A REPORT UPON
THE CENTRAL
BUSINESS DISTRICT

COLUMBUS URBAN AREA A Report Upon the CENTRAL BUSINESS DISTRICT

Prepared for the

CITY PLANNING COMMISSION

and

FRANKLIN COUNTY REGIONAL PLANNING COMMISSION

By Harland Bartholomew and Associates City Planners Saint Louis, Missouri

April, 1955

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City Planning Commission Franklin County Regional Planning Commission

Gentlemen:

In accordance with our agreement we are pleased to submit herewith our preliminary report upon your Central Business District.

The central business district is a small, but unusually important portion of large urban areas such as Columbus. Every effort must be made to protect and improve such areas so that they can better perform their function and can more successfully compete with new outlying business districts.

The accompanying report contains data regarding the advantages and defects of the local business district, trends of development therein, and improvements that should be made during the next 25 years.

During the preparation of this report we have received the most helpful assistance from local officials, organizations and individuals. Your staffs performed much of the detailed work upon this study.

Respectfully submitted,

HARLAND BARTHOLOMEW AND ASSOCIATES

By Russel H. Riley

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#### INTRODUCTION

The central business district is the heart of the urban community. It serves as the focus of economic, cultural and, in part at least, social activities not only of the city proper but also of a large part of the hinterland beyond. It provides the locus of major retail stores, offices, types of government facilities, hotels and theaters which rely upon the whole community for their patronage or use. The general arrangement of the district and of land uses therein, the systems of downtown streets and major access arteries, the facilities for mass transportation and areas for offstreet parking are the principal elements which determine how well the district can perform these funtions.

The protection and even more, the improvement, of the central business area are of vital importance to Columbus. Not only do the many downtown business establishments and individual property owners have a direct stake in its future, but the city itself depends on the district for a substantial part of its tax income. The assessed valuation of land and buildings in the central business district aggregates more than \$115,000,000 or approximately one seventh of the total valuation of land and buildings in the city as a whole.

Because of its centrality and consequent convenience and accessibility to most of the population, the downtown district is able to offer the widest possible choice of goods and services as well as to provide the locale for cultural events, the theater, or other entertainment which must draw from the entire urban population for their interest and support. These purposes can never be completely replaced by outlying centers. While many kinds of goods and services of the more standard types can and should be provided in local shopping districts for convenience and efficiency, a strong central business district is necessary to the successful maintenance of specialty shops, most clothing stores and similar establishments where personal taste and individual preference dictate a wide variety of selection. Thus, improvement of existing shopping facilities and services as well as in the general appearance, convenience and accessibility of the district would benefit the whole community.

The substantial amount of suburban growth -- or urban decentralization -- brought about by the ever increasing use of the private automobile for local transportation, has had a marked effect on the central city core. Not only have the closer-in areas been retarded in growth, but large new shopping centers have sprung up in the outlying sections of most communities, frequently in direct competition with downtown merchants. This condition is even more pronounced in Columbus than in most cities of comparable size, with five major centers already in existence and several others in the construction or planning stage. While the central business district is still the primary focus of retail and business activities here, considerable improvement will be needed in the future if the downtown area is to hold its own in competition with these decentralized shopping centers, with their more liberal parking areas and greater freedom from traffic congestion. Furthermore, intensive building development and high land values make improvement of downtown conditions both difficult and costly.

Many of the individual establishments in the central business district as well as the district as a whole should be made more attractive. Parking facilities are congested, additional spaces are already needed and still more will be required in the future. Present peak traffic volumes are at or above existing street capacities in much of the district and better circulation must be brought about in the future through reduction of through movements and better traffic control. The expediting of transit operations and greater use of mass transportation are also desirable.

Measures designed to bring about the betterment of these conditions, including plans and recommendations for the desirable future pattern of land use, are the subject the desirable future pattern of land use, are the subject of this report. In addition to the general organization of the district, and a suggested parking plan, minor adjustments in transit routing and a few additional connections ments in transit routing and a few additional connections to the projected expressway innerbelt have been proposed, to the projected expressway innerbelt have been proposed, along with other suggestions to provide for better traffic along with other suggestions to provide for better traffic along and over-all improvement in the district's appearance.

# GROWTH AND DEVELOPMENT OF THE CENTRAL BUSINESS DISTRICT

The area generally comprising the Columbus central business district is bounded by Naghten Street on the north, Grant Avenue on the east, Fulton Street on the south and the Scioto River on the west. This is relatively large, however, and includes substantial fringe wholesale and industrial development and several blocks of old dwellings which cannot be considered a part of the business district proper. The concentrated business area, or core of the district, extends from Spring to Main Street between Third and Front.

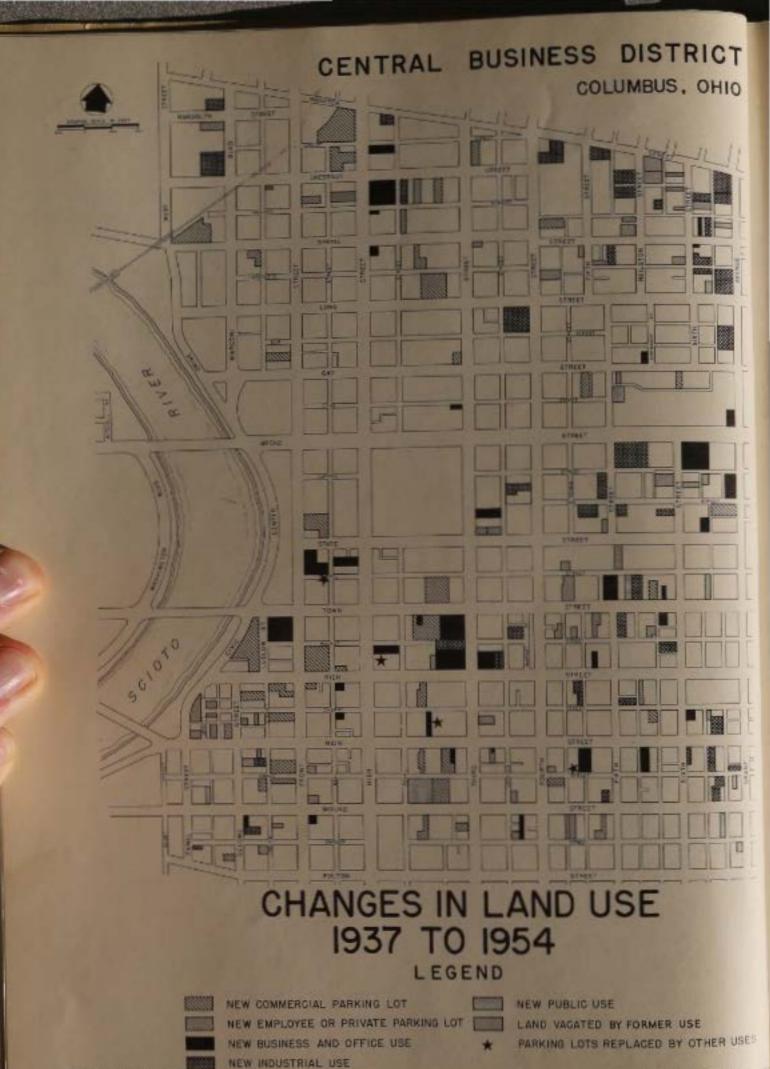
While the Columbus business district is not as centrally located as might be desired, primarily because of the unbalanced pattern or growth, particularly to the north, it is still reasonably accessible to most parts of the community and will be made more accessible on completion of the proposed system of expressways. The city is fortunate in the possession of relatively wide downtown streets although the large amount of through traffic forced into the district utilizes many of the main arteries to or beyond their traffic-carrying capacities. There is ample room for future expansion of commercial activities as well as opportunity for the creation of additional public building sites.

#### Organization of the District

In the century and a half of its existence, Columbus has witnessed many changes in the original settlement. Probably nowhere have these changes been greater or more frequent than in the central area. Many of the business structures have been replaced over the years, some of them several times, and the various retail stores and offices have gradually multiplied and expanded to meet the needs of the growing community. More recently, buildings have sometimes been removed without replacement, to serve as parking lots or to await other uses more profitable than the existing structure.

## Changes in Land Used

Changes in land use within the general central business district since 1937 are shown on Plate 1. (This map was prepared by comparing information from a 1937 Atlas and prepared by comparing information from a land use survey.)



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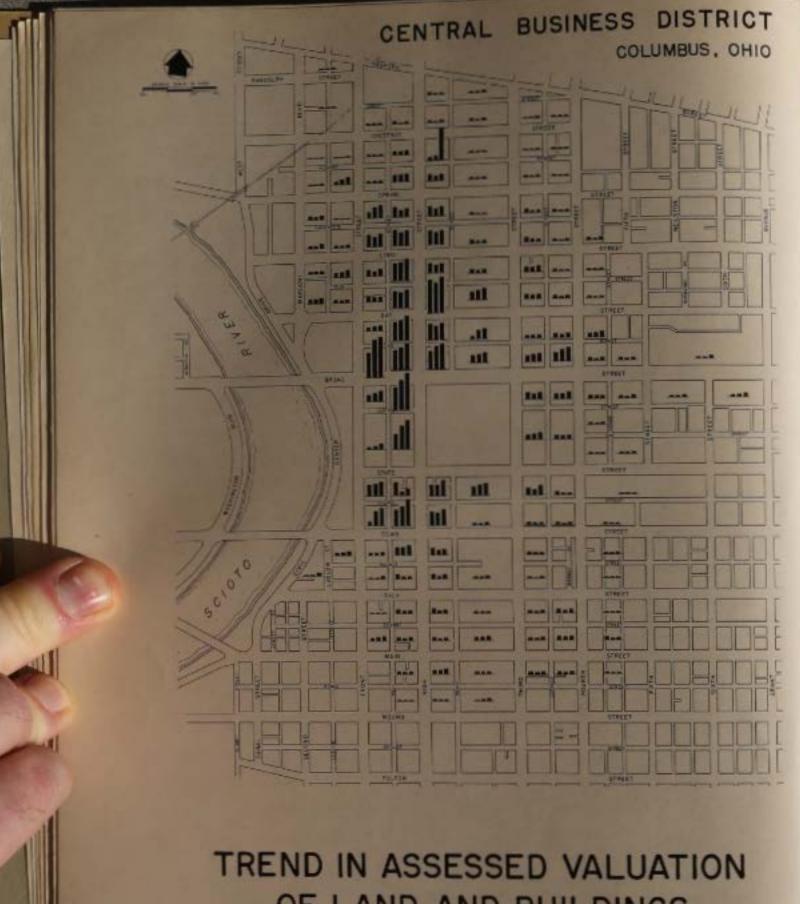
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While a large number of changes have occurred during the past 17 years, many of these involve the demolition of existing structures only, without replacement by new buildings, and relatively few changes have taken place in the concentrated inner core. The latter, however, include considerable extension of the Lazarus store in the vicinity of Front and Town Streets and the large new Farm Bureau Insurance Company building on North High Street. for the bus depot at Town and Third and the two supermarkets on Rich Street, most of the other new business or commercial establishments have been small and quite scattered through the district. The total land area involved in the new office building and other new commercial enterprises or extensions (including the F. and R. Lazarus Company enlargement) aggregates only some eight acres -- an average of about one-half acre per year.

It is obvious from Plate 1 that the greatest changes were in the establishment of additional parking facilities, either in the form of commercial parking lots and garages or in the use, at least temporarily, of cleared areas for private or employee parking. For example, two new garages and five or six new parking lots were located at the southwest periphery of the business core and a number of additional lots are to be found between Pearl and Third Streets on Town, Rich, Main and Mound as well as at the north end of the district on Spring and Chestnut. The new commercial parking lots and garages developed since 1937 comprise over 12 acres, with parking accommodations for more than 3000 cars, although at least four existing parking lots were lost during this period to new building construction. The scattered areas in the northeast sector of the district are used primarily for private and employee parking in conjunction with adjoining industries in this section.

The changes in land use between Grant and Fourth Streets north of Long involve mostly wholesale or trucking establishments or light industrial extensions and concomitant parking; ments or high industrial extensions and concomitant parking; those in the vicinity of East Broad automotive sales and those in the vicinity of East Broad automotive sales and service; and the remainder at the southeast of the district, small warehouses, garages, and a few small industries.

Thus, with the exception of a relatively few structures such as the Lazarus and Farm Bureau buildings there has been little enlargement of retail and office facilities in the Columbus business district for more than fifteen years despite the substantial growth of the city's popuyears despite the substantial growth of the city's population. During this period, on the other hand, five major lation. During this period, on the other hand, five major lation shopping centers have been developed and several outlying shopping centers have been developed and several others are now under construction or are being planned.



# OF LAND AND BUILDINGS

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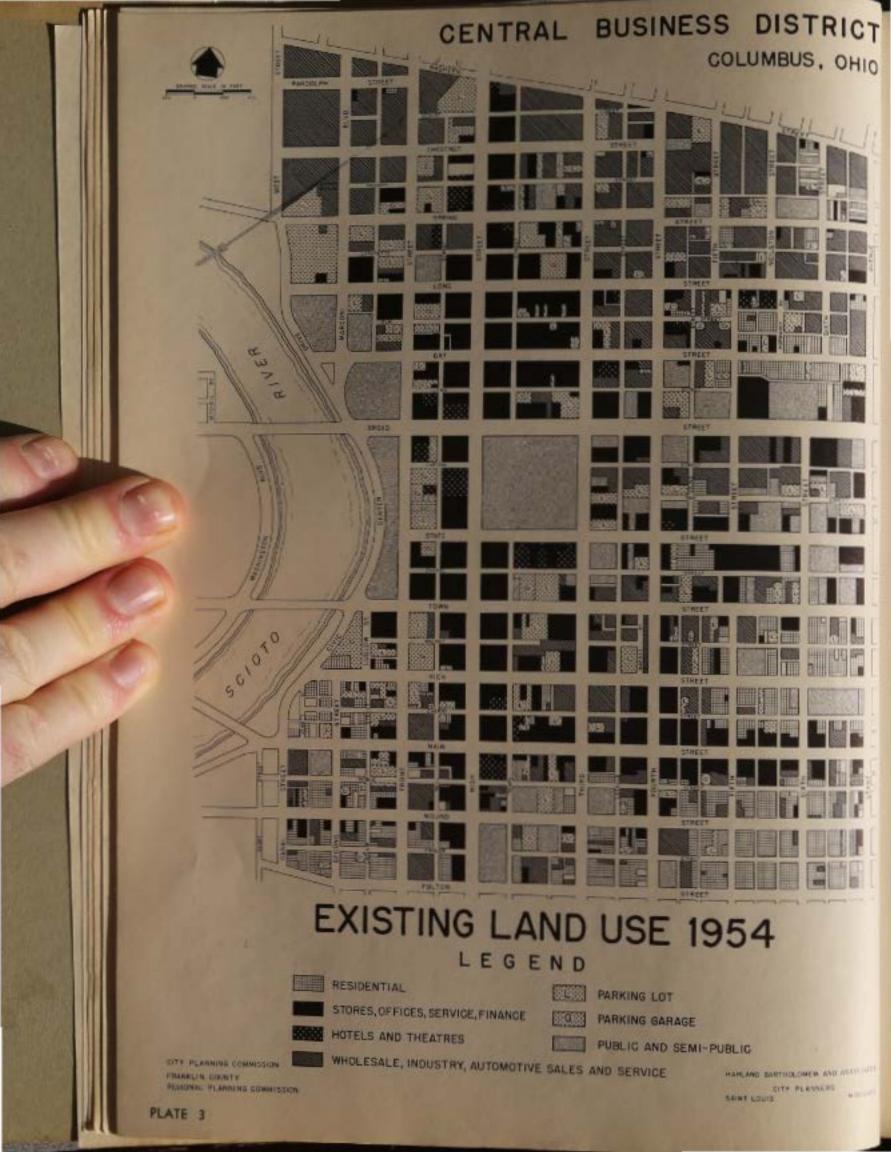
# Trends in Assessed Valuation

Plate 2 shows graphically the average assessed valuation per square foot of land and buildings by blocks or divisions thereof for the years 1937, 1944, and 1954. This information was compiled for the entire area covered by the map (although square foot valuations of the blocks and State Office Building are not shown) and includes the valuations of institutions, churches, and other semipublic as well as public tax-exempt properties.

In general and as would be expected, the highest valuations are to be found along High Street, particularly between Long and Town. However, these extend only a half block in depth on either side of the street and there is a pronounced dropping off in assessments on the side streets both east and west of High. For example, the average assessed valuations of land and buildings are largely \$50 or more per square foot along High Street between Gay and State, and \$40 to \$50 per square foot in the two blocks to the immediate north and south, in contrast with \$20 to \$30 per square foot on Gay, Broad and State Streets and less than \$10 per square foot along Long and Town Streets east of Pearl. The remaining blocks -- west of Front Street and in the north, northeast, south and southeast sectors -- are relatively low-valued, most of these ranging between \$2.50 and \$10 per square foot.

It is apparent in Plate 2 that there has been a steady increase in the value of most of the area between High and Front Street extending from Town to approximately Long, as well as along Gay Street between High and Third and on Broad, State and Third Street surrounding the Capitol. The remainder of the district has been comparatively static and many blocks--notably along High Street north of Long and south of Town Street--have actually declined in assessment since 1937. The large increase at the southeast corner of High and Chestnut resulted from the construction of the new State Farm Insurance Company building.

In general the valuation pattern is indicative of both the relatively small business core occupied by existing offices and shops in donwtown Columbus and the failure of business establishments to develop more intensively along the various side streets in a compact, well-rounded along the various side streets in a compact, well-rounded district. Except for the property along State Street and district. Except for the property along State Street and in the vicinity of Town and High Streets, little of the area south of the Capitol has been intensively used from a business standpoint, assessments in some blocks dropping a business standpoint, assessments in some blocks dropping to \$2.50 per square foot or lower.



The total assessed valuation of land and buildings in \$116,750,950 of which \$93,397,940 is included in the business core between Front and Fourth and Spring and the Main Streets. (These figures include book valuations of the Main Post Office, City Hall, State Capitol, State Office Building, and other public as well as semi-public tax-exempt properties, the four specifically mentioned amounting to \$25,598,000). The district as a whole represents about one seventh and the inner core about one ninth of the assessed valuations for the entire city (including tax-exempt property).

The concentration of values within a relatively small part of the district is attested by the fact that the business core comprises some 80 per cent of the value of the central business district as a whole. Furthermore, over \$38,500,000--or 42 per cent of the total valuation of taxable property within the area as a whole is included in the blocks between Long and Town and Pearl and Front Streets which aggregate less than seven per cent of the district shown on Plate 2.

#### Existing Land Uses

The distribution of land uses within the central business district is shown on Plate 3. In order to indicate their relation to the stores, offices and other business development, parking lots and garages have been delineated separately from other land uses, even though all parking areas are shown in detail on a later plate.

The most striking characteristic of the existing land use pattern is the lack of organization, particularly of commercial establishments within the district. While High Street is almost solidly commercial north of Mound Street and, except for the State Capitol, the area between High and Third and Rich and Spring Streets is also almost solidly commercial, a large amount of scattering has occurred east of Third Street in both the north and south quadrants of the area. Much of the commercial development along east State Street, consists of doctors and medical offices directly or indirectly related to the two hospitals in the vicinity of Grant and State. The frontage along East Main Street is almost completely occupied by furniture and household appliance stores, service establishments, and the like, generally of a different character and only somewhat removed from the shopping district to its north.

The scattering of commerce over too wide an area not only prevents the development of a compact, efficient shopping district which can be conveniently served by ample offstreet parking accommodations, but also tends to detract from the appearance of the district due to the interspersion of submarginal properties.

Industrial uses occupy the extreme northwest sector, consisting of several sizeable industries and large warehouses along the railroad west of Front Street, and considerable industrial property is to be found also in the area between Fourth and Grant Streets north of Gay. The latter includes warehouses, wholesale establishments, trucking depots and other scattered industries, most of the frontage on Long Street east of Third, for example, being used by automotive appliance concerns and miscellaneous distributors. Automobile agencies in the vicinity of Fifth and Broad have several large used car lots located between Capital and Oak Streets.

Most of the industrial property around Fourth and Town Streets is occupied by produce houses induced by the city market at this location. The latter is unsightly, interferes with normal traffic flow and occupies valuable land which could be used much more profitably for other purposes. The present site is much too cramped for efficient operation and the market should be moved to a new site where ample parking, loading and railroad facilities can be made available.

Certain public buildings which perform administrative or cultural functions of city-wide service are commonly located in or at the edge of the central business district where they are convenient to the various offices as well as to most citizens of the community. Many semi-public buildings, including institutional headquarters and some of the older churches, also prefer central locations convenient to other downtown facilities. When appropriately located, these buildings can be assets to the district, providing a degree of openness and greenery at the edges of business development which adds to its attractiveness of business development which adds to its attractiveness while helping to promote the economic stability of the adjoining area.

The public and semi-public properties within the Columbus business district are rather extensive. With the exception of the State Capitol, which occupies a site of ten acres in the center of the business core. The

public buildings are well located at the edge of the district mostly between Front Street and the Scioto River. The existing State Office Building opposite State Street is a particularly attractive structure and the City Hall, while old, is well located at Broad and Front Streets. new State Office Building is seriously needed and the state is now considering its erection. The main Post Office and Federal Building is relatively new but postal facilities are already inadequate and a new structure is needed. The Court House, County Jail and Detention Home are all situated in the vicinity of Mound, Fulton and High Streets, the Court House and Jail are old, and the former no longer adequate to accommodate all the county administrative functions, necessitating the decentralization of certain offices in other buildings in addition to the new Court House Annex. The Court House will require eventual rebuilding or replacement to provide needed space and a more efficient arrangement of offices.

Semi-public buildings are somewhat scattered, mostly in the area between Gay and High east of Third Street. Some of the larger of these are Catholic properties, notably St. Joseph's Cathedral and the Cathedral School on East Broad Street and the Holy Cross Church and school and St. Joseph's Academy on East Rich Street. The two hospitals located in the block between State and Town Streets east of Sixth are conveniently placed from the standpoint of centrality of service but extremely restricted in area both for building expansion and parking, and additional land should be made available in the future. Much of the commercial frontage on East State Street and in the vicinity of the hospitals along Grant is now used for doctors' offices and a substantial hospital-clinic-medical office development in this vicinity in the future would be a desirable use of the land.

Residences have been crowded from most of the area although living facilities are located above some of the smaller stores. The residential structures that remain are to be found principally in the sections west of Front and south of Main and in the southeast sector along Rich, Mound and Fulton Streets as well as along East Gay and scattered and Fulton Streets as well as along East Gay and scattered in the extreme northeast. Many of these dwellings are in bad in the extreme northeast. Many of these dwellings are in bad in the extreme northeast of these dwellings are in bad in the extreme northeast. They should be replaced by other uses although the ment. They should be replaced by other uses although the area contemplated for redevelopment east of Fourth Street is well adapted to downtown apartments.

Table 1
EXISTING LAND USES

# Central Business District Columbus, Ohio

Use	Acreage		Per Cent of Total Area
Residential		39.50	7.9
Commercial Sales and Service, Offices and Finance	79,25		
Hotels and Amusement	6.53		
Automotive Sales and Service, Wholesale and Industry Total Business Uses	86,88	72,66	34.3
Parking Lots and Garages		39.90	7.9
Public Property	27.97		
Semi-Public Property Total Public & Semi-Public	17.58	45,55	9,1
Streets and Alleys	2	00.90	40.0
Vacant		4.13	0.8
Total Area of District	5	02,64	100.0

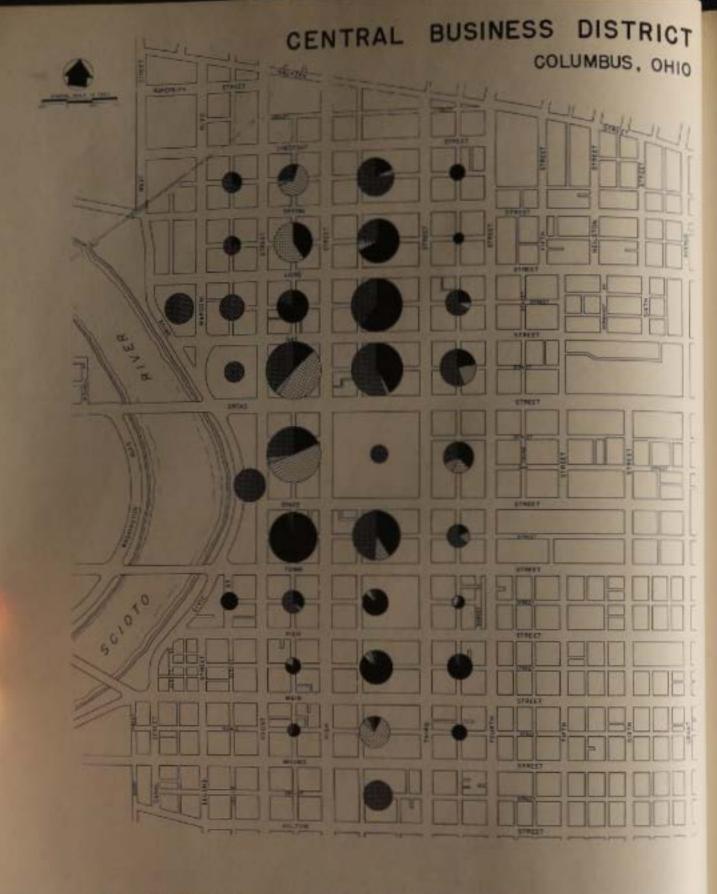
A number of parking lots and garages are located in the district. Many of these are small although usually intensively used. (In general, employee parking areas have not been delineated separately on Plate 3, being considered an integral part of the establishments which they serve.) The largest concentrations are to be found along Front Street at the edge of the business core and to a lesser degree along Spring, Chestnut, Town and Rich Streets.

The existing bus terminal at Town and Third Streets is conveniently related to the center of the district, but the site is too constricted in size for satisfactory bus operations and lacks space for the handling of private automobiles used in local transport. As a result considerable interference with traffic, particularly on Third Street, is caused by double parking or cruising around the station. While the site is closer than necessary to the business core, occupying land which would be more valuable for other commercial uses, it can be utilized with less interference if enlarged sufficiently to provide additional space for buses as well as adequate off-street area to accommodate the short-time parking of private automobiles and taxis used in passenger transfers.

The areas occupied by existing land uses within the central business district are shown in Table 1. These figures differ slightly from those in an earlier report which included a few additional blocks at the north edge of the district.

which comprise two-fifths of the entire area--or almost as much as all industrial and commercial establishments and off-street parking combined. This is due to the wide streets originally laid out as well as to the numerous wide alleys traversing most blocks. The wide thoroughfares facilitate vehicular circulation in the district but the alleys create problems of traffic control due to their use as trafficways and concomitant traffic interference caused by the short blocks and excessive turning movements.

While a substantial acreage is still used for residence purposes, this represents less than one-twelfth of the total district area. Industrial and wholesale establishments along with auto sales and service occupy slightly ments along with auto sales and service, finance, hotels, more land than retail business, offices, finance, hotels, theaters, and the like, which constitute the core of the theaters, and the like, which constitute the core of the business district, all industrial and commercial properties



# DISTRIBUTION OF FLOOR SPACE

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together accounting for one-third of the total acreage. The State Capitol, City Hall, Post Office and other public property together with churches, schools, and miscellaneous institutional or semi-public land have absorbed nearly one-tenth of the aggregate district area. While some 40 acres are used for off-street parking, including commercial, customer and private parking lots or garages, this represents only eight per cent of the total area. The aggregate parking area in downtown Columbus is only slightly larger than the acreage of off-street parking facilities in the central business district of Dayton even though the latter is somewhat smaller in population and a much smaller area was included in the business district.

## Distribution of Floor Area

Information concerning the area and distribution of floor space in the central business district is of assistance in determining the areas of greatest business concentration, particularly for the purpose of determining parking needs in different parts of the district. This information by major categories of business use is shown on Plate 4 for all blocks of the central district wherein such areas are significant. The data were computed from measurements taken from the Sanborn Insurance Atlas.

From a shopping standpoint, the greatest single traffic generator is the block between High and Front and Town and State Streets which includes the F. & R. Lazarus department store. The block immediately east between High and Third Streets and the three blocks immediately north of the State Capitol also contain large amounts of retail floor space.

In addition to the several public buildings, offices are concentrated in the blocks surrounding the State Capitol and in the section between High and Front Streets north of Gay. Hotels are located mainly between High and Front Streets, the largest, of course, being the Deshler-Hilton and Neil House on either side of Broad Street.

The data presented on Plate 4 correspond closely with the information on trips obtained through the 1949 Origin and Destination Survey conducted by the Ohio Highway and Destination Survey conducted by the Ohio Highway and Department. The latter revealed that the block with the Department. The latter revealed that the block with the highest number of specific trip destinations was that highest number and High Streets and the bounded by State, Town, Front and High Streets and the streets. around the State Capitol along Broad, High and State Streets. Thus, there is a close correlation between retail, office and hotel floor space, automobile destinations, and the need and hotel floor space, automobile destinations, and the need and hotel floor space, automobile destinations, and the need district.

### Summary

Existing development in the Columbus central business district has several assets, but is not arranged for maximum convenience and efficiency. Considerable improvement must be effected if it is to compete successfully with the growing number of outlying shopping centers, which already exceed the bounds of what may be considered normal or desirable—even for a community of somewhat larger size than the city's present half million. Despite Columbus's substantial population growth, moreover, there has been relatively little expansion in recent years of the commercial area downtown, in contrast with peripheral shopping facilities.

The organization of business uses, particularly retail stores and shops, is not as compact and continuous as economy, efficiency and convenience would demand, and parts of the district need refurbishment and improvement in general attractiveness. Development along High Street, for example, changes noticeably south of Town, both the appearance and character of establishments differing materially from those to the north. Some of the side streets need improvement also to attract and hold the custom and patronage which might be expected in a city this size.

From the standpoint of room for expansion, there are no serious barriers to reasonable enlargement of downtown facilities. For convenience and efficiency, better organization of retail business is desirable and could be accomplished in the area between Third or Fourth Street and Front without extending more than two or three blocks on either side of Broad Street. Certain marginal or submarginal property uses should eventually be displaced, particularly the old dwelling areas, although the southeast sector is suited to higher density apartments as proposed in preliminary to higher density apartments as proposed in preliminary studies of the Market-Mohawk section made by the Columbus Urban Redevelopment Authority.

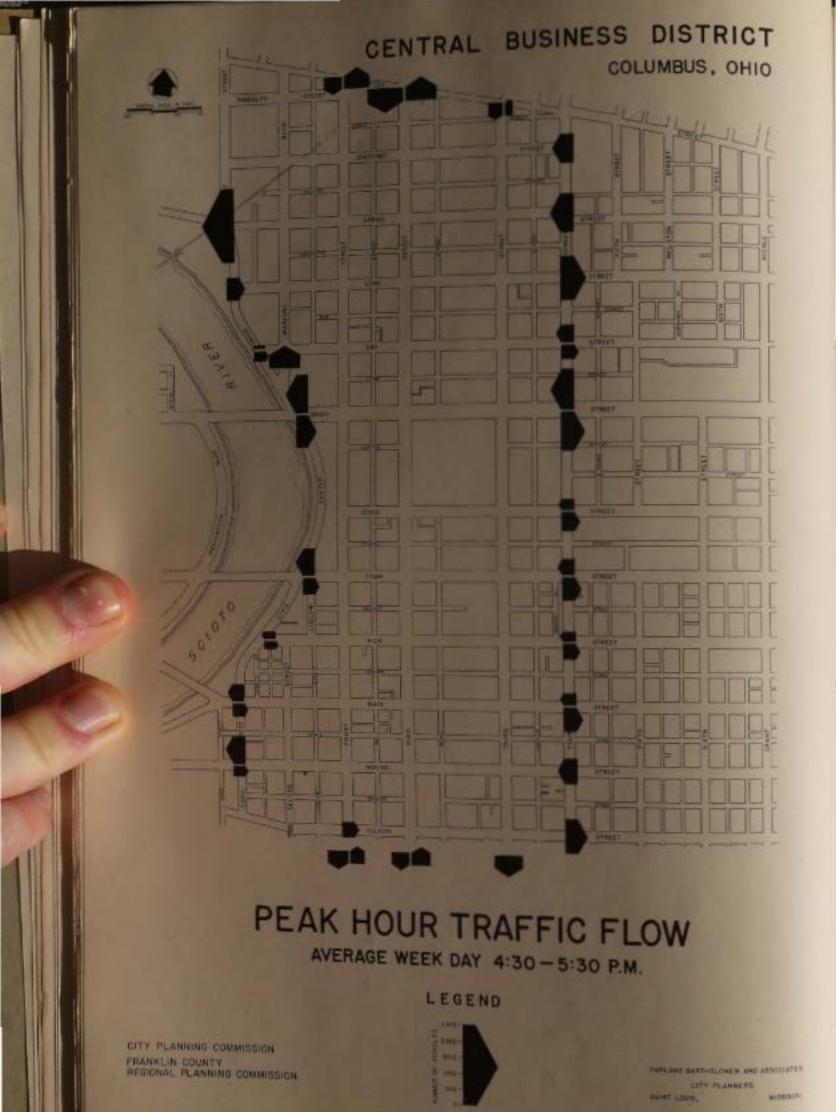


PLATE 5

# STREETS AND TRAFFIC CIRCULATION

Columbus is fortunate, as noted before, in the possession of wide downtown streets. At present, however, this advantage is partly offset by the lack of good cross-town and bypass arteries which forces a considerable volume of extraneous traffic through the central business district in traveling between different parts of the community, thereby absorbing street capacities needed for circulation during peak traffic periods within the district itself. A survey of traffic origins and destinations conducted by the Ohio Department of Highways in 1949 indicated that some 63 per cent, or nearly two out of every three vehicles entering or leaving the Columbus central business district, were merely passing through the downtown area in moving from some other part of the city to another. This is an exceptionally high percentage in comparison with such traffic in most other cities and shows the importance of developing additional crosstown arteries and especially the innerbelt expressway which will serve as a bypass route for much of this traffic.

#### Peak Hour Traffic Flow

Planning Survey and additional personnel supplied by the Regional Planning Commission and the City Traffic Engineer, traffic counts were made between the hours of 4:00 and 6:00 p.m. at the various entries to the central business district. These counts were taken on typical weekdays in early November, 1954. Maximum traffic volumes were found to occur between 4:30 and 5:30 p.m.; the amount of such movements is shown graphically by the width of directional bands delineated on Plate 5.

High Streets—the one-direction traffic on West Spring actually equalling the traffic in both directions on Broad Street. Both of these amount to about 2300 vehicles per hour. Traffic on High Street is considerably heavier at the north edge of the district than at the south, due to the elongated development northward to Worthington and the elongated development northward to Worthington and the much larger tributary population. Only 1200 vehicles per hour moved over High Street north of Livingston in contrast hour moved over High Street north of Naghten Street. The with 2100 vehicles in the vicinity of Naghten Street. The comparatively light flow at the north end of Third Street comparatively light flow at the north end of traffic north of is occasioned by the devious movement of traffic north of is occasioned by the devious movement of traffic north of increases substantially south of Spring and Long Streets, increases substantially south of Spring and Long Streets, amounting to 1800 vehicles or more per hour below Long.

Traffic is generally fairly evenly distributed on the various east-west streets south of Broad Street, particularly at the east portals to the district, where it ranges between 800 and 1100 cars per hour. However, the two one-way arteries, Long and Spring, are much more heavily travelled than Gay and Chestnut in the area north of Broad.

It is apparent that east-west traffic in the aggregate greatly exceeds that to the north and south, 10,200 vehicles passing through the west entries to the area, 12,545 to and from the east, and only 6270 and 5650 respectively to and from the north and south. This is to be expected since many more entries to the district are available to the east and west. While generally indicative of traffic volumes in each of the major directions, the figures are not perfect measures of such distribution due to the movement of some traffic around the district before crossing a particular part of the cordon. However, even though such traffic may approach the district from the north, for example, and enter from the east or west, the great disparity between the distribution of traffic volumes and the distribution of population in the major directions indicates that a substantially greater use is made of mass transportation to and from the north, particularly in the university section, and to a lesser degree to and from the east than to the west and especially the south--which is substantiated by data on the number of passengers carried by the individual transit lines. Wider use of mass transportation would help to reduce vehicular volumes in the future and should be encouraged by more direct routing of transit lines, the favoring of transit operations by traffic control measures (including the elimination, where necessary, of curb parking), the establishment of express transit routes, and in other ways, as will be discussed in a subsequent study.

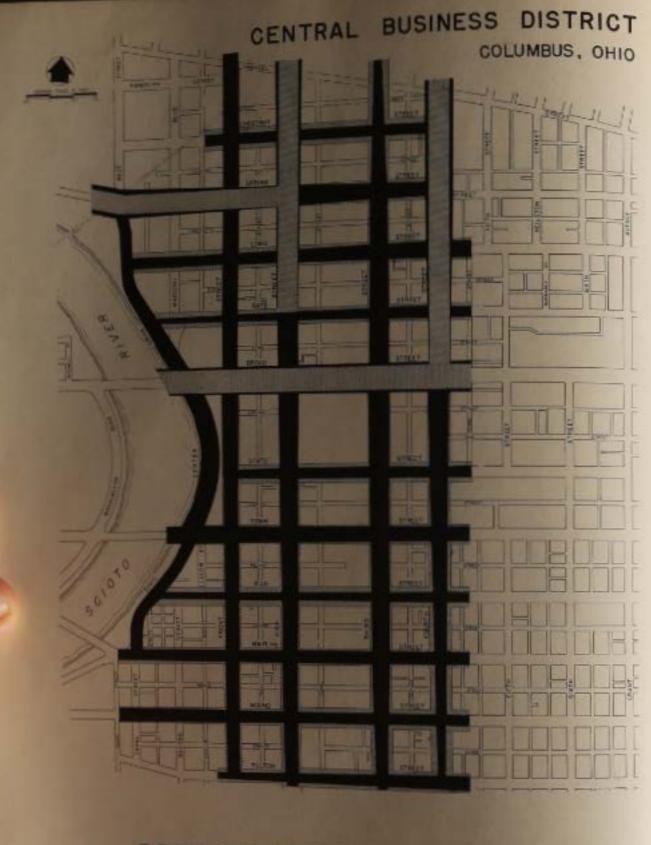
The relatively large volume of through traffic traversing the central business district is shown indirectly by comparison of traffic into and out of this area during the afternoon peak. In the average community outgoing traffic constitutes usually from 55 to 60 per cent of the total during constitutes usually from 55 to 60 per cent of the total during the maximum period, but that in Columbus represents only the maximum period, but that in Columbus represents only 53.5 per cent due to the large movement of vehicles into 53.5 per cent due to the large movement of vehicles into 53.5 per cent due to the district during this hour. Furtheras well as out of the district during this hour. Furtheras well as out of the district during this hour. Street actually have more vehicles entering than leaving Street actually have more vehicles entering than leaving the district between 4:30 and 5:30 p.m.

For purposes of determining traffic distribution during off-peak periods as well as for comparison of 1954 volumes with the 1949 Traffic Survey, 24-hour counts were made at the West Broad, North High and East Main Street portals. West Broad Street carried almost 2000 and North High Street over 1700 vehicles during the peak morning hour 7:00 to 8:00 a.m., in comparison with some 2250 and 1900 vehicles respectively during the afternoon maximum. Ordinarily, peak afternoon traffic is substantially higher than the maximum morning flow, and the comparatively heavy early morning traffic in downtown Columbus is another indication of the through movement brought about by home-to-work travel, for example, passing directly through the business district.

The 1949 Traffic Survey revealed that approximately 332,000 vehicles entered and left the Columbus central business district during the average 24-hour day. On the basis of the peak-hour counts and the pattern of traffic distribution during the rest of the day indicated by the Broad-Main-High Street enumeration, it is estimated that about 384,000 vehicles used these same arteries during an average day in November, 1954. This indicates an increase of nearly 16 per cent during the five-year period, which is consistent with increases in population, automobile registrations and driving habits in the Columbus region. While an average annual increase of more than 3 per cent is not likely to continue indefinitely over the next twentyfive to thirty years, an over-all gain in traffic volumes within this area of as much as 50 to 60 per cent would not seem improbable by 1980.

## Traffic and Street Capacities

Traffic congestion is an almost daily occurrence in the downtown districts of large cities. Even though many communities, like Columbus, have wide streets for circulation within the central business area, experience has shown that mounting traffic volumes, on-street parking, the delivery of goods and the servicing of business establishments, of goods and the servicing of business establishments, that have begun to tax many such streets to accommodate all have begun to tax many such streets to accommodate all these activities. The primary purpose of downtown streets to the movement of traffic and frequently, even in off-peak is the movement of traffic and frequently, even in off-peak or unloading, must be restricted along certain thoroughfares or unloading, must be restricted along certain thoroughfares or unloading, must be restricted along certain thoroughfares or unloading, while sometimes inconvenient, are the Such restrictions, while sometimes inconvenient, are the Such restrictions, while sometimes inconvenient, are the Cheapest means by which the traffic-carrying capacity of cheapest means by which the traffic carrying capacity of cheapest means by which the traffic carrying capacity of cheapest means by which the capacity of cheapest means of the capacity of capa



# PRESENT TRAFFIC VOLUMES AND STREET CAPACITIES

TYPICAL PEAK HOUR 4:30-5:30 P.M.

LEGEND

CITY PLANNING COMMISSION FRANKLIN COUNTY REGIONAL PLANNING COMMISSION



TRAFFIC VOLUME CASE THAN CAPACITY



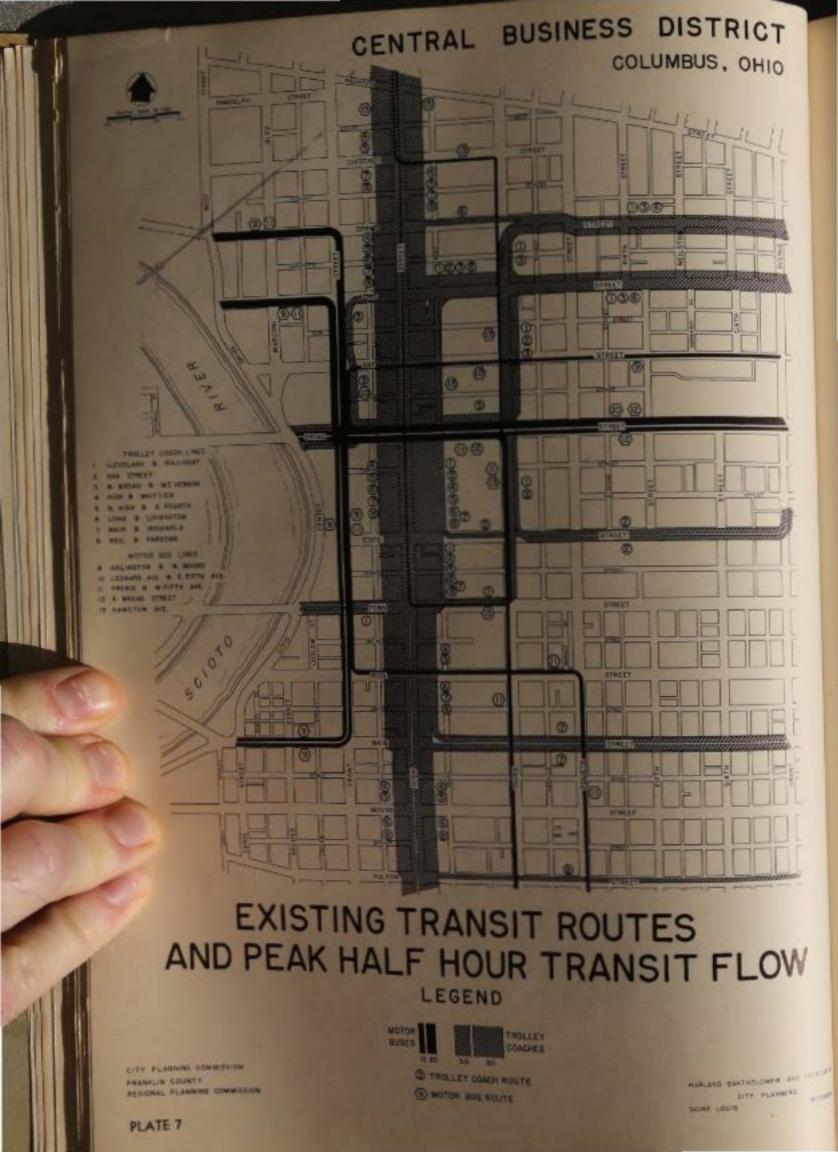
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engineering measures such as the elimination of specific turning movements, changes in the timing of signal lights, special traffic signals, one-way traffic, etc., may capacity. Street widening is an expensive but sometimes necessary last resort, although limited pavement widening is occasionally possible within the bounds of the existing street right of way.

In appraising present traffic conditions in downtown Columbus, a study was made of existing practical street capacities in comparison with vehicular volumes from the November peak-hour traffic counts. This comparison is graphically presented on Plate 6. Street capacities were determined on the basis of empirical charts developed by the Ohio Department of Highways and are based on existing pavement widths without parking (which is already prohibited during the peak-hour on practically all of these streets) and the present distribution of buses, passenger and commercial vehicles. Streets already used beyond their practical capacities are indicated on the plate by the dark band on the outside of the street, those with additional capacity available by the lighter bands outside the present volume designation.

Several streets in the north half of the business district are already carrying traffic loads which equal or exceed their normal working capacities. This is true of High Street north of Gay, of Fourth Street north of Broad, of Spring Street east of High and of Broad Street through the district. In addition, Third and Front Streets have reached or are approaching their traffic capacities. Only Long, Gay and Chestnut Streets can accommodate any material increase in the present vehicular volumes in the north end increase in the present vehicular volumes in the north end increase in the strict without becoming seriously congested thereby.

South of Broad Street, however, some additional street capacity remains, notably in the east-west direction on State, Rich and to a slightly lesser degree Mound and Fulton Streets, although both Town and Main Streets are virtually Streets, although both Town and Main Streets are virtually at capacity. The latter lead across the Scioto as well as at capacity. The latter lead across the Scioto as well as east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, which attracts more traffic, east of the business district, and the more local Rich and especially through movements, than the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through movements at the more local Rich and especially through the movement at the more local Rich and especially through the movement at the more local Rich and



It is apparent from Plate 6 that no large scale increase in vehicular movements can be accommodated by the present downtown street system without creating conditions of traffic congestion, although an increase of some 20 per cent additional could be accommodated by utilizing all existing streets to their capacity (if perfect distribution of traffic were possible) and by traffic control measures, including the elimination of certain left turns. In order to provide satisfactorily for future traffic circulation, assuming an increase in present downtown movements of at least 50 per cent, it will be necessary either to increase existing street capacities by widening or to find other means of moving people and vehicles within the urban area. The first would be most difficult and expensive. However, the latter can be accomplished by (1) construction of the projected innerbelt expressway which will accommodate through traffic and afford better distribution for traffic destined for the district, and (2) encouraging wider patronage of mass transportation, which would reduce the number of passenger cars in the area. Both of these are discussed further in the section on proposed improvements in the central business district.

#### Transit Routing and Volumes

Present transit routing in downtown Columbus and the volume of transit vehicles during the peak half hour are shown graphically on Plate 7. Only those lines operated by the Columbus Transit Company have been shown, the motor buses to and from Lockbourne, Grove City, General Motors, and a few other suburbs being operated on half hour or other special schedules with only limited service.

Eight trolley coach and five motor bus lines, constituting all except the feeder routes of the Columbus transit system, provide service to the central business district. Seven of the trolley coach and three of the motor bus lines operate through the district to another section of the city, the other three looping downtown. The one-way streets, principally Spring, Long and Third, have influenced the routing in certain instances, but in general the various lines proceed through the district with reasonable directness. Since four of the routes are operated almost completely through the district on High Street, several others operate thereon in part, and all others except the Arlington-West Mound Street line (located over Front) cross High Street, convenience to the existing office and shopping facilities and ample opportunity for transfer between lines are afforded by the present routing. However, a few changes in these routes would be desirable to facilitate operation as discussed later.

The large number of lines located over High Street generate a considerable volume of transit vehicles during the peak half hour, particularly between Town and Long Streets, where some 65 trolley coaches and four motor buses are routed northbound and almost 50 trolley coaches south-This is an average of one vehicle every 26 seconds northbound and every 38 seconds southbound. Such a volume of transit vehicles together with their loading and unloading practically absorb one lane of traffic in each direction. The far side passenger loading zones seem to be generally satisfactory to accommodate the movements, but difficulty is experienced in making certain turns, particularly that at High and Long, due to pedestrian as well as other vehicular traffic, and interference is encountered from the movements of private automobiles in and out of alleys, which are excessive and should be restricted in downtown Columbus. The left-hand turn off Town northbound on High Street is also troublesome.

Compared with the volume on High Street, peak transit operations on other streets are not heavy, the largest involving about one vehicle per minute on East Spring, Long and Third Streets and slightly more in the single block of Long between High and Third. Motor bus traffic, located mainly on Broad and Front Streets, is relatively light, amounting to no more than one vehicle each two minutes in a single direction.

As stated previously, the improvement of transit operations and increased patronage are potentially one of the principal means by which traffic conditions in general can be bettered downtown. Transit facilities for the entire Columbus area will be the subject of a later study and report, but minor modifications of a few downtown routes would afford current benefits.

# Parking Characteristics and Facilities

Traffic movement and circulation, the loading or unloading of commercial vehicles and the parking of passenger cars are all interrelated and proper provision for each is needed if they are not to interfere with one another. primary purpose of the downtown streets is traffic circulation and parking can logically be permitted on such streets only when it does not interfere with traffic. Most cities, including Columbus, have found it necessary to prohibit curb parking in parts of the central business district -- if not in the entire area during peak vehicular

flow--and to regulate its use otherwise during the business use of available street pavements. Thus, off-street parking to supply parking space.

Because of the urgent need for ample parking facilities and their effect on the convenience and prosperity of the central business district, parking is a matter of serious concern to customers, downtown business establishments, property owners and public officials, all of whom are individually affected. This is recognized in the recent statements of several prominent merchants and officials here placing additional off-street parking space among the most important community improvements needed in Columbus.

# General Standards and Requirements for Parking

While parking lots and garages have been in use in most large cities for several decades, there are as yet rather limited experience and no widely accepted standards on which to base actual parking requirements for the different types and kinds of land uses and community activities. However, experience has shown that there are several different types of parkers to be provided for, each of which has certain specific characteristics and parking requirements. These characteristics and requirements are summarized below.

Types and Distribution of Parkers. Types of parkers may be classified generally in one of three categories:

- (1) Short time or errand requiring normally a half hour or less and never more than an hour. Because of the brief period required to perform the errand or to make a few purchases, convenience is a major consideration and curb space close to the point of patronage the most desired. Such space is already limited and will tend to decrease with further curb-parking restrictions to handle increased traffic in the future. Thus, the greatest possible utilian the future. Thus, the greatest possible utilization of available curb space and the most convenient off-street parking facilities are needed to serve this group.
- (2) Shopper and patron including business and professional clients, who may wish to park from one, to more probably, two or three hours. While these also desire accommodations convenient to the stores or desire accommodations convenient to the stores or offices where they wish to shop or transact business, offices where they wish to shop or transact business, immediate proximity is not quite so important, and immediate proximity is not quite so important.

(3) Employee or other all-day parkers who work or maintain business establishments or professional offices in the district naturally seek convenience also, but should not be allowed to pre-empt facilities needed for the customers and patrons who support the district. Lots or garages for all-day parking should be located in marginal areas at the edge of the district.

Location of Parking Facilities. In general, the location of parking facilities should be determined on the basis of property values, relation to the street system and the arrangement of other land uses, including stores and offices, in the business district. Land within the core of the district is generally too valuable for other than multiple-floor parking garages and most parking lots and garages therefore must be located just outside the high value section. Customer parking should be located not more than two blocks and preferably not more than one and a half blocks from the major shopping areas. Facilities for all-day parking, however, can be located three or four blocks or more from the business core.

Type of Parking Facilities. The type of parking facility, whether an open lot, a parking garage or some other off-street space, can best be determined under specific conditions. The multiple-deck open garage is very satisfactory where the parking demand makes it economically feasible--usually within or at the edge of the main retail area. Surface parking lots are frequently useful as the first stage of development in a long range program since they are adaptable to progressive improvement with multiple-are adaptable to progressive improvement with multiple-deck structures as the parking demand increases. Close-in lots should be designed and operated for short-time parking for shoppers and business clients.

Financing and Ownership. The private development and operation of parking facilities is desirable and should be encouraged. However, public ownership and operation may be required when private initiative fails to supply the need or to maintain equitable parking rates. Furthermore, need or to provide a well-balanced arrangement of parking in order to provide a well-balanced arrangement of parking in order to provide a well-balanced arrangement of parking facilities in the future, it is desirable that the city facilities in the future, it is desirable that the city facilities in the future, it is developing the long range and private business cooperate in developing the long range parking plan since properly located sites can be more readily secured by the city through its condemnation powers of acquiring land and the sale of mortgage revenue bonds of acquiring land and the sale of mortgage revenue bonds to finance parking facilities. Such sites can then be leased for private development and operation.

Parking and Zoning Regulations. Modern zoning ordinances usually require that off-street parking space be provided in conjunction with all new or substantially remodeled buildings, including stores or other business structures. Because of the intensity of development and high land values, however, this is seldom practicable in connection with individual establishments in the central business district and such parking regulations apply generally only in the outlying business districts. Within the downtown area, strict enforcement of such a requirement would tend to discourage the erection of new buildings, thereby promoting further decentralization of shops and stores. On the other hand, the developers of new buildings should be encouraged to provide off-street parking space when this is feasible and a few stores have provided such space as customer parking stalls although these are usually limited. Public buildings especially should set aside ample area in the site and building design to meet the anticipated requirements of both official and citizen parking. However, the best means of assuring adequate off-street parking in the central business district is through comprehensive, large scale measures having the support of all public and private interests, even though the municipality must assume the initiative and primary responsibility.

# Existing Parking Facilities

The location and capacity of existing parking facilities including the different types of curb parking within the central business district are shown on Plate 8.

Within the general area shown on this plate there are 14,229 parking spaces, well over half of which--8195--can be considered as serving the business core. Of the total parking spaces, 11,561 or 81 per cent are provided total parking spaces, 11,561 or 81 per cent are provided total parking spaces, 19 per cent consist of curb stalls. Off-street and 2668 or 19 per cent consist of curb stalls. Wost of the curb spaces are to be found outside the concentrated core area although there are accommodations concentrated core area although there are accommodations for 905 cars along the curb in addition to the 7290 spaces for 905 cars along the 905 cars alon

Type of Facility  Commercial Garages  Commercial Lots  New Public Garage  Customer Lots  Private Lots	General Number 3314 5977 577 398 1295 11,561	28.7 51.7 5.0 3.4 11.2	3274 3101 577 164 174 7,290	
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The figures presented above are somewhat higher than the number of existing off-street spaces listed in the earlier Major Streets and Transit Report. However, they include many additional small private parking areas recently put into operation, as well as slightly higher that the latter are higher than would ordinarily be used.

In this connection it should be noted that the parking capacities of many commercial lots in Columbus are considerably higher than most of these off-street areas should be expected to accommodate. This is due to the extremely close spacing of cars accomplished through attendant parking and the utilization of almost all aisle space, which makes for delay and inconvenience in leaving the lot as well as excessive traffic interference at the exits and approaches. Lot area per car averages in some cases as little as 140-150 square feet in comparison with about 300 square feet per car required for good design of parking spaces and ample access aisles. (The latter is based primarily on the self-parking of vehicles, which is by far the most popular method with the average driver, but even attendant parking lots should provide sufficient area for open aisles in order to avoid undue car shifting, which with current automotive design requires at least 200 square feet per car, and preferably more, for facile delivery.)

On street-parking, where permitted, is generally restricted to one or two hours, although there are a number of unrestricted spaces at the edge of the district. Legal curb parking in practically all of the area between Civic Center Drive and Fourth Street is limited to one hour and most of the remainder of the downtown district (except for the unrestricted blocks in the northeast and southeast sectors) is limited to two hours. East Fulton, Mound, Rich, Sixth and Grant Streets, where parking is unrestricted, are residential in character. There has been a loss of are residential in character. There has been a loss of nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in one last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces in the last three years and as nearly 400 curb spaces will undoubtedly become traffic volumes increase, it will undoubtedly become to facilitate movement on particular streets. Additional off-street spaces will be needed to offset such losses.

Off-street parking facilities are concentrated in the vicinity of Front and Rich Streets and along most of Front Street from State northward, but parking lots and garages, street from State northward, but parking lots and garages, many of them small, are scattered through most of the district and around the edges of the business core. Customer

parking areas, aggregating about 400 spaces, are generally municipal market and the supermarket along Rich Street. All-day parking accommodations for over 1100 cars are located along Marconi and Spring Streets at the northwest of the district. Private parking lots, frequently rented about 1300 spaces, of which less than 200 could be considered as serviceable to the central core. The rest are scattered, mostly as small areas behind existing buildings in different parts of the district.

## Parking Duration and Use of Facilities

A parking survey conducted in 1951 indicated that a little less than half--46 per cent--of all the parkers within the over-all district shown on Plate 8 stayed less than one hour. About one parker in each five--22 per cent-remained from one to three hours and one in three--32 per cent--three hours or more. Of the curb parkers, 65 per cent parked one hour or less, 20 per cent from one to three hours, and only 15 per cent three hours or more. On the other hand, more than half of the off-street parkers (56 per cent) stayed longer than four hours, indicating the use of off-street spaces by a high proportion of all-day parkers and this is confirmed by observation of the various parking lots and garages, many of which are well filled by 9:30 a.m. or so.

Present parking rates within the district tend to encourage all-day parking. For example, fees range from 35 cents all-day in peripheral lots to fifty cents to one dollar per day around and within the business core, some relatively close-in lots at the edge of the inner core charging only the 50 cent fee. Most facilities, even at the periphery, maintain rates of 35 cents for the first one to two hours, with additional charges of 5 or 10 cents for each additional hour. The only exceptions to these are the two parking garages on Rich at Front and at Civic Center Drive, which make the standard charge of 15 cents per hour parked. The latter definitely encourages shorttime parking and parking fees at other close-in garages and lots should be similarly scheduled with the lowest practicable rates for the first one or two hours and graduated charges thereafter to discourage parking beyond three or four hours. Increased turnover under these conditions would tend to offset the loss of all-day parkers to fringe areas but, if necessary, business establishments which would benefit from the increased parking convenience and availability would find it to their advantage to help subsidize such short-time facilities.

Within the inner core of the central business district, in 1951 parking spaces were used slightly more intensively than in the area as a whole, nearly half the total parkers and more than three-fourths of the curb parkers remaining in the duration characteristics of off-street parking, with four hours or more.

More recent checks of curb parking in the central business district north of Broad Street were made in the fall of 1954 by the City Traffic Engineer and of curb and off-street parking in the area bounded by Broad, Sixth, Main and Civic Center Drive in September 1954 by Charles E. DeLeuw. These surveys indicate that for most of the average day more automobiles are now parked on-street than the number of legal curb spaces, reaching levels of 120 per cent or more in the area south of Broad Street and up to 140 per cent in the district to the north. This is indicative of the intensive use made not only of all legal stalls but also of illegal parking spaces -- opposite fire hydrants, at the ends of blocks, etc .-- as well as of loading zones. The latter (including bus stops) constitutes a relatively high proportion of the total street frontage in downtown Columbus -- nearly one-third of the streets north of Broad and almost one-fourth of those south of Broad Street -- and appear to be used in many instances for the parking of private automobiles rather than servicing of business establishments. This is a distortion of the purpose of such zones. Wherever possible, loading operations should be conducted off-street (modern zoning regulations generally require off-street loading facilities for new buildings). However, curb loading zones are needed by some establishments which have no access to alleys or other access for this purpose and should be allowed, but only for legitimate service uses and never for private parking.

From examination of the parking surveys, it would appear that available curb stalls are almost completely occupied during the day in and around the business core and even in most of the remainder of the downtown district. While off-street spaces were never completely absorbed, while off-street spaces were never completely absorbed, while off-street spaces were never round the standard the occupancy averaging slightly over 70 per cent during the occupancy averaging slightly over 70 per., it should be peak period between 12:00 and 3:00 p.m., it should be recognized that lot capacities are based generally on the recognized that lot capacities are based generally on the filling of aisles and many such lots are otherwise practically filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity. Car filled even at 70 per cent of the stated capacity of the streets turnover averages from 5 to 9 per day on most of the streets.

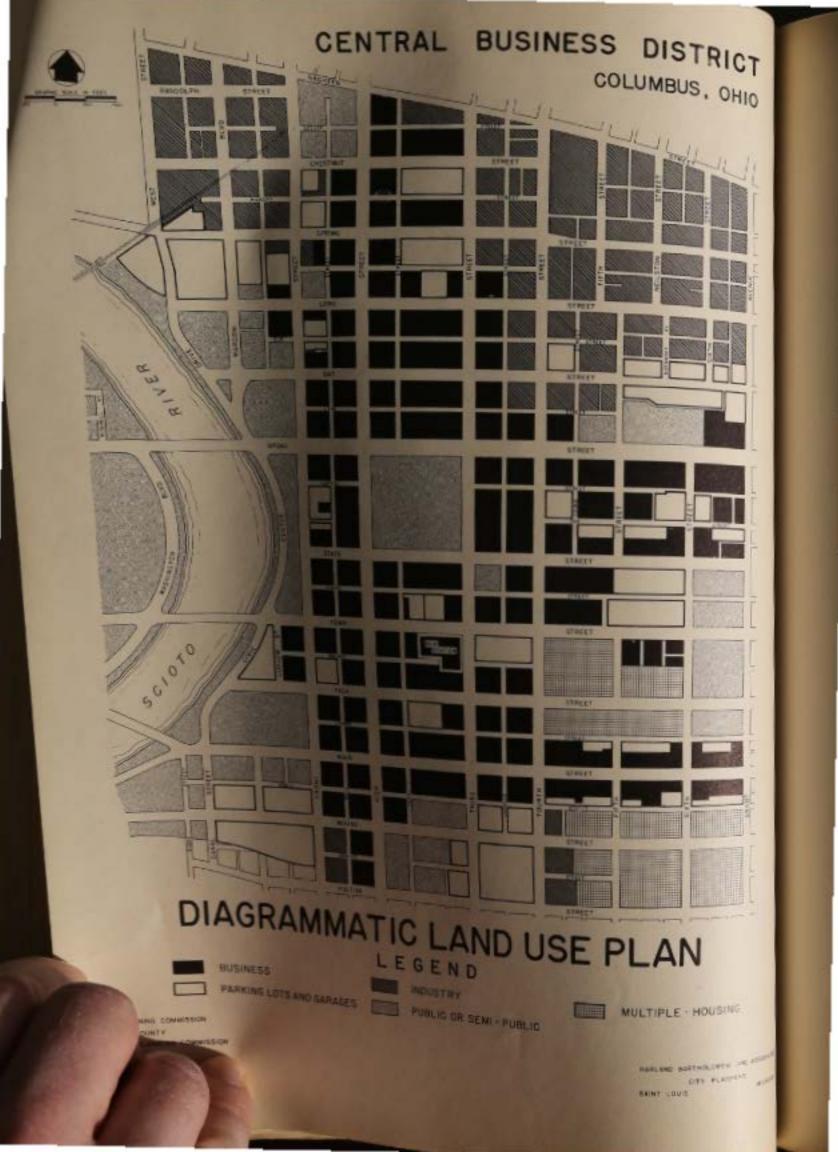
Table 2
ESTIMATED CARS PARKED DURING TYPICAL DAY

(8:00 a.m. to 5:00 p.m.) Columbus Central Business District

	Number of Spaces		Turnover		Total Cars Parked	
Туре	Core	Entire District	Core	Entire District	Inner	Entire District
Commercial Garages	3851	3891	1.5	1.5	5760	5820
Commercial Lots	3101	4554	1.6	1.5	4950	6830
Customer Lots	164	398	3.0	3.0	490	1190
Private Lots	174	1295	1.2	1.2	210	1850
All-Day Lots	-	1423		1.2		1710
Total Off-Street	7290	11,561	1.57	1.48	11,410	17,100
Curb Parking	905	2,668	6.5	4.0	5,890	10,700
	8195	14,029			17,300	27,800

turnover of 1.2 in the entire district and 1.35 in the inner core on a typical day in 1951. A group of four selected lots and one garage in the section south of Broad were among the most strategically located areas, however, and the figure may be slightly high when applied to many of the other off-street facilities serving the inner core.

An estimate of the total number of cars accommodated by the various on and off-street spaces during an average day (8:00 a.m. to 5:00 p.m.), based on the above surveys and general observation is shown in Table 2. These figures may be slightly high for the inner core since, without detailed data for each off-street facility and curb space, it is not possible to determine the exact number of such stalls pre-empted by all-day parking, and the partial 1954 surveys indicate a somewhat higher turnover than was found in the more complete 1951 count. Based on the above, however, an estimated 17,300 cars can be handled daily by parking spaces in and around the inner core (including the new municipal garage) and some 27,800 by facilities in the district as a whole. This compares with estimated requirements of 17,000 and 33,000 respectively discussed in a subsequent section of the report. While available spaces, based on the estimate, appear to be approximately equal to the core demand, there is still a considerable shortage for the remainder of the downtown area and it is both possible and probable that many of the close-in facilities are pre-empted by these extra core parkers. Furthermore, there should be a surplus of ten per cent or so in short term spaces to minimize cruising and serve the convenience of customers and patrons in parking close to specific downtown destinations.



# PROPOSED IMPROVEMENTS IN CENTRAL BUSINESS DISTRICT

The present Columbus central business district needs considerable improvement if it is to be completely in keeping with the city's role as the state capitol and a major metropolitan commercial, industrial and educational center. While it has the advantage of wide streets and a favorable natural location along the Scioto, as well as a number of attractive buildings, the district still needs betterment of its overall appearance, convenience, and operating efficiency so as to attract additional stores and patrons to the downtown area.

#### Organization of Land Uses

#### Future Land Use

The development of well organized and closely integrated shopping and office facilities is a major determinant of the value and usefulness of the business district. The suggested general location and extent of these areas together with ancillary land developments and other major uses are shown graphically on Plate 9.

The principal stores, shops and offices now extend generally along High Street from the vicinity of Spring southward to Main as well as on Long, Gay, and State Streets, although parts of this area have interspersed establishments of a marparts of this area have interspersed establishments of a marparts of the same would continue along High Street in Main shopping facilities would continue along High Street in the future but expansion is proposed along the several side the future but expansion is proposed along the several side streets. Compactness is a desirable feature of the business streets. Compactness is a desirable feature of the business streets for greater convenience and accessibility. These streets for greater convenience and accessibility.

East Broad Street is also proposed for fuller commercial development. Certain specialty stores similar to those already located on Broad Street would be especially appropriate for part of this frontage, such stores being now somewhat limited for a city of Columbus' size. It is recognized that limited for a city of Columbus' not proposed for fuller commercial and stores similar to those somewhat are substantial and may remain for some years, but even sixth are substantial and may remain for some years, but even

so such establishments occupy valuable property more useful to other business purposes and should eventually be moved

Stores along Main Street are generally somewhat different from those to the north, consisting mainly of furniture and appliance sales, one or two chain department stores, and miscellaneous shops in the medium to low-price ranges. No change in these uses is proposed, but property at the rear of many existing buildings could be developed advantageously for customer parking to serve the Main Street area, as indicated on Plate 9.

State Street east of Fourth has been increasingly used for doctor's offices and medical clinics, many of them associated with the two hospitals near State and Grant. This is an appropriate use for this property which should be continued and extended to East Town Street. (Property on the south side of Town is proposed to offset the loss of part of the area for all-day parking lots between Town and State Streets.)

Manufacturing concerns and wholesale distributing established and can be continued without hindering the core business growth.

Existing parking areas scattered through the industrial sections have not been shown on the plan, but these are expected to remain and should be expanded or relocated to meet all parking requirements for the individual concerns.

The two small industrial areas along Front and Fourth Streets at the south edge of the district comprise a few substantial existing industries. While these do not interfere with the future business development, the property east of Fourth could be advantageously used for housing but would be roughly used for housing but would be acquire under present conditions. The area too expensive to acquire under present conditions. The area west of West Street occupied by the Ohio State Penitentiary west of west Street occupied business district. However, its is not a part of the central business district. However, its relation to the district and the availability of rail service

as well as good street access indicates its desirability for future.

parking facilities will be discussed in detail in a subsemajor lots and garages have been shown on Plate 9, even though
most of the existing off-street spaces are expected to remain.
The proposed major parking accommodations located generally
around the edge of the business core should be used primarily
for customers and patrons. The large lots situated near the
should be used for all-day parking by the owner-employee,
minimizing the necessity for travel through the area to find
suitable space.

It will be noted that the existing central market at Town and Fourth Streets has been replaced on the land use plan, this property to be used for retail stores or offices and a large parking garage. The market is poorly located, as heretofore mentioned, and should be moved.

The existing bus terminal at Town and Third Streets has been enlarged in area on the land use plan. While not perfectly located, and occupying land more valuable for other business uses, the station is convenient to the area and accessible to major streets. Consequently, it is recommended for enlargement to permit more satisfactory operation, with less traffic interference. Adequate area should be provided for waiting private cars and taxis, the loading and discharge of passengers and ample bus storage.

Like certain parking facilities, individual churches and other small public or semi-public properties have been omitted from the general land use plan, only the principal public and semi-public areas being shown. Except for the State Capitol at the very center of the district, public development suraut the very center of the district, public development surounds the business core where it augments rather than hinders rounds the business core where it areas are at the east of retail use. The major semi-public areas are at the east of the district where they would be soundly related to the rest the district where they would be soundly related to the rest of the downtown area. Public and semi-public developments of the downtown area discussed in more detail in the following and proposals are discussed in more detail in the following section of this report.

The areas allotted to residence are relatively small, consisting of property which has been proposed for urban

Table 3

EXISTING AND FUTURE LAND USE AREAS

Columbus Central Business District

Use	Existing Acres	(1954) Per Cent	Acres	ture Per Cent
Commercial - Sales and Service, Offices, Hotels, Theaters, etc.	85.8	17.1	103.0	20.5
Parking - Commercial Lots and Garages, Customer Lot	s 39,8	7.9	55.6	11.1
Industry - Manufacturing, Wholesale, Utilities, Automotive Sales & Service		17.2	69.2	13.7
Residence - Apartments	39.5	7.9	23.7	4.7
Public and Semi-Public	45.6	9.1	57.2	11.4
Streets and Alleys	200.9	40.0	193.9	38,6
Vacant	4.1	0.8		
Total	502.6	100.0	502.6	100.0

redevelopment in the sector south of Town and east of Fourth Streets is otherwise well situated for elevator, efficiency-downtown centers of employment and the property on Mound and the poor existing conditions and suitable for redevelopment into downtown apartment housing.

A comparison of existing and future land use areas is presented in Table 3. The largest increases under the plan are to be found in the acreage allotted to commercial development and parking - the essential business activities which support the district, although a substantial enlargement of the aggregate public and semi-public property is proposed also. Other land uses are proposed to be diminished, including a slightly smaller area in streets and alleys to be brought about by the closing of certain public ways through consolidation of land into parking lots, public building sites and especially the two apartment areas. The industrial acreage would be decreased through the removal of most of the industrial establishments scattered within the district south of Broad Street. Commerce and parking together would constitute nearly 160 acres, or about one-third of the overall area, in contrast with the present one-quarter.

#### Public and Semi-Public Buildings

The nucleus of a sizable civic development exists in the State Office Building, City Hall, and main Post Office along the east bank of the Scioto in addition to the civic center long contemplated immediately west of the river. It would be desirable and most advantageous to the whole central business desirable and most advantageous to the whole central business district to enlarge the existing public open space between front Street and the river by acquiring the area south of Rich Street, which would not only contribute substantially to the Street, which would not only contribute substantially to the beauty of this section through its added greenery and the beauty of this section through its added greenery but creation of a more adequate view of the Scioto River but creation of the Scioto River bu

Clearance of this area south of Rich (now partly vacant and partly occupied mostly by old, depreciated housing) would have the advantages of (1) eliminating a number of substandard, unattractive dwellings in the two blocks; (2) providing a public unattractive dwellings in the two blocks; (2) providing a public building site convenient to mass transportation, the contembuilding site convenient to mass transportation offices as well plated innerbelt expressway and other public offices as

openness and beauty at the edge of the district in an area of sufficient size to have a beneficial influence on the district base a whole; and (4) specifically adding to the economic state vicinity of Rich and Front and High Streets which is in need of general improvement in attractiveness as well as in business development. It is proposed that the entire area of this land (between Noble and an access ramp from Fulton to the south leg of the innerbelt expressway) to be used for all-day parking as described later, although any public building should make provision for ample off-street parking in addition to the spaces to be supplied by these all-day lots of general service.

In connection with public buildings downtown as well as in less concentrated districts, it should be recognized that every building should be attractively located on an ample site so that space is available for service, parking and especially landscaping. Nothing is more complementary to architectural beauty than an appropriate setting -- and, conversely, a poor location which causes the crowding of an otherwise imposing edifice on a poorly proportioned site can detract from the whole structure. One of the primary factors in the attractiveness of the present State Office Building, for example, is the openness at either end of the laterally constricted area, which-despite its seeming extravagance to some-is no more than necessary for a building of its size. Occupancy of additional land by constructing wings at one or both ends of the existing structure would detract far more from its present beauty than the added utility of additional public offices.

The State Capitol has a site of ten acres at the very heart of the business district. This has been a familiar land mark for many years and no change is proposed. It would be unfortunate to concentrate additional office buildings upon the open space remaining in this site. Any such concentration would also add to the traffic and parking problems without benefiting the main use of the central area - retail stores and offices.

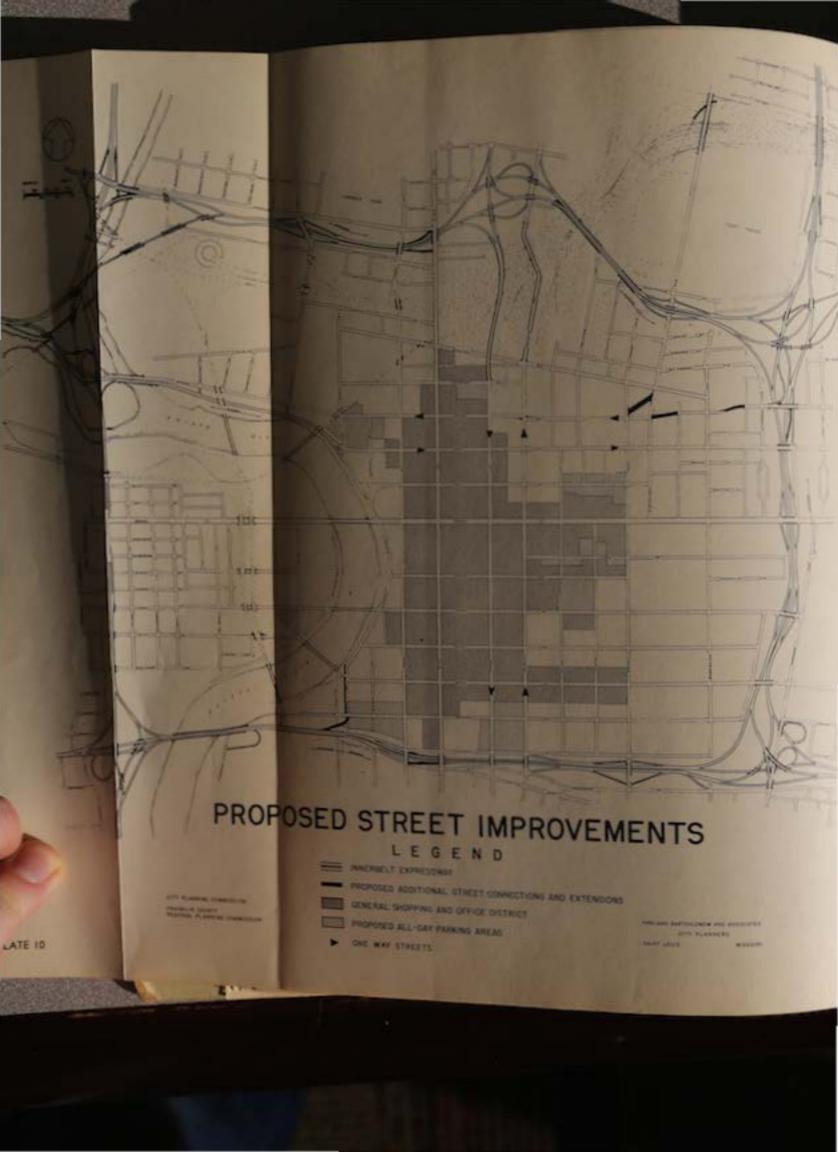
The County Court House, Jail and Juvenile Center are located in the vicinity of High, Fulton and Mound Streets at the south edge of the district. The Court House Annex is an

attractive new building but the old Court House is outmoded should be given to its relocation in the Civic Center but, buildings also, as shown on Plate 9 in order to create a county administrative center. The two existing churches at the east edge of the suggested extension will probably when they are moved.

Grant and St. Francis Hospitals, between State and Town Streets at the east edge of the district, occupy sites which are much too restricted in size, although relocation of the St. Francis Hospital has been contemplated. However, the present location -- except for the limitation of area -is not an undesirable one for these institutions since it has the advantage of centrality of service and creates no problem of interference with the normal development of the business district. It is suggested, therefore, that a medical center be developed around the two hospitals by acquiring land for expansion in the block to the south, Appropriate development of each institution would require ample area for off-street parking as well as landscaping the grounds. As noted previously, the commercially allocated frontage on State and Town Streets would be available for doctors' offices, medical clinics and similar activities ancillary to the hospital center.

desirable future use on completion of the new Veterans'
Memorial was made by a special committee of the Franklin
County Regional Planning Commission. The multiple uses
suggested, including a community center for elderly people,
an auditorium for musical and other cultural activities, a
planetarium, historical museum, etc., would provide an
planetarium for further effective utilization of this buildopportunity for further effective utilization of this building, and the proposed parking areas to the rear would furnish
ing, and the proposed parking areas to the rear would furnish
ing, and emorial Hall activities in the evening.

A new post office is contemplated but a site has not yet been finally selected for this building. It is suggested that the structure be located on High Street at the north edge of the district. Development of the post office at this location the district. Development in a part of the business would provide a major improvement in a part of the business would provide a major improvement and would have district which needs considerable betterment and would have the advantage of essential rail facilities, good access to the street and projected expressway systems and convenience to the downtown area.



#### Helicopter Facilities

Considerable progress is now being made in helicopter development and operation - in fact a few scheduled routes are now in operation - and authorities believe that this form of transportation will emerge as an important transport medium within a relatively few years. A helicopter landing field is already under consideration by the city on part of the Whittier Street dump, but additional fields may be needed in the future. A location close to the central business district has many advantages. A heliport could be located at the extreme southwest edge of the central business district (west of Canal street) adjacent to the projected innerbelt expressway on property now occupied by a coal yard and miscellaneous warehouses and industries. The existing structures are unsightly and as opportunities arise, should be cleared away to realize or recreate the natural beauty of the waterfront at this location. A site of five acres or more would be available.

#### Streets and Traffic Circulation

## Proposed Street Improvements

Columbus is fortunate in its wide downtown streets but because of the large vehicular movement the most effective use must be made of each of these arteries. A substantial proportion of the extraneous through traffic now using downtown streets must be siphoned off by other arteries and the maximum street capacities realized through modern traffic control. Extraneous traffic would be reduced by the improvements in crosstown routes described in the Major Streets report, but the principal means of removing such traffic from the business district is by the innerbelt expressway, which would serve as district is by the innerbelt expressway, which would serve as by-pass route completely around the district. The proposed a by-pass route completely around the district. The proposed location of the innerbelt expressway together with the system of downtown streets and expressway connections thereto, is shown on Plate 10. A few proposed street connections are also shown on this plan.

There are two main functions of the proposed innerbelt, both of which are essential to the satisfactory handling of anticipated traffic volumes within the downtown area:

(1) the by-passing completely around the district of traffic the by-passing completely around the area and is merely travel—which has no destination within the area and is merely traveling between points on either side, and (2) the distribution of the contral business district traffic to and between the various

entries to the district. The design of the innerbelt, as originally projected, is based particularly on serving its bypass function, with interchanges at the principal radial arteries and direct routing to and between the various other elements of the proposed expressway system. Distribution of traffic destined for the business area is to be accomplished by interchanges between the expressway loop and principal downtown streets.

In connection with the latter it is important that traffic be able to enter and leave the business district at a number of portals distributed as evenly as possible around the periphery—plish a balanced distribution of the total traffic and the most effective use of surface as well as expressway facilities. For this purpose, the preliminary expressway design proposed complete traffic interchanges at Broad and Town Streets from the east, Grant Avenue from the south, Neil Avenue, Third, Fourth Streets, and Cleveland Avenue from the north, and connection to the Sandusky Street interchange via Long Street and Spring Street from the west. Partial interchanges were proposed at East Long and Spring Streets, Fourth Street, Front Street and Furpace.

In addition to those just described, certain additional connections to provide for better traffic distribution would be desirable and a few changes or modifications in the detailed expressway design have been suggested. As indicated on Plate 10, these are:

- (1) Additional ramps to and from Front Street at Fulton to permit complete traffic interchange at this point. Under the preliminary design westbound traffic on the south leg of the innerbelt would be able to enter the downtown district at Grant Avenue and Fourth Street, but failing this, would be unable to enter the district thereafter or to emerge from the unable to enter the district thereafter or to emerge from the expressway before reaching the Mound Street interchange. Consexpressway before reaching the Mound Street interchange. Consexpressway before reaching the Mound Street interchange for the struction of the additional connections at Front and Fulton struction of the additional connections at Front and Fulton would provide increased access to the area and thereby foster would provide increased access to the area and thereby foster would provide increased access to the area and thereby foster would provide increased access to the area and thereby foster would provide increased access to the area and thereby foster would provide increased access to the area and thereby foster would provide increased access to the area and thereby foster would provide increased access to the southwest as well as
- (2) A connection to the innerbelt from Canal Street to facilitate direct movement between the west edge of the business district and west Columbus. The reverse of this movement, already provided for by way of the interchange over Furnace already provided for by way of the interchange over Furnace street, is slightly more circuitous but not unduly so.

- (3) Ramps from High Street to permit direct movement westward to and from High over the north leg of the expressway belt. As originally designed, no access is provided at either High or Front Streets between the Third Street interchange and Neil Avenue. In order to facilitate communication between the near north side and west side employment centers, between the near north side and west side employment centers, an additional connection at High Street would be desirable.
  - (4) An additional connection from the east leg of the expressway to East Spring Street. Better distribution of traffic in the area north of Broad Street would be furthered by allowing northbound traffic from the east section of the belt to enter the district over the westbound Spring Street belt to enter the district over the westbound Spring Street as well as Broad, thereby relieving the latter of part of this burden.

None of these additional connections would involve any unusually difficult acquisition or construction problems.

The proposed innerbelt expressway, as originally conceived, would provide basically for two moving lanes in each direction, or four lanes, except along the east boundary of the district where six lanes are contemplated. This design the district where six lanes are contemplated. This design is based on an estimated increase in traffic of 40 per cent between 1949 and the design year, 1970. However, traffic counts have indicated a gain of about 16 per cent during the past five years alone and the earlier estimate now appears two conservative. While four lanes may now be sufficient for portions of the expressway belt, it is recommended that both the detailed design and property acquisition be carried out the detailed design and property acquisition be carried out on the basis of an ultimate width of three moving lanes in each direction throughout even though only two lanes are coneach direction throughout even though only two lanes are coneach direction in some portions initially.

Only a few other street improvements have been suggested in the business district, most of these involving connections or extensions on East Spring Street to remove existing offor extensions on East Spring alignment. The proposed improvements and provide more direct alignment. The proposed improvements to more efficiently ments together with continued one-way operation of Spring and the streets, would enable these arteries to more efficiently handle the expected traffic volumes in the future.

South of Spring Street, Cleveland Avenue narrows to a right-of-way of 60 feet and then terminates at Broad Street. The connection between Cleveland and Grant Avenue would utilize the slightly greater width of the latter as well as provide

Table 4

# PRESENT AND ESTIMATED FUTURE PEAK HOUR TRAFFIC AND STREET CAPACITIES BY MAJOR SECTORS Columbus Central Business District

Sector	Traffic 1954	Yolumes 1980	Major Streets	Potential Street Capacity
North	6,268	7,400 (9,400)	Front High Third Fourth	1,400 1,770 1,830 1,830
East	12,545	16,800 (18,800)	Fulton Mound Main Rich Town State Broad Gay Long Spring Chestnut	6,830 1,500 1,590 1,400 1,550 1,550 2,020 1,330 1,660 1,660 1,760
South	5,655	7,700 (8,500)	Civic Center Pront High Third Fourth	1,800 1,400 1,770 1,830 1,830
West	10,201	13,300 (15,300)	Spring Long Gay Broad Town Rich Mala Mound Fulton	8,630 1,660 1,660 1,330 2,020 1,550 1,550 1,500 1,590 1,500
				14,060

for direct rather than indirect movement south of Broad Street.

It could be accomplished in the future when redevelopment or

some other opportunity made it possible without excessive cost.

Canal Street should be widened between Mound and Civic Center

Drive on its connection to the expressway.

# Street Capacities and Future Traffic Volumes

In order to test the adequacy of the downtown street system to handle future traffic increases, a comparison was made of the individual and aggregate street capacities with expected This comparison is presented in Table 4. Data on present peak-hour vehicular flow in each of the four major directions were based on the recent traffic counts, future volumes on estimated 50 per cent increases less the amount of through traffic which might reasonably be expected to be accommodated on the expressway innerbelt. (The total traffic resulting from the 50 per cent increase is shown in parentheses in Table 4.) While a future traffic increase of no more than 50 per cent in the next twenty-five years is conservative in the light of expected population growth and driving habits, much more than this cannot easily be handled by the existing street system within the central business district, and further large increases will necessitate either expensive additional street improvements or much wider use of mass transportation downtown. The latter would be by far the cheapest and easiest solution.

The 1949 Columbus and Franklin County Traffic Survey indicated that as much as 63 per cent of the total traffic in downtown Columbus has no destination there. While this proportion seems rather high, the large number of extraneous portion seems rather high, the large number of extraneous traffic counts, as noted hereinbefore, and the proportion could reaffic counts, as much as half or more of the total present traffic counts. Assuming that the innerbelt expressway is convery easily Assuming that the innerbelt expressway is converged to provide for three traffic lanes in each direction movements. Provide for three traffic lanes in each direction structed to it is estimated that this facility could accommonstructed to it is estimated that this facility could accommon throughout 2,000 cars per hour of the through traffic in each direction in addition to its functions as an interceptor and direction for the downtown feeder streets.

Based on this assumption that at least 2,000 cars per based on this assumption that at least 2,000 cars per based on this assumption that at least 2,000 cars per based on the expression of the existing streets within the central business that the existing streets within the central business way route), way route),

district will be capable of handling the estimated increase for example, estimated traffic to and from the west and east son with practical street capacities of about 14,000 and 17,500 vehicles. Traffic to and from the south would be somewaited to their capacities at the north end of the district are already through movements, these streets would be over capacity in the distributor, however, it will be possible for some of this traffic to enter the district over the less congested east-excess capacity. All the expressions of the south would be sometimed, these streets would be over capacity in the distributor, however, it will be possible for some of this traffic to enter the district over the less congested east-excess capacity.

It should be emphasized that the estimates in Table 4 are relatively conservative and that increases in traffic larger than the projected 50 per cent could well occur. From the data on possible street capacities, however, this is very nearly the limit which the street system can handle without becoming seriously congested, and it is imperative that other means be developed for taking care of any additional future loads. Present traffic control could be improved, which would help to alleviate minor traffic congestion, but the greatest gain is to be had from increased transit riding, including park-and-ride operations and express service, to be treated in a later report.

#### Traffic Control

The application of all the principles of modern traffic control and traffic engineering have a considerable influence in realizing the maximum capacity of each individual street. In realizing the maximum capacity of each individual street. Improvement of certain traffic controls in downtown Columbus improvement of certain traffic controls in downtown Columbus is needed, particularly as to turning movements at alleys or is needed, particularly as to turning movements at alleys or increase between blocks and excessive alley traffic in general, entrances between blocks and excessive alley traffic in general, contrance but not yet enforced. It is suggested that except ordinance but not yet enforced. It is suggested that

The recent abrogation of all double parking and stricter

helpful. The elimination of parking-at least during peak hours-should be considered along all transit routes where needed to expedite such service since mass transportation is one of the keys to better downtown conditions.

# Transit Routing

Present transit routing is generally satisfactory within the central business district even though an unusually large number of vehicles are operated on High Street. Because of the present difficulties encountered by the Cleveland, Oak and Long Street lines in turning right on Long at High, however, it is proposed that the first two be routed over Front Street northbound instead of on High Street. This would necessitate construction of additional wiring on State Street between High and Front Streets since these are trolley coach lines. (No additional wiring would be needed on Front Street.) However, the rerouting would improve conditions at the Long-High Street intersection as well as facilitate the turning operation at Long and in addition would reduce the transit volume northbound on High Street by about 18 vehicles during the peak half hour.

## Proposed Parking Facilities

# Future Parking Requirements

ments for the central business district due not only to incomplete knowledge of actual parking needs for different types and kinds of land uses but also to the considerable variation in such needs for similar types of development in different in such needs for similar types of development in different communities. Local shopping facilities and practices, local communities, transit usage, and even the existing parking riding habits, transit usage, and even the existing parking facilities themselves influence the parking demand. The type and manner of operation of parking lots or garages and the rates charged have a definite effect on the demand,—the rates charged have a definite effect on the demand,—the producing a noticeable increase in the cars parked. Thus, producing a noticeable increase in the cars parked. Thus, producing requirements can only be approximated and should be parking requirements can only be approximated and should be parking requirements can only be approximated and should be parking requirements can only be approximated and should be parking requirements can only be approximated and should be parking requirements can only be approximated and should be parking requirements.

In 1951, on the basis of information concerning passenger destinations within the central business district (collected in the 1949 origin-destination survey and factored to 1951), it was estimated that on an average weekday there were

some 30,000 cars bound for the general business district, approximately 15,250 of which had destinations in the inner core. From traffic increases in the last three years, as indicated by the November 1954 count, it is estimated that about 33,000 vehicles are presently bound for the general area and about 17,000 for the concentrated business core. The downtown destinations and the parking demand will normally increase proportionately with the anticipated increase of 50 per cent in downtown traffic, discussed in the previous section, thus indicating a need for accommodating at least 25,500 vehicles (on and off-street) during an average day in 1980 within the business core and about 49,500 cars in the district as a whole.

As a further evaluation of the parking requirements, the ratio of parking spaces to units of population is sometimes used. This varies considerably in different communities but studies made by the Bureau of Public Roads in six cities ranging in size between 250,000 and 500,000 show an average of 35 parking spaces (7 curb and 28 off-street) in the business district for each 1,000 persons. For comparison, Toledo in 1951 had a ratio of 31 spaces per 1,000 persons (7 at the curb and 24 off-street) and Dayton, in 1953, provided 24 spaces per 1,000 persons (3 curb and 21 off-street stalls). (The area of the district varied in the different cities, however, influencing particularly the number of curb spaces, which should be considered in appraising these figures.)

exceptionally large, it now encompasses only 5 curb and 22 off-street spaces, or 27 spaces per 1,000 persons of the urban population. The off-street ratio in particular is urban that in most of the other communities (the Dayton lover than that in most of the other communities (the Dayton business district was relatively small), even with the standard of only 25 spaces per 1,000 would require approxistandard of only 25 spaces pe

Thus, on whichever basis off-street parking requirements within the central business district are appraised, existing facilities fail to meet the demand. While the majority of existing parking areas are located in and around the business existing parking areas are located in and around the current core and if properly used would approximately meet current requirements of shoppers and business patrons, as discussed requirements of shoppers and business patrons, as discussed by all-day of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore, many of these spaces are usurped by all-day hereinbefore.

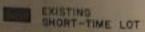
BUSINESS DISTRICT CENTRAL COLUMBUS, OHIO PROPOSED PARKING FACILITIES

LEGEND

EXISTING

PARKING GARASES & MULTI-LEVEL STRUGTURES







ALL-DAY LOTS

INDICATES PROPOSED CAPACITY



MAJOR GUSTOMER



ALL-DAY PARKING STRUCTURE

HERLEMA MICHIGANIA TOTAL 4 IN STT PLANTE SMIRT STORY

Table 5

POTENTIAL CAPACITY OF PROPOSED PARKING FACILITIES

#### Central Business District Columbus, Ohio

Type of Facility	Number of Spaces	Estimated Turnover	Total Cars Accommodated
Commercial Garages and Multi-Floor Structures	6081	2.0	12,160
Short-time facilities and Commercial lots	4057	2.5	10,100
Customer Lots	300	3.0	900
Private Lots	800	1,25	1,000
All-day Lots	5100	1.25	6,400
Main St. Customer Lots	375	3.0	1,125
	16,713	1.90	31,685
Curb Spaces	2,000	7.0	14,000
Possible Underground Garage	1,200	2.0	2,400
	19,913		48,085

spaces in proportion to the city's size and its business area than many other communities in its population range.

It should be recognized that all the problems of traffic congestion and terminal facilities cannot be solved in the central district by endless catering entirely to the private nutomobile and that ultimately a balance between private and mass transportation must be found; however, it would appear logical from the over-all traffic capacity of downtown streets and other potentialities of the business district to make provision for about a 50 per cent increase in short-time facilities particularly, as well as a substantial enlargement of the all-day areas. This will require more than 10,000 spaces in strategically located short-time lots and garages, and more than 5,000 spaces in all-day parking areas (and private lots) as enumerated in Table 5.

# Proposed Off-Street Facilities

The general plan for off-street parking facilities to sorve the central business district in the future is shown on Plate 11. No attempt is made to show existing scattered facilities, most of which, however, are expected to remain or to be substantially replaced in nearby locations as part of the natural building processes within the district. Actually, owners of individual properties will benefit if they substantially enlarge such facilities.

From the standpoint of serving the business core, the proposed plan is based on retention of the eight existing garages indicated on the map, supplemented by eight additional parking structures to be constructed in the future. These facilities would surround the office-shopping center, providing service within one to two blocks of practically the entire area from Front to Third and from Spring to Rich Streets. The combined capacity of the existing garages (including a smaller structure omitted from the plate) is 4,033, of the proposed structures 4,305 spaces. In addition, an existing commercial lot accommodating about 200 cars and spaces. scattered commercial facilities aggregating some 1,600 spaces are proposed to continue short-term service for the inner core. Existing structures, including the new Long Street garage, would be unchanged except for a slight enlargement of the Lazarus structure to absorb existing dwellings at Civic Center Drive and Rich Street and utilization of the additional capacity to be made available at Byers garage by removal of their new or used car storage to another location.

The proposed new facilities include:

- occupied in part by the Central Market on Town Street between Third and Fourth Streets. While large concentrations of automobiles tend to create problems of access and traffic circulation, the availability of the one-way streets at either side in addition to Town Street should facilitate handling the vehicles. It would be desirable to design this, as well as the other proposed structures primarily for self-parking, which would expedite operations into the garage by keeping the cars moving to the individual stalls and make for greater parking satisfaction (most drivers prefer self-parking). The property involved along Town Street is occupied mostly by old wholesale fruit and produce houses used in conjunction with the market.
- at Oak Streets. Both of these are strategically placed to serve the east edge of the future business development as well as the frontage on Broad Street. A number of structures would be replaced but these are not substantial, as indicated by the assessed valuations of land plus buildings averaging slightly over \$4.00 per square foot at each site.
- (3) Another 500-car garage at Fourth and Long Streets on property presently used by auto and other service establishments (which cover about 50 per cent of the ground area) and assessed at \$3.00 per square foot (land and buildings). The site is opposite the Ohio Bell Telephone Company building now under construction.
- (4) New garages accommodating 450 to 500 cars each in the vicinity of Spring and Front Streets on sites of existing commercial parking lots. These locations are convenient to the two hotels and the YMCA as well as to shopping facilities along north High Street.
- edges of the inner core on the south sides of Spring and Rich Streets. The two blocks are virtually half occupied by existing commercial lots and would be particularly adaptable to stage development to provide the indicated area first for surface parking, and finally ground and roof slabs. If surface parking, and finally ground and roof slabs. If necessary, the structure on Rich Street could be increased in necessary, the structure on floor if future parking requirecapacity by a third slab or floor if future parking requirements made this desirable, but easy handling of vehicles would

make a large increase of the indicated 525-car capacity undesirable at the Spring Street location.

A sub-surface garage of 1,200-car capacity under High, Broad and part of the Capitol grounds is now being considered by the Ohio State Legislature. The location and extent of this facility are shown in dotted lines on Plate 11, the dotted lines indicating that it is a sub-surface rather than the normal type of parking facility. There is no doubt that this location is unusually convenient to the major concentration of office and shopping facilities and at the center of the parking demand. The question of utilizing this property must be decided by the state rather than local authorities and the major problem is that of handling the traffic to and from the facility over the local streets. Since both Broad and High Streets are already used to or beyond their practical capacities by existing traffic, it is imperative that part of this traffic be removed in order to make an underground garage of the contemplated size practicable at this location. This emphasizes the necessity for the most expeditious construction of the innerbelt expressway to create a by-pass for through traffic around the business district. The plan for the garage provides for the essential widening of both High and Broad Streets along the Capitol grounds to maintain the present traffic capacities of these major arteries and to accommodate access ramps to the underground facilities.

The proposed all-day parking facilities consist of large areas located around the fringe of the downtown section and strategically placed to intercept traffic at principal portals to the district. The two areas at the south, for example, are adjacent to the projected innerbelt expressway at its Fourth and Front Street connections and would supply parking accommodations for vehicles to and from the east and west without the necessity for proceeding long distances into the district. Similarly, such spaces are grouped along either side of Gay and State Streets at the east edge of the central area and on Chestnut and at Spring and Civic Center Drive at the north and northwest edges respectively. The area on Chestnut will require two levels in order to develop the indicated capacity.

The property to be cleared for parking along Mound Street consists mostly of old dwellings, averaging only slightly over \$1.00 per square foot in assessment. The area along Gay Street is also mostly residential, that to the south along Cak Street generally open and used for automobile used car storage, existing parking, etc. Land along State Street is

occupied by doctors' offices, miscellaneous other enterprises and private parking, property to the rear on Town by a bus station, several dwellings, open-air storage and several parking lots. The assessed value of the latter amounts to \$1.25 per square foot.

The all-day facilities at the northwest consist of existing parking spaces, consolidated and slightly enlarged, and the area on Chestnut encompasses several existing private and commercial parking lots along with a few wholesale establishments, stores and offices averaging for the whole area an assessment of some \$2.60 per square foot. The all-day parking areas shown on Plate 11 aggregate some 5,100 spaces; in addition, about 800 spaces are expected to remain in scattered private parking lots.

The customer parking areas for some 375 cars on both sides of Main Street at the southeast corner of the district are intended primarily to show what can be done toward consolidation and improvement of land at the rear of the stores and shops to provide for off-street parking. This would be an asset to the abutting stores and a convenience to their patrons, in addition to relieving Main Street for easier traffic movement.

#### Curb Parking

Existing curb spaces amount to some 900 stalls in and around the business core and about 2,670 spaces in the downtown district as a whole. On-street space has tended to decline in recent years due to the exigencies of moving traffic, and is likely to continue to decrease in the future. For example, the proposed public building site west of Front Street and contemplated redevelopment of the Market-Mohawk sector at the southeast would eliminate as many as 400 to 500 curb spaces although this would be balanced by the additional off-street accommodations, which should be included in the design of both projects. It would appear reasonable to expect further losses of street space to no more than 2,000 or so curb stalls in the future.

Recent increases in meter rates to five cents for each half hour have been beneficial in increasing space turnover and availability in most of the business area. However, better enforcement of the one-hour parking limit is desirable, better enforcement of the one-hour parking limit is desirable, since the parking survey indicated nearly one car in five since the parking survey indicated nearly one car in five over-stayed this limit in the area north of Broad Street.

The 37 cars parked all daypre-empted space which could have been used otherwise by well over 200 parkers. All-day parking has been accomplished in Columbus by periodic feeding of the parking meter which is a direct violation of the one-hour restriction. The easiest way to eliminate this practice is strict enforcement of the parking law through regular hourly police inspection and chalking of offending cars. A well publicized inspection campaign and impartial administration of parking fines provide the most effective means of securing compliance with existing parking regulations.

In general, existing curb regulations downtown are attuned to parking habits, most space serving the inner core being restricted to one hour and certain special blocks around the Post Office, banks, Court House, etc. to a half hour or less. However, it may become necessary in the future to extend the one hour restrictions over practically all the downtown district and even to limit certain intensively used streets to half hour parking. The latter will require detailed study of parking habits from time to time in each particular block of the district.

#### Capacity of the Proposed Parking Facilities

The potential capacity of the proposed parking plan is indicated in Table 5, based on the number of accommodations and the expected turnover of the various types of facilities. The estimated turnover is somewhat higher than present space usage in existing lots and garages within the district and anticipates both more effective utilization and more favorable rate schedules for the short-time parker than those now existing. The short-time facilities include the various ommercial lots and all or part of the available spaces in even of the most strategically located garages around the usiness core. The remaining garages or multi-floor structures indicated on the plan are expected to have a lower but still relatively high turnover. Private lots are used primarily by the all-day parker and have a relatively low turnover. About half the customer spaces would serve the business core, the remainder various scattered establishments in other parts of the district.

The downtown area as a whole would be served by some 19,900 parking spaces, including the curb stalls and the possible underground garage now under consideration in the legislature. On the basis of expected utilization, these legislature. On the basis of expected utilization, the normal would accommodate slightly over 48,000 cars during the normal

business day. As estimated earlier, accommodations for approximately 49,500 cars are expected to be needed in the overall central business district by 1980, and consequently the proposed parking facilities are not quite sufficient to meet the anticipated parking demand. This deficiency would be offset in part by requiring the provision of off-street parking spaces in connection with new building construction in parts of the district outside the core, for example in the industrial areas at the northeast, and in part also by enlargement of public parking areas in the district west of the Scioto, where 500 spaces or more could be provided within three or four blocks of Town and High Streets. In addition to these facilities, it will be essential to foster wider use of mass transportation in order to reduce traffic volumes and to reduce the parking demand. While additional parking facilities over and above those shown on Plate 11 could be developed at the edges of the district, it would be more efficient and less expensive from a traffic and parking standpoint to keep as many private automobiles as possible out of the business district by developing the most expeditious and convenient transit routes, including express service.

Furthermore, the proposed parking facilities are designed to supply somewhat more than a 50 per cent increase in accommodations around the business district. These would be served by the more than 10,000 spaces in commercial garages, lots and short-time facilities and some 700 to 800 curb stalls, which are estimated to accommodate about 22,600 cars off-street and around 5,000 curb parkers daily. Since future parking requirements within the business core were estimated previously at some 25,500 cars per day, the proposed facilities should be more than capable of meeting the latter demand, provided parking rates and practices are designed to favor the short-time parker.

# Appearance of the Business District

There is a definite psychological advantage in good appearance. Within the central business district this is created by good design of streets and street appurtenances together with attractive building facades, window displays and other advertising features. One of the major assets of and other advertising shopping centers in Columbus has the various large outlying shopping centers in Columbus has been their newness and generally more harmonious architectural treatment which added novelty and physical attraction tural treatment advantages of accessibility and space to their more patent advantages of accessibility and space

for off-street parking. It is recognized that many shoppers are willing to walk a longer distance from the parking terminal to their shopping objective when the route lies through an attractive area than when it traverses marginal or substandard development.

As mentioned in other sections, the Columbus central business district needs considerable improvement in its appearance even though many individual stores and office buildings are quite attractive and well designed. For example, much of High Street north of Gay and most of the area south of Town are so mixed in character and heterogeneous in design that these blocks contrast markedly with the intervening frontage, particularly with the attractive blocks immediately north of Town and across from the State Capitol. It would be to the advantage of all downtown merchants to cooperate in refurbishing existing structures, wherever possible, to create a greater degree of harmony in the appearance of the whole downtown area as well as to improve individual building facades in general. Sound control over the character, size, and design of advertising signs could also contribute to improving the appearance of the district.

In Columbus, as in most other cities, little attention has been given to the appearance of the various parking lots, although the newer open-deck parking structures are attractive and well designed. Control over entrances and exits to these areas, limitation and standardization of signs, walls or fencing, and wherever possible, even limited land-scaping, would do much toward bettering the appearance of parking lots and of the district around them.

enhance the appearance and value of surrounding property. In this connection, the advantage of existing public buildings along the west edge of the business district and the desirability of enlarging these public areas should be recognized. Open space, trees and greenery are at far too great a premium in the concentrated central business areas of many cities. Columbus should exploit its opportunities for civic beauty downtown both by zealously protecting the existing public areas and by creating additional open spaces wherever possible, notably along the Scioto River.

Another improvement which could be made in the shopping district is the construction of sidewalk canopies similar to

those on part of the Lazarus department store building and on Kresge's. Such canopies provide protection in winter from the rain and snow and shelter in summer from the rays of the sun. When harmoniously constructed, they help to create an illusion of unity of design in the block as a whole. However, because of the numerous individual property owners involved, it would be necessary to have a high degree of cooperation and collaboration so that a continuous and harmonious canopy might result.

