

Economic and Social Contributions of the U.S. Personal Care Products Industry

Prepared for the Personal Care Products Council

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Economic and Social Contribution of the U.S. Personal Care Products Industry

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This document has been prepared pursuant to an engagement between PricewaterhouseCoopers LLP and the Personal Care Products Council. As to all other parties, it is for general information purposes only, and should not be used as a substitute for consultation with professional advisors.

Executive Summary

The personal care products industry includes a wide range of products dedicated to health and beauty, including perfume, sunscreen, hair and skin care products, cosmetics, and toothpaste. These products are staples of U.S. consumers and are used by all ages. Industry members develop, manufacture, market, and distribute personal care products for use at home and in salons and spas. The industry can be segmented into three primary segments:

- Personal care product **manufacturers** constitute an important segment of the industry. While globalization has led to the rise of manufacturing abroad, domestic personal care product manufacturing provides the majority of the products for the U.S. market and furthermore exports more industry products than are imported.
- **Wholesalers and retailers** distribute personal care products to consumers, either directly to final customers or through service providers. This segment of the industry, which includes employment in department stores and general retailers attributable to personal care product sales, has grown by more than 60 percent over the last 20 years.
- **Service providers** utilize personal care products as they serve their clients. The service segment provides vital opportunities to small businesses and historically disadvantaged groups.

The Personal Care Products Council engaged PricewaterhouseCoopers to estimate the economic and social contributions of the industry.

Economic Contribution

The economic contribution of the personal care products industry includes direct, indirect, and induced effects.

- A. Direct effects are the activities directly attributable to the industry, including the activities of manufacturers, service providers, wholesalers, and retailers.
- B. Indirect effects are the activities of upstream suppliers to the industry, whether the production of raw materials for manufacturers or advertising for beauty salons.
- C. Induced effects reflect the impact of the spending by the employees of the industry and its supply chain.

Economic contributions are measured using the 2007 IMPLAN model, which is based on Commerce Department data and includes industry input-output relationships at the federal and state levels.

Federal government employment data do not include all individuals involved in the direct selling segment of the industry. Direct sellers, an important part of the industry's sales force, typically work out of their homes and rely on personal contacts to sell their products. Many may not undertake sufficient levels of activity to be included in federal government employment figures.

Including direct, indirect, and induced economic activity, the personal care products industry is responsible for \$189 billion in GDP, \$110 billion in labor income, and \$51 billion in tax payments at the federal, state, and local levels combined. The industry accounts for almost 2.8 million jobs, representing 1.6 percent of total U.S. employment (see **Table E-1**).

Based on government data, the industry directly employs 1.3 million workers, primarily in the service sector (819,000 employees). An additional 1.5 million jobs are attributable to indirect and induced economic activity associated with the industry.

Table E-1. Total Contribution of the Personal Care Products Industry to the U.S. Economy

Item	Value	Percent of U.S. Total
Contribution to GDP (\$billions)	\$189	1.4%
Direct	68	0.5%
Indirect and Induced	121	0.9%
Labor Income (\$billions) ^a	\$110	1.2%
Direct	37	0.4%
Indirect and Induced	72	0.8%
Taxes (\$billions) ^b	\$51	NA
Direct	19	NA
Indirect and Induced	32	NA
Employment ^c	2,773,820	1.6%
Direct	1,316,610	0.7%
Indirect and Induced	1,457,210	0.8%

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database). Numbers may not add to total due to rounding.

^a Labor income is defined as wages and salaries and benefits as well as proprietors' income.

^b Includes federal, state and local government taxes.

^c Employment is defined as the number of payroll and self-employed jobs, including part-time jobs. It excludes direct sellers not captured in federal government statistics.

These figures can be considered as conservative estimates of the number of people active in the industry. Individuals in the direct selling segment of the industry who are not included in government data could add another 3.2 million to the total. In addition, almost 2.2 million people were licensed as cosmetologists and nail technicians by state governments, and many of these individuals do not appear in federal government employment data.¹

The states with the largest levels of economic activity generated by the personal care products industry are California, New York, New Jersey, Texas, and Illinois (see **Table E-2**).

¹ Information on direct sellers from Direct Sellers Association, 2007; information on licensed cosmetologists and nail technicians from *NailPro Magazine Gold Book*, 2007.

As a percentage of total state employment, the economic contribution of the personal care products industry was largest in New Jersey (3.5%), followed by Connecticut (2.7%), Illinois (2.2%), Ohio (2.2%), and Utah (2.0%) (See **Figure E-1**).

Table E-2. Total Contribution of the Personal Care Products Industry, by State, 2007

State	Employment ^a		Labor Income ^b		Contribution to GDP		Taxes ^c
	Count	Percent of State Total	Millions of Dollars	Percent of State Total	Millions of Dollars	Percent of State Total	Millions of Dollars
California	287,750	1.4%	\$12,959	1.1%	\$22,215	1.2%	\$6,387
New York	192,670	1.8%	9,685	1.3%	16,224	1.5%	4,842
New Jersey	175,820	3.5%	8,968	2.9%	15,896	3.3%	4,577
Texas	175,680	1.3%	7,436	1.0%	13,582	1.1%	3,226
Illinois	167,350	2.2%	7,088	1.8%	12,328	2.0%	3,334
Florida	150,470	1.5%	5,114	1.1%	8,787	1.2%	2,154
Ohio	148,480	2.2%	5,242	1.8%	9,161	2.0%	2,439
Pennsylvania	137,480	1.9%	5,259	1.5%	8,836	1.6%	2,330
North Carolina	99,480	1.9%	3,584	1.5%	6,357	1.8%	1,716
Michigan	72,270	1.3%	2,436	0.9%	4,108	1.0%	1,058
Georgia	69,640	1.3%	2,605	1.0%	4,535	1.1%	1,173
Minnesota	69,150	2.0%	2,601	1.6%	4,481	1.8%	1,220
Virginia	65,750	1.4%	2,447	0.9%	4,075	1.0%	1,088
Maryland	65,240	1.9%	2,546	1.4%	4,362	1.6%	1,222
Tennessee	63,380	1.7%	2,388	1.5%	4,084	1.6%	1,014
All other	833,210	1.3%	29,025	1.0%	49,813	1.1%	13,093
Total, U.S.	2,773,820	1.6%	\$ 109,385	1.2%	\$ 188,842	1.4%	\$50,874

Source: PricewaterhouseCoopers calculations based on IMPLAN modeling system (2007 database). Numbers may not add to total due to rounding.

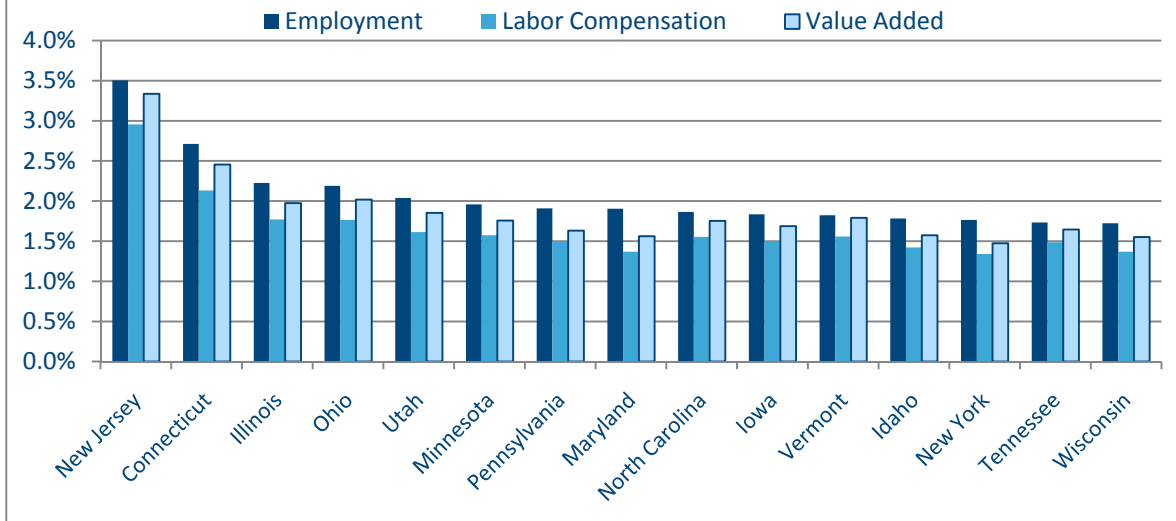
^a Employment is defined as the number of payroll and self-employed jobs, including part-time jobs. It excludes direct sellers not captured in federal government statistics.

^b Labor income is defined as wages and salaries and benefits as well as proprietors' income.

^c Percent of total state taxes cannot be calculated because tax collections by state across all industries are not available.

Total contribution includes direct, indirect and induced contributions. Direct contributions are those occurring directly within the personal care products industry. Indirect contributions are those occurring within other industries as part of the supply chain to the industry. Induced contributions are those arising from household spending of income earned from the industry or its supply chain.

Figure E-1. Personal Care Products Industry Share of Overall State Economic Activity (15 largest states based on employment share)



Source: PricewaterhouseCoopers calculations based on IMPLAN modeling system (2007 database). Employment figures exclude direct sellers and other individuals not included in government statistics.

Over the recent recession, the personal care products industry has avoided the significant declines in employment that have hit the overall economy. Between November 2007 and November 2009, employment in the personal care products industry has increased by slightly more than 1 percent, while employment across the entire economy has fallen by almost 6 percent (see **Table E-3**).

Table E-3. Change in Employment during Recession, 2007-2009

	November 2007 - November 2009 Change in Employment
Personal Care Products Industry	+1.1%
Total Nonfarm Employment	-5.8%

Source: Bureau of Labor Statistics, January 2010. Personal care products industry includes the following NAICS codes: portion of 325610, 325620, 446120, portion of 8121.

Social Contributions

The industry also makes important social contributions through charitable contributions, environmental responsibility, opportunities for women and minorities, and promotion of small business formation.

- **Diversity:** Compared to the national average, the personal care products industry employs a larger percentage of women and minorities overall and in managerial positions.
- **Small Business and Entrepreneurship:** Firms with fewer than 10 employees account for 72 percent of the industry's employment and firms with less than 50 employees account for 92 percent. Small businesses in the personal care products industry provide vital opportunities and create new jobs.
- **Charitable Contributions:** On average, personal care products manufacturers contribute more of their receipts to charity than other manufacturing sectors. Personal care products service providers contribute more than other service sectors. These contributions help to improve the communities where the personal care products companies operate.
- **Research and Development:** Growth in R&D by personal care products manufacturers has exceeded that of other manufacturers since 1997 and has grown faster than the industry's sales.
- **Environmental Impact:** Major industry participants increased sales without increasing global warming emissions between 2007 and 2008. On average, personal care products manufacturers consume less electricity relative to sales than other manufacturers. In addition, the industry

spent \$250 million on pollution abatement in 2005.

- **International Trade:** The personal care products industry generates a surplus in the balance of trade, with exports of personal care products almost 70 percent larger than imports. Personal care product manufacturers generate the largest trade surplus relative to the value of domestic shipments of all manufacturing industries.

I. Introduction

The personal care products industry includes a wide range of products dedicated to health and beauty, including perfume, sunscreen, hair and skin care products, cosmetics, and toothpaste. These products are staples of U.S. consumers and are used by all ages. Industry members develop, manufacture, market, and distribute personal care products for use at home and in salons and spas.

The industry can be segmented into manufacturers, distributors, and service providers:

- Personal care product manufacturers constitute an important segment of the industry. While globalization has led to the rise of manufacturing abroad, domestic personal care product manufacturing provides the majority of the products for the U.S. market and furthermore exports more goods than are imported.
- Wholesalers and retailers distribute personal care products to consumers, either directly to final customers or through service providers. This segment of the industry, which includes employment in department stores and general retailers attributable to personal care product sales, has grown by over 60 percent over the last 20 years.
- Service providers utilize personal care products as they serve their clients. The service segment provides vital opportunities to small businesses and historically disadvantaged groups.

At each stage of the personal care products supply chain, employment is created, income is earned, value is generated, and taxes are paid. However, the economic contribution is greater than these direct effects. Each stage of the production and delivery process relies on suppliers from other parts of the economy. Payrolls are spent by employees, generating more activity. Additional employment,

labor income, value added, and taxes are generated as a result of these indirect and induced activities.

These economic measures provide one perspective on the personal care products industry. The industry makes important social contributions through charitable contributions, environmental responsibility, opportunities for women and minorities, and promotion of small business formation.

The Personal Care Products Council engaged PricewaterhouseCoopers to quantify the economic and social contributions of the industry.

The following section of the report defines the personal care products industry. The economic contribution of the industry is discussed in Section III and its social contribution is discussed in Section IV. The Appendices provide additional information on the methodology and detailed state-level results.

II. Definition of the Personal Care Products Industry

For purposes of this report, the industry is divided into three primary segments: (1) manufacturing, (2) distribution, and (3) personal care services:

- Manufacturing includes development, production, and marketing of personal care products.
- Distribution includes transportation, wholesaling, and retailing of these products. Retail activities include the sale of personal care products in a variety of retail establishments, such as department stores and drug stores.
- Services includes spas, hair and nail salons, and barber shops that utilize personal care products.

The industry can be defined by reference to the North American Industry Classification System (NAICS) used by U.S. government statistical agencies. Based on 2007 sales, the industry accounts for 14 percent of the "Soap and cleaning compound manufacturing" segment, 100 percent of the "Toilet preparation and manufacturing" and "Cosmetics, Beauty Supplies, and Perform Stores" segments, and 80 percent of the "Personal Care Services" segment (see **Table 1**).²

The soap and cleaning compound manufacturing sector (NAICS 325620) and the other personal care services sector (NAICS 812199) include portions of the personal care products industry. Based on information on sales by industry segment, we have estimated the share of these sectors that is part of the personal care products industry. For the soap and cleaning compound manufacturing sector, we estimate that 14 percent of the economic activity in

Table 1. Personal Care Products Industry: Manufacturing and Services, 2007
(in billions of dollars)

NAICS detail	Total Sales	Pers Care Products Industry Sales	Pers Care Share of Industry
325611 - Soap and Other Detergent Manufacturing	\$26.5	\$6.5	
325612 - Polish and Other Sanitation Good Manufacturing	10.2	--	
325613 - Surface Active Agent Manufacturing	9.0	--	
325610 - Soap and Cleaning Compound Manufacturing	\$45.7	\$6.5	14%
325620 - Toilet Preparation Manufacturing	\$35.1	\$35.1	100%
446120 - Cosmetics, Beauty Supplies, and Perfume Stores	\$10.2	\$10.2	100%
812111 - Barber shops	\$0.6	\$0.6	
812112 - Beauty salons	18.9	18.9	
812113 - Nail salons	1.3	1.3	
812191 - Diet and weight reducing centers	2.2	---	
812199 - Other personal care services	3.6	0.5	
812100 - Personal Care Services	\$26.6	\$21.4	80%

Source: U.S. Census Bureau, Economic Census 2007 and PricewaterhouseCoopers.

² Additional detail is provided in Appendix II.

this code should be included; for personal care services, we estimated that 80 percent is in the personal care products industry. Appendix Table A1 in Appendix II presents the supporting detail.

III. Economic Contribution

In 2008, the average U.S. household spent over \$600 on personal care products and services.³ The industry provides value to individuals of all ages; for example, households led by individuals age 75 and over still spent over \$450 annually on average. Businesses selling these goods have become an increasingly important part of the U.S. economy. Between 1990 and 2008, employment in the personal care products industry increased by almost 33 percent, while total nonfarm employment in the United States increased by 25 percent.⁴ Much of the growth in the personal care products industry is attributable to the services segment, where employment increased by 35 percent.

The businesses providing these goods and services generate economic activity by providing employment, purchasing inputs, and selling their output.

The economic contribution of the personal care products industry can be separated into three separate components:

- Direct effects: activities directly attributable to the industry, such as the activities of the manufacturers and the service providers. The economic activity associated with bringing consumer goods to final customers are additional direct effects. These include activities of transportation companies, wholesalers, and retailers. Retail sector activity includes sales in a variety of settings, including department stores, drug stores, and direct sales by individuals.
- Indirect effects: activities of upstream suppliers to the industry. As a part of the

production process, manufacturers purchase inputs from their suppliers; those suppliers purchase inputs from other parts of the economy. Similarly, service providers purchase inputs as a part of their operations, such as marketing services, electricity, and office supplies. These upstream activities, whether the production of raw materials for manufacturers or advertising by beauty salons, are connected to the personal care products industry.

- Induced effects: spending by industry and supplier employees. Employees throughout the supply chain will receive incomes associated with the direct and indirect activities, a portion of which will be consumed. This consumption causes additional economic activity attributable to the personal care products industry.

A. Methodology

To estimate the economic contribution of the personal care products industry, we have relied on federal government statistics and the IMPLAN model, which contains industry input-output relationships at the national and state levels.

1. Direct Impacts

Direct employment for the personal care products industry was estimated to be 1.3 million in 2007 based on the industry definition in Table 1. Economic activity for the personal care products industry is based on data from the IMPLAN model with imputations made to split industries in IMPLAN that contain business lines both within and outside of the personal care products industry (see Appendix II). These estimates are consistent with information collected by the U.S. Department of Commerce.

Federal government employment data do not reflect all individuals involved in the direct selling segment of the industry. These individuals, an important part of the industry's sales force, are independent

³ Bureau of Labor Statistics, "Consumer Expenditure Survey, 2008", released October 2009.

⁴ Employment as measured by the Bureau of Labor Statistics in the Current Employment Survey. The personal care products industry was defined as the following NAICS codes: part of 32561, 32562, 44612, and part of 8121.

contractors who typically work out of their homes. Based on the information collected by the direct selling industry, we estimate that an additional 3.2 million individuals are involved in marketing personal care products that are not accounted for in the IMPLAN model, which is based on federal government data.

2. Indirect and Induced Impacts

The IMPLAN model calculates indirect economic effects for each industry based on purchases made from suppliers, and the suppliers' suppliers, and so on, cumulating upstream activity throughout the entire value chain. Induced effects are estimated based on consumer expenditures made out of the payroll generated from this chain of economic activity.

Some business lines within the personal care products industry purchase from other business lines in this industry, for example, beauty salons purchase products from toilet preparation manufacturers. Thus, the workers in the toilet preparation manufacturing industry are counted in part as indirect employees of the beauty salon business line as well as direct employees of the toilet preparation industry. To avoid counting the same workers twice, the results of the IMPLAN model were adjusted to remove indirect and induced employment that arises within the personal care products industry itself.

The IMPLAN model accounts for contribution to GDP (also known as value added) by distribution activities (wholesale, retail, and transportation services) in the margin between the manufacturer's price at the factory gate and the delivered price to the intermediate or final purchaser. The distribution margins associated with sales of personal care products industry goods are cumulated in our analysis and used to estimate associated employment and employee income.

3. Measures of Economic Activity

Four different metrics were used to measure the impact of the personal care products industry:

contribution to GDP, labor income, tax payments, and employment (see **Table 2** below).

Table 2. Description of Key Economic Metrics

Metric	Description
Contribution to GDP	The total output of each sector less the associated value of intermediate inputs. The sum of the contribution to GDP across all sectors in the economy is gross domestic product (GDP).
Labor income	The wages, salaries and benefits paid to employees and proprietors' income.
Tax payments	The taxes paid to federal, state, and local governments.
Employment	The number of payroll and self-employed jobs (including part-time jobs), averaged over the year.

4. State Estimates

IMPLAN's state-level input-output models were used to estimate direct, indirect and induced economic activity associated with the personal care products industry within each state. The direct activities of the personal care products industry within each state generate indirect and induced economic effects within the same state as well as "spill-over" economic activity in other states. The IMPLAN model identifies the industry but not the state in which spill-over effects occur. Consequently, for each industry, spill-over effects are allocated among the states in proportion to each state's share of that industry's national economic activity.

B. Economic Contribution Results

1. National Results

Total employment captured in government statistics associated with the industry amounted to almost 2.8 million in 2007, or 1.6 percent of total U.S. employment:

- The personal care products industry directly accounted for almost 1.3 million jobs, or over 0.7 percent of total U.S. employment,
- Employment in other industries indirectly attributable to or induced by activity in the personal care products industry was almost 1.5 million, or over 0.8 percent of total U.S. employment.

The Direct Sellers Association (DSA) estimates that 15 million individuals were involved in direct selling in 2007, but federal statistics for relevant NAICS codes only show employment of approximately 800,000 individuals, most of whom are independent contractors.⁵ Other data from the DSA find that sales of personal care products represented 21.5 percent of total direct sales in 2008. If a similar share of direct sellers promoted personal care products, 3.2 million individuals sold personal care products as direct sellers in 2007. Less than 10 percent of these individuals appear in government statistics.⁶

Total labor income associated with the personal care products industry amounted to \$110 billion, which includes wages and salaries, other employee benefits, and proprietors' income. Across direct,

⁵ Information on direct sellers is available at <http://www.dsa.org/research/industry-statistics/>. Census data for NAICS 45439, "Other direct selling establishments", show 794,000 businesses with no employees (sole proprietorships, corporations, or partnerships). Other government data report the number of employees ranging between 54,000 (Bureau of Labor Statistics) and 140,000 (2007 Economic Census).

⁶ While government statistics do not reflect these individuals in employment counts, their sales in principle should be captured in government statistics on output, which are generated from different sources than the employment figures.

indirect, and induced employment, labor income averaged approximately \$39,600 per job.

The contribution to GDP attributable to the personal care products industry from direct, indirect, and induced activity was \$189 billion.

Finally, this economic activity generated \$51 billion in tax payments to the federal, state, and local governments (see **Table 3**).

Table 3. Total Contribution of the Personal Care Products Industry to the U.S. Economy, 2007

Item	Amount	Percent of U.S. Total
Contribution to GDP (\$ millions)	\$188,842	1.4%
Direct	68,334	0.5%
Indirect and Induced	120,509	0.9%
Labor Income (\$ millions) ^a	\$109,385	1.2%
Direct	36,992	0.4%
Indirect and Induced	72,393	0.8%
Taxes (\$ millions) ^b	\$50,874	NA
Direct	18,945	NA
Indirect and Induced	31,929	NA
Employment ^c	2,773,820	1.6%
Direct	1,316,610	0.7%
Indirect and Induced	1,457,210	0.8%

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database).

Numbers may not add to total due to rounding.

^a Labor income is defined as wages and salaries and benefits as well as proprietors' income.

^b Includes federal, state and local government taxes.

^c Employment is defined as the number of payroll and self-employed jobs, including part-time jobs. It excludes direct sellers and other individuals not captured in federal government statistics.

2. Detail by Industry

The manufacturing segment of the personal care products industry accounted for 61,420 direct jobs, \$5.5 billion in labor income, and \$20.5 billion in contribution to GDP. Average labor income in the

manufacturing segment was approximately \$89,000. The manufacturing segment indirectly supported another 553,500 jobs, \$30 billion in additional labor income, and almost \$49 billion in additional contribution to GDP (see **Table 4**). Overall, manufacturing was responsible for approximately 22 percent of the industry's total employment contribution, 32 percent of total labor income contribution, and 37 percent of total contribution to GDP.

The wholesale, retail, and transportation segments that distribute manufactured goods for the industry directly accounted for 431,580 jobs, \$16.9 billion in labor income, and \$24.9 billion in contribution to GDP. Including the indirect and induced activity, the distribution segment accounted for 873,230 jobs, \$37.9 billion in labor income, and \$60.0 billion in contribution to GDP. Distribution represented 32 percent, 35 percent, and 32 percent, respectively, of total employment, labor income, and contribution to GDP directly and indirectly attributable to the personal care product industry. As discussed above, the employment numbers do not include all individuals involved in the direct sales of personal care products.

The services segment of the personal care products industry directly accounted for 819,690 jobs, \$14.8 billion in labor income, and \$22.6 billion in contribution to GDP. Including indirect and induced effects, the services segment accounted for 1.3 million jobs, \$36.2 billion in labor income, and \$59.6 billion in contribution to GDP. Services represented 46 percent, 33 percent, and 32 percent, respectively, of the personal care product industry's employment, labor income, and contribution to GDP.

Measures of employment in the industry from other sources suggest the federal government figures used in this report could exclude certain individuals. For example, the number of cosmetologists and nail technician licenses issued by state governments amounted to 2.18 million in 2007.⁷ If each of the

individuals holding these licenses worked in a salon, the personal care services employment figures would be significantly larger.

⁷ See *NailPro Magazine Gold Book 2007*. In certain situations, the associated level of employment could be

lower than the number of licenses. For example, some license holders might not be working, and others might hold licenses in more than one state.

Table 4. Economic Activity Attributable to the Personal Care Products Industry by Segment, 2007
(Dollar amounts in billions)

NAICS	Originating Industry	Total Employment ^a			Labor Income ^b			Contribution to GDP		
		Direct	Indirect and Induced	Total	Direct	Indirect and Induced	Direct	Direct	Indirect and Induced	Total
Manufacturing Segments										
325610	Soap and cleaning compound manufacturing	7,330	77,210	84,540	\$0.8	\$4.3	\$5.0	\$2.9	\$7.1	\$10.0
325620	Toilet preparation manufacturing	54,090	476,330	530,420	4.7	25.9	30.6	17.6	41.5	59.1
	Total Manufacturing	61,420	553,540	614,960	\$5.5	\$30.1	\$35.6	\$20.5	\$48.6	\$69.2
Distribution Segments										
42	Wholesale trade	51,000	106,180	157,180	3.7	5.2	8.8	6.2	8.4	14.6
44-45	Retail trade	375,670	309,660	685,330	12.5	14.6	27.1	18.3	24.6	42.9
48	Transportation	9,830	22,580	32,410	0.6	1.1	1.7	0.8	1.8	2.6
	Total Distribution	436,500	438,420	874,920	\$16.7	\$20.8	\$37.6	\$25.2	\$34.9	\$60.0
Services Segment										
8121	Personal care services	818,690	465,250	1,283,940	\$14.8	\$21.4	\$36.2	\$22.6	\$37.0	\$59.6
	Total	1,316,610	1,457,210	2,773,820	\$37.0	\$72.4	\$109.4	\$68.3	\$120.5	\$188.8

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database).

Numbers may not add to total due to rounding.

^a Employment is defined as the number of payroll and self-employed jobs, including part-time jobs. It excludes direct sellers and other individuals not captured in federal government statistics.

^b Labor income is defined as wages and salaries and benefits as well as proprietors' income.

Originating industries refer to the industries directly involved in the manufacturing and distribution of personal care products and provision of personal care services. Direct contributions by originating industries are those occurring within the personal care products industry. Indirect contributions by originating industries are those occurring within other industries as part of the supply chain to the personal care products industry. Induced contributions by originating industries are those arising from household spending of income earned from the personal care products industry or their supply chain.

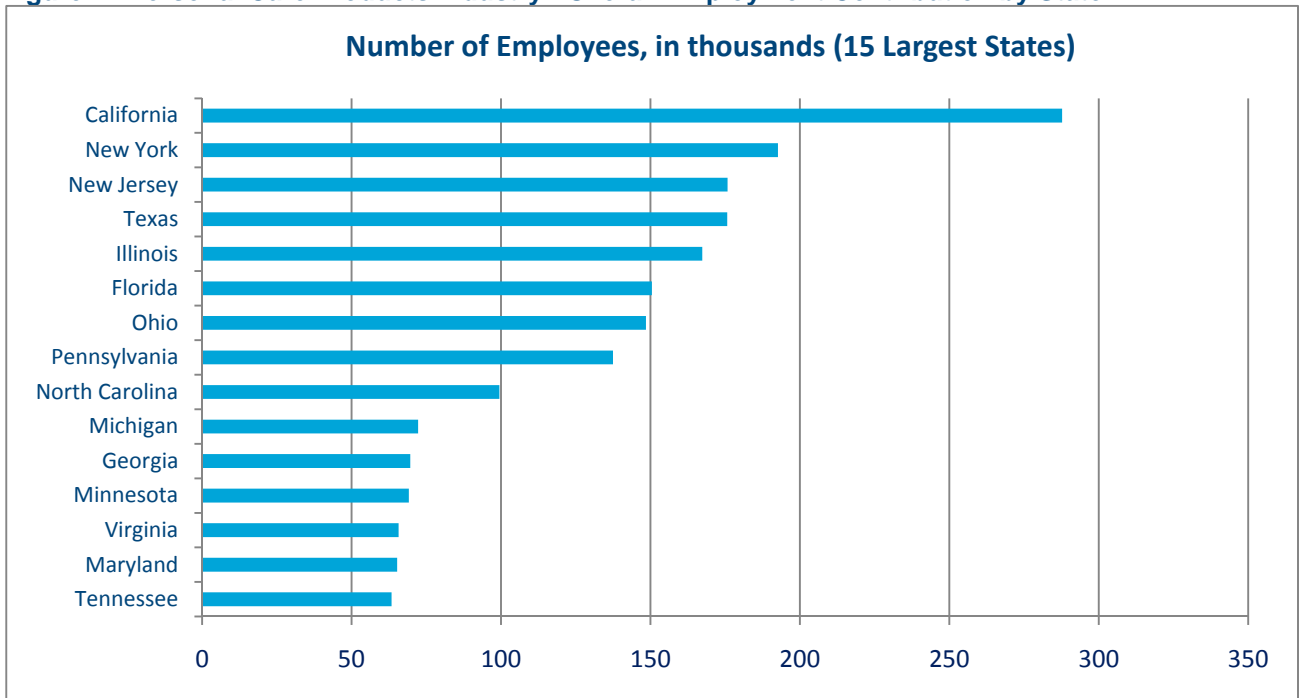
3. State Contribution

The states with the largest level of employment attributable to the personal care products industry are California (287,420), New York (193,180), New Jersey (176,670), Texas (175,420), and Illinois (167,190) (see **Figure 1**). These five states also are the largest states in terms of labor income, contribution to GDP and taxes paid.

The five states in which the personal care products industry accounts for the largest share of total state employment are New Jersey (3.5%), Connecticut (2.7%), Illinois (2.2%), Ohio (2.2%), and Utah (2.0%).

The overall contribution of the personal care products industry in each of the 50 states and District of Columbia is shown in **Table 5**.

Figure 1. Personal Care Products Industry: Overall Employment Contribution by State



Source: PricewaterhouseCoopers calculations based on IMPLAN modeling system (2007 database).

Table 5. Total Economic Contribution of Personal Care Products Industry, by State, 2007

State	Employment ^a		Labor Income ^b		Contribution to GDP		Taxes Paid (\$ Million)
	Amount	Percent of State Total	(\$ Million)	Percent of State Total	(\$ Million)	Percent of State Total	
Alabama	23,160	0.9%	\$ 709	0.7%	\$1,196	0.7%	\$289
Alaska	4,020	0.9%	138	0.6%	239	0.7%	66
Arizona	41,890	1.3%	1,509	1.0%	2,596	1.1%	668
Arkansas	19,330	1.2%	603	1.0%	1,064	1.1%	269
California	287,750	1.4%	12,959	1.1%	22,215	1.2%	6,387
Colorado	38,590	1.2%	1,384	0.9%	2,360	0.9%	610
Connecticut	59,140	2.7%	3,006	2.1%	5,303	2.5%	1,564
Delaware	8,680	1.6%	338	1.2%	577	1.3%	154
District of Columbia	5,200	0.6%	362	0.4%	533	0.5%	165
Florida	150,470	1.5%	5,114	1.1%	8,787	1.2%	2,154
Georgia	69,640	1.3%	2,605	1.0%	4,535	1.1%	1,173
Hawaii	8,910	1.0%	285	0.7%	480	0.8%	124
Idaho	16,370	1.8%	483	1.4%	828	1.6%	222
Illinois	167,350	2.2%	7,088	1.8%	12,328	2.0%	3,334
Indiana	47,740	1.3%	1,447	0.9%	2,492	1.0%	622
Iowa	37,020	1.8%	1,152	1.5%	2,067	1.7%	525
Kansas	25,070	1.4%	772	1.0%	1,365	1.1%	341
Kentucky	29,350	1.2%	930	0.9%	1,586	1.0%	425
Louisiana	23,000	0.9%	790	0.7%	1,344	0.8%	312
Maine	9,480	1.1%	269	0.9%	454	0.9%	116
Maryland	65,240	1.9%	2,546	1.4%	4,362	1.6%	1,222
Massachusetts	57,630	1.4%	2,485	1.0%	4,042	1.1%	1,141
Michigan	72,270	1.3%	2,436	0.9%	4,108	1.0%	1,058
Minnesota	69,150	2.0%	2,601	1.6%	4,481	1.8%	1,220
Mississippi	13,590	0.9%	404	0.7%	697	0.8%	170
Missouri	54,060	1.5%	1,837	1.2%	3,123	1.3%	807
Montana	5,560	0.9%	135	0.6%	246	0.7%	62
Nebraska	17,780	1.4%	524	1.1%	882	1.2%	221
Nevada	15,220	1.0%	555	0.7%	963	0.8%	241
New Hampshire	10,400	1.2%	342	0.9%	560	0.9%	146
New Jersey	175,820	3.5%	8,968	2.9%	15,896	3.3%	4,577
New Mexico	9,370	0.9%	280	0.6%	467	0.7%	115
New York	192,670	1.8%	9,685	1.3%	16,224	1.5%	4,842
North Carolina	99,480	1.9%	3,584	1.5%	6,357	1.8%	1,716
North Dakota	5,610	1.1%	137	0.8%	236	0.8%	58
Ohio	148,480	2.2%	5,242	1.8%	9,161	2.0%	2,439
Oklahoma	20,370	1.0%	676	0.7%	1,240	0.8%	289
Oregon	23,990	1.0%	746	0.8%	1,234	0.8%	339
Pennsylvania	137,480	1.9%	5,259	1.5%	8,836	1.6%	2,330
Rhode Island	8,980	1.5%	331	1.1%	557	1.3%	152
South Carolina	26,060	1.1%	820	0.8%	1,400	0.9%	355
South Dakota	5,440	1.0%	131	0.7%	231	0.7%	55
Tennessee	63,380	1.7%	2,388	1.5%	4,084	1.6%	1,014
Texas	175,680	1.3%	7,436	1.0%	13,582	1.1%	3,226
Utah	32,810	2.0%	1,084	1.6%	1,921	1.9%	507
Vermont	7,760	1.8%	254	1.6%	442	1.8%	118
Virginia	65,750	1.4%	2,447	0.9%	4,075	1.0%	1,088
Washington	43,760	1.1%	1,562	0.8%	2,607	0.8%	639
West Virginia	10,600	1.2%	324	0.9%	568	1.0%	149
Wisconsin	61,670	1.7%	2,036	1.4%	3,553	1.6%	962
Wyoming	5,600	1.5%	186	1.1%	357	1.2%	92
U.S. Total	2,773,820	1.6%	\$109,385	1.2%	\$188,842	1.4%	\$50,874

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database).

Numbers may not add to total due to rounding.

^a Employment is defined as the number of payroll and self-employed jobs, including part-time jobs. It excludes direct sellers and other individuals not captured in federal government statistics.

^b Labor income is defined as wages and salaries and benefits as well as proprietors' income.

Total economic contribution includes direct, indirect and induced contributions. Direct contributions are those occurring directly within the personal care products industry. Indirect contributions are those occurring within other industries as part of the supply chain to the personal care products industry. Induced contributions are those arising from household spending of income earned from personal care products industry or their supply chain.

C. Employment over the Recession

Relative to prior recessions, the recession that started in December 2007 has caused a large economy-wide reduction in employment. Between November 2007 and November 2009, total nonfarm employment fell by 5.8 percent. By comparison, total employment fell by approximately 3 percent in the 1981-1982 recession, the last deep recession.

In contrast to the experience of the overall economy, employment in the personal care products industry increased during the current recession. Although updated information is not available for all segments of the industry (such as independent contractors), federal statistics on relevant segments show that personal care products employment increased by 1.1 percent between November 2007 and November 2009.⁸

⁸ Information from the Bureau of Labor Statistics (Current Employment Statistics) shows that employment in relevant NAICS codes (portion of 325610, 325620, 446120, and a portion of 8121) increased by 1.13 percent.

IV. Social Contribution

In addition to generating employment and output, the personal care products industry makes other important social contributions. This section quantifies and compares the personal care product industry's social contributions with other manufacturing and services industries.

A. Diversity

The personal care products industry employs a more diverse workforce than other industries. According to employment reports filed with the Equal Employment Opportunity Commission (EEOC), a larger share of the personal care product industry's workforce is female and/or minority than the average in the economy. For total employment of the personal care products industry, minorities represent 35 percent of employment with Hispanics and African-Americans representing, respectively, 16 and 12 percent of the industry. Specifically:

- Women comprise 66 percent of the personal care products industry workforce, compared to 48 percent of the workforce for all industries (**Figure 2.A**).
- Women are more prevalent in management of the personal care products industry, representing more than half of the management positions compared to 36 percent in all industries. (**Figure 2.B**)
- Minorities in the personal care products industry represent a slightly higher share overall and in management (35 percent and 19 percent, respectively) than the economy in general (34 percent and 18 percent, respectively). Hispanics represent 16 percent and African-Americans represent another 12 percent of the personal care products workforce.

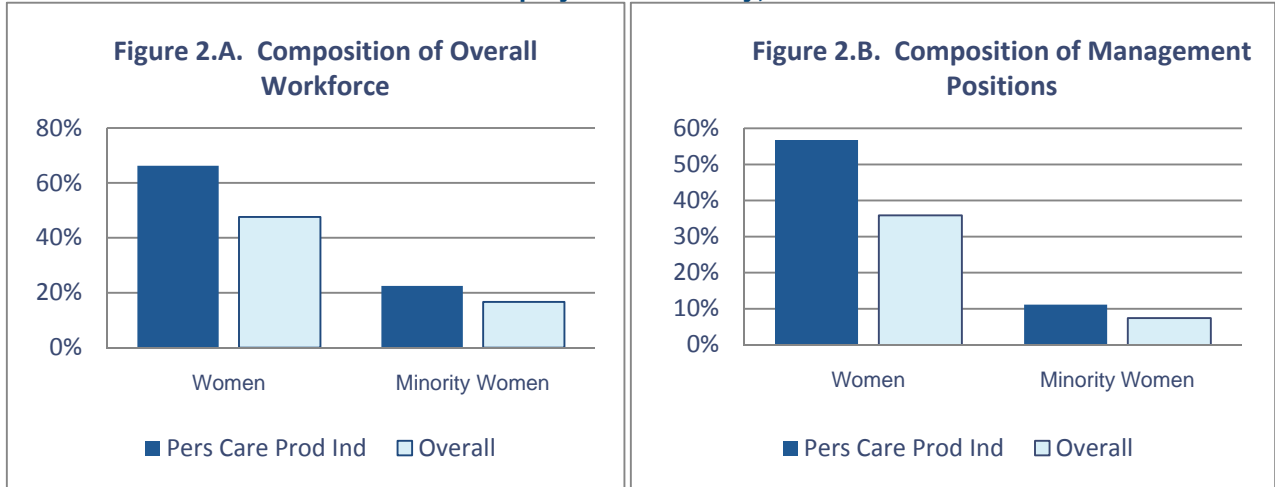
- Minority women in the personal care products industry hold a larger share of all jobs and management jobs compared to the rest of the economy. In the personal care products industry, minority women make up 22 percent of total employment and 11 percent of management, compared to 17 percent of total employment and 7 percent of management overall. (**Figures 2.A and 2.B**)

Diversity Case Study: Avon

Avon encourages workplace diversity. Five of the 13 positions on Avon's Executive Committee are held by women, including the CEO, and women hold many leadership positions in countries throughout the world. In the United States, women make up 72 percent of the total Avon U.S. workforce, 57 percent of U.S. managers, and 49 percent of U.S. senior leaders, among them the President of Avon North America. Minorities make up 36 percent of Avon's workforce in the United States and 28 percent of U.S. managers.

Source: Avon Corporate Responsibility Report and Investor Relations website, accessed May 2010.

Employment Diversity, 2008

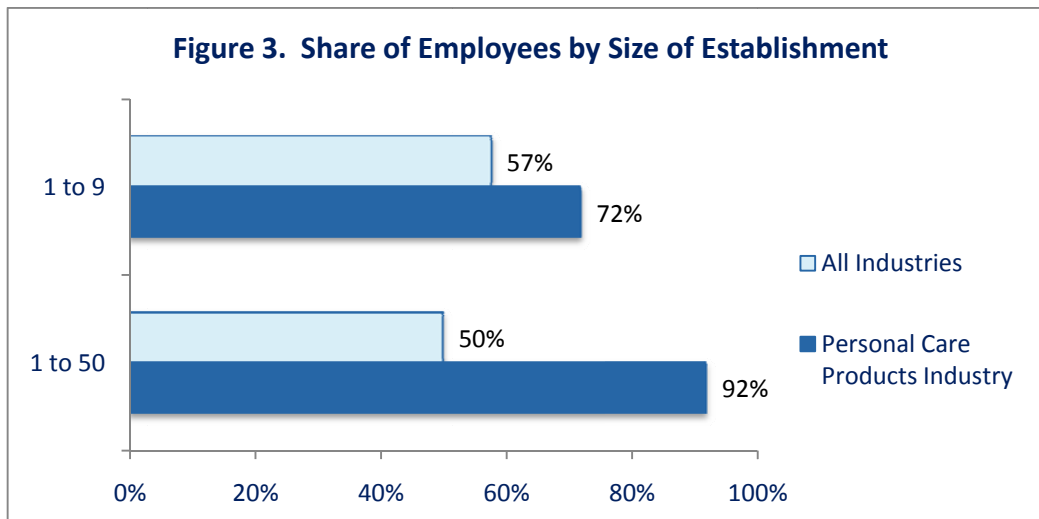


Source: EEOC, Job Patterns for Minorities and Women in Private Industry (EEO-1 Survey). Personal care products industry includes the following NAICS codes: 15 percent of 325610 (Soap Mfg), 325620 (Toilet Prep Mfg), 44612 (Cosmetics, Beauty Supplies, and Perfume Stores), 812110 (Hair, Nail, and Skin Services), and 15 percent of 812199 (All Other Personal Services).

B. Small Business and Business Creation

The personal care products industry consists of a large number of relatively small entrepreneurial firms. In 2007, there were 4,361 manufacturers and 883,334 service providers with fewer than 50 employees in the personal care products industry. Over 71 percent of total employment in the personal care products industry was in firms with fewer than 10 employees, compared to 57 percent in all industries; 92 percent of total employment in the personal care products industry was in firms with fewer than 50 employees, compared to 50 percent in all industries (see **Figure 3**).

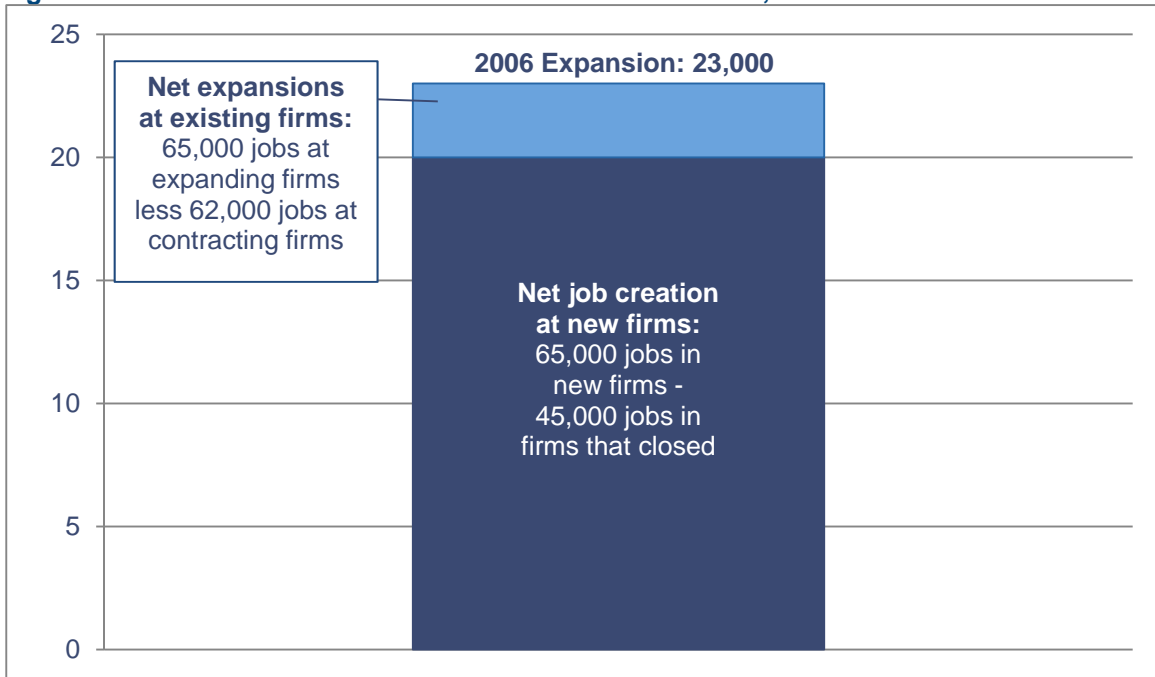
Between 2005 and 2006 (the latest years available on firm employment creation and destruction), direct employment in the manufacturing and services segment of the personal care products industry increased by 22,000 jobs, from 694,000 to 717,000.⁹ Of this increase, about 20,000 were attributable to a net increase in the number of firms and about 2,000 were attributable to a net expansion by existing firms (see **Figure 4**). By comparison, for the economy as a whole, about two-thirds of the growth in employment was attributable to net expansions at existing firms as opposed to net increases in the numbers of firms.



Source: County Business Patterns 2007. Tabulations exclude direct sellers not captured in federal government statistics.

⁹ Employment in this dataset is only available for manufacturer and service segments and excludes the distribution segment. For manufacturers and service providers, information is only available at the 4-digit NAICS level so certain segments outside of the personal care products industry are included in the calculations: certain soap and cleaning compound manufacturers (under NAICS 325610) and certain personal care service providers (under NAICS 8121).

Figure 4. Net Job Creation at Personal Care Products Firms, 2005-2006



Source: U.S. Census Bureau, Statistics of U.S. Business Employment Change data, 2005-2006. Data include soap, cleaning compound, and toilet preparation manufacturers (NAICS 3256) and personal care services (NAICS 8121).

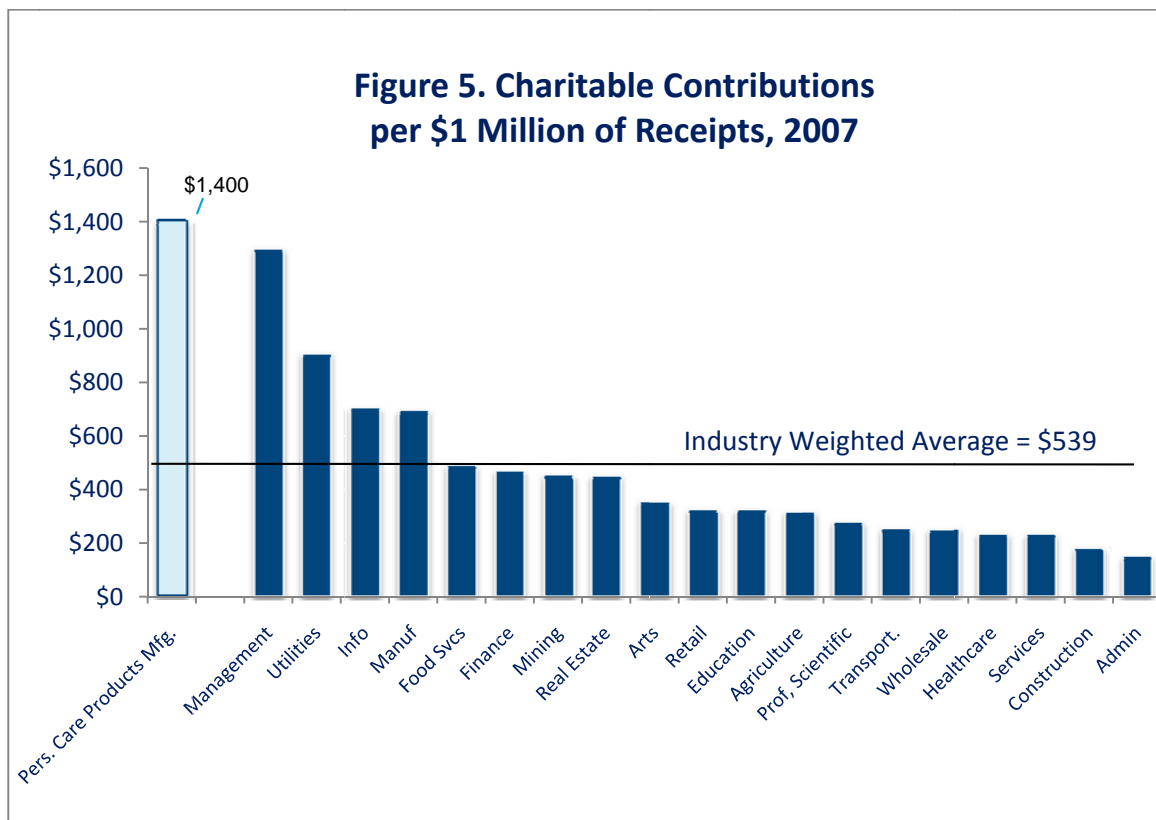
C. Charitable Contributions

In 2007, manufacturers of personal care products contributed over \$200 million to charitable causes, as reported on tax returns. For every \$1 million that personal care product manufacturers received in revenue, they made charitable contributions of approximately \$1,400; across all industries the average was \$539 (see **Figure 5**).

Charitable Contribution Case Study: M.A.C Cosmetics

Established in 1994 by M.A.C Cosmetics, the M.A.C AIDS Fund supports men, women and children affected by HIV/AIDS globally. M.A.C donates all proceeds from the sales of its VIVA GLAM (VG) lipsticks to the MAC AIDS Fund. M.A.C offers a variety of VG products in 72 countries worldwide. Together with its retail partners, M.A.C Cosmetics has provided over \$148 million to date to the M.A.C AIDS fund.

Source: The Estee Lauder Companies 2009 Annual Report



Source: Statistics of Income Division, Internal Revenue Service, *Corporate Source Book*, 2007, January 2010.

Note: Personal care products manufacturers include all soap and cleaning compound manufacturing (NAICS 325610), only a portion of which is considered as part of the personal care products industry.

D. Research and Development

Based on National Science Foundation data, personal care product manufacturers increased R&D spending at a 5.6 percent average annual rate between 1997 and 2007; in comparison, overall manufacturing grew by 5.3 percent.¹⁰ For both overall manufacturing and personal care product manufacturers, growth in R&D spending outpaced net revenue growth, which increased by 4.1 percent and 2.9 percent, respectively (see **Table 6**).

R&D Case Study: L'Oreal

L'Oreal has more than 3,300 R&D employees of 60 nationalities working in 30 different disciplines. Research is conducted in 18 research centers and 13 evaluation centers, which have active cooperation agreements with leading research and academic institutions.

In 2009, over \$800 million was dedicated to dermatological and cosmetic research. The company develops 5,000 formulas annually and filed 674 patents in 2009.

Source: L'Oreal Sustainable Development Report, 2009.

Table 6. Research and Development Spending, 1997 - 2007
(dollar amounts in billions)

	1997	2007	Average Annual Growth	Growth in Net Sales
Total Manufacturing	101.2	169.3	5.3%	4.1%
Personal Care Product Mfg ^a	2.0	3.6	5.6%	2.9%
Personal Care Product Mfg as a Percent of Total Mfg	2.0%	2.1%		

Source: National Science Foundation.

^a Includes NAICS 3253, NAICS 3255, and NAICS 3259.

¹⁰ For the personal care products industry, information was only available for a broader industry category: includes NAICS 3253, NAICS 3255, and NAICS 3259.

E. Environmental Impact

Global warming. As a part of the Carbon Disclosure Project, several of the largest manufacturers in the personal care products industry reported their carbon footprints in 2008.¹¹ In aggregate, the reporting companies did not increase global warming emissions from 2007 to 2008 despite an increase in sales.

Pollution abatement. In 2005, manufacturers in the soap, cleaning, and toilet preparations segment spent over \$250 million on pollution abatement.

Energy efficiency. Compared to other manufacturers, personal care product manufacturers are less energy intensive. Each \$1,000 of shipments of toilet preparation products consumed 34 kilowatt hours (kWh) of purchased electricity and each \$1,000 of soap and cleaning compound products consumed 64 kWh. For manufacturing overall, the average was 177 kWh, and different segments varied between 80 and 550 kWh per \$1,000 of shipments (see **Figure 6**).

Stewardship Case Study: Procter & Gamble

Procter and Gamble has reconfigured its operations to lower its impact on the environment, as summarized in the table below.

	Percent Reduction per Unit of Production Since:	
	<u>July 2007</u>	<u>July 2002</u>
Energy Usage	-11%	-48%
CO2 Emissions	-10%	-52%
Waste Disposal	-30%	-53%
Water Usage	-13%	-52%

Source: P&G 2009 Sustainability Report.

Packaging Case Study: Unilever

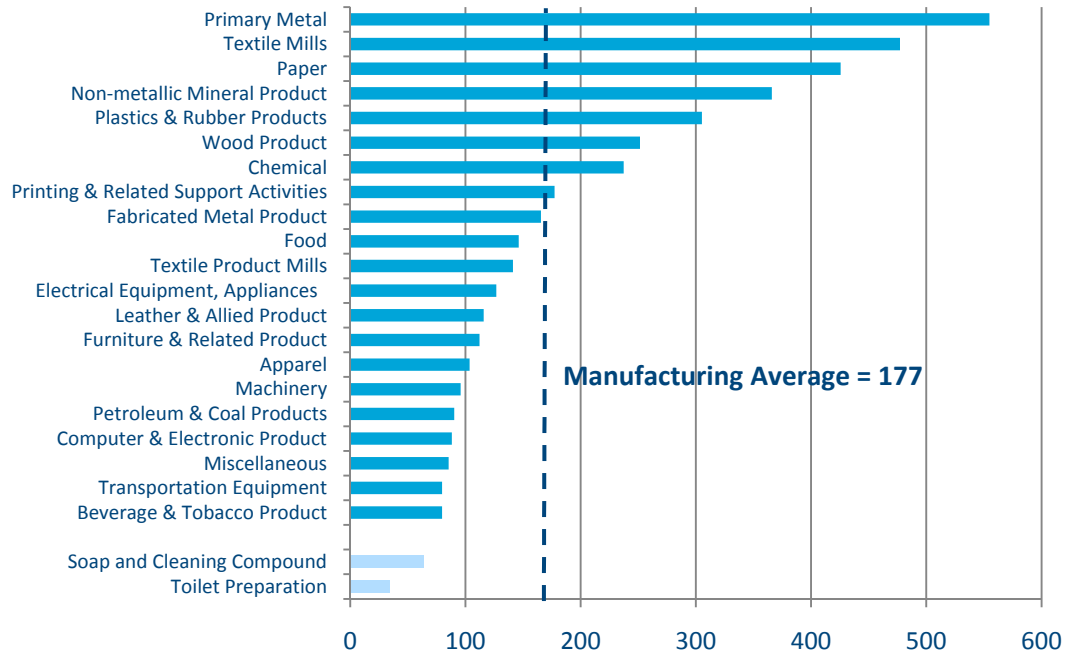
Unilever has been working to reduce packaging through innovative design and package composition over the past several years:

- In 2009, Suave Body Wash bottles started being produced with high-density polyethylene (HDPE), which is recycled at a rate of 26 to 29 percent in the U.S. instead of polypropylene, which is recycled at a rate of only 9 percent.
- A new teardrop-style Dove uses 15 percent less plastic than the previous design
- Suave shampoo reduced its packaging weight by 17 percent, allowing an annual saving in plastic resin of almost 150 tons - the equivalent of 15 million fewer shampoo bottles being thrown away each year.

Source: Unilever sustainability website. accessed May 2010.

¹¹ Carbon Disclosure Project, 2009, *Global 500 Report*. Companies in the industry reporting both 2007 and 2008 include Avon, Johnson & Johnson, Kimberly Clark, Limited Brands, L'Oreal, Procter & Gamble, and Unilever.

**Figure 6. Manufacturing Energy Intensity:
Purchased Electricity (kwh)
per \$1,000 in Shipments**



Source: U.S. Census Bureau, Annual Survey of Manufactures 2006.

Note: only a portion of soap and cleaning compound manufacturers are considered to be part of personal care products industry.

F. International Trade

The value of personal care products trade has each increased by six times since 1990. Unlike the overall manufacturing sector, where import growth has exceeded export growth, in the personal care products industry, the growth in exports has matched the growth in imports. The personal care products industry generated a trade surplus of \$5 billion in 2008 as compared to a trade deficit of \$819 billion for the economy as a whole (see **Figures 7A and 7B**).

International Trade Case Study: Mary Kay

Mary Kay products are sold in more than 35 markets worldwide, and the company's global independent sales force exceeds 1.8 million. Since 1990, the company has expanded into more than 20 new markets, and over the last five years, Mary Kay has opened subsidiaries in Moldova, India and Singapore. Mary Kay China continues to be its largest international subsidiary.

Source: Mary Kay website, accessed May 2010.

Figure 7A. Personal Care Product Imports and Exports, 1990-2008

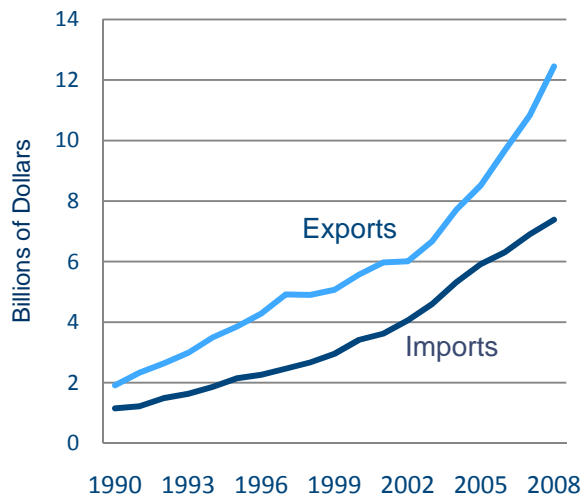
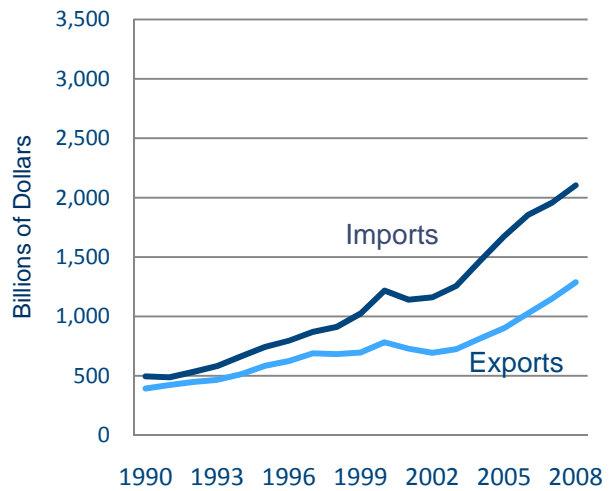


Figure 7B. Total Merchandise Imports and Exports, 1990-2008



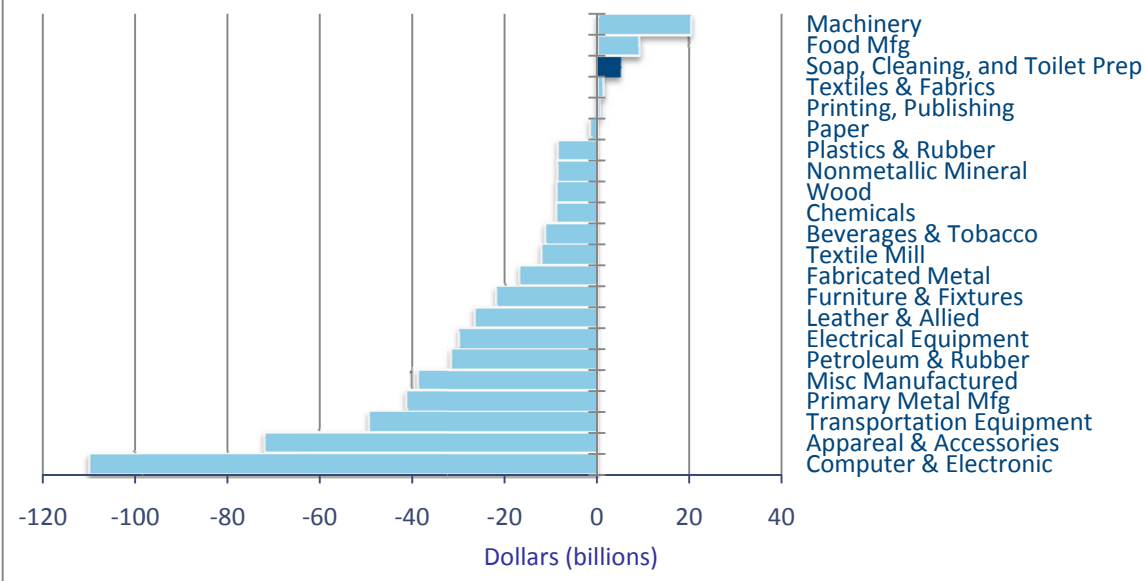
Source: International Trade Administration, TradeStats Express, accessed January 2010.

The personal care products industry is one of the few segments of the manufacturing sector that exported more than it imported in 2008 (see **Figure 8**). It generated the third largest trade surplus in the manufacturing sector, but compared to the value of domestic shipments, net exports of the personal care product manufacturing was larger than any other manufacturing sector. Net exports as a share of domestic shipments was 4 percent in 2007 for the

personal care products industry. Machinery manufacturing was the next highest at 3 percent.¹²

¹² Trade surplus figures from the International Trade Administration for 2007, sales by domestic manufacturers from the 2007 Economic Census.

Figure 8. Manufacturing Trade Balance, 2008



Source: International Trade Administration, TradeStats Express, accessed January 2009.

Appendix I: The IMPLAN Model

IMPLAN is a well known modeling system developed by the Minnesota IMPLAN Group for estimating economic impacts and is similar to the Regional Input-Output Modeling System developed by the U.S. Department of Commerce. The model is primarily based on government data sources. It can address a wide range of impact topics in a given region (county, State, or the country as a whole).

IMPLAN is built around an “input-output” table that relates the purchases that each industry has made from other industries to the value of the output of each industry. To meet the demand for goods and services from an industry, purchases are made in other industries according to the patterns recorded in the input-output table. These purchases in turn spark still more purchases by the industry's suppliers, and so on. Meanwhile, employees and business owners make personal purchases out of the additional income that is generated by this process, further increasing demand that ripples through the economy. Multipliers describe these iterations. The Type I multiplier measures the direct and indirect effects of a change in economic activity. It captures the inter-industry effects only, i.e. industries buying from local industries. The Type II (Social Accounting Matrix or SAM) multiplier captures the direct and indirect effects. In addition, it also reflects induced effects (i.e., changes in spending from households as income increases or decreases due to the changes in production).

Appendix II: Mapping of NAICS and IMPLAN Sectors

Appendix Table A1. Detail on Personal Care Products Industry Sales, 2007

NAICS detail	NAICS Code	IMPLAN Code	Total Sales (\$1,000)	Personal Care Products Industry Sales	Personal Care Share of Industry
Soap and Other Detergent Manufacturing	325611	NA	26,511,130		
<i>Personal Care Product Industry Sales:</i>					
Soaps, excluding specialty cleaners, household				4,362,446	
Glycerin, natural				144,722	
Toothpaste, including gels and toothpowder				1,962,939	
Polish and Other Sanitation Good Manufacturing	325612	NA	10,212,789		
Surface Active Agent Manufacturing	325613	NA	9,005,487		
Soap and Cleaning Compound Manufacturing	325610	138	45,729,406	6,470,107	14%
Toilet Preparation Manufacturing	325620	139	35,161,956	35,161,956	100%
Barber shops	812111	NA	615,075	615,075	
Beauty salons	812112	NA	18,925,362	18,925,362	
Nail salons	812113	NA	1,334,858	1,334,858	
Diet and weight reducing centers	812191	NA	2,168,754		
Other personal care services	812199	NA	3,585,712		
<i>Personal Care Product Industry Sales:</i>					
Hair care services				87,813	
Nail care services				118,435	
Skin care services				246,910	
Resale of cosmetics products				82,268	
Personal Care Services	812100	419	26,629,761	21,410,721	80%

Source: U.S. Census Bureau, *Economic Census, 2007*.

Appendix III: Detailed Results by State

Appendix Table A2. Employment Contribution of the Personal Care Products Industry, by State, 2007

State	Direct Employment	Indirect Employment	Induced Employment	Total Contribution	Total as a % of State Total Employment
Alabama	9,740	4,860	8,570	23,160	0.9%
Alaska	1,860	730	1,430	4,020	0.9%
Arizona	18,750	8,650	14,500	41,890	1.3%
Arkansas	8,540	4,300	6,500	19,330	1.2%
California	128,070	64,020	95,660	287,750	1.4%
Colorado	18,320	7,510	12,760	38,590	1.2%
Connecticut	30,470	11,720	16,950	59,140	2.7%
Delaware	4,570	1,540	2,570	8,680	1.6%
District of Columbia	1,830	1,240	2,140	5,200	0.6%
Florida	70,070	30,990	49,410	150,470	1.5%
Georgia	31,300	14,870	23,480	69,640	1.3%
Hawaii	4,120	1,650	3,150	8,910	1.0%
Idaho	8,000	3,630	4,740	16,370	1.8%
Illinois	81,380	34,900	51,070	167,350	2.2%
Indiana	23,240	9,390	15,120	47,740	1.3%
Iowa	18,660	7,430	10,940	37,020	1.8%
Kansas	12,180	4,840	8,050	25,070	1.4%
Kentucky	13,360	6,240	9,750	29,350	1.2%
Louisiana	9,690	4,940	8,370	23,000	0.9%
Maine	4,410	1,830	3,240	9,480	1.1%
Maryland	33,560	12,790	18,890	65,240	1.9%
Massachusetts	28,160	10,950	18,520	57,630	1.4%
Michigan	35,380	13,760	23,140	72,270	1.3%
Minnesota	33,390	14,100	21,660	69,150	2.0%
Mississippi	5,460	2,930	5,200	13,590	0.9%
Missouri	24,320	11,980	17,770	54,060	1.5%
Montana	2,440	1,060	2,070	5,560	0.9%
Nebraska	8,710	3,540	5,520	17,780	1.4%
Nevada	6,540	3,070	5,610	15,220	1.0%
New Hampshire	5,130	1,900	3,380	10,400	1.2%
New Jersey	89,080	39,620	47,120	175,820	3.5%
New Mexico	3,740	1,990	3,640	9,370	0.9%
New York	94,990	37,120	60,550	192,670	1.8%
North Carolina	47,850	21,670	29,950	99,480	1.9%
North Dakota	2,870	980	1,760	5,610	1.1%
Ohio	75,060	31,310	42,110	148,480	2.2%
Oklahoma	8,360	4,400	7,600	20,370	1.0%
Oregon	10,310	5,090	8,590	23,990	1.0%
Pennsylvania	65,720	28,800	42,960	137,480	1.9%
Rhode Island	4,470	1,680	2,830	8,980	1.5%
South Carolina	11,540	5,450	9,070	26,060	1.1%
South Dakota	2,560	950	1,930	5,440	1.0%
Tennessee	29,430	13,960	19,990	63,380	1.7%
Texas	78,050	37,580	60,050	175,680	1.3%
Utah	15,810	7,310	9,680	32,810	2.0%
Vermont	3,820	1,600	2,340	7,760	1.8%
Virginia	32,250	12,980	20,520	65,750	1.4%
Washington	20,890	8,070	14,790	43,760	1.1%
West Virginia	4,910	2,180	3,520	10,600	1.2%
Wisconsin	30,370	12,350	18,950	61,670	1.7%
Wyoming	2,910	1,150	1,540	5,600	1.5%
U.S. Total	1,316,610	577,600	879,650	2,773,820	1.6%

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database).

Numbers may not add to total due to rounding

Employment is defined as the number of payroll and self-employed jobs, including part-time jobs. It excludes direct sellers and other individuals not captured in federal government statistics.

**Appendix Table A3. Labor Income Contribution of the
Personal Care Products Industry, by State, 2007**
(Millions of dollars)

State	Direct Labor Income	Indirect Labor Income	Induced Labor Income	Total Contribution	Total as a % of State Total Labor Income
Alabama	\$162	\$ 219	\$ 328	\$ 709	0.7%
Alaska	35	40	63	138	0.6%
Arizona	476	413	620	1,509	1.0%
Arkansas	201	181	221	603	1.0%
California	3,895	4,034	5,030	12,959	1.1%
Colorado	360	426	598	1,384	0.9%
Connecticut	1,220	833	953	3,006	2.1%
Delaware	126	88	123	338	1.2%
District of Columbia	69	120	172	362	0.4%
Florida	1,723	1,412	1,979	5,114	1.1%
Georgia	788	781	1,037	2,605	1.0%
Hawaii	90	71	124	285	0.7%
Idaho	175	153	156	483	1.4%
Illinois	2,503	2,168	2,417	7,088	1.8%
Indiana	467	409	571	1,447	0.9%
Iowa	475	308	368	1,152	1.5%
Kansas	253	220	299	772	1.0%
Kentucky	303	272	354	930	0.9%
Louisiana	177	268	345	790	0.7%
Maine	83	74	113	269	0.9%
Maryland	950	733	864	2,546	1.4%
Massachusetts	742	720	1,023	2,485	1.0%
Michigan	723	728	985	2,436	0.9%
Minnesota	953	748	900	2,601	1.6%
Mississippi	115	116	173	404	0.7%
Missouri	589	569	680	1,837	1.2%
Montana	31	39	65	135	0.6%
Nebraska	173	154	197	524	1.1%
Nevada	155	154	246	555	0.7%
New Hampshire	101	96	146	342	0.9%
New Jersey	3,784	2,699	2,485	8,968	2.9%
New Mexico	65	85	130	280	0.6%
New York	3,093	2,867	3,725	9,685	1.3%
North Carolina	1,407	1,026	1,151	3,584	1.5%
North Dakota	45	36	56	137	0.8%
Ohio	2,155	1,504	1,584	5,242	1.8%
Oklahoma	166	220	290	676	0.7%
Oregon	188	227	331	746	0.8%
Pennsylvania	1,730	1,627	1,903	5,259	1.5%
Rhode Island	126	85	120	331	1.1%
South Carolina	257	236	328	820	0.8%
South Dakota	34	35	62	131	0.7%
Tennessee	874	687	827	2,388	1.5%
Texas	2,245	2,332	2,859	7,436	1.0%
Utah	407	320	357	1,084	1.6%
Vermont	110	63	81	254	1.6%
Virginia	794	730	923	2,447	0.9%
Washington	444	426	693	1,562	0.8%
West Virginia	104	97	123	324	0.9%
Wisconsin	782	560	693	2,036	1.4%
Wyoming	70	57	59	186	1.1%
U.S. Total	\$36,992	\$ 32,463	\$39,930	\$109,385	1.2%

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database).

Numbers may not add to total due to rounding.

Labor income includes wages and salaries and benefits as well as proprietors' income.

**Appendix Table A4. Contribution to GDP from the
Personal Care Products Industry, by State, 2007**
(Millions of dollars)

State	Direct Contribution to GDP	Indirect Contribution to GDP	Induced Contribution to GDP	Total Contribution	Total as a % of State GDP
Alabama	\$ 266	\$375	\$ 555	\$1,196	0.7%
Alaska	55	74	111	239	0.7%
Arizona	824	708	1,063	2,596	1.1%
Arkansas	381	306	377	1,064	1.1%
California	7,169	6,551	8,495	22,215	1.2%
Colorado	581	740	1,039	2,360	0.9%
Connecticut	2,451	1,302	1,551	5,303	2.5%
Delaware	234	143	199	577	1.3%
District of Columbia	105	177	250	533	0.5%
Florida	3,042	2,360	3,385	8,787	1.2%
Georgia	1,421	1,320	1,794	4,535	1.1%
Hawaii	143	125	212	480	0.8%
Idaho	318	245	266	828	1.6%
Illinois	4,822	3,471	4,035	12,328	2.0%
Indiana	831	701	960	2,492	1.0%
Iowa	924	510	634	2,067	1.7%
Kansas	450	392	523	1,365	1.1%
Kentucky	546	446	594	1,586	1.0%
Louisiana	299	462	583	1,344	0.8%
Maine	143	123	188	454	0.9%
Maryland	1,751	1,174	1,437	4,362	1.6%
Massachusetts	1,277	1,135	1,630	4,042	1.1%
Michigan	1,234	1,223	1,651	4,108	1.0%
Minnesota	1,768	1,211	1,501	4,481	1.8%
Mississippi	203	199	295	697	0.8%
Missouri	1,065	922	1,136	3,123	1.3%
Montana	49	78	119	246	0.7%
Nebraska	299	252	330	882	1.2%
Nevada	249	274	440	963	0.8%
New Hampshire	163	158	239	560	0.9%
New Jersey	7,526	4,232	4,138	15,896	3.3%
New Mexico	106	142	219	467	0.7%
New York	5,742	4,510	5,972	16,224	1.5%
North Carolina	2,693	1,672	1,992	6,357	1.8%
North Dakota	72	65	99	236	0.8%
Ohio	4,090	2,424	2,646	9,161	2.0%
Oklahoma	308	410	523	1,240	0.8%
Oregon	306	375	552	1,234	0.8%
Pennsylvania	3,078	2,608	3,149	8,836	1.6%
Rhode Island	222	140	196	557	1.3%
South Carolina	442	404	554	1,400	0.9%
South Dakota	53	67	111	231	0.7%
Tennessee	1,611	1,100	1,372	4,084	1.6%
Texas	4,192	4,235	5,156	13,582	1.1%
Utah	786	533	602	1,921	1.9%
Vermont	203	104	136	442	1.8%
Virginia	1,342	1,167	1,565	4,075	1.0%
Washington	717	721	1,170	2,607	0.8%
West Virginia	187	170	210	568	1.0%
Wisconsin	1,459	938	1,156	3,553	1.6%
Wyoming	138	108	111	357	1.2%
U.S. Total	\$ 68,334	\$ 53,284	\$ 67,224	\$188,842	1.4%

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database).
Numbers may not add to total due to rounding.

**Appendix Table A5. Tax Contribution of the
Personal Care Products Industry, by State, 2007**
(Millions of dollars)

State	Tax on Direct Activity	Tax on Indirect Activity	Tax on Induced Activity	Total Tax Contribution	State and Local Taxes Only
Alabama	\$63	\$ 88	\$138	\$ 289	\$116
Alaska	15	20	31	66	31
Arizona	211	176	280	668	271
Arkansas	101	73	95	269	120
California	2,130	1,804	2,453	6,387	2,799
Colorado	149	185	276	610	237
Connecticut	717	373	474	1,564	596
Delaware	63	37	54	154	64
District of Columbia	33	54	78	165	50
Florida	741	557	857	2,154	834
Georgia	377	327	469	1,173	490
Hawaii	36	32	57	124	55
Idaho	92	60	70	222	100
Illinois	1,343	888	1,102	3,334	1,368
Indiana	212	166	244	622	262
Iowa	240	123	162	525	229
Kansas	115	94	132	341	142
Kentucky	149	110	165	425	196
Louisiana	72	101	138	312	130
Maine	37	30	49	116	53
Maryland	494	317	411	1,222	522
Massachusetts	359	313	469	1,141	441
Michigan	326	301	431	1,058	453
Minnesota	484	318	418	1,220	512
Mississippi	52	46	72	170	79
Missouri	286	222	299	807	340
Montana	12	19	31	62	27
Nebraska	77	60	84	221	92
Nevada	59	66	116	241	89
New Hampshire	41	40	65	146	54
New Jersey	2,218	1,159	1,200	4,577	1,863
New Mexico	25	34	56	115	51
New York	1,756	1,294	1,792	4,842	2,177
North Carolina	758	419	539	1,716	761
North Dakota	18	16	25	58	23
Ohio	1,143	591	705	2,439	1,121
Oklahoma	73	90	125	289	117
Oregon	84	100	155	339	145
Pennsylvania	847	649	834	2,330	967
Rhode Island	64	35	53	152	67
South Carolina	114	97	143	355	153
South Dakota	12	16	27	55	22
Tennessee	421	254	338	1,014	405
Texas	1,021	958	1,247	3,226	1,213
Utah	215	132	160	507	218
Vermont	57	26	35	118	54
Virginia	359	301	428	1,088	429
Washington	173	172	294	639	215
West Virginia	51	43	55	149	66
Wisconsin	408	238	316	962	435
Wyoming	37	27	29	92	37
U.S. Total	\$18,945	\$13,653	\$18,276	\$50,874	\$21,288

Source: PricewaterhouseCoopers calculations using IMPLAN modeling system (2007 database).
Numbers may not add to total due to rounding.