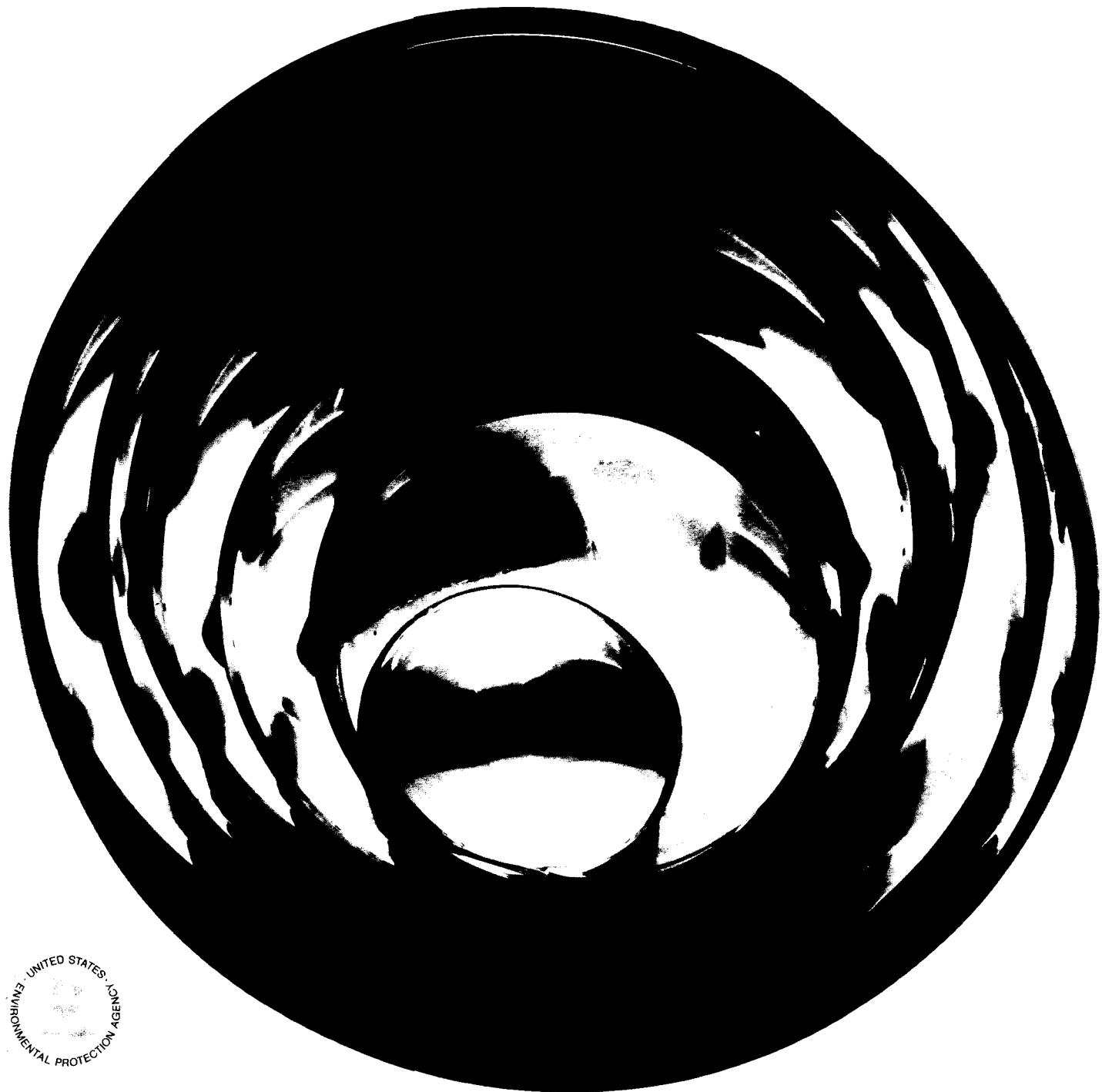


EPA 440-9-76-027

SEWAGE FACILITIES  
CONSTRUCTION REPORT  
1975



# **SEWAGE FACILITIES CONSTRUCTION REPORT 1975**

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**OFFICE OF  
WATER PLANNING  
AND  
STANDARDS**

**MONITORING AND DATA SUPPORT DIVISION  
WASHINGTON, D.C. 20460**



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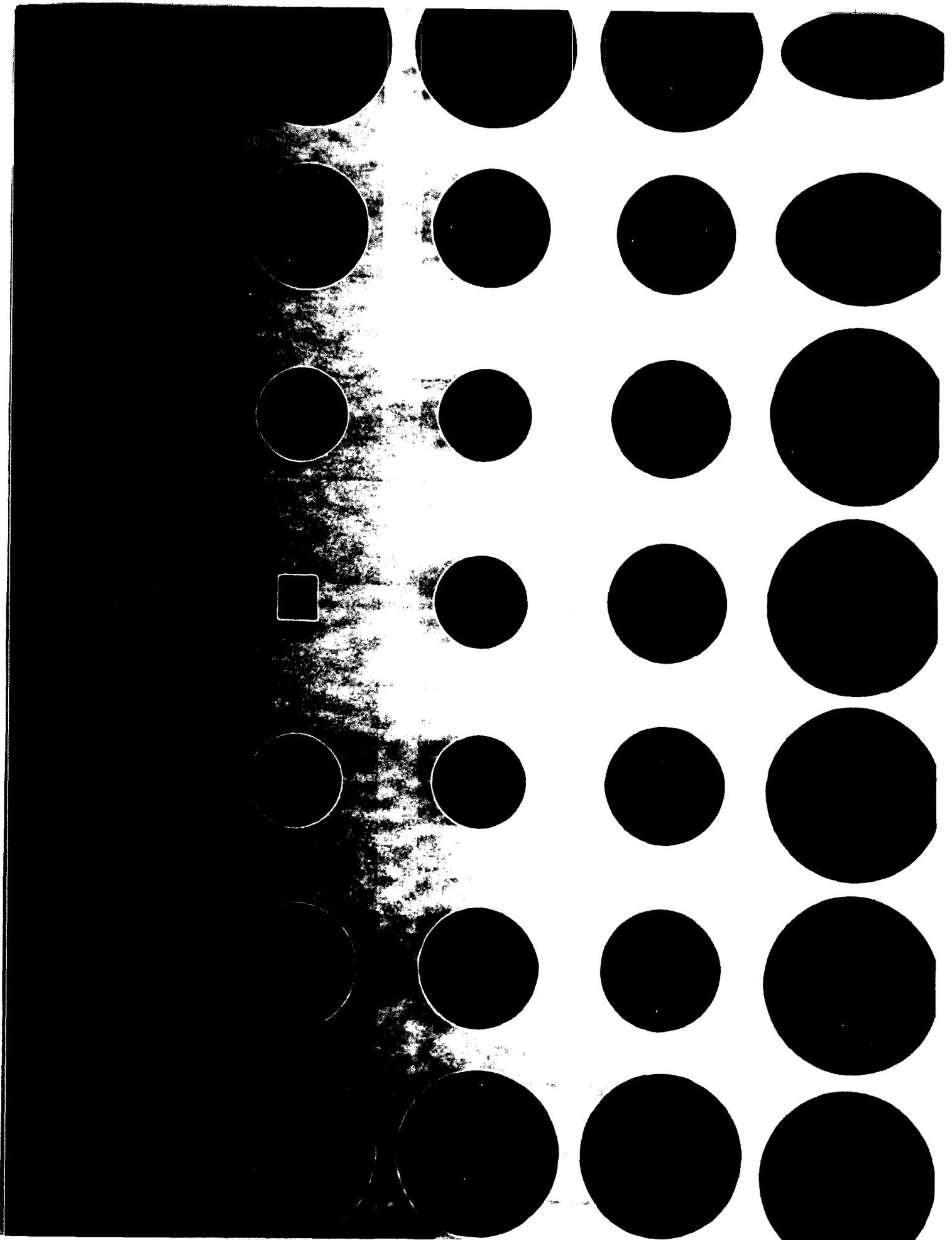
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# INTRODUCTION

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This publication contains a summary and analysis of contracts awarded during 1975 for constructing sewage facilities. Previous reports in this series were published annually for the years 1952 through 1971 and in a single report for the years 1972, 1973, and 1974.

The basic information for this report was collected and recorded, under contract, by the F.W. Dodge Division of McGraw Hill Information Systems Company.\*

Due to financial limitations, the U.S. Environmental Protection Agency is not planning to continue this publication. This is the last report in this series.

\*This material is disseminated under the auspices of the U.S. Environmental Protection Agency. No Offices of the United States Government assume any liability for its content or the use thereof.

# SUMMARY

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Analysis of the contracts awarded in 1975 and comparison to those awarded in previous years, result in the following principal observations.

- The Number of Contracts Awarded in 1975 Showed a Continuing Increase in Actual Dollars for Facility Construction Since 1952

In 1975, contract awards for sewage facilities construction totaled 4.4 billion dollars. This represents 13.3 percent of the total dollars (33 billion) spent on sewage facilities construction since 1952. When the dollar is converted to a 1957–1959 base to adjust for inflation, the contract awards for sewage facility construction were 1.744 billion dollars. This amount accounted for 7.5 percent of the total constant dollars (23.101 billion) spent on facility construction since 1952.

Since 1972, 14.4 billion dollars were spent on sewage facilities construction. This four-year figure represents 44 percent of the total dollars spent on sewage facilities construction since 1952. Using a constant dollar, 6.971 billion was spent since 1972. This four year value makes up 30.2 percent of the total constant dollars spent on facility construction since 1952.

- Since 1974, Per Capita Contract Awards Showed a Decline in Amount Spent for Sewage Facilities Construction

The annual per capita contract awards measured in constant dollars (1957–1959 base) increased 129.1 percent from 1957 to 1975. In 1975 however, the total annual awards, as measured in constant dollars show an 8.6 percent decrease from 1974. Also, the annual per capita awards measured in constant dollars decreased 10.2 percent from 1974 to 1975 (Figure 1 and Tables A1–A4). This may be indicative of a stabilization in the amount spent on sewage facilities construction after population increases and inflation are accounted for.

- Sewage Facilities Construction Accounted for 60 Percent of All Contracts Awarded in the Previous Five Years

Since 1971, sewage treatment facilities have comprised about 60 percent of all sewage facility construction (Figure 2). The remainder (40 percent) of the construction was for collecting sewers and combination projects.

# CATEGORIES OF FACILITIES CONSTRUCTION

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Contract awards for sewage facilities construction in 1975 totaled 4.4 billion dollars (Tables 1 and 2). Of this total, 2.925 billion dollars or 66.5 percent was awarded for treatment facilities, 1.016 billion dollars or 23.1 percent for collecting sewers, and the remaining 10.4 percent, 459 million dollars, was for combination projects where the breakdown in costs between the two categories was not specified. Combination group costs (Tables 1, 2 and A-7) were apportioned between sewage treatment facilities and collecting sewers in the same ratio as those for which such descriptions are available, making the figures 3.204 billion dollars and 1.196 billion dollars, respectively.

**Sewage Treatment Facilities:** This category which accounts for 67 percent of the total spending includes new plants (treatment plants, stabilization and oxidation ponds, lagoons and leeching systems, etc.) additions and/or replacements to existing plants, and an "other" classification which includes intercepting sewers, outfalls and pumping stations.

**Collecting Sewers:** This category includes lateral sewers, trunk sewers, extension force mains, lift stations on collecting or trunk lines, and combined sewers. Storm sewers are not included. In cases where combined collecting and storm sewers were part of the same contract and the costs could not be separated, one half of the contract award was assigned to the collecting sewers category.

**Combinations:** This category consists of projects where the breakdown in costs between sewage treatment facilities and collecting sewers was not specified.

More detailed data within these categories are presented in Appendix A.

# BASIC STATISTICS

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## National Trends

Annual contract awards for sewage facilities construction have increased steadily since 1957 on both a total dollar and per capita dollar basis. When the dollar is converted to a 1957–1959 base to adjust for inflation this trend is observed, except in 1975, where a decline is observed in terms of annual per capita awards as measured in constant dollars. The total current dollars for contract awards increased 10.6 percent from 1974 to 1975. When these dollars were adjusted for inflation, however, the percentage change was a decrease of 8.6 percent (Table 1).

The rate of increase in contract award dollars was higher over the last six years than it was in the preceding two six-year periods. This trend can be noted by taking the six year averages of the data for the last 18 years. The effects of year-to-year fluctuation are reduced by this method of analysis. The growth in per capita awards using constant dollars was 65.2 percent from the 1964–1969 period to the 1970–1975 period, compared to a 10.5 percent growth from the 1958–1963 period to the 1964–1969 period (Table 3).

## Awards by State

The State of New York had the highest total awards for 1975 (\$624 million) and the highest awards for each of the two major categories: treatment facilities (\$476 million) and collecting sewers (\$113 million). Those states having contracts in excess of \$200 million were: California (\$287 million), Florida (\$256 million), Indiana (\$243 million), Pennsylvania (\$225 million) and Illinois (\$212 million). Alaska had the highest total per capita awards in 1975 (\$71.91) and the highest per capita awards (\$71.20) for sewage treatment facilities. Rhode Island had the highest per capita awards (\$16.76) for collecting sewers. With the exception of Alaska, a state with special technical problems, the states with the highest per capita total awards were as follows: Delaware (\$59.35), Indiana (\$45.84), Rhode Island (\$45.33) and New Hampshire (\$40.88). Indiana was the only state to rank in the top five states in the categories of both total contract award dollars and per capita award dollars.

Figures 3 and 4 show a comparison between population density and per capita awards for sewage facilities construction by state.

## Awards by Basin

Table 5 shows the contract awards for sewage treatment facilities construction by basin for 1957–1975.

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The Northeast basin had the highest total awards in 1975 (1.067 billion) (Table 6).

The per capita awards for each of the 19 United States drainage basins for 1975 were based on the 1971 population for these basins, since these populations were the latest available. The basin with the highest per capita awards in 1975 for sewage facility construction was Alaska with an annual per capita award of \$84.38. Following Alaska, the basins with highest per capita awards in 1975 were Missouri (\$47.80) and Hawaii (\$40.47).

## Statistical Variations

Thirteen tables presenting data in different formats are included in Appendix A. Of special interest are Tables A-1 through A-6 which show percentage changes in annual contract awards. Tables A-1 and A-2 show the percentage change in annual contract award dollars per capita for 1957-1975 as measured in constant (1957-1959 base) and current dollars.

Tables A-3 and A-4 show the percentage change in annual contract award dollars for 1952-1975 as measured in current and constant dollars (1952-1959 base).

Tables A-5 and A-6 indicate the percentage change in distributed sewage treatment and collecting sewers as measured in actual dollars.

Table A-7 shows the total contract awards by state, broken down by sewage treatment facilities and collecting sewers after the costs of the combination category were apportioned in the same ratio as those for which descriptions were available.

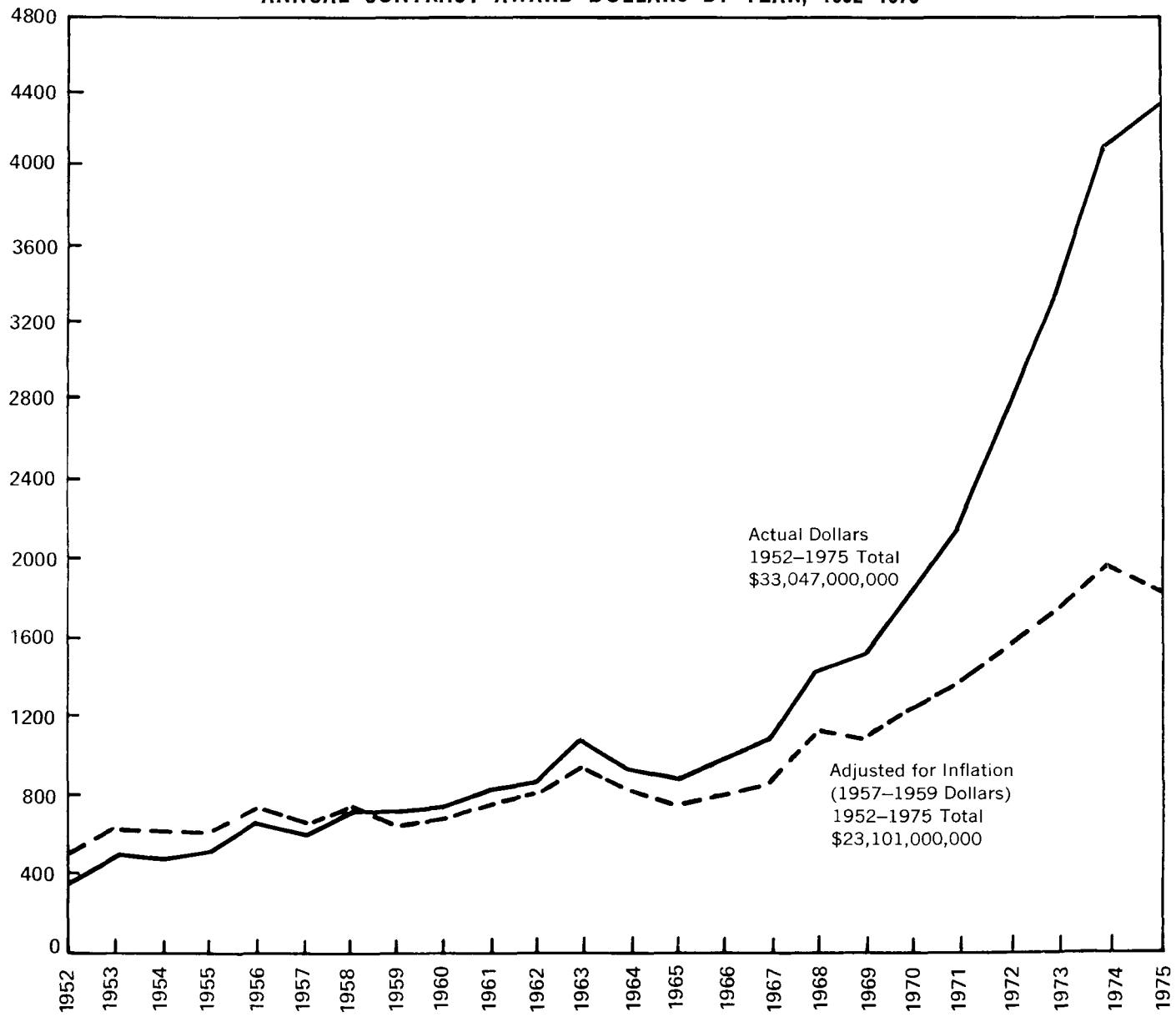
Tables A-8 and A-9 show contract awards for 1975 arranged by population size and dollar size groups for sewage treatment, collecting sewers and combinations.

Table A-10 shows the annual total contract awards by state since 1971.

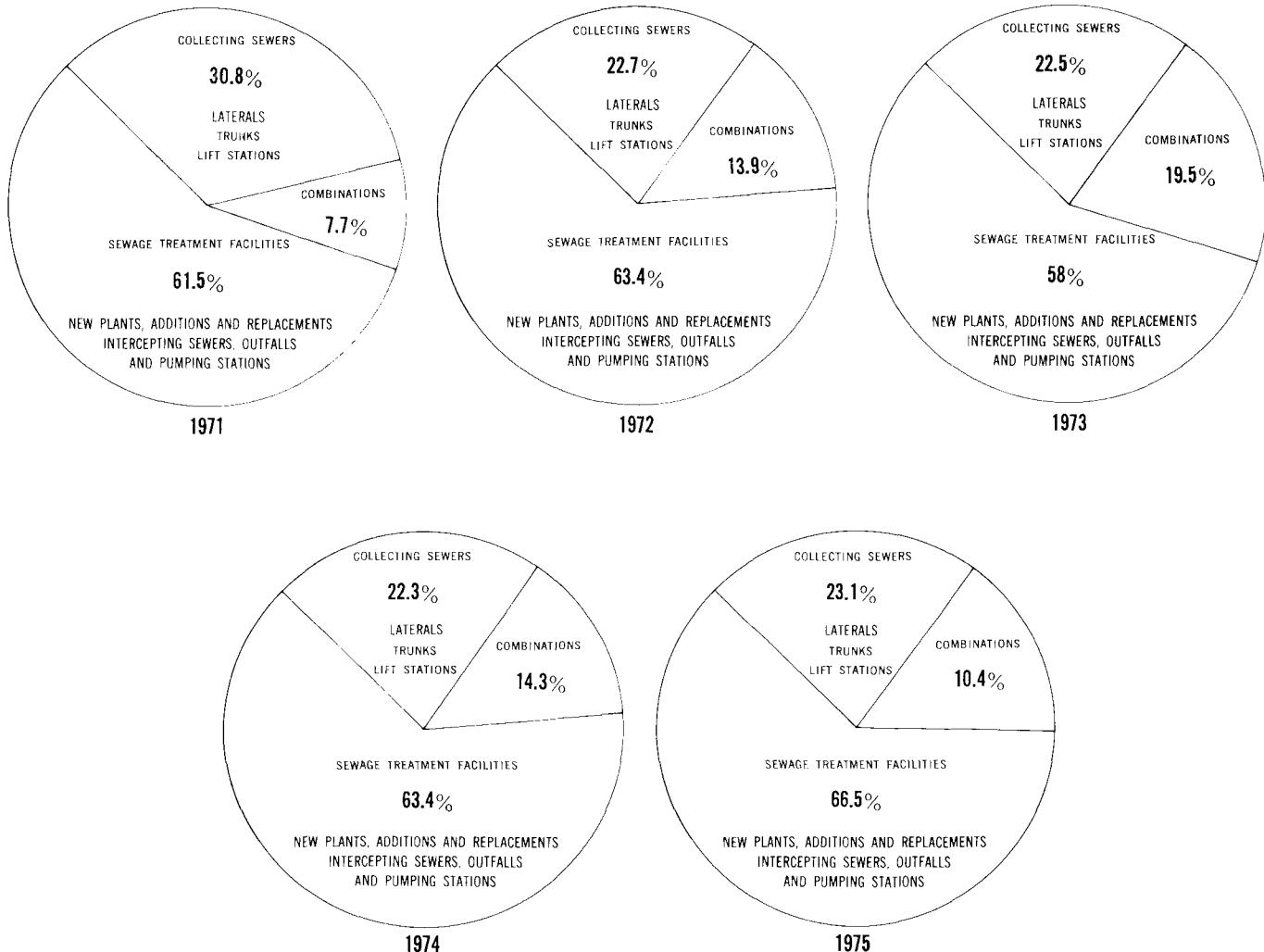
Table A-11 shows the annual total contract awards by major basin since 1971.

Tables A-12 and A-13 show the annual percentage change in the dollars spent on sewage facilities construction by state and major basin since 1971.

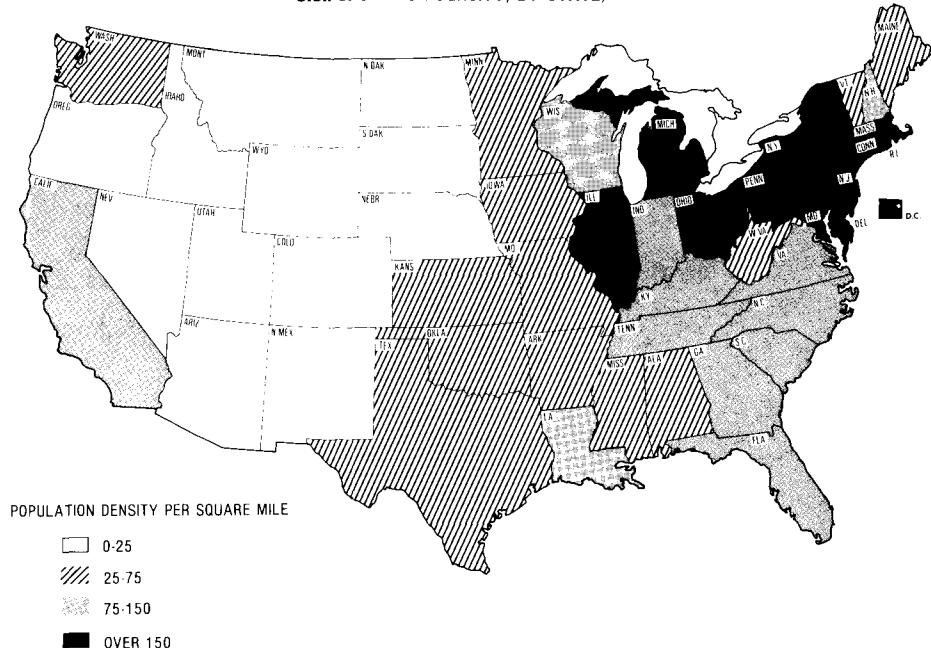
Figure 1  
ANNUAL CONTRACT AWARD DOLLARS BY YEAR, 1952-1975



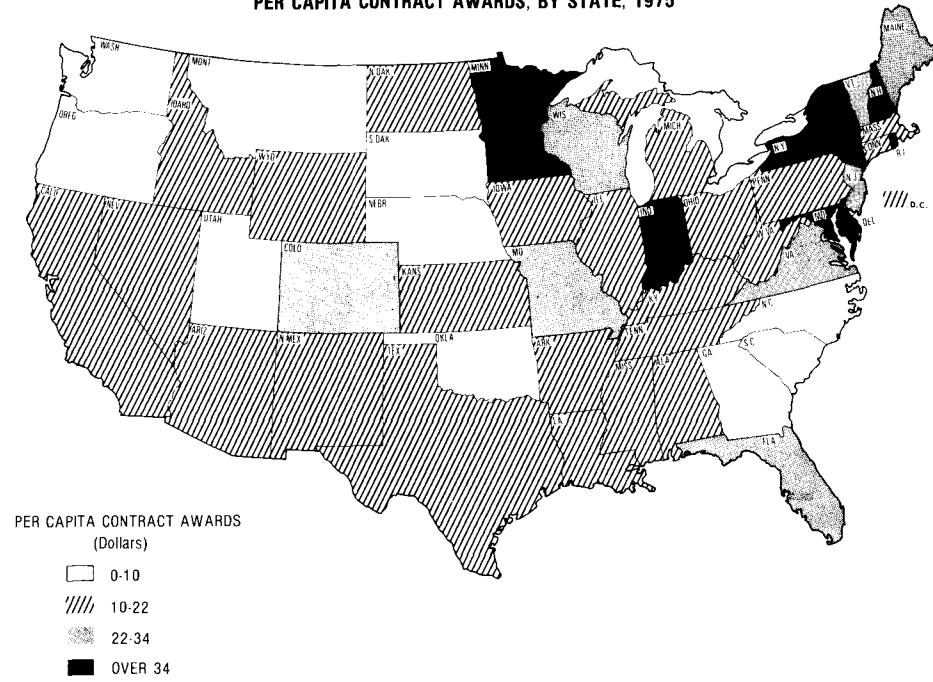
**FIGURE 2**  
**CONTRACT AWARD CATEGORIES**  
**(Share of award dollars)**  
**1971–1975**



**Figure 3**  
**U.S. POPULATION DENSITY, BY STATE, 1975**



**Figure 4**  
**PER CAPITA CONTRACT AWARDS, BY STATE, 1975**



**TABLE 1**  
**Annual contract awards—1952–1975**  
(Millions of dollars)

Year	Sewage treatment		Collecting sewers		Total	
	Current	1957–1959	Current	1957–1959	Current	1957–1959
1952	137	178	225	296	362	474
1953	187	231	286	353	473	584
1954	229	276	244	294	473	570
1955	201	232	301	345	502	577
1956	354	385	305	331	659	716
1957	351	362	247	254	598	616
1958	389	385	310	310	699	695
1959	349	336	336	320	685	656
1960	359	339	359	339	718	678
1961	449	419	380	352	829	771
1962	545	505	320	291	865	796
1963	679	612	405	358	1,084	970
1964	514	459	396	244	910	803
1965	522	458	356	304	878	762
1966	553	469	399	330	952	799
1967	597	497	448	360	1,045	857
1968	867	694	582	449	1,449	1,143
1969	825	611	684	492	1,509	1,103
1970	1,085	755	738	493	1,823	1,248
1971	1,453	909	674	403	2,127	1,312
1972	2,016	1,172	747	402	2,763	1,574
1973	2,305	1,262	962	482	3,267	1,744
1974	2,904	1,421	1,073	488	3,977	1,909
1975	3,204	1,282	1,196	462	4,400	1,744
Grand Total	21,074	14,249	11,973	8,752	33,047	23,101

NOTES

1 Constant dollars on a 1957–1959 base were computed as follows: Sewers from PHS Sewer Construction Cost Index (PHS Publication 1132); sewage treatment from PHS Sewage Treatment Plant Construction Cost Index (PHS Publication 1069).

2 The Public Health Service sewage treatment data prior to 1957 are composed of identified contracts only. Beginning with 1957 the figures include an amount apportioned to sewage treatment works from the combination contracts.

3 Data on collecting sewers prior to 1957 are obtained by subtracting Public Health Service sewage treatment data from the U.S. Department of Commerce sewer data which includes sanitary and storm systems as well as sewage treatment works. Beginning with 1957 the data for collecting sewers were assembled by the Public Health Service and do not include storm sewers.

**TABLE 2****Contract award trends, 1957-75**

	1957	1958	1959	1960	1961	1962	1963	1964
Total number of awards <sup>1</sup>	3,521	4,208	4,320	4,542	4,733	4,794	5,307	5,301
Total award dollars (millions)	598	699	685	718	829	865	1,084	910
Total award dollars (millions, 1957-1959 base)	616	695	656	678	771	796	970	803
Award dollars per capita	3.47	3.99	3.84	3.96	4.50	4.62	5.73	4.73
Award dollars per capita (1957-1959 base)	3.57	3.97	3.68	3.74	4.19	4.25	5.13	4.17
Sewage treatment award dollars (millions)	351	389	349	359	449	545	679	514
New plant award dollars (millions) <sup>2</sup>	130	128	95	97	101	117	216	144
Collecting sewers award dollars (millions)	247	310	336	359	380	320	405	396

	1965	1966	1967	1968	1969	1970	1971	1972
Total number of awards <sup>1</sup>	5,211	5,202	5,278	5,622	6,258	5,140	5,210	5,321
Total award dollars (millions)	878	952	1,045	1,449	1,509	1,823	2,127	2,763
Total award dollars (millions, 1957-1959 base)	762	799	857	1,143	1,103	1,248	1,312	1,574
Award dollars per capita	4.52	4.85	5.25	7.20	7.43	8.89	10.33	13.27
Award dollars per capita (1957-1959 base)	3.92	4.07	4.31	5.68	5.43	6.09	6.37	7.56
Sewage treatment award dollars (millions)	522	553	597	867	825	1,085	1,453	2,016
New plant award dollars (millions) <sup>2</sup>	125	145	133	194	234	277	364	460
Collecting sewers award dollars (millions)	356	399	448	582	684	738	674	747

	1973	1974	1975	Total
Total number of awards <sup>1</sup>	6,648	6,429	6,257	99,302
Total award dollars (millions)	3,267	3,977	4,400	30,578
Total award dollars (millions, 1957-1959 base)	1,744	1,909	1,744	20,180
Award dollars per capita	15.56	18.95	20.65	
Award dollars per capita (1957-1959 base)	8.31	9.11	8.18	
Sewage treatment award dollars (millions)	2,305	2,904	3,204	
New plant award dollars (millions) <sup>2</sup>	626	970	1,386	
Collecting sewers award dollars (millions)	962	1,073	1,196	

<sup>1</sup> Excludes combination contracts for 1957-1968<sup>2</sup> Included in Sewage Treatment Award Dollars above**TABLE 3****Contract awards for three 6-year periods, 1958-1975**

	1958-1963	1964-1969	1970-1975
Average award dollars (millions)	813	1,124	3,060
Percentage change from previous period		38.0%	172.2%
Average award dollars (million, 1957-1959 base)	761	911	1,588
Percentage change from previous period		19.7%	74.3%
Average per capita award dollars	4.44	5.66	14.61
Percentage change from previous period		27.5%	158.1%
Average per capita award dollars (1957-1959 base)	4.16	4.60	7.60
Percentage change from previous period		10.5%	65.2%

TABLE 4

## Contract awards by state, 1975

STATE	Total			Sewage Treatment			Collecting Sewers			Combinations		
	No.	Dollars	Per capita	No.	Dollars	Per capita	No.	Dollars	Per capita	No.	Dollars	Per capita
Alabama	38	49,149,528	13.59	13	43,839,478	12.13	23	5,149,891	1.42	2	160,159	.04
Alaska	7	25,315,065	71.91	6	25,064,356	71.20	1	250,709	.71	0	0	.00
Arizona	48	36,855,714	16.57	7	27,279,362	12.26	36	6,811,966	3.06	5	2,764,386	1.24
Arkansas	54	29,836,241	14.10	15	21,553,486	10.18	26	7,235,953	3.41	13	1,046,802	.49
California	408	286,610,978	13.52	109	219,660,873	10.36	269	56,971,022	2.68	30	9,979,083	.47
Colorado	69	56,086,680	22.13	26	45,323,664	17.88	31	8,368,024	3.30	12	2,394,992	.94
Connecticut	178	60,280,869	19.47	20	17,018,770	5.49	151	40,024,916	12.93	7	3,237,183	1.04
Delaware	45	34,365,860	59.35	4	17,811,941	30.76	35	9,272,530	16.01	6	7,281,389	12.57
District of Columbia	7	12,339,437	17.23	3	12,185,400	17.01	4	154,037	.21	0	0	.00
Florida	205	256,272,769	30.66	74	203,551,775	24.35	112	46,790,965	5.59	19	5,930,029	.70
Georgia	118	48,737,590	9.89	35	17,816,405	3.61	67	20,583,167	4.17	16	10,338,018	2.09
Hawaii	24	32,383,686	37.43	16	21,827,000	25.23	7	10,325,000	11.93	1	231,686	.26
Idaho	10	9,305,441	11.34	5	7,858,308	9.58	3	720,770	.87	2	726,363	.88
Illinois	280	212,000,722	19.02	94	128,336,649	11.51	156	40,118,886	3.59	30	43,545,187	3.90
Indiana	152	243,495,857	45.84	37	212,266,550	39.96	101	22,084,127	4.15	14	9,145,180	1.72
Iowa	138	49,475,433	17.23	36	40,100,156	13.97	88	7,449,285	2.59	14	1,925,992	.67
Kansas	133	26,519,273	11.69	14	16,120,839	7.11	108	8,162,401	3.60	11	2,236,033	.98
Kentucky	73	59,595,942	17.54	11	28,351,420	8.34	51	12,866,916	3.78	11	18,377,606	5.41
Louisiana	86	39,073,301	10.30	12	19,608,258	5.17	57	16,242,848	4.28	17	3,222,195	.84
Maine	55	26,304,224	24.83	17	17,054,888	16.10	35	5,674,816	5.35	3	3,574,520	3.37
Maryland	247	145,788,714	35.57	22	103,894,052	25.35	178	26,276,931	6.41	47	15,617,731	3.81
Massachusetts	164	111,724,357	19.17	35	79,840,235	13.69	114	27,742,440	4.76	15	4,141,682	.71
Michigan	233	196,760,928	21.48	34	82,075,907	8.96	170	104,054,862	11.36	29	10,630,159	1.16
Minnesota	277	153,427,610	39.07	19	69,881,934	17.79	176	14,738,845	3.75	82	68,806,831	17.52
Mississippi	56	36,728,858	15.65	11	25,218,773	10.74	29	2,586,684	1.10	16	8,923,401	3.80
Missouri	138	125,029,482	26.25	45	105,355,515	22.11	83	16,206,570	3.40	10	3,467,397	.72
Montana	9	5,204,807	6.95	1	4,351,322	5.81	6	664,592	.88	2	188,893	.25
Nebraska	114	14,954,539	9.67	24	8,692,562	5.62	83	5,495,698	3.55	7	766,279	.49
Nevada	16	9,086,706	15.34	7	5,026,676	8.49	5	1,218,480	2.05	4	2,841,550	4.79
New Hampshire	35	33,442,750	40.88	11	16,881,557	20.63	17	10,088,693	12.33	7	6,472,500	7.91
New Jersey	182	199,525,829	27.27	59	149,724,037	20.46	116	29,987,105	4.09	7	19,814,687	2.70
New Mexico	24	13,562,974	11.82	2	282,040	24	9	3,945,653	3.43	13	9,335,281	8.13
New York	342	624,490,951	34.46	96	476,420,902	26.29	216	113,316,694	6.25	30	34,753,355	1.91
North Carolina	129	50,948,368	9.34	29	18,152,336	3.33	77	17,068,936	3.13	23	15,727,096	2.88
North Dakota	54	8,264,409	13.01	7	4,455,330	7.01	37	3,131,772	4.93	10	677,307	1.06
Ohio	287	164,148,351	15.25	49	90,293,918	8.39	218	69,255,185	6.43	20	4,599,248	.42
Oklahoma	51	26,809,068	9.88	9	20,252,396	7.46	34	3,948,817	1.45	8	2,607,855	.96
Oregon	77	22,064,391	9.64	18	14,039,997	6.13	50	6,450,744	2.81	9	1,573,650	.68
Pennsylvania	358	225,458,519	19.06	108	119,312,005	10.08	205	69,601,364	5.88	45	36,545,150	3.08
Rhode Island	31	42,022,898	45.33	11	26,198,732	28.26	19	15,539,272	16.76	1	284,894	.30
South Carolina	46	9,480,905	3.36	8	2,123,996	7.5	32	5,063,833	1.79	6	2,293,076	.81
South Dakota	45	3,422,060	5.01	3	358,277	52	32	1,832,354	2.68	10	1,231,429	1.80
Tennessee	97	64,542,767	15.41	16	25,007,364	5.97	63	22,593,995	5.39	18	16,941,408	4.04
Texas	372	165,175,795	13.49	74	99,915,655	8.16	214	41,825,242	3.41	84	23,434,898	1.91
Utah	9	6,443,805	5.34	6	4,830,189	4.00	3	1,613,616	1.33	0	0	.00
Vermont	17	10,502,524	22.29	6	3,901,134	8.28	8	1,232,630	2.61	3	5,368,760	11.39
Virginia	216	120,568,579	24.27	38	84,717,143	17.05	157	27,594,014	5.55	21	8,257,422	1.66
Washington	79	73,662,965	20.78	24	48,167,657	13.59	42	14,256,612	4.02	13	11,238,696	3.17
West Virginia	36	31,020,225	17.20	14	15,493,224	8.59	13	9,730,103	5.39	9	5,796,898	3.21
Wisconsin	378	104,406,079	22.66	49	72,751,178	15.79	258	21,123,640	4.58	71	10,531,261	2.28
Wyoming	10	7,724,174	20.65	5	5,162,035	13.80	4	2,087,853	5.58	1	474,286	1.26
TOTALS	6,257	4,400,398,997	20.64	1,394	2,925,407,656	13.72	4,029	1,015,531,458	4.76	834	459,459,883	2.15

PERCENTAGE OF TOTAL

66.48%

23.07%

10.44%

12 TABLE 5

## Contract award dollars by basin, 1957-1975\*

Basin	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	Grand Total
Northeast	10	35	20	23	14	38	60	37	66	66	81	182	266	280	426	829	614	504	758	4,309
North Atlantic	59	63	50	70	68	77	116	87	48	58	99	100	59	109	94	97	190	292	334	2,070
Southeast	22	31	35	32	30	35	57	53	56	47	60	76	69	73	118	142	167	273	302	1,672
Tennessee River	4	7	6	6	5	3	6	11	11	6	9	14	11	10	10	4	29	16	20	188
Ohio River	54	57	62	47	60	55	58	48	56	41	46	87	38	62	117	117	175	206	296	1,682
Lake Erie	14	7	7	9	10	5	12	11	14	10	17	20	26	26	35	29	56	156	93	557
Upper Mississippi	36	37	47	28	28	42	85	40	67	74	75	85	79	104	128	142	147	249	212	1,705
Western Great Lakes	14	22	22	21	28	74	34	30	24	42	16	47	80	129	163	202	79	146	175	1,348
Missouri River	11	14	13	17	28	22	22	41	26	32	19	36	19	12	16	37	40	155	167	727
Southwest-Lower Mississippi	16	23	14	18	18	4	48	28	15	28	29	30	33	35	36	19	63	70	93	620
Colorado River	4	4	3	4	3	16	12	7	6	6	6	6	15	6	< 1	2	22	21	36	179
Western Gulf	9	18	9	16	11	30	19	21	22	18	18	23	28	31	22	51	75	80	96	597
Pacific Northwest	8	11	9	9	17	51	39	20	27	22	19	17	15	16	48	45	44	74	70	561
California	59	28	25	23	55	2	18	15	28	54	36	39	31	58	88	33	145	250	199	1,186
Great Basin	8	2	3	5	3	< 1	7	6	4	8	12	6	2	4	3	2	5	5	30	115
Alaska	—	—	—	1	2	6	< 1	1	1	< 1	< 1	4	—	8	3	3	13	1	25	68
Hawaii	—	—	1	2	1	3	8	5	3	5	4	3	5	< 1	< 1	32	21	22	115	
TOTALS	328	359	326	331	381	463	595	461	474	517	546	775	776	963	1,307	1,754	1,896	2,519	2,928	17,699

\* Sewage treatment facilities only.

TABLE 6

## Contract awards by basin, 1975

Drainage Basin	Total			Sewage Treatment			Collecting Sewers			Combinations		
	No.	Dollars	Per capita	No.	Dollars	Per capita	No.	Dollars	Per capita	No.	Dollars	Per capita
Northeast	930	1,067,126,672	25.71	236	758,493,240	18.27	629	235,527,662	5.67	65	73,105,770	1.76
North Atlantic	789	517,045,982	27.07	138	333,992,261	17.48	536	117,840,303	6.16	115	65,213,418	3.41
Southeast	575	438,613,142	17.40	168	301,899,078	11.98	332	94,653,344	3.75	75	42,060,720	1.66
Tennessee River	57	44,118,355	13.78	14	19,944,500	6.23	32	16,386,404	5.12	11	7,787,451	2.43
Ohio River	524	432,044,703	21.17	118	295,603,255	14.49	349	93,953,582	4.60	57	42,487,866	2.08
Lake Erie	276	216,216,343	22.75	51	92,739,086	9.76	203	116,409,772	12.25	22	7,067,485	.74
Upper Mississippi	844	389,547,460	21.05	168	211,591,651	11.43	520	62,444,536	3.37	156	115,511,273	6.24
*Western Great Lakes	411	250,201,189	19.85	60	174,677,091	13.86	284	58,798,234	4.66	67	16,725,864	1.32
Lake Michigan	355	187,456,449	.00	49	119,688,321	.00	246	54,454,963	.00	60	13,313,165	.00
Lake Huron	40	10,583,809	.00	9	6,104,031	.00	27	3,903,949	.00	4	575,829	.00
Lake Superior	16	52,160,931	.00	2	48,884,739	.00	11	439,322	.00	3	2,836,870	.00
Missouri River	410	205,576,509	47.80	97	166,539,982	38.73	270	31,159,308	7.24	43	7,877,219	1.83
South Central Lower Mississippi	370	156,733,620	12.84	66	92,651,676	7.59	242	45,135,881	3.69	62	18,946,063	1.55
Colorado River	83	53,106,985	23.08	21	35,916,401	15.61	49	10,043,250	4.36	13	7,147,334	3.10
Western Gulf	369	170,195,253	15.33	69	95,545,658	8.60	208	43,118,301	3.88	92	31,531,294	2.84
Pacific Northwest	166	105,032,797	16.41	47	70,065,962	10.94	95	21,428,126	3.34	24	13,538,709	2.11
California	392	262,059,189	19.55	107	199,336,409	14.87	255	52,743,697	3.93	30	9,979,083	.74
Great Basin	30	35,082,047	26.98	12	29,520,050	22.70	17	5,313,349	4.08	1	248,648	.19
Alaska	7	25,315,065	84.38	6	25,064,356	83.54	1	250,709	.83	0	0	.00
Hawaii	24	32,383,686	40.47	16	21,827,000	27.28	7	10,325,000	12.90	1	231,686	.28
TOTALS	6,257	4,400,398,997	21.77	1,394	2,925,407,656	14.47	4,029	1,015,531,458	5.02	834	459,459,883	2.27

66.48%

23.07%

10.44%

PERCENTAGE OF TOTAL

\* Aggregate of lakes Michigan, Huron, and Superior.

\*\* Based on 1971 basin population.

# APPENDIX A

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**TABLE A-1**

**Percentage change—annual contract award dollars per capita, 1957–1975 (constant dollars)**

TABLE A-2

**Percentage change—annual contract award dollars per capita, 1957–1975 (current dollars)**

TABLE A-3

Percentage change—annual contract award dollars, 1952–1975 (current dollars)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
1952	—	3.07	30.7	38.7	82.0	65.2	93.1	89.2	98.3	129.0	139.0	199.4	151.4	142.6	163.0	188.7	217.4	316.9	403.6	487.6	663.3	802.5	998.6	115.5
1953	—	0.0	6.1	39.3	26.4	47.8	44.8	51.8	75.3	82.9	129.2	92.4	85.6	101.3	121.0	142.9	219.0	285.4	349.7	484.1	590.7	740.8	830.2	
1954	—	6.1	39.3	26.4	47.8	44.8	51.8	75.3	82.9	129.2	92.4	85.6	101.3	121.0	142.9	219.0	285.4	349.7	484.1	590.7	740.8	830.2		
1955	—	31.3	19.1	39.2	36.5	43.0	65.1	72.3	115.9	81.3	74.9	89.6	108.2	128.9	200.6	263.1	323.7	450.4	550.8	692.2	776.5			
1956	—	9.3	1	3.9	9.0	25.8	31.3	64.4	38.1	33.2	44.5	58.6	74.4	129.0	176.6	222.8	319.3	395.8	503.5	567.7				
1957	—	16.9	14.6	20.1	38.6	44.6	81.3	52.2	46.8	59.2	74.7	92.1	152.3	204.8	255.7	362.0	446.3	565.1	635.8					
1958	—	2.0	2.7	18.6	23.7	55.1	30.2	25.6	36.2	49.5	64.4	115.9	160.8	204.3	295.3	367.4	469.0	529.5						
1959	—	4.8	21.0	26.3	58.2	32.8	28.2	39.0	52.6	67.7	120.3	166.1	210.5	303.4	376.9	480.6	542.3							
1960	—	20.4	51.0	26.7	22.3	32.6	45.5	60.0	110.2	153.9	196.2	284.8	355.0	453.9	512.8									
1961	—	4.3	30.8	9.8	5.9	14.8	26.1	38.6	82.0	119.0	156.6	233.3	294.1	379.7	430.8									
1962	—	25.3	5.2	1.5	10.1	20.8	32.8	74.5	110.8	115.9	219.4	272.7	359.8	408.7										
1963	—	16.1	19.0	12.2	-3.6	6.0	39.2	68.2	96.2	154.9	201.4	266.9	305.9											
1964	—	3.5	4.6	14.8	26.3	65.8	100.3	133.7	203.6	259.0	337.0	383.5												
1965	—	8.4	19.0	30.9	71.9	107.6	142.3	214.7	272.1	353.0	401.1													
1966	—	9.8	20.7	58.5	91.5	123.4	190.2	243.2	317.8	362.2														
1967	—	10.0	44.4	74.4	103.5	164.4	212.6	280.6	321.1															
1968	—	31.3	58.7	85.1	140.5	184.3	174.5	282.9																
1969	—	20.8	41.0	83.1	116.5	163.6	191.6																	
1970	—	16.7	51.6	79.2	118.2	141.4																		
1971	—	29.9	53.6	87.0	106.9																			
1972	—	18.2	44.9	59.2																				
1973	—	21.7	34.7																					
1974	—	10.6																						
1975	—																							

TABLE A-4

Percentage change—annual contract award dollars, 1952–1975 (constant dollars)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
1952	—	23.2	20.3	21.7	51.1	30.0	46.6	38.4	43.0	62.7	67.9	104.6	69.4	60.8	68.6	80.8	141.1	132.7	163.3	176.8	232.1	267.9	302.7	267.9
1953	—	-2.4	-1.2	22.6	5.5	19.0	12.3	16.1	32.0	36.6	66.1	37.5	30.5	36.8	46.7	95.7	88.9	113.7	124.7	169.5	198.6	226.9	198.6	
1954	—	1.2	25.6	8.1	21.9	15.1	18.9	35.3	39.6	70.2	40.9	33.7	40.2	50.4	100.5	93.5	118.9	130.2	176.1	206.0	234.9	206.0		
1955	—	24.1	6.8	20.4	13.7	17.5	33.6	38.0	68.1	39.2	32.1	38.5	48.5	98.1	91.2	116.3	127.4	172.8	202.3	230.8	202.2			
1956	—	14.0	-2.9	-8.4	5.3	7.7	11.2	35.5	12.2	6.4	11.6	19.7	59.6	54.1	74.3	83.2	119.8	143.6	166.6	143.6				
1957	—	12.8	6.5	10.1	25.2	29.2	57.5	30.4	23.7	29.7	39.1	85.6	79.1	102.6	113.0	155.5	183.1	209.9	183.1					
1958	—	5.6	2.4	10.9	14.5	39.5	15.5	9.6	15.0	23.3	64.4	58.7	79.6	88.8	126.4	150.9	174.7	150.9						
1959	—	3.4	17.5	21.3	47.9	22.4	16.2	21.8	30.6	74.2	68.1	90.2	100.0	139.9	165.9	191.0	165.9							
1960	—	13.7	17.4	43.1	18.4	12.4	17.8	26.4	68.6	62.7	84.1	93.5	132.2	157.2	181.6	157.2								
1961	—	3.2	25.8	4.2	-1.2	3.6	11.2	48.2	43.1	61.9	70.2	104.2	126.2	147.6	126.2									
1962	—	21.9	.9	-4.3	4	7.7	43.6	38.6	56.8	64.8	97.7	119.1	139.8	119.1										
1963	—	17.2	21.4	-17.6	11.6	17.8	13.7	28.7	35.3	62.3	79.8	96.8	79.8											
1964	—	5.1	-0.5	6.7	42.3	37.4	55.4	63.4	96.0	117.2	137.7	117.2												
1965	—	4.9	12.5	50.0	44.8	63.8	72.2	106.6	128.9	150.5	128.9													
1966	—	7.3	43.1	38.0	56.2	64.2	97.0	118.3	138.9	118.3														
1967	—	33.0	28.7	45.6	53.1	83.7	103.5	122.8	103.5															
1968	—	3.5	9.2	14.8	37.7	52.6	67.0	52.6																
1969	—	13.1	18.9	42.7	58.1	73.1	58.1																	
1970	—	5.1	26.1	39.7	53.0	39.7																		
1971	—	20.0	32.9	45.5	32.9																			
1972	—	10.8	21.3	10.8																				
1973	—	—	9.5	0																				
1974	—	—	—	-8.6																				
1975	—	—	—	—																				

TABLE A-5

**Percentage change—distributed sewage treatment award dollars, 1952–1975 (current dollars)**

TABLE A-6

**Percentage change—distributed collecting sewers award dollars, 1952–1975 (current dollars)**

TABLE A-7

## Contract awards (distributed) by states for year 1975

State	Total	Sewage Treatment	Collecting Sewers
Alabama	49,149,527	43,936,806	5,212,721
Alaska	25,315,066	25,064,356	250,709
Arizona	36,855,713	28,959,279	7,896,434
Arkansas	29,836,240	22,189,627	7,646,613
California	286,610,977	225,725,161	60,885,816
Colorado	56,086,679	46,779,100	9,307,579
Connecticut	60,280,868	18,986,006	41,294,862
Delaware	34,365,859	22,236,841	12,129,018
District of Columbia	12,339,437	12,185,400	154,037
Florida	256,272,768	207,155,453	49,117,315
Georgia	48,737,589	24,098,818	24,638,771
Hawaii	32,383,685	21,967,795	10,415,890
Idaho	9,305,440	8,299,718	1,005,722
Illinois	212,000,721	154,799,059	57,201,662
Indiana	243,495,856	217,824,075	25,671,781
Iowa	49,475,432	41,270,581	8,204,851
Kansas	26,519,272	17,479,676	9,039,596
Kentucky	59,595,941	39,519,491	20,076,450
Louisiana	39,073,300	21,566,385	17,506,915
Maine	26,304,223	19,227,123	7,077,100
Maryland	145,788,713	113,384,947	32,403,766
Massachusetts	111,724,356	82,357,135	29,367,221
Michigan	196,760,927	88,535,854	108,225,073
Minnesota	153,427,609	111,695,845	41,731,764
Mississippi	36,728,857	30,641,523	6,087,334
Missouri	125,029,481	107,462,652	17,566,829
Montana	5,204,806	4,466,112	738,694
Nebraska	14,954,538	9,158,229	5,796,309
Nevada	9,086,705	6,753,485	2,333,220
New Hampshire	33,442,749	20,814,895	12,627,854
New Jersey	199,525,828	161,765,422	37,760,406
New Mexico	13,562,973	5,955,090	7,607,883
New York	624,490,950	497,540,515	126,950,435
North Carolina	50,945,367	27,709,692	23,238,675
North Dakota	8,264,408	4,866,929	3,397,479
Ohio	164,148,350	93,088,881	71,059,649
Oklahoma	26,809,067	21,837,189	4,971,878
Oregon	22,064,390	14,996,304	7,068,086
Pennsylvania	225,455,518	141,520,492	83,938,026
Rhode Island	42,022,897	26,371,862	15,651,035
South Carolina	9,480,904	3,517,498	5,963,406
South Dakota	3,422,059	1,106,616	2,315,443
Tennessee	64,542,766	35,302,657	29,240,109
Texas	165,175,794	114,157,042	51,018,752
Utah	6,443,805	4,830,189	1,613,616
Vermont	10,502,523	7,163,729	3,338,794
Virginia	120,568,578	89,735,178	30,833,400
Washington	73,662,964	54,997,412	18,665,552
West Virginia	31,020,224	19,015,998	12,004,226
Wisconsin	104,406,078	79,151,025	25,255,053
Wyoming	7,724,173	5,450,258	2,273,915
TOTALS	4,400,395,949	3,204,621,405	1,195,777,544

NOTE: The costs of the combination group were apportioned between sewage treatment facilities and collecting sewers in the same ratio as those for which such descriptions are available.

**TABLE A-8****Contract awards by population size group, 1975**

Population Size Group	Total		Sewage Treatment		Collecting Sewers		Combinations	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Under 500	808	508,564,403	199	337,148,166	469	94,931,418	140	76,484,819
500-999	309	131,851,782	103	74,566,932	147	32,948,597	59	24,336,253
1,000-2,499	520	193,360,988	143	104,782,165	294	57,149,318	83	31,429,505
2,500-4,999	493	208,751,806	115	109,898,756	307	56,605,535	71	42,247,515
5,000-9,999	748	366,842,753	164	212,369,678	473	118,854,503	111	35,618,572
10,000-24,999	946	537,090,113	187	300,641,418	658	206,948,921	101	29,499,774
25,000-49,999	631	396,269,960	118	242,316,300	442	92,424,976	71	61,528,684
50,000-99,999	508	516,445,593	114	394,226,575	350	99,762,801	44	22,456,217
100,000-249,999	475	651,048,383	108	515,256,746	311	93,423,031	56	42,368,606
Over 250,000	819	890,173,216	143	634,200,920	578	162,482,358	98	93,489,938
TOTALS	6,257	4,400,398,997	1,394	2,925,407,656	4,029	1,015,531,458	834	459,459,883

**TABLE A-9****Contract awards by size of contract, 1975**

Dollar Size Group	Total		Sewage Treatment		Collecting Sewers		Combinations	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Under 10,000	600	3,712,107	43	275,635	527	3,220,576	30	215,896
10,000-25,000	805	13,612,850	63	1,045,883	685	11,561,676	57	1,005,291
25,000-49,999	845	30,860,255	100	3,675,308	636	23,093,734	109	4,091,213
50,000-99,999	925	66,961,599	127	9,485,193	668	48,299,165	130	9,177,241
100,000-249,999	1,104	178,785,131	249	41,818,330	686	109,836,679	169	27,130,122
250,000-499,999	694	248,028,286	195	70,850,415	358	126,847,660	141	50,330,211
500,000-999,999	565	391,948,712	195	135,745,649	265	185,506,741	105	70,696,322
1,000,000-4,999,999	553	1,172,804,884	287	667,545,951	181	345,894,529	85	159,364,404
Over 5,000,000	166	2,293,685,173	135	1,994,965,292	23	161,270,698	8	137,449,183
TOTALS	6,257	4,400,398,997	1,394	2,925,407,656	4,029	1,015,531,458	834	459,459,883

TABLE A-10

Annual contract awards for 1971-1975, by state

State	Number	1971 Amount	Number	1972 Amount	Number	1973 Amount	Number	1974 Amount	Number	1975 Amount
Alabama	33	8,359,444	32	16,971,767	69	21,606,768	59	27,624,065	38	49,149,528
Alaska	28	8,393,568	22	13,379,792	16	19,706,675	16	15,547,604	7	25,315,065
Arizona	33	3,366,658	39	10,096,608	60	28,881,164	46	24,567,190	48	36,855,714
Arkansas	33	7,875,893	39	9,582,374	48	18,122,253	61	27,440,554	54	29,836,241
California	350	121,079,365	277	68,271,938	418	225,589,282	437	312,006,890	408	286,610,978
Colorado	3	518,820	40	8,593,019	62	18,143,742	65	54,202,088	69	56,086,680
Connecticut	114	107,167,852	114	56,810,121	164	85,445,278	137	57,908,924	178	60,280,869
Delaware	18	12,277,951	10	10,446,992	27	9,733,342	25	11,413,620	45	34,365,860
District of Columbia	3	15,417,971	4	16,826,194	7	7,128,602	6	85,493,813	7	12,339,437
Florida	132	42,083,381	161	66,271,376	224	128,101,602	226	246,629,573	205	256,272,769
Georgia	112	73,116,706	117	81,364,697	130	78,505,799	115	68,081,725	118	48,737,590
Hawaii		7	912,000	19	39,555,000	16	25,754,000	24	32,383,686	
Idaho	20	3,123,169	10	5,596,012	15	12,836,148	18	12,075,015	10	9,305,441
Illinois	223	126,954,138	228	142,612,786	295	172,369,607	261	174,840,298	280	212,000,722
Indiana	133	56,341,866	119	46,700,653	137	66,268,380	113	76,724,752	152	243,495,857
Iowa	135	19,864,221	136	27,360,902	160	28,370,277	168	77,949,553	138	49,475,433
Kansas	103	10,534,217	122	13,231,635	109	8,590,745	135	23,734,849	133	26,519,273
Kentucky	56	16,547,091	58	71,996,649	80	16,998,382	86	55,231,896	73	59,595,942
Louisiana	82	10,808,608	69	9,999,169	115	50,181,372	130	64,893,462	86	39,073,301
Maine	41	22,587,441	43	19,933,438	39	37,469,810	50	26,159,600	55	26,304,224
Maryland	392	39,971,987	295	39,328,913	356	133,561,951	285	87,415,164	247	145,788,714
Massachusetts	173	59,256,836	129	34,765,889	192	180,675,051	163	100,007,109	164	111,724,357
Michigan	309	195,103,445	305	240,937,340	286	60,684,476	284	235,206,312	233	196,760,928
Minnesota	248	57,364,781	247	50,807,147	326	56,692,427	307	157,784,174	277	153,427,610
Mississippi	43	26,689,464	50	13,089,449	42	32,409,771	47	11,219,786	56	36,728,858
Missouri	122	13,485,611	116	21,364,185	141	40,175,975	136	59,499,896	138	125,029,482
Montana	8	1,769,158	8	923,570	9	11,601,592	18	17,437,131	9	5,204,807
Nebraska	95	20,877,802	136	15,953,042	153	15,717,772	146	53,753,496	114	14,954,539
Nevada	4	165,258	6	933,619	14	9,295,674	15	2,594,354	16	9,086,706
New Hampshire	24	10,381,029	27	24,007,667	8	23,093,938	22	16,914,331	35	33,442,750
New Jersey	159	51,046,499	159	48,723,164	190	60,703,614	217	354,564,060	182	199,525,829
New Mexico	19	2,989,657	16	7,416,449	15	16,918,644	12	1,777,879	24	13,562,974
New York	273	378,221,948	263	962,748,817	329	526,210,996	308	251,829,436	342	624,490,951
North Carolina	104	33,687,403	108	44,086,803	88	33,673,840	108	70,273,026	129	50,948,368
North Dakota	34	1,218,673	42	6,482,382	64	5,657,239	60	6,183,993	54	8,264,409
Ohio	293	118,621,128	221	65,781,692	343	214,864,039	318	194,448,754	287	164,148,351
Oklahoma	62	13,211,661	63	15,788,056	67	15,833,666	76	31,856,722	51	26,809,068
Oregon	95	32,252,914	80	26,479,973	62	33,397,822	81	49,447,004	77	22,064,391
Pennsylvania	336	128,356,747	270	116,444,380	343	155,604,324	333	187,169,174	358	225,458,519
Rhode Island	15	5,257,533	16	4,091,259	28	24,039,010	21	17,762,473	31	42,022,898
South Carolina	28	15,056,142	47	25,721,159	45	26,896,988	47	35,046,284	46	9,480,905
South Dakota	26	2,149,626	26	2,276,219	31	6,055,734	43	3,797,310	45	3,422,060
Tennessee	78	52,900,295	86	39,140,438	147	72,270,885	106	62,596,216	97	64,542,767
Texas	319	60,611,362	341	98,860,324	432	146,385,432	373	180,674,948	372	165,175,795
Utah		6	1,266,633	24	8,705,160	6	4,443,407	9	6,443,805	
Vermont	10	2,075,451	21	9,370,375	11	5,000,594	9	4,247,491	17	10,502,524
Virginia	95	26,300,199	114	24,120,802	200	137,585,899	212	147,971,097	216	120,568,579
Washington	98	29,682,399	118	44,303,677	97	37,305,441	105	54,074,934	79	73,662,965
West Virginia	17	4,792,647	9	1,545,916	16	6,807,600	23	10,484,819	36	31,020,225
Wisconsin	429	77,223,619	344	77,549,205	392	96,383,556	375	94,232,334	378	104,406,079
Wyoming	1	28,216	5	2,178,232	3	426,161	3	3,746,645	10	7,724,174
TOTALS	5,561	2,127,187,850	5,321	2,763,444,898	6,648	3,267,239,499	6,429	3,976,740,230	6,257	4,400,398,997

**TABLE A-11**  
**Annual contract awards for 1971-1975, by basin**

Contract Basin	Number	1971 Amount	Number	1972 Amount	Number	1973 Amount	Number	1974 Amount	Number	1975 Amount
Northeast	752	603,002,883	710	1,141,593,522	887	923,867,543	881	812,237,631	930	1,067,126,672
North Atlantic	770	195,703,807	635	194,908,490	843	373,846,620	751	469,646,045	789	517,045,982
Southeast	438	189,088,621	503	244,032,950	576	344,526,710	586	457,655,685	575	438,613,142
Tennessee River	46	29,733,824	41	19,364,925	74	46,336,963	51	30,259,555	57	44,118,355
Ohio River	482	191,577,932	399	177,731,960	598	276,125,760	536	323,656,443	524	432,044,703
Lake Erie	146	67,858,70	161	55,963,017	258	105,128,254	287	211,417,552	276	216,216,343
Upper Mississippi	760	220,031,911	753	228,587,799	953	278,914,829	885	387,956,236	844	389,547,460
*Western Great Lakes	605	260,892,958	502	302,468,139	469	140,204,948	429	251,991,793	411	250,201,189
Lake Michigan	605	260,892,958	486	276,213,662	379	117,588,195	342	132,807,379	355	187,456,449
Lake Huron			15	26,234,879	64	17,131,478	63	67,870,424	40	10,583,809
Lake Superior			1	19,598	26	5,485,275	24	51,313,990	16	52,160,931
Missouri	285	41,170,402	369	67,697,580	408	75,557,230	447	193,694,124	410	205,576,509
South Central Lower Mississippi	325	71,111,717	337	56,392,608	406	122,284,321	448	152,700,782	370	156,733,620
Colorado River	42	4,227,499	55	13,519,111	91	38,619,487	81	29,948,213	83	53,106,985
Western Gulf	317	58,147,750	330	99,741,934	427	154,492,584	362	181,151,136	369	170,195,253
Pacific Northwest	216	65,218,346	212	76,842,927	174	85,037,988	206	115,834,426	166	105,032,797
California	335	116,857,785	258	62,203,176	389	216,656,816	419	308,108,702	392	262,059,189
Great Basin	14	4,149,877	27	8,104,968	60	26,377,771	28	9,180,303	30	35,082,047
Alaska	28	8,393,568	22	13,379,792	16	19,706,675	16	15,547,604	7	25,315,065
Hawaii			7	912,000	19	39,555,000	16	25,754,000	24	32,383,686
<b>TOTALS</b>	<b>5,561</b>	<b>2,127,167,850</b>	<b>5,321</b>	<b>2,763,444,898</b>	<b>6,648</b>	<b>3,267,239,499</b>	<b>6,429</b>	<b>3,976,740,230</b>	<b>6,257</b>	<b>4,400,398,997</b>

\*Aggregate of Lakes Michigan, Huron, and Superior.

**TABLE A-12**

Percentage change in total contract awards by state, 1971-1975

**Alabama**

	1971	1972	1973	1974	1975
1971	—	+03.0	+58.5	+30.5	+88.0
1972	—	—	+27.3	+62.8	+89.6
1973	—	—	—	+27.8	+27.5
1974	—	—	—	—	+77.9
1975	—	—	—	—	—

**Alaska**

	1971	1972	1973	1974	1975
1971	—	+59.4	+34.8	+85.2	+01.6
1972	—	—	+47.3	+16.2	+89.2
1973	—	—	—	-21.0	+28.5
1974	—	—	—	—	+62.8
1975	—	—	—	—	—

**Arizona**

	1971	1972	1973	1974	1975
1971	—	+99.9	+57.9	+29.7	+94.7
1972	—	—	+86.0	+43.3	+65.0
1973	—	—	—	14.8	+27.6
1974	—	—	—	—	+50.0
1975	—	—	—	—	—

**Arkansas**

	1971	1972	1973	1974	1975
1971	—	+21.7	+30.1	+48.4	+78.8
1972	—	—	+89.1	+86.4	+11.4
1973	—	—	—	+51.4	+64.6
1974	—	—	—	—	+8.7
1975	—	—	—	—	—

**California**

	1971	1972	1973	1974	1975
1971	—	-43.5	+86.3	+57.7	+36.7
1972	—	—	+30.4	+57.0	+19.8
1973	—	—	—	+38.3	+27.0
1974	—	—	—	—	-8.0
1975	—	—	—	—	—

**Colorado**

	1971	1972	1973	1974	1975
1971	—	+56.3	+97.1	+47.2	+10.4
1972	—	—	+11.1	+30.8	+52.7
1973	—	—	—	+98.7	+09.1
1974	—	—	—	—	3.5
1975	—	—	—	—	—

**Connecticut**

	1971	1972	1973	1974	1975
1971	—	-46.9	-20.2	-45.9	-43.7
1972	—	—	+50.4	+1.9	+6.1
1973	—	—	—	-32.1	-29.4
1974	—	—	—	—	+4.1
1975	—	—	—	—	—

**Delaware**

	1971	1972	1973	1974	1975
1971	—	14.8	-20.6	-6.9	+79.9
1972	—	—	-6.7	+9.3	+29.0
1973	—	—	—	+17.3	+53.1
1974	—	—	—	—	+01.1
1975	—	—	—	—	—

**District of Columbia**

	1971	1972	1973	1974	1975
1971	—	+9.1	-53.7	+54.5	-19.9
1972	—	—	-57.5	+08.1	-26.6
1973	—	—	—	+99.3	+73.1
1974	—	—	—	—	-85.5
1975	—	—	—	—	—

**Florida**

	1971	1972	1973	1974	1975
1971	—	+57.5	+04.4	+86.0	+09.0
1972	—	—	+93.3	+72.2	+86.7
1973	—	—	—	+92.5	+00.1
1974	—	—	—	—	+3.9
1975	—	—	—	—	—

**Georgia**

	1971	1972	1973	1974	1975
1971	—	+11.3	+7.4	-6.8	-33.2
1972	—	—	-3.4	-16.2	-40.0
1973	—	—	—	-13.2	-37.8
1974	—	—	—	—	-28.3
1975	—	—	—	—	—

**Hawaii**

	1971	1972	1973	1974	1975
1971	—	+0.0	+0.0	+0.0	+0.0
1972	—	—	+37.2	+23.9	+50.8
1973	—	—	—	-34.8	-18.0
1974	—	—	—	—	+25.7
1975	—	—	—	—	—

**TABLE A-12—Continued**

Percentage change in total contract awards by state, 1971–1975 (continued)

**Idaho**

	1971	1972	1973	1974	1975
1971	—	+79.2	+11.0	+86.6	+97.9
1972	—	—	+29.4	+15.8	+66.3
1973	—	—	—	-5.8	-27.4
1974	—	—	—	—	-22.8
1975	—	—	—	—	—

**Illinois**

	1971	1972	1973	1974	1975
1971	—	+12.3	+35.8	+37.7	+67.0
1972	—	—	+20.9	+22.6	+48.7
1973	—	—	—	+1.4	+23.0
1974	—	—	—	—	+21.3
1975	—	—	—	—	—

**Indiana**

	1971	1972	1973	1974	1975
1971	—	-17.0	+17.6	+36.2	+32.2
1972	—	—	+41.9	+64.3	+21.4
1973	—	—	—	+15.8	+67.4
1974	—	—	—	—	+17.4
1975	—	—	—	—	—

**Iowa**

	1971	1972	1973	1974	1975
1971	—	+37.7	+42.8	+92.4	+49.1
1972	—	—	+3.7	+84.9	+80.8
1973	—	—	—	+74.8	+74.4
1974	—	—	—	—	+36.4
1975	—	—	—	—	—

**Kansas**

	1971	1972	1973	1974	1975
1971	—	+25.6	-18.3	+25.3	+51.7
1972	—	—	-35.0	+79.4	+00.4
1973	—	—	—	+76.3	+08.7
1974	—	—	—	—	+11.7
1975	—	—	—	—	—

**Kentucky**

	1971	1972	1973	1974	1975
1971	—	+35.1	+2.7	+33.8	+60.2
1972	—	—	-76.3	-23.2	-17.1
1973	—	—	—	+24.9	+50.6
1974	—	—	—	—	+7.9
1975	—	—	—	—	—

**Louisiana**

	1971	1972	1973	1974	1975
1971	—	—	-7.4	+64.3	+00.4
1972	—	—	+01.9	+49.0	+90.8
1973	—	—	—	+29.3	-22.0
1974	—	—	—	—	-39.7
1975	—	—	—	—	—

**Maine**

	1971	1972	1973	1974	1975
1971	—	—	-11.6	+65.9	+15.8
1972	—	—	+88.0	31.2	+32.0
1973	—	—	—	-30.1	-29.7
1974	—	—	—	—	+0.6
1975	—	—	—	—	—

**Maryland**

	1971	1972	1973	1974	1975
1971	—	—	-1.5	+34.1	+18.7
1972	—	—	+39.6	+22.3	+70.7
1973	—	—	—	-34.5	+9.2
1974	—	—	—	—	+66.8
1975	—	—	—	—	—

**Massachusetts**

	1971	1972	1973	1974	1975
1971	—	—	-41.2	+04.9	+68.8
1972	—	—	+19.7	+87.7	+21.4
1973	—	—	—	-44.5	-38.1
1974	—	—	—	—	+11.7
1975	—	—	—	—	—

**Michigan**

	1971	1972	1973	1974	1975
1971	—	—	+23.5	-68.8	+0.8
1972	—	—	-74.7	-2.3	-18.2
1973	—	—	—	+87.6	+24.2
1974	—	—	—	—	-16.2
1975	—	—	—	—	—

**Minnesota**

	1971	1972	1973	1974	1975
1971	—	—	-11.3	-1.1	+75.1
1972	—	—	+11.6	+10.6	+02.0
1973	—	—	—	+78.3	+70.6
1974	—	—	—	—	-2.7
1975	—	—	—	—	—

TABLE A-12—Continued

Percentage change in total contract awards by state, 1971–1975 (continued)

**Mississippi**

	1971	1972	1973	1974	1975
1971	—	-50.9	+21.4	-57.9	+37.6
1972	—	—	+47.6	14.2	+80.6
1973	—	—	—	-65.3	+13.3
1974	—	—	—	—	+27.4
1975	—	—	—	—	—

**Missouri**

	1971	1972	1973	1974	1975
1971	—	+58.4	+97.9	+41.2	+27.1
1972	—	—	+88.1	-78.5	+85.2
1973	—	—	—	+48.1	-11.2
1974	—	—	—	—	+10.1
1975	—	—	—	—	—

**Montana**

	1971	1972	1973	1974	1975
1971	—	-47.7	+55.8	+85.6	+94.2
1972	—	—	+56.2	+88.0	+63.6
1973	—	—	—	+50.3	-55.0
1974	—	—	—	—	-70.1
1975	—	—	—	—	—

**Nebraska**

	1971	1972	1973	1974	1975
1971	—	-23.5	-24.6	+57.5	-28.3
1972	—	—	-1.4	+36.9	6.2
1973	—	—	—	+42.0	-4.8
1974	—	—	—	—	-72.1
1975	—	—	—	—	—

**Nevada**

	1971	1972	1973	1974	1975
1971	—	+64.9	+24.9	+69.9	+98.5
1972	—	—	+95.7	-77.9	+73.3
1973	—	—	—	-72.0	2.1
1974	—	—	—	—	+50.2
1975	—	—	—	—	—

**New Hampshire**

	1971	1972	1973	1974	1975
1971	—	+31.3	-22.5	+62.9	+22.2
1972	—	—	-3.7	-29.4	+39.3
1973	—	—	—	-26.7	+44.8
1974	—	—	—	—	+97.7
1975	—	—	—	—	—

**New Jersey**

	1971	1972	1973	1974	1975
1971	—	—	-4.5	+18.9	+90.9
1972	—	—	—	+24.6	+09.5
1973	—	—	—	+84.1	+28.7
1974	—	—	—	—	-43.6
1975	—	—	—	—	—

**New Mexico**

	1971	1972	1973	1974	1975
1971	—	—	+48.1	+65.9	+53.7
1972	—	—	—	+28.1	+82.9
1973	—	—	—	-89.4	-19.7
1974	—	—	—	—	+62.9
1975	—	—	—	—	—

**New York**

	1971	1972	1973	1974	1975
1971	—	—	+54.5	+39.1	33.3
1972	—	—	-45.2	-73.7	-35.0
1973	—	—	—	-52.0	+18.7
1974	—	—	—	—	+48.0
1975	—	—	—	—	—

**North Carolina**

	1971	1972	1973	1974	1975
1971	—	—	+30.9	+0.0	+08.6
1972	—	—	—	-23.5	+15.6
1973	—	—	—	+08.7	+51.3
1974	—	—	—	—	-27.4
1975	—	—	—	—	—

**North Dakota**

	1971	1972	1973	1974	1975
1971	—	—	-31.9	+64.2	+07.4
1972	—	—	-12.6	4.5	+27.5
1973	—	—	—	+9.3	+46.1
1974	—	—	—	—	+33.6
1975	—	—	—	—	—

**Ohio**

	1971	1972	1973	1974	1975
1971	—	—	-44.4	+81.1	+63.9
1972	—	—	+26.6	+95.6	+49.5
1973	—	—	—	-9.4	-23.5
1974	—	—	—	—	-15.5
1975	—	—	—	—	—

**TABLE A-12—Continued**

Percentage change in total contract awards by state, 1971–1975 (continued)

**Oklahoma**

	1971	1972	1973	1974	1975
1971	—	+19.5	+19.8	+41.1	+02.9
1972	—	—	+0.3	+01.8	+69.8
1973	—	—	—	+01.2	+69.3
1974	—	—	—	—	-15.7
1975	—	—	—	—	—

**Oregon**

	1971	1972	1973	1974	1975
1971	—	-17.8	+3.5	+53.3	-31.5
1972	—	—	+26.1	+86.7	-16.6
1973	—	—	—	+48.1	-33.8
1974	—	—	—	—	-55.3
1975	—	—	—	—	—

**Pennsylvania**

	1971	1972	1973	1974	1975
1971	—	-9.2	+21.2	+45.8	+75.6
1972	—	—	+33.6	+60.7	+93.6
1973	—	—	—	+20.3	+44.9
1974	—	—	—	—	+20.5
1975	—	—	—	—	—

**Rhode Island**

	1971	1972	1973	1974	1975
1971	—	-22.1	+57.2	+37.8	+99.3
1972	—	—	+87.6	+34.2	+27.1
1973	—	—	—	26.0	+74.8
1974	—	—	—	—	+36.6
1975	—	—	—	—	—

**South Carolina**

	1971	1972	1973	1974	1975
1971	—	+70.8	+78.6	+32.8	-36.9
1972	—	—	+4.6	+36.3	-63.0
1973	—	—	—	+30.3	-64.7
1974	—	—	—	—	-72.8
1975	—	—	—	—	—

**South Dakota**

	1971	1972	1973	1974	1975
1971	—	+5.9	+35.2	+76.6	+59.2
1972	—	—	+22.1	+66.8	+50.3
1973	—	—	—	-24.8	-32.2
1974	—	—	—	—	-9.8
1975	—	—	—	—	—

**Tennessee**

	1971	1972	1973	1974	1975
1971	—	—	-25.9	+36.6	+18.3
1972	—	—	+84.6	+59.9	+64.9
1973	—	—	—	-13.3	-10.6
1974	—	—	—	—	+3.1
1975	—	—	—	—	—

**Texas**

	1971	1972	1973	1974	1975
1971	—	—	+63.1	+41.5	+98.1
1972	—	—	+48.1	+82.8	+67.1
1973	—	—	—	+23.4	+12.8
1974	—	—	—	—	-8.5
1975	—	—	—	—	—

**Utah**

	1971	1972	1973	1974	1975
1971	—	—	+0.0	+0.0	+0.0
1972	—	—	+87.3	+50.8	+08.7
1973	—	—	—	-48.9	-25.9
1974	—	—	—	—	+45.0
1975	—	—	—	—	—

**Vermont**

	1971	1972	1973	1974	1975
1971	—	—	+51.5	+40.9	+04.7
1972	—	—	-46.5	-54.6	+12.1
1973	—	—	—	-15.0	+10.0
1974	—	—	—	—	+47.3
1975	—	—	—	—	—

**Virginia**

	1971	1972	1973	1974	1975
1971	—	—	+23.1	+62.6	+58.4
1972	—	—	+70.4	+13.5	+99.9
1973	—	—	—	+7.5	-12.3
1974	—	—	—	—	-18.4
1975	—	—	—	—	—

**Washington**

	1971	1972	1973	1974	1975
1971	—	—	+49.3	+25.7	+82.2
1972	—	—	-15.7	+22.1	+66.3
1973	—	—	—	+45.0	+97.5
1974	—	—	—	—	+36.2
1975	—	—	—	—	—

**West Virginia**

	1971	1972	1973	1974	1975
1971	—	67.6	+42.0	+18.8	+47.2
1972	—	—	+40.4	+78.2	+06.6
1973	—	—	—	+54.0	+55.7
1974	—	—	—	—	+95.9
1975	—	—	—	—	—

**Wyoming**

	1971	1972	1973	1974	1975
1971	—	+19.8	+10.4	+78.4	+75.2
1972	—	—	80.3	+72.0	+54.6
1973	—	—	—	+79.2	+12.5
1974	—	—	—	—	+06.2
1975	—	—	—	—	—

**Wisconsin**

	1971	1972	1973	1974	1975
1971	—	+0.4	+24.8	+22.0	+35.2
1972	—	—	+24.3	+21.5	+34.6
1973	—	—	—	2.1	+8.3
1974	—	—	—	—	+10.8
1975	—	—	—	—	—

TABLE A-13

Percentage change in total contract awards by major basin, 1971-1975

**Alaska**

	1971	1972	1973	1974	1975
1971	—	+59.4	+34.8	+85.2	+01.6
1972	—	+47.3	+16.2	+89.2	
1973	—	—	-21.0	+28.5	
1974	—	—	—	+62.8	
1975	—	—	—	—	

**California**

	1971	1972	1973	1974	1975
1971	—	46.7	+85.4	+63.7	+24.3
1972	—	+48.3	+95.3	+21.3	
1973	—	+42.2	+21.0		
1974	—	—	+14.8		
1975	—	—	—	—	

**Colorado River**

	1971	1972	1973	1974	1975
1971	—	+19.8	+13.5	+08.4	+56.2
1972	—	+85.7	+21.5	+92.8	
1973	—	—	22.4	+37.5	
1974	—	—	—	+77.3	
1975	—	—	—	—	

**Great Basin**

	1971	1972	1973	1974	1975
1971	—	+95.3	+35.6	+21.2	+45.4
1972	—	+25.5	+13.3	+32.8	
1973	—	+65.1	+33.0		
1974	—	—	—	+82.1	
1975	—	—	—	—	

**Hawaii**

	1971	1972	1973	1974	1975
1971	—	+0.0	+0.0	+0.0	+0.0
1972	—	+37.2	23.9	+50.8	
1973	—	—	34.8	-18.0	
1974	—	—	—	+25.7	
1975	—	—	—	—	

**Lake Erie**

	1971	1972	1973	1974	1975
1971	—	-17.4	+54.9	+11.6	+18.6
1972	—	—	+87.9	+77.8	+86.4
1973	—	—	+01.1	+05.7	
1974	—	—	—	+2.3	
1975	—	—	—	—	

**Lake Huron**

	1971	1972	1973	1974	1975
1971	—	+0.0	+0.0	+0.0	+0.0
1972	—	—	-34.6	+58.7	-59.6
1973	—	—	—	+96.2	38.1
1974	—	—	—	—	-84.3
1975	—	—	—	—	—

**Lake Michigan**

	1971	1972	1973	1974	1975
1971	—	+5.9	-54.8	-49.0	-28.0
1972	—	—	57.3	-51.8	-32.0
1973	—	—	—	+12.9	+59.4
1974	—	—	—	—	+41.1
1975	—	—	—	—	—

**Lake Superior**

	1971	1972	1973	1974	1975
1971	—	+0.0	+0.0	+0.0	+0.0
1972	—	+89.0	+32.8	+54.4	
1973	—	—	+35.5	+50.9	
1974	—	—	—	+1.7	
1975	—	—	—	—	

**Missouri**

	1971	1972	1973	1974	1975
1971	—	+64.4	+83.5	+70.5	+99.3
1972	—	+11.6	+86.1	+03.7	
1973	—	—	+56.4	+72.1	
1974	—	—	—	+6.1	
1975	—	—	—	—	

**North Atlantic**

	1971	1972	1973	1974	1975
1971	—	-0.3	+91.0	+40.0	+64.2
1972	—	+91.8	+41.0	+65.3	
1973	—	—	+25.6	+38.3	
1974	—	—	—	+10.1	
1975	—	—	—	—	

**Northeast**

	1971	1972	1973	1974	1975
1971	—	+89.3	+53.2	+34.7	+77.0
1972	—	-19.0	-28.8	-6.4	
1973	—	—	-1.20	+15.5	
1974	—	—	—	+31.4	
1975	—	—	—	—	

**Ohio River**

	1971	1972	1973	1974	1975
1971	—	7.1	+ 44.1	+ 68.9	+ 25.5
1972	—	—	+ 55.4	+ 82.1	+ 43.1
1973	—	—	—	+ 17.2	+ 56.5
1974	—	—	—	—	+ 33.5
1975	—	—	—	—	—

**Pacific Northwest**

	1971	1972	1973	1974	1975
1971	—	+ 17.8	+ 30.4	+ 77.6	+ 61.0
1972	—	—	+ 10.7	+ 50.7	+ 36.7
1973	—	—	—	+ 36.2	+ 23.5
1974	—	—	—	—	9.2
1975	—	—	—	—	—

**South Central Lower Mississippi**

	1971	1972	1973	1974	1975
1971	—	- 20.6	+ 72.0	+ 14.7	+ 20.4
1972	—	—	+ 16.8	+ 70.8	+ 77.9
1973	—	—	—	+ 24.9	+ 28.2
1974	—	—	—	—	+ 2.6
1975	—	—	—	—	—

**Southeast**

	1971	1972	1973	1974	1975
1971	—	- 29.1	+ 82.2	+ 42.0	+ 32.0
1972	—	—	+ 41.2	+ 87.5	+ 79.7
1973	—	—	—	+ 32.8	+ 27.3
1974	—	—	—	—	4.1
1975	—	—	—	—	—

**Tennessee River**

	1971	1972	1973	1974	1975
1971	—	—	- 34.8	+ 55.8	+ 1.8
1972	—	—	—	+ 39.3	+ 56.3
1973	—	—	—	—	- 34.6
1974	—	—	—	—	4.7
1975	—	—	—	—	+ 45.8

**Upper Mississippi**

	1971	1972	1973	1974	1975
1971	—	—	+ 3.9	+ 26.8	+ 76.3
1972	—	—	—	+ 22.0	+ 69.7
1973	—	—	—	—	+ 39.1
1974	—	—	—	—	+ 0.4
1975	—	—	—	—	—

**Western Great Lakes**

	1971	1972	1973	1974	1975
1971	—	—	+ 15.9	- 46.2	3.3
1972	—	—	—	53.5	16.6
1973	—	—	—	—	+ 79.7
1974	—	—	—	—	+ 78.5
1975	—	—	—	—	- 0.6

**Western Gulf**

	1971	1972	1973	1974	1975
1971	—	—	+ 71.5	+ 65.7	+ 11.5
1972	—	—	—	+ 54.9	+ 81.6
1973	—	—	—	—	- 17.3
1974	—	—	—	—	+ 10.2
1975	—	—	—	—	5.9