Relationship Between Downtown Automobile-Parking Conditions and Retail-Business Decentralization

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This report includes three pieces of research, each of which lends a different but kindred approach to the basic problem of determining the relationships of automobile parking to retail sales in the central marketing area and the degree to which parking problems may be responsible for movement of business to suburbs.

The first study investigates the trend in relative importance of retailing activities in the central business district of the Detroit metropolitan area. An analysis was made of the statistical data from the 1939 and 1948 Censuses of Business, which pertain to retail sales volume and number of retail establishments in the downtown district, the remainder of the city, and outlying suburban areas. Together with this retailing pattern, for the same period, several relevant transportation factors were examined, such as automobile ownership, use of public transit, and population movements.

The second phase, by means of mail questionnaires to a national sample of department stores, discloses the relative extent to which recognition of parking difficulties downtown has influenced decisions by retailing executives to establish suburban branch stores.

Through depth interviews and questionnaires directed to businessmen and officials in selected Michigan cities of various population size, the final study attempts to measure the degree of participation of downtown merchants in efforts to relieve the parking shortage in their communities, whether by direct contribution, personal efforts, or adjustments in retailing techniques.

Downtown Automobile Parking and Retail-Business Decentralization: A Case Study of the Detroit Area

OBJECTIVES

●A great deal of the interest in the relationship between business and automobile-parking facilities has been oriented toward conditions that exist in the central business district of a city. Origin-and-destination studies of automobile traffic frequently conclude that parking facilities are poorest where they are most needed—in the highly concentrated downtown shopping district. The belief is frequently expressed that, as a result of these conditions, downtown business is declining in importance relative to areas of the community where more parking space is available either free or at a lower cost to the automobile driver.

The objective of this phase of the total study was an attempt to gauge the performance of the downtown section of Detroit in terms of number of retail establishments and their sales volume over a 10-year interval, as compared with that of the balance of the city and that of several communities near but outside the city limits of Detroit.

It was also desired to obtain data concerning the

automobile parking facilities serving downtown Detroit during this period, in order to measure changes in the total supply and to observe the pattern of these changes during the period of study.

In order to place the specific objectives in proper perspective, it was felt necessary to include analyses of changes in automobile ownership, the nature and usage of public transportation, and the decentralization of population residence in the Detroit area. The parking problem may be viewed as an acute result of changes in these three variables, together with little or no change in the amount of storage space available for privately owned cars. If a relationship between automobile parking and retail business is discovered, it will be useful to have in mind the influence of these causal factors, as well as evidences of inadequate downtown parking facilities.

PROCEDURES

In order to determine the magnitude of possible changes in the retailing importance of the central business district of Detroit, it was necessary to isolate the area from the rest of the city geographically. Investigation of published articles and studies dealing with downtown Detroit soon disclosed that definitions of the boundaries varied from one report to another. Since consistency in the area studied was necessary if reliable intertemporal comparisons were to be made, the first problem was to obtain boundaries which could be held constant over a time span of reasonable duration. Secondly, it would be necessary to collect the data on a consistent basis with respect to business firm composition of the downtown area.

The first requirement could have been met through arbitrarily delineating a central business district by street boundaries for two selected periods, preferably a prewar year and one in the recent past. This approach would have had the advantage of allowing specific determination of only the area which was desired. But it would have raised a problem of data collection because of the time span to be covered. If an attempt had been made to represent the performance of the central business district by comparison of the number of establishments and their sales volumes in a sharply delimited area sample of firms, the most direct approach for recent data would have been personal interviews with management of the stores doing business at the time of the study. But information with respect to prewar sales could have been obtained only from those firms in the sample which had been in existence for the entire period for which data were desired. Moreover, there would have been no direct evidence on the number of stores doing business in the earlier years. Even though the growth in sales volume for the stores remaining in the area might have been at a rate less than that for the total city and suburban areas, they would have been successful enough to have still been in business. Reliance upon the sales history of these firms overlooks the point that much of the retail decentralization of the central business district which may have occurred may have been accounted for by discontinued operation of stores which were in existence at the start of the period. If the replacement rate of new firms were less than the rate of movement away from the downtown district on the part of stores in existence at the earlier date (selected as a basis for comparison), a serious bias would have been introduced into any sample of the experience of those stores which remained for the entire period. This is true not only for the number of establishments but also for the types of merchandise lines that would have been represented.

It was desirable, therefore, to obtain a source of aggregate data of sales and establishments which would

have been compiled during the years in which the component firms had actually been on the scene in downtown Detroit. There was also the problem of data availability, even for current stores, under the directsampling approach. Obtaining the coöperation of merchants would have been a time-consuming task, at best, and there would have been some question of the reliability of the classification of the earlier figures that would have been released.

Consideration of these factors led to the decision to employ data which had been collected by the U.S. Bureau of the Census for Detroit in 1939 and 1948. Although this approach promised reasonable consistency with respect to the inclusion of the diverse stores actually within an area at the time of the census, it raised the problem of accurate delimitation of the central business district. Most major American cities have been divided into census tracts by local committees of interested representatives of business, government, and civic organizations. A primary objective of this activity has been to facilitate social and economic analysis of geographically small areas within the political boundaries of the municipality for which data has been collected by the Bureau of the Census. Due regard has been shown by the committees establishing census tract boundaries for the importance of historical comparisons; borders are created as relatively permanent fixtures in the demographic framework of the city. Moreover, the tract areas are designed to include population groups fairly homogeneous in characteristics, reasonably uniform in size, and are planned to recognize natural barriers with respect to boundaries.

Adherence to these principles, however, does not guarantee precise suitability for every study which desires to make use of the economic data collected by the Bureau of the Census. Examination of the pattern of store location in downtown Detroit showed that the heart of the central business district was contained in three tracts which extended far enough to include retailing operations different from those conducted in the center of the total area which their borders included. This situation constituted a difficulty in any attempt to define downtown Detroit precisely in terms of census tracts. It could not have been overcome by efforts to have data tabulated for only parts of the census tracts because nondisclosure requirements of the Bureau of the Census would have resulted in the omission of information for too many kinds-of-business classifications.

Despite this limitation, it was decided to proceed by utilizing retail data collected by census tracts in Detroit because the approach seemed to present the fewest difficulties of the possible alternatives. On the positive side, data had been collected by the same agency for years (1939 and 1948) that were suitable from the time viewpoint of the study, this information had been gathered for Detroit in its entirety and for incorporated communities of over 2,500 population that were in the position of being suburban alternatives to shopping in downtown Detroit, and the data could be obtained for specific tracts (through arrangements with the Bureau of the Census) that at least encompassed only the general downtown district of Detroit. The major shortcoming was, as outlined above, the failure of the downtown tracts to delineate the area finely enough, but a partial offset to this was the fact that the same excess area was included in each year's tabulation for the three tracts. Accordingly, the desired information was obtained for Tracts 1, 33, and 530 of the city of Detroit.¹ These data were reported by ten major kinds-ofbusiness classifications.

Information concerning the automobile-parking facilities serving the central business district of Detroit was obtained from two comprehensive studies dealing with this question and from personal interviews with officials of the city's Traffic Engineering Bureau. The first of the two publications dealt with conditions existing in downtown Detroit in 1936, the second with the situation prevailing in 1944. Data contained in these studies were based on first-hand inventories of off-street parking space in lots and garages. These surveys provided factual information for the specific years with which they were concerned and served as reference points for estimates of the facilities in existence in 1939 and 1948, the dates for which retail census data had been obtained.

Statistical information enumerating noncommercial passenger automobile registrations in Wayne County, Detroit, and five cities considered suburban to Detroit was obtained from the R. L. Polk Company, a firm specializing in the collection and tabulation of this type of data. The information dealt with the years 1936, 1939, 1940, 1944, 1948, and 1950.

Published reports and personal interviews with management personnel of the Department of Street Railways of Detroit were employed to gather material concerning the patronage, service, revenues, and costs of public transportation service in the city. Probably one of the clearest indicators of the origin of the traffic congestion and parking difficulties common to the central business districts of many large American cities is a computation known as the public-transportation-riding habit. The riding habit for a given year is determined by dividing the total number of revenue rides purchased in the total area served by public transit by the number of inhabitants in that area during the period. An average figure of annual rides per capita is obtained through this process. The figure does not, of course, provide information on distance traveled, qualitative characteristics of the patronage, or any of the data disclosed by origin-and-destination studies of passenger transportation. Nevertheless, it has been found to be inversely related to trends in automobile ownership over several years and as a measure of shifts in patronage for public transportation, outlines changing conditions which have contributed to automobile parking difficulties.

Statistical data showing the growth in population in Wayne County, Detroit, and the five suburban communities included in the study were obtained from the 1940 and 1950 population censuses. Analyses of population changes within Detroit between 1940 and 1950 were utilized to depict the extent and direction of population residence decentralization.

RESULTS

Tables 1 through 10 contain statistical information dealing with retail sales and the number of retail establishments in Detroit and in five selected nearby communities for the years 1939 and 1948. Because data were obtained for the three census tracts referred to earlier, it was possible to compare the retailing performance of the downtown area with that of the balance of the city, as well as with the total city figures and the data for the selected suburban areas.

Table 1 shows that by 1948 Detroit had lost a total of about 8 percent of the number of retail establishments which were doing business in 1939. This decline was not distributed evenly throughout the kinds-ofbusiness classification, however, for the sharp cut-backs in the number of firms engaged in selling food, general merchandise, and gasoline were offset partially by relatively large increases in the furniture-and-appliances group and in the automotive classification.

The increase in total dollar sales in Detroit from 1939 to 1948 in the ten kinds-of-business reported was over two-fold. An index of 1948 sales dollars relative to 1939 as a base of 100 shows a figure of more than 313. Although every line of business had at least doubled its dollar sales by 1948, gains were distributed in a manner

³ A classification problem had to be solved for census-tract data dealing with retail sales and establishments in Detroit in 1939. This information had not been tabulated by the Bureau of the Census by tracts. It was necessary, therefore, to proceed by determining the street addresses within the three tracts and then assigning address cards (for retail firms which had been counted in the 1939 census) to this area. The subsequent tabular data prepared by the Bureau of the Census constituted an aggregate for Tracts 1, 33, and 530. This procedure was not necessary for 1948 data, although they were also reported on an aggregate basis. The boundaries of tracts 1, 33, and 530 are shown in Figure 2.

that found the automotive group moved up from its third ranking position (behind food and general merchandise) in 1939 to second in 1948. Apparel sales were fourth in total dollar volume in both years, general merchandise declined from second to third, and the furniture-and-appliance group moved from tenth to seventh position. of total 1948 sales as compared with a figure of 32.6 percent in 1939.

The information in Table 3 shows data for only the three downtown census tracts used in the study. There was a loss in the number of establishments doing business in every category with the exception of a gain of one store in the furniture-and-appliances group. Every

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RETAIL	ESTABLISHMENTS	AND	SALES	BY	Kinds	OF	BUSINESS,	DETROIT,	MICHIGAN,	1939	AND	1948
		(1	Data for	sa	les are i	n ti	housands of	dollars)				

		S	tores		Sales			
Kind of Business		1948	Change	1948 Data Relative to 1939	1939	1948	Change	1948 Data Relative to 1939
Food Group.	7,269	5,562	-1,707	76.5	\$131,413	\$430,445	\$299,032	327.6
Eating and Drinking Places	4,028	4,062	34	100.8	53,420	177,747	124,327	332.7
General Merchandise Group	423	355	-68	83.9	121,206	346,845	225,639	286.2
Apparel Group	1,485	1,518	33	102.2	66,686	188,664	121,978	282.9
Furniture and Appliances	510	856	346	167.8	29,444	100,436	70,992	341.1
Automotive Group	476	666	190	139.9	94,764	414,306	319,542	437.2
Gasoline Service Stations.	1,873	1,578	-295	84.2	37,539	83,204	45,665	221.6
Lumber and Hardware	650	726	76	111.7	38,938	99,768	60,830	256.2
Drug and Proprietary Stores	861	802	-59	93.1	32,043	93,972	61,929	293.3
All Öther Retail Stores	2,269	2,117	-152	93.3	60,112	149,361	89,249	248.5
Total	19,844	18,242	-1,602	91.9	\$665,565	\$2,084,748	\$1,419,183	313.2

SOURCE: Sixteenth Census of the United States, 1940, Census of Business, Vol. I, Part 3, Retail Trade: 1939, p. 334 and United States Census of Business, 1948, Vol. III, Retail Trade, p. 21.33.

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	Sto	ores	Sales		
Kind of Business	1939 % of Total	1948 % of Total	1939 % of Total	1948 % of Total	
Food Group	36.6	30.5	19.7	20.6	
Eating and Drinking Places	20.3	22.3	8.0	8.5	
General Merchandise Group	2.1	1.9	18.2	16.6	
Apparel Group	7.5	8.3	10.0	9.0	
Furniture and Appliances	2.6	4.7	4.4	4.8	
Automotive Group	2.4	3.7	14.2	19.9	
Gasoline Service Stations	9.4	8.7	5.6	4.0	
Lumber and Hardware	3.3	4.0	5.9	4.8	
Drug and Proprietary Stores	4.3	4.4	4.9	4.5	
All Öther Retail Stores	11.5	11.6	9.1	7.3	
Total	100.0	100.0	100.0	100.0	

TABLE 2 PERCENTAGE DISTRIBUTION OF RETAIL ESTABLISHMENTS AND SALES BY KINDS OF BUSINESS, DETROIT, MICHIGAN, 1939

SOURCE: Computed from data published by the U. S. Bureau of Census.

Table 2 shows the percentage distribution of establishments and sales in Detroit during 1939 and 1948. The impact of automobile sales is clearly indicated here as this group accounted for almost a fifth of total retail sales in Detroit in 1948 as compared with only 14 percent in 1939. At the same time, the combined performance of the GAF groups (general merchandise, apparel and furniture and appliances) totaled only 30.4 percent group in the downtown area showed an increase in dollar sales except the automotive classification. Decentralization of this type of enterprise is clearly evidenced by a decline in number of firms from a 1939 figure of seven to a total of two in 1948. And although every category (except automotive) showed a sales increase for 1948, the relative gains were almost uniformly less than those experienced by the same categories in the balance of the city.

Table 4 discloses the shifting importance of the different kinds-of-business groups in downtown Detroit as general-merchandise sales constitute an even larger proportion (52.6 percent) of the total dollar volume transacted downtown in 1948 than they amounted to (50.3 percent) in 1939.

However, Table 5 shows the declining dominance of the downtown area relative to the entire city's retail sales. In 1939, the area enclosed by Tracts 1, 33, and 530 accounted for a total of 26.1 percent of total Detroit retail sales in the kinds-of-business groups reported. By 1948 this had fallen to a figure of 20.4 percent. Moreover, this decrease had been taking place in the GAF classifications, traditionally the shopping goods strongholds of the central business district. The greatest drop occurred in the furniture-and-appliances group. This classification indicated that downtown

RETAIL ESTABLISHMENTS AND SALES BY KINDS OF BUSINESS, CENSUS TRACTS 1, 33, AND 530 OF DETROIT, 1939 AND 1948

(Data for sales are in thousands of dollars)

-		Sto	ores		Sales			
Kind of Business		1948	Change	1948 Data Relative to 1939	1939	1948	Change	1948 Data Relative to 1939
Food Group	83	74	-9	89.2	\$2,597	\$9,189	\$6,592	353.8
Eating and Drinking Places	317	268	-49	84.5	9,854	26,052	16,198	264.4
General Merchandise Group	24	19	-5	79.2	87,458	224,300	136,842	256.5
Apparel Group	379	299	-80	78.9	39,801	99,718	59,917	250.5
Furniture and Appliances	49	50	1	102.0	10,967	17,508	6,541	159.6
Automotive Group	7	2	-5	28.6	1,394	622	-772	44.6
Gasoline Service Stations	- 24	15	-9	62.5	- 389	575	186	147.8
Lumber and Hardware	9	7	-2	77.8	218	1,805	1,587	828.0
Drug and Proprietary Stores	36	27	-9	75.0	6,292	10,994	4,702	174.7
All Other Retail Stores	358	312	-46	87.2	14,904	35,525	20,621	238.4
Total	1,286	1,073	-213	83.4	\$173,874	•\$426,288	\$252,414	245.2

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Source: Computed from special tabulations obtained from the U.S. Bureau of the Census.

TABLE 4

Percentage Distribution of Retail Establishments and Sales by Kinds of Business in Census Tracts 1, 33, and 530 of Detroit, 1939 and 1948

	Sto	res	Sales		
Kind of Business	1939 % of Total	1948 % of Total	1939 % of Total	1948 % of Total	
Food Group	6.4	6.9	1.5	2.2	
Eating and Drinking Places	24.6	24.9	5.7	6.1	
General Merchandise Group	1.9	1.8	50.3	52.6	
Apparel Group	29.4	27.9	22.9	23.4	
Furniture and Appliances	3.8	4.7	6.3	4.1	
Automotive Group	0.5	0.2	0.8	0.1	
Gasoline Service Stations	1.9	1.4	0.2	0.1	
Lumber and Hardware	0.7	0.7	0.1	0.4	
Drug and Proprietary Stores.	2.9	2.5	3.6	2.6	
All Öther Retail Stores	27.9	29.0	8.6	8.4	
Total	100.0	100.0	100.0	100.0	

SOURCE: Computed from special tabulations obtained from the U. S. Bureau of the Census.

TABLE 5

RETAIL ESTABLISHMENTS AND SALES BY KINDS OF BUSINESS, CENSUS TRACTS 1, 33, AND 530, EXPRESSED AS PERCENTAGES OF TOTAL CITY DATA, DETROIT, 1939 AND 1948

Kind of Business		ores	Sales		
Kind of Business	1939	1948	1939	1948	
Food Group	1.1	. 1.3	2.0	2.1	
Eating and Drinking Places	7.9	6.6	18.4	14.7	
General Merchandise Group	5.7	5.4	72.2	64.7	
Apparel Group	25.5	19.7	59.7	52.9	
Furniture and Appliances.	9.6	5.8	37.3	17.4	
Automotive Group	1.5	0.3	1.5	0.2	
Gasoline Service Stations	1.3	1.0	1.0	0.7	
Lumber and Hardware	1.4	1.0	0.6	1.8	
Drug and Proprietary Stores	4.2	3.4	16.2	11.7	
All Other Retail Stores	15.8	14.7	24.8	23.8	
All Groups	6.5	5.9	26.1	20.4	

SOURCE: Computed from special tabulations obtained from the U. S. Bureau of the Census.

stores were obtaining 37.3 percent of the total furnitureand-appliance business of Detroit in 1939 but only 17.4 percent in 1948. Although the downtown general-merchandise group obtained almost 65 per cent of total city sales in this category in 1948, it also declined from its 1939 share of over 72 percent. More than half (53 percent) of Detroit's apparel business was transacted downtown in 1948, but in 1939 this figure had stood at almost 60 percent of the city's total.

Using data from Tables 3 and 6, it can be shown that in 1939 the aggregate downtown sales volume in the GAF groups of Detroit was 75 percent higher than sales in these categories in the balance of the city. Total GAF sales downtown in 1939 were \$138,226,000: the balance of the city obtained \$79,110,000. In 1948 downtown GAF volume was \$341,526,000. But the balance of the city had sales increases in these categories which raised its figure to \$294,419,000. Therefore, by 1948, downtown GAF business exceeded that of the rest of Detroit's stores in these groups by only 16 percent.

If the data for the furniture-and-appliances group is excluded from the analysis shown above, the continued dominance of downtown stores in general merchandise and apparel is reflected. But even in these two categories the balance of the city had improved its position to such an extent by 1948 that downtown sales were only 53 percent greater than those for the rest of Detroit, instead of the 1939 comparison showing a differential of 110 percent in favor of stores in the central business district.

Tables 9 and 10 provide information concerning the retail establishments and sales in five Michigan communities either adjacent to or no more than 2 mi. from the city limits of Detroit. Examination of the 1948 TABLE 6

RETAIL ESTABLISHMENTS AND SALES BY KINDS OF BUSINESS, DETROIT, LESS CENSUS TRACTS 1, 33, AND 530, 1939 AND 1948

(Data)	for	sales	are	in	thousands	of	dollars)
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		S	tores		Sales			
Kind of Business		1948	Change	1948 Data Relative to 1939	1939	1948	Change	1948 Data Relative to 1939
Food Group	7.186	5,488	-1.698	76.4	\$128,816	\$421.256	\$292,440	327.0
Eating and Drinking Places	3,711	3,794	83	102.2	43,566	151,695	108,129	348.2
General Merchandise Group.	399	336	-63	84.2	33,748	122,545	88,797	363.1
Apparel Group	1,106	1,219	113	110.2	26,885	88,946	62,061	330.8
Furniture and Appliances	461	806	345	174.8	18,477	82,928	64,451	448.8
Automotive Group	469	664	195	141.6	93,370	413,684	320,314	443.1
Gasoline Service Stations.	1,849	1,563	-286	84.5	37,150	82,629	45,479	222.4
Lumber and Hardware	641	719	78	112.2	38,720	97,963	59,243	253.0
Drug and Proprietary Stores	825	775	-50	93.9	25,751	82,978	57,227	322.2
All Öther Retail Stores	1,911	1,805	-106	94.5	45,208	113,836	68,628	251.8
Total	18,558	17,169	-1,389	92.5	\$491,691	\$1,658,460	\$1,166,769	337.3

SOURCE: Computed from published data and special tabulations obtained from the U.S. Bureau of the Census.

TABLE 7

PERCENTAGE DISTRIBUTION OF RETAIL ESTABLISHMENTS AND Sales by Kinds of Business, Detroit, Less Census Tracts 1, 33, and 530, 1939 and 1948

	Sto	ores	Sales		
Kind of Business	1939 % of Total	1948 % of Total	1939 % of Total	1948 % of Total	
Food Group	38.7	32.0	26.2	25.4	
Eating and Drinking Places	20.0	22.1	8.9	9.1	
General Merchandise Group	2.2	2.0	6.9	7.4	
Apparel Group	6.0	7.1	5.5	5.4	
Furniture and Appliances	2.5	4.7	3.8	5.0	
Automotive Group	2.5	3.9	19.0	24.9	
Gasoline Service Stations	10.0	9.1	17.6	5.0	
Lumber and Hardware	3.5	4.2	7.9	5.9	
Drug and Proprietary Stores.	4.4	4.5	5.1	5.0	
All Öther Retail Stores	10.2	10.4	9.1	6.9	
Total	100.0	100.0	100.0	100.0	

SOURCE: Computed from published data and special tabu-ations obtained from the U. S. Bureau of the Census.

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RETAIL ESTABLISHMENTS AND SALES BY KINDS OF BUSINESS, DETROIT, LESS CENSUS TRACTS 1, 33, AND 530, EXPRESSED AS PERCENTAGES OF TOTAL CITY DATA, 1939 AND 1948

Vind of Pusinger	Ste	ores	Sales		
Kind of Business	1939	1948	1939	1948	
Food Group	98.9	98.7	98.0	97.9	
Eating and Drinking Places	92.1	93.4	81.6	85.3	
General Merchandise Group	94.3	94.7	27.8	35.3	
Apparel Group	74.5	80.3	40.3	47.1	
Furniture and Appliances	90.4	94.2	62.8	82.6	
Automotive Group	98.5	99.7	98.5	99.9	
Gasoline Service Stations	98.7	99.1	99.0	99.3	
Lumber and Hardware	98.6	99.0	99.4	98.2	
Drug and Proprietary Stores	95.8	96.6	83.8	88.3	
All Öther Retail Stores	84.2	85.3	75.2	76.2	
All Groups	93.5	94.1	73.9	79.6	

SOURCE: Computed from published data and special tabulations obtained from the U.S. Bureau of the Census.

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RETAIL ESTABLISHMENTS AND SALES BY KINDS OF BUSINESS, AGGREGATE OF FIVE COMMUNITIES^a IN DETROIT METROPOLITAN AREA, 1939 AND 1948

(Data for sales in thousands of dollars)

		Stores Sales					les	
Kind of Business	1939	1948	Change	1948 Data Relative to 1939	1939	1948	Change	1948 Data Relative to 1939
Food Group	533	475	-58	89.1	\$15,047	\$58,011	\$42,964	385.5
Eating and Drinking Places	276	336	60	121.7	4,119	15,007	10,888	364.3
General Merchandise Group	42	45	3	107.1	7,070	36,254	29,184	512.8
Apparel Group	128	184	56	143.8	3,776	17,333	13,557	459.0
Furniture and Appliances	46	121	75	263.0	2,263	12,455	10,192	550.4
Automotive Group	68	110	42	183.3	10,849	57,992	47,143	534.5
Gasoline Service Stations	238	232	-6	97.5	4,443	13,547	9,104	304.9
Lumber and Hardware	63	100	37	158.7	3,820	13,540	9,720	354.5
Drug and Proprietary Stores	67	62	-5	92.5	2,765	8,657	5,892	313.1
All Öther Retail Stores	190	244	54	128.4	6,879	13,764	6,885	200.1
Total	1,651	1,909	258	115.6	\$ 61,031	\$ 246,560	\$ 185,529	404.0

^a Dearborn, Ferndale, Lincoln Park, Royal Oak, and Wyandotte.

Source: Sixteenth Census of the United States, 1940, Census of Business, Vol. I, Part 3, Retail Trade: 1939, p. 528; and United States Census of Business, 1948, Vol. III, Retail Trade, p. 21.33-21.38.

Census of Business revealed many small cities near Detroit that logically could have been included in an analysis which aimed at discovering changes in the pattern and magnitude of retail business on the periphery of Detroit's corporate limits. When these communities were investigated with respect to 1939 data, however,

 TABLE 10

 Percentage Distribution of Retail Establishments and Sales by Kinds of Business, Aggregate of Five Communities^a in Detroit Metropolitan Area, 1939 and 1948

	Sto	ores	Sales		
Kind of Business	1939 % of Total	1948 % of Total	1939 % of Total	1948 % of Total	
Food Group	32.3	24.9	24.7	23.5	
Eating and Drinking Places	16.7	17.6	6.8	6.1	
General Merchandise Group	2.5	2.4	11.6	14.7	
Apparel Group	7.8	9.6	6.2	7.0	
Furniture and Appliances	2.8	6.3	3.7	5.1	
Automotive Group	4.1	5.8	17.8	23.5	
Gasoline Service Stations	14.4	12.2	7.3	5.5	
Lumber and Hardware	3.8	5.2	6.3	5.5	
Drug and Proprietary Stores	4.1	3.2	4.4	3.5	
All Öther Retail Stores	11.5	12.8	11.2	5.6	
Total	100.0	100.0	100.0	100.0	

^a Dearborn, Ferndale, Lincoln Park, Royal Oak, and Wyandotte.

SOURCE: Computed from data published by the U. S. Bureau of the Census.

it was found that in many cases there had been so few firms engaged in certain lines of retailing in the earlier year that information had been withheld by the Bureau of Census in order to avoid disclosing identity of the stores for which data had been collected. Total retailsales volume was usually provided as well as totals for the number of establishments. However, in order to maintain consistency in the overall analysis which proceeded by major kinds-of-business groups, it was decided to select those cities of a suburban nature (relative to Detroit) for which information was available in terms of merchandise categories.

Accordingly, 1939 and 1948 data were selected from census reports of retail trade in the five Michigan communities of Dearborn, Ferndale, Lincoln Park, Royal Oak, and Wyandotte. Their locations relative to Detroit are shown in Figure 1.

In order to facilitate comparisons with changes in the number and sales volume of retail establishments in Detroit (downtown and the balance of the city), it was decided to express the data for the five suburban communities as an aggregate figure. Thus, the performances indicated in Table 9 are representative of the total number of stores and their sales volume in each kindof-business group for all five of the cities for which data had been obtained. Since the principal point of interest in this analysis was the question of location relative to Detroit and its central business district, the data for the five communities were intended to be basically a sample of retailing experience which had this characteristic in common.



Figure 1. Location of five suburban communities relative to Detroit.

Table 9 shows that the five communities had almost a 16 percent increase in the total number of stores doing business between the years 1939 and 1948. Tables 1, 3, and 6, on the other hand, indicate that the total number of stores in the entire city of Detroit declined by about 8 percent, those in downtown Detroit by almost 17 percent, and those in the balance of the city by over 7 percent. There were some decreases in the number of establishments in the five suburban communities. However, they were confined to the food, drug, and gasoline-service-station kind of business and were relatively slight even in these instances. The furniture-and-appliances group in the outlying cities showed the greatest increase in number of establishments both in absolute and relative terms and in sales volume on a relative basis. The performance of this group outside the city was in marked contrast to downtown experience and paralleled the pattern in the balance of Detroit.

Taking the GAF categories as a whole, it was found that in 1939 GAF sales in the total city of Detroit accounted for 32.6 percent of total retail sales in the ten kinds-of-business groups. In 1948 this percentage had declined to 30.4 percent of the total for that year. In downtown Detroit, the corresponding figures were 79.5 percent and 80.1 percent, and in the balance of the city they stood at 16.2 percent and 17.8 percent respectively for the years 1939 and 1948.² In the five suburban cities, GAF sales represented 21.5 percent of the total in 1939 and by 1948 had increased to the point where they accounted for 26.8 percent of the total dollar receipts in the ten categories reported. These comparisons show clearly that suburban communities, as well as the area in Detroit outside the central business district, have increased in importance as locations where people shop for general merchandise, apparel, and furniture and appliances.

The publications containing inventories of off-street parking facilities serving the central business district of Detroit described conditions existing in 1936 and in 1944. The first of these was Street Traffic, City of Detroit, 1936-1937, prepared and published by the Michigan State Highway Department in coöperation with the Detroit Police Department and the Works Progress Administration. In this study off-street parking facilities were enumerated for an area defined as the "central district of Detroit," which included two other sections of progressively smaller size defined as the "central business district" and the "concentrated retail area." The last-mentioned was the smallest of the three geographically and was included in the central business district.

The second study was Detroit's Parking Needs, Central Business District, prepared by the Traffic Engineering Bureau of Detroit and printed in August of 1946. In this study the central business district was defined as an area which included a section somewhat larger than that known as the central district in the study conducted in 1936.

However, by adjusting the overlapping sections of each of the defined areas in the studies it was possible to determine the off-street parking facilities existing in each year for an area bordered by the Detroit River on the south, Fourth Street on the west, Vernor Highway on the north, and Hastings Street on the east.³ Offstreet parking spaces in this section were estimated to aggregate about 31,000 in 1936. Despite the increase

of almost 29,000 passenger-car registrations in Detroit from 1936 to 1944, the number of off-street spaces in this area declined to a total of about 24,000 in 1944.

In a report entitled Detroit and Its Parking Problems printed in May of 1952, John D. McGillis, director of Detroit's Municipal Parking Authority, commented on the situation prevailing in the central business district:⁴

It was found that parking lots in business districts are to a considerable extent outgrowths of the depression, having been created by the desire to remove from the tax roll nonproductive buildings and to use the land during what was then hoped was a transition period for a purpose which would pay expenses with little capital outlay. Comparatively few parking lots are owned by the parking operator. Most of them are leased. Many owners of parking lots opened as a temporary expedient, are planning to continue their use for parking purposes. None the less, as numerous examples indicate, if an owner of vacant private land in use as a parking lot gets a sufficiently attractive offer, he feels no obligation to maintain the parking lot and can be expected to lease or sell the land for a building.

Further indication of the pattern of decline in the number of off-street storage facilities serving downtown Detroit are contained in a statement which uses the 1944 inventory of parking space as a reference point.

As in most large cities, Detroit's parking lots are irregular in size and shape, inadequate in capacity and without stability of rate schedule. They are haphazardly distributed without regard to parking demand, convenience to the motorist, traffic flow problems, land use or land values. Their temporary and transitory tenure encourages the effort to obtain maximum return with minimum investment and expense which leads to overcrowding, annoying delay for parkers, blocking of adjoining streets, improper care of parked cars, etc. Most of the lots are leased by the operators, and when a better use is found for the land, the owner can be expected to sell or lease it for that use. Four such parking lots have disappeared. One was the lot on the corner of Washington Boulevard and Clifford where Stouffer's has erected a restaurant; another on Woodward on which Hughes and Hatcher constructed an addition to their store; on Fort Street, West, where the Federal Reserve Bank built; and on Elizabeth, West, where a new office building was constructed by the Michigan Mutual Liability Company, which building included a small garage.

In concluding his observations on the changes that had taken place in the supply of off-street facilities, McGillis remarked that some of the parking structures serving the central business district of Detroit have also been removed from public availability.

Some parking garages which previously served the area have been purchased for private use and taken out of the parking business. An example of this is the Fort Shelby Garage on Howard Street with a capacity of 600 cars which was purchased by the Michigan Bell Telephone Company for its use. Not all of the existing garages are well located. The larger cars which were constructed after the war cut their capacity because of the narrow column spacing built at the time when the automobile was much smaller than it is now. Shoppers' Parking increased the Central Business District garage capacity by

⁴ John D. McGillis, Detroit and Its Parking Problems, pp. 2-3.

² The seeming paradox of a decreased percentage of sales in the GAF categories for the total city of Detroit in the face of increased percentages in the two com-ponent parts is explained by the fact that increases in total sales obtained by the central business district were not of the same relative magnitude as increases in the balance of the city. ⁴ See Figure 2.

600 when they constructed their new deck on Broadway and smaller decks have been built on parking lots on Library and on West Fort. Roof parking was included on a small structure at the corner of First and Congress. The total increase of space of a permanent nature has been relatively small.

On the basis of the origin-and-destination study which it conducted in 1944, the Traffic Engineering Bureau of the City of Detroit estimated in October of that year that there was a shortage of about 2,900 automobile-parking spaces for motorists whose destinations were in the city's central business district. Through cordon counts, this agency has attempted to maintain its basis for estimates of the situation, and concluded that the shortage reached a figure of about 6,900 in the Fall of 1948 and had risen to approximately 9,000 by the spring of 1952.

The method used by the Traffic Engineering Bureau in computing its estimates of shortages was as follows:⁵

How many more parking spaces are needed? Obviously, it will not be possible to meet the ideal condition of providing adequate parking space in each block. The question arises as to what is a reasonable distance between destination and parking space. Although the survey did not give a positive answer to that question, the evidence indicates that 3 blocks is about the maximum walking distance that motorists consider accepttable.

Accordingly, detailed computations were made to determine how many motorists were unable to park within three blocks of their destinations. Although 58 blocks had more drivers going to them than parking spaces within them, the remainder had more parking spaces than drivers whose destinations were located therein. The computations, therefore, involved taking the overflow from one block and finding, if possible, unused spaces within a three-block distance where the overflow could be parked.

This arithmetical process was followed for every block. As the result, it was found that in October, 1944, there was a shortage of 2,940 parking spaces.

Table 11 contains data showing the total number of passenger car registrations in Wayne County, Detroit, and the five suburban communities for which retail sales and establishments information had been obtained. The years for which registrations are shown are those with which the several parts of the total case study dealt with respect to population, surveys of downtown parking facilities, and retail trade.

As indicated from the table, the number of registrations has increased steadily for the three areas reported. Only in 1944, at the height of the war, was there any deviation from the pattern of growth displayed in the six selected years. Even for this year the suburban communities showed an increase over 1940. From 1940 to 1950 there was a 72-percent gain in the number of automobile registrations in the five suburban communities, a 31-percent increase for Wayne County, and a 25-

⁵ Traffic Engineering Bureau of Detroit, Detroit's Parking Needs, Central Business District, August, 1946, p. 15.

percent increase in Detroit. When the absolute data for registrations are compared with population statistics for these areas, the result shows that in 1940 there were about 28 people for every 10 cars in the five suburbs, 34 for every 10 cars in Detroit, and 38 for every 10 automobiles in Wayne County. Increasing ownership of cars by suburban and county families is indicated by the comparison of 1950 ratios, which shows that the five suburbs had about 25 people for every 10 cars in that year, that Wayne County went from 38 to 35, and that in Detroit the figure remained the same, at 34 people for every 10 automobiles registered in the city.

The increasing relative density of the automobile population is significant, but even if this figure were

TABLE 11

TOTAL PASSENGER-CAR REGISTRATIONS DETROIT, FIVE DETROIT SUBURBS,⁸ AND WAYNE COUNTY, MICHIGAN (for selected years)

Area	Registrations								
	1936	1939	1940 ^b	1944	1948	1950			
Five Suburbs.	43,200	50,400	55,600	66,100	76,600	95,400			
Detroit Wayne County.	$386,500 \\ 461,900$	420,700 517,300	431,200 535,600	415,100 528,300	474,800 609,700	540,000 701,400			

^a Dearborn, Ferndale, Lincoln Park, Royal Oak, and Wyandotte. Data for 1940 estimated.

SOURCE: R. L. Polk Co.

unchanged, as in the case of Detroit, the tremendous increases in the absolute number of automobiles registered indicates the magnitude of potential demand for parking facilities and how it has changed in the decade from 1940 to 1950.

Table 13 presents data from 1928 through 1951 concerning the population served by the Department of Street Railways of Detroit and the number of revenue passengers carried by the city's public transportation system. The average number of annual revenue rides per capita is termed the riding habit in the public transit industry.

Figure 3 is a graphic presentation of the riding habit in Detroit for the same period and shows quite clearly the pattern of patronage which the Department of Street Railways has experienced in the 24-yr. interval. Especially noteworthy is the fact that the curve shows identical peaks of 238 annual rides per capita in 1929 and in 1945. Yet the wartime restrictions on private automobile usage from 1942 through 1946 account for a great deal of public transit patronage in 1945. The curve follows generally the pattern of economic activity experienced throughout the nation over the period from 1928 to 1946. But in 1947 it departs drastically from the trends measuring output for almost every other industry and, when compared against the tremendous sales volume of passenger automobiles during the postand recurring interruptions of service occasioned largely by strikes to enforce union wage demands.

Efforts to check the diminishing postwar revenues



TRACT BOUNDARIES, TRACTS 1, 33 AND 530 Figure 2. Central business district of Detroit.

war years, provides a clear picture of the shift in transportation habits among the people of Detroit.

During the same postwar period, public transit in Detroit was faced with increasing costs of operation obtained by the Department of Street Railways have included the installation of more efficient equipment and a series of rate increases. Although these measures have contributed somewhat to lessening immediate financial pressures, the loss of patronage to the private automobile may continue, partly, perhaps, because of a negative reaction by the public to increased fare costs.

Shifts in the location of population residence of people in Detroit are clearly evident from data for the 1940 and 1950 enumerations by the Bureau of Census. Anal-

 TABLE 12

 Population of Detroit, Five Detroit Suburbs, and

 Wayne County, 1940 and 1950

Area	Population					
Alta	1940	1950	% Change			
Five Suburbs Detroit Wayne County	157,048 1,623,452 2,015,623	237,723 1,849,568 2,435,235	$51\\14\\21$			

SOURCE: U. S. Census, 1940 and 1950.

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Revenue Passengers, Population Served, and Annual Rides Per Capita, Department of Street Railways, Detroit, 1928-1951

Year Ended June 30	Revenue Passengers (000)	Population Served (000)	Annual Revenue Rides per Capita
1928	358,897	1,604	224
1929	396,454	1,666	238
1930	360,302	1,728	209
1931	274,057	1,728	159
1932	232,125	1,728	134
1933	185,583	1,775	105
1934	220,329	1,652	133
1935	230,556	1,700	136
1936	244,808	1,700	144
1937	265,901	1,860	143
1938	243,638	1,806	135
1939	242,039	1,823	133
1940	257,290	1,830	141
1941	286,249	1,903	150
1942	318,184	2,031	157
1943	434,425	2,117	205
1944	484,509	2,117	229
1945	492,277	2,065	238
1946	430,738	2,100	205
1947	437,336	2,114	207
1948	420,422	2,129	198
1949	378,880	2,085	182
1950	331,783	2,102	158
1951	270,298	2,140	126

SOURCE: Annual Report, 1951, Department of Street Railways, City of Detroit.

yses of changes within Detroit show that the area referred to as the "central core" in Figure 1 contained 1,195,001 inhabitants in 1940 and that this figure had dropped to 1,137,945 by 1950. The net loss of 57,056 represents about 4.8 percent of the total 1940 population within this area. The balance of the city gained in the number of inhabitants which it contained during the decade, going from a figure of 529,100 in 1940 to a total of 801,371 in 1950. The increase of 272,271 amounts to almost 51.5 percent of the 1940 total for the balance of the city. Phenomenal population increases are readily apparent in suburban communities⁶ and in the outlying sections within large cities. But the pattern of decentralization brought out in the analysis above indicates that the central portion of Detroit did not hold its own in comparison with these other areas even in an absolute sense. While there was a gain in the total population of Detroit from 1940 to 1950 of 226,116 people (about 14 percent of the 1940 figure), the central core of the city actually lost a significant portion of its inhabitants.



Figure 3. Annual revenue rides per capita, Department of Street Railways, Detroit, 1928 to 1951. Data from Table 13.

CONCLUSIONS

This case study of automobile-parking facilities and retail trade in the central business district of Detroit has examined several factors involved in the overall relationship between the location of stores, their customers, and the transportation means available to and used by the people of the city.

It has been shown that in roughly the same period (1939–1948, 1940–1950) changes were taking place in the factors considered as follows: (1) increased automobile ownership in both Detroit and in the suburban communities adjacent to the major city; (2) increased population in Detroit and suburban communities accompanied by a marked decentralization of residence location within Detroit; (3) increased automobile usage; at least as measured by traffic flow into the central business district of the city; (4) decreased patronage of public transportation serving Detroit; (5) increased shortages of automobile parking facilities in the city's central business district; (6) increased retail dollar-sales volume in the central business district of Detroit, the balance of the city, and in a sample of

⁶ See Table 12.

suburban communities—the percentage increase was greatest in the suburban areas, lowest in the central business district; and (7) a decrease in the number of retail establishments in downtown Detroit and in the balance of the city, but an increase in stores in the suburban cities—the percentage decrease in number of establishments was greater in the central business district of Detroit than it was in the balance of the city.

In the light of changes in these factors in the directions and magnitudes observed, it is apparent that the automobile has exerted a very significant influence on the transportation and residence location habits of people living within and near the city of Detroit. It should be recognized that ownership of an automobile is one of the most important enabling factors in the decision of a family to live in an area that is less-densely settled than the central parts of many large cities. It appears that public-transit service has not obtained sufficient patronage at rates high enough to cover the costs of extending additional service to many suburban areas. Thus, the inherent convenience of the private automobile in terms of flexible scheduling, routing, and the guarantee of a seat for the owner takes on the character of a necessity for families living in remoter areas of the metropolitan region.

It must be acknowledged that with respect to technical efficiency, a large-capacity public-transit vehicle is superior in solving the problem of moving many people from one location to another within a relatively congested traffic area of a large city-superior, at least, to the effectiveness of the number of privately owned automobiles that Americans are in the habit of using to accomplish the same task. On the other hand, curvently observable parking conditions in the central business districts of our larger cities are manifestations of a higher standard of living, an embarrassment of riches with respect to the possibilities of ownership of automobiles by the American public. Moreover, there does not seem to be an observable trend (in Detroit, at least) on the part of people to abandon the use of their cars in order to conform to the physical limitations on the amount of space available to park them in a congested area. The data available for public-transit patronage appear to indicate an overwhelming preference for the private automobile as an alternative means of transportation.

Does this pattern of events mean that downtown retail trade is doomed as "a race for the suburbs" develops and gains momentum? A thorough appraisal of the factors examined in this study must recognize not only comparative rates of growth between areas in population and retail business, but also the magnitude of these factors at the beginning and close of the period studied.

The attractions of a downtown section should be recalled. The principal advantage of patronizing the central business district is, for the shopper, the opportunity to inspect a concentration of wide merchandise assortments with respect to quality, style, and price range in a geographically small area of the city. Added to this is the convenience of being able to perform many other diverse errands on one trip—banking, visiting professional and governmental offices, conducting business transactions other than retail shopping—making a day of the downtown visit, so to speak.

Moreover, although the data examined in this case study indicate definite shifts of population residence away from the central core of the city, this area still accounts for a large percentage of the total population of Detroit. As retailing facilities come into existence to serve the rapidly growing outer sections of the city and the adjacent suburban communities, some of the total pressure on the central business district is likely to be relieved. This very expansion of retailing facilities could have the effect of making downtown stores more accessible for the large number of people who still reside in the area closer to the central business district.

Therefore, in our emphasis on the decentralization phenomena which have been observed throughout this analysis to be related to increasing use of the automobile, we should not overlook the fact that the central business district of Detroit remains very important. It will probably not recapture the degree of dominance it once enjoyed in certain retail-trade merchandise lines relative to the rest of the city. But the fact that it has performed as well as it has during the period of this study should attest to its significance as a shopping area for a large proportion of the people of Detroit.

The addition of more parking facilities to service motorists who desire to travel downtown would accommodate more of the driving public and help to enhance the attractiveness of this area of Detroit. In view of the potential markets that have arisen in outlying sections of the city, however, it seems unlikely that this would permanently deter the decentralization of retail trade. The factor of proximity to a retail outlet is probably at least as important to a shopper as is the ability to store his automobile, assuming that decentralized trading areas can become large enough to rival downtown stores in terms of merchandise assortments. If the ownership of private automobiles enables enough people to live further away from the downtown section tion of a city, it is probable that enterprising merchants will locate their stores to obtain a competitive edge in bidding for their patronage. It is true that these new (or relocated) firms will have to provide parking facilities for their customers' automobiles. But the opportunities for doing this are greater than they are for the central business district. Adding more parking to a location that is closer to a large market means better service to customers. If this is accompanied by enlightened merchandising and pricing, it seems that profitable trading opportunities will induce merchants to make this adjustment.

Relationship of Downtown Automobile-Parking Facilities to the Establishment of Suburban Branches of Department Stores

OBJECTIVES

One alternative to efforts to bring customers to the location of a downtown retail firm is to move the location of the store to a point closer to the customers. Something similar to, but less than this, is the retention of the original store for the sales volume which it will continue to obtain and the establishment of branches of the parent organization that will be more closely located to prospective customers.

Because there has been an observable increase in the number of suburban branches of downtown department stores during the postwar years, it was felt desirable to examine the reasons which retailing executives of these firms gave as explanations for their action as a means of determining the extent to which centralbusiness-district parking conditions for customers had led them to this form of decentralization. Since the decision to establish a suburban branch involves a large financial investment on the part of most retail firms contemplating the move, it was felt that store executives who were primarily responsible for the expansion would have made a careful appraisal of the conditions which initially suggested such action.

Accordingly, an attempt was made to learn from the major policy-making management of a large sample of the country's downtown department stores the reasons which they believed required the establishment of a suburban branch of their main store.

PROCEDURES

It was felt that the decision to establish a suburban branch made by executives of downtown department stores would arise basically from the same conditions that would cause management of other retail establishments in the central district to decentralize their operations. Although the influence of these conditions would vary in degree from department stores to other types of retail firms, the selection of the department store as a sample base enabled the study to deal with a limitedpopulation type. Moreover, the importance of the department store as a central-business-district institution warranted its adoption as a specimen for examination of the impact that automobile-parking conditions may be making on location decisions by downtown retail merchants.

As to the composition of the sample of department stores to be included, it was thought, at first, to limit study to only those stores known to have established suburban branches. However, this would have been deficient in the respect of providing no basis of comparison between this group and the large number of downtown department stores that have not established suburban branches and do not plan to in the near future and the group that do not yet have suburban branches but are definitely planning their construction.

Therefore, a mail survey was designed consisting of a questionnaire to be sent to the presidents of 245 fullline department stores, located in the central business districts of the first 75 American cities by population rank. The number of cities was held to this figure, since it was felt that as a general rule the branch store movement would be restricted to larger communities where decentralization of population would be great enough to support an outlying branch and downtown traffic and parking conditions were such that they might have acted as important stimuli to this form of retailing decentralization. The stores selected for the mailing list each had a minimum sales volume of one million dollars in 1951 and were located in the downtown section of their respective cities. As indicated before, there was no presurvey screening of those with and those without branches.

Although the final goal of the survey was a determination of the importance of downtown parking conditions in the store's decision to establish a suburban branch, the bias that might result from a primary inquiry on this point required that the initial questions be concerned with general or classification data. The information elicited from this first section of the questionnaire was important in itself, for it was used to provide the necessary facts for subsequent cross classification of branch-store reasons against the size of the parent store, services provided (parking, delivery, solicitation and acceptance of mail and telephone orders), and the length of time the store had been doing business at its downtown site.

The second section of the questionnaire was constructed to define the locational nature of the branch operation that a parent store might have. The study was concerned only with branches that were clearly of a suburban character relative to the city in which the parent store was located. No absolute linear distance criterion could be used, a suburban branch 15 mi. dis-

Bureau of Business Research	University of Michigan
School of Business Administration	Ann Arbor, Michigan

BRANCH STORE SURVEY JULY, 1952

SECTION I. These Questions Concern Your Main Store Only

- Name of your store.
- How long has your store been in business?. vears. 3. Name of your store's president.
- Address of your store. 4
- 5. Name and title of person completing this questionnaire
- Number of employees (main store only)_ employees.
- What percentage of your total volume is sold as credit 7.
- %. business?_ No Yes
- 8. Is your main store located within the city's central business district?
- 9. Does your store have an established, regular delivery service for merchandise purchased by your customers?
- 10. Does your store regularly solicit mail orders in its advertising?
- Does your store provide parking facilities for your customers' automobiles?
 If yes, are these facilities owned by your
- yes, are these facilities owned by your store?
- 13. What is the total customer-car capacity of these parking facilities at any one time?
- 14. If answer to question 11 is yes, does your store charge its customers for this parking service?
- 15. If your store provides and charges customers for automobile parking, what is your parking rate schedule? ____1st Hour, ____2nd, 3rd, -_4th, _over 4 hours.
- 16. If answer to question 11 is no, are there, within a block of your store, other off-street parking facilities for the automobiles of your customers?
- 17. If answer to question 16 is yes, who operates them? City____, Private operators_____, _, Other (please state) Other stores.

18. Which of the following types of merchandise are carried in your store?

Women's Apparel	 Yard Goods	·
Children's Apparel	 China & Glassware	
Men's Apparel	 Furniture & Bedding	
Stationery	 Major Appliances	
Housewares		

SECTION II. This Section Applies Only to Branch Stores Your Organization Now Has in Operation

Instructions:

Please answer the following questions for each branch (you now have) in the columns provided. Circle "Yes" or " where appropriate.

	Branch One	Branch Two	Branch Three
1. a) Name of branch store			
b) Address of branch store			

SECTION II.-Continued

			nch e	Brai Tw	nch vo	Bran Th	nch ree
	c) How many employees does your store have at this branch?						
2.	Is this branch within the cor- porate limits of the city in which your main store is located?	yes	no	yes	no	yes	no
3.	Is this branch in a <i>suburban</i> shopping center <i>within</i> your main city's corporate limits?	yes	no	yes	no	yes	no
4.	Is this branch in a community which is considered suburban to your city but which is <i>out-</i> <i>side</i> the corporate limits of your main city?	yes	no	yes	no	yes	no
5.	How far is this branch from your main store (in miles)?						

6. If your answers to questions 2, 3, and 4 are all "No," proceed to Section IV directly. Do not answer Section III.

SECTION III. Reasons for the Establishment of Suburban Branch Stores

This section deals with the reasons why your organization decided to establish a branch store. We would like you to rank the reasons indicated on the following page according to their importance in the final decision reached by your management. Secondly, we would like you to weight the reasons (you have ranked) according to their proportion of your total decision to establish a branch store.

An *example* will illustrate the procedure:

Assume a man is deciding to buy a new automobile. He is asked to list the reasons why he wants to buy a new car in the order of their importance. He does this. But this does not tell us of the influence or weight of each reason in the sum total of his decision to buy a car.

Assume that the sum total of his reasons to purchase are represented by 100%. Now he is asked to weight each reason which he has previously ranked. The result is shown in the following table. The man has first gone through the list and ranked the reasons. Then he goes through the list and weights the reasons he has chosen.

Example of procedure to be followed in completing Section III.

	Possible reasons for purchase of a new automobile	Rank	Proportion of total Decision
a)	Prefer styling of new car to that of present car	3	20%
b)	Want more powerful engine than present car has	-	-
c)	Liberal trade-in allowance granted on purchase of new car	2	25%
d)	Present car in need of major repairs	1	35%
e)	Other (please state) Respondent wrote in "Good dealer service."	4	20%
f)	Other (please state)	-	-
-	Total of reasons behind decision equals		100%

This is the procedure to be followed in answering questions on the following page.

Listed below are several possible reasons why your store decided to establish the suburban branch stores it now has in operation. Would you please rank in the order of their importance those reasons which were considered in your decision to establish a branch store. Then, would you please assign weights to the reasons (you have ranked) in proportion to the influence you think they had on your total decision to establish a branch. In this latter process assume that your final decision represents 100% and that the separate reasons add up to that total. Please follow this procedure for each of the branches you may now have in operation, up to a total of three branch stores.

		Branch Number 1		B Nu	ranch mber 2	Branch Number 3	
	suburban branch store	Rank	% of total Decision	Rank	% of total Decision	Rank	% of total Decision
a)	To establish a store appealing to income classes different from those of your main store.						
b)	To expand your store's total opera- tions; additions to main store too costly.						
c)	Growth in population of area where branch is located; public transportation to your main store from this area is inade- quate.						
d)	To reach areas of potential customers who were previously <i>not</i> purchasing most of their merchandise from your store.						
e)	Space for parking customers' automo- biles not adequate in downtown location of main store.						
f)	To cut down delivery costs to customers in outlying districts of your trading area.						
g)	To regain former customers who had moved to suburban areas and hence no longer patronized your store as much as previously.						
h)	To regain customers who had always lived in the area of your suburban branch but who began to patron- ize other stores in this area.						
i)	Other (please state)		100%		100%		100%

If you wish to add further comments on the factors considered by your store's management in reaching a decision to establish your branch stores, please do so below: tant from its parent store in a large metropolitan area might have arisen for reasons different from those that accounted for a branch store in a community 15 mi. distant from the city of its parent store if the latter cities were small but distinct economic entities with respect to the bulk of the retail patronage each of them enjoyed.

Section III of the questionnaire contains the framework for a systematic notation of the reasons why the particular firm undertook the establishment of a suburban branch. Through pretest interviews with several department-store executives, it was determined that the eight reasons listed in this section of the questionnaire were likely to be the most significant in explaining the total decision to establish a branch. Provision was made, however, for an "other" category so that the respondent could enter and weigh the influence of factors which he felt were important in his particular case.

A combined ranking and weighting technique was adopted in this section of the questionnaire for two reasons. First, although the rank-order approach alone is all that can be expected in most motivation surveys. it is desirable to obtain not only a ranking of reasons for behavior, but also the assignment of some kind of differentiating weight to those ranked. Reasons which are listed 1, 2, 3, 4, etc. take on much more significance if it can be established that reason Number 1 accounts for an overwhelming proportion of the decision and that Reasons 2, 3, and 4 (although correctly listed in that order) together account for only a small amount of the total behavioral decision. Secondly, the nature of the group to be sampled was such that a familiarity with percentages could be uniformly expected and understanding in a question organization of the type selected would not be difficult to obtain.

The fourth part of the questionnaire was an attempt to gain an estimate of the extent to which downtown department stores are planning the establishment of branches, along with the reasons why they are considering this move.

RESULTS

From the total of 245 department stores to which the questionnaires were sent, 135 completed forms were returned. This response of 55 percent of the original mailing was deemed satisfactory for the survey and provided the information on which the subsequent analysis was based. Table 14 shows a distribution of the questionnaires sent and those returned by geographic regions in the United States and indicates a parallelism close enough to eliminate any serious bias in the final material due to regional location. Table 15 displays questionnaires sent and replies according to

SECTION IV. This Section Deals with Future Plans Your Store May Have with Respect to the Establishment of Branch Stores

- 1. Does your store plan to establish a branch store
- in the near future? (circle one) Yes No 2. Does your store plan to establish a branch
- within the next five years? Yes No 3. Does your store plan to have a branch in operation within the next year? Yes No
- 4. How far from your present store will your branch store(s) be? _____miles.
- 5. About how many employees will work full time at each of your proposed branch stores?
 - _____employees at Branch Number 1 _____employees at Branch Number 2
 - _____employees at Branch Number 3
- 6. What were the major reasons (in order of importance) for your decision to establish the first of your planned branch stores? (Please list below)
 First Branch Store

-	 	

Third Branch Store

 	 	 _

Thank you for your helpful cooperation. Please use the enclosed envelope to return the questionnaire to the Bureau of Business Research of the University of Michigan. city groups, the first quintile containing the first 15 cities by population rank, the fifth containing the last 15 used in the study. As indicated in the table, there was close agreement between the proportion of total questionnaires sent to a quintile and the proportion of total returns received.

Confirmation of the fact that the suburban-branchstore movement has been a large-city phenomenon is contained in Table 16, which shows that of the 36 stores reporting operation of a branch or branches at

TUDDE L

REGIONAL DISTRIBUTION OF MAILED QUESTIONNAIRES AND REPLIES, BRANCH-STORE STUDY

Geographic Regions	Population	Quest	ionnaires ent	Replies		
coopraphic regions	1 optimition	Num- ber	% of Total	Num- ber	% of Total	
New England	9.314.453	21	8.6	11	8.1	
Middle Atlantic	30,163,533	52	21.2	22	16.3	
East North Central	30,399,368	47	19.2	29	21.5	
West North Central	14.061.394	23	9.4	15	11.1	
South Atlantic	21,182,335	26	10.6	15	11.1	
East South Central	11,477,181	14	5.7	7	5.2	
West South Central	14.537.572	24	9.8	15	11.1	
Mountain	5,074,998	6	2.4	5	3.7	
Pacific	14,486,527	32	13.1	16	11.9	
Total.	150,697,361	245	100.0	135	100.0	

TABLE 15

DISTRIBUTION OF MAILED QUESTIONNAIRES AND REPLIES, BY QUINTILES OF FIRST 75 U. S. CITIES, BRANCH-STORE STUDY

Population Rank of First 75 U.S. Cities	Populati	on (000)	Questi S	onnaires ent	Replies		
by Quintiles	Number	% of Total	Num- ber	% of Total	Num- ber	% of Total	
First. Second Third. Fourth Fifth	24,9956,5434,2802,8072,118	$\begin{array}{r} 61.3 \\ 16.1 \\ 10.5 \\ 6.9 \\ 5.2 \end{array}$	$92 \\ 52 \\ 40 \\ 39 \\ 22$	$\begin{array}{r} 37.6\\ 21.2\\ 16.3\\ 15.9\\ 9.0 \end{array}$	$52 \\ 31 \\ 22 \\ 19 \\ 11$	$38.5 \\ 23.0 \\ 16.3 \\ 14.1 \\ 8.1$	
Total	40,743	100.0	245	100.0	135	100.0	

TABLE 16

DEPARTMENT STORES WITH SUBURBAN BRANCHES IN OPERATION AND DEPARTMENT STORES PLANNING CONSTRUCTION OF NEW BRANCHES, BY CITY SIZE GROUPS, BRANCH-STORE STUDY

Population Rank of First 75 U. S.	1950 (Population (000)		Stores wi Bra	Stores with Suburban Branches		Existing Suburban Branches		Stores Planning Branches		New Branches Planned	
cities, by quinties	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total	
First Second Third. Fourth Fifth	24,995 6,543 4,280 2,807 2,118	$\begin{array}{c} 61.3 \\ 16.1 \\ 10.5 \\ 6.9 \\ 5.2 \end{array}$	$\begin{array}{c} 23\\8\\4\\1\\0\end{array}$	$63.9 \\ 22.2 \\ 11.1 \\ 2.8$	$53\\11\\4\\1\\0$	$76.8 \\ 15.9 \\ 5.8 \\ 1.5$	$\begin{array}{c} 26\\11\\6\\7\\4\end{array}$	$ \begin{array}{r} 48.1 \\ 20.4 \\ 11.1 \\ 13.0 \\ 7.4 \end{array} $	$\begin{array}{c} 34\\14\\8\\7\\4\end{array}$	50.720.911.910.46.1	
Total	40,743	100.0	36	100.0	69	100.0	54	100.0	67	100.0	

the time of the study, the first 30 cities (Quintiles 1 and 2) contained over 86 percent. Moreover, stores in these cities had almost 93 percent of the total number (69) of suburban outlets of parent department stores then in operation.

However, evidence of the increasing attractiveness of this form of decentralization for stores in smaller cities is apparent from the data which show the number of firms planning branches and the number of branches they expect to construct. The last three quintiles account for about 32 percent of the stores planning to establish branches compared with a figure of 14 percent of those that had them at the time of the survey. The branches planned by stores in the latter group are 28 percent of the total, as against only 7 percent of the branches reported in operation by stores in these city quintiles.

 TABLE 17

 Distribution of Weights Assigned to Reasons for Having

 Established Suburban Branches, Branch-store Study

Rescons	Quin	tiles of First	75 U. S. C	Cities by P	opulation Ra	nk
Reason	First	Second	Third	Fourth	Fifth	Total
a	28		5		No	33
b	608	265	60		Branch	933
с	987	195	50	10	Stores	1,242
d	1,033	170	150	50		1,403
е	336	170	15	15	· · · · ·	536
f	16					16
g	345	25	10	20		400
ĥ	262	225	10	5		502
i	85	50				135
Cotal	3,700	1,100	300	100		5,200

^a See questionnaire, Section III.

Table 17 contains a distribution of the weights assigned to the reasons listed on the questionnaire for the establishment of a suburban branch. The reason, "To reach areas of potential customers who were previously not purchasing most of their merchandise needs from your store," was assigned the highest aggregate weight by executives completing the questionnaire. The second ranking aggregate reason was, "Growth in population of area where branch is located; public transportation to your main store from this area is inadequate." The reason, "To expand your store's total operations; additions to main store too costly," was third in importance. The statement dealing with automobile parking, "Space for parking customers' automobiles not adequate in downtown location of main store," was ranked only fourth in the aggregate weighting.

The percentage distribution of these results is shown in Table 18 and indicates that the first three reasons mentioned above accounted for over two thirds of the total weight attached to the several alternatives. The weight given automobile-parking conditions directly was only a tenth of the total.

An analysis of the action taken (by all the stores reporting) to provide downtown parking facilities for their customers showed no significant difference among those which had established branches, planned branches, or done neither. Similarly, there were no consistent distinctions among these three groups with respect to the length of time they had been doing business at their downtown locations, the proportion of their sales volume accounted for by credit business, whether they rendered delivery service or solicited mail and telephone orders as a means of extending their business beyond the store premises.

A slight concentration was observed in the size range (as measured by the number of employees) of stores

TABLE 18 PERCENTAGE DISTRIBUTION OF WEIGHTS ASSIGNED TO REASONS FOR HAVING ESTABLISHED SUBURBAN BRANCHES, BRANCH-STORE STUDY

Reason®	Qui	ntiles of F	irst 75 U.	S. Cities by	Population R	lank
iccuson	First	Second	Third	Fourth	Fifth	Total
a	0.8		1.7		No	0.6
b	16.4	24.1	20.0		Branch	17.9
с	26.7	17.7	16.7	10.0	Stores	23.9
d	27.9	15.5	50.0	50.0		27.0
e	9.1	15.5	5.0	15.0		10.3
f	0.4		122012			0.3
g	9.3	2.3	3.3	20.0		7.7
ĥ	7.1	20.4	3.3	5.0		9.7
i	2.3	4.5				2.6
Fotal	100.0	100.0	100.0	100.0		100.0

⁸ See questionnaire, Section III.

that had established branches. Those firms with from 2,000 to 3,000 employees accounted for about 20 percent of the total that reported operation of a suburban outlet. The remainder were distributed throughout the classifications with no apparent dominance of any single size. In this, also, there was no significant difference from the groups which reported no branches in operation and those which had none but planned their construction.

The reasons given for the planned establishment of suburban outlets follow much the same pattern as those of downtown stores which had branches in operation at the time of the survey. For example, Reasons d, c, and b, which were the three highest-ranking answers of stores with established branches, were also the first three given by executives of stores who were planning them. It was observed, also, that Reasons g and h (which dealt with regaining former customers) were ranked ahead of the question directly concerning downtown parking conditions.

CONCLUSIONS

From the response to the questions listed, it seems that the decision to establish a suburban branch is conditioned primarily by considerations of the size of a new potential market that is available in outlying sections of the metropolitan area in which the parent store has been located. The questions (g and h) which dealt directly with the issue of regaining former customers who had moved to suburban areas or who had always lived there but were beginning to patronize outlying competitors, were not weighted as highly as those (d and c) which were concerned with growth in total population in the area under consideration. It is probably hoped that the establishment of a suburban branch will recapture former patrons who have strayed from the fold, but apparently a store views its branch much more in the light of an expansion than as a relocation of its major base of merchandising activities. The fact that the branch movement has been, and (on the basis of the reports of planned suburban establishments) apparently will be, of primary importance on the periphery of very large cities attests to the necessity of a relatively large market in the outlying area before the decision is made. The reverse side of this consideration is the fact that pronounced parking problems in the central business districts of American cities have occurred (since the end of the war) practically without regard to the size of the community. Yet firms in the smaller cities covered in this study (although planning more branches than they formerly had) do not appear to be establishing suburban branches of their downtown stores at a rate even approaching that of stores in the larger metropolitan area.

When questioned directly about the influence of downtown automobile-parking facilities for customers on their decision to establish a suburban store, the respondents relegated this to fourth position. Thus, in this study the hypothesis suggested as a result of the analysis of the Detroit area seems to be supported. That is, the primary effect of automobile ownership on retail trade appears to be an enabling of residence location decentralization. This latter phenomenon, when added to the absolute growth in population in suburban areas, creates markets that can be served profitably. While recognizing that existing parking conditions in the central business district are usually not conducive to patronage from a public on wheels, merchants apparently feel that outlying areas must have some minimum population density before the establishment of a branch is warranted.

The responses given by those downtown firms who planned the future establishment of suburban outlets were in a similar vein, although there was more emphasis on the defensive aspect of the situation. Stores in this group stressed the reasons that dealt with total growth in the outlying communities, but they also gave more weight to the goal of regaining former customers. The interpretation this suggests is that these stores fear the competition of other merchants who may establish operations in the suburban territory if the downtown firm does not. Because of its reputation in the general trading area and its ability to spread merchandising and promotion costs over a larger volume if it establishes a branch, the downtown store may consider itself the logical candidate to enter the suburban market that has arisen. This appears to be the pattern of thinking of those merchants who participated in the survey. They do not cite downtown parking difficulties for customers as a major reason for their decentralization; they seem to feel that suburban markets have increased in size (through population decentralization and population growth in outlying areas) to the point where additional profit opportunities warrant the establishment of a branch of their downtown store.

Appraisal of Retailers' Participation in Activities to Relieve Downtown Parking Conditions in Five Michigan Cities

OBJECTIVES

If automobile-parking conditions for prospective customers of downtown stores have had a serious adverse effect on the sales volume enjoyed by these firms, it would be expected that their owners would be both vocal and active about the situation. It was felt that a study concerned with the relationship between parking facilities and retail trade in central business districts should examine adjustments which downtown merchants may be making with respect to improving the accessibility of their present store locations. Relocating an existing operation or establishing an additional service unit are extremes in shifting the retail pattern of a community to meet changing conditions. Alternative measures that might be taken by centrally located stores include: increasing night openings, promotion of mail and telephone business, expansion of delivery services, acquisition of land for customer parking (either individually or coöperatively with other businessmen in the downtown district), refunding customers'

Bureau of	Business	Research
School of	Business	Administration

University of Michigan Ann Arbor, Michigan

BUSINESS-PARKING STUDY

TEST QUESTIONNAIRE

This survey is being conducted in conjunction with the National Research Council to obtain a measure of the attitudes of downtown merchants toward the automobile parking situation prevailing in the central business districts of their cities. It will become part of a nation-wide study of the influence of parking conditions on business. Your cooperation will be very helpful in providing the data on which improvements in automobile parking can be based. Any information you provide will be held strictly confidential by the Bureau of Business Research of the University of Michigan.

- 1. Would you say that there is a "parking problem" in your downtown business district?
 - Yes No Don't know
- 2. How would you rate the supply of automobile parking facilities serving your downtown business district? Very good Inadequate Don't know
 - Adequate Very poor
- 3. About what proportion of your customers come downtown by automobile?
 - 25% Have no idea 75%
 - Less than 25% $_{-50\%}$ Over 75%
- 4. Do your customers ever comment about a lack of automobile parking space when they are shopping downtown? Regularly Occasionally Never
 - Frequently Seldom Don't know
- 5. Please indicate by check mark any of the following actions you have taken in the last three years primarily as a result of a poor parking situation in your downtown business district.
 - Provided free parking space for customers' auto-mobiles. (What is the total customer-car capacity a) of this space at any one time? ____ _cars)
 - Provided free parking space for customers with purchase of specified minimum amount of merb) chandise at your store.
 - c) . Provided parking space; customers charged for
 - Provided parking space, values, and parking parking.
 Tried to overcome parking difficulties by keeping store open more nights during the week.
 Tried to overcome parking difficulties by soliciting more telephone orders from customers. d)
 - e)
 - Tried to overcome parking difficulties by soliciting more mail orders from customers. f)
 - Started delivery service. g) h
 - Expanded delivery service.
 - Other (please state), i)

No individual action taken.

6. If you feel that a parking problem exists in the downtown business district of your community, will you please indicate any measures you have taken to relieve the situation apart from individual changes in your own business operations.

parking costs, encouraging greater customer use of public transportation facilities, contributing time and funds to studies of local parking, and requesting the municipal government to assume a major interest and responsibility in providing off-street parking.

The objective of this phase of the total study was an attempt to determine the extent to which the alternatives listed above (and any others encountered) were employed by downtown merchants in several Michigan cities of varying population as a contribution to the solution of parking difficulties in the central business districts of their communities.

- a) ____Organized with other merchants to study downtown parking situation and to establish parking facilities owned by a merchant group.
- Organized with other business people to study downtown parking situation and to develop proposals for action by your city government to better parking situation.
- c) ____Participated in organized efforts to encourage the use of public transportation by people traveling downtown to shop. Contributed funds to community efforts to relieve
- parking situation. Organized with other merchants to have more night
- openings, escape some of daytime demand for downtown parking space.
- f) Other (please state),

- g) ____No group action taken.
 7. Has any organized group approached you in any way concerning the downtown parking situation in the last three years?
- ____Yes ____No ____Don't know 8. If answer to question 7 is "Yes," what was the name of this group and the nature of their request or suggestion? Name of group ______ Nature of request or suggestion ______

- 9. If you have taken any individual or group action to relieve parking conditions in your city's downtown area, would you please try to estimate the time and money you have expended in these efforts during the last three years? Your answer to this question is extremely important in this study and will be held strictly confidentia

 - a) Approximate cost of parking facilities provided for customers by your store. b) Approximate cost to you of refunding customer parking costs. c) Approximate monetary contribution to group efforts to relieve downtown parking situation. d) Approximate amount of other monetary costs incurred by you to help improve downtown parking. (Please state nature below) Nature of other costs _ e) Total of approximate costs incurred by you to relieve parking. Total \$ Approximate amount of time you have spent individually or as a member of a group in studying, planning, and acting in efforts to better downtown parking conditions in
- your city. Your estimate, hr. 10. Name of your store Store address Type of merchandise handled (furniture, jewelry, etc.).

Thank you very much for your kind and helpful cooperation. Your assistance is greatly appreciated.

PROCEDURES

Five cities were selected for study, ranging from Grand Rapids to Ann Arbor in population size. The approximate 1950 figures for number of inhabitants are as follows:

Grand Rapids.	177,000
Flint	163,000
Pontiac	74,000
Battle Creek.	50,000
Ann Arbor	48,000

Through correspondence and personal interviews with downtown merchants, secretaries of community business organizations, and municipal officials concerned with parking conditions in each of these cities, an attempt was made to gauge the impact of postwar parking shortages on the operational methods of downtown retail firms. In Pontiac, a test survey was made of merchants' activities with respect to the general parking question, using an area sample of downtown stores and a short questionnaire which was completed by the store owner or manager.

It was found that in every community there were no more than five or six representatives of the central business district who had led the organization of merchants in whatever coöperative ventures they had taken and that information obtained from these individuals could describe reliably the pattern of joint action initiated by the city's downtown retailers. Interviews with individual store owners revealed somewhat more diversity with respect to adjustments the firm had made in its own operations to cope with the parking situation, but a predictable pattern emerged even here. It was found that large and long-established department stores and furniture outlets were usually the most active in implementing individual measures. The leading clothing stores would frequently be included in this group but not to the extent of the other two types. Thus, interviews with executives of these stores could be used with a reasonable degree of confidence as a gauge of the extent to which individual store action was being taken in the city's central business district as a result of downtown parking conditions.

RESULTS

Individual adjustments by stores (obtaining space for customer parking, promoting mail and telephone business, expanding delivery service, refunding customers' parking fees) were considered to be ineffective alternatives, although they have been attempted to a greater extent than before parking conditions reached their current state.

Group activity by merchants included some attention to the possibility of more-frequent night openings, but this alternative was suggested to a large extent by customer-service conditions other than parking. In fact, the view was expressed in several communities that successful night openings tend to magnify the parking problem because of customer demand for space that is concentrated in a relatively few evening hours, together with occupancy of facilities by the cars of theater-goers.

There was relatively little coöperative action among downtown merchants in the study cities in connection with encouraging prospective customers to patronize public-transit facilities. This attitude also prevailed to a large extent toward purchase and development of offstreet facilities by a merchant group.

The primary area of activity by downtown merchants in these communities appeared to consist of donations of financial help and their time after business hours to study the supply of parking facilities servicing the central business district. This was usually followed by recommendations to the municipal government for additional study of the situation and eventual action by the city to acquire, develop, and operate off-street facilities.

CONCLUSIONS

From the viewpoint of the downtown merchant, the demand and supply aspects of parking may be stated simply. It is felt that the number of people who are willing to pay a price high enough to insure a parking place for their cars under circumstances of existing storage facilities and large increases in the number of cars bidding for this space are not likely to be enough to enable downtown merchants to prosper. In order to induce a sufficient number of prospective customers to come downtown, it is believed necessary to charge low parking fees.

Usually, an effective point can be made by merchants in suggesting that the municipality assume the responsibility for providing low-cost parking by calling attention to the relationship which frequently exists between tax revenues obtained from the central business district and the costs of municipal services which it receives. It is contended that high land values of the central business district yield revenues which have subsidized, in effect, municipal services which the residential sections of the city have enjoyed. The conclusion is reached that the municipal entity should have a strong self-interest in preserving the attractiveness of the central business district for shoppers and, thus, maintain the land values of property therein.

It is argued that private-parking-facility operators charge literally all the traffic will bear and this discourages shopper patronage. Moreover, it is feared that private lots are likely to be impermanent and transitory if higher uses can be found for their sites. The private-parking operators, in turn, claim they have improved their services, are in the business to stay, and can store cars more efficiently (in less space) than can be done on the typically unattended municipal facility, and they attempt to prove through surveys that parking space downtown is adequate. They state that if more space is economically justified it would be provided either by themselves or by merchants acting individually or as a group to obtain land and devote it to parking. In this context, private-parking firms say the only competition they fear is that of the municipality and rates lower than the true cost of providing additional parking.

From the viewpoint of economic analysis, it would appear that if additional parking facilities are necessary for the merchandising activities of the central business district, they should cover their costs and be provided by the persons who benefit most from their existence. This last condition probably characterizes the difficulty of solving downtown parking problems. Who benefits most is almost impossible to prove. It is clear from interviews with downtown merchants that they feel a large number of their customers come to the central business district in their automobiles. Yet, they seem, in the aggregate, unwilling to assume a major responsibility for providing additional parking, saying that the city as an entity benefits from the high property values which an accessible business district creates.

Motorists destined for the downtown area benefit from the existence of storage space for their vehicles but apparently do not feel that they should have to bear the full cost of parking when it is their patronage of stores in the area which makes it valuable.

And municipal governments, not insensitive to the tax revenues obtainable from the central business district, feel that for the general welfare they probably benefit from the existence of additional off-street parking facilities, enough so that, in increasing numbers, they are providing them.

The objective of this phase of the total study was primarily to observe the pattern of merchant participation in efforts to relieve parking conditions prevailing in central business districts. The activities noted above indicate the solutions which are generally favored by downtown retailers. There are numerous instances of individual and coöperative action on the part of merchants in many cities to attack the problem without recourse to municipal assistance, but a growing popularity for this latter approach is evident. As a measure somewhat analogous to short-term tax exemptions offered by some governmental units to attract industry to a community, it appears likely to continue.

Acknowledgments

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Though their number precludes individual mention, a substantial debt is owed to the many department store presidents and executives throughout the country for the information they graciously provided. The participation of municipal officials, civic leaders, merchants, and secretaries of the chambers of commerce of the Michigan communities surveyed in the third phase of the study requires an appreciative acknowledgment.

Directly concerned with several aspects of the planning and conduct of the study were E. H. Gault, Frank P. Smith, John B. Hodges, James G. Hauk, and Helen Nyenhuis, of the Bureau of Business Research. Their participation was an essential part of the undertaking and is gratefully acknowledged.

To all these people and organizations a sincere note of appreciation is addressed along with the hope that their contributions have been utilized effectively in advancing business and transportation knowledge.