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APPENDIX A

TABLE 1. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN ALBANY, NEW YORK, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|---------|-------|---------|-------|---------|---------|---------|--------------------|----------------------|----------------------|
| Educational buildings..... | \$544 | \$295 | \$33 | \$7 | \$1,328 | \$207 | \$909 | \$435 ^a | \$1,557 ^a | \$1,001 ^a |
| Hospitals and institutions..... | 5 | 187 | 20 | 125 | 21 | 102 | 13 | 1,035 | 10 | 1,000 |
| Military and naval buildings..... | ..... | 15 | ..... | 3 | ..... | ..... | ..... | ..... | ..... | 10 |
| Public buildings..... | 342 | 46 | 2 | 250 | ..... | 60 | ..... | 81 | 135 | 2,557 |
| Waterfront developments..... | 62 | 13 | 17 | ..... | 65 | 136 | ..... | 721 | 644 | 415 |
| Bridges..... | ..... | ..... | 5 | ..... | ..... | ..... | ..... | 24 | ..... | 13 |
| Incinerators..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 200 |
| Lighting systems..... | ..... | ..... | ..... | ..... | 550 | 200 | ..... | ..... | ..... | ..... |
| Docks and piers..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 5 | ..... |
| Subways and tunnels..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Sewage systems..... | 493 | 10 | 2 | ..... | ..... | ..... | 20 | ..... | ..... | ..... |
| Street paving and road construction | 1,519 | 69 | 1,135 | 234 | 683 | 511 | 70 | 331 | 1,419 | 632 |
| Water supply systems..... | ..... | ..... | 65 | ..... | 50 | ..... | ..... | ..... | 49 | 445 |
| Parks (public)..... | 11 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 15 ^c |
| Total public construction..... | \$2,976 | \$635 | \$1,279 | \$619 | \$2,697 | \$1,216 | \$1,012 | \$2,643 | \$3,840 | \$6,308 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$2,976 | \$635 | \$1,279 | \$769 | \$2,867 | \$1,216 | \$1,012 | \$2,643 | \$3,840 | \$6,308 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1922 they amounted to \$150,000 and in 1923 to \$170,000. In 1919, 1920, 1921, 1924 and 1925 there were no expenditures for private schools.

^b Not reported in these three years.

^c Estimated as one-half total parks.

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TABLE 2. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN BIRMINGHAM, ALABAMA, 1923-1928

(In thousands)

| Purpose | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|---------|---------|---------|--------------------|----------------------|--------------------|
| Educational buildings..... | \$805 | \$649 | \$1,891 | \$445 ^a | \$1,183 ^a | \$717 ^a |
| Hospitals and institutions..... | 258 | 157 | 252 | 174 | 570 | 197 |
| Military and naval buildings..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Public buildings..... | 3 | 26 | 133 | 663 | 459 | 121 |
| Waterfront developments..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Bridges..... | ..... | ..... | 318 | 23 | ..... | 229 |
| Incinerators..... | ..... | ..... | ..... | ..... | 400 | ..... |
| Lighting systems..... | ..... | 4 | 914 | 40 | 45 | 12 |
| Docks and piers..... | ..... | ..... | ..... | b | b | b |
| Subways and tunnels..... | ..... | ..... | ..... | b | b | b |
| Sewage systems..... | 4 | 326 | 48 | 271 | 483 | 244 |
| Street paving and road construction..... | 271 | 1,532 | 2,320 | 3,712 | 2,197 | 2,783 |
| Water supply systems..... | 2 | ..... | 32 | 82 | ..... | ..... |
| Parks (public)..... | ..... | ..... | 3 | 18 ^c | ..... | ..... |
| Total public construction..... | \$1,343 | \$2,694 | \$5,911 | \$5,428 | \$5,337 | \$4,303 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$1,343 | \$2,935 | \$6,090 | \$5,428 | \$5,337 | \$4,303 |

Sources: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1923 they amounted to 0; in 1924 to \$241,000; and in 1925 to \$179,000.

^b Not reported in these three years.

^c Estimated as one-half total parks.

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TABLE 3. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN BOSTON, MASSACHUSETTS, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---------|---------|---------|---------|---------|----------|----------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$748 | \$720 | \$2,998 | \$1,160 | 2,781 | \$5,024 | \$2,727 | \$3,892 ^a | \$4,891 ^a | \$1,626 ^a |
| Hospitals and institutions..... | 392 | 279 | 1,269 | 1,716 | 520 | 888 | 5,259 | 2,977 | 2,222 | 3,997 |
| Military and naval buildings..... | 175 | 273 | 118 | 70 | 18 | .... | .... | 272 | .... | .... |
| Public buildings..... | 499 | 566 | 683 | 615 | 463 | 1,166 | 1,000 | 920 | 508 | 1,069 |
| Waterfront developments..... | 132 | 547 | 80 | 235 | 210 | 21 | 436 | 54 | 23 | 125 |
| Bridges..... | 527 | 450 | 125 | 1,783 | 68 | 1,283 | 487 | 1,306 | 780 | 292 |
| Incinerators..... | .... | .... | .... | 17 | .... | .... | 13 | .... | 22 | 2 |
| Lighting systems..... | 83 | 215 | 25 | 150 | 213 | 347 | 150 | 37 | 510 | 18 |
| Docks and piers..... | 94 | 32 | 3 | 228 | 110 | 203 | 132 | b | b | b |
| Subways and tunnels..... | 477 | .... | 1,700 | .... | .... | .... | .... | b | b | b |
| Sewage systems..... | 601 | 486 | 243 | 802 | 611 | 695 | 635 | 486 | 1,152 | 510 |
| Street paving and road construction | 1,532 | 1,538 | 554 | 799 | 1,745 | 1,005 | 1,328 | 1,751 | 1,463 | 1,881 |
| Water supply systems..... | 345 | 122 | 38 | 128 | 212 | 222 | 152 | 319 | 386 | 179 |
| Parks (public)..... | 33 | 53 | 13 | 843 | 109 | 30 | 3 | 23 ^c | 58 ^c | 18 ^c |
| Total public construction..... | \$5,638 | \$5,281 | \$7,849 | \$8,546 | \$7,060 | \$10,884 | \$12,322 | \$12,037 | \$12,015 | \$9,717 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$5,277 | \$5,711 | \$6,196 | \$9,103 | \$7,000 | \$10,926 | \$17,574 | \$12,037 | \$12,015 | \$9,717 |

Sources: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$210,000; in 1920 to \$463,000; in 1921 to \$60,000; in 1922 to \$785,000; in 1923 to \$50,000; in 1924 to \$245,000; and in 1925 to \$5,384,000.

^b Not reported in these three years.

^c Estimated as one-half total parks.

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TABLE 4. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN BUFFALO, NEW YORK, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---------|---------|---------|---------|---------|---------|----------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$884 | \$1,205 | \$1,270 | \$2,684 | \$2,715 | \$2,382 | \$5,040 | \$2,063 ^a | \$3,562 ^a | \$6,351 ^a |
| Hospitals and institutions..... | 1,214 | 3 | 10 | 318 | 45 | 230 | 500 | 2,461 | 2,261 | 1,317 |
| Military and naval buildings..... | 54 | 8 | ..... | ..... | 4 | ..... | ..... | 25 | 22 | 3 |
| Public buildings..... | 28 | 61 | 84 | 100 | 773 | 605 | 123 | 288 | 1,109 | 180 |
| Waterfront developments..... | 34 | 619 | ..... | 350 | 2,200 | ..... | 250 | 1,389 | 335 | 493 |
| Bridges..... | 549 | 439 | ..... | 10 | ..... | ..... | 3,000 | ..... | 43 | 666 |
| Incinerators..... | ..... | ..... | ..... | ..... | ..... | ..... | 459 | ..... | ..... | ..... |
| Lighting systems..... | 25 | 25 | 8 | 148 | 2,048 | 85 | 1,000 | ..... | ..... | ..... |
| Docks and piers..... | 129 | 23 | ..... | 50 | 75 | ..... | ..... | b | b | b |
| Subways and tunnels..... | 9 | ..... | ..... | ..... | ..... | ..... | 37 | b | b | b |
| Sewage systems..... | 24 | 17 | ..... | ..... | 28 | ..... | ..... | 38 | 169 | 60 |
| Street paving and road construction..... | 688 | 442 | 215 | 55 | 55 | ..... | 15 | 1,971 | 5,008 | 1,546 |
| Water supply systems..... | 348 | 1,449 | ..... | 4,000 | ..... | ..... | ..... | 82 | 13 | 8 |
| Parks (public)..... | 19 | 5 | ..... | ..... | ..... | 45 | ..... | ..... | ..... | ..... |
| Total public construction..... | \$3,980 | \$4,296 | \$1,587 | \$7,715 | \$7,943 | \$3,347 | \$10,424 | \$8,317 | \$12,522 | \$10,624 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$3,923 | \$4,273 | \$1,797 | \$8,480 | \$7,948 | \$4,032 | \$9,507 | \$8,317 | \$12,522 | \$10,624 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$81,000; in 1920 to 0; in 1921 to \$210,000; in 1922 to \$815,000; in 1923 to \$80,000; in 1924 to \$685,000; and in 1925 to \$120,000.

^b Not reported in these three years.

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TABLE 5. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN CHICAGO, ILLINOIS, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|----------|----------|----------|----------|----------|----------|----------|-----------------------|-----------------------|-----------------------|
| Educational buildings..... | \$5,266 | \$623 | \$3,081 | \$11,080 | \$4,564 | \$5,694 | \$20,955 | \$16,736 ^a | \$17,715 ^a | \$22,423 ^a |
| Hospitals and institutions..... | 1,076 | 1,345 | 1,684 | 1,262 | 1,981 | 4,440 | 6,150 | 6,567 | 4,197 | 5,902 |
| Military and naval buildings..... | 50 | 35 | 5 | ... | 5 | 160 | ... | 71 | 108 | 517 |
| Public buildings..... | 69 | 1,539 | 5,499 | 396 | 49 | 125 | 387 | 4,786 | 7,204 | 965 |
| Waterfront developments..... | 40 | 1,149 | 800 | 36 | 390 | 80 | 30 | 119 | 718 | 2,905 |
| Bridges..... | 4,230 | 1,264 | 265 | 4 | 1,929 | 1,676 | 3,298 | 3,787 | 8,674 | 2,294 |
| Incinerators..... | ... | ... | ... | ... | ... | 15 | 200 | ... | 788 | ... |
| Lighting systems..... | 293 | 42,277 | 100 | 315 | 393 | 227 | 1,979 | 325 | 250 | 525 |
| Docks and piers..... | 18 | ... | ... | 75 | ... | 100 | ... | b | b | b |
| Subways and tunnels..... | 140 | 230 | ... | ... | 165 | 400 | 100 | b | b | b |
| Sewage systems..... | 2,212 | 1,300 | 1,200 | 5,071 | 980 | 24 | 140 | 2 | 7,895 | 6,231 |
| Street paving and road construction..... | 393 | 91 | 3,031 | 8,822 | 322 | 10,996 | 2,147 | 944 | 440 | 2,720 |
| Water supply systems..... | 40 | ... | 162 | ... | ... | 376 | 3,039 | 200 | 1,205 | 3 |
| Parks (public)..... | 100 | 187 | ... | ... | ... | ... | ... | ... | ... | 112 ^c |
| Total public construction..... | \$13,927 | \$50,040 | \$15,827 | \$27,061 | \$10,778 | \$24,313 | \$38,425 | \$33,537 | \$49,194 | \$44,597 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$13,849 | \$50,143 | \$16,517 | \$27,311 | \$11,728 | \$26,463 | \$67,570 | \$33,537 | \$49,194 | \$44,597 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$79,300; in 1920 to \$333,000; in 1922 to \$890,000; in 1923 to \$325,000; in 1924 to \$1,115,000; in 1925 to \$2,650,000; and in 1926 to \$29,245,000.

^b Not reported in these three years.

^c Estimated as one-half total parks.

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TABLE 6.—PUBLIC CONSTRUCTION CONTRACTS AWARDED IN CLEVELAND, OHIO, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---------|---------|----------|---------|----------|----------|----------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$3,425 | \$3,028 | \$8,809 | \$2,140 | \$7,176 | \$904 | \$3,761 | \$3,651 ^a | \$4,470 ^a | \$4,148 ^a |
| Hospitals and institutions..... | 18 | 856 | 4,250 | 23 | 1,567 | 320 | 1,620 | 2,648 | 1,679 | 8,537 |
| Military and naval buildings..... | 10 | 50 | 200 | 15 | ... | ... | ... | ... | ... | ... |
| Public buildings..... | 23 | 160 | 190 | 623 | 175 | 127 | 1,059 | 40 | 58 | 181 |
| Waterfront developments..... | 75 | 58 | 107 | 34 | ... | 520 | 582 | 733 | 891 | 160 |
| Bridges..... | 526 | 27 | 166 | 5 | 396 | 48 | 490 | 992 | 1,252 | 1,925 |
| Incinerators..... | ... | ... | ... | ... | 1,000 | ... | ... | ... | ... | ... |
| Lighting systems..... | 13 | 566 | 85 | 60 | 46 | 175 | 751 | 427 | 288 | 155 |
| Docks and piers..... | 65 | ... | 12 | ... | 32 | ... | ... | b | b | b |
| Subways and tunnels..... | ... | ... | 50 | ... | 140 | 100 | ... | b | b | b |
| Sewage systems..... | 1,735 | 1,398 | 488 | 722 | 846 | 1,376 | 2,103 | 1,642 | 2,059 | 659 |
| Street paving and road construction | 3,790 | 1,321 | 2,034 | 1,923 | 4,790 | 5,408 | 7,135 | 2,497 | 5,783 | 3,966 |
| Water supply systems..... | 175 | 331 | 1,931 | 60 | 4,616 | 1,373 | 1,024 | 282 | 140 | 18 |
| Parks (public)..... | 3 | ... | ... | ... | ... | ... | ... | c | c | c |
| Total public construction..... | \$9,858 | \$7,795 | \$18,322 | \$5,605 | \$20,784 | \$10,351 | \$18,525 | \$12,912 | \$16,620 | \$19,749 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$9,840 | \$7,835 | \$18,899 | \$6,112 | \$21,286 | \$12,056 | \$18,805 | \$12,912 | \$16,620 | \$19,749 |

SOURCE: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$47,000; in 1920 to \$40,000; in 1921 to \$638,500; in 1922 to \$507,000; in 1923 to \$675,000; in 1924 to \$1,805,000; and in 1925 to \$280,000.

^b Not reported in these three years.

^c Not reported in these three years. Estimated as zero, on basis of previous years.

APPENDIX A

TABLE 7. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN DETROIT, MICHIGAN, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|----------|----------|----------|----------|----------|----------|----------|-----------------------|----------------------|----------------------|
| Educational buildings..... | \$3,068 | \$3,368 | \$9,740 | \$3,522 | \$1,989 | \$4,693 | \$4,247 | \$11,905 ^a | \$6,062 ^a | \$4,769 ^a |
| Hospitals and institutions..... | 1,062 | 158 | 637 | 154 | 20 | 2,418 | 1,227 | 1,007 | 5,402 | 2,938 |
| Military and naval buildings..... | | | | | | | | 9 | | |
| Public buildings..... | 157 | 222 | 1,471 | 170 | 877 | 253 | 391 | 715 | 1,189 | 848 |
| Waterfront developments..... | 103 | 8 | | 139 | 25 | | 26 | 156 | 107 | 121 |
| Bridges..... | | 1,000 | 3,057 | 53 | 216 | 400 | 125 | 325 | 2,318 | 8,014 |
| Incinerators..... | | | | | | 33 | | 6 | 76 | |
| Lighting systems..... | 583 | 85 | 290 | 353 | 50 | 470 | 887 | 204 | 750 | 125 |
| Docks and piers..... | | 6 | 25 | 186 | | 80 | 7 | b | b | b |
| Subways and tunnels..... | 75 | 3,315 | | | | 20 | | b | b | |
| Sewage systems..... | 4,296 | 2,501 | 10,285 | 2,409 | 200 | 422 | 3,029 | 6,766 | 6,742 | 8,071 |
| Street paving and road construction | 2,863 | 1,513 | 2,039 | 685 | 1,179 | 1,943 | 7,392 | 11,398 | 10,896 | 6,659 |
| Water supply systems..... | 199 | 1,000 | 1,282 | 687 | 5,508 | 87 | 75 | 3,507 | 3,485 | 1,928 |
| Parks (public)..... | 20 | 30 | | | | | | 18 ^c | 500 ^c | 3 ^c |
| Total public construction..... | \$12,426 | \$13,206 | \$28,826 | \$8,358 | \$10,064 | \$10,819 | \$17,406 | \$36,016 | \$37,527 | \$33,476 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$12,550 | \$9,993 | \$28,975 | \$12,822 | \$10,544 | \$12,152 | \$20,061 | \$36,016 | \$37,527 | \$33,476 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$199,000; in 1920 to \$108,000; in 1921 to \$174,000; in 1922 to \$4,650,000; in 1923 to \$480,000; in 1924 to \$1,432,500; and in 1925 to \$2,662,700.

^b Not reported in these three years.

^c Estimated as one-half total parks.

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TABLE 8 — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN HOUSTON, TEXAS, 1925-1928

(In thousands)

| Purpose | 1925 | 1926 | 1927 | 1928 |
|--|---------|---------|---------|---------|
| Educational buildings ^a | \$2,810 | \$1,640 | \$836 | \$2,152 |
| Hospitals and institutions..... | ..... | 95 | 212 | 110 |
| Military and naval buildings..... | 100 | ..... | ..... | 613 |
| Public buildings..... | 172 | 863 | 111 | 63 |
| Waterfront developments..... | 54 | ..... | ..... | 1,000 |
| Bridges..... | 374 | 68 | 351 | 81 |
| Incinerators..... | 15 | ..... | ..... | 60 |
| Lighting systems..... | 49 | ..... | ..... | 261 |
| Docks and piers..... | 1,353 | b | b | b |
| Subways and tunnels..... | ..... | b | b | b |
| Sewage systems..... | 88 | 331 | 1,264 | 1,514 |
| Street paving and road construction..... | 298 | 1,209 | 2,278 | 1,691 |
| Water supply systems..... | 320 | 285 | 153 | 102 |
| Parks (public)..... | ..... | ..... | ..... | ..... |
| Total public construction..... | \$5,633 | \$4,491 | \$5,205 | \$7,647 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$4,280 | \$4,491 | \$5,205 | \$7,647 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Includes private schools.

^b Not reported in these three years.

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TABLE 9 — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN INDIANAPOLIS, INDIANA, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---------|---------|---------|---------|---------|---------|---------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$813 | \$2,058 | \$1,292 | \$130 | \$1,433 | \$302 | \$1,006 | \$3,958 ^a | \$3,480 ^a | \$1,244 ^a |
| Hospitals and institutions..... | 346 | 42 | 195 | 2,664 | 205 | 440 | 790 | 710 | 1,679 | 1,050 |
| Military and naval buildings..... | ..... | ..... | ..... | ..... | ..... | ..... | 400 | ..... | ..... | 18 |
| Public buildings..... | 12 | 16 | ..... | ..... | 25 | 143 | 22 | 89 | 97 | 14 |
| Waterfront developments..... | 5 | ..... | 38 | ..... | 783 | ..... | ..... | ..... | 517 | 4 |
| Bridges..... | 14 | ..... | 13 | 20 | 60 | 925 | 82 | 398 | 815 | 435 |
| Incinerators..... | ..... | ..... | ..... | ..... | 375 | 80 | ..... | ..... | ..... | ..... |
| Lighting systems..... | 50 | ..... | 12 | 54 | 16 | 125 | 200 | 67 | ..... | 360 |
| Docks and piers..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | b | b | b |
| Subways and tunnels..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | b | b | b |
| Sewage systems..... | 2,045 | 100 | 401 | 750 | 2 | 209 | 415 | 501 | 2,094 | 773 |
| Street paving and road construction | 446 | 545 | 896 | 1,761 | 385 | 652 | 2,341 | 1,363 | 3,671 | 2,529 |
| Water supply systems..... | ..... | 83 | ..... | 500 | ..... | 5 | 800 | 426 | ..... | ..... |
| Parks (public)..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Total public construction..... | \$3,731 | \$2,844 | \$2,847 | \$5,879 | \$3,284 | \$2,881 | \$6,056 | \$7,512 | \$12,353 | \$6,427 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$3,738 | \$3,094 | \$2,852 | \$5,984 | \$3,284 | \$2,881 | \$6,186 | \$7,512 | \$12,353 | \$6,427 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$6,600; in 1920 to \$250,000; in 1921 to \$5,000; in 1922 to \$105,000; in 1923 to 0; in 1924 to 0; and in 1925 to \$130,000.

^b Not reported in these three years.

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TABLE 10. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN NEWARK, NEW JERSEY, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---------|---------|---------|---------|---------|---------|---------|--------------------|--------------------|----------------------|
| Educational buildings..... | \$464 | \$1,883 | \$1,447 | \$913 | \$832 | \$1,414 | \$1,772 | \$839 ^a | \$110 ^a | \$1,854 ^a |
| Hospitals and institutions..... | ..... | 17 | 56 | 329 | 2,730 | 95 | 376 | 2,638 | 762 | 138 |
| Military and naval buildings..... | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Public buildings..... | 127 | 167 | 962 | 40 | 223 | 28 | 20 | 2,936 | 18 | 894 |
| Waterfront developments..... | ..... | 60 | 739 | 297 | 96 | 70 | 198 | 266 | 257 | 26 |
| Bridges..... | 301 | 95 | 31 | 5 | 15 | 11 | 50 | 2,374 | 1,215 | 59 |
| Incinerators..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 8 | ..... |
| Lighting systems..... | ..... | 44 | 5 | 10 | 200 | 110 | 120 | ..... | ..... | 30 |
| Docks and piers..... | 116 | 950 | ..... | 25 | ..... | 35 | 300 | b | b | b |
| Subways and tunnels..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | b | b | b |
| Sewage systems..... | 267 | 50 | 146 | 171 | 162 | 98 | 326 | 86 | 844 | 515 |
| Street paving and road construction..... | 630 | 1,023 | 164 | 385 | 665 | 747 | 1,379 | 1,163 | 2,833 | 4,191 |
| Water supply systems..... | 3 | ..... | ..... | ..... | 34 | ..... | ..... | 22 | 400 | 181 |
| Parks (public)..... | ..... | ..... | ..... | ..... | ..... | 68 | ..... | 46 ^c | ..... | 15 ^c |
| Total public construction..... | \$1,911 | \$4,289 | \$3,550 | \$2,175 | \$4,957 | \$2,676 | \$4,541 | \$10,370 | \$6,447 | \$7,903 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$1,895 | \$3,339 | \$3,765 | \$2,274 | \$6,037 | \$2,781 | \$4,423 | \$10,370 | \$6,447 | \$7,903 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$100,000; in 1920 to 0; in 1921 to \$215,000; in 1922 to \$124,000; in 1923 to \$1,080,000; in 1924 to \$140,000; and in 1925 to \$182,000.

^b Not reported in these three years.

^c Estimated as one-half total parks.

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TABLE 11. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN NEW HAVEN, CONNECTICUT, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---------|-------|---------|---------|---------|---------|---------|---------|-----------------|----------------------|
| Educational buildings..... | \$762 | ..... | \$1,773 | \$356 | \$1,900 | \$139 | \$6,083 | \$3,401 | \$7,765 | \$1,167 ^a |
| Hospitals and institutions..... | 445 | \$22 | 265 | 410 | 580 | 475 | ..... | ..... | 32 | 516 |
| Military and naval buildings..... | ..... | ..... | ..... | ..... | ..... | 15 | ..... | ..... | ..... | 700 |
| Public buildings..... | 1 | 7 | 80 | 126 | 28 | ..... | 27 | ..... | 30 | 35 |
| Waterfront developments..... | 45 | ..... | 36 | 12 | ..... | ..... | ..... | ..... | 44 | 33 |
| Bridges..... | 198 | ..... | 98 | 420 | 95 | ..... | 49 | 13 | 10 | ..... |
| Incinerators..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Lighting systems..... | ..... | ..... | ..... | 12 | 22 | 5 | 100 | 17 | 167 | 25 |
| Docks and piers..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | b | b | b |
| Subways and tunnels..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | b | b | b |
| Sewage systems..... | 178 | 63 | 14 | 158 | 130 | 144 | 66 | 23 | 15 | 16 |
| Street paving and road construction | 91 | 220 | 371 | 100 | 293 | 309 | 217 | 152 | 301 | 543 |
| Water supply systems..... | ..... | ..... | ..... | ..... | ..... | ..... | 12 | ..... | ..... | 5 |
| Parks (public)..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 13 ^c | 5 ^c |
| Total public construction..... | \$1,720 | \$312 | \$2,637 | \$1,594 | \$3,048 | \$1,087 | \$6,554 | \$3,606 | \$8,377 | \$3,045 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$1,728 | \$637 | \$2,637 | \$3,524 | \$3,198 | \$1,257 | \$7,994 | \$3,606 | \$8,377 | \$3,045 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$7,200; in 1920 to \$325,000; in 1921 to 0; in 1922 to \$1,930,000; in 1923 to \$150,000; in 1924 to \$170,000; and in 1925 to \$1,440,000.

^b Not reported in these three years.

^c Estimated as one-half total parks.

APPENDIX A

TABLE 12. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN NEW ORLEANS, LOUISIANA, 1923-1928
(In thousands)

| Purpose | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|---------|----------|---------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$831 | \$1,585 | \$858 | \$1,250 ^a | \$1,325 ^a | \$1,638 ^a |
| Hospitals and institutions..... | 1,029 | 2,179 | 677 | 657 | 239 | 206 |
| Military and naval buildings..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Public buildings..... | 331 | 98 | 17 | 12 | 40 | 129 |
| Waterfront developments..... | 452 | 372 | 2,285 | ..... | 94 | 110 |
| Bridges..... | ..... | 732 | 184 | 5,000 | 53 | 30 |
| Incinerators..... | ..... | ..... | ..... | ..... | ..... | 460 |
| Lighting systems..... | 331 | 26 | 135 | 45 | ..... | ..... |
| Docks and piers..... | 1,787 | 2,669 | 752 | b | b | b |
| Subways and tunnels..... | 25 | ..... | ..... | b | b | b |
| Sewage systems..... | 50 | ..... | ..... | 200 | ..... | 557 |
| Street paving and road construction..... | 3,990 | 1,036 | 680 | 582 | ..... | 75 |
| Water supply systems..... | ..... | 2,098 | ..... | 10 | ..... | 10 |
| Parks (public)..... | ..... | 10 | ..... | ..... | 39 ^c | ..... |
| Total public construction..... | \$8,826 | \$10,805 | \$5,588 | \$7,756 | \$1,790 | \$3,215 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$8,249 | \$9,449 | \$5,008 | \$7,756 | \$1,790 | \$3,215 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1923 they amounted to \$1,235,000; in 1924 to \$1,813,000; and in 1925 to \$172,000.

^b Not reported in these three years.

^c Estimated as one-half total parks.

APPENDIX A

TABLE 13. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN NEW YORK, NEW YORK, 1919-1928
(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|----------|----------|----------|----------|----------|----------|-----------|-----------------------|-----------------------|-----------------------|
| Educational buildings..... | \$6,429 | \$13,440 | \$9,464 | \$22,368 | \$39,088 | \$46,982 | \$17,215 | \$26,387 ^a | \$27,186 ^a | \$40,967 ^a |
| Hospitals and institutions... | 3,239 | 7,199 | 8,266 | 14,647 | 6,516 | 10,790 | 13,711 | 17,049 | 16,838 | 19,434 |
| Military and naval buildings | 3,382 | 1,658 | 108 | 128 | 214 | 29 | 1,351 | 632 | 566 | 1,743 |
| Public buildings..... | 304 | 7,475 | 1,329 | 2,551 | 1,078 | 7,407 | 4,774 | 1,364 | 3,597 | 5,872 |
| Waterfront developments... | 3,205 | 839 | 4,535 | 1,216 | 1,641 | 1,000 | 323 | 950 | 2,515 | 955 |
| Bridges..... | 2,227 | 24 | 24 | 434 | 23 | 75 | 5,908 | 13,637 | 27,082 | 3,646 |
| Incinerators..... | 102 | 232 | ..... | 17 | 170 | 1,247 | 25 | 150 | 1,104 | 1,261 |
| Lighting systems..... | 131 | 1,730 | 1,150 | 2,371 | 1,736 | 715 | 1,207 | 10,330 | 1,426 | 1,308 |
| Docks and piers..... | 1,811 | 21,691 | 821 | 602 | 570 | 14 | 548 | ^b | ^b | ^b |
| Subways and tunnels..... | 254 | 650 | ..... | 21,524 | 4,309 | ..... | 60,281 | 65,000 ^c | 75,000 ^c | 80,000 ^c |
| Sewage systems..... | 7,300 | 5,468 | 297 | 1,057 | 142 | 35 | 850 | 5,000 | 8,066 | 5,212 |
| Street paving and road construction..... | 8,824 | 15,863 | 6,756 | 6,593 | 1,047 | 35 | 44 | 7,189 | 24,184 | 19,711 |
| Water supply systems..... | 491 | 886 | 93 | 744 | 178 | 529 | 60 | 833 | 2,424 | 45,393 |
| Parks (public)..... | 42 | 162 | 70 | ..... | 277 | 20 | ..... | 100 ^d | 399 ^d | 374 ^d |
| Total public construction... | \$35,514 | \$79,520 | \$32,913 | \$74,252 | \$56,989 | \$68,878 | \$106,297 | \$148,621 | \$190,387 | \$225,876 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)... | \$34,412 | \$58,033 | \$34,987 | \$57,450 | \$55,593 | \$82,713 | \$53,769 | \$83,621 | \$115,387 | \$145,876 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$963,000; in 1920 to \$854,000; in 1921 to \$2,895,000; in 1922 to \$5,324,000; in 1923 to \$3,483,200; in 1924 to \$13,849,000; and in 1925 to \$8,301,000.

^b Not reported in these three years.

^c Estimated on basis of Board of Transportation figures, and Dodge figures of subway, tunnel and railroad construction.

^d Estimated as one-half total parks.

APPENDIX A

TABLE 14. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN PHILADELPHIA, PENNSYLVANIA, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|----------|---------|----------|----------|----------|----------|----------|-----------------------|-----------------------|----------------------|
| Educational buildings..... | \$470 | \$1,618 | \$1,802 | \$5,626 | \$5,200 | \$5,422 | \$9,004 | \$11,952 ^a | \$13,766 ^a | \$9,197 ^a |
| Hospitals and institutions..... | 381 | 652 | 2,135 | 3,207 | 377 | 3,360 | 6,416 | 4,354 | 6,914 | 8,906 |
| Military and naval buildings..... | 1,018 | 1,849 | 75 | 284 | 260 | 14 | 216 | 128 | 141 | 123 |
| Public buildings..... | 509 | 25 | 279 | 320 | 400 | 315 | 1,038 | 2,692 | 1,664 | 243 |
| Waterfront developments..... | 1,121 | 197 | 221 | 897 | 525 | 2,884 | 472 | 242 | 412 | 1,879 |
| Bridges..... | 373 | 294 | 2,704 | 2,434 | 1,906 | 11,906 | .... | 4,109 | 2,829 | 5,204 |
| Incinerators..... | .... | .... | 5 | .... | 164 | .... | .... | 7 | .... | 50 |
| Lighting systems..... | 10 | 172 | 207 | 211 | 55 | 330 | 5 | 100 | 2,140 | 1,520 |
| Docks and piers..... | 4,525 | 18 | 1,418 | 2,436 | 36 | 40 | 50 | b | b | b |
| Subways and tunnels..... | 57 | 50 | 233 | 181 | 1,203 | 27,700 | 11 | c | c | c |
| Sewage systems..... | 307 | .... | 2,500 | 2,005 | 747 | 2,122 | 1,305 | 2,140 | 7,196 | 2,995 |
| Street paving and road construction | 1,312 | 3,619 | 5,724 | 1,981 | 1,431 | 1,847 | 723 | 3,025 | 6,508 | 7,734 |
| Water supply systems..... | 169 | 479 | 1,951 | 142 | 60 | 282 | 214 | 1,154 | 182 | 362 |
| Parks (public)..... | 18 | .... | 159 | 138 | 35 | 56 | 123 | 90 ^d | 13 ^d | 8 ^d |
| Total public construction..... | \$10,270 | \$8,973 | \$19,413 | \$19,862 | \$12,399 | \$56,278 | \$19,584 | \$30,394 | \$41,765 | \$38,221 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$5,738 | \$9,040 | \$18,156 | \$19,475 | \$12,298 | \$30,934 | \$21,229 | \$30,394 | \$41,765 | \$38,221 |

SOURCE: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$50,000; in 1920 to \$135,000; in 1921 to \$394,000; in 1922 to \$2,230,600; in 1923 to \$1,138,200; in 1924 to \$2,396,500; and in 1925 to \$1,705,700.

^b Not reported in these three years.

^c Not reported in these three years.

^d Expenditures from loan funds for construction, improvement and equipment of subways, as reported in Comptroller's reports, amounted in 1919 to \$2,610,093; in 1920 to \$1,747,645; in 1921 to \$2,591,890; in 1922 to \$5,120,112; in 1923 to \$207,541; in 1924 to \$3,316,456; in 1925 to \$30,567,107; in 1926 to \$24,186,366; and in 1927 to \$18,966,420.

^e Estimated as one-half total parks.

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TABLE 15. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN ROCHESTER, NEW YORK, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|---------|---------|---------|---------|---------|---------|---------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$1,239 | \$1,332 | \$836 | \$3,040 | \$272 | \$644 | \$216 | \$1,736 ^a | \$2,301 ^a | \$3,051 ^a |
| Hospitals and institutions..... | 167 | 1 | 255 | 145 | 1,934 | 2,030 | 500 | 13 | 1,189 | 2,292 |
| Military and naval buildings..... | 4 | 4 | 49 | ..... | ..... | ..... | 10 | ..... | ..... | ..... |
| Public buildings..... | 72 | 10 | 8 | 54 | ..... | 250 | 450 | 16 | 31 | 7 |
| Waterfront developments..... | 662 | 861 | 15 | 1,806 | ..... | ..... | ..... | 510 | ..... | ..... |
| Bridges..... | 5 | 500 | 65 | 10 | ..... | 5 | ..... | ..... | ..... | ..... |
| Incinerators..... | ..... | ..... | ..... | ..... | ..... | 10 | ..... | ..... | ..... | ..... |
| Lighting systems..... | ..... | ..... | ..... | ..... | 231 | 105 | 2,929 | ..... | 30 | 11 |
| Docks and piers..... | ..... | ..... | ..... | 24 | ..... | ..... | ..... | b | b | b |
| Subways and tunnels..... | ..... | 16 | ..... | ..... | 2,000 | ..... | 1,938 | b | b | b |
| Sewage systems..... | 239 | ..... | 97 | 202 | 82 | 43 | 35 | 215 | 387 | 162 |
| Street paving and road construction | 498 | 65 | 93 | 580 | 128 | 127 | 468 | 944 | 1,375 | 1,087 |
| Water supply systems..... | ..... | ..... | ..... | ..... | 2 | ..... | ..... | ..... | 1,000 | ..... |
| Parks (public)..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Total public construction..... | \$2,886 | \$2,789 | \$1,418 | \$5,861 | \$4,649 | \$3,214 | \$6,546 | \$3,434 | \$6,813 | \$6,610 |
| Total private construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$2,886 | \$2,873 | \$1,468 | \$6,357 | \$2,669 | \$4,547 | \$4,858 | \$3,434 | \$6,813 | \$6,610 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to 0; in 1920 to \$100,000; in 1921 to \$50,000; in 1922 to \$320,000; in 1923 to \$20,000; in 1924 to \$1,333,000; and in 1925 to \$250,000.

^b Not reported in these three years.

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TABLE 16. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN ST. LOUIS, MISSOURI, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|---|---------|---------|---------|---------|---------|---------|---------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$778 | \$758 | \$1,187 | \$3,101 | \$2,682 | \$712 | \$1,494 | \$2,997 ^a | \$2,507 ^a | \$1,806 ^a |
| Hospitals and institutions..... | 391 | 718 | 507 | 2,702 | 584 | 1,650 | 146 | 2,605 | 752 | 4,459 |
| Military and naval buildings..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Public buildings..... | 44 | 65 | 94 | 157 | 45 | .. | 314 | 1,375 | 5,260 | 209 |
| Waterfront developments..... | .. | 8 | .. | .. | 58 | 30 | .. | 1,232 | .. | .. |
| Bridges..... | 18 | .. | 23 | .. | 768 | .. | 105 | 341 | 153 | 1,256 |
| Incinerators..... | .. | .. | .. | 70 | .. | .. | .. | .. | .. | 15 |
| Lighting systems..... | .. | .. | .. | 35 | 15 | 530 | 103 | 1,900 | 948 | 2,731 |
| Docks and piers..... | .. | .. | .. | .. | .. | .. | .. | b | b | b |
| Subways and tunnels..... | .. | .. | .. | .. | .. | .. | .. | b | b | b |
| Sewage systems..... | 36 | 407 | 225 | 9 | 313 | 1,951 | 2,323 | 629 | 3,891 | 2,741 |
| Street paving and road construction | 443 | 1,242 | 888 | 1,964 | 2,447 | 1,577 | 2,078 | 4,113 | 3,524 | 4,820 |
| Water supply systems..... | .. | 9 | 14 | 440 | .. | .. | .. | .. | 470 | .. |
| Parks (public)..... | .. | .. | .. | .. | .. | .. | .. | 75 ^c | .. | .. |
| Total public construction..... | \$1,710 | \$3,207 | \$2,938 | \$8,478 | \$6,912 | \$6,450 | \$6,563 | \$15,267 | \$17,505 | \$18,037 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers) | \$1,720 | \$3,257 | \$3,018 | \$9,168 | \$8,147 | \$9,525 | \$6,951 | \$15,267 | \$17,505 | \$18,037 |

SOURCE: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$10,000; in 1920 to \$50,000; in 1921 to \$30,000; in 1922 to \$690,000; in 1923 to \$1,235,000; in 1924 to \$3,075,000; and in 1925 to \$388,000.

^b Not reported in these three years.

^c Estimated as one-half total parks.

APPENDIX A

TABLE 17. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN ST. PAUL, MINNESOTA, 1919-1928

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 |
|--|-------|-------|---------|---------|---------|---------|---------|--------------------|--------------------|--------------------|
| Educational buildings..... | \$128 | \$155 | \$1,285 | \$855 | \$1,220 | \$879 | \$554 | \$661 ^a | \$758 ^a | \$469 ^a |
| Hospitals and institutions..... | 5 | 360 | 455 | 26 | 245 | 415 | 1,195 | 8 | 411 | 55 |
| Military and naval buildings..... | | | 50 | | | | | | 30 | |
| Public buildings..... | 40 | 19 | 9 | 2 | | 92 | 66 | | 98 | 12 |
| Waterfront developments..... | | | | | | | 46 | | | |
| Bridges..... | | 51 | | 33 | 100 | 2,000 | | | | |
| Incinerators..... | | | | | | | | | 17 | |
| Lighting systems..... | | 7 | 84 | 45 | 18 | 9 | | | | 12 |
| Docks and piers..... | | | | | | | | b | b | b |
| Subways and tunnels..... | | | 5 | | | | | b | b | b |
| Sewage systems..... | 3 | 30 | 427 | 126 | 280 | 472 | 20 | 66 | 259 | 264 |
| Street paving and road construction | 5 | 16 | 626 | 189 | 780 | 434 | 127 | 314 | 355 | 613 |
| Water supply systems..... | | | 880 | | 40 | | | 25 | 45 | |
| Parks (public)..... | | | | | | | | | | |
| Total public construction..... | \$181 | \$638 | \$3,821 | \$1,276 | \$2,683 | \$4,301 | \$2,008 | \$1,074 | \$1,973 | \$1,425 |
| Total private schools and exclusive of subways, tunnels, docks and piers) | \$221 | \$703 | \$3,908 | \$1,501 | \$3,278 | \$4,526 | \$2,287 | \$1,074 | \$1,973 | \$1,425 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these three years. In 1919 they amounted to \$40,000; in 1920 to \$65,000; in 1921 to \$92,000; in 1922 to \$225,100; in 1923 to \$595,000; in 1924 to \$225,000; and in 1925 to \$279,000.

^b Not reported in these three years.

APPENDIX B

NOTES ON TABLES 5-9, CHAPTER II, PP. 28-33

Departments Covered and Purpose of Expenditures in New York City

From Special Revenue Bond Fund:

- Armory Board — Construction and reconstruction of Armories. (This is the only case in which Special Revenue Bonds are issued in the city for capital improvements, aside from certain street paving work in railroad areas.)
- Presidents, Five Boroughs — Paving and repaving streets and avenues. (Now financed out of tax budget appropriations.)
(New Municipal Airport — 1929)

From Corporate Stock, Serial Bonds and Assessment Bond Fund; and Tax Note Fund:

- Armory Board — Armories.
- Department of Public Welfare — Hospitals, nurses' homes, clinics and nearby adjuncts.
- County Court House, Manhattan.
- Department of Plant and Structures — Construction of ferryboats; erection of ferry terminals, operating slips, etc., construction of waterfront and inland reclamation stations and of rubbish disposal plants; construction and paving, etc. of bridges.
- Department of Public Markets — Terminal Markets.
- Department of Correction — Jails, workhouses, reformatories, penitentiaries, houses of detention.
- Board of Education — Schools, high, technical and trade schools, playgrounds and athletic fields.
- City College — Commerce Building.
- Board of Higher Education — Construction of new Hunter College Center.
- Public Libraries and branch libraries — Construction of new Brooklyn Central Library.
- Department of Parks — Five Boroughs — Improvement of parks, and construction, reconstruction, equipment, etc. of park buildings:
 - Manhattan: American Museum of Natural History; Boat Houses, Central Park; Metropolitan Museum; Paving and repaving drives in Central Park; Construction of new parks and playgrounds; Extensions of existing parks; Riverside Drive Park improvements; Improvement of Harlem River Driveway, etc.
 - Brooklyn: Greenhouses, shelter houses, comfort stations, etc. Picnic houses; Equipment of playgrounds; Repaving drives in parks, etc. Construction and extension of parks and beaches; Brooklyn Institute and Museum of Arts and Sciences, etc.
 - Bronx: Botanical Gardens buildings, etc. Golf courses, construction and improvement of parks and playgrounds. Comfort stations, bath houses and other structures in parks; paving and repaving in parks, etc.
 - Queens and Richmond: Construction of walks and drives, of comfort stations and other buildings, etc. Construction and extension of parks, beaches and playgrounds, and golf courses.

- Westchester County Park Commission — Construction of Bronx River Parkway.
- Department of Health — New hospitals, additions and extensions to Bellevue and Allied Hospitals.
- Police Department — Station houses.
- Department of Street Cleaning — Dumps, buildings, garages, refuse disposal plants and floating equipment.
- Presidents, Five Boroughs — Erection of miscellaneous buildings, — court houses, municipal buildings, public bath houses, libraries, garages, asphalt plant, sewage disposal plants, comfort stations, etc. Repaving and improving streets and avenues a large part of the total.
- Board of Water Supply — Construction of new water supply system for New York City. Delivery tunnel from Hillview Reservoir to Bronx, Queens and Brooklyn; sewage disposal plants in watersheds.
- Department of Water Supply, Gas and Electricity — Construction and equipment of water supply systems; largely laying, relaying, extending and improving water mains, trunk main appurtenances, pumping stations, reconstruction of aqueducts. Gas and electricity construction work of minor importance.
- Department of Docks — Construction and improvement of docks; bay improvements; construction and equipment of piers, sheds, embankments, basins, bulkheads, etc.
- Fire Department — Fire alarm offices, engine houses, central offices; extension and modernizing of fire alarm systems, fire boats.
- Board of Transportation — Construction and equipment of subway lines, yards, sub-station power plants, etc. (Relatively small expenditures on Brooklyn-Richmond Tunnel also included in this group).
- Street Improvement Fund — Assessable Improvements — Road construction, regulating, grading and paving of streets, highways and roads, laying curbs, sidewalks, drainage systems, including trunk and lateral sewers; construction of public beaches and boardwalks; reconstruction of roads, express highways, new arterial streets.

From Special Accounts:

- Presidents, Five Boroughs — Construction of Library Building, City College. Restoring and repaving streets.

From Current Revenue:

- Restoring and Resurfacing Streets — These are properly not figures for expenditures, but budget appropriations. They are, however, a sufficiently accurate representation of the actual amounts spent for this purpose during these years. (They are amounts paid by private contractors, in some instances, and by city departments for the restoration of streets when opened to install or repair a subsurface structure).

APPENDIX C

NOTES TO CHAPTER II: FINANCIAL PROCEDURE IN NEW YORK CITY

The financial accounts of the city, which include, of course, the counties contained within the city, can be readily classified under the following headings:

1. — Tax Budget Fund Accounts
2. — General Fund Accounts
3. — Special Revenue Bond Fund Accounts
4. — Tax Note Accounts
5. — Corporate Stock and Serial Bond Fund Accounts
6. — Assessment Bond Fund Account
7. — Special Fund Accounts
8. — Trust Fund Accounts
9. — Sinking Fund Accounts

1 — TAX BUDGET FUND ACCOUNTS

The Budget of the City of New York is adopted by the Board of Estimate and Apportionment at the end of each October, and includes appropriations for the operation and maintenance of the city government, and the county governments within the city, including Debt Service charges and taxes imposed by the state upon the counties contained within the city. This budget is then submitted to the Board of Aldermen (often called in other cities the Common Council) for its consideration, and in considering it the Board of Alderman can only reduce or eliminate certain specific appropriations, subject, of course, to the veto power of the Mayor. After this action has been consummated, the appropriations become effective as of the first of the calendar year, which co-ordinates with our fiscal year, and soon thereafter these "A" vouchers make their appearance for payment.

As the tax rate is not fixed until the first Monday in March, and as the first half of the taxes are not collected until the first of May, it becomes necessary for the corporation to borrow money to meet its expenses in the interim. This it does through the medium of Revenue Bonds or Revenue Bills.

2 — GENERAL FUND ACCOUNTS

About February 15th the Comptroller submits to the Board of Aldermen his statement of the estimated amount of the General Fund for the Reduction of Taxation. This amount is deducted from the budget total and the balance is the theoretical amount to be collected in taxes. About the same time the Department of Taxes and Assessments submits a certified statement to the Board of Alderman, and also the tax rolls showing the assessed valuation of taxable real and personal property. With these three amounts available the tax rate can be easily figured and is carried out to eight decimal places on the dollar.

When the Comptroller submits his statement of the General Fund Revenues he also advises the Board of Alderman as to the amount of special assessments collectible for the current year from the city and boroughs, the borough and county lines being co-terminus.

3 — SPECIAL REVENUE BOND FUND ACCOUNTS

These appropriations are supplemental to the tax budget appropriations and they are issued under the subdivisions of Section 188 of the Charter and other special laws

which are too numerous to mention here. These bonds when issued are redeemed in the budget succeeding the year of their issue. In some instances the Comptroller, particularly in regard to mandatory charges, claims, etc., is empowered to sell these bonds without the approval of any other board or body. In other instances, however, he must receive the approval of the Board of Estimate and Apportionment, upon the recommendation of the Board of Aldermen, or the Board of Estimate and Apportionment only.

For the removal of snow, these bonds are issued under the provisions of Section 546 of the Charter which provides for their redemption. Section 229 of the Charter makes it a mandatory obligation upon the Board of Estimate and Apportionment to redeem all special revenue bonds.

Special Revenue bonds are not issued until the payments are required, and then usually in large blocks. The time, the rate and the amount is determined solely by the Comptroller, the issues being limited by the amounts of the authorizations.

4 — TAX NOTE ACCOUNTS

Near the end of Section 169 of the Greater New York Charter is that provision of law which lays down a pay-as-you-go policy upon the City of New York. That is to say, no long-term bonds can be issued, except in certain cases for any other than a revenue producing improvement. Therefore, the Board of Estimate and Apportionment from time to time authorizes non-revenue-producing public improvements under the provisions of Section 189 of the Charter. These funds are authorized only by the Board of Estimate and Apportionment. The issue of these notes follows exactly the same procedure as Special Revenue Bonds, and they are redeemed in the same way in the budget succeeding the year of their issue. As the vouchers are received for payment the Comptroller, without any further approval, sells blocks of these tax notes to the bankers at such rates of interest, in such amounts and at such times as he believes to be to the best interests of the city, limited, of course, to the total amount authorized.

Likewise, there is provided in the budget for each year a sum of money to pay the interest on these revenue bills, special revenue bonds and tax notes.

5 — CORPORATE STOCK AND SERIAL BOND FUND ACCOUNTS

These bonds, which are long-term bonds, are authorized by the Board of Estimate and Apportionment, in some instances alone, in others upon the recommendation of the Commissioners of the Sinking Fund and in others with the concurrence of the Board of Alderman. These bonds are authorized and issued under the provisions of Sections 47, 169, 189 (showing the manner in which they are issued), 176, 178 (Water) and 180 (Docks). Under the authority of special acts of the State Legislature, which are not included in the City Charter, the Board of Estimate and Apportionment may authorize the issuance of corporate stock for specific projects, such as rapid transit railroads, new water supply systems located outside the city as distinct from the extension of the water supply system within the city, and for other projects which need not be commented upon at this time.

As the vouchers chargeable to these authorizations are received, corporate stock notes are issued in blocks at such rates, in such amounts and for such periods as the Comptroller may determine to be in the best interests of the city. At a later period, when the money market is favorable, the Comptroller requests the Sinking Fund to fix the rate of interest on the long term bonds to be sold. This is usually done upon his recommendation both as to the rate of interest and the amount of the bonds to be sold. When the bonds have been sold to the public, or to the city's own sinking funds or pension funds, the corporate stock notes are taken up by the proceeds of the corporate stock. The premium on the bonds is diverted to the General Fund for the Reduc-

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tion of Taxation. For their ultimate redemption there is provided annually in the budget an amortization amount to the Sinking Fund on account of the outstanding corporate stock. The appropriation for the redemption of serial bonds is not made to the Sinking Funds, as their pro rata part must be redeemed each year. The respective amounts are definitely known and the total amount is carried in the budget in Code 3019. Corporate stock is redeemed through the sinking funds while serial bonds are redeemed, in a pro rata part, through a direct budgetary appropriation.

6 — ASSESSMENT BOND FUND ACCOUNT

For the purpose of showing the present layout of the city and the layout of the undeveloped sections in the future, there is an official City Map which can be altered only after a public hearing. When it is desired to acquire lands for a park, parkway, street or avenue, petition is made by the local board or boards of the Borough President to the Board of Estimate and Apportionment. After a public hearing the Corporation Counsel is directed to institute condemnation proceedings, and the Borough President submits a rule map showing the property to be acquired, and a damage map showing the individual parcels included in the rule map, which are forwarded to the Corporation Counsel as a basis of the condemnation proceedings. In the meantime a map showing the area of assessment is prepared by the Chief Engineer of the Board of Estimate and Apportionment and submitted to the Board of Estimate and Apportionment for its approval, showing the area to be assessed for the acquisition of the property in question. With these maps before it, the Court, after hearing both sides interested, makes tentative awards. After hearing objections final awards are made. To assist the Court in determining the award, the interest on the property from the date title vested, the total amount to be assessed, and finally the spreading of this amount as an assessment over the various parcels of property affected, there is assigned from the Corporation Counsel's office a staff of clerks, computers and engineers, which is called the Bureau of Street Openings.

After title to the land for streets, parkways and avenues has vested in the City, either through condemnation or dedication, request is made by the local board or boards of the Borough President to the Board of Estimate and Apportionment for the physical improvement thereof, whether it be a drainage system, trunk or lateral sewers, temporary or permanent pavement, regulating, grading, curbing or flagging. The Board of Estimate and Apportionment then gives preliminary authorization to the Borough President under whose control this work falls. He prepares his contract, plans and specifications for the work in question, and then advises the Board of its estimated cost. Approval is then granted and the work performed. The cost of the work, both preliminary and final, and the interest on the money outlaid, is certified to the Board of Assessors, which lays out an area of assessment and apportions the assessment on the various parcels of property benefited. As there are many of these proceedings, this Board of Assessors holds hearings on the area of assessment which differ from those for the acquisition of the property.

To finance these assessable improvements, the city occupies the dual capacity of Trustee and Banker, and as the Banker it has established two assessment funds called, respectively, the "Fund for Street and Park Openings" and the "Fund for Street Improvements." The acquisition of property is financed through the medium of the former assessment fund and the physical improvements through the latter fund. These two funds, which are revolving and are the main holding accounts, have likewise subsidiary accounts showing particular projects.

The awards for the acquisition of property, the payment of the salaries of the clerks and engineers in the Bureau of Street Openings and the engineering forces in the Borough President's office assigned to these projects, the payment to the contractors for the physical work and other incidental expenses are paid in advance out of these funds. Later these funds are recouped by the assessments paid to the Comptroller's

office, which receives, after the assessments have been confirmed by the Court in the acquisition proceedings and by the Board of Assessors in the street improvement proceedings, a duly certified assessment roll showing the amounts to be collected on the various parcels of property benefited.

In order to assist in the financing of these two accounts the Comptroller is authorized by the Board of Estimate and Apportionment, in accordance with the provisions of Sections 174, 181 and 184 of the Greater New York Charter, to issue ten-year assessment bonds whose redemption is to be effected through the medium of these two funds. However, assessments are cancelled, reduced and imposed upon city property, and to replenish these two funds for this share of the expense, the Board authorizes ten-year corporate stock which becomes a part of the city debt. These assessment bonds are also part of the city debt, as they are borrowed on the city's credit, but they have a contingent asset in the outstanding and unpaid assessments. These bonds are issued at such times and in such amounts as the Comptroller deems advisable, restricted, however, to the total amount of the authorization given by the Board of Estimate and Apportionment. Practically all of these bonds are bought by the city's own sinking funds.

Special assessments for local improvements spread over a borough or boroughs of the city are financed in the same manner as other improvements except that their collections are made with the annual tax rate. Sometimes they are collected in equal partial payments for various periods up to five years. This procedure is found in Section 247 of the Charter. These amounts are credited to the respective assessment funds.

7 — SPECIAL FUND ACCOUNTS

The law provides that all the revenues of the City of New York must go into the General Fund for the Reduction of Taxation, unless specifically provided by law to be diverted to the respective sinking funds or to be used for a specific purpose. It is to these last mentioned accounts that the special funds relate. They are revenues received for the use of armories, revenues derived from two of the large city bridges, tuition fees at certain colleges and schools, water revenues of a certain part of the water system and amounts received from plumbers and others for the opening of streets where pavements are restored by the Borough Presidents out of these funds and others which become self-evident by reference to the title of the account. No certificates of indebtedness are issued on account of these funds, payments being made out of the actual cash received.

8 — TRUST FUND ACCOUNTS

Trust Fund Accounts cover funds held by the city in trust for some individual or corporation, such as Unclaimed Salaries and Wages, Intestate Estates, etc. Payments are made out of these accounts by the Comptroller without the issuance of bonds, as payment can be made only from cash in hand.

9 — SINKING FUND ACCOUNTS

There are seven sinking funds, one of which while named a sinking fund, is not such in fact, as it merely accumulates funds for the payment of interest on the debt of the old City of New York. This is the "Sinking Fund for the Payment of Interest on the City Debt." Into these respective accounts flow the miscellaneous revenues pledged by law and, in addition, the annual amortization appropriations included in the tax budget of each year — see Codes 3014 and 3015 of the Annual Budget. This last mentioned account is provided for the ultimate redemption of corporate stock. Serial bonds, as already advised, do not require a sinking fund as they are redeemed pro rata directly through the budget.

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One of these sinking funds, that is, the "Sinking Fund for the Redemption of the City Debt," receives revenues directly from various sources and indirectly from the "Sinking Fund for the Payment of Interest on the City Debt" in a total sum far in excess of its actual requirements. As a medium to pass this surplus revenue to the General Fund for the Reduction of Taxation, the City of New York sells annually General Fund Bonds, under the provisions of Section 222 of the Charter, to the "Sinking Fund for the Redemption of the City Debt." All these bonds mature in 1930, when the Sinking Fund becomes extinct by the payment of its last public obligation, at which time these General Fund Bonds will be cancelled. In February of each year the Comptroller advises the Commissioners of the Sinking Fund as to the probable surplus in this sinking fund, and they authorize him to buy these bonds at 3%, and during the year these bonds are actually issued and held by the Sinking Fund in various amounts, depending upon the receipt of these revenues but not exceeding the total amount authorized to be bought. Interest is paid on these bonds. Later the Comptroller takes the amount of these General Fund Bonds into consideration when he certifies to the Board of Aldermen his estimate of the general fund for the year. While these bonds become a debt of the corporation, still they are an asset of the sinking funds. As the sinking funds are deducted from the total debt, it will be seen that one hand washes the other — while the gross debt increases, the assets increase in like amount.

APPENDIX D

ESTIMATED NUMBER OF OFFICIALS AND EMPLOYEES OF THE GOVERNMENT OF NEW YORK CITY DURING THE YEAR 1929^a

| <i>Department, Court or Office</i> | <i>Number of Employees</i> | <i>Department, Court or Office</i> | <i>Number of Employees</i> |
|--|----------------------------|--|----------------------------|
| Accounts, Commissioner of..... | 109 | Finance, Department of..... | 1,037 |
| Aldermen, Board of, and City Clerk..... | 169 | Fire Department..... | 7,441 |
| Ambulance Service, Board of..... | 5 | General Sessions, Court of..... | 235 |
| American Museum of Natural History..... | 265 | Grant's Tomb..... | 3 |
| Aquarium..... | 28 | Health, Department of..... | 3,687 |
| Armory Board..... | 11 | Higher Education, Board of..... | 5 |
| Art Commission..... | 11 | Hunter College ^d | 1,292 |
| Assessors, Board of..... | 41 | Hunter College Teacher's Retirement System..... | 1 |
| Banking Commission..... | | Jurors, Commissioner of | |
| Bellevue and Allied Hospitals..... | 2,797 | Bronx County..... | 11 |
| Bronx, President of the Borough of..... | 1,605 | Kings County..... | 25 |
| Bronx County Law Library..... | 1 | New York County..... | 40 |
| Brooklyn, President of the Borough of... 2,638 | | Queens County..... | 7 |
| Brooklyn Institute of Arts and Sciences | | Richmond County..... | 3 |
| Botanic Garden..... | 63 | Law Department..... | 498 |
| Central Museum..... | 117 | Licenses, Department of..... | 94 |
| Children's Museum..... | 23 | Manhattan, President of Borough of... 3,197 | |
| Brooklyn Public Library..... | 415 | Mayoralty, The..... | 28 |
| Chief Medical Examiner..... | 51 | Metropolitan Museum of Art..... | 450 |
| Child Welfare Board..... | 156 | Municipal Assembly..... | 4 |
| Children's Court..... | 152 | Municipal Civil Service Commission..... | 114 |
| City Chamberlain..... | 34 | Municipal Court..... | 408 |
| City Court..... | 170 | National Guard and Naval Militia..... | 423 |
| City Employees' Retirement System..... | 92 | New York Botanical Garden..... | 120 |
| City Magistrates' Court..... | 623 | New York Public Library..... | 758 |
| City Marshals..... | 70 | New York Public Library Building..... | 20 |
| City Record, Board of..... | 39 | New York Zoological Garden..... | 137 |
| College of the City of New York ^b | 1,296 | Parks, Department of — | |
| Correction, Department of..... | 911 | Bronx..... | 614 |
| County Clerk — | | Brooklyn..... | 799 |
| Bronx County..... | 45 | Manhattan..... | 1,033 |
| Kings County..... | 55 | Park Board..... | 8 |
| New York County..... | 111 | Queens..... | 288 |
| Queens County..... | 52 | Richmond..... | 136 |
| Richmond County..... | 42 | Parole Commission..... | 51 |
| County Court — | | Plant and Structures, Department of... 3,267 | |
| Bronx County..... | 34 | Police Department..... | 18,003 |
| Kings County..... | 127 | Public Administrator — | |
| Queens County..... | 18 | Bronx County..... | 1 |
| Richmond County..... | 16 | Kings County..... | 8 |
| County Court and Surrogate, Richmond | | New York County..... | 18 |
| District Attorney — | | Queens County..... | 4 |
| Bronx County..... | 43 | Richmond County..... | 1 |
| Kings County..... | 74 | Public Markets, Department of..... | 265 |
| New York County..... | 226 | Public Welfare, Department of ^e | 6,091 |
| Queens County..... | 45 | Purchase, Department of..... | 106 |
| Richmond County..... | 13 | Queens, President of Borough of..... | 4,923 |
| Docks, Department of..... | 548 | Queens Borough Public Library..... | 153 |
| Education, Department of ^e | 42,000 | Records, Commissioner of — | |
| Elections, Board of..... | 102 | Bronx County..... | 17 |
| Estimate and Appraisal, Clerk's Office... 5 | | Kings County..... | 42 |
| Estimate and Apportionment, Board of..... | 189 | New York County..... | 45 |
| Examining Board of City Surveyors..... | 2 | New York County, Surrogate's Court.. 31 | |
| Examining Board of Plumbers..... | 5 | | |

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ESTIMATED NUMBER OF OFFICIALS AND EMPLOYEES OF THE GOVERNMENT OF NEW YORK CITY DURING THE YEAR 1929^a—Continued

| <i>Department, Court or Office</i> | <i>Number of Employees</i> | <i>Department, Court or Office</i> | <i>Number of Employees</i> |
|--|----------------------------|--|----------------------------|
| Register — | | Supreme Court, 2nd Department, Appellate Division ¹ | 43 |
| Bronx County..... | 83 | Supreme Court, 2nd Department, Appellate Term..... | 7 |
| Kings County..... | 234 | Supreme Court Library — | |
| New York County..... | 142 | Brooklyn, Borough of..... | 4 |
| Queens County..... | 166 | Queens County..... | 2 |
| Revision of Assessments, Board of..... | 1,150 | Richmond County..... | 4 |
| Richmond, President of Borough of..... | | Surrogate's Courts — | |
| Sheriff — | | Bronx County..... | 28 |
| Bronx County..... | 101 | Kings County..... | 57 |
| Kings County..... | 63 | New York County..... | 96 |
| New York County..... | 124 | Queens County..... | 20 |
| Queens County..... | 33 | Taxes and Assessments, Department of.. | 378 |
| Richmond County..... | 40 | Teachers' Retirement System..... | 51 |
| Sinking Fund, Commissioners of..... | 100 | Tenement House Department..... | 497 |
| Special Sessions, Court of..... | 23 | Transit Commission..... | 274 |
| Standards and Appeals, Board of..... | 7 | Transportation, Board of..... | 2,819 |
| Staten Island Institute of Arts and Sciences | 9,665 | United States Volunteer Life Saving Corps..... | 3 |
| Street Cleaning, Department of..... | 439 | Water Supply, Board of..... | 350 |
| Supreme Court, First Department..... | | Water Supply, Gas and Electricity, Department of..... | 2,885 |
| Supreme Court, First Department — | | Weights and Measures, Bureau of..... | 34 |
| Maintenance of Appellate Division Court House..... | 22 | | |
| Supreme Court, Second Department — | | | |
| Kings County..... | 129 | | |
| Queens County..... | 21 | | |
| Richmond County..... | 7 | | |
| | | Total..... | 131,667 |

Source: City of New York Official Directory, 1929.

^a The figures do not include the large numbers employed for purely temporary or emergency periods, such as election inspectors, substitute teachers, temporary clerks for preparation of tax bills and for collection of taxes, monitors at civil service examinations, snow-removal employees and employees required for vacation relief or to help out during short rush periods in the various departments.

^b Represents the number of positions rather than incumbents; employees in the evening sessions are, in a large number of instances, also on the college staff in the day time, resulting in some duplication.

^c Estimated. Represents the number of positions rather than incumbents; employees in the evening schools are, in a large number of instances, also in the day schools.

^d Represents the number of positions rather than incumbents; employees in the evening and summer sessions are in a large number of instances, also on the college staff in the day time.

^e Census of paid employees, October, 1923.

^f The Appellate Division, Second Department, embraces the Counties of Kings, Queens, Richmond, Nassau, Suffolk, Westchester, Putnam, Dutchess, Orange and Rockland. Employees and expenses are paid directly by the State. A part of the total sum required is assumed by the State, and the remainder apportioned against each county by the State Comptroller, and the City is assessed the sums so apportioned to Kings, Queens and Richmond.

APPENDIX E

BRIEF CHRONOLOGY OF THE CATSKILL MOUNTAIN WATER SUPPLY

| | |
|---|--------------------------------|
| Report of Special Committee to Manufacturers' Association: sources west of the Hudson River considered for Brooklyn..... | March 15, 1897 |
| John R. Freeman's report submitted to Comptroller Bird S. Coler... | March 23, 1900 |
| Burr-Hering-Freeman Commission's report rendered to Commissioner of Water Supply Robert Grier Monroe..... | Nov. 30, 1903 |
| Constitutional amendment passed exempting water-supply bonds from debt limit..... | Nov. 8, 1904 |
| Chapter 724 of the Laws of 1905, creating the Board of Water Supply and defining its duties and powers, signed by Governor Frank W. Higgins..... | June 3, 1905 |
| Board of Water Supply Commissioners appointed by Mayor George B. McClellan..... | June 9, 1905 |
| Chief Engineer J. Waldo Smith began his duties..... | Aug. 1, 1905 |
| Report of Board of Water Supply to Board of Estimate and Apportionment, recommending development of the Catskill Mountain watersheds submitted..... | Oct. 9, 1905 |
| Plan for this development adopted by Board of Estimate and Apportionment..... | Oct. 27, 1905 |
| Plan filed with State authorities for approval..... | Nov. 3, 1905 |
| Development of watersheds of the Esopus, Rondout, and Catskill creeks approved by State authorities..... | May 14, 1906 |
| Experimental shaft, new west shaft, of the Hudson pressure tunnel, begun..... | Feb. 23, 1907 |
| Contract 2, the first for aqueduct construction, embracing 11 miles between Cold Spring and Hunters Brook, awarded..... | March 27, 1907 |
| First sod turned, with appropriate ceremonies, by Mayor McClellan, near Garrison..... | June 20, 1907 |
| Contract 3, for the main dams of the Ashokan reservoir, awarded... | Aug. 26, 1907 |
| Police Bureau established..... | Feb. 28, 1908 |
| First concrete placed for the aqueduct structure, near Peekskill.... | April 28, 1908 |
| First masonry laid for the Olive Bridge dam of the Ashokan reservoir | Sept. 19, 1908 |
| Contract 30, for the Hill View reservoir, awarded..... | Dec. 10, 1909 |
| Contract 9, for the Kensico reservoir, awarded..... | Dec. 24, 1909 |
| Contracts 63, 65, 66 and 67 for City Tunnel No. 1, awarded..... | { May 26, 1911 June 5, 1911 |
| Maximum contractors' forces, 17,243 men, at active field work..... | Aug. 23, 1911 |
| Maximum contractors' earnings, \$2,214,000 for month..... | Nov., 1911 |
| Headings of the Hudson pressure tunnel met, and "holing through" shot fired by Mayor William J. Gaynor..... | Jan. 30, 1912 |
| Bureau of Claims established..... | July 9, 1912 |
| Brooklyn water delivered to Queens Borough through 48-inch main laid by the Board of Water Supply..... | May 16, 1913 |
| Contract 89, for the Silver Lake reservoir, awarded..... | Aug. 19, 1913 |

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| | |
|--|---|
| Storage of water in the Ashokan reservoir begun | Sept. 9, 1913 |
| Last heading in City Tunnel No. 1, between shafts 8 and 9 "holed through" by Mayor John Purroy Mitchell | Jan 12, 1914 |
| Authority to develop the Schoharie watershed obtained from State authorities | Oct. 21, 1914 |
| Began filling the Kensico reservoir with Catskill water | Nov. 22, 1915 |
| Began filling the Hill View reservoir with Catskill water | Nov. 30, 1915 |
| Board of Water Supply approved amended plan for development of the Schoharie watershed | Dec. 22, 1915 |
| First delivery of Catskill water into the distribution pipes of New York City; Bronx Borough supplied with Catskill water for the first time ^a | Dec. 27, 1915 |
| Hill View reservoir filled to full flow line for the first time | Dec. 29, 1915 |
| Board of Estimate and Apportionment adopted amended plan to develop the Schoharie watershed | Jan. 31, 1916 |
| Amended Schoharie plan filed with the State authorities for approval | Feb. 29, 1916 |
| Kensico reservoir filled to full flow line for the first time | May 23, 1916 |
| State Conservation Commission approved amended Schoharie plan | June 6, 1916 |
| Manhattan Borough supplied with Catskill water for the first time | Nov. 29, 1916 |
| Water from the Ashokan reservoir passed over the spillway for the first time | Dec. 12, 1916 |
| Brooklyn and Queens Boroughs supplied with Catskill water for the first time | Jan. 22, 1917 |
| Richmond Borough supplied with Catskill water for the first time; began filling the Silver Lake reservoir with Catskill water | Jan. 27, 1917 |
| Silver Lake reservoir filled to full flow line for the first time | Feb. 20, 1917 |
| Maintenance of the Esopus watershed and operation of completed reservoir and aqueduct structures transferred to Department of Water Supply, Gas and Electricity | Aug. 1, 1917 |
| Civic Celebration of the introduction of Catskill water into New York City | { Oct. 12, 13 and 14, 1917 |
| Contract 200, for the Shandaken tunnel, the first contract for the Schoharie development, awarded | Nov. 9, 1917 |
| Contract 203, for the Gilboa dam, awarded | June 20, 1919 |
| Board of Estimate and Apportionment adopted resolution requesting the Board of Water Supply to undertake studies for an additional supply of water for New York City | June 17, 1921 |
| Contracts 209, 210 and 211, for additional siphon pipes at fourteen locations along the Catskill aqueduct, awarded | Nov. 23, 1921 |
| Board of Estimate and Apportionment approved plan of new conduits for the Boroughs of Brooklyn and Richmond | Oct. 20, 1922 |
| Contracts 196, 197, 198 and 199, for new conduits in the Boroughs of Brooklyn and Richmond, awarded | { Jan. 16, 1923 Mar. 26, 1923 Jan. 29, 1924 |
| Last heading in the Shandaken tunnel, between Shafts 2 and 3, "holed through" | Feb. 13, 1923 |
| Schoharie Creek water delivered through the Shandaken tunnel for the first time | Feb. 9, 1924 |
| Board of Estimate and Apportionment approved plan of the Williamsburg conduit, in the Boroughs of Brooklyn and Queens | May 2, 1924 |

^a Small quantities mixed with Bronx River water had been supplied to the Williamsburg district through the Bronx conduit during the last week of November, 1915.

| | |
|---|--------------------------------|
| Plan for City Tunnel No. 2 submitted to Board of Estimate and Apportionment for approval..... | Dec. 30, 1924 |
| Full capacity of the Catskill aqueduct made available for the first time by placing in operation the last pipe-line at the steel-pipe siphons..... | Jan. 7, 1925 |
| Contracts 218 and 219, for the Williamsburg conduit, awarded..... | { Feb. 3, 1925 Feb. 4, 1925 |
| Water delivered to Richmond Borough through the new conduits in Brooklyn Borough and Narrows Siphon No. 2 for the first time.. | Feb. 16, 1925 |
| Storage of water in the Schoharie reservoir begun..... | July 24, 1926 |
| Board of Estimate and Apportionment approved policy of Board of Water Supply with respect to sewage disposal in villages on the Schoharie watershed..... | Dec. 9, 1926 |
| Williamsburg conduit placed in service..... | Jan. 22, 1927 |
| Plan for City Tunnel No. 2 adopted by Board of Estimate and Apportionment..... | Mar. 10, 1927 |
| Plan for City Tunnel No. 2 filed with State authorities for approval.. | May 18, 1927 |
| Plan for City Tunnel No. 2 approved by State authorities..... | June 15, 1927 |
| Maintenance and operation of the Shandaken tunnel transferred to Department of Water Supply, Gas and Electricity..... | July 1, 1927 |
| Plan for development of the Rondout creek and tributaries of the Delaware River submitted to Board of Estimate and Apportionment for approval..... | July 27, 1927 |
| Authority to develop water supply from the Catskill creek and its tributaries and Kaaterskill creek, with aqueduct from the Catskill creek to the Ashokan reservoir, rescinded by Water Power and Control Commission..... | Sept. 26, 1927 |
| Schoharie reservoir filled to full flow line for the first time..... | Oct. 19, 1927 |
| Maintenance and operation of the Schoharie reservoir transferred to Department of Water Supply, Gas and Electricity..... | Jan. 1, 1928 |
| Plan for development of the Rondout creek and tributaries of the Delaware River adopted and approved by Board of Estimate and Apportionment..... | Jan. 12, 1928 |
| Plan for development of the Rondout creek and tributaries of the Delaware River filed with Water Power and Control Commission for approval..... | Jan. 19, 1928 |
| Contracts 224, 225, 226 and 227, for City Tunnel No. 2, awarded .. | Oct. 5, 1928 |

Source: Board of Water Supply, *Annual Report*, 1928.

APPENDIX F

NOTES TO TABLE 17, CHAPTER III, P. 58

Class *Departments Covered and Purpose of Expenditures*

1. BUILDINGS..... *From Tax Receipts:*
 Executive: Armories and a few institutions administered by the Division of Standards.
 Correction and Penal: Prisons, reformatories, penitentiaries, etc.
 Education: Normal schools and a few schools of agriculture, etc.
 Health: Division of Laboratories and Institute for Study of Malignant Diseases.
 Mental Hygiene, Curative and Charitable: Hospitals for the insane, institutions for mental defectives, etc.
 Defensive: Armories and some camps.
 Public Works: Administration, Division of Public Buildings, maintenance and repairs.
 Special Funds: "Other Funds, — Construction."
From Bond Issues:
 State Institutions Building Fund: Hospitals, prisons, offices, etc.
 State Improvement Fund: Predominantly hospitals, prisons, offices, etc.
2. HIGHWAYS AND BRIDGES..... *From Tax Receipts:*
 Public Works Department: Division of Highways; maintenance of highways — General and Special; miscellaneous repairs, highways, Indian Reservations; all fixed charges; outlays, Highway Division.
 Port of New York Authority: Bridge construction.
 Lake Champlain Bridge: Bridge construction.
 Westchester County Park Commission: Bronx Parkway.
 Special Funds: Federal Post Roads Revolving Fund.
From Bond Issues:
 Highway Improvement Fund.

- | <i>Class</i> | <i>Departments Covered and Purpose of Expenditures</i> |
|-------------------------------------|--|
| 3. CANALS AND WATERWAYS | <p><i>From Bond Issues:</i></p> <ul style="list-style-type: none"> • Maintenance and Repairs. <ul style="list-style-type: none"> Public Works Department: Canal Division. Special Funds: Black River Regulating District; Hudson River Regulating District; Canal Fund maintenance and repairs. General Fund: Canal maintenance. Canal Construction. <ul style="list-style-type: none"> Special Funds: Barge canal construction. |
| 4. PUBLIC WORKS DEPARTMENT . . . | <p><i>Miscellaneous Outlays from General Fund:</i></p> <p>This is the item "Public Works Department — outlays from General Fund" (other than Public Works Department outlays — Highway Division). It covers a variety of construction expenditures, largely on bridges and waterways, which can not be distributed between other major classes.</p> |
| 5. PARKS AND RESERVATIONS | <p><i>From Tax Receipts.</i></p> <p>Conservation and Protective: Parks, reservations, memorials, etc.</p> <p><i>From Bond Issues:</i></p> <p>Special Funds: State Park System.</p> |
| 6. HOLLAND TUNNEL | <p><i>From Tax Receipts:</i></p> <p>New York Bridge and Tunnel Commission: General Fund.</p> <p>Special Funds: New York-New Jersey Tunnel Fund.</p> |
| 7. GRADE CROSSING ELIMINATIONS. | <p><i>From Tax Receipts:</i></p> <p>General Fund: Grade Crossing eliminations.</p> <p><i>From Bond Issues:</i></p> <p>Special Funds: Grade Crossing Elimination Fund.</p> |

APPENDIX G

TABLE 1. — TOTAL FEDERAL EXPENDITURES FOR NEW CONSTRUCTION BY CONTROLLING ORGANIZATIONS, 1919-1929*

(In thousands)

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|--|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <i>Building and Ground Improvement</i> | | | | | | | | | | | |
| <i>Department of Commerce</i> | | | | | | | | | | | |
| Coast and Geodetic Survey..... | 864 | 113 | 88 | 10 | 2 | ..... | 4 | 33 | 7 | 33 | 22 |
| Bureau of Fisheries..... | | | 99 | 10 | 6 | ..... | 29 | 6 | 18 | 21 | 48 |
| Bureau of Lighthouses..... | | | | | | | | | | | |
| Engineering Construction Division..... | 760 | 776 | 574 | 406 | 503 | \$479 | 429 | 492 | 561 | 781 | 710 |
| Bureau of Mines..... | | | | | | | | | 100 | 3 | 180 |
| Bureau of Standards..... | 62 | 9 | 9 | 9 | 9 | 9 | 10 | 9 | 259 | 8 | 31 |
| <i>Department of the Interior</i> | | | | | | | | | | | |
| Frederick's Hospital..... | | | | | 60 | ..... |  | 50 | ..... | 10 | 220 |
| Howard University..... | 4 | | | 201 | 16 | ..... | 197 | 310 | ..... | ..... | ..... |
| St. Elizabeth's Hospital..... | 186 | 25 | 15 | 184 | 14 | 98 | 46 | 15 | 7 | 210 | ..... |
| National Park Service..... | 86 | 26 | 99 | 163 | 92 | 178 | 112 | 99 | 124 | 149 | 268 |
| <i>Department of Justice</i> | | | | | | | | | | | |
| Superintendent of Prisons..... | 727 | 351 | 221 | 198 | 179 | 356 | 349 | 1,223 | 1,425 | 341 | 177 |
| <i>Department of Labor</i> | | | | | | | | | | | |
| Bureau of Immigration..... | 41 | | 48 | 78 | 38 | 5 | | 5 | | | |
| Newly Department..... | 84,416 | 82,288 | 41,188 | 31,557 | 18,686 | 16,774 | 16,777 | 8,372 | 7,768 | 7,658 | 9,388 |
| <i>Department of the Treasury</i> | | | | | | | | | | | |
| Supervising Architect..... | 8,860 | 6,431 | 7,888 | 10,053 | 9,167 | 5,185 | 3,952 | 3,343 | 2,619 | 6,551 | 10,921 |
| <i>War Department</i> | | | | | | | | | | | |
| Quartermaster Corps..... | 143,367 | 4,052 | 5,118 | 1,807 | 1,134 | 660 | 529 | 1,205 | 7,803 | 5,512 | 12,259 |
| Veteran's Bureau..... | | | | | | | 2,903 | 4,268 | 6,117 | 6,412 | 4,495 |
| Armed Forces of the Central..... | 216 | 170 | ..... | ..... | ..... | ..... | ..... | 89 | 745 | 387 | 387 |
| D. C. Engineering Department..... | 120 | 458 | 173 | 2,400 | 2,025 | 1,046 | 1,024 | 1,528 | 2,360 | 1,551 | 4,639 |
| Public Buildings and Public Parks..... | 409 | 346 | 162 | 545 | 234 | 113 | 144 | 208 | 353 | 1,835 | 235 |
| Panama Canal and Railroad..... | 1,986 | 1,933 | 757 | 35 | 85 | 197 | 423 | 338 | 1,235 | 1,584 | 1,592 |
| Total..... | \$241,274 | \$96,978 | \$56,349 | \$47,462 | \$32,290 | \$25,080 | \$28,928 | \$21,623 | \$31,501 | \$31,630 | \$45,537 |

* The figures are for fiscal years ending June 30th.
 † Including all types of construction at shore stations.
 ‡ Less than \$500.

TABLE 1. — TOTAL FEDERAL EXPENDITURES FOR NEW CONSTRUCTION BY CONTROLLING ORGANIZATIONS, 1919-1929* — Continued

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|-----------|-----------|-----------|----------|----------|-----------|-----------|----------|----------|----------|-----------|
| (In thousands) | | | | | | | | | | | |
| <i>Roads</i> | | | | | | | | | | | |
| Department of Agriculture | | | | | | | | | | | |
| Bureau of Public Roads | \$3,753 | \$23,539 | \$60,943 | \$93,075 | \$79,448 | \$100,787 | \$102,053 | \$89,194 | \$90,002 | \$89,369 | \$91,505 |
| Department of the Interior | | | | | | | | | | | |
| National Park Service | 145 | 104 | 64 | 251 | 213 | 376 | 1,212 | 1,299 | 1,250 | 3,011 | 3,601 |
| War Department | | | | | | | | | | | |
| Quartermaster Corps | 16,052 | 392 | 93 | 820 | 42 | 145 | 48 | 2,724 | 1,775 | 374 | 282 |
| D. C. Engineering Department | 735 | 1,115 | 1,190 | 825 | 825 | 1,162 | 2,241 | 384 | 1,456 | 2,312 | 2,812 |
| Public Buildings and Public Parks | 95 | 68 | 227 | 148 | 236 | 382 | 496 | 640 | 517 | 2,264 | 2,375 |
| Board of Road Commissioners for Alaska | 951 | 124 | 19 | 10 | 36 | 13 | 13 | 20 | 58 | 296 | 434 |
| Panama Canal and Railroads | | | | | | | | | | 118 | 203 |
| Total | \$21,731 | \$25,342 | \$62,536 | \$94,329 | \$80,810 | \$102,880 | \$106,069 | \$94,261 | \$95,058 | \$97,744 | \$101,212 |
| <i>Drainage, Irrigation, Power, Water, Dams, etc.</i> | | | | | | | | | | | |
| Department of the Interior | | | | | | | | | | | |
| National Park Service | \$31 | \$8 | \$112 | \$74 | \$79 | \$119 | \$135 | \$110 | \$57 | \$47 | \$150 |
| Bureau of Reclamation | 5,928 | 4,040 | 6,351 | 6,467 | 8,399 | 8,826 | 7,902 | 6,653 | 5,324 | 7,025 | 7,940 |
| War Department | | | | | | | | | | | |
| Corps of Engineers | 5,438 | 12,677 | 17,413 | 7,965 | 11,226 | 17,748 | 19,264 | 13,236 | 10,472 | 9,351 | 19,396 |
| Quartermaster Corps | 43,227 | 1,613 | 438 | 369 | 192 | 113 | 246 | 87 | 130 | 712 | 210 |
| D. C. Engineering Department | 612 | 443 | 680 | 695 | 825 | 1,081 | 1,428 | 1,779 | 1,614 | 1,896 | 1,909 |
| Public Buildings and Public Parks | 10 | | | | | | | | | | |
| Panama Canal and Railroad | 1,450 | 325 | 440 | 34 | 90 | 70 | 146 | 1,027 | 1,080 | 231 | 121 |
| Total | \$56,696 | \$19,106 | \$25,434 | \$15,604 | \$20,811 | \$27,937 | \$29,121 | \$22,892 | \$18,677 | \$19,262 | \$29,726 |
| <i>Floating Equipment</i> | | | | | | | | | | | |
| Department of Commerce | | | | | | | | | | | |
| Coast and Geodetic Survey | \$43 | | | | | | | | | | \$411 |
| Bureau of Fisheries | | | | | | | | | | | 46 |
| Bureau of Lighthouses | 3,356 | \$258 | \$777 | \$438 | \$1,000 | \$128 | \$244 | \$669 | \$669 | \$3,097 | \$49,712 |
| Marine Engineering Division | 374,333 | 181,692 | 168,379 | 98,101 | 45,852 | 47,728 | \$36,554 | 34,962 | 37,677 | 34,097 | 49,712 |
| Navy Department | | | | | | | | | | | 52 |
| Panama Canal and Railroad | | | | | | | | | | | 695 |
| Total | \$377,732 | \$181,950 | \$170,373 | \$98,539 | \$46,852 | \$47,915 | \$36,762 | \$35,467 | \$38,768 | \$34,852 | \$50,221 |

* The figures are for fiscal years ending June 30th.

* Less than \$500.

APPENDIX G

TABLE 1. — TOTAL FEDERAL EXPENDITURES FOR NEW CONSTRUCTION BY CONTROLLING ORGANIZATIONS, 1919-1929. — Continued.
(In thousands)

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------------|
| <i>Waterways and Water Front Improvements</i> | | | | | | | | | | | |
| <i>Department of Labor</i> | | | | | | | | | | | |
| Bureau of Immigration..... | \$120 | \$167 | \$10 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| <i>War Department</i> | | | | | | | | | | | |
| Corps of Engineers..... | 13,796 | 22,856 | 27,325 | \$16,715 | \$21,569 | \$33,685 | \$36,401 | \$29,866 | \$25,804 | \$31,039 | \$31,257 |
| Quartermaster Corps..... | 333 | 39 | 28 | 20 | 2 | ..... | 67 | 2 | 2 | 35 | 37 |
| Panama Canal and Railroad..... | 1,597 | 342 | 1,107 | 277 | 5 | 118 | 170 | 66 | 88 | 82 | ..... |
| Total..... | \$15,846 | \$23,404 | \$28,470 | \$17,012 | \$21,576 | \$33,803 | \$36,638 | \$29,932 | \$25,894 | \$31,156 | \$31,294 |
| <i>Miscellaneous</i> | | | | | | | | | | | |
| <i>Department of Commerce</i> | | | | | | | | | | | |
| Bureau of Aeronautics..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Coast and Geodetic Survey..... | ..... | ..... | ..... | ..... | ..... | ..... | 6 | ..... | \$300 | ..... | \$1,740 ^b |
| <i>Department of Fisheries</i> | | | | | | | | | | | |
| Bureau of Fisheries..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| <i>Department of Labor</i> | | | | | | | | | | | |
| Bureau of Immigration..... | ..... | ..... | \$12 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| <i>War Department</i> | | | | | | | | | | | |
| Corps of Engineers..... | \$2,640 | \$2,836 | 3,443 | \$3,504 | \$1,662 | \$2,357 | \$2,611 | \$2,160 | 2,661 | 5,587 | 6,101 |
| Quartermaster Corps..... | 528 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| D. C. Engineering Department..... | 84 | 84 | 86 | 95 | 113 | 120 | 153 | 201 | 271 | 300 | 313 |
| Total..... | \$3,252 | \$2,920 | \$3,541 | \$3,599 | \$1,775 | \$2,477 | \$2,764 | \$2,361 | \$3,232 | \$7,687 | \$8,158 |

^a The figures are for fiscal years ending June 30th
^b Less than \$500.

APPENDIX G

T L E . — TOTAL FEDERAL EXPENDITURES FOR NEW CONSTRUCTION BY CONTROLLING ORGANIZATIONS, 1919-1929* — Continued

(In thousands)

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <i>Total—All Types of Construction</i> | | | | | | | | | | | |
| Department of Agriculture | | | | | | | | | | | |
| Bureau of Public Roads | \$3,753 | \$23,539 | \$60,943 | \$93,075 | \$79,448 | \$100,786 | \$102,053 | \$ 89,195 | \$90,002 | \$89,369 | \$91,505 |
| Department of Commerce | | | | | | | | | | | |
| Bureau of Aeronautics | 43 | 4 | 8 | 10 | 2 | 6 | 4 | 3 | 300 | 1,800 | 1,740 |
| Coast and Geodetic Survey | 64 | 113 | 99 | 10 | 6 | 6 | 29 | 6 | 58 | 81 | 413 |
| Bureau of Fisheries | 760 | 776 | 574 | 406 | 503 | 479 | 429 | 492 | 561 | 781 | 710 |
| Bureau of Lighthouses | 3,356 | 258 | 777 | 437 | 1,000 | 128 | ... | 245 | 669 | ... | 180 |
| Engineering Construction Division | 62 | 9 | 9 | 9 | 9 | 9 | 10 | 8 | 259 | 8 | 31 |
| Bureau of Mines | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Bureau of Standards | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Department of the Interior | | | | | | | | | | | |
| Freedman's Hospital | 4 | ... | ... | 201 | 60 | ... | 197 | 50 | ... | ... | 220 |
| Howard University | 186 | 25 | 15 | ... | 16 | ... | 46 | 370 | ... | ... | ... |
| St. Elizabeth's Hospital | 232 | 138 | 275 | 488 | 104 | 28 | 15 | 15 | 7 | 210 | ... |
| National Park Service | 5,928 | 4,039 | 6,351 | 6,467 | 8,399 | 673 | 1,459 | 1,508 | 1,431 | 3,207 | 4,019 |
| Bureau of Reclamation | 727 | 351 | 221 | 198 | 179 | 8,826 | 7,902 | 6,653 | 5,324 | 7,025 | 79,400 |
| Department of Justice | | | | | | | | | | | |
| Superintendent of Prisons | ... | ... | ... | ... | ... | ... | ... | ... | 1,425 | 341 | 177 |
| Department of Labor | | | | | | | | | | | |
| Bureau of Immigration | 161 | 167 | 69 | 78 | 38 | 5 | ... | 5 | ... | ... | ... |
| Navy Department | 458,749 | 263,980 | 209,563 | 129,658 | 64,539 | 64,501 | 53,331 | 43,334 | 45,445 | 41,755 | 59,095 |
| Department of the Treasury | | | | | | | | | | | |
| Supervising Architect | 8,860 | 6,431 | 7,884 | 10,053 | 9,167 | 5,185 | 3,952 | 3,343 | 2,619 | 6,551 | 10,922 |
| War Department | | | | | | | | | | | |
| Corps of Engineers | 21,874 | 38,370 | 48,181 | 28,184 | 34,456 | 53,790 | 58,275 | 45,261 | 38,937 | 45,976 | 56,754 |
| Quartermaster Corps | 203,508 | 6,095 | 5,677 | 2,195 | 1,370 | 919 | 890 | 1,292 | 7,935 | 6,634 | 12,787 |
| Veterans' Bureau | 216 | 170 | ... | ... | ... | ... | 2,903 | 4,268 | 6,117 | 6,412 | 4,495 |
| Architect of the Capitol | 1,551 | 2,100 | 2,129 | 4,010 | 3,788 | 3,389 | 4,846 | 6,231 | 745 | 387 | 387 |
| D. C. Engineering Department | 419 | 346 | 162 | 570 | 128 | 150 | 590 | 6,020 | 6,020 | 6,061 | 9,673 |
| Public Buildings and Public Parks | 95 | 68 | 227 | 148 | 236 | 382 | 496 | 640 | 517 | 296 | 2,600 |
| Board of Road Commissioners for Alaska | 5,984 | 2,725 | 3,547 | 358 | 166 | 457 | 961 | 1,712 | 2,843 | 2,709 | 1,969 |
| Panama Canal and Railroad | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total | \$716,532 | \$346,700 | \$346,704 | \$276,545 | \$204,114 | \$240,041 | \$238,282 | \$206,537 | \$213,130 | \$222,331 | \$266,149 |

* The figures are for fiscal years ending June 30th.

† Less than \$500.

APPENDIX G

TABLE 2.—TOTAL FEDERAL CONSTRUCTION EXPENDITURES FOR REPAIRS AND MAINTENANCE BY CONTROLLING ORGANIZATION, 1919-1929.^a

Contract or Special Force
(In thousands)

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <i>Department of Commerce</i> | | | | | | | | | | | |
| Bureau of Aeronautics..... | b | b | b | b | b | b | \$1 | \$1 | \$2 | \$3 | \$1 |
| Coast and Geodetic Survey..... | \$3 | \$19 | \$6 | \$8 | \$3 | b | b | b | 1 | 5 | 83 |
| Bureau of Fisheries..... | | | | | | | | | | | |
| Bureau of Lighthouses..... | | | | | | | | | | | |
| Engineering Construction Division..... | 412 | 578 | 554 | 559 | 625 | \$666 | 678 | 760 | 725 | 813 | 840 |
| Marine Engineering Division..... | | | | | | | | | | | |
| Bureau of Mines..... | | | | | | | | | | | |
| Bureau of Standards..... | 13 | 14 | 14 | 14 | 13 | 15 | 14 | 13 | 14 | 13 | 14 |
| <i>Department of the Interior</i> | | | | | | | | | | | |
| Freedman's Hospital..... | 3 | 4 | 4 | 9 | 12 | 7 | 4 | 9 | 6 | 6 | 3 |
| Howard University..... | | | | | | | | | | | |
| St. Elizabeth's Hospital..... | | | | | | | | | | | |
| National Park Service..... | | | | | | | | | | | |
| Bureau of Reclamation..... | | | | | | | | | | | |
| <i>Department of Labor</i> | | | | | | | | | | | |
| Bureau of Immigration..... | 59 | 12 | 113 | 84 | 117 | 420 | 105 | 120 | 60 | 59 | 274 |
| <i>Navy Department</i> | | | | | | | | | | | |
| <i>Department of the Treasury</i> | | | | | | | | | | | |
| Supervising Architect..... | 939 | 900 | 917 | 856 | 813 | 773 | 713 | 889 | 939 | 1,025 | 1,037 |
| <i>War Department</i> | | | | | | | | | | | |
| Corps of Engineers..... | 12,850 | 15,194 | 17,527 | 16,901 | 17,590 | 20,578 | 22,889 | 22,986 | 26,555 | 25,170 | 24,778 |
| Quartermaster Corps..... | | | | | | | | | | | 658 |
| U. S. Shipping Board..... | | | | | | 480 | 199 | 356 | 178 | 99 | 45 |
| Veterans Bureau..... | | | | | | | 4,438 | 1,060 | 1,182 | 1,094 | 769 |
| D. C. Engineering Department..... | 442 | 450 | 550 | 503 | 496 | 567 | 582 | 768 | 780 | 1,111 | 1,006 |
| Public Buildings and Public Parks..... | | | | | | | | | | | |
| Board of Road Commissioners for Alaska..... | | | | | | | | | | | |
| Total..... | \$14,721 | \$17,177 | \$19,693 | \$18,941 | \$19,677 | \$23,513 | \$29,630 | \$26,970 | \$30,451 | \$30,240 | \$29,520 |

^a This includes all types of construction. The figures are for fiscal years ending June 30th.
^b Less than \$500.

APPENDIX G

TABLE 2. — TOTAL FEDERAL CONSTRUCTION EXPENDITURES FOR REPAIRS AND MAINTENANCE BY CONTROLLING ORGANIZATION, 1919-1929 ^a—Continued

Regular Force
(In thousands)

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| <i>Department of Commerce</i> | | | | | | | | | | | |
| Bureau of Aeronautics..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Coast and Geodetic Survey..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Bureau of Fisheries..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Bureau of Lighthouses..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| <i>Engineering Construction Division.....</i> | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Marine Engineering Division..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Bureau of Mines..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Bureau of Standards..... | \$5 | \$4 | \$4 | \$4 | \$5 | \$3 | \$4 | \$5 | \$4 | \$5 | \$4 |
| <i>Department of the Interior</i> | | | | | | | | | | | |
| Freedman's Hospital..... | 3 | 3 | 4 | 4 | 4 | 4 | 6 | 5 | 7 | 7 | 10 |
| Howard University..... | .. | 51 | 68 | 62 | 73 | 64 | 59 | 68 | 78 | 97 | 110 |
| St. Elizabeth's Hospital..... | .. | 55 | 60 | 100 | 100 | 100 | 106 | 106 | 120 | 125 | 285 |
| National Park Service..... | 300 | 309 | 393 | 432 | 426 | 514 | 591 | 552 | 557 | 690 | 779 |
| Bureau of Reclamation..... | 1,833 | 2,144 | 2,978 | 2,104 | 2,115 | 2,521 | 2,553 | 2,402 | 1,815 | 1,757 | 1,779 |
| <i>Department of Labor</i> | | | | | | | | | | | |
| Bureau of Immigration..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| <i>Navy Department</i> | | | | | | | | | | | |
| <i>Department of the Treasury</i> | | | | | | | | | | | |
| Supervising Architect..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| <i>War Department</i> | | | | | | | | | | | |
| Corps of Engineers..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Quartermaster Corps..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| U. S. Shipping Board..... | .. | .. | .. | .. | .. | 10 | 237 | 52 | 128 | 45 | 105 |
| Veterans Bureau..... | .. | .. | .. | .. | .. | .. | 890 | 947 | 1,155 | 1,221 | 1,444 |
| D. C. Engineering Department..... | 1,127 | 1,191 | 1,334 | 1,396 | 1,369 | 1,575 | 1,678 | 1,902 | 2,083 | 2,478 | 2,183 |
| Public Buildings and Public Parks..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Board of Road Commissioners for Alaska..... | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Total..... | \$3,323 | \$3,762 | \$4,861 | \$4,102 | \$4,092 | \$4,791 | \$6,124 | \$6,039 | \$5,947 | \$11,493 | \$12,346 |

^a This includes all types of construction. The figures are for fiscal years ending June 30th.

APPENDIX G

TABLE 2. — TOTAL FEDERAL CONSTRUCTION EXPENDITURES FOR REPAIRS AND MAINTENANCE BY CONTROLLING ORGANIZATION, 1919-1929 a.—Continued

Special or Regular Force (Not Specified)
(In thousands)

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <i>Department of Commerce</i> | | | | | | | | | | | |
| Bureau of Aeronautics | | | | | | | | | \$200 | \$200 | \$200 |
| Coast and Geodetic Survey | | | | | | | | \$72 | 79 | 78 | 79 |
| Bureau of Fisheries | \$34 | \$73 | \$60 | \$67 | \$70 | \$69 | \$75 | | | | |
| Bureau of Lighthouse Engineering Construction Division | | | | | | | | | | | |
| Marine Engineering Division | 506 | 756 | 628 | 510 | 603 | 576 | 567 | 466 | 626 | 642 | 512 |
| Bureau of Mines | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Bureau of Standards | | | | | | | | | | | |
| <i>Department of the Interior</i> | | | | | | | | | | | |
| Freedman's Hospital | | | | | | | | | | | |
| Howard University | | | | | | | | | | | |
| St. Elizabeth's Hospital | | | | | | | | | | | |
| National Park Service | | | | | | | | | | | |
| Bureau of Reclamation | | | | | | | | | | | |
| <i>Department of Labor</i> | | | | | | | | | | | |
| Bureau of Immigration | 51,303 | 48,482 | 47,042 | 23,673 | 17,261 | 16,870 | 19,746 | 20,976 | 22,279 | 20,394 | 24,073 |
| <i>Navy Department</i> | | | | | | | | | | | |
| <i>Department of the Treasury</i> | | | | | | | | | | | |
| Supervising Architect | | | | | | | | | | | |
| <i>War Department</i> | | | | | | | | | | | |
| Corps of Engineers | | | | | | | | | | | |
| Quartermaster Corps | | | | | | | | | | | |
| U. S. Shipping Board | | | | | | 22,616 | 12,677 | 11,190 | 14,774 | 15,900 | 16,972 |
| Veterans Bureau | | | | | | | | | | | |
| D. C. Engineering Department | | | | | | | | | | | |
| Public Buildings and Public Parks | 1,547 | 1,821 | 1,474 | 1,280 | 1,397 | 1,607 | 1,728 | 1,827 | 1,829 | 1,815 | 2,011 |
| Board of Road Commissioners for Alaska | 152 | 64 | 123 | 279 | 320 | 348 | 279 | 374 | 373 | 564 | 563 |
| Total | \$53,553 | \$51,207 | \$49,338 | \$25,820 | \$19,662 | \$42,097 | \$35,083 | \$34,916 | \$40,171 | \$39,804 | \$44,421 |

a This includes all types of construction The figures are for fiscal years ending June 30th.

APPENDIX G

TABLE 2. — TOTAL FEDERAL CONSTRUCTION EXPENDITURES FOR REPAIRS AND MAINTENANCE BY CONTROLLING ORGANIZATION,
1919-1929^a—Continued

Total (Special, Regular and Not Specified Forces)
(In thousands)

| Department, Bureau or Office | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <i>Department of Commerce</i> | | | | | | | | | | | |
| Bureau of Aeronautics..... | ... | ... | ... | ... | ... | ... | ... | ... | \$200 | \$200 | \$200 |
| Coast and Geodetic Survey..... | 334 | \$74 | \$60 | \$68 | \$71 | \$69 | \$76 | \$73 | 81 | 81 | 80 |
| Bureau of Fisheries..... | 3 | 20 | 6 | 8 | 3 | ... | ... | 6 | 1 | 5 | 83 |
| Bureau of Lighthouses | | | | | | | | | | | |
| Engineering Construction Division..... | 412 | 578 | 554 | 559 | 625 | 666 | 679 | 760 | 724 | 813 | 840 |
| Marine Engineering Division..... | 506 | 756 | 628 | 510 | 603 | 576 | 567 | 466 | 626 | 642 | 512 |
| Bureau of Mines..... | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Bureau of Standards..... | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
| <i>Department of the Interior</i> | | | | | | | | | | | |
| Freedman's Hospital..... | 6 | 7 | 8 | 13 | 15 | 11 | 10 | 14 | 14 | 13 | 12 |
| Howard University..... | .. | 56 | 76 | 69 | 81 | 71 | 66 | 76 | 86 | 107 | 122 |
| St. Elizabeth's Hospital..... | 55 | 60 | 80 | 100 | 100 | 100 | 106 | 106 | 120 | 125 | 285 |
| National Park Service..... | 300 | 309 | 393 | 433 | 426 | 514 | 591 | 553 | 557 | 690 | 779 |
| Bureau of Reclamation..... | 1,833 | 2,143 | 2,978 | 2,104 | 2,115 | 2,522 | 2,552 | 2,402 | 1,815 | 1,757 | 1,779 |
| <i>Department of Labor</i> | | | | | | | | | | | |
| Bureau of Immigration..... | 59 | 12 | 113 | 84 | 117 | 420 | 105 | 120 | 60 | 59 | 274 |
| Navy Department..... | 51,303 | 48,482 | 47,042 | 23,673 | 17,261 | 16,870 | 19,746 | 20,976 | 22,279 | 20,394 | 24,073 |
| <i>Department of the Treasury</i> | | | | | | | | | | | |
| Supervising Architect..... | 939 | 900 | 917 | 856 | 813 | 772 | 713 | 889 | 939 | 1,025 | 1,037 |
| <i>War Department</i> | | | | | | | | | | | |
| Corps of Engineers..... | 12,850 | 15,194 | 17,527 | 16,901 | 17,590 | 20,578 | 22,889 | 22,986 | 26,555 | 25,170 | 24,778 |
| Quartermaster Corps..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5,900 | 6,306 |
| U. S. Shipping Board..... | ... | ... | ... | ... | ... | 23,106 | 13,113 | 11,598 | 15,080 | 16,044 | 17,121 |
| Veterans Bureau..... | ... | ... | ... | ... | ... | ... | 5,328 | 2,007 | 2,337 | 2,315 | 2,214 |
| D. C. Engineering Department..... | 1,569 | 1,641 | 1,884 | 1,899 | 1,865 | 2,142 | 2,261 | 2,670 | 2,863 | 3,589 | 3,189 |
| Public Buildings and Public Parks..... | 1,547 | 1,821 | 1,474 | 1,279 | 1,397 | 1,607 | 1,728 | 1,826 | 1,829 | 1,815 | 2,011 |
| Board of Road Commissioners for Alaska..... | 152 | 64 | 123 | 279 | 320 | 348 | 279 | 374 | 373 | 564 | 563 |
| Total..... | \$71,597 | \$72,146 | \$73,892 | \$48,864 | \$43,431 | \$70,401 | \$70,838 | \$67,925 | \$76,568 | \$81,337 | \$86,287 |

^a This includes all types of construction. The figures are for fiscal years ending June 30th.

^b Less than \$500.

APPENDIX G

TABLE 3. — TOTAL FEDERAL EXPENDITURES FOR NEW CONSTRUCTION BY GEOGRAPHICAL DIVISIONS, 1919-1929*

(In thousands)

| Division | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| New England..... | \$24,229 | \$24,044 | \$15,902 | \$11,109 | \$11,176 | \$11,019 | \$18,604 | \$13,320 | \$14,044 | \$10,884 | \$8,484 |
| Middle Atlantic..... | 79,725 | 52,621 | 38,867 | 28,291 | 17,318 | 22,944 | 28,477 | 21,352 | 27,038 | 27,784 | 27,959 |
| East North Central..... | 44,399 | 11,572 | 17,649 | 22,404 | 20,671 | 21,839 | 23,522 | 19,703 | 20,797 | 26,115 | 30,394 |
| West North Central..... | 6,801 | 4,382 | 13,003 | 18,940 | 14,742 | 22,371 | 20,941 | 22,154 | 25,409 | 21,666 | 22,806 |
| South Atlantic..... | 137,356 | 59,430 | 48,465 | 41,476 | 26,206 | 26,273 | 29,451 | 35,123 | 39,355 | 30,662 | 39,047 |
| East South Central..... | 27,436 | 11,961 | 17,288 | 13,583 | 16,183 | 27,573 | 26,093 | 18,569 | 15,542 | 16,163 | 16,437 |
| West South Central..... | 30,098 | 12,682 | 15,748 | 18,568 | 18,577 | 19,493 | 19,633 | 16,668 | 13,386 | 13,190 | 25,287 |
| Mountain..... | 6,336 | 7,496 | 16,137 | 17,424 | 18,366 | 21,878 | 21,204 | 17,095 | 17,685 | 21,568 | 22,547 |
| Pacific..... | 29,567 | 27,569 | 34,131 | 23,254 | 24,361 | 25,427 | 25,221 | 24,467 | 17,728 | 23,394 | 31,471 |
| Total United States..... | \$385,947 | \$211,757 | \$217,160 | \$195,049 | \$167,600 | \$198,817 | \$213,146 | \$188,451 | \$190,984 | \$191,426 | \$224,382 |
| Alaska..... | 148 | 380 | 769 | 530 | 1,010 | 1,137 | 1,030 | 1,245 | 1,148 | 869 | 1,113 |
| Hawaii..... | 1,544 | 2,059 | 1,627 | 1,726 | 3,964 | 7,534 | 2,112 | 2,289 | 2,206 | 3,050 | 5,077 |
| Porto Rico..... | 24 | 297 | 352 | 264 | 201 | 201 | 175 | 143 | 143 | 248 | 21 |
| Panama..... | 6,268 | 2,744 | 3,786 | 587 | 187 | 515 | 1,416 | 1,761 | 2,941 | 3,034 | 2,274 |
| Undistributed..... | 322,601 | 132,463 | 123,010 | 78,382 | 31,089 | 31,837 | 20,403 | 12,648 | 15,590 | 23,704 | 33,282 |
| Grand Total..... | \$716,532 | \$349,700 | \$346,704 | \$276,545 | \$204,114 | \$240,041 | \$238,282 | \$206,537 | \$213,130 | \$222,331 | \$266,149 |

* This includes all types of construction. The years are fiscal years ending June 30th.

APPENDIX H

TABLE I.—PUBLIC CONSTRUCTION CONTRACTS AWARDED IN CHICAGO DISTRICT (THE CENTRAL WEST), 1919-1929*

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------|-----------------------|------------------------|------------------------|
| Educational buildings..... | \$41,718 | \$48,958 | \$79,239 | \$82,265 | \$61,512 | \$75,471 | \$90,529 | \$116,208 ^b | \$95,626 ^b | \$106,944 ^b | \$100,991 ^b |
| Hospitals and institutions..... | 11,709 | 16,659 | 21,836 | 27,290 | 15,822 | 22,619 | 28,850 | 29,825 | 40,911 | 35,042 | 38,676 |
| Military and naval buildings..... | 771 | 1,070 | 3,493 | 1,021 | 484 | 1,027 | 1,151 | 816 | 1,750 | 2,702 | 2,026 |
| Public buildings..... | 3,982 | 7,321 | 10,883 | 17,061 | 6,339 | 3,900 | 8,870 | 14,579 | 24,838 | 13,258 | 18,061 |
| Waterfront developments..... | 17,705 | 7,855 | 6,316 | 7,911 | 13,609 | 17,699 | 7,025 | 11,957 | 11,838 | 22,802 | 21,191 |
| Bridges..... | 16,458 | 15,924 | 13,722 | 15,162 | 22,134 | 20,096 | 20,914 | 28,036 | 42,552 | 44,847 | 35,408 |
| Incinerators..... | 43 | 20 | 38 | 130 | 509 | 377 | 270 | 326 | 1,464 | 412 | 272 |
| Lighting systems..... | 1,773 | 44,020 | 2,311 | 4,160 | 4,358 | 3,498 | 11,033 | 8,489 | 8,786 | 9,735 | 9,452 |
| Docks and piers..... | 444 | 1,288 | 3,137 | 851 | 290 | 1,113 | 4,057 | c | c | c | c |
| Subways and tunnels..... | 1,050 | 3,620 | 130 | 3,094 | 235 | 1,325 | 580 | c | c | c | c |
| Sewage systems..... | 22,362 | 17,762 | 24,805 | 22,451 | 24,441 | 16,634 | 53,448 | 35,436 | 52,746 | 56,425 | 45,911 |
| Street paving and road construction..... | 82,647 | 95,494 | 97,672 | 141,372 | 125,444 | 105,840 | 133,589 | 147,572 | 170,373 | 207,532 | 188,921 |
| Water supply systems..... | 5,817 | 16,638 | 14,890 | 12,963 | 15,494 | 20,931 | 17,174 | 32,966 | 32,901 | 15,725 | 22,249 |
| Parks (public)..... | 325 | 455 | 155 | 604 | 78 | 119 | 101 | 1,286 ^d | 2,951 ^d | 944 ^d | 376 ^d |
| Total public construction..... | \$206,804 | \$277,082 | \$278,577 | \$336,341 | \$290,749 | \$290,649 | \$377,591 | \$427,496 | \$487,336 | \$515,368 | \$483,534 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers.....) | \$209,235 | \$277,988 | \$281,389 | \$348,715 | \$305,343 | \$305,270 | \$416,869 | \$427,496 | \$487,336 | \$515,368 | \$483,534 |

SOURCE: F. W. Dodge Corporation, Statistical Division.

^a Covers Illinois, Indiana, Iowa, Wisconsin, South Michigan, Missouri, Kansas, Oklahoma, Nebraska.

^b Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these four years. In 1919 they amounted to \$3,923,921; in 1920 to \$5,812,700; in 1921 to \$6,079,000; in 1922 to \$16,319,600; in 1923 to \$15,119,300; in 1924 to \$17,058,400; and in 1925 to \$43,914,800.

^c Not reported in these four years.

^d Estimated as one-half total parks.

APPENDIX H

TABLE 2. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN NEW YORK DISTRICT (NEW YORK STATE AND NORTHERN NEW JERSEY), 1919-1929

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|--|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------------------|-----------------------|------------------------|-----------------------|
| Educational buildings..... | \$21,842 | \$33,617 | \$28,498 | \$53,377 | \$75,703 | \$87,445 | \$53,301 | \$68,998 ^a | \$77,329 ^a | \$101,967 ^a | \$98,233 ^a |
| Hospitals and institutions..... | 13,369 | 12,794 | 13,908 | 26,444 | 20,756 | 38,683 | 23,425 | 47,688 | 53,291 | 54,191 | 44,711 |
| Military and naval buildings..... | 7,939 | 3,170 | 330 | 308 | 408 | 74 | 2,406 | 750 | 1,878 | 4,735 | 2,982 |
| Public buildings..... | 1,756 | 10,576 | 3,393 | 5,967 | 3,953 | 13,412 | 11,025 | 12,179 | 12,575 | 19,086 | 30,968 |
| Waterfront developments..... | 9,336 | 3,472 | 6,324 | 4,551 | 4,944 | 3,952 | 3,794 | 4,911 | 9,248 | 5,265 | 9,920 |
| Bridges..... | 3,164 | 10,452 | 2,827 | 3,913 | 5,152 | 3,250 | 13,116 | 27,438 | 43,040 | 15,158 | 14,833 |
| Incinerators..... | 339 | 312 | 76 | 37 | 250 | 1,588 | 611 | 916 | 2,952 | 2,065 | 667 |
| Lighting systems..... | 257 | 12,722 | 1,457 | 3,708 | 5,758 | 6,137 | 12,600 | 12,507 | 4,672 | 2,319 | 4,276 |
| Docks and piers..... | 5,776 | 35,373 | 1,089 | 2,872 | 732 | 399 | 8,905 | 6 | 6 | 6 | 6 |
| Subways and tunnels..... | 266 | 666 | 68 | 23,654 | 6,590 | 2,581 | 64,405 | 70,000 ^c | 80,000 ^c | 85,000 ^c | 95,000 ^c |
| Sewage systems..... | 17,400 | 7,785 | 2,711 | 5,757 | 6,412 | 5,943 | 4,581 | 16,336 | 24,220 | 17,416 | 21,383 |
| Street paving and road construction..... | 42,049 | 40,841 | 29,597 | 30,069 | 25,714 | 25,524 | 17,475 | 52,045 | 107,333 | 106,471 | 117,933 |
| Water supply systems..... | 1,744 | 10,370 | 1,146 | 8,013 | 2,390 | 11,434 | 969 | 4,438 | 8,591 | 57,034 | 8,587 |
| Parks (public)..... | 83 | 221 | 70 | 70 | 683 | 197 | 200 | 202 ^d | 650 ^d | 476 ^d | 1,150 ^d |
| Total public construction..... | \$125,320 | \$182,371 | \$91,494 | \$173,740 | \$159,445 | \$200,569 | \$216,813 | \$318,408 | \$425,779 | \$471,683 | \$450,643 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$120,994 | \$148,765 | \$98,016 | \$157,462 | \$159,845 | \$220,078 | \$161,006 | \$248,408 | \$345,779 | \$386,683 | \$355,643 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these four years. In 1919 they amounted to \$1,715,800; in 1920 to \$2,433,000; in 1921 to \$7,679,000; in 1922 to \$10,248,500; in 1923 to \$7,721,700; in 1924 to \$22,489,100; and in 1925 to \$17,501,900.

^b Not reported in these four years.

^c Not reported in these four years.

^d Estimated as one-half total parks.

APPENDIX H

TABLE 3. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN PITTSBURGH DISTRICT, 1919-1929*

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|
| Educational buildings..... | \$16,110 | \$29,808 | \$44,027 | \$41,361 | \$41,650 | \$29,535 | \$54,436 | \$43,963 ^b | \$51,672 ^b | \$45,098 ^b | \$42,899 ^b |
| Hospitals and institutions..... | 3,339 | 9,029 | 10,927 | 8,507 | 9,142 | 16,083 | 15,587 | 13,119 | 17,869 | 24,640 | 23,412 |
| Military and naval buildings..... | 265 | 954 | 384 | 468 | 410 | 321 | 532 | 4,562 | 913 | 893 | 208 |
| Public buildings..... | 2,494 | 4,823 | 2,976 | 3,880 | 3,103 | 3,682 | 3,769 | 6,229 | 5,368 | 4,071 | 9,170 |
| Waterfront developments..... | 6,504 | 4,948 | 2,755 | 5,992 | 7,609 | 4,844 | 5,255 | 6,161 | 5,649 | 5,737 | 4,884 |
| Bridges..... | 7,825 | 9,915 | 15,027 | 7,849 | 9,720 | 8,969 | 22,014 | 20,872 | 31,397 | 27,552 | 21,088 |
| Incinerators..... | 86 | 16 | 165 | 205 | 1,349 | 234 | 195 | 490 | 577 | 299 | 431 |
| Lighting systems..... | 516 | 1,817 | 602 | 1,737 | 4,738 | 1,264 | 5,486 | 862 | 3,332 | 4,648 | 9,131 |
| Docks and piers..... | 1,870 | 80 | 22 | 693 | 1,022 | 820 | 1,843 | c | c | c | c |
| Subways and tunnels..... | 4,738 | 500 | 65 | 158 | 443 | 250 | 1,766 | d | e | e | e |
| Sewage systems..... | 9,172 | 8,306 | 10,741 | 12,297 | 12,275 | 15,259 | 17,430 | 20,213 | 28,397 | 16,021 | 16,838 |
| Street paving and road construction | 69,494 | 52,613 | 77,688 | 76,218 | 91,242 | 91,351 | 96,419 | 102,122 | 105,457 | 108,450 | 106,422 |
| Water supply systems..... | 6,676 | 9,813 | 7,644 | 5,675 | 11,027 | 9,822 | 13,614 | 9,435 | 5,411 | 6,932 | 6,811 |
| Parks (public)..... | 3 | 10 | 31 | 2 | 214 | 43 | 28 | 146 ^d | 940 ^d | 202 ^d | 163 ^d |
| Total public construction..... | \$129,092 | \$132,632 | \$173,054 | \$165,042 | \$193,944 | \$182,177 | \$238,374 | \$227,974 | \$256,982 | \$244,543 | \$241,457 |
| Total public construction (in- clusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$123,656 | \$133,446 | \$176,688 | \$169,632 | \$196,811 | \$189,170 | \$241,881 | \$227,974 | \$256,982 | \$244,543 | \$241,457 |

Source: F. W. Dodge Corporation, Statistical Division.

^b Covers Western Pennsylvania, West Virginia, Ohio, Kentucky.

^c Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these four years, in 1919 they amounted to \$1,173,300; in 1920 to \$1,394,000; in 1921 to \$3,720,000; in 1922 to \$5,441,000; in 1923 to \$4,332,000; in 1924 to \$8,063,000; and in 1925 to \$7,115,800.

^d Not reported in these four years.

^e Estimated as one-half total parks.

APPENDIX H

TABLE 4. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN ATLANTA DISTRICT
(SOUTHEASTERN STATES), 1923-1929^a

(In thousands)

| Purpose | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|-----------|-----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|
| Educational buildings..... | \$39,064 | \$44,206 | \$34,742 | \$45,634 ^b | \$45,024 ^b | \$39,323 ^b | \$26,789 ^b |
| Hospitals and institutions..... | 16,090 | 14,154 | 10,868 | 9,809 | 9,807 | 8,248 | 8,248 |
| Military and naval buildings..... | 561 | 89 | 953 | 1,151 | 942 | 1,628 | 1,309 |
| Public buildings..... | 4,116 | 7,214 | 11,436 | 10,515 | 9,279 | 6,629 | 8,269 |
| Waterfront developments..... | 5,441 | 15,158 | 11,601 | 11,400 | 11,642 | 8,032 | 34,127 |
| Bridges..... | 13,785 | 12,502 | 16,991 | 23,021 | 20,954 | 37,270 | 18,508 |
| Incinerators..... | 272 | 379 | 504 | 419 | 749 | 702 | 286 |
| Lighting systems..... | 1,197 | 2,990 | 6,741 | 3,165 | 2,964 | 1,378 | 7,601 |
| Docks and piers..... | 4,617 | 3,120 | 2,748 | ^c | ^c | ^c | ^c |
| Subways and tunnels..... | 85 | 80 | 83 | ^c | ^c | ^c | ^c |
| Sewage systems..... | 3,331 | 4,657 | 9,816 | 9,217 | 11,580 | 5,953 | 5,870 |
| Street paving and road construction..... | 58,104 | 73,263 | 114,284 | 121,654 | 105,588 | 91,690 | 68,534 |
| Water supply systems..... | 6,467 | 9,864 | 8,910 | 10,987 | 7,553 | 6,455 | 3,743 |
| Parks (public)..... | 130 | 249 | 656 | 154 ^d | 107 ^d | 323 ^d | 167 ^d |
| Total public construction..... | \$153,260 | \$187,925 | \$230,333 | \$247,426 | \$226,189 | \$207,692 | \$183,451 |
| Total public construction (inclusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$157,501 | \$190,810 | \$236,473 | \$247,426 | \$226,189 | \$207,692 | \$183,451 |

SOURCE: F. W. Dodge Corporation, Statistical Division.

^a Covers North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, Arkansas, Louisiana.

^b Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these four years. In 1923 they amounted to \$8,943,400; in 1924 to \$6,085,300; and in 1925 to \$8,971,500.

^c Not reported in these four years.

^d Estimated as one-half total parks.

APPENDIX H

TABLE 5. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN PHILADELPHIA DISTRICT
(MIDDLE ATLANTIC STATES), 1919-1929*

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|----------|----------|-----------|-----------|----------|-----------|-----------|-----------------------|-----------------------|-----------------------|-----------------------|
| Educational buildings..... | \$11,333 | \$12,127 | \$29,675 | \$37,946 | \$20,292 | \$20,203 | \$30,685 | \$47,143 ^b | \$46,329 ^b | \$52,033 ^b | \$52,263 ^b |
| Hospitals and institutions..... | 4,453 | 5,795 | 11,548 | 12,643 | 3,894 | 10,414 | 15,522 | 15,200 | 20,028 | 22,656 | 17,413 |
| Military and naval buildings..... | 5,769 | 5,853 | 882 | 1,034 | 735 | 205 | 822 | 673 | 2,419 | 2,817 | 1,398 |
| Public buildings..... | 1,919 | 1,193 | 3,388 | 3,157 | 1,239 | 2,945 | 4,040 | 5,830 | 5,816 | 5,861 | 31,213 |
| Waterfront developments..... | 6,587 | 2,597 | 1,536 | 3,667 | 2,772 | 4,874 | 1,695 | 3,152 | 3,100 | 4,959 | 4,811 |
| Bridges..... | 8,343 | 7,532 | 10,178 | 7,593 | 5,276 | 19,759 | 12,872 | 14,872 | 27,786 | 29,524 | 23,696 |
| Incinerators..... | 24 | 129 | 88 | 223 | 194 | 212 | 117 | 650 | 553 | 110 | 639 |
| Lighting systems..... | 167 | 1,260 | 1,789 | 967 | 773 | 1,759 | 826 | 918 | 3,739 | 3,085 | 1,253 |
| Docks and piers..... | 6,954 | 601 | 3,117 | 9,902 | 5,766 | 2,270 | 222 | ^e | ^c | ^c | ^c |
| Subways and tunnels..... | 112 | 100 | 160 | 215 | 1,221 | 28,016 | 11 | ^d | ^d | ^d | ^d |
| Sewage systems..... | 2,741 | 1,830 | 7,593 | 5,517 | 3,997 | 8,499 | 9,042 | 8,287 | 15,106 | 10,577 | 8,936 |
| Street paving and road construction..... | 35,545 | 28,154 | 55,531 | 55,709 | 21,183 | 28,227 | 33,132 | 40,340 | 47,365 | 55,469 | 47,141 |
| Water supply systems..... | 1,310 | 3,203 | 5,907 | 5,279 | 3,444 | 3,249 | 4,900 | 4,539 | 4,623 | 2,976 | 3,676 |
| Parks (public)..... | 258 | 90 | 159 | 453 | 96 | 116 | 237 | 123 ^e | 58 ^e | 61 ^e | 91 ^e |
| Total public construction..... | \$85,515 | \$70,464 | \$131,551 | \$144,305 | \$71,332 | \$130,743 | \$114,123 | \$141,727 | \$176,932 | \$190,118 | \$192,535 |
| Total public construction (in- clusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$80,130 | \$71,638 | \$131,226 | \$141,134 | \$67,929 | \$108,080 | \$123,061 | \$141,727 | \$176,932 | \$190,118 | \$192,535 |

SOURCE: F. W. Dodge Corporation, Statistical Division.

^a Covers Eastern Pennsylvania, Southern New Jersey, Maryland, Delaware, District of Columbia, Virginia.

^b Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these four years. In 1919 they amounted to \$1,680,680; in 1920 to \$1,874,200; in 1921 to \$2,951,600; in 1922 to \$6,945,800; in 1923 to \$3,584,200; in 1924 to \$7,573,000; and in 1925 to \$9,170,700.

^c Not reported in these four years.

^d Not reported in these four years. (Expenditures from loan funds for construction, improvement and equipment of Philadelphia subways, as reported in Comptroller's reports, amounted in 1919 to \$2,610,093; in 1920 to \$1,747,645; in 1921 to \$2,591,890; in 1922 to \$5,120,112; in 1923 to \$2,07,541; in 1924 to \$3,316,456; in 1925 to \$30,567,107; in 1926 to \$24,185,365; and in 1927 to \$18,966,420.)

^e Estimated as one-half total parks.

APPENDIX H

TABLE 6. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN BOSTON DISTRICT
(NEW ENGLAND STATES), 1919-1929^a

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|----------|----------|----------|----------|----------|----------|----------|-----------------------|-----------------------|-----------------------|-----------------------|
| Educational buildings..... | \$11,019 | \$17,683 | \$21,304 | \$20,541 | \$22,010 | \$28,670 | \$35,233 | \$35,706 ^b | \$45,549 ^b | \$43,710 ^b | \$42,308 ^b |
| Hospitals and institutions..... | 3,663 | 4,324 | 8,105 | 10,133 | 7,225 | 8,267 | 11,068 | 10,319 | 14,331 | 13,847 | 14,374 |
| Military and naval buildings..... | 1,562 | 1,801 | 715 | 374 | 873 | 439 | 208 | 630 | 820 | 1,451 | 1,061 |
| Public buildings..... | 2,233 | 1,866 | 2,598 | 1,807 | 2,622 | 3,573 | 5,758 | 4,094 | 5,936 | 7,684 | 6,745 |
| Waterfront developments..... | 1,849 | 1,543 | 614 | 2,342 | 1,644 | 640 | 927 | 1,030 | 1,478 | 1,778 | 1,437 |
| Bridges..... | 2,097 | 8,614 | 2,563 | 4,789 | 5,927 | 5,387 | 3,608 | 7,647 | 7,986 | 9,269 | 5,159 |
| Incinerators..... | 35 | ..... | 7 | 17 | 30 | 111 | 220 | 100 | 425 | 202 | 59 |
| Lighting systems..... | 446 | 1,960 | 406 | 2,137 | 2,645 | 2,246 | 1,825 | 3,125 | 3,354 | 2,186 | 2,666 |
| Docks and piers..... | 631 | 248 | 135 | 518 | 2,020 | 526 | 283 | ..... | ..... | ..... | ..... |
| Subways and tunnels..... | 482 | 16 | 1,725 | 111 | ..... | 200 | 15 | ..... | ..... | ..... | ..... |
| Sewage systems..... | 3,958 | 2,366 | 962 | 4,076 | 3,144 | 3,694 | 3,846 | 3,637 | 3,924 | 3,860 | 4,214 |
| Street paving and road construction..... | 15,394 | 13,422 | 9,192 | 12,998 | 15,922 | 10,394 | 13,954 | 19,150 | 20,856 | 28,876 | 27,216 |
| Water supply systems..... | 2,276 | 5,815 | 2,537 | 1,643 | 1,245 | 2,153 | 3,406 | 6,739 | 5,596 | 12,498 | 2,913 |
| Parks (public)..... | 35 | 807 | 18 | 871 | 253 | 130 | 124 | 584 | 129 ^d | 151 ^d | 332 ^d |
| Total public construction..... | \$45,680 | \$60,465 | \$50,871 | \$62,317 | \$65,560 | \$66,430 | \$83,475 | \$92,255 | \$110,377 | \$125,512 | \$108,484 |
| Total public construction (in- clusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$45,999 | \$62,370 | \$51,000 | \$71,444 | \$68,958 | \$75,874 | \$99,662 | \$92,255 | \$110,377 | \$125,512 | \$108,484 |

SOURCE: F. W. Dodge Corporation, Statistical Division.

^a Covers Maine, New Hampshire, Rhode Island, Massachusetts, Vermont, Connecticut.

^b Private schools, which were subtracted from the figures for educational buildings in earlier years, are included in these four years. In 1919 they amounted to \$1,432,467; in 1920 to \$2,169,500; in 1921 to \$1,989,200; in 1922 to \$9,756,100; in 1923 to \$8,417,900; in 1924 to \$10,170,000; and in 1925 to \$16,485,000.

^c Not reported in these four years.

^d Estimated as one-half total parks.

APPENDIX H

TABLE 7. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN TEXAS DISTRICT, 1925-1929
(In thousands)

| Purpose | 1925 | 1926 | 1927 | 1928 | 1929 |
|--|----------|-----------------|------------------|-----------------|------------------|
| Educational buildings ^a | \$13,182 | \$14,019 | \$10,992 | \$14,407 | \$12,381 |
| Hospitals and institutions..... | 2,548 | 2,458 | 3,687 | 2,694 | 3,174 |
| Military and naval buildings..... | 175 | 105 | 620 | 648 | 300 |
| Public buildings..... | 2,241 | 4,091 | 3,895 | 3,758 | 3,615 |
| Waterfront developments..... | 4,157 | 1,110 | 949 | 3,259 | 12,329 |
| Bridges..... | 1,026 | 919 | 1,517 | 1,270 | 2,784 |
| Incinerators..... | 56 | 148 | 14 | 77 | 267 |
| Lighting systems..... | 138 | 156 | 6,155 | 486 | 956 |
| Docks and piers..... | 1,558 | b | b | b | b |
| Subways and tunnels..... | ..... | b | b | b | b |
| Sewage systems..... | 1,053 | 6,336 | 3,510 | 4,025 | 2,129 |
| Street paving and road construction..... | 3,263 | 10,551 | 22,728 | 25,632 | 31,058 |
| Water supply systems..... | 4,022 | 2,836 | 6,198 | 4,232 | 2,255 |
| Parks (public)..... | ..... | 23 ^c | 547 ^c | 11 ^c | 560 ^c |
| Total public construction..... | \$33,419 | \$42,752 | \$60,812 | \$60,499 | \$71,808 |

Source: F. W. Dodge Corporation, Statistical Division.

^a Includes private schools.

^b Not reported in these four years.

^c Estimated as one-half total parks.

APPENDIX H

TABLE 8. — PUBLIC CONSTRUCTION CONTRACTS AWARDED IN MINNEAPOLIS DISTRICT
(THE NORTHWEST), 1919-1929^a

(In thousands)

| Purpose | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 |
|---|----------|----------|----------|----------|----------|----------|----------|----------------------|----------------------|----------------------|----------------------|
| Educational buildings..... | \$6,880 | \$14,848 | \$14,696 | \$12,342 | \$13,032 | \$9,113 | \$6,779 | \$9,107 ^b | \$7,275 ^b | \$6,159 ^b | \$6,039 ^b |
| Hospitals and institutions..... | 2,659 | 1,941 | 3,771 | 1,612 | 5,123 | 1,975 | 3,181 | 4,683 | 2,540 | 3,347 | 2,195 |
| Military and naval buildings..... | 125 | 149 | 569 | 389 | 58 | 46 | 93 | 31 | 133 | 303 | 58 |
| Public buildings..... | 1,038 | 868 | 3,374 | 559 | 1,912 | 588 | 1,041 | 986 | 2,287 | 733 | 3,396 |
| Waterfront developments..... | 982 | 3,327 | 2,739 | 1,293 | 4,398 | 387 | 358 | 348 | 144 | 5,746 | 1,740 |
| Bridges..... | 1,664 | 4,204 | 1,529 | 1,127 | 3,094 | 4,892 | 2,535 | 1,413 | 1,341 | 3,016 | 3,475 |
| Incinerators..... | 12 | ... | 97 | ... | ... | 58 | 16 | ... | ... | ... | 8 |
| Lighting systems..... | 246 | 115 | 213 | 156 | 455 | 210 | 474 | 468 | 347 | 646 | 347 |
| Docks and piers..... | 115 | 5 | 250 | 4,000 | 1,171 | 2,114 | 100 | ... | ... | ... | ... |
| Subways and tunnels..... | 35 | 3 | 4 | ... | ... | ... | ... | ... | ... | ... | ... |
| Sewage systems..... | 2,080 | 3,896 | 1,969 | 804 | 1,089 | 1,053 | 1,069 | 1,732 | 1,094 | 1,241 | 2,676 |
| Street paving and road construction. | 7,390 | 8,751 | 14,359 | 7,850 | 14,620 | 11,876 | 8,275 | 13,870 | 13,883 | 12,073 | 21,246 |
| Water supply systems..... | 794 | 1,235 | 1,891 | 526 | 2,194 | 622 | 825 | 1,539 | 485 | 618 | 870 |
| Parks (public)..... | 6 | 1 | ... | ... | ... | ... | 10 | ... | 2 ^d | ... | 7 ^d |
| Total public construction..... | \$24,026 | \$39,343 | \$45,461 | \$30,658 | \$47,151 | \$32,934 | \$24,756 | \$34,177 | \$29,531 | \$33,882 | \$42,057 |
| Total public construction (in- clusive of private schools and exclusive of subways, tunnels, docks and piers)..... | \$24,562 | \$40,909 | \$46,059 | \$27,394 | \$46,885 | \$32,166 | \$25,995 | \$34,177 | \$29,531 | \$33,882 | \$42,057 |

Sources: F. W. Dodge Corporation, Statistical Division.

^a Covers Minnesota, North Dakota, South Dakota, North Michigan.

^b Private schools which were subtracted from the figures for educational buildings in earlier years, are included in these four years. In 1919 they amounted to \$686,435; in 1920 to \$1,574,000; in 1921 to \$852,000; in 1922 to \$735,900; in 1923 to \$905,000; in 1924 to \$1,346,500; and in 1925 to \$1,339,000.

^c Not reported in these four years.

^d Estimated as one-half total parks.

TABLE 1. — MUNICIPAL BOND YIELDS, 1900-1929

STANDARD STATISTICS INDEX YIELDS OF 15 MUNICIPAL BONDS AND BASIS AT WHICH NEW YORK CITY LONG TERM BONDS WERE ISSUED

| Year | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|
| | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent |
| 1900 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.12 | 3.13 | 3.12 | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | 3.13 | 3.13 | 3.13 | 3.13 | 3.13 | 3.13 | 3.13 | 3.13 | 3.12 | 3.12 | 3.08 | |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | 3.09 | ... | 3.03 | ... | ... | 3.03 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3.07 | ... | 3.02 | 3.02 | 2.98 | |
| | 3.08 | | | | | | | | | | | | | | | | | | | | | | 3.01 | |
| 1901 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.09 | 3.08 | 3.09 | 3.10 | 3.10 | 3.10 | 3.10 | 3.10 | 3.10 | 3.10 | 3.10 | 3.15 | 3.17 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.17 | 3.17 | 3.17 | 3.17 | |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | 2.94 | ... | 3.08 | ... | ... | 3.29 | ... | ... | 3.22 | ... | ... | ... | ... | ... | ... | ... | ... | 3.37 | 3.18 | ... | ... | ... | 3.22 | |
| 1902 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.17 | 3.18 | 3.19 | 3.15 | 3.15 | 3.15 | 3.15 | 3.15 | 3.15 | 3.19 | 3.19 | 3.21 | 3.20 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.25 | 3.25 | 3.25 | |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | ... | ... | ... | 3.24 | 3.27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3.20 | 3.25 | ... | |
| | | | | | | | | | 3.23 | 3.30 | | | | | | | | | | | | | 3.25 | |
| | | | | | | | | | 3.24 | 3.29 | | | | | | | | | | | | | | |
| 1903 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.26 | 3.26 | 3.29 | 3.30 | 3.31 | 3.31 | 3.30 | 3.30 | 3.31 | 3.36 | 3.40 | 3.47 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.48 | |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | 3.31 | ... | 3.32 | 3.36 | 3.32 | 3.32 | 3.36 | 3.32 | ... | ... | 3.42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3.46 | ... | ... | |
| 1904 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.48 | 3.49 | 3.52 | 3.51 | 3.49 | 3.49 | 3.51 | 3.49 | 3.48 | 3.48 | 3.42 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.38 | |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | 3.49 | ... | 3.50 | ... | ... | 3.48 | ... | 3.46 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3.40 | ... | ... | |
| 1905 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.38 | 3.38 | 3.37 | 3.37 | 3.38 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.41 | 3.43 | 3.43 | 3.44 | |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | 3.49 | ... | ... | 3.47 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3.50 | ... | ... | |

APPENDIX I

TABLE I. — MUNICIPAL BOND YIELDS, 1900-1929—Continued

| Year | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|
| | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent |
| 1906 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.44 | 3.45 | 3.48 | 3.47 | 3.51 | 3.54 | 3.57 | 3.64 | 3.70 | 3.69 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 | 3.67 |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | 3.65 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1907 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.68 | 3.70 | 3.73 | 3.72 | 3.76 | 3.80 | 3.80 | 3.86 | 3.93 | 4.00 | 4.11 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 | 4.17 |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | 3.98 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1908 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.17 | 4.00 | 3.97 | 3.98 | 3.95 | 3.90 | 3.93 | 3.91 | 3.89 | 3.86 | 3.82 | 3.79 | 3.79 | 3.79 | 3.82 | 3.83 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | 4.29 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1909 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.75 | 3.73 | 3.72 | 3.74 | 3.75 | 3.77 | 3.78 | 3.80 | 3.79 | 3.82 | 3.83 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 | 3.85 |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | 3.93 | 3.96 | 3.98 | 3.96 | 3.96 | 3.96 | 3.96 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 | 3.98 |
| 1910 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.87 | 3.88 | 3.91 | 3.93 | 3.97 | 3.99 | 4.04 | 4.03 | 4.02 | 4.00 | 3.97 | 4.01 | 4.01 | 4.01 | 4.02 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.01 |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | 4.16 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1911 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.99 | 3.99 | 3.98 | 3.97 | 3.96 | 3.96 | 3.97 | 3.97 | 3.97 | 3.97 | 3.97 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | 4.21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1912 | | | | | | | | | | | | | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.00 | 3.99 | 4.00 | 4.01 | 4.01 | 4.02 | 4.01 | 4.01 | 4.03 | 4.04 | 4.08 | 4.09 | 4.09 | 4.09 | 4.08 | 4.04 | 4.08 | 4.08 | 4.08 | 4.08 | 4.08 | 4.08 | 4.08 | 4.09 |
| Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | 4.21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

APPENDIX I

TABLE 1.—MUNICIPAL BOND YIELDS, 1900-1929—Continued

| Year | January | February | March | April | May | June | July | August | September | October | November | December |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|
| | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent |
| 1913 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.09 | 4.08 | 4.12 | 4.16 | 4.20 | 4.25 | 4.35 | 4.32 | 4.36 | 4.30 | 4.21 | 4.23 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | 4.49 | ... | ... | ... | ... | ... | ... | ... |
| 1914 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.17 | 4.17 | 4.11 | 4.10 | 4.10 | 4.09 | 4.10 | ° | ° | ° | ° | ° |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | 4.18 | ... | ... | ... | ... | ... | ... | ... | ... |
| 1915 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.15 | 4.14 | 4.13 | 4.14 | 4.22 | 4.21 | 4.23 | 4.23 | 4.19 | 4.18 | 4.08 | 4.02 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | 4.44 | ... | ... | ... | ... | ... | ... |
| | | | | | | 4.30 | | | | | | |
| 1916 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.99 | 3.96 | 3.95 | 3.96 | 3.97 | 3.97 | 3.97 | 3.96 | 3.95 | 3.90 | 3.85 | 3.84 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | 4.13 | ... | ... | ... | ... | ... | ... | ... | ... |
| | | | | 4.03 | | | | | | | | |
| 1917 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 3.82 | 3.90 | 3.94 | 4.08 | 4.15 | 4.26 | 4.29 | 4.32 | 4.38 | 4.35 | 4.44 | 4.51 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | ... | 4.46 | ... | ... | ... | ... | ... |
| | | | | | | | 4.39 | | | | | |
| 1918 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.52 | 4.48 | 4.54 | 4.59 | 4.58 | 4.52 | 4.47 | 4.51 | 4.53 | 4.53 | 4.37 | 4.36 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1919 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.43 | 4.46 | 4.53 | 4.52 | 4.47 | 4.44 | 4.44 | 4.45 | 4.44 | 4.45 | 4.45 | 4.47 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

° Stock Exchange closed.

APPENDIX I

TABLE 1. — MUNICIPAL BOND YIELDS, 1900-1929—Continued

| Year | January | February | March | April | May | June | July | August | September | October | November | December |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|
| | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent |
| 1920 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.53 | 4.62 | 4.62 | 4.83 | 5.03 | 5.23 | 5.25 | 5.28 | 5.22 | 5.06 | 5.02 | 5.10 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1921 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 5.05 | 5.12 | 5.11 | 5.12 | 5.12 | 5.27 | 5.34 | 5.25 | 5.14 | 5.07 | 4.93 | 4.52 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4.33 |
| 1922 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.43 | 4.43 | 4.37 | 4.20 | 4.17 | 4.18 | 4.21 | 4.18 | 4.11 | 4.14 | 4.20 | 4.15 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | 4.12 | ... | ... | ... | ... | ... | ... | ... | ... |
| 1923 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.13 | 4.12 | 4.15 | 4.18 | 4.20 | 4.21 | 4.31 | 4.33 | 4.36 | 4.34 | 4.32 | 4.35 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1924 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.31 | 4.31 | 4.31 | 4.30 | 4.23 | 4.19 | 4.16 | 4.15 | 4.08 | 4.10 | 4.09 | 4.12 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | ... | 4.19 | ... | ... | ... | ... | ... | ... |
| 1925 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.10 | 4.08 | 4.07 | 4.05 | 4.02 | 4.01 | 4.06 | 4.03 | 4.12 | 4.15 | 4.22 | 4.13 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | ... | ... | ... | 4.04 | ... | ... | ... | ... | ... | ... | ... |
| 1926 | | | | | | | | | | | | |
| Standard Statistics Index Yields of | | | | | | | | | | | | |
| 15 Municipal Bonds..... | 4.10 | 4.09 | 4.09 | 4.07 | 4.06 | 4.06 | 4.06 | 4.04 | 4.08 | 4.09 | 4.09 | 4.07 |
| Basis at which New York City Long | | | | | | | | | | | | |
| Term Bonds were issued..... | ... | 4.18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

APPENDIX I

TABLE I. — MUNICIPAL BOND YIELDS, 1900-1929—Continued

| Year | January | | February | | March | | April | | May | | June | | July | | August | | September | | October | | November | | December | | | |
|------|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|-----|-----|
| | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | Per Cent | | |
| 1927 | Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 Municipal Bonds..... | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4.04 | 4.04 | 4.00 | 4.00 | 4.00 | 3.96 | 3.94 | 4.00 | 4.00 | 4.02 | 4.00 | 3.96 | 3.93 | 3.93 | 3.93 | 3.90 | | | | | | | | | | |
| | Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Term Bonds were issued..... | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4.12 | ... | ... | ... | ... | 3.94 | 3.94 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| 1928 | Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 Municipal Bonds..... | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3.89 | 3.89 | 3.89 | 3.89 | 3.89 | 3.93 | 4.02 | 4.09 | 4.13 | 4.16 | 4.16 | 4.17 | 4.17 | 4.15 | 4.15 | 4.15 | | | | | | | | | | |
| | Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Term Bonds were issued..... | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3.86 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1929 | Standard Statistics Index Yields of | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 Municipal Bonds..... | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4.16 | 4.25 | 4.32 | 4.29 | 4.29 | 4.23 | 4.23 | 4.23 | 4.28 | 4.28 | 4.31 | 4.32 | 4.29 | 4.25 | 4.25 | ... | | | | | | | | | | |
| | Basis at which New York City Long | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Term Bonds were issued..... | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ... | ... | ... | ... | ... | ... | 4.81 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

Source: Standard Statistics Bulletin, base book 1929-1930, page 59. and card files of the Bond Buyer.

APPENDIX I

TABLE 2. — AMOUNT OF LONG AND SHORT TERM BONDS ISSUED BY CITIES IN THE UNITED STATES, 1905-1929*
(In millions)

| Bonds | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------|---------|----------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|
| 1905 | | | | | | | | | | | | |
| Long Term Bonds..... | ... | ... | ... | ... | ... | ... | \$16.5 | \$17.2 | \$18.5 | \$19.1 | \$16.5 | \$16.6 |
| Short Term Bonds..... | ... | ... | ... | ... | ... | ... | 16.8 | 16.1 | 16.0 | 15.5 | 16.3 | 13.9 |
| 1906 | | | | | | | | | | | | |
| Long Term Bonds..... | \$18.0 | \$22.1 | \$22.7 | \$23.3 | \$23.5 | \$22.9 | 25.1 | 24.4 | 25.4 | 24.0 | 25.1 | 25.0 |
| Short Term Bonds..... | 14.8 | 15.9 | 15.0 | 14.9 | 14.5 | 11.1 | 10.4 | 13.7 | 13.6 | 13.2 | 14.4 | 14.2 |
| 1907 | | | | | | | | | | | | |
| Long Term Bonds..... | 23.9 | 20.6 | 20.6 | 23.1 | 23.2 | 25.0 | 25.1 | 25.2 | 26.9 | 27.5 | 28.1 | 28.8 |
| Short Term Bonds..... | 13.1 | 12.8 | 14.4 | 12.9 | 12.6 | 14.0 | 14.0 | 10.6 | 13.2 | 13.2 | 11.3 | 14.4 |
| 1908 | | | | | | | | | | | | |
| Long Term Bonds..... | 29.7 | 30.2 | 29.2 | 28.2 | 28.5 | 27.7 | 29.6 | 31.5 | 28.1 | 29.3 | 29.4 | 29.9 |
| Short Term Bonds..... | 15.0 | 14.6 | 13.1 | 13.6 | 14.9 | 15.1 | 14.6 | 14.4 | 13.5 | 13.2 | 13.4 | 11.8 |
| 1909 | | | | | | | | | | | | |
| Long Term Bonds..... | 32.4 | 32.0 | 33.1 | 31.2 | 31.3 | 30.7 | 29.0 | 27.3 | 26.9 | 29.8 | 29.1 | 27.7 |
| Short Term Bonds..... | 11.4 | 11.5 | 11.5 | 11.2 | 10.2 | 9.9 | 9.9 | 9.7 | 8.0 | 8.2 | 8.9 | 9.2 |
| 1910 | | | | | | | | | | | | |
| Long Term Bonds..... | 24.0 | 26.1 | 26.0 | 25.7 | 26.4 | 26.2 | 27.0 | 33.1 | 33.4 | 30.2 | 30.7 | 32.4 |
| Short Term Bonds..... | 9.5 | 13.6 | 13.9 | 14.1 | 14.9 | 16.6 | 16.4 | 18.3 | 19.8 | 20.4 | 21.3 | 19.6 |
| 1911 | | | | | | | | | | | | |
| Long Term Bonds..... | 37.5 | 37.5 | 37.8 | 38.6 | 38.5 | 38.7 | 37.7 | 32.8 | 33.6 | 32.8 | 34.0 | 39.4 |
| Short Term Bonds..... | 20.0 | 17.2 | 17.8 | 17.5 | 16.2 | 13.6 | 14.0 | 14.2 | 15.0 | 14.2 | 14.2 | 16.3 |
| 1912 | | | | | | | | | | | | |
| Long Term Bonds..... | 36.6 | 35.9 | 35.3 | 34.5 | 34.4 | 33.5 | 33.3 | 34.6 | 33.8 | 33.6 | 31.6 | 31.4 |
| Short Term Bonds..... | 15.4 | 14.0 | 13.0 | 13.5 | 15.5 | 16.4 | 16.0 | 15.2 | 16.1 | 18.6 | 18.7 | 20.8 |
| 1913 | | | | | | | | | | | | |
| Long Term Bonds..... | 29.8 | 29.0 | 29.2 | 30.1 | 31.0 | 32.6 | 34.0 | 37.5 | 37.9 | 40.2 | 46.4 | 40.9 |
| Short Term Bonds..... | 23.8 | 25.6 | 27.9 | 27.9 | 26.0 | 29.0 | 40.3 | 42.7 | 39.0 | 42.1 | 40.3 | 37.2 |
| 1914 | | | | | | | | | | | | |
| Long Term Bonds..... | 42.0 | 42.4 | 41.6 | 40.4 | 38.5 | 37.0 | 37.2 | 32.8 | 33.8 | 35.9 | 30.3 | 31.7 |
| Short Term Bonds..... | 34.7 | 33.0 | 31.6 | 40.0 | 40.0 | 35.8 | 23.8 | 20.4 | 21.9 | 18.1 | 18.5 | 18.7 |
| 1915 | | | | | | | | | | | | |
| Long Term Bonds..... | 37.0 | 36.8 | 37.8 | 39.2 | 40.6 | 42.6 | 41.0 | 42.7 | 42.4 | 39.5 | 44.5 | 43.2 |
| Short Term Bonds..... | 19.1 | 19.2 | 18.3 | 11.6 | 11.8 | 12.6 | 12.9 | 15.1 | 16.6 | 18.9 | 20.6 | 20.3 |
| 1916 | | | | | | | | | | | | |
| Long Term Bonds..... | \$38.4 | \$39.5 | \$40.2 | \$39.4 | \$41.9 | \$41.2 | \$41.4 | \$40.4 | \$39.5 | \$39.7 | \$37.6 | \$37.0 |
| Short Term Bonds..... | 19.9 | 20.6 | 22.8 | 22.1 | 23.8 | 23.5 | 24.4 | 26.0 | 25.2 | 24.7 | 25.9 | 27.9 |

TABLE 2. — AMOUNT OF LONG AND SHORT TERM BONDS ISSUED BY CITIES IN THE UNITED STATES—Continued
(In millions)

| Bonds | January | February | March | April | May | June | July | August | September | October | November | December |
|-----------------------|---------|----------|-------|-------|-------|-------|-------|--------|-----------|---------|----------|----------|
| 1917 | | | | | | | | | | | | |
| Long Term Bonds..... | 35.6 | 39.6 | 39.4 | 40.6 | 37.8 | 36.7 | 37.1 | 35.3 | 35.2 | 34.4 | 30.4 | 41.1 |
| Short Term Bonds..... | 30.2 | 29.5 | 31.2 | 31.2 | 31.6 | 31.8 | 32.7 | 30.9 | 32.5 | 32.6 | 31.5 | 32.0 |
| 1918 | | | | | | | | | | | | |
| Long Term Bonds..... | 30.3 | 24.7 | 25.0 | 23.8 | 22.7 | 22.9 | 21.9 | 22.4 | 23.2 | 24.8 | 29.0 | 30.6 |
| Short Term Bonds..... | 32.3 | 36.4 | 34.2 | 35.9 | 35.1 | 39.1 | 39.4 | 40.4 | 41.6 | 42.6 | 44.6 | 41.4 |
| 1919 | | | | | | | | | | | | |
| Long Term Bonds..... | 36.5 | 41.0 | 43.4 | 47.8 | 56.7 | 58.9 | 64.2 | 69.3 | 70.8 | 71.9 | 71.8 | 48.2 |
| Short Term Bonds..... | 41.6 | 38.1 | 38.2 | 38.6 | 38.5 | 36.1 | 37.5 | 42.5 | 40.6 | 46.3 | 47.2 | 48.2 |
| 1920 | | | | | | | | | | | | |
| Long Term Bonds..... | 67.5 | 67.9 | 68.3 | 68.1 | 63.6 | 65.1 | 64.5 | 63.4 | 66.3 | 65.8 | 68.4 | 71.0 |
| Short Term Bonds..... | 47.6 | 46.8 | 47.8 | 48.6 | 53.5 | 55.1 | 55.3 | 51.9 | 51.8 | 50.3 | 55.3 | 59.5 |
| 1921 | | | | | | | | | | | | |
| Long Term Bonds..... | 77.7 | 80.2 | 83.5 | 86.0 | 91.2 | 95.9 | 115.3 | 115.5 | 116.9 | 122.0 | 126.5 | 130.5 |
| Short Term Bonds..... | 60.8 | 63.6 | 64.2 | 65.7 | 64.2 | 64.1 | 63.5 | 59.5 | 60.1 | 56.8 | 46.8 | 42.2 |
| 1922 | | | | | | | | | | | | |
| Long Term Bonds..... | 134.1 | 135.0 | 133.3 | 134.8 | 130.6 | 128.3 | 106.6 | 108.4 | 107.5 | 103.4 | 98.5 | 96.7 |
| Short Term Bonds..... | 40.0 | 38.5 | 36.7 | 34.2 | 34.2 | 32.9 | 33.0 | 35.9 | 34.9 | 32.4 | 37.0 | 37.9 |
| 1923 | | | | | | | | | | | | |
| Long Term Bonds..... | 96.8 | 92.4 | 90.6 | 85.5 | 87.7 | 90.9 | 94.6 | 93.4 | 95.5 | 97.7 | 101.4 | 102.8 |
| Short Term Bonds..... | 40.0 | 42.8 | 44.6 | 44.3 | 39.7 | 44.3 | 42.9 | 43.0 | 45.1 | 49.0 | 50.6 | 55.2 |
| 1924 | | | | | | | | | | | | |
| Long Term Bonds..... | 112.4 | 116.2 | 121.1 | 124.0 | 123.5 | 122.5 | 120.6 | 123.7 | 121.5 | 122.2 | 120.0 | 125.6 |
| Short Term Bonds..... | 56.1 | 57.5 | 60.1 | 67.5 | 77.6 | 80.8 | 81.5 | 81.8 | 81.5 | 82.2 | 83.7 | 80.2 |
| 1925 | | | | | | | | | | | | |
| Long Term Bonds..... | 113.8 | 114.7 | 111.9 | 114.3 | 113.4 | 109.3 | 117.1 | 113.2 | 118.9 | 119.5 | 120.4 | 116.4 |
| Short Term Bonds..... | 84.0 | 80.3 | 78.1 | 73.7 | 70.9 | 63.4 | 72.2 | 74.4 | 71.6 | 74.2 | 72.2 | 71.9 |
| 1926 | | | | | | | | | | | | |
| Long Term Bonds..... | 116.5 | 113.8 | 112.2 | 113.4 | 115.1 | 115.1 | 113.5 | 121.8 | 115.7 | 113.5 | 114.1 | 119.9 |
| Short Term Bonds..... | 68.6 | 70.1 | 69.5 | 67.7 | 63.4 | 61.1 | 55.1 | 51.0 | 59.1 | 54.6 | 54.1 | 52.7 |
| 1927 | | | | | | | | | | | | |
| Long Term Bonds..... | 121.4 | 121.1 | 122.7 | 121.2 | 123.8 | 125.6 | 123.2 | 117.2 | 122.2 | 125.6 | 126.0 | 120.3 |
| Short Term Bonds..... | 50.0 | 47.3 | 49.2 | 50.7 | 53.0 | 54.2 | 52.1 | 55.6 | 54.9 | 55.6 | 56.5 | 55.2 |
| 1928 | | | | | | | | | | | | |
| Long Term Bonds..... | 118.0 | 117.2 | 116.3 | 112.4 | 110.2 | 116.0 | 115.8 | 113.3 | 109.7 | 107.7 | 104.1 | 108.2 |
| Short Term Bonds..... | 57.7 | 60.9 | 61.1 | 61.2 | 62.2 | 61.2 | 59.7 | 63.2 | 59.7 | 58.0 | 60.3 | 64.1 |
| 1929 | | | | | | | | | | | | |
| Long Term Bonds..... | 110.3 | 111.2 | 111.3 | 113.9 | 115.9 | 111.4 | ... | ... | ... | ... | ... | ... |
| Short Term Bonds..... | 64.4 | 64.5 | 66.4 | 68.3 | 69.7 | 70.2 | ... | ... | ... | ... | ... | ... |

* The figures given are a twelve month moving average centered at the first of the seventh month.

APPENDIX I

TABLE 3A. — TAX RECEIPTS AND NEW ISSUES OF LONG TERM BONDS IN SELECTED CITIES, 1900-1929*

(In thousands)

| YEAR | BALTIMORE, MD. ^b | | BIRMINGHAM, ALA. ^c | | BOSTON, MASS. ^f | | CHICAGO, ILL. ^h | | DETROIT, MICH. ^j | | LOS ANGELES, CAL. ⁱ | | MINNEAPOLIS, MINN. ^k | |
|------|-----------------------------|---------------------|-------------------------------|--------------------------|----------------------------|--------------------------|----------------------------|---------------------|-----------------------------|--------------------------|--------------------------------|--------------------------|---------------------------------|--------------------------|
| | Tax Receipts | Bond Issues | Tax Receipts ^d | Bond Issues ^e | Tax Receipts | Bond Issues ^g | Tax Receipts | Bond Issues | Tax Receipts ⁱ | Bond Issues ^k | Tax Receipts ^m | Bond Issues ⁿ | Tax Receipts ^o | Bond Issues ^p |
| 1900 | \$5,581 | \$5,982 | \$152 | \$549 | \$24,672 | \$3,164 | \$12,243 | \$500 | \$3,602 | ..... | ..... | ..... | ..... |  |
| 1901 | 5,599 | 210 | ..... | 43 | 32,757 | 5,371 | 16,562 | 1,065 | 3,376 | ..... | ..... | \$2,000 | \$186 | |
| 1902 | 6,277 | 1,190 | 186 | 88 | 25,236 | 9,368 | 14,299 | ..... | 3,808 | ..... | ..... | ..... | \$2,386 | |
| 1903 | 6,196 | 115 | 193 | 82 | 25,874 | 6,617 | 14,789 | 250 | 4,128 | ..... | ..... | 2,180 | 470 | |
| 1904 | 6,711 | 340 | 203 | 239 | 26,614 | 7,190 | 15,960 | 8,250 | 4,248 | ..... | ..... | 538 | 850 | |
| 1905 | 6,895 | 3,365 | 272 | 16 | 28,405 | 7,447 | 16,846 | 2,000 | 4,248 | ..... | ..... | 1,798 | 695 | |
| 1906 | 6,890 | 1,152 | 252 | 86 | 29,649 | 5,922 | 17,434 | 1,400 | 4,122 | ..... | ..... | 1,500 | 253 | |
| 1907 | 7,241 | 2,292 | 267 | 33 | 28,618 | 5,250 | 22,667 | ..... | 4,090 | ..... | ..... | 288 | 220 | |
| 1908 | 7,546 | 5,233 | ..... | 173 | 30,822 | 4,499 | 22,667 | 4,850 | 4,333 | ..... | ..... | ..... | 1,165 | |
| 1909 | 8,272 | 4,595 | 342 | 391 | 32,427 | 3,650 | 24,078 | 1,700 | 4,986 | ..... | ..... | 1,034 | 1,847 | |
| 1910 | 8,529 | 5,063 | 441 | 500 | 33,219 | 4,616 | 25,130 | 4,375 | 5,208 | ..... | ..... | 6,936 | 1,751 | |
| 1911 | 8,723 | 2,948 | 646 | 1,540 | 34,136 | 3,526 | 27,312 | 3,375 | 6,320 | ..... | ..... | 5,236 | 565 | |
| 1912 | 8,555 | 6,700 | 361 | 316 | 34,788 | 4,775 | 24,734 | 2,855 | 7,211 | ..... | ..... | 4,666 | 3,449 | |
| 1913 | 9,506 | 8,125 | 402 | 182 | 37,292 | 8,226 | 30,739 | 996 | 8,820 | ..... | ..... | 11,754 | 2,080 | |
| 1914 | 9,557 | 8,550 | 852 | 341 | 37,356 | 7,146 | 31,872 | 5,232 | 10,081 | ..... | ..... | 1,020 | 2,615 | |
| 1915 | 9,825 | 9,325 | 934 | 1,486 | 39,499 | 7,173 | 36,561 | 7,046 | 10,245 | ..... | ..... | 1,593 | 3,623 | |
| 1916 | 11,056 | 1,775 | 921 | 36 | 40,345 | 5,766 | 38,653 | 5,673 | 13,062 | ..... | ..... | 4,185 | 3,255 | |
| 1917 | 11,197 | 2,069 | 981 | 100 | 39,743 | 4,289 | 39,346 | 3,179 | 13,485 | ..... | ..... | 492 | 2,531 | |
| 1918 | 12,116 | 564 | 1,010 | 398 | 46,650 | 2,220 | 35,030 | 4,576 | 16,186 | ..... | ..... | 348 | 2,606 | |
| 1919 | 13,542 | 775 | 729 | 25 | 55,086 | 3,078 | 55,593 | 14,655 | 16,186 | ..... | ..... | 35 | 235 | |
| 1920 | 20,594 | 1,088 | 748 | 1,997 | 57,922 | 2,845 | 59,698 | 12,090 | 22,010 | ..... | ..... | 8,892 | 5,576 | |
| 1921 | 22,037 | 11,488 | 1,271 | 1,666 | 58,294 | 5,280 | 84,029 | 18,379 | 25,501 | ..... | ..... | 1,186 | 7,456 | |
| 1922 | 22,037 | 11,811 | 1,421 | 788 | 60,026 | 8,095 | 83,120 | 8,906 | 35,593 | ..... | ..... | 3,905 | 3,331 | |
| 1923 | 24,824 | 9,099 | 1,435 | 1,422 | 61,861 | 7,190 | 93,009 | 8,221 | 27,914 | ..... | ..... | 10,504 | 4,424 | |
| 1924 | 29,302 | 11,496 | 1,472 | 150 | 62,387 | 6,795 | 93,009 | 8,066 | 30,037 | ..... | ..... | 17,602 | 15,840 | |
| 1925 | 27,299 | 8,978 | 1,797 | 3,843 | 64,782 | 7,474 | 103,903 | 6,534 | 18,380 | ..... | ..... | 11,272 | 5,836 | |
| 1926 | 28,080 | 18,522 | ..... | 3,167 ^e | 78,474 | 10,817 | 106,884 | 7,148 | 19,555 | ..... | ..... | 17,085 | 18,798 | |
| 1927 | 28,837 | 11,847 | ..... | 3,215 ^e | 76,169 | 8,718 | 123,178 | 14,931 | 24,038 | ..... | ..... | 26,542 | 18,550 | |
| 1928 | ..... | 14,860 ^e | ..... | 2,597 ^e | 77,793 | 10,204 | ..... | 55,005 ^e | 76,031 ^e | ..... | ..... | 29,564 | 20,415 | |
| 1929 | ..... | 12,622 ^e | ..... | 3,592 ^e | ..... | 6,664 ^e | ..... | 92,046 ^e | 76,571 ^e | ..... | ..... | 13,171 ^e | 7,443 | |
| | | | | | | | | | 16,460 | | | | 20,874 ^m | 2,877 ^e |

- ^a Long term bonds are any bonds having a maturity of more than one year. Unless otherwise indicated, the date covers the fiscal year ending December 31st.
- ^b Figures taken from Baltimore, Comptroller's Annual Reports, and Commissioners of Finance, Annual Reports. Bonds issued are for city stock issued during the year.
- ^c The years 1907 through 1910 are for the fiscal year ending June 30th; 1911 covers the period from July 1, 1910, to September 30, 1911; and the years 1912 through 1929 are for years ending September 30th.
- ^d Figures taken from Birmingham, Auditor's Annual Report, 1900, 1908-1910; City Tax Collector's Annual Reports 1902-1907; Annual Financial Reports 1910-1925. They cover real and personal taxes, interest and discount, merchants' tax, excess bids tax sale, 1900-1907; real and personal property tax 1907-1925.
- ^e Figures taken from Birmingham City Officers' Annual Reports 1900-1907; Auditor's Annual Reports 1908-1910; Annual Financial Reports 1910-1925. The figures cover the sum of public improvement bonds and general city bonds.
- ^f Figures taken from Boston, Treasury Department Annual Reports. They cover fiscal years ending January 31st, 1901-1925 (i.e. year 1900 is year ending January 31, 1901), and 11 months period ending December 31, 1925.
- ^g Cover city loans for permanent improvements 1900-1928.
- ^h Figures taken from Chicago, Comptroller's Annual Reports.
- ⁱ Figures taken from Detroit, Comptroller's Annual Reports, 1900-1918, 1923-1927, and other figures from the present City Comptroller through the courtesy of the Detroit Bureau of Governmental Research, Inc. The figures cover years ending June 30th.
- ^j Figures are total receipts from general tax levies.
- ^k Figures cover receipts from sale of bonds exclusive of bonds issued by the Water Commission or for street railways.
- ^l Figures taken from Los Angeles, Auditor's Annual Reports 1902-1922; Comptroller's Annual Reports of Financial Transactions of Municipalities, California, 1911-1928. Figures cover fiscal year ending November 30th, 1902 through 1908, and fiscal year ending June 30th, 1909-1929.
- ^m The figures cover collection of current and delinquent taxes except for the years 1902 through 1905 and 1908 when they cover only collection of current taxes.
- ⁿ The figures cover the amount of bond sales, principal plus premiums and accrued interest, except for the years 1901 through 1911 when they cover only the principal.
- ^o Figures taken from U. S. Bureau of Census, Financial Statistics of Cities, and cover general property tax receipts.
- ^p Figures taken from Minneapolis, Municipal Statistics, 1917; Budget Facts and Financial Statistics, 1924; and Report of Board of Estimate and Taxation, 1924-1928 (official), and cover total bond issues.
- ^q Sum of bond issues as reported by Bond Buyer.
- ^r Tax levy.
- ^s No data published.
- ^t This figure is not comparable with the rest of the series, and is therefore omitted.
- ^u Estimated from total revenue receipts, which were \$28,246,867. Property taxes represented 73.9 per cent of the total revenue for 1928.

APPENDIX I

TABLE 3B. -- TAX RECEIPTS AND NEW ISSUES OF LONG TERM BONDS IN SELECTED CITIES, 1900-1929*
(In thousands)

| YEAR | NEWARK, N. J. | | NEW YORK, N. Y. | | PHILADELPHIA, Pa. | | PITTSBURGH, Pa. | | ROCHESTER, N. Y. | | ST. LOUIS, Mo. | | SEATTLE, WASH. | |
|------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|
| | Tax Receipts ^b | Bond Issues ^c | Tax Receipts ^d | Bond Issues ^e | Tax Receipts ^f | Bond Issues ^g | Tax Receipts ^h | Bond Issues ⁱ | Tax Receipts ^j | Bond Issues ^k | Tax Receipts ^l | Bond Issues ^m | Tax Receipts ⁿ | Bond Issues ^o |
| 1900 | \$3,193 | \$2,107 | \$72,295 | \$33,745 | \$18,252 | \$5,800 | \$4,569 | \$7,000 | ..... | ..... | ..... | ..... | \$ 374 | ..... |
| 1901 | 3,327 | 1,145 | 75,959 | 38,371 | 18,304 | 18,304 | 4,501 | ..... | ..... | ..... | ..... | ..... | \$ 348 | ..... |
| 1902 | 3,697 | 1,497 | 78,622 | 29,602 | 18,052 | 6,415 | ..... | ..... | \$2,679 | 116 | ..... | ..... | 460 | \$ 100 |
| 1903 | 3,848 | 202 | 72,513 | 43,023 | 18,519 | 42 | 4,645 | ..... | 2,701 | 3,000 | ..... | ..... | 616 | 400 |
| 1904 | 3,916 | 900 | 77,611 | 86,826 | 19,157 | 16,005 | 4,763 | 1,086 | 2,299 | 1,420 | ..... | ..... | 733 | 190 |
| 1905 | 4,278 | 3,530 | 86,322 | 41,211 | 19,371 | ..... | 5,107 | 2,000 | 2,875 | 410 | ..... | ..... | 853 | 423 |
| 1906 | 4,794 | 715 | 83,694 | 57,052 | 20,065 | ..... | 6,880 | 1,500 | 2,684 | 75 | ..... | ..... | 1,101 | ..... |
| 1907 | 4,981 | 1,166 | 86,679 | 79,100 | 20,586 | 6,200 | 9,818 | 1,066 | 2,794 | 75 | ..... | ..... | 1,648 | 2,350 |
| 1908 | 5,928 | 2,155 | 103,628 | 73,341 | 21,412 | 19,375 | 9,680 | 4,051 | 2,926 | 1,075 | ..... | ..... | 2,367 | 400 |
| 1909 | 5,928 | 1,500 | 117,369 | 72,566 | 21,968 | 8,740 | 11,483 | 4,178 | 3,132 | 1,739 | ..... | ..... | 2,547 | 1,000 |
| 1910 | 6,192 | 1,805 | 133,590 | 63,023 | 22,733 | 5,000 | 10,799 | 5,600 | 3,287 | ..... | ..... | ..... | 2,728 | 3,046 |
| 1911 | 7,722 | 2,545 | 135,024 | 86,086 | 23,917 | 13,450 | 10,732 | 1,528 | 3,421 | ..... | ..... | ..... | 3,633 | 2,186 |
| 1912 | 6,955 | 1,163 | 149,491 | 153,578 | 17,358 | 4,925 | 7,382 | 2,846 | 3,778 | 1,525 | ..... | ..... | 2,957 | 3,630 |
| 1913 | 7,818 | 1,550 | 148,557 | 252,681 | 17,584 | 6,375 | 7,079 | 4,500 | 3,968 | 6,174 | ..... | ..... | 3,189 | 1,275 |
| 1914 | 8,267 | 8,885 | 142,994 | 222,047 | 18,846 | 2,625 | 6,957 | 1,134 | 4,360 | 1,022 | ..... | ..... | 4,111 | 375 |
| 1915 | 9,590 | 2,220 | 157,899 | 118,041 | 18,992 | 5,000 | 7,704 | 4,650 | 4,575 | 2,000 | ..... | ..... | 3,835 | 1,279 |
| 1916 | 10,499 | 1,724 | 175,174 | 174,796 | 19,473 | 20,360 | 9,072 | 1,170 | 5,124 | 1,270 | ..... | ..... | 4,725 | ..... |
| 1917 | 11,206 | 2,365 | 171,315 | 192,480 | 24,843 | 20,050 | 8,335 | 264 | 5,856 | 1,875 | ..... | ..... | 4,417 | 575 |
| 1918 | 12,686 | 3,018 | 191,982 | 107,280 | 32,999 | 12,500 | 10,304 | 910 | 6,087 | 2,241 | ..... | ..... | 5,315 | 710 |
| 1919 | 16,572 | 1,133 | 201,792 | 148,674 | 34,726 | 8,000 | 10,879 | 5,644 | 7,057 | 1,715 | ..... | ..... | 6,138 | 245 |
| 1920 | 18,377 | 1,305 | 209,928 | 210,373 | 43,498 | 12,714 | 13,173 | 5,694 | 7,076 | ..... | ..... | ..... | 7,112 | 270 |
| 1921 | 19,236 | 6,625 | 262,000 | 343,803 | 47,967 | 24,576 | 14,136 | 5,826 | 8,239 | 4,225 | ..... | ..... | 11,864 | 1,500 |
| 1922 | 21,871 | 3,710 | 298,905 | 154,811 | 41,899 | 30,497 | 13,780 | 4,260 | 10,790 | 6,891 | ..... | ..... | 13,037 | 1,530 |
| 1923 | 22,120 | 5,700 | 288,969 | 198,668 | 42,749 | 12,000 | 15,131 | 1,213 | 10,989 | 4,805 | ..... | ..... | 13,848 | 763 |
| 1924 | 24,569 | 6,250 | 303,211 | 449,877 | 48,755 | 15,000 | 15,321 | 1,056 | 11,684 | 2,975 | ..... | ..... | 14,347 | 10,000 |
| 1925 | 25,274 | 4,900 | 319,189 | 461,396 | 50,773 | 82,410 | 14,772 | 1,916 | 13,719 | 4,800 | ..... | ..... | 14,528 | 4,900 |
| 1926 | 28,854 | 5,300 | 350,290 | 553,383 | 54,386 | 65,124 | 16,874 | 9,073 | 18,205 | 4,150 | ..... | ..... | 15,877 | 8,631 |
| 1927 | 30,872 | 13,100 | 383,592 | 300,363 | 57,471 | 35,500 ^m | 17,519 | 13,974 | 14,699 | 4,616 | ..... | ..... | 16,428 | 11,520 |
| 1928 | 32,742 | ..... | 419,683 | 408,002 | ..... | ..... | ..... | 6,481 ^m | 16,668 | 5,710 ^d | ..... | ..... | 19,436 | 7,861 |
| 1929 | ..... | 9,250 ^m | ..... | ..... | ..... | 34,326 ^m | ..... | 2,800 ^m | ..... | 4,720 ^d | ..... | ..... | 9,242 | 10,000 ^m |
|  | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 7,191 ^m |

- ^a The long term bonds are any bonds having a maturity of more than one year. Unless otherwise indicated, the years cover the fiscal year ending December 31st, and the figures are taken from each city's Comptroller's Annual Reports.
- ^b Figures taken from Newark, Auditor of Accounts Reports, 1900-1928, and include tax receipts from real and personal property taxes, franchise, trolley, jitney, gross receipts and poll taxes.
- ^c Figures taken from Newark, Comptroller's Annual Reports 1900-1915; Auditor of Accounts Reports 1916-1928.
- ^d Covers tax receipts on real estate, special franchise, real estate of corporations, personal property.
- ^e Total bonds issued for public improvements.
- ^f Total amount received by Receiver of Taxes.
- ^g Long term loans issued.
- ^h Figures cover fiscal years ending January 31, 1900-1913 (i.e. year 1900 is fiscal year ending January 31, 1901), and 11 months period ending December 31, 1914.
- ⁱ Includes taxes of current year, delinquent taxes and special taxes.
- ^j Covers proceeds from the sale of bonds.
- ^k Covers revenue from taxes, including general city tax, interest and penalties on taxes, water frontage and bank taxes.
- ^l Covers par value of bonds sold.
- ^m Sum of bonds issued as reported by the Bond Buyer.

APPENDIX J

SUMMARY OF LAWS AS TO ALLOWABLE BOND ISSUES

| STATE | TABULAR SUMMARY OF AVAILABLE LAWS AS TO ALLOWABLE BOND ISSUES, IN PER CENT OF TAXABLE BASES, AND ISSUANCE OF WATER WORKS BONDS IN EXCESS THEREOF ^a |
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| ALABAMA..... | Towns under 6,000, 5 per cent. Three per cent additional for waterworks, sewerage, gas, electric lighting plants, and street improvements. Towns of 6,000 or more, also Gadsden, Ensley, Decatur and Albany, 7 per cent. Per cent unlimited for school-houses, waterworks, sewers, and street improvements, where cost of same, in whole or in part, is to be assessed against abutting properties. Cities of Sheffield and Tuscumbia excepted. |
| CALIFORNIA..... | Fifteen per cent for all purposes. |
| COLORADO..... | For incorporated municipalities, 3 per cent. Water works bonds, unlimited. |
| CONNECTICUT..... | Towns and municipalities, 5 per cent for all purposes. For water works, a special act of the General Assembly is required for bond issues in excess of 5 per cent. |
| DELAWARE..... | No general law limiting bonding. Each issue must be authorized by enabling act; 6 per cent of assessed valuation is assumed as maximum limit. |
| FLORIDA..... | Permissible indebtedness of each city or town is controlled by its charter and ordinances. |
| IDAHO..... | Water works bonds may be issued in excess of the legal limits for other bonded indebtedness. |
| ILLINOIS..... | Limit for all purposes 5 per cent of assessed valuation. |
| INDIANA..... | Municipalities, including water works, limited to 2 per cent of assessed valuation. For the purchase of water works, bonds may be issued against the utility. Such mortgage bonds bear no relation to 2 per cent limit. |
| IOWA..... | Towns of less than 10,000, 1¼ per cent of actual value of taxable property. Cities of 10,000 or over, by a majority vote, may issue bonds for water works, including existing indebtedness, to the amount of 5 per cent of assessed valuation. |

^a This record is the best available, but needs to be further checked, especially with reference to effect of charters of cities of different classes.

- KANSAS**.....General bond limit, 15 per cent of assessed valuation. Towns of less than 15,000, additional 2 per cent for water works. Cities of over 15,000, limited only by vote of electors.
- KENTUCKY**.....Cities exceeding 15,000, 10 per cent of assessed valuation. Cities of less than 15,000, fourth class, 5 per cent; fifth and sixth classes, 3 per cent. In case of an emergency, water bonds may be issued in excess of above limits.
- LOUISIANA**.....General limit of 10 per cent of assessed valuation. Bonds for any municipal improvements, running for a period not exceeding 10 years, unlimited.
- MAINE**.....For all purposes, 5 per cent of assessed valuation.
- MARYLAND**.....No general limit. Each municipal bond issue requires authorization by the General Assembly. Bonds in amount of 2 per cent of taxable basis, in addition to any other indebtedness limitation, may be issued by counties or municipalities for water or sewerage construction, upon order of State Board of Health.
- MASSACHUSETTS**....For water works, not in excess of 10 per cent of assessed valuation.
- MICHIGAN**.....For water works, not in excess of 5 per cent of assessed valuation. Mortgage bonds against a utility may be issued beyond the 5 per cent limit. Detroit has a total debt limit of 15¼ per cent of assessed value. Two per cent is the limit for water works.
- MINNESOTA**.....In general 10 per cent of assessed valuation. Many special acts for public utilities exist. Water works bonds in excess of 10 per cent of assessed valuation require special authorization.
- MISSISSIPPI**.....Legal limit of bonded indebtedness of any municipality for all purposes, 15 per cent of assessed valuation.
- MISSOURI**.....General limit, 5 per cent of assessed valuation. For water works and certain other public utilities, towns under 30,000, not to exceed 10 per cent of assessed valuation. By affirmative vote of 4/7 of voters, cities of 75,000 and over may issue water works bonds to the extent of 20 per cent of taxable property.
- MONTANA**.....General limit, 3 per cent of taxable valuation. Water and sewerage bonds, apparently unlimited.
- NEW MEXICO**.....General limit, 1 1/3 per cent of actual value of taxable property. Water and sewerage bonds, 4 per cent of assessed valuation.
- NEW YORK**.....General limit, 10 per cent of assessed valuation. Water works bonds unrestricted.
- NORTH CAROLINA**...Total indebtedness limited to 8 per cent of assessed valuation. Water works and electric light improvements not counted in arriving at net indebtedness.

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- NORTH DAKOTA** . . . Five per cent of assessed valuation for all purposes, except that incorporated cities, by a three-fourth vote of resident property holders, may increase indebtedness to 8 per cent of assessed valuation.
- OHIO** Two and one-half per cent total property value, without a referendum. Total net indebtedness that can be incurred with and without a vote of the electors is limited to 5 per cent of the assessed valuation. A favorable vote of two-thirds of those voting is required. Three per cent additional can be authorized by an order of the State Board of Health. When income from water works is sufficient to pay interest and retire bonds, water works bonds may exceed these requirements.
- OKLAHOMA** Five per cent of assessed valuation for general purposes. When authorized by a majority vote, public utility bond issues are unlimited.
- OREGON** Two per cent of assessed valuation without a referendum. A total of 10 per cent of assessed valuation with a referendum. Water works bonds included in 10 per cent.
- PENNSYLVANIA** General, 2 per cent of assessed valuation without a referendum. Seven per cent of assessed valuation with a referendum. Philadelphia may issue bonds to 10 per cent of assessed valuation. All other municipalities 10 per cent, if assented to by three-fifths of the electors voting. Water works bonds in excess of general limit allowed by a few municipalities.
- SOUTH CAROLINA** . . . Water works and sewerage bond issues only are unlimited.
- SOUTH DAKOTA** For general purposes, 5 per cent of assessed valuation. For water and sewerage, 10 per cent of assessed valuation.
- TENNESSEE** There are legal limits placed upon bond issues for sewers, paving, etc. Water works bond issues are unlimited by law.
- TEXAS** Towns under 5,000 are limited to $1\frac{1}{2}$ per cent of assessed valuation for all purposes. Cities and towns of over 5,000 fix their own legal limit for various purposes, but cannot exceed a $2\frac{1}{2}$ per cent of assessed valuation for all purposes.
- UTAH** Cities of 5,000 or over, 8 per cent of assessed valuation for all purposes. Towns under 5,000, 12 per cent of assessed valuation for all purposes.
- VERMONT** General provisions: Total indebtedness of a municipality cannot exceed ten times the amount of the last grand list of such municipality. This provision does not apply when the charter of a municipality limits its indebtedness.
- VIRGINIA** General limit, 18 per cent of assessed valuation. Exception: By a majority vote the general limit may be exceeded for water works or other revenue producing projects.

- WASHINGTON..... For general purposes, $1\frac{1}{2}$ per cent of assessed valuation. With the consent of three-fifths of the voters, 5 per cent of assessed valuation. For water, light and sewers, with the consent of three-fifths of the voters, 10 per cent of assessed valuation. For the purification of water, or any improvement to a water system designed to protect the public health, no limit.
- WEST VIRGINIA..... For water supply and sewerage, limited to 5 per cent of assessed valuation. Two and a half per cent of assessed valuation is maximum for water works bonds.
- WISCONSIN..... General limit for all purposes, 5 per cent of assessed valuation. Mortgage certificates on the utility itself may be issued in excess of the general limit, for the purchase or construction of a new utility, but not for improvements to a system already owned by a municipality.

SOURCE: *Water Works Practice*: Manual of the American Water Works Association, Baltimore, 1925 pp. 549-552.

