COMMISSION ADOPTS ADDITIONAL PLAN ELEMENTS

The Southeastern Wisconsin Regional Planning Commission is charged by State Statute with the function and duty of making and adopting a master plan for the physical development of the Region. The Commission believes that the adoption of such a plan is an essential basis for sound decision-making at all levels of government concerning both rural and urban development. At its annual meeting on June 4, 1970, the Commission adopted two additional plan elements as part of the evolving comprehensive plan for the Southeastern Wisconsin Region. The two plan elements adopted are the Fox River watershed plan and the Milwaukee County jurisdictional highway system plan. The Commission had previously adopted, on September 22, 1966, a comprehensive plan for the Root River watershed and on December 1, 1966, the regional land use and transportation plans. These latter three plan elements, together with the two additional elements adopted at the June 4 meeting, constitute the comprehensive plan for the Region as that plan exists to date. Additional plan elements, including a regional library plan, a regional sanitary sewerage system plan, and a Milwaukee River watershed plan, are presently under preparation by the Commission; and work on the preparation of still other elements, including a regional airport plan, will begin shortly.

Fox River Watershed Plan
The comprehensive plan for the Fox River watershed adopted by the Commission was described in two previous issues of this Newsletter (see Vol. 9, No. 5, and Vol. 10, No. 1). The plan includes a
set of carefully coordinated recommendations concerning land use development, natural and recreational resources protection, flood control, water pollution abatement, and water supply development within this important watershed. With the completion and adoption of the Fox River watershed plan, the Commission has completed watershed plans for two of the 11 major watersheds in the Region, covering 1,136 square miles, or about 42 percent of the total area of the Region. As noted above, a third comprehensive watershed plan for the important Milwaukee River watershed is now under preparation and is expected to be completed at the end of this year. A fourth watershed planning program for the Menomonee River watershed is scheduled to be mounted in 1971.

The Commission, in accordance with its strictly advisory role, will soon formally certify the adopted comprehensive plan for the Fox River watershed to all local and county units of government in the watershed and to all concerned areawide, state, and federal agencies for adoption and implementation. Agreement on the Fox River watershed plan among all levels and agencies of government operating within the watershed is considered to be essential, especially with respect to the implementation of the water pollution abatement recommendations contained in the plan. Recent federal regulations pertaining to grants-in-aid for waste treatment facility and trunk sewer construction require that all such proposed projects be in conformance with an adopted and certified areawide plan. The Commission has attempted to partially meet its responsibilities to the constituent local units of government in this respect through the preparation of the Fox River watershed plan. Within the statutory framework of regional planning in Wisconsin, it is now up to the local units of government to cooperatively consider and adopt the recommended plan or, in the alternative, to seek agreement upon a modified plan and then to use the agreed-upon plan as a basis for joint implementation.

**Milwaukee County Jurisdictional Highway System Plan**

The Milwaukee County jurisdictional highway system plan, as adopted by the Commission, constitutes a refinement of, and amendment to, the
previously adopted regional transportation plan, as that plan applies to Milwaukee County. It not only recommends jurisdictional responsibility for each of the individual facilities that together comprise the total arterial street and highway system for Milwaukee County but also recommends right-of-way and pavement widths for each arterial facility, together with the type of improvement that may be required. The preparation of jurisdictional highway system plans for each county in the Region was recommended as an important plan implementation action in the adopted regional transportation plan. In addition to the Milwaukee County plan now completed and adopted, such plans are under preparation, at the specific request of the respective county highway committees, in Ozaukee, Racine, Walworth, and Waukesha Counties. All of the county jurisdictional highway system plans are being cooperatively prepared by the county involved, the State Highway Commission, the U. S. Bureau of Public Roads, the Regional Planning Commission, and the local units of government concerned (see SEWRPC Newsletter, Vol. 8, No. 3).

The adopted regional transportation plan is a functional highway system plan and, as such, consists of recommendations concerning the general location, type, capacity, and service levels of the arterial street and highway facilities required to serve the Region to the year 1990. The Milwaukee County jurisdictional highway system plan contains specific recommendations as to which level of government—state, county, or local—should be responsible for the construction, maintenance, and operation of each of the various arterial facilities contained in the functional plan. Thus, the jurisdictional highway system plan provides for integrated state trunk, county trunk, and local trunk highway subsystems and for realignment of the supporting federal aid highway systems. A portion of the proposed jurisdictional highway system plan for Milwaukee County is shown on Map 1, together with an explanation of the code numbers assigned to each arterial link and an example of a typical cross section recommended in the plan.
Map 1
PART OF THE PROPOSED JURISDICTIONAL HIGHWAY SYSTEM PLAN FOR MILWAUKEE COUNTY: 1990

LEGEND

- STATE TRUNK HIGHWAY—FREEWAY
- LOCAL TRUNK HIGHWAY
- STATE TRUNK HIGHWAY—STANDARD ARTERIAL
- 4-4-C ARTERIAL CODE (see note)
- COUNTY TRUNK HIGHWAY

Note: As shown on the above portion of the Milwaukee County jurisdictional highway system plan, a three-digit arterial code has been assigned to each link in the proposed 1990 arterial system designating for each link the type of improvement required, the cross section recommended to meet the forecast traffic demand, and the level of service provided by the recommended cross section. For example, the code circled on the above map is 4-4-C. The first digit identifies the recommended type of improvement: 4 = Reconstruction for Additional Capacity. Other types of improvement coded in the plan are: Resurfacing Only, Construction of New Facility, Reconstruction with Same Capacity, Special Facilities, and No Work Required. The second digit identifies the recommended arterial cross section: 4 = Typical Cross Section No. 4 (see below). There are a total of nine typical cross sections recommended in the plan for various kinds of two, four, six, and eight lane arterials. The letter following the two digits identifies the level of service provided by the recommended cross section under forecast traffic volumes. Levels of service range from A, or free flow operation at low volumes, high speeds, and the most desirable operating conditions, through F, or forced flow operation at very low speeds and very undesirable operating conditions.

TYPICAL CROSS SECTION NO. 4
FOUR LANE ARTERIAL
(DESIRABLE) TYPE I, II, III

6" GRAVEL BASE
DUAL 36" HIGH TYPE PAVEMENT
150' ROW
ESTIMATED CONSTRUCTION COST PER MILE $112,050
ANNUAL MAINTENANCE COST PER MILE $4,500

ESTIMATED COST PER MILE (RESURFACE) $46,500
CAPACITY RANGE LEVEL OF SERVICE
D 17,400–19,800 VEH./DAY
E 19,800–22,000 VEH./DAY

Source: SEWRPC
ADDITIONAL PLAN ELEMENTS—Continued

The jurisdictional highway planning effort in Milwaukee County was required not only in order to implement the regional transportation plan but also to cope with the growing traffic demands within Milwaukee County; to adjust the existing state, county, and local trunk highway systems to major changes in land use development; to reestablish a county trunk highway system within the county; and to adjust the existing jurisdictional highway systems to changes in traffic patterns that have resulted from freeway construction and use, as well as from changing land use development. The need to adjust the state and county trunk highway systems should be apparent solely from the fact that these two important highway systems were last considered as systems within Milwaukee County in the early 1920's and that all changes in these two systems since that time have been made on an ad hoc basis.

The arterial street and highway system recommended to serve the arterial traffic demand in Milwaukee County through the design year 1990 totals about 771 route-miles of facilities, or about 22 percent of the approximately 3,600 route-miles of facilities expected to comprise the total (including collector and minor, or land access, facilities) street and highway system within the County in 1990. Of this total arterial system, 220 route-miles, or about 28 percent, are proposed to comprise the state trunk system, including all of the existing, committed, and proposed freeways serving Milwaukee County through the plan design year 1990, as well as a limited number of miles of standard surface arterial facilities. The state trunk highways include all those arterial facilities which should provide the highest level of traffic service, the lowest level of land access service, carry the longest average trip lengths, and provide region-wide continuity.

The proposed county trunk system includes 217 route-miles of facilities, or an additional 28 percent of total arterial mileage proposed to serve Milwaukee County in the plan design year of 1990. The proposed county trunk system is comprised entirely of standard surface arterials, since all freeways are included in the proposed state trunk system.
county trunk highways include all arterial facilities which provide an intermediate level of traffic and land access service, carry intermediate trip lengths, and provide intercommunity continuity.

The proposed local trunk system includes 333 route-miles of facilities, or about 43 percent of the total arterial mileage proposed to serve Milwaukee County in the plan design year of 1990. The local trunk highways include those arterial facilities which provide the lowest level of traffic service, the highest degree of land access service, and provide only intra-community continuity.

One of the most important objectives of the jurisdictional highway system planning programs is to attain the most effective use of the total public resources in the provision of highway transportation facilities by focusing the appropriate resources and capabilities on corresponding areas of need. That the recommended Milwaukee County jurisdictional highway plan accomplishes this objective is indicated by the fact that the proposed state trunk system may be expected to carry approximately 8.7 million of the 13.3 million arterial vehicle-miles of travel anticipated to occur daily within Milwaukee County by the year 1990. Thus, approximately 28 percent of the total arterial street and highway mileage within the County may be expected to carry approximately 65 percent of the total arterial travel demand. The proposed county trunk system may be expected to carry an additional 2.7 million arterial vehicle-miles of travel. Thus, an additional 28 percent of the total arterial street and highway mileage may be expected to carry an additional 21 percent of the total arterial travel demand. The remaining 1.9 million arterial vehicle-miles of travel, or 14 percent of the total demand, would be carried on the proposed local trunk system. Thus, the proposed state and county systems together may be expected to carry approximately 86 percent of the total arterial vehicle-miles of travel expected to take place within the County by the year 1990, leaving only 14 percent to be carried by the local arterial systems. This con-
centration of travel demand on the various arterial subsystems is indicated in Figure 1. The total vehicle-miles of travel which may be expected to occur daily on all streets and highways within Milwaukee County by the year 1990 is estimated to be 15.4 million vehicle-miles. The proportionate share of this total load, which each of the recommended jurisdictional subsystems may be expected to carry by 1990, is similarly summarized in Figure 2.

The jurisdictional highway system plan for Milwaukee County thus clearly focuses the available resources on the areas of greatest need; and its adoption and implementation should serve to relieve the local units of government in Milwaukee County of much of the cost attendant to the movement of heavy volumes of fast, through traffic of areawide importance within the County. The jurisdictional highway system plan thus not only provides an important basis for the attainment of intergovernmental coordination and management of the total street and highway system in Milwaukee County but also provides an important basis for correcting certain fiscal inequities which have been attendant to highway system development in urban areas.

The jurisdictional highway planning program, which took two years to complete, was carried out by an interagency staff having representation from the State Highway Commission of Wisconsin, Milwaukee County, and the Regional Planning Commission. Technical policy direction was provided by a Technical Advisory Committee, with representation from the U. S. Bureau of Public Roads, the State Highway Commission of Wisconsin, the Regional Planning Commission, Milwaukee County, and the 19 local units of government within Milwaukee County.

The assignment of jurisdiction to the various arterial facilities was done through the application of criteria prepared for this purpose. The criteria deemed most significant to the classification were related to three basic characteristics of the arterial facilities: 1) trip service, 2) land
One of the most important objectives of the Milwaukee County jurisdictional highway planning program was to realign the state, county, and local trunk highway systems in such a manner so that the most effective use of the total public resources would be attained by focusing appropriate resources and capabilities on corresponding areas of need. This figure demonstrates how this objective is met in the completed jurisdictional highway system plan. The proposed state trunk highway system, which would constitute only about 28 percent of the total arterial street and highway system in Milwaukee County, could be expected to carry about 65 percent of the total arterial travel. Similarly, the county trunk system, which would comprise an additional 28 percent of the total system, could be expected to carry an additional 21 percent of total arterial travel demand. Thus, only about 14 percent of the total 1990 arterial travel would have to be carried on arterials built and maintained by the cities and villages.

use service, and 3) the operational characteristics of the facilities themselves. Detailed criteria relating to each of these characteristics were prepared and the criteria applied to develop the recommended jurisdictional highway system plan. The criteria are summarized in Table 1.
Whereas Figure 1 portrayed forecast distribution of only arterial vehicle-miles of travel in Milwaukee County, this figure portrays the forecast distribution of all vehicle-miles of travel—arterial, collector, and local. The proposed state trunk highway system, consisting of only 220 miles of arterials, or about 6 percent of the total street and highway mileage, may be expected to carry about 56 percent of the total travel demand. Another 18 percent could be expected to be accommodated on the 217-mile county trunk highway system. Only 26 percent of all vehicle travel would occur on local trunk, collector, and minor streets. If the recommended Milwaukee County jurisdictional highway system plan is fully implemented, it will result not only in a more efficient, safer, and convenient arterial highway system but also in cleaner, safer, and congestion-free collector and local street systems.

A careful analysis was made of the financial feasibility of the recommended jurisdictional highway system plan. Total plan construction and maintenance costs were estimated and compared to anticipated revenues over a 20-year plan implementation period and the costs tabulated for each municipality within the County. It was found that the plan, if followed, could be fully implemented at a somewhat lower rate of public
### Table 1
SUMMARY OF FUNCTIONAL CRITERIA FOR THE JURISDICTIONAL CLASSIFICATION OF ARTERIAL HIGHWAYS IN MILWAUKEE COUNTY

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Type I - State Trunk Highways</th>
<th>Type II - County Trunk Highways</th>
<th>Type III - Local Trunk Highways</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trip Service</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trip Length</strong></td>
<td>Average trip length over 11 miles.</td>
<td>Average trip length 7 to 11 miles.</td>
<td>Average trip length under 7 miles.</td>
</tr>
<tr>
<td><strong>Land Use Service</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transportation Terminals</strong></td>
<td>Connect and serve(^1) inter-regional rail, bus, and major truck terminals; airports; and seaports.</td>
<td>Connect and serve(^1) freeway interchanges, noncommercial airports, pipeline terminals, major intra-regional truck terminals, and rapid transit loading points.</td>
<td>Connect and serve(^1) major off-street parking facilities and minor truck terminals.</td>
</tr>
<tr>
<td><strong>Recreational Facilities</strong></td>
<td>State fairgrounds and state parks.</td>
<td>Regional parks and special recreational use areas.</td>
<td>Community parks.</td>
</tr>
<tr>
<td><strong>Commercial Centers</strong></td>
<td>Regional retail and service centers.</td>
<td>Community retail and service centers.</td>
<td>Neighborhood retail and service centers.</td>
</tr>
<tr>
<td><strong>Industrial Centers</strong></td>
<td>Major regional industrial areas.</td>
<td>Major community industrial areas.</td>
<td>Minor community industrial areas.</td>
</tr>
<tr>
<td><strong>Institutional</strong></td>
<td>Universities, county seats, and major medical centers.</td>
<td>County institutions, colleges, vocational schools, and community hospitals.</td>
<td>High schools.</td>
</tr>
<tr>
<td><strong>Operational Characteristics</strong></td>
<td>Interregional continuity comprising integrated system at state level.</td>
<td>Intercommunity continuity comprising integrated system at county level.</td>
<td>Intra-community continuity comprising integrated system at city, village, or town level.</td>
</tr>
<tr>
<td><strong>System Continuity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spacing</strong></td>
<td>Minimum 2 miles.</td>
<td>Minimum 1 mile.</td>
<td>Minimum 0.5 mile.</td>
</tr>
<tr>
<td><strong>Volume</strong></td>
<td>Minimum 19,000 vehicles per average weekday (1990 forecast).</td>
<td>Minimum 10,000 vehicles per average weekday (1990 forecast).</td>
<td>Minimum 7,500 vehicles per average weekday (1990 forecast).</td>
</tr>
<tr>
<td><strong>Traffic Mobility</strong></td>
<td>Average overall travel speed(^2) 30 to 60 miles per hour within the 1963 urban growth ring; 30 to 70 miles per hour outside the 1963 urban growth ring.</td>
<td>Average overall travel speed(^2) 20 to 40 miles per hour within the 1963 urban growth ring; 25 to 60 miles per hour outside the 1963 urban growth ring.</td>
<td>Average overall travel speed(^2) 25 miles per hour or less.</td>
</tr>
<tr>
<td><strong>Land Access Control</strong></td>
<td>Full or partial control(^3) of access.</td>
<td>Partial control(^4) of access.</td>
<td>Minimum control(^5) of access.</td>
</tr>
</tbody>
</table>

\(^1\) Arterial facilities shall be considered to connect and serve given land uses when direct access from the arterial facility to roads serving the land use is available within the following maximum on the road distances from the main vehicular entrance to the land use served: Type I Arterial Facility 1 mile; Type II Arterial Facility 0.5 mile; Type III Arterial Facility 0.25 mile.

\(^2\) Average overall travel speed is defined as the summation of the distances traveled by all vehicles using a section of highway during an average weekday divided by the summation of actual travel times. Average overall travel speeds range from 7 to 10 mph below equivalent average operating speeds.

\(^3\) Full control of access is defined as exercise of the police power to regulate the placement and geometrics of direct connections without regulation of the number of access points.

\(^4\) Partial control of access is defined as exercise of the police power so as to permit some direct access in addition to connections at selected public roads, with generally one point of access being permitted to each abutting parcel of land.

\(^5\) Minimum control of access is defined as exercise of the police power so as to prohibit direct access except at selected public roads via grade-separated interchanges.
expenditures for highways than the present rate. The financial analysis also carefully explored the effect of proposed changes in the jurisdictional highway systems on supplemental aids and allotments received by each municipality within the County.

Specific procedures for implementation of the recommended plan are set forth in the plan report. The most important of these include formal plan adoption by the federal, state, and local units of government concerned; realignment of the state trunk, county trunk, and federal aid systems to conform with the adopted plan; elimination of the connecting street concept; assumption of full maintenance responsibilities by the state for all state trunk highways and by the county for all county trunk highways; integration of the recommended plan into the construction and programming procedures of both the State Highway Commission and the Milwaukee County Department of Public Works; and adoption of common, uniform construction aid formulae and policies for all state and county trunk highways which would limit the local share of the cost of the construction of these facilities to 15 percent of the total cost, that total cost being determined on the basis of clearly defined eligible participating work items. The report also recommends certain actions by the state, county, and local units of government to protect needed rights-of-way from development, including the adoption of appropriate official maps, and to protect the capacity of the arterial highway facilities through the control of marginal access. The plan also includes a recommended staging for the improvement of the state and county trunk highway systems within Milwaukee County.

Adoption and implementation of the recommended jurisdictional highway system plan will not only provide Milwaukee County with a highway transportation system which will effectively serve future travel demand at an adequate level of service but which will concentrate appropriate resources on corresponding areas of need, assuring more effective use of public resources in the provision of highway transportation services,
ADDITIONAL PLAN ELEMENTS—Continued

and which will also provide a more equitable distribution of highway improvement, operation, and maintenance costs among the various levels and agencies of government concerned.

The Milwaukee County jurisdictional highway system plan has already been adopted by the Milwaukee County Board of Supervisors and endorsed by the State Highway Commission and the U. S. Bureau of Public Roads. In addition, a number of municipalities in Milwaukee County have also acted to endorse or adopt the plan. The plan, as adopted by the Commission, has been formally certified to the local governments in Milwaukee County, as well as to all concerned areawide, state, and federal agencies, as a significant amendment to the adopted regional transportation plan. It is the Commission's hope that such jurisdictional highway system plans can be completed for each of the remaining six counties in the Region within the next few years.

SECOND DISTRICT PLANNING PROGRAM UNDERWAY

The Commission has undertaken, at the request of the Racine County Board of Supervisors, a program designed to prepare a comprehensive plan for the development of the Racine Urban Planning District. The District is bounded by IH 94 on the west, the Milwaukee County line on the north, the Kenosha County line on the south, and Lake Michigan on the east and encompasses all of the existing and anticipated urban development around one of the larger central cities of the Southeastern Wisconsin Region—the City of Racine (see Map 2). The District is approximately 101 square miles in area and lies in only two major watersheds—the Root River and the Pike River watersheds. In addition, all but a small portion of the District lies east of the subcontinental divide traversing the Southeastern Wisconsin Region.
The planning program for the Racine Urban Planning District is being carried out under a "Moratorium and Long-Range Planning Agreement," executed in 1968 among and between Racine County, the City of Racine, the Village of Sturtevant, and the Town of Mt. Pleasant. The Agreement is one of the most significant intergovernmental cooperative agreements negotiated within the Region in that the intent evidenced by the local units of government involved is to seek the sound resolution of development problems through cooperative, areawide planning rather than to resort to legal struggles that often destroy the climate for constructive intergovernmental action. Included in the Agreement are provisions for an annexation-incorporation truce applicable to a portion of the District, for the interim provision of basic municipal services between municipalities, and for the conduct of a two-phase comprehensive district planning program.

The first, or functional, phase of the program calls for the preparation of a plan for the physical development of the Racine Urban Planning District, including land use, housing, transportation, school, park and recreation, and municipal utility plan elements. Certain physical plan implementation devices, including zoning, land division, and sanitary ordinances; an official map ordinance; and representative precise neighborhood development unit plans, will also be prepared as part of the first phase. This phase of the overall program is scheduled for completion in December 1970.

The completion of the first phase will form the basic input to the second, or jurisdictional, phase of the program. This phase is designed to provide recommendations relative to the future governmental framework of the District as required to implement the agreed-upon comprehensive plan for the physical development of the area. Included in the second phase will be such considerations as whether existing governmental units should be expanded or consolidated and whether sewerage, water supply, police and fire protection, park and recreation, health, or other municipal services should be provided by Racine County, by metropolitan service districts, by cooperative municipal action, by individual municipalities, or by other means.
The firm of Harland Bartholomew and Associates, Chicago, Illinois, has been retained by the Commission to conduct the initial study work elements and to prepare a development plan for the District which will complete the first phase of the two-phase program. Providing the policy direction necessary to the conduct of the planning program and assisting the Commission and the consultant in their work efforts is a Citizens Advisory Committee. This Committee is composed of 21 members, including four ex-officio members—the Chairman of the Racine County Board of Supervisors, the Mayor of the City of Racine, the President of the Village of Sturtevant, and the Chairman of the Town of Mt. Pleasant—and serves to keep the local government officials, legislative bodies, and citizens informed on the content and progress of the program. The Committee is composed of the following members:

David Rowland . . . . . . . Executive Vice-President and Chairman Treasurer, Carpenter-Rowland-Batenburg Company

William K. Eastham . . . . Executive Vice-President, Vice-Chairman and Secretary S. C. Johnson & Son, Inc.

Paul J. Cody . . . . . . . Urban Affairs Manager, S. C. Johnson & Son, Inc.

David Grimm . . . . . . . Treasurer, Racine Taxpayers Association

Wesley Hansche . . . . . . Chairman, Town of Mt. Pleasant Plan Commission

Jack Harvey . . . . . . . City Attorney, City of Racine

Kenneth L. Huck . . . . . . Mayor, City of Racine
SECOND DISTRICT PLANNING PROGRAM—Continued

LeRoy Jerstad, Jr. . . . . . . President, Village of North Bay

Richard LaFave . . . . . . Chairman, Racine County Board of Supervisors

Marshall Lee, Jr. . . . . . . Chairman, Town of Caledonia

John Margis, Jr. . . . . . . First Vice-Chairman, Racine County Board of Supervisors

Edward Mickelson, Jr. . . . President, Village of Sturtevant

James Mohrhauser . . . . . President, Milwaukee Cylinder Corporation

Henry Rohner . . . . . . . Chairman, Town of Mt. Pleasant

Eric Schroder . . . . . . . Board Member, Racine Unified School District No. 1

Virgil Schulz. . . . . . . Trustee, Village of Sturtevant

Mrs. Beryl Streiff . . . . . President, Village of Elmwood Park

Willard Walker. . . . . . . Executive Vice-President, Walker Forge, Inc.

In addition, several staff members of Racine County and the City of Racine serve as nonvoting members of the Committee.

Gilbert Berthelsen . . . . . County Administrator, Racine County
The Racine Urban Planning District comprehensive planning program is the second district planning program to be undertaken by the Commission, the first being completed in 1967 for the Kenosha Planning District, comprised of the City of Kenosha and the Towns of Pleasant Prairie and Somers. Such district planning programs are intended to provide the basis for the preparation of areawide development plans in greater depth and detail and the basis for implementation of the regional plans. The Regional Planning Commission is an advisory agency; and it is, therefore, only through cooperative interagency action that the regional plans will be implemented. The establishment of planning programs for such subareas of the Region as the Racine Urban Planning District affords the Regional Planning Commission an excellent opportunity to coordinate overall regional planning programs with more detailed planning programs for subareas of the Region and thereby to provide for substantial implementation of the regional plans through local action.
SEDIMENT CONTROL CONFERENCE HELD

A Regional Sediment Control Conference was held on April 1, 1970, at the University of Wisconsin, Waukesha Campus. The purpose of the Conference was to explore the growing problem of urban and rural soil erosion and consequent stream and lake sedimentation and to discuss those measures which may be taken by local units of government to minimize the detrimental effects of such erosion and sedimentation. While soil erosion was once thought of as a rural problem, sediment caused by careless development and construction in urban areas has become one of the nation's most serious sources of water pollution; and current research indicates that sediment yields from areas undergoing urban development can be as much as 500 times greater than from rural areas.

The Regional Sediment Control Conference was sponsored by the Wisconsin Association of Soil and Water Conservation Districts, in cooperation with several other agencies and organizations, including the Regional Planning Commission. The Commission has developed suggested regulations designed to be incorporated into zoning, land subdivision control, and building ordinances that can be effectively utilized by local units of government in the Region to control extensive soil erosion and sediment. These suggested regulations have been published in a series of appendices to SEWRPC Planning Guide No. 6, Soils Development Guide.

WINGSPREAD CONFERENCE HELD ON SECONDARY EDUCATION FOR ENVIRONMENTAL PLANNING

Exploration of the role that high schools may play in the development of an understanding for the necessity of cooperative regional planning as a means of resolving growing environmental problems was the theme of a Conference held on May 12, 1970, at the Wingspread Conference Center in Racine, Wisconsin. The Conference was jointly sponsored by the Cooperative Educational Service Agency (CESA) District 18, the Wis-
WINGSPREAD CONFERENCE—Continued

Wisconsin Department of Public Instruction, and the SEWRPC, in cooperation with The Johnson Foundation. Participants in the Conference included representatives from public and nonpublic high schools in CESA District No. 18, the Cooperative Educational Service Agency serving an area that includes most of Kenosha, Racine, Walworth, and Waukesha Counties in southeastern Wisconsin.

It has been generally recognized that cooperative regional planning is essential to promote harmony between urban and rural, local and state, and public and private interests in the resolution of these problems. The success of regional planning, however, must ultimately depend upon an understanding by the citizen body of the role that regional planning can play in the resolution of many environmental problems. In view of this, the CESA Conference specifically attempted to explore the manner in which the high school curricula in CESA District 18 could serve as a means of alerting today's youth to the environmental problems they will inevitably have to face as adults. The possibility of incorporating course work on the secondary educational level on the subject of environmental problems was considered, including the feasibility of incorporating special units of study into presently existing courses or establishing complete semester units of study dealing with present and future environmental problems. Several school districts have already evidenced an interest in including environmental planning in their curricula. If sufficient interest develops, similar conferences may be held for the other CESA agencies serving southeastern Wisconsin.
The Commission has completed and has available for distribution its 1969 Annual Report. The preparation of an Annual Report by the Commission is required under Section 66.945(8)(b) of the Wisconsin Statutes. The Report, however, is intended to serve a number of functions in addition to meeting the specific legislative requirement. As a publication documenting activities conducted during the year under the continuing land use-transportation study being carried out pursuant to the areawide planning requirements of the 1962 Federal Aid Highway Act, it serves as an annual report to the State and Federal Departments of Transportation. In addition, this publication is intended to meet certain requirements of the U. S. Department of Housing and Urban Development, including the preparation of an overall program design and an annual work program. Finally, and most importantly, the Commission's Annual Report is intended to provide local public officials and interested citizens with a comprehensive overview of the Commission activities, including all work programs related to the three major Commission functions of inventory, plan design, and plan implementation.

In addition to recording all activities during 1969 conducted under the current and ongoing Commission work programs, the 1969 Annual Report sets forth a proposed five-year work program that recommends the establishment of the following new major planning programs:

- Regional Airport Planning Program—scheduled to begin in July 1970 and to be completed in June 1973.

- Regional Housing Study—scheduled to begin in July 1970 and to be completed in June 1973.

- Menomonee River Watershed Study—scheduled to begin in January 1971 and to be completed in December 1973.
Regional Water Supply System Planning Program—scheduled to begin in January 1972 and to be completed in December 1974.

Regional Outdoor Recreation and Open-Space Planning Program—scheduled to begin in January 1973 and to be completed in December 1974.

In addition to the foregoing new major planning programs, the Commission proposes to carry out a continuing regional land use-transportation planning program in accordance with the areawide planning requirements of the Federal Aid Highway Act of 1962. Subsequent to the preparation of the five-year work program, the Commission received a formal request from the Walworth County Board of Supervisors to conduct a regional solid waste disposal study as soon as possible. The Commission is currently considering a modification of the five-year work program to include such a study, depending upon the need for the study as evidenced by additional requests from local units of government and the ability to postpone already scheduled work programs in order to accommodate a solid waste disposal study. Such a study might be combined with the preparation of a mineral resources conservation plan, which plan element has already been formally requested by Racine County.

Copies of the 1969 Annual Report may be obtained by contacting the Commission offices. The price is $1.00 within the Region and $2.00 outside the Region.

1970 AERIAL PHOTOS OBTAINED

The Commission has recently obtained new aerial photographs of the 2,689-square mile Southeastern Wisconsin Region. The Commission first obtained aerial photography of the Region in 1963 and again obtained large-scale aerial photographs in 1967. The new 1970 aerial photographs are available in two scales. Large-scale photographs are available at a scale of 1" = 400' and cover four U. S. Public Land Survey
Sections, or four square miles, being centered over the common section corner. Small-scale photographs are available at a scale of 1" = 2000', covering an entire 36-square mile U. S. Public Land Survey Township. The photography was taken at elevations of about 9,600 feet for the large-scale photographs and 36,000 feet for the small-scale photographs during the early and middle parts of April 1970, when the Region was free from snow but before the trees had leafed out. All physical features, such as roads, buildings, structures, streams and watercourses, marshland and woodland areas, and other land lines and landforms, are clearly delineated on the photographs.

The photographs will provide the primary source of data for the necessary updating of all Commission base maps, of all existing land use information, and of natural resource base inventory components, such as wetlands and woodlands. Since the previous 1963 and 1967 aerial photographs were similarly produced, a direct, precise comparison of the same area at three points in time can now be readily made. Thus, the new photographs will be extremely useful to the Commission as it performs its continuing function of planning for, and monitoring the growth and development of, the Region.

As in past years, the current aerial photography should prove to be extremely useful to the local units of government, to private enterprise, and to many individuals throughout the Region. The Commission has sold over 21,000 prints of the 1967 aerial photographs of the Region since they became available three years ago. Orders for such photographs have come from all sections of the Region and from all sectors of the economy. Local units of government have used the photos to update local base maps, to prepare detailed land use and zoning district maps, and in the review of subdivision plats and annexation petitions. Many communities have prepared a mosaic of the aerial photographs covering the area within the corporate limits and surrounding environs to provide a convenient reference during council, board, or committee meetings. Private individuals have also extensively utilized Commis-
sion aerial photographs. In particular, those individuals concerned with building and land development have used the photos for investigations, site selection, and preliminary site design. Commercial and industrial firms, in particular, have used the photos as an aid in site selection for such operations as supermarkets, gasoline stations, and department stores. Other users of the photos include utility companies and sand and gravel companies.

Paper prints of the large-scale and small-scale aerial photos may be obtained by contacting the Commission offices. The cost of each print is $1.00 for all member local units of government and $2.00 for private individuals and commercial firms. Discounts are available in quantities of six or more if ordered at one time. The above charges reflect only the actual cost incurred by the Commission in materials and staff time in making the aerial photograph reproductions.

WATERSHED TOURS CONDUCTED

The Commission continues to provide educational tours of watersheds within the Region to organizations and groups at no cost, exclusive of transportation charges. During the past year, such tours have been conducted for Muskego High School, Waukesha High School, the Waukesha County Democratic Party, the Fox River Watershed Committee, the Milwaukee River Watershed Committee, and the Wisconsin Chapter of the Soil Conservation Society of America. These tours have been very well received by the participating groups and have served to illustrate in a very practical way the resource-related problems of the watersheds in the Region. The Commission staff will, upon request, provide to any interested group a complete itinerary and commentary for resource-related tours of watersheds within the Region for which the Commission either has or is preparing comprehensive plans.
LAKE USE REPORTS AVAILABLE

A series of lake use reports prepared by the Wisconsin Department of Natural Resources as part of the Fox River Watershed Study are now available from the Commission offices. The reports were prepared for all lakes within the Fox River watershed which have an area of 50 acres or more and include a description of the physical characteristics of the lake, including a discussion of the lake basin, shore and drainage characteristics, climate and hydrology, and soils; of water quality; of the resources of the lake, including a discussion of aquatic plants, fish resources, pleasure boating, game resources, and aesthetic features; of lake use, including a discussion of fishing, hunting, trapping, wildlife observation, swimming, boating; and cottages and homesites; of recreational rating; of existing land use; of existing protective measures, including a discussion of sewage disposal, land use zoning, and water zoning; of recreational and resource-related problems, including a discussion of deteriorating water quality, wildlife habitat, and fishery and limited use opportunities; and of recommended resource protection and enhancement measures. Supplementary tables and maps are also included in the reports.

Lake use reports are available for the following lakes within the Fox River watershed: Army, Benedict, Beulah, Big Muskego, Bohner, Booth, Browns, Buena, Camp, Center, Como, Cross, Denoon, Dyer, Eagle, Eagle Spring, Echo, Elizabeth, Geneva, Green, Kee Nong Go Mong, Lilly, Little Muskego, Long, Lower Phantom, Lulu, Marie, Middle, Mill, North, Pell, Peters, Pewaukee, Pleasant, Potters, Powers, Spring, Silver (Kenosha County), Silver (Walworth County), Tichigan, Upper Phantom, Voltz, Wandawega, Waubeesee, and Wind. Each report is priced at $1.00. Similar reports are currently under preparation for all major lakes in the Milwaukee River watershed.
AROUND THE REGION

WAUKESHA COUNTY

The Waukesha County Board of Supervisors adopted, on June 23, 1970, a county Floodland and Shoreland Zoning Ordinance designed to protect the floodlands and shorelands of the incorporated areas of Waukesha County. The Ordinance is designed not only to assist in the implementation of the recently adopted Fox River watershed plan, but also to meet the requirements for effective county floodland and shoreland zoning contained in the State Water Resources Act of 1965. The floodland and shoreland zoning regulations adopted by Waukesha County follow closely the substantive recommendations made by the Commission in SEWRPC Planning Guide No. 5, Floodland and Shoreland Development Guide. The Ordinance also contains subdivision control regulations applicable to the shoreland areas of the County. The adoption of this Ordinance, coupled with the prior adoption of a Sanitary Code by the Waukesha County Board of Health, satisfies the state floodland and shoreland management requirements in Waukesha County.

CITY OF FRANKLIN

The Common Council of the City of Franklin, on July 23, 1970, adopted an Official Map Ordinance and an Official Map covering a one and one-half square mile area of the City. This Ordinance, adopted pursuant to Section 62.23(6)(b) of the Wisconsin Statutes, provides the legislative framework for the future adoption of neighborhood unit development plans now under preparation as additions and amendments to the Official Map. The Official Map is one of the most under-utilized plan implementation devices. It is intended to be used to implement a community's plan for streets, highways, parks, parkways, and playgrounds. Its basic purpose is to prohibit the construction of buildings or structures on land that has been designated for current or future public use.
IS THERE A DIFFERENCE BETWEEN AN EXPRESSWAY AND A FREEWAY?

Yes! There are several important differences between an expressway and a freeway. An expressway is defined as a divided arterial highway for through traffic, with partial control of access and with grade separations or interchanges at only certain selected major intersections, all other intersections being at grade. A freeway, on the other hand, is defined as a divided arterial highway for through traffic, with full control of access and with full grade separations or interchanges at all intersections.

It can be seen from the foregoing definitions that traffic can enter and leave a freeway only at grade-separated interchanges with other public streets. Traffic can, on the other hand, enter an expressway both at grade-separated interchanges and non-grade-separated intersections with other public streets and at a limited number of direct private driveways opening onto the expressway. The freeway is the only functional type of highway which is exempt from serving one of the basic functions of all other kinds of public streets; namely, the provision of land access. Since the land access function is in direct conflict with yet another basic function of all public streets, namely, the movement of traffic, its elimination serves to make the freeway the safest, as well as the most efficient, type of highway facility.

It is apparent from the foregoing definitions that the so-called "Milwaukee County expressways" are actually freeways, and this improper reference has caused much confusion among lay people about the differences between freeways and expressways. While the freeway is becoming relatively common within the Region and includes such important facilities as the North-South, East-West, Airport, and Zoo Freeways in Milwaukee County; Interstate Highway 94 in Kenosha, Racine, Milwaukee, and Waukesha Counties; USH 141 in the southern portion of Ozaukee County; and STH 15 in Milwaukee, Waukesha, and Walworth
Counties, expressways are relatively rare. USH 41 through Waukesha and Washington Counties was, until its conversion to a freeway this year, an expressway. STH 190 in Waukesha County is another example of an expressway within the Region.

Figure 3 shows a typical freeway. Note the complete absence of marginal access and the grade separation of all intersecting streets. Figure 4 shows a typical expressway, and note the presence of a limited number of private driveways providing direct access to the facility and the at-grade intersections with public streets. The adopted regional transportation plan proposes only two short reaches of expressways: STH 164 from Moreland Boulevard in the City of Waukesha to the Proposed Bay Freeway and the Waukesha Bypass (CTH A) from STH 18 to the Proposed Bay Freeway, both in Waukesha County.
SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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