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## CHAPTER VIII

### FUTURE PROJECTS

Long-range planning of public permanent improvements is not yet in an advanced state in this country. While methods of financing, the making of budgets, and city and regional planning have received increasing attention from public authorities, many public works projects are still undertaken on short notice and in response to pressing needs. The legislative and administrative steps required before contracts are let, or the details of financing are arranged, are usually so many that it is difficult to estimate the probable volume of work to be undertaken until the year is well under way. For these reasons estimates of the total future projects of the various governments in the United States must contain a substantial element of uncertainty and error.

Exhaustive series of probable future undertakings, such as the one of "proposed work," published weekly by the Engineering News-Record, and that of "contemplated projects," published monthly by the F. W. Dodge Corporation, run in the past so far in excess of contracts actually let or expenditures incurred, that they can hardly be accepted as a reliable measure of the volume of future work. They are at the best an indication of the amount of construction under consideration. Many of the projects entering into these totals will no doubt be undertaken at some time in the future, and many will, with equal certainty, be either wholly abandoned or replaced by others.

Over short periods of time, likewise, it is not feasible to use the current figures of the volume of public bond issues in forecasting the probable amount of public construction. There are, first, a variety of uncertain factors to be weighed in predicting the course of the bond market itself. Some of these, as is well known, are of a temporary and even accidental nature, and may easily, for the time being, act to interrupt the long-time trend, and thus confuse the processes of forecast. The existence, further, of easy money rates and favorable bond prices are not the sole determinants of

increases in public borrowings. Mounting tax rates and debt service charges, or the failure of administrative agencies to plan their programs of permanent improvements sufficiently in advance has often kept down the volume of bond issues in the face of satisfactory conditions in the money market. In May, 1930, it is only possible to say that public agencies which are prepared to borrow for the financing of permanent improvements, will not, during 1930, be restricted by the fear of high money rates which were a potent and restraining influence in the eighteen months before.

Although precise forecast of the course of events in the near future is surrounded by these obstacles, it is reasonably clear from the available data that the secular trend of future public expenditures for permanent improvements is definitely and appreciably upward. The expected continuing increase of expenditures on public works in this country may be attributed to well-known causes. In the past decade the traffic congestion arising out of the wide use of the automobile has imposed upon all American governments an expanding budget of expenditures for road and street improvement. At the present time the cost of road and street building, and their maintenance, amounts to more than one-third of total outlays for public construction in the United States. From present indications, a considerable time will elapse before there can be expected any slackening in the rate of increase of expenditures for these purposes. Projects of road building; of the widening and extension of streets; of bridge and tunnel construction; of the building of boulevards and new arteries for traffic are now far behind essential and recognized requirements. Meanwhile, the cost of maintenance and repairs of existing highways, bridges, subways and tunnels has been steadily rising, and has come to represent a large item in the public budget of capital expenditures. Among the capital projects of the next decade, also, it would appear necessary to allow for the rising costs of facilities auxiliary to the aviation industry, which, with its development, may well impose new and unpredictable burdens of expenditure on local, state and federal governments.

The rising cost of maintenance and repairs is not a feature of road, street and bridge building alone. With the increase in the size and complexity of the modern public plant and equipment, there have come vast increases in the expenditures on maintenance which will, of course, in the future constitute a substantial and

growing portion of the total public budget. Separation of the costs of maintenance and repairs from those of new construction is for most public agencies not possible, and where they are separated it is not certain that the classifications are reliable, but it is clear from the data that are at hand that the problem of financing the future maintenance of an expanding public plant is coming to be recognized as a difficult one. In the figures of expenditures on construction by the federal government, for instance, the cost of maintenance and repairs represented in 1929 nearly one-fourth of the total outlays on public works,<sup>66</sup> and it is probably no exaggeration to estimate the total expenditures on maintenance and repairs as no less than 15 per cent of the total cost of public construction in the country.

Much of the increase in public works is to be associated in the United States with the growth of large cities, where the items of transportation, water supply and sewage facilities alone account for the major part of the rise in total expenditure. In nearly every instance in this country, the rise of the large city has been followed by the growth of population in surrounding areas, with the result that these areas have undergone legal or de facto absorption. As a consequence of this movement, the standards of the public plant and equipment tend to rise over a widening territory, and to penetrate constantly because of the habits and standards of an urban population, into the rural areas. It was pointed out earlier<sup>67</sup> that the public works program of a community reflects the prevailing standard of living of its members. The factor of increasing school attendance,<sup>68</sup> the demand for improved water supplies and sewage facilities, in short, for advance in the material benefits of civilization, would appear to be a permanent feature of the American scene. The pressure for permanent improvements is bound to continue, and their adoption to be limited by the capacity of governments to pay for them.

Working in the same direction is the tendency, throughout American local governments, to create city and regional planning commissions whose function it is, among other things, to plan the future construction programs of public agencies. For the most part, these commissions occupy only an advisory position, but their

<sup>66</sup> See Chapter IV, Table 26, p. 88.

<sup>67</sup> Chapter I, p. 10.

<sup>68</sup> See *Recent Economic Changes*, Volume I, Chapter 1, p. 16.

incorporation into the administrative branches of government would appear to be only a matter of time. While the centralized planning and execution of programs of public construction should lead to great economies in administration all along the line, the total effect of planned and far-reaching programs of public works should be an increase in their gross volume.

A fundamental factor limiting the amount of expenditures on future projects is, of course, the capacity of the government to pay. In many small American cities, towns, and even states, whose expenditures for capital improvements have since the war been large, future outlays on the same or higher levels depend on a growing population, expanding industry and trade, and a steady increase in the assessed valuation of property. This condition is, however, not universal, and where such growth is not found, the program of public works is more likely to be curtailed than expanded. The City of Schenectady, New York, for instance, considers that the rate of growth of its population is decreasing. It does not, at the moment, look forward to any material industrial expansion within its limits. During the 10 years ending in 1928, the average annual increase in city expenses has been at the rate of \$377,000. By elaborate estimates of the probable future population of the city, and of the trend in the assessed valuation of property, the budget commission has concluded that ". . . the city's expense is increasing at a faster rate than its income based upon the yearly increase in assessable valuations."<sup>69</sup> In order, therefore, to prevent a rise in the tax rate prevailing in Schenectady in 1928, the commission proposes a capital budget for essential improvements in which expenditures would drop from \$1,546,000 in 1929 to \$100,000 in 1938, and would amount in the whole period to \$5,171,000, as contrasted with an earlier proposed budget of capital expenditures of over \$9,000,000.<sup>70</sup>

The limitations placed on increasing expenditures by bond limits and by too slow a rate of increase in the assessed valuation of property is again shown in the experience of San Diego City, California. Here it has been found that "the costs of government have increased much faster than assessed values" and that bonded indebtedness has been increased faster than the growth of bonding

<sup>69</sup> Capital Budget Commission, *A Long Term Financial and Improvement Program for the City of Schenectady, N. Y.*, Schenectady, N. Y., April, 1929, Section I, p. 7.

<sup>70</sup> *Idem*, Section II, pp. 47 and 52-53.

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capacity. . . ."<sup>71</sup> The facts are shown in Table 50. In this case, as in many others like it in this country, the consolidation of city and county assessing has resulted in reducing the assessed value of San Diego City. It is, in this connection, estimated that if the city property were on a higher assessment basis than county property,

TABLE 50.—ASSESSED VALUATIONS, BONDING CAPACITY AND BONDING MARGINS, SAN DIEGO CITY, CALIFORNIA 1917-1926

(In thousands)

YEAR	NET ASSESSED VALUATION	BONDING CAPACITY 15% OF VALUATION	BONDS OUTSTANDING AND AUTHORIZED	BONDING MARGIN
1917.....	\$84,660	\$12,699	\$10,614	\$2,085
1918.....	86,342	12,951	10,299	2,652
1919.....	86,616	12,992	11,518	1,474
1920.....	88,068	13,210	11,207	2,003
1921.....	93,365	14,005	11,356	2,649
1922.....	93,454	14,018	10,990	3,028
1923.....	108,247	16,237	11,946	4,291
1924.....	114,752	17,213	16,629	583
1925.....	121,537	18,231	16,710	1,521
1926.....	126,259	18,939	18,148	791

SOURCE: California Taxpayers' Association, Inc., Los Angeles, Cal., *Report of San Diego City, California, Association Report No. 6, May, 1928, p. 21.*

it would be possible to continue to increase bond issues and to retain satisfactory bond margins during the years 1927 to 1936.<sup>72</sup>

The City of Indianapolis, likewise, falls within that category of local governments that are faced with the necessity of reducing expenditures on future permanent improvements because they are rapidly exhausting their borrowing power. With projects during the next decade amounting to more than \$30,000,000, several departments of government would, as Table 51 shows, in that period exceed their borrowing capacity. The cost of the proposed improvements of the county government, for example, would exceed its bonding power by approximately \$5,000,000. This condition elicited the comment that Indianapolis must finance some of its

<sup>71</sup> California Taxpayers' Association, Inc., Los Angeles, Cal., *Report of San Diego City, California, Association Report No. 6, May, 1928, p. 7.*

<sup>72</sup> *Idem*, p. 30.

improvements "otherwise than by the issuance of bonds. . . . There is grave question whether any unit (of government) should so nearly use up its borrowing power. It would seem to be good practice to retain a margin of at least \$1,500,000, particularly for use in a real emergency."<sup>73</sup>

Where, on the other hand, population has been growing, trade and industry expanding, and, therefore, the assessed valuation of

TABLE 51. — BORROWING CAPACITY AND ESTIMATED COST OF IMPROVEMENTS, INDIANAPOLIS, 1930-1940

DEPARTMENT OF GOVERNMENT	TOTAL TEN-YEAR BONDING POWER	ESTIMATED COST OF PROPOSED IMPROVEMENTS, 1930-1940
Civil City . . . . .	\$7,907,249	\$11,658,000
Parks . . . . .	3,121,502	"
Sanitation . . . . .	3,257,019	4,900,000
Schools . . . . .	5,629,799	5,240,000
County . . . . .	13,908,414	8,691,000

Source: Indianapolis Chamber of Commerce, *The Need of Budgeting Capital Expenditures for Indianapolis*, July, 1929.

\* Not estimated.

property increasing, local and state governments have not felt the pinch of narrowing bond margins and reduced current revenues, and are prepared to proceed with large future projects of public works. The case of New York City and of New York State has already been described in detail.<sup>74</sup> During the calendar year 1930, the program of public construction for the territorial area of New York State, announced in January 1930 by Governor Roosevelt, contemplates total expenditures of roughly \$450,000,000, an amount nearly one-third greater than the average outlays for the same purpose during the preceding years.

The City of Buffalo, New York, had on June 30, 1928, a debt margin of nearly 50 per cent. The net debt of Buffalo is limited by the State Constitution to \$10,000,000 plus 10 per cent of its assessed valuation. As of June 30, 1928, the financial status of the

<sup>73</sup> Indianapolis Chamber of Commerce, *The Need for Budgeting Capital Expenditures for Indianapolis*, July, 1929, p. 19.

<sup>74</sup> Chapters II and III.

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city in this regard was as follows: <sup>75</sup>

Ten per cent of assessed valuation.....	\$105,991,310.50
Additional flat amount.....	10,000,000.00
<hr/>	
Constitutional limit of net debt.....	\$115,991,310.50
Bonds outstanding .....	\$88,573,695.57
Deductions:	
Water bonds .....	\$16,814,489.42
Less issues prior to 1904.....	1,352,169.10
	<hr/>
	\$15,462,320.32
Certificates .....	6,128,861.57
Monthly local .....	148,811.60
Sinking Funds .....	2,816,162.48
	<hr/>
Total Deductions .....	\$24,556,155.97
Net Debt .....	64,017,539.60
Debt Margin (48.26 per cent).....	\$ 51,973,770.90

In the twelve years from June 1, 1918, to June 30, 1930, the capital expenditures of the City of Detroit have averaged roughly \$40,000,000 a year, and reached the peak, in 1926-1927, of more than \$66,000,000. Over the whole period the largest items in the capital budget have been sewers, schools, water, rapid transit and parks and boulevards. A ten-year improvement program, announced early in 1929, contemplates expenditures on permanent improvements, in the period 1929-1938, amounting to \$630,000,000 or \$63,000,000 a year, an average annual outlay far in excess of the average expenditures in the preceding decade. In this budget the largest items are as follows:

Rapid transit .....	\$200,000,000
Sewage disposal .....	90,000,000
Street openings and widenings.....	75,000,000
Schools .....	50,000,000
Water supply .....	50,000,000
Port development .....	25,000,000
Grade separation .....	20,000,000

It is not expected that the consummation of these projects will be hindered by financial difficulties. Extensions of water and street railway utilities will be financed out of water rates and car fares. "Assuming a normal increase in the City's assessed valuation during the next ten years . . . this program can be carried out with

<sup>75</sup> Buffalo Municipal Research Bureau, Inc., *The Municipal Research Bulletin, A Capital Expenditure Program*, Volume I, No. 16, November, 1928, p. 5.

very little effect upon taxes, and possibly without increasing the present rate at all for these purposes." Borrowing limits are 4 per cent of the assessed valuation for general public improvements; 2 per cent for water, 1 per cent for lighting; and 2 per cent for street railways. "Within these limits, there is ample margin and over for financing . . . requirements for water, lighting and street railways. The city is somewhat restricted . . . with a 4 per cent limit for such general public improvements as sewers, grade separation, port development, airports, playgrounds, hospitals and other public buildings. In fact, the limit at this time is so restrictive that improvements . . . now authorized" exceed the legal limit by \$12,000,000. Added borrowing power, however, "which will accrue as a result of the normal annual increase in valuations and other sources (such as annual sinking fund reserves), will be large enough to permit the gradual carrying out of the projects subject to this limitation."<sup>76</sup>

The annual expenditures of Philadelphia on permanent improvements exceed \$50,000,000. There is little evidence in the available material of any planned program of future projects. The ten-year program issued by the Mayor<sup>77</sup> does not indicate the cost of the various undertakings, but it is clear from their character that they will require expenditures larger than the budgets of the past years. The City of Philadelphia has borrowed heavily for public works, and its debt service charges have risen from 47.55 cents per \$100 in 1910 to 82.02 cents in 1926. The tax rate of the city is, however, low, and, if there were the disposition to do so, a substantial portion of the permanent improvements could be financed out of current revenue.<sup>78</sup>

In many instances, the prevailing political situation may materially affect the public works program. The electorate has, on occasion, refused to vote for bond issues when it had lost confidence in the officials of the government. On several occasions the voters of Toledo have rejected bond issues proposed by the administration. The situation in Chicago, in 1929 and 1930, is another illustration

<sup>76</sup> Detroit Bureau of Governmental Research, *Public Business*, Volume IV, No. 13, Feb. 15, 1929, *A Ten Year Improvement Program for Detroit, 1929-1938*, pp. 187 and 188.

<sup>77</sup> Mayor Harry A. Mackey's 10-Year Program for Central Philadelphia and West Philadelphia Development, no date.

<sup>78</sup> Bureau of Municipal Research of Philadelphia, *Citizens' Business*, No. 750, Oct. 5, 1926 and No. 901, Aug. 27, 1929.

of the same condition. Dissatisfaction with the inequalities in fixing the assessed value of property; <sup>79</sup> fear of further extravagance and maladministration in the spending of public moneys has led the voters of Chicago to reject one bond issue after another. The banks, too, have stopped granting temporary advances to the administration, which was considered in a virtual state of bankruptcy, unable to meet its current obligations. Although there can be no question of the actual solvency of the City of Chicago, the state of affairs, in 1929 and 1930, has resulted in the suspension of many projects that would otherwise have been undertaken.

To form a sound judgment regarding the capacity of American governments to pay for expanding programs of public works in the future is, in the present state of our knowledge, a task of unusual difficulty. Conditions differ widely from place to place. From 1919 to 1927 the per capita net debt of American state governments nearly tripled, having increased from \$4.44 to \$12.32. Between 1921 and 1927 the per capita net debt of cities with a population of 30,000 and over increased from \$85.68 to \$128.27, or nearly 50 per cent. Again, between 1919 and 1927 the assessed valuation of real and personal property in the 48 states increased by nearly 80 per cent, from about \$80,000,000,000 to \$140,000,000,000.<sup>80</sup> The practice of assessing the value of all forms of property, however, is far from being uniform throughout the country, and there is no method by which it can be made so. In the future, as in the past, the capacity of government to pay will vary with the prosperity of the industry of the country, and may be expected to have somewhat the same rate of decline or advance.

<sup>79</sup> Herbert D. Simpson, *The Tax Situation in Illinois*, The Institute for Research in Land Economics and Public Utilities, Northwestern University, Chicago, Ill.

<sup>80</sup> U. S. Bureau of the Census, *Financial Statistics of Cities and Financial Statistics of States*.