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THE FEDERAL EMERGENCY PROGRAM UNDER THE PWA

AIMS

THE administration that came into office in the spring of 1933 adopted expanded public works as one of the major parts of its recovery program. Title II of the National Industrial Recovery Act provided for the creation of a Federal Emergency Administration of Public Works (PWA), and although a portion was assigned to other NRA activities, the sum appropriated by the Act, \$3,300,000,000, included the largest amount ever applied to recovery purposes in any public works scheme. Moreover, the entire amount was to be allotted by June 1935, that is, within two years. In point of fact, six months after the PWA had begun work the entire fund had been allotted, although in part tentatively, and it was announced that additional applications to an equal amount, for which no funds were available, had reached Washington. The principal object of this prompt allotment of the funds was "to increase employment quickly", by restoring consumer purchasing power and the demand for capital and other durable goods.

PROVISIONS, ACT OF 1933

The method by which the Federal government was to finance the public works program was described in the National Industrial Recovery Act as follows:

Sec. 202. The Administrator, under the direction of the

PLANNING PUBLIC WORKS

President, shall prepare a comprehensive program of public works, which shall include among other things the following:

(a) Construction, repair and improvement of public highways and park ways, public buildings, and any publicly owned instrumentalities and facilities;

(b) conservation and development of natural resources, including control, utilization, and purification of waters, prevention of soil or coastal erosion, development of water power, transmission of electrical energy, and construction of river and harbor improvements and flood control and also the construction of any river or drainage improvement required to perform or satisfy any obligation incurred . . . through a treaty with a foreign Government heretofore ratified and to restore or develop for the use of any State or its citizens water taken from, or denied to them by performance on the part of the United States of treaty obligations heretofore assumed: *Provided*, That no river or harbor improvements shall be carried out unless they shall have heretofore or hereafter been adopted by the Congress or are recommended by the Chief of Engineers of the United States Army;

(c) any projects of the character heretofore constructed or carried on either directly by public authority or with public aid to serve the interests of the general public;

(d) construction, reconstruction, alteration, or repair under public regulation or control of low-cost housing and slum-clearance projects;

(e) any (other) project of any character heretofore eligible for loans under subsection (a) of section 201 of the Emergency Relief and Construction Act of 1932, as amended and paragraph (3) of such subsection (a) shall for such purposes be held to include loans for the construction or completion of hospitals the operation of which is partly financed from public funds, and of reservoirs and pumping plants and for the construction of dry docks; and if in the opinion of the President it seems desirable, the construction of naval vessels . . . and of aircraft required therefor and construction of heavier-than-air aircraft and technical construction for the Army Air Corps

and such Army housing projects as the President may approve, and provision of original equipment for the mechanization or motorization of such Army tactical units as he may designate.

. . . *Provided further*, That this title shall not be applicable to public works under the jurisdiction or control of the Architect of the Capitol or of any commission or committee for which such Architect is the contracting and/or executive officer.

Sec. 203 (a) With a view to increasing employment quickly (while reasonably securing any loans made by the United States) the President is authorized . . . through the Administrator or through such other agencies as he may designate or create,

(1) to construct, finance, or aid in the construction or financing of any public-works project included in the program prepared pursuant to section 202;

(2) upon such terms as the President shall prescribe, to make grants to States, municipalities, or other public bodies for the construction, repair, or improvement of any such project, but no such grant shall be in excess of 30 per centum of the cost of the labor and materials employed upon such project;

(3) to acquire by purchase, or by exercise of the power of eminent domain, any real or personal property in connection with the construction of any such project, and to sell any security acquired or any property so constructed or acquired or to lease any such property with or without the privilege of purchase: *Provided*, That all moneys received from any such sale or lease or the repayment of any loan shall be used to retire obligations issued (for financing of the program) in addition to any other moneys required to be used for such purpose;

. . . *Provided*, That in deciding to extend any aid or grant hereunder to any State, county, or municipality the President may consider whether action is in process or in good faith assured therein reasonably designed to bring the ordinary current expenditures thereof within the prudently estimated revenues thereof.

The provisions of this section and section 202 shall extend to public works in the several States, Hawaii, Alaska, the District of

Columbia, Puerto Rico, the Canal Zone, and the Virgin Islands. . . .

(c) In the acquisition of any land or site for the purposes of Federal public buildings and in the construction of such buildings provided for in this title, the provisions contained in sections 305 and 306 of the Emergency Relief and Construction Act of 1932, as amended, shall apply.

(d) The President, in his discretion, and under such terms as he may prescribe, may extend any of the benefits of this title to any State, county, or municipality notwithstanding any constitutional or legal restriction or limitation on the right or power of such State, county, or municipality to borrow money or incur indebtedness.

In substance, Section 203 provided that the Federal government would lend up to 70 per cent on 'reasonable security' and give an outright grant of 30 per cent of the cost of the labor and materials used on any project of the types specified in Section 202. The grant would be given, however, only to states, municipalities or other public bodies.¹ Moreover, a loan would be extended without a grant, or a grant without a loan, provided, in the latter case, that the grant was not merely being substituted for public works expenditures that the applicant would have made in any event. The rate of interest on the local bonds received by the government in exchange for loans was established at 4 per cent. If local bonds carried a higher rate, the difference would be refunded to the local unit. Allotments made to Federal

¹ The phrase "other public bodies" evoked a flood of applications from institutions of a non-profit making or public character. The PWA interpreted the phrase, however, on the basis of the *status* of the applicant, rather than its functions. That is, the test was whether the applicant was an arm of the state and was controlled by the legislative or executive branch of the state, city or county. It was evident from Congressional debates on the bill that such bodies as counties, irrigation or fire districts, incorporated commissions or authorities were intended, and that there was no expectation of extending gifts of money except to governmental agencies.

agencies or departments were, of course, all in the form of outright grants.

Section 203 (d), concerning the apparent abrogation of constitutional limitations on the debt-incurring powers of states, counties and municipalities, was construed by the PWA only in connection with Section 203 (3). That is, no loans were made in excess of the debt limits of a local government unit, but it was believed that the Federal government could purchase and then lease to applicants who had reached their debt limits or could not borrow for legal reasons the property that was constructed with Federal funds. Such a solution proved very popular with the applicants, but unfortunately for them was nullified by court rulings that the leases, which were to be paid off by local units within the life of the project, were comparable to installment buying and thus constituted the legally-forbidden debt. Even if the arrangements had not proved infeasible legally, the Federal government would have hesitated to extend its functions into even temporary ownership of school buildings, water plants or other public works which normally are in the hands of non-Federal agencies. Only one such project was accepted, that of the Georgia State Prison, which can if necessary be converted to Federal uses without doing violence to the traditions of Federal activity.

Funds could also be loaned to aid in "the financing of such railroad maintenance and equipment as may be approved by the Interstate Commerce Commission as desirable for the improvement of transportation facilities". Loans, but not grants, could be made to private corporations for construction purposes under Section 202 (c), (d) and (e).

In addition to the general provision for loans and grants, Title II made appropriations of part of the funds for specific purposes. The state highway systems received grants totaling \$400,000,000, on terms and with results discussed in Chapter IX. Fifty million dollars were allotted in the Act for national

PLANNING PUBLIC WORKS

forest highways, roads, trails, bridges and related projects, roads in Indian reservations and through public lands.

For the purpose of "aiding in the redistribution of the overbalance of population in industrial centers", \$25,000,000

TABLE 19

PWA ALLOTMENTS TO FEDERAL AGENCIES FOR PURPOSES
OTHER THAN THE PWA CONSTRUCTION PROGRAM

TOTAL AMOUNT OF APPROPRIATION	\$3,300,000,000
<i>Executive and Legislative Allotments</i>	
Farm Credit Administration	\$100,000,000
Tennessee Valley Authority	50,000,000
Emergency Conservation Corps	
Purchase of land	20,000,000
Current expenses	301,037,315
Great Smoky National Park	1,550,000
National Recovery Administration	4,924,000
Civil Works Administration	400,000,000
Federal Emergency Relief Corporation	1,505,000
Subsistence Homesteads	25,000,000
Public Works Administration	
Administrative expense	6,812,205
Administrative reserve	25,000,000
Special reserve	35,000,000
National Planning Board	35,000
National Planning Board (State consultants)	250,000
Emergency Housing Corporation	100,001,000
<i>Special Allotments</i>	
Central Statistical Office	20,000
Electric Home and Farm Authority, Inc.	1,000,000
Executive Council	20,000
Federal Alcohol Control Commission	500,000
General Accounting Office	506,000
National Emergency Council	60,000
Treasurer, relief of contractors	100,000
Interior, Office of Secretary	14,731
Surplus Relief Corporation	25,000,000
Earmarked for Federal projects, air-conditioning	1,000,000
Virgin Islands	1,000,000
Emergency Leasing Corporation	1,000
Total Allotments	<u>\$1,100,336,251</u>
Balance Available for Loans and Grants	<u>\$2,199,663,749</u>

Source: Senate Doc. No. 167, 73rd Cong. 2nd Sess., pp. 10-11

were set aside for making loans and otherwise aiding in the purchase of subsistence homesteads, the repayments of such loans to be placed in a revolving fund for homestead purposes. The Division of Subsistence Homesteads subsequently created was not attached to the PWA but was placed under the Department of the Interior.

Finally, \$100,000,000 were assigned to the Farm Credit Administration for expenditures in carrying out the Agricultural Adjustment Act. Table 19 shows the distribution of these special grants to Federal agencies, some of which were made by later executive order. Thus, \$1,100,000,000 of the fund were allotted to various sections of the Recovery Administration to carry on projects apart from the regular public works program of construction, leaving about \$2,200,000,000 to be assigned to Federal departments, states, municipalities and other public bodies, private corporations and railroads for construction purposes.

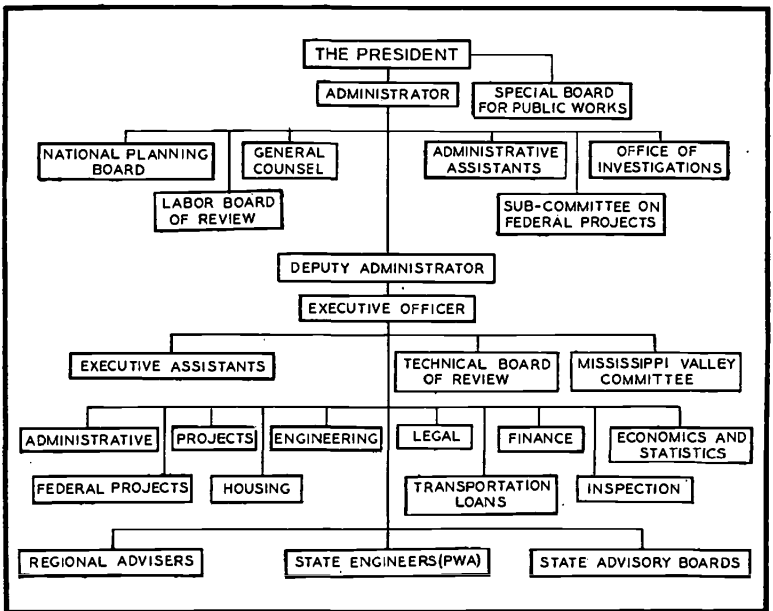
STRUCTURE OF THE PWA

An elaborate organization was promptly set up to handle the allotment of funds. Chart II shows its structure. The duties of the Washington agencies are obvious, for the most part, from their titles. The Division of Inspection has inspectors in each state, whose functions are to watch the performance of public works contracts entered into by local bodies as soon as construction begins. The Division of Investigation was established to guard against irregularities in the distribution of funds. The Technical Board of Review handles "difficult questions of engineering, finance or law", especially relating to very large projects, and controversial matters, chiefly dealing with non-Federal projects, such as appeals from applicants whose requests for funds were rejected, and protests against allotments of funds. The Mississippi Valley

PLANNING PUBLIC WORKS

Committee was established to advise the Administration concerning certain projects in the states of the Mississippi River drainage area. The subjects of main interest to the Committee

CHART II
STRUCTURE OF THE
PUBLIC WORKS ADMINISTRATION



are flood control, power development, navigation, irrigation, reforestation and soil erosion, and water conservation in general. It is expected that the Water Flow Committee, composed of the Secretaries of Agriculture, Interior, War and Labor, and appointed to draft a plan for national economic development, will cooperate with this Committee in attacking the problem of coordinated development of the country's chief inland waterway. The State Advisory Boards were made

responsible for (1) stimulating the submission of projects; (2) assembling the essential data from applicants; (3) examining the projects from the point of view of coordinated planning and social desirability; (4) submitting the application to Washington with their recommendations. Each Advisory Board consisted of three members (four in Louisiana and Texas). The State Engineers, appointed by the PWA, are the executive officers of the Advisory Boards and are responsible directly to the Administrator for the analysis and submission to Washington of projects in the states. Ten regional advisers were appointed to assist the National Planning Board in drawing up its comprehensive plan. Both the Regional Advisers and the State Advisory Boards were abolished when the allotment of funds was completed and the PWA turned to the work of transferring funds and supervising construction.

LABOR CONDITIONS

The labor provisions of the act included the usual clauses barring the use of convict labor and giving preference in employment to ex-service men with dependents, citizens, and residents of the political subdivision where the work is carried on. The thirty-hour week was established unless in the opinion of the Government Engineer the work was of an emergency character or there was an insufficient supply of labor in the immediate vicinity of the project, and unless the project was in an isolated district where the employees were boarded and lodged by the contractors. It was required that "the maximum of human labor be used in lieu of machinery wherever practicable and consistent with sound economic and public advantage; and to the extent that the work may be accomplished at no greater expense by human labor than by the use of machinery, and labor of requisite qualifications

is available, such human labor [should] be employed".² Such a clause, if enforced, would appear to be in contradiction to the expressed hope of the Administration that public works expenditures would stimulate the materials and machinery industries; it is probable, however, that the factor of expense was given preponderate importance. Certainly no such general use of hand labor as was practiced by the Civil Works Administration was accepted, since the PWA did not intend to provide 'work relief'.

The Special Board for Public Works established wage scales for projects financed from Federal funds as follows.

REGION ³	MINIMUM HOURLY WAGE
Southern zone	
Skilled labor	\$1.00
Unskilled labor	.40
Central zone	
Skilled labor	1.10
Unskilled labor	.45
Northern zone	
Skilled labor	1.20
Unskilled labor	.50

Intermediate classes of labor were to be paid the prevailing rates of the district, but not below the zone minima for unskilled labor fixed as above. If the prevailing hourly rate prescribed under collective agreements or understandings between organized labor and employers on April 30, 1933 was above the minimum set for the zone, that agreed wage rate was to be paid for employees on PWA projects.

² Article D, Contract Provisions, Bul. No. 2, PWA.

³ *Southern zone*: South Carolina, Georgia, Florida, Arkansas, Alabama, Mississippi, Louisiana, Arizona, Oklahoma, Texas, New Mexico.

Central zone: Delaware, Maryland, Virginia, Tennessee, Colorado, Utah, California, North Carolina, West Virginia, Kentucky, Missouri, Kansas, Nevada, District of Columbia.

Northern zone: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Indiana, Wisconsin, Minnesota, Nebraska, Wyoming, Oregon, South Dakota, Idaho, Ohio, Michigan, Illinois, Iowa, North Dakota, Montana, Washington.

A Board of Labor Review, composed of one labor representative, one representative of employers and a chairman representing the PWA, was established to hear cases arising under the operation of contracts. In the first six months of its existence the Board had few cases, mainly because non-Federal projects were slow in being started, but in the cases it did handle several questions recurred frequently. First, the regulations did not specify the types of labor which fell in the intermediate class—that is, which were not unskilled and which were not classifiable as 'expert mechanics'.⁴ Second, the PWA rates for skilled and unskilled labor were, for certain sections of the country, claimed to be so high that contracting authorities were anxious about costs. Third, the 'prevailing rate' clause was so phrased as to open the possibility that all public works construction in the United States would have to be brought under union conditions, irrespective of the actual degree of unionization in a zone and the type of work required on a project.

As to the first question, intermediate rates, presumably they could have been fixed on the basis of local custom. But in some cases pressure arose in non-union projects on the part of the contractors, who endeavored to have as many semi-skilled 'helpers', at intermediate rates, and as few skilled mechanics, at skilled rates, as possible. Under union conditions, the organized building trades' limitations on the number of helpers who could serve as journeymen, or 'intermediate grade' workers, fixed the ratio. Certain building trades unions, however, claimed as skilled mechanics workers who, when unorganized, are universally recognized as semi-skilled.

The second question, the level of wage rates set by PWA regulations, is familiar in government enterprises and involves the old controversy concerning government competition with private firms in the labor market. The PWA took the position that the wage rates were adjusted to provide a standard of living in decency and comfort, and were fixed to increase purchasing

⁴ Article B (d) of the Contract Provisions specified that the minimum rates fixed by the PWA could not be used to discriminate against assistants, helpers, apprentices, and skilled journeymen mechanics.

power, and defended them on this basis. The relatively high scales in some regions, however, engendered the fear that the PWA program, if economically administered, would absorb the most skilled workers, and that as private construction activity developed it would have to draw from the less skilled group which remained. The problem is examined more fully in Chapter XIV.

The third difficulty was that whereas the agreement with respect to the precedence of prevailing rates, entered into between the Administrator and the building trades unions on August 14, 1933, covered only building construction, the prevailing rate clause of the PWA regulations, as mentioned above, covered all construction projects. The question, therefore, was of the types of project that would be affected by the prevailing rates clause. If, for example, river work had usually been done under non-union conditions, would rates of wages for land work which prevailed under collective agreements in effect on April 30, 1933⁵ apply to river work? In 1931 Congress passed the Bacon-Davis Act, providing that on all public buildings prevailing rates of wages should be paid. There has been much state legislation to the same effect, but considerable vagueness as to what prevailing rates were within the meaning of these statutory definitions, as there was in the regulations of the Special Board for Public Works. The vagueness appeared not only with respect to types of project but also in connection with the degree to which union conditions should be accepted as prevailing over geographical areas which were under jurisdiction of a particular union in theory but not in practice.

PROGRESS OF THE PROGRAM

A statistical account of PWA activities shows the necessity of establishing an elaborate organization. In addition, it reveals the points of difficulty and delay, both of a general and an incidental nature, in carrying out a scheme of unemploy-

⁵ As provided in the agreement of August 14, 1933.

ment relief and business stimulation through public works.

The PWA enumerated the types of project that would be given priority in awarding funds to non-Federal bodies as follows: (1) water works and sewage; (2) school buildings; (3) other 'regenerative' projects (that is, projects tending to stimulate further projects), such as highways, bridges, tunnels, transmission of electrical energy into districts not hitherto served; (4) other projects that are socially necessary and economically sound. These rules of priority were to be applied to both grants and loans. For Federal projects the PWA found the six-year advance estimates of needed construction and maintenance, collected by the Federal Employment Stabilization Board from the various government departments, a useful guide. These projects offered the quickest method of expediting the construction program during the first two months.

Table 20 shows the distribution of awards by type of

TABLE 20
PWA ALLOTMENTS BY TYPE OF PROJECT¹
(in thousands)

TYPE	TOTAL	FEDERAL	NON-FEDERAL
TOTALS	\$2,175,436	\$1,380,949	\$794,487
Highway construction	504,992	463,249	41,743
Utilities	221,864	14,780	207,083
Railways	199,608	.....	199,608
Aircraft and aviation aids	20,169	19,750	419
Buildings	307,401	168,803	138,598
Structures and bridges	153,201	.....	153,201
Vessels	262,384	262,384	.....
Reclamation, irrigation, flood control and power	236,940	202,136	34,804
Water navigation aids	182,624	180,812	1,813
Agricultural aids and game protection	23,141	23,141	.....
Miscellaneous	63,112	45,894	17,218

Source: Division of Economics and Statistics, PWA

Excludes allotments for purposes other than public works.

project in Federal and non-Federal groups.⁶ In the Federal column street and highway allotments far exceed all others, since they include the \$400,000,000 statutory grant. The second largest item is naval vessels, which received a special grant of \$238,000,000. A large part of the Federal engineering projects, as well as ordinance and equipment (amounting to about \$18,000,000 under Miscellaneous), is under the supervision of the Army. The award of funds to Federal projects constituted about 63 per cent of all allotments, owing partly to the advance planning work of the Federal Employment Stabilization Board, and the absence of legal and financial hindrances in the case of Federal applications. The two statutory grants for public roads and to the Navy also influenced this figure heavily. Over 45 per cent of the Federal funds were devoted to Army and Navy construction, including ships and aircraft. In fact, the amounts allotted to these two departments exceeded the total of all allotments to states, municipalities and other public bodies (see Table 21). Many of the projects undertaken by the Army were for river and harbor work; \$7,500,000 were allotted for 100 combat planes, while most of the remainder of the Federal allotments under 'Aircraft and aviation aids' went to the Bureau of Aeronautics of the Navy and the Aeronautics Branch of the Department of Commerce (approximately \$7,500,000 and \$2,500,000 respectively).

Of other large Federal allotments, over \$100,000,000 went to the Department of the Interior for reclamation projects,

⁶ Most figures in this chapter do not include allotments to the Civilian Conservation Corps, the Civil Works Administration, the Tennessee Valley Authority, for housing, or other statutory grants with the exception of grants for Federal-aid highways and other roads. Equipment, maintenance and repairs are, however, generally included. The totals in the tables presented are not always consistent because the tables, while showing in each case the latest data available, were compiled at different times. Withdrawals and reallocations of funds cause slight changes in the figures from time to time, but do not affect the general tenor of the argument.

THE PWA PROGRAM

103

TABLE 21
DISTRIBUTION OF PWA ALLOTMENTS BY AGENCY

FEDERAL	AMOUNT (in thousands)	PERCENTAGE OF FEDERAL	PERCENTAGE OF GRAND TOTAL
Agriculture ¹	\$56,511	4	3
Public roads	400,000	29	18
Commerce	9,051	1	*
Justice	1,255	*	*
Labor	1,943	*	*
Post Office	533	*	*
State	4,761	*	*
Interior	174,038	13	8
Treasury	92,906	7	4
War	343,523	25	16
Navy	38,266	20	13
Navy (statutory) ²	238,000		
Independent offices	6,540	*	*
District of Columbia	1,760	*	*
Total Federal	\$1,369,087	100 ⁶	62
NON-FEDERAL			
States and municipalities	\$450,744	67	25
Other public bodies	105,895		
Housing ³	48,772	6	2
Private projects ⁵	13,618	2	1
Relief highways	8,931	0	*
Railroads	199,608	24	9
Total non-Federal	\$827,568	100 ⁶	37
Grand total allotted	\$2,196,655	100	100 ⁶

Source: Division of Economics and Statistics, PWA

¹ Excluding public roads.

² For warships.

³ Later reduced; see text below.

⁴ Less than one-half of one per cent.

⁵ Excluding railroads.

⁶ Actual totals of figures shown are slightly less than 100 because of omission of items marked *.

including the Boulder Dam and All-American Canal in the Southwest, the Grand Coulee Dam in the State of Washington, and the Casper-Alcova irrigation and power project in Wyoming. The large allotment to the Treasury is explained by the fact that it is responsible for the construction of post offices, for which about \$48,000,000 were allotted.

Among non-Federal allotments for projects of a public

character, utilities (sewers and water works) received the largest amounts, followed by buildings and bridges and structures. The small amounts allotted for other types of non-Federal work are in general balanced by large Federal allotments, either because they are for projects usually undertaken by the Federal government or because they are on a scale that necessitated Federal control (for example, reclamation, irrigation, flood control and power).

The railroads hesitated to apply for loans until especially favorable terms had been arranged, but their allotments then rose to the highest figure for any one type of non-Federal allotment. Through the President's intervention a reduction was secured in the price of steel rails, and, with the cooperation of the Federal Coordinator of Transportation, the loans were granted on special terms. To those railroads not in immediate danger of reorganization and possessing reasonable credit on the assumption of recovery, loans were granted for the purchase of rails and fastenings on notes maturing within ten years and subject to amortization in equal annual payments after the first year. These loans were made without collateral in some few instances, provided the credit condition of the railroad seemed favorable. Loans up to 100 per cent of the cost were also made for buying new equipment, through the purchase by the government of equipment-trust certificates, amortizable in semi-annual payments over periods of fifteen or twenty years. For the repair and reconstruction of equipment, the PWA accepted, in return for loans, collateral-trust notes to be paid off in ten years. To enable the Pennsylvania Railroad to complete its electrification program, the PWA agreed to purchase, in addition to equipment-trust certificates, thirty-year serial collateral trust bonds secured by bonds and stocks of subsidiary companies.

For all railroad loans an interest rate of 4 per cent was

established, but interest was to be paid only after the first year. The trustees acting under the trust indentures under which the carriers' securities were issued were to be independent and to have no interlocking relationships with the borrowers. All loans were made with the approval of the Interstate Commerce Commission.

The theory behind the favorable terms accorded the railroads was that they would enable one of the largest buyers of capital goods to make purchases and also to relieve the severe unemployment among railroad shop and maintenance-of-way labor. Moreover, it was argued that since railroads were so largely subject to government regulation through the Interstate Commerce Commission and the Railway Labor Act loans to them were especially safe.

Loans to other types of private corporation were not, as a whole, regarded with favor. First, it was found that many of the projects proposed were not soundly conceived, especially those pertaining to housing; second, they inevitably gave rise to objections from other private enterprises which saw no reason why they too should not 'cash in' at the government's expense; third, the PWA showed a noticeable lack of enthusiasm to giving direct financial aid to private industry through 'pouring money in at the top'. Loans to private corporations (apart from railroads and housing corporations, which will be dealt with later) were therefore few. On January 10, 1934, they amounted to \$13,618,000, and included loans for hospitals, toll bridges, waterfront developments and a few utilities in some of the smaller cities. By the middle of February 1934 the PWA had determined to award to public bodies or railroads alone any surplus funds that might accrue from the rescinding of allotments.

In the light of this attitude towards the private development of public utilities, it is interesting to examine the

awards to public bodies for such purposes. The larger power developments for which PWA funds were contributed have already been mentioned; to them should be added the Tennessee Valley project, which is administered by a separate authority, but with PWA funds.

Loans for publicly-owned power and light plants were approved for only 31 projects in 20 states; of these, 17 were considered to be in competition with existing privately-owned plants. Of the 31 projects, 6 were to be built in places of over 25,000 population (2 being additions to existing municipal plants), 10 in places of 10,000 to 25,000 population (6 being additions to existing plants), and 15 in places of less than 10,000 population (6 being additions to existing plants). The influence that they will have upon rate competition is, of course, as important a consideration as the additional service they will provide.

The third type of private enterprise eligible for PWA funds consisted of limited dividend housing corporations. It was expected that money could be lent for socially desirable housing, developed to make adequate provision for population densities, and entirely apart from speculative real estate schemes. No loans were to be granted to the full value of the project; the applicant was to show evidence of a 'tangible equity' in the form of cash, land, materials or services. These standards were high; very few private applications met them. The housing problem in the United States would seem, as yet, to be too complex and undefined to be solvable through the simple expedient of generous financial aid from the Government. Therefore, only \$48,000,000 were lent in preliminary allocations; of this, over \$23,000,000 were later revoked, chiefly because the applicants failed to meet the equity requirements. Even the slum clearance plans, advocated when the Emergency Public Works Hous-

TABLE 22

CLASSIFICATION OF PWA PROJECTS BY SIZE

SIZE OF PROJECT	F E D E R A L				N O N - F E D E R A L			
	NUMBER OF PROJECTS	PERCENT-AGE OF TOTAL	PROJECT COST IN DOLLARS	PERCENT-AGE OF TOTAL	NUMBER OF PROJECTS	PERCENT-AGE OF TOTAL	PROJECT COST IN DOLLARS	PERCENT-AGE OF TOTAL
Under \$49,999	9,957	68.9	\$141,533,404	10.34	858	46.0	\$19,475,663	1.93
50,000 to 99,999	2,093	15.9	141,286,311	10.32	323	17.3	24,073,538	2.39
100,000 to 499,999	1,678	12.8	307,607,393	22.47	439	23.5	99,669,851	9.90
500,000 to 999,999	126	1.0	83,889,995	6.13	89	4.8	63,927,703	6.35
1,000,000 to 4,999,999	153	1.2	368,049,422	26.87	118	6.3	250,409,385	24.89
5,000,000 to 9,999,999	15	0.1	96,537,241	7.05	22	1.2	137,980,824	13.71
10,000,000 to 24,999,999	15	0.1	205,181,579	14.99	12	0.6	171,470,000	17.04
25,000,000 to 49,999,999	1	0.01	25,000,000	1.83	1	0.1	29,258,000	2.91
50,000,000 to 99,999,999	...	...	...	...	3	0.2	210,000,000	20.87
Total	13,138	100.0	\$1,369,085,345	100.00	1,865	100.0	\$1,006,264,964	100.00

Source: Division of Economics and Statistics, PWA

ing Corporation was established, met a check because of the excessively high prices demanded for land.⁷

The Housing Corporation is, for the present, restricting its activities to loans for house renovation, "exploratory work and to demonstration projects placed where a fortunate combination of need and low land costs makes immediate construction feasible".⁸

Table 22 presents a classification of Federal and non-Federal projects by size. The column 'total project cost in dollars' in the non-Federal group refers to total cost of the projects in that class, including money spent by the applicant, not to total allotments by the PWA. About 8,000 projects to be financed by means of the Federal-aid highway funds, falling in the classification under \$49,999, are included; also naval projects, less than 100 in number, financed under the special grant of \$238,000,000. Although the size of projects as described in this table is only a rough guide, it gives some indication of the length of time required for completion.

Table 23 shows the financing of non-Federal projects according to method—grant or loan. Omitting loans without

TABLE 23
METHOD OF FINANCING NON-FEDERAL PWA PROJECTS
(in thousands)

METHOD	LOANS	GRANTS	SPENT BY APPLICANT	TOTAL
Loans without grants ¹	\$248,380	...	...	\$248,380
Loans with grants	433,198	\$106,386	...	539,584
Grants without loans	...	39,603	\$178,697	218,300
Totals	\$681,578	\$145,989	\$178,697	\$1,006,264

Source: Division of Economics and Statistics, PWA

¹ Including loans to railroads, housing corporations and other private enterprises.

⁷ The Housing Corporation secured a ruling which permitted it to give notice of condemnation whenever a project was being delayed by unreasonably high land prices.

⁸ Letter from the Administrator of Public Works; Senate Doc. 167, 73rd Cong., 2nd Sess., p. 3.

grants, which went largely to private enterprises, the proportion of grants to total allotments was 30 per cent, as stipulated in the act. If additional grants had been given, undoubtedly non-Federal projects would have been allotted more quickly. But the PWA felt the necessity of guarding against too liberal awards of grants where loans were not financially feasible, since such a policy would have evoked a general plea of impoverishment on the part of applicants in order to obtain grants.

Tables 24 and 25 reveal the rate of progress in awarding and transferring funds by months, to April 30, 1935, and the employment created. The tables indicate a considerable lag in value of contracts awarded and of day labor work started. The explanation lies partly in the interval intervening between the time of preliminary filing of applications and the execution of bond contracts by the applicants. Applications were approved much more quickly in Washington during the first months of 1934, and the delays then began in the execution of bonds, although this procedure was stimulated in some degree by the threat of withdrawal of allotments if applicants did not act promptly. The remainder of this chapter will discuss the nature of the delays and difficulties that faced the PWA in attempting the expansion of public construction, difficulties which prevented the program from full and prompt accomplishment in spite of the generous terms of the act.⁹

⁹ As this book goes to press a second huge public works program has just been approved by Congress (April 5, 1935) and the details announced by the President. It appropriates an additional sum of \$4,000,000,000, together with \$880,000,000 in existing balances of the RFC and PWA, to be used "in the discretion and under the direction of the President" to provide "relief, work relief and to increase employment by providing for useful projects". The fund of \$4,000,000,000 is earmarked into eight broad classifications of projects; the remaining \$880,000,000 is to be used by the FERA for relief purposes while the program gets under way. It is interesting to compare the allocation of funds under the two programs, by purpose. It should be noted that both programs include large sums for purposes other than construction.

(Note concluded on p. 113)

TABLE 24

PROGRESS ON PWA ALLOTMENTS FOR NON-FEDERAL PROJECTS, JUNE 1933-APRIL 1935¹

YEAR AND MONTH ²	CONTRACTS AWARDED AND DAY LABOR WORK STARTED VALUE							NUMBER OF MEN AT WORK (monthly averages)
	ALLOTMENTS (in thousands)	TOTAL ESTIMATED COST ³ (in thousands)	TOTAL VALUE (i n t h o u s a n d s)	NON-FEDERAL PROJECTS EXCLUDING ALLOTMENTS MADE TO RAILROADS VALUE OF CONTRACTS AWARDED	OF CONTRACTS AWARDED AND DAY LABOR WORK STARTED UNDER RAILROAD ALLOTMENTS ⁴ ESTIMATED VALUE OF DAY LABOR WORK STARTED	OF CONTRACTS AWARDED AND DAY LABOR WORK STARTED UNDER RAILROAD ALLOTMENTS ⁴ VALUE		
<i>1933</i>								
June	.....	.....	.....	.....	.....	.....	.....
July	\$880	\$909	\$213	\$91	\$122	.....	.....
August	92,236	92,280	2,408	1,783	626	.....	.....
September	174,303	190,443	7,352	5,075	2,277	.....	1,168
October	265,991	293,057	18,569	14,828	3,740	.....	3,602
November	482,033	533,366	27,400	22,788	4,612	.....	15,929
December	660,146	731,582	53,961	46,281	7,680	.....	21,993
<i>1934</i>								
January	818,399	964,624	129,649	67,576	8,073	\$54,000	22,546	
February	817,430	960,685	184,600	91,388	9,305	83,907	31,706	
March	794,168	920,910	249,856	109,305	9,927	130,624	42,538	
April	778,592	927,602	299,328	131,615	10,370	157,343	64,736	
May	762,474	913,546	333,930	158,684	11,172	164,074	93,050	
June	943,630	1,154,047	369,140	190,202	12,866	166,072	121,151	
July	970,449	1,206,332	409,527	227,722	14,494	167,310	143,228	
August	993,410	1,258,288	449,240	263,765	15,077	170,398	158,032	
September	996,938	1,271,498	475,118	289,413	15,307	170,398	154,599	
October	998,590	1,275,185	509,989	319,376	15,772	174,841	155,944	
November	986,694	1,272,776	550,323	344,831	16,047	189,445	150,922	
December	988,112	1,283,470	574,751	368,077	16,497	190,177	123,764	

1935							
January	971,767	1,273,818	601,243	389,686	16,638	194,919	98,987
February	968,568	1,283,409	618,778	407,221	16,638	194,919	91,792
March	948,324	1,268,501	645,256	431,699	16,638	196,919	101,150
April	944,577	1,277,763	663,211	447,653	16,639	198,919 ⁵	109,489

Source: Division of Economics and Statistics, PWA

¹ All figures, except for employment (last column), are cumulative. Occasional decreases in allotments are due to rescissions.

² As of end of month.

³ Includes money to be supplied by the applicant.

⁴ Separate totals as to contracts and day labor work started not available.

⁵ Estimated.

TABLE 25
 PROGRESS ON PWA ALLOTMENTS FOR FEDERAL PROJECTS, JUNE 1933-APRIL 1935¹

YEAR AND MONTH ²	ALLOTMENTS (in thousands)	CONTRACTS AWARDED AND DAY LABOR WORK STARTED		MEN AT WORK (monthly averages)
		TOTAL VALUE (i n t h o u s a n d s)	VALUE OF CONTRACTS AWARDED VALUE OF DAY LABOR WORK STARTED	
<i>1933</i>				
June	\$638,000	.....	.....	.....
July	688,555	\$48,336	\$8,404	329
August	922,854	256,670	196,727	9,654
September	1,233,775	409,707	272,563	52,219
October	1,293,714	598,753	391,464	117,257
November	1,314,782	719,973	478,136	226,880
December	1,349,937	825,062	554,590	238,575
<i>1934</i>				
January	1,370,874	912,342	619,909	226,852
February	1,371,910	956,910	657,947	218,878
March	1,381,541	1,008,868	698,516	227,102
April	1,404,280	1,076,724	758,272	254,126
May	1,405,993	1,114,575	784,842	320,822
June	1,406,390	1,155,645	814,294	407,429
July	1,506,596	1,184,936	831,638	475,812
August	1,507,721	1,214,441	853,347	440,590
September	1,518,556	1,242,287	872,751	374,075
October	1,521,273	1,268,932	884,432	303,289
November	1,542,467	1,289,182	900,747	233,926
December	1,546,501	1,308,865	917,099	184,110
<i>1935</i>				
January	1,556,333	1,321,147	925,620	148,973
February	1,520,479	1,332,693	932,790	135,134
March	1,521,343	1,343,387	941,574	138,430
April	1,522,596	1,366,416	960,529	144,367

Source: Division of Economics and Statistics, PWA

¹ All figures, except for employment (last column) are cumulative. ² As of end of month. Occasional decreases in allotments are due to rescissions.

PROBLEMS RAISED WITH RESPECT TO THE USE OF PUBLIC
WORKS AS A MEANS OF BUSINESS STIMULATION
AND REEMPLOYMENT

In spite of the interest aroused in public works projects as a result of the Emergency Relief and Construction Act of 1932, the 1933 appropriation found the local units at first unprepared to submit projects, partly because whatever planning might have been done in the early years of the depression had been curtailed by the dismissal of engineering forces for reasons of economy, and partly because of the financial stringencies that had affected almost all states and cities by 1933. By September, however, both the number and the value of applications filed in Washington and with state engineers had increased sharply. The slower upturn

(Note 9 concluded)

1933 PROGRAM ¹		(in millions)
Highways, roads, etc.		\$437
Rivers, harbors, etc.		393
TVA and housing		125
Naval construction		238
Other Federal construction		544
Loans and grants to states, cities, etc.		764
Loans to railroads		200
CWA		400
CCC		323
Relief: FERA and AAA		276
Total		\$3,700
1935 PROGRAM		
Highways, roads, bridges, grade crossings, etc.		\$800
Housing		450
Reforestation, flood-control, rivers and harbors, etc.		350
Loans and grants to states, cities, etc.		900
Rural electrification		100
Rural relief and rehabilitation, etc.		500
CCC		600
Work relief for professional workers		300
FERA		880
Total		\$4,880

¹ Includes additional \$400,000,000 earmarked one year later for PWA.

in the number of applications approved in Washington reveals the early influx of ineligible projects, as well as the delays incident to the exact interpretation of the act, a task upon which considerable time was spent by the Special Board of Public Works. The gap between the number and value of applications approved and the number and value of bond contracts sent to the applicants by the government was accounted for by the formalities involved in examining a project and the difficulties and delays in preparing bond contracts.¹⁰ By the end of November the value of non-Federal applications alone was more than \$3,000,000,000, but less than half of those sent through the clearing house of state engineers to Washington were finally approved. Projects were examined concurrently by the engineering, legal and financial divisions, and were then sent for final approval to the Special Board of Public Works. The legal and financial divisions were required not only to pass upon the original applications, but also to manage the drawing up of bond contracts after the applications were approved. Tables 24 and 25 show that the Federal projects approved outran the non-Federal by a wide margin, because of the difficulties encountered in financing the non-Federal work. In states where these difficulties could not be readily overcome, Federal projects were begun as far as was feasible. There was some attempt to distribute non-Federal allotments on a basis of 75 per cent weight to population and 25 per cent weight to unemployment. The amount awarded for Federal projects in each state was subtracted before this calculation was made, but at the end of 1933 only 18 states had received Federal and non-Federal allotments that equaled their quotas on this basis.

¹⁰ Administrator Ickes estimated that the interval between an allotment and the first transfer of funds was at least sixty days, of which thirty were spent in drawing up the bond contract.

The extent to which Federal projects directly increased employment is indicated in Table 26. Ten times the number of men on non-Federal work were in Federal employment in December 1933. This is partly accounted for by the larger number of allotments to Federal agencies than to non-Federal applicants, both public and private. The level of employment in non-Federal work in 1934 and 1935 was, however, very much higher, owing in part to the introduction of railroad and relief highway loans.

Actual expenditures of allotments, presented in Table 27, also reveal considerable disparity between Federal and non-Federal activity. Federal expenditures of emergency funds totaled almost \$172,000,000 from July 1 to December 31, 1933, while all non-Federal expenditures amounted to only \$48,000,000. On June 30, 1934, at the end of the fiscal year, proportionate expenditures by the Federal agencies were slightly greater, and on April 30, 1935 greater still. Payments for wages and materials on the part of contractors preceded these disbursements, so that the lag in expenditures over the months concerned was not quite as severe as these figures would seem to indicate; nevertheless, the political subdivisions continued to show a decided delay in putting the funds to work. The Federal agencies that have expended their funds relatively rapidly are undoubtedly those which were best prepared to advance their programs, such as the Bureau of Public Roads. Moreover, none was hindered by legal or financial complications of the sort faced by localities; this is also true of the railroads.

Even after non-Federal applications were approved, marked delay was caused by the legal procedure requisite to issue securities in most states. This includes giving public notice of intention to act, the period required being in some instances as long as 90 days. If voting by the citizens is necessary before the securities can be issued, another

TABLE 26
 MEN EMPLOYED ON CONSTRUCTION AND NON-CONSTRUCTION PROJECTS FINANCED BY PWA
 ALLOTMENTS, JULY 1933-MARCH 1935¹

	1933							1934
	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	
CONSTRUCTION PROJECTS, total	329	9,654	59,030	129,417	255,498	282,467	278,960	
<i>Federal, total</i>	329	9,654	52,219	117,257	226,880	239,575	226,852	
Public roads	.....	.....	20,439	58,385	119,885	131,550	131,530
Other Federal	329	9,654	31,780	58,872	106,995	108,025	95,322	
<i>Non-Federal, total</i>	.....	.....	1,168	3,602	15,929	21,992	22,546
Railroads	.....	.....	.....	.....	.....	.....	302
Non-Federal housing	.....	.....	.....	.....	.....	75	132
Other non-Federal	.....	.....	1,168	3,602	15,929	21,918	22,112
<i>Work relief highways</i>	.....	.....	4,795	7,473	10,673	17,977	25,826
<i>Tennessee Valley Authority</i>	.....	.....	848	1,085	2,016	2,922	3,736
<i>Emergency housing</i>	.....	.....	.....	.....	.....	.....	.....
NON-CONSTRUCTION PROJECTS,								
total	317,506	309,704	246,461	299,119	1,809,791	3,194,112	4,239,824	
<i>Public Works Administration</i>	142	547	1,245	1,516	2,183	2,390	2,676	
<i>National Recovery Administration</i>	1,255	2,057	2,248	2,084	2,000	2,160	2,309	
<i>Civilian Conservation Corps</i>	316,109	307,100	242,968	294,861	344,273	321,701	331,433	
<i>Civil Works Administration</i>	.....	.....	.....	.....	1,460,527	2,866,916	3,902,304
<i>All other</i>	.....	.....	.....	658	808	945	1,102
GRAND TOTAL	317,835	319,358	305,491	428,536	2,065,289	3,476,579	4,518,784	

Source: Division of Economics and Statistics, PWA

	FEBRUARY	MARCH	APRIL	1934 MAY	JUNE	JULY	AUGUST
CONSTRUCTION PROJECTS, total	285,431	297,040	340,993	437,791	558,297	659,557	639,074
<i>Federal, total</i>	218,878	227,102	254,126	320,822	407,429	475,812	440,590
Public roads	122,340	119,590	137,410	175,030	247,390	298,700	267,700
Other Federal	96,538	107,512	116,716	145,792	160,039	177,112	172,890
<i>Non-Federal, total</i>	31,706	42,538	64,737	93,050	121,151	143,228	158,032
Railroads	13,537	22,303	34,141	48,983	60,755	63,243	63,049
Non-Federal housing	98	215	503	796	1,024	1,185	1,339
Other non-Federal	18,071	20,020	30,093	43,271	59,372	78,800	93,644
<i>Work relief highways</i>	29,966	20,656	13,527	14,750	21,127	30,960	29,564
<i>Tennessee Valley Authority</i>	4,881	6,744	8,603	9,169	8,570	9,557	10,888
<i>Emergency housing</i>	.....	.....	.....	.....	.....	.....	.....
NON-CONSTRUCTION PROJECTS,							
total	3,791,246	2,519,154	373,930	343,999	343,192	344,641	407,364
<i>Public Works Administration</i>	2,863	2,897	3,057	3,435	3,608	3,796	3,908
<i>National Recovery Administration</i>	2,565	2,834	3,173	3,704	3,782	3,894	3,859
<i>Civilian Conservation Corps</i>	321,631	247,944	314,486	335,624	334,538	335,940	398,661
<i>Civil Works Administration</i>	3,462,981	2,264,241	51,985	.....	.....	.....	.....
<i>All other</i>	1,206	1,238	1,229	1,236	1,264	1,011	936
GRAND TOTAL	4,076,677	2,816,194	714,923	781,790	901,489	1,004,198	1,046,438

¹ Monthly averages based on weekly reports.

THE PWA PROGRAM

TABLE 26 (cont.)
 MEN EMPLOYED ON CONSTRUCTION AND NON-CONSTRUCTION PROJECTS FINANCED BY PWA
 ALLOTMENTS JULY 1933-MARCH 1935¹

	1934				1935		
	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
CONSTRUCTION PROJECTS, total	568,123	494,102	422,988	342,711	278,541	254,951	278,880
<i>Federal, total</i>	374,075	303,289	233,926	184,110	148,973	134,856	144,766
Public roads	218,127	154,149	99,394	66,582	43,940	27,543	33,097
Other Federal	155,948	149,140	134,532	117,528	105,033	107,313	111,669
<i>Non-Federal, total</i>	154,599	155,944	150,922	123,764	98,987	91,792	101,150
Railroads	52,023	44,077	33,493	28,472	20,085	20,164	16,625
Non-Federal housing	1,755	2,106	2,553	2,277	1,961	2,130	2,390
Other non-Federal	100,821	109,761	114,876	93,015	76,041	69,498	82,135
<i>Work relief highways</i>	27,577	22,545	23,375	21,866	17,866	15,524	19,411
<i>Tennessee Valley Authority</i>	11,872	12,215	12,721	12,800	12,399	12,572	13,394
<i>Emergency housing</i>	.....	109	44	171	316	207	159
NON-CONSTRUCTION PROJECTS,							
total	372,877	406,370	402,839	384,463	407,403	395,428	370,310
<i>Public Works Administration</i>	4,204	4,468	4,902	5,176	5,399	5,627	5,778
<i>National Recovery Administration</i>	3,752	3,787	3,877	3,994	4,099	4,304	4,986
<i>Civilian Conservation Corps</i>	363,974	397,164	393,098	374,322	396,946	384,513	358,548
<i>Civil Works Administration</i>	.....	.....	.....	.....	.....	.....	.....
<i>All other</i>	947	951	962	971	968	984	998
GRAND TOTAL	941,000	900,472	825,827	727,174	685,944	650,379	649,190

¹ Monthly averages based on weekly reports.

THE PWA PROGRAM

119

TABLE 27
EXPENDITURE OF PWA FUNDS
JULY 1933-APRIL 1935
(in thousands)

(1)	(2)	(3)	(4)	(5)	(6)
PURPOSE	JULY-DEC. 1933	JAN.-JUNE 1934	TOTAL, FISCAL YEAR, 1933-34 ¹	JULY 1, 1934-APRIL 1935	JULY 1933-APRIL 1935
Tennessee Valley Authority	\$1,457	\$9,580	\$11,037	\$28,420	\$39,457
Public highways	119,077	148,805	267,882	280,393	548,275
Boulder Canyon project	7,538	11,907	19,445	20,444	39,889
River and harbor work	17,165	55,285	72,450	125,025	197,475
Subsistence homesteads	...	2,330	2,330	3,267	5,597
All other ²	26,725	105,359	132,084	271,240	403,324
Total direct expenditures	171,962	333,266	505,228	728,789	1,234,017
Loans to railroads	...	70,739	70,739	74,312	145,051
Loans and grants to states, municipalities, etc.	48,098	30,500	78,598	88,990	167,588
Grand total	\$220,060	\$434,505	\$654,565	\$892,091	\$1,546,656

Source: Daily Statements of United States Treasury

¹ Sum of Columns 2 and 3.

² CWA, CCC and Emergency Housing expenditures excluded.

month may pass. Finally the bids for the work must be advertised for a given period before they are accepted. In certain states, municipalities and other public bodies did not have legal powers that would permit them to receive loans from the PWA; in such cases the PWA encouraged the passage of special enabling legislation by the state legislatures that would make loans possible. Bond closings after the bond contracts had been executed were also a source of difficulty. For example, if bonds are dated January 1 and contracts are not closed until January 2, accrued interest must be paid for the extra day or the contract may be ruled invalid. The most favorable circumstances for bond closings are not easy to arrange when numerous closings are involved.

All this legal framework is the outcome of many years of

experience in the necessity of checks to unlimited spending by local authorities, but it inevitably involves difficulties in the lending of funds by the Federal government. The PWA also encountered serious financial as well as legal difficulties in the way of lending public funds to local bodies. The financial situation of many local governments by 1933 was such that neither the PWA nor the taxpayers were willing to allow them to incur new debt. Mounting tax delinquencies, defaults and unbalanced budgets impeded a large-scale borrowing program (see Ch. VI-VIII and XI). Experience has shown that under present conditions, while non-Federal projects will in time provide considerable employment, they cannot in general under existing laws be forwarded promptly and speedily. The interpretation of 'reasonable security', which was a more liberal phrase than the term 'fully and adequately secured' in the Emergency Relief and Construction Act of 1932, was still held to mean that only legally-binding obligations could be contracted in accordance with the definition of such obligations in the various states. Test suits were sometimes necessary to determine the binding character of an obligation offered in exchange for a loan.¹¹

An increase in tax delinquencies, if traceable to the depression and not to poor city management, was not considered a threat to reasonable security, nor were records of defaults if due to bank failures or other emergency causes. The Finance Division established a formula whereby loans having a 'better-than-even' chance of being repaid were deemed to be reasonably secured; if the chance seemed only 'even', the amount of employment and purchases of materials involved were considered a balancing factor in making a

¹¹ The possible effect on the bond market of the large volume of government-held municipal securities, which can be resold by the PWA, is discussed in Ch. X.

final decision on a loan. The fact that these individual decisions were necessary is one more indication that financial stringencies almost stifled the entire program.

Loans were refused if the applicant appeared unable to carry its existing and proposed indebtedness without serious burden on tax payers. The effect of this policy was that if any city was not already heavily loaded with debt, it was likely to become so, whereas if the city was already in a serious financial condition, no help could be offered by the PWA. The opinion was prevalent in certain influential quarters that the good to be done through non-Federal projects was therefore limited under the act, and the main effort to combat depression had to be made through Federal activities.

The question may be raised, however, whether these delays deserved the criticism to which they were subjected. The majority were unavoidable, in the sense that they grew out of the superimposition of a new method of finance and, to some degree, a new industry, on a rigid legal and financial framework developed through long years of lawmaking and institutional growth. As a means of relieving unemployment on a large scale, the public works program could not quickly succeed because the revision of the economic and financial pattern of the nation could not be carried sufficiently far. As a means of stimulating industry by purchases of materials and machinery it is impossible to judge, with the inadequate data available at present, what the effects have been. The rapidity with which such stimulation is produced, and its extent, depend in part on the size of stocks already on hand, while the degree of stimulation depends in turn on the price structure. Finally, so-called delays which arose from the attempt to introduce careful examination and avoid irregularities were part of a general effort to effect reform coinci-

dentially with recovery, and could not be eliminated without sacrificing the former aim.

THE NATIONAL PLANNING BOARD

The Administration committed itself to the belief that the orderly planning and control of public works was essential to an efficient and socially desirable use of government money for this purpose. No statement was made in the act concerning the possible utilization of public works as a stabilizing factor, but the first stipulation in Title II required that a comprehensive program of public works be formulated, which presumably could be used in the future towards this end. The comprehensive program was put in the hands of the National Planning Board of the PWA. Its functions, as stated, were to engage in research concerning the potential development of public works in relation to social and economic needs and to draw up a comprehensive plan for regional areas in cooperation with national, state and local agencies. It was also expected that the National Planning Board would advise concerning projects submitted to the PWA in the light of their social and economic desirability in the national economy as a whole. It was, however, impossible for the National Planning Board to submit such a comprehensive plan or to judge projects in strict relation to it in time to produce a definite guide to the allocation of funds.

The financial requirements for a loan or grant also precluded allotments primarily on the basis of a national, coordinated plan of public works, since applications had to be rejected where there was no prospect that the local body would be able to sustain the repayments. The government was not prepared to turn over the money entirely in the form of grants, or to effect the expenditures entirely through

Federal agencies, since the latter could not undertake to extend their activities into areas which they had hitherto not entered on any wide scale.

For these reasons, the burden of deciding on the future place of a given project in the comprehensive plan of public works fell partly on the PWA itself, while it was awarding the funds, and was worked out with the advice of the Planning Board rather than with reference to a plan already formulated. The extent to which 'social and economic desirability' was a factor in the award of funds is described earlier in this chapter.

Meanwhile, the Planning Board carried on the duties prescribed for it under Title II. Among its activities until June 1934, when it became the National Resources Board, were the following:

(1) Advice to the Administrator of Public Works, in the form of statements, tables and charts pertaining to possible criteria for geographic allocations of funds. The Board recommended an average of figures on population, unemployment, relief funds, and families receiving aid in each state as a test of the desirability of any given distribution of public works funds throughout the states. It was recognized that such an average would have two serious weaknesses, the first perhaps temporary: (a) adequate statistics were not available on any of the four elements making up the average except population; (b) distribution of funds by states ignores the fact that about 60 per cent of the cost of public works is probably for materials and transportation, and these materials must often be obtained at some distance from the location of the project. No close correlation between the allocation of funds in a certain region and the stimulation of the materials industry in the region could be hoped for. However, by making use of a Federal Employment Stabilization Board study on the distribution by states of the 'materials dollar' in 1929, the Planning Board was able to apply its recommended test to the actual allocation of funds as of October 17, 1933. In view of the

financial and legal requirements which necessarily influenced the actual allocations, the smallness of the excesses and deficits shown at this date for each state in relation to the recommended test is noteworthy. As the allocation of funds continued, the possibility of using the test appeared to diminish. In October over \$1,000,000,000 had been allotted to Federal agencies to be spent in the various states, and about \$250,000,000 to non-Federal agencies. The excesses of allotments for each state over the quota recommended by the Planning Board ranged from zero to only 3 per cent; the deficiencies from zero to 2 per cent. Two months later Federal allotments had reached \$1,357,000,000 and non-Federal \$605,000,000; twenty states which had deficiencies in October had had their allotments raised, three which showed an excess had had them lowered, but one still had a deficiency, while twenty-five formerly having an excess maintained that position.

The Board also collected materials pertaining to types of public project as allotments were made, in order to assist in maintaining an appropriate balance among different types of work in different areas.

(2) Future planning among both Federal government agencies and cities, states and regions. The Planning Board secured \$250,000 for the employment of consultants to state and regional planning boards if and when they were set up, provided certain conditions as to permanence, representation and genuine activity on the part of these boards were met. Preliminary reports, which may deal primarily with land use and transportation studies and a tentative ten-year program of public works, are required not later than six months after the consultant is appointed. By January 1, 1934 fifteen State Planning Boards had been established under this provision. A regional division was also made: twelve district chairmen were appointed to assist in the coordination of state planning units, official or voluntary, and to act as liaison officers between the states and the Planning Board. The individual regions were developed on the basis of common primary drainage, land use and transportation interests.

(3) Research on (a) the general field of national planning,

(b) a program for continuous public works planning. The three main aspects of the problem, physical, economic and administrative, are being investigated, first by analyzing the factual material already available, and second by developing from the present situation a program of national and coordinated planning.

The National Planning Board was converted by Executive Order on June 30, 1934 into the National Resources Board consisting of the following members: the Secretary of the Interior (chairman), of War, of Agriculture, of Commerce, and of Labor, the Federal Emergency Relief Administrator, and the three original members, Frederic A. Delano, Wesley C. Mitchell and Charles E. Merriam. It was charged by the President to draw up a plan for the use of the country's land and water resources.¹²

¹² Its report, *National Planning and Public Works in Relation to Natural Resources and including Land Use and Water Resources with Findings and Recommendations*, was presented to President Roosevelt on November 28, 1934.