REGIONAL PLANNING PROGRAM RECOMMENDED BY SEWRPC

At its Quarterly Meeting on April 5, 1962, the SEWRPC approved the Prospectus for a Regional Planning Program designed to provide the information needed for solving many of the major problems facing the rapidly developing urban complexes of the Southeastern Wisconsin area.

The study will furnish much valuable information needed for solving drainage, flood control, sewerage, water supply, land use, water use and other resource related problems as well as permit an analysis of the region's transportation problems in great depth and thereby permit the sound planning, design, construction, operation and maintenance of highway and transit facilities throughout the region.

A unique feature of the proposed program is the extent to which local municipalities and counties will participate in the preparation of regional plans, thereby providing an unprecedented opportunity for the cooperative solution of area wide problems through full consideration of all local, county, state and federal planning efforts within the region.

The Prospectus is the work of a Technical Advisory Committee created to assist the SEWRPC.

Copies of the Prospectus have been distributed to all governmental bodies within the region and in accordance with the advisory role of the Commission, has been recommended for their consideration and approval. SOUTHEASTERN PLANNISSION

TRANSPORTATION PLANNING - A CHANGING CONCEPT

Until recent years it was considered sufficient to plan highways and mass transit facilities as independent, individual projects. Since the end of World War II, the increased size and complexity of urban areas and the increased use of the automobile has created new and involved transportation problems. It has become painfully apparent that piecemeal approaches to the transportation problem no longer are adequate. The transportation demand of today requires the maximum utilization of all existing facilities. It has therefore become necessary to consider the complete transportation system of an area when planning new facilities.

THE PROBLEMS HAVE ALWAYS BEEN THERE

Two basic problems have always existed for the transportation engineer:

- 1. If a new highway or other transportation facility is constructed, or an old one improved, how many persons and vehicles will use the new facility?
- 2. Even if it is known how present traffic might use a proposed facility, how many persons and vehicles will use the same facility in the future?

To these two problems a third problem is added by the need to consider entire systems in the planning work, ie:

3. What will be the effect of the new facility on the existing transportation-land use system?

METHODS OF SUPPLYING ANSWERS HAVE CHANGED

Techniques for supplying the information necessary to answer the above questions have changed radically in recent years. Originally the only information available was in the form of traffic volume counts. Such counts showed only how the present network of highways was being used at one point in time, and were of little use for long range planning purposes. About 20 years ago the origin and destination survey was developed to provide the factual information necessary to acceptably answer the first question. Unfortunately such data could not answer the second question. Approximately eight years ago new concepts and techniques were developed to relate travel demand to land use and thereby permit rational estimates tobe made of the number of travelers who would use transportation facilities both now and in the future. These

TRANSPORTATION PLANNING . . . continued

new and revolutionary planning techniques have been made possible only through the development of high speed computers and operations research-systems engineering methodology.

NEW TECHNIQUES HAVE EVOLVED

These new techniques recognize that land use and transportation planning are inseparable. This is so because:

- 1. The land use pattern determines the amount and distribution of travel within an area.
- 2. The transportation system is the basic skeleton or framework about which all urban development occurs today.

These new concepts and techniques were developed and are being applied in area wide transportation studies now underway in three of the nation's largest urbanizing areas: CATS (Chicago Area Transportation Study), Penn-Jersey (Philadelphia-Camden-Trenton), and LARTS (Los Angeles Regional Transportation Study) as well as in smaller studies in Pittsburgh, Denver and Seattle-Tacoma. All of these studies are envisioned as continuing transportation planning efforts and some have already shifted into an on-going program in which transportation data is constantly up-dated and analyzed.

THE NEW APPROACH

The new design approach involves:

- Relating trip generation directly to land use by determining the rate at which travel is generated by various types of urban activities. This presently requires the conduct of an origin-destination survey.
- 2. Establishing the future land use pattern or patterns.
- 3. Establishing the total future travel demand by applying the trip generation rates to the future-land use patterns.
- 4. Converting total travel demand to travel pattern-future trip desire lines.
- 5. Developing a network of facilities to serve the volumes and locations of these trip desire lines.

If these new techniques are to be applied to the solution of regional transportation problems certain basic land use and travel habit data will have to be collected and analyzed, for the key to proper utilization of these methods is sound, uniform data collection.

WHY WE NEED A COMPREHENSIVE STUDY OF THE REGION

Transportation and traffic planning studies of various types are not entirely new to the Southeastern Wisconsin Region. Standard origin-destination surveys have been carried out for the Milwaukee 'Metropolitan Area' and for the cities of Racine (1951), Kenosha (1952), and Waukesha (1956). Some special purpose origin-destination studies have also been conducted. The study of the Milwaukee Area, which as the largest urban concentration comprises the core of the seven county region, was carried out in 1944 and 1945 and published in 1946. The study area was limited to 42% of Milwaukee County, (at that time over 90% of the 1945 population of the County). The old study limits, as compared with present urbanization, are shown in figure 1, page 6.

Obsolescence of these data is due to the radical changes which have occurred in regional development patterns over the past decade. The urban expansion has spread out to include not only all of Milwaukee County but parts of Ozaukee, Washington, Waukesha and Racine Counties as well, and has included a substantial migration of people from the central city to suburban areas. Industry and trade, as well as residences, have followed this trend.

Consequently the area is developing into a region composed of multiple centers, each having its own community patterns and each serving as a terminus for inter and intra-regional traffic. These shifts in land development have been accompanied by comparable shifts in transportation requirements. Significant shifts have occurred in the relative roles and importance of highway, rail and air transportation. An entirely new inter and intra-regional transportation system is taking shape in the form of the Interstate Highway and Milwaukee Expressway systems and proposed reconstruction of such major highways as USH 12 and STH 15. Many new terminal facilities and major traffic generators have been constructed including outlying shopping centers. Similar changes are occurring in the other two standard metropolitan areas, Racine and Kenosha. New studies are now needed to define and quantify the changing travel demands resulting from these changing development patterns.

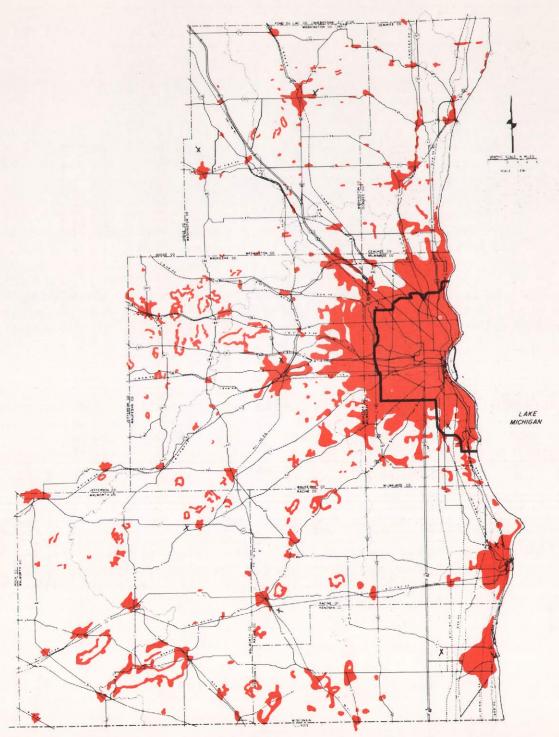
It is significant, however, that no land use or travel pattern inventories have been conducted specifically for the region as an entity. The development of such inventories is essential both to sound regional and local planning efforts.

WHAT THE PROPOSED STUDY WILL ACCOMPLISH

Following are some results of studies proposed in the Regional Planning Program Prospectus:

- 1. Establish for the first time the complete pattern of movement of people and goods within the region.
- Permit quantitative analysis of transportation needs on both a local and regional basis, and evaluation of these needs for alternative land use plans proposed by city and county planners.
- 3. Permit quantitative assignment of future traffic volumes to the developing freeway system and major arterial and collector street systems.
- 4. Establish a coordinated, systematized, uniform data collection and analyses system providing a summary of data on population, employment, motor vehicle ownership, land use, soil and water capabilities, etc. for the region. These data will be suitable for machine processing and be made available to local communities on request.
- 5. Permit a greatly increased understanding by the public, planners and engineers of the interrelationship between land use and transportation.
- 6. Permit a greatly increased understanding of the factors influencing residential, industrial and commercial land development and a better insight into local and regional growth patterns.
- 7. Establish an increased awareness of the effect of each community's planning on surrounding communities and the region, and fully coordinate the transportation planning efforts of all levels and agencies of government.
- 8. Provide powerful analytical tools to local communities for testing and evaluation of alternative land use and transportation plans and for the planning of public works improvements of all types.

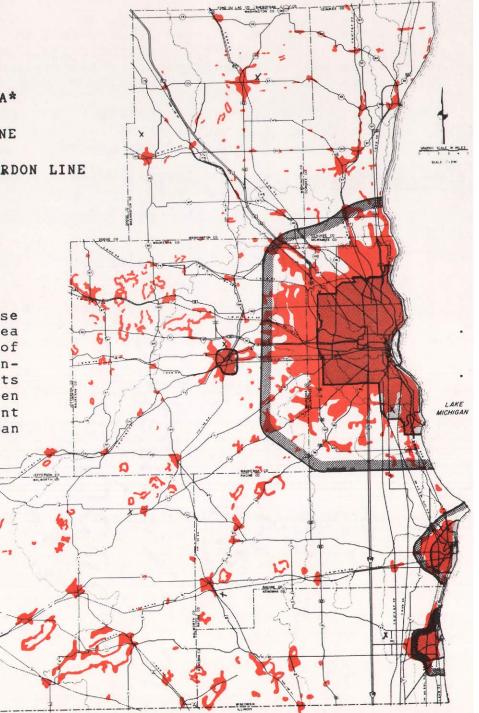
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URBANIZING AREA* 1944 CORDON LINE RECOMMENDED CORDON LINE

LEGEND

*Defined for the purpose of this map, as an area which is in some stage of urban development, including rural districts where houses have been constructed to an extent resembling light urban development.



SOME TERMS MAY BE UNFAMILIAR

For many people, transportation planning is a new area of study. The fact that you are reading this Newsletter indicates your interest. For your information, here are a few definitions which may help you to a better understanding of this complex subject as it unfolds.

- Prospectus: A preliminary statement of an enterprise, giving advance information and calculated to arouse interest and win support. A proposal.
- Transportation System: The circulation system of the region including arterial streets, expressways, freeways and mass transit facilities.
- Optimal Plan: That combination of transportation facilities and operating procedures which fulfill stated objectives better than any other.
- Origin-Destination Survey: An inventory to develop information on the number of trips into, within and through the region, the origins and destinations of these trips, the purpose of the trips, the mode of travel used and the time of day the trips are made. The information is collected by (1) actually interviewing drivers at roadside stations located where major roads cross the "cordon line"...an imaginary line drawn around the area under study; and, (2) actually interviewing residents of a selected cross section of dwelling units throughout the study area.
- Major Traffic Generator: A concentration of travel origins or destinations such as a major shopping center or the Brave's Stadium.
- Travel Patterns: Travel is an orderly and measurable human occurrence which can be described both qualitatively and quantitatively. Such descriptions of the daily travel occurring throughout a region are referred to as travel patterns. Travel exhibits readily recognizable and quantifiable patterns by time, trip length, mode of transportation used and directional flow, as well as by geographic area and land development.

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ELECTRONIC DATA PROCESSING . . . A New Planning Tool

We are keeping pace in this rapidly advancing field of technology. Through a contract with Marquette University, now in its third month, the SEWRPC is proceeding in its study of data processing and systems analyses. The preliminary reports received so far outline a Regional Socio-Economic Activity Model which is subdivided on a functional basis. The report on a Spatial Model which will distribute the Socio-Economic Activity on an areal basis will be forthcoming. These models will form the basis for the design of an information system suitable for electronic data processing. The study is scheduled for completion by September.

Four metropolitan areas of Wichita, Tulsa, Denver and Little Rock are joining in a cooperative project to test the use of electronic data processing for land use and housing information. A federal demonstration grant of \$192,000 is contributing two-thirds of the \$288,000 cost; the remaining \$96,000 being provided by the four metropolitan planning commissions. The project includes establishing techniques for developing and keeping up-to-date a centralized metropolitan area data processing system aimed at providing information basic to decisions on urban planning and urban renewal. The Wichita-Sedgwick County Metropolitan Area Planning Department has . already completed portions of an extensive land use survey using electronic data processing.

The SEWRPC is benefiting from this project study materially through the close contact and mutual exchange of information with Mr. Robert Wegner, Project Director and good friend of our Director, Sanford S. Farness.

Bucks County, Pennsylvania is a pioneer in this field with the recent installation of a complete county data processing center. Data on population, land use, economics, employment and transportation is now readily available for summary and analyses on the basis of small planning areas, as well as for separate municipalities and the total county. Important data from all departments will be used to add increased dimensions to planning analyses. Past and present conditions and trends, which were assumptions or "educated guesses" before, will now be accuritely determined. An intensified program of data collection and enumeration is being organized to keep this weath of information current and accurate.

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THINK ABOUT IT . . .

If you have ever driven a car, you have probably, at some time, been a part of a traffic tie up, where sometimes it took you ten minutes or more to move ten blocks. Whom did you blame for your time loss: If you have ever attended a Braves game, or tried to cross those radial streams of traffic going to the game, you know what we mean. This type of traffic problem was easily solved and the reason should be obvious...the destination was known. The ease with which the traffic is now moved around and into the Braves Stadium is a monument to transportation planning and engineering.

The problem would not have been solved as easily if the same traffic congestion existed without a knowledge of the destination or origin.

* * *

According to the Motor Vehicle Department, there are nearly 700,000 registered motor vehicles in the Southeastern Wisconsin Region and it is estimated that by 1980 there will be over 1,000,000. In 1962 there are approximately 1,600,000 persons living in the Southeastern counties and it is predicted that by 1980 there will be nearly 2,500,000 people living in the region. Nine hundred thousand people and 300,000 cars are going to have to be provided for so that this expected growth of a sprawling metropolitan area may be orderly and desirable.

We think we have problems now with pollution, drainage, sewerage, water supply, providing recreational and open areas, schools, taxes and so on. Add nearly a million persons, without properly planning for them, and we will really know what problems are. Who could deny the necessity for sound planning today for orderly growth and development tomorrow.

It is this type of sound planning that the Regional Planning Program Prospectus proposes.

MORE ABOUT OUR COMMISSIONERS . . . Brief Sketches

MR. LYLE LINK, Waukesha County, is a member of the Commission's Planning Committee. A life long resident of Waukesha County, he lives presently in the Town of Genesee. He has been, for nearly twelve years, president of Link Builders, Inc., a construction firm doing business principally in the City of Waukesha and its suburbs. He was appointed by the Governor to the Commission, and his term expires in September, 1962.

MR. JOHN P. MURPHY, <u>Milwaukee County</u>, is a member of the Intergovernmental and <u>Public Relations Committee</u>. Born in Iowa, he has lived in Milwaukee County since 1927. Since 1954 he has owned and operated the John P. Murphy, Inc., Land Developers and Building Contractors. He has been a member of the Milwaukee County Board for six years, and was appointed by that Board to the Commission. His term expires in 1966.

MR. WILFRED PATRICK, <u>Racine County</u>, is a member of the Commission's Intergovernmental and Public Relations Committee. He attended Marquette University and is presently a supervisor in Prototype Engineering with the Modine Manufacturing Company in Racine. He has been a member of the. County Board for eight years, serving recently as its vicepresident and was appointed by the Racine County Board to the Commission. His term expires in 1966.

MR. GEORGE L. SCHLITZ, Kenosha County, is a member of the Planning Committee. A life long resident of Kenosha County, he has been a County Board Supervisor for thirteen years and served as its chairman for two years. He is also chairman of the Wisconsin Federal Surplus Property Commission (Bong Base). Appointed by the Kenosha County Board to the Commission, his term expires in 1962.

Annual Meeting Notice

The annual meeting of the Southeastern Wisconsin Regional Planning Commission has been scheduled for Thursday, June 7, at 2:00 p.m. in the new Washington County Courthouse in West Bend. Agendas will be mailed in advance upon request.

IT HAS BEEN SAID ...

"Leading highway engineers now recognize that urban highways cannot be planned as separate projects but must be conceived. located and designed in each metropolitan area as parts of an urban complex system of highway facilities. It has come to be recognized that the total urban highway network acts as a system in which every element affects the use of other elements in the system.

"...a plan must be developed for an integrated system of freeways and arterial highways in each metropolitan area if an inexcusable waste of public funds is to be avoided."

Prof. Robert B. Mitchell, Univ. of Penn., from his booklet, "Metropolitan Planning for Land Use and Transportation"

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FIRST CLASS MAIL

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