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MIGHWAY
LIERARY
MICHIGAN STATE HIGHWAY
DEPARTMENT — LANSING

PREPARED BY THE PLANNING DIVISION MICHIGAN STATE HIGHWAY DEPARTMENT JOHN C. MACKIE, COMMISSIONER

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November 30, 1962

Mr. E. Bellenbaum Chief Planning Engineer Office of Planning

Dear Mr. Bellenbaum:

This introduces the "Jackson, Michigan State Highway Plan." The Plan is based upon comprehensive studies and analyses of the past, present, and future economic, population, land-use, and transportation development of the Jackson Metropolitan Area. Various trends emerged as a result of these studies and were correlated with one another and viewed in their overall relation to highway needs.

The recommendations encompass both the immediate as well as the future transportation requirements of the area and were formulated in conjunction with local officials, planners, civic groups, interested citizens, and the Bureau of Public Roads. Due to limitations of available finances, it is recommended that the highway program for Jackson be completed in three stages. The time sequence for implementing these three stages will depend upon the availability of funds and local traffic needs. The attainment of the goals proposed in this plan will result in benefits to both the City of Jackson and state highway users.

Robert S. Boatman, Director

Robert S. Boatman

Planning Division

Office of Planning



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TABLE OF CONTENTS

Letter of Introduction Table of Contents Preface Introduction	ii
INVENTORY	
Economic Inventory Area Population Land Use Existing Highway	5
FORECAST	
Economic Potential Future Population Land Use Forecast Future Traffic Volumes	14
ANALYSIS	
Highway Department Policy Evaluation of Objectives	21
SUMMARY	31
TRAFFIC ANALYSIS	36
RESOLUTION	37
MAPS	
1. Regional Location 2. Major Employment Centers 3. 1960 Traffic Volumes 4. Future Land Use 5. 1982 Traffic Volumes 6. Alternative Highway Systems 7. Stage I Proposed Highway System 8. Stage II Proposed Highway System 9. Stage III Proposed Highway System	9 16 28 33
TABLES	
1. Employment 2. Retail Sales 3. Effective Buying Income 4. Population Data 5. Population Projections 1970	3 4 6

PREFACE

The objective of developing a highway plan is to recommend highway improvements which, when implemented, will adequately meet the needs and goals of the community. It is an established policy of the Michigan State Highway Department to develop such a plan prior to undertaking major construction. It is essential that each plan reflect agreement between planners from the municipality concerned and the State Highway Department.

The Planning Division of the Highway Department is directly responsible for the preparation of highway plans. Staff members of this division gather pertinent data and present factual information essential to the planning of a highway facility. Decisions are based on a comprehensive study of existing and future community characteristics and traffic needs.

Before proposals of the completed highway plan can be realized, they must be mutually agreeable to both the local legislative body and the State Highway Commissioner. When joint approval has been secured, the plan is submitted to the Route Location and Programming Divisions for implementation.

ORGANIZATION

This report contains information concerning existing and future community characteristics, an analysis of this data, and recommendations to adequately meet future needs. This information is grouped in the following sections:

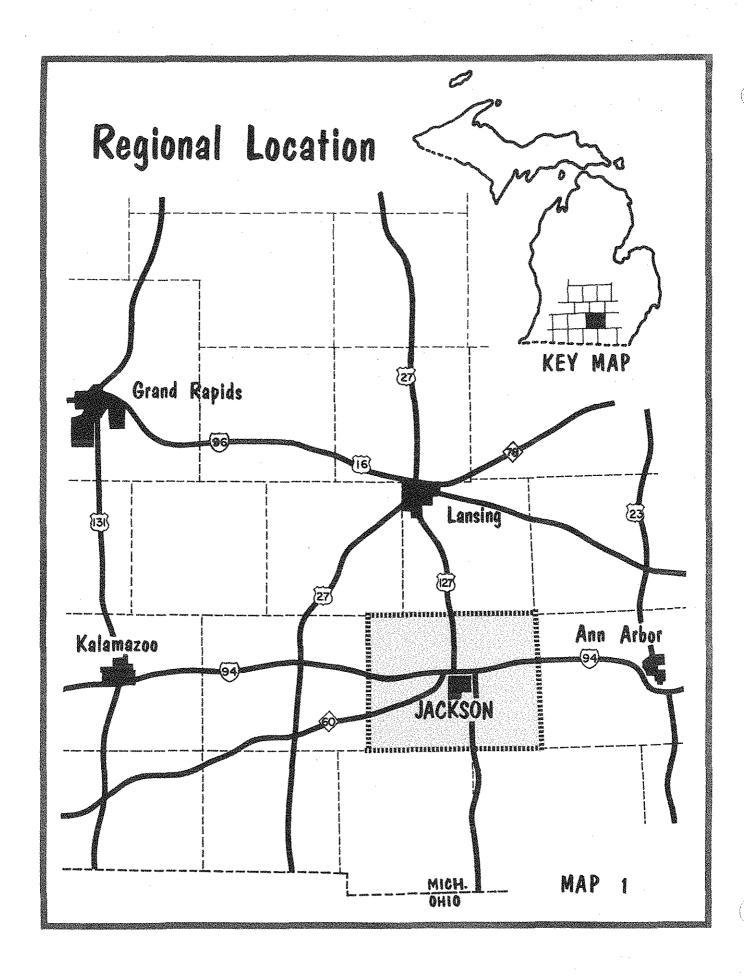
- I. Inventory
- II. Forecast
- III. Analysis
- IV. Summary

INTRODUCTION

The purpose of this report is to outline a program of improvements in the highway system for the City of Jackson. The highway plan, an integral part of the major street plan, must be designed to distribute traffic efficiently to the major areas of traffic attraction both within the city and its outlying areas.

Jackson lies directly south of I-94, a major east-west freeway, and west of US-127, a major north-south highway (See Map 1). Major construction on these principal routes provides ample highway facilities allowing for traffic to bypass the urban area of Jackson. In addition to these facilities, important improvements have been completed on M-60 west of Jackson, connecting it to Interstate route I-94 northwest of the city.

The completion of these major highway improvements provides adequate facilities for through traffic desires. It does not, however, solve the problems of accommodating traffic entering the city or of the distribution of traffic within the city. These are the problems with which this study is directly concerned.



INVENTORY

ECONOMIC INVENTORY

A study of the area economy is a vital aspect of the Jackson highway planning report. An economic study will provide information enabling the community to understand the need for highway improvements.

Economics, together with population and land use inventories, forms the basis for determining highway needs. The primary economic base chosen for the Jackson Highway Planning Report is employment. Employment is probably the most accurate single barometer of economic change. Other measures of Jackson's economic change evaluated in this report include retail sales and effective buying income.

Employment

Jackson has been primarily transportation oriented in terms of employment opportunities tendered. In the past, railroads furnished considerable employment. Today the focus of Jackson resident employment is upon automotive and related industries, with nearly all large manufacturing concerns in Jackson being related to automobile production.

Employment figures for the 1950-1960 decade are shown in Table 1. The relative importance of manufacturing in the Jackson County labor market has remained constant, while in the city proper it has declined. This can be partially attributed to a shift of manufacturing plant locations out of the city and into the immediate areas of the county.

Two other groups of considerable importance for employment opportunities are wholesaleretail trade and services. The first of these furnishes a higher percentage of jobs in the city and county than at the state level. Jackson's location at the intersection of two major freeways aids retail and wholesale distribution.

In 1960, services also furnished more jobs proportionally in the City of Jackson than in the state. In Jackson the service group is presently the most rapidly growing in terms of percentage increase in employment between 1950 and 1960.

The importance of the transportation, communications and utilities employment group is mainly the result of employment provided by Consumers Power Company which has its home offices in Jackson.

Total employment declined in the City of Jackson during the 1950-1960 decade while the county gained over 7,500 jobs. This change has been due to a shifting of employment opportunities out of Jackson and into the area surrounding the city. County employment increased 19.7 per cent while total employment in Michigan went up only 13.9 per cent.

TABLE 1

EMPLOYMENT

		-		Percent
	Year	Number Employed	Percent Change	of Total
Total Employment				
Michigan	1950	2,393,574	warm should wrong	100.0
	1960	2,726,864	13.9	100.0
Jackson (County)	1950	38,265	alabiy maran Milay	100.0
	1960	45,798	19.7	100.0
Jackson (City)	1950	20,719	obetile anticle prioris	100.0
	1960	18,874	-8.7	100.0
Manufacturing				
Michigan	1950	978,312	densinya Malajah Melide	40.9
•	1960	1,035,892	5.9	38.0
Jackson (County)	1950	13,605	Analogue acceptés describes	35.6
	1960	16,256	19.5	35.5
Jackson (City)	1950	7,183	aboutly desirant warners	34.7
	1960	5,865	-18.3	31.1
Wholesale-Retail Trade		×		
Michigan	1950	421,247	NATION WINDOWS CARRIED	17.6
	1960	484,018	14.9	17.8
Jackson (County)	1950	7,287	SMETS Streets 3-0550	19.0
· ·	1960	8,324	14.2	18.2
Jackson (City)	1950	4,452	eccepts attacked attacked	21.5
	1960	3,714	-16.6	19.7
Services				
Michigan	1950	377,048	MERCEN AMERICA SAMERE	15.8
	1960	542,827	44.0	19.9
Jackson (County)	1950	5,956	HONE CHARLES	15.6
	1960	8,510	42.9	18.6
Jackson (City)	1950	3,853	Wildrein (papel), marjini)	18.6
	1960	4,251	10.3	22.5
Transportation, Com- munication, Utilities				
Michigan	1950	151,063	NUMBER STREET, NUMBER	6.3
	1960	155,588	3.0	5.7
Jackson (County)	1950	4,168	MATERIA ANNO	10.9
<u> </u>	1960	4,276	2.6	9.3
Jackson (City)	1950	2,617	etiteir einsta ablant	12.6
,, ,, ,, ,, ,, ,, ,, ,	1960	1,919	-26.7	10.2
			·	

Source: U.S. Bureau of Census

Retail Sales

Retail sales changes provide another indicator of economic growth. Retail sales figures are shown in Table 2. While retail sales increased considerably in Jackson during the 1950-1960 decade, this increase was markedly below the county and state. However, per capita sales increased more rapidly in the city than in either the county or the state, and are now nearly twice as high in Jackson as those for the two larger areas. This would tend to indicate that Jackson is becoming an increasingly important regional center, drawing customers from outside the city. Retail sales are highly dependent upon income individuals receive. During periods of relatively high income, people tend to be optimistic about purchases; the converse is also true.

TABLE 2	RETAIL	SALES	
Retail Sales 1	Year	Dollars	Percent Change
Michigan	1950	\$6,768,995,000	Helia Diagno resonata
	1960	9,985,127,000	47.5
Jackson (County)	1950	116,130,000	MANAGEMENT AND
	1960	164,190,000	41.4
Jackson (City)	1950	89,374,000	- Administrative and Science a
	1960	118,543,000	32.6
Sales Per Capita			
Michigan	1950	1,062	**************************************
	1960	1,276	20.2
Jackson (County)	1950	1,076	H*-Smarthagening.
	1960	1,244	15.6
Jackson (City)	1950	1,749	microscopies con-
	1960	2,337	33.6

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Effective Buying Income

Effective buying income is shown in Table 3. Jackson proper has generally kept up with the rest of Michigan in effective buying income as measured by per capita increases. In total income, however, Jackson increased at a slower rate than the state between 1956 and 1958. Jackson County during the same period, showed increases in per capita income higher than either the City of Jackson or Michigan.

Changes between 1958 and 1960 show Michigan increasing at a faster rate than both the city and county in per capita income and total income. The county is increasing its total income faster than the city, but both areas are increasing at approximately the same rate in per capita income. This reflects the more rapid population growth in the county.

TABLE 3	EFFECTIVE	BUYING INCOME	
Per Capita ²	<u>Year</u>	Amount	Percent Change
Michigan	1956	\$1,812	****
	1958	1,810	-0.1
	1960	2,073	14.5
Jackson (County)	1956	1,647	Avermitati outonomenen
	1958	1,693	2.8
	1960	1,895	11.9
Jackson (City)	1956	1,966	wo combination which which
-	1958	1,976	0.5
	1960	2,229	12.8
Total Income			
Michigan	1956	\$13,504,032,000	Accordate 22 Colonia de como
~~	1958	14,287,180,000	5.8
	1960	16,550,713,000	15.8
Jackson (County)	1956	202,797,000	·
	1958	221,672,000	9.4
	1960	255,415,000	15.2
Jackson (City)	1956	107,337,000	- de-ministratura de la companya de
	1958	107,719,000	0.4
	1960	112,543,000	4.5

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AREA POPULATION

Population figures for the City of Jackson, County of Jackson and Michigan are shown in Table 4. Jackson County had a population of 131,994 in 1960. This marked an increase of 22.3 percent over 1950 which was the third largest in Jackson County since 1900. The county's growth in population between 1950 and 1960 was at only a slightly lower rate than that registered by Michigan during the same period. However, in only one other period (1910–1920), has the county's rate of increase kept up with population changes in the state as a whole.

Population in the City of Jackson reached a peak of 55,187 in 1930. Since that time the population has hovered around 50,000. During the 1950-1960 decade it suffered a loss of 0.7 percent.

The areas of most rapid population growth in Jackson County are the Townships of Summit, Blackman, Leoni, Napoleon and Spring Arbor, all of which are contiguous to the City of Jackson. Of the 24,069 gained by Jackson County in 1950-1960, 17,363 were in the above townships, indicating the general direction of growth in the county.

Of the surrounding seven counties, Jackson County's population increase of 22.3 percent ranked behind gains registered by Livingston, Washtenaw, and Eaton, but was ahead of Ingham, Lenawee, Calhoun and Hillsdale.

The composition of Jackson County population is changing slowly. In 1950, 56.8 percent of the population was classified as urban by the U.S. Bureau of the Census. By 1960, this percentage had increased to 57.6 percent. Michigan, by contrast, has 70.6 percent and 73.4 percent of its population classified as urban in 1950 and 1960 respectively.

As population distribution and concentration characteristics are altered, changes occur in the demands which are placed on the use of land. These land uses, in turn, affect traffic desires and movements and place new requirements on street and highway systems.

TABLE 4

POPULATION DATA

YEAR	MICHIGAN	PERCENT CHANGE	JACKSON COUNTY	PERCENT CHANGE	CITY OF JACKSON	PERCENT CHANGE
1960	7,823,194	22.8	131,994	22.3	50,720	-0.7
1950	6,371,766	21.2	107,925	15.9	51,088	2.9
1940	5,256,106	8.5	93,108	0.9	49,656	-10.0
1930	4,842,325	32.0	92,304	27.2	55,187	14.1
1920	3,668,412	30.5	72,539	35.8	48,374	53.9
1910	2,810,173	16.1	53,426	10.8	31,433	24.8
1900	2,420,982	describe deviate contrary	48,222	swipe name-louery	25,180	enterry enance-harmon

SOURCE: U.S. Bureau of the Census Reports

LAND USE

Land use within the Jackson area has a direct bearing upon the origins and destinations of vehicular movement and upon the number of trips made. Land use patterns result from the functional location which establishments or groups of establishments choose in relation to one another. Interaction between land uses is facilitated by highways. New highways which provide access to relatively undeveloped areas not only encourage new land uses in these areas, but intensify the use of lands already developed. Improper land use can produce interference with the smooth and safe flow of traffic by creating turning and stopping movements on urban highways, and by failing to include the provision of adequate terminal parking facilities.

The land use patterns within the City of Jackson which generate the greatest amount of traffic are the commercial concentration in the central business district and the industrial developments scattered along major thoroughfares and railroad facilities throughout the city. Those industries employing the greatest number of employees are shown by the map "Major Employment Centers". In addition to these locations, there are a number of smaller employment centers located between Belden Road and the northern branch of the New York Central Railroad.

EXISTING HIGHWAY SYSTEM

Highway and railroad locations have largely determined the direction of urban land use expansion in the Jackson area. Early industrial developments depended upon railroad facilities for the movement of their products to various markets. The dispersion of manufacturing activity in Jackson created a need for the quick movement of goods which could only be provided by the use of trucks. As a result of this development, industries selecting future locations are principally concerned with available highway facilities for the efficient movement of their goods and also for easy access by their employees.

At present, the principal routes of the state highway system in Jackson are Michigan Avenue (I-94 BL), extending east-west through the central business district, West Avenue (US-127 BR, M-50), a north-south route passing almost entirely through residential development, and Cooper Avenue (M-106) another north-south artery which terminates in the central business district.

Traffic volumes for these routes are shown on Map 3, "1960 Traffic Volumes". Michigan Avenue is the main artery in the existing highway system of Jackson and carried a high of 21,000 vehicles per day in 1960 in the central business district. This volume of traffic presents many problems due to the inadequacy of the existing facility for distributing vehicles. In 1960, West Avenue and Cooper Avenue, the other routes in the existing state system, carried volumes of less than 10,000 vehicles while Jackson Avenue, which is not in the highway system, carried volumes of 12,500 vehicles.





FORECAST

The preceding inventory presents a generalized picture of the existing character of the Jackson area. By using data available to forecast future developments, long-range plans can be formulated to permit the incorporation of the solutions to short-range problems. There are obvious elements of uncertainty involved in predicting future needs, but if the process is not attempted, public funds may be expended on projects which could become only temporary, and wasted in satisfying future needs.

ECONOMIC POTENTIAL

The largest employers in the City of Jackson and Jackson County are automotive oriented. The area is also highly dependent upon defense contracts with several companies producing goods essential to national defense. The primary manufacturing industry in the area, automotive, is maturing with an increasing use of automated production techniques. To maintain employment at present levels and to promote future employment opportunities, industrial diversification is a necessity.

The Jackson Area Industrial Development Corporation is taking the lead in the promotion of economic growth through industrial diversification. Since its establishment in 1958, this organization has been instrumental in the expansion or relocation of forty plants in the area. It also has assumed an important role in the development of three industrial parks; Micor, Scheele, and Southside. In these industrial parks, the Jackson area has land available for future growth. At the same time, the area possesses a good supply of skilled labor. According to the 1960 Census, 685 or 45.4 percent of those unemployed in the city were skilled or semi-skilled. The figures for the county show 1,551 or 51.9 percent of the unemployed as being in these categories. These two factors of available space and employees, combined with Jackson's central location between Detroit and Chicago, should enable the area to attract new industries.

FUTURE EMPLOYMENT

Future employment levels in Jackson County can be projected by a study of past employment trends. Jackson County has been experiencing employment growth during the past twenty years; however, the rate of growth has slowed considerably, dropping from a 26.7% increase in 1950 over 1940 employment to 19.7% in 1960 employment over 1950 figures. Another factor of importance in projection of employment is the relation between the number of employed and the total population. Here Jackson County has experienced a

decline from 38.4% employed in 1940 to 34.7% in 1960. On the basis of past trends, employment in Jackson County has been projected to approximately 52,400 for 1970.

The County labor force distribution between employment groups in 1960 was approximately the same as during 1950. If this trend holds true for 1970, the services category can be expected to show the largest increase in its relative share of the County employment. Manufacturing employment should remain in approximately the same position and the wholesale-retail trade and transportation, communications and utilities classifications can be expected to show a slight decline in their relative shares of employment furnished to Jackson County residents.

The actual level of total employment reached in 1970 for Jackson County is highly dependent upon future manufacturing employment trends, since manufacturing is the base from which an urban economy generally receives impetus to grow. If manufacturing fails to provide additional employment, other employment groups will probably be correspondingly lower.

EFFECTIVE BUYING INCOME

Future effective buying income in the City of Jackson and Jackson County can be expected to increase rapidly. Projections of 1965 effective buying income have been made by Sales Management Magazine, and show Michigan increasing its total effective buying income by 146 percent, and Jackson by 149.1 percent over 1958. Jackson's increase is one of the largest for areas within the East North Central States.

FUTURE POPULATION

Population growth trends in the Jackson area provide indicators of local needs and requirements for highway facilities. Area population trends, shown in Chart 5 include 1970 estimates from two published reports: Population of Michigan Counties, Projections to 1970, by J. F. Thaden of the Institute for Community Development, and Annual Report, 1961–1962, by the Jackson Metropolitan Area Regional Planning Commission. According to the latter, the City of Jackson is expected to have between 50,900 and 58,700 residents in 1970. The projected population of Jackson County is anticipated to range between 151,670 and 160,030 according to JMARPC. J. F. Thaden's projections show the County having a 1970 population of between 158,500 and 161,430. Based on projection of past employment trends, Jackson County population should be approximately 152,000 by 1970 (See Future Employment Section).

None of the projections for the City of Jackson or the County anticipate that these areas

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will increase faster than does the state. According to Dr. Thaden, Michigan's population in 1970 will increase between 22.6 and 23.4 percent over 1960. Estimates for Jackson County's increase range between 20.1 percent and 22.3 percent, and for the City of Jackson between 0.4 percent and 15.7 percent. The sections having the largest growth in the County are expected to be the suburban areas around the city which will increase between 18,000 and 28,000. Where in the city this growth occurs will be dependent upon land use policies.

TABLE 5	POPULATION	PROJECTIONS 1970	į
		***************************************	120

Projection	Michigan	% Change	Jackson County	% Change	Jackson <u>City</u>	% Change
Α	9,654,000	23.4	160,280	21.4	entito, labbre curion sevene	appeared and the definition and the second
В	9,600,000	22.7	158,500	20.1	minima managa anaga anggay	Philip Station and all adjunctions
С	9,588,770	22.6	161,430	22.3	enform moners werens unaugu.	edited willy-by-reposit graphs
D	COURSE WHICH SOME	MONTH COURTS NAMED	151,670	14.9	50,900	0.4
E	9,093,830	16.2	157,100	19.0	THE PERSON NAMED AND POST OF THE PERSON NAMED PARTY.	March means wealth anapap
F	1004588 vectorii Aunoria oprapag	Adorbi Manda Kuche	160,030	21.2	58,700	15.7

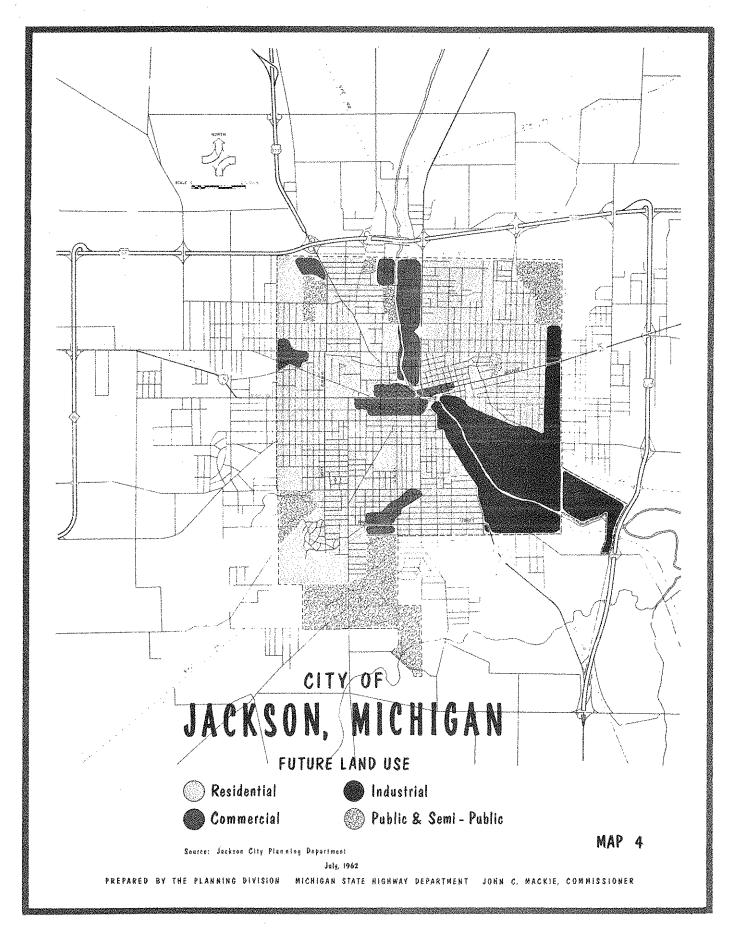
Source: A-C T. F. Thaden, Population of Michigan Counties, Projections to 1970

D-F Jackson Metropolitan Area Regional Planning Commission, Annual Report, 1961-1962

LAND USE FORECAST

The Land Use Plan, developed as part of the Master Plan for the City of Jackson is shown on page 16. This plan indicates the local policies to be considered in the ultimate development of the city. Through the use of land development regulations, new growth and development can be guided to conform to the Master Plan for the community. Because these future land uses will have to be serviced by highway facilities, a knowledge of proposed land use patterns is important to highway planning.

The land use plan for the City of Jackson calls for a substantial amount of industrial land to be located in the southeast portion of the city. This area is now served by local roads, causing traffic to flow through residential districts in order to reach this area. The problem will be greatly increased as future development occurs. The solution is to provide a major traffic facility connecting to an overall circulation system.



Future land use considerations indicate that all land adjacent to West Avenue and Prospect Avenue, the present location of US-127 BR and M-50, will remain in residential land use. This presents the problem of requiring Business Route traffic to pass through a residential area.

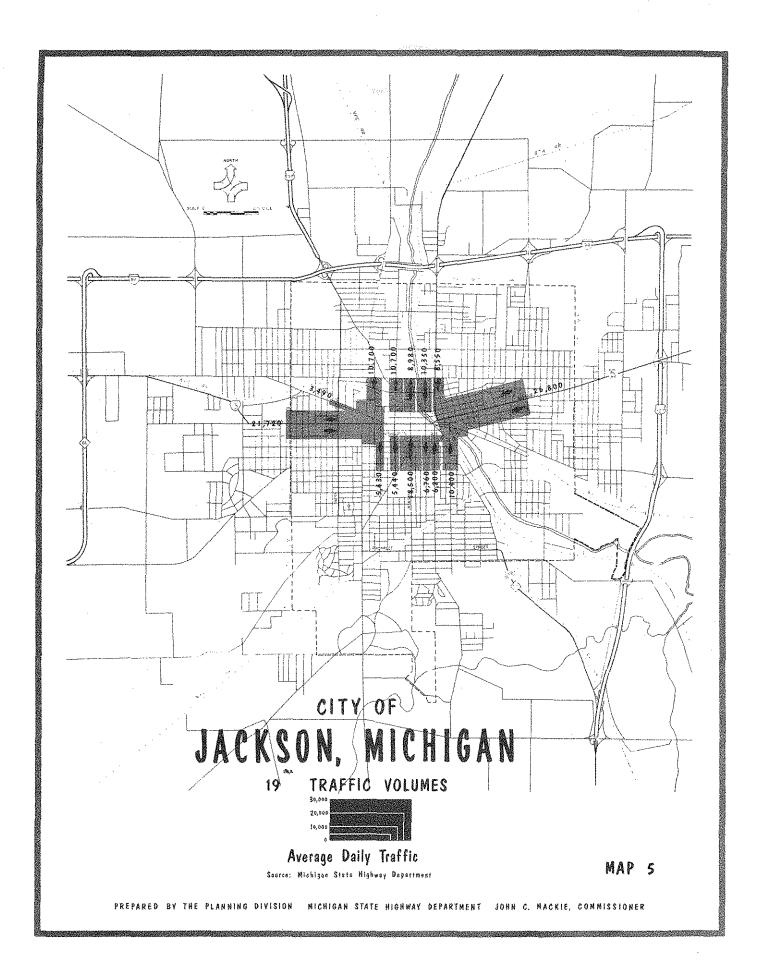
The land use plan indicates that the central business district will be confined to the area between Clinton Street on the north, Washington Avenue on the south, and First Street on the west extending to the railroad on the east. Traffic conditions in this area are already congested with only one major traffic facility, Michigan Avenue, serving present needs.

FUTURE TRAFFIC VOLUMES

Although much of the growth expected to occur in the Jackson area will probably take place outside of the Jackson city limits, traffic volumes within the city will continue to increase as people use the automobile for work, shopping or recreation and other leisure-time activities. The 1982 traffic flow projections for the recommended city highway loop system (see Alternate D1 in the Analysis Section), made by the Traffic Division of the Michigan State Highway Department, are shown by the map on page 19. Traffic volume on Michigan Avenue, the major traffic facility within the City of Jackson, is expected to decrease from 21,000 vehicles in 1960 to a high of 12,000 by 1982 due to the expected shift of highway traffic from Michigan to the recommended loop system. Traffic on the loop is expected to increase substantially.

The influx of traffic volumes to the central business district will compound existing circulation problems. Conflicts between pedestrian and vehicular traffic would make easy access and smooth flow extremely difficult. The current highway system of Jackson would be inadequate not only for future highway traffic but also for satisfactory integration with the local street system in the central business district.

These observations and predictions indicate that improved circulation must be provided in and around the central business district of Jackson, particularly for the east-west flow of traffic on Michigan Avenue and the Business Route of US-127. Suggestions for providing these improvements have been advanced by the city, highway planners and others. The following section will present the advantages and disadvantages of the proposed solution to the problems within the City of Jackson.



ANALYSIS

Numerous solutions to the traffic problems in the City of Jackson have been considered by local officials and the Planning Division of the Michigan State Highway Department. A study of the alternatives is necessary to demonstrate benefits and disadvantages of choices available regarding the planning of highways in the city.

HIGHWAY DEPARTMENT POLICY

The study of alternate solutions was facilitated by the use of established urban highway standards which led to the elimination of certain routes. Right-of-way standards have been set up by the Michigan State Highway Department to insure widths adequate for modern highways in urban areas. These standards require widths of 86 feet for ultimate four-lane two-way traffic and for three and four-lane one-way traffic. For proposed five-lane two-way traffic, 100 foot widths are required and 120 feet for seven lanes. These widths are based on twelve foot traffic lanes, two foot curb and gutter sections, a buffer strip of widths varying from 9 to 17 feet (for safety to pedestrians, utilities, snow removal storage and as a storm water splash area), and walks 5 feet in width, set one foot from each edge of the right-of-way. These standards are applicable in the city areas where plats abutting state highways are submitted for approval and it is anticipated that the highway will be used for five years duration or more.

In selecting routes for new highway systems in the Jackson urban area, the above standards must be used as guidelines. Other considerations must include community development policies established by the city.

EVALUATION OF OBJECTIVES

The objectives considered in the development of a highway system for the City of Jackson are to:

- (1) Allow the city to carry out a revitalization program including development of a shoppers mall, off street parking with major access facilities and the elimination of traffic congestion on Michigan Avenue.
- (2) Provide a highway system that will remove traffic destined for the central business district from residential areas.
- (3) Provide the industrial areas of the city with access to major traffic facilities.

EVALUATION OF ALTERNATIVE SOLUTIONS

The solution of any problem usually results in various advantages and disadvantages which must be considered in determining the adequacy of the various alternatives. These

factors, with regard to correcting the traffic problem in Jackson are discussed in the following paragraphs.

Alternate A-Existing Highway System in Jackson (See Map 6)

The US-127 BR and M-50 alignment enters the city from the northwest on Clinton Road, proceeds southeast to West Avenue, then runs south on West Avenue from St. Clair to High Street, goes east on High to Fourth Street, south on Fourth to Prospect Street, east on Prospect to Brooklyn Road, and southeasterly on Brooklyn Road, leaving the City of Jackson.

I-94 BL follows Michigan Avenue in a general east-west direction through the entire city.

M-106 enters Jackson at the north city limit on Cooper Street, follows this artery south and terminates at Michigan Avenue.

Advantage

1. Retention of this system would involve relatively little construction expense.

Disadvantages:

- Although the present system can accommodate existing traffic volumes, distribution of vehicles to and within the Central Business District is inadequate because West Avenue is too far from the CBD.
- 2. The use of Michigan Avenue as I-94 BL in the downtown area conflicts with urban renewal plans.
- 3. West Avenue traverses residential sections.
- 4. Greater travel distance is required to reach the Central Business District (particularly on US-127 BR) than with Alternate D2.
- 5. Left turns from Michigan Avenue are very difficult and in some cases are prohibited in the Central Business District.

Alternate B - Trail-Franklin Loop and Belden Road and Francis-Bridge One-Way Pair (See Map 6).

The southern side of the loop portion of this alternate would be comprised of Franklin Street, from Second to Milwaukee Street. The east side would be an arc from Franklin and Milwaukee northeast to Michigan Avenue at Perrine Street, and then it would swing back to Milwaukee and Trail in a northwesterly direction. The north part of the loop would be Trail Street from Milwaukee to Steward Avenue. The west side would be Steward, from Trail to Michigan, and Second, from Michigan to Franklin.

The western leg of the part of this alternative referred to as the "Belden Road and Francis-Bridge One-Way Pair" would consist of Francis Street from Franklin to Morrell,

east on Morrell to Orchard, southeast on new construction to Bridge and Everhard and east on Bridge to relocated Belden Road near the intersection of Merriman and Bridge. The eastern leg of this one-way pair would follow Milwaukee from Franklin to Wilkins, and go southeast on relocated Belden to Bridge Street.

This system would also involve the continued use of Michigan Avenue to the east and west of the loop and north and south distributors similar to those for Alternate D.

Advantage

1. There would be less traffic congestion on this highway system than on alternative systems, since much of the traffic destined for the Central Business District would use local streets within the loop.

Disadvantages:

- 1. It would cost more than Alternate D1 due to the need for extensive new construction and right-of-way acquisition on the east side of this loop.
- 2. This alternate is too far from the Central Business District to permit efficient distribution of traffic in the downtown area.
- 3. It would involve adverse travel distance for east-west through traffic.
- 4. It would traverse residential areas, resulting in reduced residential amenities for abutting properties.
- 5. The Francis-Bridge and Belden Road one-way pair portion, in combination with the Trail-Franklin loop, would completely surround a small residential area.

Alternate C - High Street (See Map 6)

This alternate would involve the eastward extension of High Street from Belden Road to Losey Street and from Chlebus Street east to a proposed interchange with US-127.

Advantages:

- 1. It would permit more direct access from the industrial park in the south-eastern part of Jackson to the US-127 freeway than does the South Street interchange.
- 2. It would involve a shorter length of trunkline requiring future maintenance than would other alternatives.

Disadvantages:

- 1. Due to its proximity to the South Street interchange, construction of the proposed High Street interchange would necessitate removal of the one at South Street, at considerable expense.
- The existing interchange at Brooklyn Road (M-50) and US-127 is designed to handle the heavy volumes of traffic destined for the City of Jackson. Routing of US-127 BR on High Street would result in a marked reduction of traffic using the

Brooklyn Road interchange with the consequence that it would not function up to its design capacity.

Adverse travel distance would be involved for traffic entering the CBD from the south.

Due to the disadvantages listed above, an interchange for High Street cannot presently be justified. Future community growth however, may alter conditions which could warrant this new interchange.

Alternate D - Total Recommended System (See Maps 7, 8 and 9)

This highway system is recommended for accomplishment in three phases. Staging for this project is discussed in the Summary section which follows. It would ultimately be comprised as follows:

The Loop — This facility would carry I-94 BL, US-127 BR, and M-50 traffic. The east-bound movements would be served by new construction, from Michigan and Steward south-east to Washington and Blackstone, would follow existing Washington to Milwaukee, and continue northeast as new construction to the intersection of Michigan and Perrine. Otsego from Washington to Milwaukee, would also become part of the southern portion of the loop. Westbound traffic would be served by new construction from a point just west of the New York Central tracks, northwest parallel to the tracks to Clinton Street. Then it would angle west on Clinton to Blackstone, where it would take a southwesterly direction, on a new location, to the point of beginning at Steward and Michigan.

US-127 BR and M-50 Route — These highways would enter Jackson from the north on Clinton Road and proceed south on Lansing Avenue. These two streets would operate as a two-way facility from the north city limit to Steward Avenue. From this point the route would be one-way south on Steward as far as Michigan and one-way north on Blackstone, from Clinton Street, which would be the north side of the Loop, to Lansing Avenue and continue one-way on Lansing Avenue to its intersection with Steward. These trunklines would then follow the loop from whence they would proceed southward on Milwaukee from Washington to Wilkins and continue southeasterly on the proposed Belden Road alignment to the south city limit.

I-94 BL - This highway would use the loop described above and would continue to be located on Michigan Avenue on either end of the loop within Jackson.

M-106 — This facility would be abandoned upon the completion of the total system. This, however, would be many years in the future so a one-way pair of streets using Cooper as southbound from Ganson, and Milwaukee as northbound extended to Cooper Street at Gibson, is warranted.

Advantages:

1. This total system would provide direct access to the Central Business District,

- one of the principal traffic generators in the city, with a minimum of stops for the motorist.
- 2. The system, as proposed, would entail the use of a minimum number of railroad crossings, thereby contributing to the overall efficiency of traffic movement and providing more safety for the motorist.
- 3. Traffic capacity would be increased, resulting in less congestion in the Central Business District.
- 4. This system would allow the possibility for the development of a shoppers mall, and would connect outlying parking areas with major traffic facilities. It could be partially completed within an urban renewal project, thus allowing the community to receive non-cash grant-in-aid from the Federal government for money expended on the highway improvements.
- 5. In comparison with the other alternatives considered, traffic destined for points beyond the CBD would be required to travel less adverse distance.

Disadvantages:

- 1. The costs for right-of-way acquisition and construction would be more than for any suggested alternate system with the exception of Alternate B.
- 2. Steward and Lansing Avenues, which would constitute a one-way pair northwest of the downtown loop as part of the ultimate system would, like West Avenue, encroach upon residential areas.

Alternate D1 - Central Business District Project, I-94 Business Loop (Part of Alternate D).

Advantages:

- 1. This project would allow the motorist easy access into the downtown and "off-street" parking areas, yet provide for "through" traffic to bypass the downtown.
- 2. It would serve all state trunklines. Upon departing from the central area, motorists would have easy egress from the city.
- 3. The Central Business District Loop project would conform to existing and proposed land uses. One-way streets would separate residential areas from commercial activities, and permit the possibility for the development of a shoppers mall within the "loop".
- 4. The one-way loop would offer the advantages inherent in a one-way traffic operation. Turning conflicts would be minimized, safety would be increased, and the difficulties regarding opposing traffic would be removed.

Disadvantages:

- Construction and right-of-way costs would be greater than those for any other alternate considered except Alternate B.
- 2. The problem of the need for an at-grade railroad crossing for access to the Central

Business District from the east would not be solved.

Alternate D2 - Belden Road Project (Part of Alternate D).

Advantages:

- 1. The Belden project would provide a barrier between an extensive industrial district and an area designated as residential by the future land use plan for the city. The route would be constructed parallel to Belden Road, which is presently serving as the barrier, and add to the space between homes and the industrial activity. It would also provide additional parking for the industries fronting on Belden.
- 2. This project would integrate with the proposed urban renewal project, assist in the clearing of blighted housing, and enable control of access for the portion of the total state trunkline system from Wilkins Street to High Street.
- 3. A more direct line of access to the Central Business District from the south would be provided than if any other considered alternate were employed.
- 4. In comparison with Alternate C, which would remove much traffic from the existing Brooklyn Road interchange, this alternative would make full use of this facility.

Disadvantages:

- 1. Construction costs would be greater with the use of this alternative in comparison with the use of a one-way pair comprised of existing streets.
- 2. Would require a longer length of trunkline that requires future maintenance than would Alternate C.

<u>Alternate E</u> - Same as Alternate D except that Van Buren Street would be used as the North Side of the Loop instead of Clinton (See Map 6).

The use of Van Buren Street as part of the north side of the loop would involve extending the proposed new construction, which would parallel the New York Central tracks, northwest past Clinton Street to Van Buren. The loop would then proceed west on Van Buren to Steward and then south on Steward to Michigan Avenue.

Advantages:

- 1. They are the same as for Alternate D.
- 2. Also, this system would include a parking area, which is between Clinton and Van Buren, within the resulting loop.

<u>Disadvantages:</u>

- 1. They are the same as for Alternate D.
- 2. Also, the use of Van Buren would require the removal of a large and expensive factory which is located north of Clinton between Mechanic and Jackson Streets.

Other Alternatives Considered:

Washington and Franklin One-Way Pair

These two streets would serve US-127 BR and M-50 traffic as a one-way pair between Second and Milwaukee Streets. I-94 BL would continue to be located on Michigan Avenue and there would be no "loop". This one-way pair, would be tied into the rest of the local highway system in a way similar to that described for the "Recommended System".

The use of these two streets for carrying highway traffic was rejected because Franklin traverses a residential area. This system would not be as adequate as Alternate D for purposes of distributing traffic to the Central Business District and integrating with Urban Renewal plans.

Francis and Milwaukee One-Way Pair

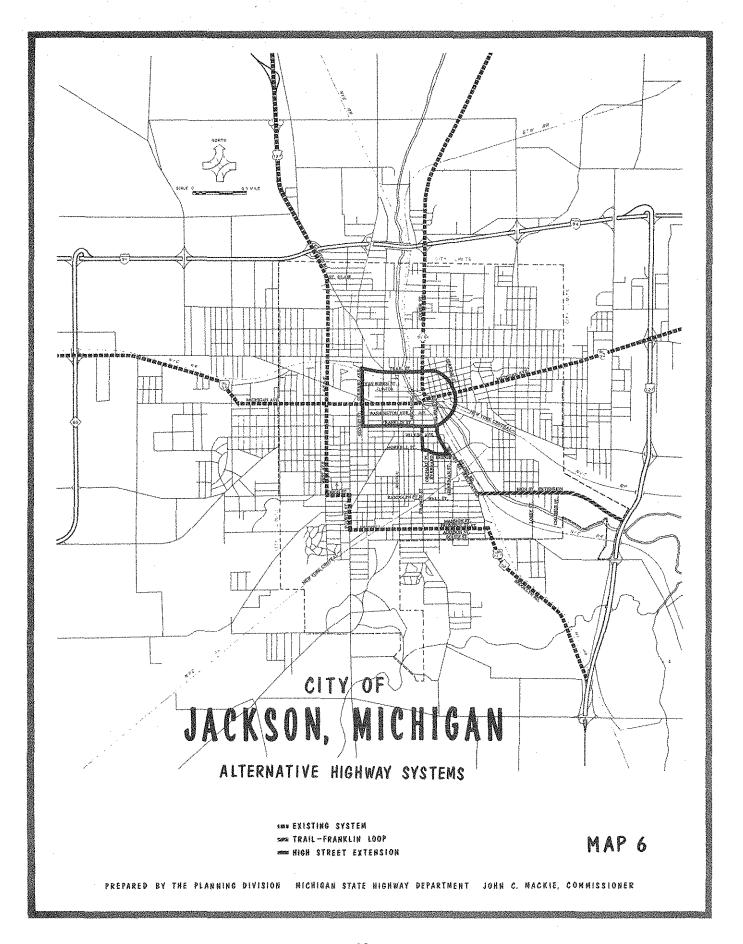
These two north-south streets would be used for US-127 BR and M-50 and would carry traffic as a one-way system south of the loop. Vehicles would be carried east to existing US-127 BR/M-50 at Belden or Brooklyn Road on a one-way pair comprised of Prospect and either Mansion, Addison or South Streets.

The Highway Department had considered using Francis and Milwaukee to distribute northsouth traffic because these streets would have provided more direct access to the Central Business District from the south than does present US-127 BR and would have been less expensive to use than would Belden Road. Both of these arteries; however, run through residential areas, involve greater travel distance than the Belden Road project, and conflict with Urban Renewal plans in the area south of the Central Business District.

Francis and Mechanic One-Way Pair

This alternate would operate as a one-way pair from Washington Avenue, which would be the southern side of the "loop", to Morrell Street, at which point the traffic on Mechanic would be routed east on Morrell to Francis. From Morrell south to a point near the south city limit, Francis would be used as a two-way street. Traffic would then be routed east to existing US-127 BR on a one-way pair similar to the one which would be employed for the Francis-Milwaukee one-way pair alternate.

A system using Francis and Mechanic as a one-way pair was discarded for several reasons. The underpass for the New York Central crossing at Mechanic Street is too low to permit adequate truck underclearance. An expensive grade separation would be required where the New York Central line crosses Francis between Randolph and Wall Streets. These streets would be carrying heavy volumes of traffic through residential areas south of the Central Business District. In addition, the use of these streets for carrying through traffic is inimical to proposed urban renewal plans.



SUMMARY

SUMMARY

The objectives established to guide the future highway plan for the City of Jackson include; aiding in the revitalization of the central business district, eliminating traffic circulation problems on Michigan Avenue, and providing the industrial areas of the city with major traffic facilities.

To satisfy these objectives, the Planning Division of the Michigan State Highway Department and local planning officials have formulated a recommended highway plan. This plan provides a one-way loop around the central business district which will increase the capacity of the present system and define and unify business activity within the loop. In addition to these important elements, the proposed plan provides direct access to the central business district from both the north and south. The southern approach, Belden Road, provides an important buffer strip between residential and industrial land uses besides serving the industrial area with a transportation facility. The northern approach, in addition to providing direct access to the central business district, reduces the amount of travel distance presently required to reach the central area.

The money programmed under the current five-year program is not enough to accomplish the entire recommended highway plan. For this reason a program for staging improvements was developed on the basis of available funds. These stages, together with the improvements to be made, are discussed in the following paragraphs:

STAGE

Included in this stage is the construction of relocated Belden Road and reconstruction of Milwaukee to form a continuous artery from Prospect Street to Michigan Avenue, with an operational connection of relocated Belden to Brooklyn Road, and construction of the northern portion of the loop from Michigan Avenue and Columbus west to Blackstone Street on Clinton Street. Blackstone will be used as a one-way street southbound to the southern portion of the loop. Washington Avenue will be the southern part of the loop from Blackstone to Otsego and will be extended from Otsego to Milwaukee Street. New construction on Otsego, from Washington to Milwaukee will become part of the highway system. Milwaukee—Ganson, from Michigan to Ganson and Ganson to Cooper, will be used to carry northbound M-106 traffic. Portions of the existing highway system to be abandoned in Stage I are those now on Michigan, between the east and west extremities of the Stage I loop, and south of Michigan on West, High, Fourth, and Prospect. Other parts of the existing system will remain in use, with Cooper, from Ganson to the north side of the Stage I loop, carrying traffic one-way southbound for M-106.

STAGE II

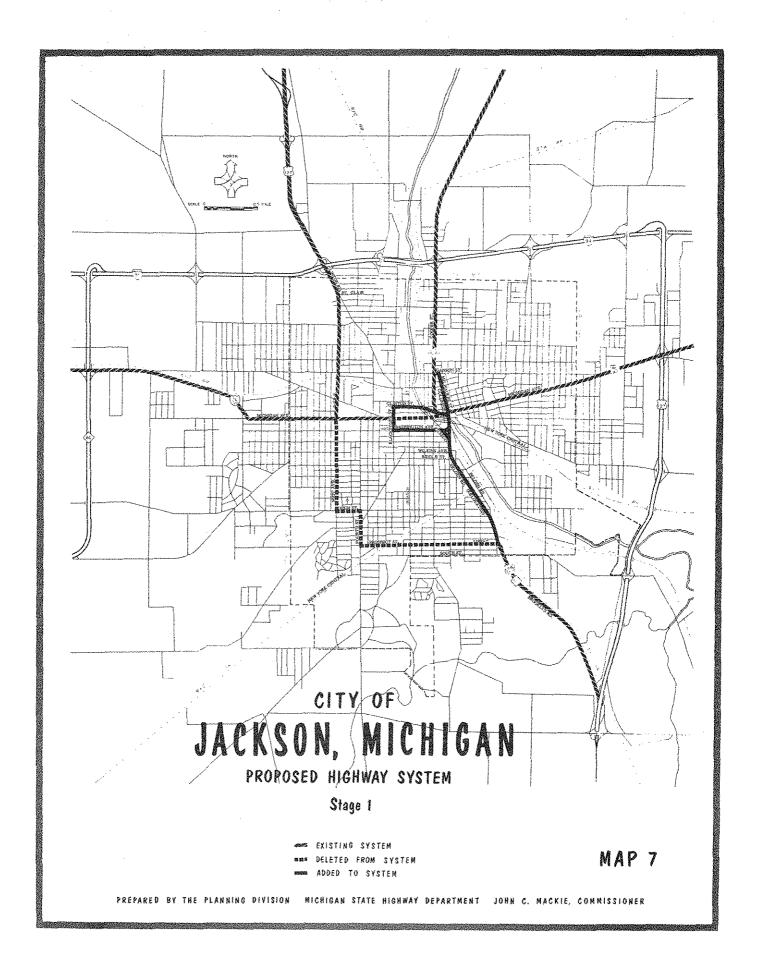
This stage of construction would complete the loop by extending Clinton Street and

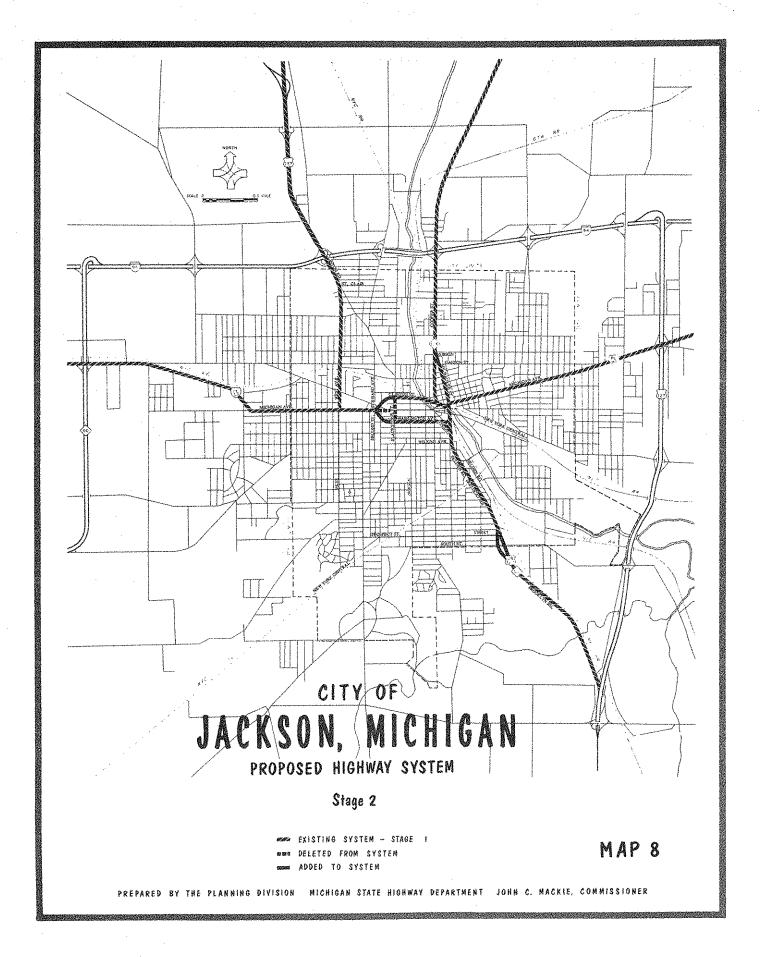
Washington Avenue from Blackstone to Michigan Avenue. Included in this stage will be the construction of an extension of Milwaukee Street north from Ganson to Cooper Street. This will permit smoother one-way operation of Milwaukee and Cooper. Also, the portions of Blackstone and Michigan within the Stage II loop, which were used as part of the highway system, are to be abandoned, and relocated Belden Road is to be extended from Prospect to South Street and swing back to Brooklyn Road in a southeasterly direction. This portion of Belden will carry southbound traffic and Brooklyn Road, from its southern merger with Belden north to Prospect, will carry northbound vehicles.

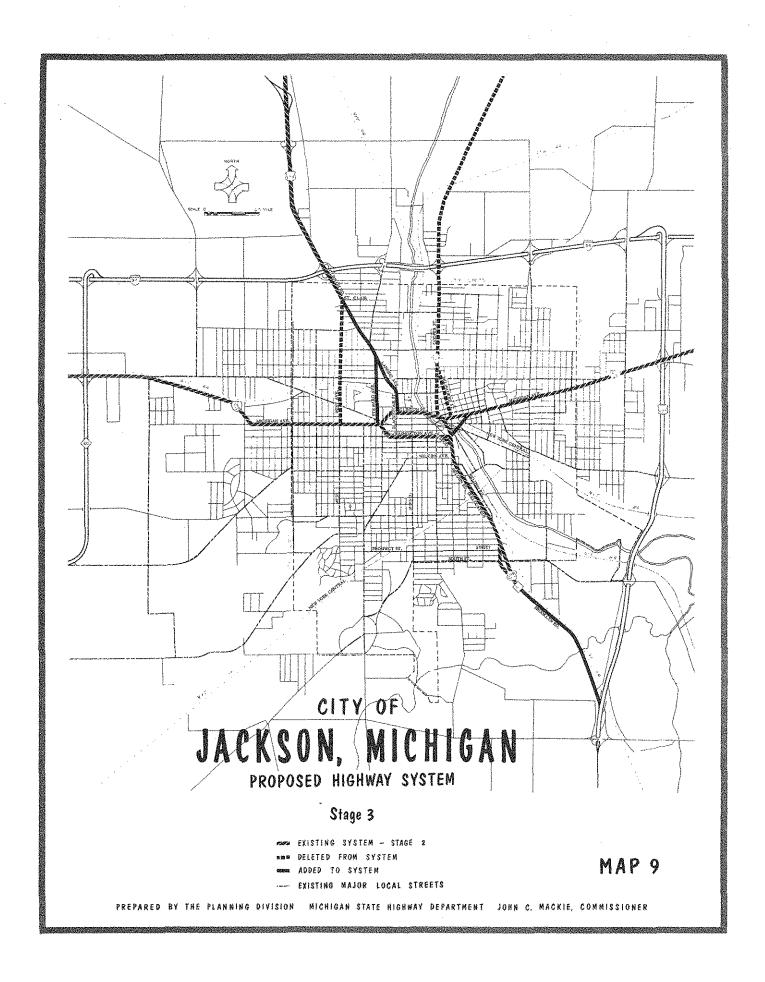
STAGE III

Several improvements in the highway system are included in this stage of development. The extension of Washington Avenue from Milwaukee northeast to Michigan Avenue at Perrine, via a bridge over The New York Central tracks, will provide a smooth and efficient flow of traffic on the southern portion of the loop. This stage will include the construction of an improved route for US-127 BR and M-50 on Belden Road between the merger of Belden and Brooklyn Roads south of the city limits, to the Brooklyn Road interchange. Improvements will be required on Clinton Road, Lansing Avenue, Steward Avenue, and Blackstone Street to complete the recommended transportation system. In addition, West Avenue, from Clinton Road south to Michigan, and Cooper and Milwaukee north of the Stage III loop, will be abandoned as part of the highway system.

For more detailed information on this highway system, the reader is invited to check the Engineering Report which has been prepared by the Route Location Division of the Michigan State Highway Department.







OFFICE MEMORANDUM



October 10, 1962

File: 38000 C-30 (2)

TO:

R. S. Boatman, Director

Planning Division

FROM:

H. H. Cooper, Director

Traffic Division

SUBJECT:

Traffic Division Review of Proposed State Highway Plan for Jackson

We have reviewed the recommended Highway Plan for Jackson. We believe implementation of the plan will provide for greatly improved operation on the trunkline system in Jackson as well as providing capacity for future increases in traffic volumes in the City.

Completion of Stage III of the I-94 business loop in the central business district will provide a smoother and quicker path for vehicles not having a destination in the central area and at the same time will allow for better and more attractive access into the central area for those vehicles who may have a destination in the central area. An additional benefit is that vehicular and pedestrian traffic within the central area will no longer be intermixed with through arterial traffic. We would caution that in Stage I, the four right-angle turns for trunkline traffic at Blackstone will deter from the attractiveness of the proposed loop. In addition, the heavy pedestrian volumes at the Blackstone-Michigan Avenue intersection intermixed with the through and turning vehicular traffic at this intersection will result in an undesirable situation at those times when pedestrian and vehicular traffic is at a peak. While backups or serious delays could result, we are hopeful that by negative control techniques such as re-routing pedestrian traffic or closing crosswalks, the potential problem at this location can be minimized.

Completion of the M-106 and US-127 BR-M-50 project along Milwaukee and Cooper and along Belden will provide an attractive north-south trunkline and arterial facility through the City of Jackson. The lack of a continuous north-south facility in the City of Jackson has long been evident. The proposed facilities will accommodate this need and in addition will serve many existing and future industries almost directly. An important benefit of the proposed facility will be to relieve many residential streets of truck traffic. There has long been a problem in the City of Jackson in that truck traffic with origins or destinations within the City has been forced to use make-do arterial and trunkline facilities. This is, of course, undesirable from both the standpoint of the truckers and from the standpoint of those living in the affected areas.

H. H. Cooper, Director Traffic Division

HHC:HMH:mli

cc: G. F. Baker

GITY OF JACKSON



MICHIGAN

UNDER COMMISSION-MANAGER GOVERNMENT

DFFICE OF EVERETT D. DATTELL DITY DLERK

CS #38082-83 38031-72

BY THE CITY COMMISSION:

BE IT THEREFORE RESOLVED, that the proposal by the Michigan State Highway Department for the alignment of I-94 BL, US-127 BR, and M-50 in and through the City of Jackson, all as set forth in a map of said alignment attached hereto, hereby is approved on October 30, 1962.

THE DESCRIPTION OF THE JOINT ALIGNMENT is as follows:

US-127 BR and M-50, beginning at the south City Limits; thence northerly to Prospect Street on Brooklyn Road and Belden Road as one-way streets; thence northerly on Belden Road to Damon Street; thence northwesterly on new location to Milwaukee at Wilkins Street; thence northerly on Milwaukee to Otsego; thence northerly on Milwaukee and Otsego as one-way streets to the Central Business District I-94 Loop; thence along X-94 BL to West Avenue at Michigan Avenue; thence north on existing US-127 B2 and M-50.

The Central Business District I-94 Loop, a part of the above route is as follows: Beginning at the junction of Michigan Avenue and Second Street; thence one-way southeasterly on relocation to Washington Avenue, east on Washington Avenue to Otsego; thence on relocation from Otsego to Milwaukee at Water Street; thence north on Milwaukee to Michigan Avenue; thence westerly on Michigan Avenue to the southwest side of the New York Cennal Railroad; thence northwesterly on new location to Clinton Street, west on Clinton, and Clinton extended southwesterly to Steward (extended) at Michigan, existing 1-94 BL, the point of beginning. During the interim period to the above stage, Blackstone between Clinton and Washington Avenue will be signed a part of the Business Loop. To coordinate the one-way movements on the Business Loop, N-106 from Michigan to Ganson will operate as a one-way pair on Milwaukee and Cooper Streets.

AND, BE IT FURTHER RESOLVED, that the City of Jackson hereby grants the Michigan State Highway Department permission to take over and designate this route as part of the State trunkline system.

State of Michigan) County of Jackson) ss. City of Jackson

I, Rverett D. Cattell, Clerk in and for the City of Jackson, County and State aforesaid, do hereby certify that the foregoing is a true and compared copy of a resolution adopted by the City Commission of the City of Jackson, Michigan on October 30, 1962, by the following vote: Yeas: Comms. Havens, Moble, Rogalski, Spaeth, Steensma, Wright, and Mayor Magiera-7. Nays: O. Absent: Comms. Commay and Hutchies-2.

IN WITNESS WHEREOF, I have hereunder affixed my signature and the seal of the City of Jackson, Michigan this 31st day of October, 1962.

Eneretto Cattell City CLERK

HIGHWAY DEPARTMENT

STEVENS T. MASON BUILDING

LANSING 26

JOHN C. MACKIE + COMMISSIONER

HOWARD E. HILL MANAGING DIRECTOR

JOHN E. MEYER

DIRECTOR

FOR ENGINEERING

FREDERICK E. TRIPP

DIRECTOR

FOR ADMINISTRATION

ERRATA SHEET FOR JACKSON STATE HIGHWAY PLAN

Page 14 FUTURE POPULATION

Second sentence should read:

"Area population trends, shown in Table 5"

Footnote should be numbered 3 rather than 4.

Page 15 TABLE 5

First line of the source reference under Table 5 should read:

"A-C J.F. Thaden"

Page 17 FUTURE TRAFFIC VOLUMES

Second sentence of the first paragraph should read:

"The 1982 traffic flow projections for the recommended city highway loop system (see Alternate D1 in the Analysis Section), made by the Traffic Division of the Michigan State Highway Department, are shown by the map on page 18."

Page 18 MAP 5

Complete title of this map is:

"City of Jackson, Michigan 1982 Traffic Volumes"

Page 28 MAP 6

Correct the legend by reversing the patterns representing the "Trail-Franklin Loop" and the "High Street Extension."

