2020 REGIONAL TRANSPORTATION PLAN

2000 EDITION

- [x] 2020 RTP, 2000 Edition
- [ ] Destination 2020 Planning Process, 2000 Edition
- [ ] Environmental Justice Planning Process
- [ ] TIP Chapters 1-5 and Appendices
- [ ] TIP Project Listing
- [ ] Conformity Analysis Documentation
  - [ ] Appendix A
  - [ ] Appendix B
  - [ ] Appendix C
- [ ] TIP Public Comment & Response
- [ ] 2020 RTP, 2000 Edition Public Comment & Response

DESTINATION 2020

CHICAGO AREA TRANSPORTATION STUDY

October 2000

DESTINATION 2020

2000 EDITION OF THE

2020 REGIONAL TRANSPORTATION PLAN

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DESTINATION 2020
REGIONAL TRANSPORTATION PLAN
2000 EDITION

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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 system 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 (RTP) Committee. The planning process involved state and local elected and appointed officials, professional staff from many units of local government, regional transportation providers, planners, representatives from business, public interest and civic groups, and private citizens. The involvement of the public constituted a critical element of the planning process. Prior to key decision points CATS held special access opportunities at which the public was afforded recognition, consideration, and feedback of its comments.

The development of goals and objectives to guide plan development was the most important early step in the process. As before, maintenance of the existing system received the designation of primary goal. The other goals stated in the *2020 RTP* are as follows: 1) accessibility and mobility; 2) transportation and land development; 3) transportation system efficiency; 4) environmental; 5) social; and 7) safety. The combination of these eight goals is joined to the 46 objectives detailed in Chapter 3; the final recommendations of the plan result from the balance of these goals, which sometimes compete against each other for priority.

Current System and Regional Growth Forecasts

The northeastern Illinois region is currently home to over 7.8 million people and nearly 4 million jobs, and boasts a complex, mature and far-reaching transportation system. 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 transportation requirements are significantly tied to both intra and interstate commerce. 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.

All of the planning for the *2020 RTP* is based upon the population, household and employment forecasts developed by The Northeastern Illinois Planning Commission (NIPC). NIPC completed the initial forecasts in which substantial attention was given to the interaction between land use and transportation and then, with the help of regional leaders, explored desirable development patterns and the feasibility of land use policies.

The forecasts predict strong regional growth throughout the next two decades, a very different condition than the one that prevailed between 1970 and 1990.

According to the forecasts, the population will grow to slightly over 9 million people by 2020 and employment will increase to nearly 5.4 million jobs. The dual increases in population and employment will result in a significant increase in travel demand, with average daily trips forecast to grow by 19 percent to nearly 28 million between 1999 and 2020. Also, 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 the question of whether to construct a third regional airport that would accommodate the increase in air travel predicted for the future or whether to use Midway and O'Hare airports to accommodate all future air travel needs was considered unlikely to be resolved before the plan's completion. As a consequence, NIPC created two future airport scenarios, both assuming that adequate air carrier capacity would be provided and that the economic development of the region would not be inhibited. One scenario assumed that all of the future air capacity would be provided for through improvements made at the existing airports, O'Hare and Midway. The other assumed that the proposed South Suburban Airport would be built and that future enplanements would be made at a combination of Midway, O'Hare, and the South Suburban Airport. However, since air service capacity decision-making is not within the purview of the *2020 RTP*, neither the feasibility nor the desirability of either airport scenario is addressed.

As discussed later in this chapter, future distributions of population, households and employment were developed by NIPC for each airport scenario. The *2020 RTP* projects, systems, policies and strategies presented in Chapter 5 will be necessary regardless of which airport scenario prevails.

Financial Strategy

CATS developed projections of both the funds expected to be available for transportation purposes and the costs associated with the existing system and the proposed expansions. Revenue projections were based on traditional funding sources, such as gasoline and sales taxes, tolls and fares, and assume that periodic funding increases will be enacted, as has happened in the past. The increase in funds brought on by Illinois FIRST and The Transportation Equity Act of the 21st Century (TEA-21) were incorporated into financial projections. Since Governor Ryan's Illinois FIRST program, adopted by the General Assembly in the Spring of 1999, and the TEA-21 produced increases larger than projected, the 2020 projection also increased. 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 drawn from the analysis of our revenue projections and the cost of our needs is that the region is still not likely to have enough resources to bring the system

into a state of good repair and provide the services that the forecasts suggest the region will need. The fiscal restraint requires that many projects be neglected, many resources for components limited and significant capital maintenance needs for highway and transit unmet.

Major Plan Components

The *2020 RTP* includes an air quality conformity analysis, a financial strategy, and 12 major plan components. These components are as follows:

- Maintenance of the existing highway and transit systems (over 80 percent of projected resources);
- Twenty-two major capital improvements to expand the existing expressway system lane miles by 16 percent and the rail transit system vehicle miles by 22 percent;
- A designated 1,412 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 transportation options and non-motorized access to public transit;
- A set of eight intermodal freight 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
- An Intelligent Transportation Systems (ITS) Deployment Action Plan which serves as the Gateway Architecture for northeastern Illinois including a array of technologies to improve the safety and efficiency of the system;
- A midwest high speed rail initiative with several key components in northeastern Illinois; and
- Support for developing a coordinated system of transit services for people with disabilities and senior citizens.

While the *2020 RTP* was developed under the fiscal constraint requirements of federal law, 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 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;
- Conduct 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 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 the deterioration of our transportation infrastructure, a degradation of our mobility and a less robust regional economy.

CHAPTER I

INTRODUCTION

Nearly 23 million trips are made every day via ground transportation in northeastern Illinois; and, whether directly or indirectly, the system that makes these trips possible affects the lives of everybody in this region of over seven million people. A good transportation system supports the well-being--social, economic and environmental--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. Unfortunately, however, the provision of good transportation service is expensive and our financial resources are limited. It is therefore of the highest importance that we design improvements in the future to ensure the best system possible with the financial resources expected to be available.

The *2020 Regional Transportation Plan (RTP)*, initially approved in 1997, is the sixth regional transportation plan for northeastern Illinois. The Chicago Area Transportation Study (CATS) published the first plan 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 designed to maintain our existing transportation investments and to serve our future travel needs, which are expected to grow significantly between now and 2020. The plan is integrated with northeastern Illinois' land resource management strategies and air quality goals.

The *2000 Edition of the 2020 RTP* is an update of the plan approved by the Policy Committee in November 1997. The process to develop the original *2020 RTP*, called *Destination 2020*, began in the fall of 1994 and came in response to changes in growth and development patterns, the need to extend the horizon year and new federal transportation legislation.

The *2000 Edition of the 2020 RTP* update was developed under the direction of Regional Transportation Plan (RTP) Committee. The CATS' Work Program Committee established the RTP Committee to direct the *Destination 2020* process. The RTP Committee continued in this role during the update process. In addition, several CATS committees and task forces assisted with the update. The *2000 Edition of the 2020 RTP* was developed in response to the following four issues:

- the need to reflect changes in the growth forecasts for the region;
- the need to assess the status of major projects, systems, policies and strategies included in the *2020 RTP*;

- the need to update the financial forecasts in response to increases included in the Transportation Equity Act for the 21st Century (TEA-21) and Illinois FIRST; and
- the need to respond to the federal requirement for a three-year review of the plan and air quality conformity analysis.

CATS developed the *2020 RTP*. CATS, which is the designated Metropolitan Planning Organization (MPO) for the northeastern Illinois region, is directed by a Policy Committee. 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. As it developed the plan, 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, household and employment forecasts, the data on which the plan is based. 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 cooperative planning process was continued during the plan update with NIPC providing revised population, household and employment forecasts for 2020.

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 update 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 and intermodal freight needs as well as transportation management and congestion management strategies. As part of the update, components dealing with intelligent transportation systems, high speed rail and a coordinated system of transit services for people with disabilities and seniors were added.

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.

A key component of *Destination 2020* and the 2000 update 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

The Executive Summary provides a brief overview of the planning process, the major components of the plan and the challenges for the future.

Chapter 1, Introduction, serves as a preface to the update.

Chapter 2, Public Involvement, describes the public involvement strategies that were adopted for *Destination 2020* and the update. 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. It also 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. For the first time, the plan identifies major maintenance projects. All maintenance projects are identified through the short-term *Transportation Improvement Program (TIP)* development process.

The proposed transit and highway projects are delineated in this chapter. These projects will require about 15 percent of the projected financial resources. The proposed projects must not be construed as recommending precise alignments or specifications. 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 Transportation System Development (TSD) Plan*: 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 led to the development in the *2020 RTP* of a similar system for public transit. The Strategic Regional Transit (SRT) System, a new component in the original *2020 RTP*, 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 components. The bicycle and pedestrian component includes policies to develop bicycling and walking as transportation modes. The intermodal freight 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 methods to monitor and evaluate the performance of these strategies and projects in northeastern Illinois. These components were revised as appropriate in this update. Three new components dealing with intelligent transportation systems, high speed rail and a coordinated system of accessible transit services are included.

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. More detailed performance measures for environmental justice and social equity issues were added in the update. 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 focus upon 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. Detailed corridor studies and the SRA System studies should move forward, while more studies of the SRT System 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. This goal was also carried throughout the update process.

Destination 2020: 1995-1997 Efforts

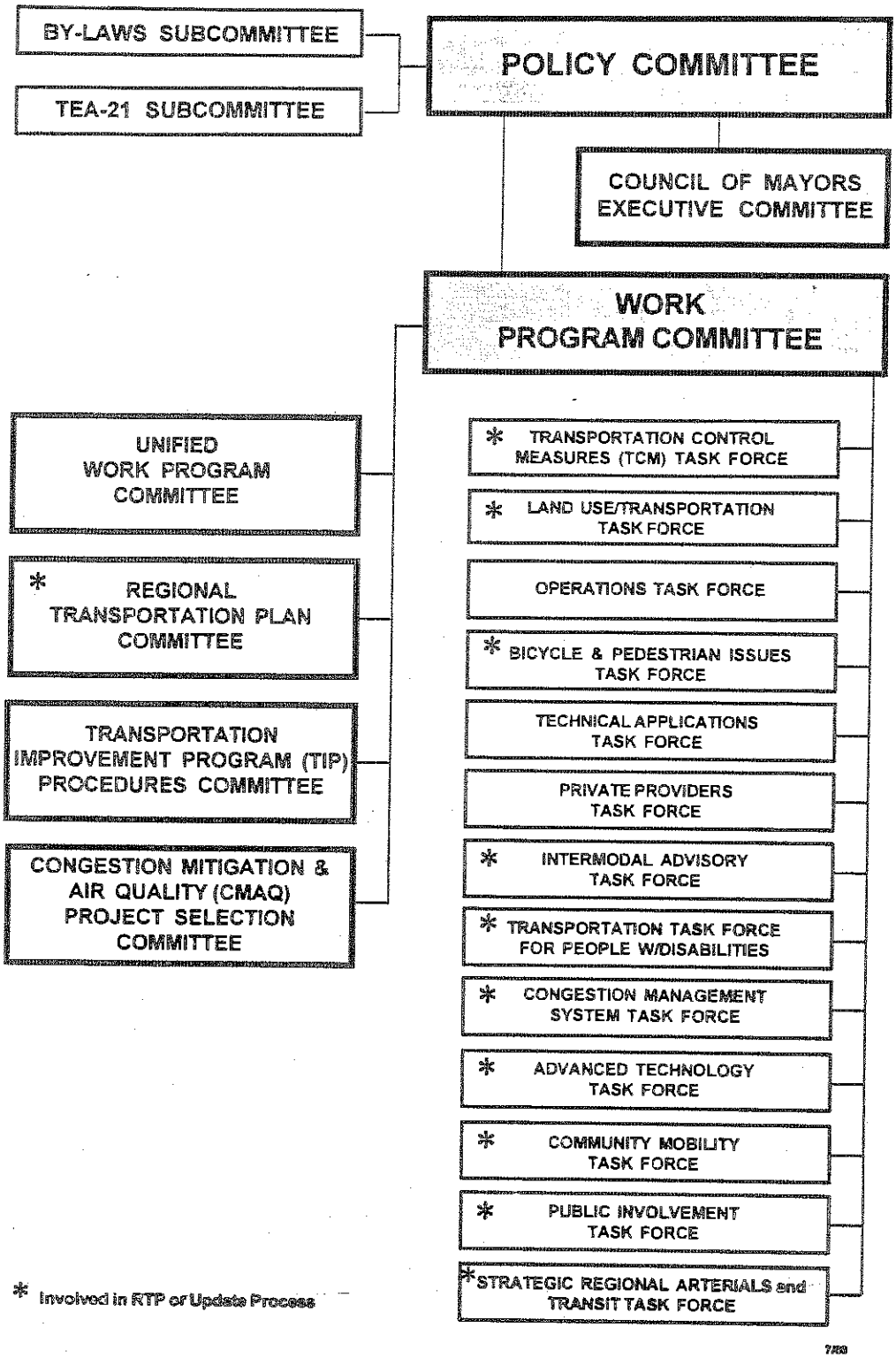
In order to ensure that all transportation consumers had an opportunity to participate in the development of the *2020 RTP,* the RTP Committee adopted the following seven strategies to promote the *Destination 2020* process:

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

It 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. Committees and subcommittees are comprised of Work Program Committee members. Fifty percent of task force membership is set-aside for participants from a variety of special interest and citizen groups. Participation by individual municipalities and councils of mayors is always encouraged. Figure 2.1 shows the committee structure and notes which committees and task forces had responsibilities for the different 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. Membership on working groups was made up of interested individuals and agencies throughout the region. 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.

FIGURE 2.1

CHICAGO AREA TRANSPORTATION STUDY COMMITTEE STRUCTURE



Meetings of the RTP Committee, its working groups and all the other CATS subcommittees and task forces with plan development responsibilities were open to the public. Each meeting was listed on the CATS 24-hour meeting telephone hotline and any interested party could be put on the mailing list for these groups and receive meeting materials. The groups held 126 meetings over the three-year period.

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, the locations of the meetings and an evaluation of the their purpose. These reports were used by the Public Involvement Working Group to plan the next set of meetings. For some of the meetings, these reports also served to document the results of surveys the RTP 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 meeting the regionally significant criteria of level 1 moved on for a more in-depth assessment in the level 2/2A screening phase. Level 2/2A screening was a technical evaluation by the appropriate committee or task force of each project's implementability and relationship to transportation needs. For example, the Non-Motorized Issues Task Force evaluated bicycle and pedestrian proposals. The report, *Destination 2020 Evaluation: Level 2 and*

[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, Destination 2020 Planning Process.

2A, documented the results of this phase. Since the final disposition of all proposals by the responsible committee or task force 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 commenter 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 25 through October 7, 1997. 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.

The RTP Committee was continually adding the names of individuals and organizations to its mailing list throughout the three-year period. At the initiation of the *Destination 2020* process, CATS developed a list of approximately 4,000 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* did not end our public involvement activities. CATS staff has made numerous presentations on the plan and transportation issues before community groups and at larger conferences and workshops since the adoption of the plan.

Public Involvement Since Plan Adoption and During the Update Process

After the completion of the plan development process, CATS did an extensive review and update of its public involvement process. The Public Involvement Working Group was expanded by the Work Program Committee and elevated to task force status. The Public Involvement Task Force was directed to oversee an evaluation of the *Destination 2020* public involvement process as the first step in an update to the 1994 version of the Public Involvement Plan. This evaluation resulted in the addition of several new plan elements. The updated *Public Involvement Plan* was approved in 1999. Three of the most significant additions were the development of a Web site and the publication of the *Destination 2020 Regional Transportation Plan Popular Summary* and the *Citizen's Guide*. One of the underlying premises of the updated public involvement process is that CATS has an obligation to provide all citizens with usable tools so that they can increase their understanding of the factors that influence transportation decisions and thereby participate more fully in the planning process.

The CATS Web site includes a wide variety of information about CATS, its planning partners, MPO schedules and activities and opportunities for citizens to learn and participate in transportation decisions. The Web site also includes links to many other transportation resources. The *2020 RTP* popular summary and the *Transportation Improvement Program* are accessible through the site, large portions of in which can be viewed in Spanish.

CATS' Citizen's Guide details the specific steps and ways in which the public can become involved with the strategies outlined in the plan. While the *Public Involvement Plan* outlines what strategies will be used to increase public participation, the *Citizen's Guide* demonstrates how the tools included in the plan can be used to educate the public and encourage people to take an active role in the transportation planning process. The *Citizen's Guide* is available in English and Spanish.

CATS also devoted a significant amount of time updating its contact list. Over 7,000 elected officials, community, business and special interest groups, human service agencies, members of the general public and others are now regularly informed about major CATS activities. Since many of the names represent organizations, many thousands more have access to CATS information.

A brochure describing CATS is available in English and Spanish. In addition to the *Citizen's Guide*, the *What Is CATS* brochure, and the *2020 RTP* popular summary, several of the major CATS policy and informational documents will be produced in a popular summary format. These summaries will be short and presented in a non-technical way in English and Spanish so that the general public can better understand its content. The *Public Involvement Plan* calls for the production of several other easy-to-read documents.

The Public Involvement Task Force retained the seven basic public involvement strategies for the *2000 Edition of the 2020 RTP* process. The task force determined that emphasis should be placed on outreach to citizens for education as well as information exchange activities. The task force also determined that it was important to recognize

that citizens need to know why they should care about transportation issues. Since the 2000 edition was only a "tune-up" of the *2020 RTP*, the outreach efforts focused on education and issue identification. The *2020 RTP* popular summary, the *What Is CATS* brochure and the Web site were used in the update process. The *Citizen's Guide* was only recently completed, and therefore not available to the task force at that time.

A *Destination 2020 Update* newsletter was published before a series of fourteen public meetings during March and April 2000, mid-way through the update process. All individuals and groups on the contact list received the newsletter announcing the update and location of the meetings. The newsletter also described the update process. The fourteen meetings were held around the region at accessible locations. A separate report, *2020 Regional Transportation Plan, 2000 Edition, Public Involvement: March/April Meetings,* (August 2000), describing them was prepared.

Each meeting included a brief description of the update process. Participants were asked to identify the strengths and weaknesses of the current transportation system. The balance of the time was devoted to participants' responses. Participants were informed that these comments would serve as an early start for the *2030 RTP* process. NIPC also participated in these meetings and posed questions to participants about its Regional Growth Strategy. While many comments were targeted to the *2030 RTP* process, the RTP Committee reviewed and considered them as it prepared the update. These meetings produced three noteworthy issues for the *2020 RTP* update. First, the concern regarding the lack of coordinated paratransit service was mentioned at every meeting. Second, safety of the transportation system was also mentioned frequently. Finally, there was a great deal of support for expanding the description of the capital maintenance component of the plan. The RTP Committee's actions in these areas were reinforced by participants' comments. The committee decided to include a component on coordination of transit service for people with disabilities and seniors (universal design) and expand the capital maintenance component. The *2000 Edition of the 2020 RTP* also includes a new safety goal and related objectives.

Special outreach efforts to communities of color were initiated during the update process. CATS staff participated in meetings with leaders from the African-American and Hispanic communities to introduce them to CATS and the transportation planning process. CATS staff is now working with these leaders to host educational and informational meetings in local community areas. These meetings will significantly enrich the *2030 RTP* process and other CATS activities.

The final formal public comment period was held from August 7 through September 8, 2000. Five public hearings and open houses were scheduled around the region. To notify the public of these meetings, a postcard was sent to the entire contact list and display ads were placed in eleven newspapers, including ones serving minority populations. NIPC also placed a legal notice in the *Tribune*. In addition, Pace placed 1,500 car cards in its buses. Similar posters were installed in 100 CTA stations. Posters were sent to all municipalities and public libraries in the region. Metra included an article on the public hearings in its newsletter, *On the Bi-Level*. Special media advisories

were distributed to broadcast and print media. The RTP Committee reviewed the comments received at these meetings and considered them as it made a recommendation to the Policy Committee on the *2000 Edition of the 2020 RTP*. The RTP Committee prepared the report, *2000 Edition of the 2020 Regional Transportation Plan: Public Hearing Process, Comments and Response*, (September 2000), documenting these meetings including all comments received and how they were considered. As is CATS' policy, the RTP Committee provided written responses to all comments.

Future efforts will include:

- Completion of the popular summaries identified in the *Public Involvement Plan;* preparation of an annual effectiveness report;
- Maintenance and expansion of the contact list;
- Outreach meetings to communities of color;
- Participation at subregional and local events (county fairs, community festivals, workshops, etc.) to introduce CATS and the planning process to citizens; and,
- More targeted contact with the print and broadcast media to increase coverage of CATS activities.
- Expand the Web site including improved access to the *TIP* and bicycle and pedestrian plans.

CHAPTER III

REGIONAL PLANNING AND POLICY FRAMEWORK

Regional Airport Assumptions and Impacts

At the beginning of the *2020 RTP* process the question of whether to construct a third regional airport that would accommodate the increase in air travel predicted for the future or whether to use Midway and O'Hare airports to accommodate all future air travel needs was considered unlikely to be resolved before the plan's completion. As a consequence, NIPC created two future airport scenarios, both assuming that adequate air carrier capacity would be provided and that the economic development of the region would not be inhibited. One scenario assumed that all of the future air capacity would be provided for through improvements made at the existing airports, O'Hare and Midway. The other assumed that the proposed South Suburban Airport would be built and that future enplanements would be made at a combination of Midway, O'Hare, and the South Suburban Airport. However, since air service capacity decision-making is not within the purview of the *2020 RTP*, neither the feasibility nor the desirability of either airport scenario is addressed.

As discussed later in this chapter, future distributions of households and employment were developed by NIPC for each airport scenario. The *2020 RTP* projects, systems, policies and strategies the plan presents in Chapter 5 were chosen because they will be necessary in the future regardless of which airport scenario prevails.

Regional Growth Policy and Forecasts

An essential component of transportation planning is the preparation of credible population, households and employment forecasts. 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 most likely distribution of those people and jobs. In generating such forecasts, the commission believes that the actual future levels and distribution will result not only from countless private sector decisions but also from important government policy and investment actions. NIPC's Regional Growth Strategy and *Strategic Plan for Land Resources Management* provide guides to potential policy. But to what extent will these policies be implemented? Decisions about the need for and location of additional air service capacity 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 issues regarding 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;
- 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 regionwide population, household and employment totals for forecast years continuing through 2020. In March 1994, NIPC determined that northeastern Illinois would grow to slightly over 9 million people and about 5.3 million jobs (by the year 2020 (a respective 25% and 37% increase from 1990) and also that air service capacity needs would be met. The regional totals were reaffirmed by NIPC in December 1999.

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

The regionwide forecasts of total employment 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. The REAL developed and used CREIM, the Chicago Region Econometric Input/Output Model, to generate several alternative projections. A forecast technical advisory committee, including representatives from the transportation planning community, the counties, city of Chicago, the suburban municipal associations, agencies of the state of Illinois and 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. During the update, forecasts were revised by employment category to reflect changes in industry patterns since the early 1990's.

The associated population total was then determined by constructing general assumptions about labor force participation, long-term rates of unemployment, multiple job-holding patterns 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, 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 step in the process was the allocation of the regional totals to subregional forecast zones and, in order 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 used the DRAM/EMPAL model, which distributed jobs and households in response to travel costs.

The DRAM/EMPAL model first distributed employment on the basis of prior employment and household location, variables which are 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, then calculated the implied number of household heads by place of work, then distributed to 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 investments including airport development, as well as land use objectives, and to provide a basis upon which to engage the region's leaders in a discussion about regional directions. The third objective was to give NIPC 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). Its information was not produced using DRAM/EMPAL but was derived from township

level forecasts which had been produced by consultants as part of the state's 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*. A DRAM/EMPAL 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). A DRAM/EMPAL Infill/Redevelopment Scenario assumed increased development densities around eight selected rail stations, agricultural protection in areas designated 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

The 3 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. The regional leaders considered a list of policy tools. These were divided into two general categories: (1) those tools with regional effects that would help moderate the rate of dispersed development and/or encourage reinvestment in mature communities; and (2) those tools with local effect that 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 previously 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 disinvestments, and (3) high standards of new development in areas where it can be accomplished in a cost-effective manner.*

NIPC therefore assumed that policy tools which conform to the Commission's finding would be in widespread use in northeastern Illinois during the forecast period and would influence the development pattern of the region. Such tools are the following:

- 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.

In 1998, NIPC formed a region-wide advisory committee, comprised primarily of government officials, to help refine this list and to assist in the development of detailed policy recommendations. A series of thirteen policy papers is being prepared as a result of this effort.

Distribution of Households and Employment

The final forecasts also reflect the considerable involvement of local officials. Preliminary municipal forecasts, derived from the scenarios described above, 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 the airport scenarios and the construction of projects proposed in the *2020 RTP* on land use, the performance of the transportation system, and air quality.

The first scenario, 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, with no South Suburban Airport and no expansion in ground transportation beyond committed projects and not including the extension of I-355 between I-55 and I-80.

The second scenario, 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 South Suburban Airport forecasts which had been generated by state of Illinois consultants from adjusted NIPC forecasts. The adjustment calculated for those previous forecasts was applied to the EAI/Base scenario at the DRAM/EMPAL zone level to produce a scenario labeled SSA/Base. The comparison of the SSA/Base and EAI/Base scenarios 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 was shown to be relatively minor.

The third scenario, identified as Existing Airport Improvements/RTP (EAI/RTP), was constructed to reflect the impact of building the transportation network proposed at the March 1997 public meetings. This 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 scenario reflected the impact on SSA/Base of the proposed *2020 RTP*. The adjustments described above were applied to produce a scenario labeled SSA/RTP.

Since the 1997 forecast cycle, NIPC staff has reviewed the forecasts in terms of changing development, capacity constraints, changes in municipal boundaries and the continuing input of over 90 municipalities. Final forecast scenarios shown in Figure 3.1 reflect the adjustments to the 1997 forecasts.

These forecast scenarios are based on the assumption of a moderation of decentralization trends, implementation of the projects proposed in the *2020 RTP* reflect additional minor adjustments to the scenarios noted above. The only differences in the scenarios are the assumptions about where air service capacity is added within northeastern Illinois and

FIGURE 3.1

NIPC POPULATION, HOUSEHOLD, AND EMPLOYMENT FORECASTS

Total Population						
	1980 Census	1990 Census	2020 EAI No-Build	2020 EAI/RTP	2020 SSA No-Build	2020 SSA/RTP
Chicago	3,005,072	2,783,726	3,055,867	3,007,325	2,954,302	2,919,183
Suburban Cook	2,248,556	2,321,341	2,638,437	2,607,514	2,678,920	2,645,533
Suburban DuPage	658,858	781,666	1,002,436	985,704	1,002,260	985,812
Kane	278,405	317,471	538,281	556,606	535,851	553,537
Lake	440,388	516,418	746,635	806,379	725,883	782,144
McHenry	147,897	183,241	320,080	346,162	313,837	338,785
Will	324,460	357,313	743,264	735,310	833,947	820,007
Total	7,103,636	7,261,176	9,045,000	9,045,000	9,045,000	9,045,000

Total Households						
	1980 Census	1990 Census	2020 EAI No-Build	2020 EAI/RTP	2020 SSA No-Build	2020 SSA/RTP
Chicago	1,093,409	1,025,174	1,170,553	1,152,464	1,134,725	1,121,657
Suburban Cook	785,708	854,314	998,596	986,986	1,012,663	1,000,116
Suburban DuPage	222,014	279,344	367,237	360,733	367,172	360,733
Kane	93,729	107,176	193,817	200,614	192,955	199,491
Lake	139,715	173,966	269,452	291,785	261,498	282,500
McHenry	49,078	62,940	116,368	125,777	114,101	123,099
Will	103,071	116,933	258,147	255,791	291,037	286,554
Total	2,486,724	2,619,847	3,374,150	3,374,150	3,374,150	3,374,150

Total Employment						
	1980 Census	1990 Census	2020 EAI No-Build	2020 EAI/RTP	2020 SSA No-Build	2020 SSA/RTP
Chicago	1,555,600	1,482,381	1,684,260	1,695,929	1,646,949	1,655,618
Suburban Cook	1,121,100	1,293,976	1,758,745	1,769,338	1,754,190	1,764,734
Suburban DuPage	293,100	529,998	818,622	815,178	816,071	815,214
Kane	118,300	145,205	232,467	231,620	224,493	223,550
Lake	160,700	228,606	423,094	426,232	384,737	387,708
McHenry	46,600	65,526	123,706	113,984	105,155	96,389
Will	91,000	99,393	239,106	227,719	348,405	336,787
Total	3,386,200	3,845,085	5,280,000	5,280,000	5,280,000	5,280,000

Source: Northeastern Illinois Planning Commission (NIPC)

the differential impact of these airport assumptions on the distribution of people and jobs. Both scenarios use the same regional total. If the projected growth in air service demand is not satisfied, the regional totals would be somewhat lower. Both scenarios forecast a moderation of past trends and show growth in the city of Chicago as well as 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* scenarios 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–an unsurprising result given that the great majority of the region's transportation system is already in place.

The locations of jobs are not further decentralized by building additional highway and rail capacity. With these new roads and rail projects 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.

Figure 3.1 presents the forecasts for each of the 2020 scenarios, as well as 1980 and 1990 census figures. From that information, two general conclusions can be drawn about the growth in population and employment between 1990 and 2020 under the four forecast scenarios. First, the differences between the growth forecasted for each subarea under the various 2020 scenarios are minor in comparison to the general level of growth forecasted from 1990 for each of the subareas. 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 from 1980 to 1990-a period during which Chicago lost both population and employment-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 together with the private sector and the general public, in the development of our regional vision so that a desirable quality of life 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. This vision has not changed between the 1997 version of the plan and the 2000 update. The transportation strategy focuses on maintaining and improving 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 opportunities and preserves the existing infrastructure. It should also support regional and local land resource 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 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, policies, and systems together create the plan.

The RTP Committee considered seven sources of information in developing the 1997 version of the goals and objectives. These sources are:

- 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 thirteen regional meetings. The results of that outreach provided the seventh source. The final 1997 version of the goals and objectives reflects the incorporation of the outreach results in the committee's deliberations.

The update to the *2020 RTP* included a review of the original goals and objectives. The RTP Committee considered the seven planning factors reflected in the TEA-21

legislation, Title VI and environmental justice concerns and system safety. The RTP Committee also considered the extensive dialogue regarding system maintenance that has emerged since the 1997 approval of the plan. The committee determined that establishing system maintenance as the overarching goal of the plan was consistent with the financial strategy and priorities identified in the plan. In addition, the committee established a new safety goal and related objectives, refocused several existing objectives and added several new ones in the area of environmental justice and social equity. There is now one overarching goal, seven sector goals and forty-six objectives to guide the update of the *2020 Regional Transportation Plan.* Except for capital maintenance, no priority ranking is implied by their order of listing. Each goal has a set of related objectives. Figure 3.2 lists these goals and objectives.

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 eighteen network measures to test the overall performance of the plan. The committee also established fourteen project measures and six supplemental measures to test the performance of individual projects. As part of the update process, the committee also established more detailed accessibility measures to address the new environmental justice and social equity objectives. 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 sector goals.

FIGURE 3.2
GOALS AND OBJECTIVES

PRIMARY GOAL

***Maintain and improve** the capital infrastructure of the existing transportation system.*

ACCESSIBILITY AND MOBILITY

GOAL: *Provide an integrated and coordinated transportation system that maximizes accessibility and includes a variety of mobility options that 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. Plan and program innovations to increase connectivity among all modes with specific emphasis on the transit system, including fare coordination as well as physical improvements.
3. Improve access to transit, including expanded opportunities for auto and non-motorized access.
4. Expand the advantages of alternatives to Single Occupant Vehicle (SOV) travel.
5. Support the development and increased use of a coordinated network of non-motorized 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 land use plans and adopted plans and policies of the Northeastern Illinois Planning Commission most notably the regional Growth Strategy and Strategic Plan for Land Resource Management, as reflected in the adopted 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 transportation demand management, intelligent transportation systems, and other appropriate strategies.
17. Enhance the operating condition of the transportation system in order to maximize its full people and goods carrying potential.
18. Maintain and upgrade the transportation system in order to improve system reliability.
19. Increase the effectiveness of the transportation system through the use of technological improvements to increase system efficiency and capacity.

ENVIRONMENTAL

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

OBJECTIVES

20. 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.
21. Promote the development of a transportation system that promotes clean air, minimizes mobile source emissions, and contributes to meeting National Ambient Air Quality Standards (NAAQS), including the development and implementation of effective Transportation Control Measures (TCM).
22. Develop a transportation system that promotes energy efficiency.
23. Encourage the design of transportation facilities that minimize adverse noise and vibration impacts.
24. Encourage the design and landscaping of transportation rights-of-way to reduce maintenance costs, promote regional biodiversity, improve water quality, manage stormwater, and improve aesthetics.
25. 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.*

OBJECTIVE

26. 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.
27. Develop transportation improvements that promote investment in, and revitalization of, existing communities.
28. Provide a transportation system that promotes economic growth, the retention of existing businesses, and the attraction of new business to the region.
29. Provide a transportation system that accommodates and encourages tourism.
30. Encourage counties and municipalities to support the development of new intermodal facilities where appropriate.

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.
36. Ensure that transportation investments do not result in disparate impacts on low-income and traditionally under served communities.
37. Ensure that all residents of the region have full access to the regional transportation planning process.

FINANCIAL

GOAL: *Provide for the development of a transportation system which efficiently uses financial resources and is financially attainable.*

OBJECTIVES

38. Pursue all emerging and available opportunities, including innovative financing mechanisms, to fund the planning, design, construction, operation, and maintenance of all parts of the region's transportation system.
39. Encourage cost effective operating policies and capital improvements.
40. Enhance opportunities for the private sector to participate in the provision of transportation facilities and services.
41. Increase to the extent possible the region's share of federal and state transportation funds.

SAFETY

GOAL: *Provide a safe and secure transportation system that allows for the movement of people and goods.*

OBJECTIVES

42. Maintain and upgrade the transportation system infrastructure to improve safety.
43. Identify frequent crash locations on the transportation system and develop strategies to make them safer.
44. Improve the security of the transportation system for the traveling public and transported goods.
45. Include safety considerations in the design of all new transportation projects.
46. Encourage and promote the elimination of at-grade grade crossing conflicts at high activity locations.

CHAPTER IV

REGIONAL TRENDS AND THE EXISTING TRANSPORTATION SYSTEM

Geography

The name of Chicago conjures images of towering office buildings in the historic Loop, bustling retail on North Michigan Avenue and the beaches of Lake Michigan. Other images include O'Hare Airport, the new suburban office parks along I-88, farms in southern Will County and the town square in Woodstock. The city's neighborhoods run the gamut from new residential loft districts just west and south of the Loop, to the bungalow belt of the southwest side to 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, and 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 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 Chicago Loop, while still meeting the needs of residents on the region's rural edge.

Growth and Development

From the region's first commuter rail suburb located in 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 along the lines of the 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 the changing urban landscape in Chicago and all across the country. An aggressive statewide road-building program, the creation of the tollway system and the creation of the federal interstate highway system were all factors that contributed to 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 here 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 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

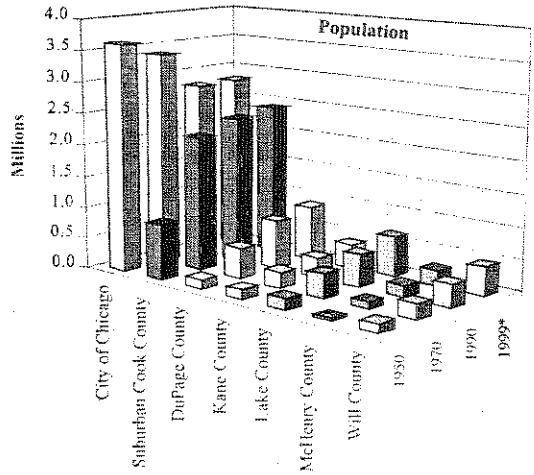
Population

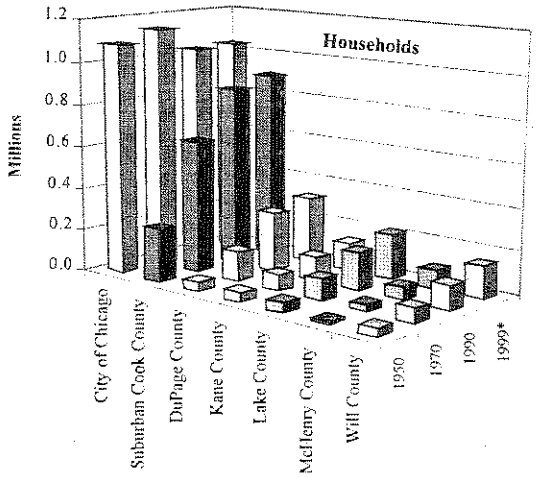
Since 1950, most of the region's population growth has taken place in the suburbs. Figure 4.1 presents population totals for 1950, 1970, 1990 and 1999 by county. Between 1950 and 1970, the six-county population grew by 35 percent, with suburban Cook County accounting for two-thirds of the region's 1.8 million increase. During that same period, the total population in the five "collar" counties more than doubled to 1.5 million people.

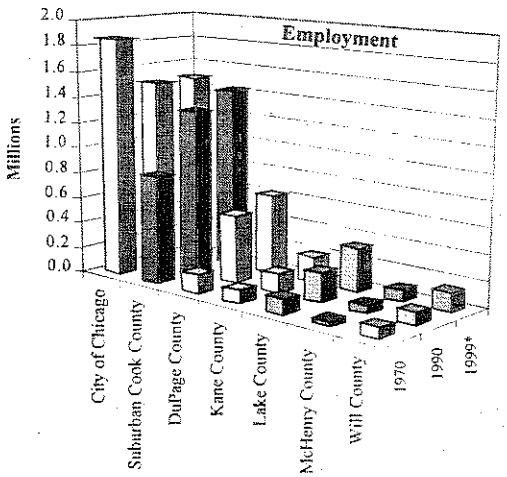
FIGURE 4.1
POPULATION, HOUSEHOLD AND EMPLOYMENT TRENDS

	Population (millions)				Households (millions)				Employment (millions)		
	1950	1970	1990	1999*	1950	1970	1990	1999*	1970	1990	1999*
City of Chicago	3.621	3.369	2.784	2.805	1.088	1.138	1.025	1.036	1.864	1.482	1.486
Suburban Cook County	.888	2.124	2.321	2.409	.249	.628	.854	.898	.836	1.294	1.421
DuPage County	.155	.488	.782	.876	.043	.136	.279	.311	.146	.530	.621
Kane County	.150	.251	.317	.381	.043	.075	.107	.129	.103	.145	.198
Lake County	.179	.383	.516	.651	.047	.103	.174	.213	.116	.229	.338
McHenry County	.051	.112	.183	.254	.015	.033	.063	.088	.036	.066	.090
Will County	.134	.248	.357	.460	.037	.071	.117	.153	.083	.099	.153
Six-County Total	5.178	6.975	7.260	7.836	1.522	2.184	2.619	2.828	3.184	3.845	4.307

*1999 Census Estimates







From 1970-1990 the region's population grew much more slowly: only 285,000 people were added, or 4 percent. The growth in suburban Cook County slowed dramatically, while the collar counties' growth climbed at almost the same rate. Combined, their population increased by 673,000, slightly more than the decrease in the city of Chicago Between 1990 and 1999 he rate of population growth is estimated to have increased to eight percent, with Chicago gaining population for the first time since 1950.

Households

The average household size in the region has decreased from 3.3 in 1950 to 3.2 in 1970 and 2.7 in 1990.As a result, households have grown faster than population. Figure 4.1 shows county household totals for 1950 through 1999. 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. That trend is estimated to have leveled off between 1990 and 1999, with both population and households gaining eight percent. The location of household growth generally followed the population growth.

Employment

In a similar fashion to population and household trends, suburban jurisdictions have led the region in employment growth since 1970. Figure 4.1 also shows employment totals by county for 1970, 1990 and 1999. The 21 percent employment growth between 1970 and 1990 greatly outpaced the four 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. Employment growth between 1990 and 1999 is estimated to be 12 percent, still exceeding the eight percent household and population growth; in this category too, Chicago shows a slight increase.

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 nine percent. As shown in Figure 4.1, 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 transport in the Chicago region has continued to change. The role of the automobile has grown dramatically, as transit ridership has slipped and the 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 58 percent to 68 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.

FIGURE 4.2
DESTINATION OF WORK TRIPS

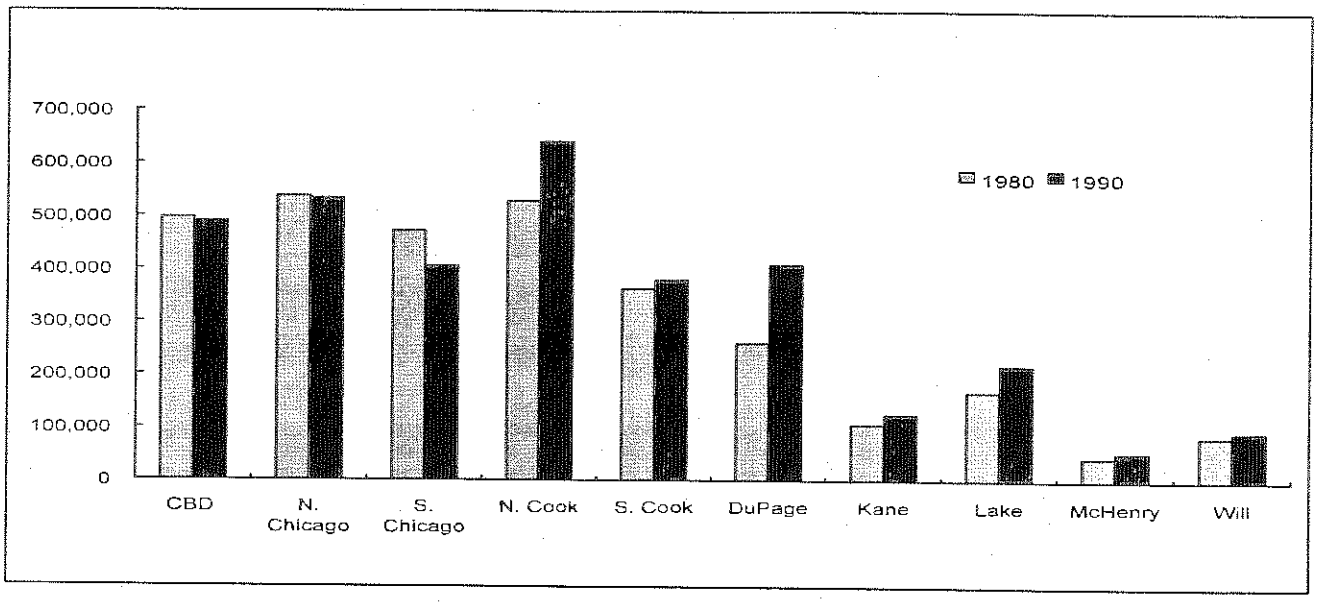
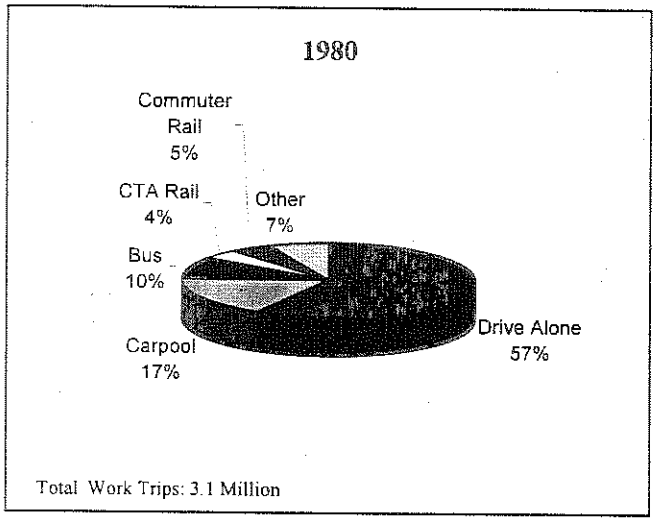


FIGURE 4.3
COMMUTING BY MODE



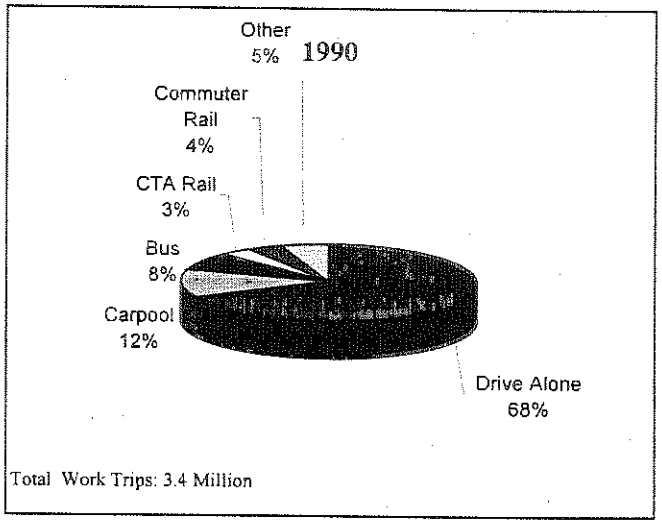
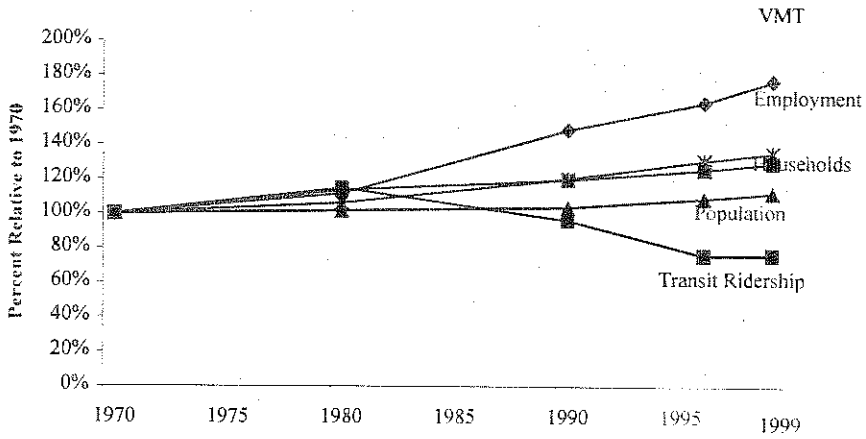


FIGURE 4.4
TRENDS IN TRANSIT AND HIGHWAY USE



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 1970-1999 period. Both transit ridership and VMT grew by roughly 20 percent from 1970-1980; however, the region's population increased by less than two percent, its household increased by 14 percent and its employment increased by six 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 by just six percent, households by nine percent and employment by 20 percent. Between 1995 and 1999, the household, employment and VMT trends continued. In the same period, transit ridership increased for the first time since 1980.

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 86.2 million annually. The growth at O'Hare has been extraordinary, increasing from 5.7 million passengers in 1960 to more than 72 million in 1999. Also of note is the "comeback" of Midway Airport. Its 13.6 million passengers in 1999 were substantially higher than its 1980 total of 1.3 million.

The Transportation System Today

Highway System

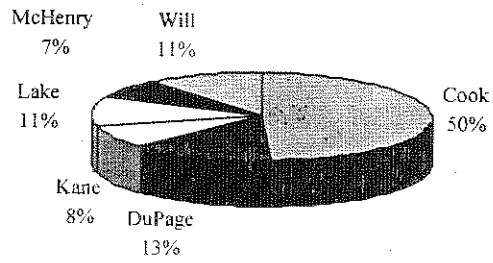
In 1999, private vehicles carried over 90 percent of the region's motorized trips - approximately 18 million person trips per day. The system consists of 54,600 lane miles of freeways and expressways, arterials and collectors and local streets. The region's lane miles are presented by county and functional class in Figure 4.5. Figure 4.6 is a map of the existing freeway, expressway, arterial and collector systems.

Approximately 188 of the Illinois State Toll Highway Authority's (ISTHA) 274 route miles fall within CATS' planning region--42 percent of the region's 449 freeway and expressway route miles. Of the remaining 58 percent, 56 fall under the jurisdiction of the

Illinois Department of Transportation and the city of Chicago's Skyway comprises two percent. Interstates included in the ISTHA system are I-294, I-88, I-355, I-90 west of O'Hare Airport, and I-94 in Lake County.

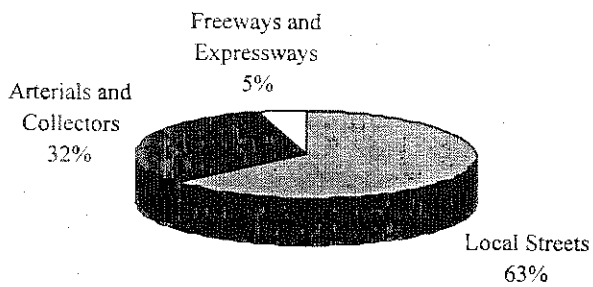
FIGURE 4.5
HIGHWAY LANE MILES

By County



Total: 54,600 Lane Miles

By Functional Class



Total: 54,600 Lane Miles

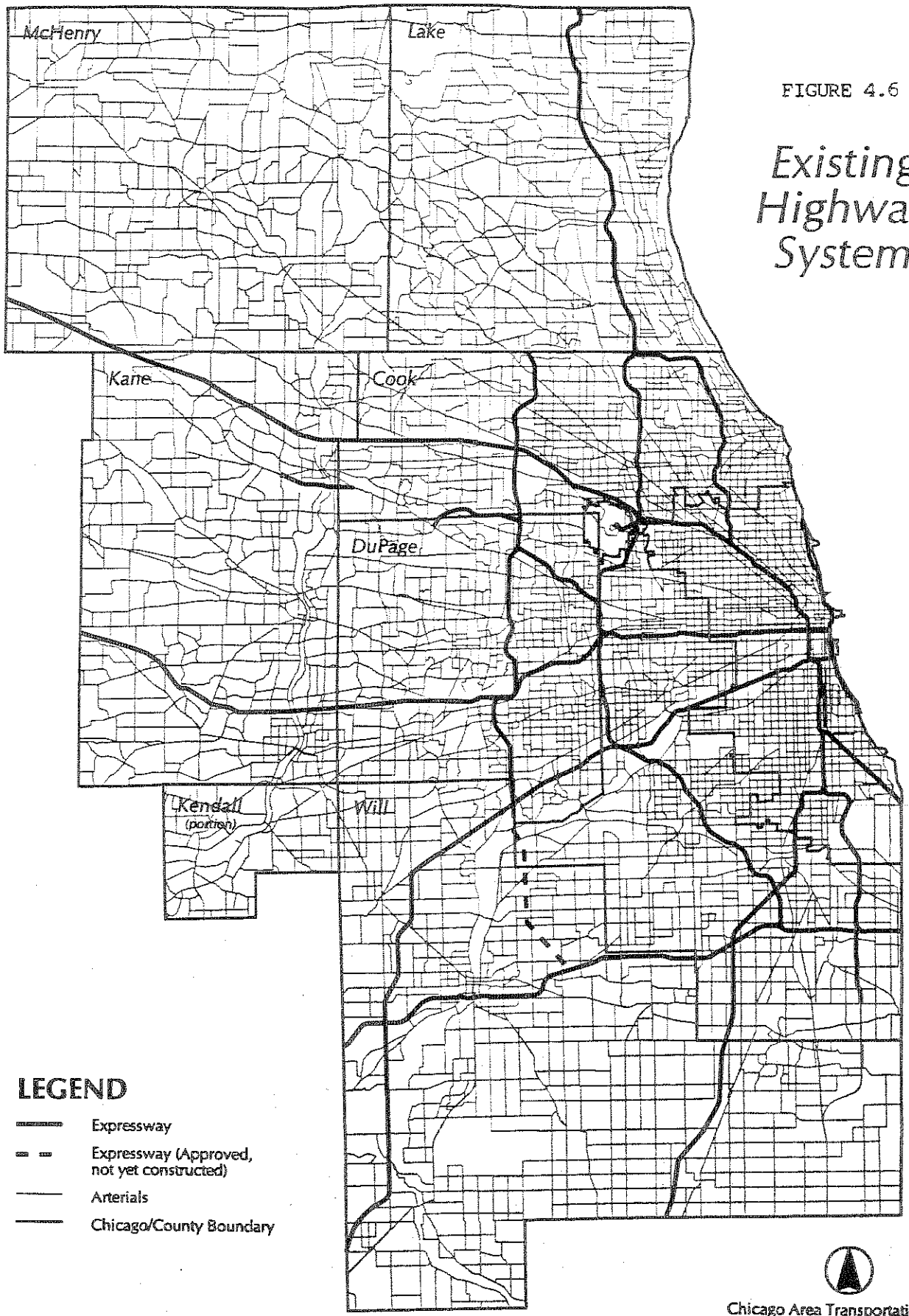
Existing Highway System Deficiencies

Between 1985 and 1995 VMT in the region increased by almost 40 percent, but the number of highway lane miles increased by only five percent. The trend of VMT increasing faster than roadway capacity has continued to the present and 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.

FIGURE 4.6

Existing Highway System



LEGEND

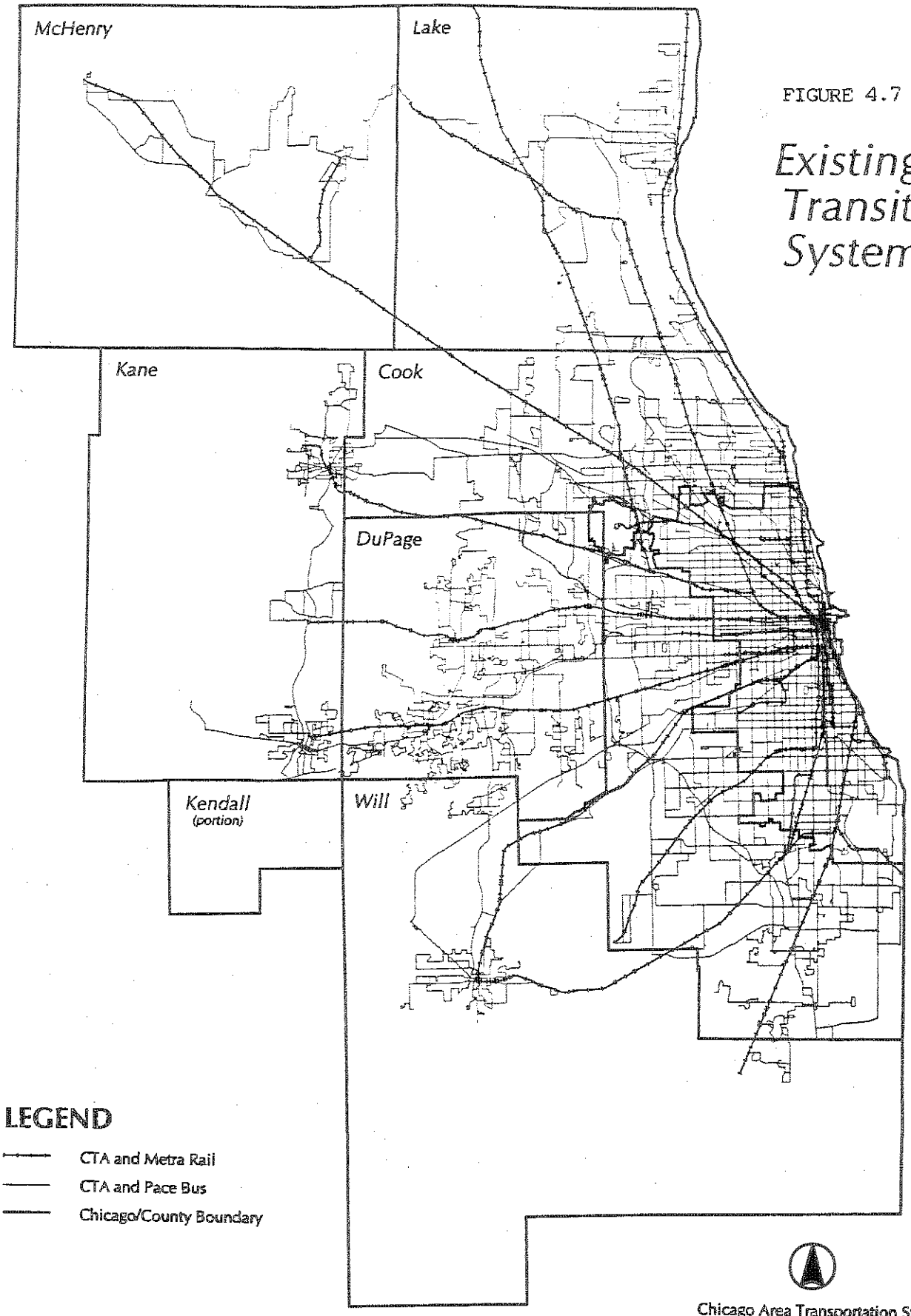
- Expressway
- Expressway (Approved, not yet constructed)
- Arterials
- Chicago/County Boundary

Chicago Area Transportation Study
July 25, 2000

0 5 10 Miles

FIGURE 4.7

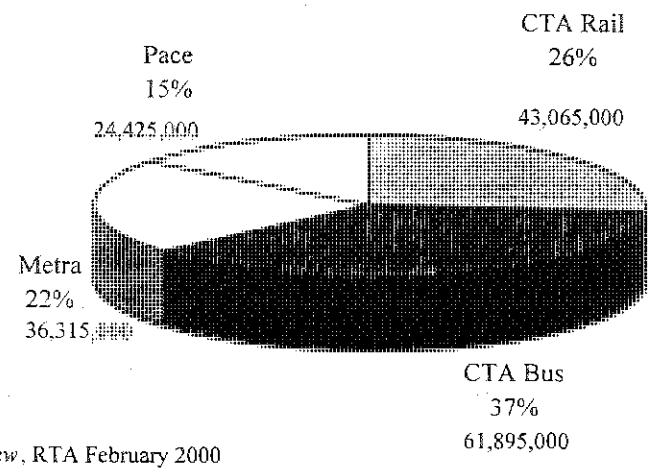
Existing Transit System



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. Figure 4.9 lists additional 1998 operating characteristics.

FIGURE 4.8
1998 TRANSIT SERVICE
Annual Vehicle Revenue Miles



Source: *Peer Review*, RTA February 2000

FIGURE 4.9
1999 TRANSIT OPERATION CHARACTERISTICS

	Route Miles	Routes	Stations	Vehicles	Annual Riders
CTA Bus	1935	131	n/a	1878	300.2 million
CTA Rail	288	n/a	142	1190	141.7 million
Metra	546	n/a	240	947	76.6 million
Pace	n/a	230	n/a	534	40.2 million
Total	2769	361	382	4679	558.7 million

Source:RTA 1999 Annual Report

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 for the 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 freight 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;
- Approximately 4,500 tons of freight move through O'Hare Airport daily; and
- The region's annual water freight volume is 26.5 million tons.

Airports

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 1999 O'Hare accounted for 84 percent of the region's 86.2 million annual airline passengers, Midway for 16 percent and Meigs for less than 1 percent. Nearly all of the 9.7 million international passengers used O'Hare.

In addition to the three Chicago airports, nine general aviation airports serve the suburbs: Palwaukee (189,000 annual operations); DuPage (216,000); Aurora (129,000); Lewis University (92,000); Schaumburg (84,000); Waukegan (90,000); Lake-in-the-Hills (43,000); 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 current inventory of bicycle facilities indicates that there are 1,516 miles of existing and committed facilities;
- The 1990 CATS Household Travel Survey found that 13 percent of all trips are made by walking;
- 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, while bicycling was less than 1 percent for both;
- The 1990 census found that four percent of work trips are made by walking and 0.2 percent by bike; and
- A 1995 Council of Mayors Trail Survey found that two-thirds of all travel on bike 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. It 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 1999 (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 15 percent increase from 1999), that employment will be 5.3 million (a 23 percent increase from 1999) and that households will grow to 3.4 million (a 19 percent increase from 1999). The additional travel demands generated by this growth will further strain the already congested roadway network. Figure 4.10 shows the no-build transportation system performance changes from 1999 to 2020. Information from the graphs is summarized below:

- With no improvements to the system as it exists in 1999, vehicle miles traveled (VMT) are forecasted to grow by 20 percent.
- Due to constrained roadway capacity, the VMT on congested roadways will grow even faster--by 45 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 surprising that the fifteen percent forecast increase in transit use is nearly equal to the rate of population growth.
- The total time spent traveling is a measure which combines transit, auto and commercial vehicle travel. If no transportation improvements are made between 1999 and 2020, this measure is forecast to jump 35 percent - twice the increase in population and households and 50 percent more than the increase in employment.

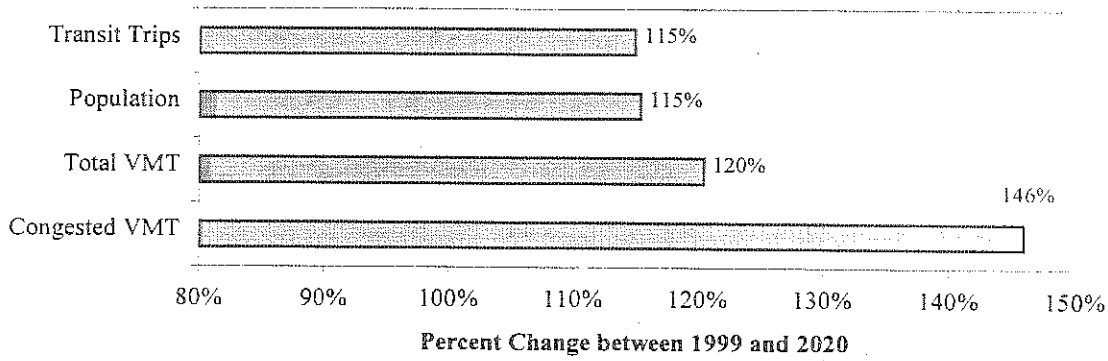


FIGURE 4.10
NO-BUILD TRANSPORTATION SYSTEM, 2020 CONDITIONS

The *Destination 2020* report, *Alternatives Development: Deficiency Analysis*, contains additional analyses of future regional development and travel patterns based on the preliminary NIPC 2020 socio-economic 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 *2000 Edition of the 2020 RTP* identifies to best meet those 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 projects: in this chapter is a description of the level of capital maintenance recommended in the plan and specifies regarding 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, the capital maintenance of the existing system, new 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, strategies and smaller capital projects that improve the efficiency of the system and maximize the benefits of the capital maintenance projects.

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

- Over 80 percent of the projected resources allocated for maintenance of the existing highway and transit systems in their current condition;
- Twenty-two major capital improvements to expand the existing expressway system lane miles by sixteen percent and the rail transit system vehicle miles by twenty-two percent;
- A designated 1,412 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 covered by the SRT System;
- 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 eight intermodal freight 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;

- An Intelligent Transportation Systems (ITS) Deployment Action Plan including an array of technologies to improve the safety and efficiency of the system;
- Support for a high speed rail initiative that includes a number of components for northeastern Illinois; and
- Support for developing a coordinated system of transit services for people with disabilities and senior citizens.

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

Maintaining the existing transportation system is the highest priority for all implementers in northeastern Illinois. The *2020 RTP* recognizes the maintenance, rehabilitation and preservation needs of our existing system as its overarching goal and consequently over 80 Percent of projected resources through 2020 have been allocated for the capital maintenance of the existing system (The term capital maintenance is used in the *2020 RTP* to include all maintenance activities that are not routine maintenance--snow removal, roadway patching and vehicle cleaning and repair). Capital maintenance projects protect the safety and efficiency of the system and 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 equally challenging. The advanced age of the system and past under-investment 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.

TEA-21 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. TEA-21 planning factors require that the planning process "emphasize the efficient preservation of the existing transportation system". TEA-21 also requires that the process "assess the capital investment and other measures necessary to preserve the existing transportation system (including requirements for operational improvements, resurfacing, restoration, and rehabilitation of existing and future major roadways, as well as operations, maintenance, modernization, and rehabilitation of existing and future transit facilities)" and make the most efficient use of existing transportation facilities to relieve vehicular congestion and enhance the mobility of people and goods."

The following list highlights some of the major capital maintenance projects to be undertaken by the various implementers. It should in no way be considered inclusive of all the maintenance needs nor should it reflect precedence over smaller projects which are not listed. There are many maintenance projects such as signals, electrical, communications, support facilities and equipment

that are not included in the following list. In order to be consistent with the financial projections, the costs are reflected in 1995 dollars.

Illinois Department of Transportation

- Rehabilitate 1,500 bridges--$4 billion
- Arterial Reconstruction--$1.5 billion
- Routine Roadway Resurfacing--$6.5 billion
- 100 Miles of Interstate Reconstruction--$2.0 billion, including:
  - I-55 from Grundy County Line to Kedzie Avenue--$600 million
  - I-94 from I-57 to I-80--$100 million
  - I-290 from 25th Avenue to I-94--$440 million

Illinois State Toll Highway Authority

- Rehabilitate 125 miles of roadway--$817 million
- Roadway Resurfacing of 155 miles--$323 million
  - Tri-State and North-South
  - I-88 from mile-post 117.5 to 140.5
  - I-90 from mile-post 0-40

Chicago Department of Transportation

Reconstruction of South Lake Shore Drive from I55 to 67th Street--$89 million
Rehabilitation of Wacker Drive--$400 million

Chicago Transit Authority

Bus Replacement--$670 million
Rail Car Rehabilitation/Replacement--$1.65 billion
Rehabilitate Subways--$310 million
Rehabilitate Dan Ryan Red Line--$145 million
Rehabilitate Evanston Purple Line--$70 million
Rehabilitate North Main Line--$195 million
Rehabilitate O"Hare--$272 million
Station Rehabilitation--$1.4 billion

Metra

Rail Car Rehabilitation/Replacement--$2.1 billion
Rehabilitate track & Structure--$1.2 billion
Stations and Parking--$560 million

Pace

Garages and Transit Center--$35million
Vehicle Replacements (fixed route, paratransit and vanpool vehicles)--$460 million

(Note: The CTA Douglas Branch of the Blue Line and the Brown Line are New Start projects in the SRT System component)

The costs of bringing the transit, tollway 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 given current funding sources not enough resources will be available to meet all expected tollway capital maintenance needs. For the first time, the tollway may experience a backlog of unmet 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 *Transportation Improvement Program, TIP*, capital program development cycles. Approximately $32.2 billion should be available for capital maintenance. Chapter 7 provides the detailed assessment of the capital maintenance needs.

Transit and Highway Projects

The *2020 RTP* includes transit and highway infrastructure projects and specific modal recommendations. However, each project must undergo detailed feasibility analyses in order to 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 559 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 eight 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 the feasibility and detailed operating characteristics. The capital cost of these projects is approximately $ 2.465 billion.

The highway system in northeastern Illinois carries the vast majority of personal, recreational and tourist 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. 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 alternative. Expressways are considered to be multi-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 $2.842 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 and the current status of project implementation.

North Central Service (NCS) Enhancements

This project provides for the addition of trackage on the Wisconsin Central Ltd. portion of the route (Antioch to Franklin Park). In addition, capacity enhancements on the Milwaukee District West Line tracks shared with the NCS will provide commuter train access to an existing third track east of Franklin Park, which is currently used exclusively for freight operation. This will entail track and signal improvements as well as modifying the configuration of existing stations to provide platform access to all three tracks. The proposed investments will expand the line's operational capacity, allowing for increased service frequencies during the peak and midday periods as well as evening and reverse-peak period service. The NCS Enhancements will improve the quality of transit service in portions of rapidly growing Lake and north Cook counties, with service to O'Hare Airport and downtown Chicago.

Current Status: Major Investment Study completed in 1998. Environmental Assessment approved by Federal Transit Administration (FTA) in June 2000 and Full Funding Grant Agreement from FTA expected for the initial phase by the end of 2000. Funds received to date-$22.9 million.

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 initial feasibility studies have been completed.

Current Status: Phase 1 feasibility study completed in 1999. Phase 2 study of detailed demand forecasts and operational feasibility will be initiated in 2000 and will take 3-4 years to complete.

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 for 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.

Current Status: The city of Chicago and CTA are currently considering interim transit service improvements in the corridor. A more capital-intensive phasing study will begin in 2000.

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.

Current Status: The city of Chicago is working on right-of-way acquisition.

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.

Current Status: The Far South Transportation Study should be completed in 2000. Several alternatives have been identified to meet short and long-term needs. The study is being coordinated with land development and environmental initiatives in the area. The results of the study will serve as a scope for a major investment study and low-cost improvements.

South Suburban Commuter Rail Corridor

This project calls for the introduction of commuter rail service along approximately 32 miles of 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, expanding the number of transit accessible employment opportunities for residents of southern Cook and eastern Will counties.

Current Status: A Phase 1 feasibility study was completed in 1999. Phase 2 study will begin in 2000. A reduction in alternative alignments to access downtown is an expected result from the Phase 2 effort.

FIGURE 5.1

Recommended Major Projects

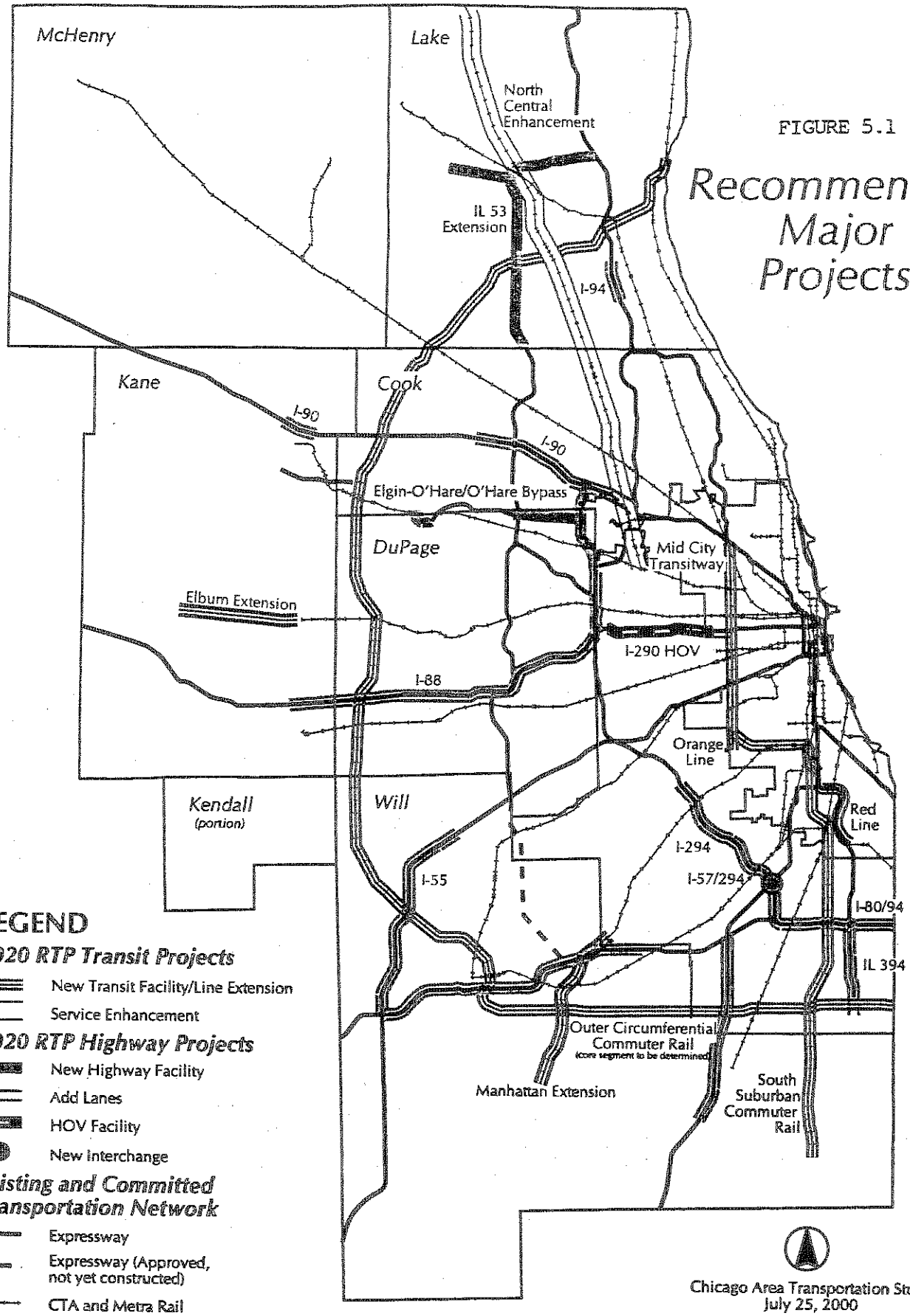


FIGURE 5.2
HIGHWAY AND TRANSIT PROJECTS

Project Name	Description	Length (miles)	Cost $1995 (millions)	2020 Weekday Users (1,2)	
				Existing Airports	SSA
North Central Service Enhancements (2)	Additional track and improved service on the North Central Line	36	$254	13,400	13,300
Outer Circumferential Commuter Rail Corridor	New commuter rail service along approximately 50 miles of the EJ&E line in the Chicago suburbs	~50	$255	12,100	12,600
Mid-City Transitway(3)	New rail line b/w Jefferson Park (Blue Line) & 87th St. (Red Line)	22	$1,000	93,900	89,700
Orange Line Extension(3)	Midway Airport to Ford City	2	$166	26,300	25,200
Red Line Extension	95th St. to 130th St. along I-94	6	$282	36,100	33,700
South Suburban Commuter Rail Corridor	New commuter rail service on the UP/CSX line from LaSalle St. Station to Beecher	38	$216	21,900	15,800
Central Kane Extension UP-W to Elburn (2)	Extend service on UP-W line West of Geneva to Elburn	7.5	$78	3,900	4,300
SWS Extension and Service Enhancement (2)	Extend SWS southwest to Manhattan and improve service along entire line	11	$214	17,800	18,800
I-55 Add Lanes	Naperville Rd. to I-80	13	$49	71,300	70,600
IL 53 Extension	New six-lane tollway from Lake-Cook Rd. to I-94 and IL 120	23	$681	241,400	239,500
I-94 Add Lanes	IL22 to IL60	3	$30	48,700	48,900
I-90 Add Lanes	IL25 to Randall Rd.	4	$40	40.000	44,800
I-90 Add-Lanes (4)	Add-lanes on I-90 from I-294 to Roselle Rd.	13 Add-Lane	$130	86,600	83,300
I-294 Add Lanes; O'Hare Bypass/East Elgin-O'Hare Extension (4)	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	375,500	351,800
Elgin-O'Hare Expressway	West extension from Hanover Park to Streamwood	2	$62	83,300	83,200
I-88 Add Lanes	I-290 to IL31	23	$250	102,000	102,300
I-294 Add Lanes	95th St. to IL394	18	$180	82,400	81,900
I-80 Add Lanes	US45 to I-55	20	$88	76,200	80,300
I-80/94 Add Lanes	I-94/IL 394 to Indiana State Line	3	$90	67,600	68,100
I-57 Add Lanes	I-80 to West Airport Access Rd.	13	$34	60,600	77,900
IL394 Add Lanes	I-80/94 to Sauk Trail	6.5	$24	44,100	48,600
I-290 HOV Lanes(5)	Austin Blvd. to I-88	7	$244	71,200	70,600
I-57/I-294 Interchange	New interchange	N/A	$70	28,700	32,600

(1) A combination of new travel modeling techniques and new socioeconomic data results in user data between the 1997 and 2000 version of the plan.
(2) Weekday transit users represent passengers using transit projects, and counting both boardings and alightings on rail extensions. For highway projects, it is the total number of vehicle equivalents using at least some portion of the facility.
(3) These figures are based on Major Investment Studies conducted by Metra.

(4) Users are calculated from corridor transit demand.

(5) 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 separately
(6) Increased traffic volume resulting from additional capacity

Union Pacific West Line Extension to Elburn

This project is a seven-mile extension of the Union Pacific West Line from its current terminus in Geneva to Elburn. The extension will provide rail service to a growing area; it will also relieve a parking shortage at Geneva and eliminate the operational constraint that currently exists because the lines's current storage yard in West Chicago is located east of the terminal station, requiring deadheading of trains.

Current Status: The Central Kane Corridor Major Investment Study was completed in 1998. Full Funding Grant Agreement from FTA expected in 2000. Funds received to date-$12.6 million.

Southwest Service Enhancement and Extension to Manhattan

This project is a twelve-mile extension of the Southwest Service from its current terminus in Orland Park to Manhattan. The current service is severely limited due to a lack of track capacity and operational constraints. The improvements will increase on-time performance and permit Metra to offer an expanded level of service in the corridor. The extension will provide service to the growing central and southwest Will County area.

Current Status: The Southwest Corridor Major Investment Study was completed in 1998. Full Funding Grant Agreement from FTA expected in 2000 for the initial phase. Funds received to date-$6.28million.

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

The project calls for the widening of I-55 for thirteen miles from Weber 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.

Current Status: No activity beyond limits change since approval of *2020 RTP* in 1997.

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.

Current Status: Study of alternatives reactivated in 1998. Phase 1 study identifying needs, developing and evaluating alternatives. Phase 1 will culminate in a Draft Environmental Impact Statement in late 2000.

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 the removal of 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.

Current Status: No activity since approval of *2020 RTP* in 1997.

I-90 Add Lanes, Elgin Toll Plaza to Randall Road

The portion of the original project from IL 25 to the Elgin Toll Plaza was completed in 1999. This project consists of the widening of I-90 from the Elgin Toll Plaza to Randall Road. The widening will increase the total number of I-90 lanes 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. **Current Status: Portion between IL 25 and Elgin Toll Plaza completed in 1999. No activity on the remaining portion of the project since the approval of the 2020 RTP in 1997.**

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 for new access to O'Hare Airport. The expanded 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.

Current Status: ISTHA completed an internal systems analysis of the bypass extension in 1998. Further work on the I-90 Add Lanes awaiting the outcome of the Northwest Transit Corridor Feasibility in 2000.

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.

Current Status: No activity since the approval of the *2020 RTP* in 1997.

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.
Current Status: No activity since the approval of the *2020 RTP* in 1997.

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 this stretch of I-294 from three to four in each direction, 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.
Current Status: No activity since the approval of the *2020 RTP* in 1997.

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.
Current Status: No activity since the approval of the *2020 RTP* in 1997.

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.
Current Status: Phase I engineering scheduled for completion in 2000. Construction programmed for FY2004.

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.
Current Status: No activity since the approval of the *2020 RTP* in 1997.

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.
Current Status: Phase I engineering scheduled for completion in 2000.

I-290 HOV, Austin Boulevard to I-88

This project calls for the widening of I-290 between Austin Boulevard and I-88 to accommodate a lane in 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.

Current Status: Phase 1 engineering in underway. A $100M set of improvements for an interim solution is underway and expected to be completed in 2001.

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.

Current Status: Study of alternative configurations is underway and expected to be completed in 2001.

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 SRAs varies according to their location. 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 appropriate type of median and provide for the ability 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 allroads within one category. The *SRA Design Concept Report* is a description of an optimal design for the three roadway classes of 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 undesirable or 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 help to ensure that transportation facilities and land development strategies 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 achieve SRA supportive land uses decisions.

From a funding perspective, a designated system of SRAs will help differentiate 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 *Transportation Improvement Program (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* process but a density reclassification of the region will be undertaken during the *2030 Regional Transportation Plan (RTP)* development process.

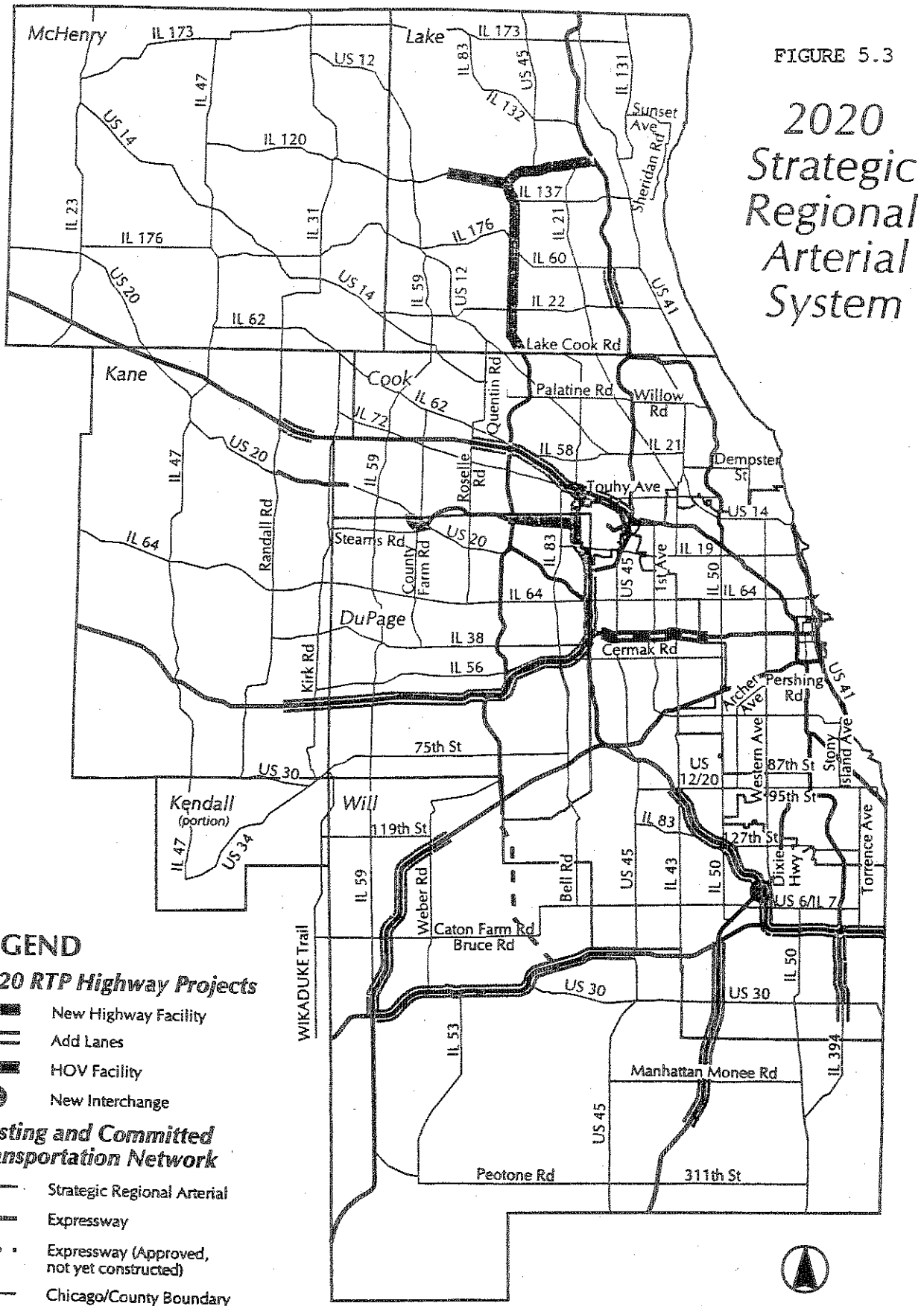
Subsequent studies of the original individual SRA routes, public comment on routes from the 2010 system and studies of proposed new routes have resulted in changes to the SRA System. The 1,412 route miles comprising the 2020 SRA System are shown in Figures 5.3 and 5.4. SRA routes or route segments that currently do not exist are shown in the mileage totals.

The 2020 SRA System includes changes in southern DuPage County. The shortage of SRA 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 1997 version of the *2020 RTP* directed the MPO staff to bring together DuPage County, the DuPage Mayors and Managers Conference, affected municipalities and other transportation providers to work together to attempt to find an acceptable set of routes to handle the subregional travel in southern DuPage County. The county has initiated a study of transportation needs in the southern portion of the county that includes an analysis of all north-south routes between IL 59 and I-355. The study results will be included in the *2030 RTP* planning process.

The financial strategy presented in Chapter 7 projects that approximately $ 1.140 million should be available for 190 centerline miles of SRA capacity expansion through 2020. Approximately $4.55 billion for the capital maintenance of SRA routes is part of the overall capital maintenance category described in an earlier section of this chapter.

FIGURE 5.3

2020 Strategic Regional Arterial System



LEGEND

2020 RTP Highway Projects

- New Highway Facility
- Add Lanes
- HOV Facility
- New Interchange

Existing and Committed Transportation Network

- Strategic Regional Arterial
- Expressway
- Expressway (Approved, not yet constructed)
- Chicago/County Boundary

Chicago Area Transportation Study
July 25, 2000

0 5 10 Miles

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	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	IL 23	Lake, McHenry
IL 394	US 30	IL 1	Cook, Will
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 / Hollywood Ave / Cornell Dr	US 14	57th Street	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

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 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 bus ridership, is included. A Central Area Transportation Program involving improvements such as busways, transit priority treatments, and use of off-street rights-of-way, are part of the SRT System. Twenty transportation centers or major park-n-ride facilities and seventeen new suburban express bus routes are also included in the system. 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 improvement
- Grade separations and 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

Since the approval of the original *2020 RTP*, a number of studies have been completed and SRT System improvements selected for implementation. Extensions, service improvements and operational improvements to Metra's UP-West Line and Southwest Service are moving forward as a federal "new start" projects. These two projects now also appear in the Transit and highway Projects component of the plan. Capacity upgrades to the North Central Service, which appears in the Transit and Highway Projects component, are also proceeding. Reconstruction of the Douglas Branch of the CTA Blue Line and capacity enhancements on the CTA Brown Line have been studied and are being pursued as new start projects. On the SRT bus system, limited stop service was introduced on Western Avenue in December 1998. The CTA X49 Express Service increases travel speeds by 24 percent for longer distance cross-town passengers. Improvements, including shelters and passenger information, to the 61 stops on the X49 have been programmed. Other limited stop SRT bus services are provided on King Drive (peak periods) and Cermak Road (weekends).

Numerous studies of SRT System improvements are underway. CTA is currently examining limited-stop type bus services on Irving Park Road and Garfield Boulevard, as well as completing comprehensive studies of bus services in the north and south lakefront SRT corridors. RTA is looking at signal priority treatments on the SRT bus system and the development of a Signal Priority Integration Plan. RTA, in conjunction with the service boards, is preparing a Regional Transit Coordination Study which will include a variety of elements to improve transfers between the transit agencies. The multi-year plan consists of numerous studies that will address physical coordination, service coordination, fare coordination, and information coordination. Rapid transit service enhancements for improved O'Hare and Midway airport access are under study. Improved transit person and goods movements are being examined as an alternative to congested highway travel. The Central District Transportation Study is examining mobility issues, deficiencies and solutions in the Chicago central area. On the commuter rail system, formal study of a Wadsworth branch of Metra's Milwaukee North Line started in 2000. The Southeastern Wisconsin Regional Planning Commission is studying commuter rail extensions which serve areas outside the six-county region. Three Wisconsin extensions are currently under study: Fox Lake to Walworth, WI (Milwaukee North), Antioch to Burlington, WI (North Central Service), Kenosha, WI to Milwaukee, WI (UP-North). The Kane-Kendall commuter rail feasibility study will start later in 2000. In Indiana, the Northwestern Indiana Regional Planning Commission has recommended service to Valparaiso from the South Shore Line.

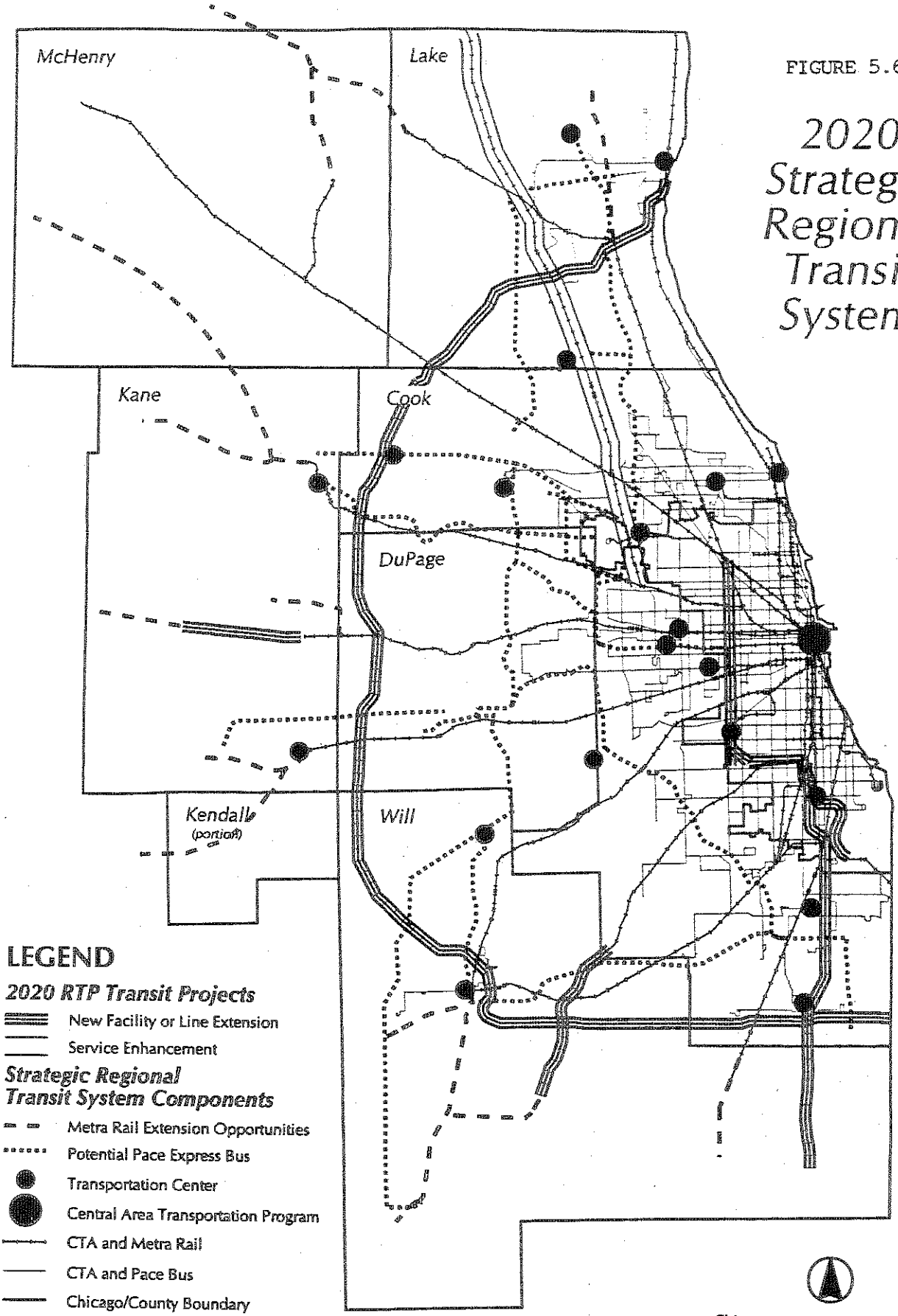
Each route will undergo a detailed analysis. The scope of these studies is described in Chapter 8.

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

The financial strategy presented in Chapter 7 projects that approximately $1.025 billion 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 in addition to the two mentioned above, two additional ones could be implemented within the constraints of the plan.

FIGURE 5.6

2020 Strategic Regional Transit System



LEGEND

2020 RTP Transit Projects

- New Facility or Line Extension
- Service Enhancement

Strategic Regional Transit System Components

- Metra Rail Extension Opportunities
- Potential Pace Express Bus
- Transportation Center
- Central Area Transportation Program
- CTA and Metra Rail
- CTA and Pace Bus
- Chicago/County Boundary

Chicago Area Transportation Study
July 25, 2000

0 5 10 Miles

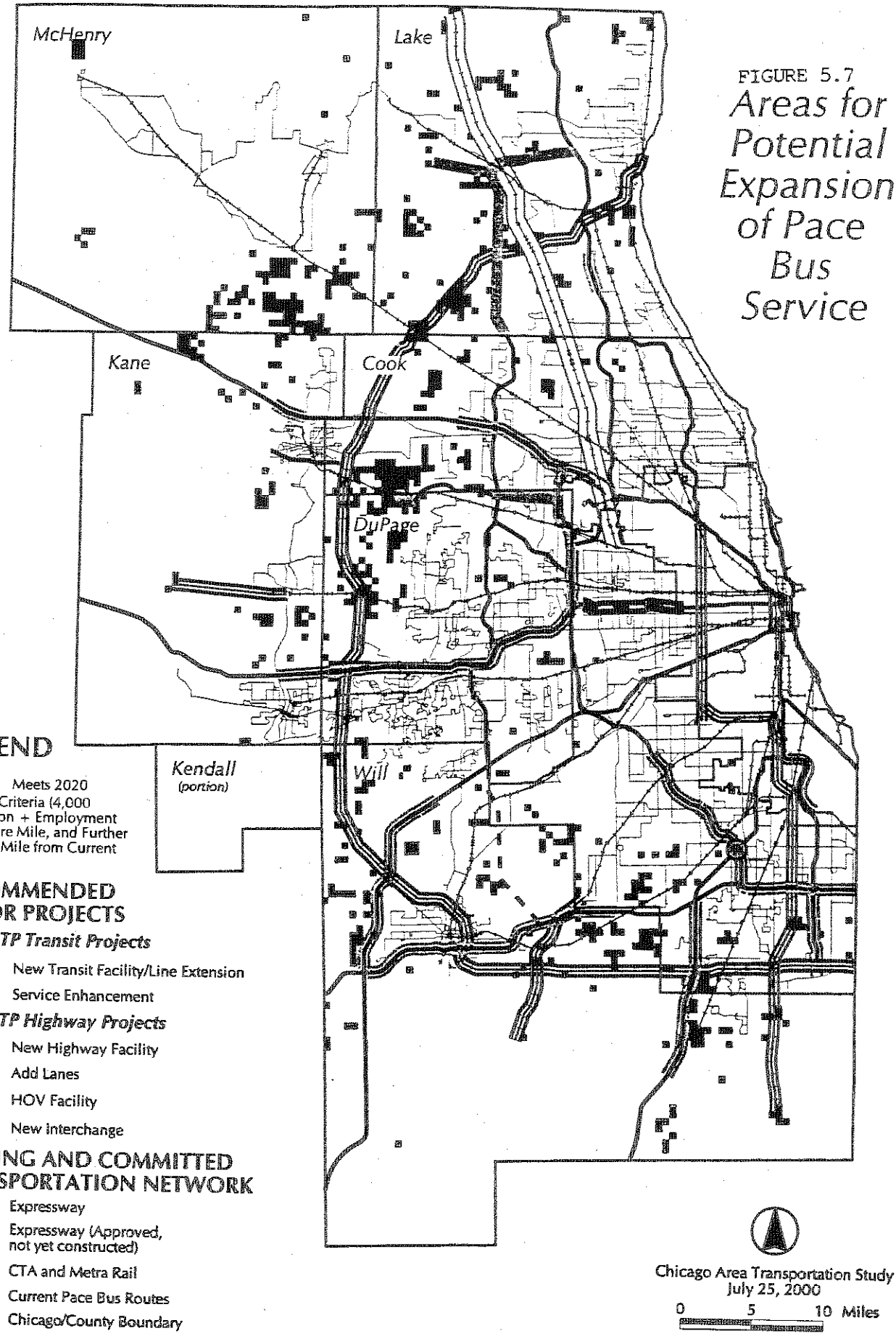


FIGURE 5.7

Areas for Potential Expansion of Pace Bus Service

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; and it is an attractive investment option because it 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. An 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 level of service standards for new local bus service.

The *2020 RTP* projects that $50 million should be available for suburban local bus expansion. Based on Pace level of service criteria and Pace's 1997 Capital and Operating Costs, the *Destination 2020* process calculated that the suburban bus fleet could be expanded by 28%. Using Pace's bus service schedule this would represent a 34% increase in bus service miles over current levels.

Bicycle and Pedestrian Transportation

The northeastern Illinois region recognizes the 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 *2020 RTP* begins to 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. During the *2020 RTP* development process a database for bicycle and pedestrian planning was developed.

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 1999, CATS updated an inventory of designated bicycle and pedestrian facilities (existing, committed and planned. There are 1,516.2 miles of existing and committed facilities and an additional 3,012.1 miles of planned facilities. This represents respective increases of 53% and 164 % from the 1995 inventory. Figure 5.8 illustrates the existing and committed facilities identified in the inventory.

Bicycle Trip Conditions
Since a typical bicycle trip is likely to utilize designated facilities for only a part of a trip, in 1996 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.

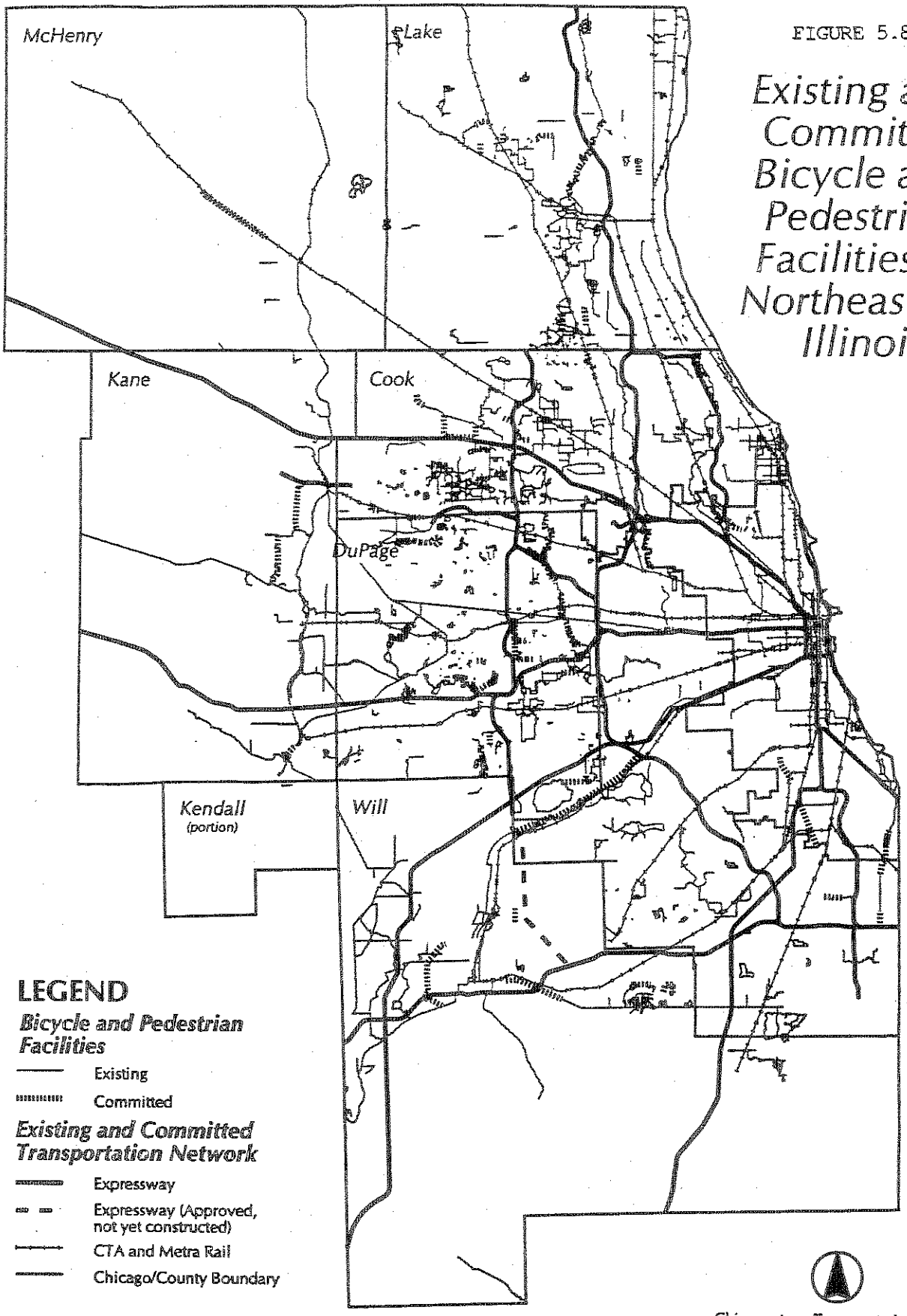
Pedestrian and Bicycle Travel Data
The task force concluded that there is a lack of good travel data for bicycle and pedestrian modes and that the region should enhance its database. The CATS 1990 Household Travel Survey shows that walking accounts for 13 percent of all trips. The 1990 Census shows that 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, in areas such as safety, levels of walking and cycling, and access to transit, will enhance our ability to forecast future trip making and improve project selection. In 2000 the task force created a data standards working group to coordinate future data collection efforts. Additionally, CATS is working on improving its methods of estimating non-motorized trips using the regional travel forecasting models.

Promotion and Education
CATS recognizes the need to provide promotion and education services for planners and implementers of bicycle and pedestrian facilities as well as the current and potential users of those facilities.

CATS holds the biannual Soles and Spokes Conference which is designed to enlighten and educate those interested in bicycle and pedestrian issues. As part of the conference, the *Awards for Excellence* program recognizes the efforts of individuals, municipalities, organizations and

FIGURE 5.8

Existing and Committed Bicycle and Pedestrian Facilities in Northeastern Illinois



businesses in the region that promote the use of bicycle and pedestrian activity. In 2000, the conference also included two days of technical training on bicycle and pedestrian facilities. CATS will continue to provide targeted training opportunities in areas such as:

- Identifying and creating safe routes to schools;
- Accommodating cyclists on roadways in accordance with AAHSTO guidelines;
- Developing community support for bicycle and pedestrian facilities;
- Securing funding and developing capitol programs; and
- Encouraging the use of walking and biking for transportation.

Other bicycle and pedestrian planning tools are being or have been developed. In early 2000, a slide show was completed that describes how to assess a community's bikeability and start the local bicycle planning process. CATS staff is also compiling a bicycle and pedestrian planning resource that will be available in both print and web-based formats. This resource addresses issues such as:

- The need for and benefits of walkable and bikeable communities;
- What agencies are involved with bicycle and pedestrian planning and implementation in this region;
- Strategies for developing and implementing a local bicycle and/or pedestrian plan;
- Transportation and land use policies that affect bicycle and pedestrian travel;
- Strategies for encouraging the use of walking and biking for transportation;
- Success stories from around the region, nation and world; and
- Current status of bicycle and pedestrian planning and implementation at the local, sub-regional and regional levels.

Many communities have cycling and walking promotions targeted at the general public. The city of Chicago promotes bike month and distributes a bikeways map and other educational materials. Since 1999, public and private organizations across the region have participated in a commuter challenge to promote biking to work. A Shop by Bike program was developed in 1999 using Congestion Mitigation and Air Quality Program (CMAQ) funds and is being tested in urban and suburban communities. The Secretary of State is developing the Share the Road campaign directed at driver education.

Access to Transit

The Regional Transportation Authority's Regional Technical Assistance Program (RTAP) supports local projects that provide improved access to transit. Through the RTAP program many communities are proposing transit, bicycle and pedestrian oriented development around their transit stations. In 1999 CTA initiated a pilot program to allow bikes on trains during the weekend throughout the year. Pace recently began installing racks on buses under its Bikes on Buses program and expects to have its entire fleet equipped with racks by 2002. The city of Chicago bike rack program has resulted in the installation of 5,386 racks since 1993. An additional 1,600 are planned in 2000. The suburban areas have used CMAQ funds to help pay for the installation of 973 racks and 49 lockers, primarily around transit stations, and have received an additional $180,000 in CMAQ funds for another round of installation.

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 across jurisdictions.
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. Actions may include: installing sidewalks and bike lanes, redesigning and/or repaving streets, developing off-road trails and making roadway and railroad crossings easier and safer for pedestrians and cyclists.
   - 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.
4. Improve connections between subregional and other networks.
   - Complete trails within the Northeastern Illinois *Regional Greenways and Trail Plan* and the Grand Illinois Trail 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.

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 1997 the Illinois Prairie Trail Authority and the Forest Preserve District of Cook County in cooperation with NIPC and the Open Lands Project prepared an updated Northeastern Illinois

Regional Greenways and Trail Plan. Several counties and the suburban councils of mayors conducted evaluations of their respective plans as a basis for further refinements. Some of the activities resulting from these evaluations include: developing subregional capital programs, producing and distributing facilities maps and other promotional materials, finding connections amongst neighboring communities and providing technical and planning support at the local level. Figure 5.9 summarizes the scope of the subregional bicycle and pedestrian plans in the region. The greenways and trails plans are also included.

FIGURE 5.9

STATUS OF BICYCLE AND PEDESTRIAN PLANNING IN NORTHEASTERN ILLINOIS

Region	Planning Activities
City of Chicago	In 1992 adopted the Bike 2000 Plan, which includes 29 recommendations in the areas of engineering, education, encouragement and enforcement. In 1997 published the Bicycle Facilities Development plan which identified and prioritized 29 potential off-street corridors for bicycle travel. During 2000, parts of four of these corridors will be under construction. In 2000 adopted the Streets for Cycling plan, which identified a network of on-street facilities and provided the basis for updating the city's bicycle map. Implementation of this plan, which involves striping bike lanes and installing signage, is currently underway. The city will soon start developing a 2010 plan.
North Shore/ Northwest	In 1995 created a bicycle facilities plan which identified priority travel zones and called for the development of a regional network of bicycle facilities. In 2000, the councils received a combined $17,000 in planning funds to assist local planning efforts and initiate a cluster planning process where communities work together to eliminate missing links amongst them
North Central	In 1996 Developed a bicycle facilities plan which included a recommended network of bikeways, a method for project prioritization and suggested priority projects. In 2000, the council received $7,000 in planning funds to assist local planning efforts and develop a capital program that addresses access to trails, access across barriers and safe streets for cycling.
Central	In 1996 tdeveloped bicycle facilities plan which included a recommended network of bikeways and project priorities. Priority is given to local STP funded roadway projects that provide bicycle improvements. Recommendations have been made to Cook County to incorporate bicycle lanes into highway projects.
Southwest	In 1996 adopted the Southwest Suburban Bikeway Plan, which included a recommended network of bikeways, a method for project prioritization and suggested priority projects. In 2000, the council received $13,000 in planning funds to update the planned network, develop a sub-regional capital plan and assist local planning efforts.
South	In 1996 adopted the South Suburban Bikeway Plan, which included a recommended network of bikeways, a method for project prioritization and suggested priority projects. In 2000, the council received $21,000 in planning funds to update the plan, develop a capital program, convene corridor task forces, assist local planning and promotional efforts and study the economic development benefits of a subregional bikeway system.
DuPage	In 1995 the Dupage Mayors and Managers Conference, the County Planning Commission and the County Board adopted the DuPage County Regional Bikeway Plan. The plan consists of a recommended network of bikeway facilities and pedestrian improvements, a map of existing and proposed facilities, and shared goals and policies of the County and local jurisdictions. As of August 2000 approximately 45% of the 552-mile bike plan has been constructed.
Kane	In 1996 developed a comprehensive transportation plan which included a bicycle and pedestrian element including the addition of 166 miles of new facilities to provide connections within and between communities and established an action plan which has led to the routine accommodation of cyclists and pedestrians during all new county road construction projects and the paving of shoulders during reconstruction projects. New development review procedures also incorporate consideration of bicycle and pedestrian accommodations. In 2000, the council received $25,000 in planning funds to update its bike/pedestrian plan, develop a capitol program, convene corridor meetings, assist local planning and education efforts, produce and distribute a facilities map and initiate a coordinated signage program..
Lake	In 1996 developed a set of policy recommendations to improve the bicycling environment. The Lake County DOT has institutionalized the consideration of bicycle and pedestrian needs in its transportation planning and has been building a skeleton of sidepath and off-road facilities to which municipalities can link.
McHenry	In 1996 developed McHenry County Sub-Regional Bicycle Plan. The plan included goals, policies and a suggested bicycle facility network. Many municipalities have used the plan to guide local planning efforts. McHenry DOT has institutionalized consideration of bicyclist and pedestrian needs during road construction and reconstruction projects.
Will	In 1995 adopted a set of goals and strategies for the Will County Bicycle and Pedestrian Plan.
6-Counties	In 1995, the Illinois Dept. of Natural Resources initiated the Grand Illinois Trail, a 500-mile loop of on and off-road facilities linking the Mississippi River to Lake Michigan. The trail system builds on and provides connections amongst already existing and planned routes. In 1997, 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. Over 50% of facilities in the plan have been built.

In addition to the efforts at the county and subregional levels, the state has also enhanced the role of bicycle planning. In 1996, *Policies and Procedures for Accommodating Bicycle Travel in Highway Improvements,* the Illinois Department of Transportation (IDOT) instituted a bicycle planning policy which 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. Since the adoption of this policy, IDOT has used it in cooperation with local plans to help ensure that bicycle and pedestrian needs are considered during road rehabilitation projects.

The development of a comprehensive regional bicycle and pedestrian plan has been an objective of the regional transportation plan since it was proposed in the *2010 TSD Plan* Update. The lack of good, comprehensive information on bicycle and pedestrian travel and the various stages of subregional bicycle and pedestrian planning continues to delay the realization of that objective. The subregional planning organizations agree that more work is needed before a coordinated regional bicycle and pedestrian plan can be developed. The emphasis in the next two years will continue to be on completing subregional plans, identifying critical missing links for a regional system, improving access to transit and promoting bicycle and pedestrian modes. The work completed in 1999 and proposed for 2000 will contribute significantly to this effort. A regional bicycle and pedestrian plan, including planned facilities, will be developed as part of the *2030 RTP* planning process. The Bicycle and Pedestrian Issues Task Force is developing an outline and scope for this plan. It is important to move aggressively on these subregional efforts because bicycling and walking are included 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. The financial strategy projects that approximately $225 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 Freight 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. Trailers and containers are an increasingly preferred means of moving non-bulk and unitized products. Measured in terms of volume of intermodal units processed (in this context the processing is almost entirely rail-to-truck and vice versa), the region is widely recognized as the largest center in North America, as is

sometimes described as the "3rd largest port in the world (trailing Hong Kong and Singapore). Intermodal volume in northeastern Illinois exceeds 11 million TEUs (twenty-foot equivalent units) per year.

Goods movement is largely a private sector business that is competitive, customer-driven with a 24-7 (24 hours a day, 7 days a week) activity cycle. Figure 5.10 shows the nature of truck movements in the region. Measured in terms of automobile equivalents, trucks constitute 28% (in a range of 4-51%) of vehicular traffic on interstates, and 16% (range of 4-61%) on other marked routes in the region.

Substantial elements of the transportation infrastructure which support intermodal freight operations are in the public domain. Often private sector investment needs resulting from asset management and market response are not synchronized with public sector programming and investments. The *2020 RTP* addresses this investment discontinuity through regional policies which are intended to 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. This figure is expected to exceed $25 billion by 2020.

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 provides a statistical overview of the extent of intermodal freight operations in the region.

Twenty-six major intermodal terminals or clusters have qualified for status as intermodal connection sites in the National Highway System (NHS), i.e., they meet one or more USDOT criteria. Twenty-seven connector routes comprising 84 separate links totaling 55 miles have been 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 representative example of major intermodal facilities with related NHS connector links plus 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*.

FIGURE 5.10

TRUCK ACTIVITY BY TIME OF DAY IN NORTHEASTERN ILLINOIS

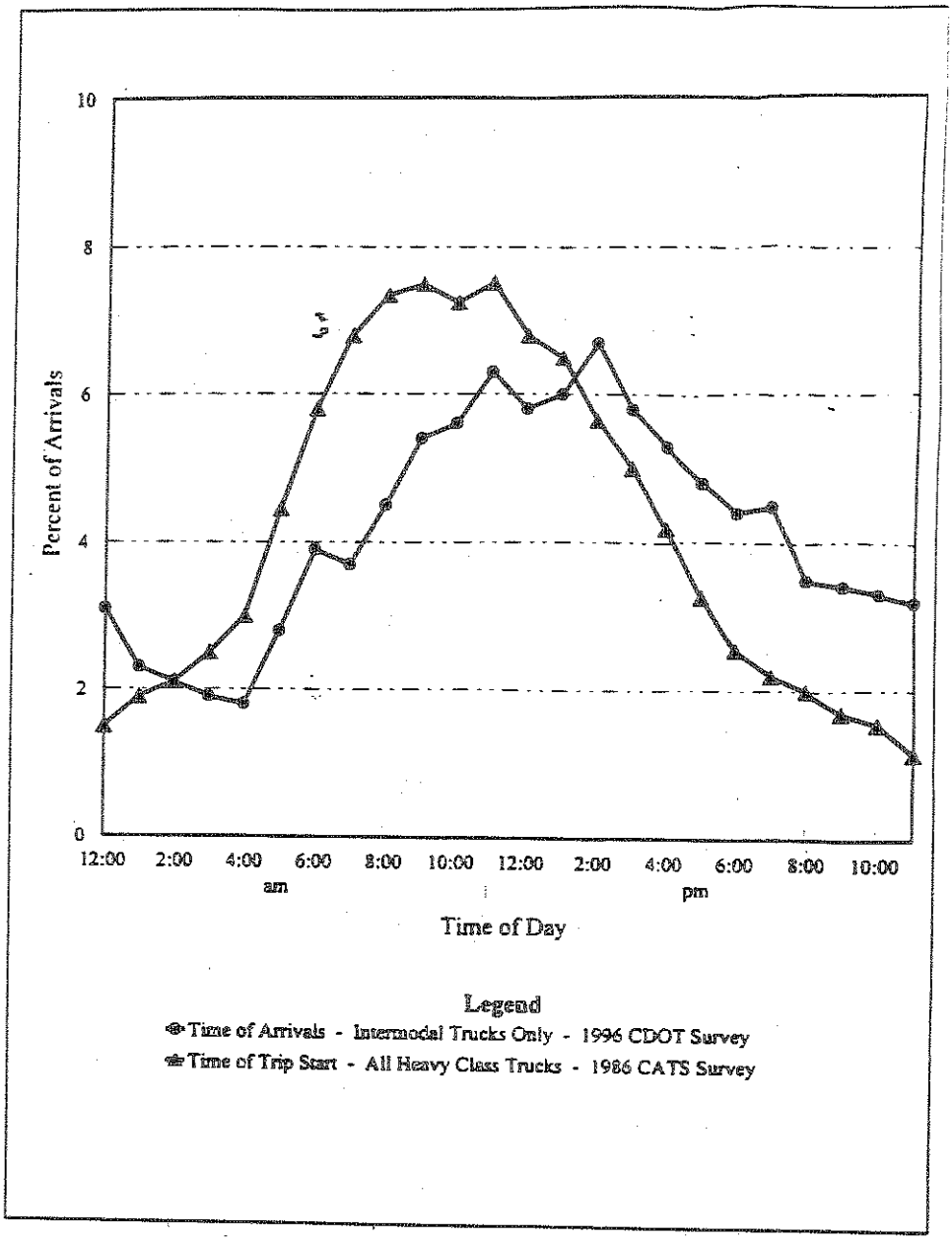


FIGURE 5.11

STATISTICAL DIGEST OF NORTHEAST ILLINOIS FREIGHT INTERMODAL 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 movements/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 volume of freight moved in trucks [1996]	1,591,100 tons
Daily volume of freight moved in trucks [2020]	2,267,300 tons

RAIL INDUSTRY

Annual intermodal lifts {trailers and containers} [1996]		5,100,000
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 volume of freight moved by rail [1996] :		2,460,000 tons
Forecast of daily volume moved [2020] :		4,375,200 tons

AIR FREIGHT INDUSTRY

Annual air cargo operations [1999] { O'Hare airport only}	domestic:	19,340
	international:	5,112
	TOTAL :	24,252
Annual tonnage of air freight [1999] { O'Hare airport only} *	domestic :	890,559
	international :	797,358
	TOTAL :	1,687,917

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 volume waterborne freight in region [1999] :	26.555M tons
- Port of Chicago :	26.000M tons
- Port of Waukegan :	0.555M tons

FIGURE 5.12

IMTERMODAL CONNECTOR LISTING

(Freight)

CONNECTOR	Link Limits		NHS CONNECTION	CITY	FACILITY NAME	OPERATOR
	From	To				
71st St.	Harlem (IL 43)	Gate	Harlem (IL 43)	Bedford Park	Bedford Park	CSX Intermodal
73rd St.	Cicero (IL 50)	Savre Ave.	Cicero (IL 50)	Bedford Park	Bedford Park	CSX Intermodal
Frontage Roads	Harlem (IL 43)	Gate (Access road)	Harlem (IL 43)	Bedford Park	Bedford Park	CSX Intermodal
Naragansett Ave.	73rd St.	Proposed Gate	Harlem (IL 43)	Bedford Park	Bedford Park	CSX Intermodal
Savre Ave.	71st St.	73rd St.	Harlem (IL 43)	Bedford Park	Bedford Park	CSX Intermodal
119th St.	I-57	Gate (Wolcott Ave.[2])	I-57	Blue Island	Iowa Interstate	Iowa Interstate
100th St.[1]	Torrence Ave.	Indianapolis Blvd.	Torrence Ave.	Chicago	KCBX Cluster	Multiple
103rd St.[1]	Torrence Ave.	Woodlawn Ave.	I-94	Chicago	Calumet River Cluster	Multiple
106th St.[1]	Indianapolis Blvd.	Torrence Ave.	Torrence Ave.	Chicago	Calumet River Cluster	Multiple
122nd St.	Stony Island Ave.	Torrence Ave.	Torrence Ave.	Chicago	Lake Calumet Cluster	Multiple
15th St.	Ashland Ave.	Gate (Wood St.[2])	I-55 and I-290	Chicago	Global One	Union Pacific
18th St.	Canal St.	I-90/94	I-90 / I-94	Chicago	26th St.	Union Pacific
31st St.	Western Ave.	California Ave.	I-55	Chicago	Western Ave.	BNSF
41stSt.	Pulaski Ave.	Gate (Hamlin Ave.[2])	I-55	Chicago	Corwith	BNSF
43rd St.	Western Ave.	Ashland Ave.	I-55	Chicago	Railport	CN/BNSF
47th St.[1]	Wentworth Ave.	Pulaski Ave.	I-90 / I-94	Chicago	Corwith	BNSF
51st St.	Wentworth Ave.	Gate (Shields Ave.[2])	I-90 / I-94	Chicago	47th St.Yard	Norfolk Southern
59th St.	Western Ave.	State St.	I-90 / I-94	Chicago	59th St. Yard - CSXI	CSX Intermodal[3]
61st St.	State St.	Gate (Lafavette Ave.[2])	I-90 / I-94	Chicago	63rd St. Yard	CSX Intermodal[3]
63rd St.	Wells St.	Gate (Indiana Ave.[2])	I-90 / I-94	Chicago	63rd St. Yard	CSX Intermodal[3]
79th St.[1]	Cicero Ave.	Gate (Oakley Ave.[2])	Western Ave	Chicago	Landers	Norfolk Southern
Archer Ave.	Canal St.	Cermak (22nd St.)	I-90 / I-94	Chicago	26th St.	Union Pacific
Ashland Ave.[1]	Van Buren St.	47th St.	I-290	Chicago	Global One	Union Pacific
Blue Island Ave.[1]	Western Ave.	Ashland Ave.	I-55	Chicago	Western Ave.	BNSF
California Ave.	31st St.	I-55	I-55	Chicago	Western Ave.	BNSF
Canal St.	18th St.	Gate	I-90 / I-94	Chicago	26th St.	Union Pacific
Cermak (22nd St.)	Archer Ave.	I-90/94	I-90 / I-94	Chicago	26th St.	Union Pacific
Congrss Pkwy.	Ashland Ave.	I-290 EB on Ramp	I-290	Chicago	Global One	Union Pacific
Damen Ave.[1]	Blue Island Ave.	I-55	I-55	Chicago	IMX	Multiple
Indianapolis Blvd.	100th St.	Ewing Ave.	Ewing Ave.	Chicago	KCBX Cluster	Multiple
Kedzie Ave.[1]	47th St.	I-55	I-55	Chicago	Corwith	BNSF
LaSalle St.	47th St.	I-90/94 NB on Ramp	I-90 / I-94	Chicago	47th St.Yard	BNSF
Pulaski Rd.[1]	47th St.	I-55	I-55	Chicago	Corwith	BNSF
State St.	63rd St.	59th St.	I-90 / I-94	Chicago	63rd St. Yard	CSX Intermodal[3]
Stony Island Ave.[1]	130th St.	Gate	I-94	Chicago	Lake Calumet Cluster	Multiple
Stony Island Ave.[1]	103rd St.	Gate So. of 122nd St.	I-94	Chicago	Lake Calumet Cluster	Multiple
Van Buren St.	Ashland Ave.	I-290 WB on Ramp	I-290	Chicago	Global One	Union Pacific
Wells St.	59th St.	63rd St.	I-90 / I-94	Chicago	63rd St. Yard	CSX Intermodal[3]
Wells St.	51st St.	I-90/94 SB on Ramp	I-90 / I-94	Chicago	47th St.Yard	BNSF
Wentworth Ave.	I-90/94 NB off Ramp	47th St.	I-90 / I-94	Chicago	47th St.Yard	BNSF
Wentworth Ave.	I-90/94 SB off Ramp	47th St.	I-90 / I-94	Chicago	47th St.Yard	BNSF
Wentworth Ave.	63rd St.	59th St.	I-90 / I-94	Chicago	63rd St. Yard	CSX Intermodal[3]
26th St.	IL 50/Ogden Ramp	Gate (Central Ave.[2])	IL 50	Cicero	Cicero 26th St.	BNSF
Indiana Ave.	Sibley (IL 83)	Gate (149th St.[2])	I-94	Dolton	Yard Center	Union Pacific
Sibley (IL 83)	Indiana Ave.	I-94	I-94	Dolton	Yard Center	Union Pacific
Belmont Ave.	Williams Dr.	US 45	US 45	Franklin Park	Bensenville	CP Rail System
Franklin Ave.	Williams Dr.	Gate	US 45	Franklin Park	Bensenville	CP Rail System
Williams Dr.	Franklin Ave.	Belmont Ave.	US 45	Franklin Park	Bensenville	CP Rail System
157th St.	West Ave.	Park Ave.	159th St.	Harvey	CN Gateway	CN/IC
167th St.	Center St.	Halsted (IL 1)	I-80 / I-294	Harvey	Movers - Multi-User	CN/IC
171st St.	Center St.	Halsted (IL 1)	I-80 / I-294	Harvey	Movers - Multi-User	CN/IC
Center St.	159th St.	171st St.	I-80 / I-294	Harvey	Movers - Multi-User	CN/IC
Park Ave.	157th St.	159th St.	159th St.	Harvey	CN Gateway	CN/IC
West Ave.	157th St.	159th St.	159th St.	Harvey	CN Gateway	CN/IC
Halsted (IL 1)	159th St.	I-80	I-80 / I-294	Harvey	Movers - Multi-User	CN/IC
67th St.	Santa Fe Dr.	US 45	US 45	Hodgkins	Willow Springs	BNSF
75th St.	I-294 Ramps	Gate (Santa Fe Dr.[2])	I-294	Hodgkins	Willow Springs	BNSF
Santa Fe Dr.	67th St.	Gate (75th St.[2])	US 45	Hodgkins	Willow Springs	BNSF
Fort Hill Dr.	Jefferson	Gate	IL 59	Naperville	Auto-Transload	BNSF
Jefferson St.	Fort Hill Dr.	IL 59	IL 59	Naperville	Auto-Transload	BNSF
Lake (US 20)	US 45	IL 64	US 45	Northlake	Global Two	Union Pacific
Railroad Ave.	Lake St.(US 20)	IL 64	IL 64	Northlake	Global Two	Union Pacific
Lawrence Ave.[1]	US 45	Gate (Michigan[2])	US 45	Schiller Park	Schiller Park East	CP Rail System

[1] These NHS connectors serve multiple facilities. For a complete listing of intermodal facilities, please consult *Proposed Intermodal Connectors to the National*

[2] Nearest Street to the associated freight facility entrance.

[3] Facility is presently controlled by CSX Intermodal and will be turned over to Norfolk Southern within the next three years.

FIGURE 5.12B

FIGURE 5.12B

INTERMODAL CONNECTOR LISTING

(Metra)

CONNECTOR LINK	LINK LIMITS		NHS CONNECTION	CITY	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 Rd.	I-88	Aurora	Aurora	Metra
Glacier Park Ave.	Access Rd.	IL 59	IL 59	Aurora	Route 59	Metra
Oak Park Ave.	West BartlettRd.	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.	Harlem 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	Ridgewood Pl.	US 41	Highland Park	Highland Park	Metra
Deerfield Rd.	Ridgewood Pl.	US 41	US 41	Highland Park	Highland Park	Metra
Old Elm	Everett	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	Roselle	Roselle	Metra
Irving Park Rd.	Ardmore	Roselle Rd.	Elgin-O'Hare	Roselle	Roselle	Metra
IL 19	Springinsguth	Elgin O'Hare	Elgin-O'Hare	Schaumburg	Schaumburg	Metra
Ryan Way	Travis	Station	US 20	Schaumburg	Schaumburg	Metra
Springinsguth	Station	IL 19	Elgin-O'Hare	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
Cass Ave.	Quincy	75th St.	75th St.	Westmont	Westmont	Metra
West St.	Front St.	IL 38	IL 38	Wheaton	Wheaton	Metra

FIGURE 5.12C

INTERMODAL CONNECTOR LISTING

(Chicago Transit Authority and Other Operators

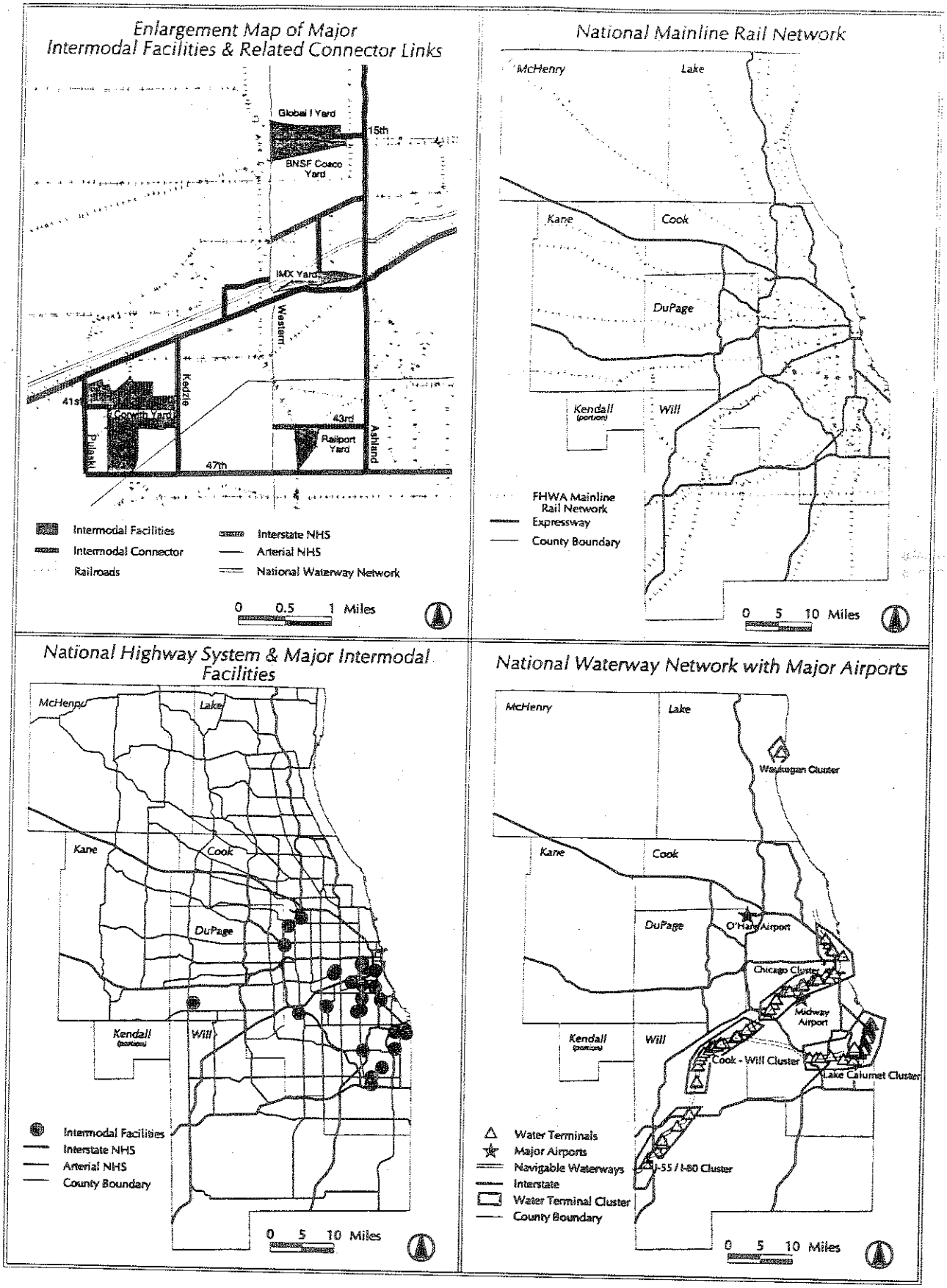
CONNECTOR	Link Limits		NHS CONNECTION	CITY	FACILITY NAME	OPERATOR
	From	To				
Marquette	Lafayette	Western	Western	Chicago	69th Street	CTA
79th Street	I-94	Western	Western	Chicago	79th Street	CTA
87th Street	I-94	Western	Western	Chicago	87th Street	CTA
Michigan	95th Street	127th Street	95th/127th Street	Chicago	95th Street	CTA
Belmont	Cicero	Kedzie	Cicero	Chicago	Belmont Blue Line	CTA
Belmont	Western	Clark	Western	Chicago	Belmont Blue Line	CTA
Chciago	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	McCormick	McCormick	Chicago	Howard	CTA
Milwaukee	Lawrence	Touhy	Touhy	Chicago	Jefferson Park	CTA
Sheridan	Devon	Loyola	McCormick	Chicago	Loyola	CTA
Devon	McCormick	Sheridan	McCormick	Chicago	Loyola	CTA
Michigan*	Jackson	Madison	Wacker	Chicago	Van Buren	Downtown**
State*	Jackson	Wacker Drive	Wacker	Chicago	Multiple Stations	Downtown**
Madison*	Clinton	Michigan	Wacker	Chicago	Ogilvie Trans. Center	Downtown**
Washington*	CLinton	Michigan	Wacker	Chicago	Ogilvie Trans. Center	Downtown**
Pulaski	Archer	Garfield	Garfield Blvd.	Chicago	Pulaksi	CTA
Michigan*	Washington	Wacker Drive	Wacker	Chicago	Randolph Street	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 n s	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, consult *Proposed Intermodal Connectors to the National Highway System for Northeastern Illinois, Version2, March 1996.*

**Downtown operators may include CTA, Amtrak, and/or Metra.

FIGURE 5.13

Intermodal Networks in Northeastern Illinois



Chicago Area Transportation Study
July 25, 2000

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's needs and issues are understood and considered in the context of the regional transportation 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 implementers. Outreach efforts have resulted in the identification of 62 specific needs and remedial projects proposed. To date 18 have been implemented and an additional 19 are in process, i.e. full or partial funding has been provided and work has been initiated on engineering and/or construction. This process of soliciting improvement needs from the industry and working cooperatively with implementers 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 component of the *2020 RTP*.

ISTEA advocated strong intermodal and freight plans, programs, technical and research activities. TEA-21 continues this advocacy. Northeastern Illinois has made a substantial effort to meet the intermodal goals of TEA-21 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 eight specific system and policy statements for the intermodal component of the *2020 RTP*.

1. Develop a process to identify and incorporate a strategic regional freight 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.
2. Identify bottlenecks to the efficient operation of the intermodal freight industry and develop, evaluate and implement improvements needed to address these bottlenecks.

3. 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.
4. 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.
5. Encourage public-private partnerships to address freight and intermodal needs and improvements.
6. Support for planning initiatives for projects of regional significance such as the Chicago (Gateway Rail) project and the Joliet Arsenal Redevelopment Project which are designed to enhance the performance of the freight transportation network.
7. Consider 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.
8. Position the region's intermodal industry for full participation in initiatives of national and international consequence, such as the National Corridor Planning Development Program and the Coordinated Border Infrastructure Program.

Transportation Management Strategies

Transportation management (TM) strategies are approaches that improve the operations of the transportation system and manage the demand for transportation facilities. These strategies are designed to increase system efficiency, modify travel behavior, and improve air quality without costly infrastructure improvements. A variety of TM strategies are needed to meet existing and future transportation needs resulting from: increases in population and employment; increases in vehicle miles traveled (VMT); increases in traffic congestion; need for improvements in operational efficiency; changes in travel patterns; decreasing densities which limit traditional transit options in suburban areas; and the need to reduce transportation-related pollution.

TM strategies consist of three interrelated components:

- *Transportation Systems Management (TSM)* 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 and high occupancy vehicle (HOV) use. Examples include traffic signal interconnects, emergency traffic patrols, HOV priority facilities, and park n ride lots.
- *Transportation Demand Management (TDM)* consists of strategies that manage the demand for transportation facilities by increasing the share of transit and other alternative modes, decreasing tripmaking, and lowering the overall growth in vehicle miles of travel, particularly for single occupant vehicle (SOV) trips. TDM strategies in northeastern Illinois are voluntary in nature and require the coordinated efforts of employers, public agencies, and private organizations. Examples include episodic ozone reduction campaigns, vanpool programs, employer-based travel reduction programs, transit incentive programs, rideshare matching services, and carsharing programs.
- *Intelligent Transportation Systems (ITS)* consist of the deployment and use of technologies which improve, manage and share information, integrate transportation services, and provide other transportation system management and operational improvements capable of enhancing

system efficiency and safety. Significant ITS programs and infrastructure have been implemented and/or planned for the region since the adoption of the *2020 RTP*. These expanded and new initiatives are defined in the ITS section of the plan.

TM strategies are often referred to as "Transportation Control Measures" (TCMs). Many TM projects or programs in northeastern Illinois, including some described in this section of the plan, have been identified as TCMs in the State Implementation Plan (SIP) for Illinois.

Status and Needs of the 11 TM Strategies in the 2020 RTP

The 1997 version of the *2020 RTP* identified and emphasized eleven specific TM strategies for continued implementation, study and possible development by 2020. These eleven strategies were developed based on proposals submitted through the call for proposals phase of the *Destination 2020* process, proposals previously submitted to the Transportation Control Measures (TCM) Development Task Force, and review by the RTP Committee.

The *2020 RTP* recommends that the eleven TM strategies contained in the 1997 version of the plan be continued with the following enhancements:

- Expansion of the scope of ITS strategies to include new and potential future projects and technologies, such as the expansion of strategy 11 to include all automated payment systems and strategy 8 to include all transit operations and monitoring programs.
- Increased business involvement in the development and promotion of alternative travel modes, particularly for strategies 2, 3, 4, 5, 7 and 11.
- Increased municipal involvement in the development of facilities supporting alternative mode use, particularly for strategies 4, 5 and 6.
- Development of new employer incentives for alternative mode promotions, such as state tax credits for employer-provided alternative mode support or the use of reductions in employee SOV commuting as credits in a statewide emissions trading program, particularly for strategies 2,3,4, 5, 6, 7 and 11.
- Increased recognition of the interdependent nature of TM strategies and the need for coordinated development of physical improvements with programs and incentives encouraging alternative mode use.

Priority TM Strategies for Northeastern Illinois

Each strategy description and level of implementation for the eleven TM strategies follow.

1. Traffic Signal Coordination and Transit Signal Priority. Traffic signal interconnects contribute to reduced congestion, improved system efficiency and improved air quality due to increased speeds and reduced vehicle idling. Transit signal priority systems contribute to increased transit ridership and decreased operating costs through improved reliability and increased speeds. The plan gives high priority for signal timing programs and centralized signal control systems in central business districts and suburban activity centers. It also strongly supports the consideration of signal interconnects and timing programs, as well as transit signal priority systems, to enhance future operations of existing and new facilities.

Recommendations: Give priority to signal interconnects and transit signal priority as a component of every arterial rehabilitation, reconstruction, and capacity addition program, as recommended in the ITS component of the plan.

2. Rideshare Development. As suburb-to-suburb travel continues to grow, alternative suburban travel modes (primarily carpooling, vanpooling, and bus transit) become increasingly important. The plan recognizes that incentives, regional campaigns, private sector involvement, and priority facilities for high occupancy vehicles (HOVs) support increased participation in suburban carpooling, vanpooling and bus transit. Further, coordination among alternative transportation mode agencies (carpool, vanpool, and transit), the private sector, and local communities is necessary to effectively develop increased ridesharing in northeastern Illinois.
Recommendation: The CATS Rideshare Services program should coordinate with partner agencies to develop effective methods to increase private sector participation in voluntary rideshare programs for bus transit, vanpooling and carpooling.

3. Expanded Vanpool Programs. The Pace VIP and private vanpool programs continue to grow. Vanpools provide a viable transportation alternative to SOV commuting, particularly in low-density suburban markets where traditional transit is inefficient. Opportunities to increase vanpool use are expected from continued
suburban development, increases in re verse commuting and special initiatives associated with welfare reform. The plan recognizes that private sector participation in vanpool promotion, financial incentives for vanpool riders and employers who promote vanpooling, and priority facilities HOVs reduce SOV travel through vanpool market development.
Recommendation: Expand carpool programs and supporting incentives and facilities to meet current needs and to serve future demands.

4. Improvements to the Bicycle and Pedestrian Environment. The plan includes bicycle and pedestrian modes as a major plan component. The bicycle and pedestrian component 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: Coordinate transportation investments to encourage and increase bicycle and pedestrian mode share, particularly in areas with high congestion.

5. Parking Management. The plan encourages local 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 plan supports development of a regional study of parking management techniques which includes: development of educational, informational and promotional materials; distribution of materials to municipalities and companies; and provision of technical support to encourage priority parking, parking space reduction and parking demand-reduction programs. Materials would include examples of successful programs' analyses of the cost-effectiveness of such programs, and development of an HOV parking model ordinance.

Recommendation: CATS, in coordination with other agencies and local governments, should develop technical assistance materials for distribution to municipalities and other interested parties that will promote effective parking space reduction programs.

6. Regional Park-n-Ride Network. Northeastern Illinois has a large network of park-n-ride lots at rail stations primarily serving the Chicago central business district (CBD) travel market. A network of park-n-ride lots for the non-CBD travel market by bus transit, carpools, and vanpools is developing slowly, but requires increased support. There are currently thirteen Pace-operated park-n-ride lots for suburban bus transit riders and one IDOT-operated park-n-ride lot for carpools and vanpools in the region. Development of park-n-ride lots in conjunction with priority HOV facilities at expressway entrance ramps are currently being examined at the subregional level as part of the Priority HOV Metered Ramp Bypass Lanes study (see Strategy 7). In addition, development of a means to encourage municipal involvement in park-n-ride lot development should be explored. The plan supports the coordinated development of a network of park-n-ride lots for suburb-to-suburb and reverse commute travel markets by bus transit, rail station feeder buses, vanpools, and carpools and encourages the integration of these facilities into the plans of large capital roadway projects.
Recommendation: Continue to develop a regional park-n-ride network for CBD-oriented rail transit service, and initiate a study to evaluate demand, determine locations, and investigate operational policies for a regional park-n-ride lot system serving suburb-to-suburb and reverse commute travel for bus, rail station feeder bus, vanpool and carpool use.

7. Priority High Occupancy Vehicle (HOV) Metered Ramp By-pass Lanes with Support Programs. As directed by the 1997 version of the 2020 RTP, CATS and a multi-agency working group are conducting a planning evaluation of priority HOV queue by-pass lanes on metered expressway ramps. This combination of TM strategies is being developed at the subregional level and is intended to improve system efficiency and encourage HOV (carpool, vanpool, and bus transit) travel. The working group has reviewed HOV practices around the U.S. and northeastern Illinois, conducted a thorough screening of the region's expressways, identified three subregional areas for further study, and recommended evaluation of these facilities with support programs such as employer outreach programs, park-n-ride lot development, and public information, enforcement, and maintenance plans for each subregional area.
Recommendation: Complete the Priority HOV Metered Ramp By-pass Lanes with Support Programs study.

8. Transit Operations Monitoring and Safety. A variety of information and communication technologies to improve the management and safety of bus and rail transit systems are currently being developed and implemented in northeastern Illinois. These include technologies that provide transit operators greater control over the quality of transit service by sharing information among transit systems and with other transportation systems. Use of these technologies can, for example, ensure smooth, timed transfers between transit vehicles, maintain uniform scheduled service through bus communication with transit signal priority systems, and monitor security on transit facilities and vehicles through communication and surveillance systems. These also include technologies which will provide users with real-time information on transit service and transit facilities through a variety of user-friendly points of access located at transit stations, bus stops, home, work, and other locations, which allows users to make informed travel choices. This

combination of operational improvements and user information will contribute to increased desirability of transit for users and increased transit utilization.
Recommendation: Implement transit operations monitoring and safety systems as recommended in the ITS component of the plan.

9. Advanced Traveler Information and Transportation Management Systems. Advanced Traveler Information and Transportation Management Systems are multi-modal networks of regional and subregional operations centers, known as "hubs", which collect and disseminate transportation information. These hubs are currently being developed at the municipal, county, and regional levels in northeastern Illinois and will be interconnected to allow real-time dissemination of consistent transportation information across jurisdictional boundaries. This information benefits two user groups: (1) transportation agencies and emergency services, which use it to improve the operations of the transportation system, and (2) individual travelers, who use it to determine the most efficient mode, route, and time of day travel choices. The plan supports the continued development of regional and subregional hubs.
Recommendation: Continue the implementation of travel hubs at the municipal, county and regional level, and upgrade hubs that are currently in operation, as recommended in the ITS component of the plan.

10. Automated Payment Systems. Electronic fare and toll collection systems are designed to simplify use of transit and tollway systems. These collection methodologies save time for system users and improve the efficiency of revenue collection for operating agencies. The plan supports regionally integrated fare payment systems that make effective use of available fare technologies and offer seamless service to system users. Examples of integrated fare payment systems include the current use of CTA fare cards on Pace buses and in-vehicle transponders on the Illinois State Toll Highway and the Toll Road. Integration of fare and toll collection strategies could also be expanded to cover both transit and roadway facilities using a single system.
Recommendation: Implement automated payment systems, as recommended in the ITS component of the plan, and evaluate the potential for integration of fare/toll collection strategies.

11. Direct Alternative Mode Incentives. The 1998 TEA-21 revisions to the Internal Revenue Code allow employers to provide tax incentives to their employees who choose to use alternative modes of travel to work. As a result, participation in the RTA/CTA Transit Benefit Program has increased significantly. Development of the CTA U-PASS transit incentive program for university and college students has also resulted in significant increases in student ridership. The plan further supports investigation of state legislation for tax credits for employer-provided alternative mode transportation subsidies.
Recommendation: Increase participation in existing transit incentive programs and investigate state tax credits for employer-provided transportation subsidies for transit and other alternative modes.

Emerging Trends in the Development of TM Strategies

During the development of the 2000 version of the *2020 RTP*, the TCM Development Task Force reviewed and documented the use of TM strategies in other U.S. metropolitan areas. The task force found that northeastern Illinois has a comparable variety of TM strategies to other

metropolitan areas, but that other regions have begun to develop more coordinated approaches to the development and implementation of TM strategies, at both the local and regional levels.

In northeastern Illinois, there are several efforts currently underway for the coordinated evaluation, development and implementation of TM strategies at both regional and subregional levels:

- *Coordination of ITS Strategies.* Coordination of technology-related TM strategies includes the Gary-Chicago-Milwaukee Priority Corridor, the Strategic Early Deployment Plan for ITS, and multiple efforts by the RTA to coordinate emerging transit technologies.
- *Priority HOV Metered Ramp Bypass Lanes with Support Facilities.* The interagency working group advising CATS on the planning evaluation of priority high occupancy vehicle (HOV) queue bypass lanes on metered expressway ramps (strategy 7) has directed that these facilities be evaluated with support programs such as employer outreach, park-n-ride lot development, and public information and outreach for each study corridor.
- *Integration of TM Strategies into Capital Investment Projects.* The Congestion Management System (CMS) for northeastern Illinois provides for the evaluation of TM strategies as part of federally-funded highway add lanes projects through the preparation of a Travel Demand Reduction (TDR) study in project Phase 1 engineering. IDOT District 1 and Metra also implement TM strategies on a project-by-project basis as part of their capital projects, and both Metra and the RTA encourage municipalities to plan for transit-oriented development around rail stations.
- *Alternative Mode Marketing and Outreach.* Initial efforts at coordination of alternative mode marketing and outreach by various service providers include: the Partners for Clean Air and CATS Rideshare Services' joint mass media campaign; the joint employer outreach efforts conducted by CATS Rideshare Services and Pace at employers with identified transit, vanpool and carpool markets; the RTA marketing program for the region's transit systems; and joint radio media purchases by CATS Rideshare Services, the Illinois Environmental Protection Agency (IEPA) and the RTA.

New Initiative: Regional TM Framework

The 2020 RTP recommends the investigation of a regional framework for the coordinated development and implementation of TM strategies. This investigation should take place in advance of the development of the 2030 Regional Transportation Plan for northeastern Illinois and include two major components:

1. **Investigation Area I: Location-Based TM Strategy Development & Implementation.** Building upon existing transportation agencies' actions to integrate TM strategies into capital projects, this investigation should include the initial selection of a study corridor(s) or regional sub-area(s) where appropriate combinations of TM strategies and capital improvements can be evaluated to determine the effect of their implementation on travel demand and system operations. Four resulting products are recommended: (1) development of information and technical assistance to support local communities in investigating and implementing TM strategies; (2) development of institutional procedures for evaluating a combination of TM strategies during the planning and engineering phases for the broad range of capital transportation projects undertaken in northeastern Illinois;

(3) identification of financial means for implementing a combination of TM strategies on a corridor or sub-area level; and (4) completion of a pilot study which applies the first three components to a particular sub-area or corridor.

2. **Investigation Area II: Coordinated Promotion of Alternatives to SOV Travel.** Coordinated promotion of a variety of travel alternates to the single occupancy vehicle (SOV) should be continued and fostered. These alternates include rail transit, bus transit, subscription bus service, vanpool, carpool, bicycle and pedestrian modes, as well as alternative work arrangements such as telecommuting and alternate work hours. The investigation should evaluate major coordination efforts promoting a variety of alternates to SOV travel now being implemented in other regions, including: multi-agency employer outreach; mass media campaigns; travel information sources; and alternative mode incentive programs.

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. In addition, the transit system has 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.

While the growth of the entire Chicago region is vital to our economic well being, resulting congestion has meant increased delays for individuals and costly losses in productivity for business.

In November 1999, the CATS Policy Committee approved the operational procedures and status of its *Congestion Management System for Northeastern Illinois* (CMS). Originally approved in 1997, the CMS is defined by federal regulation as a process interfaced with the *Transportation Improvement Program (TIP) and 2020 Regional Transportation Plan (RTP)* explaining how congestion is addressed in the planning and programming process. The CMS specifically includes,

- An assessment of current congestion
- Strategies or projects that may be implemented to preclude or delay the need for new or expanded highway capacity projects
- Strategies or projects that may be implemented to enhance and extend the effective life of new or expanded highway capacity projects; and
- Measures, criteria or a process used evaluate congestion management efforts

The *1999 CMS Status Report* discusses how these activities fit into the CATS planning and programming process and provides a detailed statistical assessment of current and forecast congestion conditions in northeastern Illinois.

The CATS Policy Committee delegates the responsibility of the CMS process to the Work Program Committee's Congestion Management System (CMS) Task Force. As occurred in 1999, the CMS Task Force is periodically called upon to review and affirm the CMS' intent and operation. The task force utilizes ongoing plan and program development activities to fulfill the CMS monitoring activity. Indeed, the centerpiece of the CMS for northeastern Illinois is the way in which information flows between the region's transportation project implementers and the CATS planning and programming process.

The *1997 CMS Plan* establishes that regular transportation planning and programming activities examine and dispose of alternatives in a systematic and objective (i.e. goal-driven) fashion. Because project circumstances vary and planning resources are arranged in different ways, the analysis methods and approaches are not often the same, nor do the results lend themselves to uniform comparison across the board. Closely examining the effectiveness of any analysis requires focusing on a particular program (e.g. STP) or project situation (e.g. an SRA study). While this complicates one's ability to compare the relative merits of disparate project proposals, the northeastern Illinois CMS proceeds toward this goal in a manner integral to the cooperative, comprehensive and continuing transportation planning process. The ways in which this is accomplished are elaborated in the *1999 CMS Status Report*.

Transportation improvements should be considered at a variety of levels or "plateaus". Within each of these plateaus, improvements may be considered in the context of system monitoring and effectiveness evaluation or strategy consideration and project selection.

- At the highest level plateau, improvements are considered in terms of a land use / transportation analysis (system monitoring and effectiveness evaluation) and Regional Transportation Plan (strategy consideration / project selection).
- The second plateau analyses are developed through the regional transportation exercise conducted for an air quality determination. The results of this analysis provide an integrated and comprehensive evaluation of congestion mitigation efforts in the region.
- Sub-area analyses for a countywide plan produce the results for the third plateau. At this level network and socioeconomic inputs are refined and modified in order to test locally preferred alternatives and to better validate results for use in preparing facility-based forecasts.
- The fourth plateau is characterized by a major project analysis, such as a major investment study, for a large highway or rail project. In this analysis, specific link volumes can be evaluated in order to ascertain the appropriate scale for the improvement. The conclusions drawn from this type of study are integrated with the federal NEPA process.
- At the fifth level, an arterial analysis for a corridor improvement project is performed. Most arterial transportation improvements are initiated in response to specific local performance deficiencies. The success of arterial management strategies such as signal interconnects, access control, parking management and transit improvements relies less on regional travel demand model output and more on a thoroughgoing understanding of how travelers use the corridor.
- The final plateau produces traffic projections for an arterial section improvement. Once a project has reached the design and engineering phase, data resources become available to credibly analyze specific operational improvements.

While elaborate corridor studies are not separately conducted for every project in the TIP, design and engineering work is always based on twenty-year traffic projections developed under RTP and TIP (modeled) assumptions. These projections are typically provided or reviewed by CATS staff and offer the most immediate assessment of forecast congestion conditions and potential strategy effectiveness.

The CMS and RTP project development, evaluation and selection

The eight goals of the *2020 RTP* support the list of recommendations. Highway congestion is cited throughout the plan as the culprit of a variety of transportation and social ills. Congestion management, in whatever form, is generally recognized as a worthy objective.

The *2020 RTP* addresses congestion mitigation via large-scale multi-modal solutions, primarily through highway and transit capital improvements. To evaluate multi-modal alternatives, the RTP Committee established project-screening criteria and handled disposition of major project proposals through ad-hoc working groups. Congestion measures were used both to select which major highway and transit projects to test and also to evaluate regional effects of alternative project mixes.

The *2020 RTP* includes major capital improvements to expand expressway and rail transit facilities. Implementing these projects over the next twenty years will necessarily involve a great deal of project planning and design engineering that, by definition, seek to optimize the efficiency and performance of the new facilities. The *1999 CMS Status Report* outlines the mechanism by which implementation is monitored with regard to meeting congestion objectives.

A full inventory of highway congestion levels may be tabulated from the results of the CATS travel demand models. These models are applied to each *2020 RTP* scenario as part of the air quality conformity determination and provide a comprehensive and consistent measure of expected system performance. The results of the travel demand analysis reside in large data files that can be queried and further analyzed in many ways. The data tables appearing in the appendices for this *2020 RTP*, the *1999 CMS Status Report* and in Appendix A of the conformity analysis documentation provide a regional illustration of the *2020 RTP* and the current *TIP's* contribution to congestion mitigation.

Intelligent Transportation Systems

In the last 25 years a major shift has taken place in the relationship between the supply and demand of transportation facilities. A combination of increasing costs and environmental concerns has reduced the amount of new construction. At the same time, the technological revolution has made information sharing and management strategies more practical and effective. Intelligent Transportation Systems (ITS) is a collective name for the array of technology applications that improve management practices and allow information exchanges. Transportation providers can offer an improved range of services and travelers are empowered to make better and more timely travel decisions. At the same time, safety and efficiency are enhanced through improved information and management of transportation facilities.

Examples of familiar ITS applications in use in the Northeastern Illinois region are:

- I-PASS: this system allows drivers to pay tolls electronically without stopping at the tollbooth;
- IDOT emergency traffic patrol: "Minutemen" tow trucks can be quickly dispatched to clear incidents on the expressways;
- CTA transit card payment system: transit cards allow users to pay fares electronically on both PACE and CTA;
- IDOT Traffic Systems Center: collects information on freeway traffic and makes it available to television and radio for broadcast; and
- RTA provides information on routes, schedules, and fares through the Traveler Information Center.

In the Northeastern Illinois region, many transportation organizations are actively involved in the development and application of ITS, including:

- Illinois Department of Transportation;
- Regional Transportation Authority;
- Chicago Department of Transportation;
- Illinois State Toll Highway Authority;
- Chicago Area Transportation Study; and
- Counties and local governments.

Benefits of Technology

Intelligent transportation systems provide a new way to approach the challenge of planning a safe and efficient travel network. When developed properly, ITS can:

- reduce rush hour congestion and delays;
- eliminate toll plaza delays;
- save lives through faster emergency response times;
- offer travelers choices through more timely information about their travel options; and
- reduce travel times and delays for transit vehicles.

All this can be accomplished while helping to reduce the negative environmental impacts of transportation.

Many potential ITS benefits come from the integration of projects. Integration optimizes the benefits in the same way an office computer network enhances productivity over an isolated personal computer. The whole system will provide significantly more benefit than the sum of the parts.

Regional Vision for Technology

ITS will be used to improve the quality of information available to users of the transportation system. It will also support the management of transportation facilities to improve performance and safety.

This vision for Intelligent Transportation Systems embraces the views of:

- the traveling public;
- transportation service providers;

- transportation agencies;
- business organizations; and
- other community groups.

The vision prioritizes ITS actions, and insures that efforts move toward the goals of the *2020 RTP*.

Framework for ITS

In order to realize the benefits of ITS, it is necessary to coordinate the development of these systems by establishing a framework for implementation. The United States Department of Transportation developed the National ITS Architecture to provide a guide in developing a regional framework. A regional framework called the Gateway Architecture has been developed to coordinate ITS activities in Northeastern Illinois.

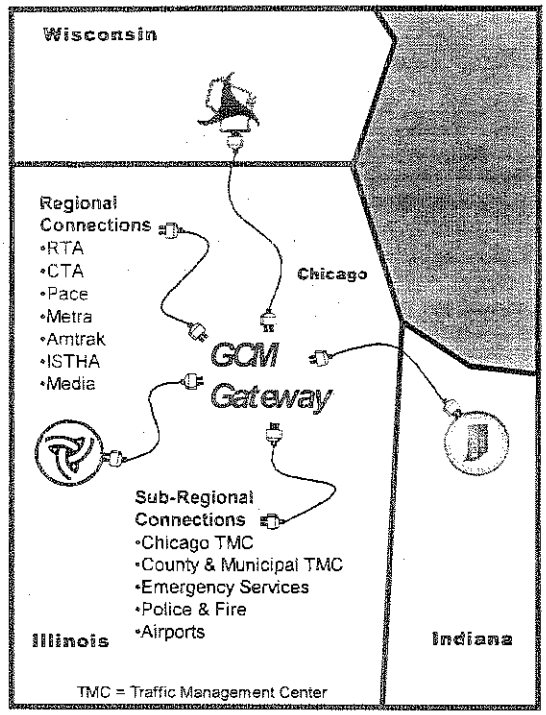
The ITS framework provides a master plan for deployment of ITS technologies and systems. The framework is used to establish communications between systems, which include:

- traffic and transit management centers;
- transit, police and emergency medical vehicles;
- roadside equipment such as traffic signals, traffic detectors, and variable message signs; and
- vehicles, both personal and commercial.

The Federal Highway Administration and the Federal Transit Administration have issued interim guidance on the ITS framework. The intent of the interim guidance is to foster integration and encourage the incorporation of ITS into the transportation planning process. A notice for proposed rule making addressing consistency with the National ITS Framework was issued on May 25, 2000. New projects will need to comply with the regional framework, which is consistent with the National ITS Architecture and Standards. The Strategic Early Deployment Plan (SEDP), approved by the Chicago Area Transportation Study's Policy Committee in June 1999, describes these compliance guidelines.

System integration refers to the process of physically making the hardware and software components of ITS technologies work together. Integration provides consistent, accurate, and reliable information to transportation agencies. ITS components work together to provide for better use of resources and sharing of data across modes and jurisdictions. Figure 5.14 demonstrates a simplified version of how system integration connects Illinois agencies as well as Wisconsin and Indiana. These connections were conceived as part of the Gary-Chicago-Milwaukee Corridor.

Figure 5.14
GARY – CHICAGO – MILWAUKEE GATEWAY



The importance of technical compatibility between ITS applications cannot be overstated. When Federal funds are used for ITS investments, they will be required to be consistent with the National ITS Architecture.

ITS Planned Projects

The approved ITS Deployment Action Plan (summarized in FIGURE 5.15) is the culmination of a two-year cooperative effort among regional transportation agencies and the public. The projects listed in the plan reflect a wide range of technologies and integration levels.

This listing of projects was completed in May of 1999. New ITS projects have been planned since that date.

FIGURE 5.15
ITS DEPLOYMENT ACTION PLAN PROJECTS

INFRASTRUCTURE		
Improvement	*Agency*	*Description*
Install Fiber Optic Communication Lines	IDOT	Install Fiber: I-290E to Loop I-290W to I-294, I-90
	ISTHA	Complete Fiber Network
	CTA	Install Fiber: Red Line (Loop to Howard) Brown Line Blue Line
	CDOT	Install data pipeline from CDOT to IDOT
Closed Circuit Television Surveillance	*IDOT*	Install surveillance: Circle interchange area I-55 I-290W to I-294 I-90
	ISTHA	Continued installation at key locations
	Lake County	Demonstrations at key locations, and future deployment
Variable Message Sign Deployment	IDOT	Deployment of additional locations
	ISTHA	Deployment of 22 initial locations
Parking Management Systems	RTA	Electronic system design, prototype, and deployment
Intelligent Transit Vehicles and Systems	CTA	Equip 1,473 buses with Mobile Data Terminals and Global Positioning Systems Equip 264 buses with Bus Service Management System Future deployment to entire fleet
	Pace	Design and implement Intelligent Bus System
Paratransit Management System	Pace	Design and implementation of electronic systems
OPERATIONS CENTERS		
Improvement	*Agency*	*Description*
Gateway Traveler Information System	IDOT	Integration- provide electronic connections to: Illinois Agencies Wisconsin Indiana Counties and Municipalities Emergency Services Airports, etc.
Development of Transit Hub	RTA	Feasibility study and conceptual design; future integration
Development of Traffic Management Centers	ISTHA	Continued expansion of ISTHA Center
	CDOT	Design of CDOT center, with future integration
	Lake County	Feasibility/concept study and implementation
	DuPage area	Feasibility/concept study and implementation

MULTIPLE AGENCY PROJECTS	
Improvement	*Description*
Expansion of Cicero Smart Corridor	Using a variety of ITS solutions to tackle multiple transportation issues from the Edens to Chicago City limits
Interagency Signal Coordination	Pilot deployment in two corridors
Integrated Corridors	Pilot evaluation and deployment
Advance Transit Signaling	Pilot deployment of 10 signals
Transit Signal Priority	RTA Regional Transit Signal Priority Integration Plan Inventory Location analysis Simulation technology analysis and implementation
	CTA Transit Signal Priority Deploy at 200 signals Future deployment of 800 signals
Arterial Incident Management *(Cook County)*	Engineering analysis and construction along Lake-Cook Road

INFORMATION MANAGEMENT		
Improvement	*Agency*	*Description*
Regional Kiosk	RTA	Design, study, and pilot deployment
Active Transit Station Signing	RTA	Short Term Plan Design, develop, and test prototype Limited implementation with future expansion
	CTA	Deploy 1000 active signs
Travel Information Archive	N/A	Develop requirements Basic implementation and modeling support

The individual projects in the ITS component of the *2020 RTP* may not have regional significance; as a grouping, however, the ITS component is regionally significant.

The Northeastern Illinois region's *Transportation Improvement Program (TIP)* includes many of the projects listed in Figure 5.15. In many cases ITS efforts are nested into a larger project. Some of the ITS efforts in the current TIP include:

- Signal Interconnects;
- Fiber Installation;
- Highway Video Surveillance;
- Variable Message Signs;
- Traffic Management Centers;
- Transportation Kiosks;
- Bus Service Management Systems;
- Parking Management Systems;
- Active Transit Station Signs; and
- Automated Vehicle Location Systems

Many ITS projects are exempt from regional analysis for air quality conformity. ITS efforts will be reviewed on a project-by-project basis to determine the appropriate conformity analysis.

Timeframes and Funding

A vision for ITS has been crafted, and a plan for achieving that vision has been mapped out. The plan timeframe categorizes projects into short, medium and long-term efforts over ten years. These projects are further documented in the *SEDP*.

The cost of the efforts summarized in the *SEDP* for ITS is approximately $136 million. The *2020 RTP* projects that approximately $80 million should be available for ITS. Funding of all projects is needed to insure that advanced technologies and ITS will be used effectively in the future.

High Speed Rail

Nine states in the Midwest--Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Nebraska and Wisconsin--have proposed a 12-corridor, 3,000-mile route system, contained within the Midwest Regional Rail System (MWRRS). This system would radiate from Chicago, with service to Milwaukee-Madison-Minneapolis/St. Paul; Omaha; St. Louis; Kansas City; Carbondale; Cincinnati; Cleveland; and Detroit. The Federal Railroad Administration (FRA) has designated several of these routes as high-speed rail corridors. Trains will operate at speeds up to 110 miles per hour. With Chicago as the hub of this system, downtown-to-downtown connectivity between major urban centers will be a major transportation asset to the city of Chicago and the greater metropolitan area.

Studies by the MWRRS partners suggest that reduced travel times, increased frequency and reliability of service, quality of service, and inter-modal connectivity are key to revitalizing passenger rail service in the Midwest. Attributes inherent to high-speed rail are expected to attract a broad ridership base. With full implementation of the system, the MWRRS is forecast to attract approximately 9.6 million passengers annually. This level of ridership is estimated to be four times greater than the current passenger train volume.

Vehicular travel times within the northeastern Illinois have increased dramatically in recent years due to congestion. It is a goal of the MWRRS to provide an alternative travel choice for those currently traveling by automobile from Chicago to cities such as St. Louis, Carbondale and Milwaukee. The system's downtown connectivity should make passenger rail service an attractive alternative for both the business and leisure traveler.

The regional economy is experiencing significant growth. Sustained economic growth is dependent upon the availability and reliability of transportation facilities in the region. Mobility for both passengers and freight is key to sustaining Chicago's economic vitality, economic growth, and quality of life in the 21st Century. The MWRRS is expected to act as another catalyst supporting the economic vitality of northeastern Illinois.

Nearly $201 million has been committed or spent on high-speed rail development in Illinois. The Chicago-St. Louis corridor is the highest priority in the state and so Illinois FIRST will provide $70 million for improvements in this corridor. In addition, $55 million in federal funds, $42

million in private funds and an additional $34 million in state funds comprise the funds committed to date. Improvements in this corridor include testing a train control program, upgrading of track, a pedestrian and grade crossing safety program and the purchase of new trainsets. To complete the upgrade of this corridor, IDOT estimates that an additional $150 million will be needed.

The potential impacts on downtown Chicago such as terminal location and coordination with freight operations and Metra services support the inclusion of the high-speed rail initiative in the *2020 RTP*. The impacts on the surface transportation system must be incorporated into the planning process. CATS will continue to monitor the progress of the MWRRS and evaluate its impacts on the regional transportation system as each element of the system moves to implementation.

Transit Accessibility Through Universal Design

Universal Design is a term applied to developed or improved areas such as: buildings, housing, paths, parks and parking lots; services such as: transportation, community programs, opportunities; vehicles such as buses, taxis, trains, boats, vans and cars; and access to information which is available to senior citizens and persons with disabilities as well as the nondisabled. Pedestrian issues of universal design are included in the bicycle and pedestrian component of the *2020 RTP*. The coordination of transit services for people with disabilities and seniors is included in this component.

One of the *2020 RTP* objectives is to "Promote the development of a transportation system that improves travel opportunities for people with disabilities." Transportation planning should consider the needs of persons with disabilities and senior citizens for a variety of reasons:

- It is estimated that there are approximately 54,000,000 Americans with disabilities, twenty percent of the total population.
- This is the largest and fastest growing sector of the population.
- National reports suggest that the growing senior population, many of whom also have disabling conditions, is currently fourteen percent, but is predicted to reach twenty percent by 2030.
- Those two populations combined could equal thirty to thirty-five percent of the population by the year 2030.
- Temporally disabled individuals, parents with strollers, people who have difficulty with stairs, and narrow passageways will maneuver more freely in universally designed environments.

Recognizing the uniqueness of disability needs, CATS established the Transportation Task Force for People with Disabilities to get a needed perspective on transportation issues. The task force is in the process of gathering information for a transportation resource guide for persons with disabilities. The RTA, CTA, Metra, and Pace have ADA Advisory Councils that meet on a regular basis. At these meetings, challenges with service delivery and suggestions for improved service are discussed. The groups have worked on future service plans and have assisted in fixed route service equipment decisions. CTA, Metra and Pace are working to meet standards for accessibility, safety, and weather protection at public transit stops and wait stations. Awareness efforts will be initiated to encourage municipalities to upgrade and maintain stops. All transit modes are in the process of replacing inaccessible vehicles with accessible ones. Metra reports

92% of their key stations, identified as required by ADA, are accessible. The CTA has 41 of its 43 key stations accessible. Pace plans that all bus routes will be accessible by the end of 2002. CTA currently has 862 of its 1873 buses lift-equipped. Four hundred fifty buses are on order and will start delivery to the CTA in August 2000. Full compliance is expected, by the CTA by the end of 2002.

Efforts will continue to subsidize private, accessible taxi service for persons with disabilities. This helps fill in gaps in mainline and paratransit service. CTA and the city of Chicago have an initiative to expand the Chicago Taxi Access Program (TAP). TAP currently has eight participating taxi companies, with another eight operating a limited number of vehicles. Five of these companies have accessible vehicles.

Under the Americans with Disabilities Act mainline transportation providers (commuter rail excepted) must provide a complementary ADA paratransit service for persons with disabilities who cannot use mainline service and who are within three quarters of a mile of the mainline service. The RTA has developed new ADA certification criteria for paratransit service. Five interview and assessment sites are scattered throughout the region. They are located in Naperville, Homewood, Libertyville, and two sites in the city of Chicago. Travel training to teach persons with disabilities how to use the transit system is conducted by several entities. This program should be expanded to include and encourage seniors to use mainline transit. The CTA hosts new customer training and the Transit Ambassadors Program for personnel. Pace conducts disability awareness training for personnel.

While the traditional transit providers are moving to meet ADA requirements and provide access to their systems, there are areas in the region that do not have transit options. The South Suburban Chicago Mass Transit District (SSCMTD) and the Illinois Department of Transportation (IDOT) sponsored studies in the south suburbs that showed duplication, fragmentation and gaps in paratransit service. A study in DuPage County produced similar findings. The CTA and the city of Chicago are conducting a study to identify and remedy gaps in transportation services for seniors and people with disabilities.

The *2020 RTP* recognizes the need to further evaluate the transportation needs of seniors and people with disabilities. The plan recommends that CATS undertake planning efforts in cooperation with transit providers, human service agencies and others to investigate initiatives in providing service for senior citizens and persons with disabilities. The coordination efforts started in South Cook and DuPage counties can serve as models of communities working together to provide local solutions.

The *2020 RTP* recommends that CATS staff, in cooperation with the Transportation Task Force for People with Disabilities and transit providers, examine the transportation needs of seniors and people with disabilities and develop recommendations for improvements in service delivery, coverage and information dissemination. The *2020 RTP* supports these efforts and recommends the integration of universal design concerns into the *2030 RTP* planning process.

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.

In the interim between the *Destination 2020* process ending in 1997 and the *2000 Edition of the 2020 RTP*, the modeling process has continued to evolve. While model structures have not changed, the methods of generating input information have. Inevitably, the differences in inputs cause changes in the model results. This is to be expected, and the differences represent an improved quality of analysis. In addition as stated in Chapter 3, the socioeconomic forecast was updated and the base year is 1999 instead of 1996-three years closer to the horizon year. The change in base year generally results in a lower percentage change between the base year and 2020 than shown in the 1997 edition. Changes will be noticed for both project and regional evaluation measures. Footnotes to the tables in this chapter note where additional methodological changes occur. Finally, during the update, several calculation errors in the 1997 edition were corrected.

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 files were updated for the *2020 RTP* in June 2000. The 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, how they were originally developed, and how they were updated.

Transportation Networks - The foundation for the network performance evaluation was provided by the existing (1999) transportation network, referred to as the no-build network. This represents roadway and transit facilities as they exist in 1999, as well as 2020 if no new capacity is added. The *2020 RTP* network represents the regional transportation network after implementation of the plan, and is the same network used as input to the air quality conformity analysis. 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. For a discussion of conformity transportation network development, please refer to *Appendix A, Supplementary Tables for the Conformity Process in Northeastern Illinois*, published in August 2000.

Model Methodology - The data presented in the following sections were extracted from the air quality conformity runs for the *2020 RTP* and *FY 01-06 Transportation Improvement Program*. Because the air quality conformity analysis no longer requires running a no-build scenario, the no-build scenario was developed and run only for the *2020 RTP* analysis. 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 August 2000.

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.

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 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.

FIGURE 6.1
NETWORK EVALUATION MEASURES

Measurement	RTP Goal Addressed
Vehicle Miles of Travel 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	System Efficiency and Economic
Total VMT and Total Transit PMT	Environmental
% of Households Within 1 Hour of 50% of All Jobs by Auto or Transit	Social and Economic
% of All Households Located Within Zones with Less Than the Regional Average Income That Are Within 50% 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
Daily Fuel Consumption	Environmental and Efficiency

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 (Transit) on Facility	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
	Number of Households and Jobs in Corridor	NIPC	Social/Economic
	Jobs per Household	NIPC	Social/Economic
	% of Project Within Sewer Service Area	NIPC	Transportation and Land Development
	% 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

FIGURE 6.3
SUPPLEMENTAL PROJECT MEASURES

Resource Stewardship Objective Measures
Are there Greenways within 1 mile, 2 miles, and/or intersecting the project area.
Acres of Designated Agricultural Protection Areas (as defined by NIPC *Strategic Plan for Land Resource Management)* within 1 mile and 2 miles of the project area.
Acres of Water Resources-floodplains, wetlands, lakes, and streams within 1 and 2 miles of the project area.
Acres of Natural Areas from Illinois Natural Areas Inventory (1994) and Nature Preserves (1994) within 1 mile and 2 miles of the project area.
Acres of Recreational Areas (Forest Preserves, Parks) within 1 and 2 miles of the project area.
Registered Historic and Cultural Sites within 1 mile or 2 miles of the project area.

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 projected to result in some notable impacts, measured by comparing the 2020 build and the 2020 base scenarios, including:

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

Socioeconomic File	1999	2020 EAI/Base	2020 EAI/RTP
Transportation Networks	1999	1999	1999 + Committed + RTP
Total Network VMT (000's)	182,256	217,424	229,833
VMT on Congested Links (000's)	40,656	58,902	57,238
Percent VMT on Congested Links	22%	27%	25%
Increased Auto Vehicle Hours of Delay (000's hours)	N/A	1,445	411
VMT Exceeding Level of Service "D" (000's)	25,008	32,678	32,088
Total Transit PMT (000"s)	21,302	27,632	29,042
Total Auto Person Trips (000's)	20,901	24,928	24,962
Total Transit Person Trips (000's)	2,143	2,509	2,654
Percent of households within One Hour of 2.03 Million Jobs by(1)			
Auto	86%	68%	87%
Transit	46%	53%	68%
Percent of Low Income Households within One Hour of 2.03 Million Jobs by Public Transportation	61%	64%	81%
Total Time Spent Traveling (000's of hours)			
Commercial Vehicles	934	1,275	1,074
Total Vehicles	5,561	7,678	6,979
Transit Riders	1,114	1,346	1,381
Total Person User Cost (1995 $000's)	24,775	29,471	31,186
Highway Fuel Consumption (000's of gallons)	9,382	11,672	12,000

(1) 2.03 million jobs represent ½ of the 1996 total employment.

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

Socioeconomic File	1999	2020 SSA/Base	2020 SSA/RTP
Transportation Networks	1999	1999	1999 + Committed + RTP
Total Network VMT (000's)	182,256	221,783	231,546
VMT on Congested Links (000's)	40,656	59,799	55,924
Percent VMT on Congested Links	22%	27%	24%
Increased Auto Vehicle Hours of Delay (000's hours)	N/A	1,083	453
VMT Exceeding Level of Service "D" (000's)	25,008	33,155	32,387
Total Transit PMT (000's)	21,302	26,897	29,349
Total Auto Person Trips (000's)	20,901	25,115	25,080
Total Transit Person Trips (000's)	2,143	2,419	2,629
Percent of households within One Hour of 2.03 Million Jobs by(1)			
Auto	86%	76%	86%
Transit	46%	52%	67%
Percent of Low Income Households within One Hour of 2.03 Million Jobs by Public Transportation	61%	62%	81%
Total Time Spent Traveling (000's of hours)			
Commercial Vehicles	934	1,219	1,077
Total Vehicles	5,561	7,417	7,023
Transit Riders	1,114	1,295	1,375
Total Person User Cost (1995 $000's)	24,775	29,700	31,224
Highway Fuel Consumption (000's of gallons)	9,382	11,700	11,937

(1) 2.03 million jobs represents ½ of the 1996 total employment.

Due to increased accessibility, a four to six percent increase in network VMT is estimated with the implementation of the *2020 RTP*; at the same time a two percent decrease in vehicle miles of travel exceeding level of service "D" is estimated;

- Total auto person trips remain the same, and transit trips increase by six to nine percent;
- Despite an increase in network VMT with the *2020 RTP*, the region realizes a five to nine percent decline in total vehicle hours of travel; and
- Implementation of the *2020 RTP* results in a higher level of auto accessibility to employment than the base case.

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 1.5 million vehicle equivalents, traveling a total of approximately 9 million vehicle equivalent miles;
- Highway capital cost efficiencies range from $50 to $630 per vehicle equivalent mile, with an average cost of $1,900 per vehicle equivalent served; and
- New *2020 RTP* transit facilities are expected to provide service to 210,000 – 225,000 riders traveling 1.5 to 1.7 million miles daily.

FIGURE 6.6

HIGHWAY PROJECT EVALUATION RESULTS

Project Description and Capital Cost in $000's	Entering Volume (000's daily Veq's)(1)	Capital Cost/VEQ ($/Veq)	VMT (000's Daily Veq)	Capital Cost/VMT ($/VMT)	*2020 RTP* Forecasts
New Interchange, I-294 at I-57	29	2,423	N/A		EAI
$70,000	33	2,118	N/A		SSA
I-57 Add Lanes I-80 to West Airport Access Road	61	554	443	77	EAI
$34,000	79	433	646	53	SSA
I-55 Add Lanes, Naperville Rd to I-80	72	682	613	80	EAI
$49,000	71	689	590	83	SSA
I-80 Add Lanes, US 45 to I-55	78	1,132	606	145	EAI
$88,000	82	1,077	646	136	SSA
I-94 (Tri-State Tollway) Add Lanes, IL 22 to IL 60	47	633	146	205	EAI
$30,000	48	625	148	202	SSA
I-90 (Northwest Tollway) Add Lanes Randall Road to IL 25	44	915	143	280	EAI
$40,000	44	899	146	275	SSA
IL 394 (Calumet Expwy) Add Lanes, I-80 to Sauk Trail	45	538	190	126	EAI
$24,000	49	486	211	114	SSA
I-88 (E-W Tollway) Add Lanes, IL 31 to I-290	102	2,454	817	306	EAI
$250,000	101	2,472	817	306	SSA
I-294 Add Lanes, IL394 to 95th Street	82	2,195	747	241	EAI
$180,000	82	2,206	727	248	SSA
I-80 Add Lanes, I-94/IL 394 to Indiana Border	68	1,329	175	515	EAI
$90,000	68	1,319	176	511	SSA
IL 53 Extension, Lake-Cook Rd to IL 120 and I-94	243	2,802	2,336	292	EAI
$681,000$	240	2,838	2,300	296	SSA
Elgin-O'Hare Expwy Extension, Hanover Park to Streamwood	89	696	148	419	EAI
$62,000	88	701	147	422	SSA
I-90 (Northwest Tollway) Add Lanes, Roselle Road to I-294	87	1,502	492	264	EAI
$130,000	83	1,561	478	272	SSA
O'Hare Bypass to Elgin-O'Hare Expwy and I-90, with Access to Airport	378	2,303	1,673	520	EAI
$870,000	352	2,472	1,577	552	SSA
I-290 HOV Lane(2)	72	3,400	392	622	EAI
$244,000	71	3,443	388	630	SSA

(1)Destination 2020 (1997) volumes resulted from a daily assignment. These results are calculated from an improved (time-of-day) procedure. (2)Increased traffic volume resulting from additional capacity.

FIGURE 6.7
TRANSIT PROJECT EVALUATION RESULTS

Project Description and Capital Cost in $000's	Boardings	Capital Cost/Boarding ($/Boarding)	Passenger Miles Traveled (PMT)	Capital Cost/PMT ($/PMT)	*2020 RTP* Forecast
South Suburban Commuter Rail Corridor, LaSalle St. Station to Beecher	21,900	9,856	509,700	424	EAI
$216,000	15,800	13,685	341,400	633	SSA
North Central Service Enhancement, Antioch to Union Station (1)	13,400	18,955	226,100	1,123	EAI
$254,000	13,300	19,098	224,400	1,132	SSA
Mid-City Transitway, O'Hare Blue Line/Jefferson Park Station to Dan Ryan Red Line/87th Street (2)	93,900	10,600	432,700	2,300	EAI
$1,00,0000	89,700	11,100	409,000	2,400	SSA
Dan Ryan Red Line Extension (3)	36,100	7,808	205,900	1,370	EAI
$282,000	33,700	8,369	192,000	1,468	SSA
Midway Orange Line Extension (3)	26,300	6,319	55,200	3,009	EAI
$166,000	25,200	6,591	52,900	3,139	SSA
Outer Circumferential Commuter Rail Corridor, (EJ&E) –Core Segment	12,100	21,094	104,000	2,451	EAI
$255,000	12,600	20,206	107,500	2,371	SSA
Central Kane Extension UP-W Line to Elburn (1)(2)	3,900	20,000	31,200	2,500	EAI
$78,000	4,300	18,100	34,400	2,268	SSA
Southwest Extension, SouthWest Service to Manhattan (1)	17,800	12,022	168,600	1,269	EAI
$214,000	18,800	11,383	156,700	1,366	SSA

(1) Data based on Metra Major Investment Studies completed in 1999.
(2) Boardings are calculated from corridor transit demand.
(3) Extension ridership includes boardings and alightings.

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

FIGURE 6.8

HIGHWAY PROJECT LAND USE EVALUATION RESULTS

Project Land Use (within 2 miles) Measures - Highway Corridors									
Project	1996 Consistency	1995 Sewer Service	1990 Available Land (acres)	1990 Low Income Hhold	1990 Moderate Income Hholds	Socioeconomic Information			
						Households	Employment	Employment/ 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	18,000	3.00	1990
						10,000	42,000	4.20	EAI
						9,000	34,000	3.78	SSA
I-90 (Northwest Tollway) Add Lanes, Randall Road to IL 25	N/A	100%	3,000	17%	33%	19,000	30,000	1.58	1990
						28,000	48,000	1.71	EAI
						27,000	47,000	1.74	SSA
I-88 (E-W Tollway) Add Lanes, IL 31 to I-290	N/A	90%	13,000	13%	26%	103,000	261,000	2.53	1990
						128,000	392,000	3.06	EAI
						128,000	390,000	3.05	SSA
I-55 Add Lanes, Naperville Rd. to I-80	N/A	100%	30,000	12%	23%	20,000	17,000	0.85	1990
						53,000	49,000	0.92	EAI
						57,000	49,000	0.86	SSA
Elgin-O'Hare Expwy Extension, Hanover Park to Streamwood	N/A	99%	4,000	7%	18%	24,000	14,000	0.58	1990
						35,000	43,000	1.23	EAI
						35,000	41,000	1.17	SSA
I-80 Add Lanes, US 45 to I-55	N/A	99%	30,000	24%	39%	43,000	47,000	1.09	1990
						69,000	83,000	1.20	EAI
						71,000	89,000	1.25	SSA
I-80 Add Lanes, I-94/IL 394 to Indiana Border	N/A	100%	1,000	18%	35%	22,000	28,000	1.27	1990
						53,000	71,000	1.34	EAI
						54,000	74,000	1.37	SSA
IL 394 (Calumet Expwy) Add Lanes, I-80 to Sauk Trail	N/A	100%	8,000	19%	34%	26,000	39,000	1.50	1990
						32,000	56,000	1.75	EAI
						33,000	62,000	1.88	SSA
I-57 Add Lanes, I-80 to West Airport Access Road	N/A	70%	24,000	11%	26%	22,000	27,000	1.23	1990
						38,000	63,000	1.66	EAI
						46,000	105,000	2.28	SSA
IL 53 Extension, Lake-Cook Rd. to IL 120 and I-94	N/A	100%	30,000	11%	24%	47,000	65,000	1.38	1990
						92,000	120,000	1.30	EAI
						90,000	108,000	1.20	SSA
I-294 (Tri-State Tollway) Add Lanes, IL 394 (to I-94) to 95th Street	N/A	100%	6,000	20%	39%	122,000	149,000	1.22	1990
						137,000	198,000	1.45	EAI
						142,000	203,000	1.43	SSA
New Interchange, I-294 at I-57	N/A	100%	2,000	30%	48%	23,000	24,000	1.04	1990
						26,000	32,000	1.23	EAI
						29,000	34,000	1.17	SSA
I-90 (Northwest Tollway) Add Lanes, Roselle Road to I-294	N/A	100%	3,000	13%	28%	88,000	302,000	3.43	1990
						94,000	471,000	5.01	EAI
						94,000	420,000	4.47	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	308,000	3.38	1990
						67,000	357,000	5.33	EAI
						67,000	324,000	4.84	SSA
I-290 HOV Lanes, Austin Blvd. to I-88	N/A	100%	500	24%	40%	137,000	171,000	1.25	1990
						142,000	189,000	1.33	EAI
						137,000	184,000	1.32	SSA

FIGURE 6.9

TRANSIT PROJECT LAND USE EVALUATION RESULTS

Project Land Use (within 2 miles) Measures - Highway Corridors									
Project	1996 Consistency	1995 Sewer Service	1990 Available Land (acres)	1990 Low Income Hhold	1990 Moderate Income Hholds	Socioeconomic Information			
						Households	Employment	Employment/ Hhold	1990 and 2020 Forecast
North Central Service Enhancement, Antioch to Union Station	N/A	100%	28,000	13%	28%	164,000	341,000	2.08	1990
						238,000	556,000	2.34	EAI
						236,000	480,000	2.03	SSA
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	364,000	0.82	1990
						488,000	388,000	0.80	EAI
						471,000	381,000	0.81	SSA
Dan Ryan, Red Line Extension to 130th	N/A	100%	3,000	31%	50%	90,000	51,000	0.57	1990
						96,000	59,000	0.61	EAI
						96,000	61,000	0.64	SSA
Midway Orange Line Extension to Ford City/76th St.	N/A	100%	1,000	25%	42%	72,000	93,000	1.29	1990
						61,000	91,000	1.49	EAI
						61,000	88,000	1.44	SSA
Outer Circumferential Commuter Rail Corridor (EJ&E) - Core Segment	N/A	100%	35,000	9%	20%	62,000	98,000	1.58	1990
						161,000	252,000	1.57	EAI
						160,000	239,000	1.49	SSA
South Suburban Commuter Rail Corridor, LaSalle St. Station to Beecher	N/A	15%	28,000	34%	52%	202,000	134,000	0.66	1990
						229,000	176,000	0.77	EAI
						234,000	210,000	0.90	SSA
UP-W Extension to Elburn	N/A	39%	11,116	18%	32%	15,000	20,000	1.33	1990*
						28,000	30,000	1.07	EAI
						28,000	29,000	1.04	SSA
SWS Extension to Manhattan	N/A	78%	18,858	23%	36%	17,000	6,000	0.60	1990*
						30,000	19,000	0.63	EAI
						30,000	21,000	0.70	SSA

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.

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 (Acrea)	1990 Water Resources (Acres)	1993 Natural Resource Areas (Acres)	1990 Recreational Areas (Acres)	1996 Historic and Cultural Sites (Numbers)
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 Segment	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
UP-W Extension to Elburn						
SWS Extension to Manhattan						

FIGURE 6.11
HIGHWAY PROJECT SUPPLEMENTAL MEASURE RESULTS

Project Supplementary Land Use (within 2 miles) Measures Natural and Cultural Resources which Might Be Impacted by Highways						
Project	1992 Greenways (Number Intersecting and in corridor)	1994 Agricultural Protection Areas (Acrea)	1990 Water Resources (Acres)	1993 Natural Resource Areas (Acres)	1990 Recreational Areas (Acres)	1996 Historic & Cultural Sites (Numbers)
I-94 (Tri-State Tollway) Add Lanes, IL 22 to IL 60	1,3	0	711	906	3,062	2
I-90 (Northwest Tollway) Add Lanes, Randall Road to IL 25	1,3	0	769	99	2,482	3
I-88 (E-W Tollway) Add Lanes, IL 31 to I-290	8,4	0	2,557	2,493	11,489	1
I-55 Add Lanes, Naperville Rd. to I-80	0,6	4,782	4,707	638	2,073	4
Elgin-O'Hare Expwy Extension, Hanover Park to Streamwood	0,1	0	869	0	1,569	0
I-80 Add Lanes, US 45 to I-55	6,1	7,505	3,370	382	4,595	12
I-80 Add Lanes, I-94/IL 394 to Indiana Border	1,1	7,505	204	1,113	4,373	0
IL 394 (Calumet Expwy) Add Lanes, I-80 to Sauk Trail	1,2	0	747	968	6,105	0
I-57 Add Lanes, I-80 to West Airport Access Road	3,0	2,120	1,487	112	5,614	0
IL 53 Extension, Lake-Cook Rd. to IL 120 and I-94	7,2	0	6,942	269	5,477	1
I-294 (Tri-State Tollway) Add Lanes, IL 394 (to I-94) to 95th Street	3,4	0	1,153	1,295	8,813	1
New Interchange, I-294 at I-57	0,4	0	213	247	843	0
I-90 (Northwest Tollway) Add Lanes, Roselle Road to I-294	3,4	0	1,386	648	9,260	0
O'Hare Bypass to Elgin-O'Hare Expwy and I-90, with Access to Airport	2,3	0	1,158	0	5,940	1
I-290 HOV Lanes, Austin Blvd. to I-88	5,3	0	115	0	3,063	33

Environmental Justice and Title VI

AS part of the *2020 RTP* update process, CATS committed to improving its evaluation techniques measuring the benefits and impacts of the *2020 RTP* on minority and low income groups. The *2020 RTP* update process includes new and expanded measures of accessibility for these populations. The regional planing process has used accessibility to jobs within 1 hour by transit as a measure of accessibility for low-income households. While this measure remains and is included in Figure 6.4, the update process expanded this analysis.

The Community Mobility Task Force assisted the RTP Committee in the development of the measures used in the update. The task force will also assist in the development of an overall, long-term enhancement of measures for the *2030 RTP* planning process.

The Community Mobility Task Force conducted an extensive review of access measures used in the 1997 version of the *2020 RTP* and collected information on access measures used by MPOs across the country. The task force identified twenty potential measures. Measures were classified in terms of data availability, research requirements, and relevance to MPO related environmental justice and Title VI issues. The lack of consistent available data and the short timeframe for the update process were significant constraints on which measures could reasonably be considered for the 2000 Edition of the plan. Based on this analysis, the Policy Committee committed to incorporate three measures into the *2020 RTP* update process. They are:

- Analysis of race, ethnicity and household income from the 1990 Census
- Analysis of income distribution from the 2020 population forecasts prepared by the Northeastern Illinois Planning Commission.
- Analysis showing travel time/cost accessibility for work trips and other destinations.

The following figures present the results of these analyses. They are intended to place the *2020 RTP* in an initial context for developing refined environmental justice and Title VI goals and evaluation methods for the *2030 RTP* process. Figure 6.12 displays the 1990 Census minority population data tabulated to the CATS zone system and is mapped as population density. Figure 6.13 displays 1990 Census households with incomes less than $17,500 annually also tabulated by CATS zones and mapped as household density. The 2020 transportation system is included in both figures. Figure 6.14 includes data that can be used to measure travel time accessibility for different trip types by tabulating daily trips in minutes during the a.m. peak period. Trips are tabulated according to where they are "based". Tabulations are prepared by trip type, mode, and the two 2020 land use scenarios. The work trip data is presented for a 90-minute travel time threshold. The *2020 RTP* calculates a 60-minute threshold for access to jobs in the earlier set of performance measures. This threshold was established by the 1999 City of Chicago/Cook County Welfare Reform Task Force report as an "outward limit" of reasonable travel for people moving off welfare to work.

In their current form, largely because of a lack of current data and specific forecasting methods, only general conclusions can be drawn regarding the region" target populations and the way they use the region" transportation system.

The general conclusions can be summarized as follows:

- Minority population and low-income households are located throughout the region with the highest geographical concentrations (both in terms of population density and its minority component) evident in the most mature parts of the city of Chicago.

- Income forecasts estimate that nearly ¾ of the region's 2020 households will have incomes within 30 % of the regional mean.

- Regional variations in trip accessibility (in terms of travel time) are largely attributable to travel mode. Auto travel time is governed primarily by prevailing congestion levels with the longest travel times being attributable to travel in or through congested areas. Transit travel time is governed primarily by the level of service being provided with the longest travel times being due to long distance trips being made from areas with few transit options.

Some observations with regard to using this data to evaluate transportation options available to the targeted populations:

- Use of 1990 Census data as a basis for locations of minority households in 2020 was acknowledged in advance as being problematic. Minority populations are not currently forecast. To determine the validity of the Census data, CATS acquired the services of the University of Illinois, Chicago, Urban Transportation Center (UTC). The UTC research showed a strong correlation between the 1990 location of minority and low-income populations and 1997 locations.

- Forecasts of income distribution are currently a fixed input to the travel forecasting process and are used to help predict auto ownership and mode choice. The region's income distribution is forecast to become more equitable (i.e. more households approaching the mean) but the travel demand forecasts do not affect this estimate.

- The specific relationships between minority and low-income households and the jobs they hold are not well understood. Components of a household profile (such as persons, workers, autos) are currently utilized to estimate trip making and mode choice, but have little effect on matching household workers with specific jobs. Linking workers with jobs is currently estimated by evaluating all job opportunities and the variable travel costs associated with reaching them. Research in this area was conducted by UIC for Pace as part of Pace's welfare to work/job access planning efforts.

FIGURE 6.12

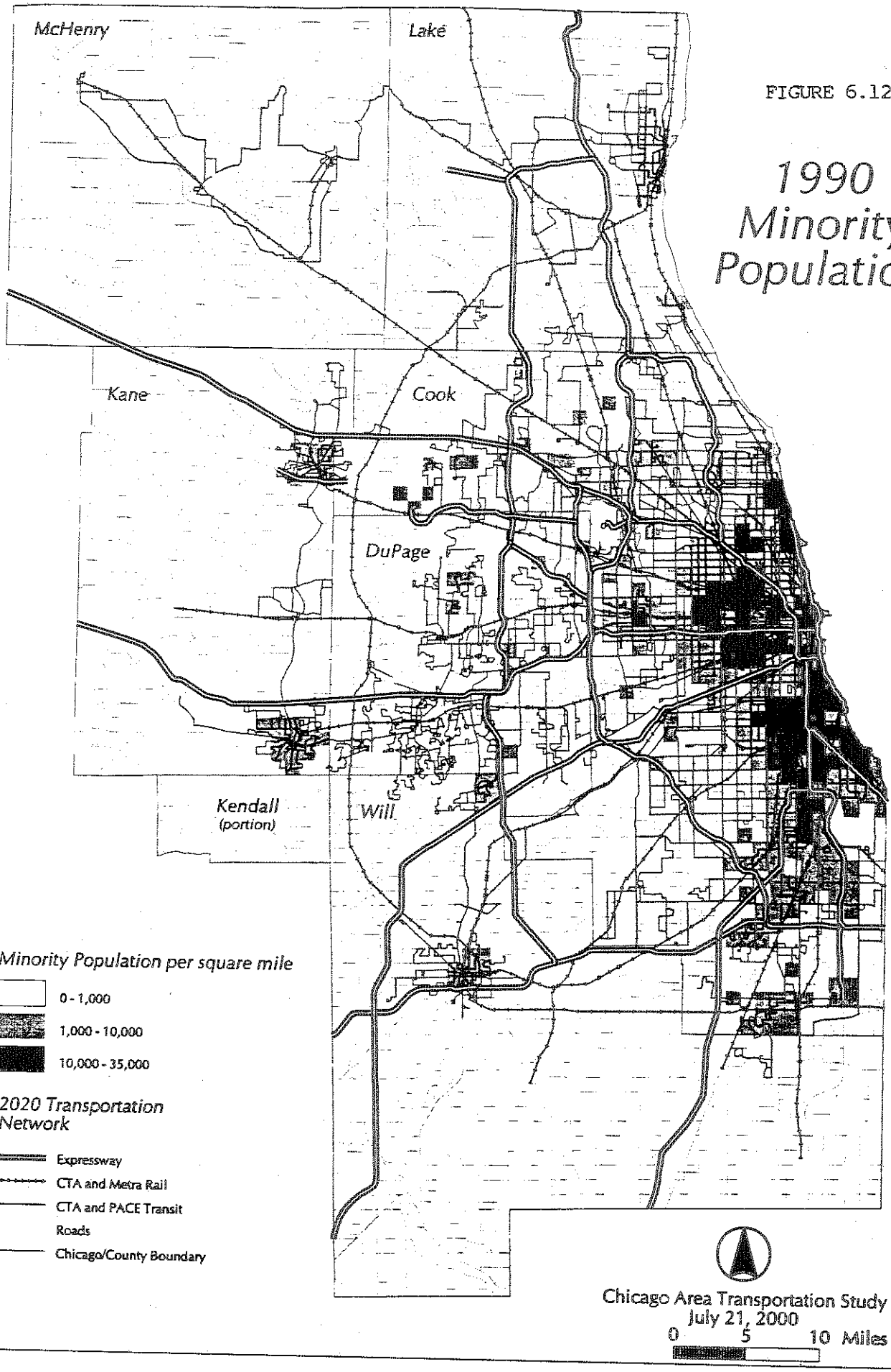

1990
Minority
Population
McHenry
Lake
Kane
Cook
DuPage
Kendall
(portion)
Will
Minority Population per square mile
0 - 1,000
1,000 - 10,000
10,000 - 35,000
2020 Transportation
Network
Expressway
CTA and Metra Rail
CTA and PACE Transit
Roads
Chicago/County Boundary
Chicago Area Transportation Study
July 21, 2000
0
5
10 Miles

FIGURE 6.13

1990 Low Income Households

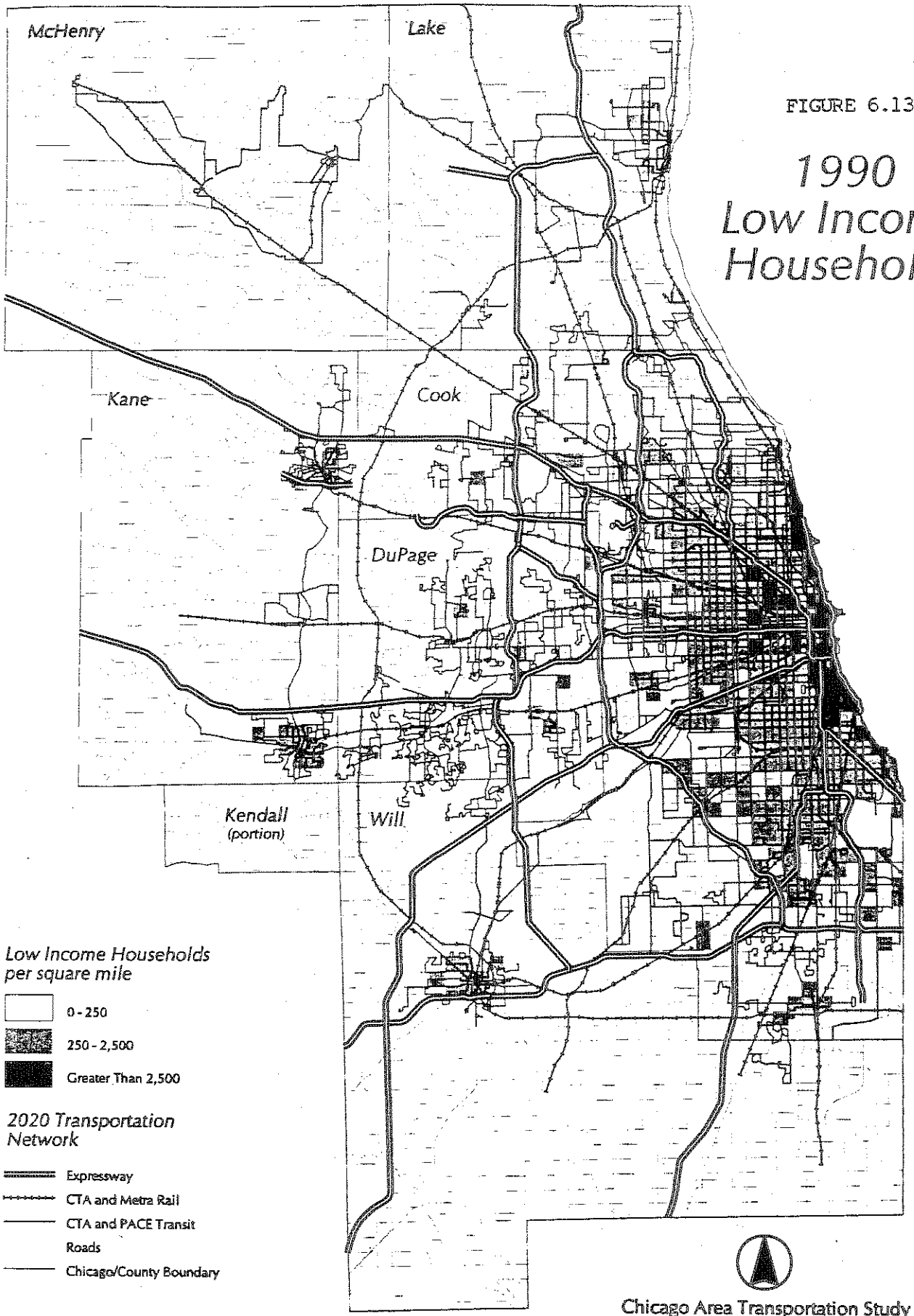


FIGURE 6.14
TRAVEL TIME ACCESSIBILITY

2020 Existing Airport Infrastructure (EAI) Scenario Results-Ninety minute threshold

All trips within 90 minutes

DISTRICT	transit trips w/in 90 min.	total transit trips	% transit w/in 90 min.	auto trips w/in 90 min.	total auto trips	% auto w/in 90 min.
region	2,562,210	2,627,387	98%	19,942,267	21,803,766	91%
chicago	1,201,554	1,203,056	100%	5,462,679	6,182,034	88%
cook co. balance	750,959	757,058	99%	6,194,250	6,587,142	94%
region balance	609,697	667,273	91%	8,285,338	9,034,590	92%

Work trips within 90 minutes

DISTRICT	transit trips w/in 90 min.	total transit trips	% transit w/in 90 min.	auto trips w/in 90 min.	total auto trips	% auto w/in 90 min.
region	961,490	984,142	98%	5,478,045	6,711,565	82%
chicago	405,858	407,205	100%	1,306,147	1,763,320	74%
cook co. balance	283,992	285,698	99%	1,668,737	1,963,620	85%
region balance	271,640	291,239	93%	2,503,161	2,984,625	84%

2020 South Suburban Airport (SSA) Scenario Results-Ninety minute threshold

All trips within 90 minutes

DISTRICT	transit trips w/in 90 min.	total transit trips	% transit w/in 90 min.	auto trips w/in 90 min.	total auto trips	% auto w/in 90 min.
region	2,529,478	2,598,609	97%	20,290,616	21,884,824	93%
chicago	1,171,347	1,172,606	100%	5,451,167	6,027,736	90%
cook co. balance	743,702	748,501	99%	6,367,573	6,655,601	96%
region balance	614,429	677,502	91%	8,471,876	9,201,487	92%

work trips within 90 minutes

DISTRICT	transit trips w/in 90 min.	total transit trips	% transit w/in 90 min.	auto trips w/in 90 min.	total auto trips	% auto w/in 90 min.
region	945,708	972,870	97%	5,665,330	6,722,942	84%
chicago	391,039	392,166	100%	1,351,940	1,705,906	79%
cook co. balance	278,211	279,616	99%	1,767,242	1,991,224	89%
region balance	276,458	301,088	92%	2,546,148	3,025,812	84%

The report, *Environmental Justice Planning Process for the 2000 Edition of the 2020 RTP,* documents the work by the various CATS committees and task forces and CATS staff on these measures. The report also includes a description of the targeted outreach efforts to communities of color initiated during the *2020 RTP* update process and mentioned in Chapter 2.

Based on the above referenced research and the analysis of the *2020 RTP* conducted to date, the initial finding is that minority and low-income populations reside in areas that will be very well served by public transportation and the expressway system in 2020. Based on the current geographic distribution, these populations will continue to enjoy a high level of accessibility and mobility. This level of accessibility is consistent with environmental justice goals. Since this evaluation was based on the results of only three measures, albeit important ones, the results should be viewed as preliminary. Further analysis will be necessary. It will be a major challenge for the *2030 RTP* planning process to develop the data and tools to refine and evaluate environmental justice issues in greater depth and detail so as to yield a stronger more comprehensive conclusion in this area.

The *2020 RTP* recommends pursuing these issues and other measures, including those not selected for the *2020 RTP* update during the *2030 RTP* planning process. The RTP Committee with assistance from other task forces will evaluate the results of the analysis conducted for the *2020 RTP* update process. This evaluation will form the basis for the technical and public involvement components of the *2030 RTP* planning process. The *2030 RTP* will specifically include elements that integrate environmental justice and Title VI issues in all levels of plan development with special emphasis in the goals and objectives, alternatives development and evaluation phases.

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 northeastern Illinois region is required to attain the NAAQS by 2007.

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

and NOx emissions and calculated for future years are equal to or less than those included in the *SIP* on-road mobile source budgets.

The 2000 conformity analysis is different from the test required for the 1997 version of the *2020 RTP*. In July 2000 the Illinois Environmental Protection Agency (IEPA) informed CATS that the US Environmental Protection (USEPA) had determined that motor vehicle emissions budgets submitted by IEPA for the year 2007 were adequate for the purposes of conducting transportation conformity. Federal conformity requirements call for a test against the attainment budget rather than the Build/No Build test once budgets have been established by IEPA and found adequate by USEPA. In addition, the region is now required to meet a NOx budget as well as one for VOCs. The tools used to conduct the air quality analysis have also changed. The MOBILE 5b model was used along with new input settings. A detailed description of the conformity analysis procedures is included in the report, *2020 Regional Transportation Plan, 2000 Edition and Proposed Transportation Improvement Program for Northeastern Illinois, FY 2001-2006, Conformity Analysis Documentation.* The use of the new model along with the new settings results in different emissions for the 2000 Edition of the *2020 RTP*.

The conformity test uses the two growth scenarios prepared for the *2020 RTP* as described in Chapter 3. A growth forecast was developed for each airport scenario. Tests were made for three analysis years (2007, 2015 and 2020). Each analysis year included the *FY 2001-2006 TIP* 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 2001-2006 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 6.15 presents the VOC and NOx 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 6.15 the total for each scenario for each analysis year is lower than the SIP 2007 attainment year on-road mobile sources total of 204.07 tons per day for VOCs and 364.6 tons per day for NOx.

FIGURE 6.15
CONFORMITY ANALYSIS RESULTS, TOTAL VOC AND NOx EMISSIONS
(tons per day)

Scenario	VOC	NOx
2007 Existing Airport Improvements	147.64	266.39
2007 South suburban Airport	145.69	267.71
2015 Existing Airport Improvements	114.07	177.25
2015 South Suburban Airport	112.82	177.22
2020 Existing Airport Improvements	114.54	168.82
2020 South Suburban Airport	113.89	168.89
2007 VOC Budget=204.07 tons per day 2007 NOx Budget=364.6 tons per day		

Plan Performance Monitoring

CATS will develop a performance monitoring system for the *2020 RTP*. The system will 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 will include both performance monitoring and implementation monitoring. **Plan implementation monitoring** tracks the progress of the region's transportation implementers 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 will be 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 in an Annual Effectiveness Report for Northeastern Illinois. An annual list of obligated projects, as required by TEA-21, will be a part of this report.

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 46 associated objectives as in Chapter 3.

Maintenance

Goal: Maintain and improve the capital infrastructure of the existing transportation system.

The *2020 RTP* recognizes the importance of maintaining the existing system by establishing maintenance as its overarching goal. The *2020 RTP* assigns 80 percent of the projected resources for system maintenance. While the plan does not completely eliminate the backlog of highway and transit maintenance projects, significant reductions will be achieved, particularly for transit. The plan identifies some of the major capital maintenance projects that will likely be completed during the planning timeframe.

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.

The *2020 RTP* improves accessibility and mobility in the region through its significant support to all modes of travel. Approximately 15 percent of the funds are allocated to the improvement of the existing system, with another 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 22 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 22 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 15 percent increase in population and 23 percent increase in employment between 1999 and 2020 will contribute to a 40 percent increase in congestion in the region. Even with the full 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 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 no improvements, yields the following projections for 2020:

- The total vehicle miles traveled (VMT) exceeding level of service "D" would be 2 percent less with the *2020 RTP* networks than with the base networks;
- The number of transit person trips would be 6-9 percent higher with the *2020 RTP* networks;
- The transit person miles traveled would be 5-9 percent higher with the *2020 RTP* networks;
- Due to a reduction in roadway congestion, the total daily hours of travel by commercial vehicles would be 12-15 percent lower with the *2020 RTP* networks though the number of trips remain the same;
- The 22 major plan projects are projected to serve more than 1.6 million daily users; and
- An additional 15% of the region's households will be accessible to jobs within one hour by transit and an additional 10-20% of households by auto.

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 adopted plans and policies of the Northeastern Illinois Planning Commission most notably the Regional Growth Strategy and *Strategic Plan for Land Resource Management* as reflected in the adopted 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 projects with local land use plans. Although a determination was not made as to whether the *2020 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 22 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 22 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 highway system by completing segments that will improve connectivity.

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, no improvements, yields the following projections for 2020:

- VMT exceeding level of service "D" would be two percent less with the build networks;
- The projection of total daily hours of travel by commercial vehicles would be 12-15 percent lower with the build networks, though the number of trips remains the same; and

- Vehicle hours of delay are reduced.

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:

- The number of vehicle miles traveled per gallon of fuel consumed increases from the no-build to the build scenario, indicating an improvement in fuel efficiency. ;
- The number of person transit trips would be six to nine percent higher with the build networks; and
- The *2020 RTP* total emissions are well below the mobile source budgets.

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 low income households accessible to a majority of regional jobs via transit, within one hour, would increase from by one percent with the build network versus the no-build network;
- The percentage of households accessible to a majority of regional jobs via an automobile, within one hour, would increase from 68 percent to 87 percent with the build network versus the no-build network in the Existing Airport Improvements Scenario, and increase from 76 percent to 86 percent in the SSA scenario; and
- The total daily hours of travel by commercial vehicles would be 10-15 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, additional lanes on I-90 and I-88 and I-290 HOV will improve travel times for persons traveling to many of these destinations 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 number of person transit trips would be 6-9 percent higher with the build networks;

- The transit person miles traveled would be 5-9 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 by one percent under either scenario; and
- The percentage of low-income households accessible to 2.03 million regional jobs via an automobile, within one hour, would increase from 70 to 80 percent in the no-build networks to 90 percent in the build networks.

The *2020 RTP* also includes an analysis of new environmental justice measures. (To be added when EJ measure results are available)

Financial

Goal: Provide for the development of a transportation system which 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 Further Study, included in Chapter 8, 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 series of evaluation and design studies considering 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 76 percent of the funds projected to be available are allocated to the capital maintenance of the existing system;
- 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.

Safety

Goal: Provide a safe and secure transportation system that allows for the movement of people and goods.

The *2020 RTP* supports actions that create a safe environment for all modes. All the projects in the *2020 RTP* are to be implemented in a safe manner and are to include safety considerations in their design and construction. Bicycle and Pedestrian policies

encourage the accommodation of safe bicycle and pedestrian travel in transportation and development decisions as well as promoting safe access to transit. In addition, the transportation management strategies include projects to improve safety of bus and rail systems through improved information and communications technologies. The intelligent transportation systems strategies include technologies to improve emergency response vehicles. The intermodal policies include the consideration of critical project needs to improve clearances and intersections for the safer operations of intermodal cariers.

TEA-21 Seven Factors Summary

The sixteen planning factors included in the Intermodal Surface Transportation Efficiency Act of 1991 established one of the important policy frameworks for the development of the *2020 Regional Transportation Plan*. TEA-21 restructured these factors into seven areas that must be explicitly considered in the metropolitan planning process. Consideration of the seven planning factors occurred at five levels during the initial plan development process and the update: 1) MPO committee structure; 2) goals and objectives; 3) evaluation; 4) RTP components; and, 5) other issues. Figure 6.16 summaries the relationship between the factors and the planning process in these areas.

FIGURE 6.16

THE CONSIDERATION OF THE SEVEN TEA-21 FACTORS IN THE *2020 RTP*

TEA-21 Factor	*2020 RTP* Update Consideration of the 7 TEA-21 Factors
1. Support the economic vitality of the metropolitan planning area, especially by enabling global competitiveness, productivity, and efficiency.	CATS Committee Structure: The CATS committee structure provides opportunities for a wide range of organizations and individuals to participate in the planning process. The Policy Committee includes all of the major transportation implementers in the region. Thirteen task forces support the Policy Committee by studying and making recommendations on a variety of transportation issues. Fifty percent of task force membership is set aside for private citizens from a variety of special interests groups, such as business and developers, environmental, public interest, human service, and user/advocacy, and private transportation providers. For example, the Intermodal Advisory Task Force assesses and responds to issues and opportunities affecting intermodal transportation facilities and resources. *2020 RTP* Goals and Objectives: The Economic Goal with Objectives 26 through30 and the Accessibility and Mobility Goal with Objectives1 and 7, listed in Chapter 3, incorporate this factor. Evaluation: The deficiency analysis identified the relative need for transportation improvements throughout the region. Measures used during the final plan analysis addressed issues of congestion through levels of service analysis and total time spent traveling. *2020 RTP* Components: Each of the plan components focuses on reducing congestion and improving the performance of the entire transportation system. The intermodal component address issues concerning access to ports, airports, major freight distribution routes and intermodal facilities. Other: Coordination among the Northwestern Indiana regional Planning Commission (NIRPC), the Southeastern Wisconsin regional Planning Commission (SEWRPC) and CATS facilitates interstate discussion regarding all travel including, system connectivity, freight movements and recreational travel

2. Increase the safety and security of the transportation system for motorized and non-motorized users.	CATS Committee Structure: The Strategic Regional Arterials and Transit Task Force and provided transportation implementers and users to discuss design issues for strategic regional arterials that dealt with safety and the need to serve both regional and local travel needs and safety issues for transit users. The RTP Committee added safety to the list of regional goals during the update. The Bicycle and Pedestrian Issues Task Force has discussed a wide range of safety and security issues. *2020 RTP* Goals and Objectives: A new Safety Goal and Objectives 42, 43, 45 and 46 were established as part of the plan update process. Objective 44 was revised. This goal and the related objectives as listed in Chapter 3, incorporate this factor into the *2020 RTP*. *2020 RTP* Components: The safety goal directs that all new transportation projects include safety considerations into their design. Safety concerns are also included in the bicycle and pedestrian, and intermodal policies and the accessibility through universal design components. Evaluation:
3. Increase the accessibility and mobility options available to people and for freight.	CATS Committee Structure: The Bicycle and Pedestrian Issues Task Force supported the expansion of bicycle and pedestrian transportation options and developed the bicycle and pedestrian component. The Intermodal Advisory Task Force developed the intermodal component. The TCM Development Task Force developed several strategies that reduce SOV travel and promote transit. The Transportation Task Force for People with Disabilities offers opportunity for transit dependent users and providers to discuss ways to increase accessibility and the use of transit services. *2020 RTP* Goals and Objectives: The Accessibility and Mobility Goal with Objectives 1 through 7, and Objectives 31 and 32, listed in Chapter 3, incorporate this factor. Evaluation: Project level measures such as volumes, passenger boardings, vehicle miles traveled and person miles traveled were used to select projects for the *2020 RTP*. Network measures such as travel times were used to measure accessibility for all users as well as targeted populations. *2020 RTP* Components: All the components of the *2020 RTP* support this factor by encouraging the implementation of a wide range of projects and strategies to improve traffic flow and provide options to the auto. The SRT, bicycle and pedestrian, high speed rail and transportation management components are particularly noteworthy as they support this factor.
4. Protect and enhance the environment, promote energy conservation, and improve quality of life.	CATS Committee Structure: The groups that addressed this factor included the RTP Committee, the Intermodal Advisory Task Force, the TCM Development Task Force and the Community Mobility Task Force. The twelve Councils of Mayors served as a resource on the effects of transportation decisions. *2020 RTP* Goals and Objectives: The Transportation and Land Development, Environmental and Social goals along with their respective objectives 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. In addition, several environmental justice measures were added during the update. Two other measures 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* bicycle and pedestrian, transit and transportation demand strategies support the reduction of auto travel, especially SOVs. The increase in funding for these strategies in the *2000 Edition of the 2020 RTP* further supports these efforts. The *2020 RTP* documents the performance of the final plan, in chapter 6. The evaluation reflects the social, economic, environmental and energy effects of the plan. 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 created the Community Mobility Task Force to deal with access to jobs and other related mobility issues. That task force along with the RTP Committee oversaw the development of new evaluation measures for environmental justice during the update process. The task force and the committee will continue to provide direction on future research and analysis of environmental justice issues.
5. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.	CATS Committee Structure: Members of the Work Program Committee include state and county highway implementers, assuring consideration of the connectivity of roads in and outside the metropolitan area. Public and private transit providers and Class 1 railroads also are members of the committee assuring multimodal coordination. The SRAT Task Force address connectivity issues for the SRA and SRT systems. The Intermodal Advisory Task Force and the Advanced Technology Task Force respond to issues directly related to enhancing freight movement. *2020 RT* Goals and Objectives: Objectives 1, 2,5,7, 15, 26 and 30, listed in chapter 3, specifically consider this factor. *2020 RTP* Components: The Major Projects add multimodal capacity to the existing system. The SRA System addresses this factor by identifying major arterials that support the interstate system. The SRT System is an integrated network of existing high capacity commuter rail, rapid transit and bus services that are vital to mobility, congestion relief and economic development. The remaining components provide additional modal options and provide congestion relief. Other: Coordination between CATS, NIRPC and SEWRPC on major transportation facilities assure consideration of issues regarding connectivity between states.
6. Promote efficient system management and operation.	CATS Committee Structure: The CMS Task Force developed the CMS which is incorporated by reference into the *2020 RTP*. The Advanced Technology Task Force developed the ITS component for the plan. *2020 RTP* Goals and Objectives: The Transportation System Efficiency Goal and its associated objectives and Objective 39, listed in chapter 3, support this factor. Evaluation: Two test scenarios were used to investigate the impacts of pricing and demand management strategies during the level 3 screening. *2020 RTP* Components: The congestion management strategies, SRA System, SRT System, intermodal freight, ITS and transportation management components incorporate the concepts of the management and operations systems. The region has safety, bridge and pavement management systems in place and functioning.
7. Emphasize the efficient preservation of the existing transportation system.	CATS Committee Structure: The TCM Development Task Force developed the travel demand management strategies incorporated into the *2020 RTP*, and the Advanced Technology Task Force developed the ITS component and provided information on technologies that affect traffic

	movement. *2020 RTP* Goals and Objectives: Maintenance of the existing system is the overarching goal of the plan. The Transportation System Efficiency goal, with Objectives 1, 18, and 38, listed in Chapter 3, incorporate this factor. *2020 RTP* Components: Capital maintenance accounts for over 80% of the projected resources in the *2020 RTP*. 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.

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 programs. 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:

1. State motor fuel taxes and vehicle registration fees were assumed to increase in the future as they have increased historically;
2. Sales tax revenue will increase proportionally to NIPC forecasted household growth.
3. Federal legislation similar to TEA-21 will be enacted and the provisions of TEA-21 which guarantee full funding and stable, fixed percentage allocations to the states, will continue.

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 which merit further study as well as additional capital renewal needs and additional improvements in all the other plan components. Finally, the plan identifies the existing tax and user fee based sources that could be modified as well as potential innovative funding sources that could be considered to increase the level of future revenues.

The conclusion from the analysis of the revenue projections and assessments of our transportation needs is that the region will not 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. All transportation operators will have to seek additional capital funding from federal, state and local sources or from new 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 primarily from a motor fuel tax and vehicle registration and license fees. Vehicle registration fees provide 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 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 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 (e.g. resurfacing) and major (e.g. reconstruction) 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 1998 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 $ 16.28 billion through the year 2020. These projections are based on the current funding programs. Therefore $2.465 billion of this amount is associated with expansion projects and is unlikely to be available for capital maintenance. The amount available for transit capital maintenance was also reduced by $1.025 billion, 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 these funds should be available for non-regionally significant SRT System expansion and improvement 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. Currently, state and local officials are reviewing the overall status of the tollway system, including its financial condition. While revenue projections have not substantially changed, the financial needs of the tollway system may be increasing. Since no consensus has been reached on the future of the tollway system and no action has been taken, the *2000 Edition of the 2020 RTP* will remain unchanged. The plan recognizes that a wide range of options are being explored and that modifications may be needed at a future date.

Highways-IDOT

IDOT developed the forecasts of state resources using a 25-year trend line of past gross state revenues and extending it out another 25 years. The result was deflated to 1995 using an assumed inflation factor of 2.2 to 2.6 percent through 2004 and 2 percent thereafter. Using trend lines permits the capture of all influences on the tax base. Federal funds were forecasted by extrapolating from national historical figures and near-term FHWA forecasts and applying the legislated Illinois minimum percentage (approximately 3.4 percent). Those results were reduced by 10 percent to reflect the fact that, as a rule, not all authorized federal funds are actually made available to the states. As in the past, northeastern Illinois is assumed to receive an average of 45 percent of statewide funding. The northeastern Illinois region should have $ 19.877 billion available through 2020.

Local

While the *2020 RTP* does not deal with local transportation decisions, TEA-21 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 local governments, CATS estimates that local jurisdictions will have approximately $32 billion available over the 25-year period for transportation expenditures. Of this amount, slightly more than half will be spent on construction and slightly less than half on operations and maintenance. 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		$ 19.877
Transit capital revenues		16.28
Capital maintenance/expansion	13.14	
Capital expansion only	3.14	
Tollway revenue, new tolls		1.337
IDOT and local operating revenues		14.8
Tollway operating/capital revenues		8.2
Transit operating revenues		36.5
TOTAL		$96.994

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

Transportation System Needs

The overarching goal of the *2020 RTP* is to preserve the region's transportation system and maximize its people and goods carrying efficiency. TEA-21 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 $31.2 billion over the plan period, which is lower than 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 $2.942 billion in 1995 dollars. ISTHA projects its operating expenses and debt service to be approximately $5.77 billion in 1995 dollars. These expenses are based on the assumptions stated earlier for tollway usage and tolls. The data collected in the surveys of local jurisdictions indicates that about $15.4 billion will be spent over 25 years to operate and maintain the system; this is 48 percent of transportation funding expected to be available to local jurisdictions.

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. These figures were reviewed in light of projects recently programmed with Illinois FIRST funding and were determined by CATS staff to be consistent with the 1996 data.

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 services.

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

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

Existing System (1996-2020)		
Highway operations/routine maintenance costs		$14.8
IDOT costs	2.9	
Local costs	11.9	
Tollway operating costs/debt service		5.8
Transit operating/routine maintenance costs		31.2
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		$53.671

*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 $12.74 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. The 2000 version of the *2020 RTP* increases the allocation for capital maintenance to $17.861 billion. This increase will permit IDOT to make a small reduction in the backlog.

ISTHA projects that $1.6 billion will be available through the plan period to rehabilitate and maintain the existing tollway system, including roadways, bridges, buildings and facilities. The tollway is in a position similar to highway and transit operators. The tollway may need to balance a backlog of capital maintenance projects with requests for new facilities and services to meet travel demands.

Capital Costs

Transportation implementers and CATS staff developed conceptual project capital costs. CATS provided implementers 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 allocates $17.861 billion to maintain the existing state-maintained highway system at current levels. This equals 90 percent of available state highway capital resources. Approximately $12.74 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 $879 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 private vehicle trips; however, some system expansion will still be needed.

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 $1,140 million, $1.025 billion, $50 million and $225 million respectively should be available for these components. This allocation of resources to these components reflects their high priority.

The *2020 RTP* includes 22 transit and highway projects, totaling $5.307 billion. Those projects proposed for federal and state funding equal $3.091 billion. Approximately 15 percent of the federal and state resources will be needed to accomplish these projects. Seven projects are

proposed for partial or full tollway funding. These projects total $2.216 billion. The tollway is projected to devote approximately $879 million from existing toll revenue available for these projects. The *2020 RTP* projects that at least $1.337 billion in new bond proceeds or other sources 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, cannot 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 transportation needs. Failure to note this would 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 of 1995 dollars)

Projected Sources		
Title 23/state highway resources		$19,877,000
Transit capital resources		16,280,000
Capital maintenance	12,740,000	
Capital expansion	3,540,000	
Tollway existing resources		2,479,000
Tollway, new tolls		1,337,000
TOTAL		$39,973,000
Investment Categories		
Highway Capital Maintenance (including SRA System)		$17,861,000
Tollway Capital Maintenance		1,600,000
Transit Capital Maintenance (including SRT System)		12,740,000
Strategic Regional Arterial System (improvements and expansion)		1,140,000
Strategic Regional Transit System (improvement and expansion)		1,025,000
Improvements to Existing System		2,223,000
Major Transit Projects	994,000	
Major Highway Projects	1,229,000	
New Projects		3,084,000
Major Transit Projects	1,471,000	
Major Highway Projects	1,613,000	
Suburban Bus Expansion (beyond SRT System expansion)		50,000
Bicycle and Pedestrian Modes (transportation sources)		225,000
Feasibility Studies, ROW for Corridors		25,000
TOTAL		$39,973,000

These projections are based on a set of assumptions regarding future federal, state and local funding availability. There currently are no commitments regarding the actual receipt of these revenues. Bicycle and pedestrian projects that are part of larger highway projects and non-transportation sources are not included in these projections.

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 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 $2 billion would be needed to bring the entire transit system to a state of "good repair" and IDOT acknowledges that the $17.861 billion earmarked for highway capital maintenance will keep the system at a level of repair only slightly better than current conditions. The plan also is able to earmark only enough funds to expand the capacity of the strategic regional arterials by 190 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 implementers 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 high of $4.5 million in 1990 to a low of $2.2 million in 1991. 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 effort test. The requirement calls for the state to show 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 have 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 targeted to reduce congestion. Most proposals have centered on toll bridges. Some of the methods to implement such a strategy are 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. System-wide 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 implementers 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*, to meet federal requirements, 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 Qality Conformity Analysis was based on the best information available from implementers 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 of the air quality conformity determination.

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 implementers 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. This *2020 RTP* update is the product of this process. The plan will be reviewed every three years and updated, consistent with current federal requirements. The next update cycle will result in a *2030 RTP* consistent with federal requirements for a 20-year plan horizon. The growth forecasts will be reviewed on this same schedule and revised as 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. These corridor planning studies 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 implementers 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 for new or expanded major facilities.

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.

FIGURE 8.1
STATUS OF STRATEGIC REGIONAL ARTERIALS STUDIES

		Public Hearing	Target Date
Subset 1			
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)	Cook County Final Report, November 1998		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	Final Report, May 1998		Complete
402 IL 23	Final Report, July 1996		Complete
403 IL 83 / IL 132	Final Report, January 1997		Complete
404 Downtown Chicago Routes	Final Report, June 1998		Complete
405 IL 56 / Cermak Road	Final Report, November 1996		Complete
406 Peotone Road	Final Report, December 1999		Complete
407 IL 83/127th Street/130th Street	Final Report, November 1999		Complete
408 55th Street Corridor	Final Report, August 1998		Complete
409 Torrence Avenue	Final Report, August 1998		Complete
410 Algonquin Road/IL 62	Final Report, April 2000		Complete
411 Dempster Street / McCormick Boulevard / Lincoln Avenue	Final Report, September 1999		Complete
414 Roselle Road Corridor	Advisory Panel 1 Report, January 1996		Pending
Subset 5			
501 Fabyan Parkway/IL 38	Final Report, February 1998		Complete
502 IL 1 (Halsted), IL 394 (Calumet Expressway)	Geometric Design Submittal April 2000		Jul-00
503 IL 72 (Higgins)/Touhy	Draft Report, February 2000		Complete
504 US 20	Draft Report, March 2000		Complete
505 IL 59	Final Report, August 1999		Complete
507 Stearns Road	Final Report, March 1998		Complete
508 IL 53	Final Report, February 1999		Complete
509 Pulaski, Wilson/IL 50 (Cicero)/167th	Draft Report, January 2000.		Complete
510 Charles/IL 120 (Belvidere)	Draft Report, February 2000		Complete
511 IL 19 - Western Section	Final Report, February 1998		Complete
512 IL 176 (Wauconda/Ivanhoe)/IL 60-83/IL 60 (Townline)	Final Report, January 1998		Complete
513 IL 47 / IL 71 / US 34	Final Report, November 1999		Complete

FIGURE 8.1
STATUS OF STRATEGIC REGIONAL ARTERIALS STUDIES
(Continued)

WIKADUKE Trail		
Heggs/Eola/WIKADUKE Trail	Final Report, September 1999	Complete
Caton Farm Road	Final Report, September 1999	Complete
119th Street/127th Street	Final Report, September 1999	Complete
95th Street/Boughton Road	Final Report, September 1999	Complete
Subset 6		
IL 176 (Il 23 to US 12)	No Report	
Manhattan-Monee Rd (US 45 to IL 1)	No Report	
IL 131/IL 120	No Report	
Sunset Avenue/Golf Rd./Greenwood Ave.	No Report	

SRT Design Studies

The RTA and the three service boards will conduct detailed studies of the SRT routes and facilities included in the *2020 RTP*. These studies 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.

As stated in Chapter 5, a number of studies are underway. Technology improvements such as transit signal priority, transit station signing and the Regional Transit Coordination Study are examples of current efforts. Metra is investigating several proposals for transfer stations with CTA service. 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 could be made when specific funding choices must be made. The route studies will provide a method to obtain local support for specific recommendations and public/private funding partnership opportunities.

Implementation of Bicycle and Pedestrian Policies

The realization of the *2020 RTP* bicycle and pedestrian policies requires a coordinated and comprehensive approach. Governments, agencies and organizations at the state, regional, subregional and local levels must continue to work together to improve and provide facilities for cyclists and pedestrians while promoting their safe use. Because walking and cycling traditionally have been considered local transportation issues, a great deal of emphasis has been placed on local planning, implementation and promotion.

The Illinois Department of Transportation (IDOT) has a full time bicycle and pedestrian coordinator who can help identify and advocate for funding opportunities and assist with the application and, as necessary, revision, of IDOT's policy regarding the accommodation of cyclists and pedestrians in road projects.

CATS has a full time staff person dedicated to bicycle and pedestrian issues. CATS provides planning assistance at the sub-regional and local levels, assists with regionwide promotion and education activities, maintains a database of facilities and provides a forum—through the Bicycle and Pedestrian Issues Task Force—to guide regional efforts. These efforts will culminate in a regional bicycle and pedestrian plan that will identify a regional network of bikeways and more specific implementation strategies. CATS will use its Web site to inform interested bike and pedestrian planners about the subregional plans. CATS will provide direct access to these plans wherever possible. CATS also administers the CMAQ program, which programmed 10 million dollars for bicycle and/or pedestrian related projects. CATS provided funds and resources in FY98-01 for sub-regional planning efforts.

Planning and implementation varies from sub-region to sub-region. Seven councils will receive Unified Work Program funds for FY01 for activities such as: developing subregional capital programs, producing and distributing facilities maps and other promotional materials, finding connections amongst neighboring communities and providing technical and planning support at the local level. For FY00-04, over $41 million in locally programmed surface transportation dollars will be used on projects that include at least some accommodations for cyclists and/or pedestrians.

Many communities in northeastern Illinois have begun or completed comprehensive bicycle plans and are promoting the use of non-motorized modes for transportation.

Implementation of the Intermodal Freight Policies

The continuation of the efforts established during the development of the intermodal freight 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 implementers 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 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. Five 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 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

The *Destination 2020* process began with the assumption that there are linkages between land use and transportation. While there is no conclusion regarding which comes first or which has the strongest influence on development, it is clear that transportation facilities create access and access creates opportunities for development. Decisions by developers within local zoning policies help determine how opportunities are realized.

There are transportation and land use issues and improvements that are not within the scope of the *2020 RTP*. The *Destination 2020* process reflects the fact that community and subregional transportation and land use issues and problems are best addressed through a more localized planning process. Given the size and complexity of the region, the *2020 RTP* and NIPC's Regional Growth Strategy cannot adequately address the many local issues and concerns that affect specific communities and neighborhoods throughout northeastern Illinois. The regional transportation 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 efforts should recognize the *2020 RTP* and evaluate 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. Two such efforts have been initiated since the community planning concept included in the *2020 RTP* was approved in 1997: the Metra Southwest Service Corridor and the Northeast Chicago/Near North Suburbs Corridor. While each area is distinctive, each faces many of the same challenges as other communities in northeastern Illinois. In the Metra Southwest Service Corridor issues include reinvestment in declining areas, how best to support stable existing communities, protect sensitive environmental areas, and avoid impacting agricultural lands. In the Northeast Chicago/Near North Suburbs Corridor, high priority issues are increasing auto congestion and pedestrian safety. The goals of these efforts are to develop practical and implementable solutions and to produce complementary transportation improvements and development decisions. These studies, if successful, may serve as templates for similar initiatives throughout the region. These community 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.

Financial support for community planning activities is available through the new Illinois Corridor Program that will provide $2 million annually to local governments in northeastern Illinois. TEA-21 includes the Transportation and Community and System Preservation Program (TCSP) to assist communities and regions with innovative community planning activities. Funding ranges from $25-50 million annually.

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, planning feasibility, alternatives analyses, 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.

An important focus for any such study must be the impact that a project would have on land use and 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-90/Northwest Corridor

An RTA led feasibility study of high capacity transit service options has been completed in this corridor. The RTA, ISTHA and five local municipalities sponsored the effort. 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. 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.
Status: The Phase 1 feasibility study was completed in 2000. The results of the study strongly support further analysis. A full alternatives analysis including a financial strategy will begin shortly and will take two years to complete.

I-294 Corridor, Balmoral Avenue to Lake-Cook Road
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.
Status: The limits of this corridor were extended from I-90 south to Balmoral as part of the 2020 RTP update. The extension eliminates a missing link in the number of lanes along I-294 in this part of the system. Studies for the widening between Balmoral and Dempster should be completed in 2001.

Outer Circumferential Corridor (non-core segment)
This corridor would implement commuter rail service on the Elgin, Joliet and Eastern Railway (EJ&E) between Waukegan and Lynwood Village. 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.
Status: The Phase 1 feasibility study of the entire corridor was completed in 1999. The Phase 2 study of detailed demand forecasts and operational feasibility will begin in 2000 and will take 3-4 years to complete.

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. Congestion will continue to increase when the East Elgin-O'Hare Extension plan project is constructed. Funding is not currently available for improvements to the existing facility.
Status: No activity since approval of 2020 RTP in 1997.

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.
Status: No activity since approval of 2020 RTP in 1997.

Inner Circumferential Corridor, Franklin Park to Midway Airport
This corridor would implement commuter rail service on the Indiana Harbor Belt and a portion of the Belt Railway Company freight lines. The northern terminus would be the existing North Central Line O'Hare Airport station; the southern terminus would be at Midway Airport remote parking facility on 55th Street.

Status: The Phase 1 feasibility study was completed in 1999. The Phase 2 study of detailed demand forecasts and operational feasibility will begin in 2000 and will take 3-4 years to complete.

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).
Status: The RTA, CTA and the village of Skokie have identified a scope of work as part of a RTA Regional Technical Assistance Program grant for 2000. The scope is currently limited to an examination of up to 3 additional stations in Skokie, including one near Old Orchard which would involve a short extension.

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 Commonwealth Edison. This corridor should be studied in conjunction with the Yellow Line North Corridor.
Status: No activity on this project since the approval of the *2020 RTP* in 1997.

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.
Status: The completion of the Phase 1 study is expected in late 2000.

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 corridor segments, be part of a new regional beltway.
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.
Status: No activity since approval of 2020 RTP in 1997.

Metra Electric Corridor, University Park to the South Suburban Airport
Metra studied alternative alignments for extending the Electric line to serve the South Suburban Airport. 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.
Status: The Phase 1 feasibility study was completed in 1998. No additional work is identified at this time.

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.
Status: No activity since approval of 2020 RTP in 1997.

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.
Status: The Phase 1 engineering for corridor from I-80/I-94 to IL 1 is expected to be completed in 2000.

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.
Status: No activity since approval of 2020 RTP in 1997.

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.
Status: A study is underway.

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.
Status: No activity since approval of 2020 RTP in 1997.

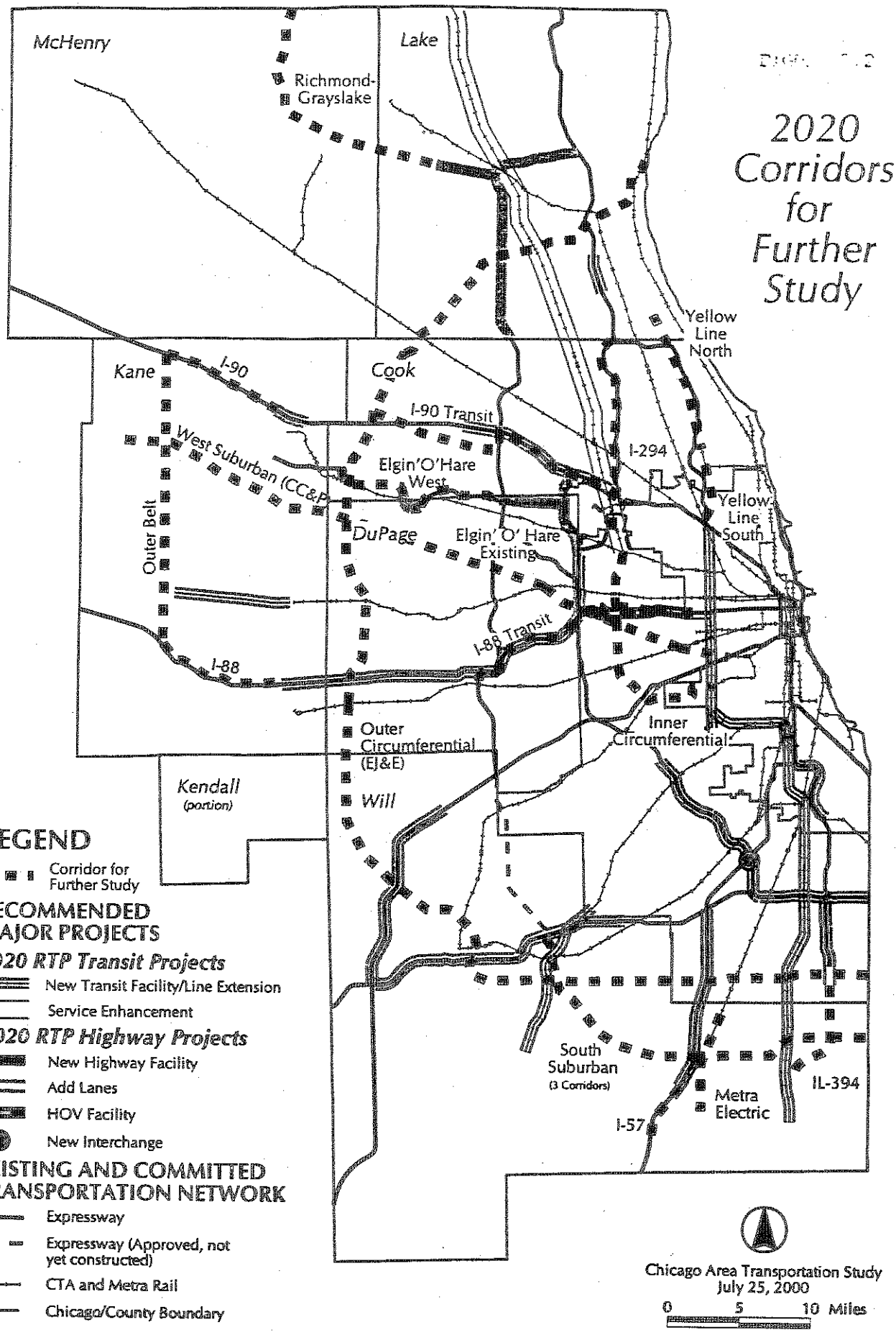
I-90 Corridor, Randall Road to the Outer Belt Corridor
This corridor extends the I-90 add lanes plan project approximately seven miles to northern terminus of the Outer Belt Corridor. Like the I-88 corridor, its justification is tied to the Outer Belt Corridor.
Status: No activity since approval of 2020 RTP in 1997.

West Suburban Corridor, Union Station to Burlington, IL
Metra is studying the feasibility of commuter rail service on the Illinois Central freight line. This service could be run as a shuttle between Burlington, IL and the UP West line in Elmhurst, or continue to Union Station on the Heritage Corridor tracks.
Status: The Phase 1 study is expected to be completed in 2000.

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.

Status: IDOT will begin a Phase 1 engineering study for the addition of HOV lanes from I-88 to Austin Avenue when the project at the Hillside merge is complete. As part of the study, alternatives including mass transit and non-motorized options will be evaluated.


2020 Corridors for Further Study
McHenry
Lake
Richmond-Grayslake
Kane
I-90
Cook
I-90 Transit
West Suburban (CC&P)
Outer Belt
DuPage
Elgin' O' Hare West
Elgin' O' Hare Existing
I-294
Yellow Line North
Yellow Line South
I-88
I-88 Transit
Outer Circumferential (EJ&E)
Inner Circumferential
Kendall (portion)
Will
South Suburban (3 Corridors)
Metra Electric
IL-394
I-57
LEGEND
Corridor for Further Study
RECOMMENDED MAJOR PROJECTS
2020 RTP Transit Projects
New Transit Facility/Line Extension
Service Enhancement
2020 RTP Highway Projects
New Highway Facility
Add Lanes
HOV Facility
New Interchange
EXISTING AND COMMITTED TRANSPORTATION NETWORK
Expressway
Expressway (Approved, not yet constructed)
CTA and Metra Rail
Chicago/County Boundary
Chicago Area Transportation Study
July 25, 2000
0 5 10 Miles