

FINDING ADDITIONAL REVENUE FOR CITIES

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SYNOPSIS

Facilities needed for transportation in large metropolitan areas are: (1) construction of new arterial traffic routes and improvement of existing routes; (2) improvement of other city streets to care for the needs of abutting property and neighborhood traffic; (3) provision of additional terminal facilities to care for passenger-car parking and the loading and unloading of commercial vehicles; and (4) improvement of mass transportation facilities.

The plight of the large cities due to shortage of funds is indicated by the lag in the progress of work undertaken under the urban Federal-aid provision of the 1944 Federal Aid Highway Act. On October 1, 1947 Federal funds allotted to projects approved for construction on the Federal-aid highway system stood at 46 percent of the total funds apportioned for the three postwar fiscal years, at 40 percent in the case of the secondary system funds, but at only 24 percent in the case of urban-system funds.

The situation in cities is probably due to: (1) trends in urban growth; (2) competition for authority and revenue because of pyramiding of governmental units; (3) lack of home-rule powers; (4) essential weaknesses in financial structures; and (5) increasing costs and demands.

Philadelphia's public-improvement program calls for the expenditure of \$444 million with \$113 million going for highway projects. A two-year capital improvement program for Baltimore provides for the expenditure of \$56.2 million, of which \$12 million would be for highway projects, and \$1 million for off-street parking facilities. In Baltimore the estimated income from all existing sources of revenue will fail to equal anticipated disbursements by amounts ranging from \$11 million in 1948 to \$14 million in 1950.

The best revenue-producers, ranked in descending order according to the anticipated revenues, appeared to be: tax on incomes and payrolls; assessment of local property taxes against manufacturer's inventories, tools, and machinery which are now exempt from such taxation; local general sales tax; local business tax; service charges for garbage and trash collection; sewer rentals; local automotive taxes of various types; and local amusement taxes. A special session of the legislature held in November granted Baltimore the same taxing power as the State, with certain exceptions, for the calendar years 1948 through 1951.

The highway needs of cities, important as they are, cannot be expected to be solved to the disregard of all other needs. The Baltimore study and other investigations seem to indicate that there are several means by which, with some help from the State and Federal governments, cities can obtain the additional revenues they will require during the next few years. Such relief is likely to be only temporary, and what is needed, it appears, is a complete overhauling of present American concepts of metropolitan-area government. A workable solution might be found in the creation of metropolitan-district authorities to which certain powers of all governmental units lying within the area would be delegated, which the authorities would administer on an area-wide basis, and which no other unit in the area would exercise.

There was a time not so long ago when the crying need throughout the Nation was for reasonably direct all-weather highways to connect the good street systems of the larger towns and cities with each other. Then the motorist or truck driver leaving the city was fortunate if he could travel over a few miles of

rural "hard road" (as all roads having stone surfaces or better were commonly called) before being dumped unceremoniously into the mud. Often he found himself in the mud as soon as he crossed the city line.

Today the situation is often reversed. The highway traveler or hauler of goods who ap-

proaches any of the larger urban areas over a State highway usually travels over a reasonably adequate road into which have been incorporated all or many of the most modern concepts of grading, horizontal and vertical alignment, width, and surfacing. Frequently these approaches provide two or more lanes for travel in each direction; often the opposing streams of traffic are divided physically, grades at intersections are separated, and parking on the traveled way is prohibited. But as the heart of the central city is approached there is usually a change, a change which frequently occurs at the city limits. The roadway narrows; the separation of opposing streams of traffic disappears; intersections are frequent, and at grade; the surface becomes rougher; and vehicles standing along the curbs impede the flow of traffic, the volume of which is usually much greater at this point than it was on the more adequate rural sections of the approach highway.

RECOGNITION OF THE URBAN PROBLEM

By universal acknowledgment, one of the greatest public-improvement needs of today is more adequate facilities for transportation in the large cities of this country. The facilities required are: (1) construction of new arterial routes and the improvement of existing routes for the facilitation of arterial traffic; (2) the improvement of other city streets to care for the needs of service to abutting property and neighborhood traffic; (3) provision of additional terminal facilities to care for passenger-car parking and the loading and unloading of commercial vehicles; and (4) improvement of the mass-transportation facilities which will always be needed because private passenger cars and taxicabs can not possibly move all the traffic that must move to keep these cities alive.

However, such improvements cost money, tremendous amounts of it, and most of America's larger cities are extremely short of this important commodity right now. Taken collectively, their current fiscal position is probably worse than that of any other class of governmental units.

The financial plight of the cities is not a new problem, but the present widespread concern about it is a relatively new phenomenon. State recognition and attempts toward the solution of urban problems have varied. In

connection with the highway function the direct assistance given has been of three general types: (1) Actual performance of some construction and maintenance of city streets by the State with State funds; (2) cooperative action with the local units in one or both functions; and (3) payments of shares or aids from State revenues, usually from highway-user revenue. Indirect assistance has also been rendered by other means, especially through action by the State legislatures giving cities additional taxing or other fiscal powers. However, the assistance given in most States has been far from adequate, with the result that the acute problem still exists.

Federal recognition of urban problems has taken several forms. Insofar as the highway function is concerned this has consisted principally of: (1) Direct expenditures under unemployment relief programs; (2) Federal aid in the preparation of plans in connection with improvement programs (such as is extended through the Bureau of Community Facilities of the Federal Works Agency); (3) Federal-State or Federal-State-local cooperation in traffic and other highway-planning studies; and (4) Federal-State cooperation with or without city participation in the construction of highway facilities. The Hayden-Cartwright Act of 1934 established many important changes in Federal highway-aid policies, one of the most important of which was the removal of the limitation against spending Federal-aid funds for the improvement of routes in the built-up sections of places having populations in excess of 2,500. However, complete recognition by the Federal Government of the importance and seriousness of the problem did not come until the Federal-Aid Highway Act of 1944 became law. This law not only provided funds for construction on the Federal-aid highway systems, including the urban extensions thereof, but it also provided special aids for projects on the Federal-aid systems in urban areas. The term "urban area" was defined as "an area including and adjacent to a municipality or other urban place of 5,000 or more population as determined from the latest Federal census." The boundaries of these areas were to be delineated by the State highway departments subject to the approval of the Public Roads Administration. The law also provided for the creation of a National System of Inter-

state Highways of primary importance to be so selected as to connect "the principal metropolitan areas, cities, and industrial centers." These provisions of the 1944 Act are a long step toward a solution of the Nation's urban highway problems.

That something is seriously wrong now is indicated by the lag in the progress of work undertaken under the urban Federal-aid provision of the 1944 Federal-Aid Highway Act. According to the Public Roads Administration, projects utilizing about 67½ percent of the Federal-aid highway system funds apportioned for the three postwar fiscal years had been programmed for construction by October 1, 1947. The comparable percentages of Federal-aid secondary and urban funds programmed by that time were 65 and 50, respectively. On the same date Federal funds allotted to actual projects approved for construction stood at 46 percent in the case of Federal-aid primary system funds, 40 percent in the case of secondary-system funds, but only 24 percent in the case of urban-system funds. The reasons given for the slower rate of advancement of the urban projects are primarily factors peculiar to urban highway construction: (1) greater amount and complexity in the advance planning required; (2) greater difficulties in obtaining rights-of-way; (3) difficulties in the arrangement of financing for such projects.

Other data compiled by the Public Roads Administration are also illuminating. As of August 1, 1947, 89 percent of the matching funds for improvements programmed with urban Federal-aid funds were being provided by the States; 4 percent by counties, about 1 percent from miscellaneous sources, and only a little more than 6 percent by the cities. Correspondingly matching-fund arrangements for Federal-aid primary system projects were 99 percent by the States and 1 percent by all other sources; and for Federal-aid secondary system projects, 84 percent by the States, 15 percent by the counties, and 1 percent by other sources. The great interest in getting urban Federal-aid projects under way expressed by officials of most cities can be reconciled with the data presented above only by assuming that shortages of available funds have been primarily responsible for the lack of greater city participation.

REASONS FOR THE PLIGHT OF THE CITIES

Before suggestions for improving the financial conditions of the cities can be made it is necessary to understand why the cities, particularly the larger ones, are now in such a serious plight. The more important reasons that prevail rather generally may be grouped under five major headings: (1) trends in urban growth; (2) competition for authority and revenue because of pyramiding of governmental units; (3) inherent lack of home-rule powers; (4) essential weaknesses in financial structure; and (5) continuously increasing costs and demands.

Trends in Urban Growth—A recent article that has attracted considerable attention (1)¹ pointed out that the rate of urbanization of the United States (based on U. S. Census Bureau definition) is slowing up, if the prewar trend is continuing. Population statistics are quoted to prove the contentions made, but the interpretations of some of these data are open to question.

The major implication of the article is that the cities of America, particularly the larger ones, are rapidly losing some aspects of their relative position of importance and affluence, and that their situation is likely to deteriorate rapidly. And, interestingly enough, the chief reason assigned by the unidentified author for the evident increasingly serious problems to be faced by the cities is the development of modern transportation facilities.

Some interesting information about the 20 largest metropolitan districts in Continental United States as they existed in 1940 is presented in Table 1. These are the areas established by the Census Bureau according to its own somewhat arbitrary definition and are probably more inclusive in some instances (Baltimore, for example) than are the "true" metropolitan areas when the term is defined as applying to entire urban areas which are, in effect, single economic or sociological units. However, the differences are not serious, and this treatment has the advantage of placing all of the areas on a common basis (2).

Eleven of the areas have total populations in excess of 1 million, but only 5 of the central cities have populations in excess of that amount, while populations greater than 1

¹ Italicized figures in parentheses refer to list of references at the end of the paper.

million are found outside the central cities of 5 areas, only three of which cities are in the 1 million or more population class. The percentages of the total population outside the central cities range from only 8.4 percent in the case of New Orleans to 66.3 percent in the case of Pittsburgh and 67.2 percent in the case of Boston.

In every instance but one the percentage increase in population between 1930 and 1940 was greatest outside the central city, and in that case (the Scranton-Wilkes Barre area) the entire area showed a decline. In more than half of the areas the numerical increase was

marked physical effects upon the present central cities. One is that areas formerly residential are being converted to commercial, industrial, or tax-exempt areas. Another is that some former good residential and commercial areas are now becoming blighted, while structures in other areas are no longer in demand for productive purposes and are being wrecked to avoid paying taxes on them.

Competition for Authority and Revenue—The New York Metropolitan District as defined by the U. S. Census Bureau contains 519 units of government other than school districts below

TABLE 1
POPULATION DISTRIBUTION IN LARGEST METROPOLITAN AREAS IN THE UNITED STATES AS INDICATED BY THE CENSUS OF 1940 (†)

Name of Area	Population			Percentage of Population	
	Total	In Central City or Cities	Outside Central City or Cities	In Central City or Cities	Outside Central City or Cities
1. New York - northeastern New Jersey.	11,690,520	8,435,496	3,255,024	70.3	29.7
2. Chicago	4,499,126	3,396,808	1,102,318	75.5	24.5
3. Los Angeles	2,904,696	1,604,277	1,400,319	51.8	48.2
4. Philadelphia	2,895,044	1,931,334	967,310	66.6	33.4
5. Boston	2,350,514	770,516	1,579,698	32.8	67.2
6. Detroit	2,295,867	1,623,452	672,415	70.7	29.3
7. Pittsburgh	1,994,060	671,659	1,322,401	33.7	66.3
8. San Francisco-Oakland	1,423,525	396,699	491,826	65.6	34.4
9. St. Louis	1,367,977	816,043	551,929	59.7	40.3
10. Cleveland	1,214,943	373,336	336,607	72.3	27.7
11. Baltimore	1,046,692	359,100	187,592	82.1	17.9
12. Minneapolis-St. Paul	911,077	780,106	130,971	85.6	14.4
13. Washington, D. C.	907,816	663,091	244,725	73.0	27.0
14. Buffalo-Niagara Falls	857,719	653,930	203,789	76.2	23.8
15. Milwaukee	790,336	587,472	202,864	74.3	25.7
16. Cincinnati	789,309	455,610	333,699	57.7	42.3
17. Providence	711,500	253,604	457,996	35.6	64.4
18. Kansas City (Missouri-Kansas)	634,093	520,636	113,457	82.1	17.9
19. Scranton-Wilkes Barre	623,581	226,640	402,941	36.0	64.0
20. New Orleans	540,030	494,537	45,493	91.6	8.4

also greatest outside the central cities. Recent population estimates by the Census Bureau provide indications that the trend of the 1930-1940 decade is continuing.

The significance of these figures is that in the case of the larger urban centers the real cities have far outgrown the bounds of the original political or "civil" cities. In the ten largest urban areas as defined by the Census Bureau there is none in which less than 24 percent of the population lives outside the central city. Thus the latter, strictly limited in both area and authority as it is in most cases, is in no position to administer the real city of today or solve its problems.

This outward growth is having some very

the State level. School districts are omitted from consideration here because of their questionable status as separate governmental units. The Pittsburgh area, with 244 units, contains the second largest number of governmental units, while the Chicago area is third with 228. The units included are counties, townships (or their equivalent), municipalities, and special districts. The number and type of such governmental units found within each of the 20 largest metropolitan districts in the United States are indicated in Table 2.

The units within a single district compete with each other to a greater or less degree for both authority and revenue. In the larger metropolitan areas most of the individual

governmental units maintain separate administrative organizations and often perform closely allied functions, sometimes the same functions.

Regardless of the reason for the creation of these independent governmental units, the fact remains that their extreme multiplicity, particularly in some instances, cannot avoid complicating the government of an area which is essentially one in primary interest by splitting it up into a multitude of small units, and overlaying these with other governmental jurisdictions of various types. The existence of these units often prevents expansion of the boundaries of the central cities, an expansion that might help them to solve some of their financial problems. Furthermore, the multiplicity of such units, and the duplication in administrative organizations and in the execution of functions which they create, cannot avoid adding considerably to the expense of governing entire metropolitan areas.

The fact that some of the largest metropolitan areas in the country include relatively few governmental units raises a question as to whether the government of such areas cannot be carried on without a multiplicity of governmental jurisdictions. The Baltimore and Cleveland metropolitan areas, both of which contain populations well in excess of one million, each contain only 15 governmental units below the State level, while the New Orleans area is governed by only seven such units. It is probable that even these areas are not now being governed with an optimum of efficiency, and that the number of units in each case could be still further reduced. It may be argued that in each of these areas only a relatively small percentage of the total population lives outside the central city, and, therefore, fewer units are to be expected. However, the Chicago metropolitan area, with a smaller percentage of its total population outside the central city than Cleveland has, contains 228 governmental units. On the other hand, the Providence metropolitan area, in which nearly two-thirds of the population lives outside the central city, contains only 42 governmental units.

Inherent Lack of Home-Rule Powers—American city governments have no sovereign powers. Whatever powers they possess come as a grant from the State legislatures. In

some States the legislatures have been extremely generous and farsighted in giving so-called "home-rule" powers to their cities, particularly the larger ones. In other States the legislatures have been unwilling to grant powers to the cities that will permit them to operate without coming frequently to the legislatures for permission to impose certain taxes or charges, or to do other things that city governments believe to be desirable.

The lack of home-rule powers handicaps city governments in revising their revenue structures and in incurring and servicing debt. The

TABLE 2
NUMBER OF GOVERNMENTAL UNITS OTHER THAN SCHOOL DISTRICTS IN LARGEST METROPOLITAN DISTRICTS, 1942

Name of Area	All Units	Coun- ties	Town- ships	Muni- cipal- ities	Spe- cial Dis- tricts
1. New York-north-eastern New Jersey	519	14	78	286	141
2. Chicago	228	5	42	115	66
3. Los Angeles	99	3		56	40
4. Philadelphia	190	7	71	93	19
5. Boston	96	5	64	19	8
6. Detroit	78	3	27	45	3
7. Pittsburgh	244	6	82	137	19
8. San Francisco-Oak-land	133	6		41	86
9. St. Louis	114	5	18	70	21
10. Cleveland	15	2	5	5	3
11. Baltimore	15	4		5	6
12. Minneapolis-St. Paul	59	5	17	36	1
13. Washington, D. C.	63	4		32	27
14. Buffalo-Niagara Falls	56	2	12	15	27
15. Milwaukee	22	2	6	14	
16. Cincinnati	73	5	14	47	7
17. Providence	42	3	23	8	8
18. Kansas City (Missouri-Kansas)	26	4	5	11	6
19. Scranton-Wilkes Barre	73	4	18	50	1
20. New Orleans	7	2		3	2

Source "Governmental Units in the United States, 1942," U. S. Bureau of the Census, 1944, Table 11, pp 64-67

situation is further complicated by the fact that in most States the cities do not have representation in the State legislature in proportion to their population. Consequently, it is extremely difficult for them to get enabling legislation passed which is opposed by the rural areas.

Essential Weaknesses in Financial Structures—City financial structures generally are characterized by two outstanding weaknesses. The first is their high degree of reliance upon property taxes as a source of revenue. The second is the extremely high per capita debt that now prevails.

According to the Census of Governments of 1942, cities having populations in excess of 25,000 inhabitants then received 65.2 percent of their general revenue from local taxes upon property, 9.8 percent of their revenue from other local taxes, 17.4 percent from Federal and State aid, and 7.6 percent from earnings and miscellaneous sources (3). Similar data for 1939 for the central cities of the 20 largest metropolitan areas are shown in Table 3.

parison ends for the reason that the cities find it necessary to support from these sources practically all of their activities, with the exception of schools in a few instances, while in most States the townships and rural towns support only a limited number of activities, such as general government and relief, from these sources. Very little of the aggregate highway mileage in cities is completely or even partially supported by agencies other than the

TABLE 3
DISTRIBUTION OF 1939 REVENUES BY MAJOR SOURCES AND 1940 PER CAPITA PROPERTY TAX LEVIES FOR CERTAIN CITIES AND THEIR OVERLYING GOVERNMENTS

Name of City	Total ^a	Revenues by Major Sources, 1939							Per Capita Property Tax Levies in 1940		
		Local Taxes and Licenses			Fines and Forfeits	Use of Money and Property	From Other Governments	Other	All Levies	All Levies Except County and State	
		Total	Prop-erty	Other						Total	City Only
		%	%	%	%	%	%	%	Dollars	Dollars	Dollars
New York	100.0	68.8	59.0	9.8	.3	2.8	22.7	5.6	85.97	65.92	65.92
Chicago	100.0	72.3	63.7	8.6	.3	1.9	20.4	5.0	54.80	51.31	21.05
Los Angeles	100.0	62.4	59.4	3.0	.7	1.3	28.8	6.9	51.33	35.34	15.34
Philadelphia	100.0	75.0	72.1	2.9	.4	8.9	6.4	9.4	40.89	39.22	22.87
Boston	100.0	73.2	70.4	2.8	.3	3.2	17.9	5.6	79.44	74.48	74.48
Detroit	100.0	74.6	73.6	1.0	.8	.2	16.8	7.7	49.35	41.66	41.66
Pittsburgh	100.0	73.2	77.5	.7	.4	.7	14.1	6.7	62.19	45.03	26.71
San Francisco	100.0	66.3	64.7	1.6	.3	2.0	25.9	5.4	51.33	51.33	51.33
St. Louis	100.0	82.5	68.1	14.4	.4	1.1	6.5	9.4	37.43	35.34	23.20
Cleveland	100.0	60.1	59.7	.4	.5	.5	30.8	8.1	43.78	36.21	22.29
Baltimore	100.0	71.5	66.8	4.7	.2	3.3	19.9	5.2	43.09	40.14	40.14
Minneapolis	100.0	66.6	64.1	2.5	.5	1.9	20.9	10.2	49.86	38.53	38.53
Washington, D. C.	100.0	78.1	44.5	33.6	.8	1.0	15.7	4.3	35.71	35.71	35.71
Buffalo	100.0	67.6	66.7	.9	.2	.1	25.5	6.5	64.63	48.95	48.95
Milwaukee	100.0	68.3	66.4	1.9	.3	1.7	21.8	8.1	56.34	37.57	35.41
Cincinnati	100.0	50.9	50.2	.7	.7	3.4	30.0	15.1	38.67	32.53	19.08
Providence	100.0	77.0	74.2	2.8	.2	3.2	13.9	5.7	51.42	51.42	51.42
Kansas City, Missouri	100.0	86.6	76.8	11.8	.6	.8	5.6	4.4	51.50	40.28	21.65
Seranton	100.0	84.4	81.8	2.6	.6	.4	10.7	3.9	36.73	30.68	14.32
New Orleans	100.0	80.0	60.1	19.9	.4	1.7	10.2	7.9	35.39	29.65	18.23
Total (Weighted Average) ^b	100.0	70.5	64.1	6.4	.5	2.1	20.4	6.6	c	c	c

^a Detail may not add to total because of rounding component percentages.

^b Weighted average of all cities having populations in excess of 100,000

^c No data available

Source: "Financial Statistics of cities: 1939," Bureau of the Census, Table 4. "City Finances: 1944, City Property Taxes in Wartime," Bureau of the Census, Table 4.

In most States the cities receive a smaller percentage of their total revenue from State and Federal aid than any other governmental unit except special districts. In 1942, for example, the counties received approximately one-third of their total revenue from such aids, school districts nearly 36 percent, and townships and towns about 20 percent, while the cities received only 16 percent of their revenue from these sources (3).

Only townships and rural towns received as much of their total revenue from local tax sources as did the cities. But there the com-

cities themselves, but in the case of the townships and towns the more important mileage located within their boundaries is almost universally supported by the State, while a part or in some cases all of the remainder is supported directly by the counties.

According to the Census of Governments, there was outstanding in 1942 a gross total of approximately 19 billion dollars in state, county, and local debt. Of this amount 3.3 billion dollars was debt of the state; 2.0 billion, debt of the counties; 8.1 billion, debt of cities having population in excess of 25,000; 1.1

billion, debt of other incorporated places; 0.3 billion, debt of townships and towns; 1.9 billion, school district debt; and 2.4 billion dollars was debt owed by other special districts. Approximately 10 percent of the total debt was covered by sinking fund and other offsets, the states having about 15 percent of their debt covered by such offsets and the cities about 13 percent. Offsets to outstanding debt of the other units ranged from 1.7 percent in the case of special districts to 7.6 percent in the case of the counties (4). It is important to note that almost exactly half of the entire debt outstanding was local debt of the incorporated places. To this should be added a proportional share of the overlying state, county, special district, and school district debts, to obtain the total liability of residents of these places for state and local debt.

In the Census of Governments report per capita local debt figures are given for the country as a whole and for the individual states but not for any unit below the state level. The per capita gross local debt outstanding for the entire United States in 1942 was \$119.46 (5). Data compiled by the Census Bureau for individual cities for 1939 indicate that in that year the average per capita gross local debt of all cities having populations of 100,000 or more was \$137.74 (6). The average for cities having populations of 500,000 and over was \$158.87, while for those having populations between 300,000 and 500,000 the average was \$136.30, and for places having populations of 100,000 to 300,000 the average was \$98.87.

The urban debt load can be even more clearly demonstrated by citing a few examples. The data for 1939 indicate that at that time the gross per capita local public debt of the citizens of Philadelphia was \$211.61; while that of the citizens of Pittsburgh was \$222.66 (6). In 1942 the gross per capita local debt of all the citizens of Pennsylvania was only \$123.76. This, of course, included the local debt of the cities of Philadelphia and Pittsburgh. The gross per capita debt in the city of Detroit in 1939 was \$180.73 while in 1944 the gross per capita local debt for the entire State of Michigan was only \$109.94.

Increasing Costs and Demands—Current population trends seem to indicate that the existing central cities of all our larger metropolitan

districts will eventually begin to lose populations in spite of increases for the entire metropolitan areas. Decreases have already been recorded for Boston, Philadelphia, St. Louis, and Cleveland, and for Manhattan Borough which is the heart of the city of New York. It, therefore, becomes logical to ask: Are these decreases likely to be accompanied by decreases in the costs of government of those cities? The answer is almost certainly, no; in fact, it is the opposite which experience indicates is most likely to occur. The main reason for this is that the costs of highways, police and fire protection, and many other major city services, do not decrease when resident populations move out and areas formerly occupied by them are turned over to commercial or industrial occupancy. Furthermore, new residential developments within the city limits which will eventually probably take up all of the inhabitable land lying within them will add a new increment of cost to the city's governmental operations.

Increases in the total populations of metropolitan areas will naturally cause increased demands throughout the areas for the facilities and services furnished by government. Even though it may not continue to increase in population, the central city of each such area will be subjected to some of the demands of this additional population load. The increases will not be felt to the same extent by all governmental functions, however. The "general government" function is not likely to be affected nearly as much as are functions such as public safety, sanitation, health and hospitals, public welfare, and highways. For these reasons and others, some of which are listed below, the dollar costs of government in American cities are likely to continue to follow the increasing trend which has been typical of the dollar costs of government generally in the United States from the very beginning.

Increases in price and wage levels will cause the apparent costs of government to rise. Comparisons of the actual burdens of financing government, and of the effort required of the individual taxpayer to bear them, can be made for a series of years only after dollar amounts of expenditures for those years have been adjusted for changes in the prices charged for the goods and services that the taxpayer must buy. However, it is the actual dollar volumes that are most commonly compared.

Changes in the composition of populations will also have a direct bearing upon the demand for certain governmental services. Thus, a declining birth rate might entirely offset the effects of over-all population increases insofar as the demand for elementary school facilities is concerned.

Advances in science and technology tend to make life more effective, pleasant, and comfortable, but they also frequently add to the burden that governmental units, especially cities, must bear. Similarly, rising living standards bring increased demands that governments provide increased facilities and services. Thus, increases in the density of automobile ownership and in the amount of vehicle use will be reflected in demands for better and wider streets, added parking facilities, and more traffic control and policing. Also, larger incomes usually generate a demand for better housing and thereby encourage construction of more dwellings, especially garden-type multiple family units and detached houses. Such developments require the construction and maintenance of additional streets, lights, water mains, and sewers, as well as requiring extra fire, police, and garbage- and trash-collection services. These added expenditure requirements are usually not matched by equivalent declines in local governmental expenditures in areas depopulated by the movement of families to the new areas.

As cities grow larger and older they tend to be more and more affected by the disease known as urban blight. It affects all types of areas, commercial and industrial as well as residential. Blighted areas are not necessarily slum areas but every blighted area is a potential slum and thereby a threat to the well-being of the entire community. In order to protect themselves cities cannot afford not to take remedial action regardless of the cost.

As civilization becomes increasingly complex the security of the average individual and, consequently, his inherent ability to be independent and meet unforeseen emergencies, decline. Therefore, when misfortune comes, particularly economic depression, he is much less able to take care of himself and his family than was the case when the standard of living was lower but individual independence was greater. The result has been a necessary broadening program of public welfare, espe-

cially in the fields of health conservation, hospital services, general relief, continuing aids to the aged and handicapped, and pensioning of public employees.

A visit to any large American city will quickly yield many evidences of the deferred maintenance of public facilities, especially streets and buildings. Maintenance is extremely difficult to dramatize, and when governmental budgets are being cut to keep the tax rate down or for some other reason it is usually the maintenance items that receive the bulk of the cuts. This is unfortunate because inadequate maintenance of a facility will only result in more rapid deterioration than should be the case, thereby hastening the day when the cost of reconstruction will become necessary.

Each new facility added to a city's capital investment increases its maintenance obligation. These additional requirements coupled with the clearly demonstrated need to spend more on maintaining existing properties are going to increase the operating costs of the city. However, such increases are actually sound economy which will be subsequently reflected in decreased costs for reconstruction.

In addition, there are numerous other factors that may operate to increase the cost of government. For example, the public frequently demands that government assume the responsibility for providing services that ordinarily would be provided by private capital. Also, the public often requires that city governments furnish or subsidize cultural and related activities beyond the scope of those in which they would normally engage as part of their educational and recreational activities. Finally, that intangible quality known as civic pride is sometimes responsible to a large degree for certain types of city expenditures, and demands for additional expenditures of this type are frequently made.

MAGNITUDE OF THE PROBLEM

Although the complete information necessary to indicate the magnitude of the requirements for additional funds now facing the Nation's larger cities is not available, data, mainly on contemplated capital outlays, for a few cities will serve to indicate something of the magnitude of the problem faced by the major cities.

The Philadelphia City Planning Commis-

sion in 1945 recommended a program of public improvement to be carried out during the period from 1946 through 1951 (7). The estimated cost of all the projects considered as desirable was approximately 444 million dollars of which highway projects totaled 113 million. Projects scheduled for the recommended program to be carried out in the stated period totaled 256 million dollars, of which highway projects amounted 87 million.

A capital improvement program for the city of Cleveland to cover the 1946-1951 period was adopted by the City Planning Commission on June 22, 1945 (8).

The total cost of the projects involved was estimated at 68 million dollars of which public utility projects totaled 17 million and street projects 12 million. A report by the Capital Budget Programming Committee of the city of New Haven, Connecticut, submitted in September 1946 (9), outlined a program of public improvement for the period 1947 through 1952 which would involve a total expenditure of approximately 12.5 million dollars, an estimated 1.3 million of which would represent highway projects. It was the opinion of the committee that an approximately equal additional sum would have to be spent subsequently to meet the capital needs of the city which were estimated at about 25 million, of which approximately 2.4 million dollars represented highway needs.

The Indianapolis postwar planning committee recently proposed a 25 million-dollar program of city improvement (10), of which it was estimated that 5.5 million would be required for railroad grade separations, thoroughfares, and off-street parking. The report included a financial plan based on the completion of the program within a period of seven years. According to the committee's program the improvements would be financed partly from current revenues, partly from Federal aid, and partly from borrowings.

The capital improvement program for the City of Baltimore, Maryland, proposed by the Commission on City Plan in April 1947 (11), called for capital expenditures over a three-year period totaling 56.2 million dollars, 12 million of which would be made for highway projects, and 1 million for off-street parking facilities.

In connection with the studies conducted by the Joint Fact-Finding Committee on High-

ways, Streets, and Bridges of the California legislature (12), the State Highway Department and the cities were asked to estimate the anticipated cost of needed construction, reconstruction, maintenance, and operation. The results, with adjustments for anticipated changes in price levels, indicated that the expenditure of about 792 million dollars for the construction of streets in incorporated places having populations of 2,500 or more would be required to provide an adequate urban highway system. It was estimated that an additional 236.8 million dollars would be required for maintenance and administration from 1946 through 1959. Maintenance costs, which were averaging 10.9 million dollars for the current biennium, were expected to increase gradually to a level of 15 million by 1959 and administrative costs, currently at approximately 3.25 million per year, were expected to increase to 3.95 million by 1959.

It may be argued that most of the proposed programs such as those just described are largely in the idea stage, and that when the grandiose dreams and wishful thinking of the planners are reduced to a level of practicality the needs will not loom nearly as large. That may be partially true, but when consideration is given to the amount of municipal public works that has already been brought to the design stage these programs do not seem so fantastic. A report by the Bureau of Community Facilities of the Federal Works Agency (13) indicates that at the close of 1946, 998 local governmental units (cities, villages, towns, and townships) out of a total of 1,338 such units having populations in excess of 10,000 inhabitants reported having plans in preparation, completed, or approved for projects that were expected to cost more than 5.6 billion dollars.

The anticipated expenditures just discussed represent for the most part an increment of expenditures in addition to those that have been made in the past. It cannot be argued that the expenditures required for capital outlays to bring the physical plants of the cities up to where they should be are one-time expenditures that will not need to be duplicated. It is true that it may not be necessary to maintain the same high level of expenditures in all future years, but on the other hand we do not build for eternity and these facilities must all be replaced in due time. Furthermore, if the

metropolitan areas continue to grow, even at a greatly reduced rate, and other demands for additional expenditures continue for the reasons previously outlined, it is to be anticipated that the need for further expenditures not included in these programs will continue. Thus, it is evident that more money and lots of it is going to have to be spent in American cities in years to come. Some will be spent by the Federal government and some by the States, but most of it must be raised and spent by the cities themselves. The question then arises: Where are they going to get the needed funds?

BALTIMORE: A PROBLEM AND SOME POSSIBLE SOLUTIONS

If for no other reason than because of the provisions of the Federal Aid Highway Act of 1944, the Public Roads Administration has a legitimate interest in the financial problems of the cities and in finding possible solutions for them. Consequently, the agency has cooperated with the city of Baltimore in a study of its financial situation which involves the consideration of possible additional sources of revenue for the city. Although the final report on the study has not yet been completed, the city has utilized some of the results in formulating its plans for establishing its revenue structure for 1948 and future years.

The Present Situation—In some respects the Baltimore metropolitan area is typical of the larger metropolitan areas of the United States, while in others it is not. The metropolitan district as defined by the Census Bureau ranked eleventh in 1940 among metropolitan areas in total population. In percentage of the total population of the metropolitan district living outside the central city Baltimore tied with the Kansas City (Missouri-Kansas) metropolitan area in ranking seventeenth, since only 17.9 percent of the total population of each metropolitan district lived outside the central city.

With respect to the number of governmental units found in the metropolitan district Baltimore in 1940 tied with Cleveland for 18th place, since both metropolitan areas contained a total of 15 units each other than school districts. Baltimore's status as an independent city, with no overlying county government to interpose between it and the State to levy taxes or to set up competing administrative

agencies, allows a freedom of action and freedom from competition for authority and revenue that most of the larger cities do not enjoy.

Baltimore is in a favorable position today as compared to other large cities because of the careful and conservative management of its finances that has been characteristic over many decades of its history. The chief defect of this policy appears to have been a penurious attitude toward the maintenance of the facilities owned by the city, and to some extent toward the services that should be rendered to its citizens.

The city is fortunate in having a relatively low per capita tax rate that is to be still further reduced this year. It is also fortunate in that it received a greater total percentage of its total income from State and Federal aids than almost any other city of its size.

On the other hand, there are some unfavorable elements in the present Baltimore picture. The per capita debt of the city is high, higher even after the deduction of reserves than is the corresponding debt of any other city of the United States having a population between 500,000 and 1,000,000. This does not mean that the city has borrowed or spent its money unwisely, on the contrary its credit rating is of the best. It does mean, however, that now when a huge program of outlays is needed the city is not in a position greatly to increase its outstanding debt.

Furthermore, many of the older facilities of the city, particularly streets and buildings, are going to need reconstruction in the near future, while additional facilities must be built. City officials have already warned the citizens that beginning in 1948 anticipated disbursements are going to exceed anticipated revenues by a considerable amount annually, probably by at least 10 percent of the total disbursements.

Estimate of Financial Requirements—In attempting to estimate the future financial requirements of the city it was first necessary to estimate what the disbursements may be expected to be. With the information at hand it was not considered desirable to attempt to estimate the disbursements beyond 1950. The result was the estimated total disbursements of the city from general and enterprise funds for all purposes in the years from 1946 through 1950, which are presented in Table 4.

TABLE 4
ESTIMATED TOTAL DISBURSEMENTS OF THE CITY OF BALTIMORE FROM GENERAL AND ENTERPRISE FUNDS FOR ALL PURPOSES, FOR THE YEARS 1946-1960
(Amounts in Millions of Dollars)

Year	Total						Administration, Operation and Maintenance				Debt Service ^a				Capital Outlay ^b			
	General Government		Enterprises		Total		General Government		Enterprises		Total		General Government		Enterprises		Total	
	In-clude Bond Funds	Ex-clude Bond Funds	In-clude Bond Funds	Ex-clude Bond Funds	Total	General Government	Enterprises	Total	Debt as of 6-30-47	Later Issues	Total	Debt as of 6-30-47	Later Issues	Total	From Bond Issues	From Current Revenue	Total	
	Funds	Funds	Funds	Funds		Enterprise	Prises											
1946	70.7	68.5	64.2	62.1	53.9 ^c	51.4 ^c	2.8 ^c	12.6	8.9	8.9	3.7	3.7	3.7	3.7	2.1 ^c	1.8 ^c	4.9 ^c	
1947	85.8	81.6	78.8	74.0	67.9 ^d	64.6 ^d	3.3 ^d	11.1	7.6	7.6	3.5	3.5	3.5	3.5	2.8	1.8	6.8	
1948	121.1	96.1 ^e	105.8	88.5	82.7	79.7 ^f	3.0	11.4	7.9	7.8	3.3	3.2	3.2	3.2	17.0	1.8	27.0	
1949	124.8	95.8	105.2	86.2	83.1	79.5 ^g	3.6	10.7	6.9	6.8	3.3	3.7	3.7	3.7	17.0	1.8	27.0	
1950	112.5	97.5	100.5	89.5	85.1	79.5 ^h	3.6	12.4	8.2	7.9	4.2	4.0	4.0	4.0	11.0	1.8	17.0	
Total	510.9	438.9	452.5	402.6	370.7	354.1	16.6	58.2	39.5	39.0	18.7	18.4	18.4	18.4	49.9	9.0	82.0	

^a Debt service estimates will disagree with the comptroller's figures since these are net after deducting the earned income from invested loan funds.
^b Estimate of expenditures from bond funds for capital outlay is based upon the capital improvement program for Baltimore, assuming that the recommended program (as adjusted) to reflect the defeat of certain bond issues in the 1947 referendum amounts to a total of \$2,580,533, including \$6 million for airports and \$14,800 thousand for water. It is assumed that about \$2.5 million will be expended on the program in 1947 and the remainder during the next 2 years. Pay-as-you-go funds are in addition.

^c Estimate based on 1946 Comptroller's report
^d Computed as follows: Total general and special funds appropriations, \$79.6 millions
 Less: Debt service appropriations 9.7
 Capital outlay from current revenues 2.0
 Remainder \$67.9

^e Computed as follows:
 Estimated 1948 (Millions) \$71.2
 Actual 1947 (Millions) \$71.2

Total general fund appropriations (per Mr. Fallon's letter of Aug. 5, 1947) \$87.8
 Add: Difference between amount shown in letter and the 1947 report of general fund appropriations. 5.9
 Special fund estimate 1.9
 Difference in special fund Requirements .5
 Total 96.1

^f Assumption is made that the price levels on new construction, and materials and supplies purchased during 1947 will remain in effect, and that administrative, operational and maintenance costs incurred because of new construction during 1947 and 1948 will remain constant.
^g Assumption is made that \$1,500 thousand airport bonds at 1-7/8 percent will be issued during latter part of 1947 or early 1948, and that no principal will fall due before 1951. It is also assumed that \$4,500 thousand will be issued in 1949 or 1950 at the same interest rate.

The information presented for 1946 was based upon the Comptroller's report for that year, while the data shown for 1947 are based in general upon the appropriations. Disbursements reported in the table are net to the extent that trust fund transactions are omitted as also are interfund transfers and payment of debt from accumulated sinking funds. They are gross, however, to the extent that payments into sinking funds to build up balances for future debt requirements are included in addition to payment into those funds for immediate debt retirement. Payments from funds already on hand for the financing of capital outlays are not deducted from the estimated disbursements for those purposes. Disbursements for both regular governmental purposes and enterprises are included in the total but are also shown separately.

The estimated requirements for administration, operation, and maintenance rise steadily from a total of 53.9 million dollars in 1946 to 83.1 million in 1950. In making these estimates recognition was given to expected increases in price levels, added requirements because of new construction, and the effects of expected salary increases for policemen and firemen.

The estimated requirements for debt service decline steadily from 12.6 in 1946 to 10.7 million dollars in 1949, but rise again to 12.4 million in 1950. The requirements for servicing debt outstanding on June 30, 1947 could be calculated accurately, and estimates of the requirements of issues to be made after that date were included to arrive at the totals shown.

The estimated capital outlay for 1946 of 4.2 million dollars was obtained from the Comptroller's report for that year. It was estimated that a high rate of expenditure of about 27 million dollars a year would be reached in both 1948 and 1949, but that the capital outlay expenditures would decline to approximately 17 million in 1950. The estimates for 1948 and 1949 were based primarily upon the recommended construction program for two years outlined in Table XI of the report on the Capital Improvement Program for Baltimore. The recommended 60 million-dollar program was reduced to compensate for the bond issues turned down by the electorate in the 1947 election. The remainder of 52.6 million was supplemented by 1.4 million to account for miscellaneous outlays to be made in addition

to the program recommended by the Commission on City Plan. Since no further information was available on which to estimate the rate of expenditure on this program, it was assumed that the entire program would be completed by the end of 1949, with the work being put in the preliminary stages during 1947 and 25 million dollars expended during 1948 and the same amount during 1949. The estimate of 17 million dollars of capital outlays during 1950 is based on the assumption that projects partially completed under the two-year capital improvement program would be continued, but that little additional construction work would be undertaken. Although no data of any kind were available to support this estimate it was believed reasonable in the light of the past record of the city on capital-expenditures programs. Furthermore, consideration was given to the fact that the city might seriously endanger its present excellent credit rating by issuing more bonds than were already contemplated.

The total disbursements involved represent new highs for the city of Baltimore. The totals increase from 70.7 million dollars in 1946 to a high of 121.1 million in 1948, and thereafter decline to a total of 112.5 million in 1950.

The totals shown in the disbursements table were considered as being totals needed to finance the program in each of the five years covered. Estimates were then made of the revenues to be received from existing local sources for each year from 1946 to 1950. These estimates are presented in Table 5. Ad valorem property taxes were estimated to yield approximately 45 million dollars a year of an anticipated average total of 60 million per year to be obtained from these sources.

Revenues to be received from other governments (i.e., Federal and State only in this instance) were expected to increase from a total of about 13.8 million dollars in 1946 to 24.0 million in 1950. Provision was made for the expected increases in aid from shared taxes from the State that would accrue in 1947 and succeeding years because of the action of the regular 1947 session of the State legislature.

Receipts from bond issues or balances in bond funds were expected to vary from about 2.2 million in 1946 to a high of 25 million in 1948 and 1949, after which a decline to 15 million was anticipated for 1950. These esti-

mates were calculated on the basis of the improvement program previously described.

With one exception balances on hand or anticipated were omitted from these calculations. An expected revenue surplus of 3.4 million dollars for 1947 was carried into 1948 because the expected receipts for the year would exceed the Comptroller's original estimate by that amount as a result of increased State aid to be received.

Beginning with 1948 the estimated receipts from all sources failed to equal the estimated requirements by considerable amounts, 11.3 million dollars in 1948, 12.4 million in 1949,

out that the present exemptions granted in the case of manufacturers' inventories of raw materials and manufactured products, and tools and machinery used by them in manufacturing, offered lucrative sources of possible additional income from the property tax.

A study of the business-tax schedules now in effect in Baltimore indicated that some additional revenue should be available from that source because of recently enacted provisions of the minor-privilege-charge schedules. Also, an active campaign to see that expired franchises are renewed should produce some favorable results.

TABLE 5
ESTIMATE OF FUTURE SOURCES OF FUNDS FOR BALTIMORE
(Amounts in Millions of Dollars)

Year	Total to Finance Program	Revenue from Present Sources								Additional Revenue Required
		Total	Revenue from Local Sources					Revenue from Other Governments	Receipts from Bonds Issued or Balances in Bond Funds	
			Other	Ad Valorem Property Taxes	Other taxes and Licenses	Enterprise Revenues	Other			
1946	70.6	70.6	54.7	42.7	2.2	7.9	1.9	13.8	2.2	
1947	85.8	89.2 ^a	65.1	44.2	5.7	8.5	6.7 ^a	19.1	5.0	(3.4) ^c
1948	121.1	109.8	62.4	44.6	2.4 ^b	9.0	6.4 ^d	22.4	25.0	11.3
1949	120.8	108.4	59.4	45.0	2.4	9.0	3.0	24.0	25.0	12.4
1950	112.5	98.4	59.4	45.0	2.4	9.0	3.0	24.0	15.0	14.1
Total	510.8	476.4	301.0	221.5	15.1	43.4	21.0	103.3	72.2	34.4

^a Includes 1.2 million for interest on invested loan fund balances
2.0 " for repairing streets from Baltimore Transit Co.
5 " special assessment revenue for special work

^b Decrease is due to loss of special taxing authority yielding an estimated \$3,300 thousand

^c Estimated surplus

^d Includes the \$3.4 million surplus from 1947

and 14.1 million in 1950. These are the amounts which it was estimated that the city must raise from sources other than those now in use, or by increasing the income from present sources.

Study of Revenue Sources—Consideration of the local property tax indicated two possibilities for obtaining additional revenue from this source. Comparison of the total per capita levies on property in Baltimore and other cities (see Table 3) indicated that the Baltimore average was considerably below the corresponding average for all cities of 500,000 to 1,000,000 inhabitants, and that no increase in the per capita property tax levy in Baltimore by both the State and the city which would total less than 20 percent would place Baltimore in an unfavorable position as compared to most of the other large cities of the United States. Furthermore, it was pointed

out that the present exemptions granted in the case of manufacturers' inventories of raw materials and manufactured products, and tools and machinery used by them in manufacturing, offered lucrative sources of possible additional income from the property tax. Consideration was given to a number of other possible local tax sources, a few of which were already in effect in the city, and all of which had been tried with some measure of satisfaction by other municipalities. Included in these were amusement and allied taxes, automotive taxes, general and specific consumption and sales taxes, income and payroll taxes, hotel-room taxes, occupancy taxes, fire insurance taxes, and taxes upon pari mutuel pools.

Each of the imposts considered was analyzed from the standpoint of productivity, incidence, regressiveness, dependability, relationship to existing State and Federal taxes, difficulty of administration, and the experience of other cities with imposts of these types. The question of legality under Maryland laws was not considered because of the assumption that

if the need were great enough the laws could be amended.

All of the taxes studied are objectionable from some standpoint, but most of them have favorable attributes that warrant consideration by cities badly in need of additional revenues. For example, although excise taxes, especially those of a general nature, tend to be extremely regressive they are good revenue producers and provide one means of reaching the so-called "daylight citizens" who come to the city to work, shop, or to seek recreation, but who do not live there. Income and payroll taxes as now in effect tend to be regressive also, although this characteristic can be alleviated by the establishment of proper exemptions and through graduation of rates. These taxes are particularly effective in reaching those who live in the suburbs but earn their livelihood in the cities.

Consideration was given to the possibilities of imposing new license and permit charges of various types, but the outlook for large revenues from these sources is not good. Consideration was also given to the proposition of imposing further service and rental charges of various types. Although such charges would probably be unpopular, they are used to good advantage by a number of cities and have possibilities for Baltimore, especially from the standpoint of reaching the owners of tax-exempt property and some residents of suburban areas who use the facilities of the city.

The use of parking meters, which Baltimore does not now have, was also considered. Although the installation of parking meters does not offer the promise of large revenues, their use to defray traffic-police expense and a part of the cost of constructing and maintaining streets, coupled with their utilization in regulating the use of available street parking places and parking places on municipally owned lots, seem to offer possibilities that are worthy of consideration.

The pros and cons of municipal ownership and operation of public utilities from the standpoint of additional revenues for the city were also studied. Baltimore already owns its water system, airport, conduit system, and harbor facilities. Any proposal for the purchase by the city of other existing local utilities, particularly the electricity, gas, and transit facilities, would not be likely to receive much support at this time even though the

prospects of obtaining large revenues from this source appear to be good.

The likelihood of obtaining additional revenue from other governments was also considered. The types of assistance studied were grants-in-aid, shared taxes, partial or complete assumption by the State or Federal government of the responsibility for some local functions (such as relief to destitute persons), co-operation with the city in the performance of certain functions, payments by the State and Federal government in lieu of taxes on property owned by them which is located in the city, and State collection of local taxes.

Although there appears to have been much justifiable dissatisfaction in recent years with the financial assistance received by Baltimore from the State, the action of the regular 1947 session of the Legislature in increasing local participation in several types of State-collected revenues, notably imposts upon motor-vehicle users, should remedy this condition to some extent. The additional amount to be received because of this action could not be estimated at the time the study was made.

Special consideration was given, however, to one additional form of State assistance that offers prospects of a good return to Baltimore. This is the possibility of adding an increment to the present State income tax, the proceeds of which would be returned insofar as possible to the governmental unit in which the income was earned. In spite of the administrative difficulties that would be sure to be encountered, the tax offers greater potentialities for enforcing a contribution toward the expenses of the city from those who earn their living there but reside elsewhere than does a similar tax imposed by the city.

Estimates of Income from Various Sources—Although no specific source of additional revenue was recommended in this study, estimates were made of what Baltimore might expect to receive from adoption of some of the more promising ones. These data are presented in Table 6. The estimates of possible income were computed by various methods, the most logical one being applied in each case.

It was calculated that, at a 5-percent rate applied to all admission charges and cabaret checks, an admissions tax would yield about 1 million dollars annually. An annual use tax of 5 dollars per vehicle on passenger cars and

10 dollars per vehicle on commercial vehicles would produce about 900,000 dollars annually at 1944 registration levels, while on the same registration basis, a 1-cent per gallon tax on gasoline sold in Baltimore was calculated to

The computations indicated that a 1-percent tax on earned incomes and payrolls would be most lucrative of all the taxes in the group, as it could be expected to provide additional revenues of 10 million dollars annually. Next

TABLE 6
ESTIMATES OF ANNUAL INCOME THAT COULD BE DERIVED BY BALTIMORE CITY FROM SELECTED SOURCES OF REVENUE

Tax or Impost	Base and Rate of Annual Tax, License, or Other Charge	Annual Income to Baltimore	Basis of Estimation	Cities Levying Imposts Used in Computing Estimates
Admissions tax	5 percent of all admission charges, cabaret checks, etc.	1,031	Composite of per capita yields to other cities adjusted to 5 percent rate	Seattle, Philadelphia, Spokane and Norfolk
Automotive taxes:				
Use tax	\$5 each passenger and \$10 each commercial vehicle	900	Estimated 1944 Baltimore registration	
Motor fuel tax	1¢ per gallon	1,000	Estimated 1944 Baltimore registration and fuel consumption	
Business taxes on gross receipts	110 percent of all business gross receipts ^a	3,300	Estimated per capita yield	Seattle
Consumption and sales:				
Alcoholic beverage	50¢ per gallon on all alcoholic liquor sold	1,500	Present Baltimore tax (same base and rate)	
Tobacco	Same base and rates as present tax	1,700	Present Baltimore tax (same base and rate)	
General	1 percent on gross receipts from retail sales, restaurant checks, and rents	5,200	Composite of estimated per capita yields to other cities as adjusted to a 1 percent rate	New Orleans, Los Angeles, and Oakland
Income and payroll	1 percent of earned incomes and payrolls ^b	10,000	Composite of estimated per capita yields to other cities as adjusted to a 1 percent rate	Toledo and Philadelphia
Property tax on manufacturers' inventories	Current property tax rate (1947—\$2.90)	3,730	Valuation given by the 1945 "Committee on Additional Tax Revenue For The City of Baltimore"	
Tools and machinery	Current property tax rate (1947—\$2.96)	2,368		
Other:				
Hotel room tax	5 percent of charge for transient occupancy	275	Income to hotels given in 1940 "Census of Service Establishments"	New York and Providence
Garbage and refuse collection	Residential unit—90¢ per month; commercial unit—\$1-2 per month	3,300	Composite of estimated per capita receipts	Dallas
Parking meters	5¢ per hour (during business hours only)	218	Assumed 3,500 meters at national average of receipts per meter given by M. F. O. A. (\$82.38)	Cleveland, Buffalo, Minneapolis and St. Paul
Sewer rentals	25 percent of water bills	1,500	Based on 1946 water sales	Philadelphia, Sacramento, and Madison

^a Same basis as Seattle tax which exempts banking, boxing and wrestling, farmers, fraternal societies, fuel, hospitals, liquor sales, motor vehicles, public utilities, racing, and real estate sales.

^b Corporate and unearned incomes excluded as in Philadelphia tax. Yield could be increased considerably by broadening the tax base to include them. Toledo taxes corporation income but not incomes from intangibles. Regressiveness of Philadelphia and Toledo taxes might be overcome by providing for exemptions and moderately graduated rates.

produce about one million dollars annually. A tax at the rate of 0.1 percent on the gross receipts of all businesses was estimated to yield 3.3 million dollars annually, while a general sales tax imposed at a 1-percent rate was calculated to yield 5.2 million annually.

most lucrative would be the imposition of the property tax at prevailing rates upon manufacturers' inventories, tools, and machinery. These sources should yield about 6.1 million in new revenue per year.

Of minor importance from a revenue stand-

point, but nevertheless valuable in exacting tribute from nonresidents would be the hotel-room tax and parking-meter charges. The former source was calculated to yield 275,000 dollars annually, and the latter, based on an assumed annual income of about 60 dollars from each of 3,500 meters, was estimated to provide 218,000 dollars annually.

Two types of service charges were estimated to have excellent revenue-producing possibilities. Charges for garbage and trash collection at rates of 90 cents per month for residential units and 1 and 2 dollars per month for commercial units should produce about 3.3 million dollars annually, while sewer rental charges at the rate of 25 percent of water bills should yield 1.5 million dollars each year.

It was pointed out in the report that some of the factors to be considered before any new type of impost was decided upon would be the relation between costs of administration and collection to total productivity, the general public reaction to the impost, and its effects upon various classes of individuals and enterprises.

The data developed from this study were submitted to the Mayor by the Commission on City Plan, and were undoubtedly useful to him and other policy-making officials of the city in preparing their representations of Baltimore's needs to the Governor and members of the State Legislature.

Legislative Action on Baltimore's Financial Problems—A special session of the Legislature was called by the Governor for November 5, the principal matter to be considered being Baltimore's plea for authority to tap additional sources of revenue. The Legislature had already given the City broad authority to impose additional taxes for a trial period of two years, and this authority was due to expire on December 31, 1947. Taxes now imposed under this grant of power are the utility, pinball-machine, tobacco, and liquor taxes which were expected to produce revenues of nearly 5 million dollars during the 1947 calendar year. Legislation which would have extended and broadened these powers was enacted at the regular 1947 session of the Legislature, but was vetoed by the Governor as being too broad and endangering the productivity of the State's revenue sources.

During its brief special session the Legis-

lature enacted Senate Bill No. 1, the Baltimore revenue authorization bill, which was signed by the Governor on November 10. This act provides that during the calendar years 1948 through 1951 the city may exercise, in addition to all other taxing powers granted to it, "the power to tax to the same extent as the State has or could exercise said power" within the limits of the city, with certain specific exceptions. The prohibitions include the taxation of intangibles, motor fuel, motor vehicles, incomes, inheritances, estates, pari mutuel pools, corporation franchises, recording of documents, deposits in saving banks, and insurance premiums. No official indication has yet been given of what new imposts will be levied as a result of the granting of these powers to the city.

CONCLUSION

The theme with which this paper began—the great need for the modernizing of highway transportation facilities in cities—has been subordinated to a general discussion of the financial needs of cities, but it has not been forgotten. The highway needs of cities, important as they are, comprise only one segment of their tremendous requirements for physical improvements, and it cannot be expected that the needs of this one segment will be fulfilled to the disregard of all others.

The only final solution of the highway problem, then, is one that will provide for taking care of all these requirements. The Baltimore study and other investigations of a similar nature indicate that there are apparently several possible means by which cities can, with some help from the State and Federal governments, obtain the additional revenues they will need during at least the next few years. But unless other and even more fundamental innovations are adopted also the relief will be only temporary.

What is needed in addition to some new sources of revenue, it seems, is a complete overhauling of present American concepts of metropolitan-area government. It must be recognized that the real city of today is not the "political" city, circumscribed largely by boundaries of legal fiction, but is instead an economic organism that includes both the core, or central area, and all its satellite communities. Local government, therefore, should be organized to function insofar as possible for

the whole metropolitan area, not for only one segment of it.

Overlapping and duplication should be eliminated wherever possible in the interests of both efficiency and economy. The extremely large number of governmental units that are now operating in most metropolitan areas should be reduced to the greatest practicable extent.

Two attractive theoretical possibilities for solution of the local-government problem in metropolitan areas have certain serious practical disadvantages. One, the expansion of the boundaries of the present central cities to include entire metropolitan areas, would certainly meet strenuous objection by the citizens of the other governmental units to be absorbed, and would tend to enlarge and perpetuate the weaknesses of the existing city governments. The other, the creation of an entirely new city government for the whole area into which all existing local governments would be merged, would not possess some of the disadvantages of the other plan, but would certainly meet strong opposition. Under present laws neither arrangement could unify a metropolitan area extending across State boundaries.

A more workable solution might, perhaps, be found in the creation by States of metropolitan-district authorities to which certain powers of all governmental units lying within the affected areas would be delegated, which these would administer on an area-wide basis, and which no other unit in the area would exercise.

Concomitant with the creation of such an authority should go the dissolution of as many as possible of the local units, particularly special-purpose districts, that had previously existed in the area.

The effect would be to provide central administration within the area of most local-government functions while permitting the more important local units to retain their political identity. This plan would have an added advantage in that, perhaps on the basis of precedents already established, and with the approval of the Federal Government a metropolitan-district authority could be granted the power by the States concerned to operate throughout a single area extending into two or more States.

There is probably no one solution that will work in every case because the conditions in every case are different, the background is different, and the people are different. There are a number of possible avenues toward the solution of these metropolitan-area problems. One thing is certain, however: The state governments must immediately take a more realistic attitude toward their cities and the cities' problems. Charters must be liberalized and representation in the state legislatures must be increased to give the cities a more nearly proportional voice in state affairs. Above all, provision must be made in the very near future to give the cities broader taxing powers, and to permit them to revamp their assessment and tax-levying procedures which are now so far out-of-date.

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DEPARTMENT OF DESIGN

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CONTINUOUSLY REINFORCED CONCRETE PAVEMENTS WITHOUT JOINTS

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SYNOPSIS

Over a period of years many weaknesses have become apparent in the design of concrete pavements. Such things as pumping, high joints, faulted joints, faulty load transfer devices, corner breaks, and blowups are known to almost everyone interested in pavement design. Entirely satisfactory solutions for many of these difficulties have not been found. If a concrete pavement could be designed which would eliminate these weaknesses, it would constitute a major step forward.

A careful study suggests the possibility that a continuously reinforced concrete pavement having heavier than normal reinforcement and no joints would be subject to very few, if any, of the weaknesses now inherent in concrete pavement. The available information indicates that longitudinal steel in the amount of 0.5 percent of the cross-sectional area of the pavement may be sufficient to prevent open transverse cracks. Transverse steel, perhaps slightly heavier than normal, extending across two lanes of pavement should allow the elimination of the longitudinal joint and prevent objectionable longitudinal cracking. Thus, by means of steel reinforcement, it may be feasible to eliminate all joints and open cracks and the elimination of these, it is believed, would avoid most of the difficulties previously mentioned. The cost of such pavement would probably be comparable with the present designs for heavy duty roads. The exact amount of steel required to prevent open cracks, the thickness of the concrete, and the service behavior cannot be stated definitely until experimental pavements have been constructed and observed.

About 25 years ago the construction of concrete pavement on an extensive scale was begun. During the ensuing period engineers have designed and redesigned pavement without obtaining their objective, a perfect pavement design. Expansion and contraction joints were introduced to prevent blowups and to control cracking. The introduction of transverse joints introduced new problems. Because no water-tight joint has been developed, high joints and pumping have been

accentuated. The lack of an adequate load transfer device has resulted in faulting of the joints causing large impact forces, broken slabs and a rough riding pavement.

The longitudinal joint was introduced to eliminate longitudinal cracking, which it generally does, but it also created a pavement weakness which results in interior corner breaks and sometimes spalling and disintegration due to moisture getting in and saturating the concrete at that point. In fact, all joints