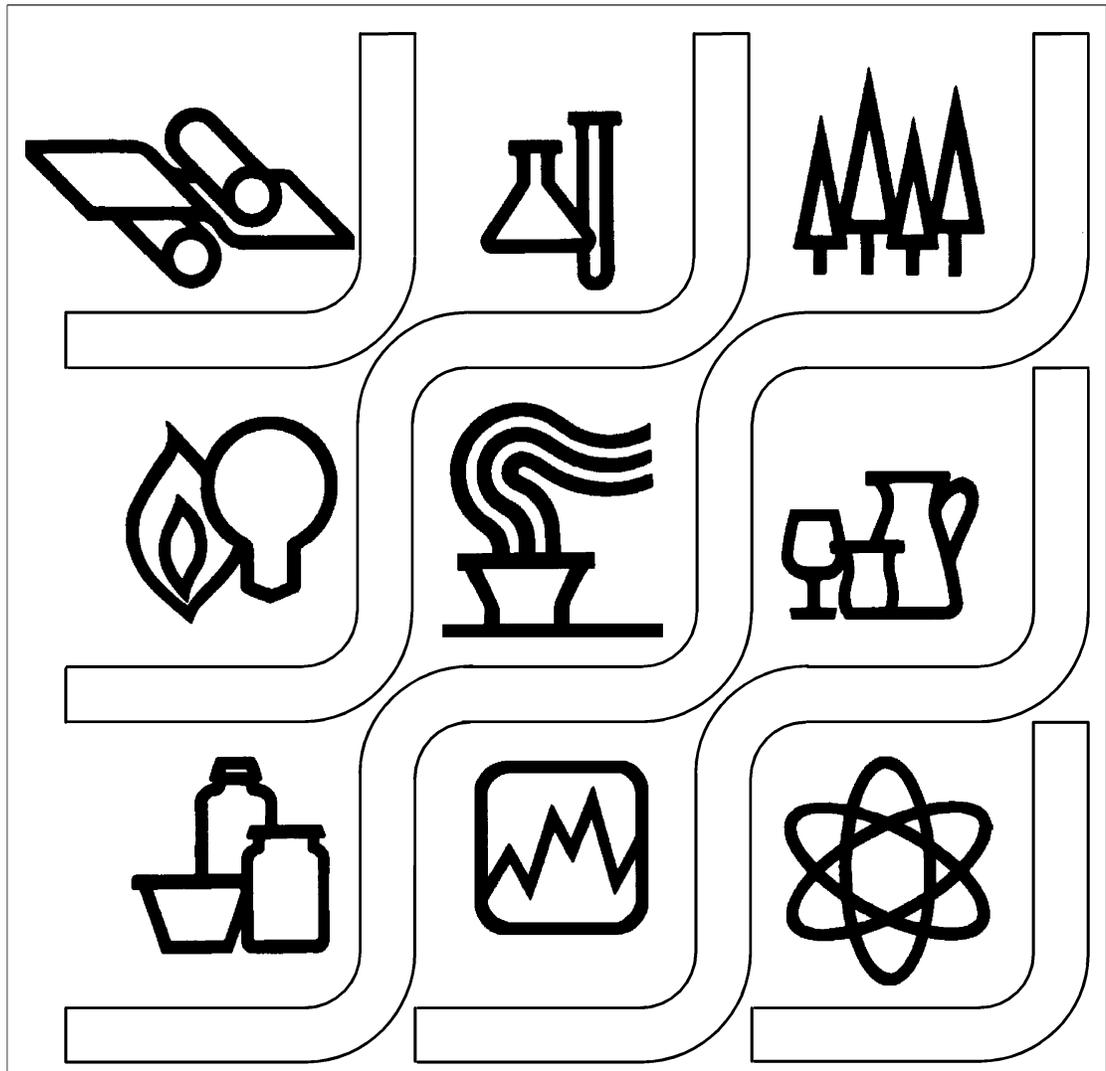


CURRENT INDUSTRIAL REPORTS
**Pollution Abatement
Costs and Expenditures: 1994**

MA200(94)-1



U.S. Department of Commerce
Economics and Statistics Administration
BUREAU OF THE CENSUS

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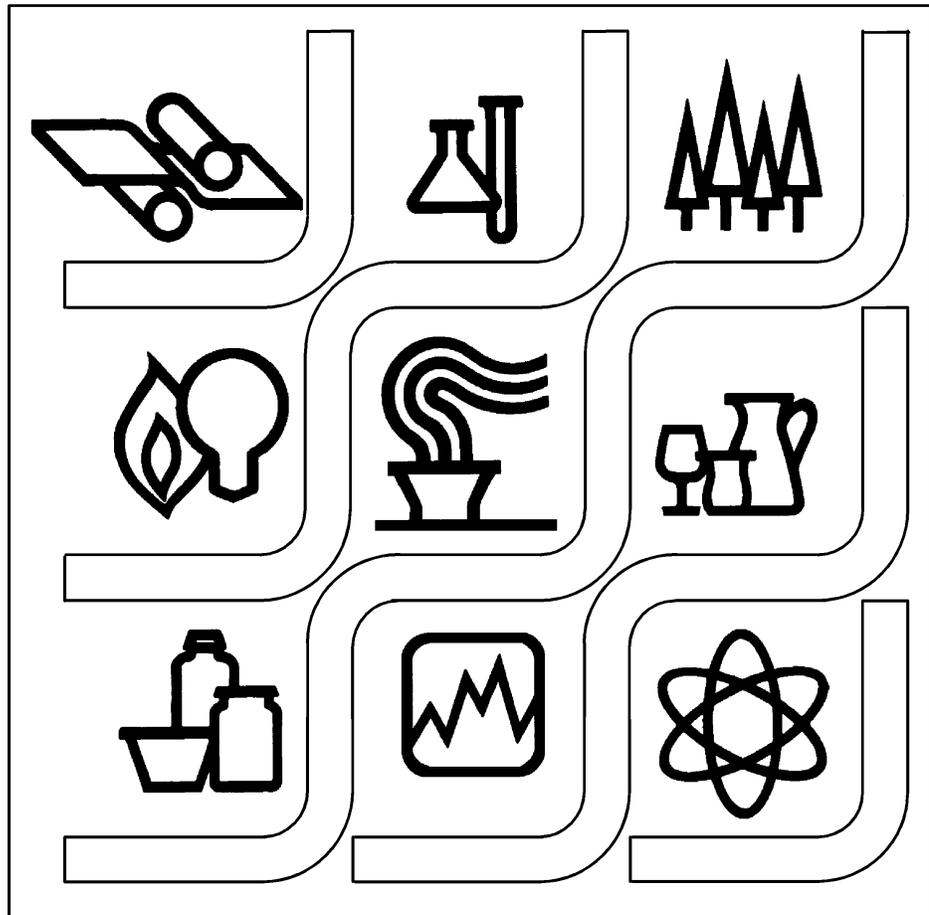
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Introduction

MANUFACTURING

Tables 1 through 13b present manufacturing pollution abatement costs and expenditures data. These data are collected on Form MA-200, Survey of Pollution Abatement Costs and Expenditures. The survey has been conducted annually by the U.S. Census Bureau since 1973, except for 1987.

Summary of Survey Results

Pollution abatement capital expenditures by manufacturing establishments with 20 employees or more amounted to \$7,880 million in 1994. Of this total, \$7,578 million was attributable to a particular media: \$4,311 million for air, \$2,430 million for water, and \$838 million for solid/contained waste. Spending for the nonmedia and other was \$302 million.

Approximately 73 percent of the \$7,880 million new capital expenditures for pollution abatement was made by establishments classified in four major industry groups: Chemicals and Allied Products (Major Group 28), Petroleum and Coal Products (Major Group 29), Paper and Allied Products (Major Group 26), and Primary Metal Industries (Major Group 33).

In 1994, three States (Texas, California, and Louisiana) accounted for approximately 35 percent of total new pollution abatement capital expenditures. Texas comprised 12 percent of the total.

Operating costs related to pollution abatement activities totaled \$20,669. Of this amount, \$18,770 was attributable to a particular media: \$6,139 million for air, \$7,031 million for water, and \$5,601 million for solid/contained waste. Spending for the nonmedia and other was \$1,899 million.

The pollution abatement totals for the media for 1994 can be compared with the following in 1993: \$7,178 million in pollution abatement capital expenditures and \$17,555 million in pollution abatement operating costs. Total pollution abatement media capital expenditures increased 6 percent. Air, water, and solid/contained waste capital expenditures increased 5, 6, and 10 percent, respectively. Total pollution abatement media operating costs showed an overall increase of 7 percent. Air operating costs increased 10 percent. Water operating costs increased 6 percent. Solid/contained waste operating costs increased 5 percent.

Information in the Tables

Historic tables. Tables 1 and 2 show historic and summary data. Table 1 shows the data by major group (two-digit industries), and table 2 shows the data by State.

Detail tables. Pollution abatement capital expenditures (PACE) and pollution abatement operating costs (PAOC) are shown for the media air, water, and solid/contained waste and for the nonmedia and other. These data are shown for industries and States.

PACE data for the media air, water, and solid/contained waste are shown in tables 3 through 6c. PACE for the media totals are shown in table 3 at the two-, three-, and four-digit industry level. PACE media totals for States by major group (two-digit industries) are shown in table 5. Detail for table 3 is shown in tables 4a through 4c at the major group level. Tables 6a through 6c show detail for table 5 at the State level.

Within the PACE detail tables 4a through 4c and 6a through 6c, the media capital expenditures are separated on the basis of abatement technique. The tables distinguish between plant and equipment designed to abate pollutants through end-of-line (EOL) techniques and those designed to reduce or eliminate the generation of pollutants through production process enhancements (PPE). Separate expenditure data also are shown in the detail tables for expenditures to abate hazardous and nonhazardous pollutants.

For air expenditures, tables 4a (industry data) and 6a (State data) show data for the major types of air pollutants (particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead) as a group. If an air expenditure is not for one of the major types of air pollutants and is not hazardous, it is classified as other. Analysis of these data should take into account that, where expenditures occur for a single device that has the ability to abate more than one pollutant, the classification of the device is guided by the primary purpose for which the device was installed.

Pollution abatement operating costs (PAOC) data for the media air, water, and solid/contained waste are shown in tables 7 through 11b. PAOC for the media totals are shown in table 7 at the two-, three-, and four-digit industry level. PAOC media totals for States by major group (two-digit

industries) are shown in table 9. Detail for table 7 is shown in tables 8a, 8b, and 8c at the major group level. Tables 10a, 10b, and 10c show detail for table 9 at the State level.

Within the PAOC detail tables, data are shown for expenditures to abate hazardous and nonhazardous pollutants. Within nonhazardous water and nonhazardous solid/contained waste, costs are shown as payments to industry and payments to government.

Tables 11a and 11b tabulate the pollution abatement operating cost data for the media by kind of cost instead of by media. Tables 11a and 11b show data for all media by kind of cost: depreciation; salaries and wages; fuel and electricity; contract work/services; and materials, leasing, and other costs. Table 11a shows two-, three-, and four-digit industry data; and table 11b shows State by major group data.

Nonmedia and other expenditures are shown in tables 12a, 12b, 13a, and 13b. Pollution abatement nonmedia and other capital expenditures are shown in tables 12a and 12b. Table 12a shows data by major group (two-digit industry level). Table 12b shows data by State. Pollution abatement nonmedia and other operating costs are shown in tables 13a and 13b. Table 13a shows data by major group (two-digit industry level). Table 13b shows data by State. The nonmedia pollution abatement expenditures are for underground storage tanks and site cleanup. Other expenditures include noise abatement, radiation abatement, multimedia, and not elsewhere classified (n.e.c.). Multimedia expenditures are for the abatement of pollutants that cross media.

Changes in Data Collection Affecting Historic Comparisons

The 1992, 1993, and 1994 MA-200 survey forms differ from previous years. These changes may affect the year-to-year comparisons of some of the results.

Some of the general terminology and definitions are changed or new:

Pollution abatement is redefined as "... for the purpose of reducing, eliminating, or disposing of unwanted emissions or wastes that are created by the production process and harmful to the environment or the removal of pollution created by prior-years' production. For this survey, only expenditures with the primary purpose of protecting the environment are included." The revised pollution abatement definition replaces a reference to "pollutants" in prior definitions with "unwanted emissions or wastes." It expands the prior definition by adding the qualification "harmful to the environment" to the qualification "created by the production process." The definition then goes a step further and specifies that

expenditures qualify for reporting only if the *primary purpose* is environmental protection. It adds the reporting of expenditures to remove pollution created by production in prior years.

The techniques for pollution abatement are clarified. "Prevention" is changed to "source reduction" and "waste minimization." Definitions for these two new terms are provided on the 1992, 1993, and 1994 MA-200 survey forms. "Collection/disposal" and "recycling" are now defined.

Instructions and the type of data collected for capital expenditures for the media are changed:

Capital expenditures now include a measure of "end of line" and "production process enhancements" (formerly changes-in-production process) for solid/contained waste as well as for air and water. New "special instructions" explain how to report production process enhancement expenditures if it is not feasible to report only the portion intended for environmental protection.

"Percent hazardous" is now collected for water pollution abatement capital expenditures as well as for air and solid/contained waste.

The seven types of pollutants data collected for air pollution capital expenditures are combined into three categories:

1. Hazardous
2. Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead
3. Other nonhazardous air pollutants

The instructions for capital expenditures clarify that "construction in progress intended for environmental protection" is reportable.

The instructions also clarify that "recycling equipment if your primary product is recycling" is *not* reportable.

The instructions and items for the pollution abatement operating costs for the media also are revised:

The operating cost categories were changed beginning with 1992. Costs for "fuel and electricity" are separate from "materials and supplies." "Services," now termed "contract work/services," is separate from "equipment leasing and other costs." "Materials and supplies" and "equipment leasing and other costs" are combined into "materials, leasing, and miscellaneous." "Labor" was renamed "salaries and wages" to emphasize that dollars spent on environmental administration are now reported in this category.

"Percent hazardous" is now collected for air and water as well as for solid/contained waste.

Form instructions clarify that the following expenses are reportable beginning with 1992:

- Incremental costs for consumption of environmentally preferable materials and fuels
- Conducting environmental studies for development or expansion
- Compliance and environmental auditing
- Developing pollution abatement operating procedures

Additional instructions explain that “taxes, fines, legal fees, and superfund taxes and contributions” are *not* reportable.

Though not specified in the prior-year instructions, testing and monitoring procedures and equipment were excluded from surveys prior to 1992. These costs and expenditures are reportable since 1992.

“Cost recovered” is now termed “cost offsets.” These offsets are pollution abatement operating expenses recovered as a result of pollution abatement techniques. The definition was clarified to specify that cost offsets must be related to production and for environmental protection.

The 1992 report showed pollution abatement expenditures for “nonmedia” and “other” for the first time. “Nonmedia” includes data for underground storage tanks and site cleanup. “Other” expenditures are for noise abatement, radiation abatement, multimedia, and not elsewhere classified (n.e.c). “Multimedia” expenditures are for the abatement of pollutants that cross media. Capital for the “nonmedia” and “other” was collected for all categories. Operating expenses were collected for all categories in 1992 except underground storage tanks. Operating expenses for underground storage tanks were collected for the first time in 1993.

Scope

The survey covers plants classified in manufacturing industries¹ by the annual survey of manufactures (ASM) with the following specific differences:

1. Establishments in Major Group 23, Apparel and Other Textile Products, are excluded from the pollution abatement survey. These establishments operate primarily in rented quarters where the abatement of pollution is generally arranged by the landlord.

2. The sample does not include establishments with fewer than 20 employees. Early surveys showed that establishments with fewer than 20 employees contributed only about 2 percent to the pollution estimates while constituting more than 10 percent of the sample size. No adjustment is made to account for these establishments.

Methodology

The 1994 survey results are based upon a probability sample panel of approximately 17,800 establishments selected from a frame created from the 1992 Census of Manufactures and augmented by a universe of births identified for the 1993 Annual Survey of Manufactures (ASM). Each survey year a sample of the most recently identified birth establishments is selected and added to the survey panel.

The sample selection of the pollution abatement survey panel is based on a probability proportionate to size (pps) design. For each establishment, a probability of selection is assigned directly proportional to the value of shipments as reported in the census. The actual probability value is determined by the reliability constraint assigned for the industry to which the establishment belongs. These constraints are assigned consistent with the limitation of an overall sample size of about 17,800 establishments. The probability assignment was subject to one constraint. If the pps value was less than .04, the probability was reset exactly to .04. This was done to protect against the possibility of very small selected establishments with large sampling weights adversely affecting the estimates if they reported an “unexpected” large value. Sample selection was carried out in a random fashion. Selected establishments were assigned a sampling weight equal to the inverse of the probability of selection.

Revisions

Statistics for previous years may be revised, primarily as the result of corrected data from respondents.

Limitations of the Data

Sampling variation. The particular sample selected for this survey is one of a large number of similar probability samples of the same size that could have been selected by chance using the same sample design.

Each of the possible samples would yield somewhat different sets of results. The sampling errors—the differences between the estimate obtained and the results theoretically obtainable from a comparable complete canvass of the same target universe—are unknown. Guides to the potential size of the sampling errors are provided by the estimated relative standard errors of the average. Relative standard errors tend to be somewhat higher for detailed figures than for larger aggregates.

¹Establishments are classified in industries by industry definitions described in the 1987 edition of the *Standard Industrial Classification (SIC) Manual* published by the Office of Management and Budget. (For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.)

In conjunction with its associated estimates, the relative standard error (computed as the estimated standard error of estimate divided by the value of the estimate) may be used to define confidence interval ranges that could be expected to include comparable complete coverage value for specified percentages of all possible samples. The complete coverage value would be included in the range:

1. From one standard error below to one standard error above the derived estimate for about two-thirds of all samples.
2. From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
3. From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference that the comparable complete coverage results would be within the indicated ranges would be correct in approximately the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates shown would differ from complete coverage results by as much as one, two, or three standard errors, respectively.

For example, if an estimated total is shown as \$20.0 million with an associated relative standard error of 2 percent, the standard error is \$.4 million (2 percent of \$20.0 million). Then there is approximately 67 percent confidence that the interval \$19.6 to \$20.4 million includes the complete coverage total, about 95 percent confidence that the interval \$19.2 to \$20.8 million includes the complete coverage total, and almost certain confidence that the interval \$18.8 to \$21.2 million includes the complete coverage total.

The estimated absolute standard errors of the ratio of year-to-year change are also presented for these same key items. These estimated errors are derived from the variances of the individual yearly estimates, and thus are overestimates since the correlations from year-to-year estimates are not accounted for. Since this year-to-year change is itself a percentage measure, the absolute standard error of this measure is displayed rather than the relative standard error to avoid confusion.

For example, if an estimated total for 1994 is \$22.0 million with an associated relative standard error of 2 percent, and if an estimated total for 1993 is \$20.0 million with an associated relative standard error of 3 percent, the implied change is 10 percent, and the absolute standard error of year-to-year change is 3 percent on the 10 percent.

Stratum variation. To maintain a minimal sample, the universe is divided into three strata. Stratum 1 contains four-digit industries with historically high pollution abatement expenditures. The sample selected to represent stratum 1 is designed to yield estimates for each four-digit industry in the stratum with a specified level of expected reliability.

Stratum 3 contains four-digit industries with little or no historic pollution expenditures. A small sample represents this stratum. Because of the minimal expenditures, estimates for the four-digit industries are not published at that level. The estimates are included in the two- and three-digit level data.

Stratum 2 contains all four-digit industries not in stratum 1 or 3. The sample selected to represent stratum 2 is designed to yield estimates for all three-digit manufacturing industries with a specified level of expected reliability.

Plants in stratum 2 and especially stratum 3 tend to have high weights resulting from their lower probabilities of selection. Thus, more data variability is seen in industries with historically low pollution abatement. The confidence interval ranges reflect this observation. For example, in table 11, for industry 2013, the pollution abatement operating cost is \$30.4 million with a relative standard error of 22 percent. The standard error is \$6.7 million. There is 67 percent confidence that the interval \$23.7 to \$37.1 million includes the complete coverage total; about 95 percent confidence that the interval \$17.0 to \$43.8 million includes the complete coverage total; and almost certain confidence that the interval \$10.3 to \$50.5 million includes the complete coverage total.

Data variability decreases at higher tabulations of the data. The three-digit industry group 201 consists of the four-digit industry 2013, used in the example above, and industries 2011 and 2015. Continuing with the example, the relative standard error for the four-digit industry 2013 is 22 percent. At the three-digit level, the relative standard error drops to 6 percent.

Response limitations. There are limitations resulting from the accuracy of survey respondents' reporting and constraints on surveying capabilities. Specific response limitations are:

1. **Production process enhancements (PPE) capital expenditures.** The survey respondent is instructed to report "the pollution abatement portion of the installed cost of enhancement projects intended for environmental protection. Estimate the pollution abatement portion as the extra cost of pollution abatement features in structures and equipment (i.e., your actual spending less what you would have spent without the pollution abatement features built in)." Telephone conversations and interviews with survey respondents indicate that estimating such an incremental cost is difficult in many instances. The net effect of this reporting problem is not known; thus, the data user should consider this limitation when interpreting the PPE data.
2. **Cost offsets.** This item attempts to measure how much of pollution abatement costs are recovered through reuse or sale of recovered materials and energy. Part of the instructions state: "Cost offsets must be related to production and for environmental protection." This qualification makes it imperative that

the data preparer be aware of the original motivation of the decision to minimize waste or recover energy in order to adequately complete the form. The U.S. Census Bureau believes that this information is not always known.

3. **Operating costs for pollution abatement.** The survey respondent is asked to provide the following data separately: depreciation; salaries and wages; fuel and electricity; contract work/services; and materials, leasing, and other costs. In many cases, interviews with survey respondents have revealed that, with the exception of depreciation, book records are not kept for each category. Thus, these data must be estimated from other information.
4. **Nonmedia costs and expenditures.** Caution should be used in interpreting site cleanup data. Much of media, nonmedia, and other pollution abatement expenditures can be linked to laws and regulations. The expenditures are predictable, and industry estimates are reliable within the standard errors. Many site cleanup expenditures are related to laws and, therefore, are predictable by industry. However, some site cleanup incidents are the result of accidents. This makes the data more volatile than the media, underground storage tanks, and other pollution abatement expenditures data which are generally relatable to existing and pending legislation. Note that standard errors are given only for key measures, not for specific types of pollution abatement. In addition, there are abandoned sites under site cleanup, but since no plants are located on or specifically associated with the sites, the expenses are not covered by this survey.
5. **Air capital expenditures for major group 29.** The air capital expenditures for Major Group 29, Petroleum and Coal Products, include expenditures to meet the clean fuel requirements of the Clean Air Act. Expenditures for equipment and structures yielding cleaner fuel generally also achieve pollution abatement in the production process. Thus, it is generally not possible to separate clean fuel expenditures from pollution abatement expenditures for the production process.
6. **Capital expenditures by small companies.** Small companies, generally those with 50 employees or fewer, tend to report capital expenditure projects at the project's completion. Instead of reporting costs over time as the costs were incurred, a project total appears in 1 year. Since small companies tend to have high weights, the weighted project total sometimes appears as a notable increase in the data for 1 year. No attempt is made to adjust the data.

Operational errors. In addition to the response limitations, the estimates are subject to various operational errors; e.g., errors of collection, reporting, and transcription. The operational errors would also occur if a complete

canvass were conducted under the same conditions used for this survey. Explicit measures of the effects of the operational errors generally are not available. However, it is believed that most of the important operational errors were detected and corrected in the course of the U.S. Census Bureau's review of the data for reasonability and consistency.

NONMANUFACTURING

Table 14 and tables 15a through 15d present nonmanufacturing pollution abatement capital expenditures data. The data are collected on the Form PA-2, Plant and Equipment Survey: Supplement for Pollution Abatement. The U.S. Census Bureau has conducted the survey annually since 1988. Prior to 1988, the Bureau of Economic Analysis conducted the survey.

Summary of Survey Results

In 1994, pollution abatement capital expenditures for the media, nonmedia, and other by nonmanufacturing companies amounted to \$551 million for mining, \$4,662 million for petroleum, and \$4,349 million for electric utilities. Pollution abatement capital expenditures for the media air, water, and solid/contained waste amounted to \$434 million for mining, \$4,190 million for petroleum, and \$4,179 million for electric utilities. This represented a 10 percent decrease, a 6 percent increase, and a 4 percent increase, respectively, compared with the prior year. Air capital expenditures showed gains of 10 percent for petroleum, 7 percent for electric utilities, and 16 percent for mining. Water capital expenditures showed an increase of 19 percent for mining, a decrease of 2 percent for electric utilities, and no change for petroleum. Solid/contained waste capital expenditures decreased 1 percent for mining, 11 percent for electric utilities, and 4 percent for petroleum. Nonmedia and other capital expenditures rose 1 percent for mining and 1 percent for electric utilities and decreased 2 percent for petroleum.

Information in the Tables

Historic table. Table 14 shows pollution abatement capital expenditures for the media air, water, and solid/contained waste totals and for total nonmedia and other by industry. Table 14 also shows new plant and equipment data by industry.

Detail tables. Detail for table 14 is shown in tables 15a through 15d. Within tables 15a through 15c, the media capital expenditures are separated on the basis of abatement technique and by hazardous and nonhazardous expenditures. For air expenditures (table 15a), data also are shown as a group for the major types of air pollutants:

particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead. If an air expenditure is not for one of the major types of air pollutants and is not hazardous, it is classified as other. In table 15d, nonmedia and other abatement expenditures are shown for underground storage tanks, site cleanup, noise pollution, radiation, multimedia, or n.e.c. types of pollutants.

Changes in Data Collection Affecting Historic Comparisons

The 1992, 1993, and 1994 PA-2 survey forms differ from previous years. These changes may affect the year-to-year comparisons of some of the results.

Some of the general terminology and definitions are changed or new:

Pollution abatement is redefined as “. . . for the purpose of reducing, eliminating, or disposing of unwanted emissions or wastes that are created by the production process and harmful to the environment or the removal of pollution created by prior-years' production. For this survey, only expenditures with the primary purpose of protecting the environment are included.” The revised pollution abatement definition replaces a reference to “pollutants” in prior definitions with “unwanted emissions or wastes.” It expands the prior definition by adding the qualification “harmful to the environment” to the qualification “created by the production process.” The definition then goes a step further and specifies that expenditures qualify for reporting only if the *primary purpose* is environmental protection. It adds the reporting of expenditures to remove pollution created by production in prior years.

The techniques for pollution abatement are clarified. “Prevention” is changed to “source reduction” and “waste minimization.” Definitions are provided on the form for these. “Collection/disposal” and “recycling” are now defined.

Instructions and the type of data collected for capital expenditures for the media are changed:

Capital expenditures now include a measure of “end of line” and “production process enhancements” (formerly changes-in-production process) for solid/contained waste as well as for air and water. New “special instructions” explain how to report production process enhancement expenditures if it is not feasible to report only the portion intended for environmental protection.

“Percent hazardous” is now collected for air and water pollution abatement capital expenditures as well as for solid/contained waste.

Type-of-pollutants data are now collected for air pollution capital expenditures. Air pollutants are collected by three categories:

1. Hazardous
2. Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead
3. Other nonhazardous air pollutants

The instructions clarify that “research and development” is *not* reportable.

Though not specified in the prior-year instructions, expenditures for testing and monitoring equipment were excluded from surveys prior to 1992. These expenditures are reportable since 1992.

The 1992 report showed pollution abatement expenditures for “nonmedia” and “other” for the first time. The “nonmedia” include data for underground storage tanks and site cleanup. “Other” expenditures are for noise abatement, radiation abatement, multimedia, and not elsewhere classified. “Multimedia” expenditures are for the abatement of pollutants that cross media.

Scope

The survey covers companies classified in mining, petroleum, and electric utility industries and includes all operations of the company. A company's capital expenditures are assigned to a single industry in accordance with the standard industrial classification (SIC) of the company's principal product or service. For mining, the survey covers the four SIC Major Groups: 10, Metal Mining; 12, Coal Mining; 13, Oil and Gas Extraction; and 14, Nonmetallic Minerals, Except Fuels. For petroleum, the survey covers SIC Major Group 29, Petroleum and Coal Products. The survey of pollution abatement expenditures in nonmanufacturing also covers SIC major group 29 used in the manufacturing survey, but the data differ. The manufacturing survey (MA-200) collects data at the plant level while the nonmanufacturing survey (PA-2) collects data at the company level. The manufacturing data presented for petroleum in tables 1 and 13b represent only the refining operations of the petroleum companies. The nonmanufacturing data presented in tables 14 through 15d also may include the extraction and distribution network of a company. For electric utilities, the survey covers SIC Industry Groups 491, Electric Services; and 493, Combination Utility Services, with the exception of Rural Electric Administration utilities.

Methodology

The total new plant and equipment expenditures shown in table 14 are estimates from the Plant and Equipment Expenditures Survey (P&E) conducted by the U.S. Census

Bureau. See the U.S. Department of Commerce News, Wednesday, April 10, 1991, CB91-125, PESVY(90)-4 for a description of the P&E's coverage and methodology. The same mail panel is used for the P&E and its pollution abatement supplement, the PA-2. Spending ratios derived from the data collected on the PA-2 are applied to the P&E estimates to yield the total new pollution abatement capital expenditures estimates.

Limitations of the Data

The data are subject to various response and operational errors; e.g., errors of collection, reporting, and transcription. However, it is believed that most of the important operational errors were detected and corrected in the course of the U.S. Census Bureau's review of the data for reasonability and consistency.

SELECTED INDUSTRIAL AIR POLLUTION CONTROL EQUIPMENT

Table 16 presents Selected Industrial Air Pollution Control Equipment: 1990 to 1994. These data are collected by the U.S. Census Bureau annually on the Current Industrial Reports Form MA35J. This information is provided for reference. For more detail, see the MA35J annual publication.

Scope

This survey covers firms engaged in the manufacture of selected industrial air pollution control equipment.

Methodology

The statistics in table 16 were collected by mail on Form MA35J. The survey panel includes all known manufacturers of the selected products specifically designed for use in air pollution control, approximately 100 companies.

Revisions

Statistics for previous years may be revised, primarily as the result of corrected data from respondents.

Limitations of the Data

The data are subject to various response and operational errors; e.g., errors of collection, reporting, and transcription. However, it is believed that most of the significant errors are identified by the computer edit and corrected in the course of the U.S. Census Bureau's review of the data for reasonableness and consistency.

QUESTIONS CONCERNING THIS REPORT

Please direct questions concerning data in this report to the U.S. Census Bureau, Manufacturing and Construction Division, Federal Office Building 4, Room 2135, Washington, DC 20233, or call the Environment, Technology, and Innovation Branch on **301-457-4667**.

TERMINOLOGY AND ABBREVIATIONS

For an explanation of the terms used in this report, see the appendix for reproductions of the report forms MA-200 and PA-2, including instructions.

The following abbreviations and symbols appear frequently in the tables:

–	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies.
(Z)	Less than half the unit shown.
(X)	Not applicable.
(NA)	Not available.
EOL	End of line.
n.e.c.	Not elsewhere classified.
PACE	Pollution abatement capital expenditures.
PAOC	Pollution abatement operating costs.
PPE	Production process enhancements.
r	Revised by 5 percent or more from previously published figures.

Table 1. Summary Capital Expenditures and Operating Costs by Major Groups: 1990 to 1994

[Million dollars, except percentages. Totals may not agree with detail because of independent rounding. For data prior to 1990, see MA200(90)-1. Statistics in other than the first two columns in this table

SIC code	Major group	Annual survey of manufactures (ASM) ¹		Pollution abatement capital expenditures (PACE) ²					
		Value of shipments	New capital expenditures	Total PACENM ³	Media				Nonmedia and other
					Total	Air	Water	Solid/contained waste	
	All industries	1994.. (NA)	(NA)	7 880.5	7 578.0	4 310.6	2 428.9	838.5	302.5
		1993.. 3 128 284.2	102 200.9	7 568.2	7 177.9	4 122.0	2 294.9	761.0	390.3
		1992.. 3 004 861.3	103 210.6	8 393.0	7 866.9	4 403.1	2 509.8	954.0	526.1
		1991.. 2 826 207.3	98 916.4	(NA)	7 390.1	3 706.3	2 814.6	869.2	(NA)
		1990.. 2 873 501.6	101 953.1	(NA)	6 030.8	2 562.0	2 651.4	817.5	(NA)
20	Food and kindred products	1994.. (NA)	(NA)	284.2	274.3	105.9	152.8	15.5	9.9
		1993.. 423 257.0	9 389.3	240.2	219.9	73.9	113.6	32.4	20.3
		1992.. 407 156.9	9 899.3	352.1	316.8	85.1	202.6	29.1	35.2
		1991.. 387 600.9	9 361.9	(NA)	481.8	94.6	359.5	27.7	(NA)
		1990.. 384 009.0	8 858.4	(NA)	249.0	64.6	163.3	21.1	(NA)
21	Tobacco products	1994.. (NA)	(NA)	3.1	3.1	(D)	(Z)	(D)	(Z)
		1993.. 28 383.8	387.7	18.1	17.8	16.7	(D)	(D)	.3
		1992.. 35 198.5	389.3	15.1	14.5	12.9	(D)	(D)	.6
		1991.. 32 031.7	405.3	(NA)	5.9	3.8	.5	1.6	(NA)
		1990.. 29 922.4	277.8	(NA)	5.9	4.0	.8	1.1	(NA)
22	Textile mill products	1994.. (NA)	(NA)	67.4	59.3	23.8	30.7	4.9	8.1
		1993.. 73 950.6	2 450.0	43.8	39.9	15.6	15.6	8.6	3.9
		1992.. 70 517.6	2 223.9	43.0	34.3	11.8	18.7	3.9	8.7
		1991.. 65 705.9	2 109.4	(NA)	56.8	27.8	21.4	7.6	(NA)
		1990.. 65 951.4	2 316.5	(NA)	45.9	18.7	24.8	2.4	(NA)
24	Lumber and wood products	1994.. (NA)	(NA)	162.6	135.4	102.6	16.0	16.8	27.2
		1993.. 94 546.9	1 950.7	91.1	74.0	51.5	13.0	9.5	17.2
		1992.. 81 764.8	1 761.8	102.6	94.5	50.7	18.9	24.9	8.1
		1991.. 70 568.9	1 573.2	(NA)	141.2	102.0	13.8	25.4	(NA)
		1990.. 74 287.2	1 874.9	(NA)	105.1	57.8	10.4	36.9	(NA)
25	Furniture and fixtures	1994.. (NA)	(NA)	71.8	68.4	33.6	23.0	11.8	3.5
		1993.. 47 348.8	972.5	45.1	39.7	17.4	1.9	20.3	5.4
		1992.. 43 689.4	814.2	25.6	17.9	14.3	.8	2.8	7.7
		1991.. 40 027.3	728.8	(NA)	23.7	16.2	2.8	4.7	(NA)
		1990.. 41 682.0	916.4	(NA)	23.6	19.0	2.3	2.3	(NA)
26	Paper and allied products	1994.. (NA)	(NA)	648.1	635.9	241.9	195.9	198.1	12.2
		1993.. 133 485.8	7 363.8	737.7	715.6	307.3	289.2	119.2	22.1
		1992.. 133 062.4	7 950.4	1 022.6	1 004.6	396.7	373.4	234.5	18.0
		1991.. 128 824.1	9 008.7	(NA)	1 232.6	480.8	552.7	199.0	(NA)
		1990.. 131 444.6	10 809.2	(NA)	1 075.2	414.0	509.6	151.7	(NA)
27	Printing and publishing	1994.. (NA)	(NA)	59.2	57.0	45.3	4.3	7.4	2.3
		1993.. 172 736.8	4 873.6	42.4	38.4	28.3	3.9	6.2	3.9
		1992.. 166 797.6	5 378.8	47.9	41.8	32.9	4.5	4.4	6.1
		1991.. 156 684.6	5 041.4	(NA)	37.2	26.8	6.2	4.2	(NA)
		1990.. 157 059.5	5 812.3	(NA)	67.8	56.4	4.4	7.0	(NA)
28	Chemicals and allied products	1994.. (NA)	(NA)	2 034.3	1 931.0	676.9	1 005.6	248.4	103.3
		1993.. 314 743.8	15 679.0	2 088.8	1 957.9	767.5	937.9	252.5	130.9
		1992.. 305 371.3	16 384.1	2 315.8	2 120.9	774.5	1 017.3	329.1	194.9
		1991.. 292 325.8	16 008.7	(NA)	2 066.1	816.4	942.3	307.5	(NA)
		1990.. 288 183.7	15 202.1	(NA)	1 852.1	596.2	995.0	260.9	(NA)
29	Petroleum and coal products	1994.. (NA)	(NA)	2 586.9	2 572.0	1 982.3	466.9	122.9	14.8
		1993.. 144 714.9	6 303.9	2 672.0	2 648.5	1 974.7	567.2	106.6	23.5
		1992.. 149 941.1	6 539.0	2 702.8	2 685.0	2 079.8	492.6	112.6	17.8
		1991.. 158 076.4	5 895.9	(NA)	1 462.5	996.7	373.3	92.5	(NA)
		1990.. 172 588.6	4 158.1	(NA)	916.8	425.7	400.8	90.3	(NA)
30	Rubber and miscellaneous plastics products	1994.. (NA)	(NA)	87.3	75.2	52.4	17.2	5.6	12.1
		1993.. 122 776.2	4 994.6	76.2	63.3	44.0	11.6	7.6	12.9
		1992.. 113 611.4	4 790.0	108.2	96.7	71.1	18.2	7.3	11.5
		1991.. 100 667.9	4 214.7	(NA)	81.7	50.8	18.8	12.2	(NA)
		1990.. 101 398.2	4 344.8	(NA)	93.8	68.9	11.0	13.9	(NA)
31	Leather and leather products	1994.. (NA)	(NA)	5.5	5.4	(D)	4.5	(D)	.1
		1993.. 9 990.9	130.8	18.3	18.1	1.6	15.7	.8	.1
		1992.. 9 667.9	133.0	9.6	8.5	.9	6.7	.9	1.1
		1991.. 9 142.2	99.5	(NA)	15.0	1.1	9.6	4.3	(NA)
		1990.. 9 887.3	114.4	(NA)	8.3	.7	6.5	1.1	(NA)
32	Stone, clay and glass products	1994.. (NA)	(NA)	217.4	210.6	148.9	48.9	12.8	6.8
		1993.. 65 573.7	2 417.2	131.4	118.1	83.2	16.1	18.7	13.3
		1992.. 62 383.7	2 454.5	154.6	138.8	93.4	20.2	25.3	15.7
		1991.. 59 610.6	2 381.3	(NA)	154.4	119.9	22.2	12.3	(NA)
		1990.. 63 468.0	2 729.2	(NA)	127.5	94.1	19.8	13.6	(NA)
33	Primary metal industries	1994.. (NA)	(NA)	446.0	428.0	290.1	98.5	39.4	18.0
		1993.. 142 384.4	4 726.4	481.2	442.2	280.7	92.0	69.5	39.0
		1992.. 138 209.1	5 344.9	560.6	525.7	342.6	123.5	59.5	34.9
		1991.. 132 836.6	5 878.7	(NA)	673.4	499.2	131.9	42.2	(NA)
		1990.. 146 052.0	5 788.6	(NA)	499.1	278.6	166.8	53.7	(NA)
34	Fabricated metal products	1994.. (NA)	(NA)	158.8	140.6	77.1	41.1	22.4	18.3
		1993.. 175 137.3	4 912.6	117.6	102.9	44.8	39.3	18.9	14.6
		1992.. 167 055.7	4 452.1	145.4	103.3	42.4	42.4	18.5	42.1
		1991.. 157 077.3	4 071.6	(NA)	176.9	80.7	66.4	29.8	(NA)
		1990.. 163 052.8	4 744.8	(NA)	171.0	52.9	61.1	57.0	(NA)
35	Industrial machinery and equipment	1994.. (NA)	(NA)	297.1	283.6	116.5	152.1	15.0	13.5
		1993.. 277 957.2	7 930.6	122.9	105.0	65.7	20.2	19.1	18.0
		1992.. 258 336.2	8 063.5	174.2	150.3	88.8	31.7	29.8	23.9
		1991.. 243 479.4	7 334.3	(NA)	128.4	88.7	27.6	12.1	(NA)
		1990.. 256 344.7	8 293.8	(NA)	107.8	46.7	41.3	19.8	(NA)
36	Electronic and other electric equipment	1994.. (NA)	(NA)	293.8	276.8	116.0	90.8	70.0	17.0
		1993.. 233 342.6	9 985.2	197.2	176.7	92.7	67.9	16.2	20.5
		1992.. 216 229.5	8 980.0	149.8	126.6	63.0	45.6	17.9	23.2
		1991.. 197 879.5	8 121.2	(NA)	233.7	90.7	122.7	20.3	(NA)
		1990.. 194 847.9	9 237.1	(NA)	177.5	92.8	58.4	26.3	(NA)

See footnotes at end of table.

cover manufacturing establishments with 20 or more employees. See introductory text for a detailed description of survey coverage and for the meaning of abbreviations and symbols]

Pollution abatement operating costs (PAOC) ²						Standard error of change (percent)		Standard error of estimate (percent)		SIC code
Total PAOCNM ⁴	Media				Nonmedia and other	PACE	PAOC	PACE	PAOC	
	Total	Air	Water	Solid/ contained waste						
20 669.5	18 772.0	6 139.1	7 031.5	5 601.4	1 897.5	5	2	4	1	1994
18 798.8	17 555.0	5 574.6	6 631.8	5 348.6	1 243.8	2	1	2	2	1993
19 228.0	17 466.4	5 395.0	6 576.9	5 494.4	1 761.6	5	2	3	2	1992
(NA)	17 308.9	4 955.6	6 345.0	6 008.3	(NA)	4	2	4	2	1991
(NA)	17 070.7	5 010.9	6 416.4	5 643.4	(NA)	4	2	2	2	1990
1 540.0	1 447.6	172.4	940.5	334.7	92.4	12	5	7	4	1994 20
1 368.0	1 339.3	156.1	857.8	325.4	28.7	6	2	7	3	1993
1 340.1	1 312.0	162.7	835.7	313.6	28.1	28	5	7	3	1992
(NA)	1 254.2	149.6	788.5	316.1	(NA)	53	4	42	5	1991
(NA)	1 108.8	145.9	692.4	270.4	(NA)	12	3	11	4	1990
36.1	35.9	14.3	11.5	10.1	.2	10	13	46	10	1994 21
(D)	32.8	12.8	10.2	9.8	(D)	14	1	26	6	1993
(D)	33.5	11.2	10.8	11.5	(D)	94	13	15	6	1992
(NA)	48.4	16.4	13.7	18.3	(NA)	11	2	36	18	1991
(NA)	44.8	15.9	13.3	15.6	(NA)	8	4	30	17	1990
320.7	315.7	58.2	178.8	78.8	5.0	27	7	16	5	1994 22
279.8	272.8	42.3	165.1	65.4	7.0	12	3	9	4	1993
264.2	256.2	38.1	152.5	65.7	7.9	20	11	10	4	1992
(NA)	213.7	36.1	123.5	54.1	(NA)	47	7	32	9	1991
(NA)	198.3	26.2	114.7	57.5	(NA)	38	5	25	8	1990
387.0	342.8	135.6	66.6	140.7	44.2	28	9	7	5	1994 24
279.3	253.1	90.5	51.9	110.6	26.3	14	4	14	5	1993
268.0	243.0	89.3	49.5	104.2	25.0	29	12	12	5	1992
(NA)	298.4	91.1	34.8	172.6	(NA)	64	10	42	13	1991
(NA)	259.3	86.2	37.1	136.0	(NA)	82	8	25	12	1990
174.0	144.4	49.4	16.7	78.3	29.6	49	10	28	6	1994 25
136.7	124.2	42.6	18.2	63.4	12.5	34	4	6	6	1993
126.0	118.5	43.0	14.3	61.2	7.5	20	14	15	6	1992
(NA)	136.2	45.9	24.3	66.0	(NA)	37	5	23	16	1991
(NA)	140.8	50.5	23.4	66.9	(NA)	68	8	35	16	1990
1 913.2	1 879.5	536.9	829.5	513.1	33.7	6	5	4	3	1994 26
1 948.3	1 901.5	511.2	852.7	537.5	46.8	4	2	5	4	1993
1 896.2	1 860.7	535.6	822.7	502.4	35.5	5	6	6	4	1992
(NA)	1 635.0	400.8	790.7	443.5	(NA)	4	2	3	4	1991
(NA)	1 606.8	397.5	788.3	421.0	(NA)	4	3	3	4	1990
307.1	287.5	114.7	34.3	138.5	19.6	33	6	12	4	1994 27
266.0	258.4	95.3	33.0	130.1	7.6	19	3	19	4	1993
260.0	239.0	85.6	36.5	117.0	21.0	18	11	13	4	1992
(NA)	228.1	87.7	30.3	110.2	(NA)	13	14	12	11	1991
(NA)	240.7	70.5	30.6	139.6	(NA)	45	10	23	10	1990
5 103.9	4 566.9	1 138.7	1 996.7	1 431.5	537.1	6	4	6	2	1994 28
4 801.8	4 348.2	1 013.6	1 957.0	1 377.6	453.6	3	1	3	3	1993
4 862.2	4 425.1	1 026.9	1 946.8	1 451.3	437.1	3	4	3	3	1992
(NA)	4 046.9	879.6	1 786.9	1 380.5	(NA)	5	3	3	3	1991
(NA)	3 943.4	841.9	1 799.0	1 302.5	(NA)	5	2	4	2	1990
3 120.0	2 914.9	1 742.0	755.7	417.2	205.1	10	6	9	4	1994 29
2 792.5	2 647.9	1 585.3	685.2	377.4	144.7	5	1	5	4	1993
3 190.8	2 585.4	1 428.9	742.8	413.7	605.4	11	4	6	4	1992
(NA)	2 849.0	1 464.7	793.9	590.4	(NA)	3	2	2	3	1991
(NA)	2 704.9	1 472.2	701.9	530.8	(NA)	7	4	3	4	1990
515.7	439.6	119.2	90.7	229.8	76.1	20	7	11	4	1994 30
408.8	385.2	104.6	83.5	197.1	23.5	19	3	12	5	1993
403.9	379.6	105.7	73.3	200.5	24.3	39	9	27	5	1992
(NA)	440.9	121.0	76.9	243.0	(NA)	22	14	20	9	1991
(NA)	427.6	96.6	113.4	217.6	(NA)	17	4	15	10	1990
61.3	60.1	3.3	38.7	18.2	1.1	9	21	27	12	1994 31
51.5	50.9	3.6	29.6	17.7	.6	76	5	13	14	1993
53.9	53.5	3.7	30.6	19.2	.4	40	37	43	13	1992
(NA)	45.9	2.1	28.2	15.6	(NA)	90	8	55	29	1991
(NA)	48.9	7.0	26.1	15.7	(NA)	70	7	25	25	1990
632.5	599.5	309.6	108.0	182.0	33.0	27	6	14	4	1994 32
543.8	521.1	269.0	102.4	149.7	22.8	13	2	6	4	1993
521.6	491.2	248.5	94.6	148.1	30.3	19	5	15	4	1992
(NA)	464.9	220.5	85.1	159.2	(NA)	21	3	16	4	1991
(NA)	497.3	247.6	93.1	156.7	(NA)	14	8	10	5	1990
2 361.5	2 211.5	982.1	692.2	537.2	150.0	9	5	5	4	1994 33
2 144.0	2 017.2	944.5	598.2	474.6	126.8	7	1	7	3	1993
2 101.1	1 993.4	933.1	575.0	485.3	107.7	5	4	5	3	1992
(NA)	2 002.6	911.7	564.0	526.9	(NA)	6	3	5	3	1991
(NA)	2 025.5	943.7	565.4	516.4	(NA)	5	2	4	4	1990
872.0	786.1	135.9	327.4	322.9	85.9	28	6	19	4	1994 34
741.9	679.4	126.6	267.3	285.4	62.5	9	3	7	4	1993
869.3	761.2	130.4	284.3	346.6	108.0	8	6	7	4	1992
(NA)	842.6	133.8	301.1	407.6	(NA)	12	8	11	5	1991
(NA)	813.8	114.2	343.5	356.1	(NA)	12	5	9	8	1990
505.3	444.3	79.1	147.1	218.1	61.0	92	5	34	3	1994 35
488.1	445.1	71.9	157.2	216.0	43.0	6	2	8	4	1993
524.6	463.7	65.4	160.5	237.9	60.9	22	7	7	4	1992
(NA)	573.9	70.0	165.1	338.8	(NA)	23	5	18	8	1991
(NA)	557.7	77.9	159.5	320.3	(NA)	25	7	10	7	1990
841.1	771.9	165.4	329.9	276.7	69.2	35	7	19	4	1994 36
716.1	662.4	121.8	297.5	243.1	53.8	19	2	13	5	1993
722.1	657.1	117.9	288.8	250.4	65.0	18	10	6	5	1992
(NA)	833.0	22.1	323.6	409.5	(NA)	44	10	33	12	1991
(NA)	787.8	113.1	370.3	304.4	(NA)	18	7	12	14	1990

Table 1. Summary Capital Expenditures and Operating Costs by Major Groups: 1990 to 1994—

[Million dollars, except percentages. Totals may not agree with detail because of independent rounding. For data prior to 1990, see MA200(90)-1. Statistics in other than the first two columns in this table

SIC code	Major group	Annual survey of manufactures (ASM) ¹		Pollution abatement capital expenditures (PACE) ²						
		Value of shipments	New capital expenditures	Total PACENM ³	Media				Nonmedia and other	
					Total	Air	Water	Solid/contained waste		
37	Transportation equipment -----	1994--	(NA)	(NA)	351.1	336.9	244.8	60.8	31.3	14.2
		1993--	414 614.4	11 408.2	297.2	277.6	178.7	67.1	31.8	19.6
		1992--	399 857.3	11 045.0	321.0	281.0	179.4	69.2	32.5	40.0
		1991--	364 032.1	10 646.9	(NA)	301.4	175.8	94.7	30.8	(NA)
		1990--	367 926.7	10 578.7	(NA)	395.3	206.6	142.6	46.1	(NA)
38	Instruments and related products -----	1994--	(NA)	(NA)	87.8	72.0	42.3	17.1	12.6	15.8
		1993--	136 916.4	4 430.9	127.7	105.0	65.1	19.2	20.7	22.7
		1992--	134 870.3	4 617.2	123.2	89.1	52.7	18.8	17.5	34.1
		1991--	127 159.7	4 489.5	(NA)	104.4	27.1	44.3	33.0	(NA)
		1990--	123 776.7	4 292.0	(NA)	91.5	57.7	25.5	8.2	(NA)
39	Miscellaneous manufacturing industries -----	1994--	(NA)	(NA)	18.0	12.6	8.1	2.7	1.8	5.4
		1993--	42 425.6	932.7	19.3	17.2	12.4	(D)	(D)	2.1
		1992--	39 594.0	1 047.5	19.1	16.6	10.2	(D)	(D)	2.5
		1991--	37 131.4	822.1	(NA)	13.1	7.3	3.8	2.0	(NA)
		1990--	37 205.2	805.5	(NA)	17.7	6.6	7.0	4.1	(NA)

¹Includes Major Group 23, Apparel and Other Textile Products.

²Excludes Major Group 23, Apparel and Other Textile Products.

³PACENM denotes pollution abatement capital expenditures, including the nonmedia and other.

⁴PAOCNM denotes pollution abatement operating costs, including the nonmedia and other.

Con.

cover manufacturing establishments with 20 or more employees. See introductory text for a detailed description of survey coverage and for the meaning of abbreviations and symbols]

Pollution abatement operating costs (PAOC) ²						Standard error of change (percent)		Standard error of estimate (percent)		SIC code
Total PAOCNM ⁴	Media				Nonmedia and other	PACE	PAOC	PACE	PAOC	
	Total	Air	Water	Solid/ contained waste						
1 465.3	1 116.4	293.7	342.5	480.2	348.9	26	6	20	5	1994 37
1 326.5	1 194.4	302.4	350.9	541.2	132.1	9	2	7	4	1993
1 298.5	1 171.7	298.5	347.0	526.2	126.8	10	5	10	4	1992
(NA)	1 118.3	254.7	319.6	544.0	(NA)	1	1	6	3	1991
(NA)	1 232.0	247.3	373.1	611.6	(NA)	12	4	10	4	1990
409.2	311.6	65.4	99.0	147.2	97.6	15	7	7	6	1994 38
382.9	336.6	59.3	94.1	183.2	46.3	18	2	20	4	1993
393.3	331.9	48.0	89.4	194.5	61.5	18	8	11	4	1992
(NA)	280.0	33.3	77.9	168.7	(NA)	1	1	20	6	1991
(NA)	247.7	37.4	68.5	141.7	(NA)	12	4	10	7	1990
103.5	95.7	23.5	26.0	46.2	7.8	11	8	14	6	1994 39
(D)	84.5	21.2	20.0	43.3	(D)	9	3	7	5	1993
(D)	89.7	22.7	21.7	45.3	(D)	23	11	7	5	1992
(NA)	74.9	14.5	17.0	43.4	(NA)	1	1	17	8	1991
(NA)	114.7	19.2	32.7	62.7	(NA)	33	24	19	59	1990

Table 2. Summary Capital Expenditures and Operating Costs by States: 1990 to 1994

[Million dollars, except percentages. Totals may not agree with detail because of independent rounding. For data prior to 1990, see MA200(90)-1. Statistics in this table cover manufacturing

State and year	Pollution abatement capital expenditures (PACE) ¹						
	Total PACENM ²	Media				Nonmedia and other	
		Total	Air	Water	Solid/contained waste		
United States	1994..	7 880.5	7 578.0	4 310.6	2 428.9	838.5	302.5
	1993..	7 568.2	7 177.9	4 122.0	2 294.9	761.0	390.3
	1992..	8 393.0	7 866.9	4 403.1	2 509.8	954.0	526.1
	1991..	(NA)	7 390.1	3 706.3	2 814.6	869.2	(NA)
	1990..	(NA)	6 030.8	2 562.0	2 651.4	817.5	(NA)
Alabama	1994..	203.7	198.8	89.9	41.8	67.1	4.9
	1993..	156.8	150.6	61.8	75.7	13.1	6.2
	1992..	126.8	119.4	54.3	48.2	16.9	7.4
	1991..	(NA)	316.6	143.0	133.7	39.9	(NA)
	1990..	(NA)	195.7	70.6	99.1	26.0	(NA)
Alaska	1994..	6.9	6.9	6	2.8	3.5	-
	1993..	10.2	10.2	9	8.4	.9	(Z)
	1992..	15.3	15.3	2.1	11.4	1.8	-
	1991..	(NA)	9.3	6.0	(D)	(D)	(NA)
	1990..	(NA)	11.1	8.5	(D)	(D)	(NA)
Arizona	1994..	54.3	54.2	31.5	17.3	5.5	.1
	1993..	24.3	24.2	15.2	7.9	1.2	.1
	1992..	32.0	30.8	13.6	16.2	1.1	1.2
	1991..	(NA)	24.4	15.6	5.3	3.4	(NA)
	1990..	(NA)	18.3	9.7	5.5	3.1	(NA)
Arkansas	1994..	48.4	45.9	29.2	13.2	3.4	2.6
	1993..	68.4	59.4	16.9	33.8	8.6	9.1
	1992..	81.9	75.6	28.3	41.2	6.0	6.4
	1991..	(NA)	57.1	17.6	28.4	11.2	(NA)
	1990..	(NA)	80.0	34.4	37.8	7.7	(NA)
California	1994..	1 717.0	1 699.0	1 271.3	408.4	19.2	18.0
	1993..	985.1	955.2	802.4	114.6	38.2	29.9
	1992..	589.8	547.9	418.7	88.5	40.7	41.9
	1991..	(NA)	696.6	443.7	226.4	26.5	(NA)
	1990..	(NA)	503.0	286.6	176.1	40.3	(NA)
Colorado	1994..	32.4	31.3	13.6	15.9	1.8	1.2
	1993..	9.2	7.9	3.2	4.3	.5	1.3
	1992..	15.1	13.7	6.5	5.9	1.2	1.4
	1991..	(NA)	30.0	7.9	11.0	11.1	(NA)
	1990..	(NA)	26.0	9.4	13.0	3.6	(NA)
Connecticut	1994..	64.1	62.3	19.7	39.9	2.7	1.8
	1993..	32.7	23.1	4.3	14.4	4.4	9.6
	1992..	34.9	29.3	7.9	13.2	8.2	5.5
	1991..	(NA)	70.8	14.4	51.2	5.1	(NA)
	1990..	(NA)	41.3	10.9	26.6	3.8	(NA)
Delaware	1994..	44.0	(D)	(D)	(D)	(D)	.2
	1993..	95.1	94.8	84.8	3.3	6.7	.3
	1992..	61.1	59.8	43.9	(D)	(D)	1.3
	1991..	(NA)	60.0	33.0	(D)	(D)	(NA)
	1990..	(NA)	25.7	23.0	2.1	.5	(NA)
District of Columbia	1994..	(NA)	-	-	-	-	-
	1993..	.2	-	-	-	-	.2
	1992..	(Z)	(Z)	(Z)	(Z)	-	-
	1991..	(NA)	(D)	-	(D)	-	(NA)
	1990..	(NA)	(D)	(D)	(D)	(D)	(NA)
Florida	1994..	117.4	115.1	14.1	44.2	56.8	2.2
	1993..	70.9	64.3	14.0	46.0	4.3	6.6
	1992..	110.8	105.9	24.5	74.0	7.4	4.9
	1991..	(NA)	90.1	18.6	63.1	8.4	(NA)
	1990..	(NA)	130.5	64.3	59.3	6.9	(NA)
Georgia	1994..	106.9	92.8	43.7	36.8	12.3	14.1
	1993..	136.0	123.5	80.0	23.1	20.3	12.5
	1992..	186.0	173.3	146.9	15.8	10.6	12.7
	1991..	(NA)	271.0	170.0	86.6	14.4	(NA)
	1990..	(NA)	238.3	124.8	98.8	14.7	(NA)
Hawaii	1994..	5.7	4.7	2.6	2.1	(Z)	1.1
	1993..	37.3	37.2	1.8	35.3	-	.2
	1992..	2.8	2.8	.5	2.3	-	(Z)
	1991..	(NA)	4.0	1.8	(D)	(D)	(NA)
	1990..	(NA)	23.2	12.6	(D)	(D)	(NA)
Idaho	1994..	28.4	27.6	18.0	(D)	(D)	.8
	1993..	37.3	37.2	15.1	19.3	2.8	.1
	1992..	25.8	25.0	14.3	10.3	.4	.8
	1991..	(NA)	36.5	26.2	9.4	.9	(NA)
	1990..	(NA)	32.2	4.1	26.1	2.1	(NA)
Illinois	1994..	309.2	294.5	198.4	78.2	17.8	14.7
	1993..	307.7	295.7	221.1	53.9	20.7	12.0
	1992..	366.8	350.5	250.1	81.3	19.1	16.2
	1991..	(NA)	207.0	129.8	63.0	14.2	(NA)
	1990..	(NA)	273.2	81.0	158.3	33.8	(NA)
Indiana	1994..	216.7	208.3	144.7	55.3	8.3	8.3
	1993..	292.0	286.7	209.2	55.5	22.0	5.3
	1992..	363.4	330.9	220.6	94.3	16.0	32.5
	1991..	(NA)	364.4	204.5	139.4	20.5	(NA)
	1990..	(NA)	246.7	94.2	131.7	20.7	(NA)
Iowa	1994..	52.1	46.3	22.1	17.6	6.5	5.8
	1993..	43.4	39.6	26.1	8.8	4.8	3.8
	1992..	52.2	46.9	27.0	14.2	5.7	5.3
	1991..	(NA)	39.3	22.1	12.3	4.9	(NA)
	1990..	(NA)	30.5	17.6	9.7	3.2	(NA)
Kansas	1994..	92.6	81.5	36.3	21.0	24.2	11.1
	1993..	96.0	93.8	61.0	24.7	8.0	2.2
	1992..	193.9	186.1	153.7	23.5	8.9	7.8
	1991..	(NA)	85.0	68.9	9.7	6.4	(NA)
	1990..	(NA)	35.6	12.8	20.1	2.7	(NA)

See footnotes at end of table.

establishments with 20 or more employees. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

Pollution abatement operating costs (PAOC) ¹					Standard error of change (percent)		Standard error of estimate (percent)		State and year	
Total PAOCNM ³	Media				Nonmedia and other	PACE	PAOC	PACE		PAOC
	Total	Air	Water	Solid/contained waste						
20 669.5	18 772.0	6 139.1	7 031.5	5 601.4	1 897.5	5	2	4	1	1994 U.S.
18 798.8	17 555.0	5 574.6	6 631.8	5 348.6	1 243.3	2	1	2	2	1993
17 466.4	17 466.4	5 395.0	6 576.9	5 494.4	1 761.6	5	2	3	2	1992
19 228.0	17 308.9	4 955.6	6 345.0	6 008.3	(NA)	4	2	4	2	1991
(NA)	17 070.7	5 010.9	6 416.4	5 643.4	(NA)	4	2	2	2	1990
(NA)										
460.7	437.3	133.8	193.6	109.9	23.4	20	11	10	8	1994 AL
412.2	393.4	140.6	157.2	95.6	18.8	15	3	12	6	1993
401.6	380.0	136.2	146.7	97.1	21.6	4	11	7	6	1992
(NA)	388.5	96.8	156.4	135.3	(NA)	12	9	8	11	1991
(NA)	338.8	93.5	138.8	106.5	(NA)	20	8	6	6	1990
21.2	21.2	4.3	9.6	7.3	-	32	30	25	33	1994 AK
29.3	28.9	6.9	12.8	9.2	.3	48	4	40	23	1993
31.5	31.4	8.2	14.7	8.5	.1	112	16	67	21	1992
(NA)	45.6	12.8	21.8	11.0	(NA)	9	4	1	9	1991
(NA)	32.7	9.8	15.9	7.0	(NA)	2	15	11	8	1990
160.9	145.6	74.8	38.7	32.1	15.3	60	13	18	7	1994 AZ
124.9	119.9	65.2	32.7	22.0	5.0	16	7	20	8	1993
143.4	129.4	66.4	36.0	27.1	14.0	21	17	14	10	1992
(NA)	104.8	61.5	22.0	21.2	(NA)	15	6	11	9	1991
(NA)	115.9	68.1	25.1	22.7	(NA)	8	7	9	8	1990
262.5	247.2	77.2	102.5	67.6	15.2	19	16	12	10	1994 AR
247.8	226.3	63.9	99.6	62.8	21.5	11	4	22	10	1993
224.6	208.1	56.2	92.3	59.5	16.5	23	14	16	11	1992
(NA)	174.2	46.7	79.0	48.5	(NA)	10	5	8	6	1991
(NA)	161.0	46.2	75.9	39.0	(NA)	14	7	13	6	1990
1 826.3	1 632.0	698.0	502.3	431.7	194.3	25	8	12	6	1994 CA
1 567.4	1 426.2	546.0	484.9	395.4	141.2	5	2	7	5	1993
1 637.6	1 492.6	490.3	584.1	418.2	145.0	11	6	8	4	1992
(NA)	1 717.0	616.4	549.7	550.9	(NA)	18	7	12	5	1991
(NA)	1 818.5	673.7	558.2	586.6	(NA)	10	6	6	6	1990
187.7	109.9	36.5	42.8	30.6	77.8	194	31	47	22	1994 CO
93.7	85.5	14.0	45.7	25.7	8.2	11	4	16	10	1993
95.5	83.5	11.3	44.5	27.7	12.0	7	10	13	12	1992
(NA)	251.7	28.5	107.3	115.9	(NA)	28	39	7	28	1991
(NA)	267.3	22.1	188.2	57.0	(NA)	34	19	24	48	1990
212.8	187.7	21.9	76.9	88.9	25.1	35	15	11	10	1994 CT
185.1	160.8	19.9	53.4	87.5	24.3	7	7	7	8	1993
197.6	168.5	23.6	52.8	92.1	29.1	6	11	9	5	1992
(NA)	213.9	22.8	82.9	108.2	(NA)	17	9	10	14	1991
(NA)	249.5	27.8	118.3	103.4	(NA)	11	14	8	21	1990
162.1	158.0	79.3	53.5	25.2	4.0	(X)	19	(X)	6	1994 DE
145.1	143.3	79.0	44.4	19.9	1.8	11	3	22	17	1993
153.3	145.5	67.9	54.1	23.5	7.9	17	16	16	15	1992
(NA)	155.2	64.3	65.1	25.8	(NA)	23	2	5	10	1991
(NA)	145.2	58.4	60.9	25.9	(NA)	11	2	11	9	1990
-	-	-	-	-	-	(D)	(D)	(D)	(D)	1994 DC
4.4	4.4	(D)	.5	(D)	-	-	91	-	12	1993
13.3	1.4	.3	.4	.7	11.9	1	86	46	40	1992
(NA)	1.1	(Z)	.4	.7	(NA)	(X)	60	(X)	57	1991
(NA)	1.4	(Z)	.6	.8	(NA)	(X)	17	(X)	59	1990
367.4	350.7	110.9	132.0	107.8	16.7	80	8	42	4	1994 FL
322.8	297.0	79.8	118.5	98.6	25.8	10	4	16	6	1993
336.7	304.3	81.6	125.4	97.3	32.4	6	8	5	5	1992
(NA)	291.5	88.0	114.5	89.0	(NA)	4	6	3	6	1991
(NA)	322.4	97.5	128.8	96.1	(NA)	9	6	5	8	1990
470.5	455.0	119.5	213.0	122.6	15.5	9	8	7	4	1994 GA
428.6	415.9	119.0	182.2	114.7	12.8	13	3	10	6	1993
396.8	375.7	118.4	152.3	105.0	21.1	17	8	16	6	1992
(NA)	422.3	120.1	191.3	110.8	(NA)	26	10	21	7	1991
(NA)	407.8	104.4	187.5	116.0	(NA)	10	10	8	7	1990
21.7	20.3	7.4	8.9	4.1	1.4	12	111	71	59	1994 HI
15.2	12.3	(D)	4.4	(D)	2.8	98	3	60	33	1993
16.2	12.8	3.3	4.6	4.9	3.4	43	31	53	33	1992
(NA)	15.8	(D)	9.0	(D)	(NA)	3	8	33	18	1991
(NA)	12.0	3.5	(D)	(D)	(NA)	62	16	23	13	1990
91.2	79.9	26.7	30.8	22.4	11.3	21	18	20	9	1994 ID
(D)	63.9	23.7	24.6	15.6	(D)	9	8	21	12	1993
68.0	60.4	21.3	23.9	15.2	7.7	19	24	23	13	1992
(NA)	37.7	11.1	15.6	11.1	(NA)	15	6	15	8	1991
(NA)	44.5	14.1	19.4	10.9	(NA)	25	3	4	10	1990
906.1	866.3	322.2	284.7	259.5	39.8	12	7	11	4	1994 IL
920.3	879.5	332.0	289.1	258.4	40.8	3	2	3	6	1993
932.0	896.1	322.5	297.0	276.7	35.9	10	7	3	6	1992
(NA)	783.4	261.9	263.7	257.8	(NA)	4	4	6	4	1991
(NA)	842.4	287.8	276.7	277.9	(NA)	22	5	7	5	1990
774.7	729.6	245.7	284.0	199.8	45.2	6	5	6	3	1994 IN
736.8	690.4	241.2	253.1	196.1	46.4	6	2	5	4	1993
752.4	706.6	255.2	253.2	198.2	45.7	6	5	6	3	1992
(NA)	667.5	197.2	240.1	230.2	(NA)	11	2	4	4	1991
(NA)	628.5	183.2	257.5	187.9	(NA)	14	4	10	3	1990
233.6	220.3	56.0	86.4	77.9	13.2	14	14	11	9	1994 IA
190.1	173.4	51.8	66.4	55.1	16.7	5	2	6	7	1993
178.9	168.9	53.3	60.0	53.6	12.0	15	12	9	7	1992
(NA)	149.1	46.4	56.7	48.0	(NA)	13	3	10	9	1991
(NA)	140.6	44.3	51.0	45.3	(NA)	8	11	8	9	1990
134.0	126.0	39.4	42.3	44.3	8.0	42	19	23	14	1994 KS
136.2	125.0	34.6	45.6	44.8	11.2	13	6	43	13	1993
113.1	107.3	29.0	37.0	41.3	5.7	78	13	35	11	1992
(NA)	139.7	47.8	42.2	49.7	(NA)	31	11	9	13	1991
(NA)	142.4	41.0	49.5	52.0	(NA)	15	6	10	8	1990

Table 2. Summary Capital Expenditures and Operating Costs by States: 1990 to 1994—Con.

[Million dollars, except percentages. Totals may not agree with detail because of independent rounding. For data prior to 1990, see MA200(90)-1. Statistics in this table cover manufacturing

State and year		Pollution abatement capital expenditures (PACE) ¹					
		Total PACENM ²	Media				Nonmedia and other
			Total	Air	Water	Solid/contained waste	
Kentucky	1994..	89.2	87.4	56.2	14.3	17.0	1.8
	1993..	117.1	104.0	64.3	15.0	24.8	13.1
	1992..	197.5	180.9	132.4	25.7	22.8	16.6
	1991..	(NA)	152.0	86.4	50.6	15.1	(NA)
	1990..	(NA)	135.5	60.3	68.4	6.9	(NA)
Louisiana	1994..	796.0	782.1	281.7	397.3	103.1	14.0
	1993..	931.0	905.2	367.1	449.5	88.5	25.9
	1992..	1 091.0	1 057.2	477.6	430.8	148.8	33.8
	1991..	(NA)	564.2	315.6	184.0	64.5	(NA)
	1990..	(NA)	301.9	85.4	144.9	71.6	(NA)
Maine	1994..	51.6	36.3	16.9	11.7	7.7	15.3
	1993..	46.1	45.2	19.2	19.8	6.2	5.8
	1992..	67.2	62.2	23.8	26.8	11.6	5.0
	1991..	(NA)	95.4	21.0	(D)	(D)	(NA)
	1990..	(NA)	104.1	25.6	25.1	53.4	(NA)
Maryland	1994..	22.9	20.4	12.7	5.2	2.5	2.6
	1993..	42.6	40.8	23.6	11.3	5.9	1.8
	1992..	45.2	38.1	16.4	16.2	5.5	7.1
	1991..	(NA)	94.6	67.6	21.9	5.2	(NA)
	1990..	(NA)	133.1	80.6	45.2	7.3	(NA)
Massachusetts	1994..	45.7	39.5	19.8	17.7	2.1	6.2
	1993..	88.5	82.8	42.6	31.7	8.4	5.7
	1992..	65.0	59.5	18.4	35.6	5.5	5.5
	1991..	(NA)	58.6	17.5	26.3	11.8	(NA)
	1990..	(NA)	69.9	14.5	44.2	11.1	(NA)
Michigan	1994..	321.7	312.8	220.7	64.6	27.5	8.9
	1993..	194.1	176.4	128.3	33.1	15.0	17.7
	1992..	183.9	159.3	99.4	37.9	22.0	24.6
	1991..	(NA)	172.9	90.0	49.7	33.1	(NA)
	1990..	(NA)	178.9	97.2	52.7	29.1	(NA)
Minnesota	1994..	41.9	37.7	23.3	8.4	5.9	4.2
	1993..	195.7	193.8	166.0	13.0	14.8	1.9
	1992..	137.2	133.1	91.8	29.7	11.6	4.1
	1991..	(NA)	64.4	43.9	13.8	6.7	(NA)
	1990..	(NA)	92.6	54.6	30.4	7.6	(NA)
Mississippi	1994..	71.9	70.8	30.3	34.0	6.5	1.1
	1993..	80.3	78.8	38.2	35.3	5.4	1.4
	1992..	115.8	112.8	88.3	15.8	8.8	3.0
	1991..	(NA)	68.2	43.2	19.0	6.0	(NA)
	1990..	(NA)	68.7	27.2	35.1	6.5	(NA)
Missouri	1994..	73.1	70.4	53.2	12.1	5.1	2.7
	1993..	56.5	45.9	24.6	13.3	8.1	10.7
	1992..	69.8	65.2	28.5	25.5	11.2	4.5
	1991..	(NA)	61.4	39.4	16.6	5.3	(NA)
	1990..	(NA)	72.4	22.3	43.8	6.3	(NA)
Montana	1994..	157.3	157.3	145.8	5.1	6.3	(Z)
	1993..	18.4	18.3	(D)	(D)	(D)	.1
	1992..	7.6	7.1	2.2	(D)	(D)	.5
	1991..	(NA)	18.3	14.7	(D)	(D)	(NA)
	1990..	(NA)	9.5	6.0	(D)	(D)	(NA)
Nebraska	1994..	14.4	13.2	7.3	5.1	.8	1.2
	1993..	9.9	9.7	1.8	5.3	2.7	.2
	1992..	12.4	8.0	3.7	2.6	1.7	4.4
	1991..	(NA)	5.6	2.7	2.2	.7	(NA)
	1990..	(NA)	5.8	3.4	1.9	.4	(NA)
Nevada	1994..	2.4	2.3	1.0	(D)	(D)	(Z)
	1993..	4.5	3.4	1.8	1.0	.6	1.1
	1992..	5.4	5.3	2.1	2.5	.8	.1
	1991..	(NA)	2.2	1.0	1.2	(Z)	(NA)
	1990..	(NA)	4.1	(D)	(D)	3.1	(NA)
New Hampshire	1994..	(D)	29.5	26.9	2.0	.6	(D)
	1993..	53.7	53.4	(D)	7.1	(D)	.2
	1992..	17.6	(D)	(D)	2.2	(D)	(D)
	1991..	(NA)	8.5	2.5	3.6	2.4	(NA)
	1990..	(NA)	9.7	3.8	2.9	3.0	(NA)
New Jersey	1994..	129.1	119.3	57.4	47.6	14.3	9.8
	1993..	155.8	137.0	37.0	72.2	27.8	18.9
	1992..	192.7	154.0	65.6	70.3	18.0	38.8
	1991..	(NA)	245.5	100.3	124.0	21.3	(NA)
	1990..	(NA)	152.3	60.3	74.3	17.6	(NA)
New Mexico	1994..	(D)	(D)	(D)	(D)	(D)	(D)
	1993..	79.2	78.7	68.2	(D)	(D)	.5
	1992..	44.3	44.3	36.2	(D)	(D)	-
	1991..	(NA)	26.0	9.5	(D)	(D)	(NA)
	1990..	(NA)	67.3	34.0	32.7	.7	(NA)
New York	1994..	180.2	162.7	83.6	56.2	22.8	17.5
	1993..	152.4	129.8	72.1	32.0	25.7	22.6
	1992..	184.5	128.8	72.9	29.0	26.8	55.7
	1991..	(NA)	200.5	88.8	55.4	56.3	(NA)
	1990..	(NA)	249.3	121.8	78.9	48.7	(NA)
North Carolina	1994..	141.3	133.2	55.9	54.5	22.8	8.1
	1993..	254.4	226.3	99.6	91.2	35.5	28.1
	1992..	281.0	259.8	97.3	132.2	30.3	21.2
	1991..	(NA)	276.3	68.8	181.0	26.5	(NA)
	1990..	(NA)	212.3	81.3	110.6	20.4	(NA)
North Dakota	1994..	1.8	1.7	.5	1.2	(Z)	.1
	1993..	10.0	10.0	8.8	.1	1.0	(Z)
	1992..	3.7	3.7	1.1	2.2	.3	-
	1991..	(NA)	(D)	(D)	(D)	-	(NA)
	1990..	(NA)	(D)	(D)	(D)	(D)	(NA)

See footnotes at end of table.

establishments with 20 or more employees. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

Pollution abatement operating costs (PAOC) ¹							Standard error of change (percent)		Standard error of estimate (percent)		State and year
Total PAOCNM ³	Media				Nonmedia and other	PACE	PAOC	PACE	PAOC		
	Total	Air	Water	Solid/contained waste							
407.3	379.0	155.0	123.7	100.3	28.3	13	10	13	7	1994 KY	
346.2	331.3	144.7	102.4	84.2	14.9	5	2	9	5	1993	
339.1	324.8	138.4	102.2	84.1	14.3	11	7	6	5	1992	
(NA)	331.3	121.4	107.8	102.1	(NA)	17	8	8	6	1991	
(NA)	327.7	131.2	103.8	92.7	(NA)	30	4	13	5	1990	
1 175.7	999.4	334.3	368.9	296.2	176.3	5	7	4	5	1994 LA	
989.1	922.7	325.8	362.5	234.4	66.4	3	2	4	5	1993	
969.2	920.0	317.3	347.6	255.1	49.3	5	5	2	5	1992	
(NA)	892.4	282.3	366.7	243.4	(NA)	7	5	2	3	1991	
(NA)	827.0	261.3	328.9	236.7	(NA)	8	2	4	3	1990	
143.8	131.7	22.2	67.8	41.7	12.1	7	14	4	9	1994 ME	
129.6	124.7	25.8	40.7	58.2	4.9	5	2	8	10	1993	
129.7	123.5	21.2	60.7	41.5	6.2	6	12	8	10	1992	
(NA)	127.3	18.8	59.6	48.9	(NA)	12	3	2	7	1991	
(NA)	113.5	16.0	56.2	41.2	(NA)	16	4	13	7	1990	
190.5	188.6	45.1	101.4	42.1	1.9	9	13	13	12	1994 MD	
227.5	222.0	54.6	98.3	69.1	5.4	18	7	12	9	1993	
210.0	205.6	55.4	80.5	69.7	4.4	8	7	19	6	1992	
(NA)	212.4	47.6	77.7	87.1	(NA)	8	8	4	4	1991	
(NA)	194.2	47.6	77.8	68.8	(NA)	11	3	10	6	1990	
301.7	273.6	59.3	110.8	103.5	28.1	15	11	13	7	1994 MA	
258.9	249.0	35.4	120.2	93.4	9.8	40	5	28	8	1993	
261.0	246.2	34.3	106.9	105.1	14.8	20	11	11	7	1992	
(NA)	247.6	39.1	99.2	109.5	(NA)	19	16	16	9	1991	
(NA)	249.2	33.7	88.8	126.8	(NA)	29	11	18	13	1990	
912.6	774.1	231.2	282.2	260.7	138.4	41	5	23	4	1994 MI	
823.9	768.5	226.3	291.0	251.2	55.4	8	2	5	3	1993	
796.1	763.0	220.2	290.8	252.0	33.1	8	5	7	3	1992	
(NA)	692.6	186.1	266.0	240.5	(NA)	6	4	6	3	1991	
(NA)	739.5	195.9	273.6	270.0	(NA)	14	5	7	5	1990	
320.1	296.2	116.5	100.2	79.5	23.9	2	7	8	4	1994 MN	
286.0	277.4	93.3	100.3	83.7	8.6	10	3	2	5	1993	
261.4	254.5	72.2	102.5	79.8	7.0	24	15	7	6	1992	
(NA)	247.3	58.7	87.3	101.3	(NA)	7	18	10	14	1991	
(NA)	211.9	61.2	77.4	73.3	(NA)	26	4	3	7	1990	
267.0	252.5	120.2	72.6	59.6	14.5	8	9	7	5	1994 MS	
261.6	258.7	108.0	79.4	71.3	2.9	5	2	6	9	1993	
271.9	269.1	120.9	86.1	62.1	2.8	32	10	6	7	1992	
(NA)	216.0	101.0	62.6	52.3	(NA)	19	3	19	5	1991	
(NA)	201.0	92.4	65.0	43.6	(NA)	7	4	6	5	1990	
283.0	276.7	84.4	103.9	88.3	6.3	18	6	6	4	1994 MO	
308.3	297.7	79.1	123.4	95.2	10.6	5	3	11	5	1993	
299.1	287.6	79.2	111.6	96.8	11.6	11	8	8	4	1992	
(NA)	268.4	59.8	115.2	93.4	(NA)	13	15	8	7	1991	
(NA)	344.2	72.9	160.1	111.2	(NA)	17	5	13	17	1990	
61.7	58.5	31.0	14.2	13.3	3.2	715	87	72	32	1994 MT	
23.4	22.5	15.7	4.3	2.6	1.0	88	2	43	12	1993	
(D)	25.5	17.3	4.8	3.4	(D)	17	7	9	12	1992	
(NA)	44.5	25.2	11.9	7.4	(NA)	82	17	43	5	1991	
(NA)	39.9	21.9	11.7	6.4	(NA)	67	5	7	16	1990	
64.1	60.0	15.2	22.8	22.0	4.1	27	16	18	10	1994 NE	
56.1	53.5	14.0	19.2	20.4	2.6	14	10	8	11	1993	
62.7	60.0	12.8	23.6	23.5	2.7	26	28	11	12	1992	
(NA)	41.1	8.7	14.8	17.6	(NA)	14	10	15	16	1991	
(NA)	37.9	9.3	14.6	14.0	(NA)	29	12	18	15	1990	
14.5	(D)	4.1	(D)	4.9	(D)	21	(X)	12	(X)	1994 NV	
10.9	10.3	4.8	2.5	3.0	.6	25	9	29	21	1993	
12.7	11.0	3.4	4.6	3.0	1.8	128	65	45	20	1992	
(NA)	9.0	3.1	2.6	3.3	(NA)	41	61	29	50	1991	
(NA)	7.8	1.4	2.9	3.4	(NA)	273	12	69	38	1990	
69.3	63.2	9.5	32.3	21.3	6.1	22	33	38	19	1994 NH	
48.7	46.4	6.9	21.1	18.3	2.3	28	5	10	15	1993	
47.4	44.1	5.8	20.6	17.7	3.4	(X)	17	(X)	15	1992	
(NA)	49.7	5.2	22.6	21.9	(NA)	23	5	13	13	1991	
(NA)	51.3	6.3	21.5	23.5	(NA)	28	8	26	14	1990	
587.5	554.2	142.2	235.9	176.0	33.3	14	12	12	7	1994 NJ	
721.0	634.8	143.8	298.4	192.6	86.3	11	6	10	11	1993	
784.8	673.8	146.6	285.7	241.5	111.0	8	16	12	13	1992	
(NA)	669.5	188.7	244.4	238.4	(NA)	8	4	4	9	1991	
(NA)	668.9	169.9	273.8	225.3	(NA)	10	5	6	6	1990	
57.2	56.7	37.5	9.4	9.8	.5	(X)	31	(X)	9	1994 NM	
79.3	75.7	42.1	13.2	20.4	3.6	18	3	60	41	1993	
65.2	63.4	34.2	11.4	17.8	1.8	127	52	70	42	1992	
(NA)	54.7	29.1	11.5	14.1	(NA)	16	4	26	15	1991	
(NA)	51.8	31.9	7.3	12.6	(NA)	438	5	64	17	1990	
648.0	563.3	109.1	212.3	242.0	84.7	37	7	26	6	1994 NY	
717.9	647.6	122.3	235.7	289.6	70.3	10	2	14	5	1993	
718.5	650.6	115.5	235.6	299.4	67.9	7	7	8	5	1992	
(NA)	665.5	106.0	248.2	311.3	(NA)	12	9	8	6	1991	
(NA)	619.5	109.6	239.9	270.0	(NA)	14	3	12	6	1990	
623.6	579.3	159.4	239.8	180.1	44.3	7	6	9	4	1994 NC	
549.5	512.1	130.8	218.1	163.3	37.4	6	2	7	4	1993	
580.8	554.4	213.2	155.6	265.5	26.5	8	9	4	3	1992	
(NA)	433.4	113.5	182.6	137.2	(NA)	15	9	8	7	1991	
(NA)	431.4	117.7	172.1	141.7	(NA)	16	5	9	7	1990	
8.5	8.3	1.6	4.0	2.8	.2	11	26	37	22	1994 ND	
18.0	17.2	5.0	6.8	5.4	.7	92	5	48	49	1993	
(D)	19.3	4.4	6.8	8.1	(D)	29	117	32	52	1992	
(NA)	8.7	(D)	3.3	(D)	(NA)	(X)	4	(X)	12	1991	
(NA)	8.0	1.7	2.8	3.5	(NA)	(X)	10	(X)	13	1990	

Table 2. Summary Capital Expenditures and Operating Costs by States: 1990 to 1994—Con.

[Million dollars, except percentages. Totals may not agree with detail because of independent rounding. For data prior to 1990, see MA200(90)-1. Statistics in this table cover manufacturing

State and year		Pollution abatement capital expenditures (PACE) ¹					
		Total PACENM ²	Media				Nonmedia and other
			Total	Air	Water	Solid/contained waste	
Ohio	1994..	435.3	413.5	196.0	192.3	25.2	21.8
	1993..	267.3	238.0	118.0	84.9	35.0	29.4
	1992..	335.6	309.1	142.7	127.4	39.0	26.4
	1991..	(NA)	290.0	130.9	93.8	65.3	(NA)
	1990..	(NA)	298.9	130.8	128.5	39.5	(NA)
Oklahoma	1994..	34.4	30.9	12.0	17.1	1.8	3.5
	1993..	41.5	40.6	16.8	20.7	3.0	1.0
	1992..	42.6	41.1	13.9	10.8	16.4	1.5
	1991..	(NA)	63.4	28.8	30.4	4.2	(NA)
	1990..	(NA)	38.3	18.2	17.3	2.7	(NA)
Oregon	1994..	64.8	59.2	29.7	24.6	4.8	5.6
	1993..	48.5	46.8	25.7	15.2	5.9	1.8
	1992..	109.5	105.8	37.0	63.2	5.6	3.7
	1991..	(NA)	74.3	12.9	47.4	14.0	(NA)
	1990..	(NA)	51.5	23.2	21.8	6.5	(NA)
Pennsylvania	1994..	340.1	327.6	185.4	58.4	83.8	12.5
	1993..	346.8	322.8	174.7	116.7	31.5	24.0
	1992..	305.7	272.4	140.5	63.0	68.9	33.4
	1991..	(NA)	340.4	185.9	124.3	30.2	(NA)
	1990..	(NA)	206.1	94.1	81.5	30.6	(NA)
Rhode Island	1994..	20.0	14.0	6.3	5.4	2.4	5.9
	1993..	6.5	2.9	1.5	1.3	.2	3.5
	1992..	5.4	2.2	.8	1.3	.2	3.2
	1991..	(NA)	5.9	1.4	4.2	.2	(NA)
	1990..	(NA)	13.6	4.2	5.7	3.7	(NA)
South Carolina	1994..	95.8	89.4	49.6	35.1	4.8	6.4
	1993..	161.3	157.9	65.4	57.5	35.0	3.4
	1992..	126.0	119.9	44.1	64.7	11.1	6.1
	1991..	(NA)	99.3	42.8	44.5	12.0	(NA)
	1990..	(NA)	127.4	53.6	57.0	16.8	(NA)
South Dakota	1994..	(D)	(D)	(D)	(D)	.1	(Z)
	1993..	1.4	1.0	.6	.4	(Z)	.4
	1992..	4.3	(D)	(D)	1.1	.5	(D)
	1991..	(NA)	3.0	2.2	.2	.6	(NA)
	1990..	(NA)	(D)	(D)	(D)	(D)	(NA)
Tennessee	1994..	187.3	183.6	(D)	30.2	(D)	3.7
	1993..	133.5	127.9	83.1	30.2	14.6	5.6
	1992..	222.2	218.3	163.9	33.5	21.0	3.9
	1991..	(NA)	139.2	95.1	28.4	15.7	(NA)
	1990..	(NA)	136.3	84.4	39.2	12.7	(NA)
Texas	1994..	923.2	884.9	461.9	336.2	86.7	38.3
	1993..	1 036.3	1 002.6	501.2	376.5	125.0	33.7
	1992..	1 491.8	1 446.0	777.2	483.5	185.3	45.8
	1991..	(NA)	1 055.7	511.4	390.1	154.2	(NA)
	1990..	(NA)	895.3	328.7	417.8	148.8	(NA)
Utah	1994..	20.7	20.7	12.5	7.3	.9	(Z)
	1993..	36.0	35.3	30.5	2.6	2.3	.6
	1992..	86.9	86.4	74.8	10.0	1.6	.5
	1991..	(NA)	61.9	51.7	8.8	1.4	(NA)
	1990..	(NA)	32.2	5.8	21.6	4.7	(NA)
Vermont	1994..	3.4	2.7	1.1	.6	1.0	.7
	1993..	(D)	8.4	1.1	6.7	.6	(D)
	1992..	(D)	13.7	1.5	9.0	3.2	(D)
	1991..	(NA)	3.0	(D)	.3	(D)	(NA)
	1990..	(NA)	(D)	1.4	5.0	(D)	(NA)
Virginia	1994..	99.6	92.7	51.2	35.3	6.3	6.9
	1993..	182.9	180.7	79.7	80.6	20.4	2.2
	1992..	222.8	217.6	128.0	65.1	24.4	5.2
	1991..	(NA)	119.0	60.9	39.3	18.8	(NA)
	1990..	(NA)	75.5	24.3	36.6	14.6	(NA)
Washington	1994..	148.2	142.4	100.1	33.4	9.0	5.7
	1993..	126.0	109.7	58.1	34.2	17.4	16.3
	1992..	195.3	186.7	101.5	41.5	43.7	8.5
	1991..	(NA)	389.0	86.2	283.5	19.3	(NA)
	1990..	(NA)	127.4	30.7	61.4	35.2	(NA)
West Virginia	1994..	69.3	66.8	30.4	30.4	6.0	2.5
	1993..	77.1	69.1	26.1	34.8	8.3	8.0
	1992..	90.4	85.1	21.5	33.6	30.0	5.3
	1991..	(NA)	51.3	27.4	18.8	5.1	(NA)
	1990..	(NA)	51.5	20.8	27.0	3.7	(NA)
Wisconsin	1994..	100.5	93.8	35.5	42.8	15.5	6.7
	1993..	133.2	128.1	45.0	53.2	29.9	5.1
	1992..	147.3	136.9	63.2	52.2	21.5	10.4
	1991..	(NA)	201.1	120.2	50.2	30.7	(NA)
	1990..	(NA)	164.2	97.2	40.0	27.0	(NA)
Wyoming	1994..	(D)	(D)	(D)	(D)	(D)	(D)
	1993..	(D)	63.4	58.6	3.5	1.2	(D)
	1992..	(D)	11.8	(D)	6.3	(D)	(D)
	1991..	(NA)	13.9	8.7	2.8	2.4	(NA)
	1990..	(NA)	13.9	(D)	(D)	(D)	(NA)

¹Excludes Major Group 23, Apparel and Other Textile Products.²PACENM denotes pollution abatement capital expenditures, including the nonmedia and other.³PAOCNM denotes pollution abatement operating costs, including the nonmedia and other.

establishments with 20 or more employees. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

Pollution abatement operating costs (PAOC) ¹						Standard error of change (percent)		Standard error of estimate (percent)		State and year
Total PAOCNM ³	Media				Nonmedia and other	PACE	PAOC	PACE	PAOC	
	Total	Air	Water	Solid/contained waste						
1 348.8	1 212.6	346.5	445.5	420.5	136.2	41	7	23	5	1994 OH
1 117.4	1 016.3	266.6	373.5	376.2	101.1	3	2	5	4	1993
1 170.0	1 030.8	271.6	365.9	393.4	139.2	10	4	5	4	1992
(NA)	1 031.9	271.0	373.3	387.6	(NA)	11	5	9	3	1991
(NA)	1 115.4	283.8	415.0	416.6	(NA)	9	4	7	5	1990
140.9	132.5	37.6	55.7	39.2	8.4	21	17	24	12	1994 OK
123.5	118.1	40.1	38.4	39.6	5.4	10	3	15	10	1993
122.6	117.0	37.5	42.8	36.7	5.7	18	11	15	9	1992
(NA)	110.0	31.8	40.6	37.6	(NA)	38	7	23	6	1991
(NA)	84.8	22.8	33.0	29.0	(NA)	11	5	7	7	1990
219.8	209.2	60.0	89.8	59.5	10.6	24	14	10	10	1994 OR
192.7	177.7	52.5	74.3	50.9	15.0	6	4	17	7	1993
182.9	170.3	48.3	76.8	45.2	12.6	40	17	14	8	1992
(NA)	200.4	53.5	70.4	76.5	(NA)	38	21	26	19	1991
(NA)	159.4	47.5	55.1	56.8	(NA)	17	5	10	11	1990
1 106.7	1 006.7	286.7	382.6	337.4	100.0	6	9	4	6	1994 PA
916.6	864.3	252.7	290.6	320.9	52.3	9	2	5	5	1993
952.1	890.9	256.9	295.4	338.6	61.3	9	6	8	5	1992
(NA)	867.6	275.5	275.5	416.2	(NA)	19	6	8	5	1991
(NA)	880.3	268.8	271.5	340.0	(NA)	11	4	9	4	1990
63.7	60.0	17.8	18.6	23.6	3.7	49	31	9	11	1994 RI
(D)	29.3	5.5	12.0	11.8	(D)	30	4	5	11	1993
33.7	31.0	5.9	12.1	13.0	2.8	12	17	23	13	1992
(NA)	34.4	3.9	14.3	16.1	(NA)	15	5	21	15	1991
(NA)	62.4	8.9	25.6	27.9	(NA)	35	11	28	14	1990
394.1	379.6	108.1	163.5	108.0	14.5	9	9	4	6	1994 SC
405.8	392.4	116.5	157.9	118.0	13.5	24	2	15	7	1993
379.2	360.1	104.1	140.7	115.3	19.1	18	12	14	7	1992
(NA)	344.4	65.0	141.7	137.7	(NA)	7	16	5	9	1991
(NA)	346.2	85.1	146.5	114.5	(NA)	19	3	8	16	1990
15.0	15.0	2.7	7.3	5.0	(Z)	(X)	42	(X)	26	1994 SD
13.1	13.1	3.5	5.9	3.7	(Z)	7	20	28	26	1993
16.6	16.5	2.9	6.3	7.3	(Z)	(X)	80	(D)	33	1992
(NA)	9.0	1.0	4.8	3.1	(NA)	629	17	60	29	1991
(NA)	6.4	.1	3.5	2.8	(NA)	(X)	25	(X)	25	1990
561.8	504.3	126.4	214.1	163.8	57.6	11	7	3	4	1994 TN
525.3	468.1	104.9	205.5	157.6	57.2	5	3	7	5	1993
441.0	441.0	99.0	189.8	152.2	33.7	20	8	12	6	1992
(NA)	420.8	92.1	183.5	145.2	(NA)	12	8	7	6	1991
(NA)	398.6	91.4	179.9	127.4	(NA)	18	3	9	6	1990
2 692.1	2 326.6	892.0	849.8	584.7	365.5	4	4	3	3	1994 TX
2 286.6	2 167.6	865.9	777.5	524.2	119.1	6	2	4	3	1993
2 700.2	2 092.2	791.7	753.7	546.8	608.0	11	4	8	2	1992
(NA)	2 054.6	739.5	695.3	619.8	(NA)	5	4	4	3	1991
(NA)	1 888.0	709.7	606.4	571.9	(NA)	4	3	3	2	1990
119.8	110.8	59.3	26.6	24.9	8.9	39	20	44	16	1994 UT
136.4	129.8	56.7	33.5	39.6	6.6	3	10	49	18	1993
129.7	123.4	52.4	31.8	39.1	6.3	73	38	49	22	1992
(NA)	90.7	45.4	18.1	27.1	(NA)	92	20	20	18	1991
(NA)	94.7	29.0	17.8	48.0	(NA)	28	11	46	31	1990
21.2	18.0	2.8	6.0	9.2	3.2	13	49	30	29	1994 VT
(D)	15.0	2.2	4.7	8.0	(D)	13	10	27	28	1993
19.8	17.5	2.9	5.9	8.8	2.2	170	37	38	24	1992
(NA)	14.7	1.5	6.0	7.2	(NA)	28	15	5	20	1991
(NA)	16.6	5.2	4.8	6.7	(NA)	(X)	10	(X)	27	1990
366.0	350.8	117.6	131.3	101.8	15.3	5	8	6	4	1994 VA
383.9	351.2	102.1	139.6	109.5	32.7	16	3	9	7	1993
361.9	334.4	93.5	139.3	101.6	27.4	58	11	26	8	1992
(NA)	271.1	69.3	115.0	86.7	(NA)	29	3	19	5	1991
(NA)	271.9	68.8	119.3	83.7	(NA)	6	6	4	5	1990
428.3	410.4	149.5	155.1	105.8	17.8	33	11	21	8	1994 WA
397.2	366.5	115.6	131.2	119.7	30.8	8	3	14	6	1993
394.3	368.2	124.1	132.2	111.9	26.1	26	8	14	6	1992
(NA)	387.0	113.4	136.0	137.6	(NA)	134	8	52	6	1991
(NA)	374.4	102.8	150.2	121.4	(NA)	21	5	6	6	1990
243.2	232.8	86.9	84.8	61.1	10.4	35	21	23	18	1994 WV
287.7	273.4	84.5	121.1	67.9	14.3	16	5	28	17	1993
306.6	283.6	75.9	124.1	83.5	23.1	21	24	12	17	1992
(NA)	328.0	78.6	118.7	130.7	(NA)	3	3	5	2	1991
(NA)	208.9	49.7	94.1	65.1	(NA)	7	2	5	3	1990
486.7	455.6	97.5	185.5	172.6	31.1	18	12	13	7	1994 WI
448.5	432.7	94.8	188.5	149.4	15.8	11	3	21	10	1993
404.3	394.1	83.1	176.1	134.9	10.2	16	13	22	10	1992
(NA)	354.0	84.7	142.8	126.5	(NA)	14	10	8	7	1991
(NA)	348.4	75.9	150.0	122.5	(NA)	10	9	9	7	1990
26.1	(D)	15.4	(D)	3.5	(D)	(X)	(X)	(X)	(X)	1994 WY
23.5	21.3	10.0	7.5	3.8	2.2	360	5	76	18	1993
28.8	28.7	15.5	9.8	3.3	.1	48	38	29	17	1992
(NA)	19.9	6.2	7.0	6.7	(NA)	27	1	48	21	1991
(NA)	18.5	4.3	(D)	(D)	(NA)	78	16	31	20	1990

Table 3. Capital Expenditures by Industries for All Media: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
	All industries¹	7 578.0	4 310.6	2 428.9	838.5	4
20	Food and kindred products	274.3	105.9	152.8	15.5	7
201	Meat products	25.8	1.9	22.7	1.1	11
2011	Meat packing plants	14.2	.7	12.8	.7	16
2013	Sausages and other prepared meats	1.2	.7	.3	.2	55
2015	Poultry slaughtering and processing	10.4	.5	9.6	.2	13
202	Dairy products	21.6	6.7	13.0	2.0	27
2022	Cheese, natural and processed	8.5	2.8	5.7	(Z)	52
2023	Dry, condensed, and evaporated dairy products	6.0	3.9	2.1	-	20
2026	Fluid milk	6.1	-	4.5	1.7	57
203	Preserved fruits and vegetables	43.4	3.1	36.7	3.6	10
2032	Canned specialties	4.2	(D)	3.0	(D)	30
2033	Canned fruits and vegetables	6.7	1.7	4.0	1.0	7
2035	Pickles, sauces, and salad dressings	5.6	(Z)	5.5	(Z)	31
2037	Frozen fruits and vegetables	20.2	.3	19.2	.7	14
2038	Frozen specialties, n.e.c.	6.5	(D)	4.7	(D)	37
204	Grain mill products	49.2	33.1	12.7	3.4	15
2043	Cereal breakfast foods	10.1	9.3	(D)	(D)	2
2045	Prepared flour mixes and doughs	7.2	6.9	(Z)	.3	89
2046	Wet corn milling	26.4	13.7	(D)	(D)	10
2047	Dog and cat food	1.9	1.0	.2	.7	30
2048	Prepared feeds, n.e.c.	2.6	1.3	.9	.4	43
205	Bakery products	12.2	(D)	5.4	(D)	15
2051	Bread, cake, and related products	(D)	4.9	(D)	.1	(X)
2052	Cookies and crackers	2.2	(D)	.4	(D)	9
2053	Frozen bakery products, except bread	(D)	-	(D)	(Z)	(X)
206	Sugar and confectionery products	25.0	11.7	11.9	1.4	24
2061	Raw cane sugar	1.6	1.6	.6	.4	64
2062	Cane sugar refining	1.5	(D)	.7	(D)	13
2063	Beet sugar	6.1	2.3	3.4	.3	47
2064	Candy and other confectionery products	9.5	2.5	6.9	.2	53
2066	Chocolate and cocoa products	(D)	2.7	(D)	(D)	(X)
2067	Chewing gum	(D)	(D)	(D)	(Z)	(X)
207	Fats and oils	17.5	9.8	7.1	.6	21
2075	Soybean oil mills	15.5	9.3	6.1	.2	23
208	Beverages	51.8	(D)	20.1	(D)	13
2082	Malt beverages	(D)	(D)	10.2	(D)	(X)
2085	Distilled and blended liquors	6.5	-	6.5	(Z)	97
2086	Bottled and canned soft drinks	(D)	(D)	3.1	(D)	(X)
209	Miscellaneous food and kindred products	27.7	3.0	23.1	1.6	42
2091	Canned and cured fish and seafoods	6.8	.1	6.6	(Z)	92
2092	Fresh or frozen prepared fish	1.8	.1	(D)	(D)	49
2095	Roasted coffee	1.3	1.2	(Z)	(Z)	50
2096	Potato chips and similar snacks	1.6	.3	(D)	(D)	26
2099	Food preparations, n.e.c.	16.2	1.1	13.7	1.4	59
21	Tobacco products	3.1	(D)	(Z)	(D)	46
211	Cigarettes	1.2	1.1	(Z)	(Z)	50
2111	Cigarettes	1.2	1.1	(Z)	(Z)	50
214	Tobacco stemming and redrying	1.8	(D)	(Z)	(D)	71
2141	Tobacco stemming and redrying	1.8	(D)	(Z)	(D)	71
22	Textile mill products	59.3	23.8	30.7	4.9	16
221	Broadwoven fabrics mills, cotton	7.4	3.7	2.6	1.1	13
2211	Broadwoven fabrics mills, cotton	7.4	3.7	2.6	1.1	13
222	Broadwoven fabrics mills, manmade fiber and silk	3.7	2.6	.4	.6	33
2221	Broadwoven fabrics mills, manmade fiber and silk	3.7	2.6	.4	.6	33
224	Narrow fabrics mills	(D)	(D)	(D)	(D)	(X)
2241	Narrow fabrics mills	(D)	(D)	(D)	(D)	(X)
225	Knitting mills	(D)	(D)	(D)	(D)	(X)
2257	Weft knit fabrics mills	(D)	(D)	(D)	(D)	(X)
226	Textile finishing, except wool	16.2	.7	15.4	.1	44
2262	Finishing plants, manmade	6.6	.3	6.2	-	51
2269	Finishing plants, n.e.c.	9.5	.4	9.0	.1	65
228	Yarn and thread mills	6.9	1.4	5.5	.1	51
2281	Yarn spinning mills	6.9	1.4	5.5	.1	51
229	Miscellaneous textile goods	12.1	10.4	1.1	.5	34
2295	Coated fabrics, not rubberized	8.4	8.1	(D)	(D)	48
2297	Nonwoven fabrics	3.3	2.0	(D)	(D)	29
24	Lumber and wood products	135.4	102.6	16.0	16.8	7
241	Logging	2.2	.6	1.5	.2	41
2411	Logging	2.2	.6	1.5	.2	41
242	Sawmills and planing mills	29.9	15.4	4.8	9.6	11
2421	Sawmills and planing mills, general	27.7	13.4	4.8	9.5	12
2426	Hardwood dimension and flooring mills	2.2	2.0	.1	.1	37
243	Millwork, plywood, and structural members	24.8	19.6	2.3	2.9	29
2431	Millwork	3.3	2.3	(Z)	1.0	26
2435	Hardwood veneer and plywood	2.4	.5	.9	1.0	52
2436	Softwood veneer and plywood	17.8	16.0	1.1	.6	39

See footnotes at end of table.

Table 3. Capital Expenditures by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
24	Lumber and wood products—Con.					
249	Miscellaneous wood products	77.0	66.2	7.3	3.5	6
2491	Wood preserving	7.9	.4	5.2	2.3	47
2493	Reconstituted wood products	66.5	63.5	2.1	.8	4
2499	Wood products, n.e.c.	2.6	2.3	(Z)	.3	47
25	Furniture and fixtures	68.4	33.6	23.0	11.8	28
251	Household furniture	13.4	11.7	(D)	(D)	23
2511	Wood household furniture	10.9	9.7	(D)	(D)	27
2517	Wood television and radio cabinets	1.2	.8	—	.4	59
252	Office furniture	29.0	19.1	(D)	(D)	7
2521	Wood office furniture	(D)	(D)	(Z)	(Z)	(X)
2522	Office furniture, except wood	(D)	(D)	.3	(D)	(X)
254	Partitions and fixtures	24.8	2.1	22.3	.4	75
2541	Wood partitions and fixtures	1.1	1.0	.1	.1	58
2542	Partitions and fixtures, except wood	23.7	1.1	22.3	.4	78
26	Paper and allied products	635.9	241.9	195.9	198.1	4
261	Pulp mills	72.7	25.3	38.5	8.9	12
2611	Pulp mills	72.7	25.3	38.5	8.9	12
262	Paper mills	358.9	115.8	87.7	155.4	6
2621	Paper mills	358.9	115.8	87.7	155.4	6
263	Paperboard mills	148.1	74.1	57.8	16.1	2
2631	Paperboard mills	148.1	74.1	57.8	16.1	2
265	Paperboard containers and boxes	13.9	5.3	3.2	5.4	37
2653	Corrugated and solid fiber boxes	12.9	4.9	3.1	4.9	39
267	Miscellaneous converted paper products	42.4	21.3	8.7	12.4	19
2671	Paper coated and laminated, packaging	4.7	3.7	.4	.6	52
2672	Paper coated and laminated, n.e.c.	6.8	6.3	.1	.5	15
2673	Bags: plastics, laminated, and coated	3.5	2.1	.1	1.4	37
2674	Bags: uncoated paper and multiwall	7.7	3.8	2.1	1.8	90
2676	Sanitary paper products	15.9	2.4	5.7	7.8	1
2679	Converted paper products, n.e.c.	3.1	3.1	.1	—	57
27	Printing and publishing	57.0	45.3	4.3	7.4	12
271	Newspapers	3.7	.7	.8	2.2	43
2711	Newspapers	3.7	.7	.8	2.2	43
273	Books	3.1	2.1	(D)	(D)	11
2732	Book printing	2.7	1.7	(D)	(D)	11
275	Commercial printing	46.1	39.9	(D)	(D)	15
2752	Commercial printing, lithographic	30.8	26.8	1.4	2.6	20
2754	Commercial printing, gravure	14.2	12.7	(D)	(D)	22
2759	Commercial printing, n.e.c.	1.1	.5	.2	.3	31
276	Manifold business forms	1.2	.7	.1	.4	35
2761	Manifold business forms	1.2	.7	.1	.4	35
277	Greeting cards	(D)	(D)	(Z)	(D)	(X)
2771	Greeting cards	(D)	(D)	(Z)	(D)	(X)
279	Printing trade services	(D)	(D)	.2	(D)	(X)
2796	Platemaking services	(D)	(D)	.2	(D)	(X)
28	Chemicals and allied products	1 931.0	676.9	1 005.6	248.4	6
281	Industrial inorganic chemicals	154.8	92.6	43.0	19.2	10
2812	Alkalies and chlorine	10.0	7.5	(D)	(D)	6
2813	Industrial gases	4.9	4.8	.1	(Z)	84
2816	Inorganic pigments	35.0	15.9	15.5	(D)	4
2819	Industrial inorganic chemicals, n.e.c.	105.0	64.4	25.5	15.0	14
282	Plastics materials and synthetics	464.9	130.5	308.9	25.5	19
2821	Plastics materials and resins	359.5	75.4	269.6	14.6	24
2822	Synthetic rubber	47.4	26.5	13.8	7.2	2
2823	Cellulosic manmade fibers	(D)	(D)	(D)	(D)	(X)
2824	Organic fibers, noncellulosic	(D)	(D)	(D)	(D)	(X)
283	Drugs	179.0	42.0	118.2	18.8	24
2833	Medicinals and botanicals	42.9	9.8	31.7	1.4	13
2834	Pharmaceutical preparations	129.8	31.1	83.2	15.5	33
2835	Diagnostic substances	5.0	.8	2.4	1.9	81
2836	Biological products, except diagnostic	1.3	.4	.9	(Z)	55
284	Soaps, cleaners, and toilet goods	49.1	22.4	23.1	3.6	6
2841	Soap and other detergents	13.4	(D)	4.3	(D)	5
2842	Polishes and sanitation goods	6.2	(D)	5.5	(D)	37
2843	Surface active agents	24.4	13.8	9.8	.7	1
2844	Toilet preparations	5.1	1.3	3.5	.3	22
285	Paints and allied products	16.4	10.8	3.6	2.1	13
2851	Paints and allied products	16.4	10.8	3.6	2.1	13
286	Industrial organic chemicals	918.9	337.2	447.0	134.7	3
2861	Gum and wood chemicals	10.2	(D)	3.0	(D)	1
2865	Cyclic crudes and intermediates	69.9	(D)	30.4	(D)	4
2869	Industrial organic chemicals, n.e.c.	838.8	299.4	413.6	125.8	4
287	Agricultural chemicals	98.9	16.4	42.2	40.3	3
2873	Nitrogenous fertilizers	20.3	(D)	8.3	(D)	12
2874	Phosphatic fertilizers	20.8	3.1	14.4	3.3	5
2875	Fertilizers, mixing only .....	.5	.2	.3	—	11
2879	Agricultural chemicals, n.e.c.	57.3	(D)	19.3	(D)	1
289	Miscellaneous chemical products	49.0	25.0	19.7	4.3	6
2891	Adhesives and sealants	8.2	4.3	3.4	.5	18
2892	Explosives	(D)	2.8	(D)	(D)	(X)
2895	Carbon black	(D)	2.6	(D)	(D)	(X)
2899	Chemical preparations, n.e.c.	24.7	15.3	7.5	1.9	6

See footnotes at end of table.

Table 3. Capital Expenditures by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
29	Petroleum and coal products	2 572.0	1 982.3	466.9	122.9	9
291	Petroleum refining	2 558.4	1 976.7	461.8	119.9	9
2911	Petroleum refining	2 558.4	1 976.7	461.8	119.9	9
295	Asphalt paving and roofing materials	6.9	3.5	2.0	1.4	20
2951	Asphalt paving mixtures and blocks	2.2	1.0	.1	1.1	44
2952	Asphalt felts and coatings	4.7	2.6	1.9	.2	21
299	Miscellaneous petroleum and coal products	6.7	2.0	3.1	1.6	26
2992	Lubricating oils and greases	3.5	.1	1.8	1.6	39
2999	Petroleum and coal products, n.e.c.	3.2	1.9	1.3	—	33
30	Rubber and miscellaneous plastics products	75.2	52.4	17.2	5.6	11
301	Tires and inner tubes	3.7	2.5	.8	.4	9
3011	Tires and inner tubes	3.7	2.5	.8	.4	9
305	Hose and belting and gaskets and packing	3.4	1.3	1.9	.1	6
3052	Rubber and plastics hose and belting	2.2	(D)	(D)	(Z)	6
3053	Gaskets, packing, and sealing devices	1.2	(D)	.2	(Z)	14
306	Fabricated rubber products, n.e.c.	5.8	3.7	1.3	.8	25
3061	Mechanical rubber goods	1.6	1.1	.2	.2	30
3069	Fabricated rubber products, n.e.c.	4.2	2.6	1.1	.5	33
308	Miscellaneous plastics products, n.e.c.	62.2	44.8	13.1	4.3	13
3081	Unsupported plastics film and sheet	17.2	10.4	6.2	.6	12
3082	Unsupported plastics profile shapes	1.3	.6	(D)	(D)	34
3083	Laminated plastics plate, sheet, and profile shapes	3.7	3.2	(D)	.1	39
3084	Plastics pipe	2.2	2.0	—	.2	89
3086	Plastics foam products	10.1	9.1	.4	.7	39
3087	Custom compounding of purchased plastics resins	7.4	5.2	2.0	.2	58
3089	Plastics products, n.e.c.	20.0	14.1	3.6	2.3	23
31	Leather and leather products	5.4	(D)	4.5	(D)	27
311	Leather tanning and finishing	4.9	(D)	4.4	(D)	29
3111	Leather tanning and finishing	4.9	(D)	4.4	(D)	29
32	Stone, clay, and glass products	210.6	148.9	48.9	12.8	14
321	Flat glass	6.2	5.9	(Z)	.3	37
3211	Flat glass	6.2	5.9	(Z)	.3	37
322	Glass and glassware, pressed or blown	36.7	33.3	3.1	.3	39
3221	Glass containers	20.5	(D)	(D)	(Z)	69
3229	Pressed and blown glass, n.e.c.	16.2	(D)	(D)	.3	12
323	Products of purchased glass	6.9	(D)	4.8	(D)	16
3231	Products of purchased glass	6.9	(D)	4.8	(D)	16
324	Cement, hydraulic	56.8	51.2	3.5	2.1	5
3241	Cement, hydraulic	56.8	51.2	3.5	2.1	5
325	Structural clay products	6.7	(D)	1.4	(D)	18
3251	Brick and structural clay tile	4.3	(D)	(D)	—	27
3253	Ceramic wall and floor tile	2.0	.8	(D)	(D)	1
326	Pottery and related products	43.8	17.2	26.4	.2	55
3264	Porcelain electrical supplies	42.9	17.0	25.8	.1	56
327	Concrete, gypsum, and plaster products	16.4	7.3	4.4	4.8	28
3271	Concrete block and brick	1.5	—	.2	1.3	85
3272	Concrete products, n.e.c.	4.3	.6	1.5	2.3	47
3273	Ready-mixed concrete	3.8	1.4	1.6	.9	49
3274	Lime	4.3	4.2	—	.1	76
3275	Gypsum products	2.5	1.1	1.1	.2	27
329	Miscellaneous nonmetallic mineral products	36.7	26.7	(D)	(D)	19
3291	Abrasive products	3.0	2.6	.2	.2	43
3292	Asbestos products	1.3	1.1	.2	—	98
3295	Minerals, ground or treated	6.0	2.5	(D)	(D)	24
3296	Mineral wool	21.1	15.6	1.2	4.3	29
3297	Nonclay refractories	4.0	3.6	.4	—	47
3299	Nonmetallic mineral products, n.e.c.	1.3	1.3	—	—	72
33	Primary metal industries	428.0	290.1	98.5	39.4	5
331	Blast furnace and basic steel products	230.9	165.9	45.4	19.7	9
3312	Blast furnaces and steel mills	219.0	164.2	37.4	17.4	9
3313	Electrometallurgical products	(D)	(D)	(D)	—	(X)
3315	Steel wire and related products	2.7	.1	2.3	.3	35
3316	Cold finishing of steel shapes	4.7	(D)	2.0	(D)	8
3317	Steel pipe and tubes	(D)	.1	(D)	.2	(X)
332	Iron and steel foundries	47.0	38.5	5.0	3.6	7
3321	Gray and ductile iron foundries	41.3	35.2	3.8	2.3	8
3324	Steel investment foundries	1.3	.8	(D)	(D)	2
3325	Steel foundries, n.e.c.	3.9	2.5	(D)	(D)	11
333	Primary nonferrous metals	64.2	39.7	15.3	9.3	8
3331	Primary copper	27.4	19.8	(D)	(D)	17
3334	Primary aluminum	19.4	12.6	(D)	(D)	3
3339	Primary nonferrous metals, n.e.c.	17.4	7.3	6.8	3.3	2
334	Secondary nonferrous metals	28.0	21.3	4.9	1.9	9
3341	Secondary nonferrous metals	28.0	21.3	4.9	1.9	9
335	Nonferrous rolling and drawing	41.4	14.2	23.5	3.7	11
3351	Copper rolling and drawing	6.2	1.7	4.1	.4	29
3353	Aluminum sheet, plate, and foil	18.3	8.9	7.7	1.7	4
3354	Aluminum extruded products	4.2	.3	3.9	.1	36
3356	Nonferrous rolling and drawing, n.e.c.	8.2	2.8	4.5	.9	40
3357	Nonferrous wire drawing and insulating	4.2	.5	3.2	.4	43

See footnotes at end of table.

Table 3. Capital Expenditures by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
33	Primary metal industries—Con.					
336	Nonferrous foundries (castings) -----	5.2	2.8	1.8	.6	10
3363	Aluminum die-castings -----	3.2	1.7	1.5	(Z)	14
3365	Aluminum foundries -----	1.3	.8	(Z)	.5	8
339	Miscellaneous primary metal products -----	11.1	7.7	2.8	.7	35
3398	Metal heat treating -----	(D)	(D)	(D)	.2	(X)
3399	Primary metal products, n.e.c. -----	(D)	(D)	(D)	.5	(X)
34	Fabricated metal products -----	140.6	77.1	41.1	22.4	19
341	Metal cans and shipping containers -----	7.9	5.8	1.5	.6	4
3411	Metal cans -----	7.5	5.4	1.5	.6	4
342	Cutlery, handtools, and hardware -----	11.5	3.4	2.3	5.7	11
3423	Hand and edge tools, n.e.c. -----	1.9	1.0	.8	(Z)	26
3425	Saw blades and handsaws -----	1.1	.9	(D)	(D)	75
3429	Hardware, n.e.c. -----	8.1	1.3	(D)	(D)	10
343	Plumbing and heating, except electric -----	2.6	(D)	1.0	(D)	7
3432	Plumbing fixture fittings and trim -----	1.9	(D)	.9	(D)	6
344	Fabricated structural metal products -----	54.0	33.4	12.5	8.2	48
3441	Fabricated structural metal -----	41.4	25.4	7.8	8.2	62
3442	Metal doors, sash, and trim -----	3.9	3.2	.7	(Z)	70
3443	Fabricated plate work (boiler shops) -----	4.1	1.0	3.1	—	50
3444	Sheet metal work -----	2.0	1.2	.8	—	64
3449	Miscellaneous metal work -----	2.5	2.5	—	—	80
345	Screw machine products, bolts, etc. -----	4.8	1.9	2.0	1.0	20
3451	Screw machine products -----	2.1	.6	.7	.8	36
3452	Bolts, nuts, rivets, and washers -----	2.8	1.2	1.3	.3	23
346	Metal forgings and stampings -----	13.6	(D)	3.1	(D)	29
3462	Iron and steel forgings -----	1.6	1.0	.2	.4	43
3463	Nonferrous forgings -----	1.3	(D)	.9	(D)	44
3465	Automotive stampings -----	2.1	1.5	.4	.3	39
3466	Crowns and closures -----	2.1	—	—	—	90
3469	Metal stampings, n.e.c. -----	6.5	4.4	1.6	.4	50
347	Metal services, n.e.c. -----	19.0	7.2	9.9	1.9	17
3471	Plating and polishing -----	12.3	2.4	8.3	1.7	20
3479	Metal coating and allied services -----	6.7	4.9	1.6	.2	31
348	Ordnance and accessories, n.e.c. -----	4.9	1.1	2.8	1.1	7
3482	Small arms ammunition -----	(D)	(D)	(D)	(D)	(X)
3483	Ammunition, except for small arms, n.e.c. -----	1.0	.4	(D)	(D)	18
3489	Ordnance and accessories, n.e.c. -----	(D)	(D)	1.7	.2	(X)
349	Miscellaneous fabricated metal products -----	22.3	13.9	6.1	2.3	18
3491	Industrial valves -----	6.7	5.0	.7	1.0	36
3492	Fluid power valves and hose fittings -----	1.9	.1	.9	.8	69
3493	Steel springs, except wire -----	1.7	1.3	.4	.1	86
3494	Valves and pipe fittings, n.e.c. -----	3.0	2.8	.2	—	37
3496	Miscellaneous fabricated wire products -----	1.3	(D)	(D)	.3	48
3497	Metal foil and leaf -----	3.7	2.7	.9	(Z)	32
3499	Fabricated metal products, n.e.c. -----	3.9	(D)	(D)	—	42
35	Industrial machinery and equipment -----	283.6	116.5	152.1	15.0	34
351	Engines and turbines -----	7.5	1.6	5.1	.9	7
3511	Turbines and turbine generator sets -----	(D)	(D)	(D)	(D)	(X)
3519	Internal combustion engines, n.e.c. -----	(D)	(D)	(D)	(D)	(X)
352	Farm and garden machinery -----	10.7	2.3	3.6	4.8	7
3523	Farm machinery and equipment -----	5.7	1.6	(D)	(D)	11
3524	Lawn and garden equipment -----	5.1	.7	(D)	(D)	6
353	Construction and related machinery -----	13.6	(D)	(D)	2.2	19
3531	Construction machinery -----	9.2	(D)	(D)	1.4	15
3537	Industrial trucks and tractors -----	3.7	2.7	.5	.5	58
354	Metalworking machinery -----	198.5	66.0	131.0	1.5	48
3544	Special dies, tools, jigs, and fixtures -----	1.0	(D)	(D)	.5	57
3545	Machine tool accessories -----	1.5	(D)	(D)	.7	30
3546	Power-driven handtools -----	195.5	65.1	130.2	.2	48
355	Special industry machinery -----	3.4	2.4	.9	.1	31
3559	Special industry machinery, n.e.c. -----	2.3	1.6	.6	(Z)	40
356	General industrial machinery -----	9.7	5.6	2.0	2.1	31
3561	Pumps and pumping equipment -----	1.1	.6	.2	.3	50
3562	Ball and roller bearings -----	5.4	3.3	.5	1.6	49
3565	Packaging machinery -----	1.4	1.3	(Z)	.1	88
357	Computer and office equipment -----	3.0	.3	1.6	1.1	19
3571	Electronic computers -----	1.1	.3	.7	.1	25
358	Refrigeration and service machinery -----	29.9	(D)	(D)	1.2	6
3585	Refrigeration and heating equipment -----	29.1	(D)	(D)	.9	6
359	Industrial machinery, n.e.c. -----	7.3	4.2	1.9	1.1	20
3592	Carburetors, pistons, rings, and valves -----	4.1	2.8	1.2	(Z)	16
3599	Industrial machinery, n.e.c. -----	2.4	.8	.7	.9	51
36	Electronic and other electric equipment -----	276.8	116.0	90.8	70.0	19
361	Electric distribution equipment -----	5.7	1.0	4.1	.5	27
3612	Transformers, except electronic -----	1.7	(D)	(D)	.1	5
3613	Switchgear and switchboard apparatus -----	4.0	(D)	(D)	.4	38
362	Electrical industrial apparatus -----	12.9	10.1	2.1	.7	38
3621	Motors and generators -----	2.1	1.1	.4	.6	17
3624	Carbon and graphite products -----	7.2	7.2	—	—	66
3625	Relays and industrial controls -----	3.6	1.9	1.6	.1	34

See footnotes at end of table.

Table 3. Capital Expenditures by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
36	Electronic and other electric equipment—Con.					
363	Household appliances.....	10.1	4.2	5.6	.3	29
3631	Household cooking equipment.....	1.7	1.3	.3	(Z)	40
3632	Household refrigerators and freezers.....	2.9	(D)	(D)	(D)	13
3633	Household laundry equipment.....	1.2	(D)	(D)	(D)	37
3634	Electric housewares and fans.....	3.5	—	3.4	(Z)	79
364	Electric lighting and wiring equipment.....	54.1	.6	3.4	50.0	88
3643	Current-carrying wiring devices.....	2.7	(Z)	1.8	.9	67
3644	Noncurrent-carrying wiring devices.....	1.5	.4	.8	.3	35
3648	Lighting equipment, n.e.c.....	48.8	.1	(Z)	48.6	98
366	Communications equipment.....	3.9	2.3	1.1	.4	6
3661	Telephone and telegraph apparatus.....	(D)	(D)	(D)	(D)	(X)
3663	Radio and television communications equipment.....	(D)	(D)	(D)	(D)	(X)
367	Electronic components and accessories.....	170.9	81.8	72.5	16.5	9
3671	Electron tubes.....	3.0	.4	(D)	.5	15
3672	Printed circuit boards.....	6.0	1.7	3.6	.7	20
3674	Semiconductors and related devices.....	150.8	77.8	60.6	12.4	10
3675	Electronic capacitors.....	6.7	.4	4.0	2.3	54
3679	Electronic components, n.e.c.....	3.3	1.1	1.9	.3	13
369	Miscellaneous electrical equipment and supplies.....	18.8	15.8	1.7	1.3	26
3691	Storage batteries.....	12.9	11.4	1.2	.3	38
3692	Primary batteries, dry and wet.....	(D)	(D)	.2	(D)	(X)
3694	Engine electrical equipment.....	(D)	(D)	.2	(D)	(X)
37	Transportation equipment.....	336.9	244.8	60.8	31.3	20
371	Motor vehicles and equipment.....	232.7	199.8	23.5	9.4	29
3711	Motor vehicles and car bodies.....	184.0	172.8	6.7	4.5	36
3714	Motor vehicle parts and accessories.....	45.7	24.8	16.4	4.5	12
3715	Truck trailers.....	2.3	1.6	.4	.2	23
372	Aircraft and parts.....	60.3	19.4	22.5	18.4	5
3721	Aircraft.....	13.2	7.3	5.0	.8	9
3724	Aircraft engines and engine parts.....	17.0	6.3	(D)	(D)	7
3728	Aircraft parts and equipment, n.e.c.....	30.1	5.7	(D)	(D)	7
373	Ship and boat building and repairing.....	11.0	8.4	1.1	1.5	14
3731	Ship building and repairing.....	(D)	(D)	(D)	.5	(X)
3732	Boat building and repairing.....	(D)	(D)	(D)	1.0	(X)
374	Railroad equipment.....	(D)	3.7	(D)	.8	(X)
3743	Railroad equipment.....	(D)	3.7	(D)	.8	(X)
375	Motorcycles, bicycles, and parts.....	(D)	(D)	(D)	.3	(X)
3751	Motorcycles, bicycles, and parts.....	(D)	(D)	(D)	.3	(X)
376	Guided missiles, space vehicles, parts.....	15.5	7.4	7.8	.3	9
3761	Guided missiles and space vehicles.....	(D)	(D)	(D)	.3	(X)
3764	Space propulsion units and parts.....	(D)	(D)	(D)	—	(X)
3769	Space vehicle equipment, n.e.c.....	1.2	—	1.2	—	98
379	Miscellaneous transportation equipment.....	7.4	(D)	(D)	.5	3
3795	Tanks and tank components.....	(D)	—	(D)	(D)	(X)
3799	Transportation equipment, n.e.c.....	(D)	(D)	1.4	(D)	(X)
38	Instruments and related products.....	72.0	42.3	17.1	12.6	7
381	Search and navigation equipment.....	12.0	9.9	.9	1.2	13
3812	Search and navigation equipment.....	12.0	9.9	.9	1.2	13
382	Measuring and controlling devices.....	8.9	3.9	(D)	(D)	31
3824	Fluid meters and counting devices.....	1.9	.9	1.0	(Z)	48
3826	Analytical instruments.....	2.7	(Z)	(D)	(D)	81
3827	Optical instruments and lenses.....	1.4	1.3	.2	(Z)	71
3829	Measuring and controlling devices, n.e.c.....	1.8	.8	.6	.4	51
384	Medical instruments and supplies.....	9.2	4.7	3.2	1.2	30
3841	Surgical and medical instruments.....	4.8	(D)	(D)	.5	50
3842	Surgical appliances and supplies.....	1.2	.7	(Z)	.5	47
3845	Electromedical equipment.....	2.2	(D)	(D)	—	45
386	Photographic equipment and supplies.....	41.7	23.7	(D)	(D)	5
3861	Photographic equipment and supplies.....	41.7	23.7	(D)	(D)	5
39	Miscellaneous manufacturing industries.....	12.6	8.1	2.7	1.8	14
391	Jewelry, silverware, and plated ware.....	1.8	1.1	.7	(Z)	28
394	Toys and sporting goods.....	2.3	1.6	.2	.5	19
3949	Sporting and athletic goods, n.e.c.....	1.3	.9	.1	.3	10
395	Pens, pencils, office, and art supplies.....	1.4	.8	.1	.5	13
396	Costume jewelry and notions.....	1.0	.2	.4	.3	15
399	Miscellaneous manufactures.....	5.4	3.9	1.1	.4	29
3995	Burial caskets.....	1.9	(D)	(D)	(Z)	68
3996	Hard surface floor coverings, n.e.c.....	1.4	1.1	(D)	(D)	17
3999	Manufacturing industries, n.e.c.....	1.9	(D)	.7	(D)	42

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 4a. Capital Expenditures by Major Groups for the Media Air: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PACE	Air							Standard error of estimate (PACE) (percent)
			Total	Hazardous	Type of pollutant abated			Abatement technique		
					Total	Particulates, etc. ¹	Other	End of line	Production process enhancements	
	All industries²	7 578.0	4 310.6	1 020.9	3 289.8	2 746.1	544.5	2 228.1	2 082.6	4
20	Food and kindred products	274.3	105.9	4.1	101.9	50.0	51.9	81.4	24.6	7
21	Tobacco products	3.1	(D)	-	(D)	(D)	1.1	.7	(D)	46
22	Textile mill products	59.3	23.8	6.2	17.5	11.0	7.0	11.9	11.8	16
24	Lumber and wood products	135.4	102.6	6.2	96.4	76.9	18.4	76.4	26.1	7
25	Furniture and fixtures	68.4	33.6	18.2	15.4	7.7	7.7	14.2	19.4	28
26	Paper and allied products	635.9	241.9	57.5	184.3	144.4	39.9	163.0	78.9	4
27	Printing and publishing	57.0	45.3	8.2	37.1	28.7	9.2	22.9	22.4	12
28	Chemicals and allied products	1 931.0	676.9	229.7	447.2	379.7	67.8	408.8	267.1	6
29	Petroleum and coal products	2 572.0	1 982.3	472.1	1 510.2	1 340.9	169.3	786.0	1 196.2	9
30	Rubber and miscellaneous plastics products	75.2	52.4	7.1	45.4	33.6	12.1	30.7	21.8	11
31	Leather and leather products	5.4	(D)	(Z)	(D)	(D)	(Z)	(Z)	(D)	27
32	Stone, clay, and glass products	210.6	148.9	10.2	138.7	112.8	25.9	85.5	63.4	14
33	Primary metal industries	428.0	290.1	47.5	242.5	222.1	20.4	228.0	62.1	5
34	Fabricated metal products	140.6	77.1	9.3	67.8	34.3	33.6	33.9	43.2	19
35	Industrial machinery and equipment	283.6	116.5	5.8	110.6	88.4	22.3	7.8	108.7	34
36	Electronic and other electric equipment	276.8	116.0	54.5	61.5	49.2	12.3	80.4	35.6	19
37	Transportation equipment	336.9	244.8	67.0	177.8	148.5	29.3	172.8	72.0	20
38	Instruments and related products	72.0	42.3	14.5	27.8	12.4	15.4	17.6	24.7	7
39	Miscellaneous manufacturing industries	12.6	8.1	2.8	5.3	4.6	.7	4.9	3.2	14

¹Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead.

²Excludes Major Group 23, Apparel and Other Textile Products.

Table 4b. Capital Expenditures by Major Groups for the Media Water: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PACE	Water					Standard error of estimate (PACE) (percent)
			Total	Type of pollutant abated		Abatement technique		
				Hazardous	Nonhazardous	End of line	Production process enhancements	
	All industries¹	7 578.0	2 428.9	665.9	1 763.1	1 698.4	730.5	4
20	Food and kindred products	274.3	152.8	8.1	144.7	123.6	29.2	7
21	Tobacco products	3.1	(Z)	-	(Z)	(Z)	-	46
22	Textile mill products	59.3	30.7	13.1	17.6	16.3	14.4	16
24	Lumber and wood products	135.4	16.0	4.1	11.9	9.8	6.2	7
25	Furniture and fixtures	68.4	23.0	22.3	.7	22.8	.2	28
26	Paper and allied products	635.9	195.9	36.3	159.6	108.9	87.0	4
27	Printing and publishing	57.0	4.3	.8	3.5	1.8	2.5	12
28	Chemicals and allied products	1 931.0	1 005.6	263.8	741.9	631.9	373.7	6
29	Petroleum and coal products	2 572.0	466.9	173.5	293.4	353.0	113.9	9
30	Rubber and miscellaneous plastics products	75.2	17.2	2.4	14.8	10.9	6.3	11
31	Leather and leather products	5.4	4.5	.1	4.4	3.7	.8	27
32	Stone, clay, and glass products	210.6	48.9	4.8	44.1	41.4	7.5	14
33	Primary metal industries	428.0	98.5	33.8	64.7	80.7	17.8	5
34	Fabricated metal products	140.6	41.1	20.9	20.2	23.0	18.1	19
35	Industrial machinery and equipment	283.6	152.1	6.9	145.2	146.0	6.2	34
36	Electronic and other electric equipment	276.8	90.8	34.0	56.9	68.6	22.3	19
37	Transportation equipment	336.9	60.8	29.7	31.0	40.7	20.1	20
38	Instruments and related products	72.0	17.1	9.2	7.9	13.8	3.3	7
39	Miscellaneous manufacturing industries	12.6	2.7	1.9	.8	1.5	1.1	14

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 4c. Capital Expenditures by Major Groups for the Media Solid/Contained Waste: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PACE	Solid/contained waste					Standard error of estimate (PACE) (percent)
			Total	Type of pollutant abated		Abatement technique		
				Hazardous	Nonhazardous	End of line	Production process enhancements	
	All industries¹	7 578.0	838.5	352.7	486.8	521.5	317.0	4
20	Food and kindred products	274.3	15.5	1.0	14.5	14.1	1.4	7
21	Tobacco products	3.1	1.4	-	1.4	(Z)	1.4	46
22	Textile mill products	59.3	4.9	.2	4.6	(D)	(D)	16
24	Lumber and wood products	135.4	16.8	6.2	10.6	11.0	5.8	7
25	Furniture and fixtures	68.4	11.8	.6	11.2	(D)	(D)	28
26	Paper and allied products	635.9	198.1	4.2	193.8	78.9	119.2	4
27	Printing and publishing	57.0	7.4	2.9	4.5	5.2	2.2	12
28	Chemicals and allied products	1 931.0	248.4	116.7	131.8	179.7	68.7	6
29	Petroleum and coal products	2 572.0	122.9	101.7	21.2	100.6	22.3	9
30	Rubber and miscellaneous plastics products	75.2	5.6	1.1	4.5	3.2	2.4	11
31	Leather and leather products	5.4	.4	(Z)	.4	.4	(Z)	27
32	Stone, clay, and glass products	210.6	12.8	1.1	11.7	5.3	7.5	14
33	Primary metal industries	428.0	39.4	22.6	17.8	22.6	16.8	5
34	Fabricated metal products	140.6	22.4	4.7	17.7	11.1	11.3	19
35	Industrial machinery and equipment	283.6	15.0	3.9	11.1	11.1	3.9	34
36	Electronic and other electric equipment	276.8	70.0	64.6	5.4	60.1	9.9	19
37	Transportation equipment	336.9	31.3	14.7	16.6	10.6	20.7	20
38	Instruments and related products	72.0	12.6	5.6	7.0	2.0	10.6	7
39	Miscellaneous manufacturing industries	12.6	1.8	.8	1.0	1.2	.7	14

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 5. Capital Expenditures by States and Major Groups for All Media: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PACE	Media			Standard error of estimate (PACE) (percent)
			Air	Water	Solid/contained waste	
	United States¹	7 578.0	4 310.6	2 428.9	838.5	4
20	Food and kindred products	274.3	105.9	152.8	15.5	7
21	Tobacco products	3.1	1.7	(Z)	1.4	46
22	Textile mill products	59.3	23.8	30.7	4.9	16
24	Lumber and wood products	135.4	102.6	16.0	16.8	7
25	Furniture and fixtures	68.4	33.6	23.0	11.8	28
26	Paper and allied products	635.9	241.9	195.9	198.1	4
27	Printing and publishing	57.0	45.3	4.3	7.4	12
28	Chemicals and allied products	1 931.0	676.9	1 005.6	248.4	6
29	Petroleum and coal products	2 572.0	1 982.3	466.9	122.9	9
30	Rubber and miscellaneous plastics products	75.2	52.4	17.2	5.6	11
31	Leather and leather products	5.4	.5	4.5	.4	27
32	Stone, clay, and glass products	210.6	148.9	48.9	12.8	14
33	Primary metal industries	428.0	290.1	98.5	39.4	5
34	Fabricated metal products	140.6	77.1	41.1	22.4	19
35	Industrial machinery and equipment	283.6	116.5	152.1	15.0	34
36	Electronic and other electric equipment	276.8	116.0	90.8	70.0	19
37	Transportation equipment	336.9	244.8	60.8	31.3	20
38	Instruments and related products	72.0	42.3	17.1	12.6	7
39	Miscellaneous manufacturing industries	12.6	8.1	2.7	1.8	14
	Alabama	198.8	89.9	41.8	67.1	10
20	Food and kindred products	3.7	(D)	1.5	(D)	16
22	Textile mill products	1.0	.9	.1	.1	25
24	Lumber and wood products	13.6	(D)	(D)	2.7	28
26	Paper and allied products	78.7	26.2	25.3	27.2	14
28	Chemicals and allied products	69.0	27.6	6.4	35.0	21
29	Petroleum and coal products	2.9	1.7	1.1	.1	77
30	Rubber and miscellaneous plastics products	1.7	1.5	.1	.1	23
32	Stone, clay, and glass products	1.8	1.3	.4	-	37
33	Primary metal industries	15.1	11.5	3.0	.6	13
34	Fabricated metal products	1.0	.4	.3	.4	62
35	Industrial machinery and equipment	5.8	5.0	.7	.1	44
36	Electronic and other electric equipment	2.5	1.9	(D)	(D)	15
	Alaska	6.9	.6	2.8	3.5	25
24	Lumber and wood products	(D)	-	(D)	(D)	(X)
26	Paper and allied products	(D)	.4	(D)	(D)	(X)
	Arizona	54.2	31.5	17.3	5.5	18
20	Food and kindred products	(D)	(D)	(D)	(D)	(X)
26	Paper and allied products	10.7	6.2	4.5	(Z)	55
28	Chemicals and allied products	4.9	(Z)	3.8	1.1	50
32	Stone, clay, and glass products	9.0	5.6	.9	2.5	69
33	Primary metal industries	4.6	2.7	1.7	.2	50
36	Electronic and other electric equipment	(D)	(D)	(D)	(Z)	(X)
37	Transportation equipment	5.5	2.7	(D)	(D)	26

See footnotes at end of table.

Table 5. Capital Expenditures by States and Major Groups for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
Arkansas -----						
		45.9	29.2	13.2	3.4	12
20	Food and kindred products	1.5	.5	1.0	(Z)	24
24	Lumber and wood products	10.1	8.9	.7	(D)	42
26	Paper and allied products	22.8	(D)	(D)	(D)	11
28	Chemicals and allied products	2.0	(D)	(D)	(D)	40
32	Stone, clay, and glass products	4.8	4.8	—	—	46
34	Fabricated metal products	1.8	1.0	.4	.5	54
36	Electronic and other electric equipment	1.0	.6	.1	.3	40
California -----						
		1 699.0	1 271.3	408.4	19.2	12
20	Food and kindred products	29.6	5.0	22.8	1.8	26
22	Textile mill products	2.5	2.1	.2	.1	46
24	Lumber and wood products	2.6	1.7	.3	.6	26
25	Furniture and fixtures	22.4	.6	21.7	(Z)	83
26	Paper and allied products	20.7	11.2	7.9	1.7	40
27	Printing and publishing	6.4	4.7	.9	.8	33
28	Chemicals and allied products	244.9	12.2	231.3	1.4	34
29	Petroleum and coal products	1 282.8	1 166.8	109.5	6.5	15
30	Rubber and miscellaneous plastics products	4.1	4.0	.1	(Z)	80
32	Stone, clay, and glass products	25.2	22.7	1.7	.7	56
33	Primary metal industries	6.2	3.8	(D)	(D)	37
34	Fabricated metal products	4.5	2.2	1.9	.4	16
35	Industrial machinery and equipment	2.7	.5	1.3	.9	40
36	Electronic and other electric equipment	21.5	16.6	4.3	.6	25
37	Transportation equipment	19.2	14.7	3.6	.8	8
38	Instruments and related products	2.4	1.5	(D)	(D)	22
39	Miscellaneous manufacturing industries	1.3	1.0	.1	.2	7
Colorado -----						
		31.3	13.6	15.9	1.8	47
20	Food and kindred products	2.5	(D)	(D)	(D)	8
29	Petroleum and coal products	3.8	3.2	.4	.2	84
32	Stone, clay, and glass products	1.1	(D)	(D)	—	42
36	Electronic and other electric equipment	18.8	7.4	11.3	.1	75
38	Instruments and related products	2.9	(D)	2.7	(D)	75
Connecticut -----						
		62.3	19.7	39.9	2.7	11
26	Paper and allied products	8.7	6.4	2.0	.3	51
27	Printing and publishing	5.6	5.5	(Z)	.1	85
28	Chemicals and allied products	(D)	(D)	(D)	(D)	(X)
30	Rubber and miscellaneous plastics products	1.5	1.5	(Z)	—	55
32	Stone, clay, and glass products	1.3	1.3	—	—	67
34	Fabricated metal products	2.1	.5	1.3	.3	34
36	Electronic and other electric equipment	1.0	.3	.6	.1	62
37	Transportation equipment	(D)	(D)	(D)	(D)	(X)
38	Instruments and related products	1.4	1.2	.2	—	73
Delaware -----						
		(D)	(D)	(D)	(D)	(X)
20	Food and kindred products	7.7	.3	7.4	(Z)	80
28	Chemicals and allied products	14.1	9.4	(D)	(D)	20
29	Petroleum and coal products	(D)	(D)	(D)	(D)	(X)
37	Transportation equipment	5.3	5.0	—	.2	39
Florida -----						
		115.1	14.1	44.2	56.8	42
20	Food and kindred products	9.6	(D)	6.8	(D)	7
26	Paper and allied products	25.4	3.2	18.2	4.0	2
28	Chemicals and allied products	21.7	5.8	15.1	.8	32
32	Stone, clay, and glass products	2.0	(D)	1.2	(D)	8
34	Fabricated metal products	1.2	(Z)	1.2	(Z)	26
36	Electronic and other electric equipment	49.4	.3	.3	48.7	96
37	Transportation equipment	2.6	.8	.8	1.0	58
Georgia -----						
		92.8	43.7	36.8	12.3	7
20	Food and kindred products	10.0	1.6	7.2	1.1	35
22	Textile mill products	10.7	3.9	6.3	.4	34
24	Lumber and wood products	10.2	9.3	.6	.7	7
26	Paper and allied products	22.3	6.7	6.4	9.2	2
27	Printing and publishing	(D)	(D)	(Z)	—	(X)
28	Chemicals and allied products	11.6	7.2	4.2	.2	12
32	Stone, clay, and glass products	7.2	2.1	4.8	.3	17
33	Primary metal industries	4.9	(D)	2.1	(D)	18
34	Fabricated metal products	(D)	(D)	(Z)	(Z)	(X)
35	Industrial machinery and equipment	2.2	1.3	.8	.1	56
36	Electronic and other electric equipment	2.0	.2	1.7	.1	19
37	Transportation equipment	6.0	(D)	.3	(D)	29
38	Instruments and related products	2.4	(Z)	2.3	(Z)	93
Hawaii -----						
		4.7	2.6	2.1	(Z)	71
29	Petroleum and coal products	4.1	2.1	2.0	(Z)	80
Idaho -----						
		27.6	18.0	(D)	(D)	20
20	Food and kindred products	6.5	2.0	4.5	.1	47
24	Lumber and wood products	10.1	10.0	.1	(Z)	46
26	Paper and allied products	(D)	(D)	(D)	(D)	(X)
28	Chemicals and allied products	7.5	(D)	1.1	—	—
36	Electronic and other electric equipment	(D)	(D)	(D)	(Z)	(X)
Illinois -----						
		294.5	198.4	78.2	17.8	11
20	Food and kindred products	15.7	6.8	7.9	1.0	12
26	Paper and allied products	5.2	3.0	.1	2.1	46
27	Printing and publishing	5.5	4.6	(D)	(D)	43
28	Chemicals and allied products	36.6	21.9	13.4	1.3	19
29	Petroleum and coal products	116.9	98.1	17.7	1.1	15

See footnotes at end of table.

Table 5. Capital Expenditures by States and Major Groups for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
Illinois—Con.						
30	Rubber and miscellaneous plastics products	4.9	3.4	(D)	(D)	43
32	Stone, clay, and glass products	52.4	26.3	25.8	.2	46
33	Primary metal industries	28.9	21.6	3.6	3.6	31
34	Fabricated metal products	7.3	4.5	1.5	1.3	42
35	Industrial machinery and equipment	6.9	3.5	(D)	(D)	12
36	Electronic and other electric equipment	5.9	.9	4.5	.6	52
37	Transportation equipment	6.8	2.9	.6	3.3	43
Illinois		208.3	144.7	55.3	8.3	6
Indiana						
20	Food and kindred products	3.4	2.6	.8	(Z)	4
24	Lumber and wood products	4.5	4.2	(D)	(D)	53
26	Paper and allied products	1.2	1.2	—	—	71
27	Printing and publishing	4.6	3.7	(D)	(D)	8
28	Chemicals and allied products	32.6	(D)	25.4	(D)	35
29	Petroleum and coal products	(D)	(D)	(D)	1.4	(X)
30	Rubber and miscellaneous plastics products	3.1	1.9	.6	.6	43
32	Stone, clay, and glass products	6.0	(D)	(D)	.2	19
33	Primary metal industries	105.5	82.7	19.2	3.7	2
34	Fabricated metal products	4.9	2.8	1.8	.3	44
36	Electronic and other electric equipment	(D)	(D)	1.9	.1	(X)
37	Transportation equipment	9.5	5.3	(D)	(D)	5
Indiana		46.3	22.1	17.6	6.5	11
Iowa						
20	Food and kindred products	15.0	8.0	(D)	(D)	6
26	Paper and allied products	4.3	4.3	(Z)	—	36
28	Chemicals and allied products	7.5	2.8	2.8	1.9	55
33	Primary metal industries	(D)	(D)	(D)	(D)	(X)
34	Fabricated metal products	2.7	1.9	.1	.8	49
35	Industrial machinery and equipment	(D)	(D)	3.2	(D)	(X)
36	Electronic and other electric equipment	2.6	.6	1.9	(Z)	17
Iowa		81.5	36.3	21.0	24.2	23
Kansas						
20	Food and kindred products	4.7	.4	4.1	.2	54
27	Printing and publishing	1.2	1.0	(Z)	.1	71
28	Chemicals and allied products	(D)	4.8	(D)	(D)	(X)
29	Petroleum and coal products	34.5	19.9	6.5	8.1	52
32	Stone, clay, and glass products	3.7	2.9	(Z)	.8	29
33	Primary metal industries	2.7	.6	2.0	.1	64
35	Industrial machinery and equipment	2.9	2.1	.6	.2	48
36	Electronic and other electric equipment	2.5	2.3	.2	.1	32
37	Transportation equipment	(D)	2.1	(D)	(D)	(X)
Kansas		87.4	56.2	14.3	17.0	13
Kentucky						
21	Tobacco products	1.4	(D)	—	(D)	92
24	Lumber and wood products	2.1	2.1	—	—	59
26	Paper and allied products	(D)	.3	1.8	(D)	(X)
27	Printing and publishing	3.1	2.8	—	.3	10
28	Chemicals and allied products	41.1	23.5	7.5	10.1	27
29	Petroleum and coal products	(D)	(D)	—	—	(X)
30	Rubber and miscellaneous plastics products	1.2	.4	.5	.4	32
33	Primary metal industries	3.0	(D)	.4	(D)	4
34	Fabricated metal products	2.6	1.5	1.1	(Z)	49
37	Transportation equipment	7.0	4.9	2.0	.2	41
Kentucky		782.1	281.7	397.3	103.1	4
Louisiana						
20	Food and kindred products	(D)	(D)	.8	.5	(X)
24	Lumber and wood products	1.3	1.1	.2	—	21
26	Paper and allied products	12.4	5.3	3.4	3.7	2
28	Chemicals and allied products	546.1	180.6	280.8	84.6	3
29	Petroleum and coal products	174.0	63.0	104.4	6.7	1
34	Fabricated metal products	37.3	22.4	7.5	7.5	68
37	Transportation equipment	(D)	(D)	—	.1	(X)
Louisiana		36.3	16.9	11.7	7.7	4
Maine						
26	Paper and allied products	32.3	16.1	(D)	(D)	2
37	Transportation equipment	1.0	.6	(D)	(D)	45
Maine		20.4	12.7	5.2	2.5	13
Maryland						
20	Food and kindred products	(D)	.9	1.3	(D)	(X)
26	Paper and allied products	4.4	(D)	1.0	(D)	16
28	Chemicals and allied products	6.7	2.3	2.2	2.1	18
30	Rubber and miscellaneous plastics products	3.5	3.2	.3	—	40
33	Primary metal industries	(D)	(D)	(Z)	—	(X)
Maryland		39.5	19.8	17.7	2.1	13
Massachusetts						
22	Textile mill products	(D)	(D)	.7	—	(X)
27	Printing and publishing	1.9	1.4	.4	.1	59
28	Chemicals and allied products	4.0	1.0	2.5	.5	22
30	Rubber and miscellaneous plastics products	4.7	3.2	1.4	(Z)	87
32	Stone, clay, and glass products	1.8	1.5	.2	(Z)	70
33	Primary metal industries	1.3	.8	(D)	(D)	23
34	Fabricated metal products	2.3	(D)	1.2	(D)	42
37	Transportation equipment	(D)	(D)	(D)	—	(X)
38	Instruments and related products	12.6	5.7	6.0	1.0	14
Massachusetts		312.8	220.7	64.6	27.5	23
Michigan						
20	Food and kindred products	9.6	5.5	3.9	.2	2
24	Lumber and wood products	7.0	6.7	(D)	(D)	2
25	Furniture and fixtures	(D)	(D)	(Z)	(D)	(X)
26	Paper and allied products	8.8	(D)	2.8	(D)	15
27	Printing and publishing	(D)	(D)	—	.1	(X)

See footnotes at end of table.

Table 5. Capital Expenditures by States and Major Groups for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
Michigan—Con.						
28	Chemicals and allied products	26.7	6.0	14.2	6.6	22
29	Petroleum and coal products	22.7	.6	22.1	(Z)	80
30	Rubber and miscellaneous plastics products	3.2	.8	(D)	(D)	17
32	Stone, clay, and glass products	27.6	(D)	(D)	1.8	6
33	Primary metal industries	27.4	23.0	3.6	.8	31
34	Fabricated metal products	13.2	5.8	2.2	5.2	17
35	Industrial machinery and equipment	4.4	3.0	.9	.5	16
37	Transportation equipment	134.1	124.0	8.7	1.4	50
38	Instruments and related products	(D)	—	(D)	.3	(X)
39	Miscellaneous manufacturing industries	1.0	.8	(Z)	.2	38
Minnesota						
		37.7	23.3	8.4	5.9	8
20	Food and kindred products	6.4	4.6	1.4	.4	25
24	Lumber and wood products	(D)	(D)	(D)	.3	(X)
25	Furniture and fixtures	1.8	1.8	.1	(Z)	91
26	Paper and allied products	(D)	(D)	(D)	(D)	(X)
27	Printing and publishing	2.0	.8	—	1.1	30
32	Stone, clay, and glass products	1.1	(D)	(Z)	(D)	42
34	Fabricated metal products	1.7	.6	.8	.2	40
35	Industrial machinery and equipment	1.4	.9	.2	.3	41
36	Electronic and other electric equipment	1.5	.5	1.0	(Z)	57
37	Transportation equipment	(D)	(D)	(D)	(D)	(X)
Mississippi						
		70.8	30.3	34.0	6.5	7
20	Food and kindred products	1.7	—	1.7	(Z)	64
24	Lumber and wood products	5.0	4.1	(D)	(D)	17
26	Paper and allied products	(D)	4.0	(D)	(D)	(X)
28	Chemicals and allied products	27.1	13.5	(D)	(D)	3
29	Petroleum and coal products	(D)	(D)	(D)	(D)	(X)
30	Rubber and miscellaneous plastics products	5.9	(D)	(D)	.1	66
32	Stone, clay, and glass products	1.1	.1	.3	.6	92
33	Primary metal industries	1.4	.3	1.1	—	66
37	Transportation equipment	1.0	(D)	(Z)	(D)	83
Missouri						
		70.4	53.2	12.1	5.1	6
20	Food and kindred products	(D)	(D)	3.2	.2	(X)
28	Chemicals and allied products	12.5	6.7	4.9	1.0	6
32	Stone, clay, and glass products	4.0	3.8	.1	.1	44
33	Primary metal industries	9.5	6.8	(D)	(D)	30
34	Fabricated metal products	3.0	1.7	(D)	(D)	3
36	Electronic and other electric equipment	4.1	2.9	1.2	.1	28
37	Transportation equipment	(D)	(D)	.2	.2	(X)
Montana						
		157.3	145.8	5.1	6.3	72
24	Lumber and wood products	(D)	(D)	.2	(D)	(X)
28	Chemicals and allied products	8.4	8.4	—	—	77
29	Petroleum and coal products	136.2	135.3	(D)	(D)	83
33	Primary metal industries	(D)	(D)	(D)	—	(X)
Nebraska						
		13.2	7.3	5.1	.8	18
20	Food and kindred products	5.8	4.0	1.4	.4	36
33	Primary metal industries	(D)	(D)	(D)	(Z)	(X)
36	Electronic and other electric equipment	(D)	(D)	(D)	.1	(X)
37	Transportation equipment	1.3	.2	1.2	—	86
Nevada						
		(D)	(D)	(D)	(D)	(X)
28	Chemicals and allied products	(D)	(D)	(D)	(D)	(X)
New Hampshire						
		29.5	26.9	2.0	.6	38
26	Paper and allied products	26.2	25.7	.5	(Z)	43
New Jersey						
		119.3	57.4	47.6	14.3	12
20	Food and kindred products	13.6	8.2	5.1	.3	49
26	Paper and allied products	1.7	.9	.5	.2	52
27	Printing and publishing	1.7	1.1	.5	.2	37
28	Chemicals and allied products	58.4	10.2	35.9	12.2	11
29	Petroleum and coal products	27.5	23.1	3.8	.6	37
30	Rubber and miscellaneous plastics products	3.3	3.2	.1	(Z)	56
32	Stone, clay, and glass products	1.8	(D)	(D)	.2	56
33	Primary metal industries	1.8	1.0	(D)	(D)	4
34	Fabricated metal products	3.0	2.9	.1	(Z)	87
38	Instruments and related products	4.6	(D)	(D)	—	10
New Mexico						
		(D)	(D)	(D)	(D)	(X)
33	Primary metal industries	(D)	(D)	(D)	(D)	(X)
36	Electronic and other electric equipment	(D)	(D)	(D)	(D)	(X)
New York						
		162.7	83.6	56.2	22.8	26
20	Food and kindred products	2.9	1.3	1.2	.4	15
26	Paper and allied products	7.9	.4	2.2	5.3	38
28	Chemicals and allied products	66.4	23.6	36.9	5.8	63
30	Rubber and miscellaneous plastics products	1.6	1.4	(Z)	.1	36
32	Stone, clay, and glass products	4.5	3.6	.6	.3	35
33	Primary metal industries	21.4	18.2	2.6	.6	18
34	Fabricated metal products	3.1	.3	2.2	.6	58
35	Industrial machinery and equipment	(D)	(D)	2.7	(D)	(X)
36	Electronic and other electric equipment	6.2	.6	4.7	.8	47
37	Transportation equipment	1.1	1.1	(Z)	—	50
38	Instruments and related products	(D)	(D)	2.3	(D)	(X)
39	Miscellaneous manufacturing industries	2.1	1.2	.6	.4	25

See footnotes at end of table.

Table 5. Capital Expenditures by States and Major Groups for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
North Carolina		133.2	55.9	54.5	22.8	9
20	Food and kindred products	5.5	1.4	3.8	.3	26
21	Tobacco products	1.5	1.5	(Z)	(Z)	37
22	Textile mill products	16.3	3.7	10.8	1.8	38
24	Lumber and wood products	4.7	3.2	.6	.8	21
25	Furniture and fixtures	6.2	5.4	.2	.7	43
26	Paper and allied products	18.8	(D)	5.9	(D)	3
27	Printing and publishing	2.0	.2	(Z)	1.8	74
28	Chemicals and allied products	56.3	22.3	25.1	8.8	16
30	Rubber and miscellaneous plastics products	2.6	1.5	.4	.7	25
32	Stone, clay, and glass products	3.8	1.7	2.1	.1	21
33	Primary metal industries	(D)	(D)	.4	.4	(X)
34	Fabricated metal products	2.8	(D)	1.6	(D)	45
35	Industrial machinery and equipment	1.2	.2	.9	(Z)	40
36	Electronic and other electric equipment	6.4	1.4	2.0	3.0	36
37	Transportation equipment	1.3	.5	.5	.3	38
38	Instruments and related products	(D)	.1	(Z)	(D)	(X)
North Dakota		1.7	(D)	(D)	(Z)	37
20	Food and kindred products	1.3	(D)	(D)	-	42
Ohio		413.5	196.0	192.3	25.2	23
20	Food and kindred products	4.6	2.4	.7	1.5	25
22	Textile mill products	4.3	4.3	-	-	87
25	Furniture and fixtures	(D)	3.8	-	(D)	(X)
26	Paper and allied products	11.4	5.8	1.3	4.3	13
28	Chemicals and allied products	46.0	17.8	25.3	2.9	15
29	Petroleum and coal products	(D)	10.0	(D)	2.6	(X)
30	Rubber and miscellaneous plastics products	9.0	5.6	2.8	.7	26
32	Stone, clay, and glass products	14.8	11.7	1.7	1.4	17
33	Primary metal industries	32.5	19.2	(D)	(D)	7
34	Fabricated metal products	8.7	4.2	4.0	.5	11
35	Industrial machinery and equipment	206.0	74.3	131.2	.5	46
36	Electronic and other electric equipment	1.9	1.0	.5	.3	35
37	Transportation equipment	47.0	35.3	9.8	1.9	9
Oklahoma		30.9	12.0	17.1	1.8	24
20	Food and kindred products	4.0	-	3.9	(Z)	74
26	Paper and allied products	1.2	(Z)	(D)	(D)	16
28	Chemicals and allied products	4.1	3.6	.5	(Z)	47
29	Petroleum and coal products	11.0	1.9	9.1	(Z)	52
32	Stone, clay, and glass products	1.8	1.7	(Z)	.1	54
33	Primary metal industries	3.1	1.0	(D)	(D)	46
34	Fabricated metal products	3.6	2.4	1.1	.2	46
Oregon		59.2	29.7	24.6	4.8	10
20	Food and kindred products	3.4	(Z)	3.3	(Z)	30
24	Lumber and wood products	9.7	7.4	1.3	1.0	31
26	Paper and allied products	14.1	.7	13.0	.3	13
33	Primary metal industries	2.4	1.1	1.2	.1	37
36	Electronic and other electric equipment	22.3	16.2	3.6	2.5	19
37	Transportation equipment	5.3	2.9	1.6	.7	36
Pennsylvania		327.6	185.4	58.4	83.8	4
20	Food and kindred products	17.5	6.7	10.2	.6	30
22	Textile mill products	5.7	1.2	4.5	(Z)	64
24	Lumber and wood products	6.2	4.5	.9	.7	24
25	Furniture and fixtures	(D)	(D)	-	(D)	(X)
26	Paper and allied products	17.7	8.0	2.0	7.7	17
27	Printing and publishing	2.7	2.1	.1	.5	31
28	Chemicals and allied products	38.1	19.6	11.9	6.5	21
29	Petroleum and coal products	(D)	(D)	(D)	(D)	(X)
32	Stone, clay, and glass products	8.2	7.0	1.1	.1	10
33	Primary metal industries	43.1	29.2	8.9	4.9	8
34	Fabricated metal products	12.6	9.4	2.3	.9	31
35	Industrial machinery and equipment	2.4	1.0	.8	.7	23
36	Electronic and other electric equipment	(D)	(D)	1.9	1.1	(X)
37	Transportation equipment	6.0	3.3	(D)	(D)	15
38	Instruments and related products	2.0	1.0	.6	.3	54
39	Miscellaneous manufacturing industries	2.2	1.9	(Z)	.2	61
Rhode Island		14.0	6.3	(D)	(D)	9
22	Textile mill products	(D)	(D)	(D)	(D)	(X)
28	Chemicals and allied products	(D)	(D)	(D)	-	(X)
30	Rubber and miscellaneous plastics products	1.0	.6	.4	-	80
South Carolina		89.4	49.6	35.1	4.8	4
20	Food and kindred products	1.4	(Z)	.5	.9	50
22	Textile mill products	2.0	.3	1.5	.2	10
24	Lumber and wood products	1.8	(D)	(D)	.2	17
26	Paper and allied products	21.5	(D)	7.1	(D)	2
28	Chemicals and allied products	38.6	19.6	17.4	1.7	4
30	Rubber and miscellaneous plastics products	4.5	(D)	3.3	(D)	2
32	Stone, clay, and glass products	5.6	5.5	(Z)	.1	6
33	Primary metal industries	2.9	1.3	1.1	.4	35
34	Fabricated metal products	1.4	.9	.5	(Z)	64
35	Industrial machinery and equipment	6.8	4.1	(D)	(D)	36
36	Electronic and other electric equipment	1.1	.3	(Z)	(D)	24
37	Transportation equipment	1.2	1.1	(Z)	-	29
South Dakota .....		.5	(D)	(D)	.1	28

See footnotes at end of table.

Table 5. Capital Expenditures by States and Major Groups for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PACE	Air	Water	Solid/contained waste	Standard error of estimate (PACE) (percent)
	Tennessee	(D)	50.6	(D)	(D)	(X)
20	Food and kindred products	6.0	4.4	1.2	.3	8
22	Textile mill products.....	1.8	(D)	.7	(D)	12
25	Furniture and fixtures	1.6	1.6	—	(Z)	85
26	Paper and allied products.....	(D)	10.5	(D)	(D)	(X)
28	Chemicals and allied products.....	42.3	24.3	14.1	3.8	8
30	Rubber and miscellaneous plastics products	3.5	(D)	(D)	.1	16
32	Stone, clay, and glass products	3.4	1.6	1.7	.1	52
33	Primary metal industries	6.4	3.0	2.8	.6	33
35	Industrial machinery and equipment	1.7	.6	.5	.6	18
37	Transportation equipment	1.4	.5	.5	.4	31
	Texas	884.9	461.9	336.2	86.7	3
20	Food and kindred products	7.2	.7	5.5	.9	32
24	Lumber and wood products	10.7	9.8	.7	.1	6
26	Paper and allied products.....	18.6	(D)	(D)	2.8	8
27	Printing and publishing	1.0	.4	(Z)	.5	20
28	Chemicals and allied products.....	316.0	144.9	131.3	39.8	5
29	Petroleum and coal products.....	444.3	248.0	163.9	32.5	4
30	Rubber and miscellaneous plastics products	5.3	4.7	.3	.3	42
32	Stone, clay, and glass products	5.2	4.9	.3	(Z)	7
33	Primary metal industries.....	20.0	11.9	5.9	2.2	15
34	Fabricated metal products	5.7	3.9	1.7	.1	35
35	Industrial machinery and equipment	1.9	1.2	.2	.4	42
36	Electronic and other electric equipment.....	38.4	16.9	15.3	6.1	3
37	Transportation equipment	5.8	1.7	3.1	.9	16
38	Instruments and related products	3.5	(D)	(D)	.1	34
	Utah	20.7	12.5	7.3	.9	44
29	Petroleum and coal products	9.9	9.9	—	—	91
37	Transportation equipment	6.6	.7	(D)	(D)	9
	Vermont	(D)	(D)	(D)	(D)	(X)
36	Electronic and other electric equipment.....	(D)	(D)	(D)	(D)	(X)
	Virginia	92.7	51.2	35.3	6.3	6
20	Food and kindred products	3.9	(D)	(D)	(Z)	8
22	Textile mill products.....	3.0	1.4	1.6	(Z)	53
24	Lumber and wood products	3.7	2.4	1.1	.2	30
26	Paper and allied products.....	8.7	3.8	4.8	.1	7
27	Printing and publishing	5.7	(D)	—	(D)	48
28	Chemicals and allied products.....	41.5	18.9	19.6	3.0	1
30	Rubber and miscellaneous plastics products	4.9	(D)	(D)	(Z)	1
32	Stone, clay, and glass products	4.4	2.3	(D)	(D)	29
33	Primary metal industries	3.4	3.0	(Z)	.4	26
34	Fabricated metal products	4.4	2.0	2.4	.1	52
35	Industrial machinery and equipment	2.0	.2	.4	1.5	33
37	Transportation equipment	6.4	5.4	(D)	(D)	36
	Washington	142.4	100.1	33.4	9.0	21
20	Food and kindred products	(D)	(D)	9.8	(D)	(X)
24	Lumber and wood products	7.2	3.3	3.5	.3	22
26	Paper and allied products.....	40.1	28.7	8.7	2.6	18
28	Chemicals and allied products.....	(D)	(D)	.2	(D)	(X)
29	Petroleum and coal products.....	58.5	53.5	3.9	1.2	50
33	Primary metal industries	12.6	6.8	4.1	1.7	6
36	Electronic and other electric equipment.....	2.8	1.0	.7	1.0	34
37	Transportation equipment	2.5	.7	1.6	.2	12
38	Instruments and related products	3.7	3.0	.6	—	42
	West Virginia	66.8	30.4	30.4	6.0	23
20	Food and kindred products	2.0	—	2.0	—	48
28	Chemicals and allied products.....	35.2	(D)	14.1	(D)	5
33	Primary metal industries	22.1	(D)	13.1	(D)	66
36	Electronic and other electric equipment.....	5.5	5.5	—	—	85
	Wisconsin	93.8	35.5	42.8	15.5	13
20	Food and kindred products	19.0	3.7	14.3	.9	53
24	Lumber and wood products	4.8	4.5	—	.2	33
25	Furniture and fixtures	1.4	1.3	.1	.1	48
26	Paper and allied products.....	34.8	7.1	20.3	7.3	13
27	Printing and publishing	5.0	(D)	(Z)	(D)	8
28	Chemicals and allied products.....	3.1	.8	(D)	(D)	10
31	Leather and leather products	1.9	—	1.9	—	71
32	Stone, clay, and glass products	1.2	.2	(Z)	1.0	71
33	Primary metal industries	8.8	7.3	1.1	.3	10
34	Fabricated metal products	2.4	1.1	1.1	.2	23
35	Industrial machinery and equipment	6.1	1.1	1.2	3.8	9
36	Electronic and other electric equipment.....	2.1	1.3	.6	.1	46
37	Transportation equipment	2.2	(D)	(D)	(D)	8
	Wyoming	7.7	4.1	3.6	.1	17
28	Chemicals and allied products.....	6.6	3.6	3.0	.1	16

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 6a. Capital Expenditures by States for the Media Air: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PACE	Air							Standard error of estimate (PACE) (percent)
		Type of pollutant abated					Abatement technique		
		Total	Hazardous	Nonhazardous			End of line	Production process enhancements	
				Total	Particulates, etc. ¹	Other			
United States²	7 578.0	4 310.6	1 020.9	3 289.8	2 746.1	544.5	2 228.1	2 082.6	4
Alabama	198.8	89.9	31.9	58.1	47.3	10.8	53.0	36.9	10
Alaska	6.9	6	(D)	(D)	(D)	—	6	—	25
Arizona	54.2	31.5	(D)	(D)	17.9	(D)	22.2	9.3	18
Arkansas	45.9	29.2	2.0	27.3	22.9	4.4	18.9	10.3	12
California	1 699.0	1 271.3	254.9	1 016.4	(D)	(D)	585.6	685.7	12
Colorado	31.3	13.6	6.5	7.1	7.1	.3	12.1	1.4	47
Connecticut	62.3	19.7	2.6	17.0	10.5	6.6	10.5	9.2	11
Delaware	(D)	(D)	(D)	20.2	19.6	.6	(D)	16.4	(X)
Florida	115.1	14.1	4.0	10.1	7.5	2.6	5.4	8.7	42
Georgia	92.8	43.7	10.9	32.8	27.2	5.6	27.8	15.9	7
Hawaii	4.7	2.6	.6	1.9	.2	1.7	.1	2.5	71
Idaho	27.6	18.0	1.7	16.2	15.3	.9	17.4	.6	20
Illinois	294.5	198.4	79.0	119.4	84.9	34.5	108.3	90.1	11
Indiana	208.3	144.7	11.3	133.4	124.4	9.0	107.7	37.1	6
Iowa	46.3	22.1	3.3	18.9	17.0	1.8	14.3	7.9	11
Kansas	81.5	36.3	20.6	15.7	11.3	4.4	20.1	16.2	23
Kentucky	87.4	56.2	8.4	47.7	46.3	2.2	14.0	42.2	13
Louisiana	782.1	281.7	108.6	173.1	130.9	42.2	145.9	135.8	4
Maine	36.3	16.9	(D)	(D)	(D)	(D)	1.8	15.1	4
Maryland	20.4	12.7	.6	12.1	11.2	1.0	11.6	1.1	13
Massachusetts	39.5	19.8	2.6	17.2	15.0	2.2	14.2	5.6	13
Michigan	312.8	220.7	60.7	160.0	136.4	23.6	155.3	65.3	23
Minnesota	37.7	23.3	2.8	20.5	16.9	3.6	8.8	14.5	8
Mississippi	70.8	30.3	4.7	25.6	23.4	2.3	19.9	10.4	7
Missouri	70.4	53.2	4.5	48.7	(D)	(D)	47.2	5.9	6
Montana	157.3	145.8	5.8	140.0	138.9	1.1	10.7	135.1	72
Nebraska	13.2	7.3	.2	7.1	6.5	.7	3.4	3.9	18
Nevada	(D)	(D)	(D)	(D)	.1	(D)	(D)	(D)	(X)
New Hampshire	29.5	26.9	4.1	22.8	1.9	20.8	24.9	2.0	38
New Jersey	119.3	57.4	10.8	46.6	31.5	15.1	45.1	12.2	12
New Mexico	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
New York	162.7	83.6	10.4	73.1	44.3	28.8	30.9	52.7	26
North Carolina	133.2	55.9	14.7	41.2	34.2	7.3	31.9	23.9	9
North Dakota	1.7	(D)	(Z)	(D)	(D)	(D)	(D)	(Z)	37
Ohio	413.5	196.0	29.3	166.7	144.6	22.1	81.3	114.7	23
Oklahoma	30.9	12.0	3.3	8.7	5.4	3.3	8.7	3.2	24
Oregon	59.2	29.7	(D)	(D)	13.6	(D)	14.4	15.4	10
Pennsylvania	327.6	185.4	58.3	127.1	91.5	34.7	94.5	90.9	4
Rhode Island	14.0	6.3	1.4	4.9	1.4	3.9	2.2	4.1	9
South Carolina	89.4	49.6	17.1	32.5	20.8	11.8	37.8	11.8	4
South Dakota	(D)	(D)	—	(D)	(D)	—	(D)	—	(X)
Tennessee	(D)	50.6	11.0	39.6	36.2	3.4	42.1	8.5	(X)
Texas	884.9	461.9	140.2	321.7	262.5	59.2	203.7	258.3	3
Utah	20.7	12.5	1.7	10.7	10.6	.1	11.0	1.5	44
Vermont	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(X)
Virginia	92.7	51.2	10.2	41.0	34.7	6.3	35.0	16.2	6
Washington	142.4	100.1	8.2	91.9	73.2	18.6	39.9	60.2	21
West Virginia	66.8	30.4	5.5	25.0	19.6	5.4	21.0	9.4	23
Wisconsin	93.8	35.5	7.7	27.8	21.5	6.3	25.2	10.2	13
Wyoming	7.7	4.1	(Z)	4.1	4.1	—	(D)	(D)	17

¹Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead.

²Excludes Major Group 23, Apparel and Other Textile Products.

Table 6b. Capital Expenditures by States for the Media Water: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PACE	Water					Standard error of estimate (PACE) (percent)
		Total	Type of pollutant abated		Abatement technique		
			Hazardous	Nonhazardous	End of line	Production process enhancements	
United States¹	7 578.0	2 428.9	665.9	1 763.1	1 698.4	730.5	4
Alabama	198.8	41.8	18.8	23.0	21.8	20.0	10
Alaska	6.9	2.8	.7	2.0	2.7	—	25
Arizona	54.2	17.3	2.0	15.3	10.5	6.8	18
Arkansas	45.9	13.2	(D)	(D)	3.8	9.5	12
California	1 699.0	408.4	57.5	351.0	153.4	255.0	12
Colorado	31.3	15.9	14.1	1.8	15.0	.8	47
Connecticut	62.3	39.9	2.4	37.5	37.7	2.3	11
Delaware	(D)	(D)	(Z)	9.7	9.1	(D)	(X)
Florida	115.1	44.2	3.1	41.1	18.4	25.8	42
Georgia	92.8	36.8	6.8	30.1	27.0	9.8	7

See footnotes at end of table.

Table 6b. Capital Expenditures by States for the Media Water: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Water						Standard error of estimate (PACE) (percent)
	Total PACE	Total	Type of pollutant abated		Abatement technique		
			Hazardous	Nonhazardous	End of line	Production process enhancements	
Hawaii	4.7	2.1	—	2.1	.6	1.5	71
Idaho	27.6	(D)	(D)	5.2	6.1	(D)	20
Illinois	294.5	78.2	9.9	68.3	62.6	15.6	11
Indiana	208.3	55.3	15.7	39.6	46.3	8.9	6
Iowa	46.3	17.6	2.8	14.8	16.3	1.3	11
Kansas	81.5	21.0	7.0	14.1	16.0	5.1	23
Kentucky	87.4	14.3	5.6	8.7	10.5	3.8	13
Louisiana	782.1	397.3	184.3	212.9	334.7	62.6	4
Maine	36.3	11.7	1.1	10.6	(D)	(D)	4
Maryland	20.4	5.2	1.4	3.8	4.0	1.1	13
Massachusetts	39.5	17.7	10.5	7.1	9.6	8.0	13
Michigan	312.8	64.6	13.2	51.4	53.7	10.9	23
Minnesota	37.7	8.4	1.3	7.1	6.7	1.7	8
Mississippi	70.8	34.0	18.0	15.9	(D)	(D)	7
Missouri	70.4	12.1	3.1	9.0	10.2	1.9	6
Montana	157.3	5.1	(D)	(D)	(D)	(D)	72
Nebraska	13.2	5.1	1.8	3.3	(D)	(D)	18
Nevada	(D)	(D)	(D)	.4	(D)	.1	(X)
New Hampshire	29.5	2.0	1.2	.8	1.0	1.1	38
New Jersey	119.3	47.6	12.7	34.9	42.3	5.3	12
New Mexico	(D)	(D)	(Z)	(D)	(D)	(D)	(X)
New York	162.7	56.2	10.6	45.6	47.2	9.1	26
North Carolina	133.2	54.5	13.8	40.6	28.6	25.8	9
North Dakota	1.7	(D)	(Z)	(D)	(D)	(D)	37
Ohio	413.5	192.3	16.0	176.3	183.6	8.7	23
Oklahoma	30.9	17.1	1.7	15.4	16.9	.2	24
Oregon	59.2	24.6	7.2	17.4	18.0	6.7	10
Pennsylvania	327.6	58.4	14.0	44.4	33.7	24.8	4
Rhode Island	14.0	(D)	3.7	(D)	(D)	2.7	9
South Carolina	89.4	35.1	3.6	31.5	22.8	12.3	4
South Dakota	(D)	(D)	(Z)	(D)	(D)	(Z)	(X)
Tennessee	(D)	(D)	(D)	(D)	(D)	(D)	(X)
Texas	884.9	336.2	158.1	178.2	218.7	117.5	3
Utah	20.7	7.3	3.6	3.8	7.2	.2	44
Vermont	(D)	(D)	(D)	(D)	(D)	(D)	(X)
Virginia	92.7	35.3	5.6	29.7	25.0	10.3	6
Washington	142.4	33.4	6.2	27.1	27.6	5.7	21
West Virginia	66.8	30.4	3.2	27.2	24.9	5.4	23
Wisconsin	93.8	42.8	2.7	40.1	36.9	5.9	13
Wyoming	7.7	3.6	—	3.6	2.8	.8	17

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 6c. Capital Expenditures by States for the Media Solid/Contained Waste: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Solid/contained waste						Standard error of estimate (PACE) (percent)
	Total PACE	Total	Type of pollutant abated		Abatement technique		
			Hazardous	Nonhazardous	End of line	Production process enhancements	
United States¹	7 578.0	838.5	352.7	486.8	521.5	317.0	4
Alabama	198.8	67.1	(D)	(D)	47.9	19.2	10
Alaska	6.9	3.5	(Z)	3.5	3.2	-.3	25
Arizona	54.2	5.5	.8	4.6	2.2	3.2	18
Arkansas	45.9	3.4	1.2	2.2	(D)	(D)	12
California	1 699.0	19.2	10.8	8.4	13.7	5.5	12
Colorado	31.3	1.8	1.4	.4	.9	.9	47
Connecticut	62.3	2.7	1.6	1.1	2.5	.2	11
Delaware	(D)	(D)	(D)	(D)	(D)	(D)	(X)
Florida	115.1	56.8	50.5	6.3	53.4	3.4	42
Georgia	92.8	12.3	.3	12.0	11.3	1.0	7
Hawaii	4.7	(Z)	—	(Z)	—	(Z)	71
Idaho	27.6	(D)	(D)	(D)	(D)	(Z)	20
Illinois	294.5	17.8	4.4	13.3	11.2	6.5	11
Indiana	208.3	8.3	3.3	6.0	6.2	2.1	6
Iowa	46.3	6.5	2.1	4.4	5.4	1.1	11
Kansas	81.5	24.2	16.7	7.5	4.6	19.6	23
Kentucky	87.4	17.0	8.1	8.9	10.9	6.0	13
Louisiana	782.1	103.1	18.1	85.0	72.3	30.8	4
Maine	36.3	7.7	1.3	6.4	7.1	.7	4
Maryland	20.4	2.5	1.5	1.0	1.2	1.3	13
Massachusetts	39.5	2.1	1.0	1.1	1.0	1.1	13
Michigan	312.8	27.5	5.3	22.2	10.1	17.4	23
Minnesota	37.7	5.9	.8	5.1	4.4	1.6	8
Mississippi	70.8	6.5	1.2	5.3	4.8	1.6	7
Missouri	70.4	5.1	2.6	2.5	4.0	1.1	6

See footnotes at end of table.

Table 6c. Capital Expenditures by States for the Media Solid/Contained Waste: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PACE	Solid/contained waste					Standard error of estimate (PACE) (percent)
		Type of pollutant abated		Abatement technique			
		Total	Hazardous	Nonhazardous	End of line	Production process enhancements	
Montana	157.3	6.3	(D)	(D)	6.2	.1	72
Nebraska	13.2	.8	.1	.7	.6	.2	18
Nevada	(D)	(D)	(D)	(Z)	(D)	(D)	(X)
New Hampshire	29.5	.6	.4	.1	(D)	(D)	38
New Jersey	119.3	14.3	11.1	3.2	10.6	3.7	12
New Mexico	(D)	(D)	(D)	(D)	(D)	(D)	(X)
New York	162.7	22.8	10.3	12.6	13.6	9.2	26
North Carolina	133.2	22.8	11.8	11.0	9.3	13.5	9
North Dakota	1.7	(Z)	(Z)	(Z)	—	(D)	37
Ohio	413.5	25.2	11.2	13.9	12.6	12.6	23
Oklahoma	30.9	1.8	(D)	(D)	1.4	.4	24
Oregon	59.2	4.8	1.3	3.6	.8	4.0	10
Pennsylvania	327.6	83.8	(D)	(D)	77.2	6.6	4
Rhode Island	14.0	(D)	(D)	(D)	.4	(D)	9
South Carolina	89.4	4.8	.4	4.3	3.4	1.4	4
South Dakota	(D)	.1	(Z)	(Z)	.1	—	(X)
Tennessee	(D)	(D)	(D)	(D)	(D)	(D)	(X)
Texas	884.9	86.7	56.8	29.9	63.9	22.8	3
Utah	20.7	.9	(D)	(D)	.8	(Z)	44
Vermont	(D)	(D)	(D)	(D)	(D)	(D)	(X)
Virginia	92.7	6.3	1.6	4.7	4.5	1.8	6
Washington	142.4	9.0	2.8	6.2	3.8	5.2	21
West Virginia	66.8	6.0	(D)	(D)	3.3	2.7	23
Wisconsin	93.8	15.5	.8	14.7	15.0	.5	13
Wyoming	7.7	.1	(Z)	(Z)	.1	(Z)	17

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 7. Operating Costs and Cost Offsets by Industries for All Media: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
	All industries¹	18 772.0	6 139.1	7 031.5	5 601.4	1 693.4	726.5	287.3	679.6	1
20	Food and kindred products	1 447.6	172.4	940.5	334.7	91.5	15.9	22.9	52.6	4
201	Meat products	233.6	9.8	184.8	39.0	5.7	.1	2.3	3.3	6
2011	Meat packing plants	71.3	6.9	52.5	12.0	2.5	.1	1.6	.8	13
2013	Sausages and other prepared meats	30.4	1.2	17.2	12.0	1.5	(Z)	.2	1.3	22
2015	Poultry slaughtering and processing	131.8	1.7	115.1	15.0	1.7	(Z)	.4	1.3	6
202	Dairy products	136.5	2.2	96.3	38.0	3.6	(Z)	1.1	2.5	11
2022	Cheese, natural and processed	48.1	.4	35.2	12.5	.8	(Z)	.2	.6	18
2023	Dry, condensed, and evaporated dairy products	12.1	1.5	7.7	3.0	(D)	—	—	(D)	30
2024	Ice cream and frozen desserts	29.9	.2	19.7	10.0	.5	—	.2	.3	28
2026	Fluid milk	46.0	.1	33.5	12.4	(D)	—	.7	(D)	16
203	Preserved fruits and vegetables	241.3	6.3	161.6	73.4	21.6	.3	4.2	17.0	9
2032	Canned specialties	22.0	(D)	13.3	(D)	.6	—	—	.6	14
2033	Canned fruits and vegetables	95.8	1.6	60.4	33.7	14.8	.2	2.1	12.6	19
2034	Dehydrated fruits, vegetables, and soups	5.2	(D)	3.2	(D)	.9	(Z)	(D)	(D)	48
2035	Pickles, sauces, and salad dressings	19.8	.3	13.8	5.8	.5	(Z)	(D)	(D)	31
2037	Frozen fruits and vegetables	57.5	1.0	45.0	11.5	2.5	—	1.4	1.1	3
2038	Frozen specialties, n.e.c.	41.0	.8	25.9	14.3	2.3	.1	.4	1.8	23
204	Grain mill products	164.3	54.5	77.6	32.3	16.0	8.7	1.0	6.3	7
2041	Flour and other grain mill products	10.3	7.0	2.0	1.3	.3	.1	(Z)	.1	60
2043	Cereal breakfast foods	28.5	10.7	10.0	7.8	4.6	.6	(Z)	4.0	6
2044	Rice milling	9.8	6.8	1.6	1.4	5.8	5.2	(Z)	.5	48
2045	Prepared flour mixes and doughs	6.9	.8	3.2	2.9	.4	.1	(Z)	.2	38
2046	Wet corn milling	77.7	20.8	49.3	7.7	2.0	1.0	.6	.4	5
2047	Dog and cat food	17.9	3.4	7.9	6.6	.7	.3	.1	.3	21
2048	Prepared feeds, n.e.c.	13.1	5.0	3.6	4.6	2.3	1.4	.2	.7	22
205	Bakery products	46.5	6.6	22.4	17.5	3.8	.4	.7	2.7	9
2051	Bread, cake, and related products	30.5	5.0	16.4	9.2	1.4	.3	.4	.7	11
2052	Cookies and crackers	12.7	1.2	4.4	7.0	2.2	.1	.2	1.8	17
2053	Frozen bakery products, except bread	3.3	.4	1.6	1.3	.3	(Z)	.1	.2	34
206	Sugar and confectionery products	92.9	24.2	40.2	28.6	1.8	.1	.5	1.2	13
2061	Raw cane sugar	14.8	3.8	4.1	6.8	.2	—	—	.2	37
2062	Cane sugar refining	9.1	2.1	4.5	2.5	(Z)	(Z)	(Z)	(Z)	11
2063	Beet sugar	14.8	5.2	7.0	2.5	(D)	(Z)	(D)	(Z)	30
2064	Candy and other confectionery products	31.8	2.9	16.8	12.1	(D)	.1	(D)	.6	14
2066	Chocolate and cocoa products	16.5	7.7	5.4	3.4	.1	—	—	.1	48
2067	Chewing gum	(D)	(D)	(D)	(D)	(Z)	—	—	(Z)	(X)
2068	Salted and roasted nuts and seeds	(D)	(D)	(D)	(D)	.2	(Z)	(Z)	.2	(X)
207	Fats and oils	78.9	25.7	40.4	12.8	6.0	3.6	1.7	.6	11
2074	Cottonseed oil mills	3.2	1.8	.8	.6	(Z)	—	—	(Z)	58
2075	Soybean oil mills	47.4	15.8	24.7	7.0	4.5	3.5	.7	.3	15
2076	Vegetable oil mills, n.e.c.	4.5	1.2	1.9	1.4	.1	.1	.1	(Z)	30
2077	Animal and marine fats and oils	8.9	5.7	2.5	.7	.2	.1	(Z)	(Z)	37
2079	Edible fats and oils, n.e.c.	14.8	1.2	10.5	3.1	1.2	.1	.9	.2	16

Table 7. Operating Costs and Cost Offsets by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
20	Food and kindred products—Con.									
208	Beverages	287.6	18.4	213.2	56.0	23.7	1.9	5.7	16.1	5
2082	Malt beverages	172.0	(D)	139.6	(D)	(D)	—	(D)	(D)	4
2083	Malt	6.8	1.3	4.5	.9	1.9	1.8	—	(Z)	34
2084	Wines, brandy, and brandy spirits	7.2	(D)	2.9	(D)	.1	—	(Z)	(Z)	43
2085	Distilled and blended liquors	3.7	.1	2.1	1.6	.1	—	(Z)	.1	51
2086	Bottled and canned soft drinks	91.0	1.2	59.2	30.7	7.9	(Z)	(D)	(D)	13
2087	Flavoring extracts and syrups, n.e.c.	6.9	.1	4.9	1.9	.2	—	.1	.1	38
209	Miscellaneous food and kindred products	166.0	24.7	104.0	37.2	9.3	.7	5.7	2.8	16
2091	Canned and cured fish and seafoods	7.5	.3	6.1	1.2	(Z)	(Z)	(Z)	—	61
2092	Fresh or frozen prepared fish	15.9	1.4	9.7	4.9	.4	.1	.2	.1	27
2095	Roasted coffee	14.6	5.1	5.8	3.8	.7	.2	.1	.4	19
2096	Potato chips and similar snacks	56.5	3.2	41.9	11.4	3.3	.2	2.1	1.0	18
2097	Manufactured ice	1.0	.2	.3	.5	.2	(Z)	(Z)	.1	61
2098	Macaroni and spaghetti	1.4	.1	.6	.7	(Z)	(Z)	(Z)	(Z)	22
2099	Food preparations, n.e.c.	69.0	14.5	39.7	14.8	4.7	.1	3.2	1.3	33
21	Tobacco products	35.9	14.3	11.5	10.1	.1	—	—	.1	10
211	Cigarettes	21.8	10.2	6.2	5.4	(Z)	—	—	(Z)	14
2111	Cigarettes	21.8	10.2	6.2	5.4	(Z)	—	—	(Z)	14
213	Chewing and smoking tobacco	1.4	.3	(D)	(D)	(Z)	—	—	(Z)	25
2131	Chewing and smoking tobacco	1.4	.3	(D)	(D)	(Z)	—	—	(Z)	25
214	Tobacco stemming and redrying	12.8	3.8	(D)	(D)	(Z)	—	—	(Z)	16
2141	Tobacco stemming and redrying	12.8	3.8	(D)	(D)	(Z)	—	—	(Z)	16
22	Textile mill products	315.7	58.2	178.8	78.8	15.7	2.0	3.2	10.5	5
221	Broadwoven fabrics mills, cotton	33.5	7.4	21.5	4.6	2.3	(D)	(D)	1.8	7
2211	Broadwoven fabrics mills, cotton	33.5	7.4	21.5	4.6	2.3	(D)	(D)	1.8	7
222	Broadwoven fabrics mills, manmade fiber and silk	26.3	(D)	(D)	10.2	3.2	(D)	(D)	1.9	10
2221	Broadwoven fabrics mills, manmade fiber and silk	26.3	(D)	(D)	10.2	3.2	(D)	(D)	1.9	10
223	Broadwoven fabrics mills, wool	7.1	.4	5.4	1.3	(D)	—	—	(D)	18
2231	Broadwoven fabrics mills, wool	7.1	.4	5.4	1.3	(D)	—	—	(D)	18
224	Narrow fabrics mills	17.0	(D)	(D)	8.0	(D)	(Z)	(Z)	(D)	3
2241	Narrow fabrics mills	17.0	(D)	(D)	8.0	(D)	(Z)	(Z)	(D)	3
225	Knitting mills	70.2	11.1	45.6	13.4	1.2	.1	.4	.7	12
2251	Women's hosiery, except socks	4.9	.5	3.4	.9	(Z)	—	—	(Z)	27
2252	Hosiery, n.e.c.	4.9	.7	3.2	1.0	(Z)	(Z)	(Z)	(Z)	34
2253	Knit outerwear mills	15.4	1.2	11.8	2.4	.3	(Z)	.1	.2	20
2254	Knit underwear mills	3.6	1.2	1.3	1.0	.3	(Z)	(Z)	.3	30
2257	Weft knit fabrics mills	31.2	4.5	20.6	6.0	.4	(Z)	.2	.1	22
2258	Lace and warp knit fabrics mills	9.5	2.8	5.0	1.7	(Z)	(Z)	(Z)	(Z)	26
226	Textile finishing, except wool	71.0	8.7	53.2	9.1	2.0	.8	.7	.5	12
2261	Finishing plants, cotton	16.2	1.7	12.1	2.3	.3	.1	.2	.1	19
2262	Finishing plants, manmade	41.5	5.9	29.6	6.0	1.3	.5	.4	.4	18
2269	Finishing plants, n.e.c.	13.3	1.0	11.5	.8	.4	.2	.1	(Z)	27
227	Carpets and rugs	18.2	1.5	10.0	6.7	.5	.1	(Z)	.4	10
2273	Carpets and rugs	18.2	1.5	10.0	6.7	.5	.1	(Z)	.4	10
228	Yarn and thread mills	22.2	4.3	11.1	6.8	.9	.1	.3	.6	12
2281	Yarn spinning mills	17.0	4.1	7.9	4.9	.7	.1	.3	.3	15
2282	Throwing and winding mills	2.8	(Z)	1.8	.9	.2	—	—	.2	10
2284	Thread mills	2.4	.2	1.3	.9	—	—	—	—	25
229	Miscellaneous textile goods	50.3	12.6	19.1	18.6	3.3	(D)	(D)	2.4	13
2295	Coated fabrics, not rubberized	14.5	7.1	1.4	6.0	.4	(D)	(Z)	(D)	26
2296	Tire cord and fabrics	6.6	.7	4.4	1.5	1.1	(Z)	(Z)	1.0	69
2297	Nonwoven fabrics	20.2	3.0	9.6	7.6	1.5	(D)	(Z)	(D)	10
2299	Textile goods, n.e.c.	8.5	1.8	3.5	3.2	.3	(D)	(D)	.2	25
24	Lumber and wood products	342.8	135.6	66.6	140.7	28.1	6.7	4.8	16.6	5
241	Logging	25.9	9.2	8.8	7.9	.1	—	—	.1	36
2411	Logging	25.9	9.2	8.8	7.9	.1	—	—	.1	36
242	Sawmills and planing mills	71.9	26.1	14.4	31.4	9.0	3.1	.5	5.4	6
2421	Sawmills and planing mills, general	63.0	20.6	13.7	28.6	7.0	1.9	.5	4.7	6
2426	Hardwood dimension and flooring mills	8.9	5.5	.6	2.8	2.0	1.2	—	.7	13
243	Millwork, plywood, and structural members	94.9	44.4	11.7	38.8	7.9	2.1	.2	5.5	12
2431	Millwork	25.1	9.3	2.3	13.5	5.1	1.7	.1	3.2	13
2434	Wood kitchen cabinets	9.4	1.9	.7	6.8	.9	(Z)	(Z)	.8	31
2435	Hardwood veneer and plywood	18.4	10.5	2.6	5.3	1.2	.1	—	1.2	46
2436	Softwood veneer and plywood	33.0	20.0	4.9	8.1	.3	.1	(Z)	.2	17
2439	Structural wood members, n.e.c.	9.0	2.7	1.3	5.1	.3	.2	.1	.1	26
244	Wood containers	6.7	1.2	.3	5.2	3.3	(D)	—	(D)	17
2448	Wood pallets and skids	5.1	.4	.2	4.4	2.3	(D)	—	(D)	23
245	Wood buildings and mobile homes	24.7	1.3	4.6	18.8	.4	(Z)	—	.4	5
2451	Mobile homes	17.0	(D)	(D)	15.4	.3	(Z)	—	.3	6
2452	Prefabricated wood buildings	7.7	(D)	(D)	3.4	.1	—	—	.1	9
249	Miscellaneous wood products	118.7	53.4	26.8	38.6	7.4	(D)	4.0	(D)	4
2491	Wood preserving	12.4	.7	6.4	5.2	.8	(Z)	(D)	(D)	16
2493	Reconstituted wood products	79.7	47.4	19.5	12.9	4.9	(D)	(D)	1.0	4
2499	Wood products, n.e.c.	26.7	5.3	.9	20.4	1.7	.3	(Z)	1.5	9
25	Furniture and fixtures	144.4	49.4	16.7	78.3	16.5	3.2	.4	13.0	6
251	Household furniture	70.2	32.7	3.8	33.7	11.5	2.0	(Z)	9.5	11
2511	Wood household furniture	48.7	26.3	1.1	21.3	6.8	1.6	—	5.2	15
2512	Upholstered household furniture	9.5	3.1	.7	5.7	1.8	.3	—	1.5	18
2514	Metal household furniture	5.0	1.5	1.3	2.2	.1	(Z)	—	.1	33
2515	Mattresses and bedsprings	2.6	.2	.1	2.3	(Z)	—	—	(Z)	28
2517	Wood television and radio cabinets	2.8	1.3	.2	1.3	(Z)	(Z)	—	(Z)	42
2519	Household furniture, n.e.c.	1.6	.2	.4	1.0	2.7	(Z)	(Z)	2.7	48

Table 7. Operating Costs and Cost Offsets by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
25	Furniture and fixtures—Con.									
252	Office furniture	29.5	8.6	3.9	16.9	1.9	.8	.1	1.0	11
2521	Wood office furniture	13.2	3.0	1.0	9.2	.3	(D)	(Z)	(D)	23
2522	Office furniture, except wood	16.3	5.6	2.9	7.7	1.6	(D)	.1	(D)	9
253	Public building and related furniture	9.7	2.0	2.3	5.4	.8	(Z)	.2	.6	14
2531	Public building and related furniture	9.7	2.0	2.3	5.4	.8	(Z)	.2	.6	14
254	Partitions and fixtures	25.3	3.3	4.7	17.3	1.9	.3	.1	1.5	7
2541	Wood partitions and fixtures	12.0	1.5	.6	9.9	1.0	.3	—	.7	12
2542	Partitions and fixtures, except wood	13.3	1.8	4.2	7.4	.9	.1	.1	.8	7
259	Miscellaneous furniture and fixtures	9.7	2.8	1.9	5.0	.4	(Z)	—	.4	12
2591	Drapery hardware and blinds and shades	3.9	.7	1.2	2.1	(Z)	(Z)	—	(Z)	14
2599	Furniture and fixtures, n.e.c.	5.8	2.1	.7	2.9	.3	(Z)	—	.3	17
26	Paper and allied products	1 879.5	536.9	829.5	513.1	285.1	116.0	41.5	127.6	3
261	Pulp mills	198.7	69.0	96.4	33.3	31.9	(D)	(D)	8.7	7
2611	Pulp mills	198.7	69.0	96.4	33.3	31.9	(D)	(D)	8.7	7
262	Paper mills	859.9	206.8	432.6	220.5	109.6	43.1	23.0	43.5	5
2621	Paper mills	859.9	206.8	432.6	220.5	109.6	43.1	23.0	43.5	5
263	Paperboard mills	524.9	187.8	216.1	121.0	52.0	32.5	3.6	15.8	4
2631	Paperboard mills	524.9	187.8	216.1	121.0	52.0	32.5	3.6	15.8	4
265	Paperboard containers and boxes	66.8	11.0	18.4	37.4	46.4	4.9	1.5	40.0	11
2653	Corrugated and solid fiber boxes	31.0	1.6	12.5	16.8	31.2	.1	.7	30.4	16
2655	Fiber cans, drums, and similar products	3.6	.4	.7	2.5	1.1	.1	.1	.9	55
2656	Sanitary food containers	7.8	2.0	1.4	4.5	3.3	.1	.3	2.9	25
2657	Folding paperboard boxes	24.0	7.0	3.7	13.3	10.9	4.6	.5	5.8	20
267	Miscellaneous converted paper products	229.3	62.3	66.0	101.0	45.2	(D)	(D)	19.7	8
2671	Paper coated and laminated, packaging	41.0	13.2	6.3	21.5	2.1	.2	.1	1.7	24
2672	Paper coated and laminated, n.e.c.	47.5	21.3	6.3	20.0	(D)	(D)	.1	(D)	17
2673	Bags: plastics, laminated, and coated	20.3	6.2	3.9	10.2	7.4	.8	.2	6.4	23
2674	Bags: uncoated paper and multiwall	19.5	1.1	11.1	7.4	14.1	11.3	.1	2.8	57
2675	Die-cut paper and board	4.7	.8	.6	3.3	.7	.1	(Z)	.6	44
2676	Sanitary paper products	73.3	15.1	30.9	27.4	(D)	.1	(D)	(D)	1
2677	Envelopes	2.4	.3	1.0	1.0	.2	(Z)	.1	.1	43
2678	Stationery products	3.2	.6	.7	1.9	.8	.1	(Z)	.6	50
2679	Converted paper products, n.e.c.	17.5	3.8	5.3	8.5	2.7	.5	.3	1.9	27
27	Printing and publishing	287.5	114.7	34.3	138.5	106.4	41.5	2.3	62.6	4
271	Newspapers	32.7	1.3	6.7	24.7	6.7	.7	.3	5.7	10
2711	Newspapers	32.7	1.3	6.7	24.7	6.7	.7	.3	5.7	10
272	Periodicals	3.3	.4	.4	2.6	(D)	(Z)	(Z)	(D)	8
2721	Periodicals	3.3	.4	.4	2.6	(D)	(Z)	(Z)	(D)	8
273	Books	23.6	5.1	3.6	14.9	17.5	2.2	.3	15.0	7
2731	Book publishing	5.2	.9	1.3	3.0	.6	.1	.1	.4	15
2732	Book printing	18.4	4.2	2.3	11.9	16.9	2.1	.2	14.6	7
274	Miscellaneous publishing	2.6	.4	.4	1.8	.4	.1	.1	.3	19
2741	Miscellaneous publishing	2.6	.4	.4	1.8	.4	.1	.1	.3	19
275	Commercial printing	194.1	104.0	16.9	73.1	69.2	38.0	1.2	29.9	5
2752	Commercial printing, lithographic	124.3	60.6	13.1	50.5	37.2	10.9	1.2	25.1	6
2754	Commercial printing, gravure	51.5	39.7	3.1	8.7	30.4	26.8	(Z)	3.5	10
2759	Commercial printing, n.e.c.	18.2	3.6	.8	13.8	1.6	.3	(Z)	1.2	14
276	Manifold business forms	12.7	1.3	2.7	8.8	6.7	.1	.2	6.5	11
2761	Manifold business forms	12.7	1.3	2.7	8.8	6.7	.1	.2	6.5	11
277	Greeting cards	4.3	.5	.7	3.2	(D)	(Z)	(Z)	(D)	3
2771	Greeting cards	4.3	.5	.7	3.2	(D)	(Z)	(Z)	(D)	3
278	Blankbooks and bookbinding	4.2	(Z)	.4	3.7	.7	—	—	.7	12
2782	Blankbooks and looseleaf binders	3.1	(Z)	.3	2.7	.2	—	—	.2	12
2789	Bookbinding and related work	1.1	—	.1	1.0	.5	—	—	.5	32
279	Printing trade services	10.1	1.7	2.7	5.8	1.2	.4	.2	.7	10
2791	Typesetting	1.7	.3	.6	.7	.3	.1	.1	.2	46
2796	Platemaking services	8.4	1.3	2.0	5.1	.9	.3	.1	.5	7
28	Chemicals and allied products	4 566.9	1 138.7	1 996.7	1 431.5	321.0	140.4	89.7	90.9	2
281	Industrial inorganic chemicals	615.9	188.2	242.3	185.4	59.3	17.2	29.5	12.6	4
2812	Alkalies and chlorine	60.5	14.1	30.6	15.7	9.1	(D)	1.9	(D)	4
2813	Industrial gases	15.8	7.0	7.2	1.6	(Z)	(Z)	(Z)	(Z)	3
2816	Inorganic pigments	117.0	23.1	58.9	35.0	19.2	(D)	14.0	(D)	4
2819	Industrial inorganic chemicals, n.e.c.	422.6	144.0	145.5	133.1	31.0	14.9	13.6	2.5	6
282	Plastics materials and synthetics	861.3	213.2	379.8	268.3	56.0	25.4	8.2	22.3	5
2821	Plastics materials and resins	587.3	152.5	242.8	192.1	38.8	18.4	5.4	14.9	7
2822	Synthetic rubber	112.1	(D)	56.2	(D)	5.4	1.1	.1	4.1	4
2823	Cellulosic manmade fibers	57.9	(D)	33.1	(D)	(D)	(D)	(D)	(D)	3
2824	Organic fibers, noncellulosic	104.0	24.5	47.8	31.7	(D)	(D)	(D)	(D)	5
283	Drugs	372.7	76.0	142.9	153.8	13.2	3.2	4.3	5.7	5
2833	Medicinals and botanicals	119.1	26.0	50.2	42.9	(D)	.3	(D)	1.2	9
2834	Pharmaceutical preparations	219.5	45.8	83.1	90.5	9.4	2.8	(D)	(D)	6
2835	Diagnostic substances	17.2	2.3	4.0	10.8	(D)	—	(Z)	(D)	29
2836	Biological products, except diagnostic	17.0	1.9	5.6	9.5	.3	.1	(Z)	.2	15
284	Soaps, cleaners, and toilet goods	178.5	30.9	80.6	66.9	5.4	1.1	1.1	3.2	5
2841	Soap and other detergents	54.5	10.4	29.0	15.1	1.8	.3	.7	.8	8
2842	Polishes and sanitation goods	13.4	1.8	4.8	6.8	.5	(Z)	.1	.3	19
2843	Surface active agents	63.1	15.4	27.8	19.9	1.4	.7	.2	.5	2
2844	Toilet preparations	47.4	3.3	19.0	25.1	1.7	(Z)	.1	1.5	13
285	Paints and allied products	107.0	20.9	18.0	68.1	10.7	1.0	1.7	8.0	7
2851	Paints and allied products	107.0	20.9	18.0	68.1	10.7	1.0	1.7	8.0	7
286	Industrial organic chemicals	1 826.6	449.9	863.5	513.3	139.4	69.9	36.3	33.3	5
2861	Gum and wood chemicals	15.0	5.7	4.3	5.0	.5	(D)	(D)	(Z)	6
2865	Cyclic crudes and intermediates	309.1	63.5	158.7	87.0	23.6	(D)	(D)	7.2	5
2869	Industrial organic chemicals, n.e.c.	1 502.5	380.7	700.5	421.3	115.3	64.6	24.7	26.0	5

Table 7. Operating Costs and Cost Offsets by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
28	Chemicals and allied products—Con.									
287	Agricultural chemicals	400.2	119.7	172.9	107.6	28.9	21.2	6.1	1.6	2
2873	Nitrogenous fertilizers	40.1	16.2	16.2	7.7	2.6	1.7	.8	(Z)	4
2874	Phosphatic fertilizers	145.5	70.4	35.6	39.5	(D)	(D)	(D)	(D)	2
2875	Fertilizers, mixing only	4.7	3.2	.6	.8	.5	.4	(Z)	(Z)	9
2879	Agricultural chemicals, n.e.c.	210.0	29.9	120.5	59.6	(D)	(D)	(D)	1.2	2
289	Miscellaneous chemical products	204.6	39.9	96.6	68.0	8.2	1.3	2.5	4.4	9
2891	Adhesives and sealants	52.0	6.2	30.5	15.2	4.0	.8	1.1	2.1	33
2892	Explosives	15.9	1.9	7.7	6.2	.2	(Z)	(Z)	.2	13
2893	Printing ink	11.4	1.4	3.1	6.8	.5	.1	.1	.3	24
2895	Carbon black	11.4	9.6	.7	1.1	.1	.1	—	(Z)	31
2899	Chemical preparations, n.e.c.	114.0	20.8	54.5	38.7	3.4	.3	1.3	1.8	5
29	Petroleum and coal products	2 914.9	1 742.0	755.7	417.2	337.8	251.7	61.7	24.4	4
291	Petroleum refining	2 842.3	1 712.0	742.3	388.0	328.6	246.0	61.5	21.1	4
2911	Petroleum refining	2 842.3	1 712.0	742.3	388.0	328.6	246.0	61.5	21.1	4
295	Asphalt paving and roofing materials	43.3	18.3	7.0	18.1	5.9	4.9	.1	.8	9
2951	Asphalt paving mixtures and blocks	4.1	1.8	1.2	1.0	.3	.1	(Z)	.2	30
2952	Asphalt felts and coatings	39.3	16.4	5.7	17.1	5.6	4.9	.1	.7	9
299	Miscellaneous petroleum and coal products	29.3	11.7	6.4	11.2	3.3	.8	.1	2.4	16
2992	Lubricating oils and greases	16.6	2.0	5.1	9.5	2.7	.3	.1	2.4	18
2999	Petroleum and coal products, n.e.c.	12.7	9.7	1.3	1.7	.6	.5	(Z)	(Z)	27
30	Rubber and miscellaneous plastics products	439.6	119.2	90.7	229.8	35.5	7.4	2.6	25.4	4
301	Tires and inner tubes	46.5	15.7	6.6	24.3	4.3	(D)	(D)	2.5	11
3011	Tires and inner tubes	46.5	15.7	6.6	24.3	4.3	(D)	(D)	2.5	11
302	Rubber and plastics footwear	2.3	.2	.4	1.7	.1	(Z)	(Z)	.1	—
3021	Rubber and plastics footwear	2.3	.2	.4	1.7	.1	(Z)	(Z)	.1	—
305	Hose and belting and gaskets and packing	25.3	5.0	6.9	13.5	1.4	.6	.1	.8	9
3052	Rubber and plastics hose and belting	13.4	2.4	3.3	7.7	.5	(Z)	(Z)	.5	8
3053	Gaskets, packing, and sealing devices	11.9	2.6	3.6	5.7	.9	.6	(Z)	.3	15
306	Fabricated rubber products, n.e.c.	57.1	10.8	10.0	36.3	.8	.1	.1	.6	10
3061	Mechanical rubber goods	24.8	4.1	3.7	17.0	.5	.1	.1	.4	15
3069	Fabricated rubber products, n.e.c.	32.3	6.8	6.3	19.2	.3	(Z)	—	.3	14
308	Miscellaneous plastics products, n.e.c.	308.3	87.4	66.8	154.1	28.8	(D)	(D)	21.5	5
3081	Unsupported plastics film and sheet	74.3	26.5	21.3	26.5	4.1	(D)	.2	(D)	6
3082	Unsupported plastics profile shapes	11.7	1.8	3.1	6.8	1.3	(Z)	(D)	(D)	17
3083	Laminated plastics plate, sheet, and profile shapes	27.4	10.5	4.6	12.3	3.6	2.8	(Z)	.8	23
3084	Plastics pipe	5.3	.5	1.5	3.4	.3	(Z)	(Z)	.2	31
3085	Plastics bottles	10.5	1.7	2.0	6.8	.5	.1	(Z)	.4	29
3086	Plastics foam products	30.1	12.4	5.0	12.7	.6	(Z)	(Z)	.6	18
3087	Custom compounding of purchased plastics resins	26.5	5.3	2.9	18.3	1.2	.1	(Z)	1.1	22
3088	Plastics plumbing fixtures	3.9	3.0	(Z)	.9	(Z)	(Z)	(Z)	(Z)	72
3089	Plastics products, n.e.c.	118.7	25.8	26.4	66.5	17.3	1.5	1.4	14.4	8
31	Leather and leather products	60.1	3.3	38.7	18.2	1.7	.2	1.2	.3	12
311	Leather tanning and finishing	51.9	2.1	37.1	12.7	1.3	.2	1.1	.1	13
3111	Leather tanning and finishing	51.9	2.1	37.1	12.7	1.3	.2	1.1	.1	13
314	Footwear, except rubber	5.5	.6	.6	4.3	.1	(Z)	(Z)	.1	37
3143	Men's footwear, except athletic	3.4	.2	.2	3.0	(Z)	(Z)	(Z)	(Z)	58
316	Luggage	1.1	.1	.5	.5	.1	(Z)	(Z)	.1	40
3161	Luggage	1.1	.1	.5	.5	.1	(Z)	(Z)	.1	40
32	Stone, clay, and glass products	599.5	309.6	108.0	182.0	63.6	30.3	3.0	30.3	4
321	Flat glass	16.4	6.3	2.8	7.4	(D)	(Z)	—	(D)	13
3211	Flat glass	16.4	6.3	2.8	7.4	(D)	(Z)	—	(D)	13
322	Glass and glassware, pressed or blown	87.6	32.6	23.8	31.2	9.8	2.1	1.3	6.4	4
3221	Glass containers	24.9	10.5	4.9	9.4	2.2	(D)	(D)	.6	8
3229	Pressed and blown glass, n.e.c.	62.7	22.1	18.9	21.8	7.6	(D)	(D)	5.9	4
323	Products of purchased glass	31.5	8.0	10.7	12.8	1.6	.1	.1	1.5	9
3231	Products of purchased glass	31.5	8.0	10.7	12.8	1.6	.1	.1	1.5	9
324	Cement, hydraulic	150.7	124.6	7.1	19.0	23.9	22.7	.1	1.0	5
3241	Cement, hydraulic	150.7	124.6	7.1	19.0	23.9	22.7	.1	1.0	5
325	Structural clay products	18.0	9.0	3.3	5.7	(D)	.1	(Z)	(D)	6
3251	Brick and structural clay tile	6.1	4.1	.9	1.1	(Z)	—	—	(Z)	13
3253	Ceramic wall and floor tile	6.4	1.5	1.9	3.1	(D)	(Z)	(Z)	(D)	4
3255	Clay refractories	5.2	3.3	.5	1.3	.2	.1	(Z)	.1	9
326	Pottery and related products	23.5	4.4	7.0	12.1	5.1	.3	.1	4.7	13
3261	Vitreous plumbing fixtures	6.2	.7	2.1	3.4	.2	(D)	(Z)	(D)	2
3262	Vitreous china table and kitchenware	4.0	.4	1.2	2.3	.1	(Z)	(Z)	(Z)	7
3263	Semivitreous table and kitchenware	1.6	.3	.5	.9	2.9	(D)	—	(D)	84
3264	Porcelain electrical supplies	9.8	2.5	2.7	4.6	1.8	(Z)	.1	1.8	26
3269	Pottery products, n.e.c.	1.9	.4	.6	1.0	.2	(Z)	(Z)	.1	25
327	Concrete, gypsum, and plaster products	109.5	44.3	20.1	45.1	15.0	2.1	.8	12.1	10
3271	Concrete block and brick	13.0	3.6	2.8	6.6	1.8	.3	.2	1.3	29
3272	Concrete products, n.e.c.	19.0	6.5	3.3	9.2	1.6	.5	.2	.9	21
3273	Ready-mixed concrete	27.3	9.0	7.9	10.5	1.9	.9	.4	.6	18
3274	Lime	22.9	14.5	3.2	5.2	(Z)	(Z)	—	(Z)	26
3275	Gypsum products	27.3	10.7	3.0	13.7	9.8	.4	(Z)	9.3	21
328	Cut stone and stone products	1.9	.4	.9	.6	(Z)	(Z)	(Z)	(Z)	—
3281	Cut stone and stone products	1.9	.4	.9	.6	(Z)	(Z)	(Z)	(Z)	—
329	Miscellaneous nonmetallic mineral products	160.3	80.1	32.3	48.0	7.3	2.9	.6	3.9	10
3291	Abrasive products	35.7	12.1	9.0	14.6	1.2	.1	.2	.9	13
3292	Asbestos products	4.0	.8	.6	2.6	.5	.5	—	—	98
3295	Minerals, ground or treated	23.1	15.2	4.8	3.1	.5	.3	.1	.1	28
3296	Mineral wool	78.2	44.1	15.5	18.6	2.7	.9	.2	1.6	14
3297	Nonclay refractories	8.5	3.9	1.2	3.3	1.4	.2	.1	1.2	33
3299	Nonmetallic mineral products, n.e.c.	10.8	4.0	1.1	5.7	.9	.8	(Z)	(Z)	40

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SIC code	Industry	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
33	Primary metal industries	2 211.5	982.1	692.2	537.2	133.8	76.3	14.7	42.9	4
331	Blast furnace and basic steel products	1 219.2	483.8	465.4	270.0	36.5	5.3	9.0	22.2	6
3312	Blast furnaces and steel mills	1 099.7	463.9	409.9	225.9	32.1	5.0	8.4	18.7	7
3313	Electrometallurgical products	15.0	5.2	6.6	3.2	(Z)	(Z)	—	—	15
3315	Steel wire and related products	20.8	2.1	10.0	8.7	(D)	(Z)	(Z)	(D)	23
3316	Cold finishing of steel shapes	58.7	9.6	31.1	18.0	(D)	.2	.4	(D)	7
3317	Steel pipe and tubes	25.0	2.9	7.8	14.3	.2	(Z)	.1	.1	22
332	Iron and steel foundries	280.5	130.8	47.5	102.2	6.1	1.9	1.7	2.5	4
3321	Gray and ductile iron foundries	228.0	109.2	38.9	79.6	4.9	1.8	(D)	(D)	5
3322	Malleable iron foundries	(D)	(D)	(D)	—	—	—	—	—	(X)
3324	Steel investment foundries	(D)	(D)	(D)	—	.3	(D)	(D)	(D)	(X)
3325	Steel foundries, n.e.c.	33.3	14.1	4.0	15.2	1.0	.1	(Z)	.9	8
333	Primary nonferrous metals	348.5	253.3	41.3	54.0	64.3	62.3	(D)	(D)	4
3331	Primary copper	131.9	(D)	9.4	7.9	(D)	(D)	(D)	(D)	6
3334	Primary aluminum	152.1	103.3	18.0	30.9	44.7	43.6	(D)	(D)	5
3339	Primary nonferrous metals, n.e.c.	64.4	35.3	13.9	15.2	(D)	—	—	—	5
334	Secondary nonferrous metals	81.7	50.9	15.9	15.0	2.4	1.7	.1	.5	6
3341	Secondary nonferrous metals	81.7	50.9	15.9	15.0	2.4	1.7	.1	.5	6
335	Nonferrous rolling and drawing	203.4	47.6	89.4	66.3	18.7	3.9	1.6	13.2	10
3351	Copper rolling and drawing	47.3	9.8	22.7	14.8	9.5	.6	.6	8.3	14
3353	Aluminum sheet, plate, and foil	59.1	21.0	19.7	18.4	3.8	2.0	(D)	(D)	14
3354	Aluminum extruded products	25.9	2.8	13.5	9.6	.9	(D)	—	.7	28
3355	Aluminum rolling and drawing, n.e.c.	4.0	1.6	2.0	4	—	—	—	—	47
3356	Nonferrous rolling and drawing, n.e.c.	44.7	8.6	23.9	12.1	3.1	.3	.2	2.6	31
3357	Nonferrous wire drawing and insulating	22.4	3.8	7.7	10.9	1.3	(D)	(Z)	(D)	14
336	Nonferrous foundries (castings)	47.9	8.2	19.8	19.8	3.0	.1	(D)	(D)	5
3363	Aluminum die-castings	19.6	2.5	12.0	5.2	2.2	(Z)	(D)	(D)	7
3364	Nonferrous die-castings, except aluminum	5.8	.7	3.3	1.8	.2	(Z)	.1	(Z)	13
3365	Aluminum foundries	12.6	2.3	2.2	8.0	.3	(Z)	(D)	(D)	10
3366	Copper foundries	5.3	1.7	.7	2.8	.1	(Z)	(Z)	(Z)	18
3369	Nonferrous foundries, n.e.c.	4.6	1.0	1.6	2.0	.2	(Z)	(Z)	.2	11
339	Miscellaneous primary metal products	30.3	7.5	13.0	9.8	2.8	1.0	.5	1.3	6
3398	Metal heat treating	11.7	1.2	6.2	4.2	1.0	(Z)	(D)	(D)	9
3399	Primary metal products, n.e.c.	18.6	6.3	6.7	5.6	1.9	.9	(D)	(D)	8
34	Fabricated metal products	786.1	135.9	327.4	322.9	41.1	14.0	7.7	19.4	4
341	Metal cans and shipping containers	69.7	23.0	23.8	22.9	1.5	.3	.1	1.2	6
3411	Metal cans	60.2	19.0	22.4	18.8	1.1	.1	(Z)	1.0	7
3412	Metal barrels, drums, and pails	9.5	4.0	1.4	4.1	.4	.2	(Z)	.2	11
342	Cutlery, handtools, and hardware	61.4	10.0	24.6	26.9	3.6	.5	1.1	2.1	10
3421	Cutlery	5.8	.9	1.6	3.3	.3	—	.1	.2	23
3423	Hand and edge tools, n.e.c.	14.1	2.5	5.6	5.9	1.8	.2	.6	1.1	21
3425	Saw blades and handsaws	6.1	1.3	.8	4.0	—	—	—	—	40
3429	Hardware, n.e.c.	35.5	5.3	16.5	13.6	1.6	.3	.5	.8	14
343	Plumbing and heating, except electric	26.6	7.3	9.4	9.9	.8	.1	.1	.5	8
3431	Metal sanitary ware	8.8	4.7	2.5	1.6	.2	.1	(Z)	(Z)	12
3432	Plumbing fixture fittings and trim	14.5	1.8	6.6	6.1	.3	(Z)	.1	.2	12
3433	Heating equipment, except electric	3.3	.8	.3	2.2	.3	—	—	.3	14
344	Fabricated structural metal products	75.8	11.1	27.6	37.1	2.6	.1	.3	2.2	11
3441	Fabricated structural metal	14.2	2.8	5.1	6.3	1.5	(Z)	(Z)	1.5	19
3442	Metal doors, sash, and trim	14.4	2.2	3.9	8.2	.5	.1	.2	.3	25
3443	Fabricated plate work (boiler shops)	20.7	2.4	9.9	8.5	.1	—	.1	.1	24
3444	Sheet metal work	13.6	2.6	4.4	6.6	.4	—	(Z)	.4	23
3446	Architectural metal work	2.6	.3	.6	1.8	—	—	—	—	50
3448	Prefabricated metal buildings	3.7	.4	2.0	1.3	(Z)	—	—	(Z)	44
3449	Miscellaneous metal work	6.6	.5	1.7	4.3	(Z)	—	—	(Z)	48
345	Screw machine products, bolts, etc.	36.5	3.7	17.9	15.0	2.5	.5	.6	1.4	11
3451	Screw machine products	8.3	1.0	2.6	4.7	1.3	.4	.2	.6	21
3452	Bolts, nuts, rivets, and washers	28.3	2.8	15.3	10.3	1.2	(Z)	.4	.8	13
346	Metal forgings and stampings	92.9	14.5	34.3	44.2	12.4	(D)	(D)	1.6	10
3462	Iron and steel forgings	12.5	1.5	5.0	5.9	.3	.1	.1	.1	25
3463	Nonferrous forgings	11.0	2.2	6.3	2.5	.3	—	—	.3	42
3465	Automotive stampings	40.0	3.4	16.4	20.2	1.1	.1	.8	.3	13
3466	Crowns and closures	3.1	1.1	.6	1.4	.2	(Z)	(Z)	.2	57
3469	Metal stampings, n.e.c.	26.4	6.2	6.0	14.2	10.5	(D)	(D)	.7	14
347	Metal services, n.e.c.	227.3	36.0	120.2	71.1	7.2	2.2	2.8	2.2	5
3471	Plating and polishing	151.9	13.0	90.1	48.9	4.3	.6	2.3	1.3	5
3479	Metal coating and allied services	75.4	23.0	30.1	22.2	2.9	1.5	.5	.9	11
348	Ordnance and accessories, n.e.c.	79.2	8.1	28.6	42.5	5.1	(Z)	(Z)	5.0	17
3482	Small arms ammunition	10.2	(D)	(D)	4.5	(D)	—	—	(D)	3
3483	Ammunition, except for small arms, n.e.c.	27.6	2.6	15.5	9.5	1.3	—	—	1.3	46
3484	Small arms	7.5	(D)	(D)	3.8	.1	—	(Z)	.1	26
3489	Ordnance and accessories, n.e.c.	33.9	3.6	5.7	24.7	(D)	(Z)	—	(D)	8
349	Miscellaneous fabricated metal products	116.7	22.2	41.1	53.4	5.3	(D)	(D)	3.2	12
3491	Industrial valves	25.9	2.8	9.8	13.3	1.2	(D)	(D)	.6	25
3492	Fluid power valves and hose fittings	10.8	1.5	4.6	4.7	.2	(Z)	(Z)	.2	23
3493	Steel springs, except wire	1.7	.2	.3	1.3	—	—	—	—	57
3494	Valves and pipe fittings, n.e.c.	16.5	3.8	4.9	7.8	1.3	(Z)	(Z)	1.3	39
3495	Wire springs	2.2	.1	.1	2.0	(Z)	—	—	(Z)	38
3496	Miscellaneous fabricated wire products	10.8	1.1	5.9	3.8	.3	.1	.1	.1	37
3497	Metal foil and leaf	28.0	8.6	7.8	11.7	.9	(D)	(Z)	(D)	27
3498	Fabricated pipe and fittings	6.9	2.0	2.2	2.7	.4	.1	.2	.1	30
3499	Fabricated metal products, n.e.c.	13.8	2.2	5.5	6.1	.9	(D)	.5	(D)	25
35	Industrial machinery and equipment	444.3	79.1	147.1	218.1	36.9	1.9	2.5	32.6	3
351	Engines and turbines	42.7	10.6	15.6	16.5	(D)	.1	.1	(D)	12
3511	Turbines and turbine generator sets	11.1	1.5	4.6	5.0	.1	(Z)	(Z)	.1	9
3519	Internal combustion engines, n.e.c.	31.6	9.2	10.9	11.4	(D)	(Z)	(Z)	(D)	15
352	Farm and garden machinery	35.2	6.2	12.1	16.9	4.8	.1	.2	4.5	8
3523	Farm machinery and equipment	24.7	4.6	8.3	11.7	3.5	(D)	(D)	3.3	10
3524	Lawn and garden equipment	10.6	1.6	3.9	5.2	1.3	(D)	(D)	1.2	12

Table 7. Operating Costs and Cost Offsets by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
35	Industrial machinery and equipment—Con.									
353	Construction and related machinery	55.6	13.1	15.5	26.9	3.4	.2	.1	3.1	7
3531	Construction machinery	35.4	9.9	10.5	15.0	1.3	.1	(Z)	1.2	7
3532	Mining machinery	3.6	.3	.9	2.4	.1	—	—	.1	28
3533	Oil and gas field machinery	6.4	1.4	1.6	3.5	.6	(Z)	(Z)	.5	22
3534	Elevators and moving stairways	1.4	.4	.5	.5	—	—	—	—	52
3535	Conveyors and conveying equipment	3.2	.3	.5	2.4	.1	(Z)	(Z)	.1	32
3536	Hoists, cranes, and monorails	1.3	.1	.4	.8	.1	(Z)	(Z)	.1	36
3537	Industrial trucks and tractors	4.1	.6	1.2	2.3	1.2	(Z)	(Z)	1.2	34
354	Metalworking machinery	42.8	5.2	15.2	22.4	4.5	(Z)	.7	3.8	9
3541	Machine tools, metal cutting types	2.8	.3	.9	1.6	.2	(Z)	(Z)	.2	21
3542	Machine tools, metal forming types	1.9	.2	.7	1.0	.1	—	.1	.1	28
3544	Special dies, tools, jigs, and fixtures	16.8	1.7	4.9	10.2	3.5	—	.4	3.1	18
3545	Machine tool accessories	8.0	.9	3.6	3.5	.3	(Z)	.1	.2	20
3546	Power-driven handtools	4.5	.5	1.6	2.4	.2	—	(Z)	.2	21
3548	Welding apparatus	6.4	1.3	2.8	2.2	.1	(Z)	(Z)	.1	12
3549	Metalworking machinery, n.e.c.	1.2	.1	.5	.6	.1	—	(Z)	.1	32
355	Special industry machinery	27.0	4.3	7.3	15.4	1.4	.1	.1	1.3	12
3552	Textile machinery	2.7	.3	1.2	1.2	(Z)	—	(Z)	—	33
3554	Paper industries machinery	5.3	1.3	1.5	2.5	(Z)	—	—	(Z)	36
3555	Printing trades machinery	3.1	.4	.8	1.9	.1	—	(Z)	.1	20
3556	Food products machinery	2.0	.2	.6	1.2	.1	—	(Z)	.1	31
3559	Special industry machinery, n.e.c.	13.2	2.2	3.0	8.0	1.1	.1	—	1.0	17
356	General industrial machinery	57.4	6.1	19.3	32.0	3.1	.3	.1	2.7	10
3561	Pumps and pumping equipment	3.1	.5	.5	2.0	.6	.3	(Z)	.3	26
3562	Ball and roller bearings	20.1	1.6	10.2	8.3	.7	—	—	.7	17
3563	Air and gas compressors	4.3	.5	.9	2.8	.3	(Z)	(Z)	.3	17
3564	Blowers and fans	5.3	.5	1.2	3.5	.1	—	(Z)	.1	30
3565	Packaging machinery	3.4	.5	.9	2.1	.2	—	(Z)	.2	31
3566	Speed changers, drives, and gears	3.9	.7	.6	2.6	.3	—	(Z)	.3	26
3567	Industrial furnaces and ovens	3.2	.8	.4	2.0	(Z)	—	—	(Z)	41
3568	Power transmission equipment, n.e.c.	4.9	.1	1.9	2.8	(Z)	—	(Z)	(Z)	43
3569	General industrial machinery, n.e.c.	9.2	.8	2.7	5.8	.8	—	(Z)	.8	35
357	Computer and office equipment	45.5	5.5	14.8	25.2	8.5	.6	.4	7.6	8
3571	Electronic computers	15.7	1.5	4.3	10.0	5.6	(D)	.2	(D)	15
3572	Computer storage devices	11.5	2.2	3.9	5.3	1.0	(Z)	.1	.8	10
3577	Computer peripheral equipment, n.e.c.	12.4	1.4	4.4	6.6	2.0	(D)	.1	(D)	19
3578	Calculating and accounting equipment	1.3	(Z)	.2	1.1	—	—	—	—	69
3579	Office machines, n.e.c.	4.6	.4	1.9	2.2	(Z)	—	—	(Z)	22
358	Refrigeration and service machinery	78.7	17.1	29.3	32.4	6.2	.5	.6	5.1	5
3581	Automatic vending machines	2.8	.4	.8	1.7	.1	(Z)	(Z)	.1	50
3582	Commercial laundry equipment	1.4	.2	.4	.8	(D)	(Z)	(D)	.1	49
3585	Refrigeration and heating equipment	67.5	15.1	26.3	26.1	5.3	.4	.3	4.6	5
3586	Measuring and dispensing pumps	1.0	.1	.3	.6	(D)	(Z)	(D)	(Z)	19
3589	Service industry machinery, n.e.c.	5.9	1.3	1.5	3.1	.4	.1	.1	.3	18
359	Industrial machinery, n.e.c.	59.4	10.9	18.0	30.4	(D)	(Z)	.3	(D)	11
3592	Carburetors, pistons, rings, and valves	12.9	1.9	5.3	5.7	.1	(Z)	(D)	(D)	19
3593	Fluid power cylinders and actuators	5.3	.8	1.5	2.9	(D)	—	(D)	.2	25
3594	Fluid power pumps and motors	5.1	.6	1.4	3.1	1.3	—	—	1.3	25
3599	Industrial machinery, n.e.c.	35.5	7.5	9.6	18.5	.8	—	—	.8	15
36	Electronic and other electric equipment	771.9	165.4	329.9	276.7	81.2	10.9	10.4	59.9	4
361	Electric distribution equipment	18.7	1.6	8.6	8.4	1.2	.1	.1	.9	12
3612	Transformers, except electronic	7.3	1.0	2.2	4.1	.9	.1	(Z)	.7	10
3613	Switchgear and switchboard apparatus	11.3	.6	6.4	4.3	.3	(Z)	.1	.2	19
362	Electrical industrial apparatus	69.0	26.9	20.2	21.9	3.6	.4	.5	2.7	17
3621	Motors and generators	18.2	2.0	6.4	9.8	2.1	.1	.2	1.7	12
3624	Carbon and graphite products	34.7	22.3	6.5	6.0	(Z)	(Z)	(Z)	(Z)	32
3625	Relays and industrial controls	13.7	2.2	6.7	4.8	1.3	.2	.2	.9	16
3629	Electrical industrial apparatus, n.e.c.	2.3	.5	.6	1.3	.2	(Z)	(Z)	.1	40
363	Household appliances	47.5	5.9	17.4	24.1	5.8	.4	.7	4.7	11
3631	Household cooking equipment	6.1	.5	3.0	2.7	.4	—	(D)	(D)	22
3632	Household refrigerators and freezers	11.6	2.1	3.3	6.3	2.7	(Z)	(D)	(D)	8
3633	Household laundry equipment	10.7	1.4	5.4	4.0	.3	—	.1	.1	27
3634	Electric housewares and fans	7.4	.4	1.9	5.1	1.2	(Z)	(Z)	1.2	41
3635	Household vacuum cleaners	2.9	.4	1.0	1.5	.1	(Z)	(Z)	.1	38
3639	Household appliances, n.e.c.	8.8	1.3	3.0	4.6	1.1	.4	.1	.5	22
364	Electric lighting and wiring equipment	58.1	7.3	23.5	27.2	3.2	.2	1.1	1.9	12
3641	Electric lamp bulbs and tubes	9.3	1.0	4.1	4.3	.5	(Z)	(Z)	.4	27
3643	Current-carrying wiring devices	13.8	.9	7.7	5.2	.4	(Z)	.1	.2	38
3644	Noncurrent-carrying wiring devices	11.0	1.0	3.9	6.2	.2	(Z)	.1	.1	17
3645	Residential lighting fixtures	5.1	.3	2.6	2.2	.1	(Z)	.1	(Z)	41
3646	Commercial lighting fixtures	1.9	.2	.6	1.2	.4	.1	(D)	(D)	41
3647	Vehicular lighting equipment	13.6	3.0	3.7	6.9	1.1	(Z)	(D)	(D)	10
3648	Lighting equipment, n.e.c.	3.2	.9	1.0	1.3	.6	(Z)	.1	.5	26
365	Household audio and video equipment	25.3	3.8	9.4	12.1	1.7	(Z)	.2	1.5	12
3651	Household audio and video equipment	18.0	2.4	7.6	8.0	.9	(Z)	.1	.7	15
3652	Prerecorded records and tapes	7.4	1.4	1.8	4.2	.8	(Z)	(Z)	.7	19
366	Communications equipment	38.0	5.9	11.9	20.1	2.4	.6	.3	1.5	10
3661	Telephone and telegraph apparatus	15.4	2.4	6.3	6.8	1.2	.2	.1	.9	4
3663	Radio and television communications	19.5	3.1	4.8	11.7	.9	.4	.1	.4	20
3669	Communications equipment, n.e.c.	3.0	.5	.8	1.7	.3	(Z)	.1	.1	15
367	Electronic components and accessories	388.3	77.7	198.7	111.8	37.8	1.7	4.2	31.9	6
3671	Electron tubes	25.1	3.5	12.6	9.0	(Z)	(Z)	—	(Z)	24
3672	Printed circuit boards	112.6	11.1	73.6	28.0	6.6	.2	(D)	(D)	8
3674	Semiconductors and related devices	172.5	52.4	77.2	42.9	10.1	.5	.8	8.8	9
3675	Electronic capacitors	15.8	2.4	6.2	7.1	1.6	.4	.1	1.0	36
3676	Electronic resistors	2.4	.4	1.0	.9	.3	(Z)	.1	.1	45
3678	Electronic connectors	8.4	.5	5.8	2.1	.1	(Z)	.1	(Z)	39
3679	Electronic components, n.e.c.	51.0	7.2	22.2	21.5	19.1	.5	(D)	(D)	8

Table 7. Operating Costs and Cost Offsets by Industries for All Media: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
36	Electronic and other electric equipment—Con.									
369	Miscellaneous electrical equipment and supplies	127.1	36.1	40.0	50.9	25.5	7.3	3.3	14.9	13
3691	Storage batteries	57.4	19.9	17.4	20.1	17.6	2.1	2.4	13.0	22
3692	Primary batteries, dry and wet	5.7	1.9	1.6	2.3	(D)	(D)	.1	.6	30
3694	Engine electrical equipment	26.1	4.3	9.4	12.5	1.1	.1	.4	.6	28
3695	Magnetic and optical recording media	29.9	8.5	9.2	12.1	(D)	(D)	.1	.3	17
3699	Electrical equipment and supplies, n.e.c.	8.0	1.5	2.5	4.0	.9	.3	.3	.4	32
37	Transportation equipment	1 116.4	293.7	342.5	480.2	71.4	5.3	13.2	52.8	5
371	Motor vehicles and equipment	722.1	221.1	233.8	267.2	50.7	1.4	7.1	42.2	7
3711	Motor vehicles and car bodies	399.2	163.0	108.5	127.6	27.5	.7	1.4	25.4	12
3713	Truck and bus bodies	8.9	1.9	1.6	5.3	.8	(Z)	(Z)	.8	23
3714	Motor vehicle parts and accessories	299.2	54.2	121.0	124.0	20.5	.6	5.6	14.3	7
3715	Truck trailers	9.0	1.3	2.1	5.6	1.4	(Z)	.1	1.3	22
3716	Motor homes	5.8	.6	.5	4.6	.4	(Z)	(Z)	.4	13
372	Aircraft and parts	239.5	38.1	75.4	126.0	7.8	(D)	4.4	(D)	8
3721	Aircraft	99.1	14.9	26.2	58.0	4.9	(Z)	(D)	(D)	14
3724	Aircraft engines and engine parts	60.7	8.8	23.9	28.0	1.9	.1	.4	1.4	16
3728	Aircraft parts and equipment, n.e.c.	79.6	14.4	25.3	40.0	1.1	(D)	(D)	.6	8
373	Ship and boat building and repairing	61.3	12.2	11.2	37.9	5.5	.3	.3	4.9	10
3731	Ship building and repairing	43.1	7.7	9.1	26.3	4.8	.1	(D)	(D)	10
3732	Boat building and repairing	18.2	4.5	2.1	11.6	.7	.2	(D)	(D)	24
374	Railroad equipment	9.2	1.1	2.0	6.1	.4	—	(Z)	.4	10
3743	Railroad equipment	9.2	1.1	2.0	6.1	.4	—	(Z)	.4	10
375	Motorcycles, bicycles, and parts	6.6	1.4	1.9	3.4	.6	(Z)	(Z)	.5	13
3751	Motorcycles, bicycles, and parts	6.6	1.4	1.9	3.4	.6	(Z)	(Z)	.5	13
376	Guided missiles, space vehicles, parts	55.4	13.9	14.2	27.3	1.1	.1	(D)	(D)	9
3761	Guided missiles and space vehicles	30.5	6.0	8.0	16.5	.6	.1	.1	.4	7
3764	Space propulsion units and parts	21.3	7.7	5.1	8.5	.5	—	(D)	(D)	16
3769	Space vehicle equipment, n.e.c.	3.7	.2	1.1	2.3	—	—	—	—	82
379	Miscellaneous transportation equipment	22.3	6.0	4.1	12.3	5.3	(D)	(D)	.9	11
3792	Travel trailers and campers	7.4	2.3	.3	4.7	.3	(Z)	(Z)	.3	30
3795	Tanks and tank components	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
3799	Transportation equipment, n.e.c.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
38	Instruments and related products	311.6	65.4	99.0	147.2	19.4	1.8	4.0	13.5	6
381	Search and navigation equipment	64.0	11.2	23.1	29.7	(D)	(D)	.1	1.1	9
3812	Search and navigation equipment	64.0	11.2	23.1	29.7	(D)	(D)	.1	1.1	9
382	Measuring and controlling devices	51.1	5.4	19.8	25.9	(D)	(Z)	(D)	(D)	14
3821	Laboratory apparatus and furniture	2.0	.3	.8	.9	(Z)	—	—	(Z)	39
3822	Environmental controls	5.7	.8	1.8	3.1	.1	—	(Z)	.1	25
3823	Process control instruments	6.2	.2	2.3	3.8	(Z)	—	(Z)	(Z)	30
3824	Fluid meters and counting devices	6.3	1.3	1.7	3.3	(D)	—	(D)	(D)	20
3825	Instruments to measure electricity	7.8	.5	3.3	4.0	.1	(Z)	(Z)	(Z)	22
3826	Analytical instruments	7.9	.8	2.4	4.7	.1	—	(Z)	.1	20
3827	Optical instruments and lenses	1.9	.2	.3	1.4	(Z)	—	—	(Z)	32
3829	Measuring and controlling devices, n.e.c.	13.2	1.3	7.2	4.7	(Z)	—	(Z)	(Z)	45
384	Medical instruments and supplies	58.3	16.8	14.2	27.4	4.6	(D)	.5	(D)	13
3841	Surgical and medical instruments	20.1	7.6	4.0	8.5	2.2	.4	(Z)	1.7	27
3842	Surgical appliances and supplies	24.4	6.4	5.8	12.2	1.4	(D)	.4	(D)	20
3843	Dental equipment and supplies	3.0	.6	.7	1.6	.2	.1	.1	.1	42
3844	X-ray apparatus and tubes	7.6	1.2	3.1	3.3	.8	(Z)	(Z)	.8	17
3845	Electromedical equipment	3.2	1.0	.5	1.7	(Z)	—	—	(Z)	30
385	Ophthalmic goods	7.8	(D)	(D)	3.8	.2	(Z)	(Z)	.2	17
3851	Ophthalmic goods	7.8	(D)	(D)	3.8	.2	(Z)	(Z)	.2	17
386	Photographic equipment and supplies	128.7	30.4	38.5	59.8	12.1	.9	3.1	8.0	10
3861	Photographic equipment and supplies	128.7	30.4	38.5	59.8	12.1	.9	3.1	8.0	10
387	Watches, clocks, watchcases, and parts	1.8	(D)	(D)	.7	(D)	(Z)	(D)	(Z)	2
3873	Watches, clocks, watchcases, and parts	1.8	(D)	(D)	.7	(D)	(Z)	(D)	(Z)	2
39	Miscellaneous manufacturing industries	95.7	23.5	26.0	46.2	6.8	1.1	1.6	4.1	6
391	Jewelry, silverware, and plated ware	9.3	2.6	3.6	3.0	.6	.1	.3	.2	13
3911	Jewelry, precious metal	3.3	1.3	1.1	.9	(Z)	—	(Z)	(Z)	16
3914	Silverware and plated ware	3.5	1.0	.9	1.6	.3	.1	.1	.1	7
3915	Jewelers' materials and lapidary work	2.5	.3	1.6	.6	.2	(Z)	.1	.1	43
393	Musical instruments	2.3	.6	.8	.8	(Z)	(Z)	(Z)	(Z)	8
3931	Musical instruments	2.3	.6	.8	.8	(Z)	(Z)	(Z)	(Z)	8
394	Toys and sporting goods	17.4	2.6	3.9	10.9	3.6	(D)	(D)	1.7	10
3944	Games, toys, and children's vehicles	4.3	.6	.9	2.8	.9	—	—	.9	16
3949	Sporting and athletic goods, n.e.c.	12.9	1.9	3.0	8.0	2.6	(D)	(D)	.8	12
395	Pens, pencils, office, and art supplies	10.3	1.9	1.9	6.5	.4	(D)	(Z)	(D)	14
3951	Pens and mechanical pencils	2.8	.6	.8	1.4	(D)	—	(Z)	(D)	11
3952	Lead pencils and art goods	2.9	.3	.8	1.8	(Z)	—	—	(Z)	18
3953	Marking devices	1.4	.1	.1	1.2	.1	(Z)	(Z)	(Z)	75
3955	Carbon paper and inked ribbons	3.1	.8	.2	2.1	(D)	(D)	—	(Z)	20
396	Costume jewelry and notions	14.0	1.5	7.5	4.9	.4	.1	(D)	(D)	18
3961	Costume jewelry	4.4	.6	2.1	1.6	.1	(Z)	(Z)	(Z)	13
3965	Fasteners, buttons, needles, and pins	9.6	.9	5.4	3.3	.3	(Z)	(D)	(D)	25
399	Miscellaneous manufactures	42.5	14.4	8.1	20.0	1.8	.1	.1	1.7	9
3991	Brooms and brushes	1.5	.2	.4	.9	(Z)	—	—	(Z)	45
3993	Signs and advertising specialties	8.0	2.5	2.0	3.5	.2	(Z)	(Z)	.1	28
3995	Burial caskets	1.8	.4	.5	.9	(Z)	—	—	(Z)	33
3996	Hard surface floor coverings, n.e.c.	17.6	9.3	1.3	7.1	(D)	(Z)	(Z)	(D)	5
3999	Manufacturing industries, n.e.c.	13.6	2.1	3.9	7.6	(D)	—	—	(D)	18

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 8a. Operating Costs by Major Groups for the Media Air: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PAOC	Air				Standard error of estimate (PAOC) (percent)
			Total	Type of pollutant abated		Total	
				Hazardous	Nonhazardous		
	All industries¹	18 772.0	6 139.1	1 377.8	4 763.8	1	
20	Food and kindred products	1 447.6	172.4	10.7	161.7	4	
21	Tobacco products	35.9	14.3	(D)	(D)	10	
22	Textile mill products	315.7	58.2	13.6	44.7	5	
24	Lumber and wood products	342.8	135.6	16.4	119.1	5	
25	Furniture and fixtures	144.4	49.4	12.9	36.4	6	
26	Paper and allied products	1 879.5	536.9	57.5	479.4	3	
27	Printing and publishing	287.5	114.7	39.1	75.6	4	
28	Chemicals and allied products	4 566.9	1 138.7	359.8	781.3	2	
29	Petroleum and coal products	2 914.9	1 742.0	310.2	1 431.8	4	
30	Rubber and miscellaneous plastics products	439.6	119.2	31.2	88.0	4	
31	Leather and leather products	60.1	3.3	.3	3.0	12	
32	Stone, clay, and glass products	599.5	309.6	51.8	257.8	4	
33	Primary metal industries	2 211.5	982.1	242.6	739.5	4	
34	Fabricated metal products	786.1	135.9	49.6	86.3	4	
35	Industrial machinery and equipment	444.3	79.1	14.9	64.2	3	
36	Electronic and other electric equipment	771.9	165.4	54.8	110.5	4	
37	Transportation equipment	1 116.4	293.7	78.0	215.8	5	
38	Instruments and related products	311.6	65.4	28.9	36.6	6	
39	Miscellaneous manufacturing industries	95.7	23.5	(D)	(D)	6	

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 8b. Operating Costs by Major Groups for the Media Water: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PAOC	Water					Standard error of estimate (PAOC) (percent)
			Total	Type of pollutant abated			Total	
				Hazardous	Nonhazardous	Payments to industry			Sewage services payments to government
	All industries¹	18 772.0	7 031.5	1 707.7	5 323.8	4 008.3	1 315.5	1
20	Food and kindred products	1 447.6	940.5	24.5	915.9	430.7	485.2	4
21	Tobacco products	35.9	11.5	-	11.5	6.3	5.3	10
22	Textile mill products	315.7	178.8	12.0	166.8	64.8	102.0	5
24	Lumber and wood products	342.8	66.6	8.9	57.6	48.8	8.9	5
25	Furniture and fixtures	144.4	16.7	4.4	12.3	5.7	6.6	6
26	Paper and allied products	1 879.5	829.5	33.1	796.3	678.1	118.2	3
27	Printing and publishing	287.5	34.3	6.1	28.2	11.2	17.0	4
28	Chemicals and allied products	4 566.9	1 996.7	709.0	1 287.7	1 122.4	165.3	2
29	Petroleum and coal products	2 914.9	755.7	251.8	503.9	481.7	22.2	4
30	Rubber and miscellaneous plastics products	439.6	90.7	6.7	84.0	49.2	34.8	4
31	Leather and leather products	60.1	38.7	3.5	35.2	21.3	13.9	12
32	Stone, clay, and glass products	599.5	108.0	13.6	94.4	73.1	21.3	4
33	Primary metal industries	2 211.5	692.2	191.0	501.2	445.2	56.0	4
34	Fabricated metal products	786.1	327.4	124.3	203.1	142.4	60.7	4
35	Industrial machinery and equipment	444.3	147.1	31.6	115.4	78.8	36.6	3
36	Electronic and other electric equipment	771.9	329.9	123.0	206.9	139.5	67.4	4
37	Transportation equipment	1 116.4	342.5	110.8	231.7	165.8	65.9	5
38	Instruments and related products	311.6	99.0	32.3	66.7	44.7	22.0	6
39	Miscellaneous manufacturing industries	95.7	26.0	21.2	4.8	-	6.1	6

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 8c. Operating Costs by Major Groups for the Media Solid/Contained Waste: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PAOC	Solid/contained waste					Standard error of estimate (PAOC) (percent)
			Total	Type of pollutant abated			Total	
				Hazardous	Nonhazardous	Payments to industry			Solid/contained waste collection payments to government
	All industries¹	18 772.0	5 601.4	1 841.4	3 759.9	3 458.1	301.8	1
20	Food and kindred products	1 447.6	334.7	13.2	321.6	267.9	53.7	4
21	Tobacco products	35.9	10.1	.1	10.0	9.2	.8	10
22	Textile mill products	315.7	78.8	13.3	65.4	54.6	10.9	5
24	Lumber and wood products	342.8	140.7	28.6	112.1	101.4	10.7	5
25	Furniture and fixtures	144.4	78.3	18.4	60.0	52.5	7.4	6

Table 8c. Operating Costs by Major Groups for the Media Solid/Contained Waste: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Solid/contained waste						Standard error of estimate (PAOC) (percent)
		Total PAOC	Type of pollutant abated					
			Total	Nonhazardous			Solid/contained waste collection payments to government	
				Hazardous	Nonhazardous	Payments to industry		
26	Paper and allied products.....	1 879.5	513.1	54.9	458.2	417.0	41.2	3
27	Printing and publishing.....	287.5	138.5	37.1	101.4	93.5	7.8	4
28	Chemicals and allied products.....	4 566.9	1 431.5	672.3	759.1	732.2	27.0	2
29	Petroleum and coal products.....	2 914.9	417.2	203.4	213.8	199.9	13.9	4
30	Rubber and miscellaneous plastics products.....	439.6	229.8	41.7	188.1	166.6	21.5	4
31	Leather and leather products.....	60.1	18.2	3.4	14.8	12.6	2.2	12
32	Stone, clay, and glass products.....	599.5	182.0	26.1	155.9	142.2	13.6	4
33	Primary metal industries.....	2 211.5	537.2	181.4	355.8	341.2	14.6	4
34	Fabricated metal products.....	786.1	322.9	135.9	187.0	172.1	14.9	4
35	Industrial machinery and equipment.....	444.3	218.1	61.4	156.8	144.8	12.0	3
36	Electronic and other electric equipment.....	771.9	276.7	104.2	172.5	158.7	13.8	4
37	Transportation equipment.....	1 116.4	480.2	163.4	316.8	292.2	24.7	5
38	Instruments and related products.....	311.6	147.2	69.9	77.3	70.8	6.5	6
39	Miscellaneous manufacturing industries.....	95.7	46.2	12.8	33.4	28.7	4.7	6

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 9. Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
	United States¹	18 772.0	6 139.1	7 031.5	5 601.4	1 693.4	726.5	287.3	679.6	1
20	Food and kindred products.....	1 447.6	172.4	940.5	334.7	91.5	15.9	22.9	52.6	4
21	Tobacco products.....	35.9	14.3	11.5	10.1	.1	—	—	.1	10
22	Textile mill products.....	315.7	58.2	178.8	78.8	15.7	2.0	3.2	10.5	5
24	Lumber and wood products.....	342.8	135.6	66.6	140.7	28.1	6.7	4.8	16.6	5
25	Furniture and fixtures.....	144.4	49.4	16.7	78.3	16.5	3.2	.4	13.0	6
26	Paper and allied products.....	1 879.5	536.9	829.5	513.1	285.1	116.0	41.5	127.6	3
27	Printing and publishing.....	287.5	114.7	34.3	138.5	106.4	41.5	2.3	62.6	4
28	Chemicals and allied products.....	4 566.9	1 138.7	1 996.7	1 431.5	321.0	140.4	89.7	90.9	2
29	Petroleum and coal products.....	2 914.9	1 742.0	755.7	417.2	337.8	251.7	61.7	24.4	4
30	Rubber and miscellaneous plastics products.....	439.6	119.2	90.7	229.8	35.5	7.4	2.6	25.4	4
31	Leather and leather products.....	60.1	3.3	38.7	18.2	1.7	.2	1.2	.3	12
32	Stone, clay, and glass products.....	599.5	309.6	108.0	182.0	63.6	30.3	3.0	30.3	4
33	Primary metal industries.....	2 211.5	982.1	692.2	537.2	133.8	76.3	14.7	42.9	4
34	Fabricated metal products.....	786.1	135.9	327.4	322.9	41.1	14.0	7.7	19.4	4
35	Industrial machinery and equipment.....	444.3	79.1	147.1	218.1	36.9	1.9	2.5	32.6	3
36	Electronic and other electric equipment.....	771.9	165.4	329.9	276.7	81.2	10.9	10.4	59.9	4
37	Transportation equipment.....	1 116.4	293.7	342.5	480.2	71.4	5.3	13.2	52.8	5
38	Instruments and related products.....	311.6	65.4	99.0	147.2	19.4	1.8	4.0	13.5	6
39	Miscellaneous manufacturing industries.....	95.7	23.5	26.0	46.2	6.8	1.1	1.6	4.1	6
	Alabama	437.3	133.8	193.6	109.9	23.9	9.9	3.0	11.0	8
20	Food and kindred products.....	15.6	1.4	12.0	2.2	.3	.1	(Z)	.2	18
22	Textile mill products.....	10.4	1.8	5.0	3.5	1.2	(Z)	—	1.1	19
24	Lumber and wood products.....	11.6	4.0	2.6	5.0	.4	.1	.1	.2	22
25	Furniture and fixtures.....	3.7	.7	.4	2.5	.4	(Z)	—	.3	31
26	Paper and allied products.....	102.4	28.8	55.4	18.2	5.1	(D)	—	(D)	6
28	Chemicals and allied products.....	157.6	36.5	88.1	33.0	4.2	2.2	(D)	(D)	20
29	Petroleum and coal products.....	1.6	.7	.2	.7	.1	.1	(Z)	(Z)	29
30	Rubber and miscellaneous plastics products.....	17.8	8.9	1.9	7.0	(D)	—	—	(D)	22
32	Stone, clay, and glass products.....	8.8	6.7	1.4	.7	1.2	1.2	(Z)	(Z)	23
33	Primary metal industries.....	62.6	35.1	14.9	12.6	1.5	.1	.2	1.2	6
34	Fabricated metal products.....	11.0	.9	3.5	6.6	1.4	—	(Z)	1.3	39
35	Industrial machinery and equipment.....	9.3	2.3	3.3	3.7	.3	(Z)	.1	.1	25
36	Electronic and other electric equipment.....	12.4	(D)	1.6	7.6	(D)	(D)	(Z)	.3	7
37	Transportation equipment.....	8.7	.8	2.4	5.6	(D)	—	(D)	(D)	33
39	Miscellaneous manufacturing industries.....	2.4	1.5	.6	.3	.1	(Z)	(Z)	(Z)	65
	Alaska	21.2	4.3	9.6	7.3	5.1	(Z)	(Z)	5.0	33
20	Food and kindred products.....	(D)	(D)	4.2	(D)	.1	(Z)	(Z)	(Z)	(X)
26	Paper and allied products.....	13.7	3.4	5.3	5.0	5.0	—	—	5.0	46
28	Chemicals and allied products.....	(D)	(D)	(Z)	(D)	—	—	—	—	(X)
	Arizona	145.6	74.8	38.7	32.1	12.4	9.6	.8	1.9	7
20	Food and kindred products.....	6.1	.5	3.6	1.9	.2	—	.1	.1	35
26	Paper and allied products.....	10.8	2.6	6.7	1.5	.9	.8	.1	—	46
27	Printing and publishing.....	2.8	1.7	.5	.6	.3	.1	(Z)	.1	32
28	Chemicals and allied products.....	6.8	2.9	1.8	2.0	(Z)	(Z)	—	—	44
32	Stone, clay, and glass products.....	10.7	7.2	2.3	1.2	1.2	.4	(Z)	.7	35
33	Primary metal industries.....	(D)	(D)	3.5	1.4	(D)	(D)	(Z)	.1	(X)
34	Fabricated metal products.....	(D)	1.3	(D)	3.0	.3	.1	.1	.1	(X)
35	Industrial machinery and equipment.....	1.3	.3	.6	.4	(Z)	(Z)	(Z)	(Z)	62
36	Electronic and other electric equipment.....	23.7	4.9	9.8	9.0	.3	.1	.1	.1	10
37	Transportation equipment.....	18.9	6.5	4.6	7.9	(D)	(D)	.3	.5	31
38	Instruments and related products.....	2.7	.2	.9	1.6	.1	—	—	.1	29
39	Miscellaneous manufacturing industries.....	(D)	.1	(D)	.6	(Z)	—	—	(Z)	(X)

Table 9. **Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—**
Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
	Arkansas	247.2	77.2	102.5	67.6	33.3	3.5	1.6	28.2	10
20	Food and kindred products	31.6	4.1	22.7	4.8	1.1	.1	.1	.8	18
22	Textile mill products.....	7.2	.3	5.5	1.5	.2	—	(Z)	.2	64
24	Lumber and wood products	16.0	9.3	3.1	3.6	.5	.1	.1	.3	18
25	Furniture and fixtures	2.4	(D)	(D)	1.2	(D)	(Z)	(D)	(D)	7
26	Paper and allied products.....	57.8	28.4	20.9	8.6	(D)	(D)	(D)	(D)	6
27	Printing and publishing	1.1	(D)	(D)	.8	.2	(Z)	(Z)	.2	13
28	Chemicals and allied products.....	74.1	17.7	34.1	22.3	(D)	(D)	(Z)	(Z)	31
30	Rubber and miscellaneous plastics products	4.6	1.0	.7	2.9	.1	(Z)	(Z)	(Z)	13
32	Stone, clay, and glass products	8.1	6.4	.9	.8	—	—	—	—	45
33	Primary metal industries	18.4	4.6	4.7	9.1	.2	.1	.1	.1	24
34	Fabricated metal products	10.0	2.0	4.2	3.8	.4	.1	.1	.2	24
35	Industrial machinery and equipment	3.6	.8	.7	2.1	1.0	—	(Z)	1.0	27
36	Electronic and other electric equipment	7.3	1.0	2.4	4.0	1.5	—	—	1.5	24
37	Transportation equipment	2.6	.3	.9	1.3	.4	—	—	.4	46
38	Instruments and related products	1.8	(D)	(D)	.3	1.6	—	(Z)	(D)	24
	California	1 632.0	698.0	502.3	431.7	97.6	47.3	15.3	35.0	6
20	Food and kindred products	133.1	13.0	88.7	31.4	8.1	.5	1.6	6.1	11
22	Textile mill products.....	13.0	3.6	7.0	2.4	.2	—	.1	.1	32
24	Lumber and wood products	39.1	10.4	5.8	22.9	5.2	1.8	.3	3.2	8
25	Furniture and fixtures	15.0	5.6	1.3	8.1	.9	.3	(Z)	.5	16
26	Paper and allied products.....	62.8	19.9	21.7	21.1	3.3	.6	1.7	1.0	21
27	Printing and publishing	35.1	15.3	3.8	16.0	6.4	1.1	.3	5.0	13
28	Chemicals and allied products.....	130.2	30.1	54.2	45.9	2.2	.5	.5	1.2	15
29	Petroleum and coal products	670.5	434.6	155.2	80.7	38.0	30.3	6.4	1.3	11
30	Rubber and miscellaneous plastics products	30.2	12.5	5.0	12.7	1.6	.4	.2	1.0	19
32	Stone, clay, and glass products	67.6	45.0	6.7	15.8	10.6	(D)	.2	(D)	8
33	Primary metal industries	39.3	11.7	15.0	12.6	3.6	(D)	.1	(D)	9
34	Fabricated metal products	94.7	22.0	41.8	30.9	5.4	.8	1.2	3.4	15
35	Industrial machinery and equipment	27.8	6.2	7.4	14.2	1.4	.1	.3	1.0	12
36	Electronic and other electric equipment	130.9	30.8	54.0	46.1	5.5	.8	1.3	3.4	11
37	Transportation equipment	102.2	28.8	24.5	48.9	3.8	.1	.9	2.7	9
38	Instruments and related products	31.6	6.6	7.8	17.2	1.0	.2	.2	.6	14
39	Miscellaneous manufacturing industries	7.9	1.8	1.8	4.3	.4	.1	(Z)	.3	13
	Colorado	109.9	36.5	42.8	30.6	4.8	1.3	.5	3.0	22
20	Food and kindred products	30.7	2.9	22.9	4.9	1.3	.1	.4	.9	9
24	Lumber and wood products	1.2	(D)	(Z)	(D)	(Z)	—	—	(Z)	22
27	Printing and publishing	2.5	.5	.4	1.5	.8	.2	.1	.5	29
28	Chemicals and allied products.....	7.4	2.8	2.1	2.5	.1	(Z)	(Z)	.1	40
29	Petroleum and coal products	27.6	20.4	3.7	3.5	.9	.9	—	—	83
30	Rubber and miscellaneous plastics products	1.8	.4	(D)	(D)	(Z)	—	—	(Z)	57
32	Stone, clay, and glass products	6.1	3.5	1.0	1.6	.5	.1	(Z)	.4	21
33	Primary metal industries	7.4	1.1	.3	6.0	.2	—	—	.2	60
34	Fabricated metal products	2.6	.3	1.2	1.1	(Z)	—	(Z)	—	39
35	Industrial machinery and equipment	4.6	1.0	2.1	1.5	.8	—	—	.8	20
36	Electronic and other electric equipment	6.0	.9	3.9	1.3	.1	—	—	.1	39
37	Transportation equipment	6.0	.3	2.4	3.4	—	—	—	—	23
38	Instruments and related products	4.3	(D)	(D)	1.5	(Z)	—	—	(Z)	11
	Connecticut	187.7	21.9	76.9	88.9	6.4	2.3	.8	3.3	10
20	Food and kindred products	6.8	.1	4.8	2.0	.1	—	—	.1	65
22	Textile mill products.....	1.8	.2	.6	1.0	—	—	—	—	52
25	Furniture and fixtures	1.0	.1	.5	.4	(Z)	(Z)	(Z)	(Z)	30
26	Paper and allied products.....	19.5	3.9	10.3	5.3	.3	—	.2	.1	32
27	Printing and publishing	5.5	1.0	.7	3.8	1.1	(Z)	(Z)	1.1	30
28	Chemicals and allied products.....	31.7	6.5	13.4	11.8	2.2	1.7	.1	.4	15
30	Rubber and miscellaneous plastics products	7.7	.9	.9	5.9	.1	(Z)	(Z)	.1	35
32	Stone, clay, and glass products	2.4	.6	.1	1.7	.1	(Z)	(Z)	(Z)	54
33	Primary metal industries	6.5	1.4	2.0	3.1	(D)	(Z)	(Z)	(D)	23
34	Fabricated metal products	26.2	2.6	14.3	9.2	.7	(D)	.1	(D)	18
35	Industrial machinery and equipment	9.4	.6	3.6	5.2	.1	—	(Z)	.1	21
36	Electronic and other electric equipment	12.1	.7	5.9	5.5	.3	(Z)	.1	.2	37
37	Transportation equipment	50.1	2.6	17.2	30.2	.7	(Z)	.1	.5	27
38	Instruments and related products	3.4	.6	1.1	1.7	(D)	(D)	(Z)	(Z)	25
39	Miscellaneous manufacturing industries	2.7	.1	1.4	1.2	(D)	—	—	(D)	35
	Delaware	158.0	79.3	53.5	25.2	(D)	(D)	(D)	2.8	6
20	Food and kindred products	14.6	.4	12.1	2.2	1.2	(Z)	—	1.1	33
27	Printing and publishing	1.1	(Z)	.1	.9	.4	—	—	.4	77
28	Chemicals and allied products.....	42.8	11.9	17.6	13.2	(D)	(D)	(D)	.4	18
29	Petroleum and coal products	(D)	(D)	(D)	(D)	(D)	(D)	(D)	—	(X)
30	Rubber and miscellaneous plastics products	2.1	(D)	(D)	1.4	—	—	—	—	33
37	Transportation equipment	(D)	(D)	(D)	(D)	.9	—	.2	.7	(X)
38	Instruments and related products	1.2	.1	.3	.9	(Z)	—	—	(Z)	47
	District of Columbia	5.8	.6	.3	4.9	1.3	.6	(Z)	.6	16
27	Printing and publishing	5.4	.2	.3	4.9	1.3	.6	(Z)	.6	16
	Florida	350.7	110.9	132.0	107.8	41.8	18.4	4.4	18.9	4
20	Food and kindred products	64.3	6.5	38.8	19.0	12.7	(Z)	(D)	(D)	9
22	Textile mill products.....	1.3	.2	.8	.3	(Z)	(Z)	(Z)	(Z)	63
24	Lumber and wood products	5.7	2.3	1.2	2.3	.3	.1	.1	.1	27
25	Furniture and fixtures	2.3	1.1	.2	.9	.1	(Z)	(Z)	.1	34
26	Paper and allied products.....	94.7	42.9	35.0	16.8	10.5	(D)	.1	(D)	4
27	Printing and publishing	9.1	4.0	1.6	3.5	1.3	.5	.1	.7	26
28	Chemicals and allied products.....	100.2	40.0	32.4	27.8	10.5	(D)	(D)	.3	7
29	Petroleum and coal products	1.9	.9	.2	.7	.2	.1	(Z)	(Z)	37
30	Rubber and miscellaneous plastics products	3.4	.5	.9	2.0	(Z)	(Z)	(Z)	(Z)	41
32	Stone, clay, and glass products	15.1	6.4	3.3	5.4	3.8	.1	(Z)	3.7	18

Table 9. Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—
Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
Florida—Con.										
33	Primary metal industries	6.9	1.4	1.9	3.6	.1	(Z)	.1	.1	46
34	Fabricated metal products	13.1	1.3	5.5	6.3	.2	(Z)	(Z)	.1	24
35	Industrial machinery and equipment	2.8	.2	.7	1.8	.2	(Z)	(Z)	.1	36
36	Electronic and other electric equipment	11.7	.9	4.3	6.5	1.5	.1	1.0	.4	20
37	Transportation equipment	12.3	1.7	3.1	7.6	.3	.1	(Z)	.2	24
38	Instruments and related products	5.3	.7	1.8	2.8	.1	(Z)	(Z)	(Z)	14
Georgia		455.0	119.5	213.0	122.6	34.9	14.9	4.6	15.4	4
20	Food and kindred products	55.2	11.1	36.0	8.0	1.4	.2	.8	.5	18
21	Tobacco products	(D)	(D)	(D)	(D)	—	—	—	—	(X)
22	Textile mill products	42.8	5.7	26.6	10.6	1.2	.2	.1	.9	11
24	Lumber and wood products	18.3	9.1	2.1	7.2	.7	(Z)	(Z)	.7	16
25	Furniture and fixtures	(D)	(D)	(D)	(D)	.1	—	.1	.1	(X)
26	Paper and allied products	135.9	45.5	64.8	25.7	18.3	(D)	(D)	5.9	7
27	Printing and publishing	6.7	2.9	.5	3.3	1.0	.2	(Z)	.8	14
28	Chemicals and allied products	65.7	9.4	38.7	17.7	2.3	(D)	(D)	(D)	8
29	Petroleum and coal products	2.0	.6	.8	.6	—	—	—	—	45
30	Rubber and miscellaneous plastics products	12.8	8.4	1.3	3.1	.3	.1	(Z)	.2	31
32	Stone, clay, and glass products	19.2	9.0	4.3	6.0	4.4	1.4	.1	2.9	12
33	Primary metal industries	22.0	4.8	9.7	7.4	1.7	(D)	(Z)	(D)	20
34	Fabricated metal products	10.6	2.1	4.4	4.1	.1	(Z)	.1	.1	15
35	Industrial machinery and equipment	5.0	.8	1.5	2.7	1.3	(Z)	.1	1.2	21
36	Electronic and other electric equipment	19.2	3.7	6.4	9.1	1.3	.1	.3	.8	36
37	Transportation equipment	23.9	3.8	9.5	10.6	.4	(Z)	.1	.3	17
38	Instruments and related products	3.9	.5	1.5	1.9	—	—	—	—	57
39	Miscellaneous manufacturing industries	6.0	.3	3.7	2.0	.1	(Z)	.1	(Z)	39
Hawaii		20.3	7.4	8.9	4.1	.5	.1	.2	.3	59
20	Food and kindred products	2.8	(D)	1.5	(D)	.2	(Z)	(Z)	.1	74
29	Petroleum and coal products	14.8	5.5	6.9	2.4	—	—	—	—	80
32	Stone, clay, and glass products	1.7	(D)	.1	(D)	—	—	—	—	22
Idaho		79.9	26.7	30.8	22.4	1.6	.2	(D)	(D)	9
20	Food and kindred products	19.5	2.7	14.2	2.5	(D)	—	(D)	(D)	18
24	Lumber and wood products	6.0	3.2	.4	2.3	(Z)	(Z)	(Z)	(Z)	14
26	Paper and allied products	(D)	(D)	(D)	(D)	—	—	—	—	(X)
28	Chemicals and allied products	33.3	14.4	6.8	12.0	(Z)	—	(Z)	(Z)	17
35	Industrial machinery and equipment	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(X)
36	Electronic and other electric equipment	11.2	2.3	6.2	2.6	.3	.1	.1	.1	20
Illinois		866.3	322.2	284.7	259.5	107.5	58.6	14.3	34.6	4
20	Food and kindred products	74.6	9.8	45.3	19.5	3.4	1.2	1.0	1.2	14
24	Lumber and wood products	3.9	.9	.5	2.4	.2	.1	(Z)	.1	26
25	Furniture and fixtures	6.7	1.1	1.1	4.6	.2	.1	(Z)	.1	26
26	Paper and allied products	33.1	10.1	5.0	18.0	17.2	.1	.1	17.0	22
27	Printing and publishing	23.8	10.7	2.4	10.7	(D)	(D)	(D)	3.0	12
28	Chemicals and allied products	170.2	37.4	81.0	51.8	20.8	7.8	9.8	3.3	11
29	Petroleum and coal products	204.2	141.5	45.1	17.5	(D)	(D)	(D)	2.4	6
30	Rubber and miscellaneous plastics products	19.2	4.0	4.4	10.7	1.7	.2	.8	.8	12
32	Stone, clay, and glass products	16.1	7.9	1.4	6.8	2.8	2.4	.2	.2	22
33	Primary metal industries	147.8	65.0	41.7	41.1	2.5	.7	.4	1.4	11
34	Fabricated metal products	61.3	12.7	23.5	25.2	1.5	.5	.5	.5	11
35	Industrial machinery and equipment	38.8	10.0	13.3	15.4	2.6	(Z)	.1	2.5	8
36	Electronic and other electric equipment	23.6	2.1	9.7	11.8	2.3	.2	.4	1.7	16
37	Transportation equipment	30.1	6.6	5.9	17.6	.6	—	(Z)	.6	20
38	Instruments and related products	7.7	1.3	2.4	4.0	.1	(Z)	(Z)	.1	33
39	Miscellaneous manufacturing industries	3.6	1.0	.8	1.8	(Z)	(Z)	(Z)	(Z)	17
Indiana		729.6	245.7	284.0	199.8	33.1	12.8	3.4	16.9	3
20	Food and kindred products	33.4	4.0	23.9	5.5	1.4	1.0	.1	.3	11
22	Textile mill products	1.9	.2	.6	1.1	.1	(Z)	(Z)	(Z)	46
24	Lumber and wood products	8.2	1.3	.8	6.1	.2	.2	—	(Z)	18
25	Furniture and fixtures	4.9	1.3	1.0	2.6	.5	(Z)	(Z)	.4	26
26	Paper and allied products	13.1	2.6	4.9	5.7	2.1	.1	.1	1.9	35
27	Printing and publishing	(D)	(D)	.6	3.7	(D)	(D)	(Z)	(D)	(X)
28	Chemicals and allied products	129.6	39.6	61.2	28.8	(D)	(D)	(D)	(D)	8
29	Petroleum and coal products	(D)	(D)	(D)	4.3	.1	(Z)	(Z)	(Z)	(X)
30	Rubber and miscellaneous plastics products	29.5	6.1	6.6	16.8	3.4	.6	.1	2.7	18
31	Leather and leather products	1.2	.1	1.0	.2	—	—	—	—	72
32	Stone, clay, and glass products	16.7	8.8	2.2	5.7	1.9	1.7	(Z)	.1	16
33	Primary metal industries	279.9	105.9	117.6	56.5	2.3	.1	.4	1.8	3
34	Fabricated metal products	37.4	4.6	17.8	15.0	1.2	.2	.6	.4	11
35	Industrial machinery and equipment	13.2	.8	5.7	6.7	.3	(Z)	.2	.1	10
36	Electronic and other electric equipment	25.0	4.7	8.0	12.3	1.6	(Z)	.7	.8	8
37	Transportation equipment	62.4	14.1	21.9	26.4	3.1	.1	.8	2.1	15
38	Instruments and related products	4.6	1.2	1.3	2.0	(D)	—	(D)	(Z)	56
39	Miscellaneous manufacturing industries	1.0	(D)	(D)	.4	(Z)	—	—	(Z)	11
Iowa		220.3	56.0	86.4	77.9	16.0	5.7	3.5	6.8	9
20	Food and kindred products	62.3	13.2	35.9	13.1	3.7	1.9	1.3	.5	9
24	Lumber and wood products	2.2	(D)	(D)	(D)	1.3	—	—	1.3	19
25	Furniture and fixtures	1.2	.4	.2	.6	.2	—	(Z)	.2	28
26	Paper and allied products	7.7	3.1	1.0	3.6	(D)	.1	(D)	.1	35
27	Printing and publishing	(D)	(D)	.4	1.4	(D)	(D)	—	.3	(X)
28	Chemicals and allied products	35.6	7.4	14.0	14.2	1.2	.1	.7	.3	17
30	Rubber and miscellaneous plastics products	5.3	1.1	1.0	3.3	(D)	(Z)	—	(D)	28
32	Stone, clay, and glass products	6.8	4.8	.4	1.6	1.2	(D)	(Z)	(D)	20
33	Primary metal industries	25.0	11.6	6.0	7.4	(D)	—	(D)	(D)	35
34	Fabricated metal products	10.6	1.5	3.9	5.3	(D)	—	—	(D)	41

Table 9. **Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—**
Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
Iowa—Con.										
35	Industrial machinery and equipment	23.7	4.5	7.0	12.2	.9	.1	.3	.4	6
36	Electronic and other electric equipment	20.7	5.0	9.5	6.1	2.0	.1	.5	1.4	33
37	Transportation equipment	13.9	.8	5.9	7.3	.4	(Z)	(Z)	.3	77
38	Instruments and related products	(D)	(D)	(D)	(D)	(D)	(Z)	(Z)	(Z)	(X)
	Kansas	126.0	39.4	42.3	44.3	26.6	4.0	2.9	19.7	14
20	Food and kindred products	10.8	1.9	5.8	3.2	.4	.1	(Z)	.2	16
24	Lumber and wood products	2.8	.2	.1	2.5	(D)	(Z)	(Z)	(D)	56
26	Paper and allied products	4.9	.1	3.1	1.7	(D)	(Z)	(Z)	(D)	64
27	Printing and publishing	4.1	1.2	.6	2.4	2.2	.4	.1	1.8	28
28	Chemicals and allied products	19.9	5.3	9.6	5.0	1.6	.5	.7	.4	18
29	Petroleum and coal products	26.0	14.3	6.0	5.7	2.1	1.8	.2	(Z)	55
30	Rubber and miscellaneous plastics products	7.0	1.9	1.4	3.7	.8	.1	.1	.6	23
32	Stone, clay, and glass products	11.3	6.7	1.3	3.3	.1	(Z)	(Z)	(Z)	25
33	Primary metal industries	3.0	1.2	.7	1.1	.1	(Z)	(Z)	(Z)	45
34	Fabricated metal products	1.2	.2	.4	.6	(Z)	(Z)	(Z)	(Z)	58
35	Industrial machinery and equipment	4.5	.8	1.9	1.7	1.2	(Z)	(Z)	1.2	37
36	Electronic and other electric equipment	7.5	2.8	2.2	2.5	14.8	1.0	1.7	12.1	57
37	Transportation equipment	20.1	2.7	8.0	9.3	2.8	(Z)	(Z)	2.8	21
38	Instruments and related products	1.3	.1	.5	.7	(Z)	(Z)	(Z)	(Z)	38
	Kentucky	379.0	155.0	123.7	100.3	20.8	3.5	2.8	14.5	7
20	Food and kindred products	21.8	4.2	13.4	4.2	.7	.1	.5	.2	28
21	Tobacco products	1.5	(D)	(D)	.5	(Z)	(Z)	(Z)	(Z)	8
24	Lumber and wood products	2.6	.7	.6	1.4	.1	.1	(Z)	.1	38
26	Paper and allied products	34.2	19.6	8.3	6.2	.2	(D)	(D)	(Z)	33
27	Printing and publishing	8.8	3.3	1.1	4.4	4.7	(D)	(D)	4.0	11
28	Chemicals and allied products	119.5	28.4	55.3	35.8	5.0	1.5	1.5	2.0	16
29	Petroleum and coal products	(D)	(D)	(D)	(D)	(Z)	(Z)	(Z)	(Z)	(X)
30	Rubber and miscellaneous plastics products	9.5	1.7	2.5	5.4	.2	(Z)	(Z)	.1	22
32	Stone, clay, and glass products	12.1	4.3	2.5	5.3	.4	.3	.1	.1	25
33	Primary metal industries	46.1	27.2	14.1	4.8	.4	(D)	(D)	(Z)	2
34	Fabricated metal products	12.8	1.7	3.3	7.8	.3	(Z)	.1	.1	22
35	Industrial machinery and equipment	7.0	1.4	2.1	3.5	(D)	(D)	(Z)	(D)	21
36	Electronic and other electric equipment	12.4	1.7	7.0	3.7	.3	(Z)	(D)	(D)	29
37	Transportation equipment	(D)	(D)	7.8	14.0	(D)	(Z)	(Z)	(D)	(X)
38	Instruments and related products	2.4	.4	.5	1.5	.1	(Z)	(Z)	(Z)	46
39	Miscellaneous manufacturing industries	1.1	(D)	(D)	(D)	(D)	(Z)	(Z)	(D)	5
	Louisiana	999.4	334.3	368.9	296.2	150.2	95.6	33.4	21.2	5
20	Food and kindred products	9.4	2.3	4.8	2.3	.8	.7	(Z)	.1	35
24	Lumber and wood products	8.5	3.3	1.9	3.3	.2	(Z)	(Z)	.1	30
26	Paper and allied products	51.5	17.6	18.4	15.5	(D)	(D)	(D)	.5	4
28	Chemicals and allied products	572.3	150.9	239.9	181.6	72.5	41.2	19.3	12.0	8
29	Petroleum and coal products	318.3	150.2	92.2	75.8	71.8	(D)	(D)	(D)	1
30	Rubber and miscellaneous plastics products	2.9	.4	.3	2.2	.1	(Z)	(Z)	(Z)	43
32	Stone, clay, and glass products	(D)	(D)	(D)	(D)	.1	.1	(Z)	(Z)	(X)
33	Primary metal industries	11.7	4.7	4.4	2.6	.3	(Z)	.1	.1	66
34	Fabricated metal products	5.2	.9	1.7	2.6	(D)	(Z)	(Z)	(D)	26
35	Industrial machinery and equipment	3.1	.8	.9	1.4	(Z)	(Z)	(Z)	(Z)	44
36	Electronic and other electric equipment	(D)	(D)	(D)	(D)	(Z)	(Z)	(Z)	(Z)	(X)
37	Transportation equipment	11.0	1.6	2.8	6.5	.2	(Z)	(Z)	.1	10
	Maine	131.7	22.2	67.8	41.7	27.0	(D)	(D)	4.8	9
20	Food and kindred products	1.5	.1	.8	.5	.1	(Z)	.1	.1	19
22	Textile mill products	2.9	.1	2.1	.7	.2	(Z)	(Z)	.2	27
24	Lumber and wood products	2.8	1.9	.4	.5	.3	(Z)	(Z)	.3	13
26	Paper and allied products	84.7	13.3	46.6	24.8	23.5	(D)	(D)	(D)	8
28	Chemicals and allied products	6.1	.8	3.3	2.0	(Z)	(Z)	(Z)	(Z)	85
30	Rubber and miscellaneous plastics products	5.7	1.0	.6	4.1	.9	(D)	(Z)	(D)	58
31	Leather and leather products	8.3	.5	6.4	1.3	.1	(Z)	(Z)	(Z)	28
32	Stone, clay, and glass products	4.7	2.5	1.6	.6	1.4	1.1	.1	.2	46
33	Primary metal industries	5.5	.6	2.3	2.6	(Z)	(Z)	(Z)	(Z)	89
34	Fabricated metal products	1.7	(Z)	1.6	.1	(Z)	(Z)	(Z)	(Z)	63
36	Electronic and other electric equipment	1.9	.3	.8	.9	.1	(Z)	(Z)	.1	38
37	Transportation equipment	4.3	.7	1.1	2.6	.1	(Z)	(Z)	.1	29
	Maryland	188.6	45.1	101.4	42.1	23.0	4.2	10.9	7.9	12
20	Food and kindred products	36.6	1.8	30.6	4.1	3.2	(Z)	3.1	.1	54
22	Textile mill products	1.1	.1	.8	.2	(Z)	(Z)	(Z)	(Z)	68
26	Paper and allied products	13.9	3.6	7.6	2.7	2.5	(D)	(D)	.2	12
27	Printing and publishing	4.0	.7	.7	2.6	3.8	.4	.1	3.3	26
28	Chemicals and allied products	50.7	10.4	25.2	15.1	7.4	.4	4.6	2.3	16
29	Petroleum and coal products	(D)	(D)	(D)	1.5	.4	.3	(Z)	(Z)	(X)
30	Rubber and miscellaneous plastics products	5.7	1.2	1.8	2.7	.3	(Z)	(Z)	.2	39
32	Stone, clay, and glass products	5.8	3.7	.4	1.7	(D)	(D)	(Z)	(D)	23
33	Primary metal industries	(D)	(D)	(D)	2.8	(D)	(Z)	(D)	(D)	(X)
34	Fabricated metal products	2.2	.8	.7	.8	.2	.1	(Z)	(Z)	30
35	Industrial machinery and equipment	3.0	.2	1.7	1.1	.1	(Z)	.1	(Z)	33
36	Electronic and other electric equipment	1.1	.1	.6	.4	.1	(Z)	(Z)	(Z)	58
37	Transportation equipment	14.1	3.3	7.3	3.5	.2	(Z)	.2	(Z)	51
38	Instruments and related products	3.4	.3	1.3	1.8	(Z)	(Z)	(Z)	(Z)	24
	Massachusetts	273.6	59.3	110.8	103.5	18.3	4.3	5.3	8.7	7
20	Food and kindred products	16.4	.7	10.0	5.7	.3	.1	.1	.1	29
22	Textile mill products	19.8	5.0	11.4	3.5	.5	.5	(Z)	.1	21
24	Lumber and wood products	1.4	.3	.2	.9	.1	(Z)	(Z)	.1	49
25	Furniture and fixtures	(D)	(Z)	(D)	(D)	(Z)	(Z)	(Z)	(Z)	(X)
26	Paper and allied products	17.0	1.2	9.2	6.7	1.0	(Z)	.1	.8	33

Table 9. Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—
Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
Massachusetts—Con.										
27	Printing and publishing	9.6	2.8	1.7	5.1	4.8	(D)	(D)	2.8	15
28	Chemicals and allied products	31.0	3.7	18.6	8.8	.6	.1	.3	.2	26
29	Petroleum and coal products	1.8	.5	.1	1.3	—	—	—	—	52
30	Rubber and miscellaneous plastics products	23.0	9.1	5.7	8.2	.8	.1	.1	.6	20
31	Leather and leather products	2.2	.3	1.2	.7	.2	.2	—	—	57
32	Stone, clay, and glass products	11.4	4.0	2.2	5.2	.8	.2	.1	.5	34
33	Primary metal industries	11.2	2.4	5.8	3.0	(D)	.2	(D)	(Z)	18
34	Fabricated metal products	24.4	5.3	7.8	11.2	.8	(Z)	.4	.4	18
35	Industrial machinery and equipment	10.4	1.1	3.4	5.9	.7	(Z)	.1	.6	32
36	Electronic and other electric equipment	34.2	10.2	13.5	10.5	.8	.1	.2	.5	23
37	Transportation equipment	(D)	(Z)	(D)	(D)	—	—	—	—	(X)
38	Instruments and related products	46.6	11.5	16.0	19.1	4.6	.1	2.7	1.8	16
39	Miscellaneous manufacturing industries	7.0	1.0	2.3	3.7	(D)	(D)	2.7	.2	13
	Michigan	774.1	231.2	282.2	260.7	58.6	17.1	10.9	30.5	4
20	Food and kindred products	35.1	4.2	17.7	13.2	6.2	.2	.1	5.9	16
24	Lumber and wood products	9.7	5.7	2.3	1.8	.1	(Z)	(Z)	(Z)	7
25	Furniture and fixtures	12.5	3.9	1.8	6.7	1.5	(D)	(Z)	(D)	9
26	Paper and allied products	60.3	13.3	28.3	18.7	13.3	(D)	1.9	(D)	16
27	Printing and publishing	5.6	1.4	.6	3.6	1.2	.1	2.9	1.0	27
28	Chemicals and allied products	161.6	41.8	58.6	61.3	9.2	4.6	3.9	.7	9
29	Petroleum and coal products	11.6	6.7	4.1	.9	1.5	1.2	(Z)	.3	70
30	Rubber and miscellaneous plastics products	19.6	4.7	5.3	9.7	1.3	.2	.2	.8	12
31	Leather and leather products	(D)	(D)	(D)	(D)	(Z)	—	—	(Z)	(X)
32	Stone, clay, and glass products	19.0	9.3	2.8	6.9	3.9	1.8	(Z)	2.0	19
33	Primary metal industries	138.4	62.4	45.5	30.6	5.5	(D)	(D)	1.4	5
34	Fabricated metal products	53.7	6.6	25.8	21.4	1.7	.1	.6	1.0	11
35	Industrial machinery and equipment	24.8	6.2	7.7	11.0	.6	(Z)	.2	.4	13
36	Electronic and other electric equipment	13.8	2.9	7.1	3.8	.6	.1	.2	.3	46
37	Transportation equipment	195.6	60.3	70.7	64.6	10.9	(Z)	2.9	7.9	5
38	Instruments and related products	6.4	1.5	1.6	3.4	.9	(Z)	(D)	(D)	19
39	Miscellaneous manufacturing industries	(D)	(D)	(D)	(D)	.4	(Z)	(Z)	.4	(X)
	Minnesota	296.2	116.5	100.2	79.5	29.9	8.6	5.2	16.1	4
20	Food and kindred products	39.1	5.3	23.3	10.5	1.8	.4	.1	1.3	19
24	Lumber and wood products	13.0	7.5	1.8	3.8	1.8	(D)	(D)	(D)	7
25	Furniture and fixtures	2.1	.4	.3	1.4	(Z)	—	—	(Z)	42
26	Paper and allied products	45.7	7.8	28.5	9.4	(D)	(Z)	(D)	(D)	9
27	Printing and publishing	8.3	3.3	.8	4.1	3.0	.1	(Z)	2.9	14
28	Chemicals and allied products	16.2	(D)	3.4	(D)	.4	—	—	.4	10
29	Petroleum and coal products	(D)	(D)	(D)	5.3	(D)	(D)	—	—	(X)
30	Rubber and miscellaneous plastics products	9.7	.9	4.8	4.1	.2	.1	(Z)	.1	44
32	Stone, clay, and glass products	13.5	(D)	1.9	(D)	.4	—	—	.4	16
33	Primary metal industries	4.8	.8	2.0	2.0	(D)	(Z)	(Z)	(D)	30
34	Fabricated metal products	17.6	3.1	7.4	7.1	.6	.1	.1	.5	21
35	Industrial machinery and equipment	12.5	1.4	4.7	6.4	1.0	(Z)	(Z)	1.0	22
36	Electronic and other electric equipment	11.6	1.0	7.0	3.6	.1	(Z)	(Z)	.1	25
37	Transportation equipment	(D)	(D)	(D)	.9	(D)	(D)	(D)	.2	(X)
38	Instruments and related products	5.9	1.4	1.5	3.0	.1	(Z)	(Z)	.1	28
39	Miscellaneous manufacturing industries	2.4	.3	.9	1.1	(Z)	(Z)	(Z)	(Z)	41
	Mississippi	252.5	120.2	72.6	59.6	35.0	(D)	(D)	4.1	5
20	Food and kindred products	13.9	2.1	8.2	3.7	(D)	(Z)	(D)	.3	22
24	Lumber and wood products	13.0	5.6	3.0	4.3	2.4	(D)	(D)	.5	14
25	Furniture and fixtures	6.8	1.6	1.3	3.9	.4	.1	(Z)	.2	21
26	Paper and allied products	39.3	19.1	10.2	10.1	(D)	(D)	(D)	1.4	4
27	Printing and publishing	(D)	(D)	.1	(D)	(Z)	—	—	(Z)	(X)
28	Chemicals and allied products	54.8	14.4	29.3	11.1	2.9	.9	1.3	.7	18
29	Petroleum and coal products	(D)	(D)	(D)	4.7	(D)	(D)	(D)	—	(X)
30	Rubber and miscellaneous plastics products	5.9	1.3	.6	4.0	.2	(Z)	(Z)	.1	20
32	Stone, clay, and glass products	3.7	1.0	1.3	1.4	.3	.1	.1	.1	49
33	Primary metal industries	2.9	.3	1.2	1.4	(Z)	—	—	(Z)	54
34	Fabricated metal products	5.3	1.3	.6	3.4	.1	—	—	.1	41
35	Industrial machinery and equipment	3.0	.2	.6	2.1	.1	—	—	.1	25
36	Electronic and other electric equipment	4.2	.2	1.7	2.3	.5	—	—	.5	13
37	Transportation equipment	(D)	.3	2.0	(D)	—	—	—	—	(X)
	Missouri	276.7	84.4	103.9	88.3	23.3	9.5	1.4	12.5	4
20	Food and kindred products	46.5	11.1	27.8	7.6	1.4	.1	.4	.9	15
24	Lumber and wood products	(D)	.4	(D)	(D)	.2	.1	(Z)	.1	(X)
25	Furniture and fixtures	3.2	.9	.2	2.1	1.1	(Z)	—	1.0	22
26	Paper and allied products	8.7	2.7	1.6	4.4	1.2	.1	(Z)	1.0	19
27	Printing and publishing	8.3	4.2	.9	3.2	5.8	3.8	.1	1.9	31
28	Chemicals and allied products	63.7	14.1	33.4	16.2	2.0	.2	.2	1.6	4
30	Rubber and miscellaneous plastics products	5.2	1.0	1.5	2.7	(Z)	(Z)	(Z)	(Z)	12
31	Leather and leather products	7.2	.1	4.2	2.9	.5	—	.5	—	42
32	Stone, clay, and glass products	21.7	15.4	3.0	3.4	(D)	(D)	(Z)	.1	10
33	Primary metal industries	29.9	17.7	3.5	8.7	(D)	(D)	(Z)	(D)	8
34	Fabricated metal products	25.0	4.1	8.9	12.1	(D)	.1	(Z)	(D)	14
35	Industrial machinery and equipment	6.1	.7	2.1	3.4	.9	(Z)	(Z)	.8	27
36	Electronic and other electric equipment	12.6	3.3	5.2	4.1	.7	(D)	.1	(D)	22
37	Transportation equipment	30.2	7.6	9.9	12.6	.6	.1	(Z)	.4	10
38	Instruments and related products	(D)	.1	(D)	(D)	(Z)	—	—	(Z)	(X)
39	Miscellaneous manufacturing industries	1.5	.4	(Z)	1.0	.1	(Z)	—	.1	67

Table 9. **Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—**
Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
	Montana	58.5	31.0	14.2	13.3	6.6	6.3	.2	.1	32
20	Food and kindred products	3.8	.6	2.4	.9	.1	(Z)	.1	(Z)	69
24	Lumber and wood products	6.4	1.1	.9	4.4	(Z)	(Z)	(Z)	(Z)	18
26	Paper and allied products	(D)	(D)	(D)	(D)	(D)	(D)	—	—	(X)
28	Chemicals and allied products	3.1	2.6	.4	.1	.8	.7	.1	—	68
29	Petroleum and coal products	30.1	16.7	6.9	6.5	4.8	4.8	—	—	60
32	Stone, clay, and glass products .....	.8	.8	—	(Z)	(Z)	(Z)	—	—	73
33	Primary metal industries	(D)	(D)	(D)	(Z)	(D)	(D)	—	—	(X)
36	Electronic and other electric equipment .....	.6	.1	(D)	(D)	.1	(Z)	(Z)	(Z)	90
	Nebraska	60.0	15.2	22.8	22.0	6.9	.6	.6	5.7	10
20	Food and kindred products	17.8	3.0	11.4	3.4	1.3	.4	(D)	(D)	14
26	Paper and allied products	1.3	.1	.3	.9	.8	—	—	.8	53
27	Printing and publishing	1.0	.3	.1	.6	(D)	.1	(Z)	(D)	33
28	Chemicals and allied products	9.4	4.3	2.9	2.2	.4	.1	.1	.1	40
30	Rubber and miscellaneous plastics products	3.2	(D)	(D)	2.1	(D)	(Z)	—	(D)	10
31	Leather and leather products	1.8	(Z)	(D)	(D)	—	—	—	—	—
32	Stone, clay, and glass products	3.3	(D)	.3	(D)	.1	(Z)	(Z)	(Z)	25
33	Primary metal industries	4.8	2.0	.5	2.3	—	—	—	—	17
34	Fabricated metal products	3.3	.5	1.8	1.1	(Z)	—	—	(Z)	40
35	Industrial machinery and equipment	4.9	.4	1.3	3.1	(D)	—	(D)	(D)	17
36	Electronic and other electric equipment	2.0	.7	.8	.5	(Z)	—	(Z)	(Z)	22
37	Transportation equipment	4.8	.5	1.1	3.3	(D)	—	—	(D)	61
	Nevada	13.7	4.1	4.7	4.9	(D)	(D)	.1	.1	19
20	Food and kindred products	3.1	.1	1.5	1.5	.1	—	(Z)	.1	56
27	Printing and publishing	(D)	(D)	(D)	—	(D)	(D)	—	—	(X)
28	Chemicals and allied products	(D)	(D)	(D)	.8	—	—	—	—	(X)
30	Rubber and miscellaneous plastics products	2.4	.4	.4	1.6	(Z)	—	(Z)	—	49
32	Stone, clay, and glass products	1.5	.8	.7	.1	(Z)	—	(Z)	(Z)	37
33	Primary metal industries	1.3	.2	.7	.5	.1	(Z)	(Z)	(Z)	85
	New Hampshire	63.2	9.5	32.3	21.3	4.3	.2	2.6	1.5	19
20	Food and kindred products	9.9	.5	7.1	2.3	.6	(Z)	.4	.2	32
22	Textile mill products	1.4	.3	.7	.4	(Z)	(Z)	(Z)	(Z)	43
26	Paper and allied products	16.8	4.6	8.4	3.8	.3	.1	.1	.1	35
28	Chemicals and allied products	11.8	.2	8.3	3.3	1.8	—	1.8	(Z)	78
30	Rubber and miscellaneous plastics products	5.3	2.2	.9	2.2	.5	—	.1	.4	38
33	Primary metal industries	4.0	.3	1.3	2.4	(D)	(Z)	(D)	(D)	23
34	Fabricated metal products	1.4	—	(Z)	1.4	—	—	—	—	70
35	Industrial machinery and equipment	1.2	.2	.2	.8	(Z)	—	—	(Z)	30
36	Electronic and other electric equipment	7.8	.9	4.7	2.1	(D)	(Z)	(D)	(D)	26
	New Jersey	554.2	142.2	235.9	176.0	26.3	6.6	14.1	5.7	7
20	Food and kindred products	44.0	3.1	26.7	14.2	1.5	.1	.3	1.2	16
22	Textile mill products	5.4	1.2	3.5	.7	.2	(Z)	(Z)	.1	43
25	Furniture and fixtures	1.3	.2	.2	.9	(Z)	(Z)	(Z)	(Z)	46
26	Paper and allied products	34.8	6.4	19.2	9.2	1.1	(D)	.4	(D)	42
27	Printing and publishing	11.0	4.4	1.2	5.4	1.0	.1	(Z)	.9	20
28	Chemicals and allied products	230.0	46.4	109.4	74.2	7.4	.8	5.4	1.2	12
29	Petroleum and coal products	82.9	42.1	26.4	14.4	11.6	(D)	7.4	(D)	15
30	Rubber and miscellaneous plastics products	17.0	2.7	4.9	9.4	.3	.1	(Z)	.2	20
31	Leather and leather products	4.3	(D)	(D)	1.1	—	—	—	—	10
32	Stone, clay, and glass products	20.7	8.8	4.7	7.1	.3	(Z)	(Z)	.2	39
33	Primary metal industries	33.7	13.8	11.2	8.7	1.6	1.2	.2	.2	17
34	Fabricated metal products	21.8	3.8	11.1	6.9	.4	.1	.1	.1	18
35	Industrial machinery and equipment	8.1	1.7	2.1	4.3	.2	(Z)	.1	.2	20
36	Electronic and other electric equipment	6.4	.5	2.4	3.5	.2	(Z)	.1	.1	25
37	Transportation equipment	4.4	.3	3.7	.4	(Z)	—	(Z)	—	89
38	Instruments and related products	22.6	4.1	5.3	13.2	.5	(Z)	(Z)	.4	38
39	Miscellaneous manufacturing industries	5.2	(D)	(D)	2.1	(Z)	(Z)	(Z)	(Z)	9
	New Mexico	56.7	37.5	9.4	9.8	.3	(Z)	.1	.1	9
28	Chemicals and allied products	5.9	5.6	.1	.3	(Z)	—	—	(Z)	78
30	Rubber and miscellaneous plastics products	1.0	.2	(Z)	.8	—	—	—	—	92
32	Stone, clay, and glass products	2.8	1.7	—	1.1	—	—	—	—	56
33	Primary metal industries	(D)	(D)	(D)	(D)	(Z)	—	—	(Z)	(X)
36	Electronic and other electric equipment	(D)	(D)	(D)	(D)	.1	(Z)	(Z)	(Z)	(X)
	New York	563.3	109.1	212.3	242.0	52.4	9.8	4.4	38.2	6
20	Food and kindred products	44.7	2.5	28.7	13.5	3.1	.1	.8	2.3	15
22	Textile mill products	6.6	1.3	2.5	2.9	.1	(Z)	(Z)	(Z)	36
24	Lumber and wood products	1.7	.3	.2	1.2	.2	(Z)	(Z)	.1	25
25	Furniture and fixtures	3.3	.6	.3	2.4	.5	.2	(Z)	.4	26
26	Paper and allied products	44.3	3.4	22.4	18.4	.8	.3	.2	.3	28
27	Printing and publishing	16.2	2.9	1.9	11.5	3.4	.8	.1	2.5	13
28	Chemicals and allied products	126.6	22.3	44.0	60.3	5.3	1.7	1.2	2.4	17
30	Rubber and miscellaneous plastics products	11.4	2.4	1.1	7.8	1.0	.5	(Z)	.4	14
31	Leather and leather products	3.8	.4	1.7	1.7	.3	.1	.1	.1	37
32	Stone, clay, and glass products	37.2	19.8	6.5	10.8	3.1	.2	(Z)	2.9	18
33	Primary metal industries	30.2	11.8	9.0	9.4	(D)	(D)	.1	(D)	13
34	Fabricated metal products	32.9	2.0	17.6	13.3	.8	(Z)	.3	.5	22
35	Industrial machinery and equipment	35.5	7.8	13.3	14.4	2.0	.1	.2	1.7	9
36	Electronic and other electric equipment	62.9	9.0	28.7	25.2	(D)	(D)	.6	(D)	12
37	Transportation equipment	25.6	6.7	8.6	10.3	.1	—	.1	(Z)	12
38	Instruments and related products	65.9	12.0	23.0	31.0	5.3	.1	.4	4.8	8
39	Miscellaneous manufacturing industries	13.8	3.5	2.8	7.5	.5	.1	.3	.1	15

Table 9. Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—
Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
	North Carolina	579.3	159.4	239.8	180.1	49.8	12.1	3.0	34.7	4
20	Food and kindred products	47.4	4.0	35.8	7.7	2.8	(D)	(D)	1.4	14
21	Tobacco products	20.4	10.8	(D)	(D)	(D)	—	—	(Z)	16
22	Textile mill products	97.4	17.6	61.9	17.9	3.6	.3	.6	2.7	9
24	Lumber and wood products	22.5	10.1	4.2	8.2	2.8	.8	(Z)	2.0	13
25	Furniture and fixtures	26.9	12.9	1.5	12.4	4.7	.8	(Z)	3.9	19
26	Paper and allied products	65.7	27.3	24.0	14.3	8.9	(D)	(D)	5.1	11
27	Printing and publishing	5.8	2.3	(D)	(D)	1.1	(D)	(Z)	1.0	23
28	Chemicals and allied products	136.8	30.4	61.5	45.0	7.0	(D)	(D)	4.3	4
29	Petroleum and coal products	2.2	.7	.3	1.2	.1	(Z)	(Z)	.1	38
30	Rubber and miscellaneous plastics products	25.0	5.9	5.9	13.3	1.5	.5	(Z)	.9	13
32	Stone, clay, and glass products	27.9	9.9	6.8	11.2	.1	(D)	(Z)	(D)	12
33	Primary metal industries	25.4	11.2	5.2	9.0	2.3	1.7	—	.5	47
34	Fabricated metal products	14.8	2.5	6.7	5.6	.9	(D)	(D)	.4	16
35	Industrial machinery and equipment	18.3	2.2	5.9	10.2	(D)	(Z)	(Z)	(D)	14
36	Electronic and other electric equipment	27.3	9.5	9.5	8.4	3.7	1.4	.2	2.1	24
37	Transportation equipment	8.4	1.4	3.1	3.9	.2	—	—	.2	28
38	Instruments and related products	5.9	.6	1.9	3.4	.7	(Z)	(Z)	.7	28
39	Miscellaneous manufacturing industries	1.0	.1	.4	.5	.1	—	(Z)	.1	75
	North Dakota	8.3	1.6	4.0	2.8	.2	(Z)	(Z)	.1	22
20	Food and kindred products	4.9	1.2	2.9	.8	.1	(Z)	(Z)	(Z)	27
37	Transportation equipment	1.2	(Z)	.5	.7	—	—	—	—	64
	Ohio	1 212.6	346.5	445.5	420.5	67.7	20.2	14.6	32.9	5
20	Food and kindred products	55.2	7.4	35.3	12.4	3.5	.1	1.0	2.4	14
22	Textile mill products	5.2	2.3	.2	2.7	(Z)	(Z)	(Z)	(Z)	62
24	Lumber and wood products	4.3	1.3	.5	2.6	.2	(Z)	(Z)	.1	18
25	Furniture and fixtures	9.0	4.9	.3	3.8	(D)	(D)	(Z)	(D)	13
26	Paper and allied products	60.9	14.0	25.1	21.7	4.2	1.9	.7	1.5	15
27	Printing and publishing	10.3	3.7	1.4	5.1	1.7	.2	.1	1.4	17
28	Chemicals and allied products	226.1	34.6	88.2	103.3	9.2	.9	1.3	7.1	9
29	Petroleum and coal products	60.8	19.2	25.9	15.7	10.4	4.4	(D)	(D)	25
30	Rubber and miscellaneous plastics products	40.8	6.9	7.3	26.5	(D)	.2	(D)	2.8	13
32	Stone, clay, and glass products	53.2	20.7	13.6	18.9	5.0	.9	.6	3.5	8
33	Primary metal industries	313.4	122.6	117.8	73.0	6.9	.9	2.2	3.8	5
34	Fabricated metal products	91.1	17.9	37.9	35.3	12.8	(D)	1.4	(D)	8
35	Industrial machinery and equipment	41.4	8.3	16.0	17.0	3.1	(Z)	.1	2.9	8
36	Electronic and other electric equipment	41.2	8.2	18.7	14.3	1.2	.2	.4	.7	22
37	Transportation equipment	192.0	72.1	55.4	64.5	3.5	.9	.6	2.0	24
38	Instruments and related products	5.9	1.5	1.4	3.0	.1	(Z)	(Z)	.1	29
39	Miscellaneous manufacturing industries	1.9	.7	.5	.7	(Z)	—	—	(Z)	42
	Oklahoma	132.5	37.6	55.7	39.2	18.5	9.7	2.3	6.5	12
20	Food and kindred products	15.2	2.1	10.7	2.5	.8	.1	.6	.1	43
24	Lumber and wood products	1.1	.4	.4	.4	.1	(Z)	(Z)	.1	44
26	Paper and allied products	23.1	4.4	12.1	6.6	1.0	.2	.5	.3	33
27	Printing and publishing	3.9	1.5	1.2	1.3	(D)	—	(D)	3.0	39
28	Chemicals and allied products	24.7	10.5	11.0	3.2	7.6	7.2	.1	.4	41
29	Petroleum and coal products	5.4	1.8	1.9	1.7	.3	.3	(Z)	(Z)	39
30	Rubber and miscellaneous plastics products	6.9	1.5	1.6	3.8	1.3	(D)	(D)	.3	11
32	Stone, clay, and glass products	11.6	7.2	1.2	3.2	1.7	.8	.2	.7	29
33	Primary metal industries	8.3	1.6	3.6	3.1	(Z)	(Z)	(Z)	(Z)	29
34	Fabricated metal products	10.9	1.1	4.6	5.2	1.0	(D)	.5	(D)	28
35	Industrial machinery and equipment	4.2	.5	1.1	2.6	.1	—	—	.1	26
36	Electronic and other electric equipment	(D)	(D)	(D)	1.0	(Z)	(Z)	—	(Z)	(X)
37	Transportation equipment	10.6	2.8	4.4	3.4	.8	(Z)	.2	.5	7
38	Instruments and related products	(D)	(D)	(D)	.8	(D)	—	—	(D)	(X)
	Oregon	209.2	60.0	89.8	59.5	20.3	7.3	1.1	11.9	10
20	Food and kindred products	26.9	.5	22.9	3.6	.6	(Z)	.3	.2	31
24	Lumber and wood products	27.2	11.6	4.6	11.0	2.6	.1	.1	2.4	11
26	Paper and allied products	58.5	26.7	24.6	7.2	(D)	(D)	—	.1	11
27	Printing and publishing	3.8	1.9	.7	1.2	(D)	.1	(D)	.4	27
28	Chemicals and allied products	3.9	.9	2.1	.9	.3	(Z)	(Z)	.3	46
30	Rubber and miscellaneous plastics products	2.0	1.4	.1	.4	(Z)	(Z)	(Z)	(Z)	24
32	Stone, clay, and glass products	3.0	.7	(D)	(D)	(Z)	(Z)	—	—	51
33	Primary metal industries	43.5	11.1	16.5	15.9	2.2	(D)	(D)	.8	34
34	Fabricated metal products	3.7	.1	2.6	1.0	(Z)	—	—	(Z)	81
35	Industrial machinery and equipment	4.1	.2	1.2	2.7	(Z)	—	—	(Z)	64
36	Electronic and other electric equipment	15.2	3.2	9.7	2.3	4.4	.2	.2	4.0	14
37	Transportation equipment	14.0	1.1	2.3	10.6	3.7	(Z)	.1	3.6	53
38	Instruments and related products	2.5	.1	(D)	(D)	(Z)	(Z)	(Z)	(Z)	22
	Pennsylvania	1 006.7	286.7	382.6	337.4	106.7	14.2	25.4	67.1	6
20	Food and kindred products	83.5	6.0	50.3	27.2	2.5	.3	1.0	1.1	14
22	Textile mill products	9.7	.8	4.7	4.2	.8	.1	.1	.7	25
24	Lumber and wood products	21.2	6.0	8.1	7.1	.5	.1	.1	.3	35
25	Furniture and fixtures	4.7	1.4	.6	2.7	.4	.2	(Z)	.2	19
26	Paper and allied products	113.1	28.7	50.8	33.7	23.1	1.5	9.5	12.1	16
27	Printing and publishing	14.0	5.0	2.0	7.0	6.6	.5	.2	5.9	10
28	Chemicals and allied products	155.9	34.6	59.0	62.4	17.9	(D)	(D)	7.5	9
29	Petroleum and coal products	71.6	22.6	29.4	19.7	1.6	1.0	(D)	(D)	18
30	Rubber and miscellaneous plastics products	12.6	2.4	1.9	8.3	8.0	.1	.1	7.9	17
31	Leather and leather products	6.4	.6	3.7	2.1	(D)	(Z)	(Z)	(Z)	16
32	Stone, clay, and glass products	55.9	31.3	10.8	13.7	5.9	.6	.6	4.8	12
33	Primary metal industries	307.6	110.4	114.1	83.1	31.2	5.8	5.0	20.5	17
34	Fabricated metal products	42.2	11.7	13.1	17.4	2.7	.2	.2	2.3	17
35	Industrial machinery and equipment	22.8	3.2	6.8	12.7	.6	.1	.2	.4	14
36	Electronic and other electric equipment	33.1	6.9	12.6	13.6	1.5	.1	.3	1.2	20

Table 9. **Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—**
Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major group are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
Pennsylvania—Con.										
37	Transportation equipment	20.5	5.0	5.8	9.7	.8	.1	.1	.7	18
38	Instruments and related products	18.6	4.6	7.6	6.5	1.0	(D)	(Z)	(D)	32
39	Miscellaneous manufacturing industries	13.1	5.6	1.4	6.2	(D)	(Z)	.1	(D)	10
	Rhode Island	60.0	17.8	18.6	23.6	5.0	1.9	.2	2.9	11
20	Food and kindred products	2.7	.4	1.5	.8	.2	(Z)	.1	.1	70
22	Textile mill products	(D)	(D)	1.2	(D)	(D)	(Z)	(Z)	(D)	(X)
26	Paper and allied products	1.4	(Z)	.3	1.1	(Z)	—	—	(Z)	93
27	Printing and publishing	2.4	1.2	.4	.8	(D)	.5	—	(D)	47
28	Chemicals and allied products	6.9	(D)	3.5	(D)	(Z)	(Z)	—	(Z)	10
30	Rubber and miscellaneous plastics products	(D)	(D)	.6	(D)	.1	.1	(Z)	(Z)	(X)
33	Primary metal industries	1.0	(Z)	.6	.4	(Z)	—	—	(Z)	83
34	Fabricated metal products	13.6	3.0	6.6	4.0	1.0	.9	.1	.1	26
35	Industrial machinery and equipment	1.2	.3	.2	.7	.6	.3	—	.3	51
38	Instruments and related products	5.8	2.2	.5	3.1	(Z)	—	—	(Z)	73
39	Miscellaneous manufacturing industries	4.6	.5	2.5	1.5	.1	(Z)	(Z)	(Z)	16
	South Carolina	379.6	108.1	163.5	108.0	19.6	10.5	2.7	6.4	6
20	Food and kindred products	9.6	.1	7.0	2.6	.1	—	—	.1	40
22	Textile mill products	34.3	4.0	22.1	8.2	2.2	.1	.7	1.4	10
24	Lumber and wood products	4.8	1.7	1.4	1.8	1.0	—	(D)	(D)	31
25	Furniture and fixtures	1.7	(D)	.1	(D)	(Z)	(Z)	(Z)	(Z)	56
26	Paper and allied products	74.1	21.3	23.4	29.3	8.1	(D)	(D)	1.4	7
27	Printing and publishing	2.5	(D)	.3	(D)	3.4	(D)	(Z)	(D)	15
28	Chemicals and allied products	143.8	40.6	74.0	29.2	1.1	.1	.2	.7	13
30	Rubber and miscellaneous plastics products	15.7	5.3	3.6	6.9	1.0	.1	(Z)	.9	17
32	Stone, clay, and glass products	14.8	7.7	4.0	3.1	.9	.9	(Z)	(Z)	15
33	Primary metal industries	29.6	17.9	5.2	6.5	.1	.1	(Z)	(Z)	25
34	Fabricated metal products	7.7	.4	3.7	3.7	.1	.1	(Z)	—	27
35	Industrial machinery and equipment	15.1	1.4	6.9	6.8	.4	—	(Z)	.4	18
36	Electronic and other electric equipment	17.0	3.7	7.0	6.2	.5	.3	.1	.2	21
37	Transportation equipment	5.0	.8	2.8	1.5	.4	(D)	—	(D)	33
38	Instruments and related products	3.2	.7	1.6	.9	.2	(Z)	(Z)	.1	74
	South Dakota	15.0	2.7	7.3	5.0	.4	.1	.1	.2	26
20	Food and kindred products	7.1	1.3	(D)	(D)	(Z)	—	(Z)	(Z)	36
24	Lumber and wood products	(D)	(D)	(Z)	(D)	—	—	—	—	(X)
28	Chemicals and allied products	2.6	.6	1.3	.7	.1	(Z)	.1	(Z)	98
38	Instruments and related products	(D)	(D)	(D)	(D)	—	—	—	—	(X)
	Tennessee	504.3	126.4	214.1	163.8	45.9	12.3	6.6	27.0	4
20	Food and kindred products	35.4	7.3	20.7	7.4	3.2	(Z)	1.4	1.7	12
22	Textile mill products	10.3	(D)	5.6	(D)	(D)	(D)	—	—	8
24	Lumber and wood products	3.6	(D)	.4	(D)	.5	.1	—	.4	11
25	Furniture and fixtures	4.8	1.1	.7	3.0	.4	.1	—	.3	22
26	Paper and allied products	32.5	6.5	15.8	10.2	.3	.1	(Z)	.1	9
27	Printing and publishing	13.1	7.4	1.4	4.3	9.2	(D)	(Z)	(D)	12
28	Chemicals and allied products	236.5	46.5	121.4	68.5	10.0	3.7	3.0	3.3	5
29	Petroleum and coal products	12.0	7.6	2.0	2.4	2.6	1.3	1.3	—	52
30	Rubber and miscellaneous plastics products	16.0	3.1	3.9	9.0	.4	.1	(Z)	.3	24
32	Stone, clay, and glass products	15.7	7.9	2.9	4.9	1.5	(Z)	.1	1.4	28
33	Primary metal industries	37.6	15.3	7.8	14.5	(D)	(D)	(Z)	.1	11
34	Fabricated metal products	18.0	1.7	9.5	6.7	.3	(Z)	.1	.1	21
35	Industrial machinery and equipment	12.3	1.6	4.2	6.5	2.8	(D)	(D)	2.6	12
36	Electronic and other electric equipment	14.3	4.9	5.0	4.4	1.2	(D)	(D)	(D)	17
37	Transportation equipment	35.8	12.1	10.8	12.9	8.9	.1	.2	8.5	16
38	Instruments and related products	2.3	.1	.7	1.5	.2	—	—	.2	41
39	Miscellaneous manufacturing industries	3.4	.8	1.0	1.6	.1	(Z)	(Z)	.1	21
	Texas	2 326.6	892.0	849.8	584.7	249.1	147.2	40.6	61.3	3
20	Food and kindred products	84.0	8.9	57.8	17.2	12.0	5.5	1.6	4.9	11
22	Textile mill products	2.2	.4	1.4	.3	.4	—	—	.4	32
24	Lumber and wood products	12.1	5.3	3.7	3.1	1.3	.1	(D)	(D)	10
25	Furniture and fixtures	4.2	.8	.7	2.6	.2	.1	(Z)	.1	23
26	Paper and allied products	71.4	22.9	26.6	21.9	16.5	.8	5.7	10.0	12
27	Printing and publishing	8.6	2.4	1.3	5.0	1.7	.1	.1	1.5	17
28	Chemicals and allied products	941.4	265.2	395.3	280.9	77.1	43.8	8.8	24.5	4
29	Petroleum and coal products	870.7	470.3	269.6	130.8	103.5	74.6	17.9	11.0	5
30	Rubber and miscellaneous plastics products	26.1	7.5	6.5	12.0	3.8	2.2	.2	1.4	15
31	Leather and leather products	5.4	—	3.9	1.5	—	—	—	—	93
32	Stone, clay, and glass products	35.7	19.4	6.5	9.8	1.6	.9	.1	.7	9
33	Primary metal industries	85.3	51.9	16.3	17.1	(D)	(D)	(Z)	(D)	13
34	Fabricated metal products	46.0	6.2	12.1	27.7	1.2	.1	.3	.8	7
35	Industrial machinery and equipment	15.9	2.8	3.6	9.5	1.5	.1	.2	1.2	14
36	Electronic and other electric equipment	59.8	13.6	27.8	18.5	5.0	1.3	.8	2.9	12
37	Transportation equipment	36.7	6.6	11.5	18.6	4.6	(D)	(D)	.9	11
38	Instruments and related products	18.2	7.2	4.1	6.8	.4	.1	.1	.3	24
39	Miscellaneous manufacturing industries	3.0	.6	1.1	1.3	.4	(Z)	(Z)	.4	31
	Utah	110.8	59.3	26.6	24.9	8.7	(D)	(D)	2.4	16
20	Food and kindred products	9.3	.5	6.6	2.3	.4	(Z)	.1	.3	30
26	Paper and allied products	(D)	(D)	(D)	(D)	(D)	—	—	(D)	(X)
28	Chemicals and allied products	(D)	(D)	(D)	(D)	(D)	(Z)	(Z)	(Z)	(X)
29	Petroleum and coal products	17.5	12.8	2.5	2.3	.2	.1	(Z)	(Z)	91
32	Stone, clay, and glass products	2.3	1.6	.2	.5	.6	.6	(Z)	(Z)	41
33	Primary metal industries	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
35	Industrial machinery and equipment	1.0	(Z)	(Z)	1.0	(Z)	—	—	(Z)	51
36	Electronic and other electric equipment	6.6	.3	5.6	.6	.1	(Z)	.1	(Z)	46
37	Transportation equipment	13.7	4.6	2.8	6.3	(D)	—	—	(D)	20
38	Instruments and related products	2.7	.4	1.2	1.1	.6	(Z)	(Z)	.6	38
39	Miscellaneous manufacturing industries	1.5	.2	.4	.9	.1	(Z)	(Z)	.1	45

Table 9. Operating Costs and Cost Offsets by States and Major Groups for All Media: 1994—
Con.

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SIC code	State and major group	PAOC				Cost offsets				Standard error of estimate (PAOC) (percent)
		Total	Air	Water	Solid/contained waste	Total	Air	Water	Solid/contained waste	
	Vermont	18.0	2.8	6.0	9.2	2.9	.2	.4	2.3	29
20	Food and kindred products	4.8	—	2.6	2.2	—	—	—	—	98
22	Textile mill products	1.0	.9	(Z)	.1	—	—	—	—	83
28	Chemicals and allied products	(D)	(D)	(D)	(D)	(D)	.1	(D)	(D)	(X)
36	Electronic and other electric equipment	(D)	(D)	(D)	(D)	(D)	—	(D)	(D)	(X)
	Virginia	350.8	117.6	131.3	101.8	33.2	12.4	2.9	17.9	4
20	Food and kindred products	43.5	14.0	23.9	5.7	1.9	(Z)	(D)	(D)	23
21	Tobacco products	(D)	1.7	(D)	2.8	(Z)	—	—	(Z)	(X)
22	Textile mill products	19.2	2.6	12.4	4.2	2.0	(Z)	1.4	.6	13
24	Lumber and wood products	16.0	6.4	3.2	6.4	1.8	1.1	(Z)	.7	20
25	Furniture and fixtures	5.9	3.9	.3	1.7	.5	(Z)	—	.4	41
26	Paper and allied products	82.6	33.5	28.6	20.6	(D)	(D)	—	4.2	5
27	Printing and publishing	14.8	9.6	.9	4.4	3.4	.9	(Z)	2.4	23
28	Chemicals and allied products	71.2	20.3	31.8	19.1	2.5	.3	.1	2.0	2
30	Rubber and miscellaneous plastics products	11.0	5.5	1.6	4.0	(D)	—	—	(D)	11
32	Stone, clay, and glass products	11.9	3.6	2.5	5.8	.7	.6	(Z)	.1	36
33	Primary metal industries	8.6	3.1	1.2	4.3	.7	(D)	(Z)	(D)	22
34	Fabricated metal products	4.9	1.0	1.8	2.1	.2	(Z)	(Z)	.2	23
35	Industrial machinery and equipment	8.5	.5	2.3	5.7	.4	(Z)	—	.4	21
36	Electronic and other electric equipment	17.0	2.7	9.2	5.2	1.1	—	(D)	(D)	12
37	Transportation equipment	23.0	9.0	5.3	8.7	(D)	(Z)	(Z)	(D)	12
38	Instruments and related products	(D)	(Z)	(D)	.7	(Z)	(Z)	(Z)	(Z)	(X)
	Washington	410.4	149.5	155.1	105.8	49.0	31.1	13.0	5.0	8
20	Food and kindred products	28.9	1.3	22.0	5.5	1.3	.1	.7	.5	16
24	Lumber and wood products	26.4	9.3	8.2	9.0	.3	(Z)	.1	.2	35
25	Furniture and fixtures	1.1	.4	.1	.6	.1	.1	—	.1	68
26	Paper and allied products	102.8	14.5	68.2	20.1	28.8	(D)	(D)	2.1	12
27	Printing and publishing	3.6	.2	.6	2.7	.9	(Z)	(Z)	.8	31
28	Chemicals and allied products	8.2	2.5	3.1	2.6	.2	(Z)	.2	(Z)	30
29	Petroleum and coal products	91.9	61.7	21.1	9.2	(D)	(D)	—	(D)	29
30	Rubber and miscellaneous plastics products	1.3	.1	.1	1.1	.1	(Z)	(Z)	.1	52
32	Stone, clay, and glass products	3.7	1.1	.9	1.7	.2	.1	(Z)	(Z)	27
33	Primary metal industries	74.3	45.8	14.5	14.0	14.2	14.1	(Z)	(Z)	10
34	Fabricated metal products	6.6	1.3	2.7	2.7	.2	—	.1	.1	25
36	Electronic and other electric equipment	8.6	1.4	3.8	3.5	.1	—	(Z)	.1	34
37	Transportation equipment	41.0	7.9	5.8	27.2	.7	(Z)	.1	.5	15
38	Instruments and related products	9.3	1.6	3.6	4.0	(D)	(Z)	(Z)	(D)	12
	West Virginia	232.8	86.9	84.8	61.1	13.5	3.6	(D)	(D)	18
20	Food and kindred products	2.9	—	2.6	.3	—	—	—	—	40
28	Chemicals and allied products	94.4	19.8	42.9	31.7	6.1	(D)	(D)	1.5	12
29	Petroleum and coal products	1.7	(D)	.1	(D)	—	—	—	—	58
30	Rubber and miscellaneous plastics products	2.3	.4	.6	1.3	—	—	—	—	57
32	Stone, clay, and glass products	3.4	(D)	.4	(D)	(D)	(D)	—	(Z)	18
33	Primary metal industries	112.4	56.3	34.6	21.6	(D)	(D)	(D)	(D)	35
34	Fabricated metal products	4.3	.7	1.5	2.1	.1	(Z)	(Z)	(Z)	27
35	Industrial machinery and equipment	1.2	.3	.3	.5	—	—	—	—	80
36	Electronic and other electric equipment	7.1	5.1	.8	1.1	(Z)	—	(Z)	(Z)	81
	Wisconsin	455.6	97.5	185.5	172.6	34.7	12.6	2.8	19.3	7
20	Food and kindred products	74.3	3.3	45.8	25.1	4.4	1.9	.8	1.7	14
24	Lumber and wood products	18.0	11.5	2.0	4.5	1.0	.4	(Z)	.7	24
25	Furniture and fixtures	10.4	2.9	.7	6.9	.5	.4	—	.2	38
26	Paper and allied products	168.0	27.1	80.7	60.1	12.5	3.0	—	9.5	15
27	Printing and publishing	13.2	7.4	1.0	4.7	7.2	(D)	(Z)	(D)	11
28	Chemicals and allied products	23.8	5.2	8.5	10.1	2.5	.5	.7	1.3	30
30	Rubber and miscellaneous plastics products	4.7	1.3	.9	2.5	.2	.1	(Z)	.1	24
31	Leather and leather products	8.4	.3	6.9	1.1	(D)	—	(D)	(Z)	19
32	Stone, clay, and glass products	5.2	.6	2.8	1.8	(Z)	—	—	(Z)	10
33	Primary metal industries	41.0	15.4	5.9	19.6	.4	(Z)	.1	.3	7
34	Fabricated metal products	25.9	6.2	11.4	8.2	.8	(D)	(D)	.3	12
35	Industrial machinery and equipment	30.1	6.7	9.5	13.9	1.5	(Z)	.1	1.4	17
36	Electronic and other electric equipment	14.9	3.6	4.9	6.4	.7	.1	.1	.5	20
37	Transportation equipment	11.8	(D)	2.9	3.9	1.7	(Z)	—	1.6	7
38	Instruments and related products	3.2	.3	.9	2.1	—	—	—	—	32
39	Miscellaneous manufacturing industries	2.2	.3	.7	1.2	(D)	—	—	(D)	17
	Wyoming	25.2	15.4	6.2	3.5	.3	.3	—	(Z)	26
28	Chemicals and allied products	15.5	10.9	3.9	.7	(D)	(D)	—	(Z)	31
29	Petroleum and coal products	6.9	2.4	2.0	2.4	(D)	(D)	—	(Z)	60
32	Stone, clay, and glass products	2.2	1.8	.1	.3	—	—	—	—	42

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 10a. **Operating Costs by States for the Media Air: 1994**

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PAOC	Air			Standard error of estimate (PAOC) (percent)
		Total	Type of pollutant abated		
			Hazardous	Nonhazardous	
United States¹	18 772.0	6 139.1	1 377.8	4 763.8	1
Alabama	437.3	133.8	25.7	108.1	8
Alaska	21.2	4.3	(Z)	4.3	33
Arizona	145.6	74.8	30.9	43.9	7
Arkansas	247.2	77.2	16.3	60.9	10
California	1 632.0	698.0	248.8	449.2	6
Colorado	109.9	36.5	5.5	31.0	22
Connecticut	187.7	21.9	4.7	17.2	10
Delaware	158.0	79.3	(D)	(D)	6
District of Columbia	5.8	.6	(Z)	.5	16
Florida	350.7	110.9	9.6	101.3	4
Georgia	455.0	119.5	14.1	105.4	4
Hawaii	20.3	7.4	1.7	5.7	59
Idaho	79.9	26.7	5.6	21.1	9
Illinois	866.3	322.2	68.9	253.2	4
Indiana	729.6	245.7	42.4	203.3	3
Iowa	220.3	56.0	16.3	39.8	9
Kansas	126.0	39.4	8.3	31.0	14
Kentucky	379.0	155.0	32.8	122.2	7
Louisiana	999.4	334.3	88.1	246.2	5
Maine	131.7	22.2	3.7	18.4	9
Maryland	188.6	45.1	8.8	36.3	12
Massachusetts	273.6	59.3	16.5	42.8	7
Michigan	774.1	231.2	55.7	175.5	4
Minnesota	296.2	116.5	20.6	95.9	4
Mississippi	252.5	120.2	5.6	114.6	5
Missouri	276.7	84.4	19.7	64.7	4
Montana	58.5	31.0	(D)	(D)	32
Nebraska	60.0	15.2	2.3	12.9	10
Nevada	13.7	4.1	2.7	1.4	19
New Hampshire	63.2	9.5	1.4	8.1	19
New Jersey	554.2	142.2	31.2	111.1	7
New Mexico	56.7	37.5	(D)	(D)	9
New York	563.3	109.1	23.9	85.2	6
North Carolina	579.3	159.4	33.2	126.2	4
North Dakota	8.3	1.6	.1	1.5	22
Ohio	1 212.6	346.5	62.2	284.4	5
Oklahoma	132.5	37.6	5.7	31.9	12
Oregon	209.2	60.0	10.4	49.6	10
Pennsylvania	1 006.7	286.7	55.3	231.5	6
Rhode Island	60.0	17.8	12.8	5.0	11
South Carolina	379.6	108.1	16.3	91.8	6
South Dakota	15.0	2.7	.1	2.6	26
Tennessee	504.3	126.4	29.5	96.8	4
Texas	2 326.6	892.0	216.6	677.9	3
Utah	110.8	59.3	2.5	56.8	16
Vermont	18.0	2.8	1.4	1.4	29
Virginia	350.8	117.6	17.5	100.1	4
Washington	410.4	149.5	22.0	127.5	8
West Virginia	232.8	86.9	26.0	60.9	18
Wisconsin	455.6	97.5	17.2	80.3	7
Wyoming	25.2	15.4	.1	15.3	26

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 10b. Operating Costs by States for the Media Water: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PAOC	Water					Standard error of estimate (PAOC) (percent)
		Type of pollutant abated					
		Total	Hazardous	Nonhazardous			
				Total	Payments to industry	Sewage services payments to government	
United States¹	18 772.0	7 031.5	1 707.7	5 323.8	4 008.3	1 315.5	1
Alabama	437.3	193.6	44.8	148.9	133.8	15.1	8
Alaska	21.2	9.6	2.0	7.6	6.3	1.3	33
Arizona	145.6	38.7	9.9	28.8	20.1	8.7	7
Arkansas	247.2	102.5	12.4	90.1	77.2	12.8	10
California	1 632.0	502.3	136.7	365.6	261.5	104.1	6
Colorado	109.9	42.8	8.2	34.6	27.1	7.5	22
Connecticut	187.7	76.9	32.5	44.4	34.5	9.9	10
Delaware	158.0	53.5	3.2	50.3	36.4	13.9	6
District of Columbia	5.8	.3	.1	.2	—	.2	16
Florida	350.7	132.0	12.7	119.2	91.6	27.6	4
Georgia	455.0	213.0	35.7	177.2	126.1	51.1	4
Hawaii	20.3	8.9	(Z)	8.8	8.0	.9	59
Idaho	79.9	30.8	2.0	28.8	21.8	7.0	9
Illinois	866.3	284.7	56.1	228.6	166.6	62.1	4
Indiana	729.6	284.0	104.3	179.7	127.6	52.1	3
Iowa	220.3	86.4	18.6	67.8	44.9	22.9	9
Kansas	126.0	42.3	10.2	32.1	25.3	6.8	14
Kentucky	379.0	123.7	29.8	93.9	72.5	21.5	7
Louisiana	999.4	368.9	166.3	202.5	199.5	3.0	5
Maine	131.7	67.8	10.0	57.8	48.9	8.9	9
Maryland	188.6	101.4	16.4	85.0	58.8	26.2	12
Massachusetts	273.6	110.8	27.2	83.6	45.9	37.7	7
Michigan	774.1	282.2	57.8	224.4	168.9	55.4	4
Minnesota	296.2	100.2	12.4	87.8	46.8	41.0	4
Mississippi	252.5	72.6	18.5	54.1	45.8	8.3	5
Missouri	276.7	103.9	28.6	75.3	43.8	31.6	4
Montana	58.5	14.2	.8	13.4	13.0	.4	32
Nebraska	60.0	22.8	3.6	19.2	10.9	8.3	10
Nevada	13.7	4.7	.4	4.3	2.7	1.5	19
New Hampshire	63.2	32.3	6.6	25.7	19.6	6.2	19
New Jersey	554.2	235.9	57.8	178.1	109.2	68.9	7
New Mexico	56.7	9.4	(D)	(D)	(D)	.5	9
New York	563.3	212.3	55.8	156.5	116.2	40.2	6
North Carolina	579.3	239.8	34.9	204.8	124.3	80.5	4
North Dakota	8.3	4.0	.1	3.9	2.3	1.6	22
Ohio	1 212.6	445.5	102.8	342.7	249.1	93.6	5
Oklahoma	132.5	55.7	7.0	48.7	35.6	13.1	12
Oregon	209.2	89.8	17.4	72.4	50.6	21.8	10
Pennsylvania	1 006.7	382.6	71.2	311.4	247.8	63.6	6
Rhode Island	60.0	18.6	5.1	13.5	9.5	4.0	11
South Carolina	379.6	163.5	23.7	139.8	117.7	22.1	6
South Dakota	15.0	7.3	.3	7.1	3.9	3.1	26
Tennessee	504.3	214.1	75.9	138.2	98.2	40.0	4
Texas	2 326.6	849.8	305.5	544.3	460.9	83.4	3
Utah	110.8	26.6	10.8	15.7	11.5	4.2	16
Vermont	18.0	6.0	(D)	(D)	(D)	3.1	29
Virginia	350.8	131.3	16.4	114.9	82.0	33.0	4
Washington	410.4	155.1	18.7	136.4	116.2	20.2	8
West Virginia	232.8	84.8	22.2	62.5	58.0	4.5	18
Wisconsin	455.6	185.5	13.1	172.4	112.8	59.6	7
Wyoming	25.2	6.2	—	6.2	6.2	(Z)	26

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 10c. Operating Costs by States for the Media Solid/Contained Waste: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Solid/contained waste						Standard error of estimate (PAOC) (percent)
	Total PAOC	Type of pollutant abated					
		Total	Hazardous	Nonhazardous			
				Total	Payments to industry	Solid/contained waste collection payments to government	
United States¹	18 772.0	5 601.4	1 841.4	3 759.9	3 458.1	301.8	1
Alabama	437.3	109.9	33.9	76.0	69.6	6.5	8
Alaska	21.2	7.3	1.1	6.2	5.3	.9	33
Arizona	145.6	32.1	11.5	20.6	19.1	1.5	7
Arkansas	247.2	67.6	13.8	53.8	50.0	3.8	10
California	1 632.0	431.7	168.2	263.4	227.6	35.8	6
Colorado	109.9	30.6	16.4	14.2	13.0	1.2	22
Connecticut	187.7	88.9	30.8	58.1	54.2	3.8	10
Delaware	158.0	25.2	7.8	17.4	15.8	1.6	6
District of Columbia	5.8	4.9	(D)	(D)	(D)	(Z)	16
Florida	350.7	107.8	16.9	90.8	79.3	11.6	4
Georgia	455.0	122.6	25.8	96.8	85.9	10.8	4
Hawaii	20.3	4.1	.7	3.4	3.0	.4	59
Idaho	79.9	22.4	2.7	19.7	17.7	2.0	9
Illinois	866.3	259.5	72.7	186.8	180.0	6.8	4
Indiana	729.6	199.8	58.5	141.3	136.5	4.8	3
Iowa	220.3	77.9	23.4	54.5	46.6	7.9	9
Kansas	126.0	44.3	15.4	28.9	26.3	2.5	14
Kentucky	379.0	100.3	37.4	62.8	59.2	3.6	7
Louisiana	999.4	296.2	147.1	149.1	147.2	2.0	5
Maine	131.7	41.7	7.7	34.0	31.7	2.3	9
Maryland	188.6	42.1	10.9	31.2	29.5	1.7	12
Massachusetts	273.6	103.5	41.9	61.6	58.8	2.8	7
Michigan	774.1	260.7	68.4	192.4	187.0	5.4	4
Minnesota	296.2	79.5	17.1	62.4	56.8	5.6	4
Mississippi	252.5	59.6	15.2	44.4	42.6	1.8	5
Missouri	276.7	88.3	35.8	52.6	48.1	4.5	4
Montana	58.5	13.3	4.1	9.1	8.7	.5	32
Nebraska	60.0	22.0	5.8	16.2	15.0	1.3	10
Nevada	13.7	4.9	.7	4.2	3.4	.8	19
New Hampshire	63.2	21.3	8.4	12.9	11.3	1.6	19
New Jersey	554.2	176.0	59.7	116.4	105.3	11.1	7
New Mexico	56.7	9.8	(D)	(D)	(D)	.3	9
New York	563.3	242.0	93.2	148.7	137.6	11.2	6
North Carolina	579.3	180.1	46.2	133.9	118.3	15.6	4
North Dakota	8.3	2.8	.7	2.0	1.5	.5	22
Ohio	1 212.6	420.5	136.4	284.1	266.4	17.7	5
Oklahoma	132.5	39.2	10.2	29.0	27.0	2.0	12
Oregon	209.2	59.5	15.4	44.1	40.9	3.2	10
Pennsylvania	1 006.7	337.4	108.7	228.7	213.9	14.8	6
Rhode Island	60.0	23.6	11.0	12.6	11.9	.8	11
South Carolina	379.6	108.0	15.9	92.1	86.2	5.9	6
South Dakota	15.0	5.0	.3	4.7	3.8	.9	26
Tennessee	504.3	163.8	51.1	112.7	99.4	13.3	4
Texas	2 326.6	584.7	262.0	322.7	300.1	22.7	3
Utah	110.8	24.9	7.6	17.3	16.0	1.3	16
Vermont	18.0	9.2	2.7	6.5	5.7	.7	29
Virginia	350.8	101.8	23.1	78.7	65.2	13.5	4
Washington	410.4	105.8	34.8	71.0	59.7	11.3	8
West Virginia	232.8	61.1	20.3	40.8	39.5	1.4	18
Wisconsin	455.6	172.6	35.2	137.4	119.6	17.8	7
Wyoming	25.2	3.5	.7	2.8	2.8	(Z)	26

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 11a. Operating Costs by Industries for Kinds of Cost: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
	All industries¹	18 772.0	2 952.0	3 264.3	2 762.0	4 142.7	4 033.6	1 617.3	1
20	Food and kindred products	1 447.6	140.2	185.2	133.4	267.6	182.3	538.9	4
201	Meat products	233.6	27.6	29.3	22.5	34.2	40.8	79.2	6
2011	Meat packing plants	71.3	9.4	7.1	7.7	9.9	10.2	27.0	13
2013	Sausages and other prepared meats	30.4	1.6	2.8	2.3	10.1	2.4	11.1	22
2015	Poultry slaughtering and processing	131.8	16.6	19.3	12.5	14.1	28.3	41.0	6
202	Dairy products	136.5	7.0	7.8	6.6	34.2	12.3	68.6	11
2022	Cheese, natural and processed	48.1	3.0	3.8	4.0	14.5	7.8	15.0	18
2023	Dry, condensed, and evaporated dairy products	12.1	1.7	.5	.9	2.4	1.2	5.4	30
2024	Ice cream and frozen desserts	29.9	1.0	1.2	.4	7.2	1.8	18.3	28
2026	Fluid milk	46.0	1.3	2.2	1.3	9.9	1.5	29.7	16
203	Preserved fruits and vegetables	241.3	27.5	33.0	17.9	49.3	30.8	82.8	9
2032	Canned specialties	22.0	(D)	2.5	1.7	4.3	(D)	9.4	14
2033	Canned fruits and vegetables	95.8	11.9	10.5	6.2	19.5	11.9	35.8	19
2034	Dehydrated fruits, vegetables, and soups	5.2	(D)	.9	.4	.9	(D)	1.7	48
2035	Pickles, sauces, and salad dressings	19.8	1.9	1.2	.7	4.8	2.3	9.0	31
2037	Frozen fruits and vegetables	57.5	8.8	9.9	7.2	12.3	7.7	11.7	3
2038	Frozen specialties, n.e.c.	41.0	2.5	8.0	1.7	7.5	5.9	15.3	23
204	Grain mill products	164.3	22.8	17.6	33.0	26.9	18.4	45.7	7
2041	Flour and other grain mill products	10.3	1.0	.5	5.3	.9	.5	2.0	60
2043	Cereal breakfast foods	28.5	4.9	5.3	3.1	4.6	2.9	7.8	6
2044	Rice milling	9.8	(D)	.8	5.5	1.4	(D)	.9	48
2045	Prepared flour mixes and doughs	6.9	(D)	.9	.3	3.0	(D)	1.9	38
2046	Wet corn milling	77.7	11.2	5.4	14.2	7.8	11.6	27.6	5
2047	Dog and cat food	17.9	2.4	3.1	2.1	6.1	1.2	3.1	21
2048	Prepared feeds, n.e.c.	13.1	2.0	1.7	2.5	3.1	1.5	2.3	22
205	Bakery products	46.5	4.6	7.6	2.3	16.7	4.3	10.9	9
2051	Bread, cake, and related products	30.5	3.3	4.9	1.6	10.3	3.0	7.4	11
2052	Cookies and crackers	12.7	.7	2.1	.5	5.6	1.2	2.5	17
2053	Frozen bakery products, except bread	3.3	.6	.6	.2	.8	.2	1.0	34
206	Sugar and confectionery products	92.9	10.5	20.7	8.2	24.0	12.9	16.6	13
2061	Raw cane sugar	14.8	1.7	4.9	1.1	3.2	3.9	.1	37
2062	Cane sugar refining	9.1	.4	1.3	.9	4.0	.9	1.7	11
2063	Beet sugar	14.8	3.3	2.5	2.1	3.2	3.1	.7	30
2064	Candy and other confectionery products	31.8	2.5	4.2	2.0	9.6	3.8	9.7	14
2066	Chocolate and cocoa products	16.5	1.3	7.0	1.5	3.2	.7	2.8	48
2067	Chewing gum	(D)	(D)	(D)	(D)	(D)	(Z)	(Z)	(X)
2068	Salted and roasted nuts and seeds	(D)	(D)	(D)	(D)	(D)	.5	1.5	(X)
207	Fats and oils	78.9	12.1	9.7	16.4	9.8	16.2	14.8	11
2074	Cottonseed oil mills	3.2	.7	.8	.6	.4	.3	.4	58
2075	Soybean oil mills	47.4	8.5	5.7	11.4	5.7	8.0	8.1	15
2076	Vegetable oil mills, n.e.c.	4.5	.7	.5	.7	1.2	.6	.9	30
2077	Animal and marine fats and oils	8.9	1.0	.8	1.8	.6	4.3	.5	37
2079	Edible fats and oils, n.e.c.	14.8	1.2	2.0	2.0	1.9	3.0	4.8	16
208	Beverages	287.6	11.1	39.8	13.5	40.3	26.7	156.2	5
2082	Malt beverages	172.0	6.6	19.5	11.2	15.6	18.7	100.3	4
2083	Malt	6.8	.4	.2	.8	.4	.4	4.6	34
2084	Wines, brandy, and brandy spirits	7.2	.9	1.4	.2	1.8	.5	2.4	43
2085	Distilled and blended liquors	3.7	.3	1.1	.2	.6	.3	1.3	51
2086	Bottled and canned soft drinks	91.0	2.7	16.2	1.1	21.2	6.3	43.5	13
2087	Flavoring extracts and syrups, n.e.c.	6.9	.2	1.5	(Z)	.6	.5	4.1	38
209	Miscellaneous food and kindred products	166.0	17.0	19.8	12.9	32.4	19.8	64.1	16
2091	Canned and cured fish and seafoods	7.5	.5	.3	.3	1.1	.3	5.0	61
2092	Fresh or frozen prepared fish	15.9	1.3	1.8	.9	3.9	1.1	6.8	27
2095	Roasted coffee	14.6	1.8	1.4	3.0	2.1	1.5	4.9	19
2096	Potato chips and similar snacks	56.5	6.4	9.2	3.6	9.7	4.1	23.7	18
2097	Manufactured ice	1.0	(Z)	.1	.1	.4	.1	.1	61
2098	Macaroni and spaghetti	1.4	(Z)	(Z)	(Z)	.8	.1	.5	22
2099	Food preparations, n.e.c.	69.0	7.0	6.9	5.0	14.3	12.7	23.1	33
21	Tobacco products	35.9	10.5	8.4	3.9	4.7	2.4	6.1	10
211	Cigarettes	21.8	7.3	(D)	(D)	3.1	(D)	4.6	14
2111	Cigarettes	21.8	7.3	(D)	(D)	3.1	(D)	4.6	14
213	Chewing and smoking tobacco	1.4	(Z)	(D)	(D)	.3	.2	.4	25
2131	Chewing and smoking tobacco	1.4	(Z)	(D)	(D)	.3	.2	.4	25
214	Tobacco stemming and redrying	12.8	3.2	3.7	2.1	1.2	1.5	1.1	16
2141	Tobacco stemming and redrying	12.8	3.2	3.7	2.1	1.2	1.5	1.1	16
22	Textile mill products	315.7	27.4	40.5	36.6	62.8	35.6	112.8	5
221	Broadwoven fabrics mills, cotton	33.5	2.3	4.0	6.0	2.5	5.7	13.0	7
2211	Broadwoven fabrics mills, cotton	33.5	2.3	4.0	6.0	2.5	5.7	13.0	7
222	Broadwoven fabrics mills, manmade fiber and silk	26.3	1.3	4.0	2.3	7.3	3.5	7.9	10
2221	Broadwoven fabrics mills, manmade fiber and silk	26.3	1.3	4.0	2.3	7.3	3.5	7.9	10
223	Broadwoven fabrics mills, wool	7.1	.6	(D)	(D)	1.0	.6	3.1	18
2231	Broadwoven fabrics mills, wool	7.1	.6	(D)	(D)	1.0	.6	3.1	18
224	Narrow fabrics mills	17.0	.4	(D)	(D)	4.9	(D)	.8	3
2241	Narrow fabrics mills	17.0	.4	(D)	(D)	4.9	(D)	.8	3
225	Knitting mills	70.2	5.0	5.8	8.7	8.0	3.2	39.4	12
2251	Women's hosiery, except socks	4.9	.4	.4	.2	1.0	.1	2.7	27
2252	Hosiery, n.e.c.	4.9	.4	.4	.7	.4	.1	2.8	34
2253	Knit outerwear mills	15.4	.8	.9	.7	1.2	.6	11.2	20
2254	Knit underwear mills	3.6	.5	.6	.6	.4	.5	1.0	30
2257	Weft knit fabrics mills	31.2	1.3	2.8	3.9	3.2	1.2	18.7	22
2258	Lace and warp knit fabrics mills	9.5	1.5	.7	2.5	1.5	.5	2.8	26

Table 11a. Operating Costs by Industries for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
22	Textile mill products—Con.								
226	Textile finishing, except wool	71.0	9.2	6.1	8.0	14.0	7.5	26.3	12
2261	Finishing plants, cotton	16.2	1.3	2.1	3.1	2.5	3.0	4.1	19
2262	Finishing plants, manmade	41.5	5.7	3.4	4.3	9.5	4.2	14.4	18
2269	Finishing plants, n.e.c.	13.3	2.1	.6	.5	2.0	.4	7.8	27
227	Carpets and rugs	18.2	.7	1.9	1.1	4.3	1.3	9.0	10
2273	Carpets and rugs	18.2	.7	1.9	1.1	4.3	1.3	9.0	10
228	Yarn and thread mills	22.2	2.6	2.4	2.9	5.3	1.6	7.4	12
2281	Yarn spinning mills	17.0	2.5	1.9	2.7	3.9	1.3	4.6	15
2282	Throwing and winding mills	2.8	(Z)	.3	(Z)	.7	(Z)	1.7	10
2284	Thread mills	2.4	.1	.2	.1	.6	.3	1.1	25
229	Miscellaneous textile goods	50.3	5.4	8.1	6.4	15.5	9.0	5.9	13
2295	Coated fabrics, not rubberized	14.5	1.6	1.7	3.6	4.3	2.6	.7	26
2296	Tire cord and fabrics	6.6	1.1	1.2	.2	1.9	1.5	.6	69
2297	Nonwoven fabrics	20.2	1.8	4.1	1.8	6.2	3.7	2.7	10
2299	Textile goods, n.e.c.	8.5	.8	1.1	.9	3.0	1.2	1.6	25
24	Lumber and wood products	342.8	39.6	52.7	68.3	119.2	43.4	19.5	5
241	Logging	25.9	1.5	5.8	7.2	7.4	3.4	.7	36
2411	Logging	25.9	1.5	5.8	7.2	7.4	3.4	.7	36
242	Sawmills and planing mills	71.9	9.1	14.2	7.1	24.6	11.8	5.2	6
2421	Sawmills and planing mills, general	63.0	7.6	12.9	4.1	22.9	11.0	4.4	6
2426	Hardwood dimension and flooring mills	8.9	1.6	1.3	2.9	1.7	.8	.7	13
243	Millwork, plywood, and structural members	94.9	7.9	14.9	22.5	31.1	11.3	7.0	12
2431	Millwork	25.1	3.0	2.3	5.1	9.4	3.2	2.1	13
2434	Wood kitchen cabinets	9.4	.8	1.5	.8	4.3	1.0	1.1	31
2435	Hardwood veneer and plywood	18.4	.9	3.8	7.9	2.3	1.5	1.9	46
2436	Softwood veneer and plywood	33.0	2.9	5.6	7.7	11.3	4.4	1.2	17
2439	Structural wood members, n.e.c.	9.0	.3	1.8	1.0	3.9	1.3	.7	26
244	Wood containers	6.7	1.3	1.3	1.4	1.6	.5	.6	17
2448	Wood pallets and skids	5.1	1.1	1.1	1.0	1.2	.3	.4	23
245	Wood buildings and mobile homes	24.7	.4	2.0	.4	19.0	.7	2.2	5
2451	Mobile homes	17.0	.3	1.6	.2	12.5	.4	1.9	6
2452	Prefabricated wood buildings	7.7	.1	.4	.2	6.5	.2	.3	9
249	Miscellaneous wood products	118.7	19.3	14.5	29.7	35.5	15.7	3.9	4
2491	Wood preserving	12.4	2.3	1.9	1.0	4.7	2.0	.5	16
2493	Reconstituted wood products	79.7	14.5	9.5	26.1	14.5	12.8	2.3	4
2499	Wood products, n.e.c.	26.7	2.5	3.2	2.7	16.3	.8	1.1	9
25	Furniture and fixtures	144.4	15.4	23.0	27.8	49.0	15.3	14.0	6
251	Household furniture	70.2	9.1	8.7	20.4	19.3	7.0	5.7	11
2511	Wood household furniture	48.7	7.4	5.5	16.3	11.4	5.5	2.7	15
2512	Upholstered household furniture	9.5	1.1	1.6	2.0	2.7	.9	1.2	18
2514	Metal household furniture	5.0	.2	1.1	.8	1.5	.3	1.0	33
2515	Mattresses and bedsprings	2.6	(Z)	(Z)	.1	1.9	(Z)	.5	28
2517	Wood television and radio cabinets	2.8	.2	.3	1.1	1.0	.1	.1	42
2519	Household furniture, n.e.c.	1.6	.1	.2	.2	.9	.1	.1	48
252	Office furniture	29.5	3.5	4.2	3.9	9.9	4.0	3.9	11
2521	Wood office furniture	13.2	1.1	1.2	2.0	5.7	1.4	1.9	23
2522	Office furniture, except wood	16.3	2.3	3.1	2.0	4.2	2.6	2.1	9
253	Public building and related furniture	9.7	.6	2.1	1.0	3.9	.9	1.3	14
2531	Public building and related furniture	9.7	.6	2.1	1.0	3.9	.9	1.3	14
254	Partitions and fixtures	25.3	1.3	6.0	1.5	11.6	2.4	2.5	7
2541	Wood partitions and fixtures	12.0	.5	3.1	.5	6.4	.7	.9	12
2542	Partitions and fixtures, except wood	13.3	.9	3.0	1.0	5.2	1.7	1.6	7
259	Miscellaneous furniture and fixtures	9.7	1.0	1.9	.9	4.3	.9	.7	12
2591	Drapery hardware and blinds and shades	3.9	.4	.8	.4	1.6	.4	.3	14
2599	Furniture and fixtures, n.e.c.	5.8	.5	1.1	.5	2.7	.5	.4	17
26	Paper and allied products	1 879.5	401.0	260.2	282.3	315.6	460.9	159.4	3
261	Pulp mills	198.7	63.3	24.0	41.1	19.8	43.2	7.2	7
2611	Pulp mills	198.7	63.3	24.0	41.1	19.8	43.2	7.2	7
262	Paper mills	859.9	193.4	123.0	114.3	119.5	227.4	82.2	5
2621	Paper mills	859.9	193.4	123.0	114.3	119.5	227.4	82.2	5
263	Paperboard mills	524.9	99.8	67.4	93.3	84.1	133.1	47.1	4
2631	Paperboard mills	524.9	99.8	67.4	93.3	84.1	133.1	47.1	4
265	Paperboard containers and boxes	66.8	4.1	13.9	5.2	25.8	8.4	9.3	11
2653	Corrugated and solid fiber boxes	31.0	2.6	6.1	.5	11.2	4.1	6.5	16
2655	Fiber cans, drums, and similar products	3.6	.1	1.1	.6	1.1	.4	.3	55
2656	Sanitary food containers	7.8	.1	2.1	.5	3.9	.4	.8	25
2657	Folding paperboard boxes	24.0	1.3	4.6	3.6	9.3	3.5	1.7	20
267	Miscellaneous converted paper products	229.3	40.4	31.8	28.3	66.4	48.8	13.5	8
2671	Paper coated and laminated, packaging	41.0	6.2	6.0	7.0	15.0	5.5	1.4	24
2672	Paper coated and laminated, n.e.c.	47.5	12.8	3.9	6.0	13.2	8.9	2.7	17
2673	Bags: plastics, laminated, and coated	20.3	3.2	2.5	2.2	7.6	3.7	1.0	23
2674	Bags: uncoated paper and multiwall	19.5	1.2	3.4	.9	4.4	8.2	1.3	57
2675	Die-cut paper and board	4.7	.6	.5	.3	2.5	.4	.5	44
2676	Sanitary paper products	73.3	13.9	11.3	10.5	14.8	18.8	3.8	1
2677	Envelopes	2.4	.1	.4	.1	.8	.3	.6	43
2678	Stationery products	3.2	.3	1.1	.2	.5	.5	.5	50
2679	Converted paper products, n.e.c.	17.5	1.9	2.6	1.2	7.6	2.4	1.8	27

Table 11a. Operating Costs by Industries for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
27	Printing and publishing	287.5	38.5	44.8	62.9	92.7	23.7	24.9	4
271	Newspapers	32.7	.5	3.5	1.1	20.7	1.7	5.2	10
2711	Newspapers	32.7	.5	3.5	1.1	20.7	1.7	5.2	10
272	Periodicals	3.3	.1	.2	.2	2.0	.3	.4	8
2721	Periodicals	3.3	.1	.2	.2	2.0	.3	.4	8
273	Books	23.6	2.7	4.2	3.5	8.2	1.6	3.4	7
2731	Book publishing	5.2	.4	.8	.6	1.9	.4	1.1	15
2732	Book printing	18.4	2.3	3.4	2.9	6.3	1.2	2.2	7
274	Miscellaneous publishing	2.6	.1	.5	.2	1.4	.2	.2	19
2741	Miscellaneous publishing	2.6	.1	.5	.2	1.4	.2	.2	19
275	Commercial printing	194.1	33.5	29.6	55.4	46.2	17.2	12.2	5
2752	Commercial printing, lithographic	124.3	22.6	19.6	29.5	34.4	9.3	8.8	6
2754	Commercial printing, gravure	51.5	9.7	7.2	21.4	4.0	7.2	2.1	10
2759	Commercial printing, n.e.c.	18.2	1.2	2.8	4.5	7.8	.6	1.3	14
276	Manifold business forms	12.7	.8	3.7	.7	5.1	1.3	1.1	11
2761	Manifold business forms	12.7	.8	3.7	.7	5.1	1.3	1.1	11
277	Greeting cards	4.3	.2	1.6	.1	1.5	.4	.5	3
2771	Greeting cards	4.3	.2	1.6	.1	1.5	.4	.5	3
278	Blankbooks and bookbinding	4.2	.1	.3	(Z)	3.1	.1	.5	12
2782	Blankbooks and looseleaf binders	3.1	(Z)	.3	(Z)	2.1	.1	.4	12
2789	Bookbinding and related work	1.1	(Z)	(Z)	(Z)	.9	—	.1	32
279	Printing trade services	10.1	.5	1.3	1.8	4.5	.9	1.2	10
2791	Typesetting	1.7	.1	.3	.2	.5	.2	.3	46
2796	Platemaking services	8.4	.4	1.0	1.5	3.9	.6	.9	7
28	Chemicals and allied products	4 566.9	849.7	875.1	609.6	941.0	1 099.2	192.3	2
281	Industrial inorganic chemicals	615.9	96.4	161.3	54.3	97.6	188.3	18.0	4
2812	Alkalies and chlorine	60.5	11.5	13.2	(D)	6.1	26.7	13.0	4
2813	Industrial gases	15.8	5.7	2.1	(D)	3.9	3.0	(D)	3
2816	Inorganic pigments	117.0	16.9	17.1	9.6	21.7	49.1	2.7	4
2819	Industrial inorganic chemicals, n.e.c.	422.6	62.3	128.8	42.4	65.9	109.5	13.5	6
282	Plastics materials and synthetics	861.3	178.2	153.4	101.3	194.2	214.0	20.2	5
2821	Plastics materials and resins	587.3	133.1	103.9	70.6	125.8	137.7	16.4	7
2822	Synthetic rubber	112.1	19.5	23.2	13.8	27.5	27.3	.9	4
2823	Cellulosic manmade fibers	57.9	9.1	10.2	6.5	(D)	20.3	(D)	3
2824	Organic fibers, noncellulosic	104.0	16.5	16.1	10.5	(D)	28.7	(D)	5
283	Drugs	372.7	75.9	66.5	36.4	95.6	70.0	28.3	5
2833	Medicinals and botanicals	119.1	28.1	26.2	16.5	20.4	22.5	5.5	9
2834	Pharmaceutical preparations	219.5	45.9	34.3	17.7	58.7	44.4	18.4	6
2835	Diagnostic substances	17.2	.7	3.7	1.3	7.8	2.1	1.6	29
2836	Biological products, except diagnostic	17.0	1.3	2.3	.9	8.7	1.1	2.7	15
284	Soaps, cleaners, and toilet goods	178.5	24.5	38.1	11.2	54.4	22.1	28.1	5
2841	Soap and other detergents	54.5	7.8	8.5	3.4	16.0	5.7	13.1	8
2842	Polishes and sanitation goods	13.4	1.2	2.8	.7	6.5	.6	1.6	19
2843	Surface active agents	63.1	11.5	15.5	5.7	12.8	12.2	5.4	2
2844	Toilet preparations	47.4	3.9	11.3	1.4	19.2	3.6	8.0	13
285	Paints and allied products	107.0	14.4	18.1	8.0	47.4	10.5	8.6	7
2851	Paints and allied products	107.0	14.4	18.1	8.0	47.4	10.5	8.6	7
286	Industrial organic chemicals	1 826.6	355.1	325.6	307.1	343.0	431.1	64.8	5
2861	Gum and wood chemicals	15.0	2.8	1.9	1.3	4.3	2.3	2.3	6
2865	Cyclic crudes and intermediates	309.1	52.2	48.6	43.9	71.6	66.3	26.5	5
2869	Industrial organic chemicals, n.e.c.	1 502.5	300.1	275.0	261.9	267.0	362.4	36.0	5
287	Agricultural chemicals	400.2	79.7	74.0	68.0	58.5	117.7	2.4	2
2873	Nitrogenous fertilizers	40.1	5.7	5.9	18.8	4.9	4.6	.2	4
2874	Phosphatic fertilizers	145.5	31.7	27.4	18.0	15.9	52.4	.1	2
2875	Fertilizers, mixing only	4.7	1.4	.6	1.2	.9	.5	.1	9
2879	Agricultural chemicals, n.e.c.	210.0	40.9	40.0	30.0	36.9	60.2	2.0	2
289	Miscellaneous chemical products	204.6	25.5	38.2	23.2	50.2	45.5	22.0	9
2891	Adhesives and sealants	52.0	3.7	11.7	10.9	13.2	9.2	3.4	33
2892	Explosives	15.9	.9	7.4	.8	3.0	3.6	.1	13
2893	Printing ink	11.4	.6	1.8	.6	5.7	1.6	1.0	24
2895	Carbon black	11.4	2.6	1.0	3.8	1.1	2.8	(Z)	31
2899	Chemical preparations, n.e.c.	114.0	17.7	16.4	7.0	27.2	28.3	17.4	5
29	Petroleum and coal products	2 914.9	526.3	463.6	630.3	438.1	820.6	36.1	4
291	Petroleum refining	2 842.3	518.6	453.3	615.0	417.5	810.2	27.7	4
2911	Petroleum refining	2 842.3	518.6	453.3	615.0	417.5	810.2	27.7	4
295	Asphalt paving and roofing materials	43.3	3.1	3.7	10.1	14.2	5.6	6.6	9
2951	Asphalt paving mixtures and blocks	4.1	.5	.7	.7	.9	.8	.4	30
2952	Asphalt felts and coatings	39.3	2.6	3.0	9.4	13.3	4.8	6.2	9
299	Miscellaneous petroleum and coal products	29.3	4.6	6.6	5.2	6.4	4.8	1.8	16
2992	Lubricating oils and greases	16.6	1.7	3.5	3.6	4.5	1.5	1.7	18
2999	Petroleum and coal products, n.e.c.	12.7	2.9	3.1	1.6	1.9	3.3	(Z)	27
30	Rubber and miscellaneous plastics products	439.6	36.1	61.0	48.0	176.9	61.3	56.2	4
301	Tires and inner tubes	46.5	2.1	8.2	10.4	17.8	3.5	4.6	11
3011	Tires and inner tubes	46.5	2.1	8.2	10.4	17.8	3.5	4.6	11
302	Rubber and plastics footwear	2.3	(Z)	.3	.2	1.2	.1	.4	—
3021	Rubber and plastics footwear	2.3	(Z)	.3	.2	1.2	.1	.4	—
305	Hose and belting and gaskets and packing	25.3	1.5	5.7	2.3	8.8	2.3	4.9	9
3052	Rubber and plastics hose and belting	13.4	.8	3.0	1.0	4.1	.8	3.8	8
3053	Gaskets, packing, and sealing devices	11.9	.7	2.7	1.3	4.7	1.5	1.1	15
306	Fabricated rubber products, n.e.c.	57.1	3.3	7.1	4.3	24.7	3.3	14.5	10
3061	Mechanical rubber goods	24.8	1.0	2.8	1.5	11.9	1.7	6.0	15
3069	Fabricated rubber products, n.e.c.	32.3	2.3	4.4	2.8	12.8	1.6	8.5	14

Table 11a. Operating Costs by Industries for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
30	Rubber and miscellaneous plastics products—Con.								
308	Miscellaneous plastics products, n.e.c. -----	308.3	29.3	39.8	30.8	124.4	52.2	31.8	5
3081	Unsupported plastics film and sheet -----	74.3	9.7	8.0	8.6	17.9	20.5	9.7	6
3082	Unsupported plastics profile shapes -----	11.7	.7	1.9	1.0	4.7	1.6	1.8	17
3083	Laminated plastics plate, sheet, and profile shapes -----	27.4	2.6	2.8	6.7	8.4	4.7	2.1	23
3084	Plastics pipe -----	5.3	.3	.8	.2	2.5	.2	1.2	31
3085	Plastics bottles -----	10.5	.5	.8	.8	7.3	.6	.5	29
3086	Plastics foam products -----	30.1	5.4	4.5	2.9	10.7	4.1	2.5	18
3087	Custom compounding of purchased plastics resins -----	26.5	1.2	3.9	1.9	14.9	2.9	1.7	22
3088	Plastics plumbing fixtures -----	3.9	—	.2	.1	.9	2.7	(Z)	72
3089	Plastics products, n.e.c. -----	118.7	8.9	16.8	8.7	57.2	14.8	12.3	8
31	Leather and leather products -----	60.1	6.9	8.2	3.5	10.1	15.3	16.1	12
311	Leather tanning and finishing -----	51.9	6.6	7.2	3.0	5.4	14.8	15.0	13
3111	Leather tanning and finishing -----	51.9	6.6	7.2	3.0	5.4	14.8	15.0	13
314	Footwear, except rubber -----	5.5	(Z)	.7	.3	3.5	.3	.7	37
3143	Men's footwear, except athletic -----	3.4	(Z)	.4	.1	2.5	.2	.2	58
316	Luggage -----	1.1	.1	.2	.1	.5	.1	.1	40
3161	Luggage -----	1.1	.1	.2	.1	.5	.1	.1	40
32	Stone, clay, and glass products -----	599.5	97.9	94.1	134.1	119.5	118.9	34.9	4
321	Flat glass -----	16.4	3.1	2.6	1.8	5.5	2.0	1.5	13
3211	Flat glass -----	16.4	3.1	2.6	1.8	5.5	2.0	1.5	13
322	Glass and glassware, pressed or blown -----	87.6	14.8	10.6	17.0	19.8	16.7	8.6	4
3221	Glass containers -----	24.9	5.9	1.6	4.7	5.4	4.6	2.7	8
3229	Pressed and blown glass, n.e.c. -----	62.7	8.9	9.0	12.4	14.4	12.1	5.9	4
323	Products of purchased glass -----	31.5	5.0	3.8	2.5	10.5	3.0	6.6	9
3231	Products of purchased glass -----	31.5	5.0	3.8	2.5	10.5	3.0	6.6	9
324	Cement, hydraulic -----	150.7	31.2	25.9	43.0	18.3	31.6	.8	5
3241	Cement, hydraulic -----	150.7	31.2	25.9	43.0	18.3	31.6	.8	5
325	Structural clay products -----	18.0	2.0	3.1	2.9	4.9	3.7	1.5	6
3251	Brick and structural clay tile -----	6.1	.9	1.2	.7	1.1	2.1	.2	13
3253	Ceramic wall and floor tile -----	6.4	.6	.9	.5	2.4	.9	1.1	4
3255	Clay refractories -----	5.2	.5	1.0	1.6	1.2	.6	.2	9
326	Pottery and related products -----	23.5	2.7	4.9	1.9	6.0	4.4	3.5	13
3261	Vitreous plumbing fixtures -----	6.2	.7	.8	.4	2.0	.9	1.3	2
3262	Vitreous china table and kitchenware -----	4.0	.4	1.5	.1	1.0	.5	.4	7
3263	Semivitreous table and kitchenware -----	1.6	.3	.4	.1	—	.8	—	84
3264	Porcelain electrical supplies -----	9.8	1.2	1.8	1.2	2.4	1.8	1.5	26
3269	Pottery products, n.e.c. -----	1.9	.2	.4	.1	.6	.3	.3	25
327	Concrete, gypsum, and plaster products -----	109.5	14.7	24.8	20.2	27.4	20.3	2.1	10
3271	Concrete block and brick -----	13.0	2.9	3.0	1.6	3.6	1.6	.3	29
3272	Concrete products, n.e.c. -----	19.0	2.7	4.9	2.6	6.1	2.3	.4	21
3273	Ready-mixed concrete -----	27.3	4.3	6.2	3.9	7.5	4.8	.7	18
3274	Lime -----	22.9	2.7	4.8	6.7	2.8	5.8	.2	26
3275	Gypsum products -----	27.3	2.2	6.0	5.5	7.3	5.9	.5	21
328	Cut stone and stone products -----	1.9	.2	.3	.2	.7	.4	.2	—
3281	Cut stone and stone products -----	1.9	.2	.3	.2	.7	.4	.2	—
329	Miscellaneous nonmetallic mineral products -----	160.3	24.2	18.2	44.6	26.4	36.9	10.1	10
3291	Abrasive products -----	35.7	8.2	2.3	3.5	4.5	13.7	3.6	13
3292	Asbestos products -----	4.0	.1	—	.5	2.8	.2	.5	98
3295	Minerals, ground or treated -----	23.1	5.8	2.9	7.8	3.0	3.3	.5	28
3296	Mineral wool -----	78.2	7.3	11.0	29.6	13.0	13.9	3.4	14
3297	Nonclay refractories -----	8.5	1.1	.7	2.0	1.5	1.7	1.4	33
3299	Nonmetallic mineral products, n.e.c. -----	10.8	1.7	1.3	1.3	1.7	4.1	.7	40
33	Primary metal industries -----	2 211.5	312.6	343.1	375.7	488.5	621.0	70.6	4
331	Blast furnace and basic steel products -----	1 219.2	163.3	167.3	199.1	277.9	380.6	31.0	6
3312	Blast furnaces and steel mills -----	1 099.7	155.1	148.1	185.4	226.2	360.8	24.1	7
3313	Electrometallurgical products -----	15.0	(D)	3.0	(D)	1.7	2.9	—	15
3315	Steel wire and related products -----	20.8	.9	3.5	1.3	9.2	3.9	2.0	23
3316	Cold finishing of steel shapes -----	58.7	3.8	9.5	5.3	26.9	10.6	2.6	7
3317	Steel pipe and tubes -----	25.0	(D)	3.2	(D)	13.9	2.4	2.2	22
332	Iron and steel foundries -----	280.5	32.0	45.1	64.7	77.4	45.3	16.0	4
3321	Gray and ductile iron foundries -----	228.0	27.7	37.4	51.1	61.6	39.1	11.1	5
3322	Malleable iron foundries -----	(D)	(Z)	(D)	(D)	(D)	(Z)	(D)	(X)
3324	Steel investment foundries -----	(D)	1.4	(D)	(D)	(D)	2.1	(D)	(X)
3325	Steel foundries, n.e.c. -----	33.3	2.9	4.8	8.4	11.2	4.1	1.9	8
333	Primary nonferrous metals -----	348.5	65.6	64.0	68.6	37.8	110.2	2.3	4
3331	Primary copper -----	131.9	26.8	19.2	31.1	9.2	45.4	.2	6
3334	Primary aluminum -----	152.1	27.0	30.6	28.2	18.5	46.3	1.6	5
3339	Primary nonferrous metals, n.e.c. -----	64.4	11.8	14.2	9.4	10.1	18.5	.5	5
334	Secondary nonferrous metals -----	81.7	16.5	11.5	17.6	14.0	21.2	1.0	6
3341	Secondary nonferrous metals -----	81.7	16.5	11.5	17.6	14.0	21.2	1.0	6
335	Nonferrous rolling and drawing -----	203.4	25.8	41.5	17.0	58.6	47.1	13.4	10
3351	Copper rolling and drawing -----	47.3	5.0	9.2	3.9	13.1	12.0	4.1	14
3353	Aluminum sheet, plate, and foil -----	59.1	10.5	10.6	7.6	17.6	10.9	1.9	14
3354	Aluminum extruded products -----	25.9	2.4	5.6	1.6	8.4	5.5	2.4	28
3355	Aluminum rolling and drawing, n.e.c. -----	4.0	1.0	.6	.3	.4	1.5	.3	47
3356	Nonferrous rolling and drawing, n.e.c. -----	44.7	5.3	12.0	2.1	8.2	14.9	2.2	31
3357	Nonferrous wire drawing and insulating -----	22.4	1.7	3.5	1.5	10.9	2.4	2.5	14
336	Nonferrous foundries (castings) -----	47.9	4.3	8.3	5.0	15.2	10.9	4.2	5
3363	Aluminum die-castings -----	19.6	2.0	3.7	2.1	4.4	6.4	1.2	7
3364	Nonferrous die-castings, except aluminum -----	5.8	.4	1.3	.7	1.4	1.4	.6	13
3365	Aluminum foundries -----	12.6	.7	1.5	.9	6.6	1.5	1.4	10
3366	Copper foundries -----	5.3	.9	.6	.7	2.3	.5	.3	18
3369	Nonferrous foundries, n.e.c. -----	4.6	.3	1.2	.8	.6	1.0	.7	11

Table 11a. Operating Costs by Industries for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
33	Primary metal industries—Con.								
339	Miscellaneous primary metal products.....	30.3	5.1	5.5	3.7	7.5	5.7	2.8	6
3398	Metal heat treating.....	11.7	2.1	2.0	.8	3.5	2.0	1.4	9
3399	Primary metal products, n.e.c.....	18.6	3.1	3.5	3.0	4.0	3.6	1.4	8
34	Fabricated metal products	786.1	72.3	171.2	86.9	244.8	135.3	75.6	4
341	Metal cans and shipping containers	69.7	12.0	10.8	16.0	14.1	9.8	7.1	6
3411	Metal cans	60.2	11.1	9.0	14.0	10.7	9.1	6.4	7
3412	Metal barrels, drums, and pails	9.5	.9	1.9	2.0	3.4	.6	.7	11
342	Cutlery, handtools, and hardware	61.4	5.1	13.0	8.1	18.4	10.9	6.0	10
3421	Cutlery	5.8	.8	.6	.7	2.5	.3	.9	23
3423	Hand and edge tools, n.e.c.....	14.1	1.6	2.9	2.3	4.1	2.2	1.1	21
3425	Saw blades and handsaws	6.1	.2	1.4	.7	2.7	.6	.5	40
3429	Hardware, n.e.c.....	35.5	2.6	8.0	4.5	9.1	7.9	3.5	14
343	Plumbing and heating, except electric	26.6	3.4	4.6	4.9	6.5	4.5	2.7	8
3431	Metal sanitary ware	8.8	(D)	1.3	2.7	1.1	1.6	(D)	12
3432	Plumbing fixture fittings and trim	14.5	1.6	2.8	2.1	4.0	2.4	1.6	12
3433	Heating equipment, except electric	3.3	(D)	.5	.2	1.4	.4	(D)	14
344	Fabricated structural metal products	75.8	5.1	10.8	3.0	36.1	12.7	8.1	11
3441	Fabricated structural metal	14.2	.8	2.4	1.1	5.9	3.0	1.0	19
3442	Metal doors, sash, and trim	14.4	1.9	1.5	.5	6.5	2.4	1.6	25
3443	Fabricated plate work (boiler shops)	20.7	1.0	2.9	.5	11.1	2.2	3.0	24
3444	Sheet metal work.....	13.6	.5	2.5	.7	6.9	2.3	.7	23
3446	Architectural metal work	2.6	.1	.1	(Z)	1.2	.3	.1	50
3448	Prefabricated metal buildings	3.7	.3	.7	.1	1.2	1.0	.3	44
3449	Miscellaneous metal work	6.6	.4	.7	.1	2.6	1.4	1.4	48
345	Screw machine products, bolts, etc.....	36.5	3.1	9.0	2.5	11.7	7.8	2.5	11
3451	Screw machine products	8.3	.6	2.6	.7	3.3	.7	.5	21
3452	Bolts, nuts, rivets, and washers	28.3	2.5	6.5	1.8	8.4	7.2	2.0	13
346	Metal forgings and stampings	92.9	11.7	19.3	5.9	31.6	14.5	9.8	10
3462	Iron and steel forgings	12.5	1.1	1.2	.9	4.9	2.3	2.1	25
3463	Nonferrous forgings.....	11.0	1.7	2.3	.2	3.5	1.7	1.7	42
3465	Automotive stampings	40.0	5.0	11.2	1.4	12.0	6.5	3.9	13
3466	Crowns and closures.....	3.1	.4	.5	.8	.7	.5	.2	57
3469	Metal stampings, n.e.c.....	26.4	3.6	4.2	2.5	10.6	3.5	2.0	14
347	Metal services, n.e.c.....	227.3	19.8	54.3	31.2	50.1	48.9	23.0	5
3471	Plating and polishing.....	151.9	12.4	38.1	16.8	31.1	35.8	17.8	5
3479	Metal coating and allied services	75.4	7.4	16.2	14.4	19.1	13.1	5.2	11
348	Ordnance and accessories, n.e.c.....	79.2	3.6	27.7	3.8	30.6	11.3	2.1	17
3482	Small arms ammunition	10.2	(D)	2.8	(D)	(D)	(D)	(D)	3
3483	Ammunition, except for small arms, n.e.c.	27.6	2.6	8.9	1.8	8.7	5.2	.5	46
3484	Small arms	7.5	(D)	1.5	.8	(D)	(D)	.7	26
3489	Ordnance and accessories, n.e.c.....	33.9	.2	14.5	(D)	15.7	2.6	(D)	8
349	Miscellaneous fabricated metal products	116.7	8.5	21.6	11.5	45.7	14.9	14.3	12
3491	Industrial valves	25.9	1.1	4.3	1.3	11.3	2.4	5.4	25
3492	Fluid power valves and hose fittings.....	10.8	.8	2.8	.5	4.0	1.2	1.6	23
3493	Steel springs, except wire	1.7	.1	.2	(Z)	.8	.5	.1	57
3494	Valves and pipe fittings, n.e.c.....	16.5	.9	2.8	2.6	6.0	2.2	1.8	39
3495	Wire springs	2.2	(Z)	.3	—	1.6	.2	(Z)	38
3496	Miscellaneous fabricated wire products.....	10.8	.5	2.5	.7	5.3	1.2	.7	37
3497	Metal foil and leaf	28.0	3.0	5.7	3.9	8.3	5.0	2.1	27
3498	Fabricated pipe and fittings	6.9	.5	1.1	.7	3.0	.9	.8	30
3499	Fabricated metal products, n.e.c.....	13.8	1.4	1.9	1.8	5.5	1.3	1.9	25
35	Industrial machinery and equipment	444.3	42.0	100.1	29.9	166.3	57.3	48.6	3
351	Engines and turbines	42.7	3.3	12.4	5.8	10.5	5.5	5.2	12
3511	Turbines and turbine generator sets	11.1	.6	2.8	1.0	3.7	1.6	1.4	9
3519	Internal combustion engines, n.e.c.....	31.6	2.7	9.6	4.8	6.7	3.9	3.8	15
352	Farm and garden machinery	35.2	3.2	8.1	3.5	10.0	6.7	3.8	8
3523	Farm machinery and equipment	24.7	1.9	6.5	2.8	7.4	3.8	2.3	10
3524	Lawn and garden equipment	10.6	1.3	1.6	.7	2.5	2.9	1.5	12
353	Construction and related machinery.....	55.6	6.7	13.8	3.2	20.6	6.5	4.8	7
3531	Construction machinery	35.4	5.5	9.6	2.0	11.8	4.7	1.8	7
3532	Mining machinery.....	3.6	.1	.6	.1	1.8	.3	.7	28
3533	Oil and gas field machinery	6.4	.7	1.6	.6	2.3	.4	.9	22
3534	Elevators and moving stairways	1.4	.1	.4	.1	.5	.1	.2	52
3535	Conveyors and conveying equipment	3.2	.1	.6	.1	1.5	.6	.3	32
3536	Hoists, cranes, and monorails	1.3	(Z)	.1	.1	.7	.1	.3	36
3537	Industrial trucks and tractors	4.1	.2	1.0	.2	1.9	.4	.5	34
354	Metalworking machinery	42.8	3.3	8.6	2.1	19.7	3.5	5.8	9
3541	Machine tools, metal cutting types	2.8	.1	.4	.1	1.7	.2	.3	21
3542	Machine tools, metal forming types	1.9	.1	.3	.1	1.0	.2	.2	28
3544	Special dies, tools, jigs, and fixtures	16.8	1.5	2.0	.5	10.4	.8	1.6	18
3545	Machine tool accessories	8.0	.3	2.6	.6	2.6	.9	1.0	20
3546	Power-driven handtools	4.5	.7	.9	.3	1.3	.4	1.0	21
3548	Welding apparatus.....	6.4	.6	2.0	.4	1.5	.8	1.2	12
3549	Metalworking machinery, n.e.c.....	1.2	.1	.3	(Z)	.6	.1	.2	32
355	Special industry machinery	27.0	2.3	4.1	.6	14.2	2.0	3.8	12
3552	Textile machinery.....	2.7	.2	.4	.1	1.2	.2	.6	33
3554	Paper industries machinery	5.3	.6	1.1	.2	1.6	1.0	.8	36
3555	Printing trades machinery	3.1	.3	.7	.1	1.7	.1	.3	20
3556	Food products machinery	2.0	.1	.3	.1	1.0	(Z)	.5	31
3559	Special industry machinery, n.e.c.....	13.2	1.1	1.6	.1	8.3	.5	1.6	17
356	General industrial machinery	57.4	2.5	12.6	3.1	26.9	6.5	5.7	10
3561	Pumps and pumping equipment	3.1	(Z)	1.1	.1	1.5	.2	.1	26
3562	Ball and roller bearings	20.1	1.0	4.4	1.3	7.4	3.9	2.1	17
3563	Air and gas compressors	4.3	.3	.7	.1	2.4	.2	.6	17
3564	Blowers and fans	5.3	.1	1.1	.1	2.9	.3	.7	30
3565	Packaging machinery	3.4	.1	.9	.1	1.6	.4	.3	31

Table 11a. Operating Costs by Industries for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
35	Industrial machinery and equipment—Con.								
356	General industrial machinery—Con.								
3566	Speed changers, drives, and gears	3.9	.2	1.2	.3	1.7	.3	.1	26
3567	Industrial furnaces and ovens	3.2	.2	.4	.4	1.8	.3	.3	41
3568	Power transmission equipment, n.e.c.	4.9	.1	1.3	.1	2.8	.4	.3	43
3569	General industrial machinery, n.e.c.	9.2	.6	1.6	.6	4.9	.5	1.1	35
357	Computer and office equipment	45.5	4.7	11.4	2.4	17.0	2.9	7.1	8
3571	Electronic computers	15.7	(D)	3.2	.8	7.3	(D)	2.6	15
3572	Computer storage devices	11.5	2.4	2.5	.4	3.5	.3	2.3	10
3577	Computer peripheral equipment, n.e.c.	12.4	(D)	4.1	.8	4.3	(D)	1.7	19
3578	Calculating and accounting equipment	1.3	—	.3	—	.8	(Z)	.2	69
3579	Office machines, n.e.c.	4.6	(D)	1.3	.4	1.0	(D)	.3	22
358	Refrigeration and service machinery	78.7	13.0	17.2	4.8	23.2	12.0	8.7	5
3581	Automatic vending machines	2.8	.1	1.3	.1	(D)	(D)	.5	50
3582	Commercial laundry equipment	1.4	(Z)	.1	.2	.8	.2	.1	49
3585	Refrigeration and heating equipment	67.5	12.5	14.7	3.9	18.8	10.3	7.3	5
3586	Measuring and dispensing pumps	1.0	(Z)	.3	(Z)	(D)	(D)	.1	19
3589	Service industry machinery, n.e.c.	5.9	.4	.7	.6	2.6	.9	.6	18
359	Industrial machinery, n.e.c.	59.4	3.0	12.0	4.4	24.5	11.7	3.8	11
3592	Carburetors, pistons, rings, and valves	12.9	.8	3.3	.6	4.4	2.4	1.2	19
3593	Fluid power cylinders and actuators	5.3	.4	1.6	.3	1.7	1.2	.2	25
3594	Fluid power pumps and motors	5.1	.2	1.1	.5	1.7	1.1	.5	25
3599	Industrial machinery, n.e.c.	35.5	1.6	5.8	3.1	16.3	7.0	1.9	15
36	Electronic and other electric equipment	771.9	93.3	178.7	92.1	199.7	126.9	81.2	4
361	Electric distribution equipment	18.7	2.1	4.5	1.0	6.6	2.1	2.4	12
3612	Transformers, except electronic	7.3	.9	1.7	.4	3.1	.6	.7	10
3613	Switchgear and switchboard apparatus	11.3	1.2	2.8	.6	3.5	1.6	1.7	19
362	Electrical industrial apparatus	69.0	5.4	11.1	17.2	21.6	7.2	6.4	17
3621	Motors and generators	18.2	1.1	3.2	1.2	8.2	1.6	2.9	12
3624	Carbon and graphite products	34.7	3.0	4.7	13.1	9.0	3.4	1.4	32
3625	Relays and industrial controls	13.7	1.1	2.9	2.6	3.5	1.9	1.8	16
3629	Electrical industrial apparatus, n.e.c.	2.3	.2	.3	.2	1.0	.3	.3	40
363	Household appliances	47.5	4.4	11.7	2.8	16.7	4.9	7.0	11
3631	Household cooking equipment	6.1	.7	1.4	.4	1.6	.8	1.2	22
3632	Household refrigerators and freezers	11.6	1.6	3.4	.5	3.9	.6	1.6	8
3633	Household laundry equipment	10.7	1.0	2.5	.9	3.1	1.7	1.6	27
3634	Electric housewares and fans	7.4	.2	1.5	.2	4.1	.4	.9	41
3635	Household vacuum cleaners	2.9	.2	.8	.2	1.2	.2	.3	38
3639	Household appliances, n.e.c.	8.8	.7	2.0	.6	2.8	1.2	1.4	22
364	Electric lighting and wiring equipment	58.1	4.1	17.1	2.5	18.9	8.4	6.9	12
3641	Electric lamp bulbs and tubes	9.3	.9	1.8	.6	3.7	1.1	1.3	27
3643	Current-carrying wiring devices	13.8	1.2	3.5	.6	3.8	3.2	1.4	38
3644	Noncurrent-carrying wiring devices	11.0	.4	2.2	.6	5.3	1.2	1.3	17
3645	Residential lighting fixtures	5.1	.3	1.4	.2	1.5	.9	.8	41
3646	Commercial lighting fixtures	1.9	.1	(D)	(D)	.6	.2	.3	41
3647	Vehicular lighting equipment	13.6	.7	(D)	(D)	2.8	1.1	1.5	10
3648	Lighting equipment, n.e.c.	3.2	.5	.6	.1	1.1	.6	.3	26
365	Household audio and video equipment	25.3	2.6	5.7	2.3	6.8	5.3	2.6	12
3651	Household audio and video equipment	18.0	2.2	3.3	1.7	4.0	4.6	2.2	15
3652	Prerecorded records and tapes	7.4	.4	2.4	.6	2.8	.8	.4	19
366	Communications equipment	38.0	2.8	12.1	1.2	13.3	3.5	4.9	10
3661	Telephone and telegraph apparatus	15.4	1.3	5.3	.3	5.1	1.5	1.9	4
3663	Radio and television communications equipment	19.5	1.4	6.3	.8	6.6	1.9	2.6	20
3669	Communications equipment, n.e.c.	3.0	.1	.6	.1	1.6	.2	.5	15
367	Electronic components and accessories	388.3	55.0	92.0	48.0	82.4	66.6	44.3	6
3671	Electron tubes	25.1	1.8	4.9	7.7	5.5	3.9	1.2	24
3672	Printed circuit boards	112.6	8.5	37.2	10.1	21.1	26.4	9.3	8
3674	Semiconductors and related devices	172.5	29.5	33.6	24.8	31.4	26.2	27.1	9
3675	Electronic capacitors	15.8	2.1	3.2	1.2	5.9	2.5	.9	36
3676	Electronic resistors	2.4	.2	.8	.3	.8	.1	.2	45
3678	Electronic connectors	8.4	.6	2.1	.6	1.9	2.5	.7	39
3679	Electronic components, n.e.c.	51.0	12.2	10.2	3.5	15.6	4.8	4.7	8
369	Miscellaneous electrical equipment and supplies	127.1	17.0	24.3	17.0	33.4	28.7	6.6	13
3691	Storage batteries	57.4	9.2	11.9	8.0	14.1	12.1	2.0	22
3692	Primary batteries, dry and wet	5.7	1.1	1.2	.7	1.3	1.1	.4	30
3694	Engine electrical equipment	26.1	1.3	4.7	5.3	8.2	5.1	1.5	28
3695	Magnetic and optical recording media	29.9	4.7	5.1	2.1	7.1	9.0	1.8	17
3699	Electrical equipment and supplies, n.e.c.	8.0	.6	1.5	1.0	2.5	1.5	.9	32
37	Transportation equipment	1 116.4	189.2	261.8	106.9	320.6	147.5	90.6	5
371	Motor vehicles and equipment	722.1	152.0	151.1	78.5	185.3	95.6	59.6	7
3711	Motor vehicles and car bodies	399.2	118.2	76.1	54.8	88.8	34.5	26.8	12
3713	Truck and bus bodies	8.9	.1	1.9	.4	3.7	1.3	1.5	23
3714	Motor vehicle parts and accessories	299.2	32.9	69.9	23.0	84.6	58.5	30.1	7
3715	Truck trailers	9.0	.5	2.3	.2	4.8	.5	.7	22
3716	Motor homes	5.8	.2	.9	.1	3.4	.8	.4	13
372	Aircraft and parts	239.5	23.1	65.8	19.5	83.4	25.4	22.2	8
3721	Aircraft	99.1	10.0	28.6	7.0	35.5	8.6	9.5	14
3724	Aircraft engines and engine parts	60.7	8.5	16.8	5.6	18.6	6.2	5.0	16
3728	Aircraft parts and equipment, n.e.c.	79.6	4.6	20.5	6.8	29.3	10.7	7.7	8
373	Ship and boat building and repairing	61.3	7.3	16.7	3.2	20.0	9.7	4.4	10
3731	Ship building and repairing	43.1	5.9	12.6	1.3	12.8	7.6	3.0	10
3732	Boat building and repairing	18.2	1.4	4.1	1.9	7.3	2.1	1.4	24
374	Railroad equipment	9.2	.3	1.5	.6	4.6	.9	1.3	10
3743	Railroad equipment	9.2	.3	1.5	.6	4.6	.9	1.3	10
375	Motorcycles, bicycles, and parts	6.6	.9	1.8	.5	1.9	1.1	.3	13
3751	Motorcycles, bicycles, and parts	6.6	.9	1.8	.5	1.9	1.1	.3	13

Table 11a. Operating Costs by Industries for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No industries are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Industry	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
37	Transportation equipment—Con.								
376	Guided missiles, space vehicles, parts -----	55.4	3.9	19.8	2.0	18.4	9.6	1.6	9
3761	Guided missiles and space vehicles -----	30.5	1.4	9.2	1.5	12.9	4.2	1.2	7
3764	Space propulsion units and parts -----	21.3	2.1	9.4	.4	3.6	5.4	.4	16
3769	Space vehicle equipment, n.e.c. -----	3.7	.4	1.1	.1	2.0	—	(Z)	82
379	Miscellaneous transportation equipment -----	22.3	1.7	5.0	2.5	6.9	5.1	1.1	11
3792	Travel trailers and campers -----	7.4	.2	1.5	1.0	3.0	1.2	.4	30
3795	Tanks and tank components -----	(D)	(D)	(D)	(D)	1.2	(D)	.2	(X)
3799	Transportation equipment, n.e.c. -----	(D)	(D)	(D)	(D)	2.7	(D)	.6	(X)
38	Instruments and related products -----	311.6	42.9	75.0	18.0	94.2	52.9	28.6	6
381	Search and navigation equipment -----	64.0	8.0	17.3	3.6	20.9	7.1	6.9	9
3812	Search and navigation equipment -----	64.0	8.0	17.3	3.6	20.9	7.1	6.9	9
382	Measuring and controlling devices -----	51.1	3.0	10.1	1.7	21.7	7.8	6.8	14
3821	Laboratory apparatus and furniture -----	2.0	.1	.2	.1	.8	.2	.5	39
3822	Environmental controls -----	5.7	.2	1.6	.1	2.3	.6	1.0	25
3823	Process control instruments -----	6.2	.1	1.5	.1	2.6	.4	1.5	30
3824	Fluid meters and counting devices -----	6.3	.8	1.6	.3	2.1	1.1	.5	20
3825	Instruments to measure electricity -----	7.8	.3	1.2	.5	3.2	1.6	1.1	22
3826	Analytical instruments -----	7.9	.5	1.8	.3	3.1	1.4	.8	20
3827	Optical instruments and lenses -----	1.9	(Z)	.6	(Z)	.9	(Z)	.2	32
3829	Measuring and controlling devices, n.e.c. -----	13.2	.8	1.7	.2	6.6	2.7	1.2	45
384	Medical instruments and supplies -----	58.3	11.3	11.5	3.3	18.7	6.0	7.5	13
3841	Surgical and medical instruments -----	20.1	6.0	3.7	1.0	5.9	.7	2.8	27
3842	Surgical appliances and supplies -----	24.4	4.2	4.2	1.8	8.4	3.0	2.8	20
3843	Dental equipment and supplies -----	3.0	.4	.7	.1	1.2	.3	.3	42
3844	X-ray apparatus and tubes -----	7.6	.4	1.7	.3	2.0	1.8	1.3	17
3845	Electromedical equipment -----	3.2	.3	1.1	(Z)	1.3	.2	.3	30
385	Ophthalmic goods -----	7.8	.6	1.8	.2	2.4	1.2	1.4	17
3851	Ophthalmic goods -----	7.8	.6	1.8	.2	2.4	1.2	1.4	17
386	Photographic equipment and supplies -----	128.7	19.9	34.0	9.1	30.1	29.9	5.7	10
3861	Photographic equipment and supplies -----	128.7	19.9	34.0	9.1	30.1	29.9	5.7	10
387	Watches, clocks, watchcases, and parts -----	1.8	.1	.2	.1	.4	.8	.3	2
3873	Watches, clocks, watchcases, and parts -----	1.8	.1	.2	.1	.4	.8	.3	2
39	Miscellaneous manufacturing industries -----	95.7	10.0	17.7	11.8	31.5	13.8	10.8	6
391	Jewelry, silverware, and plated ware -----	9.3	.9	1.6	1.2	2.6	2.0	1.0	13
3911	Jewelry, precious metal -----	3.3	.4	.5	(D)	1.2	(D)	.5	16
3914	Silverware and plated ware -----	3.5	.2	.5	(D)	.8	(D)	.2	7
3915	Jewelers' materials and lapidary work -----	2.5	.3	.6	.2	.6	.5	.3	43
393	Musical instruments -----	2.3	.2	.4	.4	.7	.4	.2	8
3931	Musical instruments -----	2.3	.2	.4	.4	.7	.4	.2	8
394	Toys and sporting goods -----	17.4	.9	3.9	1.2	7.3	1.5	2.6	10
3944	Games, toys, and children's vehicles -----	4.3	.1	1.1	.3	1.9	.3	.6	16
3949	Sporting and athletic goods, n.e.c. -----	12.9	.8	2.8	.8	5.3	1.2	2.0	12
395	Pens, pencils, office, and art supplies -----	10.3	1.2	2.3	.8	4.6	.9	.5	14
3951	Pens and mechanical pencils -----	2.8	.5	.6	.3	1.0	.2	.2	11
3952	Lead pencils and art goods -----	2.9	.2	.7	.2	1.4	.3	.2	18
3953	Marking devices -----	1.4	.1	.8	.1	.3	.1	(Z)	75
3955	Carbon paper and inked ribbons -----	3.1	.3	.3	.3	1.9	.3	.1	20
396	Costume jewelry and notions -----	14.0	2.1	2.7	1.8	3.4	2.5	1.5	18
3961	Costume jewelry -----	4.4	.3	1.1	.6	.9	1.0	.6	13
3965	Fasteners, buttons, needles, and pins -----	9.6	1.9	1.6	1.3	2.5	1.5	.9	25
399	Miscellaneous manufactures -----	42.5	4.7	6.9	6.5	12.8	6.6	5.0	9
3991	Brooms and brushes -----	1.5	.1	.3	.1	.6	.3	.1	45
3993	Signs and advertising specialties -----	8.0	.6	1.6	.8	3.1	1.0	.9	28
3995	Burial caskets -----	1.8	.2	(D)	.1	.5	.5	(D)	33
3996	Hard surface floor coverings, n.e.c. -----	17.6	2.8	(D)	4.4	3.7	2.4	(D)	5
3999	Manufacturing industries, n.e.c. -----	13.6	1.0	2.9	1.0	5.0	2.4	1.3	18

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
	United States¹ -----	18 772.0	2 952.0	3 264.3	2 762.0	4 142.7	4 033.6	1 617.3	1
20	Food and kindred products -----	1 447.6	140.2	185.2	133.4	267.6	182.3	538.9	4
21	Tobacco products -----	35.9	10.5	8.4	3.9	4.7	2.4	6.1	10
22	Textile mill products -----	315.7	27.4	40.5	36.6	62.8	35.6	112.8	5
24	Lumber and wood products -----	342.8	39.6	52.7	68.3	119.2	43.4	19.5	5
25	Furniture and fixtures -----	144.4	15.4	23.0	27.8	49.0	15.3	14.0	6
26	Paper and allied products -----	1 879.5	401.0	260.2	282.3	315.6	460.9	159.4	3
27	Printing and publishing -----	287.5	38.5	44.8	62.9	92.7	23.7	24.9	4
28	Chemicals and allied products -----	4 566.9	849.7	875.1	609.6	941.0	1 099.2	192.3	2
29	Petroleum and coal products -----	2 914.9	526.3	463.6	630.3	438.1	820.6	36.1	4
30	Rubber and miscellaneous plastics products -----	439.6	36.1	61.0	48.0	176.9	61.3	56.2	4

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
31	Leather and leather products	60.1	6.9	8.2	3.5	10.1	15.3	16.1	12
32	Stone, clay, and glass products	599.5	97.9	94.1	134.1	119.5	118.9	34.9	4
33	Primary metal industries	2 211.5	312.6	343.1	375.7	488.5	621.0	70.6	4
34	Fabricated metal products	786.1	72.3	171.2	86.9	244.8	135.3	75.6	4
35	Industrial machinery and equipment	444.3	42.0	100.1	29.9	166.3	57.3	48.6	3
36	Electronic and other electric equipment	771.9	93.3	178.7	92.1	199.7	126.9	81.2	4
37	Transportation equipment	1 116.4	189.2	261.8	106.9	320.6	147.5	90.6	5
38	Instruments and related products	311.6	42.9	75.0	18.0	94.2	52.9	28.6	6
39	Miscellaneous manufacturing industries	95.7	10.0	17.7	11.8	31.5	13.8	10.8	6
	Alabama	437.3	90.6	59.5	78.9	86.4	100.5	21.6	8
20	Food and kindred products	15.6	2.0	1.8	2.0	1.4	3.0	5.4	18
22	Textile mill products	10.4	1.5	1.5	1.1	1.5	.5	4.3	19
24	Lumber and wood products	11.6	1.1	2.4	1.3	5.0	1.3	.4	22
25	Furniture and fixtures	3.7	.4	.2	.3	2.0	.3	.5	31
26	Paper and allied products	102.4	25.9	12.0	17.9	17.0	28.1	1.5	6
28	Chemicals and allied products	157.6	38.8	22.3	25.5	26.6	43.3	1.2	20
29	Petroleum and coal products	1.6	.2	.1	.4	.5	.3	.2	29
30	Rubber and miscellaneous plastics products	17.8	.9	1.5	7.3	3.8	1.7	2.5	22
32	Stone, clay, and glass products	8.8	1.9	1.4	1.9	1.6	1.8	.2	23
33	Primary metal industries	62.6	13.9	7.1	13.1	11.3	14.6	2.5	6
34	Fabricated metal products	11.0	.4	2.7	2.5	3.4	1.8	.3	39
35	Industrial machinery and equipment	9.3	2.0	2.5	.2	2.9	.9	.8	25
36	Electronic and other electric equipment	12.4	.8	2.1	(D)	3.3	(D)	.7	7
37	Transportation equipment	8.7	.2	1.0	(D)	5.1	(D)	.8	33
39	Miscellaneous manufacturing industries	2.4	.3	.8	.4	.2	.5	.2	65
	Alaska	21.2	6.7	3.0	4.7	3.9	.7	2.2	33
20	Food and kindred products	(D)	.5	(D)	.3	(D)	(D)	2.1	(X)
26	Paper and allied products	13.7	6.1	1.8	4.3	1.4	—	.1	46
28	Chemicals and allied products	(D)	(Z)	(D)	—	(D)	(D)	—	(X)
	Arizona	145.6	20.3	27.4	28.2	25.1	34.3	10.2	7
20	Food and kindred products	6.1	.6	.8	.1	1.7	.4	2.6	35
26	Paper and allied products	10.8	1.7	.8	.9	2.6	4.5	.3	46
27	Printing and publishing	2.8	.5	.3	.7	.2	.9	.2	32
28	Chemicals and allied products	6.8	.7	2.1	.7	1.2	1.3	.8	44
32	Stone, clay, and glass products	10.7	1.4	1.7	5.5	.8	1.2	.1	35
33	Primary metal industries	(D)	(D)	(D)	(D)	4.6	(D)	.1	(X)
34	Fabricated metal products	8.0	.7	1.9	.7	2.2	1.5	.9	29
35	Industrial machinery and equipment	1.3	.1	.3	.1	.4	.2	.1	62
36	Electronic and other electric equipment	23.7	3.0	6.3	2.9	3.4	4.3	3.9	10
37	Transportation equipment	18.9	.4	4.5	5.3	5.8	2.2	.8	31
38	Instruments and related products	(D)	(D)	(D)	(D)	1.0	(D)	(D)	(X)
39	Miscellaneous manufacturing industries	1.1	(Z)	.3	(Z)	.3	.5	(Z)	18
	Arkansas	247.2	40.1	40.9	34.9	57.8	56.9	16.7	10
20	Food and kindred products	31.6	5.3	5.7	5.0	4.3	3.4	7.9	18
22	Textile mill products	7.2	1.1	1.3	.6	1.6	1.6	1.1	64
24	Lumber and wood products	16.0	1.8	2.8	4.9	.9	.4	.4	18
25	Furniture and fixtures	2.4	.2	.8	.1	.5	.2	.2	7
26	Paper and allied products	57.8	15.4	5.8	9.0	15.1	11.9	.6	6
27	Printing and publishing	1.1	(D)	(D)	(D)	.6	(Z)	.1	13
28	Chemicals and allied products	74.1	8.3	16.9	7.5	10.0	30.8	.6	31
30	Rubber and miscellaneous plastics products	4.6	.3	.5	.2	2.0	.2	1.3	13
32	Stone, clay, and glass products	8.1	1.4	.9	3.0	1.1	1.6	(Z)	45
33	Primary metal industries	18.4	4.2	1.0	1.8	8.3	2.5	.5	24
34	Fabricated metal products	10.0	1.4	1.6	.7	3.2	2.1	1.1	24
35	Industrial machinery and equipment	3.6	.1	1.1	.5	1.1	.3	.6	27
36	Electronic and other electric equipment	7.3	(D)	(D)	(D)	3.2	.2	1.2	24
37	Transportation equipment	2.6	(Z)	.3	(Z)	1.4	(D)	(D)	46
38	Instruments and related products	1.8	.2	.4	.2	.1	(D)	(D)	24
	California	1 632.0	215.6	281.7	276.8	366.0	351.9	139.9	6
20	Food and kindred products	133.1	13.3	14.7	9.7	18.4	10.5	66.4	11
22	Textile mill products	13.0	.8	1.4	1.8	3.8	.6	4.6	32
24	Lumber and wood products	39.1	2.7	5.6	6.5	16.7	6.7	.9	8
25	Furniture and fixtures	15.0	1.5	3.7	2.2	4.2	2.4	1.1	16
26	Paper and allied products	62.8	12.1	6.7	6.7	13.0	14.8	9.4	21
27	Printing and publishing	35.1	3.9	6.8	7.0	10.8	3.8	2.7	13
28	Chemicals and allied products	130.2	16.8	21.2	16.3	41.3	27.2	7.4	15
29	Petroleum and coal products	670.5	92.9	101.9	159.5	112.6	194.9	8.7	11
30	Rubber and miscellaneous plastics products	30.2	4.2	4.9	4.3	8.6	5.1	3.2	19
32	Stone, clay, and glass products	67.6	13.4	10.5	21.5	8.1	12.6	1.6	8
33	Primary metal industries	39.3	5.7	6.9	4.3	10.0	9.6	2.8	9
34	Fabricated metal products	94.7	10.2	21.2	12.9	25.9	18.4	6.1	15
35	Industrial machinery and equipment	27.8	2.5	6.1	2.0	11.0	2.7	3.6	12
36	Electronic and other electric equipment	130.9	18.7	28.5	13.6	36.4	22.2	11.4	11
37	Transportation equipment	102.2	13.7	31.8	6.5	31.5	12.7	6.1	9
38	Instruments and related products	31.6	2.3	8.0	1.4	11.0	6.1	2.9	14
39	Miscellaneous manufacturing industries	7.9	.9	1.8	.5	2.6	1.3	.7	13
	Colorado	109.9	16.4	17.8	7.5	39.2	20.2	8.7	22
20	Food and kindred products	30.7	4.1	4.5	2.0	6.4	8.4	5.3	9
24	Lumber and wood products	1.2	(D)	(D)	.1	.1	(D)	.1	22
27	Printing and publishing	2.5	.2	.5	.3	1.1	.1	.4	29
28	Chemicals and allied products	7.4	(D)	(D)	.9	3.2	(D)	.2	40
29	Petroleum and coal products	27.6	5.2	2.1	.9	16.6	2.7	(Z)	83
30	Rubber and miscellaneous plastics products	1.8	.1	.5	.1	.5	.2	.4	57
32	Stone, clay, and glass products	6.1	1.3	.9	1.3	1.3	1.0	.4	21
33	Primary metal industries	7.4	.5	.7	.6	3.6	2.0	.1	60
34	Fabricated metal products	2.6	.1	1.0	.2	.4	.7	.1	39
35	Industrial machinery and equipment	4.6	(D)	1.0	.4	.8	(D)	.5	20

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
Colorado—Con.									
36	Electronic and other electric equipment	6.0	.5	1.6	.5	1.2	1.2	1.1	39
37	Transportation equipment	6.0	.2	2.1	.2	2.5	1.0	—	23
38	Instruments and related products	4.3	(D)	.9	(Z)	.6	(D)	.1	11
Connecticut		187.7	21.1	41.4	15.0	70.6	25.9	13.7	10
20	Food and kindred products	6.8	.1	.7	(D)	(D)	.1	4.8	65
22	Textile mill products	1.8	.1	.4	.1	.5	.1	.6	52
25	Furniture and fixtures	1.0	.2	.2	(D)	(D)	.1	(D)	30
26	Paper and allied products	19.5	2.3	4.4	1.8	7.4	2.3	1.4	32
27	Printing and publishing	5.5	.5	.5	.6	3.4	.3	.2	30
28	Chemicals and allied products	31.7	6.8	7.2	4.2	6.6	5.6	1.3	15
30	Rubber and miscellaneous plastics products	7.7	.3	1.0	.4	4.2	1.5	.4	35
32	Stone, clay, and glass products	2.4	.3	.8	.3	.9	.2	(Z)	54
33	Primary metal industries	6.5	.6	.9	.4	3.4	.7	.4	23
34	Fabricated metal products	26.2	3.1	6.2	2.1	9.6	3.8	1.4	18
35	Industrial machinery and equipment	9.4	.3	1.9	(D)	4.6	1.6	(D)	21
36	Electronic and other electric equipment	12.1	.7	3.5	1.1	4.0	2.1	.7	37
37	Transportation equipment	50.1	5.4	11.7	3.1	21.6	6.8	1.4	27
38	Instruments and related products	3.4	.3	1.0	.1	1.2	.2	.6	25
39	Miscellaneous manufacturing industries	2.7	.1	.6	.1	1.8	(Z)	.1	35
Delaware		158.0	23.3	40.7	15.0	16.2	47.3	15.5	6
20	Food and kindred products	14.6	1.7	1.6	1.8	2.0	2.5	5.1	33
27	Printing and publishing	1.1	.1	.4	.2	.2	—	.2	77
28	Chemicals and allied products	42.8	13.1	4.8	2.8	7.8	6.2	8.0	18
29	Petroleum and coal products	(D)	(D)	(D)	(D)	(D)	(D)	—	(X)
30	Rubber and miscellaneous plastics products	2.1	.1	.2	(D)	1.0	.1	(D)	33
37	Transportation equipment	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
38	Instruments and related products	1.2	.1	.3	.1	.6	—	.2	47
District of Columbia		5.8	.2	.3	.2	4.8	(Z)	.3	16
27	Printing and publishing	5.4	.1	.2	.2	4.6	(Z)	.3	16
Florida		350.7	60.9	57.9	51.7	63.6	77.3	39.2	4
20	Food and kindred products	64.3	4.2	10.0	7.6	12.2	14.3	16.0	9
22	Textile mill products	1.3	.1	.1	.2	.2	.1	.6	63
24	Lumber and wood products	5.7	.6	.8	1.0	2.3	.7	.4	27
25	Furniture and fixtures	2.3	.3	.5	.4	.8	.1	.2	34
26	Paper and allied products	94.7	19.3	15.1	16.0	9.7	23.5	11.1	4
27	Printing and publishing	9.1	.7	1.3	2.7	2.7	.5	1.1	26
28	Chemicals and allied products	100.2	29.8	15.2	16.1	10.7	26.5	2.0	7
29	Petroleum and coal products	1.9	.2	.2	.4	.5	.6	.1	37
30	Rubber and miscellaneous plastics products	3.4	.1	.5	.2	1.7	.2	.9	41
32	Stone, clay, and glass products	15.1	1.7	3.1	3.6	2.6	2.6	1.4	18
33	Primary metal industries	6.9	.7	1.7	.7	2.6	1.0	.2	46
34	Fabricated metal products	13.1	1.6	2.3	.9	4.5	2.9	.9	24
35	Industrial machinery and equipment	2.8	.1	.4	.1	1.3	.4	.4	36
36	Electronic and other electric equipment	11.7	.5	2.4	1.3	3.6	2.4	1.6	20
37	Transportation equipment	12.3	.7	2.7	.3	6.0	1.2	1.4	24
38	Instruments and related products	5.3	.4	1.5	.1	2.0	.4	.8	14
Georgia		455.0	71.9	73.0	58.8	93.2	96.2	62.0	4
20	Food and kindred products	55.2	4.5	11.1	4.0	7.6	9.3	18.5	18
21	Tobacco products	(D)	(D)	(D)	.6	(D)	(D)	(D)	(X)
22	Textile mill products	42.8	5.0	3.7	4.1	8.3	5.6	16.1	11
24	Lumber and wood products	18.3	2.9	2.9	2.7	5.2	2.1	2.5	16
25	Furniture and fixtures	1.7	.1	.4	.1	.9	.1	.1	35
26	Paper and allied products	135.9	33.8	20.2	22.0	20.0	29.5	10.4	7
27	Printing and publishing	6.7	1.0	1.0	1.1	1.8	1.2	.6	14
28	Chemicals and allied products	65.7	11.0	9.5	7.0	16.9	18.8	2.6	8
29	Petroleum and coal products	(D)	(D)	(D)	.4	(D)	(D)	(D)	(X)
30	Rubber and miscellaneous plastics products	12.8	1.1	1.0	.9	2.8	6.4	.7	31
32	Stone, clay, and glass products	19.2	2.7	2.8	6.2	3.6	2.9	1.0	12
33	Primary metal industries	22.0	2.7	3.9	1.3	6.5	5.4	2.2	20
34	Fabricated metal products	10.6	.8	1.9	1.7	3.6	1.5	1.1	15
35	Industrial machinery and equipment	5.0	.6	1.1	.2	1.4	1.4	.4	21
36	Electronic and other electric equipment	19.2	1.8	4.3	2.1	3.5	6.2	1.3	36
37	Transportation equipment	23.9	1.2	6.0	4.1	7.6	3.7	1.4	17
38	Instruments and related products	3.9	.3	1.7	(Z)	.5	.1	1.3	57
39	Miscellaneous manufacturing industries	6.0	1.6	.9	.3	1.2	1.2	.8	39
Hawaii		20.3	3.8	3.5	3.0	5.4	3.4	1.2	59
20	Food and kindred products	2.8	.2	.4	(D)	(D)	.4	1.1	74
29	Petroleum and coal products	14.8	3.2	2.6	2.3	4.2	2.5	—	80
32	Stone, clay, and glass products	1.7	.2	.4	(D)	(D)	.3	—	22
Idaho		79.9	14.3	23.6	8.4	9.6	15.0	9.0	9
20	Food and kindred products	19.5	2.6	3.1	1.6	1.7	3.7	6.9	18
24	Lumber and wood products	6.0	.8	(D)	1.2	1.5	1.3	(D)	14
26	Paper and allied products	(D)	(D)	(D)	(D)	—	(D)	(Z)	(X)
28	Chemicals and allied products	33.3	5.4	14.6	3.7	(D)	(D)	(Z)	17
35	Industrial machinery and equipment	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
36	Electronic and other electric equipment	11.2	3.1	3.1	1.0	1.0	1.9	1.2	20
Illinois		866.3	129.3	157.5	135.4	209.9	165.3	68.8	4
20	Food and kindred products	74.6	7.1	8.7	5.0	18.9	12.2	22.6	14
24	Lumber and wood products	3.9	.2	.5	.4	2.0	.7	.3	26
25	Furniture and fixtures	6.7	.3	1.0	.7	3.5	.6	.7	26
26	Paper and allied products	33.1	6.8	4.8	4.3	9.5	6.3	1.4	22
27	Printing and publishing	23.8	3.8	3.2	5.1	7.8	2.3	1.7	12

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
Illinois—Con.									
28	Chemicals and allied products.....	170.2	24.8	28.7	16.5	41.7	35.9	22.5	11
29	Petroleum and coal products.....	204.2	36.1	46.8	55.3	18.1	46.2	1.6	6
30	Rubber and miscellaneous plastics products.....	19.2	1.0	2.9	1.8	9.5	2.0	2.0	12
32	Stone, clay, and glass products.....	16.1	3.0	2.3	2.7	4.3	3.5	.2	22
33	Primary metal industries.....	147.8	27.0	23.9	25.8	36.7	31.4	3.0	11
34	Fabricated metal products.....	61.3	4.3	13.3	9.6	20.0	9.4	4.7	11
35	Industrial machinery and equipment.....	38.8	5.1	9.4	2.4	12.2	6.7	2.9	8
36	Electronic and other electric equipment.....	23.6	1.8	5.0	1.3	9.9	3.4	2.2	16
37	Transportation equipment.....	30.1	7.0	4.8	3.5	10.6	3.1	1.2	20
38	Instruments and related products.....	7.7	.7	1.7	.3	3.7	.6	.7	33
39	Miscellaneous manufacturing industries.....	3.6	.2	.7	.6	1.3	.4	.4	17
	Indiana	729.6	125.1	121.7	93.2	181.7	150.9	56.9	3
20	Food and kindred products.....	33.4	3.7	3.1	2.7	5.0	2.6	16.3	11
22	Textile mill products.....	1.9	(Z)	.2	.1	.4	.8	.4	46
24	Lumber and wood products.....	8.2	.7	1.1	.5	5.2	.4	.4	18
25	Furniture and fixtures.....	4.9	.5	.6	.6	2.5	.4	.3	26
26	Paper and allied products.....	13.1	.9	2.7	1.5	3.8	3.3	.8	35
27	Printing and publishing.....	(D)	(D)	(D)	(D)	3.2	(D)	.4	(X)
28	Chemicals and allied products.....	129.6	38.8	24.8	23.4	16.8	18.1	7.7	8
29	Petroleum and coal products.....	(D)	(D)	(D)	(D)	9.5	(D)	.2	(X)
30	Rubber and miscellaneous plastics products.....	29.5	2.2	4.9	2.9	13.0	3.5	3.1	18
31	Leather and leather products.....	1.2	.3	(Z)	.1	.4	(Z)	.4	72
32	Stone, clay, and glass products.....	16.7	1.9	2.2	1.8	7.1	2.9	1.0	16
33	Primary metal industries.....	279.9	36.5	34.4	34.5	71.5	92.1	11.0	3
34	Fabricated metal products.....	37.4	3.7	7.0	3.4	11.6	7.4	4.3	11
35	Industrial machinery and equipment.....	13.2	.8	3.0	.5	5.6	1.6	1.6	10
36	Electronic and other electric equipment.....	25.0	1.6	11.4	1.4	6.4	1.9	2.4	8
37	Transportation equipment.....	62.4	5.7	15.4	5.7	18.4	11.3	6.0	15
38	Instruments and related products.....	4.6	.6	1.3	.3	1.2	.8	.4	56
39	Miscellaneous manufacturing industries.....	1.0	.1	.1	(D)	.2	(D)	.2	11
	Iowa	220.3	24.4	39.5	29.2	61.9	34.6	30.8	9
20	Food and kindred products.....	62.3	8.4	5.8	10.9	10.7	7.8	18.7	9
24	Lumber and wood products.....	2.2	.7	(D)	(D)	.5	(D)	(Z)	19
25	Furniture and fixtures.....	(D)	(D)	.2	.3	.3	(D)	.2	(X)
26	Paper and allied products.....	7.7	1.5	.4	1.1	2.6	1.3	.8	35
27	Printing and publishing.....	3.1	.6	.6	(D)	.8	.1	(D)	17
28	Chemicals and allied products.....	35.6	3.7	8.4	3.7	11.4	6.1	2.2	17
30	Rubber and miscellaneous plastics products.....	5.3	.2	.8	.2	2.9	.4	.9	28
32	Stone, clay, and glass products.....	6.8	.7	1.6	1.8	.7	1.8	.2	20
33	Primary metal industries.....	25.0	1.6	5.4	4.9	8.4	2.3	2.4	35
34	Fabricated metal products.....	10.6	.1	1.6	.4	5.4	1.1	2.0	41
35	Industrial machinery and equipment.....	23.7	1.5	8.5	2.5	7.8	1.9	1.5	6
36	Electronic and other electric equipment.....	20.7	3.1	3.6	1.9	5.7	4.9	1.4	33
37	Transportation equipment.....	13.9	1.3	1.6	.1	4.3	6.4	.2	77
38	Instruments and related products.....	(D)	(D)	(D)	(D)	(Z)	(D)	(D)	(X)
	Kansas	126.0	17.0	30.4	23.6	27.3	18.2	9.4	14
20	Food and kindred products.....	10.8	1.0	1.3	1.4	3.1	1.2	2.8	16
24	Lumber and wood products.....	2.8	(Z)	.4	.1	1.9	.1	.3	56
26	Paper and allied products.....	4.9	(Z)	.7	(D)	1.3	2.3	(D)	64
27	Printing and publishing.....	4.1	.4	1.4	.5	1.1	.2	.4	28
28	Chemicals and allied products.....	19.9	5.8	4.8	2.0	3.1	3.5	.7	18
29	Petroleum and coal products.....	26.0	1.2	10.7	9.2	1.2	3.3	.5	55
30	Rubber and miscellaneous plastics products.....	7.0	.4	1.0	(D)	3.5	1.0	(D)	23
32	Stone, clay, and glass products.....	11.3	2.6	1.9	2.5	1.3	2.2	.7	25
33	Primary metal industries.....	3.0	.3	.7	.8	.6	.6	.1	45
34	Fabricated metal products.....	1.2	.1	.1	.1	.4	.5	.1	58
35	Industrial machinery and equipment.....	4.5	.4	.9	.5	1.9	.6	.2	37
36	Electronic and other electric equipment.....	7.5	.7	3.1	1.3	1.0	1.0	.5	57
37	Transportation equipment.....	20.1	3.6	2.5	4.0	6.0	1.6	2.3	21
38	Instruments and related products.....	1.3	.1	.3	.1	.4	.1	.3	38
	Kentucky	379.0	69.8	73.6	70.6	72.0	67.9	25.1	7
20	Food and kindred products.....	21.8	1.3	1.9	1.3	4.9	5.8	6.6	28
21	Tobacco products.....	(D)	(D)	.1	(Z)	.5	—	(D)	(X)
24	Lumber and wood products.....	2.6	.2	.3	.4	1.3	.3	.2	38
26	Paper and allied products.....	34.2	8.6	6.9	7.7	5.5	(D)	(D)	33
27	Printing and publishing.....	8.8	1.4	1.7	1.9	2.1	.8	.9	11
28	Chemicals and allied products.....	119.5	22.1	27.0	21.0	19.8	25.6	4.0	16
29	Petroleum and coal products.....	(D)	(D)	(D)	(D)	(D)	(D)	—	(X)
30	Rubber and miscellaneous plastics products.....	9.5	.4	1.0	.6	4.5	1.0	2.1	22
32	Stone, clay, and glass products.....	12.1	2.1	2.8	1.1	3.0	2.4	.8	25
33	Primary metal industries.....	46.1	9.1	9.2	11.8	5.3	9.9	.8	2
34	Fabricated metal products.....	12.8	.8	2.7	1.0	4.8	2.4	1.1	22
35	Industrial machinery and equipment.....	7.0	.4	1.9	.8	2.6	.4	.8	21
36	Electronic and other electric equipment.....	12.4	.7	2.5	2.2	3.1	2.0	1.9	29
37	Transportation equipment.....	33.8	(D)	(D)	1.2	10.6	4.1	3.2	11
38	Instruments and related products.....	2.4	.2	.7	(Z)	1.2	.1	.3	46
39	Miscellaneous manufacturing industries.....	(D)	(Z)	.1	(D)	(D)	(D)	(D)	(X)
	Louisiana	999.4	199.3	155.2	128.5	223.3	288.3	5.0	5
20	Food and kindred products.....	9.4	1.5	1.6	1.5	3.3	1.3	.2	35
24	Lumber and wood products.....	8.5	.7	1.3	1.6	4.2	.6	.1	30
26	Paper and allied products.....	51.5	16.1	8.9	9.7	7.0	9.4	.4	4
28	Chemicals and allied products.....	572.3	112.3	99.0	55.2	122.7	181.7	1.4	8
29	Petroleum and coal products.....	318.3	65.2	(D)	56.1	75.3	85.8	(D)	1

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
Louisiana—Con.									
30	Rubber and miscellaneous plastics products -----	2.9	.3	.1	.2	2.0	.2	.2	43
32	Stone, clay, and glass products -----	2.5	.3	.4	.6	.5	.5	.2	52
33	Primary metal industries -----	11.7	1.8	1.5	1.8	2.1	4.1	.2	66
34	Fabricated metal products -----	5.2	.2	.8	.5	2.4	1.0	.3	26
35	Industrial machinery and equipment -----	3.1	.3	.6	.2	1.5	.3	.1	44
36	Electronic and other electric equipment -----	(D)	(D)	(D)	(D)	.6	(D)	.3	(X)
37	Transportation equipment -----	(D)	(D)	(D)	(D)	1.5	(D)	(D)	(X)
	Maine -----	131.7	30.9	18.2	10.7	19.4	41.2	11.3	9
20	Food and kindred products -----	1.5	.2	.3	.3	.4	.1	.2	19
22	Textile mill products -----	2.9	(Z)	.1	(Z)	.4	.1	2.2	27
24	Lumber and wood products -----	2.8	.6	(D)	(D)	(D)	(D)	(D)	13
26	Paper and allied products -----	84.7	25.2	11.8	6.6	10.7	28.5	1.9	8
28	Chemicals and allied products -----	6.1	.7	.7	.7	1.7	.3	2.0	85
30	Rubber and miscellaneous plastics products -----	5.7	.3	.5	.7	1.3	1.6	1.3	58
31	Leather and leather products -----	8.3	.7	.6	.3	.4	4.1	2.3	28
32	Stone, clay, and glass products -----	4.7	1.8	.8	1.0	.4	.7	.1	46
33	Primary metal industries -----	5.5	—	.4	.4	.7	3.5	.5	89
34	Fabricated metal products -----	1.7	.1	.7	(Z)	.4	.4	—	63
36	Electronic and other electric equipment -----	1.9	.1	.6	(Z)	.8	.1	.3	38
37	Transportation equipment -----	4.3	1.1	(D)	(D)	(D)	(D)	(D)	29
	Maryland -----	188.6	27.5	26.8	18.0	33.3	55.1	27.9	12
20	Food and kindred products -----	36.6	3.1	3.6	1.2	8.4	7.5	12.8	54
22	Textile mill products -----	1.1	.1	.1	.1	.2	.1	.5	68
26	Paper and allied products -----	(D)	1.9	(D)	1.2	(D)	(D)	(D)	(X)
27	Printing and publishing -----	4.0	.5	.8	.5	1.7	.3	.3	26
28	Chemicals and allied products -----	50.7	9.4	7.1	4.9	10.7	16.0	2.7	16
29	Petroleum and coal products -----	3.5	(D)	.2	.6	1.1	.5	(D)	14
30	Rubber and miscellaneous plastics products -----	5.7	.5	.8	.2	2.4	1.6	.3	39
32	Stone, clay, and glass products -----	5.8	.6	1.4	1.3	1.3	1.2	(Z)	23
33	Primary metal industries -----	(D)	(D)	(D)	4.2	(D)	(D)	(D)	(X)
34	Fabricated metal products -----	2.2	.3	.6	.5	.6	.1	.2	30
35	Industrial machinery and equipment -----	3.0	.1	.8	.1	1.1	.2	.7	33
36	Electronic and other electric equipment -----	1.1	.1	.3	.1	.2	.2	.2	58
37	Transportation equipment -----	14.1	2.5	4.1	2.9	.6	2.3	1.7	51
38	Instruments and related products -----	3.4	.1	.4	.1	1.9	.3	.6	24
	Massachusetts -----	273.6	30.5	48.7	34.7	85.5	33.7	40.5	7
20	Food and kindred products -----	16.4	1.3	1.0	.5	4.2	1.5	7.9	29
22	Textile mill products -----	19.8	2.5	1.8	2.5	3.5	1.5	8.1	21
24	Lumber and wood products -----	1.4	.1	.2	.2	.7	.1	.1	49
25	Furniture and fixtures -----	1.5	(Z)	.3	.1	.8	(Z)	.2	60
26	Paper and allied products -----	17.0	1.2	2.5	.6	9.4	2.6	.8	33
27	Printing and publishing -----	9.6	.8	1.9	1.8	3.9	.5	.8	15
28	Chemicals and allied products -----	31.0	3.8	5.9	2.2	9.8	3.1	6.2	26
29	Petroleum and coal products -----	1.8	.1	.1	.3	1.1	.2	(Z)	52
30	Rubber and miscellaneous plastics products -----	23.0	1.5	2.1	4.8	7.3	3.3	4.0	20
31	Leather and leather products -----	(D)	(D)	(D)	(D)	(D)	.3	(D)	(X)
32	Stone, clay, and glass products -----	11.4	1.4	2.3	2.7	2.5	1.5	1.0	34
33	Primary metal industries -----	11.2	1.4	2.2	1.6	2.4	2.2	1.4	18
34	Fabricated metal products -----	24.4	1.7	5.7	3.7	6.9	4.5	1.7	18
35	Industrial machinery and equipment -----	10.4	.7	1.5	.6	6.0	.6	1.0	32
36	Electronic and other electric equipment -----	34.2	5.2	7.8	7.0	6.2	5.0	3.0	23
37	Transportation equipment -----	(D)	(D)	(D)	(D)	(D)	(Z)	(D)	(X)
38	Instruments and related products -----	46.6	8.2	10.4	5.2	14.9	5.2	2.6	16
39	Miscellaneous manufacturing industries -----	7.0	.4	1.9	.5	2.0	1.3	.8	13
	Michigan -----	774.1	125.5	152.2	90.8	204.3	140.5	60.8	4
20	Food and kindred products -----	35.1	2.9	4.5	2.9	9.5	4.9	10.4	16
24	Lumber and wood products -----	9.7	1.6	1.0	3.4	2.0	1.4	.2	7
25	Furniture and fixtures -----	12.5	2.1	2.0	1.9	3.6	1.3	1.5	9
26	Paper and allied products -----	60.3	11.0	10.9	5.9	12.1	14.0	6.4	16
27	Printing and publishing -----	5.6	.7	.9	.5	2.2	.8	.5	27
28	Chemicals and allied products -----	161.6	24.4	23.6	12.8	56.4	37.1	7.2	9
29	Petroleum and coal products -----	11.6	4.3	2.9	1.4	2.3	.4	.2	70
30	Rubber and miscellaneous plastics products -----	19.6	1.9	2.4	2.3	8.4	2.6	2.0	12
31	Leather and leather products -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
32	Stone, clay, and glass products -----	19.0	3.3	2.4	1.5	3.5	6.9	1.6	19
33	Primary metal industries -----	138.4	14.5	31.3	26.1	33.7	26.9	5.9	5
34	Fabricated metal products -----	53.7	6.3	12.2	7.0	11.9	9.1	7.3	11
35	Industrial machinery and equipment -----	24.8	2.0	6.2	3.1	8.2	3.3	2.0	13
36	Electronic and other electric equipment -----	13.8	2.5	2.8	1.8	3.4	2.6	.8	46
37	Transportation equipment -----	195.6	45.7	46.3	19.3	43.9	26.9	13.5	5
38	Instruments and related products -----	(D)	.8	(D)	.3	(D)	(D)	(D)	(X)
39	Miscellaneous manufacturing industries -----	1.5	(D)	.3	(D)	.9	—	(Z)	28
	Minnesota -----	296.2	53.9	40.0	40.2	57.7	57.9	46.6	4
20	Food and kindred products -----	39.1	3.6	4.9	4.2	8.4	4.1	13.8	19
24	Lumber and wood products -----	13.0	1.6	2.0	3.5	2.8	2.5	.6	7
25	Furniture and fixtures -----	2.1	.1	.3	.1	.7	.3	.6	42
26	Paper and allied products -----	45.7	9.9	4.1	3.6	1.1	9.6	17.4	9
27	Printing and publishing -----	8.3	1.8	1.3	1.6	2.5	.4	.7	14
28	Chemicals and allied products -----	(D)	(D)	(D)	(Z)	(D)	(D)	(D)	(X)
29	Petroleum and coal products -----	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
30	Rubber and miscellaneous plastics products -----	9.7	1.6	1.1	.3	3.8	2.4	.5	44
32	Stone, clay, and glass products -----	13.5	(D)	1.1	(D)	2.1	(D)	(D)	16
33	Primary metal industries -----	4.8	.4	1.3	.5	1.6	.5	.4	30

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
Minnesota—Con.									
34	Fabricated metal products	17.6	.6	6.0	2.1	4.3	1.3	3.2	21
35	Industrial machinery and equipment	12.5	.7	3.2	.6	5.0	.7	2.4	22
36	Electronic and other electric equipment	11.6	.6	3.3	.3	4.1	1.7	1.6	25
37	Transportation equipment	2.4	(Z)	(D)	(Z)	.9	(D)	.1	22
38	Instruments and related products	5.9	.4	1.8	.1	2.3	.6	.7	28
39	Miscellaneous manufacturing industries	2.4	.1	.4	.1	1.1	.3	.4	41
	Mississippi	252.5	50.3	36.2	34.2	42.6	79.1	10.1	5
20	Food and kindred products	13.9	.6	2.1	1.6	2.2	1.4	6.0	22
24	Lumber and wood products	13.0	1.1	2.1	2.7	5.3	1.3	.4	14
25	Furniture and fixtures	6.8	.6	1.2	.9	2.9	.7	.5	21
26	Paper and allied products	39.3	12.2	3.0	(D)	8.2	5.8	(D)	4
27	Printing and publishing	(D)	(D)	(D)	(D)	.2	(D)	.2	(X)
28	Chemicals and allied products	54.8	11.5	9.9	4.6	8.8	19.7	.4	18
29	Petroleum and coal products	(D)	(D)	(D)	(D)	(D)	(D)	—	(X)
30	Rubber and miscellaneous plastics products	5.9	.5	.9	.6	3.0	.5	.4	20
32	Stone, clay, and glass products	3.7	.3	1.6	.7	.5	.5	.1	49
33	Primary metal industries	2.9	.3	.8	.2	1.3	.2	.2	54
34	Fabricated metal products	5.3	2.6	.2	.8	1.2	.1	.3	41
35	Industrial machinery and equipment	3.0	.1	.5	.1	1.3	.7	.3	25
36	Electronic and other electric equipment	4.2	(D)	.8	.2	1.8	.5	.7	13
37	Transportation equipment	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
	Missouri	276.7	31.0	52.2	43.0	61.0	53.6	36.0	4
20	Food and kindred products	46.5	2.1	5.5	7.1	6.7	3.1	22.2	15
22	Textile mill products .....	.7	.1	.1	.1	.2	.1	.1	93
24	Lumber and wood products	2.6	.3	.4	.3	.6	.9	.1	32
25	Furniture and fixtures	3.2	.2	.5	.7	1.4	.2	.1	22
26	Paper and allied products	8.7	1.2	1.1	1.2	3.7	1.0	.6	19
27	Printing and publishing	8.3	1.3	1.9	1.5	2.3	.7	.6	31
28	Chemicals and allied products	63.7	8.9	10.0	11.5	11.3	19.5	2.5	4
30	Rubber and miscellaneous plastics products	5.2	.8	.3	.2	1.0	2.3	.5	12
31	Leather and leather products	7.2	.2	1.3	.6	2.0	2.4	.6	42
32	Stone, clay, and glass products	21.7	3.0	4.9	6.9	1.6	5.0	.3	10
33	Primary metal industries	29.9	5.3	5.9	5.6	3.8	8.6	.6	8
34	Fabricated metal products	25.0	1.2	6.0	1.9	10.2	3.2	2.6	14
35	Industrial machinery and equipment	6.1	.3	1.6	.2	2.5	.7	.9	27
36	Electronic and other electric equipment	12.6	1.9	3.1	.6	3.6	2.0	1.3	22
37	Transportation equipment	30.2	4.0	8.1	4.3	7.8	3.4	2.6	10
38	Instruments and related products	2.8	.1	.8	.1	1.1	.4	.4	39
39	Miscellaneous manufacturing industries	1.5	.1	.5	.1	.8	(Z)	(Z)	67
	Montana	58.5	8.8	10.8	10.1	16.6	11.3	.9	32
20	Food and kindred products	3.8	.8	.9	.6	.8	.2	.4	69
24	Lumber and wood products	6.4	.2	.8	.3	4.6	.3	.2	18
26	Paper and allied products	(D)	(D)	(D)	(D)	(D)	(D)	—	(X)
28	Chemicals and allied products	3.1	.3	.7	2.0	.1	—	(Z)	68
29	Petroleum and coal products	30.1	5.9	4.8	4.1	9.9	5.3	.2	60
33	Primary metal industries	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(X)
	Nebraska	60.0	6.8	11.5	7.3	16.6	8.2	9.6	10
20	Food and kindred products	17.8	2.2	2.0	2.5	3.7	1.6	5.8	14
26	Paper and allied products	1.3	.1	.1	(Z)	1.0	(Z)	.1	53
27	Printing and publishing	1.0	.2	.4	.1	.2	.1	.1	33
28	Chemicals and allied products	9.4	1.5	1.7	2.1	1.8	1.6	.7	40
30	Rubber and miscellaneous plastics products	3.2	.1	(D)	.3	.7	(D)	(D)	10
31	Leather and leather products	1.8	(D)	(D)	(Z)	(D)	(D)	(D)	—
32	Stone, clay, and glass products	3.3	.8	.6	.8	.4	.7	(Z)	25
33	Primary metal industries	4.8	(D)	.6	.5	(D)	1.0	.2	17
34	Fabricated metal products	3.3	.4	.8	.3	.8	.8	.3	40
35	Industrial machinery and equipment	4.9	.6	1.1	.3	1.7	.8	.3	17
36	Electronic and other electric equipment	2.0	.1	.7	.1	.5	.4	.1	22
37	Transportation equipment	4.8	(D)	1.6	.1	2.4	(D)	.1	61
	Nevada	13.7	2.3	1.6	2.1	3.3	2.2	2.4	19
20	Food and kindred products	3.1	.1	.2	.2	1.4	.1	1.2	56
27	Printing and publishing	(D)	(D)	(D)	(D)	—	(D)	—	(X)
28	Chemicals and allied products	(D)	(D)	.4	(D)	.2	(D)	(D)	(X)
30	Rubber and miscellaneous plastics products	2.4	.1	(D)	.1	.8	.1	(D)	49
32	Stone, clay, and glass products	1.5	.4	.1	.3	.8	.8	—	37
33	Primary metal industries	1.3	.1	.3	.1	.3	.4	.1	85
	New Hampshire	63.2	4.4	14.3	7.7	13.7	15.3	7.8	19
20	Food and kindred products	9.9	.5	1.9	1.2	1.3	.8	4.2	32
22	Textile mill products	1.4	.1	.2	.2	.3	.2	.4	43
26	Paper and allied products	16.8	2.5	3.0	3.1	2.2	5.8	.2	35
28	Chemicals and allied products	11.8	—	3.4	1.8	2.8	3.1	.7	78
30	Rubber and miscellaneous plastics products	5.3	.6	.6	.6	1.7	1.5	.3	38
33	Primary metal industries	4.0	.2	.7	.4	1.0	1.2	.5	23
34	Fabricated metal products	1.4	—	.7	(Z)	.6	(Z)	(Z)	70
35	Industrial machinery and equipment	1.2	.1	.2	(Z)	.6	.2	.1	30
36	Electronic and other electric equipment	7.8	.4	2.7	.3	1.3	2.2	1.0	26
	New Jersey	554.2	82.5	84.2	69.1	131.8	106.7	80.0	7
20	Food and kindred products	44.0	2.4	7.0	2.0	10.4	2.9	19.3	16
22	Textile mill products	5.4	.7	.3	.9	.6	.2	2.6	43
25	Furniture and fixtures	1.3	.1	.1	.1	.7	.1	.1	46
26	Paper and allied products	34.8	4.9	2.8	2.6	5.9	3.6	14.9	42
27	Printing and publishing	11.0	1.3	1.6	2.0	5.2	.5	.5	20
28	Chemicals and allied products	230.0	38.2	38.1	26.1	44.7	61.4	21.5	12
29	Petroleum and coal products	82.9	17.3	11.6	19.2	16.0	17.3	1.3	15
30	Rubber and miscellaneous plastics products	17.0	1.3	1.3	1.1	7.3	1.1	5.1	20
31	Leather and leather products	4.3	(D)	.4	(Z)	.9	.4	(D)	10
32	Stone, clay, and glass products	20.7	1.4	3.5	2.4	8.8	2.7	1.8	39

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
New Jersey—Con.									
33	Primary metal industries	33.7	4.9	5.1	6.0	8.3	7.5	1.9	17
34	Fabricated metal products	21.8	1.9	4.1	2.4	4.9	5.8	2.6	18
35	Industrial machinery and equipment	8.1	.3	1.6	.5	4.1	1.1	.5	20
36	Electronic and other electric equipment	6.4	.4	1.0	(D)	3.6	.4	(D)	25
37	Transportation equipment	4.4	2.5	.7	.2	.5	.1	.4	89
38	Instruments and related products	22.6	3.3	4.4	2.0	8.5	1.1	3.3	38
39	Miscellaneous manufacturing industries	5.2	(D)	.4	(D)	1.2	.3	1.1	9
New Mexico		56.7	(D)	9.3	15.8	(D)	15.6	.8	9
28	Chemicals and allied products	5.9	.4	1.4	1.4	.1	2.6	(Z)	78
30	Rubber and miscellaneous plastics products	1.0	—	.1	(Z)	.6	.1	.1	92
32	Stone, clay, and glass products	2.8	.2	.4	1.0	.8	.4	—	56
33	Primary metal industries	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(X)
36	Electronic and other electric equipment	(D)	(D)	(D)	(D)	.9	(D)	(Z)	(X)
New York		563.3	77.2	108.9	55.7	148.0	122.1	51.4	6
20	Food and kindred products	44.7	2.3	9.1	4.5	6.9	7.4	14.5	15
22	Textile mill products	6.6	.8	.9	1.0	1.9	.9	1.2	36
24	Lumber and wood products	1.7	.1	.3	.1	1.0	.1	.1	25
25	Furniture and fixtures	3.3	.2	.4	.2	1.5	.6	.3	26
26	Paper and allied products	44.3	4.3	7.8	3.2	8.2	19.1	1.7	28
27	Printing and publishing	16.2	1.4	1.5	3.3	7.1	1.3	1.6	13
28	Chemicals and allied products	126.6	19.8	20.7	11.5	38.9	28.3	7.3	17
30	Rubber and miscellaneous plastics products	11.4	.8	1.9	.8	6.6	.7	.6	14
31	Leather and leather products	3.8	.4	.5	.3	.9	.8	1.0	37
32	Stone, clay, and glass products	37.2	8.6	3.9	9.7	4.9	7.0	3.1	18
33	Primary metal industries	30.2	6.7	5.3	3.6	4.8	8.4	1.4	13
34	Fabricated metal products	32.9	2.6	5.3	2.0	11.5	5.7	5.7	22
35	Industrial machinery and equipment	35.5	6.3	8.5	2.0	10.4	5.2	3.2	9
36	Electronic and other electric equipment	62.9	9.6	13.6	5.3	22.2	9.6	2.6	12
37	Transportation equipment	25.6	3.2	6.3	3.2	5.7	(D)	(D)	12
38	Instruments and related products	65.9	9.0	20.4	3.4	9.5	(D)	(D)	8
39	Miscellaneous manufacturing industries	13.8	1.1	2.1	1.6	5.9	2.4	.8	15
North Carolina		579.3	83.7	95.8	85.3	120.1	98.2	96.1	4
20	Food and kindred products	47.4	6.0	6.8	4.0	5.9	7.6	17.2	14
21	Tobacco products	20.4	7.1	5.6	(D)	5.9	.8	3.6	16
22	Textile mill products	97.4	6.3	9.3	13.5	12.9	7.4	47.9	9
24	Lumber and wood products	22.5	3.5	2.9	4.9	6.4	3.8	1.1	13
25	Furniture and fixtures	26.9	2.3	4.0	8.9	5.5	3.1	3.2	19
26	Paper and allied products	65.7	18.3	11.3	11.6	10.9	11.7	1.8	11
27	Printing and publishing	5.8	.8	1.2	(D)	(D)	.5	.4	23
28	Chemicals and allied products	136.8	18.5	25.1	15.6	31.8	40.5	5.3	4
29	Petroleum and coal products	2.2	.2	.4	.4	.3	.2	.7	38
30	Rubber and miscellaneous plastics products	25.0	2.3	4.6	3.6	8.0	2.5	4.1	13
32	Stone, clay, and glass products	27.9	5.5	4.9	3.2	6.3	6.0	2.0	12
33	Primary metal industries	25.4	3.9	5.2	6.6	4.3	4.6	.7	47
34	Fabricated metal products	14.8	2.2	3.6	2.2	4.1	1.8	.9	16
35	Industrial machinery and equipment	18.3	1.5	3.1	1.2	8.4	2.3	1.8	14
36	Electronic and other electric equipment	27.3	4.0	4.8	5.2	7.5	3.3	2.6	24
37	Transportation equipment	8.4	.8	2.0	.3	3.2	.8	1.3	28
38	Instruments and related products	5.9	.5	1.0	.1	2.1	1.1	1.0	28
39	Miscellaneous manufacturing industries	1.0	.1	.2	.1	.3	.2	.3	75
North Dakota		8.3	1.6	.9	.7	1.9	1.1	2.1	22
20	Food and kindred products	4.9	1.1	.4	.5	.5	.5	1.9	27
37	Transportation equipment	1.2	.3	.1	—	.8	(Z)	(Z)	64
Ohio		1 212.6	173.6	203.3	163.0	308.7	252.6	111.3	5
20	Food and kindred products	55.2	5.2	6.9	5.7	10.2	2.6	24.6	14
22	Textile mill products	5.2	.4	.3	.6	2.7	1.1	.1	62
24	Lumber and wood products	4.3	.4	.5	.9	2.0	.2	.3	18
25	Furniture and fixtures	9.0	2.9	.8	2.6	1.4	1.0	.4	13
26	Paper and allied products	60.9	6.5	8.3	7.6	15.5	18.6	4.4	15
27	Printing and publishing	10.3	1.3	1.9	2.3	2.9	.6	1.3	17
28	Chemicals and allied products	226.1	29.4	50.1	18.6	44.9	61.9	21.2	9
29	Petroleum and coal products	60.8	13.1	8.7	5.9	14.3	16.5	2.2	25
30	Rubber and miscellaneous plastics products	40.8	3.2	5.8	2.1	21.4	3.1	5.1	13
32	Stone, clay, and glass products	53.2	7.8	8.6	10.6	11.2	11.4	3.6	8
33	Primary metal industries	313.4	40.2	45.0	60.6	71.5	83.9	12.2	5
34	Fabricated metal products	91.1	7.8	17.8	9.2	24.8	21.1	10.4	8
35	Industrial machinery and equipment	41.4	4.6	9.0	3.5	13.8	4.9	5.6	8
36	Electronic and other electric equipment	41.2	3.1	8.0	9.0	11.6	4.9	4.6	22
37	Transportation equipment	192.0	45.9	30.9	23.5	57.4	20.2	14.1	24
38	Instruments and related products	5.9	1.3	.6	.1	2.6	.4	.8	29
39	Miscellaneous manufacturing industries	1.9	.4	.1	.4	.5	.1	.4	42
Oklahoma		132.5	20.8	21.0	20.0	28.6	27.0	15.2	12
20	Food and kindred products	15.2	5.2	2.1	2.2	1.4	1.2	3.1	43
24	Lumber and wood products	(D)	.2	.3	(D)	.3	.1	.1	(X)
26	Paper and allied products	23.1	4.9	2.5	3.5	5.6	5.7	.9	33
27	Printing and publishing	3.9	.6	.1	1.1	1.6	.2	.3	39
28	Chemicals and allied products	24.7	5.4	2.1	4.9	2.5	4.6	5.1	41
29	Petroleum and coal products	5.4	.1	.6	.4	.6	3.5	.1	39
30	Rubber and miscellaneous plastics products	6.9	.4	.8	.6	3.2	.7	1.2	11
32	Stone, clay, and glass products	11.6	1.1	2.2	3.1	2.2	2.5	.5	29
33	Primary metal industries	8.3	.5	1.4	.7	2.8	2.2	.6	29
34	Fabricated metal products	10.9	1.0	2.9	1.2	2.9	2.3	.6	28
35	Industrial machinery and equipment	4.2	.1	.8	.4	2.0	.4	.4	26
36	Electronic and other electric equipment	3.6	(D)	(D)	(Z)	(D)	(D)	.2	6
37	Transportation equipment	10.6	.2	4.5	1.1	1.9	1.1	1.7	7
38	Instruments and related products	(D)	(D)	(D)	(D)	(D)	(D)	.1	(X)
39	Miscellaneous manufacturing industries .....	.9	.3	.1	.2	(Z)	(Z)	.3	47

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
	Oregon	209.2	26.6	38.4	26.4	37.1	55.7	25.0	10
20	Food and kindred products	26.9	2.6	3.3	1.3	5.3	2.6	11.8	31
24	Lumber and wood products	27.2	4.0	5.1	5.0	7.7	3.5	1.9	11
26	Paper and allied products	58.5	9.2	7.7	10.9	5.7	23.4	1.7	11
27	Printing and publishing	3.8	1.0	.6	.7	1.0	.2	.3	27
28	Chemicals and allied products	3.9	.3	.9	.3	.6	1.1	.7	46
30	Rubber and miscellaneous plastics products	2.0	(Z)	.4	(D)	.5	(D)	.1	24
32	Stone, clay, and glass products	3.0	.4	1.0	.5	.5	.6	(Z)	51
33	Primary metal industries	43.5	5.1	9.4	4.7	6.0	17.1	1.1	34
34	Fabricated metal products	3.7	.3	.6	.1	2.5	.1	.1	81
35	Industrial machinery and equipment	4.1	.2	.3	(Z)	.9	2.3	.3	64
36	Electronic and other electric equipment	15.2	(D)	2.6	(D)	1.1	1.0	5.8	14
37	Transportation equipment	14.0	.5	6.0	.3	4.4	2.4	.3	53
38	Instruments and related products	2.5	(D)	.5	(D)	.4	(D)	.6	22
	Pennsylvania	1 006.7	128.7	159.8	162.3	262.2	215.2	78.4	6
20	Food and kindred products	83.5	7.2	13.2	8.3	17.2	12.8	24.7	14
22	Textile mill products	9.7	.9	1.0	.5	3.7	1.4	2.2	25
24	Lumber and wood products	21.2	1.9	3.4	4.6	8.2	1.6	1.4	35
25	Furniture and fixtures	4.7	.4	.9	.9	1.9	.3	.3	19
26	Paper and allied products	113.1	18.2	18.6	23.5	19.5	21.1	12.1	16
27	Printing and publishing	14.0	2.0	2.4	2.8	3.6	1.2	2.1	10
28	Chemicals and allied products	155.9	32.7	28.0	19.7	40.7	23.4	11.5	9
29	Petroleum and coal products	71.6	10.2	9.8	(D)	16.1	23.7	(D)	18
30	Rubber and miscellaneous plastics products	12.6	1.3	1.5	.6	5.8	2.2	1.4	17
31	Leather and leather products	6.4	.7	.9	.7	1.1	1.7	1.3	16
32	Stone, clay, and glass products	55.9	7.3	7.8	17.4	10.8	9.7	2.7	12
33	Primary metal industries	307.6	30.2	38.3	55.4	82.2	95.6	5.8	17
34	Fabricated metal products	42.2	5.3	9.3	6.2	13.2	5.0	3.3	17
35	Industrial machinery and equipment	22.8	1.6	4.6	(D)	10.2	3.0	(D)	14
36	Electronic and other electric equipment	33.1	3.5	8.5	5.3	9.3	4.9	1.5	20
37	Transportation equipment	20.5	2.1	6.4	2.4	6.8	1.6	1.1	18
38	Instruments and related products	18.6	1.7	3.0	.5	8.8	3.8	.8	32
39	Miscellaneous manufacturing industries	13.1	1.4	2.3	2.9	3.0	2.2	1.4	10
	Rhode Island	60.0	4.6	15.7	5.7	20.4	8.7	4.8	11
20	Food and kindred products	2.7	.2	.7	.2	.2	.3	1.0	70
22	Textile mill products	(D)	.2	(D)	.3	(D)	(D)	.7	(X)
26	Paper and allied products	1.4	—	.3	(Z)	.8	.2	—	93
27	Printing and publishing	2.4	(Z)	.5	.6	.3	.6	.2	47
28	Chemicals and allied products	6.9	(D)	1.4	.5	(D)	(D)	.3	10
30	Rubber and miscellaneous plastics products	(D)	(D)	(D)	.7	(D)	.3	.2	(X)
33	Primary metal industries	1.0	—	—	—	.8	.1	.1	83
34	Fabricated metal products	13.6	.8	2.9	1.7	5.3	1.7	1.1	26
35	Industrial machinery and equipment	1.2	(Z)	.4	.1	.5	.1	.1	51
38	Instruments and related products	5.8	1.1	.3	1.0	3.3	(Z)	.1	73
39	Miscellaneous manufacturing industries	4.6	.4	1.0	.3	1.4	.7	.7	16
	South Carolina	379.6	58.4	75.6	59.1	76.3	82.2	28.1	6
20	Food and kindred products	9.6	1.2	1.1	.4	1.3	1.0	4.7	40
22	Textile mill products	34.3	2.6	5.2	5.0	8.7	5.4	7.5	10
24	Lumber and wood products	4.8	1.7	.7	.5	1.0	.4	.5	31
25	Furniture and fixtures	1.7	.3	.2	.6	.3	.2	.1	56
26	Paper and allied products	74.1	15.5	12.2	20.2	9.9	15.2	1.1	7
27	Printing and publishing	2.5	(D)	.3	(D)	.5	(D)	.1	15
28	Chemicals and allied products	143.8	24.4	37.6	21.3	23.6	32.4	4.6	13
30	Rubber and miscellaneous plastics products	15.7	2.1	2.5	2.0	5.4	2.1	1.7	17
32	Stone, clay, and glass products	14.8	3.6	2.2	1.7	2.6	3.7	.9	15
33	Primary metal industries	29.6	2.2	3.0	3.4	7.6	12.5	1.0	25
34	Fabricated metal products	7.7	.6	1.7	.7	2.1	1.8	1.0	27
35	Industrial machinery and equipment	15.1	.6	3.6	.8	5.9	1.7	2.6	18
36	Electronic and other electric equipment	17.0	2.1	3.1	1.0	5.1	4.1	1.6	21
37	Transportation equipment	5.0	(D)	1.3	(D)	1.5	(D)	.3	33
38	Instruments and related products	3.2	.6	.8	.2	.8	.4	.4	74
	South Dakota	15.0	(D)	1.7	2.4	2.5	(D)	4.0	26
20	Food and kindred products	7.1	.6	.6	1.6	.9	.7	2.7	36
24	Lumber and wood products	(D)	(D)	.1	.2	.1	(D)	(D)	(X)
28	Chemicals and allied products	2.6	.5	.5	.4	.4	.6	.2	98
38	Instruments and related products	(D)	(D)	—	—	—	(D)	(D)	(X)
	Tennessee	504.3	85.7	102.9	58.0	103.0	101.2	53.3	4
20	Food and kindred products	35.4	4.1	3.2	4.0	6.0	3.0	15.1	12
22	Textile mill products	10.3	(D)	(D)	.5	2.6	(D)	2.5	8
24	Lumber and wood products	3.6	.3	.6	.6	1.3	.2	.6	11
25	Furniture and fixtures	4.8	.4	.6	.6	1.8	.5	.9	22
26	Paper and allied products	32.5	8.3	3.2	3.0	4.5	7.3	6.2	9
27	Printing and publishing	13.1	1.9	2.2	4.2	2.2	1.4	1.1	12
28	Chemicals and allied products	236.5	40.9	63.2	25.5	41.8	59.0	6.2	5
29	Petroleum and coal products	12.0	3.2	.9	1.0	3.6	2.8	.4	52
30	Rubber and miscellaneous plastics products	16.0	.9	2.5	1.4	7.2	1.4	2.5	24
32	Stone, clay, and glass products	15.7	3.8	2.2	2.2	4.6	1.7	1.2	28
33	Primary metal industries	37.6	6.6	6.5	5.1	8.3	9.5	1.5	11
34	Fabricated metal products	18.0	1.2	4.5	1.2	5.2	3.6	2.3	21
35	Industrial machinery and equipment	12.3	.9	2.4	.8	3.8	2.6	1.8	12
36	Electronic and other electric equipment	14.3	1.0	2.8	3.2	2.7	2.1	2.5	17
37	Transportation equipment	35.8	(D)	(D)	3.9	5.2	(D)	7.3	16
38	Instruments and related products	2.3	.1	.7	.1	.8	.3	.5	41
39	Miscellaneous manufacturing industries	3.4	.4	.5	.7	1.2	.2	.5	21

Table 11b. Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media					Standard error of estimate (PAOC) (percent)	
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous		Payments to government
	Texas	2 326.6	397.4	416.8	454.0	388.8	563.5	106.1	3
20	Food and kindred products	84.0	6.1	10.7	5.8	12.2	6.7	42.5	11
22	Textile mill products.....	2.2	.5	.2	.3	.3	.5	.5	32
24	Lumber and wood products	12.1	1.4	1.6	3.4	3.6	1.8	.3	10
25	Furniture and fixtures	4.2	.3	.8	.4	1.5	.4	.8	23
26	Paper and allied products.....	71.4	15.5	7.5	16.2	20.6	10.9	.8	12
27	Printing and publishing	8.6	1.1	1.2	1.2	3.1	.7	1.3	17
28	Chemicals and allied products.....	941.4	189.7	187.6	191.9	167.1	192.0	13.1	4
29	Petroleum and coal products	870.7	143.6	141.5	199.4	91.0	281.9	13.4	5
30	Rubber and miscellaneous plastics products	26.1	2.6	5.1	3.2	7.3	5.0	2.9	15
31	Leather and leather products.....	5.4	.8	.7	.2	.2	1.1	2.4	93
32	Stone, clay, and glass products	35.7	4.2	4.9	8.6	8.0	6.4	3.6	9
33	Primary metal industries	85.3	10.5	16.7	10.3	19.1	27.0	1.8	13
34	Fabricated metal products	46.0	3.0	13.4	2.5	19.1	5.1	2.8	7
35	Industrial machinery and equipment	15.9	1.3	3.2	1.0	6.4	1.6	2.3	14
36	Electronic and other electric equipment	59.8	7.3	10.2	5.8	13.2	12.0	11.4	12
37	Transportation equipment	36.7	3.8	7.3	2.5	10.8	8.1	4.1	11
38	Instruments and related products	18.2	5.6	3.8	.9	4.5	1.8	1.6	24
39	Miscellaneous manufacturing industries	3.0	.3	.6	.4	1.0	.4	.3	31
	Utah	110.8	22.4	19.2	19.7	24.9	19.2	5.5	16
20	Food and kindred products	9.3	1.1	1.2	.6	1.0	1.3	4.1	30
26	Paper and allied products.....	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(X)
28	Chemicals and allied products.....	(D)	(D)	(D)	(D)	(D)	(D)	(Z)	(X)
29	Petroleum and coal products	17.5	8.4	.6	1.9	5.0	1.5	.1	91
32	Stone, clay, and glass products	2.3	.6	.5	.6	.4	.2	(Z)	41
33	Primary metal industries	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
35	Industrial machinery and equipment	1.0	—	.2	(Z)	.8	(Z)	—	51
36	Electronic and other electric equipment	6.6	1.0	2.2	.2	.6	2.2	.3	46
37	Transportation equipment	13.7	1.3	5.0	.4	3.1	3.6	.2	20
38	Instruments and related products	2.7	.2	.7	.1	.7	.8	.2	38
39	Miscellaneous manufacturing industries	1.5	.2	.2	.1	.7	(D)	(D)	45
	Vermont	18.0	(D)	2.3	1.5	8.0	(D)	3.9	29
20	Food and kindred products	4.8	—	—	—	2.2	—	2.6	98
22	Textile mill products.....	1.0	.1	(Z)	.7	.1	(Z)	(Z)	83
28	Chemicals and allied products.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
36	Electronic and other electric equipment	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(X)
	Virginia	350.8	65.0	59.7	44.7	74.8	60.1	46.5	4
20	Food and kindred products	43.5	4.6	6.2	6.3	5.9	9.3	11.2	23
21	Tobacco products	(D)	(D)	2.1	(D)	(D)	(D)	(D)	(X)
22	Textile mill products.....	19.2	2.4	2.2	2.1	3.5	1.8	7.3	13
24	Lumber and wood products	16.0	2.3	2.0	1.9	5.8	2.9	1.1	20
25	Furniture and fixtures	5.9	.7	.9	2.5	1.1	.3	.4	41
26	Paper and allied products.....	82.6	22.6	(D)	(D)	10.5	22.4	12.3	5
27	Printing and publishing	14.8	2.3	1.7	6.5	3.1	.4	.8	23
28	Chemicals and allied products.....	71.2	16.4	17.8	7.4	15.3	12.2	2.2	2
30	Rubber and miscellaneous plastics products	11.0	.6	1.1	.8	6.8	.8	.9	11
32	Stone, clay, and glass products	11.9	1.4	1.0	1.4	5.0	1.5	1.6	36
33	Primary metal industries	8.6	1.5	.6	1.4	2.2	1.5	1.3	22
34	Fabricated metal products	4.9	.5	.9	.3	1.8	.8	.5	23
35	Industrial machinery and equipment	8.5	.5	1.6	.4	4.0	.6	1.4	21
36	Electronic and other electric equipment	17.0	1.6	6.5	2.6	3.6	1.5	1.3	12
37	Transportation equipment	23.0	(D)	7.2	2.5	(D)	2.6	(D)	12
38	Instruments and related products	(D)	(D)	(D)	(D)	.2	(D)	.4	(X)
	Washington	410.4	72.3	74.6	69.8	66.6	95.5	31.6	8
20	Food and kindred products	28.9	3.4	3.2	2.7	4.4	2.2	13.0	16
24	Lumber and wood products	26.4	2.5	5.7	6.5	7.2	3.0	1.6	35
25	Furniture and fixtures	1.1	.2	.1	.2	.2	.1	.1	68
26	Paper and allied products.....	102.8	22.1	12.0	16.2	7.5	42.6	2.3	12
27	Printing and publishing	3.6	.1	.4	.1	2.5	(Z)	.4	31
28	Chemicals and allied products.....	8.2	1.2	2.1	.4	.8	3.0	.8	30
29	Petroleum and coal products	91.9	(D)	13.8	25.8	12.0	17.8	(D)	29
30	Rubber and miscellaneous plastics products	1.3	.1	.1	(Z)	1.0	(Z)	.1	52
32	Stone, clay, and glass products	3.7	.3	.5	.4	1.6	.4	.4	27
33	Primary metal industries	74.3	13.7	16.6	13.7	7.9	20.9	1.5	10
34	Fabricated metal products	6.6	.4	1.5	.4	2.0	1.5	.8	25
36	Electronic and other electric equipment	8.6	1.5	1.4	.5	2.0	.9	2.3	34
37	Transportation equipment	41.0	(D)	13.9	(D)	13.2	1.8	6.2	15
38	Instruments and related products	9.3	1.4	2.9	(D)	2.5	1.0	(D)	12
	West Virginia	232.8	40.5	43.2	30.0	43.4	69.7	5.9	18
20	Food and kindred products	2.9	.7	.5	.4	.1	.9	.4	40
28	Chemicals and allied products.....	94.4	17.7	17.8	(D)	27.0	20.9	(D)	12
29	Petroleum and coal products	1.7	—	.4	.4	.2	.7	—	58
30	Rubber and miscellaneous plastics products	2.3	.1	.9	.2	.6	.6	(Z)	57
32	Stone, clay, and glass products	3.4	.7	.6	(D)	.6	.9	(D)	18
33	Primary metal industries	112.4	19.6	20.2	16.9	10.9	44.1	.6	35
34	Fabricated metal products	4.3	.7	.4	.4	1.4	1.1	.3	27
35	Industrial machinery and equipment	1.2	(Z)	.2	.1	.5	.1	.2	80
36	Electronic and other electric equipment	7.1	.7	1.7	2.7	1.1	.1	.8	81
	Wisconsin	455.6	67.0	64.7	52.3	114.1	80.1	77.4	7
20	Food and kindred products	74.3	6.6	4.6	3.5	23.5	6.2	29.9	14
24	Lumber and wood products	18.0	2.1	2.2	6.9	3.6	1.9	1.3	24
25	Furniture and fixtures	10.4	.6	1.2	1.6	5.6	1.2	.4	38
26	Paper and allied products.....	168.0	31.7	25.7	18.6	22.8	42.5	26.6	15
27	Printing and publishing	13.2	3.0	1.2	4.9	2.8	.6	.7	11

Table 11b. **Operating Costs by States and Major Groups for Kinds of Cost: 1994—Con.**

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States by major groups are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	State and major group	Total PAOC	Kind of cost for all media						Standard error of estimate (PAOC) (percent)
			Depreciation	Salaries and wages	Fuel and electricity	Contract work/ services	Materials, leasing, and miscellaneous	Payments to government	
Wisconsin—Con.									
28	Chemicals and allied products	23.8	3.8	4.3	2.0	6.6	5.0	2.1	30
30	Rubber and miscellaneous plastics products	4.7	.6	.5	.2	2.3	.6	.5	24
31	Leather and leather products	8.4	.9	1.5	.4	1.1	2.2	2.3	19
32	Stone, clay, and glass products	5.2	(D)	.1	.1	.7	(D)	.9	10
33	Primary metal industries	41.0	4.8	4.9	6.9	16.9	6.0	1.5	7
34	Fabricated metal products	25.9	3.0	4.7	3.4	8.1	3.6	3.0	12
35	Industrial machinery and equipment	30.1	3.1	5.9	1.7	11.0	4.8	3.7	17
36	Electronic and other electric equipment	14.9	1.8	3.6	1.1	4.0	2.7	1.7	20
37	Transportation equipment	11.8	(D)	3.3	.6	2.7	(D)	1.3	7
38	Instruments and related products	3.2	.1	(D)	.1	1.4	(D)	1.0	32
39	Miscellaneous manufacturing industries	2.2	.1	(D)	.1	.9	(D)	.4	17
Wyoming		25.2	8.3	5.1	4.1	4.7	2.8	.1	26
28	Chemicals and allied products	15.5	5.7	3.5	2.8	(D)	(D)	—	31
29	Petroleum and coal products	6.9	2.3	1.0	.4	2.8	(Z)	(Z)	60
32	Stone, clay, and glass products	2.2	.3	.5	.8	(D)	(D)	(Z)	42

¹Excludes Major Group 23, Apparel and Other Textile Products.

Table 12a. **Other Capital Expenditures by Major Groups for Kinds of Cost: 1994**

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PACENM ¹	Total PACE	Nonmedia and other							Standard error of estimate (PACE) (percent)	
				Total	Kind of cost							Not elsewhere classified (n.e.c.)
					Underground storage tanks	Site cleanup	Noise	Radiation	Multimedia			
All industries²		7 880.5	7 578.0	302.5	74.1	183.5	5.1	1.9	5.3	32.4	4	
20	Food and kindred products	284.2	274.3	9.9	6.7	2.5	(D)	(D)	(Z)	.3	7	
21	Tobacco products	3.1	3.1	(Z)	(Z)	(Z)	—	—	—	—	46	
22	Textile mill products	67.4	59.3	8.1	6.5	1.1	.1	—	(Z)	.4	16	
24	Lumber and wood products	162.6	135.4	27.2	4.8	20.4	(Z)	—	.5	1.5	7	
25	Furniture and fixtures	71.8	68.4	3.5	.5	2.8	—	—	—	.1	28	
26	Paper and allied products	648.1	635.9	12.2	2.0	8.5	(D)	—	.4	(D)	4	
27	Printing and publishing	59.2	57.0	2.3	1.1	.7	.1	—	—	.3	12	
28	Chemicals and allied products	2 034.3	1 931.0	103.3	16.5	69.1	1.3	1.0	1.3	14.2	6	
29	Petroleum and coal products	2 586.9	2 572.0	14.8	(D)	8.1	.4	—	.6	(D)	9	
30	Rubber and miscellaneous plastics products	87.3	75.2	12.1	2.6	7.6	.3	—	.1	1.5	11	
31	Leather and leather products	5.5	5.4	.1	(Z)	(Z)	—	—	—	(Z)	27	
32	Stone, clay, and glass products	217.4	210.6	6.8	3.2	3.0	.1	—	(Z)	.5	14	
33	Primary metal industries	446.0	428.0	18.0	2.2	13.4	(D)	(D)	.3	.5	5	
34	Fabricated metal products	158.8	140.6	18.3	3.6	11.5	.1	(Z)	.7	2.3	19	
35	Industrial machinery and equipment	297.1	283.6	13.5	4.1	5.8	.4	—	1.2	2.0	34	
36	Electronic and other electric equipment	293.8	276.8	17.0	2.0	14.1	(Z)	(Z)	.1	.7	19	
37	Transportation equipment	351.1	336.9	14.2	4.3	7.3	1.0	.1	(Z)	1.5	20	
38	Instruments and related products	87.8	72.0	15.8	(D)	(D)	—	—	(Z)	1.0	7	
39	Miscellaneous manufacturing industries	18.0	12.6	5.4	.4	(D)	(Z)	—	(Z)	(D)	14	

¹PACENM denotes pollution abatement capital expenditures including the nonmedia and other.

²Excludes Major Group 23, Apparel and Other Textile Products.

Table 12b. **Other Capital Expenditures by States for Kinds of Cost: 1994**

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PACENM ¹	Total PACE	Nonmedia and other							Standard error of estimate (PACE) (percent)	
			Total	Kind of cost							Not elsewhere classified (n.e.c.)
				Underground storage tanks	Site cleanup	Noise	Radiation	Multimedia			
United States²	7 880.5	7 578.0	302.5	74.1	183.5	5.1	1.9	5.3	32.4	4	
Alabama	203.7	198.8	4.9	.8	(D)	—	(D)	(Z)	.1	10	
Alaska	6.9	6.9	—	—	—	—	—	—	—	25	
Arizona	54.3	54.2	.1	.1	(Z)	—	—	—	(Z)	18	
Arkansas	48.4	45.9	2.6	.3	1.4	—	—	(D)	(D)	12	
California	1 717.0	1 699.0	18.0	3.5	12.2	.2	.1	—	1.9	12	
Colorado	32.4	31.3	1.2	.4	(D)	—	—	—	(D)	47	
Connecticut	64.1	62.3	1.8	(Z)	.6	(D)	—	—	.2	11	
Delaware	44.0	(D)	(D)	(D)	(D)	—	—	—	—	(X)	
Florida	117.4	115.1	2.2	(D)	1.7	(Z)	(Z)	(Z)	(D)	42	
Georgia	106.9	92.8	14.1	8.5	4.8	(Z)	—	(Z)	.7	7	

Table 12b. Other Capital Expenditures by States for Kinds of Cost: 1994—Con.

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PACE is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PACENM ¹	Total PACE	Nonmedia and other							Standard error of estimate (PACE) (percent)
			Kind of cost							
			Total	Underground storage tanks	Site cleanup	Noise	Radiation	Multimedia	Not elsewhere classified (n.e.c.)	
Hawaii	5.7	4.7	1.1	—	.6	—	—	.5	—	71
Idaho	28.4	27.6	.8	(D)	(Z)	(D)	—	—	(Z)	20
Illinois	309.2	294.5	14.7	2.0	10.6	(D)	(D)	.8	1.0	11
Indiana	216.7	208.3	8.3	2.2	4.7	.4	.3	.3	.5	6
Iowa	52.1	46.3	5.8	3.9	.9	—	—	—	1.1	11
Kansas	92.6	81.5	11.1	(D)	9.8	(Z)	—	—	(D)	23
Kentucky	89.2	87.4	1.8	.6	1.1	—	—	(Z)	.1	13
Louisiana	796.0	782.1	14.0	(D)	2.6	.3	(D)	(D)	(D)	4
Maine	51.6	36.3	15.3	(D)	15.0	—	—	—	(D)	4
Maryland	22.9	20.4	2.6	.8	.1	(D)	(D)	(D)	1.3	13
Massachusetts	45.7	39.5	6.2	1.2	4.1	(Z)	.3	(Z)	.5	13
Michigan	321.7	312.8	8.9	(D)	6.6	—	(D)	—	1.3	23
Minnesota	41.9	37.7	4.2	.3	(D)	.4	—	(Z)	(Z)	8
Mississippi	71.9	70.8	1.1	.1	1.0	(Z)	—	(Z)	(Z)	7
Missouri	73.1	70.4	2.7	(D)	1.1	(Z)	—	—	(D)	6
Montana	157.3	157.3	(Z)	—	—	—	—	—	(Z)	72
Nebraska	14.4	13.2	1.2	.3	.9	—	—	—	(Z)	18
Nevada	2.4	2.3	(Z)	(Z)	—	(Z)	—	—	—	12
New Hampshire	(D)	(D)	(D)	(D)	(Z)	—	—	—	(D)	(X)
New Jersey	129.1	119.3	9.8	2.7	6.0	.3	(Z)	.1	.7	12
New Mexico	(D)	(D)	(D)	—	(D)	—	—	—	—	(X)
New York	180.2	162.7	17.5	(D)	4.9	.1	—	(D)	.4	26
North Carolina	141.3	133.2	8.1	2.0	5.1	(D)	.1	(D)	.4	9
North Dakota	1.8	1.7	.1	—	.1	—	—	—	—	37
Ohio	435.3	413.5	21.8	6.2	13.9	.3	(Z)	.2	1.2	23
Oklahoma	34.4	30.9	3.5	.2	.1	—	—	—	3.2	24
Oregon	64.8	59.2	5.6	.6	4.8	.2	—	(Z)	(Z)	10
Pennsylvania	340.1	327.6	12.5	3.2	7.6	(D)	—	(D)	1.2	4
Rhode Island	20.0	14.0	5.9	5.8	.1	—	—	—	.1	9
South Carolina	95.8	89.4	6.4	.6	3.0	.1	(D)	(D)	1.8	4
South Dakota	.5	.5	(Z)	—	—	(Z)	—	—	—	28
Tennessee	187.3	183.6	3.7	.4	2.3	.7	—	(Z)	.3	3
Texas	923.2	884.9	38.3	3.2	34.5	(D)	(D)	.1	(D)	3
Utah	20.7	20.7	(Z)	(Z)	(Z)	—	—	—	—	44
Vermont	3.4	2.7	.7	.3	.4	—	—	—	—	30
Virginia	99.6	92.7	6.9	1.5	4.1	(Z)	(Z)	(D)	(D)	6
Washington	148.2	142.4	5.7	1.8	2.5	(D)	—	—	(D)	21
West Virginia	69.3	66.8	2.5	.7	1.4	(D)	—	—	(D)	23
Wisconsin	100.5	93.8	6.7	(D)	3.2	.1	—	(D)	.8	13
Wyoming	(D)	(D)	(D)	(Z)	(D)	—	—	—	—	(X)

¹PACENM denotes pollution abatement capital expenditures including the nonmedia and other.
²Excludes Major Group 23, Apparel and Other Textile Products.

Table 13a. Other Operating Costs by Major Groups for Kinds of Cost: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No major groups (two-digit industries) are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code	Major group	Total PAOCNM ¹	Total PAOC	Nonmedia and other							Standard error of estimate (PAOC) (percent)
				Kind of cost							
				Total	Underground storage tanks	Site cleanup	Noise	Radiation	Multimedia	Not elsewhere classified (n.e.c.)	
All industries²		20 669.5	18 772.0	1 897.5	181.4	1 460.0	10.2	20.3	78.5	1 471	1
20	Food and kindred products	1 540.0	1 447.6	92.4	74.1	14.9	.1	(Z)	1.3	20	4
21	Tobacco products	36.1	35.9	.2	.1	(Z)	—	—	—	2	10
22	Textile mill products	320.7	315.7	5.0	.7	3.8	(Z)	—	(Z)	5	5
24	Lumber and wood products	387.0	342.8	44.2	.4	39.4	.1	—	3.3	10	5
25	Furniture and fixtures	174.0	144.4	29.6	.3	2.4	—	—	.1	268	6
26	Paper and allied products	1 913.2	1 879.5	33.7	.9	17.4	(Z)	(Z)	6.2	93	3
27	Printing and publishing	307.1	287.5	19.6	9.0	4.4	(Z)	—	.2	60	4
28	Chemicals and allied products	5 103.9	4 566.9	537.1	23.8	438.4	5.5	12.0	30.7	267	2
29	Petroleum and coal products	3 120.0	2 914.9	205.1	.3	176.4	(D)	(D)	14.3	121	4
30	Rubber and miscellaneous plastics products	515.7	439.6	76.1	1.7	71.8	.2	—	.9	14	4
31	Leather and leather products	61.3	60.1	1.1	(Z)	.8	—	—	—	3	12
32	Stone, clay, and glass products	632.5	599.5	33.0	3.0	26.7	.1	(Z)	2.2	10	4
33	Primary metal industries	2 361.5	2 211.5	150.0	10.9	118.0	.7	5.2	4.9	104	4
34	Fabricated metal products	872.0	786.1	85.9	3.1	48.2	(D)	(D)	2.9	300	4
35	Industrial machinery and equipment	505.3	444.3	61.0	4.6	48.5	(D)	(D)	3.5	41	3
36	Electronic and other electric equipment	841.1	771.9	69.2	2.2	58.2	.1	.1	3.8	48	4
37	Transportation equipment	1 465.3	1 116.4	348.9	3.8	335.1	1.9	.3	.9	69	5
38	Instruments and related products	409.2	311.6	97.6	42.7	48.5	(Z)	.2	2.9	33	6
39	Miscellaneous manufacturing industries	103.5	95.7	7.8	(Z)	7.0	.1	—	.2	3	6

¹PAOCNM denotes pollution abatement operating costs including the nonmedia and other.
²Excludes Major Group 23, Apparel and Other Textile Products.

Table 13b. Other Operating Costs by States for Kinds of Cost: 1994

[Million dollars. Totals may not agree with detail because of independent rounding. Statistics in this table cover manufacturing establishments with 20 or more employees. No States are shown where PAOC is less than \$1.0 million. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

State	Total PAOCNM ¹	Total PAOC	Nonmedia and other							Standard error of estimate (PAOC) (percent)
			Kind of cost							
			Total	Underground storage tanks	Site cleanup	Noise	Radiation	Multimedia	Not elsewhere classified (n.e.c.)	
United States²	20 669.5	18 772.0	1 897.5	181.4	1 460.0	10.2	20.3	78.5	1 471	1
Alabama	460.7	437.3	23.4	.3	11.4	-	-	9.0	27	8
Alaska	21.2	21.2	-	-	-	-	-	-	-	33
Arizona	160.9	145.6	15.3	.3	14.6	-	(Z)	.2	2	7
Arkansas	262.5	247.2	15.2	.1	12.5	(Z)	(Z)	(D)	(D)	10
California	1 826.3	1 632.0	194.3	5.4	147.7	(D)	(D)	1.8	389	6
Colorado	187.7	109.9	77.8	67.9	(D)	(Z)	-	(D)	(Z)	22
Connecticut	212.8	187.7	25.1	8.6	11.5	.2	(D)	.6	(D)	10
Delaware	162.1	158.0	4.0	.1	2.4	-	-	.1	15	6
District of Columbia	5.9	(D)	(D)	(Z)	(D)	-	-	-	-	(X)
Florida	367.4	350.7	16.7	.4	9.9	(D)	(D)	5.1	7	4
Georgia	470.5	455.0	15.5	.4	12.4	(Z)	-	.9	18	4
Hawaii	21.7	20.3	1.4	-	.9	-	-	.5	(Z)	59
Idaho	91.2	79.9	11.3	.3	10.9	(Z)	-	-	1	9
Illinois	906.1	866.3	39.8	2.8	22.5	.4	5.0	4.2	49	4
Indiana	774.7	729.6	45.2	1.7	31.6	(D)	(D)	5.5	51	3
Iowa	233.6	220.3	13.2	.1	11.5	-	-	.2	15	9
Kansas	134.0	126.0	8.0	(D)	6.4	(Z)	-	(D)	11	14
Kentucky	407.3	379.0	28.3	19.0	6.2	(Z)	(D)	(D)	16	7
Louisiana	1 175.7	999.4	176.3	(D)	166.2	(D)	(D)	7.4	18	5
Maine	143.8	131.7	12.1	.1	10.5	-	(D)	(Z)	(D)	9
Maryland	190.5	188.6	1.9	.2	1.1	-	-	-	6	12
Massachusetts	301.7	273.6	28.1	.7	16.6	(Z)	4.6	1.6	46	7
Michigan	912.6	774.1	138.4	42.6	90.7	(Z)	-	1.6	36	4
Minnesota	320.1	296.2	23.9	(D)	21.7	-	(D)	.8	9	4
Mississippi	267.0	252.5	14.5	.4	13.4	(Z)	-	.7	1	5
Missouri	283.0	276.7	6.3	1.5	3.9	(D)	(Z)	(D)	4	4
Montana	61.7	58.5	3.2	(Z)	3.2	-	-	-	-	32
Nebraska	64.1	60.0	4.1	.1	3.9	(Z)	(Z)	.1	(Z)	10
Nevada	14.5	(D)	(D)	(Z)	(D)	-	-	(D)	(D)	(X)
New Hampshire	69.3	63.2	6.1	.2	5.4	(D)	(Z)	(Z)	(D)	19
New Jersey	587.5	554.2	33.3	.9	22.2	3.8	(Z)	.8	56	7
New Mexico	57.2	56.7	.5	(Z)	.5	-	(Z)	-	(Z)	9
New York	648.0	563.3	84.7	1.7	73.0	(D)	(D)	4.9	42	6
North Carolina	623.6	579.3	44.3	1.4	39.2	(Z)	(Z)	2.7	9	4
North Dakota	8.5	8.3	.2	.1	.1	-	-	-	-	22
Ohio	1 348.8	1 212.6	136.2	3.7	125.1	(D)	(D)	2.7	12	5
Oklahoma	140.9	132.5	8.4	(D)	6.7	-	-	(D)	1	12
Oregon	219.8	209.2	10.6	(Z)	8.5	(D)	-	.7	(D)	10
Pennsylvania	1 106.7	1 006.7	100.0	2.3	64.9	1.1	-	4.0	277	6
Rhode Island	63.7	60.0	3.7	(D)	2.4	-	-	(Z)	(D)	11
South Carolina	394.1	379.6	14.5	(D)	7.8	(Z)	(D)	.9	17	6
South Dakota	15.0	15.0	-	(Z)	-	-	-	(Z)	-	26
Tennessee	561.8	504.3	57.6	3.0	51.9	(D)	-	1.6	(D)	4
Texas	2 692.1	2 326.6	365.5	10.2	335.5	1.4	.2	7.6	106	3
Utah	119.8	110.8	8.9	(Z)	8.6	-	-	-	3	16
Vermont	21.2	18.0	3.2	(D)	3.0	-	-	(D)	-	29
Virginia	366.0	350.8	15.3	(D)	10.4	.4	(D)	2.9	7	4
Washington	428.3	410.4	17.8	.5	11.6	(Z)	-	.5	52	8
West Virginia	243.2	232.8	10.4	.1	4.3	(Z)	-	3.4	26	18
Wisconsin	486.7	455.6	31.1	.8	24.7	.1	-	2.1	33	7
Wyoming	26.1	25.2	.9	(Z)	.9	-	-	-	-	26

¹PAOCNM denotes pollution abatement operating costs including the nonmedia and other.
²Excludes Major Group 23, Apparel and Other Textile Products.

Table 14. Summary New Capital Expenditures by Companies in Mining, Petroleum, and Electric Utilities for All Media: 1990 to 1994

[Million dollars. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code ¹	Industry	New plant and equipment	Pollution abatement capital expenditures (PACE)						Nonmedia and other
			Total PACENM ²	Media					
				Total	Air	Water	Solid/contained waste		
10,12,13,14	Mining	1994 11 242.3	550.7	434.2	130.6	190.9	112.7	116.5	
		1993 10 075.2	503.6	388.8	113.2	161.1	114.5	114.8	
		1992 8 883.7	405.1	317.6	105.9	144.7	67.0	87.5	
		1991 10 022.5	(NA)	273.6	117.5	119.6	36.5	(NA)	
		1990 9 880.3	(NA)	251.7	78.9	138.2	34.6	(NA)	
29	Petroleum and coal products	1994 28 046.4	4 662.4	4 189.8	2 627.5	1 113.6	448.7	472.6	
		1993 28 671.6	4 445.4	3 963.5	2 380.4	1 115.1	468.0	481.9	
		1992 29 585.8	4 367.3	3 873.5	1 932.9	1 380.5	560.1	493.8	
		1991 35 590.6	(NA)	3 559.6	1 744.2	1 503.3	312.2	(NA)	
		1990 34 787.3	(NA)	3 221.3	1 265.6	1 643.6	312.2	(NA)	
491,493	Electric utilities ³	1994 46 151.1	4 349.4	4 179.2	3 145.3	605.5	428.4	170.2	
		1993 45 897.8	4 200.0	4 032.3	2 929.1	620.5	482.7	167.7	
		1992 42 657.6	3 037.9	2 886.7	1 948.3	567.0	371.4	151.2	
		1991 38 616.7	(NA)	1 943.2	1 054.5	573.0	315.7	(NA)	
		1990 39 267.5	(NA)	2 111.1	1 111.3	673.0	326.9	(NA)	

Table 14. **Summary New Capital Expenditures by Companies in Mining, Petroleum, and Electric Utilities for All Media: 1990 to 1994—Con.**

¹For further description of SIC codes covered in this survey, see introductory text.
²PACENM denotes pollution abatement capital expenditures including the nonmedia and other.
³Does not include Rural Electric Administration utilities.

Table 15a. **New Capital Expenditures by Companies in Mining, Petroleum, and Electric Utilities for the Media Air: 1994**

[Million dollars. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code ¹	Industry	Total PACE	Total	Air					
				Type of pollutant abated				Abatement technique	
				Hazardous	Nonhazardous			End of line	Production process enhancements
					Total	Particulates, etc. ²	Other		
10,12,13,14	Mining -----	434.2	130.6	27.4	103.2	81.0	22.2	71.4	59.2
29	Petroleum and coal products -----	4 189.8	2 627.5	551.8	2 075.7	1 839.3	236.4	1 301.3	1 326.2
491,493	Electric utilities ³ -----	4 179.2	3 145.3	94.4	3 050.9	2 925.1	125.8	2 504.0	641.3

¹For further description of SIC codes covered in this survey, see introductory text.
²Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead.
³Does not include Rural Electric Administration utilities.

Table 15b. **New Capital Expenditures by Companies in Mining, Petroleum, and Electric Utilities for the Media Water: 1994**

[Million dollars. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code ¹	Industry	Total PACE	Total	Water			
				Type of pollutant abated		Abatement technique	
				Hazardous	Nonhazardous	End of line	Production process enhancements
10,12,13,14	Mining -----	434.2	190.9	20.8	170.1	163.3	27.6
29	Petroleum and coal products -----	4 189.8	1 113.6	211.6	902.0	817.6	296.0
491,493	Electric utilities ² -----	4 179.2	605.5	31.1	574.4	554.9	50.6

¹For further description of SIC codes covered in this survey, see introductory text.
²Does not include Rural Electric Administration utilities.

Table 15c. **New Capital Expenditures by Companies in Mining, Petroleum, and Electric Utilities for the Media Solid/Contained Waste: 1994**

[Million dollars. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code ¹	Industry	Total PACE	Total	Solid/contained waste			
				Type of pollutant abated		Abatement technique	
				Hazardous	Nonhazardous	End of line	Production process enhancements
10,12,13,14	Mining -----	434.2	112.7	6.1	106.6	92.5	20.2
29	Petroleum and coal products -----	4 189.8	448.7	129.1	319.6	274.0	174.7
491,493	Electric utilities ² -----	4 179.2	428.4	35.6	392.8	397.4	31.0

¹For further description of SIC codes covered in this survey, see introductory text.
²Does not include Rural Electric Administration utilities.

Table 15d. **New Capital Expenditures by Companies in Mining, Petroleum, and Electric Utilities for Kinds of Cost: 1994**

[Million dollars. See introductory text for a description of survey coverage and for the meaning of abbreviations and symbols]

SIC code ¹	Industry	Total PACENM ²	Total PACE	Nonmedia and other						
				Total	Kind of cost					
					Underground storage tanks	Site cleanup	Noise	Radiation	Multimedia	Not elsewhere classified (n.e.c.)
10,12,13,14	Mining -----	550.7	434.2	116.5	16.7	98.8	.2	.2	-	.6
29	Petroleum and coal products -----	4 662.4	4 189.8	472.6	142.2	278.6	15.7	1.1	17.9	17.2
491,493	Electric utilities ³ -----	4 349.4	4 179.2	170.2	53.1	67.2	13.2	2.4	14.2	20.1

¹For further description of SIC codes covered in this survey, see introductory text.
²PACENM denotes pollution abatement capital expenditures including the nonmedia and other.
³Does not include Rural Electric Administration utilities.

Table 16. **Selected Industrial Air Pollution Control Equipment: 1990 to 1994**

[Million dollars]

Type of equipment	Value			Shipments by end use												
	New orders	Total shipments	Back-log of orders	Pulp and paper mill operations	Chemical and fertilizer production	Petroleum refining	Cement manufacturing	Foundries	Iron and steel mills	Primary metals smelting plants	Grain milling and handling	Coal mining and cleaning	Steam electric utility power plants	Steam industrial power plants	Municipal waste combustors	Other end use industries
Total air pollution control equipment ¹ ---	1994..	(NA)	(NA)	(NA)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
	1993..	781.2	713.4	754.1	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
	1992..	846.6	817.8	684.3	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
	1991..	962.2	825.3	621.1	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
	1990..	826.6	710.9	558.5	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Particulates emission collectors -----	1994..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	1993..	422.1	463.3	255.1	35.7	58.6	32.3	14.1	4.2	5.5	6.9	5.3	4.9	96.2	18.0	4.5
	1992..	494.0	496.0	294.4	47.4	64.4	41.2	15.0	4.1	6.6	7.3	5.6	3.4	72.4	21.0	5.2
	1991..	531.0	446.5	264.7	53.8	42.5	18.2	12.3	3.7	6.3	8.7	5.9	4.3	65.7	47.9	(D)
	1990..	426.0	394.0	221.7	61.2	42.1	10.2	10.5	3.3	6.9	3.4	4.2	4.9	47.9	38.7	-
Gaseous emission control devices -----	1994..	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	1993..	292.4	196.9	422.8	(D)	9.3	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1992..	225.2	226.9	327.3	(D)	6.3	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1991..	280.8	224.8	299.3	(D)	3.3	(D)	-	(D)	(D)	(D)	(D)	(D)	(D)	65.9	(D)
	1990..	295.1	227.7	304.0	(D)	16.2	5.6	-	(D)	(D)	(D)	(D)	97.2	39.7	-	61.6

Source: Current Industrial Reports, Selected Industrial Air Pollution Control Equipment (MA-35J), 1990 to 1994.
¹Includes other types of industrial air pollution control equipment not shown separately.
²No longer collected.

Appendix

Report Forms and Respondent Instructions

The following pages present samples of the questionnaires used for the 1994 Pollution Abatement Costs and Expenditures Survey.

Form MA-200, Survey of Pollution Abatement Costs and Expenditures.....	A-2
Form PA-2, Plant and Equipment Survey Supplement for Pollution Abatement.....	A-23

MA-200(I)
(8-94)

OMB No. 0607-0176;
Approval Expires 09/30/95



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

OFFICE OF THE DIRECTOR

FROM THE ACTING DIRECTOR
BUREAU OF THE CENSUS

Industrial firms are devoting a significant share of their resources for pollution abatement. Accurate and timely statistics are needed on a national basis so that business, Government, and the general public can better evaluate the economic implications of such costs. Your response to the annual "Survey of Pollution Abatement Costs and Expenditures" will provide this information.

We need your report only for plant(s) for which you received an addressed form. Please read the general instructions carefully. If actual records are not available, carefully prepared estimates are acceptable.

The law (Title 13, United States Code) requires your response to this inquiry. By the same law, your report to the Census Bureau is confidential. Only sworn Census Bureau employees will see the information reported and they will use it only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

Your cooperation in returning the completed form by **March 15** will help to make possible the timely release of the survey results. If you need additional time to complete the report, require additional forms, or have any questions, please call the Environment, Technology, and Innovation Branch of our Manufacturing and Construction Division on the telephone number printed on the answer sheet. Your Census Bureau appreciates your help.

Sincerely,

Harry A. Scarr

1994 SURVEY OF POLLUTION ABATEMENT COSTS AND EXPENDITURES

PLEASE COMPLETE THIS WORKBOOK. COPY THE ANSWERS TO THE ENCLOSED ANSWER SHEET. RETURN ONLY THE ANSWER SHEET.

SUBJECT and PURPOSE

This annual survey collects new capital expenditures and annual operating expenses for pollution abatement in manufacturing. It also covers cost offsets for reclaiming valuable materials or energy as a result of pollution abatement efforts.

Pollution abatement is for the purpose of reducing, eliminating, or disposing of unwanted emissions or wastes that are created by the production process and harmful to the environment or the removal of pollution created by prior-years production. For this survey, only expenditures with the primary purpose of protecting the environment are included. This survey does not collect expenditures intended to meet worker safety and health requirements. It also does not include expenditures that abate pollution when the primary purpose is to increase profits or cut costs, and the environmental protection is a side benefit.

The **statistics from this survey** are mainly used by the Bureau of Economic Analysis to incorporate pollution abatement expenditures into the national income and product accounts and by the Environmental Protection Agency to monitor the economic impact of environmental programs. Other data users include: other Federal agencies, state and local governments, trade associations, manufacturers, marketing and research companies, universities, financial institutions, and environmental reporters.

AUTHORITY and CONFIDENTIALITY

Response to this inquiry is **required by law** (Title 13, U.S. Code). By Section 9, of Title 13, U.S. Code, your report to the Census Bureau is **confidential**. It may be seen only by sworn Census Bureau employees and may be used only for statistical purposes. The data can not be used for regulation or enforcement. Copies of your report retained in your files are **immune from legal process**.

HOW TO REPORT

This report is required only for the establishment located at the address named in the address box on the answer sheet. **DO NOT COMBINE** with other establishments in your company even though operations may jointly use the same pollution abatement facilities. When this occurs, apportion the costs and expenditures according to the rate of pollution abatement equipment utilization or the relative amounts of pollutants produced.

All respondents should complete Item 1, **Operational Status**. Review Section B on page 6, **Screening for Pollution Abatement Costs and Expenditures**. Complete Item 2, **Total Pollution Abatement Costs and Expenditures**, and follow Item 2 instructions.

Answer all questions. If you can not answer a question from your plant records, please estimate the answer carefully. In some cases, identification of pollution abatement expenditures may require the joint efforts of your establishment's financial and engineering staff. Report all value figures in thousands of dollars. Report data for the calendar year. If calendar year book figures are not available except at considerable cost, reasonable estimates are acceptable. If your fiscal year ends between October 31 and February 28, fiscal year figures are acceptable.

This booklet contains general definitions and specific instructions for each item. Each item's instructions include a guide listing examples of expenditures. In most cases these lists will provide sufficient information for completing this survey form.

For further details or definitions, see the following acts:

Clean Air Act and Amendments
 Clean Water Act and Amendments
 Resource Conservation and Recovery Act and Amendments
 Pollution Prevention Act of 1990
 Comprehensive Environmental Responses, Compensation, and Liability Act
 Superfund Amendments and Reauthorization Act
 Noise Pollution Control Act

To purchase copies of recent amendments to these acts request "Committee Print 103-B" from the:

Superintendent of Documents,
 Government Printing Office,
 Washington, DC 20402, or call 202-783-3238.

This survey is directed to manufacturing operations. The information requested supplements the data collected in the annual survey of manufactures. If you think that you are **not a manufacturing operation**, call our analysts on the telephone number shown on the answer sheet for instructions. **NOTE:** Printing and publishing operations, logging, machine shops, and boat repair are included in manufacturing.

If you have **questions** or **suggestions** regarding this report, please call the Environment, Technology, and Innovation Branch on the telephone number shown on the answer sheet. Please refer to the Census Bureau file number (the 11-digit number above the plant name in the address box) when calling or in written correspondence.

DUE DATE

Complete the answer sheet and return it by **March 15** in the enclosed prepaid envelope to:

Bureau of the Census
 1201 East 10th Street
 Jeffersonville, IN 47132-0001

DO NOT RETURN THIS WORKBOOK.

If you need **additional time** to complete the report, or if you need a **duplicate workbook** or answer sheet, please call our Jeffersonville office at **812-288-3331**.

RESPONSE TIME

Public reporting burden for this collection of information is estimated to vary from 45 minutes to 35 hours per form (with an average of 2-1/2 hours), including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send **comments** regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Associate Director for Management Services, Paperwork Reduction Project (0607-0176), Room 2027, FB 3, Bureau of the Census, Washington, DC 20233-0001; and to the Office of Management and Budget, Paperwork Reduction Project (0607-0176), Washington, DC 20503.

ELECTRONIC REPORTING

For **information** concerning the possible use of reporting formats other than the form provided, such as computer tape or printouts, contact our Environment, Technology, and Innovation Branch on the telephone number shown on the answer sheet.

PUBLICATION OF RESULTS OF THIS SURVEY

Industry estimates are tabulated and published in the Current Industrial Report, Pollution Abatement Costs and Expenditures, MA-200. Companies reporting in this survey may obtain a copy of this publication without charge by marking the check box on the answer sheet for a copy of the **MA-200 publication brief**. The publication brief will be sent to the same address this booklet was mailed to. You also may request a copy without charge by writing to the Bureau of the Census, Manufacturing and Construction Division, Federal Office Building 4, Room 2135, Washington, DC 20233-0001.

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SECTION B – SCREENING FOR POLLUTION ABATEMENT COSTS AND EXPENDITURES

This survey collects the following types of expenditures for pollution abatement and environmental protection:

1. Capital expenditures for pollution abatement structures or equipment added to the production process, **and** for structures and equipment with built-in pollution abatement features to reduce generation of air pollutants, water pollutants, or solid/contained wastes.
2. Operating expenses for operating pollution abatement equipment; for removal or disposal of pollutants including **trash removal or sewage service**; for testing and monitoring of emissions or wastes; for pollution abatement audits, reports, studies, or operating procedures development.
3. Costs and expenditures for cleaning up contaminants from the site.
4. Costs and expenditures for other environmental protection such as expenditures to reduce noise pollution, radiation, or multimedia expenses.

Note: Some common pollution abatement expenses are for the removal of **garbage, paints, boxes, discarded cans, used oils, and inks** resulting from the production process.

► **ITEM 2 – TOTAL POLLUTION ABATEMENT COSTS AND EXPENDITURES**

Check **all** appropriate boxes to indicate the types of pollution abatement expenditures at this location and proceed as instructed.

- No** operating expenses or capital expenditures for pollution abatement. Your production process does not generate pollutants, or all your potential pollutants are recycled.
- Costs either included in rent or not charged. All pollution abatement expenses were included in rent, taxes, lease agreement, **or** waste removal at no charge (such as a scavenger service)
- Pollution abatement operating expenses and capital expenditures **each** were less than \$500 but greater than zero

*You have no pollution or do not need to report any. Check this box on the answer sheet. Complete **ITEM 13** of the answer sheet and return it.*

- Annual pollution abatement operating expenses exceeding \$500
- Capital expenditures exceeding \$500 for pollution abatement structures or equipment, or for structures or equipment with built-in pollution abatement features
- Costs and expenditures exceeding \$500 for underground storage tanks
- Costs and expenditures exceeding \$500 for site cleanup
- OTHER** environmental protection costs and expenditures exceeding \$500

*Complete **Section D** starting on page 8*

*Complete **Section E** starting on page 11*

*Complete **Section F** starting on page 13*

*Complete **Section G** starting on page 14*

*Complete **Section H** starting on page 15*

*Read **Section C**, General Definitions, on page 7 first*

SECTION C – GENERAL DEFINITIONS

MEDIA

Report expenditures by the media, **air, water, or solid/contained (land) waste**, that would be affected by the pollutants if the pollutants were not reduced, eliminated, or disposed of. See the hazardous versus nonhazardous pollutants section below for examples of the types of wastes affecting each media.

TECHNIQUES FOR POLLUTION ABATEMENT

Treatment refers to the wide variety of techniques used on wastes to cool, detoxify, decompose, and separate-to-store or ameliorate.

Collection/Disposal refers to the collection, storage, transport, processing, and disposal of solid waste by incineration, sanitary or other landfill methods, and disposing in authorized areas.

Waste minimization is any practice which prevents, reduces, eliminates, or recovers and reuses emissions or wastes so as to avoid treatment or collection/disposal. Waste minimization includes source reduction and recycling.

Source reduction is any practice which prevents or reduces the amount of emissions or waste generated for recycling, treatment, or collection/disposal. This can be accomplished by equipment/technology changes, process procedure modifications, product reformulation/redesign, raw material substitutions (including improved catalysts and reuse of waste or water), and improvements in housekeeping, maintenance, training, or inventory control.

Recycling is a method of waste management in which waste is recovered and reused for its material or energy values. The waste can be reused in the production process or sold to an outside party as material. We are including the burning of flammable wastes for energy recovery as recycling. Closed loop recovery systems are recycling.

HAZARDOUS VERSUS NONHAZARDOUS POLLUTANTS

Hazardous air pollutants are those regulated under Section 112 of the Clean Air Act. Examples include arsenic, benzene, beryllium, mercury, and vinyl chloride. **Nonhazardous air pollutants** examples typically include particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons, volatile organic compounds (VOC), and lead.

Hazardous water pollutants are toxic metals/toxic inorganic compounds, and toxic organic compounds as listed by the Clean Water Act. Examples of toxic metals and inorganic compounds include antimony, arsenic, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, thallium, and zinc. Examples of toxic organic compounds are benzene, chlorethane, toluene, and zylene. **Nonhazardous water pollutants** examples include conventional pollutants such as detergents and food wastes, and nonconventional pollutants.

Hazardous solid/contained wastes are listed under Subtitle C of the Resource Conservation and Recovery Act. Oils and inks are common hazardous contained liquid wastes. **Nonhazardous solid/contained waste** examples include boxes, nails, containers, sawdust, scrap metal, scrap wood, sewage sludge, dredged spoils, incinerator residue, and wrecked or discarded equipment.

SECTION D – ANNUAL OPERATING EXPENSES AND COST OFFSETS FOR POLLUTION ABATEMENT

GUIDE FOR ITEMS 3-5

The following list describes the types of expenses to report in this section. The list is intended to be a guide and is not complete.

Include operating expenses for:

- private contractor collection/disposal of waste created by the production process (Report in Item 3, line d – Contract Work.)
- sewage or solid/contained waste collection/disposal paid to Federal, State, or local governments (Report only in Item 5.)
- handling, treatment, or disposal of wastes created by the production process
- testing and monitoring of emissions or wastes
- operating and maintaining pollution abatement equipment
- fuel and power costs for operating pollution abatement equipment
- incremental costs for consumption of environmentally preferable materials and fuels
- conducting environmental studies for development or expansion
- parts for pollution abatement equipment replacement and repair
- leasing of pollution abatement equipment
- compliance and environmental auditing
- salaries and wages for time spent completing environmental reporting requirements
- developing pollution abatement operating procedures
- permits and costs incurred obtaining permits

Exclude operating expenses for:

- collection/disposal of office and cafeteria trash (If you can not separate from industrial, report the entire amount.)
- sanitary sewage (If you can not separate from industrial, report the entire amount.)
- health, safety, environmental aesthetics, or employee comfort (OSHA)
- research and development services
- manufacture of pollution abatement equipment
- taxes, fines, legal fees, superfund taxes and contributions, insurance
- interest for financing pollution abatement capital expenditures
- clean up of spills (Report in Item 10.)
- substituted materials in products to abate pollution either in the production process or from the product. Costs to reformulate products to eliminate or reduce pollution from the production process are reportable.
- abatement activities that are a normal operating procedure and would continue in the absence of pollution abatement legislation

Trash and hazardous material pick up by a private contractor are reported in Item 3, line d, solid/contained waste. Trash pick up by a government agency is reported in Item 5, line b.

Sewage costs paid to a private contractor are reported in Item 3, line d, water. Sewage costs paid to a government agency are reported in Item 5, line a.

▶ ITEM 3 – OPERATING EXPENSES FOR POLLUTION ABATEMENT EXCEPT PAYMENTS TO GOVERNMENTS FOR POLLUTANT REMOVAL

Report pollution abatement annual operating expenses by media and expense category for the survey year. If all operating expenses fall between \$500–\$1,000, round up to \$1,000, and report in the most applicable category. See Section C on page 7 for media definitions.

Depreciation – Report annual depreciation for the survey year only for all pollution abatement structures and equipment in place as of December 31 of the survey year.

Salary & Wages – Report salaries and wages diverted to pollution abatement. Follow the definition of salary and wages used for calculating the withholding tax. Report the gross earnings. Exclude supplemental labor costs.

Materials – Report the delivered cost of materials, parts, and components that were used as operating supplies for pollution abatement, or used in repair or maintenance of pollution abatement capital assets.

Expense Category	Media		
	Air	Water	Solid/Contained Waste
a. Depreciation	\$, ,000	\$, ,000	\$, ,000
b. Salaries & Wages	\$, ,000	\$, ,000	\$, ,000
c. Fuel & Electricity	\$, ,000	\$, ,000	\$, ,000
d. Contract Work/Services	\$, ,000	\$, ,000	\$, ,000
e. Materials, Leasing, Miscellaneous	\$, ,000	\$, ,000	\$, ,000
f. Total	\$, ,000	\$, ,000	\$, ,000

▶ ITEM 4 – OPERATING EXPENSES FOR HAZARDOUS POLLUTANTS REPORTED IN ITEM 3

Percent hazardous – Report percents of dollars reported in Item 3, line f which are for the abatement of hazardous pollutants. For example, if the expenses for the abatement of pollutants are intended to abate only hazardous pollutants, report 100% in the appropriate category below. Report zero (0) when no hazardous pollutants are abated. Estimate the percentage of expenditures directed to hazardous pollutants when both hazardous and nonhazardous pollutants are abated. See Section C on page 7 for hazardous pollutants definitions.

Percent Hazardous	Air	Water	Solid/ Contained Waste
		.0%	.0%	.0%

▶ ITEM 5 – PAYMENTS TO GOVERNMENTS FOR POLLUTANT REMOVAL

Payments to governments includes payments to Federal, State, county, or local governmental units for sewage services or solid/contained waste collection/disposal for the survey year.

Payments to governments for:		
a. Sewage Services	\$, ,000	
b. Solid/Contained Waste Collection/Disposal	\$, ,000	
c. Total	\$, ,000	

GUIDE FOR ITEM 6

Pollution abatement **cost offsets** (usually the value of recovered materials and energy) are pollution abatement operating expenses recovered as a result of an off-shoot of pollution abatement techniques. See Section C on page 7 for techniques definitions. There are conditions for which the techniques have cost offsets associated with them. Cost offsets must be related to production and for environmental protection. There must be a pollution abatement expense against which the cost offset is counted. *The offset may be greater than the expense.*

Conditions consistent with cost offsets:

- waste minimization (source reduction or recycling) for environmental protection
- energy recovery for environmental protection

Conditions not consistent with cost offsets:

- waste minimization (source reduction or recycling) for production efficiency or profit
- recycling of waste not related to production, such as cafeteria and office trash
- recycling that is your primary product, that is, you are a recycling plant
- savings due to better planning that avoided operating expenses
- tax credits

The list is intended to be a guide and is not complete.

Examples of cost offsets:

As an environmental protection alternative to used oil disposal, a printing plant has used machinery oil picked up by a hazardous waste collection and treatment service. The service charges a fee. The fee is reported in Item 3. The service returns the oil clean. Thus, the printer avoids buying new oil. The value of the oil is an offset to the service's fees.

A manufacturer purchases a cardboard baler. The capital expenditure is reported in Item 7. The costs of operating the baler are reported in Item 3. The manufacturer sells the cardboard to a recycler. The activity is not a potentially profit making venture; it is conducted for environmental protection. The revenues received from the recycler are cost offsets.

A manufacturer installs a closed loop recovery system in the production process so as to prevent the dumping of the chemicals into the water system. Since the closed loop recovery system recaptures and reuses the chemicals in the production process, it reduces expenses for chemicals. The pollution abatement portion of the capital expenditure pertaining to the closed loop recovery system is reported in Item 7. The operating expenses to maintain the system are reported in Item 3. The value of the recovered chemicals is reported as a cost offset.

Examples that are not cost offsets:

A copper smelter collects copper particulates in filters and sells the copper. The activity is viewed as necessary for profit goals.

Rejects and scraps are further processed at a bakery and are sold as animal feed for profit. This would be done even in the absence of environmental protection objectives.

A household cooking equipment manufacturer recaptures porcelain enamel particulates in air bags and reuses the material in the production process. The value of the particulates is substantial. The activity is viewed as necessary for profit goals.

▶ ITEM 6 – POLLUTION ABATEMENT COST OFFSETS

Note: Do not reduce the costs reported in Item 3 by the estimates here.

Air (a)	Water (b)	Solid/Contained Waste (c)	Total
\$, ,000	\$, ,000	\$, ,000	\$, ,000

SECTION E – NEW CAPITAL EXPENDITURES FOR ABATEMENT OF POLLUTANTS

GUIDE FOR ITEMS 7-8

New capital expenditures for pollution abatement are all outlays during the survey year for pollution abatement structures and equipment that are chargeable to fixed asset accounts, and for which depreciation or amortization reserves (accounts) are maintained. Report only those capital outlays actually made during the year, not the final value of equipment put in place or the building completed during the year. If leasing arrangements meet Financial Accounting Standards Board criteria, please report the original cost or market value of the structure or equipment as a new capital expenditure. **Do not report total capital expenditures.** Total capital expenditures are reported on your annual survey of manufacturers (ASM). Report only the portions of capital expenditures that are for pollution abatement as defined by this survey.

Pollution abatement structures and equipment are of two types: **end of line** and **production process**.

End-of-line structures or equipment reduce pollutants after their generation. These are separately identifiable (retrofit) treatment facilities that are installed exclusively for the purpose of abating pollutant emissions or wastes. Report the entire end-of-line expenditure.

Production process enhancements (or replacements, additions, or alterations) reduce or eliminate the generation of pollutants by converting processes and equipment to enable waste minimization (source reduction or recycling), or to enable additional uses of water prior to discharge. Report the pollution abatement portion of the installed cost of enhancement projects intended for environmental protection. Estimate the pollution abatement portion as the extra cost of pollution abatement features in structures and equipment (i.e., your actual spending less what you would have spent without the pollution abatement features built-in.)

Special instructions: Estimating the pollution abatement portion (distinct from production efficiency, energy conservation, employee safety, etc.) of a process enhancement may not be feasible in all cases. For these cases, report in this manner: **Do not** include any of the project cost **unless** the primary purpose is environmental protection. If the primary purpose of the project is environmental protection, report the whole production process enhancement project expenditure. Indicate in the remarks section that this is the case. **Caution:** A project with the primary purpose of improving production efficiency may include pollution abatement features added to meet legal requirements. Since the primary purpose of such a project is still not environmental protection, do not report **any** of the production process enhancement.

Examples of Pollution Abatement Capital

Type	Media		
	Air (a)	Water (b)	Solid/Contained Waste (c)
End-of-Line Structures and Equipment	dust collectors, scrubbers, precipitators	trickling filters, settling ponds, clarifiers, spill containment dikes	cardboard balers, compactors, bins, improved containments for waste, incinerators
Production Process Enhancements	conversion to substitute fuels that generate fewer pollutants	conversion to a closed or partially closed loop system for pollution abatement	conversion to enable recycling scrap materials, converting piping for greater pollution prevention

The following list further describes the capital expenditures to report in this section. The list is intended to be a guide and is not complete.

Include new capital expenditures for:

- end-of-line structures or equipment: new, replacement, and/or expansion, intended for environmental protection
- the pollution abatement **portion of** production process enhancements intended for environmental protection
- pollution monitoring and testing equipment (Report as production process.)
- construction in progress intended for environmental protection including pollution abatement expenditures at a plant under construction intended to replace current plant
- waste storage facilities (Report tanks in Section F, Item 9.)

Exclude new capital expenditures for:

- pollution abatement end-of-line structures or equipment, or production process enhancements intended to maximize efficiency or profit
- research and development
- health, safety, environmental aesthetics or employee comfort (OSHA)
- recycling equipment if your primary product is recycling, that is, you are a recycling plant
- motor vehicles with pollution abatement devices, or refitting motor vehicles with pollution abatement devices
- production of pollution abatement equipment that is your primary product, that is, you are a pollution abatement equipment manufacturer
- projects undertaken exclusively for the purpose of insuring adequate water supply for production

ITEM 7 – NEW CAPITAL EXPENDITURES FOR POLLUTION ABATEMENT BY MEDIA

For each media, report your pollution abatement end-of-line structures and equipment expenditures; the pollution abatement **portion** of your spending for production process enhancements; and the total of your end-of-line and your production process responses. Report the percentage of each total by media, except air, which is directed to hazardous pollutants. (Item 8 asks for the percentage for air.) Report for the survey year.

Exclude tanks from ITEM 7. Report capital expenditures for installation of safeguards or replacement of inferior underground storage tank systems in SECTION F, ITEM 9. Capital expenditures for other tank systems are not collected on this survey.

Type	Media								
	Air (a)		Water (b)		Solid/Contained Waste (c)				
End of Line	\$	,	,000	\$	,	,000	\$	,	,000
Production Process (pollution abatement portion)	\$	,	,000	\$	,	,000	\$	,	,000
Total by Media	\$	,	,000	\$	,	,000	\$	,	,000
Percent Hazardous	See Item 8.			.0%			.0%		

▶ ITEM 8 – TYPE OF AIR POLLUTANTS REPORTED IN ITEM 7

Report the percentage of new capital expenditures for air pollution abatement from Item 7 by the type of pollutant the structure or equipment will abate. For example, if expenditures are intended to abate hazardous air pollutants and sulfur oxides equally, report 50% on the hazardous air pollutant line and 50% on the particulates, sulfur oxides etc. line.

a. Hazardous air pollutants		.0%
b. Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead		.0%
c. Other nonhazardous air pollutants		.0%
d. Total	100	.0%

SECTION F – COSTS AND EXPENDITURES FOR UNDERGROUND STORAGE TANKS

▶ ITEM 9 – COSTS AND EXPENDITURES FOR UNDERGROUND STORAGE TANKS

GUIDE FOR ITEM 9

The following list describes the types of expenditures to report in this section. The list is intended to be a guide and is not complete.

Include costs and expenditures for:

- installation of safeguards for existing underground tanks
- replacement of inferior or leaking underground storage tanks
- removal of inferior or leaking underground storage tanks
- monitoring underground storage tanks

Report costs and expenditures for ***underground storage tanks*** for the survey year.

Annual operating expenses for underground storage tanks	\$,	,000
New capital expenditures for underground storage tanks	\$,	,000

SECTION G – COSTS AND EXPENDITURES FOR SITE CLEANUP

GUIDE FOR ITEM 10

Site cleanup is the abatement of pollutant contamination from leaks, spills, past production processes, or at a former disposal site (Superfund). The pollution must be on the site of the establishment named on this survey form or from your plant’s production process. Site cleanup is not reported by media. The following list describes the types of expenditures to report in this section. The list is intended to be a guide and is not complete.

Include costs and expenditures for:

- privately-paid site cleanup
- testing and monitoring
- compliance and environmental auditing
- environmental studies
- groundwater contamination cleanup
- reclamation for pollution abatement

Exclude costs and expenditures for:

- government-paid site cleanup
- taxes, fines, permits, legal fees such as for settling liability and other issues, superfund taxes and contributions
- interest for financing pollution abatement capital expenditures
- reclamation to enhance property values or for aesthetics

► ITEM 10 – COSTS AND EXPENDITURES FOR SITE CLEANUP

Report costs and expenditures for site cleanup for the survey year.

Annual operating expenses for site cleanup	\$	,	,000
New capital expenditures for site cleanup	\$	,	,000

SECTION H – COSTS AND EXPENDITURES FOR ABATEMENT OF OTHER POLLUTANTS

GUIDE FOR ITEMS 11-12

OTHER pollution abatement costs and expenditures cover pollution emissions or wastes that can not be reasonably allocated by media. Media are defined in Section C on page 7.

Include costs and expenditures for:

- noise pollution control that would otherwise disturb the surrounding community
- protection against radiation that would otherwise reach the surrounding environment
- multimedia expenses, that is, expenses that can not be allocated to one particular media (such as administrative costs for an on-site environmental office or lab)

▶ ITEM 11 – COST AND EXPENDITURES FOR OTHER POLLUTANTS

Report costs and expenditures for OTHER pollutants for the survey year.

Annual operating expenses for OTHER pollution abatement	\$	,	,000
New capital expenditures for OTHER pollution abatement	\$	,	,000

▶ ITEM 12 – TYPE OF OTHER POLLUTANTS

Check the type(s) of pollutants abated by the expenditures reported in ITEM 11.

- Noise pollution that would otherwise disturb the surrounding community
- Radiation that would otherwise reach the surrounding environment
- Multimedia expenses
- Other pollutants within the scope of this survey but not reported elsewhere on this form.
Please specify in remarks.

SECTION I – CERTIFICATION

▶ ITEM 13 – CERTIFICATION – Certify the answer sheet. For this workbook, record the name of the person who can clarify the data reported in this year’s survey.

Name of person to contact regarding this report (<i>Print or type</i>)	Telephone		
	Area code	Number	Extension

**COPY YOUR ANSWERS TO THE ENCLOSED ANSWER SHEET.
RETURN ONLY THE ANSWER SHEET.**

THANK YOU FOR YOUR COOPERATION.

**COPY YOUR ANSWERS TO THE ENCLOSED ANSWER SHEET.
RETURN ONLY THE ANSWER SHEET.
THANK YOU FOR YOUR COOPERATION.**

PLEASE COPY YOUR CFN, PLANT NAME AND LOCATION FROM THE ANSWER SHEET →	CFN																			
	Plant name																			
	Street																			
	City																			
	State															ZIP Code				

THIS IS A WORKBOOK WITH AN ENCLOSED ANSWER SHEET FOR THE SURVEY OF POLLUTION ABATEMENT COSTS AND EXPENDITURES.

PLEASE TRANSFER ALL ANSWERS TO THE ANSWER SHEET.

**COMPLETE ITEM 13, CERTIFICATION,
AND RETURN ONLY THE ANSWER SHEET
IN THE ENCLOSED ENVELOPE
TO OUR JEFFERSONVILLE OFFICE.**

THIS WORKBOOK IS FOR YOUR RECORDS.

THANK YOU FOR YOUR COOPERATION.

PLEASE TURN THIS BOOKLET OVER AND BEGIN THE SURVEY WITH THE LETTER.

1994 SURVEY OF POLLUTION ABATEMENT COSTS AND EXPENDITURES

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

PLEASE COMPLETE THE WORKBOOK.
COPY THE ANSWERS
TO THIS ANSWER SHEET.
RETURN ONLY THE ANSWER SHEET.

Mark changes to name, contact, or physical location above.
Report mailing address changes in remarks.

ITEM 1 - OPERATIONAL STATUS

Check **one box** which best describes this establishment on
December 31 **of the survey year.**

- 011 **IN OPERATION**
- 012 **TEMPORARILY
IDLE**
- 013 **PERMANENTLY CEASED
OPERATIONS, NOT YET SOLD
OR DISMANTLED**
- 014 **DISMANTLED
OR QUIT LEASE**
- 015 **SOLD** _____

SOLD INFORMATION	
Date sold:	Month <input type="text"/> <input type="text"/> Year <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Sold to:	
021 Name	_____
022 Street	_____
023 City	_____
024 State	_____ 026 ZIP _____
025 Employer Identification	<input type="text"/> <input type="text"/> <input type="text"/> - <input type="text"/>

CONTINUE WITH ITEM 2 ON PAGE 2 

ITEM 2 – TOTAL POLLUTION ABATEMENT EXPENDITURES

- 211 **No** operating expenses or capital expenditures for pollution abatement. Your production process does not generate pollutants, or all your potential pollutants are recycled.
- 212 Costs either included in rent or not charged. All pollution abatement expenses were included in rent, taxes, lease agreement, **or** waste removal at no charge (such as a scavenger service)
- 213 Pollution abatement operating expenses and capital expenditures **each** were less than \$500 but greater than zero
- 214 Annual pollution abatement operating expenses exceeding \$500 *Complete Items 3-6*
- 215 Capital expenditures exceeding \$500 for pollution abatement structures or equipment, or for structures or equipment with built-in pollution abatement features *Complete Items 7-8*
- 216 Costs and expenditures exceeding \$500 for underground storage tanks *Complete Item 9*
- 217 Costs and expenditures exceeding \$500 for site cleanup *Complete Item 10*
- 218 OTHER environmental protection costs and expenditures exceeding \$500 *Complete Items 11-12*

You have no pollution or do not need to report any. Complete ITEM 13 and return the answer sheet.

ITEM 3 – OPERATING EXPENSES FOR POLLUTION ABATEMENT EXCEPT PAYMENTS TO GOVERNMENT FOR POLLUTANT REMOVAL

Expense Category	Media		
	Air	Water	Solid/Contained Waste
a. Depreciation	301 \$, ,000	311 \$, ,000	321 \$, ,000
b. Salaries & Wages	302 \$, ,000	312 \$, ,000	322 \$, ,000
c. Fuel & Electricity	303 \$, ,000	313 \$, ,000	323 \$, ,000
d. Contract Work/Services	304 \$, ,000	314 \$, ,000	324 \$, ,000
e. Materials, Leasing, Miscellaneous	305 \$, ,000	315 \$, ,000	325 \$, ,000
f. Total	306 \$, ,000	316 \$, ,000	326 \$, ,000

ITEM 4 – OPERATING EXPENSES FOR HAZARDOUS POLLUTANTS REPORTED IN ITEM 3

Percent Hazardous	Air	Water	Solid/ Contained Waste
	401	.0%	411	421 .0%

ITEM 5 – PAYMENTS TO GOVERNMENTS FOR POLLUTION REMOVAL

Payments to governments for:		
a. Sewage Services	501	\$, ,000
b. Solid/Contained Waste Collection/Disposal	502	\$, ,000
c. Total	503	\$, ,000

ITEM 6 – POLLUTION ABATEMENT COST OFFSETS

Air (a)	Water (b)	Solid/Contained Waste (c)	Total
601 \$, ,000	611 \$, ,000	621 \$, ,000	631 \$, ,000

ITEM 7 – NEW CAPITAL EXPENDITURES FOR POLLUTION ABATEMENT BY MEDIA

Type	Media		
	Air (a)	Water (b)	Solid/Contained Waste (c)
End-of-Line	701 \$, ,000	711 \$, ,000	721 \$, ,000
Production Process (pollution abatement portion)	702 \$, ,000	712 \$, ,000	722 \$, ,000
Total by Media	703 \$, ,000	713 \$, ,000	723 \$, ,000
Percent Hazardous	See Item 8.	714 .0%	724 .0%

ITEM 8 – TYPE OF AIR POLLUTANTS REPORTED IN ITEM 7

a. Hazardous air pollutants	801	.0%
b. Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead	802	.0%
c. Other nonhazardous air pollutants	803	.0%
d. Total	100	.0%

ITEM 9 – COSTS AND EXPENDITURES FOR UNDERGROUND STORAGE TANKS

Annual operating expenses for underground storage tanks	900 \$	,000
New capital expenditures for underground storage tanks	901 \$	,000

ITEM 10 – COSTS AND EXPENDITURES FOR SITE CLEANUP

Annual operating expenses for site cleanup	101 \$	,000
New capital expenditures for site cleanup	102 \$	,000

ITEM 11 – COSTS AND EXPENDITURES FOR ABATEMENT OF OTHER POLLUTANTS

Annual operating costs for OTHER pollution abatement	111 \$	,000
New capital expenditures for OTHER pollution abatement	112 \$	,000

ITEM 12 – TYPE OF OTHER POLLUTANTS

- 121 Noise pollution that would otherwise disturb the surrounding community
- 122 Radiation that would otherwise reach the surrounding environment
- 123 Multimedia expenses
- 124 Other pollutants within the scope of this survey but not reported elsewhere on this form.
Please specify in remarks.

ITEM 13 – CERTIFICATION

This report is substantially accurate and has been prepared in accordance with instructions.

Name of person to contact regarding this report <i>(Print or type)</i> <small>131</small>	<small>132</small> Telephone		
	Area code	Number	Extension
Signature of authorized person	Month	Day	Year

Remarks

133 Check here, if you would like a copy of the MA-200 publication brief without charge.

**RETURN THIS ANSWER SHEET
TO OUR JEFFERSONVILLE OFFICE.
THE WORKBOOK IS FOR YOUR RECORDS.
THANK YOU FOR YOUR COOPERATION.**

PA-2(I)
(8-94)

OMB No. 0607-0176:
Approval Expires 09/30/95



UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, DC 20233-0001

OFFICE OF THE DIRECTOR

**FROM THE ACTING DIRECTOR
BUREAU OF THE CENSUS**

Industrial firms are devoting a significant share of their resources for pollution abatement. Accurate and timely statistics are needed on a national basis so that business, Government, and the general public can better evaluate the economic implications of such costs. Your response to the annual "Plant and Equipment Survey Supplement for Pollution Abatement" will provide this information.

Your report should cover the operations on a consolidated basis of the company identified in the address box. Please read the general instructions carefully. If actual records are not available, carefully prepared estimates are acceptable.

The law (Title 13, United States Code) requires your response to this inquiry. By the same law, your report to the Census Bureau is confidential. Only sworn Census Bureau employees will see the information reported and they will use it only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

Your cooperation in returning the completed form by **March 15** will help to make possible the timely release of the survey results. If you need additional time to complete the report, require additional forms, or have any questions, please call the Environment, Technology, and Innovation Branch of our Manufacturing and Construction Division on the telephone number shown below. Your Census Bureau appreciates your help.

Sincerely,

Harry A. Scarr

1994 PLANT AND EQUIPMENT SURVEY SUPPLEMENT FOR POLLUTION ABATEMENT

PLEASE COMPLETE THIS WORKBOOK. COPY THE
ANSWERS TO THE ENCLOSED ANSWER SHEET.
RETURN ONLY THE ANSWER SHEET.

SUBJECT and PURPOSE

This annual survey collects total new domestic capital expenditures and pollution abatement new domestic capital expenditures.

Pollution abatement is for the purpose of reducing, eliminating, or disposing of unwanted emissions or wastes that are harmful to the environment or the removal of pollution created by prior-years activities. For this survey, only expenditures which have the primary purpose of protecting the environment are included. This survey does not collect expenditures intended to meet worker safety and health requirements. It also does not include expenditures that abate pollution when the primary purpose is to increase profits or cut costs, and the environmental protection is a side benefit.

The ***statistics from this survey*** are mainly used by the Bureau of Economic Analysis in the environmental accounts that assess the effect of pollution control programs on investment and overall economic performance. Other data users include: other Federal agencies, state and local governments, trade associations, manufacturers, marketing and research companies, universities, financial institutions, and environmental reporters.

AUTHORITY and CONFIDENTIALITY

Response to this inquiry is ***required by law*** (Title 13, U.S. Code). By Section 9 of Title 13, U.S. Code, your report to the Census Bureau is ***confidential***. It may be seen only by sworn Census Bureau employees and may be used only for statistical purposes. The data can not be used for regulation or enforcement. Copies of your report retained in your files are ***immune from legal process***.

HOW TO REPORT

Report for all operations on a consolidated basis, including active and inactive sites, of the company named in the address box on the answer sheet. All respondents should complete Item 1, **Operational Status**. Review Section B on page 7, **Screening for Pollution Abatement New Capital Expenditures**. Complete Item 2, **Total New Capital Expenditures and Pollution Abatement New Capital Expenditures**, and follow Item 2 instructions.

This booklet contains general definitions and specific instructions for each item. Each item's instructions include a guide listing examples of expenditures. In most cases these lists will provide sufficient information for completing this survey form.

Answer all questions. If you can not answer a question from your company records, please estimate the answer carefully. In some cases, identification of pollution abatement new capital expenditures may require the joint efforts of your company's financial and engineering staff. Report all value figures in thousands of dollars. If the answer is zero, please report zero. Report data for the calendar year. If calendar year book figures are not available except at considerable cost, reasonable estimates are acceptable. If your fiscal year ends between October 31 and February 28, fiscal year figures are acceptable.

For further details or definitions, see the following acts:

- Clean Air Act and Amendments
- Clean Water Act and Amendments
- Resource Conservation and Recovery Act and Amendments
- Pollution Prevention Act of 1990
- Comprehensive Environmental Responses, Compensation, and Liability Act
- Superfund Amendments and Reauthorization Act
- Noise Pollution Control Act

To purchase copies of recent amendments to these acts, request "Committee Print 103-B" from the:

Superintendent of Documents,
Government Printing Office,
Washington, DC 20402, or call 202-783-3238.

If you have **questions** or **suggestions** regarding this report, please call the Environment, Technology, and Innovation Branch on the telephone number shown on the front cover.

Please refer to the identification number (the 10-digit number above the company name in the address box) in calls or correspondence.

DUE DATE

Complete the answer sheet and return it by **March 15** in the enclosed prepaid envelope to:

Bureau of the Census
Manufacturing and Construction Division
FOB 4 Room 2135
Washington, DC 20233-0001

DO NOT RETURN THIS WORKBOOK.

If you need **additional time** to complete the report, or if you need a **duplicate workbook** or answer sheet, please call our Environment, Technology, and Innovation Branch on the telephone number shown on the front cover.

RESPONSE TIME

Public reporting burden for this collection of information is estimated to vary from 45 minutes to 60 hours per form (with an average of 2-1/2 hours), including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Associate Director for Management Services, Paperwork Reduction Project (0607-0176), Room 2027, FB 3, Bureau of the Census, Washington, DC 20233-0001; and to the Office of Management and Budget, Paperwork Reduction Project (0607-0176), Washington, DC 20503.

ELECTRONIC REPORTING

For **information** concerning the possible use of reporting formats other than the form provided, such as computer tape or printouts, contact our Environment, Technology, and Innovation Branch on the telephone number shown on the front cover.

PUBLICATION OF RESULTS OF THIS SURVEY

Industry estimates will be tabulated and published in the Current Industrial Report, Pollution Abatement Costs and Expenditures, MA-200. Companies reporting in this survey may mark the check box on the answer sheet to obtain a copy of the **MA-200 publication brief** without charge. You also may request a copy by writing to the Bureau of the Census, Manufacturing and Construction Division, Federal Office Building 4, Room 2135, Washington, DC 20233-0001.

SPECIAL NOTE FOR THE PETROLEUM INDUSTRY

This survey covers all of your domestic petroleum operations including exploration, production, refining, marketing, and transportation.

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SECTION A - OPERATIONAL STATUS

▶ **ITEM 1 - OPERATIONAL STATUS**

Check the **one box** that best describes the company on a consolidated basis on December 31 **of the survey year**.

In operation on December 31 of the survey year.

No longer in operation on December 31 of the survey year.
Give date operations ceased:

Month

--	--

 Year

--	--	--	--

Change of ownership. Give date of change and ownership information:

Month

--	--

 Year

--	--	--	--

New Owner _____

Street _____

City _____

State _____ ZIP Code _____

CONTINUE WITH SECTION B ON PAGE 6.

*Failure to return the answer sheet will require the issuance of letters and duplicate forms.
Save tax dollars by sending your response in on time.*

SECTION B – SCREENING FOR POLLUTION ABATEMENT NEW DOMESTIC CAPITAL EXPENDITURES

This survey collects total new domestic capital expenditures and the following types of new capital expenditures for pollution abatement and environmental protection:

- 1. New domestic capital expenditures for pollution abatement structures or equipment added to the production process, **and** structures and equipment with built-in pollution abatement features to reduce generation of air pollutants, water pollutants, or solid/contained waste.
- 2. New domestic capital expenditures for cleaning up contaminants from the site.
- 3. New domestic capital expenditures for other environmental protection such as expenditures to reduce noise pollution, radiation, or multimedia expenditures.

ITEM 2 – TOTAL NEW DOMESTIC CAPITAL EXPENDITURES AND POLLUTION ABATEMENT NEW CAPITAL EXPENDITURES

Check **all** appropriate boxes to indicate new domestic capital expenditures and the types of pollution abatement new domestic capital expenditures for this company on a consolidated basis and proceed as instructed.

Total new domestic capital expenditures for all purposes *Complete Section D starting on page 8*

No pollution abatement new domestic capital expenditures. Your operations do not generate pollutants, or all your potential pollutants were recycled, or you had no pollution abatement capital expenditures this year

Pollution abatement new domestic capital expenditures less than \$500 but greater than zero

You have no pollution or do not need to report any. Check this box on the answer sheet. Complete ITEM 10 of the answer sheet and return it.

New domestic capital expenditures exceeding \$500 for pollution abatement structures or equipment, or for structures or equipment with built-in pollution abatement features *Complete Section E starting on page 9*

New domestic capital expenditures exceeding \$500 for site cleanup *Complete Section F starting on page 11*

OTHER environmental protection new domestic capital expenditures exceeding \$500 *Complete Section G starting on page 12*

Read Section C General Definitions, starting on page 7, first.

SECTION C – GENERAL DEFINITIONS

MEDIA

Report expenditures by the media, **air, water, or solid/contained (land) waste**, that would be affected by the pollutants if the pollutants were not reduced, eliminated, or disposed of. See the hazardous versus nonhazardous pollutants section below for examples of the types of wastes affecting each media.

TECHNIQUES FOR POLLUTION ABATEMENT

Treatment refers to the wide variety of techniques used on wastes to cool, detoxify, decompose, and separate-to-store or ameliorate.

Collection/Disposal refers to the collection, storage, transport, processing, and disposal of solid waste by incineration, sanitary or other landfill methods, and disposing in authorized areas.

Waste minimization is any practice which prevents, reduces, eliminates, or recovers and reuses emissions or wastes so as to avoid treatment or collection/disposal. Waste minimization includes source reduction and recycling.

Source reduction is any practice which prevents or reduces the amount of emissions or waste generated for recycling, treatment, or collection/disposal. This can be accomplished by equipment/technology changes, process procedure modifications, product reformulation/redesign, raw material substitutions (including improved catalysts and reuse of waste or water), and improvements in housekeeping, maintenance, training, or inventory control.

Recycling is a method of waste management in which waste is recovered and reused for its material or energy values. The waste can be reused in the production process or sold to an outside party as material. We are including the burning of flammable wastes for energy recovery as recycling. Closed loop recovery systems are recycling.

HAZARDOUS VERSUS NONHAZARDOUS POLLUTANTS

Hazardous air pollutants are those regulated under Section 112 of the Clean Air Act. Examples include arsenic, benzene, beryllium, mercury, and vinyl chloride. **Nonhazardous air pollutants** examples typically include particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons, volatile organic compounds (VOC), and lead.

Hazardous water pollutants are toxic metals/toxic inorganic compounds, and toxic organic compounds as listed by the Clean Water Act. Examples of toxic metals and inorganic compounds include antimony, arsenic, beryllium, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, thallium, and zinc. Examples of toxic organic compounds are benzene, chlorethane, toluene, and zylene. **Nonhazardous water pollutants** examples include conventional pollutants such as detergents and food, and nonconventional pollutants.

Hazardous solid/contained wastes are listed under Subtitle C of the Resource Conservation and Recovery Act. Oils and inks are common hazardous contained liquid wastes. **Nonhazardous solid/contained waste** examples include boxes, nails, containers, sawdust, scrap metal, scrap wood, sewage sludge, dredged spoils, incinerator residue, and wrecked or discarded equipment.

SECTION D - TOTAL NEW DOMESTIC CAPITAL EXPENDITURES

GUIDE FOR ITEM 3

New domestic capital expenditures are all outlays during the survey year for new structures and equipment that are chargeable to fixed asset accounts, and for which depreciation or amortization reserves (accounts) are maintained. Purchases of used structures and equipment are not new capital expenditures. Report only those capital outlays actually made during the year, not the final value of equipment put in place or the building completed during the year. Report for the company on a consolidated basis.

▶ **ITEM 3 - TOTAL NEW DOMESTIC CAPITAL EXPENDITURES**

Total new domestic capital expenditures including pollution abatement expenditures	\$ _____, _____,000
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SECTION E - NEW DOMESTIC CAPITAL EXPENDITURES FOR ABATEMENT OF POLLUTANTS

GUIDE FOR ITEMS 4-6

Pollution abatement new capital expenditures for structures and equipment are of two types: **end of line** and **production process**.

End-of-line structures or equipment reduce pollutants after their generation. These are separately identifiable (retrofit) treatment facilities that are installed exclusively for the purpose of abating pollutant emissions or wastes. Report the entire end-of-line expenditure.

Production process enhancements (or replacements, additions, or alterations) reduce or eliminate the generation of pollutants by converting processes and equipment to enable waste minimization (source reduction or recycling), or to enable additional uses of water prior to discharge. Report the pollution abatement portion of the installed cost of enhancement projects intended for environmental protection. Estimate the pollution abatement portion as the extra cost of pollution abatement features in structures and equipment (i.e., your actual spending less what you would have spent without the pollution abatement features built-in.)

Special instructions: Estimating the pollution abatement portion (distinct from production efficiency, energy conservation, employee safety, etc.) of a process enhancement may not be feasible in all cases. For these cases, report in this manner: Do **not** include any of the project cost **unless** the primary purpose is environmental protection. If the primary purpose of the project is environmental protection, report the whole production process enhancement project expenditure. Indicate in the remarks section that this is the case. **Caution:** A project with the primary purpose of improving production efficiency may include pollution abatement features added to meet legal requirements. Since the primary purpose of such a project is still not environmental protection, do not report **any** of the production process enhancement.

Examples of Pollution Abatement Capital

Type	Media		
	Air (a)	Water (b)	Solid/Contained Waste (c)
End-of-Line Structures and Equipment	dust collectors, scrubbers, precipitators	trickling filters, settling ponds, clarifiers, spill containment dikes	cardboard balers, compactors, bins, improved containments for waste, incinerators
Production Process Enhancements	conversion to substitute fuels that generate fewer pollutants	conversion to a closed or partially closed loop system for pollution abatement	conversion to enable recycling scrap materials, converting piping for greater pollution prevention

The following list further describes the capital expenditures to report in this section. The list is intended to be a guide and is not complete.

Include new capital expenditures for:

- end-of-line structures or equipment: new, replacement, and/or expansion, intended for environmental protection
- the pollution abatement **portion of** production process enhancements intended for environmental protection
- pollution monitoring and testing equipment (Report as production process.)
- construction in progress intended for environmental protection including pollution abatement expenditures at a plant under construction intended to replace current plant
- waste storage facilities (Report tanks in Section F, Item 9.)

Exclude new capital expenditures for:

- pollution abatement end-of-line structures or equipment, or production process enhancements intended to maximize efficiency or profit
- research and development
- health, safety, environmental aesthetics or employee comfort (OSHA)
- recycling equipment if your primary product is recycling, that is, you are a recycling plant
- motor vehicles with pollution abatement devices, or refitting motor vehicles with pollution abatement devices
- production of pollution abatement equipment that is a plant's primary product, that is, it is a pollution abatement equipment manufacturer
- projects undertaken exclusively for the purpose of insuring adequate water supply for production

ITEM 4 – NEW DOMESTIC CAPITAL EXPENDITURES FOR POLLUTION ABATEMENT BY MEDIA

For each media, report your pollution abatement end-of-line structures and equipment expenditures; the pollution abatement **portion** of your spending for production process enhancements; and the total of your end-of-line and your production process responses. Report the percentage of each total by media, except air, which is directed to hazardous pollutants. (Item 8 asks for the percentage for air.) Report for the survey year.

Exclude tanks from ITEM 4. Report capital expenditures for installation of safeguards or replacement of inferior underground storage tank systems in ITEM 6. Capital expenditures for other tank systems are not collected on this survey.

Percent hazardous – Report the percent of total expenditures for water and solid/contained waste which is for the abatement of hazardous pollutants. For example, if the expenses for the abatement of pollutants are intended to abate only hazardous pollutants, report 100% in the appropriate category below. Report 0 when no hazardous pollutants are abated. Estimate the percentage of expenditures directed to hazardous pollutants when both hazardous and nonhazardous pollutants are abated. See Section C on page 7 for hazardous pollutant definitions.

Type	Media		
	Air (a)	Water (b)	Solid/Contained Waste (c)
End of Line	\$, ,000	\$, ,000	\$, ,000
Production Process (pollution abatement portion)	\$, ,000	\$, ,000	\$, ,000
Total by Media	\$, ,000	\$, ,000	\$, ,000
Percent Hazardous	See Item 5.	.0%	.0%

▶ ITEM 5 – TYPE OF AIR POLLUTANTS REPORTED IN ITEM 4

Report the percentage of new capital expenditures for air pollution abatement from Item 4 by the type of pollutant the structure or equipment will abate. For example, if expenditures are intended to abate hazardous air pollutants and sulfur oxides equally, report 50% on the hazardous air pollutant line and 50% on the particulates, sulfur oxides etc. line.

a. Hazardous air pollutants		.0%
b. Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead		.0%
c. Other nonhazardous air pollutants		.0%
d. Total	100	.0%

▶ ITEM 6 – NEW DOMESTIC CAPITAL EXPENDITURES FOR UNDERGROUND STORAGE TANKS

Report new capital expenditures for **underground storage tanks** for the survey year.

Include new capital expenditures for:

- installation of safeguards for existing underground tanks
- replacement of inferior or leaking underground storage tanks

New domestic capital expenditures for underground storage tanks	\$,	,000
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SECTION F – NEW DOMESTIC CAPITAL EXPENDITURES FOR SITE CLEANUP

GUIDE FOR ITEM 7

Site cleanup is the abatement of pollutant contamination from leaks, spills, past production processes, or at a former disposal site (Superfund). The pollution must be on the property of the company named on this survey form or from your company’s production process. Site cleanup is not reported by media. The following list describes the types of expenditures to report in this section. The list is intended to be a guide and is not complete.

Include site cleanup new capital expenditures for:

- privately paid-for site cleanup capital
- testing and monitoring equipment
- reclamation for pollution abatement
- groundwater contamination cleanup capital

Exclude site cleanup new capital expenditures for:

- government paid-for site cleanup
- interest for financing pollution abatement capital expenditures
- reclamation to enhance property values or for aesthetics

▶ ITEM 7 – NEW DOMESTIC CAPITAL EXPENDITURES FOR SITE CLEANUP

Report new capital expenditures for site cleanup for the survey year.

New domestic capital expenditures for site cleanup	\$,	,000
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SECTION G - NEW DOMESTIC CAPITAL EXPENDITURES FOR ABATEMENT OF OTHER POLLUTANTS

GUIDE FOR ITEMS 8-9

OTHER pollution abatement new capital expenditures cover pollution emissions or wastes that can not be reasonably allocated by media. Media are defined in Section C on page 7.

Include new capital expenditures for:

- noise pollution control that would otherwise disturb the surrounding community
- protection against radiation that would otherwise reach the surrounding environment
- multimedia expenditures, that is, expenses that can not be allocated to one particular media (such as capital expenditures for an environmental protection office or lab)

▶ **ITEM 8 - NEW DOMESTIC CAPITAL EXPENDITURES FOR OTHER POLLUTANTS**

Report new capital expenditures for other pollutants for the survey year.

New domestic capital expenditures for OTHER pollution abatement	\$,000
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▶ **ITEM 9 - TYPE OF OTHER POLLUTANTS**

Check the type(s) of pollutants abated by the new capital expenditures reported in ITEM 8.

- Noise pollution that would otherwise disturb the surrounding community
- Radiation that would otherwise reach the surrounding environment
- Multimedia expenditures
- Other pollutants within the scope of this survey but not reported elsewhere on this form - *Please specify in remarks.*

SECTION H - CERTIFICATION

▶ **ITEM 10 - CERTIFICATION** - Certify the answer sheet. For this workbook, record the name of the person who can clarify the data reported in this year's survey.

Name of person to contact regarding this report (<i>Print or type</i>)	Telephone		
	Area code	Number	Extension

**COPY YOUR ANSWERS TO THE ENCLOSED ANSWER SHEET.
RETURN ONLY THE ANSWER SHEET.
THANK YOU FOR YOUR COOPERATION.**

THIS IS A WORKBOOK WITH AN ENCLOSED ANSWER SHEET FOR THE PLANT AND EQUIPMENT SUPPLEMENT FOR POLLUTION ABATEMENT.

PLEASE TRANSFER ALL ANSWERS TO THE ANSWER SHEET.

**COMPLETE ITEM 10, CERTIFICATION,
AND RETURN ONLY THE ANSWER SHEET
IN THE ENCLOSED ENVELOPE
TO OUR WASHINGTON OFFICE.**

THIS WORKBOOK IS FOR YOUR RECORDS.

THANK YOU FOR YOUR COOPERATION.

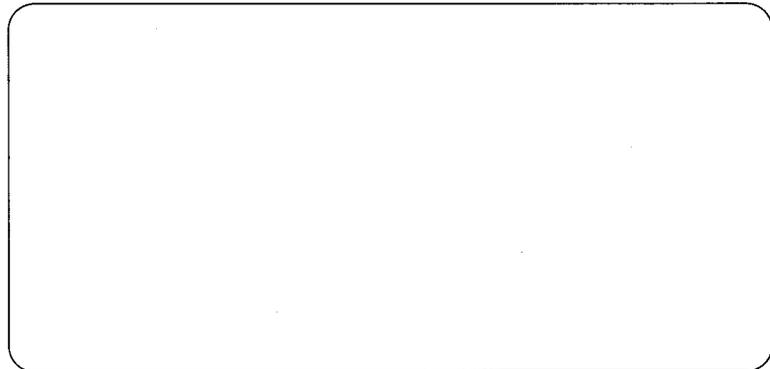
PLEASE TURN THIS BOOKLET OVER AND BEGIN THE SURVEY WITH THE LETTER.

OMB NO. 0607-0176: Approval Expires 09/30/95

FORM **PA-2**
(8-31-94)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

**1994
PLANT AND
EQUIPMENT SURVEY
SUPPLEMENT FOR
POLLUTION
ABATEMENT**



PLEASE COMPLETE THE WORKBOOK. COPY THE ANSWERS TO THIS ANSWER SHEET. RETURN ONLY THE ANSWER SHEET.

ITEM 1 - OPERATIONAL STATUS

011 **In operation** on December 31 of the survey year.

012 **No longer in operation** on December 31 of the survey year.
Give date operations ceased:

Month Year

013 **Change of ownership.** Give date of change and ownership information:

Month Year

021 New Owner _____

022 Street _____

023 City _____

024 State _____ 025 ZIP Code _____

ITEM 2 - TOTAL NEW DOMESTIC CAPITAL EXPENDITURES AND POLLUTION ABATEMENT NEW CAPITAL EXPENDITURES

211 Total new domestic capital expenditures for all purposes

214 New domestic capital expenditures exceeding \$500 for pollution abatement structures or equipment, or for structures or equipment with built-in pollution abatement features

212 **No** pollution abatement new domestic capital expenditures

215 New domestic capital expenditures exceeding \$500 for site cleanup

213 Pollution abatement new domestic capital expenditures less than \$500 but greater than zero

216 OTHER environmental protection new domestic capital expenditures exceeding \$500

ITEM 3 - TOTAL NEW DOMESTIC CAPITAL EXPENDITURES

Total new domestic capital expenditures including pollution abatement expenditures	301 \$ _____, _____, _____,000
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ITEM 4 - NEW DOMESTIC CAPITAL EXPENDITURES FOR POLLUTION ABATEMENT BY MEDIA

Type	Media		
	Air (a)	Water (b)	Solid/Contained Waste (c)
End of Line	⁴⁰¹ \$, ,000	⁴²¹ \$, ,000	⁴³¹ \$, ,000
Production Process (pollution abatement portion)	⁴⁰² \$, ,000	⁴²² \$, ,000	⁴³² \$, ,000
Total by Media	⁴⁰³ \$, ,000	⁴²³ \$, ,000	⁴³³ \$, ,000
Percent Hazardous	See Item 5.	⁴²⁴ .0%	⁴³⁴ .0%

ITEM 5 - TYPE OF AIR POLLUTANTS REPORTED IN ITEM 4

a. Hazardous air pollutants	⁵⁰¹ .0%
b. Particulates, sulfur oxides, nitrogen oxides, carbon monoxide, hydrocarbons and volatile organic compounds, and lead	⁵⁰² .0%
c. Other nonhazardous air pollutants	⁵⁰³ .0%
d. Total	100 .0%

ITEM 6 - NEW DOMESTIC CAPITAL EXPENDITURES FOR UNDERGROUND STORAGE TANKS

New domestic capital expenditures for underground storage tanks	⁶⁰¹ \$, ,000
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ITEM 7 - NEW DOMESTIC CAPITAL EXPENDITURES FOR SITE CLEANUP

New domestic capital expenditures for site cleanup	⁷⁰¹ \$, ,000
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ITEM 8 - NEW DOMESTIC CAPITAL EXPENDITURES FOR OTHER POLLUTANTS

New domestic capital expenditures for OTHER pollution abatement	⁸⁰¹ \$, ,000
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ITEM 9 - TYPE OF OTHER POLLUTANTS

- 901 Noise pollution that would otherwise disturb the surrounding community
- 902 Radiation that would otherwise reach the surrounding environment
- 903 Multimedia expenditures
- 904 Other pollutants within the scope of this survey but not reported elsewhere on this form -
Please specify in remarks.

ITEM 10 - CERTIFICATION

This report is substantially accurate and has been prepared in accordance with instructions.

Remarks

Name of person to contact regarding this report (Print or type) ¹⁰¹	¹⁰² Telephone		
	Area code	Number	Extension
Signature of authorized person	Month	Day	Year

¹⁰³ Check here, if you would like a copy of the MA-200 publication brief without charge.

RETURN THIS ANSWER SHEET TO OUR WASHINGTON OFFICE.

THE WORKBOOK IS FOR YOUR RECORDS.

THANK YOU FOR YOUR COOPERATION.