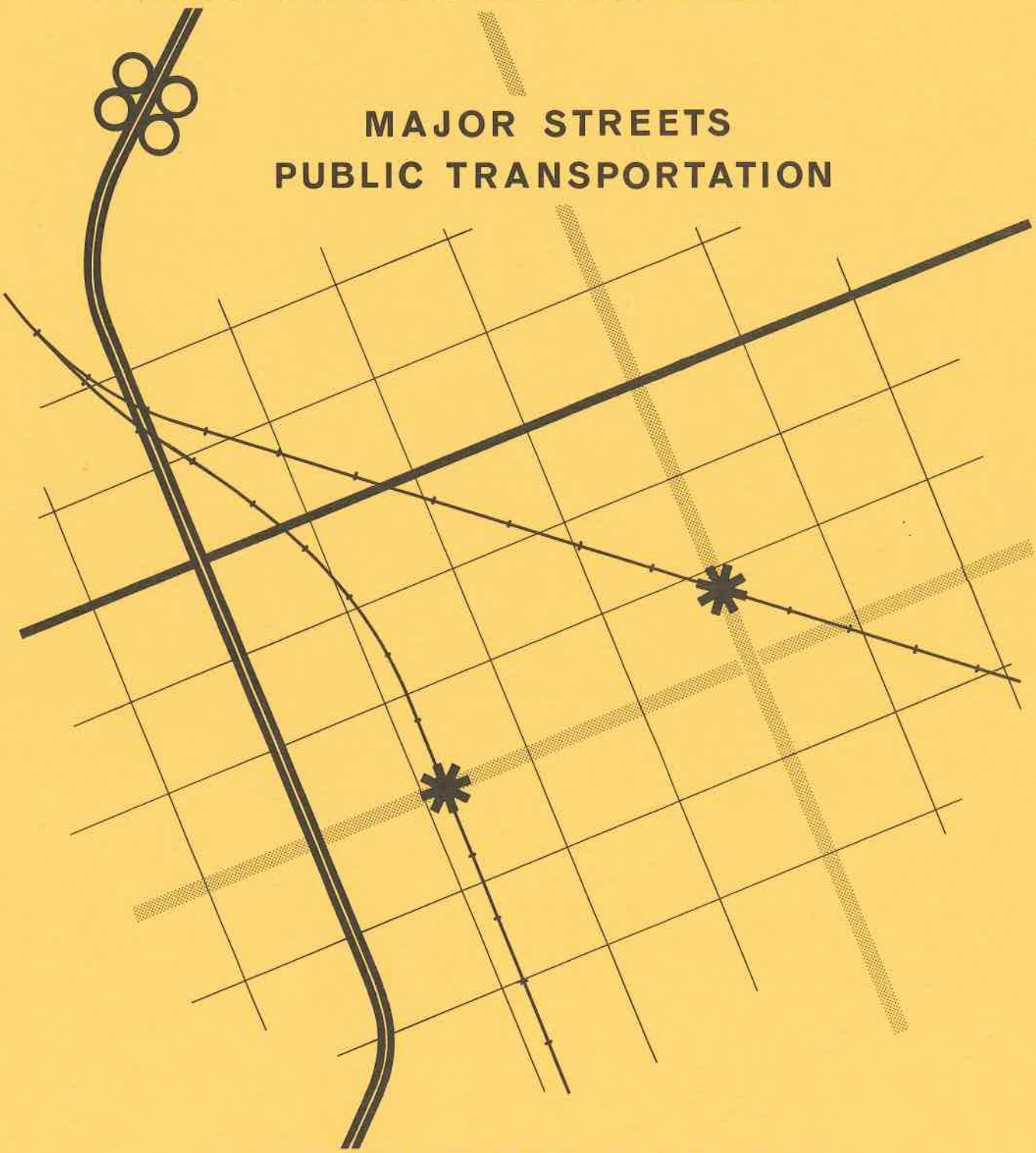
TRANSPORTATION

PART II OF THE SOURCE BOOK ON
THE COMPREHENSIVE GENERAL PLAN

MAJOR STREETS
PUBLIC TRANSPORTATION



CITY OF EVANSTON, ILLINOIS

TRANSPORTATION
Public Transportation and the Major Street System

PART II OF THE SOURCE BOOK ON THE COMPREHENSIVE GENERAL PLAN EVANSTON, ILLINOIS

Prepared by the Evanston Plan Commission, its Task Force on the Comprehensive General Plan and the Planning Department. Adopted by the Plan Commission 1972.

PLAN COMMISSION MEMBERS*

Regular Members

W. Ted Ritter, Chairman
2100 Central Park Avenue, Evanston

Pauline Williams, Vice-Chairman
1917 Grey Avenue, Evanston

Irving Cherry
729 Sheridan Road, Evanston

Ann C. Dienner
1101 Grove Street, Evanston

Sandra Gross
2737 Woodbine Avenue, Evanston

David Grumman
1332 Forest Avenue, Evanston

Thomas L. McRaith, Jr.
1107 Colfax Street, Evanston

Jonathan Stimson
1404 Lincoln Street, Evanston

Jeremy Wilson
2437 Ridge Avenue, Evanston

Associate Members

Norman Carlson
2531 Hurd Avenue, Evanston

Mimi Hynek
2623 Ridge Avenue, Evanston

Les Jacobs
1109 Hull Terrace, Evanston

Brad Laycock
330 Greenwood Street, Evanston

Roland Lieber
931 Asbury Avenue, Evanston

Ben Sosewitz
1019 Mulford Street, Evanston

Abel L. Smith
1464 Asbury Avenue, Evanston

Participating Staff*

Project Director	Richard Carter	Planning Director
Report Preparation	Peggy Linne	Planning Aide
Report Preparation	Marsha Reines	Planning Aide
Report Editing	Beth Fisher	Planning Aide
Report Review	William Nevel	Secretary, North Suburban Transit District
Report Review	Dick Gatti	Public Works Group Manager
Report Review	Dick Beckert	Traffic Engineer
Graphics	John Lowes	Draftsman
Graphics	Craig Takehara	Draftsman
Graphics	Al Tyler	Draftsman
Report Typing	Arlene Jackson	Principal Clerk Stenographer

*Members at the time of completion

TABLE OF CONTENTS

LIST OF TABLES

LIST OF ILLUSTRATIONS

INTRODUCTION

In the past twenty years comprehensive plans prepared for most communities usually have dealt with land use, public facilities and major streets. One of the important differences in the current approach to comprehensive planning is the broadened coverage of transportation. We are concerned with all forms of urban mobility, not just the automobile. Consequently, this volume deals with several forms of public transportation, streets, parking and even bicycle routes.

Public transportation was a frequently neglected topic in past comprehensive plans for several reasons. Many of the companies or authorities operating transit lines were beyond the effective control of the municipalities they were to serve. Public transportation was also considered an anachronism by some highway planners and legislators; it was expected to decline and disappear.

A number of significant events and changes in attitudes have taken place in recent years which require a broader approach to transportation planning. There seems to be a consensus among the public, politicians and planners that urban mobility cannot become entirely dependent upon the automobile. There must be a balanced system which insures transportation alternatives. New opportunities exist for communities to have some voice in the future of the public transportation facilities serving them through the creation of coordinating agencies such as the North Suburban Transit District. There is also national awareness of the need for proper funding to insure both the survival and the improvement of public transportation. In the nation, in the states and in local communities it has been the automobile that has received almost exclusive attention as far as funding is concerned. A reevaluation of priorities to allow for funding long-neglected public carriers is essential in establishing a balance between modes of urban transportation.

Even with improved public transportation, the automobile will undoubtedly remain the principal mode for most households and most trips. Its mobility is unrivaled. Improvements in the street system should continue to be made to increase safety and the smooth flow of traffic. However, dependence upon the automobile as the sole means of transportation should be reduced by offering excellent public transportation alternatives. Greater use of public transportation will result in fewer auto trips per household and perhaps reduce the number of multiple car families. Personal willingness to make other choices is also involved. Walking to the train stop and using a bike on small trips and for recreation instead of a car are means of limiting the growth in automobile usage.

It appears that more people are making such choices for their health, for environmental reasons or just plain fun. It was not very long ago that any person over twelve years of age would have been socially embarrassed to be found riding a bicycle. Now, cycling is immensely popular with all age groups. While this trend is a welcome change from the almost total dependence upon the car, our street system is not well suited to the mix of bicycle and auto traffic. A long, circular route linking most of Evanston's major parks, the lakefront and other recreational centers is proposed in this report. The route was designed to maximize safety and provide access to pleasant areas for cycling. Much remains to be done to develop better means of acommodating both vehicular and bicycle traffic. Commuter routes for bicycle traffic need to be established to serve such generators as the high school, the business areas, the university and colleges, and the railroad stations.

PUBLIC TRANSPORTATION

Evanston is especially fortunate with respect to the public transportation facilities which serve the city. It has had a long history of good external connections to Chicago via rapid transit and commuter railroad, as well as an excellent internal system provided by bus. The major carriers are the Chicago Transit Authority, the Chicago and North Western Railroad and the Evanston Bus Company. By far the largest carrier in terms of annual passenger volume is the Evanston Bus Company, which transports about 11 million people annually; followed by the Evanston branch of the Chicago Rapid Transit with about 1.5 million persons; and the Chicago and North Western Railroad with around 1 million. Other minor carriers include the United Motor Coach and Glenview Bus Company, which supply connections to northwestern suburbs, and the Continental Bus Line which carries passengers to and from O'Hare International Airport.

Public Transportation has played an important role in Evanston's development for the last eighty years. While many rapidly expanding communities are groping for some means to help them out of their traffic dilemma and their total dependence upon the automobile, Evanston already has three major transportation systems. Their presence has done much to prevent a circulation breakdown caused by the inadequate capacities of Evanston's streets. Two carriers, the Chicago and North Western Railroad and the Chicago Transit Authority's rapid transit, transport thousands of workers daily to and from Chicago. Not only do these carriers reduce the through traffic potential, but a large portion of the riders walk to local stations or are brought by bus, thus reducing the congestion which would be produced by dependence upon park-and-ride facilities. Evanston is more than a commuter suburb; many thousands of workers are brought to local jobs from Chicago and transported from C.T.A. rapid transit stops to final destinations by local bus and taxi. These transportation facilities thus make an important contribution to the economic base of the community.

A strong mutual stake exists in the continued success of these systems. The reasons for such a long history of successful operation are varied. The size and density of Evanston's population are great enough to make public transportation a practical operation; people use these facilities in large numbers. About 32 per cent of the local labor force uses public transportation, compared to 50 per cent using the automobile, 11 per cent walking and 4 per cent working at home or using other means.*

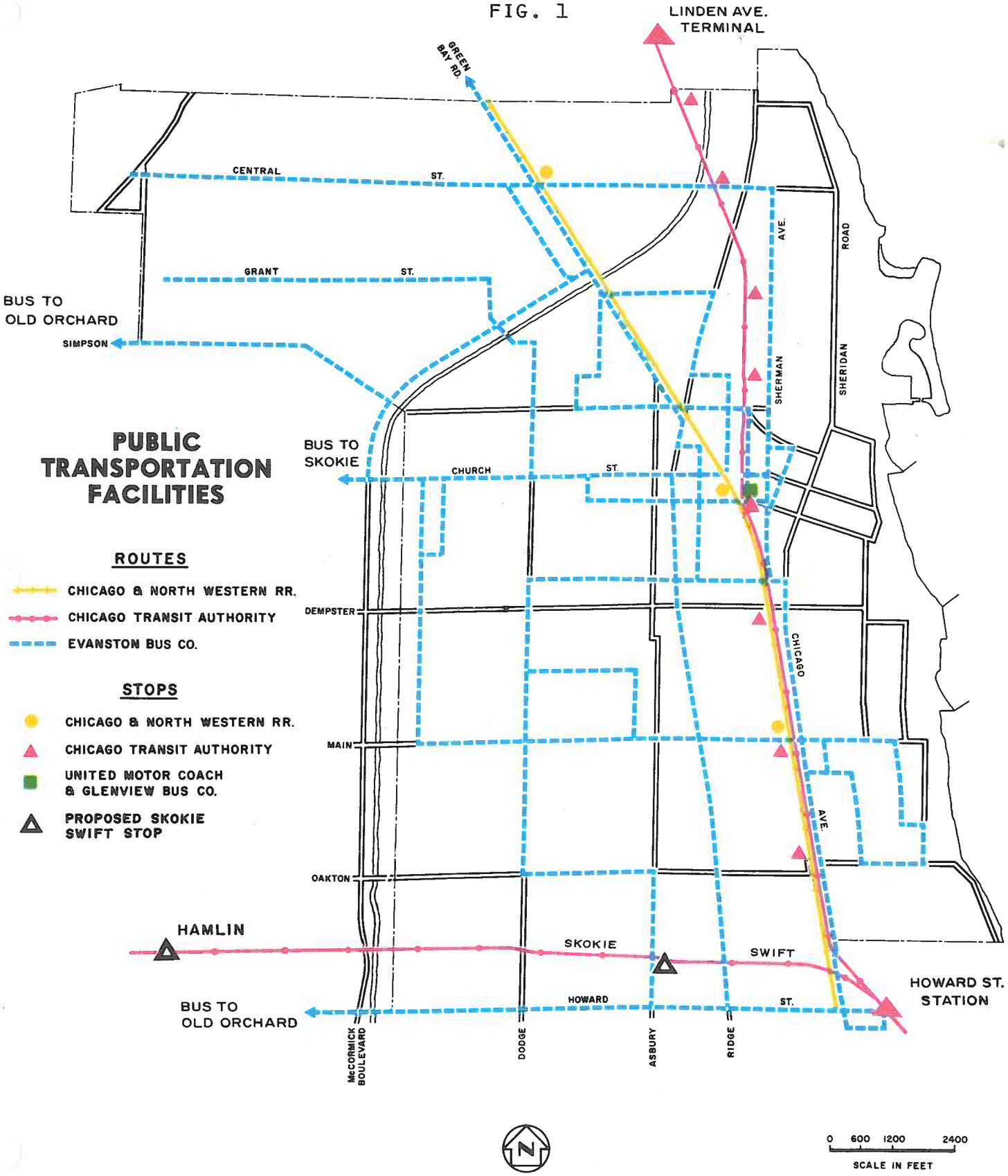
Public transportation has been in serous difficulty and is experiencing declines in many cities. Largely ignored while funds and attention have been lavished on better facilities for automobiles, many public carriers have languished and failed. In the years since World War II, transit has been involved in a self-perpetuating downward spiral,beginning with the loss of passengers to the automobile. This has resulted in declining revenues, increased fares, decreased services and insufficient capital to modernize equipment. The cumulative effect of these changes has been still further passenger losses, followed by more fare raises, off-set by rapidly rising labor and capital costs followed by further passenger loss. Many public transportation facilities have been able to survive only because of their exceptionally good route structure; however, many have failed. Somewhat belatedly, there has been a growing national concern over the future of public transportation and a more solid recognition of its vital role. However, public policy in all levels of government, development of programs, mechanisms to improve coordination, and commitment of resources to deal with the public transportation problems have been slow in coming.

In spite of the long history of service to this community, Evanston's public transportation system cannot remain immune to some of these national trends. Future maintenance of the system cannot be guaranteed without significant commitment. This involvement can be varied, but its emphasis is likely to be in the form of some kind of subsidy. The Evanston City Council expressed its approval of such measures in a resolution supporting all appropriate actions to improve the efficiency and financial health of the C.T.A. system. It also favors granting any necessary subsidy to improve the C.T.A. system service and equipment.

The three major transportation facilities serving Evanston can be seen in their relationship to one another in Figure 1. The Chicago and North Western Railroad and the Evanston Rapid Transit Division are parallel up

*1960 Census

FIG. 1


LINDEN AVE. TERMINAL
GREEN BAY RD.
CENTRAL ST.
GRANT ST.
BUS TO OLD ORCHARD
SIMPSON
BUS TO SKOKIE
CHURCH ST.
DEMPSTER
MAIN
OAKTON
HAMLIN
SKOKIE
SWIFT
HOWARD ST.
BUS TO OLD ORCHARD
HOWARD ST. STATION
McCORMICK BOULEVARD
DODGE
ASBURY
RIDGE
SHERMAN AVE.
SHERIDAN ROAD
CHICAGO AVE.
PUBLIC TRANSPORTATION FACILITIES
ROUTES
CHICAGO & NORTH WESTERN RR.
CHICAGO TRANSIT AUTHORITY
EVANSTON BUS CO.
STOPS
CHICAGO & NORTH WESTERN RR.
CHICAGO TRANSIT AUTHORITY
UNITED MOTOR COACH & GLENVIEW BUS CO.
PROPOSED SKOKIE SWIFT STOP
N
0 600 1200 2400
SCALE IN FEET

to Davis Street, where the C.T.A. line runs north and the Chicago and North Western bends northwest. Both are in the eastern half of the city but are connected to the west by local bus lines serving Central, Davis and Main Street stops. The rail line running southwest is a C & N W freight spur which carries no passengers. The east-west C.T.A. line across the southern end of Evanston is the Skokie Swift, which makes no stops in Evanston. Each of the three major public transportation systems will be examined separately.

Chicago and North Western Railroad

Commuter rail transportation from Evanston to Chicago was first provided by the former Chicago, Milwaukee and St. Paul Railroad before the turn of the century. This service, in continuous operation since that time, was later taken over by the Chicago and North Western Railroad. The North Western is almost entirely a Chicago Loop-oriented transportation facility. Currently, there are three stations in Evanston: Central Street, Davis Street and Main Street. Each of these stations is also served by the local bus system; the Davis Street station is served by other suburban bus lines as well. With the fairly high density core extending along the railroad right-of-way, a larger number of riders for both the North Western and the C.T.A. walk to the local stations.

Figure 2 shows the average number of daily riders using each of the three stations. In 1969 the average daily one-way riders from all three stations was approximately 1,900 or 3,800 total trips per day. These passengers provide about $2,000 income to the C&NW daily. Central Street, with 760 one-way daily riders, is the largest, but the other stations have comparable volumes. Over the past decade the passenger volumes for the North Western have shown a very solid increase of over 30 per cent. While it carries fewer passengers than the other forms of public transportation, it still accounts for approximately one million passengers per year.

There are a number of reasons why the North Western Railroad has not only increased its passenger volumes in a period of public transportation decline, but made it profitable as well. Two of the principal ingredients of this success are a good route structure and courageous management decisions. In 1956, when other railroads were trying to abandon the commuter business, the North Western made a concentrated effort to improve. It made a substantial investment in completely new equipment, dropped the close-in and lightly used stations, shortened travel time, streamlined schedules, revised the pricing structures of its tickets and incorporated the use of the flash pass in place of ticket punching. The regular rider was thus given a much better buy. The resulting economical, fast, comfortable ride gained it national fame. The company has been replacing old stations and actively encouraging the development of park-and-ride facilities. It has been providing other forms of transportation from its Loop terminal into the Loop itself and is trying to encourage the development of interfaces with other forms of public transportation along its routes. Station replacement, higher levels of maintenance on viaducts and rights-of-way, and strengthened connections with other forms of transportation are the major improvements remaining to be made. Transfer privileges between rail and bus modes should soon be implemented and bus bays should be constructed at all Chicago and North Western and Chicago Transit authority transfer points.

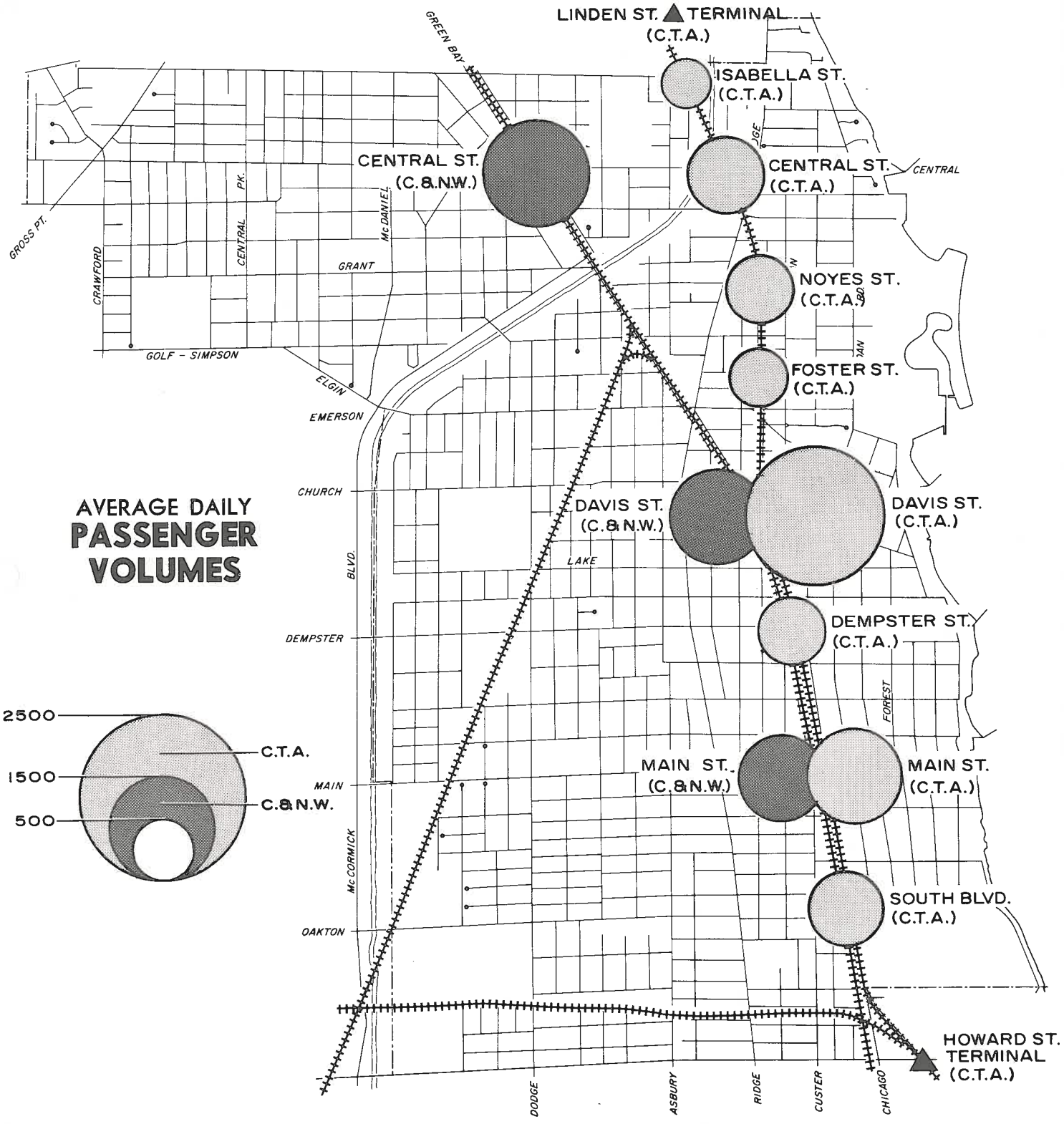
One prospect which seems to have particularly good potential is the development of a transportation center where the C.T.A. and C&NW and the Benson Avenue bus terminal come together. A study of what the possibilities might be should receive high priority. The cost of such improvements would be a major obstacle and means of financing improvements should be sought. One of the more promising possibilities might be a joint development with a business, office or commercial venture to defray the cost.

Evanston Rapid Transit

Evanston has been served by a rapid transit route to Chicago since before the turn of the century. Currently this division is known as the Evanston Rapid Transit Route, an extension of a very strong north-south element in the C.T.A.'s rapid transit network. Two types of trains are operated on this division, a local running from Wilmette to Howard Street, and an Evanston express. Both trains make all seven stops in Evanston but the Express continues to the Loop via the elevated route, making only three stops along the way.* At Howard Street Evanston passengers can choose between remaining on the Express or transferring to other trains which provide service to all parts of the Chicago area.

*At this writing the CTA is proposing to eliminate the Evanston Express and close several of the smaller stations: South Blvd., Dempster, Noyes, Foster and Isabella.

FIG. 2



PLANNING DEPARTMENT

Over the past decade passenger traffic on this route has remained stable, averaging about 1.5 million people each year. Figure 2 shows the average daily number of passengers at each of the stops within Evanston. Davis Street is by far the largest, with over 2,500 persons using it daily. It accounts for nearly half the annual passenger volume carried on this line. Altogether, about 7,000 passengers enter and leave the stations each week day. At current rates, these passengers provide over $8,000 income per day to the C.T.A.

While connections and frequency of service are good, the quality of the ride on the rapid transit is not. Some major improvement has been made in the past ten years with the replacement of pre-turn of the century wooden cars which were used on the Evanston branch, but much remains to be done. The CTA, under a federal capital improvement grant for their entire system, intends to remove the overhead lines in Evanston and replace them with third-rail electrification. This will enable the CTA to replace cars over 40-years old, and eliminate the need to switch from overhead to third-rail electricification as is currently necessary at South Boulevard. Complementary improvements will also be made to the right-of-way to insure safety under the third-rail electrification. Improvement in equipment and depots could be a major factor in attracting additional passengers or in holding present passenger volumes. New cars which are quieter, air conditioned and generally more comfortable have been introduced in small numbers on some of the new lines operating in expressway medians. They represent a significant step forward in improving the quality of the transit ride. However, in terms of their number compared to the entire rolling stock of subway and elevated trains, their impact is not great. It must be remembered that the costs of replacing such equipment on so large a scale is staggering. Capital for such outlays is in exceedingly short supply, but passage of recent federal and state legislation allocating $3.1 billion and $200 million respectively for transit capital needs has improved this picture.

The C.T.A. has had severe problems keeping revenues ahead of expenses and has faced a number of revenue crises forcing fare increases. Such increases have caused some passengers to abandon public transportation in favor of their automobile. Rising fares present a serious economic hardship for persons with low incomes, perhaps even pricing many of them out of the system. This is especially true for those riders who must use more than one system. Means other than fare increases must be found to off-set accelerating costs. Surely, local, state and federal governments have some role of responsibility to perform in keeping the transportation systems of the metropolitan areas alive. Some reallocation of resources will be required, whether from the motor fuel tax, federal aid or other sources.

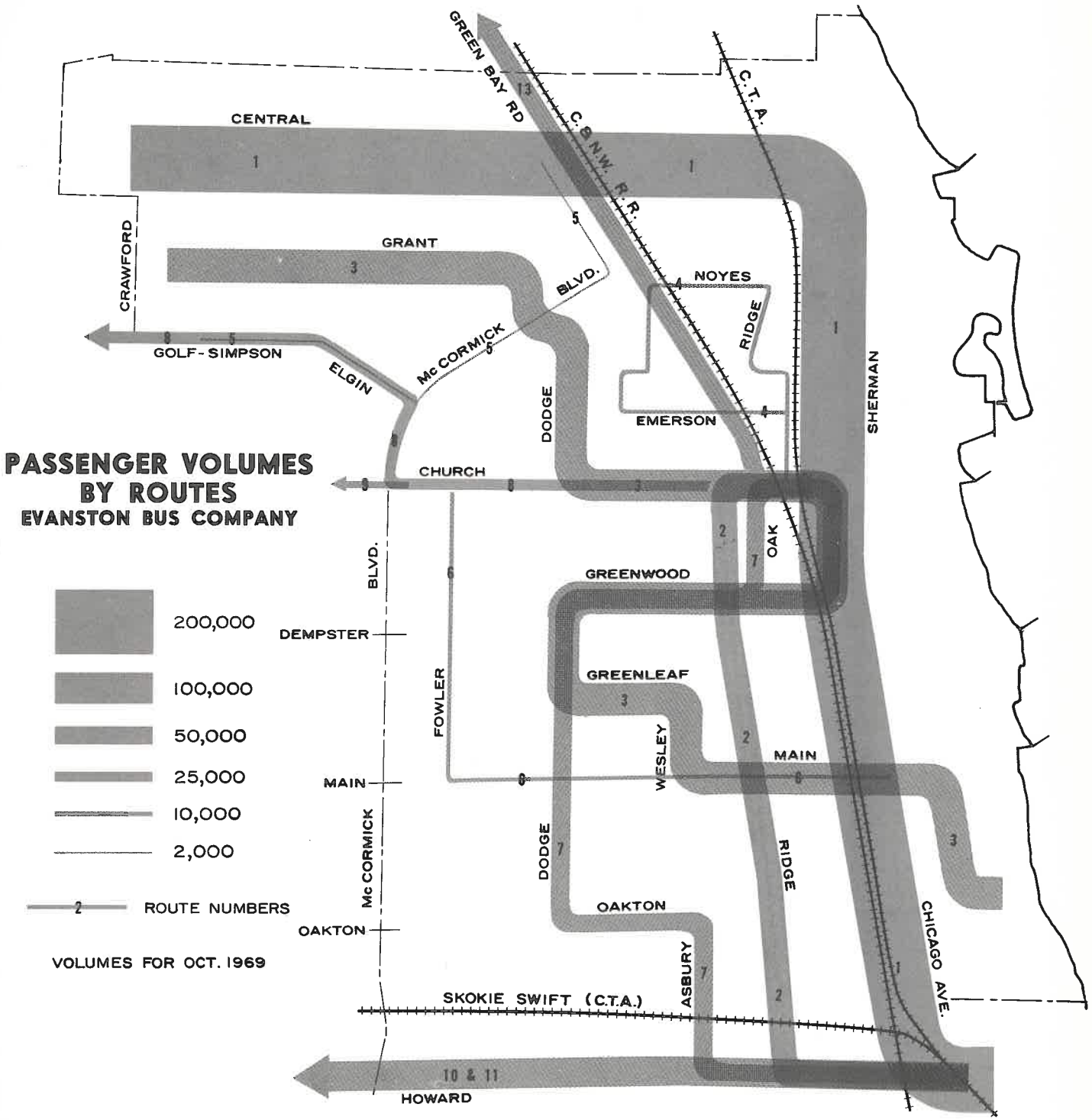
The Evanston Bus Company

The Evanston Bus Company has been providing local transportation service to the community since 1937. Prior to that time such service was provided by a streetcar system. The local bus system is unusual in that it is one of the few private bus companies in the state which has been able to operate at a profit without a subsidy. Similar operations have gone out of business in many cities or have had to go public to survive.

More passengers (approximately 8 million annually) are carried by the local bus system than by any other public transportation facility in Evanston. It is a complementary rather than a competitive form of transportation with the other carriers, and provides internal distribution of workers to and from the external, long haul carriers. In addition to its connections with commuter stations, busses serve the major employment centers of Evanston, the high school and other public facilities.

Bus routes are fairly well distributed throughout the city. There are, however, two sections that are not served: the area south of Main, north of the Skokie Swift tracks and west of Dodge/Asbury; and the University-lakefront area from the intersection of Sheridan and Ridge on the north to East Central Evanston (Dempster and Forest). Figure 3 shows the relative importance of the various routes as measured by the total passenger volumes for the year 1968. Quite a large range can be seen among the routes, from over 200,000 for the Central-Sherman route to about 2,000 for the Skokie route. A number of these routes are strong in terms of the number of passengers carried and revenues generated. Several of the weaker routes are, however, subsidized by the better ones and are not good revenue producers. One of the problems faced in a proposal for extending the existing route system is that the areas in need of better service would not generate sufficient revenue to cover the cost

FIG. 3



PLANNING DEPARTMENT

of expanded service, thus compounding the already difficult cost-revenue problem. In addition to the regularly scheduled routes, school and other charter contracts constitute a large part of revenues for the bus company.

The graph in Figure 4 illustrates the harsh realities of rapidly rising expenses common to most forms of public transportation. During the middle 1950's expenses began to rise. Since the Evanston Bus Company is a private organization which must show a profit, revenues also rose from fare increases and from additional passengers brought in through route extensions made during this period. After 1960 expenses continued to grow at a rapid rate with revenues staying ahead through successive fare increases. The number of bus miles driven also increased; however, the total number of passengers carried remained virtually constant. After the third fare increase in seven years, the number of passengers began to decline while expenses continued their upward trend (Figure 4). This widening gulf between expenses and the number of revenue passengers carried presents very serious consequences for the economic future of our bus system.

Over the past 15 years the number of passengers carried has decreased from nearly 12 million annually to approximately 8 million. There were increases in ridership until the mid-1960's, when the spiraling inflationary cycle caught up with the Evanston bus system. A variety of actions to make the bus system more contemporary, such as heated bus shelters, air conditioned buses, and more frequent service are desirable. However, it is unlikely that the number of passengers carried annually could be increased substantially by such measures alone. A more comprehensive system of improvements, including pricing, scheduling and transfer privileges among systems and modes must be accomplished.

Bus company expenses are not likely to do anything but increase. This means that fares will also have to go up or some other means of meeting expenses must be found. Because riders are extremely sensitive to fare increases, fares must be stablized. Otherwise the pattern of increasing fares, decreasing ridership and decreasing service will mean the demise of the Evanston bus system. Fare increases fall most heavily upon the users who can least afford them - the poor and the elderly on fixed incomes. If fare increases are to be checked, then some form of subsidy must be sought in the immediate future. The longer range financial picture of rising costs may make subsidization imperative if the bus system is to survive. The subsidy issue may then revolve around the question of how much is it worth to keep 8 to 12 million more annual potential automobile passengers off local streets.

In the immediate future, emphasis must be placed on investigating means of encouraging and maintaining the current levels of service. This will mean some kind of financial support. The community must evaluate its own responsibility in this effort. One of the most direct aids which can be given is simply for more people to use the local bus system. Rather than making plans for assuming the operation of the bus system, which has been the trend throughout the country, the City's role should be one of participant in such efforts as establishing better terminals and interfaces between different modes of transportation, improving bus loading areas, creating bus bays, and cooperating on matters of policy of mutual interest. In recognition of the need for better cooperation, the Evanston City Council has formed a special bus committee.

The cost-revenue problem is grave enough to deserve a thorough reevaluation to determine whether the route structure maximizes passenger volumes and makes efficient use of equipment; whether equipment is appropriate for its assignments; and whether the routes could be strengthened through improved relationships with the metropolitan system. A sub-regional evaluation was recently completed by a consultant for the North Suburban Transportation Council covering all forms of public transportation within this segment of the metroplitan area; their recommendations would improve the transit outlook in Evanston. A summary of their findings and recommendations is covered in the following section.

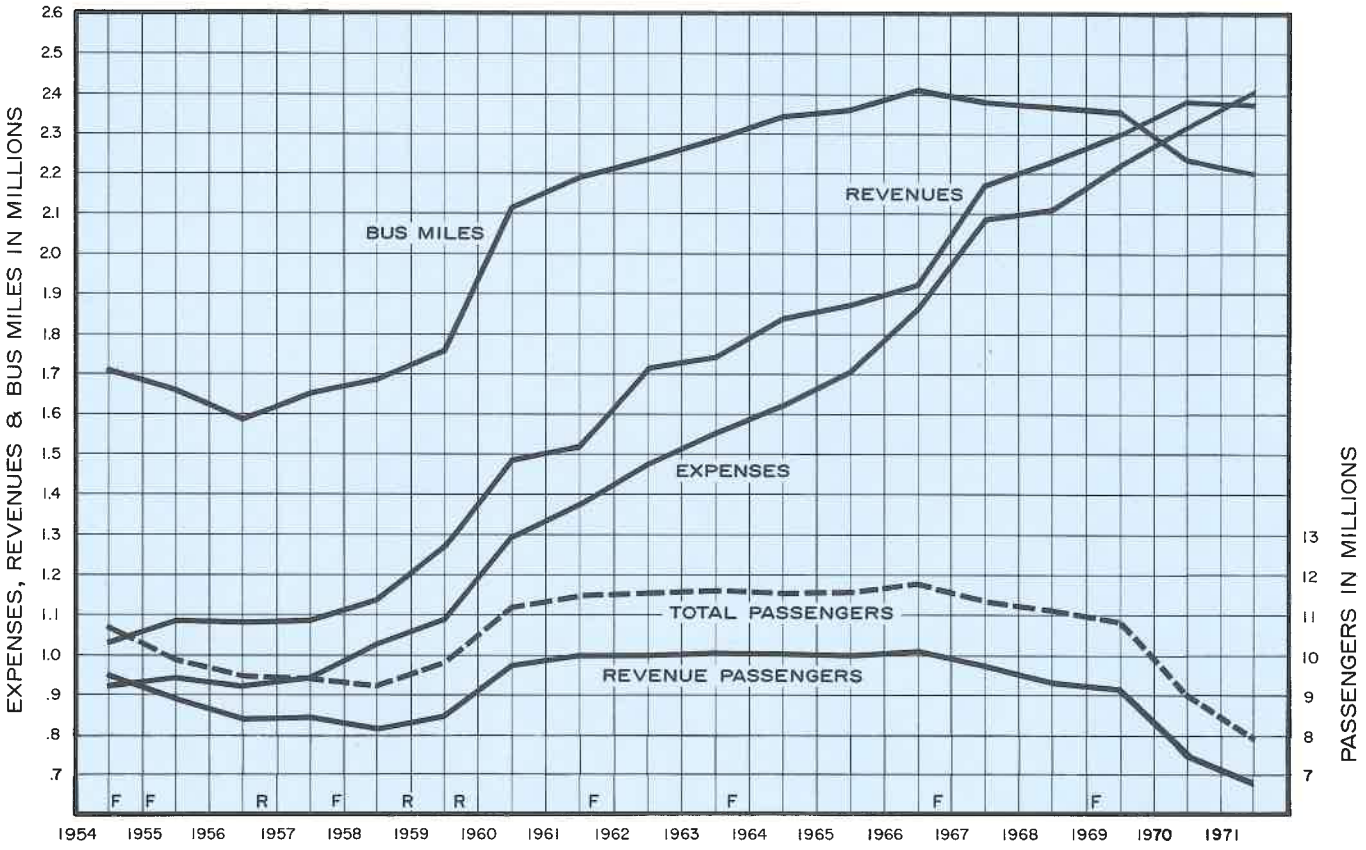
The North Suburban Transit District

Evanston shares with other northern suburbs the problem of incomplete and declining public transit. Although some of the carriers serving Evanston are fairly strong, others are facing severe financial crises which threaten their continued existence. Recognizing the seriousness of the situation and the community of interest which they share in the future of transit, fourteen northern suburbs formed the North Suburban Transportation Council in 1965. In order to determine how mass transportation service should be strengthened and improved,

FIG. 4

EVANSTON BUS COMPANY

TRENDS IN PASSENGER VOLUMES, BUS MILES, EXPENSES AND REVENUES



F – FARE CHANGES

R – ROUTE CHANGES

PLANNING DEPARTMENT

the Council retained a consultant in 1969 to develop a technical study and action program. This study, funded by the Council and the U.S. Department of Transportation, was completed in 1971.

The stated mass transportation planning objectives of the Council are to originate, sustain and improve the mass transportation facilities of the area. This purpose recognizes the vital role of transit service in providing urban mobility to the non-auto user, reducing congestion in major travel corridors and assisting in the control of pollution and urban sprawl.

The scope of the study prepared for the Council was keyed primarily to short-range transit service improvements that could be instituted with a moderate investment in fixed facilities and within a one to five year time frame. The study included an inventory of travel facilities, commuter parking and travel data; evaluation of commuter parking; possible modifications of the Skokie Swift; analysis of feeder and local bus service needs and expansion potential; analysis of land use and transit service inter-relationships; and development of a transit improvement action and implementation program.

Study Findings

The North Suburban Transportation Council study area (Figure 5) encompasses a population of about 476,000 persons and employs a labor force of 142,000 persons. Except for the Chicago commuter movement, travel is quite dispersed and automobile use predominates.

Analysis of transportation user characteristics, as surveyed within the study area, indicate a willingness to use public transit service when it presents a reasonable travel option, as it presently does for access to the Chicago central business district. Where bus service was not well coordinated or was infrequently provided, survey respondents obviously did not perceive it as a significant local transportation alternative. Non-driving individuals must spend an excessively high percentage of their income on local transportation, or must limit the work and other opportunities to which they travel. Travel needs which could be met by improved northern suburban transit service were identified as:

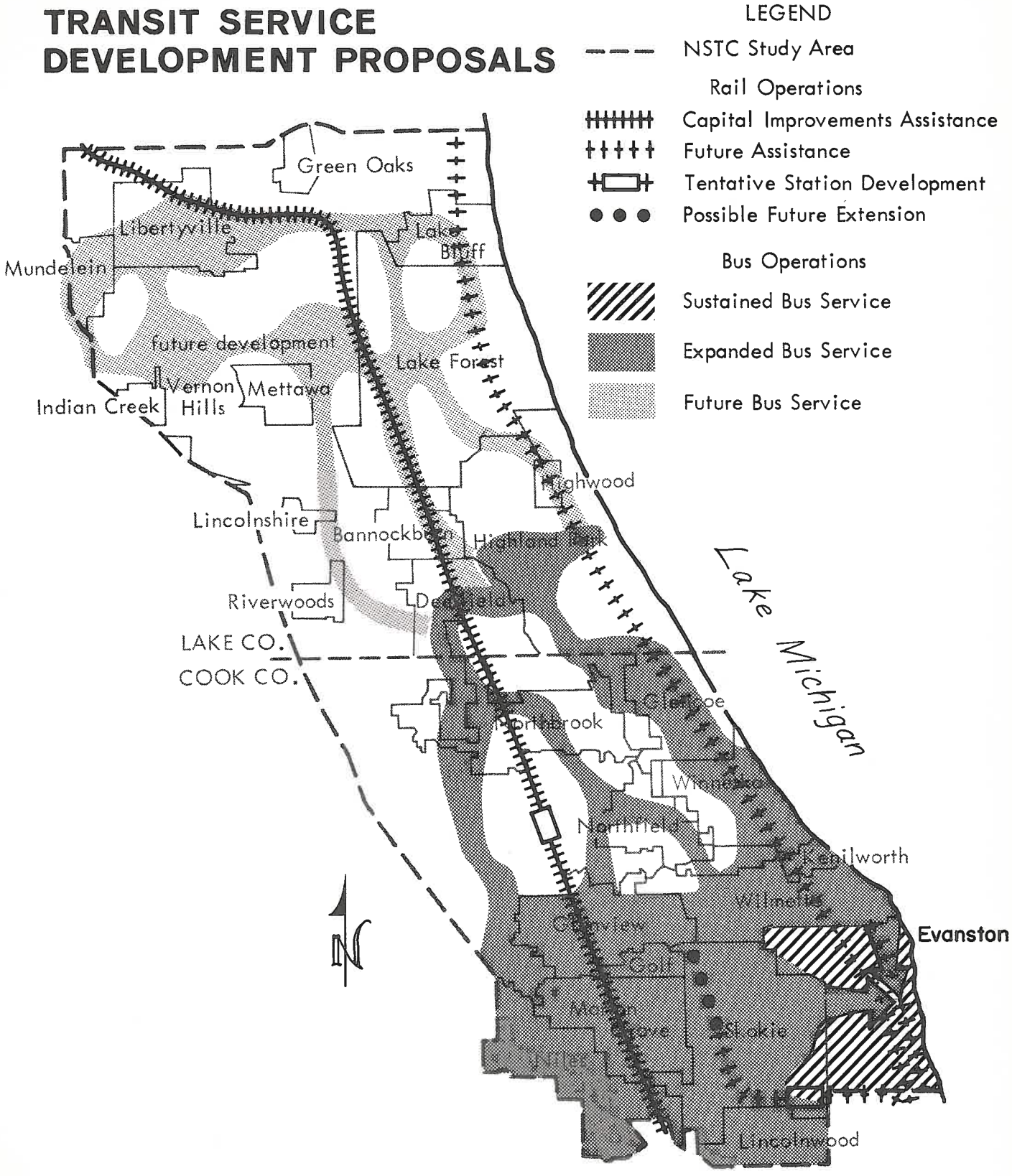
1. Better access to rail service by commuters;
2. Improved service to both young and older non-driving residents;
3. Improved local stand-by service to adult drivers;
4. Expanded access to suburban employment for lower income groups.

In its evaluation of commuter parking needs, the study noted some deficiencies in Evanston and other communities. Some modest expansion and improvements might be made at certain locations such as Main Street and Davis Street, but there are some serious cost and physical limitations involved. Also, it is more in the community's interest to improve bus connections to transit stops than to greatly expand commuter parking.

Modifications suggested for the Skokie Swift which would have some benefit for Evanston include the possibility of opening a new station at Hamlin Avenue in Skokie (Figure 1). This nearby station was suggested as a short-range solution to overcrowding of the present terminal of the Swift at Dempster Street and to meet the need for a new bus and rail transfer point to serve adjacent parts of Skokie, Evanston and Lincolnwood.

Part of the report's focus was upon the existing bus service and operations. Service in the area is provided by the Evanston Bus Company with 13 routes, United Motor Coach with 6 routes and the Glenview Bus Company with 5 routes. Only 10 of these routes were found to have a peak period service frequency of three buses per hour or better. The routes of the separate companies and the CTA Skokie bus route were shown to have poorly coordinated and competitive service run on several streets.

FIG. 5


TRANSIT SERVICE DEVELOPMENT PROPOSALS
LEGEND
NSTC Study Area
Rail Operations
Capital Improvements Assistance
Future Assistance
Tentative Station Development
Possible Future Extension
Bus Operations
Sustained Bus Service
Expanded Bus Service
Future Bus Service
Green Oaks
Libertyville
Lake Bluff
Mundelein
future development
Lake Forest
Vernon Hills
Mettawa
Indian Creek
Highwood
Lincolnshire
Bannockburn
Highland Park
Riverwoods
Deerfield
LAKE CO.
COOK CO.
Lake Michigan
Glencoe
Northbrook
Winnetka
Northfield
Kenilworth
Wilmette
Evanston
Glenview
Golf
Morton Grove
Skokie
Niles
Lincolnwood
N

It was estimated that about 35,000 daily revenue passengers are served by the three bus companies. In 1969, the Evanston Bus Company carried 15 per cent more passengers per bus mile than the national average, and actually had more riders than in 1955, both signs of strength. As pointed out earlier, however, patronage has been declining because of fare increases, and the Evanston Bus Company is now caught in the same serious spiral of rising wages, rising fares and declining ridership. United Motor Coach Company has recently been receiving subsidy from some on-line communities. The Glenview Bus Company is considered to be in a very weak operating position.

In exploring concepts for improved feeder and local bus service, the consultants reviewed available technology and assessed the practicality of each type of service for application to the study area. Their findings concluded that the conventional type of bus operation, composed of trunk and minor routes, had limited potential for expansion beyond the areas now being served. This type of operation does not work well in low density areas. Comprehensive pulse-scheduled local service was considered a practical means of extending service to some portions of the study area. This is an operating procedure designed to provide medium-density, fixed bus route service at intervals that can be easily remembered, with coordinated scheduling into central locations for convenient passenger transfer. The operation is keyed to providing a satisfactory level of service where the total amount of bus riding is relatively low.

The expanded feeder and local bus service plan developed for the area has been designed to provide full coverage in the primary service area with 30 minute minimum service frequency. The routes cover 32 per cent more miles of streets than present operations (Figure 5). Principal findings in regard to the expanded service plan are that: (1) the estimated ridership for an expanded suburban bus service is 17,400,000 annual passengers as compared to 10,300,000 today; (2) the estimated 62 per cent increase in local bus use reflects a significantly expanded mobility for users of public transit and a desirable decrease in auto dependency; (3) the total, one-time start-up and capital cost for expanded bus operation is in the 5 to 10 million dollar range, the major part of which should be eligible for federal grant assistance. What is of significance to Evanston in this proposal is the large number of potential riders to be generated through transfers from the expanded service in outlying suburbs. It is estimated that intra-region trips will raise the average number of daily riders using the Evanston Bus system from 14,800 to about 17,000.

Transit service coordination, implicit in various development proposals, is a critical element in their ultimate success. Simple preservation of existing bus service is not a viable alternative considering the present number of wasteful service duplications and the current lack of service coordination necessary for public acceptance. There is a need for joint bus-rail fares to encourage feeder bus usage. The bus-rail transfer problem is a fit subject for a demonstration project, more so than would be individual bus route extensions.

One of the first tasks identified by the consultants as prerequisite to translating transit service improvements into visible results has already been carried out. The North Suburban Transportation Council has formed a North Suburban Transit District. Their principal functions include the following:

1. Develop a unified, coordinated bus system for much of the north suburban area through contractual arrangements.

2. Minimize or eliminate duplicating and overlapping bus service.

3. Sustain and improve existing rail transit service and provide an efficient expanded bus system with an emphasis on frequent dependable service.

4. Provide a reasonable transfer privilege from bus to rail and bus to bus under a unified fare plan.

5. Coordinate bus and rail schedules for bus to rail and bus to bus transfers.

6. Work towards improving transfer points by developing improved transportation centers at various intensity levels throughout the north suburban area.

7. Assist municipalities in planning and implementing expanded commuter parking facilities.

8. Prepare a final analysis on the construction of an added stop on the Skokie Swift at Hamlin Avenue and develop an additional stop on the Milwaukee Railroad at Willow Road with a facility for park-and-ride and kiss-and-ride commuters.

9. Improve and insure transit service by providing equipment including buses, railroad stock, and supporting system facilities by seeking appropriate local, state and federal funding.

10. Establish a local mass transit district, determine a base fee for all municipalities and detail funding arrangements for various municipalities on a contractual basis based on benefits to be received.

Conclusion

Evanston's three major transportation systems carry thousands of passengers daily, thus adding greatly to the convenience of living in the community and reducing congestion on its streets. The impact of the automobile and the sharply increased costs of operating these systems has endangered their existence. Increasing service and passenger volumes, or even holding present levels will prove difficult. Piecemeal improvement of equipment, depots and service will not, alone, be enough to attract large numbers of additional riders. Only a major overhaul including scheduling, pricing and equipment improvements will yield results. Further, merely attracting additional passengers may not be enough to sustain the cost of such improvements. Other means of support will be required.

What is needed to sustain and improve public transportation goes far beyond what an individual community can provide. Many of the problems will require a regional approach and large scale financial aid. Some of the functions that can be dealt with at the sub-regional level include the unification of bus scheduling, improvements in the local bus operation, commuter parking concerns and participation in regional transit planning and implementation. Continued survival of public transportation will be strongly dependent upon local, state and national funding. There are signs of a growing sense of urgency for new approaches. Formation of the North Suburban Transit District is one, as is the formation of a new, inter-modal Department of Transportation by the State of Illinois. This department is responsible for considering a balance of transportation needs, not just highways. They have recently gained authorization and appropriation from the state legislature for an $900 million bonding program. Congress is currently debating the formation of a transportation trust fund which would make available motor fuel tax monies for financing all forms of transportation instead of earmarking them strictly for highways.
With the transit district now formed, steps are being taken to help insure the continued operations of the bus companies through a bus assistance fund to help sustain operations and make some immediate short-range improvements.

Remaining steps include: (1) submit an application for a federal grant to help plan an expanded bus system and to develop data for other transit improvements; (2) prepare a capital grant request for rail facilities for the Chicago, Milwaukee, St. Paul and Pacific Railroad; (3) pursue a demonstration program to test the effects of bus transfer privilege operation.

Although the first steps have been taken, there remains a long way to go to develop a truly effective public transportation system. Even with the formation of a Transit District, the question of interrelationships between it and other emerging districts remains. The federal Department of Transportation would like to see the development of a metropolitan plan for public transportation and the establishment of one agency with which it would deal for all Chicago area grants. This plan has yet to be developed.

The costs of sustaining a viable, balanced transportation system of which public transit is an integral part will be enormous. A reassessment of priorities for transportation funding will be required. However, the cost of saving public transportation will be a great deal less than that required to resurrect it, if it should fail.

STREET SYSTEMS

The overall objective of planning for Evanston's circulation system is to promote safe, efficient and convenient access to homes and establishments within this community and between Evanston and the metropolitan area. An important part of this planning is devising better ways to use the existing street system and overcoming some of its limitations.

The quality of the circulation system has a great deal to do with living advantages of a community. Are trips to work, school or shops carried out with relative ease and convenience or are they sources of frustration and delay? On the other hand, are travel demands going to become so great and the increase in physical improvements made on such a scale so as to threaten other community values? It is this precarious balance between accommodation of growing traffic volumes and the preservation of other attractive community qualities that will continue to provide a challenge for transportation planning in Evanston.

Evanston's Position in the Metropolitan Area

Evanston lies in the northern corridor of one of the world's largest metropolitan areas. Its proximity and ease of access to the central city is a strong asset. However, its position next to Chicago also means that it accumulates some rush hour traffic from other outlying suburbs within the corridor. Several factors have kept staggering traffic volumes from developing along Evanston's north-south major streets. First, and most important, was the construction of Edens Expressway. It has not only relieved congestion along the major north-south streets within this corridor, but it has also absorbed most of the sizable increase in traffic resulting from the growth of the northern suburbs.

A geographic feature also limits the amount of through traffic in Evanston. Its location on the shore of Lake Michigan minimizes east-west through traffic and the northwest bend of the Lake Shore north of Evanston reduces the potential for through traffic from the north.

The impact from future growth of shoreline communities will probably not be very great, for they, like Evanston are nearly completely developed. Edens Expressway is already congested, however, and future traffic volumes can be expected to put additional pressures upon it. Communities west of Edens still have capacity to grow and their impact upon this facility will require relief. Without such relief, continued growth of traffic on Edens and the resulting congestion could divert some traffic back to the Sheridan Road route.

Evanston's position in relation to Chicago and other northern suburbs has produced a long-standing fear of high volumes of through traffic. This concern has made itself strongly felt in policies dealing with traffic and street improvements. The absence of a good north-south route through the community is both a reflection of this concern and a product of the physical obstacles to its creation.

Evanston as a Traffic Generator

Because of Evanston's position within the metropolitan area, there is an almost natural assumption that the local traffic problem is created largely by through traffic generated by other communities. This is not the case. For example, about two thirds of the traffic entering Evanston in the morning rush hour from the north has a destination within Evanston. What is frequently overlooked in issues concerning traffic is the extent to which Evanston generates its own traffic. There are some 28,000 households generating trips to work, shopping, schools and recreation. There are also 34,000 local jobs drawing workers to the community, and regional service and shopping functions attracting local and out-of-town traffic. The university also generates a considerable amount of traffic, since about one-quarter of the student body commutes.

Vehicle registrations indicate that there are approximately as many local cars as there are households. Since an average household can easily generate as many as eight trips per day it is easy to see that locally generated volumes could approach 230,000 daily trips.

Taking into account some of these factors will help to establish a more balanced picture of the traffic problems and develop an appreciation for the complexity of local traffic circulation. Our traffic problems are not merely those of a community lying on the route to somewhere else.

The Character of Evanston's Streets

The Street Pattern

Another consideration to keep in mind in approaching the study of Evanston's circulation system is the character of the street pattern itself. The pattern is one of a strong grid with a few significant variations (Figure 6). The grid pattern is common to most older American cities and is an outgrowth of our system of land survey. While it is a convenient form for dividing land, the rectangular pattern applied to circulation systems without modification does create traffic problems for today's cities. One of these problems is that the grid pattern creates greater possibilities for local streets to collect more traffic than they should by giving all streets long continuity. This characteristic also inhibits the development of a street "system" whereby streets are assigned different functions.

A few modifications are found in our rectangular pattern to make it somewhat less rigid. Some of these modifications help, while others create circulation difficulties. There are two major breaks in the pattern, one made by the railroad embankments and the other by the North Shore Channel. These features do help in relieving the monotony of the grid, in giving more distinct boundaries and breaking the continuity of local streets. The interruption of the street pattern formed by the railroad embankments in the central area of Evanston, however, creates serious circulation problems in an area where movement is already difficult. Breaching or altering this barrier is a costly undertaking.

Other exceptions of the north-south, east-west alignment of the grid include the Ridge Avenue-Green Bay Road diagonals which were trails established to follow favorable topography through a poorly drained region. Streets in the original part of Evanston, which included just the central business district, were laid out in a grid with a northeast-southwest off-set.

Street Rights-of-Way

A significant factor relating to historical aspects of Evanston's street system are the standards which applied at the time of its development. The city was platted in the pre-automobile era which has resulted in many major streets having inadequate rights-of-way. Figure 7 shows the width of rights-of-way for major and collector streets. In view of today's needs, there is little logic or consistency for the assignment of rights-of-way as they now exist. Note that few routes have consistent width available to them throughout their length. There are numerous examples of exceedingly generous rights-of-way for stretches of local streets. Many of the major streets have rights-of-way of only 66 feet and are inadequate for current and future street needs. The inadequate and inconsistent rights-of-way create serious difficulties in establishing continuity of street paving widths and in carrying out any street widening programs. Widening streets on narrow rights-of-way can mean the loss of trees and the placement of traffic too close to abutting property. Widening can be accomplished with far less damaging effect on adjacent properties when a wide right-of-way is available. Too often limited rights-of-way exist where the additional width is critically needed. Segments of Chicago Avenue and Main Street are examples (Figure 7). Additional capacity is needed on segments of these commercial streets. However, the commercial structures have no set-backs and with all the rights-of-way except the sidewalks already in street pavement, there is little room to expand. Acquisition of additional rights-of-way along any route segment in such a fully developed city as Evanston would be either prohibitively expensive, politically impossible, or both.

FIG.6

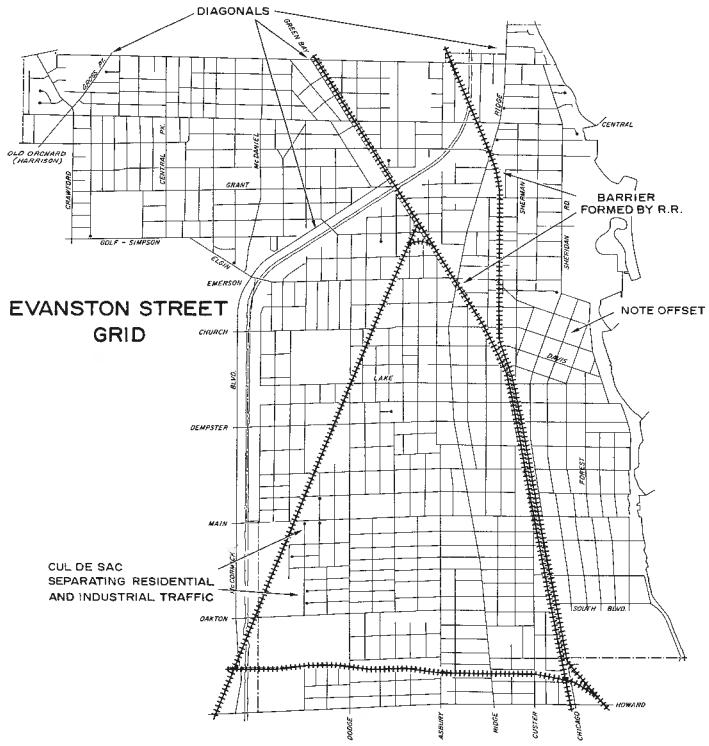


FIG.7

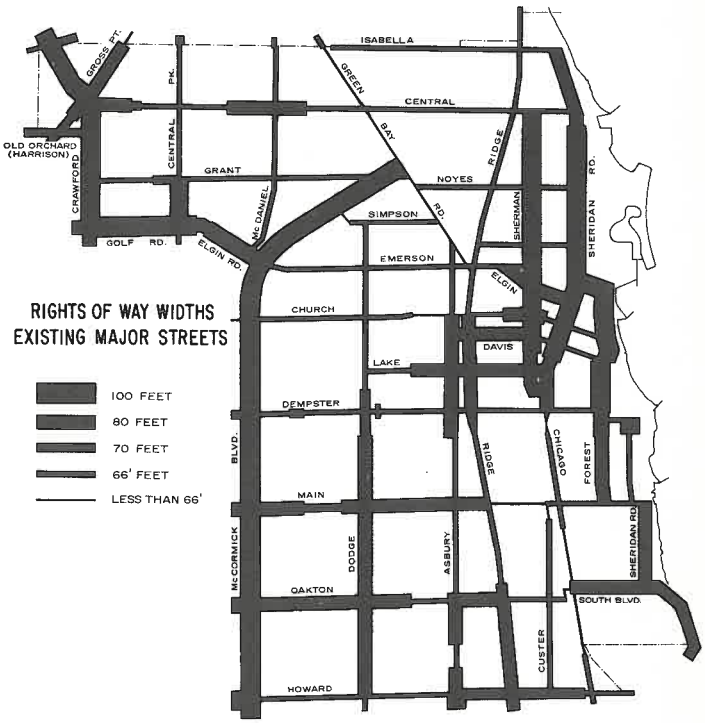


FIG.8

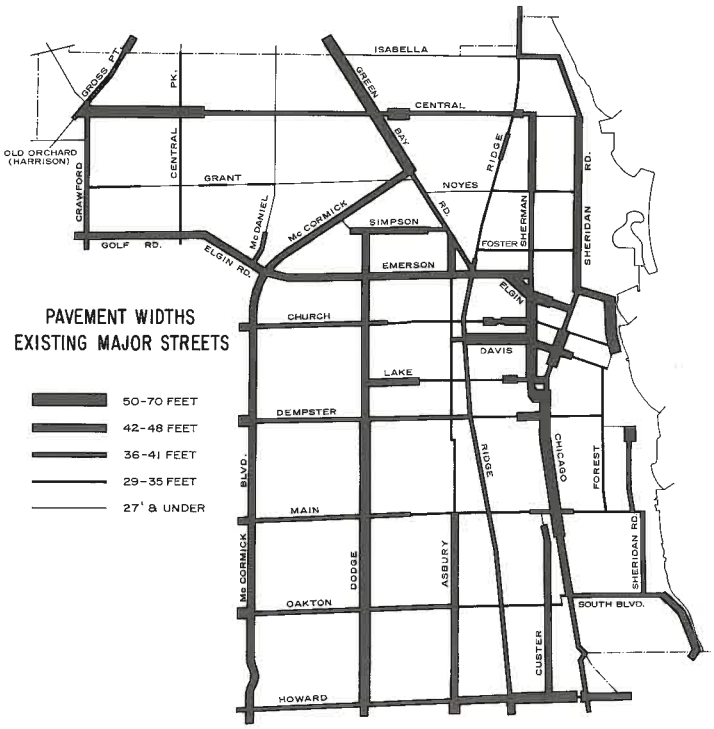
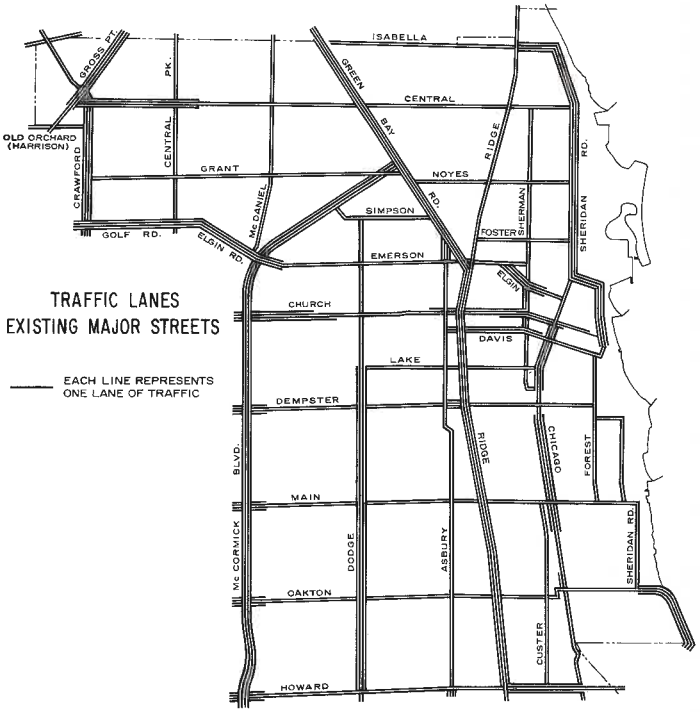


FIG.9



PLANNING DEPARTMENT

Pavement Widths

Although street paving programs were developed in conjunction with the emerging automobile age, the standards of the times were considerably lower. Unfortunately, many of the earlier established street widths have remained, even though needs have changed. Consequently, few of our streets comply with contemporary standards. Some major streets having extremely narrow traffic lanes are badly congested.

The same lack of continuity found in street rights-of-way can be seen in the map showing pavement widths (Figure 8). Many of the routes have constricting widths as they approach the central and older parts of the city. Also note that quite a difference can be observed between the pavement widths at a number of points where major streets cross into adjoining communities. There is little relationship between street widths and traffic volumes carried. For example, Dodge Avenue, carrying about 10,000 vehicles per day south of Dempster Street, has a width of 52 feet, while Ridge Avenue, with 20,000 vehicles per day, has only 36 feet. Route 42, or the Sheridan-Forest route, which carries large volumes of traffic, has street widths for every category shown in Figure 8. Street segments vary in width from 27 feet to 70 feet.

Traffic Lanes

Many of the inconsistencies noted above have produced problems in maintaining continuity of traffic flow. They have created points of congestion and hazardous conditions. Figure 9 diagrams the major and collector streets according to the number of traffic lanes they carry. (It does not indicate whether these lanes are of adequate width).

Maintaining smooth traffic flow and traffic lane continuity has been a considerable challenge. With strong opposition to any street widening programs, traffic engineering has been forced to work largely within the physical limits of the present street system. Several techniques have been used to overcome the physical shortcomings of an inadequate system, such as establishing one-way streets and stripping parking. In some cases parking has had to be stripped on at least one side to provide two adequate moving lanes.

One of the most striking features of the traffic lane map is the limited number of four-lane major streets. Only McCormick Boulevard, Crawford Avenue and the Green Bay Road-Ridge Avenue link operate with four lanes throughout their length. A few others, such as Sheridan Road, Chicago Avenue, Dodge Avenue, Elgin Road, Simpson Street and Central Street have four-lane segments. The one-way couple system of Davis and Church Streets carry three moving lanes within the downtown area.

The need for additional traffic lanes on many of the major streets is apparent during peak hours when many of the wider two-lane streets attempt to become four-lane. That is, the cars moving in one direction drive in a staggered or off-set position waiting for an opportunity to pass in the parking lane or at the approach to an intersection. This condition is particularly apparent on sections of Emerson Street, Main Street, Oakton Street, Chicago Avenue and Dempster Street. The most serious congestion covers a relatively short period of time and could be greatly relieved by stripping parking during rush hour on one or both sides to provide additional travel lanes.

There are several abrupt changes in the number of traffic lanes available as traffic crosses the Evanston-Skokie boundary and the Evanston-Chicago boundary (Figure 9). Skokie has consistently greater or equal number of lanes, while the Chicago-Evanston streets vary.

Accident Pattern

Causes of accidents are complex and varied, but among the contributing factors are congestion and inadequate street standards. The relationship between standards and safety has been demonstrated by expressways which carry large volumes of traffic but have low accident rates. Their grade-separated intersections, limited access, median strips and generous lane widths help make them safer than arterial streets.

Increased safety is one of the major motivations in making street improvements, particulary widenings that give greater traffic lane widths and intersection improvements. When the accident issue is raised in support of making improvements, it has frequently been countered by claims that accidents are mostly of the "fender bender" type and not of much consequence. While it is true that most automobile accidents involve property damage rather than injury, recent trends should not be dismissed lightly. In comparing statistics for the decade of the 1950's to that of the 1960's, total accidents have increased about 20 per cent; however, injury accidents have increased by 32 per cent and deaths by 54 per cent. Aside from the cost in human suffering, higher accident rates have also meant higher insurance costs and losses from property damage (Table 1).

Some of the differences in accidents between the two decades can be accounted for by the increase in traffic. However, it is interesting to observe that the accident rate continued to climb during the 1960's while traffic did not increase appreciably.

Figure 10 shows the distribution of the accident pattern for the year 1969. The major intersections immediately stand out with their higher accident rates. Another obvious pattern is that of the downtown area, where many conflicting types of traffic movement are found. Careful examination of various major streets in comparision with their traffic volumes shows that there is not a direct correlation between traffic volumes and accidents. Note the relatively accident-free Sheridan-Forest route in comparison with Ridge Avenue. Both have approximately the same volume. Asbury Avenue has somewhat heavier traffic than Dodge Avenue, but fewer accidents. More detailed information on the type of accidents is plotted on the large map used by the Police Department, but this generalized map is useful in pinpointing some of the problem areas which deserve attention.

Obstacles to Circulation Improvements

Planning for an improved circulation system confronts the same question as does planning for other physical elements in the community: how can older, inadequate urban facilities be adapted to today's needs? The difficulties are both physical and political, the latter being used in the broadest sense and applying to community attitudes, public policy, and inter-governmental cooperation.

The community has demonstrated a reluctance to improve major streets to ease congestion. The cause of this reluctance has several roots. There is an historic concern over Sheridan Road becoming the main route between Chicago and Milwaukee. Authors of Evanston's first plan in 1917 felt that the cherished chuck holes, jogs and other means of discouraging traffic were an unrealistic approach to circulation planning. They recognized that repressive measures would not eliminate through traffic, but merely divert it to local streets. They argued unsuccessfully for a trunk route designed to handle through traffic.

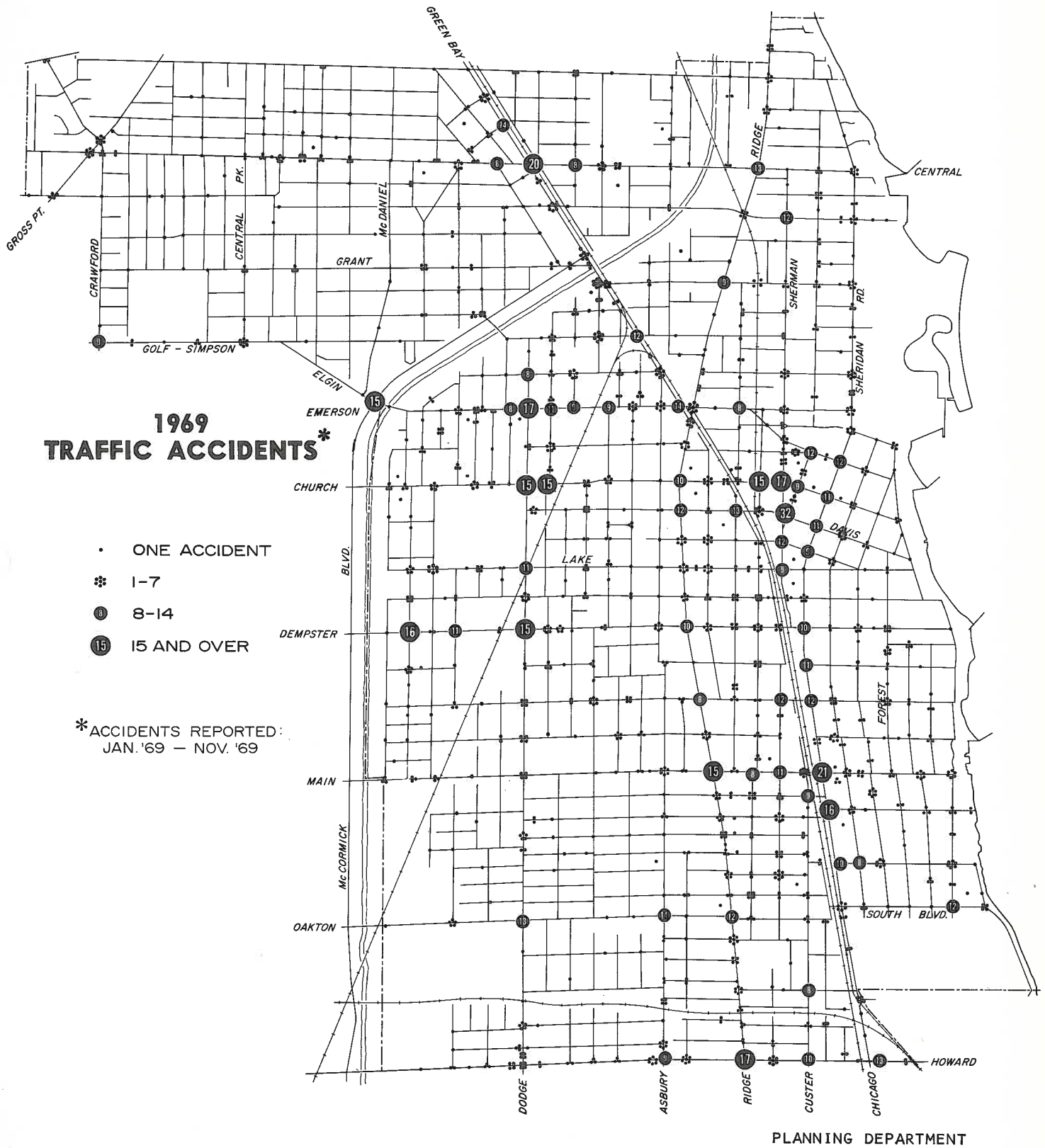
Today the concern is more broadly based. There is a genuine fear of almost any street improvement or alteration that springs from growing personal distress over increased traffic levels, concern about the effects of traffic on residential neighborhoods, the general press of urbanization and the individual's feelings of helplessness against it. Some aspects of this concern are very tangible. When a street widening is proposed, the most volatile issue is the status of the street trees. One of the community's most treasured resources is its canopy of elms, and the public is clearly unwilling to trade off street trees for major street improvements. However, widenings which do not involve significant tree loss also face strong opposition. The belief is that any widenings will draw additional traffic to Evanston streets. Finally, there is a fear of any change in the circulation system, whether it is an intersection widening, a cul-de-sac, or a street vacation, which results from the uncertainty of change. These concerns tend to produce "safe" solutions of doing nothing in the hope that the traffic will become discouraged

TABLE 1
ACCIDENT SUMMARY

Year	Vehicle Registration	Deaths	Injury Accidents	Property Damage Accidents	Total Accidents	Year
1950	22,213	9	274	1,743	2,031	1950
1951	24,817	5	272	2,018	2,295	1951
1952	25,344	0	301	1,829	2,130	1952
1953	24,468	2	321	1,774	2,097	1953
1954	23,301	2	331	2,018	2,351	1954
1955	24,630	2	306	2,032	2,340	1955
1956	25,099	4	296	1,967	2,267	1956
1957	26,360	4	328	2,017	2,349	1957
1958	26,767	0	345	1,986	2,331	1958
1959	26,715	0	352	2,130	2,482	1959
TOTALS	249,714	28	3,126	19,519	22,673	
1960	27,183	2	436	2,270	2,708	1960
1961	28,015	2	425	2,060	2,486	1961
1962	28,529	2	428	2,208	2,638	1962
1963	28,833	4	407	2,253	2,664	1963
1964	28,968	7	455	2,294	2,756	1964
1965	28,962	4	402	2,233	2,639	1965
1966	30,357	5	402	2,262	2,669	1966
1967	29,409	4	385	2,401	2,790	1967
1968	29,716	3	378	2,344	2,725	1968
1969	29,818	7	425	2,630	3,062	1969
1970	29,254	4	412	2,468	2,884	1970
1971	29,528	3	398	2,572	2,973	1971
TOTALS	348,572	47	4,953	27,995	32,994	

Source: Traffic Engineer's Annual Report

FIG.10



PLANNING DEPARTMENT

and go away. We wistfully hope for some undefined technological breakthrough to revolutionize the transportation system and solve problems. We visualize everyone else riding public transportation. We deplore the traffic situation, but use our cars frequently and will continue to do so. It is this kind of compartmentalized view of the automobile and traffic that makes dealing with circulation problems most difficult.

Another realm of difficulty in coping with circulation problems is that of inter-governmental cooperation. This manifests itself at boundary streets and major streets joining adjacent communities. Frequently little coordination is in evidence. This results from lack of communication, absence of clearly defined policies, or strongly conflicting policies. Some progress has been made in establishing better communications in this area, but where a sharp difference of policy exists, a community is seldom willing to foresake what it considers its self-interest for the good of the larger region.

Physical obstacles to circulation improvements are also formidable. They are related to the fully developed nature of the community that makes any physical change difficult and expensive. For example, altering a street alignment may require clearance of developed land or breaching the railroad embankment. In some circumstances where major streets should be widened or other improvements made, there is inadequate right-of-way and commercial development is built up to the property line. Freeing street capacity by construction of off-street parking lots involves problems of land acquisition and clearance.

Journey to Work – Mode of Transportation

The question of how Evanston workers travel to their jobs has relevance for transportation planning. Sample surveys of this type are expensive and difficult to undertake, but the census provides information about modes of travel used by residents.

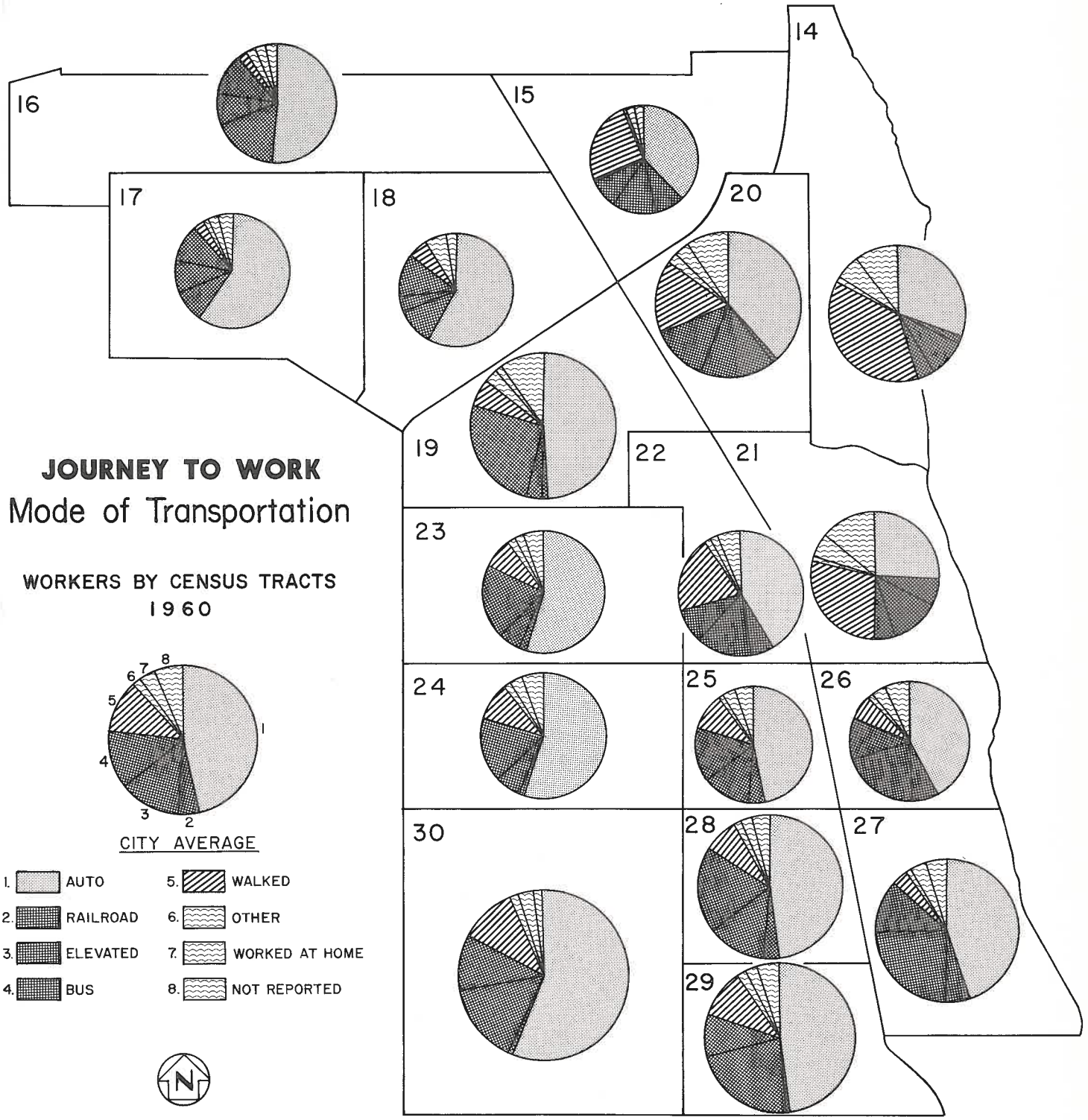
Figure 11 presents this information in the form of segmented circle graphs for Evanston and its census tracts. The area of the circle is proportionate to the number of workers, and the segments represent the proportion of workers taking each mode of transportation. As might be suspected, the automobile leads with over 40 per cent usage in all but two tracts. Surprisingly, in the two areas in which the auto is not the chief mode, walking is. One is the university area, which contains a high percentage of students and people employed by the university. The other is the central area, where residents are within easy walking distance of businesses and offices. Proximity of residences to work places in these areas helps account for the unusually high percentage of walkers.

Public transportation is well used in most sections of Evanston, with the emphasis upon particular modes varying with access to bus, commuter rail or rapid transit. In only one area does public transportation carry less than 25 per cent of the workers. On the average, about 30 per cent of all workers use public transportation, and in some tracts use runs as high as 41 per cent. The railroad is not as widely used as other forms. It seems to enjoy the greatest ridership in northwest and southeast Evanston. The elevated seems to be most popular in the central area, southeast, northwest, and southwest Evanston. Use of buses is wide with special interest shown in the west central area.

Types of Streets, Their Character and Standards

In the typical journey to work by auto, the trip is made on a series of different types of streets from home to destination. Normally, the origin is on a local street serving as an access to homes. From here the trip may proceed a block or two to a collector street, which leads out of the neighborhood to a major thoroughfare. The major street may lead to an expressway for a long work trip or to an employment center within a few miles. To approach its destination, the trip may divert to a street which leads to a parking space. Not all trips follow this sequence. There are many variations; the example is used to illustrate the basic components of a circulation system. Each of these components will be examined in more detail.

FIG.11



PLANNING DEPARTMENT

Local Streets

The primary purpose of a local street is to provide direct access to abutting properties. It is not designed to carry heavy traffic volumes and should have less continuity than other streets so as not to collect traffic volumes over 1,000 cars per day.

Standards for local street widths range from about 26 feet to 36 feet depending upon the density and type of area served. Where there is higher density and a fair amount of curb parking, at least 30 feet is required to provide for two eleven-foot travel lanes and an eight-foot parking lane on one side. Local streets with curb parking on both sides actually operate with only one moving lane.

The 26-foot standard applies only to low density areas with ample off-street parking. This is typical of newer subdivisions where more driveway space is available and where there is little on-street parking, a situation rarely found in Evanston's single family areas. Many of Evanston's local streets are only 24 feet wide and few have any parking restrictions.

Collector Streets

In addition to serving as an access to abutting land uses, collector streets serve the function of collecting traffic generated by local streets and delivering it to the major streets. They have longer continuity than the purely local streets, require greater capacity to handle their larger traffic volumes, and are usually given preference over local streets at intersections. Traffic volumes usually range from two to eight thousand vehicles per day. The recommended width for a collector is 40 feet, which allows for two eleven-foot travel lanes plus two nine-foot parking lanes. Many of Evanston's collector streets are quite narrow (24 to 27 feet). Only with parking restrictions can most of them provide two moving lanes. Even with a parking restriction on one side, the travel lanes are substandard in width. Some segments of certain collector streets are not passable for two lane traffic with parking on one side. This is especially true in winter. Minor widening should be considered to eliminate the hazardously narrow traffic lanes when major maintenance or reconstruction is required in the future.

Major Streets

Major or arterial streets have longer continuity, larger traffic volumes and greater capacity than local and collector streets. They serve three types of traffic: local, terminating, and through. With few exceptions, most of Evanston's major streets have considerable residential frontage, so they must also perform the function of a local street by providing access to abutting property. Local traffic originates and terminates within Evanston's boundaries. Terminating traffic, a large component of our total traffic, is that which originates or terminates within Evanston but has one of its trip ends outside the city. Through traffic has no origin or destination within the community.

Major streets form the principal link between home and work or between home and shopping. In Evanston these streets carry from 10,000 to 20,000 vehicles per day. To safely and efficiently carry such volumes, major streets should have at least four eleven-foot travel lanes exclusive of any parking. Although the paving width is available in some cases, few of Evanston's streets meet these standards. These streets either operate with only two travel lanes plus parking (such as Emerson Street) or they have four substandard travel lanes (such as Ridge Avenue). It is on the substandard major streets of limited capacity that most of the peak hour congestion is found.

Certain segments and intersections of these streets will require a variety of improvements to correct current deficiencies and enable them to meet future demands. Additional traffic on these streets will result from these improvements. Most of this traffic, however, will come from adjacent local streets which are now receiving traffic diverted from the congested major thoroughfares. One of the community's stated objectives has been to remove by-pass traffic from local streets and return it to the major thoroughfares where it belongs.

Although there is a good deal of logic in shifting by-pass traffic from local streets back to major streets, it must be remembered that most of the major streets also have a residential character. Only Green Bay Road and Chicago Avenue are almost entirely commerical; the rest have most of their frontages in homes or apartments. It is important to keep this fact in mind when making improvements on these streets and when considering various traffic control devices. Access to these properties must be protected and consideration given to preserving the best possible residential environment under the circumstances. Replacement of any street trees lost because of improvements is especially important. The impact of restriction on curb parking should be evaluated. Careful examination of alley traffic problems on those that parallel major streets should also be part of the planning program for these streets.

Distributor Streets

The term distributor streets is descriptive, rather than technical, referring to the elements in the downtown circulation system. These streets have some characteristics in common with local, collector and major streets. Although there is no official recognition of a distributor street classification, it is believed that distinguishing downtown streets from others is useful in circulation planning.

These streets normally carry fairly high traffic volumes of 3,000 to 10,000 vehicles per day, but they have relatively short continuity. They serve as final access routes from the longer major thoroughfares to highly concentrated central business district traffic generators. Within the central business district, these streets must serve several functions including: providing access, ingress and egress for off-street parking, on-street parking spaces and handling large volumes of pedestrian traffic at intersections.

Normally central business district streets should not be allowed to function as carriers of through traffic. Evanston has had some success in diverting through rush hour traffic from downtown and is continuing to pursue policies and programs directed toward this end. For streets with these traffic characteristics, a minimum lane width of 11 feet is adequate. Width needs vary with the requirements of the individual streets and are dictated by such questions as: how many moving lanes are desired; will curb parking need to be retained; will traffic be one way or two? A basic minimum width should be 40 feet, which would allow an option of four moving lanes or two moving lanes plus two parking lanes. A width of 58 feet is required to accommodate four moving lanes plus two parking lanes.

The distributor streets in the downtown area show an almost bewildering range of characteristics. Their widths vary from 27 to 70 feet, some are one way, some have no parking on one side, others on both sides. Some have parallel parking, others allow diagonal parking, a few can accommodate four moving lanes, other three and some only two.

Because of the complexity of the central area and its function as a focus of activity, a number of dilemmas arise in maintaining an adequate circulation system for it. Numerous conflicts develop between vehicle movements and parking; between pedestrian movements and traffic; between egress-ingress of drive-in facilities and the smooth flow of traffic. In an older downtown area such as Evanston's there is the chronic problem of providing enough parking. Consequently, exceptionally wide streets such as segments of Davis Street, Orrington Avenue, and Sherman Avenue have been converted to diagonal parking. This is contrary to safe traffic engineering practices and produces far more accidents than parallel parking. Some diagonal parking has been eliminated as off-street parking capacity has been greatly increased by the construction of the new downtown parking garage. But convenient curb parking, with rapid turnover, is an important asset to the downtown, and there is a need to maintain as much curb parking as is reasonably possible.

Important objectives for downtown distributor streets are not so much moving traffic quickly as moving it smoothly and preventing tie-ups. Reducing pedestrian-vehicle conflicts, yet enhancing accessiblity to and from the downtown, will remain the essential challenge for ciruclation planning in this area.

Expressways and Freeways

Expressways and freeways have but one function: to carry very large volumes of high speed traffic over longer distances. Unlike other streets, their function of moving traffic is not compromised by having to provide parking and access. Expressway and freeway are terms used interchangeably by most laymen. Although both are limited-access routes, a freeway has no at-grade intersections as an expressway can.

These high-capacity, limited-access routes are very efficient carriers of traffic which provide important links between all parts of the metropolitan areas. In addition to their vital role in the metropolitan economy, they aid communities in other ways. Since they are a far superior route for through traffic, they absorb most of this unwanted traffic from adjacent communities. They can reduce traffic on overburdened, nearby major streets and help stablize traffic on them.

One expressway is considered in this plan. Since the details of its design specifications and exact location have not been worked out, it will merely be designated as a high-capacity, limited access route, which at least defines its desirable characteristics. This type of roadway should also have grade-separated intersections and a median strip separating opposing traffic. Standards for width of pavement, median, and right-of-way vary depending upon anticipated traffic volumes and right-of-way acquisition problems.

Traffic Volumes

Figure 12 shows the distribution of 1968 traffic volumes for the major street system, twelve-hour profiles of traffic flow at key entrances to the city and the important traffic generators. In general, the traffic volumes on the north-south major streets run somewhat higher than those on the east-west streets. The 1971 traffic count shows that the two major entrances to Evanston on the north, Green Bay Road and Sheridan Road, carry about 16,000 and 15,000 vehicles per day respectively (Table 2). Volumes increase and additional north-south routes are found as the center of the city is approached. Sheridan Road carries over 16,000 vehicles per day adjacent to Northwestern University, and Ridge Avenue reaches a peak of 20,000 as it goes by the central business district. At the southern city limits there are five major north-south streets, whose traffic volumes range from 13,500 to 19,000 vehicles per day.

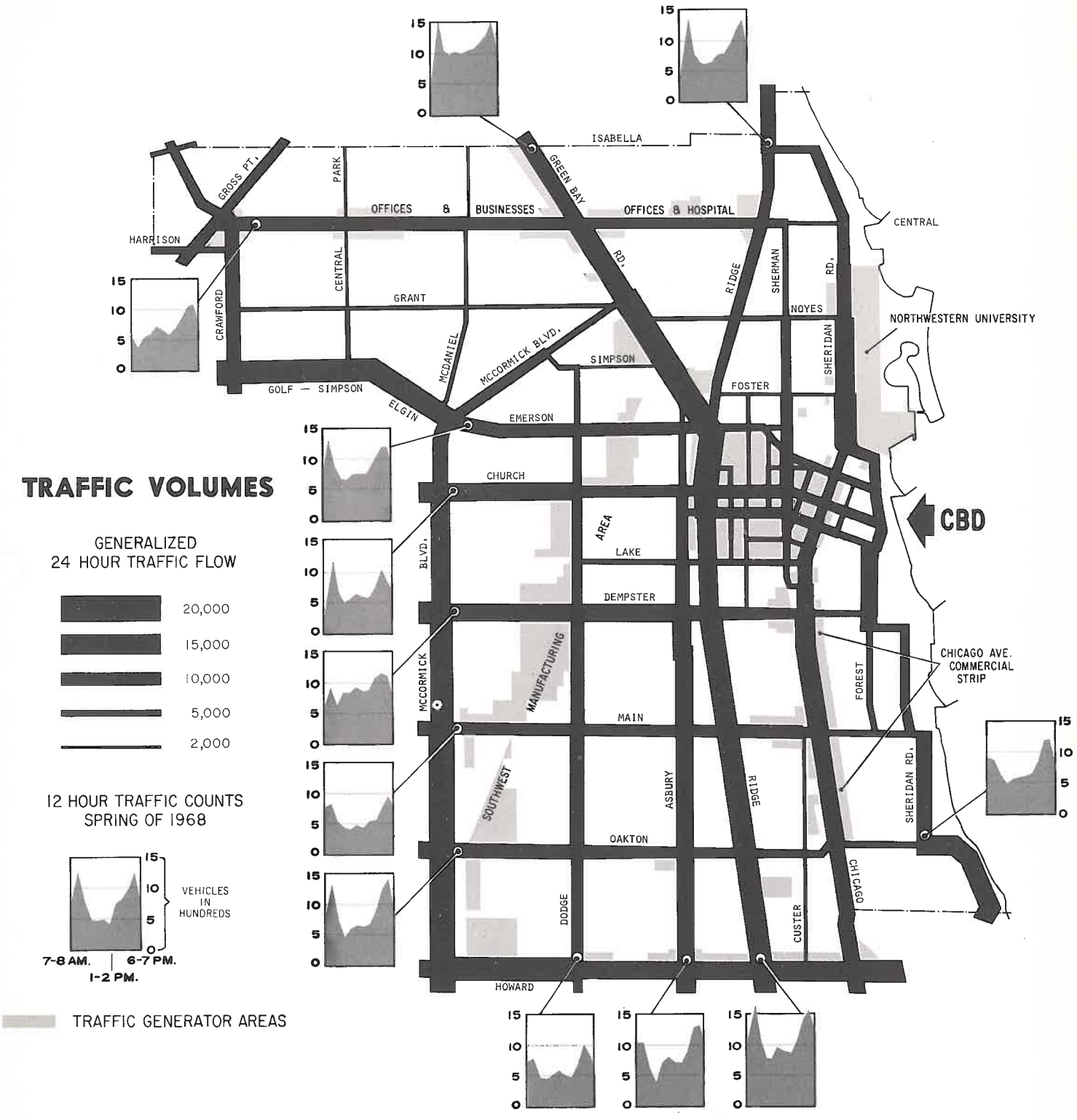
The Elgin Road-Simpson Street link is the only east-west route with volumes as high as those found on the north-south major streets. At Crawford Avenue there are over 16,000 vehicles per day. All of the western entrances to the city, including Central, Church, Dempster, Main, Oakton and Howard Streets, carry moderate volumes of approximately 10,000 vehicles per day.

The distribution of traffic volumes on most major streets shows the characteristic peaks at morning and evening rush hours. This is much more pronounced on some streets than others. Several major streets maintain relatively high volumes through the day, outside of peak hours. These include Ridge Avenue, Green Bay Road, Chicago Avenue and Dempster Street.

Within the central business district, traffic volumes range from 3,000 to 10,000 vehicles per day. The higher volumes are found on streets of longer continuity bringing traffic into the central business district, such as Sherman Avenue, Davis Street and Church Street. A study of recent traffic counts shows less through traffic in the central business district. The twelve hour traffic counts for the downtown streets have shown that they do not have the typical rush hour peaks of the major streets. Instead they carry substantial volumes of traffic throughout the day and often build near mid-day instead of at the morning and evening rush hours.

Traffic volumes are considerably lighter on the collector streets such as Custer Avenue, Lake Street, Noyes Street, Grant Street and McDaniel Avenue (Figure 12).

FIG. 12



PLANNING DEPARTMENT

TABLE 2

TRAFFIC COUNTS FOR
13 SELECTED STATIONS

(24 hour counts)

Stations	1960	1964	1966	1968	1971
1. Asbury N. of Howard	7,500	12,689	11,397	13,182	14,996
2. Central W. of Prospect	7,500	8,677	9,310	10,267	11,312
3. Chicago Ave. N. of Howard	12,100	12,607	11,116	12,772	13,450
4. Church E. of McCormick	12,000	11,328	9,891	10,529	10,829
5. Dempster E. of McCormick	14,200	18,260	16,204	12,544	15,181
6. Dodge N. of Howard	11,800	7,784	7,981	9,956	14,740
7. Emerson W. of Green Bay	8,800	9,248	8,484	10,430	11,101
8. Green Bay S. of Isabella	15,300	15,058	14,669	16,071	16,001
9. Main E. of McCormick	16,100	9,458	9,208	9,386	12,264
10. Oakton E. of McCormick	17,600	11,058	11,512	13,394	14,171
11. Ridge N. of Howard	21,400	17,704	14,802	18,029	19,109
12. Sheridan N. of Isabella	13,000	10,807	11,728	12,432	14,841
13. Sheridan S. of Sheridan Square	18,200	14,419	15,107	12,286	14,441
Total	175,500	159,097	151,409	161,278	182,436

Origin and Destination Characteristics

Evanston's first and only origin and destination survey of traffic was carried out in 1960 as part of the Lochner Report.* Motorists were interviewed at fourteen major entrances to Evanston to determine the origin and destination of their trips (Figure 13). Although this data is over 10 years old, we believe that a number of generalizations concerning the origin and destination patterns are still valid. First, the great majority of traffic using all streets was terminating in Evanston proper. Only 37 per cent of the trips were identified as through traffic. Secondly, most of the traffic crossing Evanston borders was demonstrating an interaction between Evanston and its immediate neighbors such as Skokie and the northern part of Chicago. The Chicago Loop was an important generator for only two traffic carriers within Evanston: Sheridan Road and Green Bay Road-Ridge Avenue. A much more important generator was the central area of Evanston itself. More than one-fifth of all traffic interviewed was destined for this area. Other traffic generators within Evanston included its industrial areas, the university and other scattered job centers such as offices and institutions (Figure 13).

The origin and destination survey revealed very distinctive patterns for each of the routes involved. The southbound traffic using Sheridan Road on the north limits of Evanston, the route most heavily oriented to the Loop, showed that equal amounts were also destined for northeast Evanston and downtown Evanston. About three-quarters of this traffic originated in Wilmette, Winnetka, and Glencoe and the rest came from the northwestern suburbs beyond Edens Expressway. Green Bay Road at the north city limits had twice as much of its traffic destined for downtown Evanston as the Chicago Loop. Sheridan Road at the south limits of Evanston showed a larger portion of its traffic destined for the Loop than traffic at the northern entrance of the city. This is because traffic originating in Evanston has collected at this point. Traffic at other southern entrances to the city exhibited a stronger interaction between Evanston and Rogers Park than with the Loop. The Rogers Park area accounted for about half the origins and destinations for Chicago Avenue and Ridge Avenue on the south limits of the city. Asbury Avenue and Dodge Avenue showed similar linkages with Rogers Park and the northwestern part of Chicago.

Traffic passing through the western entrances of the city also showed varied characteristics. The traffic at the more southern entrances, such as Oakton and Main, revealed a very strong relationship to the Skokie-Lincolnwood area and tended to have short trip links. For Dempster Street the Skokie area remained a primary trip generator, but the trips tended to be longer with more dispersed origins and destinations in the northwestern suburbs. Church Street, because of its short continuity, showed mainly interaction between Evanston and Skokie. At Emerson Street the trip ends were more distant, stretching out to communities such as Glenview, Mount Prospect, and Arlington Heights. Nearly all the eastern trip ends from this route were found within Evanston with the southwest manufacuring area and the downtown the leading generators. Central Street traffic was very distinctive. The trip ends outside Evanston were largely in the northwestern suburbs. Within Evanston they were highly concentrated in the northwest and northeast parts of the community, with virtually no through traffic and few destinations in other parts of the community.

A new origin and destination study should be considered during the 1970's to determine any significant shifts in some of the major streets' basic patterns. We believe that the results of such a survey would probably show a relative decline in through traffic and an increase in terminating traffic, but more precise and current evaluations of individual route characteristics are needed. Short of completing the more detailed and expensive origin and destination survey, a reliability check can be carried out to determine whether or not a new survey is required.

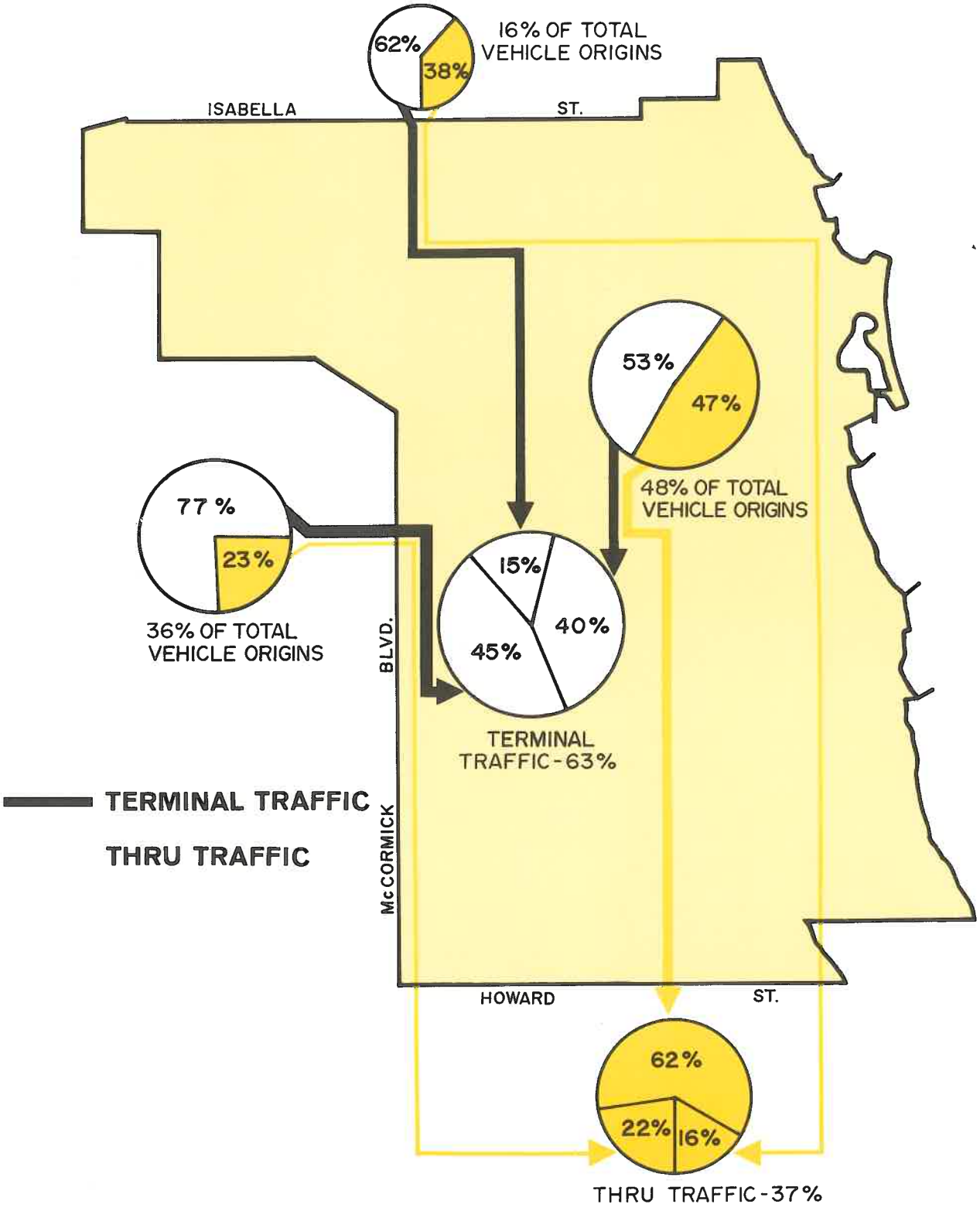
Traffic Trends and Forecasts

One assumption shared by transportation experts is that, over time, traffic generally increases everywhere. This increase comes from four sources: additional dwelling units, more vehicles per dwelling, more trips per vehicle and growth of traffic generators such as offices, stores and industry. Obviously, increases will not be uniform among all communities.

*H.W. Lochner and Company, *A Street Improvement Plan for Evanston, Illinois,* Chicago, 1961.

FIG. 13

PEAK HOUR - PEAK DIRECTION TRAFFIC ON AN AVERAGE WEEKDAY MORNING



Planning Department

To develop a perspective on future traffic volumes, it is helpful to inventory the present traffic situation and compare it to past years so that trends can be established. As simple and straightforward as such an approach might seem, it is not an easy one to use. The greatest difficulty is in accurately establishing base years and counts from which to work. Not only must traffic counts be made at a fairly large number of stations, but they must be done during the same seasons and under the same conditions. Little historical traffic data is available and the counts made in the past were not carried out on a systematic basis; consequently many of them may not be comparable.

One of the first examinations of trends was made in 1961 by the Lochner Company. They compared 1950 data for stations at eight major entrances to Evanston to their 1960 counts. They also projected 1980 traffic volumes for the same stations. This data demonstrates the remarkable growth in automobile traffic during the 1950's and illustrates some serious implications for these streets concerning future traffic volumes. The overall increase in traffic for the 1950's was 48 per cent.

As part of the Lochner Study, counts were made for 13 major entrances to Evanston. If it can be assumed that these counts were representative of traffic at that time, and that they were comparable to those made four years later, then rather surprisingly, traffic actually declined by thirteen per cent between 1960 and 1964. It did not decline uniformly; some stations remained about the same and a few increased, but the overall trend was down (Table 3). No certain explanation is available for such a change. Probably the opening of the Kennedy Expressway in 1960, resulting in full utilization of Edens Expressway, was responsible for substantial volumes of traffic being diverted from Evanston between 1960 and 1964. Caution should be used in drawing definite conclusions from these figures because their comparability is questionable. Continued substantial fluctuations in volumes reported for these stations in subsequent years certainly raises questions about the theory of consistent traffic increases on all major streets. It also affirms the need to insure that all counts are carried out on such a basis as to insure comparability.

By 1964, counts were being made on a more regular basis and at a far larger number of stations. However, it was not until 1965 that the Planning Department, recognizing that the accurate measurement of trends depended upon well-established base points of comparable data, developed a biennial traffic count program and data bank. The first counts made under the new system were in 1966. Although comparison of the 1966 and 1964 counts must be made with some reservation, it showed an overall continued decline among the 13 stations reported in 1960 and 1964. Traffic was down about 5 per cent from the 1964 level. Again, not all stations declined; some increased and some showed little change.

The second set of data under the new traffic count program was obtained in the spring of 1968. This provided two years of counts collected on the same basis where comparability was fairly certain. Between 1966 and 1968 these same 13 stations showed an overall increase of 8 per cent. This was also about 2.7 per cent higher than 1964, but still 8 per cent lower than the 1960 level. The bi-annual traffic count program was not carried out in 1970, but was resumed in 1971. At that time traffic was higher at all thirteen reporting stations than in 1968. Some were sharply higher. Still, the total volume was only 4 per cent higher than the 1960 level. During the past eleven years, average annual growth rates have varied from -2.3 to +4.4 per cent. It will be interesting to see whether 1972 counts show a continued upward swing, stabilization or decline.

The variation in traffic volumes from year to year can be considerable for any given station and that individual stations may counter the general trend of others for the year. Within the metropolitan area, traffic has been growing at the rate of 2 to 3 per cent per year on major thoroughfares. This figure is frequently used to project future traffic volumes. Such a gain does not appear to be characteristic of Evanston's major streets. It is possible that our growth in traffic has reached at least a temporary plateau where variations are more characteristic than an inexorable upward march and that the variations are so wide as to mask any general trends. The slower rates of population growth of Evanston, and the other communities lying within the same northern corridor, are probably producing a different rate of traffic growth than is found in the more rapidly developing suburban sectors.

TABLE 3
TRENDS OF 24 HOUR TRAFFIC VOLUMES
AT 13 SELECTED STATIONS

Year*	Total Traffic Volumes	Change in Volume	Per Cent Average Annual Change
1960	175,500	---	---
1964	159,097	-16,453	-2.3
1966	151,409	- 7,688	-2.4
1968	161,278	+ 9,869	+3.3
1971	182,436	+21,157	+4.4
1960-1971		+ 6,885	+0.4

***Note uneven intervals for reporting years.**

Projections of future traffic volumes were made in the earlier part of this decade by the Chicago Area Transportation Study and by Lochner. Increases of 40 and 36 per cent respectively were forecast for this region by 1980. At mid-point in the forecast period, it now appears certain that these levels will not be reached without greatly accelerated growth during the 1970's. An increase of about half the forecast's projected level seems more likely.

Some of the reasons for earlier traffic forecasts erring on the high side are related to other trends. While the forecasts of population appear to be fairly accurate, anticipated increases in vehicle registrations and declines in transit riding have failed to materialize. From 1950 to 1959, population grew 7.7 per cent, but vehicle registration grew at a much more rapid rate, increasing 22 per cent. During the 1960's the population increased by only 1 per cent and the growth in vehicle registrations slowed to 9.5 per cent. In 1961, as part of the general forecast of traffic, a 48 per cent increase in vehicle registrations was projected for 1980. In view of the most recent trends it appears likely that the actual 1980 increase will fall far short of this projection. Even the more modest revised estimate of 29 per cent, made in 1964, will not be reached unless the rate of growth in vehicle registrations reverses itself during the 1970's and returns to a gain of 20 per cent per decade. It is more likely that only a slight gain will be realized, possibly as little as 5 per cent for the 1970's and probably not exceeding 10 per cent for the next decade or a maximum of 20 per cent for the 1960-1980 period.

Although we apparently have been spared an overwhelming increase in traffic during this past decade, we cannot be entirely sanguine about the future. Even with a relatively static growth pattern, we could expect additional traffic from such things as increased use of autos, new traffic generators, and more automobiles per family. At what rate this traffic increase will take place or what levels they will reach is not certain. These unknowns plus the nature of the variations make our current traffic count program most important. With this system traffic volumes can be frequently monitored and growth or change more accurately assessed. The change of distorted data creating an erroneous picture of trends should be greatly reduced. At this point in time, an average annual growth of 0.5 per cent seems more plausible than 2 to 3 per cent.

Plan Recommendations

The Comprehensive General Plan makes four broad types of recommendations concerning streets. First, it designates the types of routes which compose the circulation system. Second, it proposes certain new routes or new alignments with consideration of alternatives. Third, it identifies route segments of the existing system which will need increased capacity. The plan also recommends that certain studies be continued or carried out as a basis for decision making on circulation questions.

Certain specific physical changes such as street widenings, parking restrictions, intersection improvements, signalization changes, etc., are not covered in a document as general as this. They are the proper subject of more detailed studies, such as the *Interim Major Street Plan* * or a future street plan. Further refinement of detail, timing of priorities and final recommendations also emerge from the development of the capital improvement program and the annual budget.

Designation of a Major Street System

The Evanston major street system, as designated in the Comprehensive General Plan, can be seen in Figure 14. This system is composed of streets of several different categories defined by their function and traffic volumes. Included are: expressways or high capacity limited access routes, major streets, collector streets, distributor streets and local streets (Table 4).

Designation of a circulation system is imporant for several reasons. First, it must be recognized that there is a system, not just a collection of streets. When decisions are to be made concerning traffic, they should be made in the broader context of a system, not on an isolated street by street or intersection by intersection basis. Second, in designating a system, certain policy decisions are implied; that is, improvements needed to lessen congestion should be made on the major and collector streets, not on local streets. Designating a street system also helps insure a wiser distribution of limited funds for street improvements by allocating these funds on a priority basis.

TABLE 4
MILES BY CATEGORY OF STREET IN DESIGNATED MAJOR STREET SYSTEM

	High Capacity and Major	Collector	Distributor	Local
Miles	31.7	8.4	4.6	92.2
% of Total	23.1	6.1	3.3	67.5

New Routes and Alignments

One of Evanston's principal long-term circulation problems is the inadequate capacity of major north-south streets. Without some relief, these routes, which are already congested, will become even worse in the future. Widening of the major north-south routes or the establishment of a new route through the center of Evanston are suggestions which have been met with little favor. Any street widening program which involves major streets passing through residential neighborhoods would be strongly opposed, especially if tree canopies would be lost. On commercial streets, such as Chicago Avenue, widening would probably not be physically possible because commercial buildings are built to the right-of-way and not set back. Any completely new route through a highly developed community such as Evanston would require extensive clearance. Such a proposition would be so costly, disruptive and controversial as to be completely impractical.

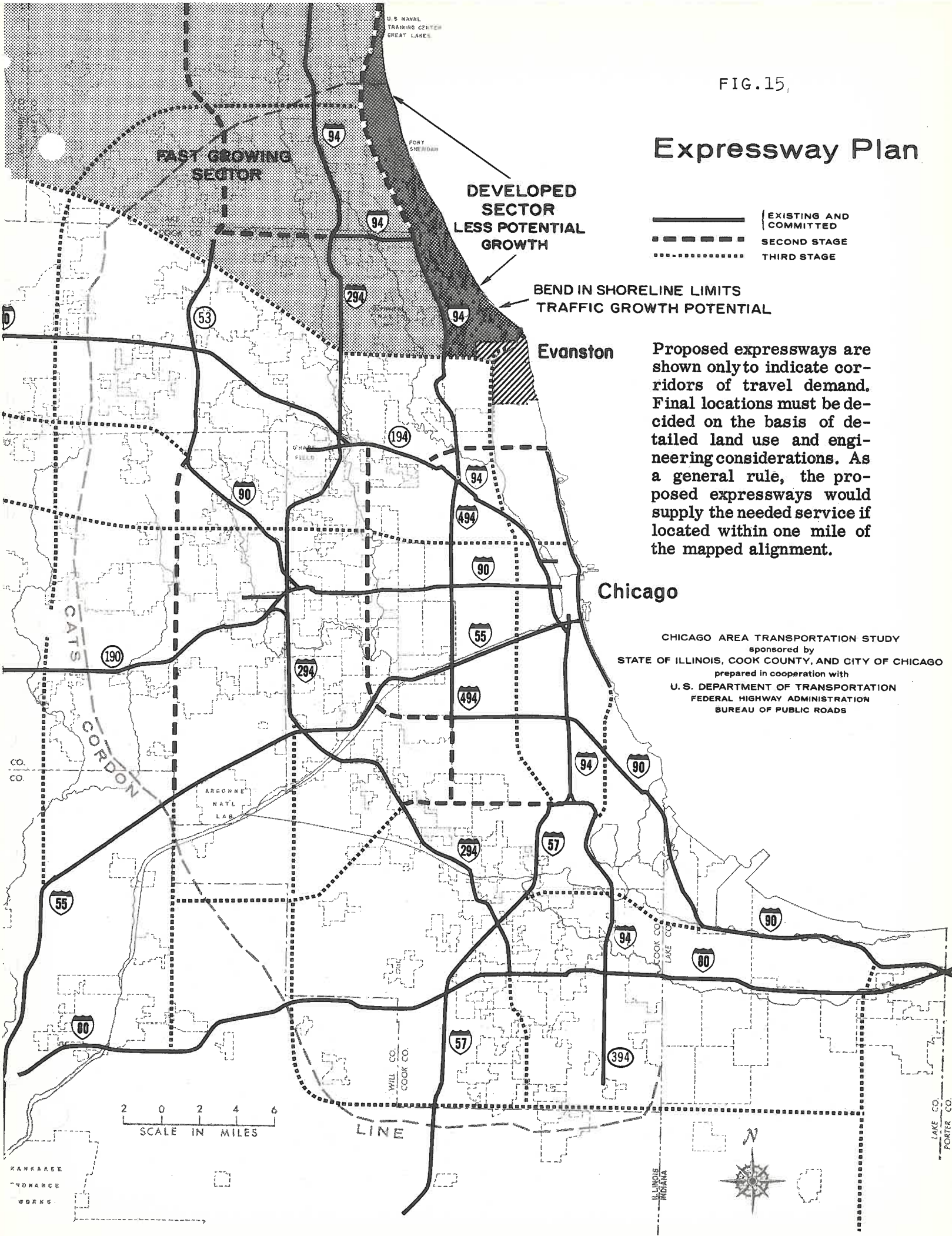
The long-range proposal of the Chicago Area Transportation Study appears to have the best possibilities for aiding the rush hour problem. They recommend, as part of their total metropolitan expressway plan, an expressway along the general alignment of McCormick Boulevard (Figure 15). This route would probably bend westward in the vicinity of Golf Road and extend through the northwestern suburbs. It is likely to extend southward from the Evanston-Skokie area to just west of the Loop, parallel to the Dan Ryan Expressway, until a connection is made with Interstate 55. An east-west link to Lake Shore Drive is also proposed in the vicinity of Hollywood Boulevard.

*Robert Sharkey, *Interim Major Street Plan,* (Planning and Conservation Department, City of Evanston, Illinois, 1964).

FIG. 14

PLANNING DEPARTMENT

FIG. 15


Expressway Plan
FAST GROWING SECTOR
DEVELOPED SECTOR LESS POTENTIAL GROWTH
BEND IN SHORELINE LIMITS TRAFFIC GROWTH POTENTIAL
EXISTING AND COMMITTED
SECOND STAGE
THIRD STAGE
Evanston
Chicago
Proposed expressways are shown only to indicate corridors of travel demand. Final locations must be decided on the basis of detailed land use and engineering considerations. As a general rule, the proposed expressways would supply the needed service if located within one mile of the mapped alignment.
CHICAGO AREA TRANSPORTATION STUDY
sponsored by
STATE OF ILLINOIS, COOK COUNTY, AND CITY OF CHICAGO
prepared in cooperation with
U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
CATS CORDON LINE
SCALE IN MILES
2 0 2 4 6
U.S. NAVAL TRAINING CENTER GREAT LAKES
FORT SHERIDAN
ARGONNE NAT'L LAB.
KANKAKEE ORDNANCE WORKS
COOK CO.
LAKE CO.
WILL CO.
ILLINOIS INDIANA
PORTER CO.
94
90
80
55
57
53
190
294
494
394
194

The Chicago Area Transportation Study's *Recommended Expressway Plan* was published in 1962 and has a general target date of 1980. The CATS plan has been reviewed by engineers of the City of Chicago, Cook County, the State of Illinois, and the U.S. Bureau of Public Roads. It is their considered opinion that the plan should serve as a guide for future expressway construction programs in the Chicago area. The expressway section of the plan shows three stages of development for a metropolitan expressway system (see Figure 15).

The McCormick Boulevard - Golf Road section which is composed of routes which help to fill in the final network is shown in the last stage category. The lines on the map are not final locations, but represent broad corridors where the study found major improvement justified. Exact locations must be determined on the basis of more detailed land use and engineering considerations. Precise locations will be worked out with communities affected, and only after public hearings are held. This process has now begun with the current corridor study for the North Suburban Freeway. The sector under study is one of the most difficult and deals with the leg which would go from McCormick Boulevard through the northwestern suburbs. Selecting a route for the freeway in this area will be a challenge because it is already highly developed and growing fast. Considerable fear and opposition have already been expressed at preliminary hearings held to explain the purpose of the corridor study. In spite of the great difficulties to be faced in establishing such a route, one has only to observe the current level of traffic along this corridor and reflect upon the remaining growth potential to realize that some type of high capacity route will be essential.

The north-south link between Evanston and Skokie should be relatively easy to establish because the right-of-way is available. Its greatest advantage is the minimum negative impact on both communities. The right-of-way is now unused land under the single ownership of the Metropolitan Sanitary District. There would be no clearance or relocation problems, and the right-of-way would be along the boundary of two communities, not splitting established neighborhoods.

Development of a North Suburban Freeway will remain a controversy for many years. The final location of the east-west link and its form, a full freeway or merely an up-graded Golf Road, are unknown. In the absence of any specific plans or details at this time, we have shown the route in the approximate location of McCormick Boulevard and Golf Road. The proposed expressway is one of the best means of alleviating local rush hour congestion on north-south streets and absorbing future traffic increases. Its overall logic as a regional route argues well for its implementation, and the plan should continue to receive Evanston's support.

There are only two alignment changes in the major street system related to the proposed McCormick Expressway. First is the consideration of a new collector street to parallel the south east side of the canal between Dodge and Green Bay Road at Noyes Street. Second, connected with this link might be a new bridge across the canal at Dodge Avenue replacing the old one at Bridge Street. These links would provide better connections between northeast Evanston and McCormick Boulevard which would, in turn, feed into the proposed McCormick Expressway south of Emerson. One alternative to this new linkage might be the improvement of Simpson Street to Ridge Avenue.

Two other possible links are related to circulation in the central business district. These are the extension of Benson Avenue south of Davis Street and/or the extension of Maple Avenue under the Chicago and North Western Railroad.

These are long range considerations for which feasibility studies have not yet been conducted. It is recommended that such studies be carried out to determine which of these alternatives should be selected and what the costs will be. Both proposals are designed to aid downtown circulation by improving north-south movements within and around the central business district.

Increased Capacity Within the Major Street System

A high capacity route in the McCormick Boulevard area would absorb much of the north-south through traffic, ease present congestion on the north-south major streets, and hold down future increases. However, this single facility cannot solve all of Evanston's traffic problems. There remains the central problem of peak hour congestion on major streets and their failure to approach contemporary standards. While their condition is good and the general spacing or pattern provides an adequate framework serving all areas of the city, their capacity is frequently inadequate.

Each route has been examined throughout its length, and present and future inadequacies, have been identified (Figure 16). Many will require some increase in their capacity and improvement of higher standards. Figure 9 showed how few of the major streets carrying heavy traffic have four travel lanes throughout their length; those that do usually have substandard widths for the volumes they carry. Ridge Avenue, which carries nearly 20,000 cars per day in four 9 foot travel lanes, is an example of an overtaxed, inadequate major street.

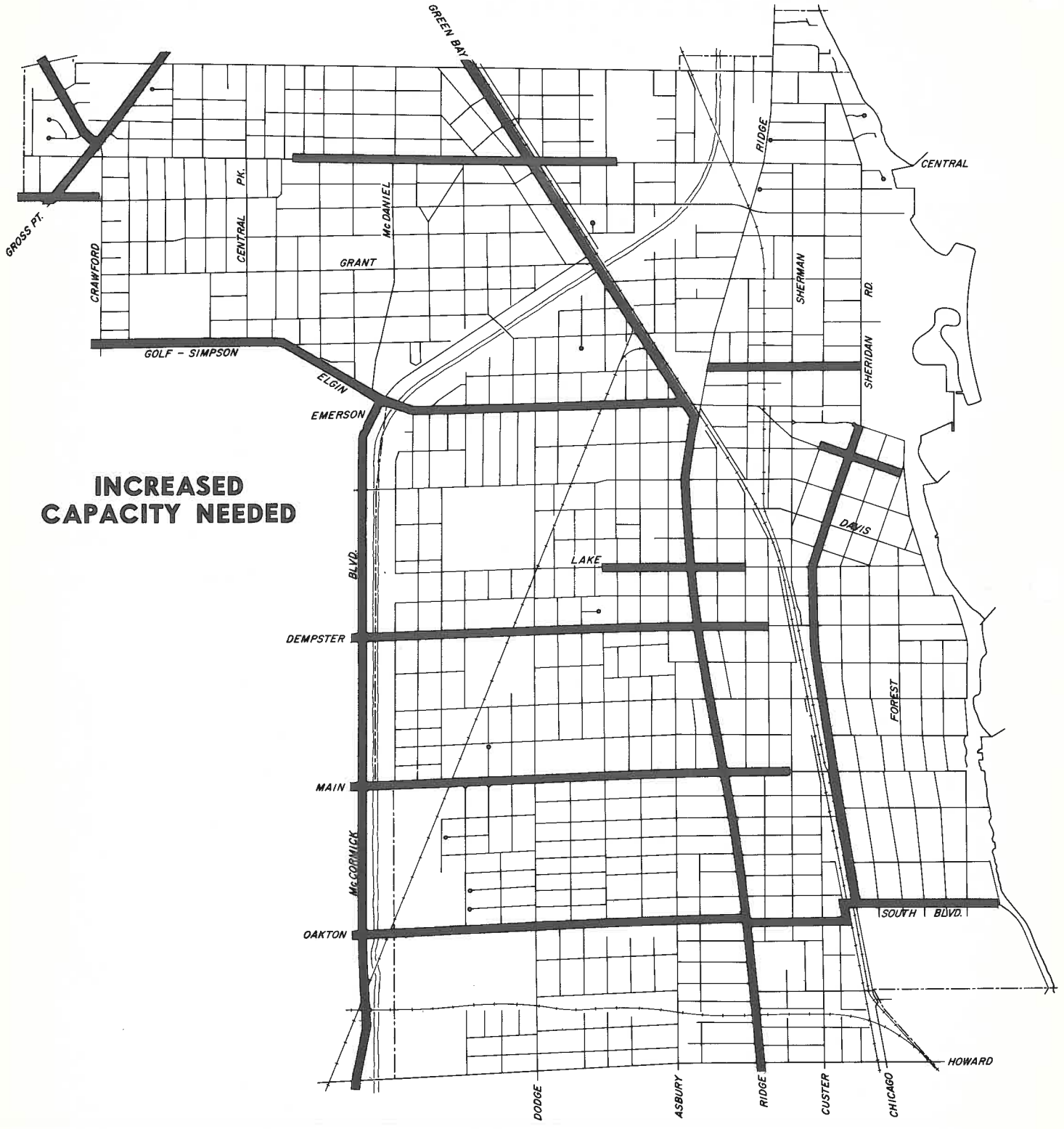
The problems and choices in providing additional capacity vary considerably among the routes. Significant improvements can be made by adding travel lanes either through stripping parking and/or widening. Where capacity can be increased by removing parking, a number of alternatives are possible including rush hour restrictions on one side only, restrictions on both sides, or all day prohibitions. Figure 17 shows major and collector streets which have sufficient paving width to accommodate additional travel lanes without widening. A comparison of Figures 16 and 17 shows that many of the streets needing additional capacity might use a parking restriction to achieve that capacity. In some cases a parking restriction would not produce additional capacity and widening would be necessary. Where parking is in short supply, street widening would be necessary to provide both additional traffic lanes and retain curb parking (such as Davis Street).

Capacity can sometimes be increased without actually adding traffic lanes. Through the application of traffic engineering techniques to a route segment, such a proposal was developed for Ridge Avenue. Small scale widenings that do not add traffic lanes but give existing ones more width help reduce congestion. The Sheridan Road project north of University Place to Central Street is an example of this technique, in which a 4 lane 36 foot street became a 4 lane, 44 foot one.

Given the obstacles to any extensive street widening programs, it is essential that optimum use be made of the limited capacities we now have. Recognition of the growing need to rely upon a variety of techniques that can be used within limited street systems is evident in one of the Federal Department of Transportation's programs, TOPICS (Traffic Operations Program to Increase Capacity and Safety). TOPICS relies upon traffic engineering techniques to improve the flow of traffic by making better use of existing streets rather than by widening. This is accomplished through such devices as improved signal systems, channelization, pavement marking, signing, turning lanes at intersections, installation of control systems, upgrading of lighting and provisions for bus turn-outs. Two major streets are recommended for TOPICS studies and application of TOPICS techniques for improvement: Ridge Avenue and Chicago Avenue. Ridge Avenue is a logical selection because of its high traffic volumes, inadequate capacity, accident record and importance to the downtown as an access route. There would be considerable resistance to any major widening of Ridge Avenue to improve its extremely narrow travel lanes because of possible tree loss. However, much could be done to relieve congestion and reduce accidents on that heavily traveled street with a program of intersection improvements and other techniques mentioned above.

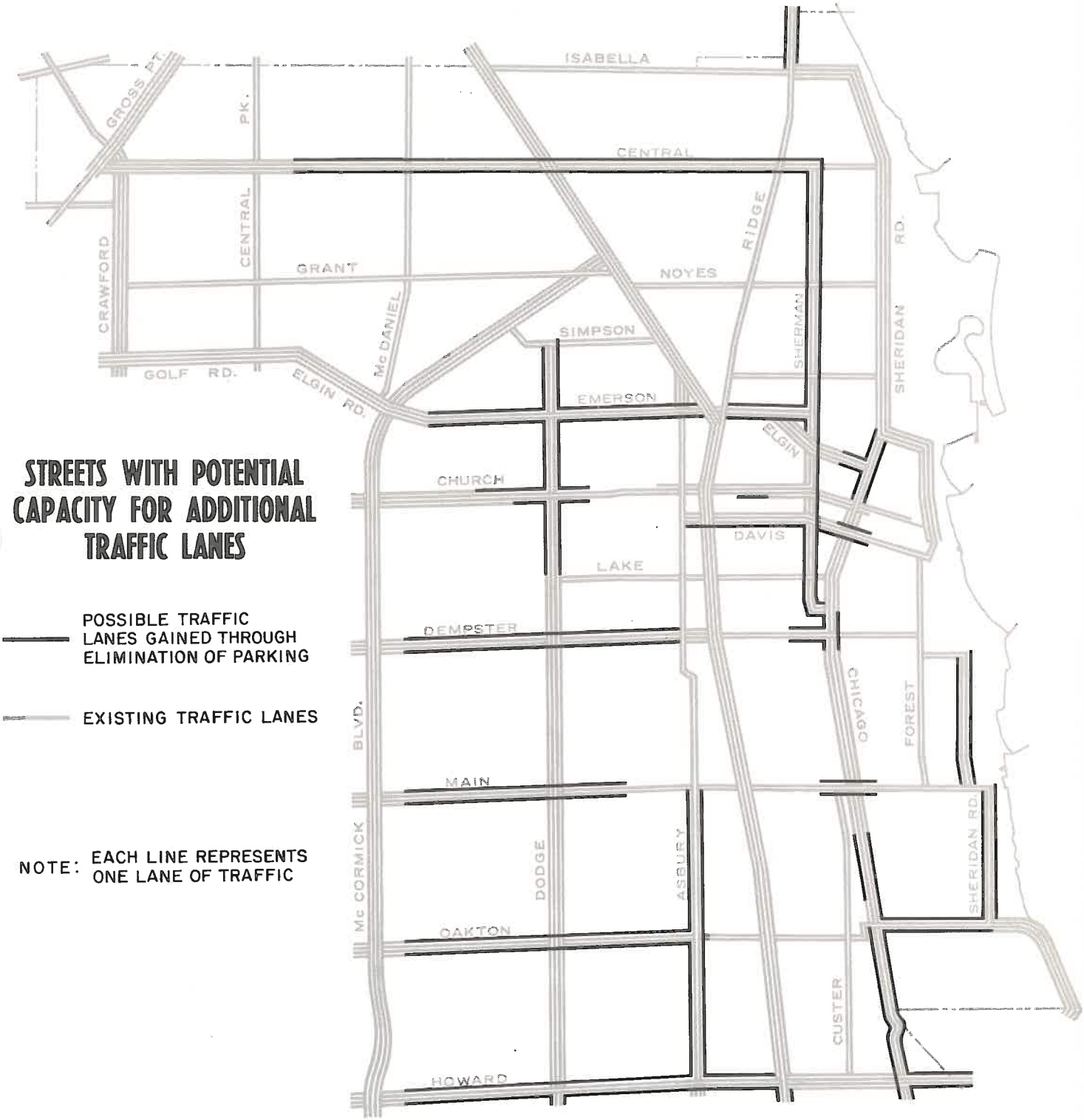
Chicago Avenue should be similarly studied and a series of improvements made to improve its capacity, keeping in mind the long-standing community objective of attracting additional traffic from the Sheridan-Forest route. Preliminary traffic engineering analysis indicates potential for achieving significant results through a variety of improvements carried out in stages. Changes in signalization, lane stripping and control of turning movements could produce immediate results. Greater increases in capacity through the removal of peak hour curb parking could be achieved at a later time as off-street parking substitutes are developed. New street lighting should also be part of the package of improvements. Obtaining greater capacity on Chicago Avenue is particularly important, given the uncertain future of the McCormick Expressway. Any short-term relief would have to come from an improved Chicago Avenue.

FIG. 16



PLANNING DEPARTMENT

FIG.17



STREETS WITH POTENTIAL CAPACITY FOR ADDITIONAL TRAFFIC LANES

POSSIBLE TRAFFIC LANES GAINED THROUGH ELIMINATION OF PARKING

EXISTING TRAFFIC LANES

NOTE: EACH LINE REPRESENTS ONE LANE OF TRAFFIC

PLANNING DEPARTMENT

Whether or not Evanston would be interested in or eligible for 50-50 cost-sharing funds, the concept of TOPICS has valid local application. Some of the techniques mentioned are now being used and others are contemplated or in the planning stage. It is important to emphasize that the value of TOPICS lies in its systematic approach rather than random application to various locations.

There are a number of examples of the local street function breaking down, in which streets adjacent to heavily traveled major routes serve as safety valves for overflow traffic. This is not an appropriate use of a local street and is the direct result of failure to provide adequate capacity on the major streets. Restrictions to the smooth flow of traffic on the major carriers must be removed if through traffic is to be eliminated from local streets. Improvements should be made not only to help keep through traffic out of the residential neighborhoods, but to improve the quality of access to Evanston's major centers of activity. Good access is a vital element in the resurgence of downtown and essential to preserving the job base provided by offices, industry, institutions and services. The fortunes of the residential community and the economic community are tied together. The quality of one is becoming more and more dependent on the success of the other.

Changes in the Local Street and Grid Pattern

A number of minor changes have been made to alter the ill effects of the unbroken grid pattern of local streets. Most improvements have been culs-de-sac. These interrupt the long continuity of local streets that had caused them to be used by through traffic or as access roads to industry. These improvements emerged out of traffic plans for several west side neighborhoods adjacent to manufacturing areas. The Cleveland-Hartrey neighborhood is an example of how such a cul-de-sac plan works (Figure 8). Additional plans have been drawn for the West End Neighborhood to achieve the same result – the elimination of industrial and through traffic from the neighborhood. Most of the proposals to the West End Plan should be carried out in the 1970's. These two neighborhoods are examples of a more comprehensive approach to traffic planning. There may be isolated points at which the local street system should be altered without requiring such complete studies, but there are other neighborhoods that should receive a complete traffic analysis.

There are some instances in which local streets not needed for access have been closed, with their land area going to adjacent parks or schools. Other similar opportunities remain and should be considered.

Completion of Street Paving Programs

Most Evanston streets are in good condition as a result of a continuing maintenance program of resurfacing. By annually resurfacing some of those in the poorest condition, this program has managed to keep the city from experiencing any massive street deterioration.

On the other hand, a number of local streets are still unpaved, and annually revert to deplorable condition in spite of continued maintenance. Unpaved streets are an anachronism in a fully developed community such as Evanston. They are expensive to maintain, unsightly and a source of irritation. At the present rate of progress, it would take 40 years to pave the remaining 13 miles of unpaved streets.

Concerned over the lack of progress, the City Council passed an ordinance in 1969 that would allow the city to participate in the cost of paving. Normally, the entire cost is apportioned among the abutting property owners through special assessments. To further encourage the paving of unpaved streets, the Council established a new policy whereby the city would pay 15 per cent of all special assessment street paving projects from motor fuel tax allocations. A higher percentage would be authorized when project costs or the assessment pattern would result in inordinately high assessments, or when the project would be of high public benefit.

Another obstacle to the paving program was removed when the Board of Local Improvements was given the authority to initiate and order in special assessments. Previously, only abutting property owners could initiate special assessments, resulting in a great deal of apathy concerning street paving. Armed with these tools, the city should follow a more aggressive policy to pave the remainder of its streets during the 1970's.

Establishment of Supplementary Truck Routes

With some exceptions, truck traffic is limited largely to the major and collector streets. In the southwestern manufacturing area of Evanston, Dodge Avenue is the only north-south truck route available. Consequently, access to the industrial area which stretches along the Mayfair branch of the Chicago and North Western Railroad is not good. Usually trucks will leave major streets such as Main, Oakton or Dodge and cut through local residential streets to reach their destination.

Excessive truck traffic on residential streets has a blighting influence. The problem has been acute in several neighborhoods adjacent to Evanston's manufacturing areas. Plans for these neighborhoods have been designed to remove truck traffic from the residential areas, yet preserve accessibility for industry. In some cases this requires supplemental truck routes to be developed along streets that are largely industrial, with short links through alleys to avoid residential neighborhoods. A supplemental paved route of this nature was recommended for consideration in the Cleveland-Hartrey Neighborhood Plan and the West End Plan. Both of these used a system of culs-de-sac and diverters to keep trucks off local streets.

Conclusion

One fact which has become apparent in the review of traffic planning to date and the speculation on future problems is the need for better, more complete data on this highly dynamic feature of the city. The Bi-Annual Traffic Count Program, begun in 1966, should be continued and the number of stations counted should be expanded. Such a program represents one of the best and least expensive means of monitoring the traffic situation.

The last origin and destination survey of Evanston's traffic was taken in 1960. Although drastic shifts have probably not occurred, it would be advisable to remain abreast of any important changes. Consideration should also be given to origin and destination studies undertaken for the central business district during the 1970's. Actually, very little is known about the complex movements within the downtown area. In 1969, the first complete cordon count was taken around the central business district. This count was taken purposely before the new parking garage or the State Bank Building opened. Subsequently, counts should continue to be taken to measure new traffic patterns resulting from changes downtown.

In order to be successful, our planning must be continuous, carried out in cooperation and coordination with other departments and comprehensive in its considerations. In this spirit, this section has been reviewed by the Department of Public Works and the City Traffic Engineer so that their insights and concerns could be incorporated. Broader cooperation between agencies, adjoining communities and local and state governments should also become part of the planning process. The desirability of advance planning has now become a necessity.

The State of Illinois requires that each community develop a long range plan by 1971 if it is to become eligible for the use of motor fuel tax funds for its street projects. The long range plan as it applies to counties and municipalities must show the following items:

1. Estimated revenues which will become available during the period.
2. Statement of intention with respect to construction and maintenance during the period.

3. Location of existing streets and highways.

4. General corridors for future highways.

5. Tabulation showing design standards and geometric features associated with different levels of traffic usage.

6. The projected future traffic usage on each highway for a 20 year period.

7. A listing of major improvements within five years of the date of each plan.

This section of the Comprehensive General Plan Source Book will help fulfill some of the new state requirements. However, much more remains to be done in the way of highly detailed studies of specific and individual street improvements and in the development of traffic analysis.

PARKING

The rapid rise in automobile ownership over the last two decades has given the American family extremely high mobility and has made trips to work, shopping areas, recreation, medical centers, schools and places of entertainment more convenient. Not only do more families own an automobile, many of them own more than one and make greater use of them. Therefore, even without significant population growth, traffic volumes can increase. Most cities were not designed to accommodate the traffic volumes which have been generated by the growing use of the automobile. The result has been twofold – congestion in the circulation system and greater problems in parking.

In highly developed urban centers such as Evanston there is little vacant land to utilize for parking, and the community has been hard-pressed to provide low-cost storage of automobiles. In many ways the parking problem has become an even greater restraint on new-found mobility than the traffic problem. "Where can I park?" is a serious consideration in making many kinds of trips. When the Junior Chamber of Commerce made its community opinion survey in 1964, parking scored first under the heading of "What do you like least about Evanston?"

Trends and Prospects

Records of Evanston vehicle registrations show a rapid increase in automobile ownership during the 1940's and 1950's with some tapering off during the 1960's. Traffic volumes on major streets have shown a similar pattern of earlier rapid growth followed by a period of slower growth. Only slight increases in automobile ownership are forecast for Evanston for 1980. A modest rise in traffic volumes is also expected. Even with a relatively static population growth pattern, additional traffic can come from increased use of automobiles, development of new traffic generators and expansion of existing ones. If we are to be successful in reducing parking problems, most of the effort must be directed at correcting existing deficiencies rather than concentrating on future demands. New business, institutions or apartment developments could aggravate existing problems, and their impact should be anticipated; however, in parking it will be more a matter of playing "catch-up" rather than planning ahead.

TABLE 5
VECHICLE REGISTRATIONS*

Year	Registrations	Per Cent Change in Decade
1940	16,680	
1950	22,213	+33
1960	27,188	+23
1970	29,254	+ 8

*City Collector's Office.

Problems

Parking problems vary in nature and intensity depending on many factors, such as the type of land use generating the demand, location within the city and time of day. The major problems include: (1) parking in the central business district for shoppers and workers; (2) parking in secondary business centers and on commercial streets; (3) overflow daytime parking in residential neighborhoods from nearby employment centers and institutions; (4) commuter parking and (5) overnight parking in apartment areas.

Central Business Area Parking

One of the oldest problems has been parking for central business district shoppers and workers. A severe shortage of parking space was one reason for a loss of trade to new outlying shopping centers built in the middle 1950's. Evanston began meeting this challenge by developing large parking lots in the periphery of the downtown area. Several of these lots incorporated a validation parking arrangement whereby the customer could obtain stamps from stores participating in the plan. These stamps, purchased by merchants from the city, allowed customers to park free. These lots were attractive and fairly well located, but because of their distances from major stores and their visibility deficiencies, they fell short of being optimal shopper parking facilities.*

Although these central area lots, combined with about 900 curb spaces, provided around 2,500 spaces, shortages persisted. In 1962 a consultant's report, entitled *"A Parking Improvement Plan for Downtown Evanston,"* recommended that 700 downtown spaces be added, 350 in the core for shoppers or short-tem parkers and 350 at the fringe for all-day parkers. A 350 stall garage was recommended in the block bounded by Sherman, Benson, Davis and Church. The report recognized the conflicts between all-day and short-term parking. The importance of locating parking for shoppers within the downtown core was emphasized, and locations too remote from the downtown's major stores were cited as chief reasons for the light usage of some lots. In 1964 a subsequent economic feasibility study reaffirmed the need for additional downtown spaces and recommended a 360-stall, 3-story garage at the location previously described. In 1966 a reevaluation was made following the approval of the State National Bank project. The report recommended a 574 stall garage with 5 levels. Late in 1969, a new 5 level parking garage structure containing approximately 600 spaces was opened in the heart of downtown. This facility has greatly eased the parking situation in the central business district.

Not until the parking structure has completed its third full year of operation can its success be adequately measured and its normal usage be determined. At such time consideration should be given to revising our parking lot rates and street parking regulations so as to attract more all-day parkers within the central business area and relieve congestion in some of the adjacent residential neighborhoods. There are an estimated 500 cars parked on an all-day basis in residential neighborhoods on all four sides of downtown.

As revitalization of the central area continues, expansion of the present garage or construction of a new one may have to be considered. Many curb spaces have been eliminated over the years as a result of new construction, curb cuts and bus stops. Additional off-street spaces will be required as still other reductions continue to occur in the future. On a number of the wider streets in the downtown area, diagonal parking was instituted to increase the supply of short-term parking. These slots constitute a major reservoir of spaces, yet they are far from satisfactory. Many cities have abandoned diagonal parking because visibility problems make it particularly susceptible to accidents. Accident potential and interruption of smooth traffic flow have to be weighed against its value as convenient short-term parking. Some reductions have already occurred, but complete removal would not seem feasible without substituting equally convenient space.

The problem of shopper parking was cited earlier as one of the main reasons for lack of economic growth in the central business district. With the recent parking improvements downtown, however, insufficient parking can no longer be considered a primary deterrent. Improved parking alone cannot restore or maintain the economic vitality of a shopping area. Effective merchandising and easy access combined with adequate parking facilities can enable merchants to compete successfully. A car-driving customer must have a place to park, but a parking place does not make a driver a customer.

*Studies of shopper attitudes have shown that distances seem greater when the shopper's destination cannot be seen from his parking space. A shopper is much more likely to be willing to walk further in a shopping center parking lot because he can see his destination then he would in a business center where his destination lies out of sight.

Parking in Secondary Business Centers

Most of the smaller secondary business centers such as Main, Central, Howard and Dempster Streets have had to rely on curb space as their chief parking resource. These older centers developed along major arterials and at junctions with public transportation in a period before dependence upon the automobile developed for shopping trips. They relied chiefly upon walk-in trade from their adjacent neighborhoods and from public transit passengers. Many of these centers were hurt by the massive shift to automboile transportation and found it difficult to adapt. Some strategically located off-street lots have developed, but most of the strip shopping areas are still dependent upon the small amount of curb parking available. Heavy traffic volumes further compound the parking problems of these secondary shopping centers. The increasing levels of traffic, combined with the narrowness of some of these commercial streets, may make it necessary to increase their carrying capacity. Removing on-street parking, at least at rush hour periods, is an inexpensive way of providing additional travel lanes without the usual disruption caused by widening. However, some means of compensation for the lost curb parking should be found. The obvious solution is to provide well-located off-street parking facilities for each block affected. Finding appropriate sites for off-street parking along commercial streets is difficult and any available sites would be expensive.

Many adaptations to present day parking needs can be found along commercial streets. Individual businesses have acquired and cleared property to provide their own off-street parking; others have turned to drive-in types of facilities. Two of the secondary business centers have off-street parking lots for their customers. A group of Central Street merchants worked out an agreement with the City to remove the meters from a public parking lot so that their customers could park free. The city is reimbursed by the merchants for revenues lost. In the Main Street business area a public metered lot meets a part of the demand for parking space in that area.

Similar lots need to be developed along other sections of commercial streets. Since parking is insufficient in many places, it is hoped that lots created to off-set losses in curb parking will provide a net gain in the parking supply. Declines in curb parking are likely to continue as the need to remove parking to increase street capacity grows, and as the accident potential of curb parking is better recognized. Certainly not all curb parking can or should be removed because it constitutes a major reservoir of parking capacity which would be difficult to replace. Curb parking is extremely convenient for the short-term parker and every motorist still enjoys at least the hope of being able to park in front of the store he wishes to visit.

Daytime Parking

Overflow parking is the principal daytime parking problem for residential areas (Figure 18). This overflow is from several sources, varies in extent, can be short or long term and is difficult to control. It creates an extremely sensitive issue in some residential areas. Among the sources are: all-day parkers from the central business area; cars awaiting servicing from automobile service establishments; hospital personnel and visitors; college students; and employees from industrial areas.

The cause of this problem is that considerable development in Evanston took place prior to today's extensive use of the automobile. Many offices, institutions, businesses, colleges and hospitals do have some off-street space, but often not enough to meet all or peak demands. Some have added many spaces where there were none before, often at great cost. However, the lack of available land and high costs puts serious restraints on their ability to meet full demand. Determining the proper ratios for each of these institutions and measures to be used in determining such ratios (beds, floor area, residents, employees, etc.) is a complex task. Applying appropriate measures to the zoning ordinance without making it completely unwieldy is also difficult. Some attempts have been made to accomplish this, but these requirements should be periodically reviewed and re-defined.

FIG.18

PLANNING DEPARTMENT

Commuter Parking

There is a limited amount of commuter parking in the vicinity of several of the Chicago and North Western and CTA stations. At some locations this parking is a source of local congestion.

At Isabella Street there is parking by CTA commuters on both sides of the street along the Community Golf Course. At the Central Street Station, North Western commuters park along the right-of-way of unpaved Popular Avenue, north and south of Central Street. There are few commuter parkers at the CTA stop at Central Street largely because of a limited supply of free curb space and strong competition for that space from the hospital. The Central Street stop is well served by the No. 1 bus line. Both the Foster and Noyes Street stops have free parking in unpaved lots underneath the elevated structure and on the CTA right-of-way. Little is known about the extent of park and ride patrons using the Davis Street stations. There may be some commuters parking in the city garage or in the metered strip along Benson Avenue, but these spaces are not free. In the vicinity of the Dempster Street CTA stop there is little all day space available. This is also true of both stops at Main Street, but there is some limited parking in the railroad right-of-way between the stations. There is also some parking by railroad patrons on adjacent residential streets. Both the CTA and North Western stations have a large portion of walk-in commuters at these stops. Connections with two Evanston Bus routes are also available here. At the CTA South Boulevard stop some commuters use the metered spaces in the city parking lot, but most patrons walk to the station.

There does not appear to be a strong argument for increasing park and ride facilities in Evanston as a means of increasing use of public transportation. What land Evanston does have which might be used for such facilities is already being so used. Most of this is now free parking and any expansion would necessitate fees to help pay for the cost. There is some question as to how much usage this parking would get and how much real impact it would have on increasing the use of public transportation. Any sizable expansion of park and ride space would only increase the number of vehicles on the street rather than reduce it. There is also a good chance that such expansion would draw commuters from other suburbs. Fortunately, thousands of transit riders live close enough to stations to walk or cycle, as Evanston's higher density areas lie within a quarter mile of most stops. Many transit riders, living at somewhat greater distances, are able to reach transit stops via a short bus ride. The City's policy should be to encourage more commuters to take the bus, walk or cycle to the stations rather than to greatly expand park and ride facilities. One very positive measure which would do much to encourage increased use of the bus would be transfer privileges between lines to reduce the problem of large double fares.

Overnight Parking

In response to Evanston's overnight parking problem, the Mayor requested, in June of 1967, that the Administration and Public Works Committee undertake a study and report within 18 months on what steps were necessary to provide 24 hour off-street parking for every automobile in Evanston. The inability to complete such a study is a measure of the difficulty and the shortage of solutions.

From 1900 to 1930 there was a boom in apartment construction in Evanston. Many of the three-story walk-up style buildings were concentrated in south and southeast Evanston. The original concept of apartment living in those times was to concentrate units near shopping and public transportation facilities. Walking distance to such facilities was a critical factor and dependence upon the automobile was not widespread. Few of the many apartment buildings constructed during those years made more than a token effort to provide garages or other parking space. Early zoning ordinances did not require that parking be provided; thus, there are many buildings today with no off-street parking whatsoever. One of these old buildings can generate enough parking demand to fill the entire curb on one side of a street for one block. Where several of these apartments are found on a block it can be easily seen why there is congestion and overflow parking into adjacent single family neighborhoods.

New zoning regulations have helped insure that new buildings provide their own parking. The bulk of the problem in these areas, however, was created years ago and cannot be corrected by current zoning regulations. At the same time that the need for better zoning regulations was being recognized, other measures were taken. Vacant pieces of land were purchased by the City in the 1950's as a means of helping meet the demand for more nighttime parking space. Off-street space for some 300 cars was created at several different locations. Early in the 1960's it was apparent that still more needed to be done. The Planning Department carried out surveys in south and southeast Evanston, and found that the most severe parking problems still remained in spite of earlier efforts to alleviate them. It was discovered that many people had to walk as far as a quarter of a mile at night from a parking space to their apartments. In a twenty-four block area of southeast Evanston, 96 per cent of the entire curb parking capacity was used. Recommendations for additional off-street parking lots grew out of the Planning Department's report, and five such lots with a total of 167 spaces have since been put into operation. Because the city was competing with the developers for what were considered prime apartment sites, the program was expensive. However, acquiring these sites had a two-fold benefit; not only was additional parking supplied, but the potential for more high density development was reduced (Figure 19). There remains, however, a serious shortage of overnight parking in these areas.

Alternate parking was instituted in 1952 to enable the city to efficiently sweep Evanston's streets on a regularly scheduled basis and quickly clear all the streets of snow after a storm. What is involved is a restriction of parking to one side of the street on alternate nights during the winter months. This enables snow removal to take place swiftly by allowing the plows complete access to the street during each 24 hour period. During the summer months parking is prohibited on each side once every week on two different nights to permit street sweeping.

Many citizens recognize that the present alternate parking ordinance makes possible an optimum street cleaning and snow removal program. Yet the present ordinance complicates the overnight parking problem by reducing the number of spaces available during hours when they are needed most. In high density areas alternate parking acutely worsens an already bad parking situation. Recently some changes were put into effect on an experimental basis to see if the adverse impact of alternate parking could be eased. In some areas of south Evanston where there is a shortage of overnight curb space, the city is trying a day-time alternate parking scheme. In the first season of operation, this arrangement has been well accepted by the local residents. However, there were no severe snow storms to adequately test the effectiveness of the new regulations concerning snow removal. There may be some compromise of the existing quality of the city's street cleaning and snow removal operations resulting from the new program. Ultimately Evanston citizens will have to decide if reduced levels of service are worth the added convenience of more on-street parking.

Solutions

Any parking plan for Evanston should combine both regulation and off-street parking programs which attempt to reconcile demand with the limited quantity of land available for off-street parking. Evanston has been employing a variety of responses to expand parking facilities, including the purchase of land for public parking lots, the construction of a downtown public parking structure, development of zoning and other regulatory measures concerning parking requirements for different types of land use.

In high density, congested residential areas, it is obvious that present off-street parking spaces should be used to their capacity. Unfortunately, as much as 25 per cent of off-street parking spaces in high density neighborhoods are often vacant at night while all curb spaces are used. A definite preference for the curb causes many residents with an available off-street space to first try to park at the curb. This aggravates the shortage and creates hardships for the person without an off-street space. A further reason for underuse of off-street parking is the cost. Although our zoning ordinance requires one parking space for each dwelling unit, there is usually a separate rent for the space and many renters elect to take a chance on finding curb space rather than paying a fee. The situation could be eased if there were some way to require those with off-street spaces to use them and make rent for a parking space part of the total housing cost.

FIG.19

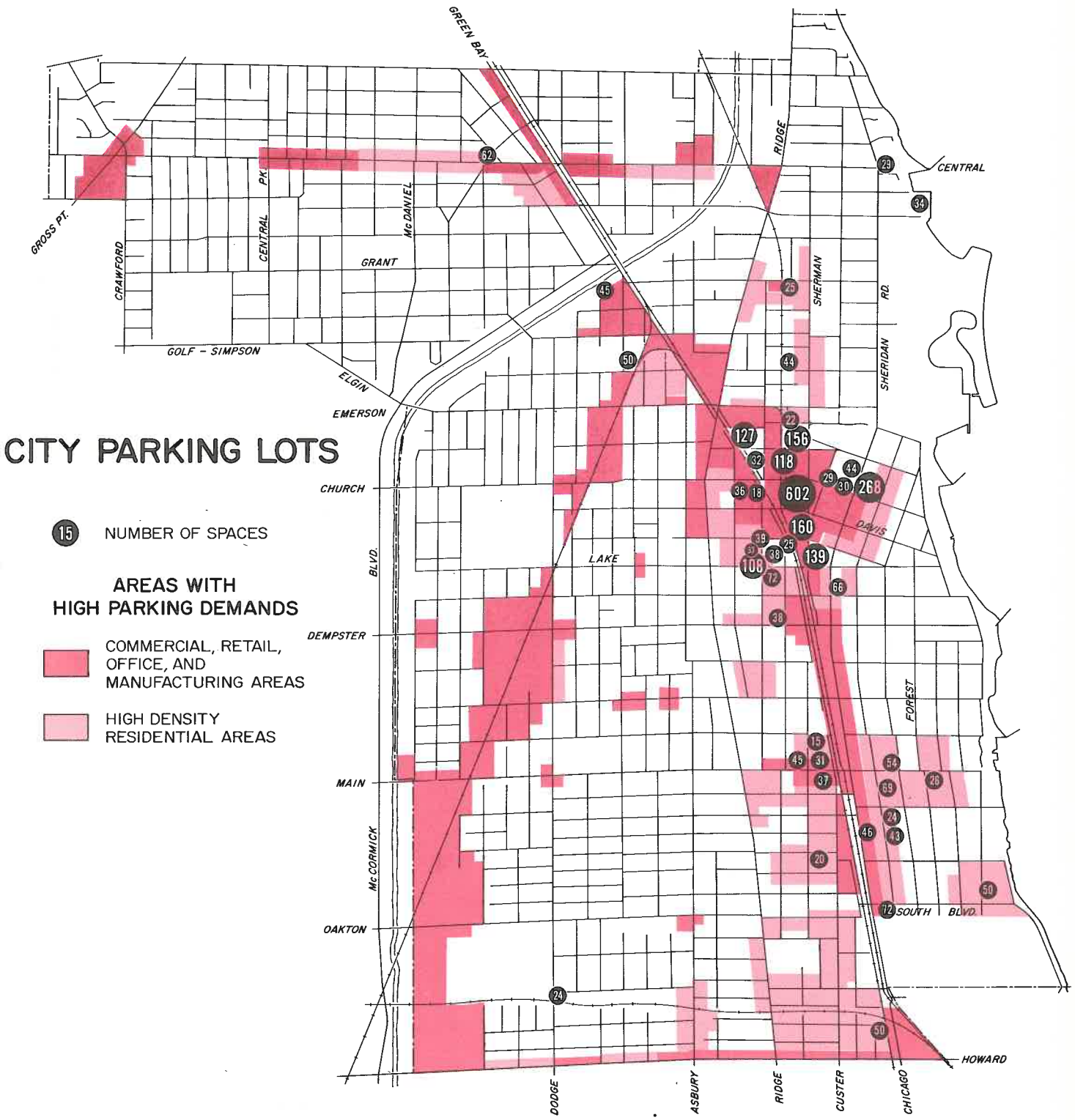
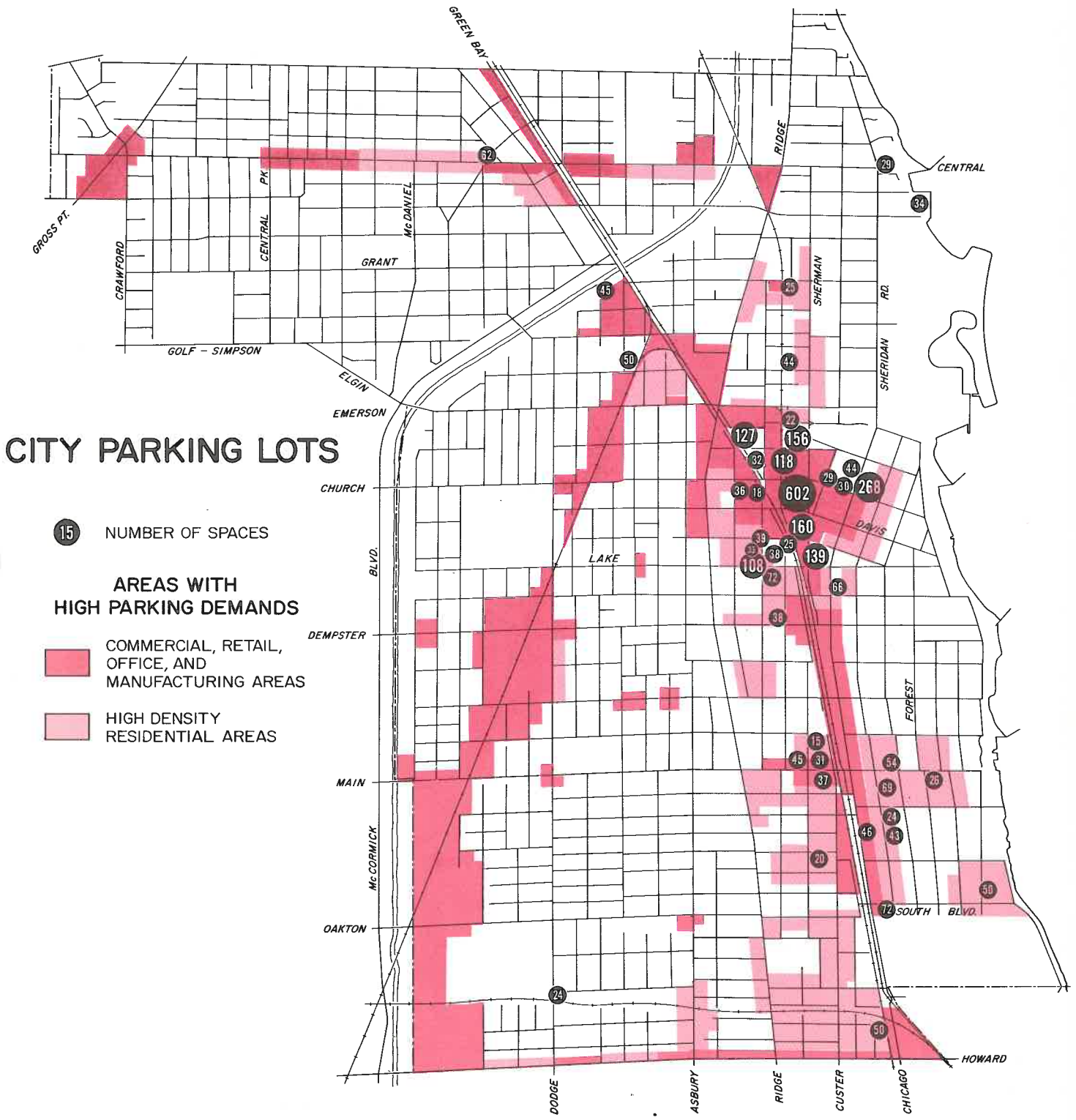

CITY PARKING LOTS
15 NUMBER OF SPACES
AREAS WITH HIGH PARKING DEMANDS
COMMERCIAL, RETAIL, OFFICE, AND MANUFACTURING AREAS
HIGH DENSITY RESIDENTIAL AREAS
GREEN BAY
GROSS PT.
CRAWFORD
CENTRAL PK.
McDANIEL
GRANT
GOLF - SIMPSON
ELGIN
EMERSON
RIDGE
CENTRAL
SHERMAN
RD.
SHERIDAN
CHURCH
BLVD.
LAKE
DAVIS
DEMPSTER
FOREST
MAIN
McCORMICK
OAKTON
SOUTH
BLVD.
HOWARD
DODGE
ASBURY
RIDGE
CUSTER
CHICAGO
127
156
118
602
268
160
139
108

FIG.19


CITY PARKING LOTS
15 NUMBER OF SPACES
AREAS WITH HIGH PARKING DEMANDS
COMMERCIAL, RETAIL, OFFICE, AND MANUFACTURING AREAS
HIGH DENSITY RESIDENTIAL AREAS
GREEN BAY
GROSS PT.
CRAWFORD
PK
CENTRAL
McDANIEL
GRANT
GOLF - SIMPSON
ELGIN
EMERSON
RIDGE
CENTRAL
SHERMAN
RD.
SHERIDAN
CHURCH
BLVD.
LAKE
DAVIS
DEMPSTER
FOREST
MAIN
McCORMICK
OAKTON
SOUTH BLVD.
HOWARD
DODGE
ASBURY
RIDGE
CUSTER
CHICAGO
62
29
34
25
45
50
44
22
127
156
32
118
29
44
30
268
36
16
602
160
39
38
25
139
108
72
66
38
15
45
31
54
37
69
25
24
46
43
20
50
72
24
50

There are several techniques available for creating new off-street parking spaces in residential areas. A relatively inexpensive one, with little disruption of existing land uses, is to utilize a portion of the rear yard adjacent to the alley. This is already being done by some property owners in the high density areas. However, the narrowness of most lots limits the quantity of new spaces which can be made available. Much more efficient use could be made of rear yards in such areas by combining a strip of contiguous yards along an alley and installing parallel or diagonal spaces. Some thought could be given to a leasing arrangement between the city and landlords where enough land would be available to make it worthwhile. Small, obsolete and dilapidated garages are found along many alleys. These structures represent very inefficient use of land for parking – many are not even used for storing vehicles. Where these garages are on land used by multiple family structures, especially those with insufficient parking, the owner should be encouraged to remove them and add more parking space. Using alleys for parking presents an opportunity to experiment with ways to make the most effective use of the very limited land available. It is this type of experimentation which is needed if we are to improve significantly the parking situation in Evanston.

In some areas demand is so great that off-street lots are needed on every block. Consideration should be given to continuing the policy of acquiring dilapidated homes in apartment areas as these homes become available, and clearing the land for additional residential off-street parking lots. Unfortunately opportunities for such action are becoming rare as rising land costs increase the pressure to make more intensive use of land. Also, other demands upon the city's parking fund are shrinking its financial capacity.

A third suggestion is to employ the multi-purpose land use concept to reduce overnight parking congestion. For example, a parcel of land could serve as a play court during the day and as a parking facility at night. Also, in residential districts adjacent to retail and commercial areas, the feasibility should be explored of using employee and shopper parking spaces to handle residential parking at night. This multiple use concept has been employed in some public lots by using a combination of permit parking for overnight or all day parking and meters for short-term parking.

A variety of new regulatory measures has been suggested to complement the creation of additional off-street parking. One long-range proposal would focus on the owners of older residential dwellings that do not provide enough off-street space, as stipulated by the zoning ordinance. Owners of these residential structures could contribute to a special assessment fund in which the revenue generated would be used to gradually develop additional off-street spaces. Several cities plagued by residential parking congestion require residents desiring to park overnight on the street to purchase a permit at a modest fee. This method might be particularly applicable to the area surrounding Evanston Hospital and Kendall College where there is much competition for space. Permits could be issued only to residents of the area. A related suggestion is to impose a tax on curb parking to all automobile owners. In both cases, the proceeds would be applied to the creation of new off-street spaces.

In summary, the construction of additional off-street parking by itself will not alleviate parking congestion in residential areas. Much of the solution lies in determining and adopting guidelines that would minimize on-street parking congestion.

The main objective for parking in retail and commercial areas is to provide adequate parking for employees and shoppers during the daytime hours. Several means have already been employed and will continue to be used. Again, these are a combination of regulatory measures and the provision of additional off-street parking. Making parking either free or at nominal cost to the customer must also be considered. In the case of downtown it has been pointed out that a second parking structure may be needed as new development continues. It may also be necessary to create additional two hour zones and/or reduce the time limit on meter parking in order to accelerate turnover. Continued use of such techniques as validation parking, business-financed parking for customers, and zoning to insure that new developments meet their own parking demand is important to achieve a parking balance.

There are no easy or inexpensive solutions — carving off-street lots out of developed business frontage is both difficult and expensive. Excessive regulation creates a feeling of resentment towards the city, and such feelings must be weighed against the effectiveness of the regulations.

Any total solution to the parking problem is beyond the community's means and perhaps beyond its will to achieve. Involved would be both costs and a level of code enforcement too great to be acceptable. However, progress should continue to be made in reducing the level of the problem or, at the very least, to insure that we lose ground more slowly. The community has shown a willingness to wrestle with these complex problems and to insist on searching for answers.

Solutions to a number of problems remain to be explored. They are likely to be more philosophically determined than technically or economically. First, how much parking do we really need in certain areas? How much can we afford to correct and how much can we simply endure? What sort of trade-offs will we be willing to make in terms of costs, inconvenience, lower levels of services, etc., to make improvements in the parking situation? There will be constant issues and questions for which specific numerical answers may never be available. Responses will be based more upon community perceptions of the problem and attitudes regarding it. Part of the problem is that parking considerations are often given low priority in the planning of many new developments. Failure to give proper weight to parking needs is, in large part, caused by old attitudes. Developers are caught between high costs and the expectations of their customers for free or low cost parking. We are not far removed from the "free" space concept of twenty years ago. Initially, parking meters were difficult for anyone to accept, even though the cost was nominal. Today elements of this attitude persist in regard to various forms of all-day or overnight parking. It must be recognized that there is a large cost factor involved in storing cars, and parking is rarely free.

BICYCLE ROUTES

Bicycling in Evanston has increased significantly in the past five years. Its popularity is enjoyed both by children and adults who bicycle not only for recreation, but also to jobs and shopping. Ecological awareness, rising transportation costs, physical fitness awareness, and rediscovering the pleasure of biking are factors contributing to the recent popularity.

This section considers some of the problems associated with cycling and describes a long-range plan for recreational bicycle routes throughout the city. The increased popularity of bicycling has brought problems of traffic conflicts, accidents, thefts, bicycle parking and inadequate laws.

Traffic Conflicts

Conflicts between automobiles and bicycles are at the point when action is essential to prevent further confusion and injury. In 1971 there were fifty-four accidents involving autos and bicycles. There was one bicycle death in Evanston in 1971 and seven in Chicago compared to none the year before. The ignorance of the bicyclists, not realizing he must obey the traffic laws, is combined with the car driver's lack of understanding that the bicyclist has equal right-of-way privileges.

It is important for cyclists to keep bicycles off major streets. Although there are many skilled cyclists who can keep up with traffic on major streets, there are too many inexperienced ones who are endangering their lives. The frequency of cars pulling out of driveways or parking places, and of car doors being opened in front of a bike is higher on a major street. When cyclists realize that travel is faster on parallel side streets some conflicts will be alleviated. The proposed bicycle routes in this plan do not correspond to any major streets. (Figure 20, Note Sheridan Road route follows the sidewalk, not the street.)

TABLE 6
BICYCLE REGISTRATIONS, ACCIDENTS, AND THEFTS

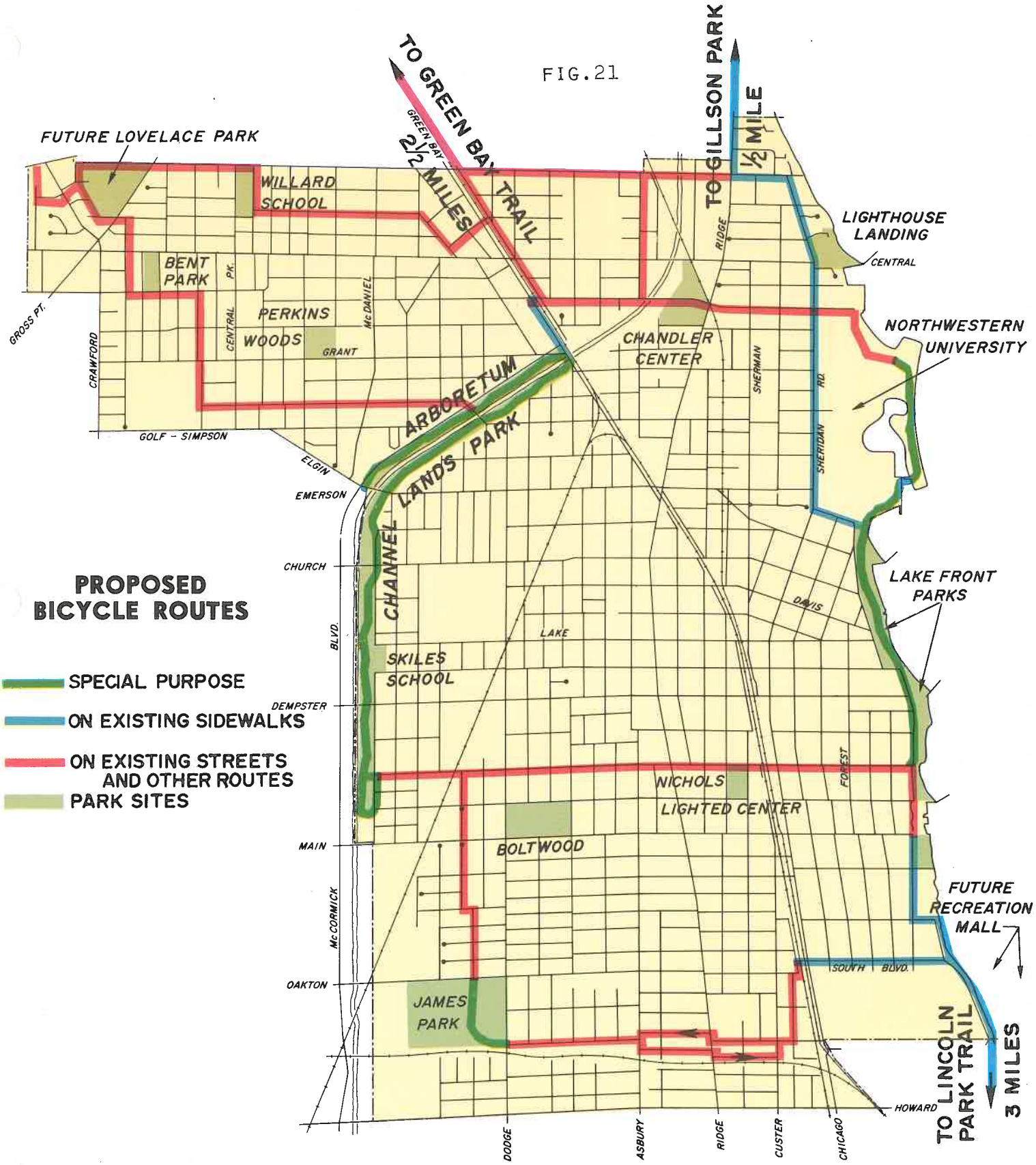
Year	Bicycle Registration	Auto Accidents Involving Bicycles	Bicycle Thefts
1965	5,661	35	629
1966	-------	42	778
1967	4,649	49	576
1968	-------	37	818
1969	7,271	39	1,079
1970	-------	68	1,452
1971	4,446	54	1,437

Sources: Police Department, City Collector

Thefts

Bicycle theft has been a longstanding problem, as the Evanston annual report of 1906 reported that ". . . a band of juvenile bicycle thieves, with headquarters in Chicago, was broken up, but not before five hundred dollars worth of bicycles had been stolen and disposed of." Bicycle thefts have shown a dramatic increase – 629 thefts in 1965 compared to 1,437 in 1971. Bicycles are a tempting item susceptible to theft, as they can be wheeled away easily and are difficult to trace. Necessary steps to combat thefts are stricter bicycle registration, serial numbers stamped in a visible location and coordination of records among surrounding communities.

FIG.21


PROPOSED
BICYCLE ROUTES
SPECIAL PURPOSE
ON EXISTING SIDEWALKS
ON EXISTING STREETS AND OTHER ROUTES
PARK SITES
TO GREEN BAY TRAIL
2½ MILES
TO GILLSON PARK
½ MILE
FUTURE LOVELACE PARK
WILLARD SCHOOL
BENT PARK
PERKINS WOODS
GROSS PT.
CRAWFORD
CENTRAL PK.
McDANIEL
GRANT
GOLF - SIMPSON
ELGIN
EMERSON
ARBORETUM
LANDS PARK
CHANNEL
CHURCH
BLVD.
SKILES SCHOOL
LAKE
DEMPSTER
MAIN
McCORMICK
OAKTON
JAMES PARK
BOLTWOOD
NICHOLS LIGHTED CENTER
FOREST
DAVIS
SHERMAN
RIDGE
SHERIDAN RD.
CHANDLER CENTER
LIGHTHOUSE LANDING
CENTRAL
NORTHWESTERN UNIVERSITY
LAKE FRONT PARKS
FUTURE RECREATION MALL
SOUTH BLVD.
HOWARD
TO LINCOLN PARK TRAIL
3 MILES
DODGE
ASBURY
RIDGE
CUSTER
CHICAGO

Bicycle registration has been substituted for licensing since 1971. The methods used for registration have changed in the last few years, and registrations fluctuate according to the City's efforts to encourage the practices. There have been no efforts to enforce registration. As of April, 1971, registration has to occur only once unless there is a change in ownership.

Bicycle Parking

The bike parking problem in downtown Evanston is apparent as bikes are seen chained to any available railing or post. This situation could be eased by placing more bicycle racks downtown. It has also been suggested that bicycle parking space be made available in the parking garage in sight of attendants. Bikes would be protected from the rain as well as thefts. Other attendant parking lots around the central area should be considered, as well as better protection for bikes at the beaches. This might be accomplished by fencing off bike racks and using beach attendants for surveillance.

Laws

Bicycle conflicts with pedestrians are also a problem, especially in the central area. Bikes are not allowed on the sidewalks in any business district defined by the zoning ordinance (Figure 21). A study of possible changes in the present laws pertaining to riding on sidewalks and streets has been recommended by City Council. Bike enthusiast groups are becoming active in making the city aware of specific problems and offering solutions.

Existing Bicycle Routes

There are, as of this time, no specifically designated bicycle paths in the City of Evanston. Bikes can travel on all streets except major thoroughfares (Figure 21). Sidewalk riding is allowed (taking certain precautions when approaching pedestrians) except in business districts. Two informal routes exist for recreational cycling, one along the banks of the North Shore Channel and the other along the lakefront.

Channel Route

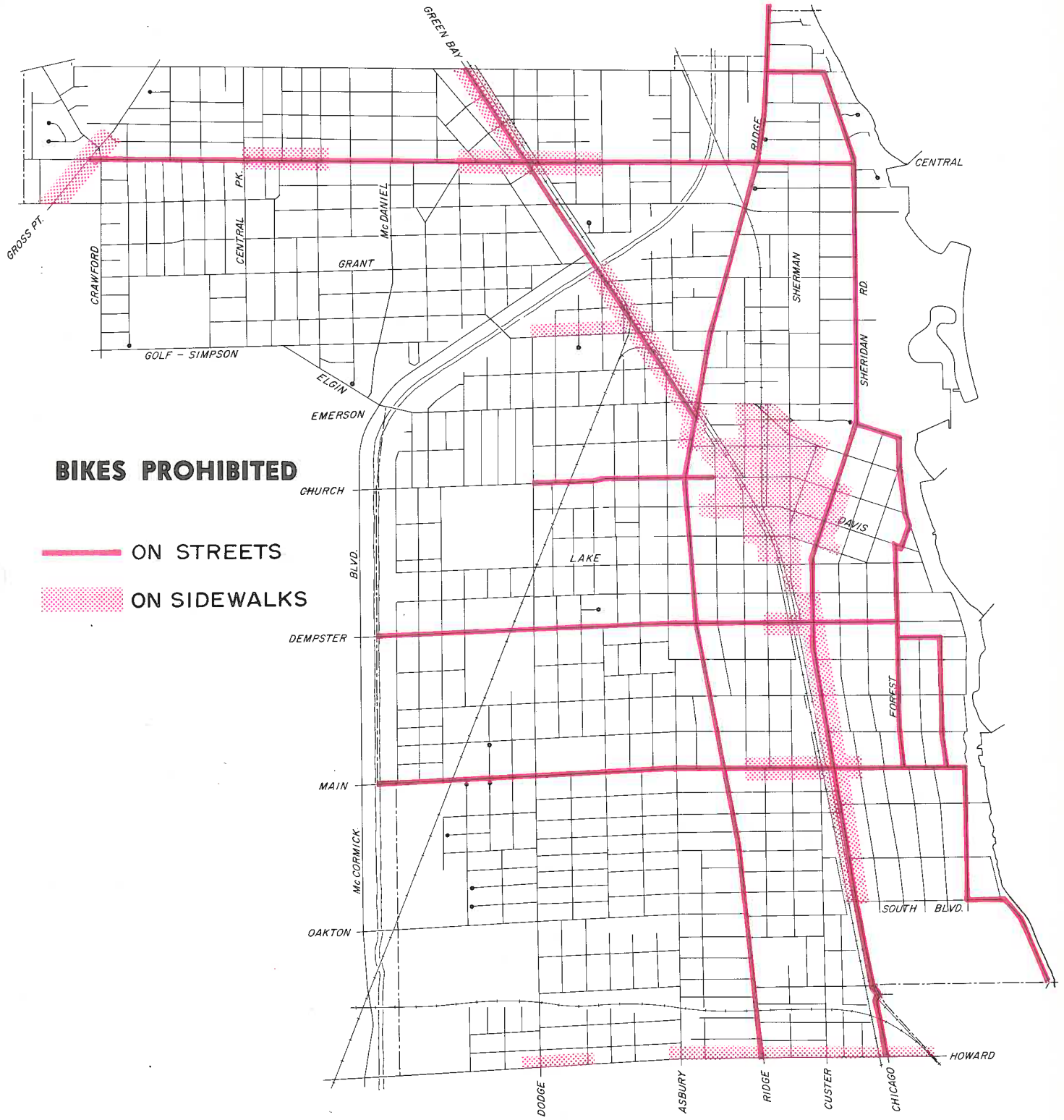
The arboretum and parks south of the arboretum have crushed stone paths for bicycles and walkers. Asphalt paving provides a smoother bicycle ride, and the city plans to complete the first paved bicycle path between Church Street and Dempster Street on the east side of the channel. The path is eight feet wide and will be asphalt paved, winding along the channel land and through Skiles Middle School. If further development along the channel produces additional traffic and there are conflict points between walkers and bicyclists, steps can be taken to separate the traffic.

Lakefront Route

The city realized the value of a lakefront bicycle path when it adopted a lakefront policy statement in 1967 which reads in part, ". . . a continuous path or paths for hiking, bicycling should be provided along the entire length of the lakefront." Over half the land along the lakefront is in public use and another third of the land is owned by Northwestern University. Although portions of the lakefront are privately owned and closed to the public, bike paths could be constructed on the public land and routed around the privately-owned parcels.

The lakefront route is presently a combination of sidewalks, sand, gravel, streets, and bumpy broken pavement on its informal weave along the length of the city. There has been no attempt to identify or maintain the route. Discussions have been held in Northwestern University as to the possibility of north-south paths through the campus. The plan in Figure 20 proposes a path along Sheridan Road either on the sidewalks or on the parkway as well as on the lake edge.

FIG. 20


BIKES PROHIBITED
ON STREETS
ON SIDEWALKS
GREEN BAY
RIDGE
CENTRAL
GROSS PT.
PK.
CENTRAL
McDANIEL
GRANT
CRAWFORD
GOLF - SIMPSON
ELGIN
EMERSON
SHERMAN
RD
SHERIDAN
CHURCH
DAVIS
BLVD.
LAKE
DEMPSTER
FOREST
MAIN
McCORMICK
SOUTH BLVD.
OAKTON
HOWARD
DODGE
ASBURY
RIDGE
CUSTER
CHICAGO

Because part of the route goes along Sheridan Road, upon which bicycles presently can not travel, it is necessary to use the sidewalks. The use of curb cuts at residential street intersections would allow a more continuous flow of travel for the cyclists and eliminate the need to dismount at every intersections. Where there is a substantial amount of cross traffic, curb cuts would not be safe. Signs warning motorists of bicycle cross traffic also helps to reduce accidents.

The lakefront route is a high priority project and requires coordination with plans now being formulated for improving the lakefront parks. A modest scale is essential in the width of paths as well as in the size of signs. There are nationally recognized signs available; however, less obtrusive alternatives should be investigated.

Proposed Routes

It is proposed that a circular route around Evanston be made part of the plans and policies of the city (Figure 20). The already discussed lakefront routes and the channel routes would be connected to the north by Lincoln, Asbury and Isabella. Scenic Gillson Park and the Bahai Temple in Wilmette are close to this point. To the south there are two links between the channel and lakefront routes – one along South Boulevard and Mulford and the other (more in the middle of the city) along Greenleaf Street. Each route on the plan is marked as consisting of a special purpose path, the existing sidewalk, or the existing street. There should be connections with routes in Chicago (Lincoln Park Path) as well as the Green Bay Trail north of the city. An effort should be made to work with Wilmette, Kenilworth and Winnetka to provide easy access over the 2.5 miles to the Green Bay Trail.

All the paths are to have signs identifying the route and warning auto drivers at intersections. Publishing small maps would help to establish the routes. Separation of bike and walking paths is recommended wherever possible. Asphalt is recommended for the special purpose trails.

The recent wide spread growth of bicycle use makes the provision of a bike path system in Evanston timely. The city should encourage this trend by supplying a well-designed system of trails. Provision of such a bike trail along the lakefront has the highest priority and would enhance the value of the lakefront by making its unique qualities more accessible. Tying the lake and the canal together allows the recreation-minded cyclists to see many parts of the city. It also facilitates getting from one point to another along a scenic, safe route.

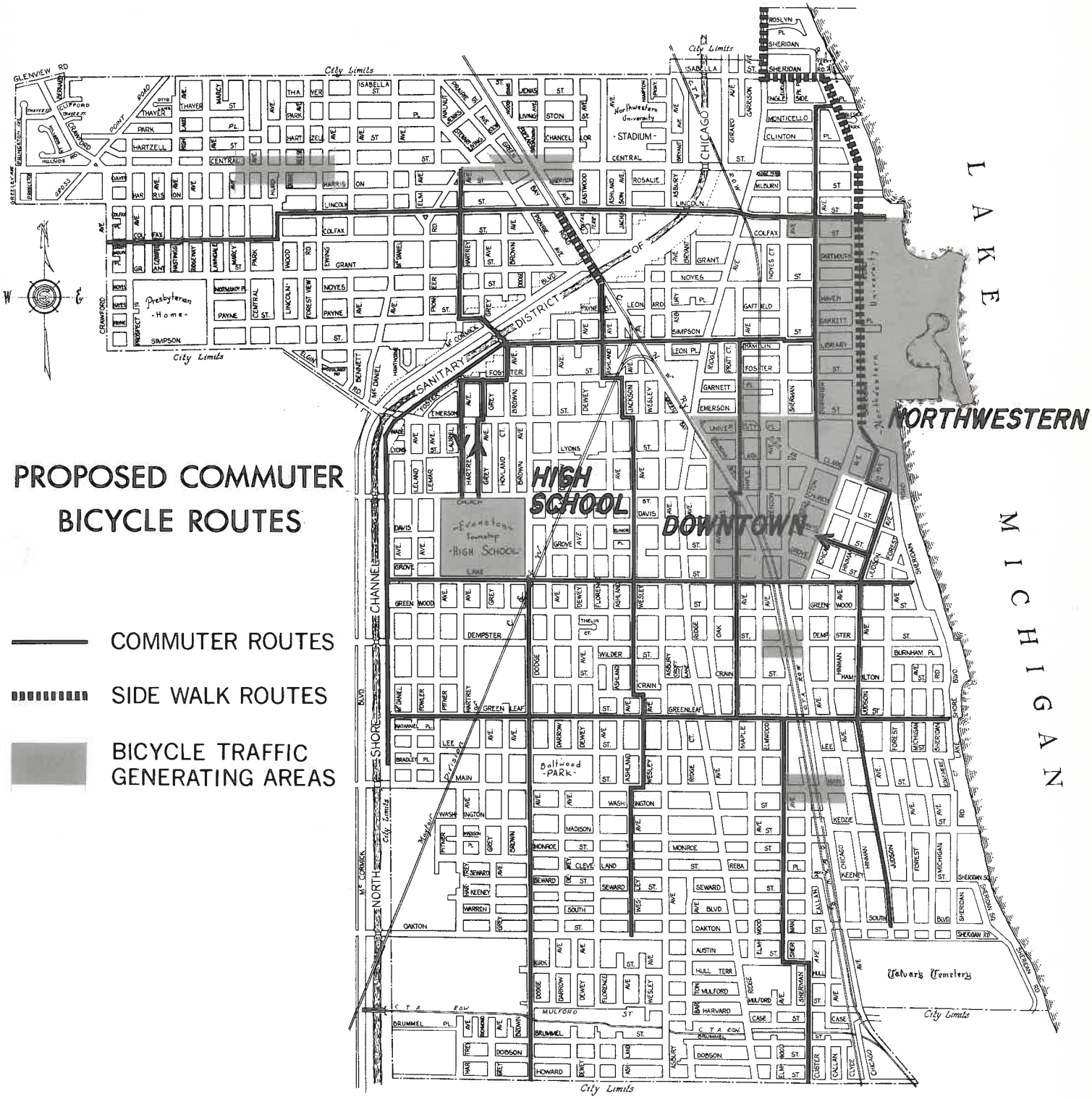
Commuter Routes

Interest has been growing in establishing "commuter routes" from Evanston's residential neighborhoods to such points as the downtown, secondary shopping areas, the university, the high school, and train stations. One of the frequent complaints of cyclists is that travel to such places is made extremely difficult by combinations of streets and sidewalks banned to cycle traffic, along with streets too narrow and too heavily travelled to be safe for cycling. There are a number of techniques for correcting this situation, but implementation is not easy.

As with the automobile traffic, working with modifications of the existing system rather than creating new systems seems to be the most practical approach.

The first step should be to identify a system of preferred routes which parallel the major streets. Ideally, these routes would have certain characteristics including relatively light vehicular traffic and adequate width to safely accommodate cars and bikes. They should follow direct routes to activity centers so that they will be attractive to cyclists and not be considered mere detours to get them off the major routes. A grid network of preferred cycle routes connecting the major residential neighborhoods to the principal activity centers such as jobs, schools,and shopping is suggested in Figure 22. These are the types of routes that the serious cyclists, concerned about safety, would work out for himself. These routes have not all been tested, and there are a few problems to be solved, but they are generally good substitutes for the major streets.

FIG. 22



PLANNING DEPARTMENT

If this system or a modification of it is acceptable, the next step would be to identify the routes with signs; work on some of the physical problems; and publicize their availability. Additional improvements could be made as bicycle traffic increases and experience is gained. Among such improvements might be the establishment of special lanes for bikes by pavement stripping and the prohibition of parking on that side of the street.

Banning auto traffic from some streets is sometimes suggested, but would be unacceptable to most residents because of the access problems that would be created. Constructing special bicycle lanes separated by a curb has been tried in some cities. Widening sidewalks is another technique suggested. Both of the latter involve considerable expense which would have to be justified in terms of heavy cycle travel.

One of the most frequently voiced complaints of cyclists is the difficult accessibility to the downtown due to a combination of streets banned to bicycle traffic, hazardous streets with high traffic volumes and sidewalks prohibited to bikes. It is recommended that removing the ban on the use of the sidewalks in downtown Evanston be considered. Enforcement of the ban should be limited to failure to yield right-of-way to pedestrians. In the interim, other measures, such as bike lanes on the sidewalks or streets should be evaluated.

Whether such measures are successful in helping accommodate both cycle and vehicular traffic will rely mostly upon our ability to change the habits and attitudes of both cyclists and motorists. Too many cyclists seem ready to disregard all rules of the road and are dangerously unpredictive in their movements. Too many motorists are overly aggressive and reluctant to yield the right-of-way to a cyclist, treating him as an intruder who has no right to use the same pavement. Unless a new set of attitudes emerges, on both the part of the motorists and the cyclist, there will be a high casualty rate accompanying the growing use of bicycles.

PUBLIC TRANSPORTATION

OBJECTIVES: To assure that all members of the community are provided urban mobility by a transit system that includes adequate coverage at a reasonable fare.

To assist all forms of public transportation to become increasingly safe, rapid, convenient, comfortable and quiet in their services to Evanston so that their use may compare favorably to the automobile.

To promote coordination and cooperation between all forms of public transportation.

POLICIES: 1. Cooperate with and assist in the financing of the sub-regional North Suburban Mass Transit District in dealing with such concerns as coordinating commuter parking, rail station location, inter-suburban bus services and feeder bus services to the commuter railroads. 2. Maximize funding for transit through the use of motor fuel tax monies and other funds available. 3. Support moves to change the national highway trust fund to a transportation trust fund. 4. Support all appropriate actions to improve the efficiency and financial health of the CTA, C&NW and the Evanston Bus system and to check fare increases. 5. Support efforts to coordinate service among carriers providing local and metropolitan service and to establish transfer privileges. 6. Insist on the development of contemporary systems that provide frequent dependable service on all transit modes. 7. Encourage major overhaul programs for the principal carriers including scheduling, pricing, route and equipment replacements. 8. Insist that the CTA and the C&NW improve their general operating environment through Evanston including their rights-of-way, viaducts and stations. 9. Promote and assist in financing passenger stop improvements such as sheltered and heated facilities which are attractively designed. 10. Participate in information programs to regularly inform the public about the existing transit facilities, routes, schedules, transfer points, fares and actively promote transit usage. 11. Investigate the feasibility of a no-fare shuttle service in downtown Evanston which would link parking lots, transfer areas, major pedestrian generators and the lakefront into a logical central area circulation system. 12. Insure that all major traffic generators are linked to the transit system and coordinate new major development projects with public transit so as minimize automobile use.

STREET SYSTEM

OBJECTIVES: To improve access to the business areas of Evanston and encourage their economic vitality.

To promote safe, steady and convenient access to homes and establishments within this community and between Evanston and the metropolitan area.

POLICIES: 1. Designate a major street system which classifies all types of Evanston streets by their function and recognizes their differences as an essential part of circulation planning. 2. Make better use of our existing street system to improve the flow of traffic through such traffic engineering techniques as improved signal coordination, channelization, pavement marking, signing, turning lanes at intersections, etc. 3. Strip parking during rush hour on one or both sides of some major streets to provide additional travel lanes where needed. 4. Widen some segments only where necessary to provide improved lane widths or to add capacity where stripping parking would not help. 5. Maintain the quality of residential segments of major streets when making improvements and considering traffic control devices for these streets. 6. Protect access to abutting properties and replace any street trees lost because of improvements. 7. Evaluate the impact of restrictions on curb parking as part of any effort to preserve the best possible residential environment when parking is stripped. 8. Remove the restrictions to the smooth flow of traffic on the major carriers with the objective of eliminating bypass traffic from local streets and returning it to the major thoroughfares. 9. Close local streets not needed for access where the land area can be added to adjacent parks and schools. 10. Prepare cul-de-sac plans for neighborhoods whose local street pattern has resulted in their use for through traffic or access roads for industry. 11. Maintain as much short term curb parking as is reasonably possible in the business districts. 12. Consider the construction of two new links related to circulation in the Central Business District: the extension of Benson Avenue south of Davis Street and the extension of Maple Avenue under the Chicago and North Western Railroad. 13. Reduce pedestrian/vehicle conflicts while improving accessibility to and from the downtown. 14. Divert through traffic from the Central Business District. 15. Support the plan for the McCormick Expressway in order to help reduce through traffic on north-south streets. 16. Coordinate traffic planning along boundary streets and through streets linking Evanston to other communities. 17. Pave remaining unpaved streets by 1980. 18. Establish supplemental truck routes along streets that are largely industrial, with short links through alleys to avoid residential neighborhoods, but preserve access to industry. 19. Continue and improve the current Traffic Count Program to monitor growth or change in traffic volumes. 20. Undertake a new origin and destination study during the 1970's to determine any significant shifts in the pattern of usage of the major streets.

PARKING

OBJECTIVE: To provide an adequate supply of parking spaces to satisfy the needs of residents, shoppers and employees.

POLICIES: 1. Maximize the use of present off-street parking spaces as a first step in alleviating parking congestion, and provide additional spaces as needed./ 2. Create additional parking spaces by utilizing undeveloped land abutting alley rights-of-way./ 3. In residential districts located adjacent to retail and commercial areas, explore the feasibility of using employees' and shoppers' parking spaces to handle overnight parking by residents./ 4. Explore the feasibility of requiring the owners of older residential structures with inadequate parking to contribute to a special assessment fund in which the proceeds would be used to develop additional off-street spaces./ 5. Provide specific bicycle parking areas in parking lots.

BICYCLES

OBJECTIVE: To provide safe, commuter routes and scenic recreational paths on which bicyclists can travel.

POLICIES: 1. Establish appropriate signing along bicycle routes for their identification and to enhance safety./ 2. Provide curb cuts to improve routes, but only at selected, carefully controlled points where there would be little vehicle-cycle conflict./ 3. Promote increased use of cyling as at least a seasonal alternative to total dependence upon the automobile for all trips./ 4. Recognize that the growth in cycling will probably make it part of the total transportation system and make plans to help meet its special needs./ 5. Create commuter bike routes between major residential neighborhoods and principal traffic generators such as the downtown, the high school and the university and railroad stations./ 6. Work with Chicago and communities to the north to provide links between existing bicycle paths./ 7. Enforce registration of bicycles to discourage theft./ 8. Continue and expand the bicycle safety programs in school./ 9. Enforce existing bicycle laws.