# Pollution Abatement and Control Expenditures,

1972-94

By Christine R. Vogan

REAL SPENDING for pollution abatement and control (PAC) increased 7.3 percent in 1994, compared with a 2.5-percent increase in 1993. The 1994 increase was the largest increase since 1984. Prices of PAC goods and services increased 3.1 percent after increasing 2.6 percent in 1993.

The following are highlights of the PAC estimates for 1994:

- Current-dollar PAC spending was \$121.8 billion in 1994. As a share of gross domestic product (GDP), PAC spending has ranged between 1.7 and 1.8 percent since the mid-1970's.
- Real spending for all major PAC types—air, water, and solid waste—increased. The largest increase was for air PAC, which increased 12.4 percent in 1994 primarily because of increased spending to purchase motor vehicle emission abatement devices as a result of more stringent emission control standards.

#### Discontinuation of the PAC Program

BEA's pollution abatement and control program (PAC) is being discontinued. The estimates presented in this article are the last of the annual series. BEA is reallocating resources away from some existing programs in order to move ahead with the most urgent priorities for maintaining and improving the U.S. economic accounts—national, regional, and international—as outlined last year in BEA's Mid-Decade Strategic Plan. In addition to discontinuing the PAC program, BEA has discontinued its regional projections program and has transferred the business cycle indicators to The Conference Board; BEA is also scaling back a joint project with the Bureau of the Census to obtain plant-level data on foreign direct investment in the United States from an annual series to a quinquennial series.

BEA prepared its first set of PAC expenditure estimates in 1975 in response to the growing concern for the environment and the significant levels of public and private spending for PAC. Since then, BEA has produced PAC estimates on an annual basis.

- Real spending for pollution abatement (PA), the largest of the three components of PAC, increased 7.6 percent. Spending for research and development increased 6.2 percent, and spending for regulation and monitoring decreased 5.7 percent.
- Real PA spending increased substantially across all sectors of the economy in 1994:
   Personal consumption (11.8 percent), business (7.4 percent), and government (6.9 percent).
- The 1994 increase in real PA spending by business, which accounts for approximately two-thirds of total PA spending, is the largest increase since 1990.

In addition to the new estimates for 1994, this article presents revised estimates of PAC expenditures for 1972–93. These revised estimates show about the same overall picture of PAC spending throughout the economy as the previous estimates. The revisions to real PAC growth rates

### **Key Terms**

In this article, PAC expenditures are presented by type (air, water, solid waste, and other) and by function (pollution abatement, regulation and monitoring, and research and development). Over nine-tenths of all PAC spending is for pollution abatement (PA); the rest is for regulation and monitoring and for research and development. PA directly reduces pollutant emissions by preventing the generation of pollutants, by recycling the pollutants, by treating the pollutants prior to discharge, or by restoration (for example, site cleanup). In this article, PA expenditures are presented by sector (personal consumption, business, and government). Regulation and monitoring is a government activity that stimulates and guides action to reduce pollutant emissions. Research and development by business and government not only supports abatement, but also helps to increase the efficiency of regulation and monitoring.

<sup>1.</sup> The previously published estimates for 1972–86 appeared in the May 1994 issue of the Survey of Current Business, and those for 1987–93, in the May 1995 issue.

reflect the revisions to current-dollar estimates. the revisions to price estimates, and the introduction of chain-type measures that eliminate the overstatement of real growth for periods after the base year and the understatement of real growth for periods before the base year.

The revisions to the current-dollar PAC estimates mainly reflect the incorporation of newly available and revised source data. The revisions were primarily in nonmanufacturing business spending to operate plant and equipment for water PAC, government spending to construct public sewer systems for water PAC, State and local government spending for solid waste disposal, and government spending for regulation and monitoring.<sup>2</sup>

The first part of this article examines recent estimates of PAC spending. The second part describes trends in PAC spending. The third

Table 1.—Change in Real Spending for Pollution Abatement and Control by Type and by Sector

	chang	cent e from eding ar
	1993	1994 P
Pollution abatement and control	2.5	7.3
Air	7.3	12.4
Water	-2.9	3.4
Solid waste	2.6	6.3
Other and unallocated <sup>1</sup>		
Pollution abatement and control	2.5	7.3
Pollution abatement	2.6	7.6
Personal consumption	4.2	11.8
Motor vehicle emission abatement devices	4.2	11.8
Operation of motor vehicle emission abatement devices		
Business	1.9	7.4
Capital account	7.0	11.3
Motor vehicle emission abatement devices	9.7	26.2
Plant and equipment	6.4	4.0
Other	0.1	1.0
Current account	- 6	5.3
Operation of motor vehicle emission abatement		0.0
devices Operation of plant and equipment	-2.2	6.9
Operation of public cover evetome?	-2.2 -2.7	1.2
Operation of public sewer systems <sup>2</sup>	-18.8	5.8
Other	-10.0	5.6
Government	4.0	6.9
Public sewer system fixed capital 4	.6	5.4
Other		
Regulation and monitoring	-11.7	-5.7
Research and development	16.3	6.2

part discusses the revisions to the estimates for 1972-93, and the fourth part discusses the source data used in preparing the estimates.

# Recent estimates

Current-dollar spending for PAC increased \$11.8 billion, to \$121.8 billion, in 1994 (table 1 and detail in table 11). The current-dollar shares of each type of PAC remained about the same in 1994 as in 1993. The shares of total PAC spending for each type in 1994 are as follows: Air, 30.9 percent; water, 34.8 percent; solid waste, 34.3 percent; and other PAC, 0.1 percent (chart 1).

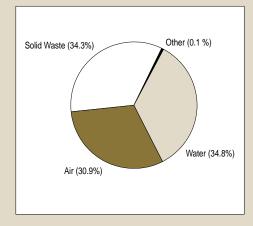
Real PAC spending increased 7.3 percent in 1994—more than twice as fast as real GDP in 1994—following a 2.5-percent increase in real PAC spending in 1993. By type, air PAC in 1994 grew faster than total PAC; solid waste and water PAC grew slower (table 2).

Pollution abatement (PA) accounts for over 95.0 percent of all PAC spending. Spending for regulation and monitoring and for research and development accounts for the rest. Within PA, spending for personal consumption accounted for 8.3 percent; business, for 65.2 percent; and government, for 26.6 percent (chart 2). These shares are about the same as those in 1993.

Real PA spending increased 7.6 percent in 1994, following a 2.6-percent increase in 1993 The 1994 increase was mainly at-(table 2). tributable to a 7.4-percent increase in spending by business. Business spending on capital

## **CHART 1**

# **Shares of Current-Dollar Pollution Abatement and Control Expenditures** by Type, 1994



U.S. Department of Commerce, Bureau of Economic Analysis

<sup>2.</sup> The government expenditures for pollution abatement and control in this article do not incorporate the new treatment of government investment that was recently introduced in the national income and product accounts.

<sup>1. &</sup>quot;Other" includes business nonmanufacturing and government spending for abatement and control of noise, radiation, and pesticide pollution; "unallocated" includes business spending not assigned to media.

For consistency with past presentations, spending to operate public sewer systems is clas-

<sup>2.</sup> For consistency with past presentations, specialing to operate points consistency with past presentations, a "Costs recovered" is the value of reclaimed materials and energy from pollution abatement.

4. For consistency with past presentations, government enterprise purchases of fixed capital (primarily for construction of public sewer systems) is classified as government spending.

NOTE.—The entries in this table are key components from tables 11 and 12; the "other" entries are consolidations of detail from those tables.

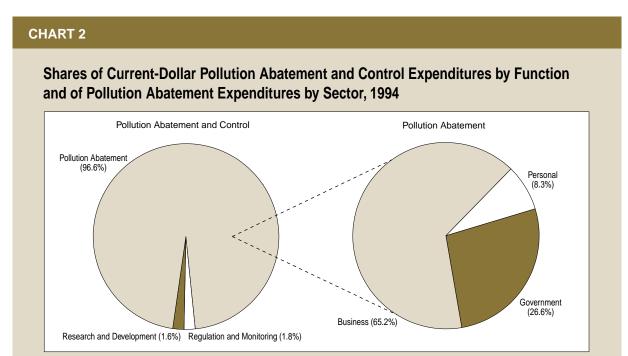


Table 2.—Current-Dollar Spending for Pollution Abatement and Control by Type and by Sector

U.S. Department of Commerce, Bureau of Economic Analysis

	Mill	ions of dol	lars	Percent from pre	
	1992	1993	1994 P	ye.	
	1332	1990	1334.	1993	1994 P
Pollution abatement and control  Air  Water  Solid waste  Other and unallocated <sup>1</sup>	104,626 29,789 39,065 36,582 -811	110,052 32,475 39,383 38,374 -181	<b>121,811</b> 37,597 42,384 41,736 94	<b>5.2</b> 9.0 .8 4.9	10.7 15.8 7.6 8.8
Pollution abatement and control	104,626	110,052	121,811	5.2	10.7
Pollution abatement	100,461	105,840	117,622	5.4	11.1
Personal consumption	7,897 7,897	8,436 8,436	9,756 9,756	6.8 6.8	15.7 15.7
devices	0	0	0		
Business Capital account Motor vehicle emission abatement devices Plant and equipment Other Current account Operation of motor vehicle emission abatement	65,925 22,042 5,892 14,139 2,011 43,883	69,010 24,103 6,625 15,338 2,140 44,908	76,631 27,743 8,649 16,512 2,582 48,889	4.7 9.3 12.4 8.5 2.3	11.0 15.1 30.6 7.7 8.9
devices Operation of plant and equipment Operation of public sewer systems <sup>2</sup> Costs recovered <sup>3</sup> Other	28,628 11,310 (1,956) 5,901	0 28,583 11,596 (1,612) 6,340	0 31,336 12,395 (1,733) 6,891	2 2.5 -17.6	9.6 6.9 7.5
Government	26,639 11,455 15,184	28,394 11,797 16,597	31,234 12,825 18,410	6.6 3.0	10.0 8.7
Regulation and monitoring	2,604 1,561	2,343 1,869	2,201 1,989	-10.0 19.7	-6.1 6.5

NOTE.—The entries in this table are key components from tables 11 and 12; the "other" entries are consolidations of detail from

account increased 11.3 percent, compared with a 10.1-percent increase for total fixed investment within GDP. The 1994 PA increase mainly reflected increased spending for purchases of motor vehicle emission abatement devices, such as catalytic converters, due to more stringent emission control standards. Business spending on current account increased 5.3 percent, reflecting increased spending to operate PA plant and equipment.

Real personal consumption PA spending, which consists of the purchases of motor vehicle emission abatement devices, increased 11.8 percent in 1994. This increase was substantially higher than the 4.4-percent increase for the motor vehicles and parts subcomponent of personal consumption expenditures within GDP. consumption PA spending increased substantially because of the more stringent emission control standards.

Real government PA spending increased 6.9 percent in 1994. The increase mainly reflected an increase in State and local government spending for solid waste disposal and in government enterprise spending for public sewer system fixed capital. In contrast, within GDP, government consumption expenditures and gross investment by State and local government, which includes government enterprises, increased only 2.5 percent.

PAC prices in 1994.—The chain-type price index for total PAC spending increased 3.1 percent in 1994, following a 2.6-percent increase in 1993

 <sup>&</sup>quot;Other" includes business nonmanufacturing and government spending for abatement and control of noise, radiation, and pes-ticide pollution; "unallocated" includes business spending not assigned to media.
 For consistency with past presentations, spending to operate public sewer systems is classified as business spending.

 <sup>&</sup>quot;Costs recovered" is the value of reclaimed materials and energy from pollution abatement.
 For consistency with past presentations, government enterprise purchases of fixed capital (primarily for construction of public sewer systems) is classified as government spending.

1994, following a 2.6-percent increase in 1993 (table 3). Price increases accelerated for all major types—air, water, and solid waste.

PAC shares and growth in 1995.—According to the information available by August 1996, the current-dollar shares of PAC by type and by function and the current-dollar shares of PA by sector are expected to have remained approximately the same in 1995 as in 1994. Growth in real PAC spending is expected to decelerate. Decelerated growth in business and personal consumption spending for motor vehicle emission abatement devices and in business spending to purchase and operate PA plant and equipment, mainly in manufacturing establishments, is expected to offset accelerated growth in business spending to purchase PA plant and equipment, mainly by electric utilities, and to operate public sewer systems.

# Trends in PAC spending, 1972–94

PAC shares.—Before 1990, air and water PAC spending accounted for the largest shares of total PAC spending (table 4 and chart 3). After 1990, water and solid waste PAC accounted for the largest shares.

Real growth rates of PAC.—Real PAC spending increased at an average annual rate of 3.6 percent during 1972-94 (table 5). PAC spending grew

Table 3.—Change in Prices for Pollution Abatement and Control

	chang prec	cent e from eding ear
	1993	1994 <i>P</i>
Total pollution abatement and control	2.6 1.6 3.8 2.2	3.1 3.0 4.1 2.3

P Preliminary.

Table 4.—Shares of Pollution Abatement and Control Spending by Function and by Type, Selected Years
[Percent]

	1972	1980	1994 <i>p</i>
Pollution abatement and control	100.0	100.0	100.0
By type:			
Áir	38.7	44.0	30.9
Water	43.3	40.7	34.8
Solid waste	19.1	16.8	34.3
Other and unallocated 1	-1.1	-1.5	.1
By function:			
Pollution abatement	92.9	94.1	96.6
Regulation and monitoring	2.2	2.5	1.8
Research and development	4.9	3.4	1.6

 <sup>&</sup>quot;Other" includes business nonmanufacturing and government spending for abatement and control of noise, radiation, and pesticide pollution; "unallocated" includes business spending not assigned to media.

faster in 1972–80 and slower in 1980–94 than in 1972–94.

By type, real growth in solid waste PAC spending accelerated faster than total PAC spending in 1972–94. The faster growth in solid waste PAC mainly reflected increased business spending to purchase and operate plant and equipment and increased State and local government spending for solid waste disposal.

Air PAC grew faster than total PAC in 1972–80, reflecting increased personal consumption and business spending to purchase and operate motor vehicle emission abatement devices. It grew more slowly than total PAC in 1980–94, reflecting decreased spending to operate these devices and decreased spending by

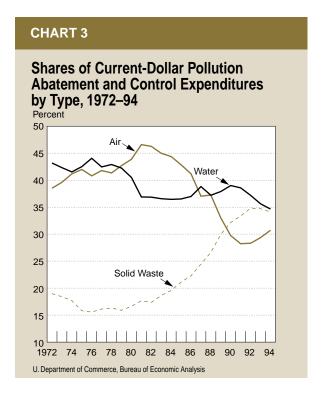


Table 5.—Average Annual Rates of Change for Real Pollution Abatement and Control Spending, Selected Periods

[Percent]			
	1972–94	1972–80	1980–94
Pollution abatement and control	3.6	4.5	3.1
By type: Air	2.7 2.6 6.3 –6.8	5.0 4.1 4.7 2.9	1.5 1.7 7.2 –12.0
By function: Pollution abatement Regulation and monitoring Research and development	3.8 2.9 –1.6	4.6 7.9 .8	3.3 .1 –2.9

 <sup>&</sup>quot;Other" includes business nonmanufacturing and government spending for abatement and control of noise, radiation, and pesticide pollution; "unallocated" includes business spending not assigned to media.

electric utilities—both business and government to purchase PA plant and equipment.

Water PAC grew more slowly than total PAC in 1972-94, mainly reflecting decreased spending by business to purchase PA plant and equipment and by government to purchase septic systems and their lateral connectors to public sewer systems and slow growth in spending by government to construct public sewer systems and by business to operate these systems.

PA shares by sector.—Business spending accounted for the largest share of total PA spending for all years (table 6 and chart 4). Business spending as a share of total PA spending generally decreased from a high in 1972 to a low in 1988 and then increased almost every year thereafter. Within business, the share spent on capital account generally decreased through 1989 and then increased every year thereafter, mainly reflecting increased spending to purchase plant and equipment. The share spent on current account generally increased through 1990 and then decreased every year thereafter, mainly reflecting slow growth in spending to operate public sewer systems and to operate plant and equipment.

Personal consumption spending as a share of total PA spending generally increased in 1972-85, declined in 1986-92, and increased in 1993-94. The decline mainly reflected a dropoff in the cost of operating motor vehicle emission abatement devices, which started falling in 1986 and reached

CHART 4 Shares of Current-Dollar Pollution Abatement Expenditures by Sector, 1972-94 Percent 80 70 Business 60 50 40 30 20 10 78 U.S. Department of Commerce, Bureau of Economic Analysis

zero by 1991.3 The increases in 1993 and 1994 were a result of increased spending to purchase these devices due to the more stringent emission control standards.

Government spending as a share of total PA spending fluctuated through 1986, mainly reflecting spending to construct public sewer systems. After 1986, shares generally rose as a result of sharper increases in State and local government spending for solid waste.

Real growth rates of PA by sector.—Business PA spending grew slower than total PA spending in 1972-94 (table 7); business PA grew slower than total PA in 1972-80 and faster in 1980-94. Personal consumption PA grew slower than total PA in 1972-94, faster than total PA in 1972-80, and slower in 1980-92. Government PA grew faster than total PA in 1972-94 and in both subperiods.

#### Sources and size of the revisions

The revisions to PAC spending for 1972-93 are statistical in origin; definitions, concepts, and coverage were not changed. Revisions in currentdollar estimates resulted from changes in estimation methodology—that is, new source data or new estimating procedures—and from the incorporation of newly available data from surveys conducted by the Department of Energy, Bureau of the Census, and the Bureau of Economic Analysis; table 8 shows the current-dollar

Table 6.—Shares of Pollution Abatement Spending by Sector, Selected Years

[Percent]

	1972	1980	1994 P
Pollution abatement	100.0	100.0	100.0
Personal consumption	8.7 3.1 5.7	13.9 7.4 6.5	8.3 8.3 0
Business On capital account Motor vehicle emission abatement devices Plant and equipment Other On current account Motor vehicle emission abatement devices Plant and equipment Public sewer systems <sup>1</sup> Other	69.2 35.9 1.4 26.8 7.7 33.3 2.7 20.8 7.2 2.5	62.8 25.6 4.2 17.6 3.9 37.1 4.8 24.1 8.2 0	65.2 23.6 7.4 14.0 2.2 41.6 0 26.6 10.5
Government State and local purchases for solid waste disposal Public sewer systems construction <sup>2</sup> Other	22.1 7.4 11.8 2.9	23.3 5.3 15.2 2.8	26.6 12.3 10.3 4.0

<sup>3.</sup> From 1972 to 1990, spending by persons consisted of spending for the operation and for the purchases of emission abatement devices. Since 1991, when the price differential between leaded and unleaded gasoline reached zero, spending has consisted only of purchases of emission abatement devices.

sified in business spending.

2. For consistency with past presentations, government enterprise construction for public sewer systems is classified as government spending.

Table 7.—Average Annual Rates of Change for Real Pollution Abatement Spending, Selected Periods

[Percent]

	1972–94	1972–80	1980–94
Pollution abatement	3.8	4.6	3.3
Personal consumption  Motor vehicle emission abatement	3.7	9.0	.7
devices	10.0	21.1	4.2
Business On capital account Motor vehicle emission abatement	3.4 2.1	3.2 1.2	3.5 2.6
devices Plant and equipment Other	13.3 1.0	24.1 0	7.6 1.6
On current account	4.4	5.0	4.1
Plant and equipment	4.4	5.5	3.7 6.2
Residential systems Public sewer systems <sup>1</sup> Other	4.5 5.5	1.6 6.1	5.2
GovernmentState and local purchases for solid	4.8	6.8	3.6
waste disposal Public sewer systems construction <sup>2</sup>	6.1 3.4	2.4 9.6	8.3 0
Other			

For consistency with past presentations, spending to operate public sewer systems is classified in business spending.
 For consistency with past presentations, government enterprise construction for public

revisions for 1972, 1980, and 1993. Revisions to real growth rates incorporate current-dollar revisions and improved measures of Fisher chaintype price indexes; table 9 shows the revisions to real growth rates for 1972–93, for 1972–80, and for 1980–93.

Current-dollar revisions.—The revisions to total PAC spending were small before 1991. The revisions were mostly downward for 1972–78; the largest revision was \$0.1 billion for 1975. The revisions were upward for 1979–93; the smallest revision was \$0.2 billion for 1979, and the largest revision was \$2.8 billion for 1992.

Revisions to real growth rates.—For 1972–93, the revision to the real growth rate of total PAC spending was 0.1 percent. The revisions to all the components of PAC by type and by function except for other PAC and for regulation and monitoring were less than 0.3 percent. The revision to the real growth rate of total PA spending was 0.1 percent.

Table 8.—Revisions to Current-Dollar Pollution Abatement and Control Spending by Type and by Function, Selected Years
[Millions of dollars]

		1972			1980		1993			
	Previously published	Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision	
Pollution abatement and control	16,586	16,635	49	50,399	50,763	364	109,044	110,052	1,008	
By type: Air Water Solid waste Other and unallocated <sup>1</sup>	6,453 7,138 3,183 –187	6,432 7,208 3,183 –187	-21 70 0 0	22,258 20,616 8,278 -752	22,353 20,638 8,524 -752	95 22 246 0	31,902 39,015 38,844 -717	32,475 39,383 38,374 –181	573 368 -470 536	
By function: Pollution abatement Regulation and monitoring Research and development	15,397 367 823	15,446 367 823	49 0 0	47,352 1,296 1,751	47,753 1,259 1,751	401 -37 0	105,386 1,924 1,734	105,840 2,343 1,869	454 419 135	

 <sup>&</sup>quot;Other" includes business nonmanufacturing and government spending for abatement and control of noise, radiation, and pesticide pollution; "unallocated" includes business spending not assigned to media.

Table 9.—Revisions to Average Annual Rates of Change of Real Pollution Abatement and Control Spending by Type and by Function, Selected Periods

[Percent]

		1972–93			1972–80		1980–93			
P P		Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision	
Pollution abatement and control	3.3	3.4	0.1	4.5	4.5	0	2.6	2.8	0.2	
By type: Air Water Solid waste Other and unallocated <sup>1</sup>	2.0 2.6 6.2 1.6	2.3 2.5 6.3 –4.5	.3 1 .1 -6.0	4.7 4.5 4.2 2.0	5.0 4.1 4.7 2.9	.3 4 .5 .9	.5 1.5 7.5 1.3	.7 1.5 7.3 –8.8	.2 0 2 -10.1	
By function: Pollution abatement Regulation and monitoring Research and development	3.5 2.6 –2.1	3.6 3.3 –1.9	.1 .7 .2	4.6 8.7 .8	4.6 7.9 .8	0 8 0	2.9 9 -3.9	3.0 .6 -3.6	.1 1.5 .3	

 <sup>&</sup>quot;Other" includes business nonmanufacturing and government spending for abatement and control of noise, radiation, and pesticide pollution; "unallocated" includes business spending not assigned to media.

For consistency with past presentations, government enterprise construction for public sewer systems is classified as government spending.

For 1972–80, there was no revision to the growth rate of total PAC spending. Downward revisions to business spending to purchase and operate plant and equipment for air and water PAC were mainly offset by upward revisions to personal consumption and business spending to operate motor vehicle emission abatement devices for air PAC and business spending for solid waste PAC. The downward revision to the growth rate for regulation and monitoring for 1972–80 was due to downward revisions to spending for 1980 and did not significantly affect the revisions to total PAC.

For 1980–93, the upward revisions to the growth rates of total PAC spending mainly reflected upward revisions to government spending to construct public sewer systems and to Federal Government spending for air, water, and solid waste PAC. The downward revision to the growth rate for solid waste was due to a downward revision to spending by State and local government for solid waste disposal for 1993. The downward revision to the growth rate for other PAC spending was due to downward revisions to Federal Government spending for PA and to downward revisions to business costs recovered (a negative cost).<sup>4</sup>

## Sources of the estimates

Some estimates of PAC expenditures are based directly on data from surveys or censuses; others are prepared by indirect methods. PAC estimates derived from direct sources account for about two-thirds of the revised estimates of total PAC spending; the remainder is based on other

Table 10.—Sources of Pollution Abatement and Control Expenditures for 1994, by Type of Estimate

[Percent of total expenditures]

Surveys Government Finances, BOC Pollution Abatement Costs and Expenditures (MA-200), BOC Value of New Construction Put in Place, BOC Federal Funding for Pollution Control, BEA	64 22 21 10 5
Structures and Equipment Expenditures Survey—Supplement for Pollution Abatement, BOC Steam-Electric Plant Operation and Design Report, DOE	5 2
Others	_
Other sources  Motor vehicle emission abatement devices  Nonmanufacturing and residential customers' spending for solid waste	36 15
disposal	14
air and water	2
Residential systems water pollution abatement investment and operation Nonmanufacturing plant and equipment, air and water	2
Electric utilities—extra cost of cleaner fuel	0 2

Preparation of the estimates was a division-wide effort, supervised by Ann M. Lawson of the Environmental Economics Division. Christine R. Vogan coordinated preparation of the article. Mary L. Roy coordinated the preparation of the estimates and assisted in the analysis of the data. R. Christian Thieme provided computer programming support. The following staff members contributed to the preparation of the estimates: Personal consumption—Frederick G. Kappler; business—Frederick G. Kappler, Jon P. Mc-Cracken, Edward J. Moulis, Mary L. Roy, R. Christian Thieme, and Christine R. Vogan; and government-Jon P. McCracken, Edward J. Moulis, Mary L. Roy, and Christine R. Vogan. Shirley D. Tisdale provided statistical services, and Sonia R. Jones provided secretarial services.

sources that provide more general survey information and on assumptions made to use this information. Table 10 shows the breakdown of the sources for PAC spending by type of estimate for 1994.

Surveys.—The most important direct sources are the Pollution Abatement Costs and Expenditures (PACE) Survey (for capital and operating spending by manufacturing establishments) and surveys of government finances (for government spending to operate sewer systems and for solid waste disposal) and of new construction put in place (for government spending to construct sewer systems). These key surveys, as well as the Structures and Equipment Expenditures Survey—Supplement for Pollution Abatement (for electric utilities and, to a lesser extent, for mining and petroleum enterprises), are conducted by the Bureau of the Census. 5 In addition, the Bureau of Economic Analysis (BEA) collects data on Federal agency funding for PAC and information from the Environmental Protection Agency (EPA) regional offices on State and local government spending for regulation and monitoring. Finally, BEA relies on the Energy Information Agency of the U.S. Department of Energy to collect data on PA operating spending by electric utilities from its Steam-Electric Plant Operation and Design Report.

Other sources.—About two-fifths of PAC spending estimates that are derived by indirect methods are accounted for by nonmanufacturing and residential customers' spending for solid waste disposal. Data sources provide only sketchy information

<sup>4. &</sup>quot;Costs recovered" is the value of reclaimed materials and energy from pollution abatement.

Acknowledgments

<sup>5.</sup> The PACE Survey and the Supplement to the Structures and Equipment Expenditures Survey have been discontinued after collecting data for 1994.

on purchases of solid waste disposal services by customer types. The indirect method compares a variety of data sources to discern and reconcile, to the extent possible, the relationship between purchasers' and suppliers' data. This process of comparison, fitting, and reconciliation is aided by taking into account information for manufacturing establishments (which also purchase services from refuse companies) as well as for nonmanufacturing establishments and residential customers, and it relies heavily on the following information: (1) Refuse-industry (that is, supplier) payroll data from the Bureau of Labor Statistics (BLS), (2) PACE survey data on manufacturing purchases on private contract, and (3) partial information on waste flows by type (that is, information about demand) and disposal services provided (that is, information about supply) from EPA one-time studies, refuse company annual reports, and trade association contacts and reports.

Most of the remainder of PAC spending is attributable to indirect estimation of spending for motor vehicle emission abatement devices. Information on unit sales of motor vehicles is from the American Automobile Manufacturers Association of the United States, Inc., and the dollar value per emission abatement device at the time of purchase is derived from selected BLS information.

Nonmanufacturing operation and maintenance spending for PA (excluding electric utilities) is estimated in relation to nonmanufacturing air and water PA plant and equipment (P&E) stocks that are being operated. The key assumption is that the ratio of operating spending to stocks for manufacturing establishments can be applied to the stocks of nonmanufacturing establishments to determine operating expenses. These nonmanufacturing PA P&E stocks (excluding electric utilities) are estimated using a perpetual inventory method. Nonmanufacturing PA P&E spending es-

## **Data Availability**

The estimates shown in tables 11 and 12 are available in electronic form to STAT-USA subscribers (Economic Bulletin Board and Internet site). To subscribe, call STAT-USA at (202) 482–1986.

The estimates are also available in printouts. To obtain an order form with their cost and schedule, and the cost of related material, write to the Industry Economics Division (BE-51), Bureau of Economic Analysis, U.S. Department of Commerce, Washington DC 20230, or call (202) 606–5350.

timates, the starting point for use of the perpetual inventory method, are derived using a variety of data sources, including the PA supplement to the structures and equipment survey mentioned earlier, an environmental protection expenditures survey by the American Petroleum Institute, the *Census of Mineral Industries*, and information about relationships between company-based and establishment-based data.

Estimates of residential systems water PA spending consist of purchases of septic systems and laterals and spending for cleaning septic systems. Data sources for these estimates include surveys of housing conducted by the Census Bureau; related construction activity indicators, such as housing permits and housing starts; and information from telephone contacts with technical experts about the cost of installing and cleaning PA residential systems.

The extra cost of cleaner fuel used by electric utilities that adopt a fuel-switching strategy to lessen emissions is estimated primarily from information on the cost and quality of oil and coal that utilities consume, which is reported by the Energy Information Agency in *Electric Power Monthly*.

Notable among the remaining sources is the indirect method used to estimate private purchases for research and development (R&D) PA spending. This method uses data on total R&D spending from the Industrial Research and Development Survey by the National Science Foundation (NSF) to extrapolate R&D spending for PAC types. Newly available NSF data providing partial coverage of PAC for 1984 and for 1989–93 have reduced reliance on extrapolation.

Tables 11 and 12 follow.

<sup>6.</sup> Prior to 1991, when there was a price differential between leaded and unleaded gasoline, PAC spending also included the operation of motor vehicle emission abatement devices. Components of operating spending were based on information from a variety of sources, including studies by EPA (for the fuel consumption penalty and maintenance cost for pre-1975 model year vehicles), data from BLS (for the prices of unleaded and leaded gasoline and the amount of unleaded gasoline purchases to which the fuel price penalty applies), and data from R.L. Polk, Inc. (for the inventory, or stock, of motor vehicles by model year). Factors for the allocation of spending between consumers and business were developed by BEA.

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94

	1972-94										п					
				1972					1973			1974				
Line		Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total 1	Air	Water	Solid waste	Other and unallocated 2	Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>
								N	lillions of	dollars	I	1				
1 2	Pollution abatement and control	<b>16,635</b> 15,446	<b>6,432</b> 5,758	<b>7,208</b> 6,921	<b>3,183</b> 3,141	- <b>187</b> -375	<b>19,325</b> 17,932	<b>7,683</b> 6,935	<b>8,206</b> 7,848	<b>3,589</b> 3,541	- <b>153</b> -392	<b>23,433</b> 21,850	<b>9,683</b> 8,901	<b>9,767</b> 9,368	<b>4,176</b> 4,114	- <b>193</b> -533
3 4 5	Personal consumption	1,350 473 877	1,350 473 877		1,997	-379	1,867 679 1,188 12,202	1,867 679 1,188		2.263		2,331 702 1,630	2,331 702 1,630 6,442		2.672	
6 7 8 9 10 11	Business On capital account On current account Private Government enterprise 5 Costs recovered 6	10,687 5,549 5,139 4,374 1,144 –379	4,290 2,633 1,657 1,634 23	4,779 2,660 2,119 999 1,121	1,997 256 1,741 1,741 (*)	-379 -379 -379 -379	6,178 6,178 6,024 5,080 1,342 -398	4,966 2,979 1,986 1,957 29	5,372 2,860 2,511 1,199 1,313	2,263 339 1,924 1,924 (*)	-398 -398 (*) -398	14,585 7,103 7,482 6,389 1,632 –538	3,696 2,746 2,689 57	6,008 3,005 3,003 1,430 1,573	2,672 403 2,270 2,270 (*)	-537 -537 -537 -2 -538
12 13 14 15	Government Federal State and local Covernment enterprise purchases of fixed capital <sup>5</sup> Regulation and monitoring	3,409 139 1,311 1,959 367	119 56 (*) 63 143	2,143 75 171 1,896 144	1,144 5 1,140 1	3 3 (*)	3,863 203 1,433 2,227 490	102 47 (*) 54	2,477 133 171 2,172 190	1,278 16 1,262 18	6 6 (*)	4,934 294 1,592 3,048 595	128 56 (*) 72 183	3,360 196 189 2,976 247	1,442 39 1,403	4 (*) 138
17 18 19 20 21	Federal State and local Research and development Private Federal	200 167 823 519 205	48 95 531 411 104	79 66 142 64 34	9 5 27 12 6	64 2 122 32 62 28	278 212 903 569 269 65	50 115 583 451 126	99 91 168 73 62 33	14 4 30 10 11	115 2 122 35 69	346 248 988 608 342	52 131 599 492 100	135 112 153 57 78	22 5 35 13	138 (*) 202 46 146
22	State and local	99 17 44 10 28 65 6 33 9 18 39 7 18 5 9  Chain-type quantity indexes, 1992=100												9		
23	Pollution abatement and control	50.4	66.5	57.5	28.7	60.4	53.6	73.8	58.4	30.0	37.9	55.5	75.1	61.1	31.3	33.0
24 25 26 27	Pollution abatement  Personal consumption  Durable goods <sup>3</sup> Nondurable goods <sup>4</sup>	48.8 52.9 14.2	63.0 52.9 14.2	56.8	28.9	67.3	51.7 68.7 20.3	70.5 68.7 20.3	57.3	30.3	60.6	53.6 68.7 19.8	72.2 68.7 19.8	60.2	31.5	67.9
28 29 30 31 32	Business On capital account On current account Private Government enterprise 5	52.5 75.4 40.5 45.0 30.7	67.8 59.2 83.6 84.5 50.7	61.1 137.0 35.9 45.5 30.3	28.1 23.6 28.8 28.8 18.5	56.3 56.3	54.3 75.4 43.4 47.2 33.9	72.6 64.2 87.8 88.8 52.7	60.2 123.1 39.5 48.9 33.5	29.6 29.8 29.4 29.4 17.0	51.2 51.2	55.1 76.4 44.1 48.2 34.8	75.1 69.1 85.9 86.8 53.9	59.4 115.9 41.0 52.2 34.4	31.3 31.7 31.1 31.1 30.5	56.8 56.8
33 34 35 36 37	Costs recovered <sup>6</sup> Government Federal State and local Government enterprise purchases of fixed capital <sup>5</sup>	56.3 39.9 21.1 33.5 50.9	44.9 70.8 .1 112.9	49.4 20.9 97.0 49.9	30.5 2.8 31.8	56.3 2.7 4.9 .3	51.2 41.7 27.8 33.9 53.4	36.2 55.2 .2 93.4	52.4 32.8 87.7 52.7	31.6 9.3 32.6	51.2 4.7 8.6 .3	56.9 46.9 34.7 33.3 64.1	37.7 52.2 .2 105.0	62.1 42.3 77.3 63.4	31.9 19.8 32.5	56.9 2.5 4.6 .1
38 39 40	Regulation and monitoring Federal State and local	44.5 53.1 37.1	56.7 61.5 54.5	49.6 55.1 43.8	7.1 12.2 3.8	78.3 81.5 37.9	55.7 69.8 43.7	60.6 60.4 60.6	61.8 65.4 57.5	8.5 17.6 2.7	131.0 138.7 29.0	60.8 80.0 44.6	61.5 57.6 63.1	69.8 82.1 57.7	11.7 24.9 3.2	142.7 152.9 6.1
41 42 43 44	Research and development Private Federal State and local	175.5 319.5 71.2 515.9	239.8 320.8 114.8 396.5	265.4 395.1 114.9 582.3	54.0 370.4 12.6 287.5	84.7 215.4 49.6 711.0	181.2 329.3 87.9 320.0	247.5 331.3 131.2 131.3	295.7 424.8 199.3 405.3	55.6 275.6 24.3 250.2	79.6 220.7 52.5 418.6	178.8 315.5 101.1 177.4	228.4 323.8 94.5 140.1	242.9 295.6 225.6 204.4	59.4 340.9 33.1 127.5	119.3 260.5 100.2 208.2
							С	hain-type	price ind	exes, 199	2=100					
45 46 47 48	Pollution abatement and control  Pollution abatement  Personal consumption  Durable goods 3	<b>31.5</b> 31.5 32.3 42.2	<b>32.5</b> 32.4 32.3 4.2	<b>32.1</b> 32.1	<b>30.4</b> 30.3	<b>38.3</b> 35.8	34.5 34.5 34.4 42.3	34.9 34.9 34.4 42.3	<b>36.0</b> 36.1	<b>32.7</b> 32.7	<b>49.8</b> 41.5	<b>40.4</b> 40.6 43.0 44.8	<b>43.3</b> 43.7 43.0 44.8	<b>40.9</b> 41.0	<b>36.5</b>	<b>72.0</b> 50.3
49 50 51 52 53 54 55	Nondurable goods <sup>4</sup> Business On capital account On current account  Private Government enterprise <sup>5</sup> Costs recovered <sup>6</sup>	30.9 33.4 28.9 28.3 32.4 34.4	32.4 35.8 27.9 27.9 23.9	31.5 31.6 31.6 29.9 32.7	30.2 31.2 30.1 30.1 30.1	34.4	34.1 37.2 31.7 31.4 34.4 39.8	35.0 37.4 31.8 31.8 29.2	35.9 37.8 34.0 32.8 34.6	32.5 32.6 32.6 32.6 32.6	39.8	40.1 42.2 38.7 38.6 40.7 48.3	43.9 43.1 44.9 44.8 55.5	40.7 42.2 39.2 37.4 40.4	36.3 36.5 36.4 36.4 36.4	48.3
56 57 58 59	Government	32.0 30.7 30.4 33.1	32.9 31.4 42.4 35.6	33.0 31.2 32.8 33.1	30.5 30.9 30.5	31.3 31.2 31.5	34.7 34.1 32.9 35.9	35.1 34.1 42.5 37.3	35.9 35.3 36.2 36.0	32.9 33.0 33.0	34.5 34.4 34.7	39.5 39.6 37.1 40.9	42.4 42.7 44.9 43.9	41.1 40.2 45.3 40.9	36.8 36.9 36.7	40.2 40.1 40.4
60 61 62 63 64	Regulation and monitoring  Federal State and local  Research and development Private	31.6 30.4 32.8 30.0 29.7	30.8 30.4 31.0 29.8 29.7	31.5 30.4 33.0 30.2 29.7	33.6 30.4 36.0 30.2 29.7	30.7 30.4 34.0 30.4 29.7	33.8 32.2 35.5 31.9 31.6	33.4 32.2 34.0 31.7 31.6	33.4 32.2 35.0 32.0 31.6	35.5 32.2 38.0 32.1 31.6	32.5 32.2 36.0 32.3 31.6	37.6 35.0 40.8 35.4 35.3	36.3 35.0 37.0 35.3 35.3	38.4 35.0 43.0 35.4 35.3	38.9 35.0 43.0 35.4 35.3	35.4 35.0 40.0 35.7 35.3
65 66	Federal State and local	30.3 29.6	30.3 29.6	30.3 29.6	30.3 29.6	30.3 29.6	32.2 31.2	32.2 31.2	32.2 31.2	32.2 31.2	32.2 31.2	35.6 33.7	35.6 33.7	35.6 33.7	35.6 33.7	35.6 33.7
							ddendum:	Business	capital o	onsumpti	on allowances:	7				
67 68 69	Valued at replacement cost in current dollars Chain-type quantity index, 1992=100 Chain-type price index, 1992=100	1,861 40.1 31.9					2,349 44.9 36.0					2,918 49.5 40.6				

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

	1972–94—Continued																
				1975					1976			1977					
Line		Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated 2	Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	
								N	illions of	dollars							
1 2	Pollution abatement and control	<b>28,302</b> 26,545	<b>11,923</b> 11,135	<b>12,073</b> 11,622	<b>4,523</b> 4,449	- <b>218</b> -669	<b>31,803</b> 29,799	<b>13,025</b> 12,142	<b>14,061</b> 13,554	<b>5,000</b> 4.934	- <b>283</b> -831	<b>35,104</b> 32,794	<b>14,716</b> 13,671	<b>14,955</b> 14,386	<b>5,718</b> 5.640	- <b>285</b> -903	
3	Personal consumption	3,245	3,245			-009	3,806	3,806		4,304	-031	4,343	4,343		3,040	-903	
4 5	Durable goods 3	1,384 1,861	1,384 1,861				1,863 1,943	1,863 1,943				2,211 2,133	2,211 2,133				
6 7	Business	16,406 7,882	7,679 4,432	6,557 3,045	2,863 405	-692	18,377	8,112	7,901 3,703	3,251 457	-887	21,038	9,013	9,167	3,823 596	-965	
8	On current account	8.524	3,247	3,512	2,458	-692	8,561 9,816	4,401 3,710	4,198	2,794	-887	9,436	4,631 4,382	4,210 4,958	3,227	-965	
9	Private Government enterprise <sup>5</sup>	7,326 1,892	3,202 45	1,666 1,846	2,457 (*)	1	8,449 2,255	3,653 58	2,002 2,196	2,794 (*)	1	9,913 2,655	4,322 60	2,364 2,594	3,227 (*)	1	
11 12	Costs recovered 6°	-693 6,894	211	5,073	1,587	-693 23	-887 7,617	225	5,653	1,684	-887 56	-966 7,412	314	5,219	1,817	-966 62	
13	Federal State and local	432 1.748	88	271 210	50 1,537	23	469 1,837	105	257 204	52 1,632	56 (*)	490 1,963	106	279 188	43 1,774	62 (*)	
15	Government enterprise purchases of fixed capital 5	4,715	123	4,592			5,311	119	5,192			4,960	208	4,752			
16 17	Regulation and monitoring Federal	653 381	206 66	279 153	32 26	136 136	725 402	203 69	328 151	28 21	167 162	833 429	241 80	370 146	39 26	182 177	
18 19	State and local	272 1,104	139 583	126 164	6 42	(*) 316	323 1,279	135 680	177 180	7 39	5 381	404 1,478	161 804	224 199	14 39	5 436	
20 21	Private Federal	609 448	466 108	68 77	21	53 248	706 528	543 131	78 84	20 14	65 299	849 578	654 144	91 90	21 14	83 330	
22	State and local	47	8	19	15 6	14	45	6	18	4	17	51	7	18	4	23	
		Chain-type quantity indexes, 1992=100															
23	Pollution abatement and control	62.0	84.6	70.7	31.5	35.2	65.9	88.5	77.0	32.8	45.2	68.1	94.0	76.2	35.5	44.5	
24	Pollution abatement	60.3	82.7	69.9	31.7	78.6	64.0	86.5	76.2	33.1	93.4	66.0	91.6	75.2	35.8	96.0	
25 26	Personal consumption  Durable goods <sup>3</sup>	88.9 36.0	88.9 36.0				99.1 45.5	99.1 45.5				107.2 51.3	107.2 51.3				
27 28	Nondurable goods <sup>4</sup>	56.6	81.4	59.1	31.1	67.6	60.1	82.8	66.5	33.3	82.7	64.3	86.2	71.7	37.0	85.1	
29 30	On capital account On current account	77.4 45.9	74.7 93.5	109.8 42.7	27.9 31.6	67.6	80.0 49.9	71.6 102.6	125.0 47.5	29.3 33.9	82.7	82.8 54.9	71.1 112.4	132.9 51.9	35.2 37.2	85.1	
31	Private	51.0 35.6	95.0 41.7	55.0 35.4	31.6 28.6		55.8 39.4	104.0 53.4	61.8 39.1	33.9 27.0		61.1 42.9	114.2 51.3	67.4 42.7	37.2 25.7		
32 33	Government enterprise <sup>5</sup>	67.6				67.6	82.8				82.8	85.1				85.1	
34 35	GovernmentFederal	62.9 47.8	55.3 73.8	91.3 55.8	32.8 23.4	13.6 25.8	65.3 49.0	58.2 84.2	95.4 49.8	32.7 22.7	30.7 58.2	59.5 47.6	76.4 79.3	82.2 50.3	33.5 17.7	31.8 60.2	
36 37	State and local	34.3 96.5	.3 159.1	83.5 95.4	33.3	.1	34.1 101.8	.4 156.6	80.7 100.8	33.2		34.3 88.9	.3 257.6	66.0 86.2	34.2	.1	
38 39	Regulation and monitoring Federal	62.4 80.8	64.0 68.0	75.2 85.5	12.9 26.9	128.8 138.1	65.6 81.0	59.2 66.6	84.1 80.0	10.5 20.2	150.2 157.1	69.7 79.8	65.5 72.0	87.5 71.6	13.8 23.2	151.4 158.6	
40	State and local	46.8	62.2	64.7	4.0	4.2	52.4	55.8	86.7	4.2	60.0	60.6	62.6	100.9	7.7	57.7	
41 42	Research and development	180.4 284.6	200.5 276.7	236.8 318.8	63.8 487.6	168.8 271.3	195.9 308.8	219.0 301.3	243.1 341.5	55.5 438.4	191.4 309.2	211.3 346.6	241.7 338.8	250.7 372.9	52.3 429.8	204.6 367.2	
43 44	FederalState and local	120.0 199.1	92.5 151.8	202.3 202.0	25.6 148.6	153.8 287.5	132.9 178.9	104.7 111.9	207.0 178.1	23.7 94.2	174.2 324.5	135.7 190.0	107.4 108.5	206.0 166.5	22.0 78.0	179.6 418.0	
							C	hain-type	price ind	exes, 199	2=100						
45	Pollution abatement and control	43.6	47.3	43.7	39.2	76.2	46.2	49.4	46.7	41.7	77.3	49.3	52.6	50.2	44.1	79.1	
46	Pollution abatement	43.8	47.7	43.8	39.2	54.6	46.3	49.7	46.9	41.6	57.1	49.4	52.9	50.4	44.0	60.4	
47 48	Personal consumption  Durable goods <sup>3</sup>	46.2 48.7	46.2 48.7				48.6 51.9	48.6 51.9				51.3 54.6	51.3 54.6				
49 50	Nondurable goods <sup>4</sup>	44.0	48.3	44.7	39.1	52.4	46.4	50.2	47.9	41.5	54.8	49.6	53.5	51.5	43.9	58.0	
51	On capital account On current account	46.2 42.3	47.8 48.8	45.1 44.1	41.7 38.8	52.4	48.5 44.9	49.5 50.9	48.2 47.3	44.8 41.1	54.8	51.7 48.2	52.4 54.8	51.5 51.2	48.6 43.3	58.0	
52 53 54 55	Private	41.9 46.2	48.7 57.2	41.3 46.0	38.8 38.8		44.1 49.7	50.7 57.3	44.2 49.6	41.1 41.1		47.2 53.7	54.7 61.7	47.8 53.6	43.3 43.2		
	Government enterprise <sup>5</sup>	52.4				52.4	54.8				54.8	58.0				58.0	
56 57	GovernmentFederal	41.1 42.2	47.5 47.3	42.2 42.1	39.4 40.5	43.1 43.0	43.8 44.7	48.0 49.5	45.0 44.9	41.9 43.1	45.7 45.6	46.8 48.0	51.2 53.2	48.3 48.2	44.2 46.0	49.0 48.9	
58 59	State and local	39.6 42.0	48.8 49.5	46.8 42.0	39.3	43.4	41.8 44.9	51.9 48.7	46.9 44.9	41.8	46.1	44.5 48.0	54.6 51.6	52.9 48.0	44.1	49.4	
60 61	Regulation and monitoring Federal	40.2 38.1	39.4 38.1	40.2 38.1	42.4 38.1	38.5 38.1	42.4 40.1	42.0 40.1	42.2 40.1	44.5 40.1	40.5 40.1	45.9 43.4	45.1 43.4	45.9 43.4	48.2 43.4	43.9 43.4	
62	State and local	42.5	40.0	43.0	47.0	44.0	45.1	43.0	45.0	49.0	46.0	48.7	46.0	49.0	53.0	50.0	
63 64	Research and development	39.2 39.1	39.1 39.1	39.1 39.1	39.1 39.1	39.4 39.1	41.8 41.9	41.8 41.9	41.7 41.9	41.7 41.9	42.0 41.9	44.8 44.8	44.7 44.8	44.7 44.8	44.6 44.8	45.0 44.8	
65 66	FederalState and local	39.3 36.6	39.3 36.6	39.3 36.6	39.3 36.6	39.3 36.6	41.8 39.1	41.8 39.1	41.8 39.1	41.8 39.1	41.8 39.1	44.8 41.6	44.8 41.6	44.8 41.6	44.8 41.6	44.8 41.6	
						I	ddendum:	Business	capital o	onsumpti	on allowances:	7	1				
67	Valued at replacement cost in current dellars	2 640				T	1 257				J	1 007					
67 68 69	Valued at replacement cost in current dollars	3,640 55.4					4,257 60.7					4,887 65.1					
09	Chain-type price index, 1992=100	45.2					48.3					51.7					

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

				191	2-34-	-Continue	u									
				1978					1979					1980		
Line		Total 1	Air	Water	Solid waste	Other and unallocated 2	Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total 1	Air	Water	Solid waste	Other and unallocated 2
			I					M	lillions of	dollars		1				
1 2	Pollution abatement and control	<b>39,495</b> 36,898	<b>16,382</b> 15,163	<b>17,001</b> 16,366	<b>6,505</b> 6,414	- <b>393</b> -1,055	<b>45,269</b> 42,426	<b>19,395</b> 18,059	<b>19,191</b> 18,520	<b>7,275</b> 7,150	- <b>592</b> -1,304	<b>50,763</b> 47,753	<b>22,353</b> 21,024	<b>20,638</b> 19,945	<b>8,524</b> 8,315	- <b>752</b> 1,531
3 4 5	Personal consumption  Durable goods <sup>3</sup> Nondurable goods <sup>4</sup>	4,849 2,506 2,343	4,849 2,506 2,343				5,518 2,855 2,663	5,518 2,855 2,663				6,654 3,552 3,102	6,654 3,552 3,102			
6 7 8 9	Business On capital account On current account	23,396 10,015 13,381	10,100 5,095 5.005	9,996 4,326 5,670	4,374 594 3,781	-1,075 -1,075	26,967 11,530 15,437	12,204 6,089 6,114	11,219 4,664 6,555 3,144	4,904 776 4,127	-1,359 -1,359	29,986 12,248 17,737	13,998 6,811 7,187	11,880 4,577 7,303	5,717 860 4,857	-1,610 -1,610
10 11	Private Government enterprise <sup>5</sup> Costs recovered <sup>6</sup>	11,396 3,060 –1,075	4,933 72 (*)	2,683 2,987	3,780	-1,075	13,283 3,514 –1,356	6,012 103 (*)	3,411	4,127 (*)	-1,360	15,270 4,078 –1,610	7,039 148	3,375 3,929	4,857 (*)	1 -1,610
12 13 14 15	Government Federal State and local Government enterprise purchases of fixed capital <sup>5</sup>	8,654 472 2,212 5,970	214 90 (*) 123	6,381 316 218 5,847	2,040 47 1,993	20 19 1	9,941 548 2,462 6,932	337 103 (*) 235	7,301 347 257 6,697	2,247 48 2,199	55 50 6	11,113 494 2,850 7,769	373 95 (*) 278	8,065 274 299 7,491	2,597 55 2,542	79 70 9
16 17 18	Regulation and monitoring	949 507 442	276 93 183	405 186 219	55 28 28	213 201 12	1,067 593 474	300 100 200	425 232 193	86 37 49	257 225 32	1,259 793 466	326 122 204	465 326 139	156 66 90	313 280 34
19 20 21 22	Research and development Private Federal State and local	1,647 999 592 57	943 789 146	219 99 104 17	36 16 16 4	449 94 326 29	1,777 1,143 564 71	1,036 924 105	247 107 118 21	39 11 24 3	455 100 317 39	1,751 1,096 591 64	1,003 869 130 5	228 110 95 23	53 19 32 3	467 99 335 33
22	State and local	31	١		7	2.0				dexes, 19		04		20	<u> </u>	
23 24	Pollution abatement and control	<b>71.2</b> 69.0	<b>98.0</b> 95.2	<b>79.4</b> 78.4	<b>38.2</b> 38.5	<b>56.4</b> 103.7	<b>72.4</b> 70.3	<b>100.2</b> 97.5	<b>81.0</b> 80.1	<b>38.6</b> 38.8	<b>70.2</b> 112.8	<b>71.9</b> 70.1	<b>98.0</b> 96.0	<b>79.6</b> 78.9	<b>41.3</b> 41.2	<b>75.9</b> 115.7
25 26 27 28	Personal consumption Durable goods 3 Nondurable goods 4 Business	113.0 54.0 66.6	113.0 54.0 90.3	72.1	40.0	87.6	106.7 56.9 68.6	106.7 56.9 95.3	73.5	40.5	97.6	105.6 65.5 67.5	105.6 65.5 93.6	70.5	43.2	101.1
29 30 31 32	On capital account On current account Private Government enterprise 5	81.5 59.2 65.8 45.8	73.2 120.0 121.8 56.8	125.8 54.8 70.5 45.5	31.9 41.4 41.4 12.2	87.6	85.3 60.2 67.0 48.0	80.1 122.1 123.6 66.5	122.2 57.9 75.2 47.6	37.8 40.8 40.8 11.0	97.6	82.9 59.8 66.3 49.2	81.8 115.4 116.4 78.5	110.9 57.6 72.8 48.6	36.7 44.3 44.3 20.3	101.1
33 34 35	Costs recovered 6°	87.6 63.7 42.1	48.6 62.8	90.9 51.9	35.6 17.9	87.6 9.4 16.8	97.6 65.6 43.9	69.7 64.2	93.0 51.2	35.4 16.6	97.6 23.6 40.3	101.1 67.7 36.0	69.5 52.1	95.4 37.2	37.5 17.2	101.1 30.3 51.1
36 37 38 39	State and local Government enterprise purchases of fixed capital 5  Regulation and monitoring Federal	35.9 97.6 74.4 88.2	0 143.4 70.3 78.1	58.1 96.7 89.9 85.3	36.5 18.2 23.4	1.2  165.3 167.6	36.2 101.1 77.4 95.3	0 249.6 70.5 77.5	65.0 98.8 87.2 98.2	36.3 26.0 28.8	5.0 184.6 173.4	38.3 105.3 82.1 114.6	0 269.4 68.8 84.8	66.9 102.8 85.9 124.1	38.5 42.5 46.7	7.1 202.4 193.8
40 41 42	State and local  Research and development  Private	62.4 216.9 374.0	66.8 260.4 374.9	92.9 255.5 372.8	14.5 44.3 300.3	138.9 194.9 383.6	62.0 214.1 390.3	67.4 261.3 400.5	75.9 263.3 367.8	23.6 44.0 188.3	346.6 181.1 371.0	54.9 187.6 332.4	61.7 224.6 334.1	49.3 216.9 335.3	39.0 54.1 282.8	327.2 165.4 325.5
43 44	Federal State and local	128.7 197.0	101.2 117.0	220.2 144.3	22.2 82.8	164.4 481.3	112.6 255.7	66.7	230.8 171.1	32.0 61.9	146.4 599.2	105.1 185.8	73.6 59.0	165.1 168.1	37.0 53.0	137.7 468.9
						Г				exes, 199						
45 46 47 48	Pollution abatement and control  Pollution abatement  Personal consumption	53.0 53.2 54.3 58.8	56.1 56.4 54.3 58.8	<b>54.8</b> 55.0	<b>46.6</b> 46.5	<b>85.8</b> 65.2	<b>59.8</b> 61.0 65.5 63.5	65.0 65.6 65.5 63.5	<b>60.7</b> 60.9	<b>51.6</b> 51.5	74.1	67.4 67.9 79.8 68.7	76.5 77.5 79.8 68.7	<b>66.4</b> 66.6	<b>56.4</b> 56.3	<b>122.2</b> 84.9
49 50 51 52 53 54	Nondurable goods <sup>4</sup> Business On capital account On current account Private Government enterprise <sup>5</sup>	53.3 55.7 51.5 50.4 58.1	57.3 56.1 58.7 58.5 67.3	55.9 55.9 55.4 51.9 57.9	46.4 53.4 45.5 45.5 45.4	62.7	59.7 61.3 58.5 57.8 63.6	65.6 61.3 70.4 70.2 81.7	61.5 62.1 60.7 57.0 63.3	51.4 59.0 50.4 50.4 50.4	71.2	67.4 67.0 67.6 67.1 71.9	76.6 67.1 87.6 87.3 99.7	67.9 67.1 67.9 63.2 71.4	56.3 67.4 54.7 54.7 54.7	81.4
55 56 57 58	Costs recovered 6 Government Federal State and local	62.7 51.0 52.4 47.9	54.7 57.2 58.9	53.3 53.0 69.7	46.6 49.4 46.5	62.7 53.1 53.0 53.5	71.2 56.9 58.2 52.8	60.2 63.6 63.6	59.6 59.0 73.4	51.6 54.6 51.5	71.2 59.1 59.0 59.5	81.4 61.6 64.1 57.8	66.7 72.4 68.8	64.3 64.1 83.1	56.4 60.7 56.2	81.4 65.3 65.2 65.8
59 60 61 62 63	Government enterprise purchases of fixed capital 5  Regulation and monitoring  Federal  State and local  Research and development	52.6 49.0 46.5 51.8 48.6	55.0 48.2 46.5 49.0 48.7	52.7 48.9 46.5 52.0 48.4	51.3 46.5 56.0 48.4	47.0 46.5 53.0 48.7	59.0 52.9 50.3 55.9 53.2	52.1 50.3 53.0 53.3	59.1 52.8 50.3 56.0 52.9	55.7 50.3 61.0 52.8	50.8 50.3 57.0 53.0	63.4 58.9 56.0 62.1 59.8	58.0 56.0 59.0 60.1	63.6 58.6 56.0 62.0 59.3	62.0 56.0 68.0 59.3	56.5 56.0 63.0 59.5
64 65 66	Private Federal State and local	48.9 48.4 44.5	48.9 48.4 44.5	48.9 48.4 44.5	48.9 48.4 44.5	48.9 48.4 44.5	53.6 52.7 48.2	53.6 52.7 48.2	53.6 52.7 48.2	53.6 52.7 48.2	53.6 52.7 48.2	60.4 59.2 53.0	60.4 59.2 53.0	60.4 59.2 53.0	60.4 59.2 53.0	60.4 59.2 53.0
						F	ddendum:	Business	capital o	consumpti	on allowances:	7				
67 68 69	Valued at replacement cost in current dollars	5,595 68.9 55.9					6,510 72.7 61.6					7,424 75.8 67.4				

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

				197	2-34-	-Continue	u									
				1981					1982					1983		
Line		Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated 2	Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated 2	Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated <sup>2</sup>
				ı	'			N	lillions of	dollars	1					
1 2	Pollution abatement and control	<b>54,409</b> 51,389	<b>25,423</b> 24,150	<b>20,150</b> 19,482	<b>9,691</b> 9,382	- <b>856</b> -1,625	<b>55,949</b> 52,986	<b>25,963</b> 24,730	<b>20,702</b> 20,044	<b>9,803</b> 9,469	- <b>518</b> -1,256	<b>59,118</b> 56,227	<b>26,681</b> 25,510	<b>21,708</b> 21,082	<b>11,119</b> 10,848	- <b>389</b> -1,212
3 4 5	Personal consumption  Durable goods <sup>3</sup> Nondurable goods <sup>4</sup>	8,195 4,823 3,372	8,195 4,823 3,372				8,356 4,964 3,392	8,356 4,964 3,392				9,764 6,201 3,563	9,764 6,201			
6 7	Business On capital account	32,512 13,061	15,529 7,883	12,350 4,163	6,420 1,015	-1,787	33,536 12,978	15,764 7,991	13,035 3,954	6,200 1.033	-1,463	35,018 12,222	3,563 15,121 7,112	14,053 4,171	7,245 939	-1.402
8 9 10	On current account	19,451 16,537	7,646 7,511 135	8,187 3,622	5,404 5,404	-1,787	20,558 16,703	7,773 7,632 141	9,081 3,904	5,167 5,167	-1,463	22,796 18,392	8,010 7,867 143	9,882 4,219	6,306 6,306	-1.402
11 12	Government enterprise 5 Costs recovered 6 Government	4,701 -1,788 10,681	426	4,566 7,132	2,962	-1,788 162	5,318 -1,463 11,093	609	5,177 7,009	3,269	-1,463 206	5,805 -1,402 11,445	625	5,663 7,029	3,603	-1.402 189
13 14	FederalState and local	506 3,209	85 (*)	220 286	53 2,909	148 14	550 3,526	87 (*)	238 276	57 3,212	168 38	795 3,871	136 4	443 290	119 3,484	97 92
15 16	Government enterprise purchases of fixed capital <sup>5</sup>	6,967 1,310	341 320	6,626 434	245	311	7,017 1,322	523 307	6,494 416	265	335	6,780 1,296	485 305	6,295 380	184	427
17 18 19	Federal State and local	818 492 1.711	108 213 953	296 138 234	143 102 65	272 39	820 502 1,641	93 214 927	272 144 243	190 75 69	265 70 403	806 490 1,595	88 216 867	241 140 246	72 111 87	405 22 396
20 21	Research and development Private Federal	1,037 646	822 131	104 119	18 44	458 93 352	1,041 1,009 604 28	799 126	102 131	17 48	91 300	920 640	728 133	93 143	16 66	83 299
22	State and local	28	(*)	11	4	13	28	2	10	4	13	35	6	10	6	14
							Ch	ain-type o	quantity in	dexes, 19	992=100					
23 24	Pollution abatement and control	<b>70.0</b> 68.4	<b>101.6</b> 100.5	<b>71.1</b> 70.6	<b>41.4</b> 41.0	<b>80.8</b> 112.9	<b>69.0</b> 67.8	<b>101.3</b> 100.8	<b>69.6</b> 69.2	<b>39.2</b> 38.7	<b>53.1</b> 87.2	<b>70.6</b> 69.7	<b>102.6</b> 102.7	<b>69.6</b> 69.4	<b>42.9</b> 42.8	<b>43.2</b> 84.0
25 26	Personal consumption  Durable goods 3	119.9 83.7	119.9 83.7				122.2 82.8	122.2 82.8				142.3 100.8	142.3 100.8			
27 28	Nondurable goods <sup>4</sup> Business	66.0	94.0	66.6	42.7	103.0	64.9	92.6	66.4	38.6	83.8	65.7	87.4	68.6	43.6	79.7
29 30 31	On capital account On current account Private	80.8 58.6 64.3	86.1 110.7 112.0	93.1 58.2 71.0	39.2 43.2 43.2	103.0	76.6 59.0 62.4	83.0 111.4 112.7	85.3 60.4 71.7	37.0 38.7 38.7	83.8	68.8 64.0 67.5	70.6 116.3 117.5	84.7 63.4 74.1	33.5 45.4 45.4	79.7
32 33	Government enterprise <sup>5</sup>	50.8 103.0	64.9	50.5	8.9	103.0	53.8 83.8	67.1	53.6	8.4	83.8	57.1 79.7	71.7	56.8	8.0	79.7
34 35 36 37	Government	59.5 33.4	72.7 41.0	78.2 27.5	37.6 14.8	56.1 97.2	59.2 34.6	98.0 40.1	74.4 28.6	38.9 14.8	68.0 105.2	58.0 48.1	93.0 62.0	70.5 50.4	41.2 30.0	60.2 58.6
	State and local Government enterprise purchases of fixed capital 5  Regulation and monitoring	38.5 87.2 77.8	0 306.0 62.0	66.4 83.9 72.8	38.7	10.3	40.2 84.4 72.9	0 440.9 55.0	71.3 79.1 64.8	40.0 61.3	26.5	42.3 77.0 68.1	1.2 373.3 52.2	68.2 72.6 56.5	41.8	61.7
38 39 40	Federal State and local	107.0 53.2	67.9 59.3	102.0 44.7	91.1 40.9	182.4 170.9 348.5	99.5 50.5	54.5 55.2	86.9 43.5	112.5 28.0	154.4 577.8	92.7 47.4	48.9 53.6	72.9 40.5	40.6 40.7	223.7 177.7
41 42	Research and development Private	165.0 283.5	192.4 285.0	200.6 286.1	59.2 241.2	145.9 277.3	147.0 255.6	173.4 256.9	192.8 258.1	58.4 217.2	119.5 250.2	136.6 223.3	155.3 224.3	186.7 226.4	70.7 189.9	111.8 218.1
43 44	Federal State and local	103.0 74.4	66.7 2.4	185.4 75.1	45.8 56.0	129.9 166.0	89.7 70.0	59.3 18.9	190.3 61.8	47.0 52.1	103.0 155.7	90.6 82.9	59.8 58.0	197.9 58.5	61.4 78.7	97.8 159.9
							C	Chain-type	price inde	exes, 199	2=100					
45 46	Pollution abatement	<b>74.3</b> 74.8	<b>84.0</b> 85.1	<b>72.5</b> 72.7	<b>64.0</b> 63.9	<b>130.6</b> 92.4	<b>77.5</b> 77.8	<b>86.1</b> 86.9	<b>76.1</b> 76.3	<b>68.4</b> 68.3	<b>120.3</b> 92.4	<b>80.0</b> 80.3	<b>87.3</b> 88.0	<b>79.9</b> 80.1	<b>70.9</b> 70.8	<b>111.1</b> 92.7
47 48	Personal consumption	86.5 73.0	86.5 73.0				86.6 75.9	86.6 75.9				86.9 77.9	86.9 77.9			
49 50	Nondurable goods <sup>4</sup> Business One operated products	74.7 73.3	84.6 73.7	74.7 72.7	63.8	88.7	78.4	87.2	79.1	68.2 80.3	89.3	80.9	88.6	82.6 80.1	70.6 80.6	89.9
51 52 53	On capital account On current account Private	75.6 74.9	97.1 96.9	75.4 69.5	74.5 62.3 62.3	88.7	76.9 79.4 78.0	77.5 98.1 97.8	75.4 80.6 74.3	66.5 66.5	89.3	80.6 81.2 79.4	81.1 96.8 96.7	83.6 77.6	69.2 69.2	89.9
52 53 54 55	Government enterprise <sup>5</sup>	80.4 88.7	110.0	79.8	62.4	88.7	85.9 89.3	110.9	85.4	66.5	89.3	88.3 89.9	105.2	88.0	69.2	89.9
56 57	GovernmentFederal	67.4 70.7	73.0 82.0	69.3 69.5	64.1 68.2	72.5 72.4	70.4 74.2	77.4 86.0	71.6 72.4	68.5 73.0	76.4 76.3	74.1 77.2	83.6 87.5	75.8 76.4	71.2 74.7	79.1 78.9
58 59	State and local Government enterprise purchases of fixed capital 5	64.7 68.7	73.0 71.4	80.0 68.9	63.9	73.1	68.1 71.5	75.9 75.9	72.0 71.5	68.3	77.0	71.1 75.7	77.8 83.1	79.1 75.6	71.0	79.7
60 61 62	Regulation and monitoring Federal State and local	64.7 61.8 67.7	63.3 61.8 64.0	64.6 61.8 68.0	68.0 61.8 74.0	62.3 61.8 69.0	69.7 66.7 72.7	68.2 66.7 69.0	69.6 66.7 73.1	73.1 66.7 79.0	67.2 66.7 74.0	73.0 70.3 75.5	71.4 70.3 72.0	73.0 70.3 76.1	76.1 70.3 81.0	70.7 70.3 77.0
63 64	Research and development Private	66.4 67.0	66.7 67.0	65.9 67.0	65.9 67.0	66.2 67.0	71.5 72.2	71.9 72.2	70.9 72.2	70.9 72.2	71.2 72.2	74.8 75.4	75.1 75.4	74.3 75.4	74.3 75.4	74.6 75.4
65 66	Federal State and local	66.0 58.0	66.0 58.0	66.0 58.0	66.0 58.0	66.0 58.0	70.9 62.3	70.9 62.3	70.9 62.3	70.9 62.3	70.9 62.3	74.4 65.8	74.4 65.8	74.4 65.8	74.4 65.8	74.4 65.8
				I			ddendum:	: Business	capital c	onsumpti	on allowances:	7	<u> </u>			
67	Valued at replacement cost in current dollars	8,656					9,338					9,813				
68 69	Chain-type quantity index, 1992=100 Chain-type price index, 1992=100	80.4 74.1					82.5 77.9					85.3 79.2				

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

				197	2–94–	-Continue	a									
				1984					1985					1986		
Line		Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated 2	Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated <sup>2</sup>
			I		I			M	lillions of	dollars	<u>     l</u>					
1 2	Pollution abatement and control	<b>66,058</b> 63,259	<b>29,415</b> 28,204	<b>24,178</b> 23,565	<b>13,027</b> 12,734	- <b>561</b> -1,245	<b>71,361</b> 68,734	<b>30,678</b> 29,427	<b>26,165</b> 25,495	<b>15,181</b> 14,806	- <b>662</b> -995	<b>76,037</b> 72,905	<b>31,431</b> 29,959	<b>28,229</b> 27,490	<b>17,062</b> 16,595	- <b>685</b> -1,139
3 4 5	Personal consumption  Durable goods <sup>3</sup> Nondurable goods <sup>4</sup>	11,041 7,354 3,687	11,041 7,354 3,687				12,161 8,309 3,851	12,161 8,309 3,851				12,684 9,386 3,298	12,684 9,386 3,298			
6 7 8 9 10 11	Business On capital account On current account Private Government enterprise 5 Costs recovered 6	39,360 14,444 24,916 20,157 6,224 -1,465	16,776 8,455 8,322 8,176 146	15,401 4,759 10,641 4,563 6,078	8,648 1,230 7,418 7,418 (*)	-1,465 -1,465 -1,465	42,038 14,547 27,491 22,015 6,710	16,963 8,189 8,773 8,631 143	16,205 4,734 11,471 4,905 6,566	10,103 1,624 8,480 8,479 (*)	-1,232 -1,232 -1,232 -1,233	44,107 14,688 29,419 23,456 7,409	17,024 8,537 8,487 8,349 138	17,300 4,741 12,559 5,291 7,269	11,228 1,411 9,817 9,817 (*)	-1,444 1,444 2
12 13 14 15	Government	12,858 944 4,320 7,594	387 115 14 258	8,165 492 337 7,336	4,086 197 3,889	-1,465 220 140 80	-1,233 14,535 1,262 4,908 8,365	304 108 12 183	9,291 718 391 8,182	4,703 276 4,427	238 159 79	-1,446 16,114 1,299 5,564 9,251	252 72 14 166	10,190 678 426 9,085	5,367 318 5,049	-1,446 306 231 75
16 17 18	Regulation and monitoring	1,286 743 543	335 101 234	389 219 169	207 76 131	355 346 9	1,251 573 678	363 103 259	464 245 219	295 101 195	129 124 5	1,461 690 771	400 104 296	510 253 257	349 136 213	202 197 5
19 20 21 22	Research and development Private Federal State and local	1,514 892 590 32	876 707 165 4	224 90 120 14	85 15 65 5	329 80 240 9	1,375 948 408 19	888 752 133 4	205 95 97 13	79 16 61 2	203 85 118 (*)	1,671 1,028 621 22	1,072 815 255 3	229 104 110 16	118 18 98 2	252 93 158 2
			•				С	hain-type	quantity	ndex, 199	92=100				•	
23 24 25 26	Pollution abatement and control  Pollution abatement  Personal consumption  Durable goods 3	<b>76.5</b> 76.1 158.8 116.1	111.0 111.5 158.8 116.1	<b>74.5</b> 74.6	<b>48.1</b> 48.1	<b>61.9</b> 84.2	80.3 80.3 170.9 127.2	113.8 114.4 170.9 127.2	<b>77.7</b> 77.7	<b>54.1</b> 53.9	<b>79.1</b> 69.2	85.9 85.6 185.8 137.9	120.7 120.8 185.8 137.9	<b>83.1</b> 83.2	<b>58.9</b> 58.6	<b>91.2</b> 84.1
27 28 29 30	Nondurable goods   Business On capital account On current account	71.4 78.7 67.6	95.0 81.5 119.3	72.1 92.9 65.4	49.8 42.9 51.0	81.3	74.5 77.5 72.8	94.9 77.3 125.5	74.0 90.0 68.8	56.1 55.9 55.9	69.6	78.4 76.6 79.2	98.5 78.6 132.8	78.9 89.0 75.6	60.5 47.1 62.9	85.4
31 32 33 34	Private Government enterprise <sup>5</sup> Costs recovered <sup>6</sup> Government	71.6 58.8 81.3 62.8	120.7 72.0 55.9	76.5 58.6 79.2	51.0 7.7 44.7	81.3	76.4 62.5 69.7 67.5	127.0 73.4 4	79.5 62.3 84.8	55.9 7.3 49.7	69.7 71.0	83.0 69.9 85.5 73.1	134.5 75.0 35.9	85.0 69.9 91.3	62.9 7.1 55.0	85.5 90.4
35 36 37 38	Federal	55.4 45.0 83.6 65.2	51.4 4.4 191.8 54.8	54.2 72.3 82.0 55.8	48.2 44.6 44.5	82.1 52.1 	71.1 48.8 87.2 61.2	47.6 3.8 135.4 57.1	75.1 71.3 86.5 64.2	65.7 49.0 61.6	90.2 49.3 62.4	72.0 53.7 94.6 68.9	32.1 4.0 121.9 60.7	69.6 76.5 94.2 68.1	73.6 54.1 70.4	129.5 46.6 93.8
39 40 41 42	Federal State and local	82.9 50.3 124.9 208.5	54.4 54.9 151.2 209.6	64.5 47.2 164.1 209.8	41.5 46.2 66.4 177.0	185.4 68.3 89.7 204.0	61.6 60.7 110.8 216.7	53.6 58.6 149.8 217.9	69.4 58.9 146.3 218.4	52.7 67.0 59.9 184.4	64.1 38.4 54.1 211.8	71.4 66.6 132.9 232.8	51.8 64.5 178.8 234.0	69.2 66.6 161.1 235.0	68.8 70.9 88.1 198.6	97.8 35.7 66.0 227.5
43 44	Federal State and local	80.7 71.7	71.9 39.1	161.0 80.4	58.4 67.2	75.9 93.8	54.4 40.2	56.2 39.1	126.6 67.8	53.3 25.3	36.4 1.0	81.3 44.5	106.2 24.6	141.3 79.8	84.8 24.2	47.8 15.7
						T			•	dex, 1992						
45 46 47 48 49	Pollution abatement and control  Pollution abatement  Personal consumption  Durable goods 3  Nondurable goods 4	82.5 82.8 88.0 80.2	88.9 89.6 88.0 80.2	83.1	<b>74.0</b> 73.9	94.8	84.9 85.2 90.1 82.7	88.9 89.6 88.0 80.2	<b>86.2</b> 86.4	<b>76.7</b> 76.7	92.2	84.6 84.8 86.4 86.2	87.4 87.8 86.4 86.2	<b>86.9</b> 87.1	<b>79.1</b> 79.0	<b>92.7</b> 86.9
50 51 52 53 54 55	Business On capital account On current account Private Covernment enterprise Covernment enterprise Covernment	83.7 83.3 84.0 82.0 91.9 92.1	90.4 83.5 98.0 97.9 106.9	86.1 83.3 87.2 81.3 91.6	73.7 82.4 72.5 72.5 72.5	92.1 92.1 92.1	85.6 85.2 86.1 84.0 93.2 90.5	90.4 83.5 98.0 97.9 106.9	88.3 85.5 89.3 84.1 93.0	76.5 83.6 75.5 75.5 75.7	90.5	85.3 87.0 84.6 82.3 92.0 86.5	88.5 87.5 89.8 89.7 97.5	88.4 86.6 89.0 84.9 91.9	78.8 86.1 77.8 77.8 77.9	86.5 86.5 86.5
56 57 58 59	Government Federal State and local Covernment enterprise purchases of fixed capital <sup>5</sup>	76.9 79.6 74.6 78.2	86.2 89.1 80.1 86.1	78.4 78.9 86.5 78.0	74.4 77.2 74.2	81.3 81.2 82.0	80.9 82.9 78.1 82.6	86.2 89.1 80.1 86.1	83.2 83.2 101.7 82.5	77.0 79.5 76.9	84.2 84.1 84.9	82.7 84.3 80.5 84.1	87.2 89.2 86.2 87.1	84.8 84.7 103.6 84.1	79.5 81.7 79.4	85.2 85.0 85.9
60 61 62 63 64 65	Regulation and monitoring Federal State and local Research and development Private Federal	75.7 72.5 79.0 77.6 78.3 77.0	74.9 72.5 76.0 77.9 78.3 77.0	75.5 72.5 79.1 77.0 78.3 77.0	78.8 72.5 84.0 77.0 78.3 77.0	72.9 72.5 80.0 77.3 78.3 77.0	78.5 75.3 81.7 79.5 80.1 79.0	74.9 72.5 76.0 77.9 78.3 77.0	78.4 75.3 82.1 79.1 80.1 79.0	81.1 75.3 86.0 79.1 80.1 79.0	75.7 75.3 83.0 79.3 80.1 79.0	81.4 78.1 84.7 80.5 80.8 80.4	80.8 78.1 82.0 80.7 80.8 80.4	81.3 78.1 85.1 80.3 80.8 80.4	84.0 78.1 89.0 80.4 80.8 80.4	78.5 78.1 86.0 80.5 80.8 80.4
66	State and local	69.2	69.2	69.2	69.2	69.2	72.9	69.2	72.9	72.9	72.9	76.1	76.1	76.1	76.1	76.1
67	Valued at replacement cost in current dollars	10,901					11,568	Dusiness	ь сарнаі (	onsumpti	on allowances:	11.918				
68 69	Chain-type quantity index, 1992=100 Chain-type price index, 1992=100	90.4 83.0					93.9 84.8					94.8 86.5				

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

				197	2-94-	-Continue	a									
				1987					1988					1989		
Line		Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>
								M	lillions of	dollars		•				
1 2 3	Pollution abatement and control	<b>78,948</b> 75,611 11,339	<b>29,362</b> 27,871 11,339	<b>30,761</b> 29,973	<b>19,432</b> 18,912	- <b>607</b> -1,145	<b>83,754</b> 80,548 12,484	<b>31,328</b> 29,882 12,484	<b>31,287</b> 30,485	<b>22,434</b> 21,924	- <b>1,295</b> -1,743	<b>88,506</b> 85,096 11,091	<b>29,339</b> 27,740 11,091	<b>33,676</b> 32,818	<b>26,658</b> 26,141	- <b>1,167</b> -1,603
4 5 6 7	Durable goods 3 Nondurable goods 4 Business On capital account	8,800 2,539 45,735 14,562	8,800 2,539 16,264 8,445	18,160 4,610	12,781 1,507	-1,471	10,249 2,235 48,396 15,025	10,249 2,235 17,044 9,031	18,617 4,170	14,599 1,824	-1,864	9,872 1,219 52,231 15,457	9,872 1,219 16,126 8,717	20,496 4,703	17,383 2,037	-1,773
8 9 10 11 12	On current account Private Government enterprise 5 Costs recovered 6 Government	31,173 24,646 8,000 -1,473 18,537	7,819 7,683 135 269	13,550 5,688 7,862 11,813	11,275 11,275 (*) 	-1,471 2 -1,473 326	33,371 26,697 8,541 -1,867 19,668	8,013 7,852 161 	14,447 6,069 8,378 11,868	12,776 12,776 (*) 	-1,864 2 -1,867	36,775 29,056 9,494 -1,775 21,774	7,409 7,257 152 524	15,793 6,454 9,339 12,322	15,346 15,346 (*) 	-1,773 2 -1,775 169
13 14 15	Federal State and local Government enterprise purchases of fixed capital <sup>5</sup> Regulation and monitoring	1,440 6,294 10,803 1,645	100 6 162 460	720 452 10,641 560	339 5,791 394	281 45 232	1,547 7,366 10,756 1,663	355 202 32 121 468	749 484 10,635 580	483 6,842	113 8	1,627 8,871 11,276 1,728	209 85 229 515	786 489 11,047 625	505 8,253 	127 43 
17 18 19 20 21 22	Federal State and local	821 825 1,692 1,053 614 26	117 343 1,032 834 196	303 257 229 106 106 17	173 222 126 18 106 2	228 4 306 95 206 5	855 808 1,542 1,113 407 22	128 340 977 879 94 5	327 253 223 112 95 15	186 210 114 22 89 2	215 5 229 100 128 (*)	862 866 1,682 1,242 420 21	133 382 1,083 980 98 5	354 272 233 125 94 14	191 206 120 25 93 2	184 6 246 112 134 (*)
			-					hain-type			``'					
23 24 25 26	Pollution abatement and control  Pollution abatement  Personal consumption  Durable goods 3	<b>87.1</b> 86.8 160.5 125.1	110.2 109.9 160.5 125.1	<b>89.0</b> 89.1	<b>65.0</b> 64.7	<b>77.4</b> 81.5	<b>89.7</b> 89.8 173.4 142.6	114.8 115.2 173.4 142.6	<b>87.9</b> 88.0	<b>72.1</b> 72.0	<b>155.5</b> 118.0	91.3 91.3 149.4 134.6	103.9 103.3 149.4 134.6	<b>91.5</b> 91.7	<b>81.5</b> 81.6	<b>132.9</b> 103.1
27 28 29 30 31	Nondurable goods 4  Business On capital account On current account Private	79.7 74.3 82.4 85.3	92.8 75.8 122.0 123.3	81.6 85.0 80.4 89.6	66.5 50.0 69.5 69.5	84.2	82.1 74.5 85.8 89.3	94.8 78.7 122.5 123.4	81.7 74.7 84.0 92.5	73.0 58.9 75.4 75.4	101.8	85.0 74.5 90.2 92.7	86.5 73.9 108.1 108.8	86.6 82.2 88.0 94.8	82.6 63.2 86.0 86.0	92.0
32 33 34 35 36	Government enterprise <sup>5</sup> Costs recovered <sup>6</sup> Government Federal State and local	74.7 84.3 82.2 78.3 59.0	75.6 	74.7 103.5 72.5 76.2	6.9 61.2 76.6 60.5	84.3 94.8 155.0 27.7	78.9 101.8 83.8 81.2 66.0	89.4 89.4 48.1 87.1 8.7	78.7 100.0 72.7 72.7	70.2 105.3 68.6	101.8 34.0 60.1 5.0	83.7 92.1 89.7 82.3 76.4	81.0 68.5 86.8 23.2	83.8 101.4 74.0 83.4	79.8 105.1 78.7	92.1 45.9 65.1 24.4
37 38 39 40	Government enterprise purchases of fixed capital <sup>5</sup> Regulation and monitoring Federal  State and local	108.2 75.1 82.3 68.8	117.3 67.4 56.8 71.9	108.1 72.2 80.2 64.2	76.9 84.4 71.4	104.4 109.6 28.3	104.0 73.9 83.4 65.7	83.2 66.3 60.1 69.0	104.3 72.9 84.1 61.9	75.7 88.3 66.9	96.1 100.6 31.0	105.8 74.2 80.0 69.1	151.9 70.9 59.5 75.8	105.1 75.7 86.6 65.1	73.9 86.5 65.0	79.2 82.2 36.9
41 42 43 44	Research and development Private Federal State and local	131.6 233.4 78.5 50.1	168.3 234.5 79.9 13.1	156.9 236.0 132.0 83.9	92.1 198.9 89.3 25.4	78.3 228.0 61.0 46.1	114.5 235.0 49.8 41.5	152.0 235.3 36.8 38.4	145.8 237.7 113.7 72.1	79.5 234.9 72.1 24.3	56.0 229.8 36.4 .9	119.8 251.6 49.3 36.2	161.7 251.9 36.8 40.3	146.3 254.3 108.0 61.2	80.2 251.9 72.2 16.0	57.8 245.9 36.5 .8
								Chain-type	e price in	dex, 1992	<u>=</u> 100					
45 46 47 48	Pollution abatement and control  Pollution abatement  Personal consumption  Durable goods <sup>3</sup>	86.6 86.8 89.5 89.1	<b>89.5</b> 89.9 89.5 89.1	<b>88.5</b> 88.7	<b>81.7</b> 81.6	<b>96.8</b> 90.1	89.2 89.3 91.2 91.0	<b>91.6</b> 91.9 91.2 91.0	<b>91.1</b> 91.3	<b>85.0</b> 85.0	<b>102.7</b> 94.8	92.7 92.8 94.0 92.9	94.8 95.1 94.0 92.9	<b>94.2</b> 94.3	<b>89.4</b> 89.4	<b>108.3</b> 99.7
49 50 51 52 53 54 55	Nondurable goods <sup>4</sup> Business On capital account On current account Private Government enterprise <sup>5</sup> Costs recovered <sup>6</sup>	87.0 88.9 86.2 84.2 93.0 89.3	89.8 89.8 90.1 90.0 94.7	89.7 88.2 90.3 86.5 93.0	81.6 86.7 80.9 80.9 80.9	89.3 89.3 89.3	89.5 91.5 88.6 87.1 94.0 93.7	92.0 92.4 92.0 91.9 95.3	91.8 90.8 92.2 89.5 94.0	85.0 89.1 84.4 84.4 84.4	93.7	93.2 94.1 92.9 91.3 98.5 98.5	95.5 95.1 96.4 96.3 99.3	95.4 93.1 96.2 92.8 98.5	89.4 92.7 88.9 88.9 88.9	98.5 98.5 98.5
56 57 58 59	Government Federal State and local Government enterprise purchases of fixed capital 5	84.7 85.9 82.8 85.8	88.3 89.8 89.1 88.5	86.7 86.3 110.1 85.8	81.6 83.6 81.5	86.5 86.5 86.5	88.1 89.0 86.7 89.0	91.8 92.4 91.0 93.0	90.2 89.6 123.7 88.9	85.0 86.7 84.9	89.5 89.5 89.5	91.1 92.4 90.2 91.7	95.1 95.9 92.9 96.7	92.3 92.3 109.0 91.6	89.4 90.9 89.3	92.9 92.9 92.9
60 61 62 63 64 65 66	Regulation and monitoring Federal State and local  Research and development Private Federal State and local	84.2 80.6 87.7 82.3 82.6 82.3 79.3	83.6 80.6 85.0 82.4 82.6 82.3 79.3	84.0 80.6 88.1 82.2 82.6 82.3 79.3	86.7 80.6 92.0 82.3 82.6 82.3 79.3	81.1 80.6 89.0 82.3 82.6 82.3 79.3	86.4 82.9 89.9 86.3 86.7 85.9 83.1	86.4 82.9 88.0 86.5 86.7 85.9 83.1	86.2 82.9 90.1 86.1 86.7 85.9 83.1	88.4 82.9 93.0 86.0 86.7 85.9 83.1	83.4 82.9 91.0 86.1 86.7 85.9 83.1	89.5 87.1 91.7 90.0 90.3 89.6 87.8	89.0 87.1 90.0 90.1 90.3 89.6 87.8	89.5 87.1 92.1 89.8 90.3 89.6 87.8	91.0 87.1 94.0 89.7 90.3 89.6 87.8	87.5 87.1 93.0 89.8 90.3 89.6 87.8
						Α	ddendum:	Business	s capital o	onsumpti	on allowances:	7				
67 68 69	Valued at replacement cost in current dollars	12,151 94.5 88.5					12,870 97.2 91.1					13,069 96.4 93.3				

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

				1377		Oommide										
				1990					1991					1992		
Line		Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total <sup>1</sup>	Air	Water	Solid waste	Other and unallocated <sup>2</sup>
			-	-				M	lillions of	dollars						
1	Pollution abatement and control	94,820	28,330	37,126	30,642	-1,279	97,904	27,785	37,921	32,825	-627	104,826	29,789	39,065	36,582	-811
2	Pollution abatement	91,611	26,881	36,320	30,097	-1,687	93,748	25,871	36,935	32,168	-1,227	100,461	28,229	37,966	35,824	-1,559
3	Personal consumption	9,331 8,946	9,331 8,946				7,425 7,425	7,425 7,425				7,897 7,897	7,897 7,897			
5	Nondurable goods <sup>4</sup>	386	386				7,423	7,423				0,097	0,097			
6	Business	58,297	17,064	23,290	19,865	-1,922	61,094	17,823	24,043	20,797	-1,569	65,925	19,529	24,808	23,544	-1,956
7 8	On capital account On current account	17,931 40,366	9,682 7,382	5,801 17,489	2,448 17,417	-1,922	19,966 41,129	11,279 6,545	6,043 18,000	2,644 18,153	-1,569	22,042 43,883	12,417 7,113	6,149 18,659	3,477 20,067	-1,956
9	Private	31,861	7,228	7,216	17,417		31,531	6,390	6,988	18,153		34,325	6,924	7,336	20,065	/+\
10 11	Government enterprise 5 Costs recovered 6 Costs	10,430 -1,924	154	10,273	(*)	-1,924	11,169 -1,571	155	11,012	1	-1,571	11,514 -1,956	189	11,323	2	-1,956
12	Government	23,983	486	13,030	10,232	235	25,229	623	12,892	11,371	342	26,639	803	13,158	12,280	397
13 14	Federal State and local	1,782 10,329	240 47	843 514	562 9,671	138 97	1,908 11,760	253 187	978 537	515 10,856	162 181	2,141 12,873	251 396	1,151 538	529 11,751	210 188
15	Government enterprise purchases of fixed capital 5	11,872	200	11,672			11,560	183	11,378			11,625	156	11,469		
16	Regulation and monitoring	1,789	578	620	428	163	2,288	742	761	515	271	2,604	817	922	591	274
17 18	Federal State and local	828 962	163 415	320 300	192 236	153 11	1,104 1,185	264 477	380 381	213 302	246 25	1,237 1,367	256 560	469 453	254 338	258 16
19	Research and development	1,419	871	186	117	245	1,868	1,173	225	141	329	1,561	743	177	167	474
20 21	PrivateFederal	957 444	755 110	97 78	19 98	86 159	1,235 601	975 189	124 86 15	25 112	111 214	546 950	431 298	55 97 26	11 144	50 410
21 22	State and local	19	7	11	(*)	(*)	32	9	15	5	4	65	14	26	11	13
							C	hain-tyne	quantity i	ndev 190	12=100					
	Belliution abstract and a 11	٠. ـ ا	6-6	60.5	60.5				· ,		1	400.5	400.5	400.5	400.5	
23 24	Pollution abatement and control	<b>94.5</b> 94.9	<b>97.8</b> 97.6	<b>98.3</b> 98.8	<b>88.9</b> 89.1	<b>142.0</b> 105.5	<b>95.3</b> 94.9	<b>94.5</b> 92.8	<b>98.2</b> 98.4	<b>92.2</b> 92.3	<b>74.3</b> 78.5	<b>100.0</b> 100.0	<b>100.0</b> 100.0	<b>100.0</b> 100.0	100.0 100.0	<b>100.0</b> 100.0
	Personal consumption	122.8	122.8	90.0	69.1	105.5	94.9	96.4	96.4	92.3	78.5	100.0	100.0	100.0	100.0	100.0
25 26 27	Durable goods <sup>'3</sup>	120.3	120.3				96.4	96.4				100.0	100.0			
	Nondurable goods <sup>4</sup> Business	01.5	89.1		89.5	07.0	04.0	91.9	07.6	90.8	on 2	100.0	100.0	100.0	100.0	100.0
28 29	Business On capital account	91.5 84.7	80.8	95.8 99.0	73.5	97.0	94.0 91.8	91.7	97.6 100.0	77.7	80.3	100.0 100.0	100.0	100.0	100.0	100.0
30 31	On current account	94.9 97.0	103.4 104.0	94.7 102.8	92.3 92.3	97.0	95.1 93.8	92.2 92.6	96.8 97.0	93.1 93.1	80.3	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0
32	Government enterprise <sup>5</sup> Costs recovered <sup>6</sup>	89.5	79.9	89.7	5.9		96.5	79.9	96.8	28.6		100.0	100.0	100.0	100.0	
33		97.1		404.0		97.1	80.4				80.4	100.0			400.0	100.0
34 35	Government Federal	95.2 87.4	62.4 97.0	104.6 77.5	88.4 111.8	61.8 68.8	96.8 90.7	78.3 100.5	99.7 86.7	95.2 99.8	87.4 78.2	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
35 36 37	State and local	84.6 108.5	12.5 130.4	88.5 108.2	87.4	53.9	93.5 101.5	48.4 117.3	94.5 101.3	94.9	97.6	100.0 100.0	100.0 100.0	100.0 100.0	100.0	100.0
	Government enterprise purchases of fixed capital 5	74.0	76.3	72.5	76.8	65.6	90.4	93.3	84.9	89.1	102.7	100.0	100.0	100.0	100.0	100.0
38 39	Federal	74.0	70.3	75.3	83.7	65.5	92.9	107.3	84.3	87.4	99.5	100.0	100.0	100.0	100.0	100.0
40 41	State and local	73.9 97.8	78.8 125.8	69.7 112.9	71.9 75.9	67.1 55.6	88.1 123.9	86.9 163.1	85.6 131.3	90.4 88.1	153.1 72.1	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
42	Private	187.6	187.7	190.1	187.8	183.4	233.2	233.5	235.3	233.8	228.1	100.0	100.0	100.0	100.0	100.0
43 44	Federal	50.4 31.0	39.6 51.6	87.0 47.0	73.1 4.7	41.7	65.7 51.1	65.7 66.0	92.1 58.7	80.7 41.7	54.3 28.5	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
**	State and local	31.0	31.0	47.0	4.7	.0						100.0	100.0	100.0	100.0	
				-			· · · · · ·	Chain-type	e price in	dex, 1992	=100	1 1			1	
45	Pollution abatement and control	95.9	97.3	96.7	94.2	111.1	98.2	98.7	98.9	97.3	104.0	100.0	100.0	100.0	100.0	100.0
46 47	Pollution abatement  Personal consumption	96.1 96.2	97.5 96.2	96.8	94.2	102.5	98.3 97.5	98.8 97.5	98.9	97.3	100.2	100.0 100.0	100.0 100.0	100.0	100.0	100.0
48	Durable goods <sup>3</sup>	94.2	94.2				97.5	97.5				100.0	100.0			
49	Nondurable goods 4															
50 51	Business On capital account	96.6 96.0	98.1 96.5	98.0 95.3	94.3 95.7	101.3	98.6 98.7	99.3 99.1	99.3 98.2	97.3 97.9	99.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0
	On current account	96.9	100.4	99.0	94.0	101.3	98.5	99.7	99.6	97.2 97.2	99.9	100.0	100.0	100.0	100.0	100.0
52 53 54 55	Private	95.7 101.2	100.3 102.1	95.7 101.2	94.0 94.1		97.9 100.5	99.7 102.6	98.2 100.5	97.2		100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	
	Costs recovered 6	101.3				101.3	99.9				99.9	100.0				100.0
56 57	Government Federal	94.5 95.3	97.0 98.4	94.7 94.5	94.2 94.9	95.7 95.7	97.9 98.3	99.1 100.4	98.3 98.0	97.3 97.6	98.6 98.6	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
58	State and local	94.8	94.2	108.0	94.2	95.7	97.7	97.6	105.5	97.3	98.6	100.0	100.0	100.0	100.0	100.0
59 60	Government enterprise purchases of fixed capital 5	94.2 92.9	98.1 92.8	94.1 92.7	94.2	90.9	98.0 97.3	99.7 97.4	97.9 97.1	97.8	96.3	100.0	100.0 100.0	100.0 100.0	100.0	100.0
61	Regulation and monitoring	92.9	92.8	92.7	94.2	90.9	96.1	96.1	96.1	96.1	96.3	100.0	100.0	100.0	100.0	100.0
62	State and local	95.1	94.0	95.1	97.0	96.0	98.3	98.0	98.2	99.0	99.0	100.0	100.0	100.0	100.0	100.0
63 64	Research and development	93.0 93.3	93.1 93.3	93.0 93.3	92.8 93.3	92.8 93.3	96.6 96.9	96.7 96.9	96.6 96.9	96.3 96.9	96.4 96.9	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0
65 66	Federal	92.7	92.7	92.7	92.7	92.7	96.2	96.2	96.2	96.2	96.2	100.0	100.0	100.0	100.0	100.0
66	State and local	92.8	92.8	92.8	92.8	92.8	96.8	96.8	96.8	96.8	96.8	100.0	100.0	100.0	100.0	100.0
						A	ddendum:	Business	s capital o	onsumpti	on allowances:	7				
67	Valued at replacement cost in current dollars	13,439					14,047					14,532				
68 69	Chain-type quantity index, 1992=100	96.6 95.7					98.0 98.6					100.0 100.0				
- 69	Chain-type price index, 1992=100	90.7					98.0					100.0				

Table 11.—Expenditures for Pollution Abatement and Control by Sector and by Type, in Current Dollars and Chain-Type Quantity and Price Indexes, 1972-94-Continued

						1					
Line				1993					1994 <i>p</i>		
		Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>	Total 1	Air	Water	Solid waste	Other and unallocated <sup>2</sup>
						Millions	of dollars				
1	Pollution abatement and control	110,052	32,475	39,383	38,374	-181	121,811	37,597	42,384	41,736	94
2	Personal consumption	105,840 8,436	30,994 8,436	38,445	37,634	-1,233	117,622 9,756	36,167 9,756	41,550	41,080	-1,176
4	Durable goods <sup>'3</sup>	8,436	8,436				9,756	9,756			
5 6	Nondurable goods <sup>4</sup>	69,010	21.459	25,014	24.150	-1,612	76,631	0 25,004	27,210	26.150	-1.733
7	On capital account	24,103	14,401	6,029	3,673		27,743	17,137	6,820	3,785	
8	On current account	44,908 34,770	7,059 6,922	18,985 7,375	20,476 20,474	-1,612	48,889 38,008	7,867 7,663	20,390 7,983	22,365 22,362	-1,733
10	Government enterprise 5	11,750	137	11,610	3	(*)	12,614	204	12,408	3	(*)
11 12	Costs recovered 6 Government	-1612 28,394	1,098	13,432	13,485	-1,612 379	-1,733 31,234	1,407	14,340	14,930	-1,733 557
13	Federal	2,197	326	1,050	631	189	2,232	346	1,034	484	368
14 15	State and local	14,214 11,983	597 175	575 11,808	12,853	190	15,906 13,097	799 262	472 12,834	14,446	189
16	Regulation and monitoring	2,343	753	750	521	319	2,201	714	622	429	436
17 18	Federal	1,249 1,094	246 508	461 289	232 290	311	1,271 930	234 480	440 182	194 234	402 34
19	Research and development	1,869	728	188	219	734	1,989	716	212	228	834
20 21 22	PrivateFederal	736 1,068	461 251	81 77	88 120	106 620	685 1,220	420 280	76 91	82 128	107 722
22	State and local	65	16	30	11	8	84	16	45	18	5
						Chain-type quantity	indexes, 1992=	:100			
23	Pollution abatement and control	102.5	107.3	97.1	102.6	23.0	110.0	120.6	100.4	109.1	12.7
24	Pollution abatement	102.6	108.1	97.5	102.8	78.1	110.5	122.4	101.1	109.6	73.6
25 26 27	Personal consumption  Durable goods <sup>3</sup>	104.2 104.2	104.2 104.2				116.6 116.6	116.6 116.6			
27	Nondurable goods <sup>4</sup>	104.2	104.2					110.0			
28	Business	101.9	108.7	96.6	100.3	81.2	109.5	122.9	100.4	106.1	86.0
29 30	On capital account On current account	107.0 99.4	114.1 99.1	95.4 96.9	102.1 100.0	81.2	119.1 104.6	131.3 108.2	104.4 99.2	101.8 106.9	86.0
31 32	Private	99.2 97.0	99.7 74.7	96.4 97.3	100.0 152.4		105.7 98.6	108.2 106.2	100.2 98.5	106.9 154.5	
33	Costs recovered 6	81.2				81.2	86.0				86.0
34	Government Federal	104.0 100.2	134.5 129.2	99.2 88.6	107.4 116.4	93.4 88.4	111.2 99.1	166.7 134.7	102.5 84.5	116.2 87.1	133.8 167.5
35 36	State and local	107.6	147.0	93.9	107.0	98.9	117.3	190.3	70.3	117.5	96.2
37 38	Government enterprise purchases of fixed capital 5	100.7 88.3	111.2 90.5	100.6 79.7	86.9	114.1	106.7 83.3	156.9 85.1	106.0 66.7	71.7	158.8
39	Federal	99.1	94.0	96.4	89.5	118.4	102.7	91.2	93.8	76.5	156.1
40 41	State and local	78.6 116.3	88.8 95.1	62.5 103.0	84.9 127.7	45.3 150.5	65.8 123.5	82.3 92.3	39.0 114.8	68.0 132.3	198.2 172.6
42	Research and development Private	130.7	103.8	144.3	782.9	204.6	118.1	91.9	131.5	708.5	200.7
43 44	FederalState and local	109.3 96.5	81.7 110.4	77.5 111.2	81.1 90.1	146.9 58.6	126.9 121.1	92.6 107.0	92.5 164.2	87.6 146.7	173.9 31.6
77	State and local	30.0	110.4	111.2	30.1	Chain-type price i			104.2	140.7	31.0
45	Pollution abatement and control	102.6	101.6	103.8	102.2	97.0	105.8	104.6	108.1	104.6	-91.2
46	Pollution abatement	102.6	101.5	103.9	102.2	101.3	106.0	104.7	108.1	104.6	102.5
47	Personal consumption	102.5	102.5				106.0	106.0			
48 49	Durable goods <sup>3</sup>	102.5	102.5				106.0	106.0			
50	Business	102.7	101.1	104.4	102.2	101.5	106.2	104.1	109.2	104.7	103.1
51 52	On capital account	102.2 103.0	101.7 100.1	102.7 105.0	103.5 102.0	101.5	105.7 106.5	105.1 102.3	106.3 110.2	106.9 104.3	103.1
53	Private Government enterprise 5	102.1	100.2	104.3	102.0		104.8	102.3	108.6	104.3	
52 53 54 55	Costs recovered 6	105.2 101.5	97.0	105.4	102.1	101.5	111.1	101.4	111.2	104.3	103.1
56	Government	102.5	101.7	102.9	102.2	102.2	105.5	105.1	106.3	104.6	104.8
57 58	Federal	102.4 102.7	100.6 102.5	102.9 113.7	102.5 102.2	102.2 102.2	105.2 105.4	102.2 106.0	106.3 124.7	105.0 104.6	104.8 104.8
59	Government enterprise purchases of fixed capital 5	102.3	101.0	102.4			105.6	107.0	105.6		
60 61	Regulation and monitoring	101.9 102.0	102.0 102.0	102.0 102.0	101.4 102.0	102.0 102.0	101.5 100.1	102.7 100.1	101.1 100.1	101.1 100.1	100.3 100.1
62	State and local	101.8	102.0	102.0	101.0	103.0	103.2	104.0	103.0	102.0	104.0
63 64	Research and development	102.9 103.1	103.0 103.1	103.0 103.1	102.9 103.1	102.8 103.1	103.2 106.2	104.3 106.2	104.1 106.2	103.4 106.2	101.9 106.2
64 65 66	Federal	102.8	102.8	102.8	102.8	102.8	101.2	101.2	101.2	101.2	101.2
66	State and local	103.2	103.2	103.2	103.2	103.2	106.4	106.4	106.4	106.4	106.4
					Addend	dum: Business capita	l consumption a	allowances: 7			
67	Valued at replacement cost in current dollars	15,432					16,954				
68	Chain-type quantity index, 1992=100	103.8					110.2				
69	Chain-týpe price ińdex, 1992=100	102.3					105.9				
p Proli						ernment enending					

P Preliminary.\* Less than \$500,000.

<sup>1.</sup> Includes spending for air and water pollution abatement and control and expenditures for solid waste collection and disposal by means acceptable to Federal, State, and local governments. Excludes agricultural production except feedlot operations.

2. "Other" includes business nonmanufacturing and government spending for abatement and control of noise, radiation and pesticide pollution; "unallocated" includes business spending not assigned to media.

3. Durable goods consist of purchases of motor vehicle emission abatement devices.

<sup>4.</sup> Nondurable goods consist of spending to operate motor vehicle emission abatement devices.

<sup>5.</sup> For consistency with past presentations, spending to operate public sewer systems is classified as business spending, and government enterprise purchases of fixed capital (primarily for construction of public sewer systems)

is classified as government spending.
6. "Costs recovered" is the value of reclaimed materials and energy from pollution abatement.
7. Business capital consumption allowances facilitate the conversion of expenditures to a cost basis. Capital consumption allowances are not available for the government sector.

NOTE.—Expenditures are attributed to the sector that performs, rather than pays for, the air or water pollution abatement or the solid waste collection and disposal.

Table 12.—Business and Government Expenditures for Air and Water Pollution Abatement in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94

indexes, 13	72-94										
					Air pol	ution abat	ement				
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
					Milli	ions of dol	lars				
Business (line 6)	4,290	4,965	6,442	7,679	8,112	9,013	10,100	12,204	13,998	15,529	15,764
On capital account (line 7)	2,633	2,979	3,696	4,432	4,401	4,631	5,095	6,089	6,811	7,883	7,991
Motor vehicle emission abatement	220 2.413	334 2.645	416 3,280	747 3,685	939 3,462	1,160 3,471	1,429 3,667	1,779 4,310	2,011 4,800	2,706 5,177	2,699 5,293
Residential systems <sup>2</sup> Agricultural business <sup>3</sup>	2,413	2,040	3,200	3,000	3,402	3,471	3,007	4,310	4,000	5,177	5,295
Agricultural business <sup>3</sup>	1.657	1,986	2.746	2 2/17	3,710	4,382	5.005	6,114	7,187	7,646	7 773
Private (line 9)	1,634	1,957	2,689	3,247 3,202	3,653	4,322	5,005 4,933	6,012	7,107	7,046	7,773 7,632
Motor vehicle emission abatement	420 1,214	603 1,355	925 1,764	1,111 2,091	1,184 2.469	1,342 2,980	1,513 3,420	1,848 4,164	2,310 4,729	2,576 4,935	2,561 5,072
Residential systems <sup>2</sup>	1,214	1,333		2,031	2,403	2,300	3,420	4,104	4,725		
Residential systems <sup>2</sup> Agricultural business <sup>3</sup> Government enterprise (line 10)		20	57	45	58	60	72	103	148	135	141
Publicly owned electric utilities	23	29 29	57	45	58	60	72	103	148	135	141
Public sewer systems <sup>4</sup>											
Government (line 12)	119	102	128	211	225	314	214	337	373	426	609
Federal (line 13)	56	47	56	88	105	106	90	103	95	85	87
Federal except highways	56	47	56	88	105	106	90	103	95	85	87
State and local (line 14)	(*)	(*) (*)	(*) (*)	1	1	1	(*) (*)	(*) (*)	(*)	(*)	(*) (*)
State and local except highways	(*)			1	1	1		(*)	(*)	(*)	(*)
Government enterprise fixed capital (line 15)	63	54	72	123	119	208	123	235	278	341	523
Publicly owned electric utilities	63	54	72	123	119	208	123	235	278	341	523
· · · · · · · · · · · · · · · · · · ·											
				Cha	ain-type qua	antity index	kes, 1992=	100			
Business (line 28)	67.8	72.6	75.1	81.4	82.8	86.2	90.3	95.3	93.6	94.0	92.6
On capital account (line 29)	59.2	64.2	69.1	74.7	71.6	71.1	73.2	80.1	81.8	86.1	83.0
Motor vehicle emission abatement	8.8 104.6	13.4 109.3	15.8 116.2	26.0 117.3	30.8 107.0	36.1 101.2	41.2 100.2	47.6 107.4	49.7 108.7	62.9 105.0	60.3 101.5
Residential systems <sup>2</sup>											
Agricultural business <sup>3</sup> On current account (line 30)	83.6	87.8	85.9	93.5	102.6	112.4	120.0	122.1	115.4	110.7	111.4
Private (line 31)	84.5	88.8	86.8	95.0	104.0	114.2	121.8	123.6	116.4	112.0	112.7
Motor vehicle emission abatement	68.0	65.5	59.7	64.4	73.0	81.0	85.8	91.8	88.3	83.2	81.9
Residential systems 2											
Agricultural business <sup>3</sup>	50.7	52.7	53.9	41.7	53.4	51.3	56.8	66.5	78.5	64.9	67.1
Publicly owned electric utilities	50.7	52.7	53.9	41.7	53.4	51.3	56.8	66.5	78.5	64.9	67.1
Other											
Government (line 34)	44.9	36.2	37.7	55.3	58.2	76.4	48.6	69.7	69.5	72.7	98.0
Federal (line 35) Federal except highways	70.8 70.8	55.2 55.2	52.2 52.2	73.8 73.8	84.2 84.2	79.3 79.3	62.8 62.8	64.2 64.2	52.1 52.1	41.0 41.0	40.1 40.1
Highway erosion abatement											
State and local (line 36)	.1	.2	.2 .2	.3	.4 .4	.3 .3	0	0	0	0	0 0
Highway erosion abatement											
Government enterprise fixed capital (line 37)	112.9 112.9	93.4 93.4	105.0 105.0	159.1 159.1	156.6 156.6	257.6 257.6	143.4 143.4	249.6 249.6	269.4 269.4	306.0 306.0	440.9 440.9
Public sewer systems 4											
				CI	nain-type p	rice indexe	s, 1992=1	00	I		
Business (line 50)  On capital account (line 51)	<b>32.4</b> 35.8	<b>35.0</b> 37.4	<b>43.9</b> 43.1	<b>48.3</b> 47.8	<b>50.2</b> 49.5	<b>53.5</b> 52.4	<b>57.3</b> 56.1	<b>65.6</b> 61.3	<b>76.6</b> 67.1	<b>84.6</b> 73.7	87.2
Motor vehicle emission abatement	42.2	42.3	43.1	47.8	51.8	54.6	58.8	63.5	68.7	73.7	77.5 75.9
Plant and equipment <sup>1</sup>	35.4	37.1	43.2	48.1	49.6	52.5	56.1	61.5	67.6	75.5	79.9
Agricultural business 3											
On current account (line 52)	27.9 27.9	31.8 31.8	44.9 44.8	48.8 48.7	50.9 50.7	54.8 54.7	58.7 58.5	70.4 70.2	87.6 87.3	97.1 96.9	98.1 97.8
Motor vehicle emission abatement											
Plant and equipment <sup>1</sup>	25.8	29.9	42.7	46.9	48.9	53.2	57.6	65.5	77.3	85.6	89.4
Agricultural business 3											
Government enterprise (line 54)	23.9 23.9	29.2 29.2	55.5 55.5	57.2 57.2	57.3 57.3	61.7 61.7	67.3 67.3	81.7 81.7	99.7 99.7	110.0 110.0	110.9 110.9
Public sewer systems <sup>4</sup> Other											
Government (line 56)	32.9	35.1	42.4	47.5	48.0	51.2	54.7	60.2	66.7	73.0	77.4
Federal (line 57)	31.4	34.1	42.7	47.3	49.5	53.2	57.2	63.6	72.4	82.0	86.0
Federal except highways	31.4	34.1	42.7	47.3	49.5	53.2	57.2	63.6	72.4	82.0	86.0
Highway erosion abatement	42.4	42.5	44.9	48.8	51.9	54.6	58.9	63.6	68.8	73.0	75.9
State and local except highways	42.4	42.5	44.9	48.8	51.9	54.6	58.9	63.6	68.8	73.0	75.9
Highway erosion abatement	35.6	37.3	43.9	49.5	48.7	51.6	55.0	60.2	66.0	71.4	75.9
Publicly owned electric utilities	35.6	37.3	43.9	49.5	48.7	51.6	55.0	60.2	66.0	71.4	75.9
Public sewer systems 4	l										

Table 12.—Business and Government Expenditures for Air and Water Pollution Abatement in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

indexes, is	31 Z-94-	-conti	nueu										
Air pollution abatement  1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1996  Millions of dollars													
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994 <i>p</i>	
					L				L				
					r	IVIIIIIOIIS	Ji uullais		ı				
Business (line 6)	15,121	16,776	16,963	17,024	16,264	17,044	16,126	17,063	17,823	19,529	21,459	25,004	
On capital account (line 7)	7,112	8,455	8,189	8,537	8,445	9,031	8,717	9,682	11,279	12,417	14,401	17,137	
Motor vehicle emission abatement	3,325 3,787	4,547 3,908	4,901	4,983	4,927	5,911	5,450	5,580	5,793	5,892	6,625 7,776	8,649 8,489	
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup>	3,707	3,906	3,288	3,554	3,518	3,120	3,266	4,102	5,486	6,525	1,116	0,409	
Agricultural business 3													
On current account (line 8)	8,010	8,322	8,773	8,487	7,819	8,013	7,409	7,382	6,545	7,113	7,058	7,867	
Private (line 9)	7,867 2,608	8,176 2,699	8,631 2,764	8,349 2,310	7,683 1,812	7,852 1,611	7,257 951	7,228 408	6,390	6,924	6,922	7,663 0	
Plant and equipment <sup>1</sup>	5,259	5,478	5,867	6,039	5,872	6,240	6,306	6,820	6,390	6,924	6,922	7,663	
Residential systems <sup>2</sup>													
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup> Agricultural business <sup>3</sup> Government enterprise (line 10)	143	146	143	138	135	161	152	154	155	189	137	204	
Publicly owned electric utilities	143	146	143	138	135	161	152	154	155	189	137	204	
Public sewer systems <sup>4</sup>													
Other													
Government (line 12)	625	387	304	252	269	355	524	486	623	803	1,098	1,407	
Federal (line 13)  Federal except highways	136 136	115 115	108 108	72 72	100 100	202 202	209 209	240 240	253 253	251 251	326 326	346 346	
Highway erosion abatement	130	113	100		100	202	209	240	200	231	320	340	
State and local (line 14)	4	14	12 12	14	6	32	85	47	187	396	597	799	
State and local except highways	4	14		14	6	32	85	47	187	396	597	799	
Highway erosion abatement	485	258	183	166	162	121	229	200	183	156	175	262	
Publicly owned electric utilities	485	258	183	166	162	121	229 229	200	183	156	175	262	
Public sewer systems <sup>4</sup>													
					l			l	ı				
					Chain-ty	e quantity	indexes, 1	1992=100 T	ı				
Business (line 28)	87.4	95.0	94.9	98.5	92.8	94.8	86.5	89.1	91.9	100.0	108.7	122.9	
On capital account (line 29)	70.6	81.5	77.3	78.6	75.8	78.7	73.9	80.8	91.7	100.0	114.1	131.3	
Motor vehicle emission abatement	72.4 68.4	96.2 68.6	100.6 57.2	98.1 61.7	93.9 60.2	110.4 51.1	99.6 51.4	100.5 63.6	100.8 83.5	100.0 100.0	109.7 118.1	138.5 124.7	
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup>	00.4	00.0	57.2	01.7	60.2	51.1	51.4	03.0	63.5	100.0	110.1	124.7	
Residential systems <sup>2</sup>													
On current account (line 30)	116.3	119.3	125.5	132.8	122.0 123.3	122.5	108.1	103.4	92.2	100.0	99.1	108.2	
Private (line 31)	117.5	120.7	127.0	134.5	123.3	123.4	108.8	104.0	92.6	100.0	99.7	108.2	
Plant and equipment <sup>1</sup>	85.1	86.3	92.4	97.4	95.6	99.1	96.4	101.1	92.6	100.0	99.7	108.2	
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup> Agricultural business <sup>3</sup>													
Government enterprise (line 32)	71.7	72.0	73.4	75.0	75.6	89.4	81.0	79.9	79.9	100.0	74.7	106.2	
Publicly owned electric utilities	71.7	72.0	73.4	75.0	75.6	89.4	81.0	79.9	79.9	100.0	74.7	106.2	
Public sewer systems <sup>4</sup>													
Other Government (line 34)	93.0	55.9	43.4	35.9	37.8	48.1	68.5	62.4	78.3	100.0	134.5	166.7	
Federal (line 35)	62.0	51.4	47.6	32.1	44.5	87.1	86.8	97.0	100.5	100.0	129.2	134.7	
Federal (inte 33)	62.0	51.4	47.6	32.1	44.5	87.1	86.8	97.0	100.5	100.0	129.2	134.7	
Highway erosion abatement													
State and local (line 36)	1.2 1.2	4.4 4.4	3.8 3.8	4.0 4.0	1.7 1.7	8.7 8.7	23.2 23.2	12.5 12.5	48.4 48.4	100.0 100.0	147.0 147.0	190.3 190.3	
Highway erosion abatement	1.2	4.4	3.0	4.0	1.7	0.7	23.2	12.3	40.4	100.0	147.0	190.3	
Government enterprise fixed capital (line 37)  Publicly owned electric utilities	373.3	191.8	135.4	121.9	117.3	83.2	151.9	130.4	117.3	100.0	111.2	156.9	
Publicly owned electric utilities	373.3	191.8	135.4	121.9	117.3	83.2	151.9	130.4	117.3	100.0	111.2	156.9	
Public sewer systems <sup>4</sup>													
					Chain-t	ype price i	ndexes, 19	992=100					
D										400.0	4044		
Business (line 50)	88.6	90.4	91.5	88.5	89.8	92.0	95.5	98.1	99.3	100.0	101.1	104.1	
On capital account (line 51)	81.1	83.5 80.2	85.4 92.7	87.5	89.8	92.4 90.9	95.1	96.5	99.1 97.5	100.0	101.7	105.1	
Motor venicle emission abatement	84.8	87.3	88.2	88.3	89.1 89.6	93.5	97.3	98.9	100.6	100.0	100.9	106.0 104.4	
Residential systems <sup>2</sup>													
Agricultural business <sup>3</sup>	96.8	98.0	98.3	89.8	90.1	92.0	96.4	100.4	99.7	100.0	100.1	102.3	
Private (line 53)	96.7	97.9	98.2	89.7	90.0	91.9	96.3	100.4	99.7	100.0	100.1	102.3	
Motor vehicle emission abatement													
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup>	89.3	91.6	91.7	89.5	88.7	90.9	94.5	97.5	99.7	100.0	100.2	102.3	
Residential systems <sup>2</sup>													
Government enterprise (line 54)	105.2	106.9	102.9	97.5	94.7	95.3	99.3	102.1	102.6	100.0	97.0	101.4	
Publicly owned electric utilities	105.2	106.9	102.9	97.5	94.7	95.3	99.3	102.1	102.6	100.0	97.0	101.4	
Other													
Government (line 56)	83.6	86.2	87.1	87.2	88.3	91.8	95.1	97.0	99.1	100.0	101.7	105.1	
Federal (line 57)	87.5	89.1	90.5	89.2	89.8	92.4	95.9	98.4	100.4	100.0	100.6	102.2	
Federal except highways	87.5	89.1	90.5	89.2	89.8	92.4	95.9	98.4	100.4	100.0	100.6	102.2	
Highway erosion abatement	77.8	80.1	82.7	86.2	89.1	91.0	92.9	94.2	97.6	100.0	102.5	106.0	
State and local except highways	77.8	80.1	82.7	86.2	89.1	91.0	92.9	94.2	97.6	100.0	102.5	106.0	
Highway erosion abatement													
Government enterprise fixed capital (line 59)	83.1 83.1	86.1 86.1	86.6 86.6	87.1 87.1	88.5 88.5	93.0 93.0	96.7 96.7	98.1 98.1	99.7 99.7	100.0 100.0	101.0 101.0	107.0 107.0	
Public sewer systems <sup>4</sup>	00.1			07.1			90.7	30.1	35.1	100.0	101.0	107.0	
•						L					لنـــــــــــــــــــــــــــــــــــــ		

Table 12.—Business and Government Expenditures for Air and Water Pollution Abatement in Current Dollars and Chain-Type Quantity and Price Indexes, 1972–94—Continued

Indexes, 1972–94	-Conti	nueu									
					Water po	ollution aba	atement				
	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
					Milli	ons of dol	lars				
Business (line 6)	4,779	5,372	6,008	6,557	7,901	9,167	9,996	11,219	11,880	12,350	13,035
On capital account (line 7)	2,660	2,860	3,005	3,045	3,703	4,210	4,326	4,664	4,577	4,163	3,954
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup> Agricultural business <sup>3</sup>	1,501 1,156	1,570 1,288	1,765 1,234	2,145 892	2,607 1,089	2,827 1,374	2,683 1,638	2,873 1,787	2,795 1,779	2,848 1,312	2,937 1,015
Agricultural business <sup>3</sup>	2,119	2,511	3,003	7 3,512	4,198	4,958	5,670	6,555	7,303	8,187	9,082
Private (line 9)	999	1,199	1,430	1,666	2,002	2,364	2,683	3,144	3,375	3,622	3,904
Plant and equipment <sup>1</sup>	789 210	972 226	1,188 241	1,409 256	1,726 274	2,064 297	2,357 323	2,788 351	2,985 384	3,210 406	3,466 431
Residential systems <sup>2</sup> Agricultural business <sup>3</sup> Government enterprise (line 10)	1,121	1,313	1 1,573	2 1,846	2,196	2,594	2,987	5 3,411	5 3,929	6 4,566	6 5,177
Publicly owned electric utilities Public sewer systems 4	1,117	1,308	5 1,567	7 1,838	9 2,187	10 2,584	10 2,976	12 3,399	13 3,915	18 4,547	17 5,159
Other	(*)	1	1	(*)	1	(*)	1	1	(*)	1	2
Government (line 12)	<b>2,143</b> 75 70	<b>2,477</b> 133	<b>3,360</b> 196	<b>5,073</b> 271	<b>5,652</b> 257	<b>5,219</b> 279	<b>6,381</b> 316	<b>7,301</b> 347	<b>8,065</b> 274	<b>7,132</b> 220 208	<b>7,009</b> 238
Federal except highways	70 5	129 5	192 4	266 5	252 5	273 6	310 7	339 9	267 7	208 12	230 8
State and local (line 14)	171	171	189	210	204	188	218	257	299	286	276
Highway erosion abatement Government enterprise fixed capital (line 15)	171 1,896	171 2,172	189 2,976	210 4,592	204 5,191	188 4,752	218 5,847	257 6,697	299 7,491	286 6,626	276 6,494
Publicly owned electric utilities Public sewer systems 4	29 1,867	22 2,150	29 2,947	32 4,560	36 5,156	52 4,700	63 5,783	81 6,616	61 7,430	57 6,568	86 6,408
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Business (line 28)	61.1	60.2	59.4	59.1	66.5	71.7	72.1	73.5	70.5	66.6	66.4
On capital account (line 29)  Motor vehicle emission abatement	137.0	123.1	115.9	109.8	125.0	132.9	125.8	122.2	110.9	93.1	85.3
Plant and equipment <sup>1</sup>	108.3 223.1	93.1 212.0	90.6 190.6	105.5 123.1	120.7 139.0	122.8 162.9	107.2 179.1	103.6 175.9	93.1 162.1	87.7 110.1	87.6 81.2
Residential systems <sup>2</sup> Agricultural business <sup>3</sup> On current account (line 30)	176.1 35.9	176.0 39.5	308.7 41.0	308.7 42.7	311.3 47.5	311.3 51.9	176.0 54.8	130.1 57.9	71.4 57.6	79.1 58.2	66.3 60.4
Private (line 31)  Motor vehicle emission abatement	45.5	49.8	52.2	55.0	61.8	67.4	70.5	75.2	72.8	71.0	71.7
Plant and equipment 1	41.8 80.1	46.4 82.7	48.8 85.0	51.8 86.4	59.2 88.0	65.2 89.8	68.3 91.9	73.3 94.0	70.5 95.9	68.5 96.1	69.2 96.0
Residential systems <sup>2</sup> Agricultural business <sup>3</sup>	4.7	9.5 33.5	19.0 34.4	26.6 35.4	35.1 39.1	44.6 42.7	49.3 45.5	52.2 47.6	54.1 48.6	56.9 50.5	58.8 53.6
Government enterprise (line 32) Publicy owned electric utilities Public sewer systems <sup>4</sup>	144.0 30.2	167.0	174.7 34.3	199.7 35.3	214.4 38.9	222.7	225.2 45.4	227.3	227.3	273.1 50.4	245.6 53.4
Other	45.5	33.4 52.9	91.1	31.8	37.1	42.6 27.1	31.3	47.5 40.0	48.5 5.1	22.8	63.5
Government (line 34)	<b>49.4</b> 20.9	<b>52.4</b> 32.8	<b>62.1</b> 42.3	<b>91.3</b> 55.8	<b>95.4</b> 49.8	<b>82.2</b> 50.3	<b>90.9</b> 51.9	<b>93.0</b> 51.2	<b>95.4</b> 37.2	<b>78.2</b> 27.5	<b>74.4</b> 28.6
Federal except highways Highway erosion abatement	19.7 418.5	31.9 348.2	41.8 253.5	55.3 293.3	49.1 322.5	49.5 333.6	51.4 269.3	50.5 324.4	36.7 246.1	26.2 420.2	27.6 322.9
State and local (line 36)	97.0	87.7	77.3	83.5	80.7	66.0	58.1	65.0	66.9	66.4	71.3
Highway erosion abatement Government enterprise fixed capital (line 37)	97.0 49.9	87.7 52.7	77.3 63.4	83.5 95.4	80.7 100.8	66.0 86.2	58.1 96.7	65.0 98.8	66.9 102.8	66.4 83.9	71.3 79.1
Publicly owned electric utilities Public sewer systems 4	549.9 49.2	398.0 52.2	428.9 62.9	418.2 95.0	458.2 100.4	633.8 85.5	725.8 95.9	856.5 97.8	589.1 102.2	509.4 83.4	754.5 78.3
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Business (line 50)	31.5	35.9	40.7	44.7	47.9	51.5	55.9	61.5	67.9	74.7	79.1
On capital account (line 51)	31.6	37.8	42.2	45.1	48.2	51.5	55.9	62.1	67.1	72.7	75.4
Motor venicle emission abatement  Plant and equipment 1  Poside title numbers 2	30.6 32.1	37.2	43.0	44.8 44.9	47.6	50.8	55.2	61.2	66.3	71.7	73.9
Residential systems <sup>2</sup> Agricultural business <sup>3</sup>	42.6	37.7 47.3	40.1 58.5	66.6	48.6 69.6	52.3 74.1	56.7 80.5	63.0 87.5	68.1 105.0	73.9 108.9	77.5 108.9
On current account (line 52) Private (line 53)	31.6 29.9	34.0 32.8	39.2 37.4	44.1 41.3	47.3 44.2	51.2 47.8	55.4 51.9	60.7 57.0	67.9 63.2	75.4 69.5	80.6 74.3
Motor vehicle emission abatement Plant and equipment 1	29.0	32.1	37.3	41.7	44.7	48.6	52.9	58.3	64.9	71.9	76.8
Residential systems <sup>2</sup> Agricultural business <sup>3</sup> Covernment enterprise (line 54)	32.6 42.3 32.7	33.9 52.8 34.6	35.2 58.1	36.9 64.2	38.7 68.6	41.1 72.0	43.6 77.2	46.5 88.4	49.8 98.3	52.4 103.9	55.8 105.7
Government enterprise (line 54)  Publicly owned electric utilities  Public owned electric utilities	24.6	26.2	40.4 32.2	46.0 38.6	49.6 41.3	53.6 44.9	57.9 48.1	63.3 52.7	71.4 60.5	79.8 67.9	85.4 73.8
Public sewer systems <sup>4</sup> Other	32.7 29.3	34.6 31.5	40.4 36.6	46.0 41.9	49.7 44.9	53.6 49.2	58.0 53.2	63.3 58.4	71.4 65.6	79.8 73.0	85.4 78.7
Government (line 56)	<b>33.0</b> 31.2	<b>35.9</b> 35.3	<b>41.1</b> 40.2	<b>42.2</b> 42.1	<b>45.0</b> 44.9	<b>48.3</b> 48.2	<b>53.3</b> 53.0	<b>59.6</b> 59.0	<b>64.3</b> 64.1	<b>69.3</b> 69.5	<b>71.6</b> 72.4
Federal except highways Highway erosion abatement	31.1 32.8	35.2 36.2	40.0 45.3	41.9 46.8	44.7 46.9	48.0 52.9	52.5 69.7	58.5 73.4	63.5 83.1	69.2 80.0	72.6 72.0
State and local (line 58) State and local except highways	32.8	36.2	45.3	46.8	46.9	52.9	69.7	73.4	83.1	80.0	72.0
Highway erosion abatement Government enterprise fixed capital (line 59)	32.8 33.1	36.2 36.0	45.3 40.9	46.8 42.0	46.9 44.9	52.9 48.0	69.7 52.7	73.4 59.1	83.1 63.6	80.0 68.9	72.0 71.5
Publicly owned electric utilities Public sewer systems 4	37.8 33.1	40.2 35.9	48.3 40.9	53.8 41.9	55.5 44.8	58.6 48.0	62.2 52.7	67.8 59.1	74.2 63.5	80.2 68.8	81.8 71.5
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illuexes, 13	, <u> </u>				14/-							
	1983	1984	1985	1986	1987	iter pollutio	1989	1990	1991	1992	1993	1994 <i>P</i>
	1903	1304	1905	1900	1307	Millions of		1990	1991	1992	1995	13347
Business (line 6)	<b>14,053</b> 4,171	<b>15,401</b> 4,759	<b>16,205</b> 4,734	<b>17,300</b> 4,741	<b>18,160</b> 4,610	<b>18,617</b> 4,170	<b>20,496</b> 4,703	<b>23,290</b> 5,801	<b>24,043</b> 6,043	<b>24,808</b> 6,149	<b>25,014</b> 6,029	<b>27,210</b> 6,820
Motor vehicle emission abatement												
Plant and equipment <sup>1</sup>	2,422 1,747	2,730 2,026	2,670 2,061	2,534 2,204	2,614 1,993	2,581 1,586	3,196 1,504	4,430 1,368	4,666 1,374	4,532 1,613	4,335 1,691	4,720 2,097
Agricultural business <sup>3</sup>	9,882	3 10,641	11,471	12,559	13,550	14,447	3 15,793	17,489	18,000	18,659	3 18,985	20,390
Private (line 9)	4,219	4,563	4,905	5,291	5,688	6,069	6,454	7,216	6,988	7,336	7,375	7,983
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup>	3,753 460	4,052 503	4,350 547	4,741 542	5,088 592	5,427 634	5,767 677	6,492 714	6,223 756	6,522 804	6,513 853	7,057 916
Agricultural business <sup>3</sup>	7	9	8	8	8	8	9	10	9	10	9	10
Government enterprise (line 10)	5,663 19	6,078 20	6,566 10	7,268 10	7,862 13	8,378 12	9,339 11	10,273 8	11,012 14	11,323 10	11,610 11	12,407 10
Public sewer systems <sup>4</sup>	5,642 2	6,056 2	6,553 3	7,256 3	7,847 3	8,362 3	9,325 3	10,262 3	10,995	11,310 3	11,596 3	12,394
Government (line 12)	7,029	8,165	9,291	10,190	11,813	11,868	12,322	13,030	12,892	13,158	13,432	14,340
Federal (line 13)	443 436	492 484	718 711	678 672	720 714	749 742	786 782	843 839	978 974	1,151 1,147	1,050 1,045	1,034 1,021
Highway erosion abatement	8 290	8	7	6	7 452	7	4 489	4	4	538	5 575	13
State and local (line 14)		337	391	426		484		514	537			472
Highway erosion abatement	290 6,295	337 7,336	391 8,182	426 9,085	452 10,641	484 10,635	489 11,047	514 11,673	537 11,378	538 11,469	575 11,808	472 12,834
Publicly owned electric utilities	73 6,222	54 7,282	63 8,119	40 9,045	37 10,604	28 10,607	49 10,998	77 11,596	64 11,314	14 11,455	11 11,797	10 12,825
runic sewer systems	0,222	1,202	0,119	3,043	10,004	10,007	10,990	11,550	11,514	11,400	11,737	12,025
					Chain-typ	e quantity	indexes, 1	992=100				
Business (line 28)	68.6	72.1	74.0	78.9	81.6	81.7	86.6	95.8	97.6	100.0	96.6	100.4
On capital account (line 29)	84.7	92.9	90.0	89.0	85.0	74.7	82.2	99.0	100.0	100.0	95.4	104.4
Plant and equipment <sup>1</sup>	68.6 129.4	74.6 143.5	70.5 143.8	65.7 152.8	66.4 136.1	63.2 106.5	76.1 99.0	102.8 88.6	104.9 86.3	100.0 100.0	93.2 101.7	97.8 122.6
Agricultural business <sup>3</sup> On current account (line 30)	58.7 63.4	76.5 65.4	89.3 68.8	81.4 75.6	79.1 80.4	70.2 84.0	80.6 88.0	90.6 94.7	88.4 96.8	100.0 100.0	88.1 96.9	104.2 99.2
Private (line 31)	74.1	76.5	79.5	85.0	89.6	92.5	94.8	102.8	97.0	100.0	96.4	100.2
Motor vehicle emission abatement	71.8	74.4	77.5	83.5	88.6	91.7	94.3	103.3	96.7	100.0	95.8	100.0
Residential systems <sup>2</sup>	96.6 60.7	97.4 76.9	98.1 89.2	98.8 81.2	99.3 79.0	99.2 70.2	99.0 80.4	98.6 90.5	99.2 88.4	100.0 100.0	100.8 88.1	101.8 104.1
Government enterprise (line 32)	56.8	58.6 258.5	62.3	69.9 120.7	74.7 154.4	78.7	83.8	89.7	96.8	100.0	97.3	98.5 97.3
Publicly owned electric utilities	249.6 56.7	58.4	120.9 62.3	69.8	74.6	145.6 78.6	123.7 83.7	80.9 89.7	144.0 96.7	100.0 100.0	114.6 97.3	98.5
Other	73.3 <b>70.5</b>	93.6 <b>79.2</b>	120.9 <b>84.8</b>	112.1 <b>91.3</b>	114.6 <b>103.5</b>	118.5 <b>100.0</b>	114.3 <b>101.4</b>	112.0 <b>104.6</b>	110.6 <b>99.7</b>	100.0 <b>100.0</b>	93.1 <b>99.2</b>	90.6 <b>102.5</b>
Federal (line 35)	50.4	54.2	75.1	69.6	72.5	72.7	74.0	77.5	86.7	100.0	88.6	84.5
Federal except highways	49.6 265.6	53.4 268.8	74.6 201.1	69.2 173.0	72.1 165.4	72.4 156.2	73.9 97.7	77.4 93.4	86.7 101.2	100.0 100.0	88.5 127.6	83.8 301.2
State and local (line 36) State and local except highways	68.2	72.3	71.3	76.5	76.2	72.7	83.4	88.5	94.5	100.0	93.9	70.3
Highway erosion abatement	68.2	72.3	71.3	76.5	76.2	72.7	83.4	88.5	94.5	100.0	93.9	70.3
Government enterprise fixed capital (line 37)	72.6 607.4	82.0 434.8	86.5 502.5	94.2 315.5	108.1 287.0	104.3 207.6	105.1 349.2	108.2 547.5	101.3 462.5	100.0 100.0	100.6 75.2	106.0 63.0
Public sewer systems 4	71.9	81.6	86.0	94.0	107.9	104.2	104.8	107.6	100.8	100.0	100.6	106.1
					Chain-t	ype price in	ndexes, 19	92=100				
Business (line 50) On capital account (line 51)	<b>82.6</b> 80.1	<b>86.1</b> 83.3	<b>88.3</b> 85.5	<b>88.4</b> 86.6	<b>89.7</b> 88.2	<b>91.8</b> 90.8	<b>95.4</b> 93.1	<b>98.0</b> 95.3	<b>99.3</b> 98.2	<b>100.0</b> 100.0	<b>104.4</b> 102.7	<b>109.2</b> 106.3
Motor vehicle emission abatement												
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup> Agricultural business <sup>3</sup>	77.9 83.7	80.7 87.5	83.6 88.9	85.1 89.5	86.8 90.8	90.1 92.4	92.7 94.2	95.1 95.7	98.1 98.7	100.0 100.0	102.6 103.1	106.4 106.0
Agricultural business <sup>3</sup> On current account (line 52)	113.6 83.6	112.5 87.2	93.3 89.3	96.2 89.0	102.2 90.3	112.7 92.2	117.6 96.2	109.2 99.0	102.4 99.6	100.0 100.0	101.6 105.0	98.1 110.2
Private (line 53)	77.6	81.3	84.1	84.9	86.5	89.5	92.8	95.7	98.2	100.0	104.3	108.6
Motor vehicle emission abatement	80.1	83.5	86.0	87.0	88.1	90.7	93.7	96.4	98.7	100.0	104.2	108.2
Plant and equipment <sup>1</sup> Residential systems <sup>2</sup> Agricultural business <sup>3</sup>	59.2 107.3	64.2 110.9	69.3 93.3	68.2 96.2	74.1 102.2	79.5 112.7	85.1 117.6	90.0 109.2	94.7 102.4	100.0 100.0	105.3 101.6	111.9 98.1
Government enterprise (line 54) Publicly owned electric utilities	88.0 76.8	91.6 80.2	93.0 82.7	91.9 84.6	93.0 85.0	94.0 88.0	98.5 94.3	101.2 96.6	100.5 99.8	100.0 100.0	105.4 100.9	111.2 102.8
Public sewer systems <sup>4</sup>	88.0	91.6	93.1	91.9	93.0	94.0	98.5	101.2	100.5	100.0	105.4	111.2
Other	81.9 <b>75.8</b>	85.5 <b>78.4</b>	88.2 <b>83.2</b>	89.2 <b>84.8</b>	90.2 <b>86.7</b>	92.8 <b>90.2</b>	96.2 <b>92.3</b>	98.2 <b>94.7</b>	99.5 <b>98.3</b>	100.0 <b>100.0</b>	107.4 <b>102.9</b>	114.0 <b>106.3</b>
Federal (line 57)	76.4	78.9	83.2	84.7	86.3	89.6	92.3	94.5	98.0	100.0	102.9	106.3
Federal except highways	76.5 79.1	79.0 86.5	83.1 101.7	84.6 103.6	86.2 110.1	89.4 123.7	92.2 109.0	94.5 108.0	98.0 105.2	100.0 100.0	102.9 113.7	106.2 124.7
State and local (line 58) State and local except highways	79.1	86.5	101.7	103.6	110.1	123.7	109.0	108.0	105.5	100.0	113.7	124.7
Highway erosion abatement	79.1	86.5	101.7	103.6	110.1	123.7	109.0	108.0	105.5	100.0	113.7	124.7
Government enterprise fixed capital (line 59)  Publicly owned electric utilities	75.6 85.5	78.0 89.2	82.5 89.7	84.1 91.0	85.8 92.1	88.9 96.7	91.6 99.2	94.1 100.2	97.9 99.0	100.0 100.0	102.4 103.6	105.6 110.0
Public sewer systems <sup>4</sup>	75.5	77.9	82.5	84.0	85.8	88.9	91.6	94.1	97.9	100.0	102.4	105.6

NOTE.—Line numbers refer to those in table 11.

P Preliminary.\* Less than \$500,000.

<sup>1.</sup> Consists of manufacturing companies and of privately and cooperatively owned electric utilities and other non-manufacturing companies.
2. Consists of private septic systems and sewer connections linking household plumbing to street sewers.
3. Feedlot operations only; see footnote 1 to table 7.

<sup>4.</sup> Public sewer systems consist of treatment plants, collection sewers, interceptor sewers, pumping stations, and dry-waste disposal plants. For consistency with past presentations, spending to operate public sewer systems is classified as business spending, and government purchases of fixed capital for public sewer systems is classified as government spending. Government spending excludes consumption of fixed capital.