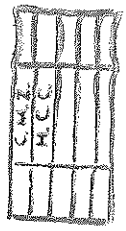
URBAN CONNECTIONS TO THE INTERSTATE SYSTEM IN MICHIGAN

MICHIGAN STATE HIGHWAY DEPARTMENT

Charles M. Ziegler State Highway Commissioner

JULY 1955



INTERSTATE HIGHWAYS IN MICHIGAN

URBAN CONNECTIONS

The Michigan State Highway Department has completed a comprehensive analysis to determine the extent of additional interstate mileage for which the state could qualify by the criteria set forth for allocation of the 2,300 miles remaining in the System's statutory limitations of 40,000 miles.

In making our analysis we were guided by the circular memorandum issued June 9, 1955 by Deputy Commissioner A. C. Clark, Bureau of Public Roads, "Criteria for Selection of Additional Interstate System Routes at Urban Areas."

Michigan was in an ideal situation in regard to selection of additions to the Interstate System in that complete data for the more populous cities had been obtained individually by Origin-Destination Traffic Studies. These studies resulted in a major arterial highway development plan in each of these cities and, being cooperative ventures, complete concurrence of thought was realized by all participating agencies.

The origin-destination surveys of the individual cities were further correlated with the state-wide origin-destination study and incorporated into the "Major Plan for Development of the State Trunkline System" based on functional highway classification.

It is the considered opinion of the Department that urban connections to the Interstate System are needed in several of Michigan's more populous cities.

However, it is felt that in six of the cities it would be practical to construct such connections to the higher geometric design standards of the freeway, while the other cities would be served by city access roads of lesser design standards.

The urban connections the Department is proposing for inclusion in the Interstate System are described and supplemented by statements of justification in the following paragraphs.

CONCLUSIONS AND RECOMMENDATIONS

1. Michigan's commerce and industry are essential to the economy of the Nation.

2. Its vast production factories, housed in its many cities, are most vital cogs in the machinery for national defense.

3. The industries of Michigan are dependent upon improved transportation methods for continued success.

4. Because of the limited amount of mileage yet to be allocated, Michigan has held her request to a minimum.

5. The total mileage of urban connections here requested is 145.20 miles.

6. We submit that the routes herein proposed for inclusion in the System be approved as necessary to the well-being of the State and the Nation.

TABULATION OF URBAN CONNECTIONS TO THE INTERSTATE SYSTEM

Detroit Metropolitan Area		Out State Cities	
Route A	16.8 mi.	Grand Rapids	14.6 mi.
Route B	18.8 "	Saginaw	7.5 "
Route C	9.6 "	Lansing	13.8 "
Route D	20.9 "	Flint	8.0 "
Route E	10.5 "	Battle Creek	3.0 "
Route F	17.3 "	Out State Cities	46.9 mi.
Route G	4.4 "	Detroit Metropolitan Area	98.3 "
Detroit Metropolitan Area	98.3 mi.	Total	145.2 mi.

THE INTERSTATE SYSTEM AND METROPOLITAN DETROIT

A network of major arterial highways has been selected for metropolitan Detroit based on the factual data gathered by the Detroit Metropolitan Area Traffic Study, conducted jointly by the Michigan State Highway Department, City of Detroit, and the Wayne County Road Commission in cooperation with the U. S. Bureau of Public Roads and various other local planning agencies.

Consideration of present and potential land uses; estimates of expansion of industry, commerce and population; type and character of traffic and future traffic trends were all taken into account in the designation of the arterial highway system serving the city.

The system was further examined to determine functional and jurisdictional characteristics. The end result was a classified highway system with each increment being administered by the proper governmental agency ensuring full integration of the entire system at all levels of importance. The system is composed of a minimum mileage which will provide adequate interchange of traffic to all places of high traffic generative qualities providing optimum mobility with an excellent ratio of utility to cost.

The City of Detroit is a vast and sprawling industrial empire and is a target for traffic from all points of the United States, Canada, and Mexico. For the traffic from each single trip having Detroit as its destination there is a definite

objective target, but collectively, as the accumulated traffic converges on the city, their destinations are many. There are several areas, such as Ford's Rouge Plant, the Mound Road defense plants, etc., each having the traffic attraction characteristics of a city of 100,000 or more in population. It is necessary to design an extensive system to serve the many enterprises contained in the metropolitan area.

The following described routes are necessary as urban connections of the Interstate System to ensure a fully integrated major highway arterial network.

ROUTE A

From a connection with the Toledo-Port Huron interstate route northerly to a connection with the Detroit to Sault Ste. Marie interstate route. Length - 16.8 miles. This route will serve a very concentrated industrial area consisting of steel mills, automotive factories, steel fabricators, chemical plants, machine shops, and many other industrial activities so necessary to the commerce and defense of the Nation. It is a distributing arm carrying large volumes of traffic with a high percentage of commercial carriers, and a high percentage of the total traffic is interstate in character. The 1975 traffic is estimated to be 90,000 vehicles in an annual average 24-hour day.

ROUTE B

From a connection with the interstate route on the western side of Detroit easterly and southerly to the Conners Creek industrial area near the Detroit River. Length - 18.8 miles.

This route will serve to distribute traffic through an area containing many developed industrial areas; rail, truck and air terminals; the general offices of the General Motors Corporation; and many defense installations. The southern portion of the route, from the interstate route south to the river, is a spur route serving the Conners Creek industrial area which contains many units of the Chrysler Corporation's vast automotive empire. It is estimated that the average daily traffic in 1975 will approximate 100,000 to 130,000 vehicles, with high concentrations of interstate traffic contained in the total traffic stream.

ROUTE C

From a connection with the interstate route on the west side of Detroit easterly to a connection with the Detroit-Muskegon interstate route. Length - 9.6 miles. This route will serve to distribute traffic through an area of concentrated industrial development including the Lincoln Division of the Ford Company, and the DeSoto Division of the Chrysler Corporation. This route is of sufficient importance that we feel the western extension of this route to a point west of Ann Arbor, incorporating the Ann Arbor north belt line, could well be justified for inclusion in the Interstate System of Highways. The 1975 average daily 24-hour traffic is estimated to be 100,000 vehicles, with a high concentration of traffic interstate in character but somewhat lower in commercial content than either Routes A or B.

ROUTE D

From a point on the Detroit-Muskegon interstate route easterly to a connection with the Detroit-Port Huron interstate route. Length - 20.9 miles. This is a very important circumferential route. It functions as an outer distributing loop carrying traffic from four different interstate highways, with which it connects, and distributes that traffic directly to its destination or to other urban routes which serve in that capacity. It is ideally situated to perform this function because it intercepts all major routes near the periphery of the major city development allowing more freedom for complete traffic interchange. Throughout its entire length of 20.9 miles, it provides direct service to hundreds of industrial plants with a concentration of lighter industries, such as machine shops, tool and die plants, etc., on the western half, and heavy industry, steel mills, tank plants and forges on the eastern portion. It is estimated that the 1975 average annual daily traffic will approximate 80,000 vehicles.

ROUTE E

From a point on the Toledo-Detroit-Port Huron interstate highway northerly to a connection with interstate highway connector Route D. Length - 10.5 miles. This route will directly serve many factories which are a vital part of the economy of the Nation and which were an integral part of the "Arsenal of Democracy" during the periods of this Nation's conflicts. Included among the plants served by this route is the huge Ford Motor Company's

River Rouge Plant. It also provides access to some of Detroit's major tool and die factories upon which the entire production plants of a great portion of major industry is so dependent. It is estimated that the 1975 average annual 24-hour traffic will be 100,000 vehicles with a high concentration of commercial carriers and with a high percentage of these carriers being interstate truckers.

ROUTE F

From a point on Interstate Connector Route D, about midway of that route southerly with a loop near the Detroit River, thence northerly to again connect with Interstate Connector Route D. Length - 17.3 miles. This route will function primarily as a distributing loop serving an area of heavy industry, such as steel mills, rolling plants, forge plants, and other similar heavy-type industries. The northern extension of the eastern arm of this loop route leads directly to an industrial area which was, during the war years, one of the most highly developed and essential defense installations in the entire nation. The 1975 average daily traffic will approximate 115,000 vehicles.

ROUTE G

From a connection with an interstate route, the Edsel Ford Expressway, northeasterly to a point on Interstate Connector Route D. Length - 4.4 miles. This route will function primarily as a distributor route that provides direct access for traffic destined for the area it traverses but which approaches the area on the Detroit-Chicago and Detroit-Toledo routes. It does not

have the importance of the other selected routes but it is a necessary unit for a fully integrated system. The primary land use served is industrial, commercial and truck terminal properties. The 1975 average annual 24-hour traffic will approximate 90,000 vehicles with a high content of commercial carriers in the total traffic stream.

THE INTERSTATE SYSTEM AND MICHIGAN'S PRINCIPAL CITIES

In addition to the Metropolitan Area of Detroit, there are five other Michigan cities in which interstate system urban connectors could be advantageously constructed. We do not wish to imply that there are only six Michigan cities that need urban connections from the Interstate System. However, it is the thinking of the Department that in only six of the state's major cities would it be possible to construct such connectors with the standard characteristics of a freeway.

URBAN CONNECTOR - CITY OF GRAND RAPIDS

From a point on the Detroit-Muskegon interstate route south of Grand Rapids, northerly and westerly to a connection with that route northwest of Grand Rapids. Length - 14.6 miles, with 5.5 miles within the corporate limits of the city. With the interstate route by-passing the city, the urban connector functions as a penetrating loop serving commerce, industry, and truck and rail terminals within the city. The city is widely known as the furniture capitol of the world and because of this it attracts a great deal of interstate traffic, but in addition

there are many machine factories which are essential to the economy of the State and Nation and which were vital to the war effort. The average annual 24-hour traffic in 1975 will approximate 80,000 vehicles.

URBAN CONNECTOR - CITY OF SAGINAW

From a point on the Detroit-Sault Ste. Marie interstate route east of Saginaw, westerly and northerly through the City of Saginaw to a connection with the interstate route north of Saginaw. Length - 7.5 miles with 2.25 miles within the corporate limits of Saginaw. This connector is a penetrating loop with the interstate route by-passing the city on the east. The location of the urban route is based upon a complete Origin-Destination Traffic Study of the Saginaw Metropolitan Area and is fully integrated with a complete arterial highway plan for the entire area. The City of Saginaw and the immediate contiguous area contain a great many industrial factories which are essential to the economy of the Nation and to its defense; principally they are tool and die corporations, forges, and large plants of the General Motors Corporation. The 1975 average daily traffic will approximate 23,000 vehicles with a high percentage of the total traffic being interstate in character.

URBAN CONNECTOR - CITY OF LANSING

From a point on the Detroit-Muskegon interstate route southeast of Lansing, through Lansing to a point on that same route west of Lansing. Length - 13.8 miles with 5.8 miles within the urban area limits of the Lansing-East Lansing urban area.

This route also functions as a penetrator with the interstate route being circumferential to the city. This route was located as a result of the comprehensive origin-destination study made of the Lansing Metropolitan Area. The City of Lansing is located about midway between Detroit and Muskegon and a high percentage of the interstate traffic either by-passes the city or uses it as a stop enroute to other places along the route; these trips being interstate in character. The urban section will enable this "pause" traffic and interstate terminal traffic to serve the points of traffic attraction characteristics within the city. Places in Lansing which can be considered as attractors of interstate traffic are: three huge General Motors factories, tool companies, forges, other allied light industries, and the facilities of the Michigan State University. The location of the route and its urban connections are fully integrated with plans for development of the arterial highway system for the Lansing area. The average daily 24-hour traffic during 1975 will approximate 41,000 vehicles.

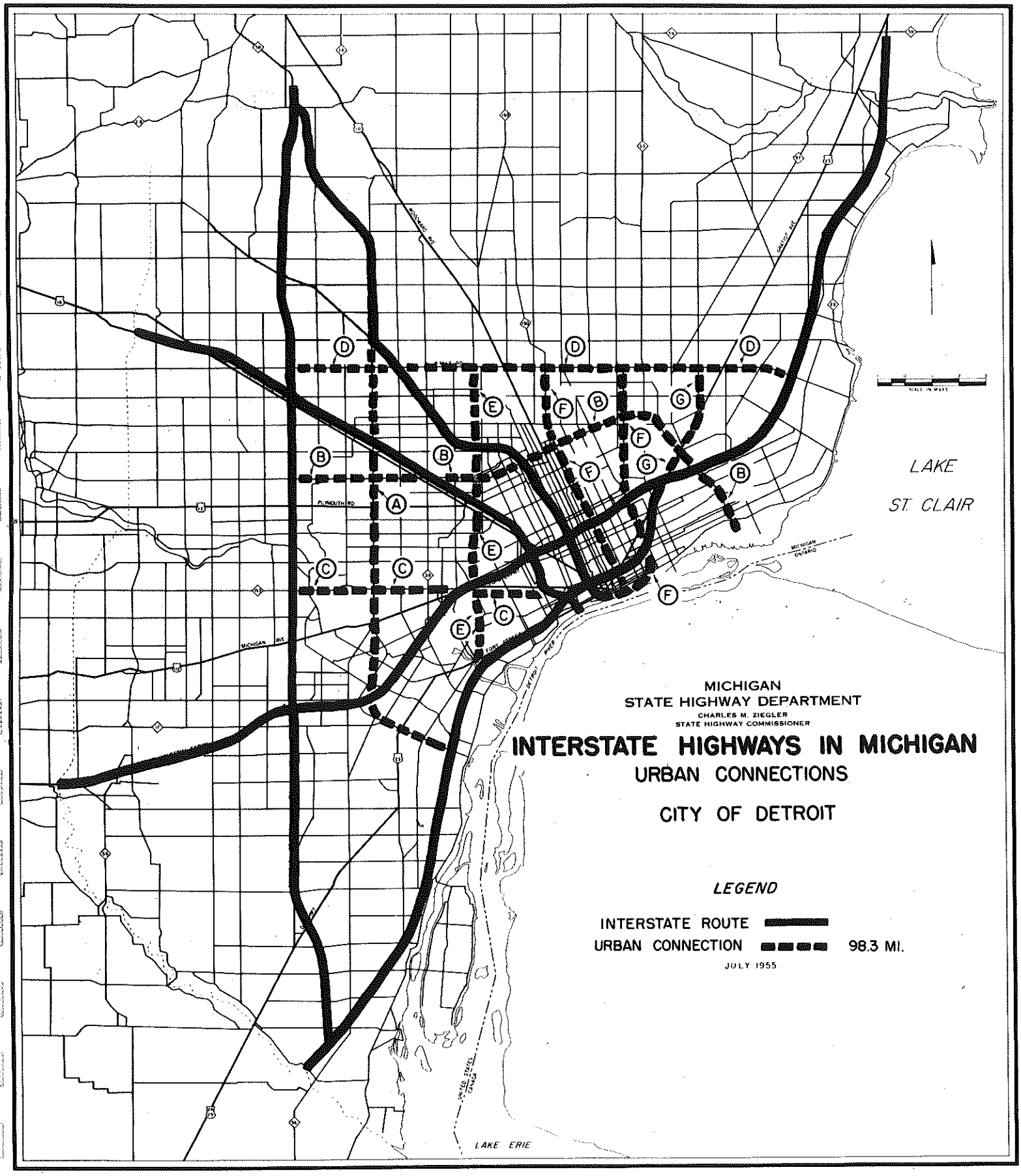
URBAN CONNECTOR - CITY OF FLINT

From a point on the Detroit-Sault Ste. Marie interstate route south of Flint, through Flint to a point on that same route west of Flint. Length - 8.0 miles with 5.0 miles within the corporate limits of the City of Flint. The interstate route by-passes Flint, making necessary a penetrating loop to serve as an access route providing direct access to the heavy industrial areas in the southwestern portion of the city. It will connect

with a planned system of major arterial highways designed by analysis of traffic desires determined by the Flint Metropolitan Area Origin-Destination Traffic Study. The City of Flint houses many types of industry and commerce which are interstate traffic attractors; chief among them being the Chevrolet, A.C. Spark Plug and Buick Divisions of the General Motors Corporation. In addition there are many lighter industries, together with truck and rail terminals all essential to the economy of the Nation and vital cogs in its defense. It is estimated that the 1975 traffic would approximate 81,000 vehicles daily, with a very high concentration of commercial carriers and with a high percentage of the total traffic volume being interstate in character.

URBAN CONNECTOR - CITY OF BATTLE CREEK

From a point on the Detroit-Chicago interstate route south of Battle Creek, northerly as a penetrating spur into the central Business District to connect with a planned major arterial highway network. Length - 3.0 miles with 1.0 mile within the corporate limits of the City of Battle Creek. The city has two principal attractors of interstate traffic; the food industry and the National Civilian Defense Headquarters. There are, of course, other developed units of industry and commerce which accumulatively result in a sizeable volume of interstate traffic entering the city. It is estimated that the 24-hour annual average traffic during 1975 will be 32,000 vehicles.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URBAN CONNECTIONS
CITY OF DETROIT
LEGEND
INTERSTATE ROUTE
URBAN CONNECTION
98.3 MI.
JULY 1955

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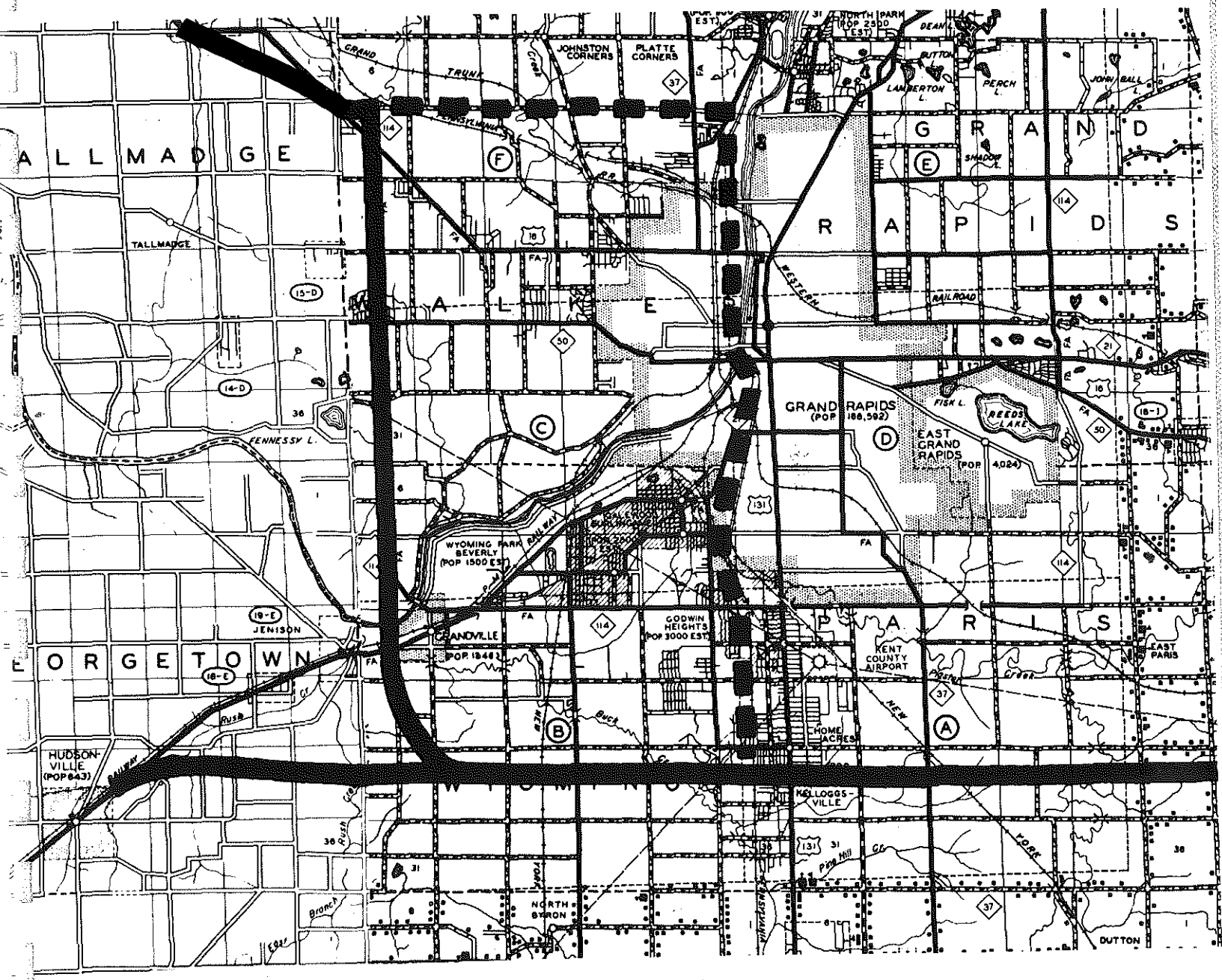
INTERSTATE HIGHWAYS IN MICHIGAN

URBAN CONNECTIONS

CITY OF GRAND RAPIDS



LEGEND

INTERSTATE ROUTE

URBAN CONNECTION — 14.6 MI.

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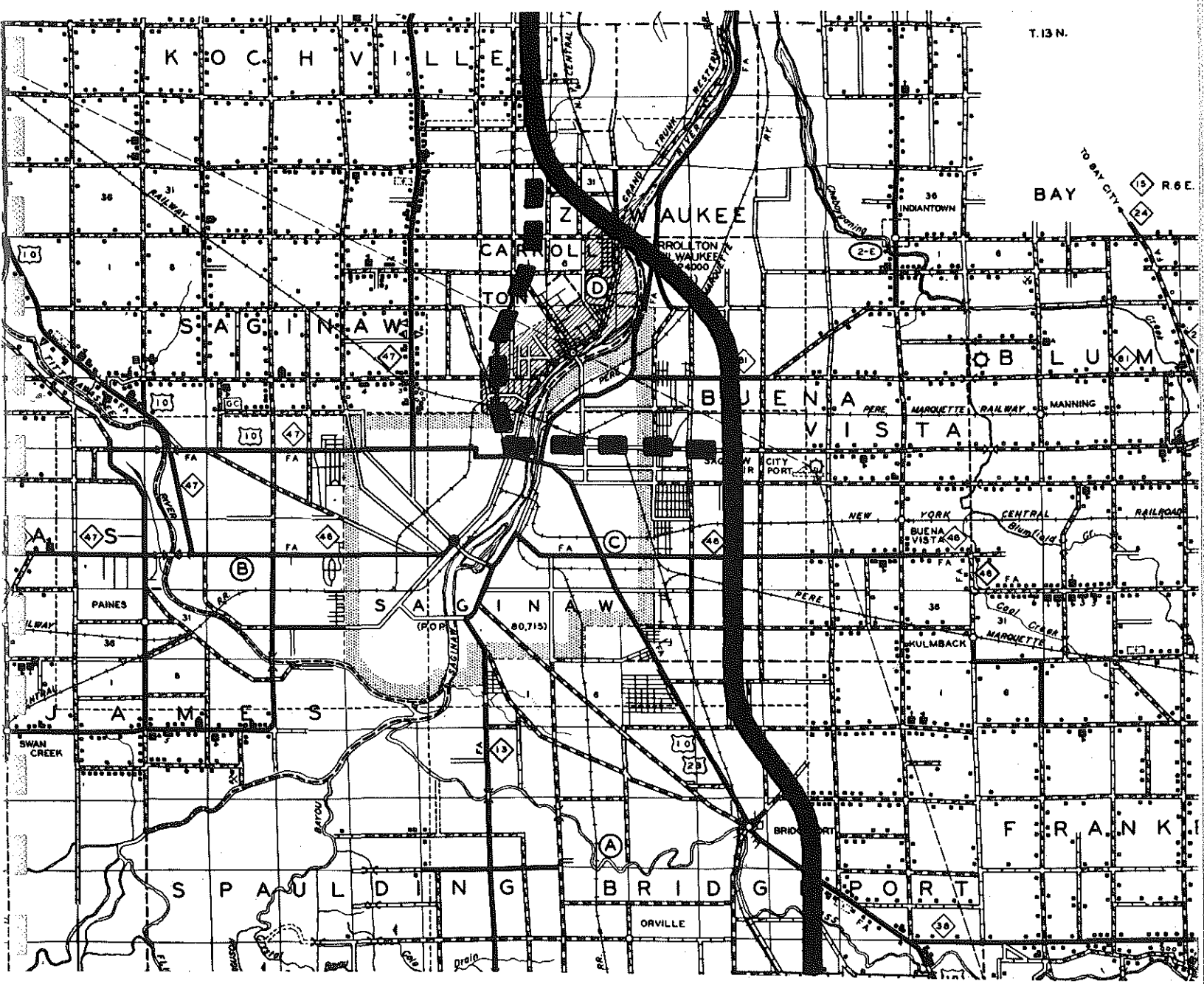
INTERSTATE HIGHWAYS IN MICHIGAN

URBAN CONNECTIONS

CITY OF SAGINAW



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INTERSTATE ROUTE

URBAN CONNECTION 7.5 MI.

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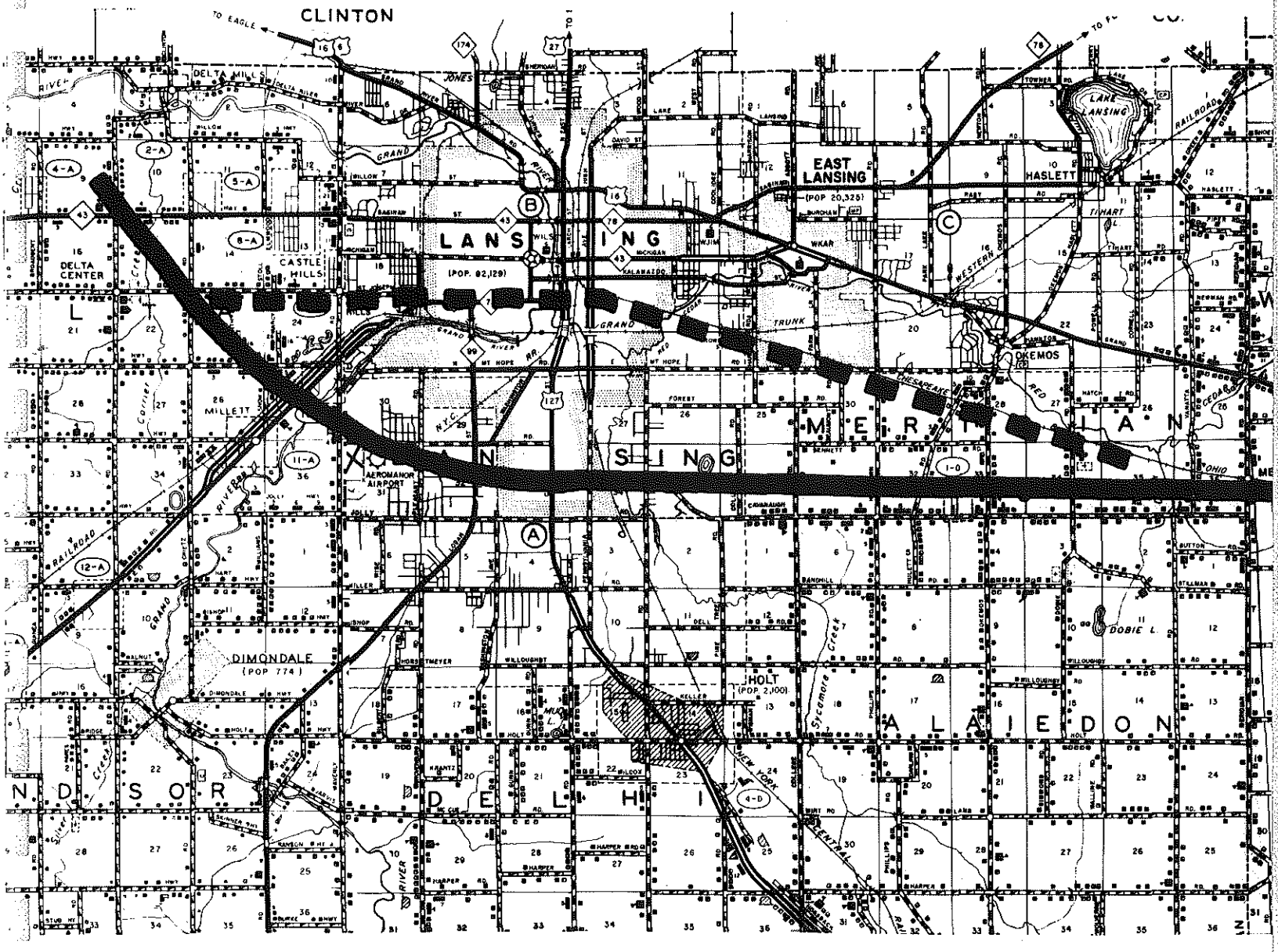
URBAN CONNECTIONS

CITY OF LANSING



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INTERSTATE ROUTE

URBAN CONNECTION 13.75 MI.

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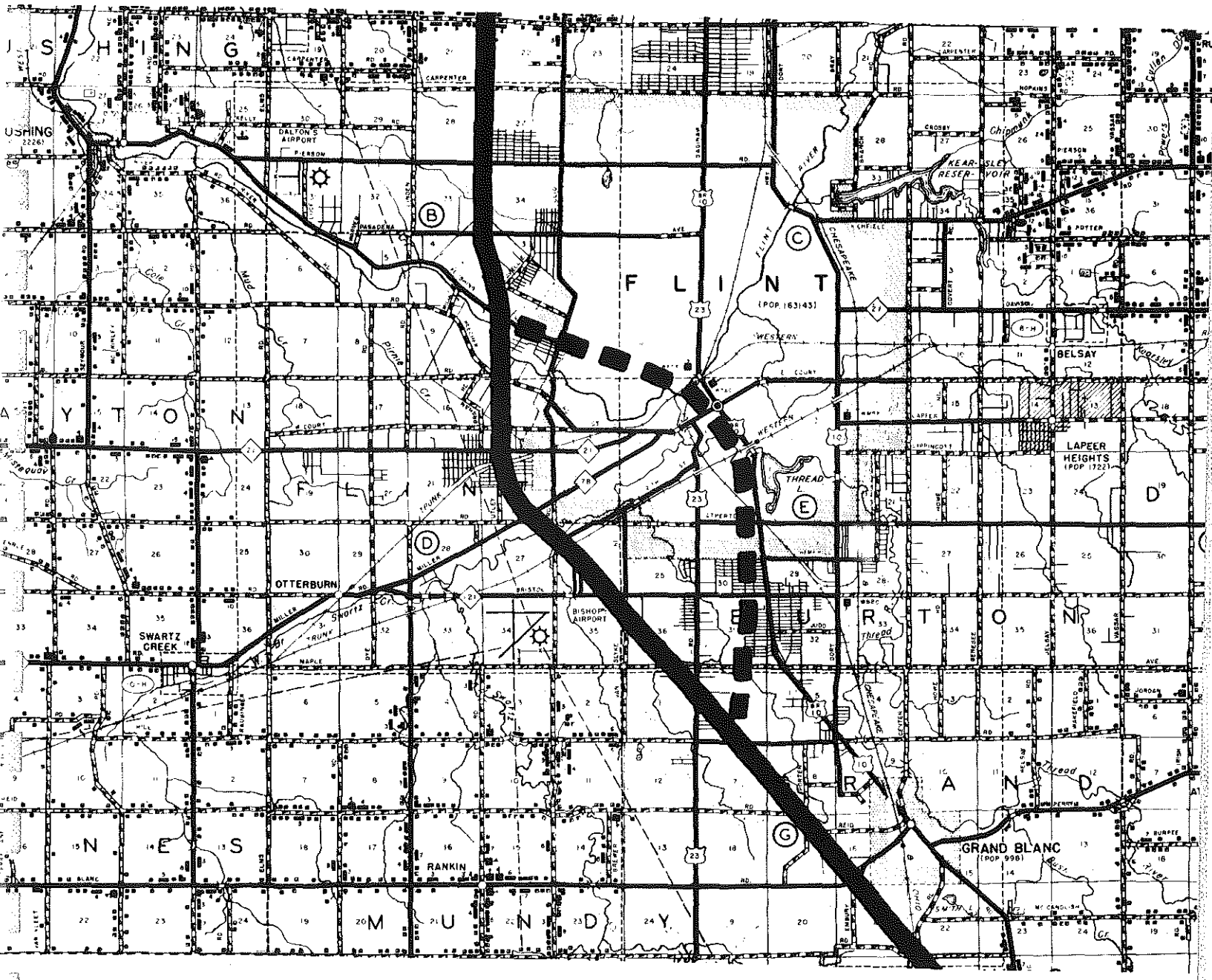
URBAN CONNECTIONS

CITY OF FLINT



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INTERSTATE ROUTE ▬▬▬

URBAN CONNECTION ▬ ▬ ▬ ▬ 8.0 MI.

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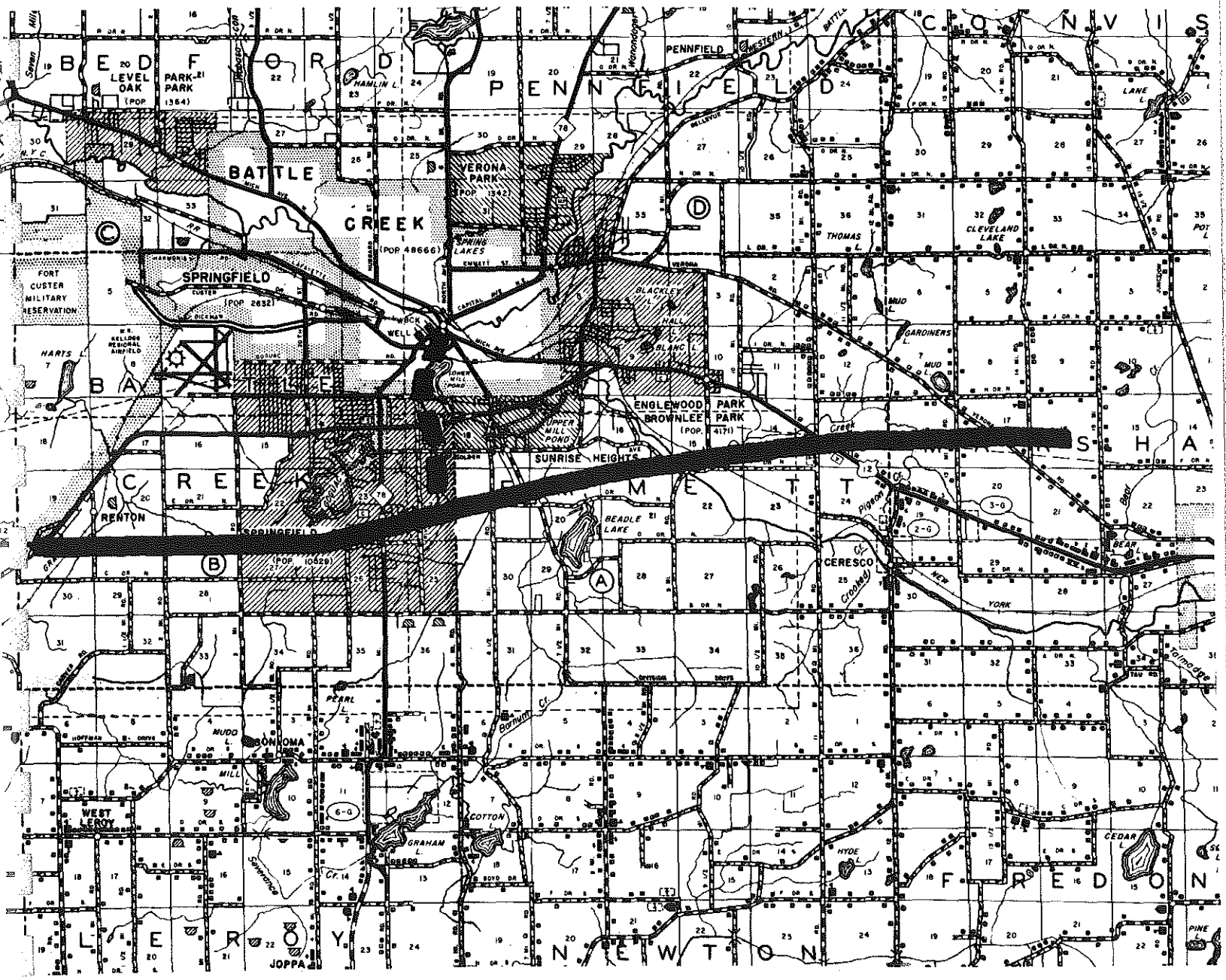
INTERSTATE HIGHWAYS IN MICHIGAN

URBAN CONNECTIONS

CITY OF BATTLE CREEK



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INTERSTATE ROUTE ▬▬▬

URBAN CONNECTION ▬ ▬ ▬ ▬ 3.0 MI.

JULY 1955