Club and the Chicagoland Bicycle Federation (the last three as public interest groups).

Transportation Demand Management (TDM): Consists of strategies that manage the demand for transportation facilities and promote travel behavior that increases transit share and vehicle occupancy, decreases tripmaking and lowers VMT growth associated with Single Occupancy Vehicle trips.

Transportation Demand Models: A set of statistical planning models that may be used to evaluate the demand for transportation facilities, the impact of development on transportation facilities, and consequences of transportation policies and actions.

Transportation Improvement Program (TIP): The region's programming and implementation agenda of surface transportation projects that contains projects for which federal capital funding is sought, federal operating assistance desired as well as all regionally significant non-federally funded projects.

Transportation Management Associations (TMA): A voluntary association of public and private agencies and firms joined to cooperatively develop transportation enhancing programs in a defined area.

Transportation Management Strategies (TMS): Non-capital-intensive approaches to improve the operational characteristics of the regional transportation system that seek to reduce and manage the demand for transportation facilities, systems and services. These approaches include Transportation Demand Management (TDM), Transportation System Management

Transportation System Management (TSM): Strategies that focus on lower-cost capital projects, operational and institutional improvements, operating efficiency improvements, quality of service enhancements and the promotion of public transit.

Unified Work Program (UWP): A description of all the regional transportation planning projects to be undertaken in a fiscal year.

USEPA: United States Environmental Protection Agency.

Vehicle Miles of Travel (VMT): The summation of the total miles traveled by vehicles in a defined area.

Work Program Committee (WPC): The WPC reviews and makes recommendations to the Policy Committee on transportation matters presented to CATS and carries out any other duties the Policy Committee assigns to it. The WPC coordinates the activities of the committees, subcommittees and task forces reporting to it. The following are members of the WPC: IDOT-OPP; COM; RTA; NIPC; CDOT; Cook County; DuPage County; Kane County; Lake County; McHenry County; Will County; CTA; Railroad Companies (Class I); Metra; Mass Transit Districts; Private Transportation Providers; Pace; ISTHA; FHWA; FTA; IDOT-District 1; IDOT-DPT; city of Chicago Department of Planning and Development; Northwestern Indiana Regional Planning Commission (NIRPC); IEPA and CATS.

Sources:
Boston Metropolitan Planning Organization, *The Transportation Plan for the Boston Region*, Boston: 1993.

Metropolitan Council of the Twin Cities Area, *Prospectus for the Transportation Process*, St. Paul: 1996.

Surface Transportation Policy Project, *ISTEA Planner's Workbook*, Washington, D.C.: 1994.

U.S. Department of Transportation, *Intermodal Surface Transportation Efficiency Act: A Guide to the Congestion Mitigation and Air Quality Improvement Program*, Publication No. HWA-PD-94-008.

APPENDIX C
ACKNOWLEDGMENTS

DESTINATION 2020
ORGANIZATION

REGIONAL TRANSPORTATION PLAN COMMITTEE

Martin G. Buehler, Chair
Lake County Department of Transportation

Carla J. Berroyer (Randy Blankenhorn)
Illinois Department of Transportation

Jo Ann Eckmann
Council of Mayors

John Paige
Northeastern Illinois Planning Commission

Michael Wagner
Alpha School Bus Company

James H. Canham (Lidia Pilecky)
Illinois State Toll Highway Authority

Luann Hamilton
Chicago Department of Transportation

Ronald Shimizu, Sidney Weseman
Regional Transportation Authority

REGIONAL TRANSPORTATION PLAN COMMITTEE WORKING GROUPS

Financial Resources

Carla Berroyer, Co-Chair
Illinois Department of Transportation

A. G. Anglum
Harris Trust & Savings Bank

Jeanette Corlett
Metropolitan Planning Council

Luann Hamilton
Chicago Department of Transportation

Patrick Rae
Council of Mayors

Ronald Shimizu, Sidney Weseman
Co-Chair
Regional Transportation Authority

Myer Blank
Civic Federation

Owen Hayes
Federal Reserve Bank

Lidia Pilecky
Illinois State Toll Highway Authority

Chuck Tokarski
DuPage County

Highway

Wally Kos, Chair
Illinois Department of Transportation

John Loper
DuPage County

Shann Winn
Council of Mayors

Luann Hamilton
Chicago Department of Transportation

Public Involvement

Jo Ann Eckmann, Chair
Council of Mayors

Randy Blankenhorn
Illinois Department of Transportation

Howard Greenwich
Neighborhood Capital Budget Group

Jackie Grimshaw, (Jan Metzger)
Center for Neighborhood Technology

Barbara Hayskar
Northbrook Chamber of Commerce

Cheri Heramb
Chicago Department of Transportation

Jonathan Lehrer
AAA Chicago Motor Club

Ronald Shimizu, Sidney Weseman
Regional Transportation Authority

Wendy Siegel, Mary Ann Mason
Heartland Alliance

Transit

Ronald Shimizu, Chair
Regional Transportation Authority

Gary Foyle
Metra

Debbie Hare
AMTRAK

Richard Hazlett
Chicago Department of Transportation

Harry Hirsch
Chicago Transit Authority

James Jarzab
PACE

Tom Rickert
Kane County Highway Department

Bill Ruyle
Prairie Stone TMA

Victoria Smith
South West Council of Mayors

Joe Voccia
Illinois Department of Transportation

Michael Wagner
Alpha School Bus Company

CONTRIBUTING CATS SUBCOMMITTEES AND TASK FORCES

Strategic Regional Arterials Subcommittee
Terry Heffron, Chair

Transportation Control Measures Development Task Force
Toby Frevert, Chair

Land Use/Transportation Task Force
Linda Fuller, Chair

Non-motorized Issues Task Force
Dalip Bammi, Chair

Intermodal Advisory Task Force
Tom Zapler, Chair

Congestion Management System Task Force
Carla Berrroyer, Chair

Principal CATS Staff

Linda M. Bolte, Deputy for Planning
Mark Fialkowski, P. E., Director of Plan Implementation
Larry Hossack, Director of Communications
Wayne R. Miczek, Chief Transportation Planner
Sukhdev Bains, Chief Transportation Analyst
Claire E. Bozic, Associate Transportation Analyst
Olin Anderson, Corridor Project Manager
Alex Smoliak, Corridor Transportation Engineer
Mary A. DeBacker, Transportation Planner
Maureen Mullady, Public Involvement Coordinator
Sasha Prokopoff, Assistant Transportation Analyst
Robert L. Padgette Jr., Transportation Cadre
Michelle Dick, Transportation Cadre
Jesus E. De La Pena, Designer
Jake Brown, Printer
Peter Reinhofer, Engineering Co-op
Andrew Stryker, Engineering Co-op
Larry Gard, Engineering Co-op

Other Contributing CATS Staff

Peter Elliott
Dean Englund
David Hunt
George Johnson
Don Kopec
Steve Laffey
Gerald Rawling
Daniel Rice
Matt Rogus
Dan Schmidt
Tom Vick
Jan Ward
Karl Welzenbach
Kermit Wies
David Zavattero

CATS WORK PROGRAM COMMITTEE

JAMES JARZAB, Chairman
Manager, Strategic Planning
Suburban Bus Board - Pace

SIDNEY MATHIAS, Vice Chairman
President, Village of Buffalo Grove
Representing CATS Council of Mayors

LINDA WHEELER
Director, Planning and Programming
Illinois Department of Transportation

NANCY MAGNUS
Bureau Chief of Local Roads
District 1, Division of Highways
Illinois Department of Transportation

STEPHEN E. SCHINDEL
Director, Division of Public Transportation
Illinois Department of Transportation

DENNIS LAWLER
Manager, Air Pollution Control
Illinois Environmental Protection Agency

SIDNEY WESEMAN
Manager, System Planning
Regional Transportation Authority

JOHN PAIGE
Director of Planning Services
Northeastern Illinois Planning Commission

JOHN RITA
South Suburban Mass Transit District
Representing Mass Transit Districts

DAVID HARRINGTON
Deputy Commissioner
Chicago Department of Transportation

GERALD WULKOWICZ
Highway Engineer
Cook County Highway Department

DALIP BAMMI
County Development Director
DuPage County

THOMAS B. RICKERT
Chief of Planning & Programming
Kane County Division of Transportation

MARTIN BUEHLER
Director of Transportation/County Engineer
Lake County

DAVID CARY
Senior Transportation Planner
McHenry County

TYSON WARNER
Planning Director
Will County

MARTIN JOHNSON
Vice President
Chicago Transit Authority

GERALD C. HOFF
Department Head, General Development
Commuter Rail Board-Metra

THOMAS A. ZAPLER
Special Representative, Union Pacific Railroad
Representing Class I Railroads

FLORENCE BOONE
Chairman
Suburban Bus Board - Pace

MICHAEL WAGNER
Alpha School Bus
Representing Private Transportation Providers

LIDIA A. PILECKY
Planning & Programming Manager
Illinois State Toll Highway Authority

STEVE CALL
Metropolitan Planning Engineer
Federal Highway Administration

VANESSA ADAMS-DONALD
Community Planner
Federal Transit Administration

JOE ZEHNDER
Deputy Commissioner
Department of Planning & Development
City of Chicago

STEVEN STRAINS
Director of Transportation
Northwestern Indiana Regional Planning Commission

ARISTIDE E. BICIUNAS
Executive Director
Chicago Area Transportation Study

ANDREW V. PLUMMER, Secretary
Associate Executive Director
Chicago Area Transportation Study

The Regional Transportation Plan (RTP) Committee provides overall guidance for the RTP development and ensures that the plan meets the needs of northeastern Illinois within the constraints of federal, state and local policies. It provides a mechanism for participation in the plan process by agencies, organizations and persons interested in long range transportation planning for the region. The RTP committee, a subcommittee of the Work Program Committee includes: Martin G. Buehler, Chair Lake County Department of Transportation, Carla J. Berroyer Illinois Department of Transportation, James H. Canham Illinois State Toll Highway Authority, Jo Ann Eckmann Council of Mayors, Luann Hamilton Chicago Department of Transportation, John Paige Northeastern Illinois Planning Commission, Sidney Weseman Regional Transportation Authority, Michael Wagner Alpha School Bus Company, Linda Bolte, Secretary Chicago Area Transportation Study.