Effectiveness of Parking Agencies

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THOUGH EVEN the horse-and-buggy era may have bad its own terminal problem, the vehicle at rest has emerged as a public problem of the first magnitude largely during the past decade. To cope with it, the ingenuity of both private enterprise and public authority has been tapped.

The variations in approach are astonishing. In connection with perhaps no other urgent public need have so many different solutions been proposed, so many financial plans utilized, so many studies undertaken, so many words spoken concerning it, or so many different administrative forms used as in the provision of off-street automobile-parking facilities. It is to this last-mentioned aspect of the parking problem, the matter of administration, that this investigation is addressed.

But even this single aspect, considered alone, is vast in its scope. Accordingly, and at the suggestion of the Parking Committee of the Highway Research Roard (at its 1949 meeting), only a particular type of administrative organization, the special parking agency, has been subjected to the research microscope.

The objectives sought to be served are many: To make a preliminary inventory of such agencies, to analyze their legal powers in connection with the planning of parking facilities, the financing, acquisition of land, construction, and operation of facilities, and to appraise their accomplishments, if such a thing is possible, in terms of acceptable standards of measurement.

PARKING ADMINISTRATION

Study of the provision of off-streetparking facilities in municipalities in the United States reveals there are at least five broad administrative patterns discernible, each with its own overtones (1) private-enterprise ownership and management, with only incidental regulation

by public authority in a few cities; (2) private enterprise and public authority in partnership, each making designated contributions to and each having prescribed responsibilities with the provision of off-street-parking facilities: (3) public parking agencies, the functions of which are exclusively concerned with parking facilities, (4) special public agencies, which provide parking facilities only as incidental to some other principal function, and (5) regular municipal officials, who provide parking accommodations in the same manner as they establish other public improvements, with no particular administrative organization specially designed for dealing with the parking problem.

PRIVATE PROVISIONS

The first of these, the provision of parking facilities through private means, has taken several different forms. Perhaps the most important is the establishment of off-street-parking accommodations as commercial undertakings in the downtown areas of cities. These are supplied wherever private individuals chose to provide the facilities, and depend, of course, upon the availability of property for the use sought to be established at the price asked.

A second means of providing facilities through private channels is the establishment of parking space pursuant to zoning regulations under the police power of the state. Designated amounts of off-street-parking space of prescribed standards are required in connection with land and property uses of various kinds. Such accommodations are so provided at the sole expense of private owners or operators. 1

¹For a comprehensive study of this matter, see Zoning for Parking Facilities, Requirements for Off-Street Automobile Parking Facilities in Zoning and Other Local Ordinances, 1950, Bulletin No 24, Highway Research Board.

A third type of private approach, perhaps distinguishable from the foregoing, involves the provision of private-parking facilities as adjuncts to individual businesses, office buildings, shopping centers, or other generators of parking demand on a voluntary basis. It is modern in conception and is based upon a full appreciation of the impact of the motor vehicle upon all phases of present-day activity.

Unlike the public provision of parking facilities, no powers of eminent domain can be exercised in connection with private accommodations provided pursuant to the three methods just outlined. The resources involved are generally limited to those of the participating individuals, and except in the case of zoning requirements, location, design, and magnitude of facilities are determined by private enterprisers, though even this private provision can be extensive at times.

The significance of the private approach, as measured in terms of present accomplishment and future promise, is indicated on page 35.

PUBLIC-AND-PRIVATE PARTNERSHIP

In the last decade, a new type of legal arrangement has developed to cope with urban parking difficulties, an arrangement that might be identified as an effective partnership of public authority and private endeavor. While no two agreements for projects that might be so characterized have the same attributes, all undertakings in this class seem to have certain things in common. Pursuant to legal agreement between a private group or corporation and public authority, the former agrees to supply sufficient capital to construct and operate off-street-parking accommodations of designated specifications, while the latter agrees to permit the use of a certain public site on stipulated terms. After an indicated period of years, the ownership of all the facilities becomes public, subject to public use upon such terms as are determined by public authority. Several outstanding examples of this type of parking facility are cited beginning on page 37 of this bulletin.

PUBLIC PARKING AGENCIES

Many urban areas in the United States are finding that, as desirable as the private approach may be, the time has come for government authority to be exercised in providing off-street-parking accommodations for public use. To this end, some states have authorized their municipalities to create special parking agencies, the functions of which are exclusively concerned with establishing public off-street-parking facilities.

While there may be more agencies of this type than those listed, at least 54 are known to exist or to have been specifically authorized as of the date of this study. Table 1 lists these special parking agencies by name. Most of them were authorized and created within the last decade.

Such agencies are to be found in 20 different states and the District of Columbia, stretching from California to New York and from Maine to Florida. They are to be found in large cities, such as New York, which had an estimated population of 7,835,099 in 1950, and in small cities, too, such as Lansdale, Pennsylvania, which had a 1950 estimated population of only 9,767. As Table 2 reveals, over half of these organizations are provided in municipalities ranging in population from 25,000 to 250,000.

Public parking agencies may be roughly divided into two subgroups, i. e., those that have advisory powers only, or limited specified powers, and those that have the power to condemn needed property for parking facilities, to issue revenue bonds, and to exercise various other powers. Of the 54 parking agencies investigated, eight are identified as committees. While most of these have only advisory functions, some have produced tangible accomplishments. Moreover, some of the organizations that are called more formally commissions or authorities are largely advisory in character too. Accordingly, all of them have been included in the study.

PLANNING POWERS

Practically all of the agencies reported upon have planning powers of some sort,

TABLE 1

SPECIAL PUBLIC PARKING AGENCIES AUTHORIZED TO DEAL EXCLUSIVELY WITH THE PROVISION OF OFF-STREET-PARKING FACILITIES IN MUNICIPALITIES

STATE AND AGENCY	POPULATION	DATE AGENO	TV WAS
STATE AND AUGNOT	1950 ^a	AUTHORIZED	CREATED
ARKANSAS Little Rock Parking Authority	102,213	1949	
CALIFORNIA Inglewood Parking Commission San Francisco Parking Authority Whitther Off-Street Parking Commission San Jose Parking Authority Modesto Parking Authority Sants Monica Parking Authority	46,046 760,753 23,866 95,044 17,347 71,299	1947 1949 1946 1949	1949 1950 1951 1951
DELAWARE Wilmington Parking Authority	110,356	1951	1951
COLORADO Denver Off-Street Parking Division of Department of Improvements and Parks	412,856	1949	
CONNECTICUT New Britain Parking Commission Norwich Parking Commission	73,726 23,429	1945 1949	
DISTRICT OF COLUMBIA Motor Vehicle Parking Agency	797,670	1942	1943
FLORIDA Miami Off-Street Parking Authority Orlando Parking Commission	246,983 51,826	1950 1949	
ILLINOIS Joliet Parking Commission La Grange Parking Commission	52,460 11,950		1947 1947
INDIANA Indianapolis Off-Street Parking Commission	424,683	1949	
MAINE Augusta Parking District	20,913	1947	1947
MARYLAND Baltimore Off-Street Parking Commission	940,205	1948	1948
MASSACHUSETTS Springfield Citizens' Committee for Off-Street Parking	162,601		
MICHIGAN Pontiac Parking Study Committee Port Huron Off-Street Parking Committee Grand Rapids Automobile Parking Authority Lansing Parking Study Committee Detroit Municipal Parking Authority Fint Parking Commission Royal Oak Parking Agency	73, 112 35, 597 175, 647 91, 694 1, 838, 517 162, 800 46, 817	1933 ' 1946 1933 1933	1947 1948 1949
NEW JERSEY Paterson Parking Authority Passaic Parking Authority Trenton Parking Authority Jersey City Parking Authority New Brunswick Parking Authority Hackensack Parking Authority	139, 423 57, 851 127, 867 300, 447 38, 768 29, 207	1948 1948 1948 1948 1948	1949 1948 1948 1949 1948
NEW YORK New York City Parking Authority Elmira Parking Authority White Plains Parking Authority Binghamton Parking Authority Peekskill Parking Authority Syracuse Parking Authority	7,835,099 49,690 43,501 81,132 17,746 220,067	1950 1948 1947 1948 1949 1948	1950 1950 1947
NORTH CAROLINA Charlotte Parking Committee Wilmington 'arking Authority	134,042 44,975		1950 1951
OHIO Cincinna ff-Street Parking Committee Columbo or Vehicle Parking Commission Cleve) rking Advisory Committee	500,510 374,770 905,636	19 47 19 47	1950 1950
OREGON Portland r ing and Congestion Committee of Traffic and Transp.rtation Commission	371,011	1949	19 49
PENNSYLVANIA New Kensington Municipal Parking Authority Pittsburgh Public Parking Authority Philadelphia Parking Authority Lanadale Municipal Parking Authority Uniontown Municipal Authority	25, 226 673, 763 2, 064, 794 9, 767 20, 423	1945 1947 1947 1947 1945	1947 1950 1951 1949
TENNESSEE Knoxville Perking Authority Nashville Perking Board	124, 183 173, 359	19 49 19 49	
WISCONSIN Milwaukee Interim Parking Commission Madison Board of Parking Commissioners	632, 651 95, 594	1948	1948 1951

a Source of Census data U S. Department of Commerce, Bureau of the Census, 1950 United States Census of Population, P-A Series, 1951, The International City Managers' Association, Municipal Year Book, 1951

TABLE 2
POPULATION DISTRIBUTION OF CITIES HAVING
SPECIAL PUBLIC PARKING AGENCIES

Population group (1950 census)	Number of cities having parking agencies
5,000 - 10,000	1
10,000 - 25,000	7
25,000 - 50,000	10
50,000 - 100,000	9
100,000 - 250,000	12
250,000 - 500,000	5
500,000 - 1,000,000	7
Over 1,000,000	3
Total	54

though some are more broadly stated than others. At least the following six have specific legal authority to formulate a master plan of parking facilities, after proper survey and investigation: Little Rock Parking Authority, San Francisco Parking Authority, Denver Off-Street Parking Division of Department of Improvements and Parks, Paltimore Off-Street Parking Commission, Grand Rapids Automobile Parking Authority, and Flint Parking Commission. Many of the others may have the same or equivalent power by implication.

The planning powers of the Grand Rapids Automobile Parking Authority are perhaps typical. The authority is authorized to investigate the parking problem and formulate a tentative master plan of parking facilities, including recommendations as to construction, methods of financing, acquisition and control of accommodations. After public hearings and approval by the city commission, the plan becomes the so-called master parking plan.

There should be little dispute as to the practical wisdom of planning powers of this complexion.

POWER OF EMINENT COMAIN

One of the important powers which a parking agency must itself possess or have legal access to is the power of eminent domain. Without it an agency may be unable to assemble the property deemed necessary to provide off-street-parking accommodations on locations properly related to generators of parking demand. Of the 54 parking agencies investigated thus far,

only 21 have been authorized to condemn, as follows:

Little Rock Parking Authority San Francisco Parking Authority San Jose Parking Authority Wilmington Parking Authority Indianapolis Off-Street Parking Commission Augusta Parking District Paltimore Off-Street Parking Commission Passaic Parking Authority Trenton Parking Authority Jersey City Parking Authority New Brunswick Parking Authority New York City Parking Authority Elmira Parking Authority White Plains Parking Authority Syracuse Parking Authority New Kensington Municipal Parking Authority Uniontown Municipal Authority (parking) Philadelphia Parking Authority Pittsburgh Public Parking Authority Knoxville Parking Authority Nashville Parking Board

The exercise of the power of eminent domain by these bodies is not unrestricted. In two instances. San Francisco and San Jose parking authorities, existing parking facilities may not be acquired unless the replacement facilities will encompass an area of land and of parking space not less than three times such areas of existing accommodations; and these may not be acquired by condemnation, except after public The restriction is even more hearing. drastic in the case of the Knoxville Parking Authority; it cannot condemn property, which, at the date of the constitution of the authority, was used for parking and has been so used continuously ever since. The power to condemn of the Philadelphia and Pittsburgh parking authorities is similarly limited. The Wilmington Parking Authority does not have the power to condemn property already devoted to a public use. the Baltimore Off-Street Parking Commission can condemn needed property, the site must be approved by the mayor and city council by ordinance.

While some parking agencies do not themselves have the right to condemn for offstreet-parking accommodations, they do possess the authority to make recommendations, generally to the city council or sometimes the city manager. The following seven are among such organizations: Inglewood Parking Commission, Whittier Off-Street Parking Commission, Denver Off-Street Parking Division of Department of Improvements and Parks, Miemi Off-Street Parking Authority, Detroit Municipal Parking Authority, Cincinnati Off-Street Parking Committee, Columbus Motor Vehicle Parking Commission, and District of Columbia Motor Vehicle Parking Agency.

It should be noted, however, that the power of eminent domain has been considered thus far only as it has been bestowed upon specially designated parking agencies. Cities in at least 32 states² and the District of Columbia now possess the power of condemnation by virtue of specific provisions in either general or special and local parking enabling legislation.³

In some of these states, the legal sanction is applicable only to designated cities, as for example in Idaho, where it is applicable only to Lewiston, and in North Carolina, only to Raleigh.

Inquiry may well be made whether it is necessary or even desirable to bestow upon special parking agencies the sovereign power of eminent domain if such authority is already lodged with the local legislative body. The answer will probably depend upon what one's attitude is toward special agencies, to what extent one is willing to entrust such authority to an administrative agency at the local level, and the urgency of the need for parking facilities. gardless of where the power is lodged, certainly some duly constituted portion of the local governmental structure ought to possess an unencumbered right to condemn property for off-street-parking accommodations.

POWER TO ISSUE REVENUE BONCS

Like the power to condemn land, authority to issue bonds, especially revenue bonds. for the provision of off-street-parking facilities, seems an indispensable ingredient of an effective municipal parking agency. While other methods of financing are not to be ignored, the revenue bond is rapidly revealing itself as a practical means of financing, especially when supported by parking-meter revenues. In fact, the rise of the special public parking agency and the development of the revenue bond for off-street-parking facilities are so closely related in time and substance that it is difficult not to relate one to the other as cause and effect.

Of the 54 parking agencies included in this study, the following 20 are authorized to issue revenue bonds for off-street automobile-parking accommodations:

Little Rock Parking Authority
San Francisco Parking Authority
San Jose Parking Authority
Wilmington Parking Authority
Indianapolis Off-Street Parking Commission

Augusta Parking District
Baltimore Off-Street Parking Commission
Passaic Parking Authority
Trenton Parking Authority
Jersey City Parking Authority
New Prunswick Parking Authority
New York City Parking Authority
Elmira Parking Authority
White Plains Parking Authority
Syracuse Parking Authority
New Kensington Municipal Parking Authority
Uniontown Municipal Authority (parking)
Philadelphia Parking Authority
Pittsburgh Public Parking Authority
Knoxville Parking Authority

It is interesting to note that without exception these 20 agencies that possess the power to issue revenue bonds also have the power of eninent domain, constituting perhaps the most important attributes of these special bodies.

Such authority is not without qualification in some places. In the case of the San Francisco and San Jose parking authorities, the electors of these two respective places must approve the issuance of bonds

Arizona, Arkansas, California, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Virginia, West Virginia, and Wisconsin

³Based upon an investigation summarized in Trends in Legislation for Off-Street Parking Facilities, 1952, Highway Research Board.

for parking facilities. This is also true of the Baltimore Off-Street Parking Commission which has been authorized by two separate acts to issue \$15,000,000 in bonds, of which \$10,000,000 has already been approved by the electorate. In addition to authority to issue bonds and notes, the Wilmington Parking Authority can establish a benefit district for parking facilities and assess real estate in the district not more than 80 percent of the costs. and charges determined by the Augusta Parking District are not subject to supervision of any state agency, according to its enabling statute. The New York City Parking Authority is authorized to issue bonds not to exceed \$100,000,000 outstanding at any one time, and five-year notes not to exceed \$250,000 at any one time to pay preliminary costs of surveys and plans. Similar limitations applicable to the Elmira, Syracuse, and White Plains parking authorities are \$1,000,000 in bonds and \$250,000 in notes.

Six other city agencies are authorized only to make recommendations, or to advise, concerning the issuance of revenue bonds, presumably to the local legislative bodies. They are: Denver Off-Street Parking Division of Bepartment of Improvements and Parks, Miami Off-Street Parking Authority, Grand Rapids Automobile Parking Authority, Detroit Municipal Parking Authority, Cincinnati Off-Street Parking Committee, Columbus Motor Vehicle Parking Commission, and Nashville Parking Board.

This apparently restricted authority of some parking agencies, however, is not necessarily impeding the financing of parking facilities in some places. In Denver, the electorate approved the issuance of \$4,500,000 in revenue bonds in September 1948, to be secured by a conveyance in trust of title to the parking facilities involved; an ordinance in May 1950 authorized the issuance of \$4,000,000 of such bonds. 4 The Grand Rapids city commission has authorized the ultimate issuance of 30-year revenue bonds not to exceed \$2,435,000 in total amount, a self-liquidating financial system, or plan, has been authorized by a June 1950 ordinance, a concept of unlimited potentiality. The financial and functional integration of curb and off-street parking into a single system has also been judicially approved for Detroit and other Michigan cities.⁵

Recause of the emerging acceptability of the revenue bond as a practical means of financing off-street automobile-parking facilities, particularly when net parking-meter revenues are pledged in connection therewith, the power to issue this species of obligation seems to have become one of primary importance. This power, like its companion power of eminent domain, needs to be associated in some way, either directly or through the local legislative body, with the administrative agency that is charged with the responsibility of providing parking facilities. Otherwise, the job cannot be done effectively.

POWER TO CONSTRUCT

Most of the special parking agencies which have been granted the powers of eminent domain and bond financing have also been authorized to construct such accommodations as seem necessary or desirable in the public interest. The following 20 are among these:

Little Rock Parking Authority
San Francisco Parking Authority
Wilmington Parking Authority
Indianapolis Off-Street Parking Commission
Augusta Parking District
Grand Rapids Automobile Parking Authority
Passaic Parking Authority
Trenton Parking Authority
Jersey City Parking Authority
New Brunswick Parking Authority
New York City Parking Authority

⁴But legal difficulties have prevented the program from going forward. See discussion beginning on page 38.

5 Michigan State Supreme Court, Parr et al. v. Ladd, 36 N. W. (2d) 157, February 28, 1949. Briefly, the "system" idea was upheld by the Michigan Supreme Court when that body found both a constitutional and statutory basis for municipal ownership and maintenance of an automobile parking system, consisting of parking facilities both on public streets and on municipal off-street lots, where a fee is charged, with power lodged in the municipality to pledge revenues derived from both parking meters and municipal parking lots to finance establishment of a single automobile-parking system.

White Plains Parking Authority
Elmira Parking Authority
Syracuse Parking Authority
New Kensington Municipal Parking Authority
Uniontown Municipal Authority (parking)
Philadelphia Parking Authority
Pittsburgh Public Parking Authority
Knoxville Parking Authority
Nashville Parking Poard

A number of safeguards against possible abuse of authority, common in other fields of public endeavor, have been provided in connection with some of these special agencies. For example, the Little Rock Parking Authority may contract for construction of parking accommodations only with the lowest responsible bidder. Likewise, work done for the Wilmington Parking Authority costing more than \$500, unless done by the authority itself or by federal or state labor, must be let upon competitive bids; and materials costing \$500 or more must be purchased pursuant to competitive bids. Similar provisions apply in connection with work for the New Kensington, Uniontown, Philadelphia, Pittsburgh, and Nashville parking agencies. Construction contracts to be let by the Indianapolis Off-Street Parking Commission must be let in the same manner as such contracts are let by the Board of Public Works, subject to the approval of the mayor.

Contracts for work for the New York City Parking Authority costing more than \$2,500 must be entered into by competitive bids. Minimum cost of work which may be let without competitive bids by the Elmira, Syracuse, and White Plains parking authorities is \$5,000.

Somewhat in contrast to the provisions for the foregoing group of parking agencies are those for the Baltimore Off-Street Parking Commission by which the commission is authorized to foster the provision and construction of off-street accommodations, rather than to provide them itself. Likewise, the four following organizations can recommend or advise concerning the construction of off-street facilities: Detroit Municipal Parking Authority, Columbus Motor Vehicle Parking Commission, Cincinnati Off-Street Parking Committee, and District of Columbia Motor Vehicle Parking Agency.

Assuming that it is desirable for public

authorities to establish municipal offstreet-parking facilities, the power to construct and improve such facilities is indispensable. Moreover, such authority should be vested in whatever administrative agency is deemed appropriate, subject to such safeguards with respect to bidding procedure and related matters as seem necessary in the public interest.

POWER TO OPERATE

Considerable controversy still centers about the question of the desirability for public authority to operate municipal offstreet-parking facilities. Opponents of municipal operation argue that while the powers of municipal government may be desirable in the planning and land assembly operations for parking facilities, and even in their construction, the operation should be left to private enterprise, which over the years has developed a know-how that is essential to the successful operation of the facilities. Proponents point out that the operation of municipal facilities is merely an activity incidental to the establishment of such facilities, and that this function should not differ, on the merits, in the case of parking facilities from that for any other kind of public improvement. While it is not the objective of this monograph to resolve this difference of opinion, the manner in which the operation function has been dealt with by the different special parking agencies is noteworthy.

Out of 54 special parking agencies, only the following 19 have been granted the power to operate the off-street-parking facilities they establish:

Little Rock Parking Authority
Whittier Off-Street Parking Commission
Wilmington Parking Authority
Augusta Parking Listrict
Letroit Municipal Parking Authority
Passaic Parking Authority
Trenton Parking Authority
Jersey City Parking Authority
New Brumswick Parking Authority
New York City Parking Authority
Elmira Parking Authority
White Plains Parking Authority
Syracuse Parking Authority

New Kensington Municipal Parking Authority

Uniontown Municipal Authority (parking)
Philadelphia Parking Authority
Pittsburgh Public Parking Authority
Knoxville Parking Authority
Nashville Parking Poard

The legal provisions concerning the operation of facilities by the Wilmington Parking Authority are significant. The authority is authorized to maintain and operate parking facilities; it may fix and revise rates and charges for the use of such facilities. Any person may question the reasonableness of any rate charged by suit in the superior court, and an appeal may be had to the supreme court concerning the matter.

In at least two instances -- the San Francisco Parking Authority and the Indianapolis Off-Street Parking Commission -- the law requires that the agencies shall not operate the parking facilities unless they are compelled to do so. In the former case, the authority must lease parking facilities for operation, by competitive bids; if no valid bid is received, the authority may operate and maintain the accommodations, but must readvertise for bids once every year. Substantially to the same effect are the provisions for the latter organization, except that the commission may operate facilities with its own employees for such period as no acceptable lessee is available.

Three parking agencies possess no authority to operate facilities, but they are permitted to make recommendations and advise concerning such operation. These are: Denver Off-Street Parking Division of the Department of Improvements and Parks, Miami Off-Street Parking Authority, and Columbus Motor Vehicle Parking Commission.

Typical of this group of agencies is the Denver Off-Street Parking Division which is authorized to recommend a method of operation of parking facilities, whether by the city and county, by private enterprise, or by a public corporation under a leasehold arrangement, or otherwise.

POWER TO USE PARKING METER REVENUES

Only a few of the public parking agencies investigated have the power to use parkingmeter revenues for the general functions of

the agency, including the establishment of off-street-parking facilities. The Whittier Off-Street Parking Commission is authorized to use 75 percent of parking-meter revenues, both curb and off-street, for the acquisition of additional off-street parking spaces, while the remaining 25 percent may be used for policing and maintenance. The Denver Off-Street Parking Division of the Department of Improvements and Parks is permitted to use parking-meter revenues to finance bond issues for off-street-parking facilities. Even greater authority is placed in the Augusta Parking District which has control of meter revenues and fines, to be used in establishing additional off-street facilities in the central business areas. Net curb-meter revenues in Port Huron, which has an Off-Street Parking Committee, are placed in a special parkingsite fund, to be used in the acquisition of property for off-street-parking purposes.

One of the most effective and desirable arrangements concerning net parking-meter revenues are those now authorized in connection with Michigan cities. The Grand Rapids Automobile Parking Authority, for example, is authorized to combine parking-meter revenues with those of other parking facilities, on an integrated system basis, all of which are to be used to finance the establishment, maintenance, and operation of the system.

An interesting variation in the treatment of revenues from parking meters has taken place in Pittsburgh, where the city has entered into an agreement with the Pittsburgh Public Parking Authority pledging parking-meter revenues to the authority.

In connection with the New York City Parking Authority, the city may under contract pledge revenues from parking meters to the authority for a period not to exceed ten years, provided that the total amount which may be paid shall not exceed the total of the principal and interest on bonds which become due and payable during such period. 6

It would seem desirable to dedicate net parking-meter revenues to the provision of

⁶For a special study on this subject, see Use of Parking Meter Revenues, Bulletin No. 33, 1951, Highway Research Board. off-street-parking facilities. This idea is consistent with the character of the parking-meter fee in its original and present legal concept. It would bolster efforts to provide the off-street accommodations so urgently needed by assisting in their financing.

SPECIAL PUBLIC AGENCIES

In addition to the public parking agencies we have just been considering, there are a few special public agencies whose incidental functions deal with the provision of off-street-parking facilities in

TABLE 3

SPECIAL PUBLIC AUTHORITIES WHOSE INCIDENTAL FUNCTIONS DEAL WITH PROVISION OF OFF-STREET-PARKING FACILITIES

STATE AND AGENCY

CALIFORNIA
Metropolitan Transportation
Districts

World Trade Center Corporation

FLORIDA Canaveral Port Authority

ILLINOIS (and Missouri)
Bi-State Development Agency

MAINE

Passamaquoddy District
Authority
Postland Dislan Davidson

Portland Public Development Commission

MARYLAND

Lexington Market Authority

MASSACHUSETTS
Metropolitan Transit
Authority

Metropolitan District

NEW YORK

World Trade Corporation

Jones Beach State Parkway Authority

New York City Parkway Authority

Triborough Bridge and Tunnel Authority

New York City Tunnel Authority

RHODE ISLAND Easton's Beach Commission

VIRGINIA Produce Market Authority

FUNCTIONS

District to prepare comprehensive transportation plans and provide necessary facilities, including off-street parking accommodations.

Corporation to foster and develop domestic and international trade for State, and to establish facilities in Los Angeles and San Francisco in connection therewith, including parking spaces.

Authority to provide port facilities, including parking accommodations.

Agency to coordinate action of Illinois and Missouri in the St. Louis Metropolitan area, with respect to bridges, tunnels, airports, terminal facilities, highways, parkways, etc., including parking areas.

Authority to establish public improvements including public garages and parking areas in Passamaquoddy district.

Commission to establish public improvements in City of Portland, including public garages and parking areas.

Authority to establish a modern public market in Baltimore, with parking facilities.

Authority to own and operate transit facilities, including off-street parking areas near its terminals and stations, in Boston Metropolitan district.

Commission to establish parking space for motor vehicles in connection with its other activities, in City of Revere.

Corporation to develop projects in State in aid of trade and commerce and, in connection therewith, parking facilities.

Authority is authorized to construct designated parkway and bridge and other projects, and automobile parking places on Jones Beach.

Authority to establish a designated park and parkway, and parking places.

Authority is authorized to establish designated bridges, bus stations, terminals, etc., in New York City, and parking facilities in connection therewith.

Authority can establish tunnels, bus and car terminals, including parking areas.

Commission to rebuild and operate Easton's Beach in City of Newport, and parking areas in connection with same.

Authority may establish farm produce market in certain cities, and parking space in conjunction with it.

municipalities. Generally, some other function, unrelated to parking, constitutes the principal activity of these organizations.

Table 3 reveals that there are at least 16 such special public agencies in 10 states. The principal function of each agency is indicated. It may be noted that most of these authorities are concentrated in the Eastern part of the United States.

Perhaps illustrative of this type of agency that has some authority concerning the provision of parking facilities is the Triborough Bridge and Tunnel Authority of New York City. This authority was created for the purpose of providing and operating, among other projects, the Marine Parkway Bridge, bus terminals, and other projects, and automobile-parking garages in connection therewith. It is authorized to issue bonds, not to exceed \$335,000,000 worth outstanding at any one time, to mature within 50 years, and to bear interest at a rate not to exceed 4 percent. It may also issue notes, in amount not exceeding \$50, 000,000 outstanding at any one time. The authority may set tolls, fees, or rentals for the use of its projects. It may condemn property, in the name of the city. and may construct, operate, and maintain facilities, subject to designated restrictions.

In general, these special agencies possess many of the same characteristics of public parking agencies described in the preceding sections.

REGULAR MUNICIPAL OFFICIALS

The original provision of public offstreet-parking facilities was effected through duly constituted municipal officials, legislative and executive. Facilities thus established constitute by far the largest class. Municipal officials still continue to provide parking accommodations in the same manner as they establish other public improvements, unassisted by any administrative organization specially designed for parking purposes.

Extensive legal authority enabling such municipal officials to establish and maintain parking facilities already exists. A

recent investigation of such statutes reveals that there are at least 266 separate laws of this kind, effective in 43 states and the District of Columbia.

The legal equipment provided municipal officials by these laws is impressive. As already indicated, cities in at least 32 states and the District of Columbia now possess the power of eminent domain in connection with parking facilities, though not without restriction in particular instances.

Legal sanction for the issuance of bonds for off-street-parking facilities is not confined, of course, to special parking agencies of the types previously outlined. At least 33 states authorize their cities in general, or designated classes thereof, or specific municipalities to issue bonds. Of these, 29 States permit the use of revenue bonds, while only 20 states authorize the general obligation bond for off-street-parking facilities.

By virtue of either general or special and local parking enabling legislation, at least 36 states 12 authorize their respective

⁷Summarized in Trends in Legislation for Off-Street Parking Facilities, 1952, Highway Research Board.

⁸All States except Colorado, Nebraska, Nevada, New Mexico, and Wyoming.

⁹ Arizona, California, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

10 California, Connecticut, Florida, Idaho, Indiana, Kansas, Maryland, Massachusetts, Minnesota, Mississippi, Missouri, New Jersey, North Dakota, Oregon, Rhode Island, South Carolina, South Dakota, Virginia, West Virginia, and Wisconsin.

11 For more data on this subject, see Trends in Legislation for Off-Street Parking Facilities, 1952, Highway Research Board.

12 Alabama, Arizona, Arkansas, California, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Virginia, West Virginia, and Wisconsin.

cities, designated classes thereof, or specific municipalities to construct or improve off-street-parking facilities, with stated restrictions, of course. Similar powers are conferred upon the District of Columbia.

Extensive legal authority also exists with respect to the operation of parking facilities by municipalities. At least 36 states 13 and the District of Columbia now are permitted to undertake this function.

Statutory authorization is not limited to the previously enumerated powers. In addition, at least 8 states 14 seem to sanction the system idea, i.e., the functional and financial integration of all parking facilities in a given area, both curb and off-street, into a single legal and operating system. From the nature of legislation in an additional 14 states 15 and the District of Columbia, the same concept might be acceptable.

Closely associated with the system idea is the legal authorization for the use of net curb-parking-meter revenues for off-street parking facilities. The laws of at least 14 states 16 and the District of Columbia contain provisions of this kind.

ACCOMPLISHMENT

We now possess a brief insight into the various types of administrative organizations that are concerned with the provision of parking facilities in cities, what their principal powers are and the extent of their use.

13 Alabama, Arizona, Arkansas, California, Connecticut, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, North Carolina, North Dakota, Ohio, Cklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, West Virginia, and Wisconsin.

14Florida, Illinois, Maryland, Michigan, Pennsylvania, Tennessee, Virginia, and Wisconsin.

15 Arkansas, California, Connecticut, Florida, Indiana, Iowa, Kansas, Maine, Massachusetts, Minnesota, New Hampshire, New York, Oregon, and South Dakota.

16 Arkansas, California, Connecticut, Florida, Illinois, Iowa, Kansas, Maine, Massachusetts, New Hampshire, New York, North Carolina, Oregon, and Wisconsin.

But what of their accomplishments? How effective has each of these types of agencies been in practice, particularly the public parking agencies?

Perhaps we should discuss this important matter in relation to each of the types of management organization previously indicated. But first, a word about accomplishment and effectiveness in general. Needless to say, this is a very difficult thing to measure objectively, even as between the broad classes of agencies. Frequently, more than one organization is at work in a given city, and it is impossible, except upon the most arduous type of investigation, to allocate accomplishment between them. Moreover, effectiveness is frequently intangible in character. To complicate matters still more, it is found that some types of agencies, such as the public parking agency, have been so recently authorized by law and created that sufficient time has not yet elapsed in which accomplishments may have been attained and a fair appraisal of their contribution made pos-

It has been assumed that the following could constitute bases for measuring accomplishment: A survey of present parking facilities and needs; the formulation of a master plan of parking accommodations; evolvement of practical proposals for financing, land acquisition, construction, and related matters; the acquisition of property for parking facilities; the financing of such accommodations, in whole or in part; the construction of the necessary facilities; and the operation and maintenance of facilities.

PRIVATE PROVISION OF PAPKING FACILITIES

The three different types that constitute this broad class have made significant contributions. Their accomplishment has been made without any assistance of public funds, a fact frequently overlooked. Yet the value of the improvements made was added to the tax base.

With respect to the establishment of off-street facilities in downtown areas of cities, private enterprisers, despite their genuine sincerity, have largely failed to supply all the needed facilities. There are examples, however, of noteworthy accomplishments in this field. The recently completed 10-story Cafritz Building in downtown Washington, D. C., with its unique ramp construction and park-at-your-desk facilities can accommodate 450 vehicles on 27 levels. It cost approximately \$7,000,000 and provides about 200,000 sq. ft. of rentable office space.

Another illustration is a unique parking garage recently completed in New Orleans, Louisiana, with a 650-car capacity. The garage cost \$400 per car space to build, exclusive of land values, a figure well below the national average made possible by the "unit" principle of building.

In Indianapolis, a 577-car garage has been completed in the central business area; it is a five-story-and-basement opentype facility.

A very striking illustration of the private approach is a recent development in Minneapolis. A group of downtown property owners and businessmen organized Downtown Auto Park, Inc., in 1950. Sites for two open-deck, ramp-type parking structures were obtained by negotiation. Private financing was facilitated by the sale of first mortgage bonds for 75 percent of the cost, the remaining 25 percent having been obtained through the sale of common stock; about \$600,000 of equity capital has been obtained. The two projects were reported to have been under construction during the past year, one with space for 535 vehicles, the other for 819 cars. Overall cost is reported as over \$2,000,000. The corporation intends to continue to build necessary parking garages, provided that sites can be obtained and the garages operated economically.

The success of private facilities has been impeded by the abuses perpetrated by some operators of such parking accommodations. These abuses and the widespread lack of minimum standards of performance by operators of off-street-parking facilities have caused at least 43 cities in the United States to enact appropriate local ordinances authorizing the licensing of off-street-parking facilities operated for profit and prescribing minimum standards of design, maintenance, and operation. In 19 additional cities, a business license is

required, but design and operation are left unregulated, except as controlled by building codes. 17

The provision of parking facilities pursuant to zoning requirements is gaining increasing impetus in cities in the United States, though not perhaps in the downtown areas where the facilities are most urgently needed. Over 185 localities have enacted appropriate zoning ordinances that contain parking requirements of varying complexions. Accomplishment in terms of the finished product may be observed in the newer sections of many of the cities where such laws are enforced. Illustrations may be found in Arlington, Virginia; Montgomery County, Maryland, and Los Angeles, California.

Perhaps the most impressive provision of parking facilities by private endeavor is in connection with shopping centers of modern design, 18 department stores, office buildings, some hotels, and other parking generators. The F. & R. Lazarus and Company department store in Columbus, Ohio, several years ago provided a 740-car opendeck parking garage within a block of its store. As many as 1,900 shoppers have used this facility in a single day. The Foley Prothers Dry Goods Company of Houston, Texas, provides another illustration with its new open-deck, five-story, 540-car garage; attendants have parked as many as 1,400 vehicles there a day on special occasions, but the average daily use is 800 Sears, Roebuck and Company, Safeway Food Stores, and other organizations have consistently provided off-street-parking facilities for the use of their patrons, to their own ultimate advantage. Parking facilities in connection with the new Hecht and Kann's Sons department stores in Arlington, Virginia, the Crenshaw Shopping Center in suburban Los Angeles; the new Prudential Building in the same city; Shirlington Shopping Center off the Shirley

^{17 &#}x27;Parking Facilities as Public Utilities,"
Proceedings of the Thirtieth Annual Meeting, 1951, Highway Research Board, pp. 15-24.

¹⁸ For an excellent treatment of such shopping centers in all of their aspects, including parking facilities, see Shopping Centers, Design and Operation, by Geoffrey Baker and Bruno Funaro, 1951.

Memorial Highway in Arlington, Virginia; Framingham, Massachusetts, the Bullock's-Pasadena Department Store in Los Angeles, which now operates at near capacity; the Rexall Drug Store at Peverly and La Cienega Boulevards in Los Angeles; these and many others provide a competitive advantage of great worth to their owners.

PUBLIC-PRIVATE PARTNERSHIP

Few illustrations of the effectiveness of this type of legal arrangement exist, but those that are available are striking. The Union Square Garage in downtown San Francisco is one example, providing 1,700 car spaces, at a cost of \$1,500,000. The land for the project, a city park one block square, is leased from the city at an annual rental of \$5,000. When the financial obligations of the project have been liquidated, the city will take title to the facility. In the meantime, the enterprise pays approximately \$16,000 a year in taxes to the city.

The Poston Commons and Pershing Square (Los Angeles) projects are similar undertakings.

PUBLIC PARKING AGENCIES

Since it is impossible to add accomplishments mathematically, outstanding illustrations of effective action will be utilized.

San Francisco - The San Francisco Parking Authority, for example, reported that cooperative effort between city authorities and private enterprise will constitute the basis for the major part of the authority's program. This program consists of four steps, to follow in the order enumerated only if the preceding steps prove inadequate: (1) Stimulation of private enterprise to finance and construct parking facilities: (2) cooperation with private enterprise in obtaining sites for garage construction; (3) acquisition of land, financing, and construction of garages by authority itself, and (4) operation of completed facilities. The authority at present seems to have entered upon the second step of this proposed program.

Projects now underway are: (1) St. Mary's Square underground garage with 750 to 1,000 parking stalls; (2) Civic Center underground garage with 1,500 to 2,000 parking stalls; (3) Mission-Bartlett Street parking lot, 250 spaces. These three projects will supply a maximum of 3,000 new spaces, representing an investment of approximately \$7,000,000. It is estimated that 5,740 parking spaces are needed immediately in the downtown area, with 14,000 needed by 1970. Significant progress seems already to have been made in San Francisco.

Some reflections by San Francisco officials on the adequacy of the authority's powers are noteworthy. Additional powers of condemnation were deemed desirable. The authority would be strengthened, it was indicated, by a consolidation of authority concerning off-street-parking facilities. The control by the parking authority of the subsurface of public parks was deemed desirable, as was the allocation of net parking-meter revenues to finance off-street accommodations.

Whittier - The Whittier Off-Street Parking Commission is an advisory group only. The city has acquired lands for five off-street parking-lots from accumulated parking-meter and parking-facility revenues. Three of these, each 100 by 140 ft., are metered with 44 parking meters; a fourth lot, 100 by 140 ft., is attendant operated, information concerning the fifth lot, 300 by 300 ft., is lacking. After sufficient land area has been acquired, it is proposed to convert some of the space into garage parking facilities. It is quite obvious that a substantial number of spaces has thus been supplied.

San Jose - The San Jose Parking Authority reported that a proposition to issue revenue bonds to finance the provision of off-street-parking facilities was submitted to the voters at the November 1950 election and defeated. The city council is currently considering resubmission of the proposition at the municipal election in the spring of 1952. No concrete program has been effectuated, accordingly.

Denver - A 1947 parking survey revealed

that 2,450 additional spaces were needed for short-time parkers and 3,950 spaces for long-time parkers. A revenue bond issue of \$4,500,000 was thereafter approved, of which \$4,000,000 was to be used in the downtown area, the remainder elsewhere. The Denver Off-Street Parking Division, of the Department of Improvements and Parks, was then created. Plans involved two opendeck, ramp-type structures, within 1,000 feet of the central retail district, with a capacity of 920 vehicles. In addition, five parking lots, with a 620-car capacity, are proposed.

Unfortunately, however, a \$3.7 million initial sale of the revenue bonds, was invalidated by the state supreme court on the theory that the city had no right to pledge the property by mortgage or agree to pay a premium on the bonds upon their redemption. ¹⁹ Under consideration is a plan to issue \$2 million in general obligation bonds to purchase land which would be leased for private construction and operation of parking facilities.

Miami - The Miami Off-Street Parking Authority prepared and successfully sponsored a 1951 statute that authorized the city to do all things necessary to provide off-street-parking facilities. The authority has also proposed the construction of two large parking garages in the downtown area, to be privately financed on a self-liquidating basis.

Indianapolis - No formal program has as yet been adopted by the Indianapolis Off-Street Parking Commission. A survey indicates that the city is now 11,000 parking spaces short in the central area and that the shortage will increase by 20 percent by 1961.

Augusta - Startling as it may seem, the Augusta Parking District reports that no additional parking facilities are needed at the present time. The district has nine parking areas and one parking strip under its jurisdiction. All lots except four are free. The combined capacity of the three lots is 288 cars.

McNichols v. City & County of Denver et al., 230 Pac. (2d) 591, December 11, 1950.

Baltimore - According to the Paltimore Off-Street Parking Commission, the underlying principle of the Baltimore plan is to deal with the parking problem within the framework and spirit of the competitive enterprise system, to encourage and help private business to construct and operate the needed parking facilities, without subsidy, special privilege, or tax abatement. Thus far, \$15,000,000 in bonds has been authorized by legislation: the question of the issuance of \$10,000,000 has been submitted to and approved by the electorate. The commission makes 20-year loans at 2½ percent on not to exceed 85 percent of the cost of a parking project; the balance must be supplied by the parking-lot operator.

The commission has prepared a comprehensive plan providing approximately 6,000 additional spaces, 4,000 in the central business district and 2,000 in the perimeter areas. A 1946 survey indicated a deficiency of 5,048 parking spaces.

Since initiation of the program in 1949, nine parking structures have been placed in operation, and five additional ones are under construction; capacities vary from 90 to 366 spaces each.

Grand Rapids - A survey has determined that a deficiency of approximately 6,000 spaces exists in the central business district. The initial program of the Grand Rapids Automobile Parking Authority consists of three parking structures, totaling 765 spaces. As of February 1951, \$800,000 in revenue bonds had been sold, providing for one five-level structure and the site for a second project. The first project, 320 parking spaces, was dedicated September 1, 1951.

Lansing - The Parking Study Committee of Lansing estimated the deficiency of parking spaces to be 7,644 in the central business district. Ten sites were designated for development, so located that practically all property in the district would be within one and a half blocks from some one of them. As of July 1950, five of these had been acquired, developed, and placed in operation, totaling 534 spaces. The remaining properties are to be acquired. Also, a proposal for the construction of a

\$500,000 four-story municipal parking-ramp in the central area is being studied by the city council.

Detroit - The Municipal Parking Authority of Detroit prepared a 1949 comprehensive initial off-street-parking program, involving a parking structure in the central business district and five parking lots in other areas. A total of 2,258 stalls will be provided thereby. Estimated 1950 deficiency of parking space in central areas within a walking distance of three blocks was 9,000 spaces. As of November, 1950, condemnation had been ordered for the parking structure and one parking lot site, and a condemnation resolution was being prepared on one other site.

Flint - The Flint Parking Commission is now undertaking a general survey of all off-street-parking facilities in the downtown area.

Passaic - According to the Parking Authority of the City of Passaic, three parking sites have been selected, to accommodate approximately 500 vehicles. Land is being acquired now. Estimated cost of the facilities is \$700,000, which was financed by sale of revenue bonds. Actual construction is probably under way now.

The powers of the authority are not deemed to be adequate, according to an official of the authority. A closer working relationship with the local governing body and some direction over placement and income from parking meters are considered to be desirable.

Trenton - The Parking Authority of City of Trenton has in operation the Lafayette parking yard, with a capacity of 360 cars and is expected to have another turned over to it on Commerce Street, with a capacity of 155 vehicles. It is having some studies made of the feasibility of several parking garages.

Jersey City - The Jersey City Parking Authority is operating 15 municipal parking sites for free parking. The operator of a leased lot will construct a garage on the site at an estimated cost of \$250,000, when

materials become available. Site has been graded and is now in use. The authority is also sponsoring a comprehensive parking survey of the city's needs.

New Brunswick - The Parking Authority of the City of New Prunswick has undertaken studies on the city's parking difficulties. Three lots have been provided, one in the heart of the business district and two on the fringe. Capacity of the three lots is 620 cars. The establishment of five additional lots in various parts of the city is under consideration by the authority. The city issued \$300,000 worth of 20-year, non-interest-bearing municipal bonds, bought by merchants and commercial property owners.

White Plains - The White Plains Parking Authority now has four metered parking lots, costing \$119,810 in the aggregate, with 583 spaces. As of February, 1951, a deficiency of 3,147 spaces was estimated for the central business district. Additional facilities are being planned.

Pittsburgh - Parking surveys have indicated a need for approximately 3,000 additional short-time parking spaces. The initial program of the Public Parking Authority of Pittsburgh consists of the construction of four separate garages, totaling 1,947 spaces. Two additional sites for short-time parkers will be developed at a later time.

It is planned to construct a city park and underground garage on one of these. A \$4 million gift will be used to purchase real estate and develop the park. Long-time parking garages are planned for the perimeter of the central business district. Financing has been completed for the immediate construction of two of the facilities, having a total capacity of 1,594 spaces.

Hackensack - The City of Hackensack, through its Parking Authority, has undertaken a large-scale, 2-million dollar, 2-year parking program that involves interior parking lots, the removal of more than 60 houses, and the improvement of existing city parking lots to accommodate the parking of almost 3,000 vehicles adjacent to its principal street. This ambitious program has

been financed by the sale of revenue bonds of the authority. The city will lease the facilities from the authority, but the authority will act as operating agent of the facilities.

SPECIAL PUBLIC AGENCIES

There are other public agencies which are authorized to provide parking facilities, but whose primary purpose is an activity other than the provision of parking facilities. It would not be surprising, therefore, if the accomplishments of this group of agencies were limited. The facts are quite to the contrary, however, in some instances.

The case of the Triborough Bridge and Tunnel Authority in New York City is perhaps typical. On July 1, 1950, the authority dedicated its \$3,000,000 seven-story Pattery Parking Garage which can accommol,050 motorist-parked cars or 1,500 attendant-parked vehicles. This is the first of a series of public garages which is planned for the city.

Another good example is the parking accommodations to be provided in connection with the rebuilding of the 119-year-old Lexington Market in Baltimore, under the jurisdiction of the Lexington Market Authority. A connected four-level, off-street-parking garage will provide approximately 1,400 car spaces. The cost of the entire market and parking facilities will approximate \$2,563,000.

REGULAR MUNICIPAL OFFICIALS

The record of achievement of municipal officials in the provision of off-street-parking facilities as a regular governmental function is impressive. In fact, so extensive has been this field of endeavor that it is difficult to survey it.

According to the International City Managers' Association, 39 percent of the cities with populations over 10,000 own and operate one or more of an aggregate of 1,043 parking lots, 450 out of 1,144 cities reporting. 20 Approximately one third of

20 The Municipal Year Book, 1951, The International City Managers' Association, page 447 et seq.

these or 105 opened their first municipal parking lot in 1950.

Methods of financing are significant. Of 180 cities reporting the information, 90 used parking-meter receipts; 56, general tax-revenues; 6, general-obligation bonds; 3 special-benefit assessments; 12, a combination of parking-meter receipts and general tax-revenues; other combinations in 5 cities; 4, property already in city ownership; and 4 used donations.

Perhaps some examples of accomplishment in individual places would be even more revealing than statistics for the entire class. Significant progress is being made in Los Angeles. As a result of the cooperative effort of the city traffic Engineering commission, the park department, the Downtown Business Men's Association, and others, a large off-street-parking garage under Pershing Square is finally under construction. The facility will be self-liquidating, is being constructed with private funds, and will be operated by a private agency for 50 years, after which full ownership will vest in the city.

In Riverside, California, a survey of needs was made at the request of city authorities; a plan was proposed and followed; the city has now acquired five lots, with a present capacity of 475 spaces, which ultimately will be expanded to 702 stalls.

Likewise, in Sacramento, after study by the City Plan Commission and the City Traffic Engineering Division, two lots, covering two city blocks, were acquired at a cost of \$1,232,109, financed by a \$1,600,000 revenue-bond issue. An aggregate of 980 cars will be accommodated, for short-time parking.

The Des Moines plan involves the establishment of four off-street parking facilities, accommodating from 1,800 to 2,000 cars. Two of these have already been constructed, one of which is a five-level, ramp-type structure with 350 spaces; the other is a nine-level, automatic-elevator-type building (Bowser System) for 450 vehicles; total cost of both is \$1,066,137, financed out of a \$1,250,000 parking-lot-fund bond issue.

The Silver Spring Business District, in Montgomery County, Maryland, has established eight parking lots, providing a total of approximately 1,700 spaces, financed out of

a bond issue and special taxes.

Ann Arbor, Machigan, has established a system of parking facilities, which includes curb-metered parking spaces, a three-deck garage costing \$314,727, and four parking lots acquired at a cost of \$240,926. It is financed by bonds and revenues from all the facilities, both curb and off-street.

Two sites have been acquired in St. Paul for approximately 400 vehicles.

Similar progress can be reported from countless other cities in all parts of the United States.

AN APPRAISAL

Public parking-agencies have been in operation but a comparatively short period of time. Moreover, many complex problems arise in connection with the provision of off-street-parking facilities in cities, some of them very difficult of solution. Indeed, familiarity with existing agencies, their powers, plans, and accomplishments, suggests that it may never be possible to single out any one type of agency as the most efficient or desirable. For all of these reasons, it is obviously too soon to arrive at any categorical conclusions.

Perhaps, therefore, the findings of this investigation will disappoint those who are the champions of the parking authority or those who believe in the private-enterprise approach or those who think the job can best be done through ordinary governmental channels. In reality, this study merely documents certain conclusions which students of parking administration have timidly asserted for some time.

The choice of method of providing offstreet-parking accommodations will vary with the size and economic characteristics of a particular city, its political and business attitudes and local mores, its tax and debt structures, the magnitude of its parking needs, and a host of related factors. It can not be said categorically that a parking authority or government officials or private interests alone can do the job in every place and under all circumstances.

There are cities in the United States where the establishment of a public parking-authority seems to be the only answer to the effective solution of the parking problem. This would be the case where municipal-debt limitations exist and have been approached by the city's outstanding obligations and where the city cannot issue revenue bonds in its own name; or where political entanglements render it impossible to do the job through ordinary government channels, where the temperaments of officials or existing departments are so sluggish or incapable of integration to meet a common menace as to make a special public parking-authority desirable, or where a job cannot otherwise be done quickly and efficiently.

But it should also be remembered, if such an authority is deemed to be necessary in the public interest for the reasons suggested above, that it complicates local government; that it is subject to democratic controls only indirectly and at a distance, that it should always "operate under glass;" and that its administrative structure, however meritorious, soon will lose its basic value unless skilled and consistent management is its counterpart.

 $^{21}{\mbox{Anne}}$ X. Alpern, city solicitor, Pittsburgh.