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## APPENDIX A

### THE COURSE OF THE BUSINESS DEPRESSION, THE GROWTH OF UNEMPLOYMENT, AND THE RELIEF PROBLEM

THE depression was largely responsible for the rapid growth of interest in the advance planning and cyclical control of public works. The acute problem of unemployment which it produced led both to widespread popular demands for the immediate large-scale expansion of public works programs for the alleviation of distress and depression, and increased interest in the possible utilization of controlled public construction as a stabilizing influence for the prevention of similar occurrences. It is not the purpose of this Appendix to reduplicate the work of many studies which have described in detail the course of the depression. A brief survey of the extent of the decline in business, the growth of unemployment and the magnitude of the relief problem which it raised may, however, be helpful in indicating the economic conditions out of which arose these proposals for expanded and flexible public works for the present mitigation and future prevention of unemployment.

#### SCOPE AND COURSE OF THE BUSINESS DEPRESSION

The general trend of economic events, 1929-33, is reflected in the movement of the business indexes presented in Table 93. The *Annalist* index of general business activity declined from 105 in 1929 to 64 in 1932, but rose again in 1933 to almost its 1931 level. Wholesale prices fell from 95 in 1929 to 65 in 1932, and 66 in 1933. This general decline in the price level, however, conceals wide disparities in the movements of the prices of individual commodities and the development of violent maladjust-

TABLE 93  
THE DECLINE IN BUSINESS ACTIVITY, 1929-1934

	1929	1930	1931	1932	1933	1934
Business activity <sup>1</sup>	105	87	74	64	72	75
Industrial production <sup>2</sup>	119	96	81	64	76	79
Wholesale prices <sup>3</sup>	95	86	73	65	66	75
Building, total <sup>4</sup>	117	92	63	28	25	32
Building, residential <sup>4</sup>	87	50	37	13	11	12
Department store sales <sup>5</sup>	100	102	91	69	67	75
Car loadings <sup>5</sup>	106	92	75	56	58	62
Bank debits, total (\$'000,000) <sup>6</sup>	935,027	661,957	481,357	322,366	282,706 <sup>14</sup>	331,935
Bank debits, outside N. Y. City (\$'000,000) <sup>6</sup>	331,938	277,317	217,523	154,401	134,257 <sup>14</sup>	165,986
Bank deposits (\$'000,000) <sup>7</sup>	53,852	54,954	51,782	41,963	37,998	41,857 <sup>15</sup>
Bank failures (number) <sup>8</sup>	642	1,345	2,298	1,456	<sup>15</sup>	<sup>15</sup>
Stock prices <sup>9</sup>	190	150	94	48	63	73
New capital issues (\$'000,000) <sup>10</sup>	10,091	6,909	3,099	1,165	710	1,402 <sup>15</sup>
National income produced <sup>11</sup>	100	85	66	46	<sup>15</sup>	<sup>15</sup>
National income paid out <sup>12</sup>	100	92	77	60	57	<sup>15</sup>
Factory employment <sup>13</sup>	105	92	77	64	69	79
Factory payrolls <sup>13</sup>	109	89	68	46	49	62

<sup>1</sup> Prepared by the *Annalist*; combined index of business activity; computed normal=100. Arithmetic average of monthly averages.

<sup>2</sup> Federal Reserve Board index; monthly average 1923-25=100.

<sup>3</sup> U. S. Bureau of Labor Statistics index; 1926=100.

<sup>4</sup> Federal Reserve Board value index of contracts awarded in 37 states as recorded by F. W. Dodge Corporation; 1923-25=100.

<sup>5</sup> Federal Reserve Board index; 1923-25=100.

<sup>6</sup> Compiled by the Federal Reserve Board.

<sup>7</sup> Total deposits of all banks in the United States, exclusive of amounts due to banks. Compiled June 30 by the Federal Reserve Board.

<sup>8</sup> Compiled by the Federal Reserve Board for calendar years; series discontinued in 1933.

<sup>9</sup> Index prepared by the Standard Statistics Co; 1926=100.

<sup>10</sup> Domestic and foreign capital issues including refunding, compiled annually by the Federal Reserve Board.

<sup>11</sup> Index; 1929=100. Estimate made by Simon Kuznets of the National Bureau of Economic Research.

<sup>12</sup> *Survey of Current Business*, January 1935.

<sup>13</sup> U. S. Bureau of Labor Statistics index; 1923-25=100.

<sup>14</sup> Total for 11 months, complete data not having been reported on account of bank holidays.

<sup>15</sup> Data not available.

ments in the price structure as the depression progressed.<sup>1</sup> The contraction of production and the fall in prices were paralleled by similar declines in other spheres of business activity—department store sales, freight car loadings, construction activity, etc. Between 1929 and 1932 stock prices fell 75 per cent. After the abandonment of gold in the spring of 1933 some revival occurred. In 1932 bank debits for the entire country were only about one-third, and for the cities outside New York, less than one-half their 1929 volume. Bank deposits fell less sharply—between 20 and 25 per cent. The decline is partly explained by the very heavy mortality of banks during this period. New financing was all but wiped out by the depression, total new issues declining from \$10,000,000,000 in 1929 to \$1,000,000,000 in 1932, and \$700,000,000 in 1933—less than one-tenth their annual volume four years previous.

Such a drastic deflationary movement inevitably caused a great shrinkage in national wealth and income. The national income produced in 1932 was less than half its 1929 volume, and national income paid out only 60 per cent of the corresponding figure for 1929.<sup>2</sup> The combined effect of the shrinkage in national income, the decline in production and in prices naturally had most serious repercussions on employment. Between 1929 and 1932 factory employment declined 40 per cent. Still greater was the drop in payrolls, the index declining from 109 to 46.

#### GROWTH OF UNEMPLOYMENT

Perhaps the most serious problem created by the depression was this rapid decline in employment. In the absence of facilities in the United States for the collection of adequate data on unemployment, attempts were made from the first year of the depression to estimate its volume.

The first figures on unemployment for the entire continental United States were obtained in conjunction with the decennial

<sup>1</sup> See F. C. Mills, *Bulletin 48* of the National Bureau of Economic Research (October 31, 1933), for a detailed presentation of the behavior of the prices of different groups of commodities, 1929-33.

<sup>2</sup> Estimates of Simon Kuznets, *Bulletin 49* of the National Bureau of Economic Research, June 7, 1934.

census of April 1930. A count was made of all persons usually working at a gainful occupation who were not at work the day preceding the enumerator's call. It showed that in that month there were slightly more than three million persons of both sexes involuntarily out of work.<sup>3</sup>

The Metropolitan Life Insurance Company conducted on December 8 and 9, 1930 a survey of unemployment conditions among its industrial policy holders. This canvass covered 46 cities and included 3.1 per cent of their total population, or a total of 887,000 adults and children of whom 356,000 were workers. On the basis of this sample the Metropolitan Life estimated that during the first week of December 1930 there were between 4,500,000 and 5,000,000 persons wholly unemployed, or about 10 per cent of the total number normally in gainful occupations.<sup>4</sup>

In the latter half of January 1931 the Federal government carried out a census of unemployment in 19 cities, the so-called Woods survey, and found that an increase of 149 per cent in the number of persons out of a job, able to work and looking for a job had occurred since April 1930, when the decennial census was taken. On the basis of this sample the number of persons unemployed in January 1931 was estimated to be 6,050,000. This estimate assumed that the growth of unemployment in rural areas had proceeded at the same rate as in the cities. It was estimated that during the ten months between the two surveys the number of unemployed for the entire country nearly doubled.

As the depression progressed the number of unemployed continued to grow. This increase can be followed for the most part only from various sample studies, but these may perhaps be regarded as broadly indicative of the trend for the entire country. The tabulation of the results of three surveys conducted in Cin-

<sup>3</sup> *Monthly Labor Review*, April 1931.

<sup>4</sup> The results of this survey were reported in detail in the *United States Daily*, January 26, 1931, together with a description of the method followed in arriving at the figure for the entire country. This figure was challenged as being too low by Miss Frances Perkins, then Industrial Commissioner of New York State, who estimated that on the basis of the sample taken by the Metropolitan Life the total number of unemployed should have been placed at about 7,000,000 (*New York Times*, February 6, 1931).

cinnati <sup>5</sup> shows that after eighteen months of depression nearly 40 per cent of those normally in gainful employment in that city were totally or partly unemployed, the percentage in both cases having doubled between May 1930 and May 1931. In Chicago on October 15, 1931 approximately 624,000 were estimated to be unemployed, a number equal to about 40 per cent of Chicago's gainfully employed workers as reported in the 1930 census.<sup>6</sup> Unemployment was also apparently spreading in the rural districts but at a less rapid pace than in the larger cities. In June 1931 slightly over 900,000 were reported as unemployed in Pennsylvania, or 24.7 per cent of all normally occupied persons as enumerated in the 1930 census.<sup>7</sup>

A survey conducted by William J. Barrett of the President's Organization on Unemployment Relief, March 15, 1932, covering 6,551 companies, showed for these concerns, as compared with 1929, a decrease of 27 per cent in employment and of 42 per cent in payrolls. The relatively much larger decline in payrolls is explained by the fact that at the date of the survey slightly over 56 per cent of all the employees were working on a part-time basis.<sup>8</sup> A further indication of the growth of unemployment is afforded by the surveys conducted by F. E. Croxton and F. C. Croxton in Buffalo, N. Y., which showed a three- to fourfold increase in unemployment between 1929 and 1932.<sup>9</sup> A similar tendency is revealed in Philadelphia. Between April 1929 and April 1933 the number of wholly unemployed increased from four to five times.<sup>10</sup>

During the later stages of the depression several further attempts were made to estimate the total number of unemployed for the entire country. An estimate of the decline of employment

<sup>5</sup> *Monthly Labor Review*, July 1931.

<sup>6</sup> *Monthly Labor Review*, February 1932; based on the *Labor Bulletin* of the Department of Labor, Illinois, November 1931.

<sup>7</sup> *Monthly Labor Review*, December 1931; based on *Special Bulletin No. 33* of the Pennsylvania Department of Labor.

<sup>8</sup> *Monthly Labor Review*, August 1932.

<sup>9</sup> *Monthly Labor Review*, February 1933.

<sup>10</sup> *Monthly Labor Review*, June 1933. Based on a survey by the University of Pennsylvania.

in several leading industries was prepared in 1933 by Meredith B. Givens on the basis of data provided by the United States Census and the current information on employment published by the Bureau of Labor Statistics. These computations show that industries which had employed 20,953,000 persons in 1929 were employing only 13,574,000 in 1932. Mr. Givens confined himself to annual data and did not attempt to arrive at a figure for total unemployment, but he computed an index of employment for major industrial groups with the monthly average for 1929 used as a base. This index is 91.6 in 1930, declines to 77.3 in 1931, to 64.5 in 1932, and to 59.3 for the first four months of 1933.<sup>11</sup> Similar methods used by the Cleveland Trust Company in preparing the monthly estimate of unemployment for the entire country show an increase from 3,000,000 in January 1930 to a peak of nearly 14,000,000 in March 1933 and a decline thereafter.<sup>12</sup> The most widely used estimates of unemployment, those of the American Federation of Labor, are presented in Table 94.

TABLE 94  
ESTIMATES OF TOTAL NUMBER UNEMPLOYED  
IN THE UNITED STATES, MONTHLY, 1930-SEPTEMBER 1934  
(in thousands)

MONTH	1930	1931	1932	1933	1934
January	3,216	7,160	10,197	13,100	11,755
February	3,565	7,345	10,486	13,294	11,443
March	3,543	7,098	10,739	13,689	10,849
April	3,188	6,739	10,990	13,256	10,551
May	3,090	6,750	11,470	12,896	10,248
June	3,250	6,841	11,853	12,204	10,310
July	3,714	7,198	12,300	11,793	10,793
August	4,101	7,357	12,344	10,960	10,821
September	4,150	7,303	11,767	10,108	10,950
October	4,639	7,778	11,586	10,122	...
November	5,364	8,699	12,008	10,651	...
December	5,541	8,908	12,124	10,769	...
Average	3,947	7,431	11,489	11,904	...

Source: American Federation of Labor, *American Federationist*, April and December 1934

<sup>11</sup> *Bulletin 47* of the National Bureau of Economic Research, June 30, 1933.

<sup>12</sup> Business Bulletin of the Cleveland Trust Company, January 1934. Cf. also the elaboration of Givens' methods by T. J. Kreps, Estimates of Unemployment During the Last Four Years, *American Statistical Association Journal*, Supplement, March 1934.

These estimates also use as a starting point the United States Census and arrive at current figures through a combination of information secured from government agencies and reports from various trades and industries.<sup>13</sup>

It is clear from the figures presented that the estimates of total unemployment vary widely, and hence it is only natural that their reliability is constantly challenged. Further light on the unemployment problem can be obtained from the activities of relief agencies during 1933, when the Federal government virtually took over the relief work of local bodies. In so far as the Civil Works Administration began to keep adequate statistical records of its operations, the scope of the unemployment problem during that year can be better judged. First, however, the development of relief efforts during the years of the depression preceding 1933 is briefly sketched.

#### THE RELIEF PROBLEM

To estimate the burden of relief presents even greater statistical difficulties than to estimate the volume of unemployment. Relief is administered by cities, counties, states and the Federal government, and by a great variety of private agencies. Frequently aid extended by cities is paid out of state funds, while states carry on relief activities with grants or loans from the Federal government. In some cases both public and private relief have been administered by local officials, in others they have been independently administered. Prior to 1933 no agency was responsible for the collection of information on relief throughout the country. Nor was any comprehensive study undertaken of the information scattered in the innumerable reports of local relief agencies, public and private. Reliance must therefore be placed on sample studies and estimates.

A study of the Cost of Family Relief in 100 Cities, 1929 and 1930 <sup>14</sup> showed that the total amount spent on relief had already

<sup>13</sup> A detailed description of the method used can be found in the *American Federationist*, October 1933. It is broadly similar to that of Dr. Givens.

<sup>14</sup> Glenn Steele, *Monthly Labor Review*, April 1931.



increased very substantially during the first year of the depression. The tabulation shows aggregate expenditures, in thousands of dollars, for this purpose in these cities, classified into two size

CLASS OF CITIES	PERCENT- AGE	
	1929	1930
60 cities with population of 100,000 or more	\$18,644	\$35,848
40 cities with population of 50,000 to 100,000	2,248	3,549
Total	\$20,892	\$39,397

groups. It would appear that on the whole the larger cities experienced relatively more severe conditions in 1930. As to the distribution of the burden between public and private agencies, the returns from 75 of the 100 cities showed that while 60 per cent of the disbursements in 1929 were derived from public funds, the proportion had risen to 72 per cent in 1930.

As the depression progressed, the share of private funds in the total amount spent for relief decreased. In 1931 a survey conducted in 26 cities and information gathered from 158 others, 184 in all,<sup>15</sup> showed that in 80 cities relief expenditures were being financed almost entirely from public funds, in 60 the relief program was being carried on by private agencies with very little assistance from public sources, and in 44 both public and private agencies were operating simultaneously. It is difficult to determine on the basis of this sample just what portion of the funds originated from private sources and how much was provided by public agencies, because most of the larger cities had a mixed program and the data from a majority of cities was not considered reliable by the authors of the survey. It is, however, significant that in more than one-half of the cities covered by the sample in the autumn of 1931 all relief work had to rely on public funds.

In one of the few comprehensive estimates made of total annual relief expenditures,<sup>16</sup> the cost of relief is calculated in 1929

<sup>15</sup> *Emergency Work Relief*, by Joanna C. Colcord (Russell Sage Foundation, 1932).

<sup>16</sup> Charles E. Persons, *Calculation of Relief Expenditures*, *American Statistical Association Journal*, Supplement, March 1933.

to have been \$85,000,000, in 1930, \$150,000,000, in 1931, \$300,000,000, and in 1932, \$500,000,000. Figures of the Department of Commerce<sup>17</sup> show that in cities with a population of over 30,000 government expenditures on relief constituted approximately 60 per cent of the total funds spent for that purpose in 1931. Assuming that this ratio was true of the country as a whole for 1932, government relief expenditures for that year would have been about \$300,000,000.<sup>18</sup>

A very complete local report covering relief expenditures of New York State, November 1931 to October 1933,<sup>19</sup> showed that some 600,000 family groups, representing approximately 2,500,000 persons, of whom 1,100,000 were children, had at one time or another received aid from the state. From November 1, 1931 to February 1, 1934 nearly \$217,000,000 were spent. Up to November 1, 1933 the Federal government had contributed over \$37,000,000. After that date most of the financing was done with CWA funds. During the first two years covered by the Report the state spent about \$100,000,000, with local bodies contributing about \$89,000,000. During the year ending October 31, 1932 the municipalities carried approximately 55 per cent of the total cost and the state 45 per cent. During the year ending October 31, 1933 approximately 43 per cent of the cost was met by local funds, and 57 per cent had to be covered by state and Federal funds. During the winter of 1933-34 the state acted as agent of the Civil Works Administration, which operated with Federal funds, and it continued to furnish funds only to those municipalities which were unable to carry on their own home relief activities.

The first comprehensive data covering relief activities for the country as a whole are given in the monthly Report of the Federal Emergency Relief Administration for December 1933, which includes the results of the operations of the Federal Civil Works

<sup>17</sup> Special Report, *Relief Expenditures by Governmental and Private Organizations, 1929 and 1931*.

<sup>18</sup> Estimate made by Simon Kuznets in connection with his estimate of total national income, *Bulletin 49*, National Bureau of Economic Research, June 7, 1934.

<sup>19</sup> Issued by Governor Lehman, March 11, 1934.

Administration from November 16, 1933 to the end of the year. This Report shows that on May 22, 1933, when the Federal Emergency Relief Administration took office, about 4,250,000 families, or nearly 19,000,000 persons, were receiving relief from public funds. During May 1933 approximately 69 per cent of all relief expenditures were financed by the Federal government, the remainder being furnished by various local agencies whose funds were becoming less and less adequate. Local governments were still able, however, to contribute at the rate of about \$23,000,000 per month during the first quarter of 1933. The report contains no mention of private funds, which had figured prominently in the estimates of 1929 and 1930. Apparently in the fourth year of the depression private sources were virtually exhausted.

The object of the Civil Works Administration was to provide work for at least 4,000,000 people during the winter of 1933-34. On November 20, 1933 all persons on work relief rolls were transferred to the payrolls of the CWA, and on the first pay day 1,108,692 workers received checks. By January 18, 1934 4,040,000 persons were employed. During the last quarter of 1933 over 10 per cent of the population was dependent on relief. During November, when the CWA began operations, 15,060,000 persons, exclusive of transients, or 12 per cent of the total population, received relief from public funds. The sources of the relief funds are shown in Table 95. Over three-fifths were provided by the Federal government.

The Report of the Federal Emergency Relief Administration for December 1933 states (p. 72) that the data collected under the Federal Emergency Relief Act of 1933 "constitute the only source of information covering the United States as a whole and bearing on the subject of public unemployment relief." Prior to that time the Reconstruction Finance Corporation was advancing money for relief purposes, but the figures it possesses on relief expenditures for 1932 are only fragmentary. These figures represent expenditures as reported by the governors of the states receiving from the Reconstruction Finance Corporation relief funds under the provision of the Emergency Relief and Construction Act of 1932, but are subject to revision when final reports are received

TABLE 95  
SOURCES OF UNEMPLOYMENT RELIEF FUNDS  
IN THE UNITED STATES, 1933-1934

PERIOD	LOCAL		STATE		FEDERAL		TOTAL
	AMOUNT	PER CENT	AMOUNT	PER CENT	AMOUNT	PER CENT	
1933	(in thousands)		(in thousands)		(in thousands)	(in thousands)	
1st quarter	\$68,622	33	\$18,406	9	\$122,380	58	\$209,408
2nd quarter	52,865	25	20,590	10	136,701	65	210,156
3rd quarter	40,565	22	26,855	15	113,553	63	180,973
4th quarter	37,751	20	46,508	24	107,967	56	192,226
1934							
1st quarter	31,926	18	61,385	34	88,051	49	181,362
2nd quarter	55,588	15	41,479	11	270,634	74	367,701
3rd quarter	69,296	16	36,544	9	316,359	75	422,199
4th quarter	67,086	13	46,701	9	394,290	78	508,077
Total	\$422,797	19	\$299,370	13	\$1,549,936	68	\$2,272,103

Source: Monthly Reports of the Federal Emergency Relief Administration

<sup>1</sup> Partly estimated.

from them. Moreover, the total expenditures estimated cover only August to December inclusive, as Federal funds were not available prior to August 1932. Figures on expenditures prior to this period are not obtainable, and data from states which did not apply for Federal relief funds during 1932 are also lacking.

Thirty-five states applied for relief from the Reconstruction Finance Corporation from August to December 1932. It was at that time using local and state funds for relief, and contributions from private sources, national organizations and others. These divisions of the sources of relief funds are not of great significance, for the funds distributed by these sources overlap, especially local funds which states frequently advance. The Reconstruction Finance Corporation disbursed sums far greater than any of these other sources of relief during this period, providing \$72,337,347.06 out of a total of \$100,387,314.54 for relief from August to December.

It must again be emphasized, however, that these figures are not inclusive of all relief expenditures even for these five months. New York State relief expenditures, for example, are not included in this estimate because the State did not apply for Federal relief

funds during that period. Nor did most of the 35 states that did apply turn to the Federal government until October 1932, so that the figures for August and September are still more incomplete than the later figures. More than half of the total relief funds reported spent during the five months were disbursed by Illinois and Pennsylvania, which paid out respectively \$29,000,000 and \$22,000,000.

There was a progressive rise in the funds allotted for relief not only by the Reconstruction Finance Corporation but also by the sources enumerated above. In August 1932 less than \$1,000,000 was spent by agencies other than the Reconstruction Finance Corporation. In December more than \$10,000,000 was spent. Likewise the Reconstruction Finance Corporation contributed only about \$6,000,000 in August, against more than \$26,000,000 in December.

It is clear that an estimate of relief funds employed in 1932 must be based upon a very uncertain and incomplete figure for the last five months of the year. The figure is subject to revision and accordingly must be used with caution. Nevertheless, it is the best available, and does give some indication of the extent of relief expenditure during 1932, and the gradual swelling of the total sum.

## APPENDIX B

### SUPPLEMENTARY NOTES TO CHAPTER VIII

#### PUBLIC WORKS PROCEDURE IN NEW YORK CITY

"BUDGET-MAKING for all of the ordinary expenditures of the city is still a more or less casual process. The budget document of New York City is little more than an itemized appropriation ordinance. It contains no estimate of the income that is expected to meet proposed expenditures. The steps involved in its preparation are as follows: early in the spring the Board of Estimate requests the heads of 165 departments, boards and bureaus to prepare and submit their estimates of all expenditures for the coming year. It is expected that the departmental estimates will be submitted by July 10th, although the time limit set by the City Charter for their submission is August 1st. They are not, however, all received even by the latter date, but keep coming in throughout July, August and September. Numerous supplementary departmental estimates not mentioned in the Charter are submitted even as late as October, the date when the Committee of the Whole of the Board of Estimate is required to approve of the tentative budget.

When received by the secretary of the Board, the departmental estimates are assigned to the 35 examiners of the Board of Estimate. Each examiner studies the estimates under his jurisdiction and holds conferences with the specified department head and the Director of the Budget. Estimates with attached recommendations are then forwarded on or before October 4th to the Committee of the Whole of the Board of Estimate. This body holds hearings with departmental heads on the estimates, and on or before October 10th adopts a printed tentative budget. Public hearings are again held later to consider principally additions to the tentative budget. Before October 20th the Board must file with its secretary a budget known as the Proposed Budget. Before

this filing date items of the budget may be increased or new ones added, but after October 20th revision can only be downward or by elimination. After public hearings are held on the proposed budget, the final budget is adopted on or before October 31st. Five days after the budget has been passed by the Board of Estimate it must go to the Board of Aldermen, which is given twenty days for its consideration. But this body has practically forsworn any part in budget-making. Deliberations on the budget, so far from twenty days, consume on some occasions no more than twenty minutes. Not over four or five times in the past thirty years has the Board of Aldermen made any change in a budget.

*Capital Outlays on Public Improvements.* The budget includes very few items for permanent improvements. The several small items for permanent improvements included in it, such as armory buildings, park improvements, construction of a municipal airport, expenses of engineering forces engaged on construction and designing of the new subways amount, in the aggregate, to a sum relatively not large. Capital outlays on permanent improvements are financed, for decidedly the greater part, by issue of long-term corporate stock or bonds. If emergency funds were required in times of depression for the relief of unemployment through an increased volume of expenditures on public works, it would matter little that the procedure involved in making budget appropriations is long and cumbersome, provided only that these unusual expenditures did not come out of current revenue but were financed by the issue of long-term bonds or by temporary borrowing. Capital expenditures in New York City are not planned in any comprehensive manner, except in the case of subways and water supply. Various projects are authorized from time to time during the year, and the tax budget is adopted in November with no indication of the outlays which the city will make from the proceeds of the sale of bonds.

The procedure involved in the authorization of capital issues is as follows: the various departments submit, at its request, to the Board of Estimate, usually in December (but also at various times during the year for specific projects), a list of items deemed

urgent and their requests for a given amount of corporate stock or tax notes for these desired improvements. These items are placed either on the current calendar of the Board or else on a special calendar of the Committee of the Whole printed early in the year—the so-called corporate stock and tax note calendar. As new items are added the calendar is revised or supplements to it are prepared. Items are picked from this calendar, acted upon by the Board of Estimate and approved early in the year. Thereafter specific new items are received and then considered by the Board through the Committee of the Whole. No special order is observed in the consideration of the items, except when the corporate stock budget is considered, nor is an attempt made to formulate a budget or program of capital expenditures. Authorizations are thus made in a piecemeal fashion and not all at one time as is the case with tax budget expenditures.

The city is not required to issue bonds and have cash actually in hand before proceeding with the execution of a project. The authorization is itself considered as equivalent to an appropriation and contracts may be immediately awarded. When obligations incurred in this way become payable, that is, when the contractors present their bills, money is secured by the issuance of corporate stock notes which mature within a period of one year unless renewed or converted into long-term stock.

In short, the procedure is as follows:

1. Requests by the departments are made to the Board of Estimate directly or indirectly.
2. Authorizations are made by the Board at any time during the year.
3. Contracts are awarded.
4. Corporate stock notes are issued in liquidation of the obligations incurred.
5. These notes are converted into long-term stock.

Borrowing by New York City is usually preceded by the issue of corporate stock notes. Long term obligations therefore are not incurred until the expenditures have been made. It is argued that such an arrangement is more economical than that obtaining in many cities which issue bonds when the project is author-



ized and in advance of its execution, since it enables the city to choose the most favorable time for the issuance of its long term stock or bonds. It may also put its obligations on the market in large blocks of \$50,000,000 or \$60,000,000 to attract active bidding.

Should no sale of long-term stock occur before their maturity, corporate stock notes may be renewed and the renewals redeemed from the next sale of stock. The total amount of such notes and renewals must at no time exceed four-fifths of the amount of corporate stock or serial bonds authorized to be issued" (*Planning and Control of Public Works*, pp. 20-25).

#### TAX AND DEBT LIMITS OF NEW YORK CITY

New York City, like the cities of other states, is restricted by state constitutional provisions in its power to raise taxes and incur debts. The Constitution of New York (Article VIII, Section 10) limits the rate of taxes which may be levied for city and county purposes, exclusive of interest and amortization charges on the funded debt, to 2 per cent of the assessed valuation of real and personal property subject to taxation for county and state purposes. The same section of the Constitution fixes the limit of the net debt of counties and cities in the State of New York, with certain important and quite considerable exceptions in the case of New York City, at 10 per cent of the assessed valuation of real property subject to taxation. No county or city, therefore, is allowed to become indebted to an amount which, including existing indebtedness, exceeds ten per cent of the assessed valuation of the real estate of the county or city subject to taxation. To this Article, however, there are certain general exceptions. Debts incurred for these purposes are outside the debt limit in all cities of the state. Such are certificates of indebtedness or revenue bonds issued in anticipation of the collection of taxes; likewise debts contracted to provide for water supply facilities.

*The Debt-incurring Power of New York City.* In computing

the debt-incurring power of the city within the debt limit, the following deductions from its gross indebtedness are to be made:

1. Bonds issued by the city to be redeemed out of the tax levy for the next year succeeding the year of their issue, provided that the amount of such bonds which may be issued in any one year in excess of the debt limitation does not exceed one-tenth of one per cent of the assessed valuation of the real estate of the city subject to taxation.

2. Sinking Fund accumulations, since the indebtedness referred to by the constitutional amendment is net and not gross indebtedness.

3. The debt of the counties consolidated into New York City, as it existed at the time of the consolidation, which is exempted by an amendment to the Constitution in 1899.

4. Water bonds and water corporate stock notes issued after December 31, 1903, exempted by constitutional amendment of 1905.

5. Certain revenue-producing improvements for New York City which, after deduction of all repairs and maintenance, netted a revenue in excess of debt charges, exempted by constitutional amendment of 1909. In effect, this means that some subway and dock bonds were exempted from the debt limit to the extent that they were self-sustaining. This exemption is available only for rapid transit and dock improvements.

6. Debts not exceeding \$300,000,000, incurred by the city after January 1, 1928, for the construction and equipment of subways, exempted by constitutional amendment in November 1927.

After making these deductions there must be added to the resulting figure the non-funded contract and land liabilities and open market orders. The sum obtained is the total indebtedness within the debt limit, and after this is subtracted from the total debt-incurring power of the city within the debt limit (that is, 10 per cent of the assessed valuation of taxable real estate), the difference is the constitutional debt-incurring power of the city within the debt limit as of a certain date. This debt margin naturally fluctuates from year to year. An increase in assessed

valuation increases the margin. On the other hand, it is reduced by the inauguration of new public improvements.

"On frequent occasions the debt limit has proved to be highly embarrassing to the city, and repeated constitutional amendments have been adopted for the purpose of increasing the borrowing powers of the city. These substantial increases, however, have not removed the fear of like difficulties in the future. The city could not have proceeded with its subway construction program had not subway debts to the extent of \$300,000,000 been specifically exempted by the constitutional amendment of November 8, 1927. Thus a city in the position of New York might, in times of emergency, when it is desired to expand public construction, be prevented from increasing capital expenditures by borrowing, in consequence of the nearness of its debt to the debt limit, unless the cumbersome procedure involved in first obtaining an exemption through an amendment to the state constitution be invoked" (*Planning and Control of Public Works*, p. 38).

Increases in the city debt-incurring power may also come from a rise in the total valuation of taxable property. "There is also available a third method (of expanding the debt limit) which, while it does not make possible a larger outstanding debt at any given moment, does make it possible to borrow a larger aggregate amount in a given period of time, at the cost of increasing current revenues by the same amount. . . . This third method consists of shortening the term of new bonds issued and/or of redeeming (them) before maturity, or merely through the accumulation of larger resources in the sinking funds", which are deductible from gross income in computing the city's net indebtedness. "By issuing fifty year bonds, the city has frozen its credit so that its program of permanent improvements is seriously menaced. . . . Shorter terms for city bonds would make the borrowed moneys revolve more quickly. The same amount of constitutional debt-incurring capacity would therefore permit the city to perform double the amount of work" (Lehman Report on *The Finances and Financial Administration of New York City*, pp. 216, 220-21). This was one of the chief advantages of the Delaney plan for financing subway construction with short-term bonds.

## APPENDIX C

### FINANCIAL CONDITION OF SELECTED LOCAL GOVERNMENTS DURING THE DEPRESSION

#### INTRODUCTION

ALTHOUGH the PWA is not restricted, as was the RFC, to making emissions only for revenue-producing improvements, the character of its aid necessitates the observance of certain precautions. Before the Federal government authorizes a loan to any community it must decide upon the appropriateness of the project; the government must make certain that local officials are not resorting to 'pork-barrel' tactics. Furthermore, since the underlying purpose of emergency public works is to stimulate employment, the Administration must attempt to gauge the extent of relief to be afforded by projected construction. And last, but not least important of considerations, it must ascertain the financial status of the community demanding the loan. The credit rating of a municipality is determined by several factors: the condition of its budget, the size and composition of its bonded indebtedness, its debt service costs, the character of its debt administration, and the steps taken to improve existing financial conditions.

To communities where the need for public improvements and unemployment relief is especially urgent but where the financial position, for one reason or another, precludes recourse to borrowing, the Federal government has donated funds as outright grants. In most instances, however, the PWA has tried to limit its grants to 30 per cent of its authorization to the municipality. The sections which follow are resumés of more detailed financial analyses made by Wylie Kilpatrick for the Federal government in an effort to determine the validity of authorizing loans for

public works to these particular cities.<sup>1</sup> These reports reveal quite clearly the demoralized state of local finances during the depression and the impossibility of setting up an absolute criterion for determining the right of any community to receive a loan and the size of the loan to be granted. The very fact, however, that the cities mentioned in this survey have received aid from the Federal government is indicative of their basic financial soundness. It is doubtful, therefore, to what extent this sample may be considered representative of municipalities as a whole.

#### THE SANITARY DISTRICT OF CHICAGO

The Sanitary District, which now comprises about 47 per cent of the area of Cook County, contains within its boundaries some sixty municipalities, including the City of Chicago. The District was created as a municipal corporation by an act of the Illinois Legislature, approved May 29, 1889, with the power to levy taxes and incur indebtedness subject to the constitutional limitation of 5 per cent of the assessed valuation. Its primary function was to prevent the contamination of Chicago's source of water supply, Lake Michigan, by effecting some method of sewage disposal other than that of directing all sewage into the Lake. The original plan was to dilute the sewage with water and then direct it, by canal and river, into the Mississippi. This plan was put into operation but was opposed by the southern cities of Illinois and by Missouri. Finally, in 1930, the United States Supreme Court directed the Sanitary District or the State of Illinois to complete a sewage treatment system and cease the undue diversion of water from Lake Michigan.

Since the chief function of the District has been that of a construction agency, its budgets have been dominated by bond sales and expenditures. Thus on the average from 1927 to 1929 approximately one-half of income was from bond sales, and the

<sup>1</sup> These reports prepared by Dr. Kilpatrick are detailed analyses of the financial status of various municipal governments: cities, counties, districts. In addition, the reports contain statistics and discussions describing the social and economic resources of these communities. No use has been made of the material on counties in the following summaries.

annual budget fluctuated between \$40,000,000 and \$60,000,000, whereas in 1931 and 1932, when bond sales were small, the annual budgets were respectively \$22,000,000 and \$13,000,000. Income of the District, excluding bond sale proceeds, is derived mainly from taxes; the rate levied has fluctuated between \$5 and \$6 per \$1,000. The District's electrical power plant has not been very lucrative. Chicago, the chief customer, has never paid for service received, and on June 30, 1933 owed \$7,907,215.

Tax income of the District was sharply curtailed following the assessment review begun in 1928 (see Ch. VII). Collections were not resumed until 1930, and, as a result, the Sanitary District, as well as all other Cook County units, is now two years in arrears in the levying of taxes. The rate of delinquency in the collection of taxes has risen sharply. The curtailment of revenue may be mitigated in the near future by the operation of the Illinois law which permits the County Treasurer to become a receiver of delinquent properties. He may operate the properties until taxes are paid.

As indicated above, borrowed funds have furnished the chief source of income of the Sanitary District. As of August 1, 1933, the indebtedness of the District totalled \$142,565,480, distributed as follows. As of the same date, the total borrowing margin (5

In default	\$10,084,500
Not in default	96,947,500
Interest on defaulted bonds	5,417,580
Constructing contracts	8,600,500
Electric power contract	18,500,000
Unpaid bills, salaries and wages	736,000
Leases	245,000
Tax anticipation warrants and interest	2,034,400
Total	\$142,565,480

per cent of the 1931 assessment) of the District was \$183,183,629. Since tax anticipation warrants and interest were then deductible, the unused borrowing margin was \$42,652,549. On December 16, the PWA purchased bonds of the District in the amount

of \$41,938,000,<sup>2</sup> thereby virtually eliminating the unused borrowing margin. On January 1, 1934, the 1932 assessment became effective. This assessment, 25 per cent lower than that of 1931, reduced the borrowing margin to \$137,387,722. If only the increase in funded debt is added to the total indebtedness as of August 1, 1933, it is apparent that the District had exceeded its borrowing margin by \$45,081,358 on January 1, 1934. Thus until assessments increase or a large amount of obligations are retired, the District will legally be unable to participate in any new borrowing.

The District first defaulted upon its obligations on January 1, 1932 when it found itself unable to sell tax anticipation warrants. As of June 30, 1933, there were in default \$10,084,500 of bonds and \$5,417,580 of interest, a total of \$15,502,080. On April 1, 1934, the Sanitary District defaulted on an interest payment of \$120,172.50 due to the Federal government for its loan. The immediate cause of this defalcation was the postponement of the penalty date on 1932 taxes from February 1, 1934 to April 15, 1934, fifteen days after the interest payment came due. Possibilities of rapid improvement in meeting maturities and interest payments are not evident.

#### MILWAUKEE, WISCONSIN

Even prior to the depression, Milwaukee showed inability to stay within the bounds of its budget, but interestingly enough, despite extraordinarily large tax delinquencies, it is now in a more secure budgetary position than it was in 1929, when it had a budget deficit of \$11,604,729 and there was no balance in the treasury at the beginning of the year. In 1932 this deficit had been reduced to \$1,742,514, exclusive of balance. Current expenditure accounts were less seriously out of balance. In 1929 there was a deficit of \$5,692,915 but in 1932 this had been converted into a surplus of \$2,869,713. The huge discrepancy of 1929 had resulted from large expenditures for capital outlays. The rapid

<sup>2</sup> The money was to be used for a sewage treatment plant as ordered by the United States Supreme Court.

and extensive industrial development of Milwaukee during the prosperity era, and the consequent growth in population, necessitated a large program of permanent improvements. During the decade 1922-31 permanent improvement costs for city jurisdictions aggregated approximately \$110,742,531. Milwaukee early adopted the pay-as-you-go method of financing a large part of its improvements, and of the above total only 44.1 per cent was financed from bonds; 21.8 per cent was financed from taxes and miscellaneous revenue, 22.8 per cent from special assessments, and 11.3 per cent from the sale of water. Since many of the improvements during construction were financed from available cash balances, the absorption of the city balance necessitated recourse to temporary loans. In 1929 the charges for this current indebtedness were \$6,056,566, 70 per cent more than in 1932.

Revenue receipts for 1932 showed a 41.6 per cent increase over 1929. General property tax revenue mounted almost twice as fast, despite widespread delinquency. Almost all other revenues decreased. Expenditures in 1932 surpassed those in 1929 in all items except public service enterprises, capital outlays, and repayment of current borrowing. These three items, however, were pared to such an extent that total expenditures decreased 5.7 per cent during that period. Capital outlays were, in 1929, 24 per cent of total expenditure; in 1932, 17 per cent. The net results of income and expenditure are summarized in the accompanying tabulation.

	1929	1932	PERCENTAGE INCREASE OR DECREASE
Total operations			
Deficit, inclusive of balance	\$11,604,729	\$ 532,989	-95.4
Deficit, exclusive of balance	11,604,729	1,742,514	-85.0
Current operations			
Total current revenue (exclusive of balance and special assessments)	22,511,349	35,664,431	+58.4
Total current expenditure (in- cluding payment of principal of funded debt)	28,204,264	32,794,718	+16.3
Net surplus or deficit	-5,692,915	+2,869,713	



	<i>(in percentage form)</i>	
	1929	1932
Debt service		
Ratio of true debt service (i. e., exclusive of temporary loans) to current expenditure	16.2	18.1
Ratio of complete debt service (i. e., including temporary loans) to total expenditure	16.8	12.5
Capital outlays		
Ratio of outlays to total expenditure	24.1	16.9
Net bonded debt		
Ratio of net bonded debt to current expenditure	56.2	61.0
Ratio of net bonded debt to current revenue	61.8	81.9

Up to December 31, 1933 Milwaukee was clear of defaults and did not resort to refunding. Wisconsin limits the life of bond issues to twenty years, which precludes the possibility of unduly prolonging them when issues are redeemed on the date due. Owing to the general use of serial bonds, sinking funds are not large and no sinking fund deficits occurred.

It was not without an effort, however, that defaults or postponements were warded off in 1933. Two attacks were made on Milwaukee's methods of financing. One suit questioned the right to use cash on hand and the proceeds of unused bond balances, the other claimed that the constitutional debt limit had been exceeded. As a consequence of these suits, the city found its ability to make loans from the banks, in anticipation of tax collections, seriously jeopardized. By the issuance of 'baby bonds' and by delaying the payment of city orders, Milwaukee was able to meet the payment of approximately \$4,000,000 interest and principal on its bonded debt without borrowing from the banks. In 1934 the situation, while still serious, was eased by an increased borrowing capacity, no interest on bank loans, employment of debt amortization fund,<sup>3</sup> and reduced tax delinquency.

From 1924 to 1930 the net debt chargeable against the 5 per

<sup>3</sup> The slow collection of taxes in 1933 resulted in a serious cash shortage. Payrolls and bond interest and maturities had to be met. After legislative sanction the amortization fund disposed of bonds it held and the proceeds were invested in tax certificates, thus replenishing the treasury.

cent debt limit increased steadily; after a slight drop in 1930, the net debt increased so sharply that the ratio was carried above the legal limit in 1932. That year the net debt was 5.2 per cent of assessments, 0.2 per cent above the legal borrowing capacity. On December 31, 1933, however, the net debt had been reduced from \$47,480,000 to \$39,588,700; the ratio of net debt to assessed valuation for the same date was 4.6 per cent, leaving a margin of \$3,002,372 for 1934 issues. The out-of-bounds borrowing in 1932 is partly explained by the reduction in margin caused by a 10 per cent drop in valuation from 1929 to 1932. All of this decrease was not caused by shrinkage of values. Large assessment litigations in 1932, the exemption of automobiles in 1931 from the personal property assessment, and the transference in 1929 of the power and light companies' assessment from localities to the state all contributed to the decrease. Furthermore, new debt incurred by Milwaukee has been of the type not deductible from the debt limit.

The largest portion of Milwaukee's general bonded indebtedness for 1922-32 was incurred for sewage systems under the administration of the independent Metropolitan Sewage Commission, established in 1921. The other cities included in the Metropolitan Sewage area are now paying Milwaukee for their share of this outlay before 1921. Next in importance was school debt, which increased steadily with the growth of the city. Of significance was the marked increase during 1931 and 1932 in debt for parks and playgrounds, part of Milwaukee's program for social services. The accompanying tabulation summarizes the debt position of Milwaukee in 1924, 1929 and 1932.

	1924	1929	1932
Gross indebtedness			
Unfunded debt			
Revenue bonds and notes	\$ 519,910	\$ 1,823,000	\$ 3,125,000
Warrants	1,533,754	1,409,169	.....
General improvement bonds	32,866,300	47,821,050	51,441,800
Public utilities	355,000	242,000	39,000
Total gross debt	\$35,274,964	\$51,295,219	\$54,605,800

	1924	1929	1932
Deductions from debt limit			
Current debt	\$2,053,664	\$3,232,169	\$3,125,000
Offset for sinking fund assets and maturing bonds	1,698,664	3,370,150	3,961,800
Public utilities	355,000	242,000	39,000
Total deductions	\$4,501,164	\$6,844,319	\$7,125,800
Net debt	\$30,773,800	\$44,450,900	\$47,480,000
Relation of debts to valuation	<i>(in percentage form)</i>		
Ratio of gross debt to valuation	4.7	5.2	6.0
Ratio of net debt to valuation	4.1	4.5	5.2

Milwaukee's unfunded debt, consisting of revenue bonds, notes and warrants, did not increase from 1929 to 1932, although the city was increasingly troubled in 1932 and 1933 by a shortage of cash. Unfunded debt in 1933 amounted to \$5,000,000 in tax redemption notes or 'baby bonds', and \$3,500,000 in city orders. Payrolls for city employees and school teachers were met half in 'baby bonds' and half in cash during May, June, September, October, November and December of 1933. Both bonds and orders for city supplies virtually became script in Milwaukee and were accepted in payment of city taxes of any kind. Of the \$3,500,000 orders issued in 1933, less than \$2,500,000 were outstanding on January 1, 1934, and of \$5,000,000 in 'baby bonds' authorized on December 12 only \$2,597,560 were outstanding. The city had received \$582,420 in payment of pledged certificates and \$1,820,020 was on hand still to be issued.

Two interesting features of Milwaukee's bonded debt are the absence of assessment bonds and (until 1933) the negligible size of the public utility debt. The city pays for assessments from current revenue and is in turn paid by the taxpayer within six years in six installments. Formerly the largest item of special assessment was for sewage systems. The creation of the Metropolitan Sewage District in 1921, however, made it possible for the city to abandon this function. The public utility debt of Milwaukee in 1924 was the smallest of any city of the same population class in the United States, and the same was true in 1929 and 1932. This class of debt, furthermore, declined from

1924 to 1932. The Federal loan and grant of \$4,600,000 for a water filtration plant in 1933 meant a reversal of this utility debt reduction policy. Milwaukee has no debt classification for relief since, under Wisconsin law, the entire burden of relief falls upon the county.

In view of the budgetary difficulties of Milwaukee, it is interesting that the Federal government approved two large loans. The loan made for an extension to the sewage disposal plant does not, however, make any incursion on the unused borrowing margin (which was \$3,002,372 on December 31, 1933) since the money has been borrowed by the county on behalf of the City Sewage Commission. Furthermore, since Wisconsin law permits the deduction from gross debt of utility debt, when this debt is secured by mortgages against the property or income of the utility, the \$4,600,000 could not affect the borrowing capacity of the city.

#### CINCINNATI, OHIO

The income of Cincinnati declined 11.5 per cent between 1928 and 1932. Income from all taxation decreased over 12 per cent between these dates, but gasoline and inheritance taxes increased considerably. The probable explanation of the growth of the former is more efficient certification of refineries and collection of the tax and increased consumption of gasoline. The greater return from the inheritance tax must be due to a higher death rate among Cincinnati property owners, since receipts from this source in other large Ohio cities declined during the same period. The only other increase in revenue was from special assessments. Income derived from borrowing declined more than 15 per cent.

An important contributory cause of decreasing revenue was tax delinquency. As reported for Hamilton County, 80 per cent of whose population lives in Cincinnati, tax delinquency grew from 3.46 per cent in 1929 to 11.44 per cent in 1933. Compared with other cities, Cincinnati fared well. Delinquencies on special

TABLE 96  
CINCINNATI, OHIO  
INCOME AND EXPENDITURE, 1928 AND 1932

	1 AMOUNT (in thousands)	2 PERCENTAGE OF TOTAL	3 AMOUNT (in thousands)	4 PERCENTAGE OF TOTAL	5 PERCENTAGE INCREASE OR DECREASE IN AMOUNT
<b>INCOME</b>					
Balance at beginning of year	\$10,177		\$6,895		-32.24
Taxes					
General property	11,080	21.97	9,538	21.39	-13.92
Motor vehicle license	402	.80	334	.75	-16.90
Gasoline tax	353	.70	517	1.16	46.35
Inheritance tax	428	.85	545	1.22	27.32
Other	552	1.10	184	.41	-66.69
Special assessments	881	1.75	1,002	2.25	13.75
Subventions and grants	2	.004	1	.002	-56.53
Interest	2,306	4.57	2,175	4.88	- 5.70
Utilities	2,792	5.54	2,326	5.22	-16.70
Borrowings	7,044	13.97	5,973	13.40	-15.20
All other	24,588	48.76	21,989	49.32	-10.57
Total, including balance	60,604		51,478		-15.06
Total, excluding balance	50,427	100.00	44,583	100.00	-11.58
<b>EXPENDITURE</b>					
General government	1,025	2.03	1,047	2.23	1.78
Protection	2,740	5.43	2,761	5.88	.76
Utilities	1,367	2.71	1,292	2.75	- 5.48
Education	1,785	3.53	2,173	4.62	21.76
Interest	4,479	8.87	4,368	9.29	- 2.48
Other	4,392	8.70	5,167	10.99	17.65
Total operation maintenance and interest	15,788	31.26	16,808	35.77	6.46

Total other outlay	6,393	12.66	5,933	12.62	- 7.20
Debt obligations	5,685	11.26	5,439	11.57	- 4.33
Other	22,643	44.83	18,815	40.04	-16.91
Total non-governmental	28,329	56.09	24,254	51.61	-14.38
Total expenditure	50,510	100.00	46,995	100.00	- 6.96
Balance, end of year	10,094		4,484		-55.58
Surplus or deficit					
Exclusive of balance at beginning of year	-82		-2,412		
Inclusive of balance at beginning of year	10,094		4,484		

assessments, usually heavier than taxes, rose from 15.5 per cent in 1929 to 21.2 per cent in 1933. The attenuation of assessed values was an additional factor in reducing the city's tax income and, at the same time, in narrowing the unused borrowing margin.

Cincinnati's total expenditures were pared as income declined. Between 1928 and 1932 they were reduced by approximately 7 per cent. Although the diminution in receipts exceeded the reduction in expenditures, cash balances from previous years were sufficient to prevent actual deficits. Table 96 indicates how the budget was balanced.

In 1932 total operations, exclusive of cash balances, showed a \$2,400,000 deficit, but this was converted into a surplus of \$4,483,532 by inclusion of the cash balance at the beginning of the year. The unencumbered cash balance at the beginning of 1934 of \$950,000 is testimony to the economical budgetary administration of the city.

The City Council, anxious to continue its solvency, made extremely conservative budget estimates for 1934. Estimated receipts, including unexpended balances, amounted to \$14,659,787, as compared with an estimated \$19,428,130 for 1933. The 1934 appropriation was set at \$14,629,787, leaving an estimated balance, unexpended, of \$30,000.

The efficient administration of Cincinnati's budget by the City Council is further demonstrated by the Council's handling of the debt. The city did not default payment of either principal or interest and resorted to very little refunding. The sinking fund completed its 1933 operations with a cash balance of \$834,100, which was \$55,181 in excess of the cash balance at the close of 1932. Cincinnati has remained within its debt limit, and although the unused borrowing margin is relatively small, the \$275,000 loans approved by the Federal government would not endanger this margin. The accompanying tabulation illustrates clearly Cincinnati's ability to assume further debt for public works. All figures are for December 31, 1933.

## FINANCES OF LOCAL GOVERNMENTS

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Total borrowing margin	\$40,483,000
Total gross debt	\$99,922,203
Allowable deductions	62,073,043
Total net debt	\$37,849,161
Unused borrowing margin	\$2,633,839
Less Federal loans	275,000
Net unused margin	\$2,358,839
Percentage which net debt bears to assessment	4.67

The service cost of Cincinnati's indebtedness is heavy, slightly more than 40 per cent of current expenditures and a little less than 20 per cent of total income.

## CLEVELAND, OHIO

Cleveland experienced severe financial difficulties as a result of the depression. Total revenues shrank from \$112,300,000 in 1929 to \$87,900,000 in 1932—22 per cent. Though expenditures were cut 18 per cent in the same period, they were \$9,610,329 in excess of receipts in 1932 as compared with \$6,374,569 in 1928. An actual deficit was forestalled by recourse to cash balances available at the beginning of each year. Total receipts and balances thus exceeded total expenditures, in 1928 by \$21,995,511, and in 1932 by \$14,487,497.

Cleveland's current budget, exclusive of cash balances, showed large operating deficits both in 1928 and 1932, although the deficit was considerably reduced in the latter year. Current expenditures (in this instance, total operation, maintenance and interest, plus payment of funded debt) exceeded current receipts (total revenue receipts, less special assessments) in 1928 by \$11,783,433 and in 1932 by \$7,243,043. This reduction of \$4,540,390 or 38.5 per cent in the current deficit is explained by the fact that retrenchment was greater than the reduction in revenue in 1932. Owing to cash balances, current deficits occurred in neither year.

Tax and special assessment delinquencies contributed greatly to Cleveland's fiscal troubles. The cumulative delinquency on special assessments rose from \$2,551,276 in 1930 to \$5,486,624 in 1933, and total collections in 1933 amounted



to only 51 per cent of the current levy. Tax delinquency was not quite so serious; the 1933 collections of current and back taxes were 81 per cent of the levy for that year; in 1932, 83 per cent. In an effort to induce prompt payment, the old law allowing tax-payers four years of grace before confiscation of property was replaced by a Tax Receivership Bill, signed April 5, 1934, which "permits the courts to appoint county treasurers as receivers for income producing properties on which taxes are delinquent. The receivers will have jurisdiction of the property until all the delinquent taxes are paid."

Table 97 shows the composition of Cleveland's debt and its debt status in 1933. The decrease in special assessment debt from 14 to 4 per cent of the total debt in the five-year period was partly offset by the growth of temporary loans. Ohio law permits the assumption of net debt up to 5 per cent of the assessed valuation. Table 97 shows that in 1933 Cleveland exceeded its legal limit by more than \$20,000,000. Net city debt was 6.7 per cent of assessed valuation as compared with 3 per cent in 1929. This increase was partly the outcome of the 31 per cent expansion of net debt and partly of the 40 per cent shrinkage in property valuation over the five-year period.

Up to February 1, 1934 Cleveland met all its maturing obligations and interest payments. On that date it defaulted on its maturing general bonds but paid all interest due and maturing bonds for special assessment, water works, and electric light. Payments were again deferred on March 1, and according to *The Bond Buyer* of March 17, Cleveland had defaulted on obligations aggregating \$1,600,000, of which \$467,000 represented overdue March payments. The condition of its unfunded debt is also significant. Although Cleveland has not had recourse to refunding of general obligations, a tax anticipation note in the amount of \$1,250,000, first due in June of 1932, has been repeatedly renewed. There were also two issues of scrip, totaling \$1,857,500, used to pay city employees, and issued against the uncollected current levy for

TABLE 97  
CLEVELAND, OHIO  
DEBT STATUS, 1929 AND 1933<sup>1</sup>

	1 AMOUNT (in thousands)	9 PER CENT	1 AMOUNT (in thousands)	9 PER CENT	PERCENTAGE OF CHANGE
General bonds	\$74,420	59.75	\$83,107	65.02	11.67
Limitation excess bonds	...	...	4,811 <sup>1</sup>	3.76	...
Special assessment debt	17,150	13.69	5,389	4.22	-68.39
Water works bonds	25,978	20.86	26,090	20.41	4.35
Electric light bonds	7,105	5.7	5,317	4.16	-25.05
Tax anticipation notes (due 4-30-34)	...	...	1,250	.98	...
Scrip (due 10-15-38)	...	...	875	.68	...
Scrip (due 12-15-38)	...	...	982	.77	...
Total gross debt	124,553	100.00	127,822	100.00	
Less self-liquidating issues					
Special assessment			5,389		
Water works			26,090		
Tax anticipation			1,250		
Other legal deductions			10,316		
Total deductions			43,046		
Difference			84,776		
Sinking funds applicable thereto			3,971		
Total net debt subject to 5% limitation			80,805		
Total legal borrowing capacity (legal limit)			60,456		
Amount by which debt exceeds legal limit			20,349		

<sup>1</sup> Balance of \$6,498,000 four percent Sewage Disposal bonds sold to PWA.

general operating purposes for 1933. Of the first issue of \$875,000, \$600,000 was returned to the city to be reissued.

The large Federal loan of \$6,498,000 and grant of \$2,492,000 would be exempt from the 5 per cent legal limitation since the loan is to be secured by mortgage revenue bonds and is therefore self-supporting. For this reason, the loan appears to be valid although Cleveland has already exceeded its debt limit. In view of the difficulty that the city has experienced in meeting its existing debt payment, however, it may not be in a position to support easily this additional debt.

#### DES MOINES, IOWA

Between 1921-22 and 1932-33 total expenditures of Des Moines dropped from \$4,096,944 to \$2,982,091. Between 1921-22 and 1929-30 expenditures decreased 20 per cent, and a further 9 per cent between 1929-30 and 1932-33. Exclusive of cash balances at the beginning of the year, total operations disclosed a surplus of \$169,180 for 1921-22, and for 1929-30 and 1932-33 deficits of \$113,009 and \$123,869, respectively. The inclusion of cash balances converted these deficits into surpluses.

Des Moines' tax revenue was not seriously affected by the depression. While a small reduction in tax levies accompanied a much larger shrinkage in assessed values, the tax rate remained the same. In 1932 the delinquency rate was about 6 per cent.

Indebtedness, as of January 1, 1934, was \$11,363,028. This represents a reduction of \$1,666,346 from the peak of 1929. The decline in net debt was slightly larger. Both general city obligations and special fund bonds declined between 1922 and 1929. The net increase of indebtedness was due chiefly to the issue and sale of public utility bonds to construct a water works system. Table 98 shows that Des Moines exceeded its 5 per cent constitutional debt limit in 1929 and 1933. The city, however, claimed the additional exemption of water

TABLE 98

DES MOINES, IOWA  
INDEBTEDNESS, 1922, 1929 AND 1933  
(in thousands)

COMPOSITION OF DEBT	1922	1929	1933
Unfunded debt	\$90	\$69	\$260 <sup>1</sup>
General bonds	6,300	4,757	3,460
Special fund bonds	3,610	2,086	1,966
Special assessment bonds	. . .	. . .	275
Public utility bonds	. . .	5,450	5,403
Miscellaneous bonds	. . .	668	. . .
Total debt	10,099	13,029	11,363
Deductions allowable	401	595	1,270
Net debt	9,697	12,366	10,093
Unused borrowing capacity	\$1,011	-\$851	-\$1,893

<sup>1</sup> An estimate of warrants outstanding as of December 31, 1933.

bonds, the exclusion of which not only eliminated the marginal deficits but also resulted in adequate surplus margins.

During the depression assessed valuations in Des Moines declined more than in many other cities owing to the peculiarity of its assessment base. The latter includes money and credit in addition to personal and real property. In 1933 total assessments were approximately 10 per cent below the 1929 level and the estimated valuation for 1934 indicated a reduction of 21 per cent.

In 1922, gross debt was 4.7 per cent of assessment, 5.65 per cent in 1929, and 6.92 per cent in 1934. The proportion of net debt to assessment moved similarly. Although outstanding debt declined after 1929, the debt service requirements increased. The ratio of debt service to current expenditure, which had fallen from 45.5 per cent in 1921-22 to 21.9 per cent in 1929-30, rose to 25.5 per cent in 1932-33. A study of maturing rates reveals that debt service charge requirements will increase up to and including 1942. Owing to declining revenues these charges bear more heavily upon the city than formerly. Federal grants totalling \$138,250 will, of course, not affect the total debt or service charges.

## BUFFALO, NEW YORK

The surplus of total income over total expenditures in Buffalo was \$3,360,566 in 1930 and \$676,990 in 1933. Current operations (all income exclusive of borrowing and all expenditure exclusive of capital outlays and that part of the debt service not paid from current income) showed a surplus of \$1,130,329 in 1930 and a deficit of \$4,650,535 in 1933. In the latter year borrowings aggregated \$24,532,410 in comparison with capital outlays of \$1,533,189 and welfare relief of \$9,821,348. The reduction of almost half in the ratio of the true debt service to current expenditures resulted from the refunding of \$4,000,000 of maturing bonds in 1933, while the ratio of complete debt service to total expenditures decreased from 19.6 per cent in 1930 to 2.4 per cent in 1933. Table 99 summarizes Buffalo's income and expenditures and indicates the essential points.

Despite a sharp increase in tax delinquency from less than 1 per cent in 1930 to 11.5 per cent in 1933, Buffalo's tax revenue has not been as severely curtailed as that of other cities of the same size. Adverse financial conditions have not prevented Buffalo from persistently increasing the amount of the unused taxing margin. The tax levy decreased much more rapidly than current expenditures, which increased from \$42,096,417 in 1929-30 to \$46,099,830 in 1931-32, and decreased to \$43,515,074 in 1932-33. In view of the budgetary deficits in 1931-32 and 1932-33 and the heavy recourse to refunding, it is likely that Buffalo will have to rely to a greater degree on the property tax levy as a source of revenue, or else retrench further.

Although expenditures for current maintenance declined from \$30,857,794 to \$27,183,101 during 1930-33, and although Buffalo received increasing aid from New York State for educational and general purposes, the heavy demand for welfare and emergency employment relief was responsible for the marked expansion of bond issues. An analysis of Buffalo's

TABLE 99

BUFFALO, NEW YORK  
INCOME AND EXPENDITURES, 1930 AND 1933  
(in thousands)

	1930	1933
<b>INCOME</b>		
Total current revenue	\$43,227	\$38,865
Borrowings		
Funding of notes	...	15,000
Borrowings for improvements	9,873	100
Revenue loans	971	7,887
Warrants	1,913	1,545
Total income	55,984	63,397
<b>EXPENDITURES</b>		
General agencies of government	1,342	1,155
Current maintenance	30,858	27,183
Welfare and emergency employment	1,396	9,821
Debt service	10,056	24,183
<b>CAPITAL OUTLAYS</b>		
Total expenditures	52,623	62,720
<b>NET RESULTS IN RESPECT OF:</b>		
Total operations		
Net surplus or deficit	3,361	677
Current operations		
Current income	43,227	38,865
Current expenditures	42,096	43,515
Net surplus or deficit	1,130	-4,651
Debt service	<i>(in percentage form)</i>	
Ratio of true debt service to current expenditure	23.38	14.96
Ratio of complete debt service to total expenditure	19.10	38.55
Capital outlay		
Ratio of capital outlays to total expenditure	19.59	2.44

bonded indebtedness discloses certain interesting facts. There has been a great increase in welfare relief issues and an almost complete cessation of borrowing for improvement purposes. Prior to 1932 relief needs were small enough to be paid from the general funds of the city. Furthermore, the size of the deficiency issues would tend to indicate deliberate insufficient budgeting by the city. Until 1929 budget shortages for operations were met by issues of certificates of indebtedness which

were accumulated and funded into bonds. With the adoption of the new city charter in 1929 this practice was supposedly eradicated, but, in reality, deficit financing still continued, only on a smaller scale.

The Federal loan and grant of \$1,148,370 will not noticeably affect the financial status of Buffalo since it is only 0.11 per cent of the assessed valuation and 1.12 per cent of the gross debt. The increasing net debt, however, diminished the unused borrowing capacity from \$36,477,759 in 1930 to \$18,876,341 in 1933. A further reduction is expected as a consequence of an estimated decline of \$80,000,000 in the assessed valuations for 1933-34 and the addition of \$6,500,000 refunding issues and the previous accruals of tax sale and improvement bonds. Owing to its recourse to refunding, the city has not defaulted. The inadequate payments of the water division to the sinking fund has necessitated increased reliance on this expedient.

#### ATLANTA, GEORGIA

Atlanta has experienced deficits since the advent of the depression. In 1930 the deficit was \$175,415 and it increased progressively to \$1,564,875 in 1933. In 1932 and 1933 the shortages were financed by issuing scrip to meet December salaries and by allowing current bills to remain unpaid. The threat of restricted bank credit by bankers was responsible for these measures. As of December 31, 1933, scrip was outstanding in the amount of \$1,046,858, and approved vouchers payable of \$180,104.

Current expenditures exceeded current income by \$941,260 in 1930 and by \$388,242 in 1931. The following year closed with a current surplus of \$100,289, but 1933 ended with a deficit of \$1,567,512. These deficiencies exaggerate the actual fiscal condition. In no year were capital outlays separated from current accounts, yet in 1930 outlays totalled \$1,450,000. If this amount could be isolated, the current deficit of that year would be changed to a surplus of \$508,740. Similarly, in 1932,

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the current surplus of \$100,289 included outlays of approximately \$300,000. The current expenditures of 1933 included vouchers of the previous year totalling \$1,409,400. It appears that in 1933 the deficit was a result of liabilities accumulated from previous years and was financed by the issuance of scrip. Table 100 summarizes budgetary operations during the four-year period 1930-33.

TABLE 100  
ATLANTA, GEORGIA  
INCOME AND EXPENDITURES, 1930-1933  
(in thousands)

	(as of December 31)				PERCENTAGE CHANGE
	1930	1931	1932	1933	1930-33
Income					
Total current income	\$11,081	\$10,695	\$9,487	\$9,028	-19
Total income <sup>1</sup>	14,427	13,666	11,480	9,820	-32
Expenditures					
Total current expenditures	12,022	11,083	9,387	10,595	-12
Total expenditures <sup>2</sup>	14,602	13,864	12,023	11,385	-22
Current surplus or deficit	-941	-388	+100	-1,568	
Total deficit	-175	-198	-543	-1,565	

<sup>1</sup> Including trust funds, temporary loans and bond sales, and premiums.

<sup>2</sup> Including trust funds and loans repaid.

During 1930-33 current income declined 19 per cent, while current expenditures fell only 12 per cent. Expenditures of 1933 were greater than those of 1932 in every category except the Water Department, whose costs fell slightly, and payments for debt service, which were reduced by refunding a \$275,000 issue. Yet, even with this general increase, expenditures would not have exceeded income had it not been for the burden of vouchers accumulated from previous years which were paid in 1933. Current income, of which the property tax is the chief source, declined steadily, but the decrease was retarded by attempts to tax new sources of revenue. The items Street Railway Company and Licenses, Fines, and Fees, which appeared in the income statement, are testimony of this attempt. In particular, the total income derived from licenses and fees was maintained by increasing



## APPENDIX

some existing charges and adding new ones, such as Moving Permit Fees, Building Inspectors' Service Charges, and Electrical Inspection Fees.

Assessed valuations rose steadily through 1931 when the basis of assessment was 70 per cent. The 1932 assessment dropped 10 per cent and the basis of assessment was changed to 100 per cent, thus reducing assessments by a total of 37 per cent. In 1933 the assessment showed a further decline of 11 per cent from the 1932 level. This change in base is especially important since Atlanta is limited to a tax levy of 15 mills and the maximum has been levied in every year since 1921. Figures of tax delinquencies show a rather high rate at delinquent dates but also indicate that these delinquencies are mostly of a temporary nature.

The weight of debt service is apparently not very heavy, yet Atlanta encountered difficulty in meeting obligations during the depression, and in 1933 was forced to refund a maturing issue. The tabulation indicates the steady reduction in debt service from 1930 to 1933 together with Dun and Bradstreet estimates for 1934 and 1935. The reduction in ratio of debt service to current expenditures was accomplished partly by the refunding of \$275,000 of maturing bonds.

YEAR	AMOUNT OF DEBT SERVICE	RATIO OF DEBT SERVICE TO CURRENT EXPENDITURES (in percentage form)
1930	\$1,827,534	15.2
1931	1,999,647	18.1
1932	1,950,952	20.7
1933	1,476,451 <sup>1</sup>	14.0
1934	1,362,197 <sup>2</sup>	...
1935	1,316,772 <sup>2</sup>	...

<sup>1</sup> The amount of service represents the sum actually expended during the year for principal and interest requirements. The drop between 1932 and 1933 was due to a refunding of \$275,000 of maturing bonds which Atlanta was unable to redeem from current income.

<sup>2</sup> Dun and Bradstreet estimates.

The funded debt of Atlanta decreased steadily after 1930, and as of December 31, 1933 totalled \$14,881,400. The gross debt decreased between 1930 and 1932, but at the close of

1933 the total was approximately that of 1932 because of a \$1,406,858 issue of scrip which counterbalanced the funded debt decrease. Temporary borrowing was also drastically reduced from a peak of \$2,700,000 in 1931 to \$775,757 in 1933. The city closed its last fiscal year without any borrowing in anticipation of tax receipts outstanding. The curtailment of short-term loans was the direct result of the banks' influence. Atlanta retained a substantial unused borrowing margin of \$11,380,603 in 1933.

Despite the fact that Atlanta's indebtedness is relatively low, and its debt service not excessive, it will apparently not be able to assume heavy additional debt for some time to come. The refunding issue covered exactly the same amount as the total of Federal loans and grants, \$275,000, for police station improvements.

#### DURHAM, NORTH CAROLINA

Durham closed the fiscal year 1932 with a deficit of \$26,126, and the fiscal year 1933 with a deficit of \$36,658. Since no unfunded debt is outstanding, the recent deficits were probably financed from accumulated cash reserves. The shortages of 1932 and 1933 are in contrast to the budgetary surpluses of \$4,131 and \$85,383 for the fiscal years 1930 and 1931, respectively. In view of the previous surpluses and the size of the budget, the deficits are not very significant.

Income from the property tax supplied half of Durham's revenues in 1932 and 1933, and the estimate for 1934 was approximately the same. Tax collections have experienced a noticeable decline during the depression but the drop has not been as severe as in many other cities. Tax delinquency at the close of the fiscal year increased from 6 per cent in 1930 to 10 per cent in 1931, and to 15 per cent in 1932. Total accumulated delinquencies have shown a somewhat similar increase, yet the total is not extremely large and no taxes for periods earlier than 1930 are outstanding, indicating that the city has an efficient collection system and that most of the year-end

delinquency is temporary in character. The special assessment situation is less favorable. As of July 1, 1933, special assessment liens outstanding totalled \$936,521. Of this, \$120,648 was to come due before the end of the year. Moreover, \$296,864 of special levies were also delinquent. The assessments were made for purposes of street improvement and will be utilized in retiring outstanding indebtedness incurred to finance the improvements.

The trend of total expenditures has been steadily downward since 1929; actual expenditures for 1933 were 20.8 per cent below the 1929 level and the estimated outgo for 1934 is 22.7 per cent lower than in 1929. The greatest decline has been in general operation, 31 per cent between 1929 and 1933; the estimated reduction for 1934 is 69.2 per cent below the 1929 level. Debt service was lower in 1933 than in 1929 by 13.2 per cent, and the estimates for 1934 are 15.9 per cent below the 1929 debt service costs.

Gross indebtedness has increased steadily and markedly: from \$1,306,000 in 1922 to \$12,921,146 in 1929. From 1929 to 1933 the debt declined to \$11,807,000. Under the terms of the Municipal Finance Act of 1917 North Carolina cities may borrow up to 8 per cent of the assessed valuation of property. Numerous reductions are allowed. On August 7, 1933, after a 13.7 per cent reduction from the previous year in assessed valuation, Durham still had a total borrowing capacity of \$5,160,000. Of this, \$4,479,887 had been used, leaving an unused borrowing margin of \$680,113, or 13.18 per cent. Included in the city's gross debt are \$1,800,000 of school bonds which are only a contingent liability. Although Durham has pledged its full faith and credit to the repayment of these bonds, they are a direct obligation of the school district, which is independent of the city.

Although, as mentioned above, the debt service cost of Durham has declined during the depression, it is still extraordinarily large, more than half of total expenditures: 1932, 59.2 per cent; 1933, 58.7 per cent; 1934, 58.1 per cent (estimated). The largest item in the debt service has been the payment of maturities and interest on assessment bonds. For

1932 and 1933 assessment bond costs were almost half of the entire debt service charge, 25.6 per cent and 24.2 per cent, respectively. The estimated charge for assessment bonds in 1934 is 22.3 per cent. In view of the high delinquency in assessment taxes, it is not unlikely that there will be defaults in assessment bonds, unless collections improve. If the most of bonds of the Water Department (which is self-sustaining) and the Special Assessments are excluded, the ratio of the total debt service charges to expenditures is much smaller: 1932, 32.9 per cent; 1933, 32.8 per cent; 1934, 32.9 per cent (estimated). The obstacles to borrowing from the Federal Government for public works are clear.