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**OAK RIDGE
NATIONAL
LABORATORY**

MARTIN MARIETTA

**Light-Duty Vehicle MPG and Market
Shares Report: Model Year 1989**

Linda S. Williams
Patricia S. Hu

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1989

OPERATED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

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Energy Division

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**LIGHT-DUTY VEHICLE MPG AND MARKET SHARES REPORT:
MODEL YEAR 1989**

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April 1990

Prepared for
Office of Transportation Systems
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OAK RIDGE NATIONAL LABORATORY
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FOREWORD

Both new car and light truck fuel economy dropped in 1989 from the previous year. New cars dropped 0.5 mpg to a value of 28.0. Light trucks also dropped 0.5 mpg to a value of 20.2. Still, both vehicle types are far above their 1976 values of 17.2 and 15.6, respectively.

For cars, the compact size class did not change its fuel economy, whereas every other size class saw its mpg drop. Some of the overall drop was due to upward size class shifts: the midsize class share went up 4.3 percentage points and the large class rose 0.6 percentage points.

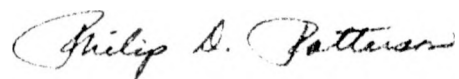
For light trucks, the small van and large utility class kept their mpg unchanged while the other classes experienced declines. The large pickup share gained 2.3 percentage points, and the small pickup share lost 3.2 percentage points.

Several new features appear in this report. Table 4 on page 2-11 shows the market shares in 1976, 1982, and 1989 for cars for domestic, transplant, foreign, and captive imports. It can be seen that in 1976 most of the compact cars were domestics. By 1989, a significant number of compact cars were transplants or imports. A similar tabulation for light trucks appears in Table 19 on page 3-12.

The new Figure 10 (page 2-12) shows the distribution of new car sales by manufacturer. Similar data for light trucks are shown in Figure 19 on page 3-13.

In a number of places the trends in vehicle characteristics are shown as line graphs, rather than as bar graphs as in earlier editions. For example, Figure 29 (page 5-11) shows the curb weight for new cars by size class. With the line graph, it is easier to see the year to year changes in weight by each car size than when the bar graphs were used.

We hope that you will find this new data of interest, and we welcome suggestion as to alternative ways it could be displayed.



Philip D. Patterson

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EXECUTIVE SUMMARY

The sales-weighted fuel economy for the entire new automobile fleet (domestics and imports combined) decreased 0.5 miles per gallon (mpg) in model year 1989, from 28.5 mpg in model year 1988 to 28.0 in 1989. This is the first observed decline in fuel economy of new automobiles since model year 1983 and the largest decline during the reporting period - model year 1976 to model year 1989 (Figure 1). Two factors contributed to this 0.5 mpg loss. First, virtually every automobile size class experienced a fuel economy reduction of at least 0.3 mpg. The only exception was the most popular size class, the compact, which showed no change in its sales-weighted fuel economy. Second, three other dominant size classes, the subcompact, midsize and large, increased their combined market share to more than 60% in model year 1989. The combination of increased market share and decreased fuel economy observed in all three of these classes contributed greatly to the overall decline in fuel economy of new automobiles.

Domestic and import automobile fleets experienced mpg losses of 0.4 mpg and 0.7 mpg, respectively, from the previous model year. This is the first observed decline in fuel economy of new domestic automobiles since model year 1983. The 0.7 mpg loss in new import automobiles can be attributed to the fact that the two most popular import size classes, the subcompact and the compact, both showed declines in their respective fuel economies from model year 1988. The gap between the sales-weighted fuel economies of the domestic automobiles and the import automobiles has narrowed from the largest gap of 10.3 mpg in model year 1977 to the smallest gap of 2.8 mpg in this model year.

Automobiles built in the U.S. by foreign manufacturers (i.e., transplants such as Honda Accord-American) continued a trend of decreasing fuel economy since model year 1984. Larger transplant vehicles are being built. Consequently, the increased market share of these larger-sized transplants resulted in a fuel economy decline from the previous model year.

Like automobiles, the sales-weighted fuel economy of the new light truck fleet decreased 0.5 mpg, from 20.7 mpg in model year 1988 to 20.2 mpg in model year 1989 (Figure 2). Two factors contributed to the 0.5 mpg loss. The fuel economy of the most popular size class, the large pickup, decreased 0.3 mpg from the previous model year. This fuel economy loss was compounded by a 2.6% gain in market share for large pickups. Furthermore, there was a 0.7 mpg drop and 0.9% market share gain by the increasingly popular small utility vehicles. Both domestic and import light truck fleets showed fuel economy declines from the previous model year (Figure 2). This is the first time during the past five years that the domestic light truck fleet experienced a fuel economy loss. However, the trend of decreasing fuel economy in import light trucks began in model year 1984.

With automobiles and light trucks both showing 0.5 mpg losses from the previous model year, the sales-weighted fuel economy of new light-duty vehicles (automobiles and light trucks combined) dropped to 25.0 mpg, a reduction of 0.5 mpg from the previous model year (Figure 3).

This is the first year since model year 1985 that the total sales of light-duty vehicles fell below 15 million units (Figure 4). Despite the record high light truck sales, the 1.9% decline in automobile sales contributed to the overall low volume in light-duty vehicle sales. This is the third consecutive year in which automobile sales decreased. Light trucks increased their share of the combined automobile and light truck market and continued the trend of light trucks gaining a larger portion of the entire new light-duty vehicle market, reaching a record high of 31.9% in model year 1989.

Most of the share shifts in the automobile market in model year 1989 can be attributed to changes in the size classes of several popular nameplates. For example, the size class changes of Chevrolet Corsica, Ford Thunderbird, Nissan Maxima, and Mercury Cougar XR-7 from compact to midsize contributed to the 4% share gain by midsizes, and consequently, to the 4% share loss by compacts.

In the light truck market, small pickups continued to lose market share, reaching 18%, its lowest level in ten years. In contrast to small pickups, large pickups gained

a larger portion of the light truck market for the second consecutive year. In particular, domestic large pickups were in demand. While the share of small vans leveled off at 18% after five years of steady growth, small utility vehicles became increasingly popular.

The trends of various vehicle characteristics from model year 1976 to 1989 are illustrated in Figure 5. The characteristics are engine size, curb weight, interior space, and wheel base. In Figure 5, the sales-weighted average values are normalized to 1976 values (for a given characteristic, the 1976 value is set equal to one, and other annual values are expressed as relative proportions). The sales-weighted interior space (in cubic feet) and wheel base (in inches) have remained relatively constant since model year 1976. Curb weight (in pounds) had dropped from model years 1977 to 1980, and have remained fairly stable since then. Engine size (in cubic inches) is one feature in automobile design that has changed dramatically since model year 1976. The sales-weighted engine size in 1989 was only 55% of what it was in model year 1976.

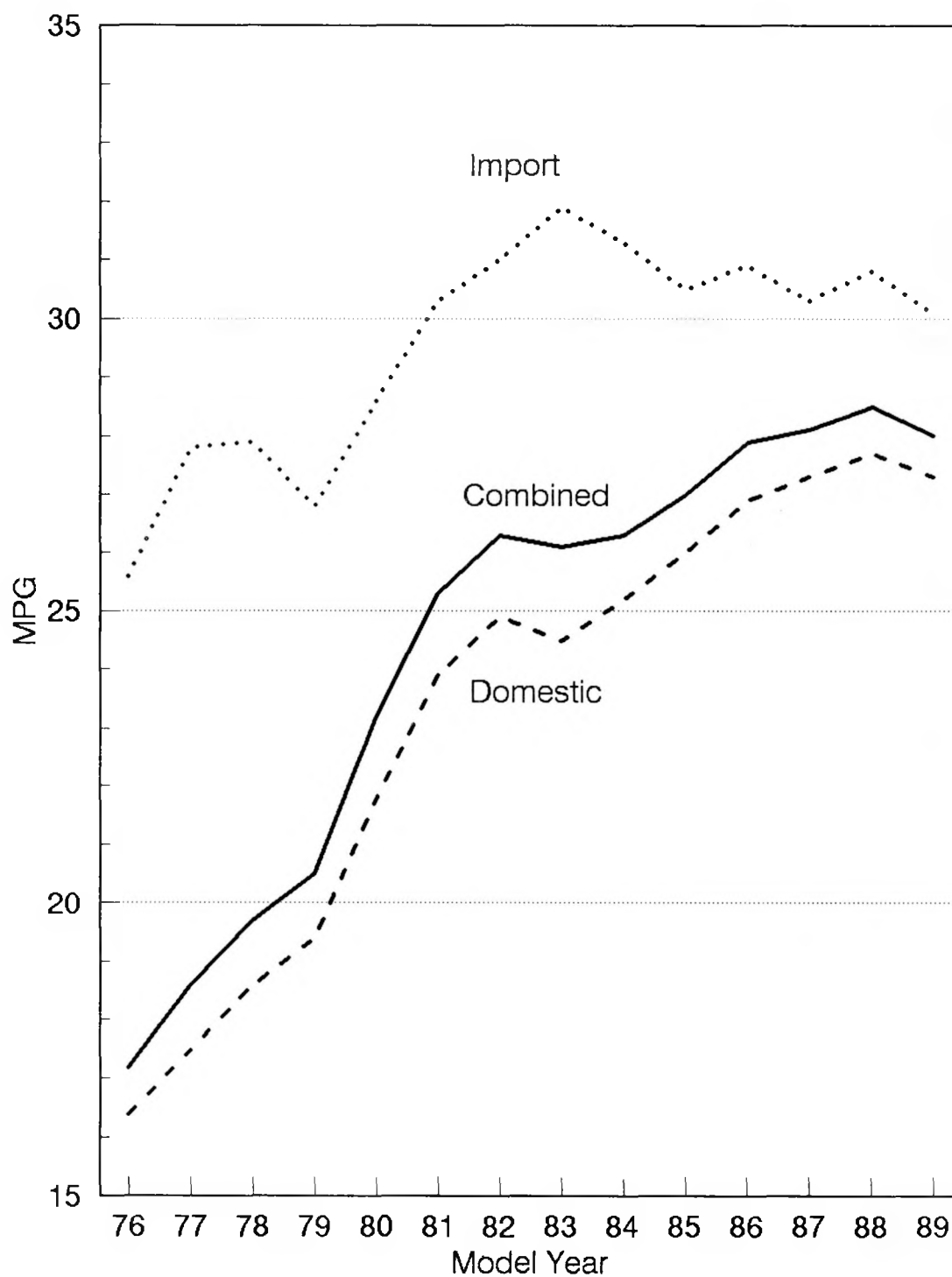


Fig. 1. *Automobile* MPG, Model Years 1976-1989.

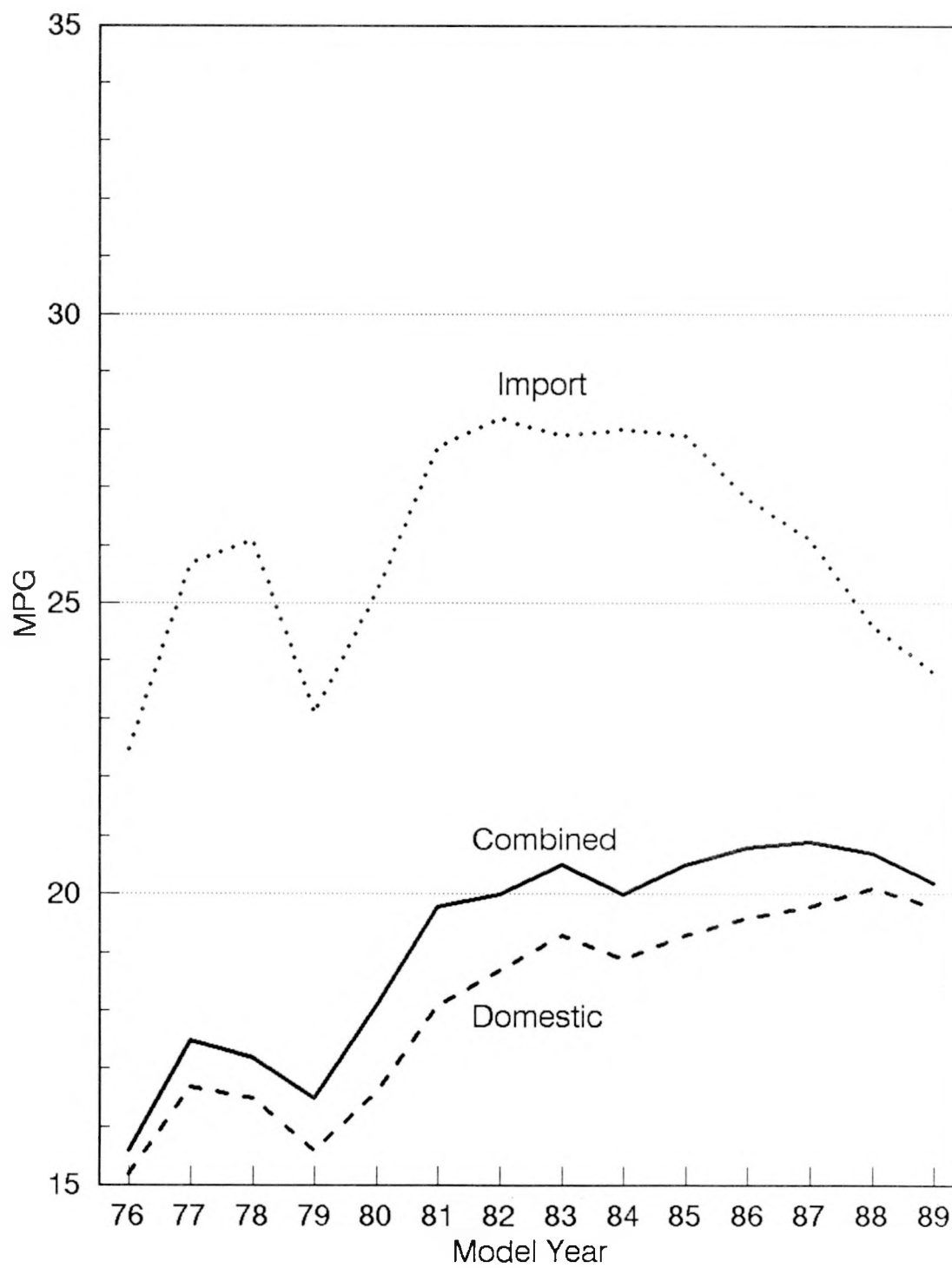


Fig. 2. *Light Truck* MPG, Model Years 1976-1989.

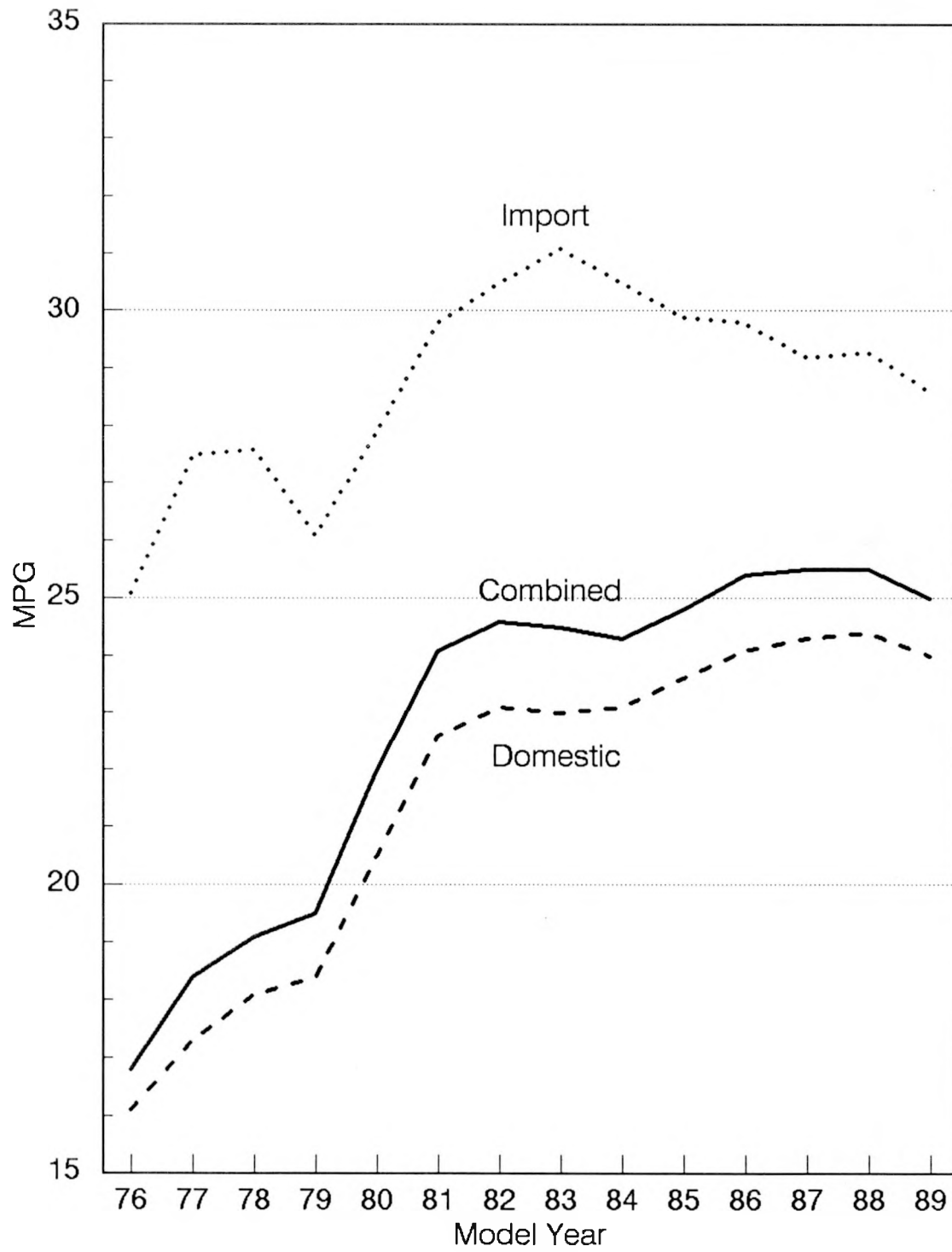


Fig. 3. *Light-Duty Vehicle* MPG, Model Years 1976-1989.

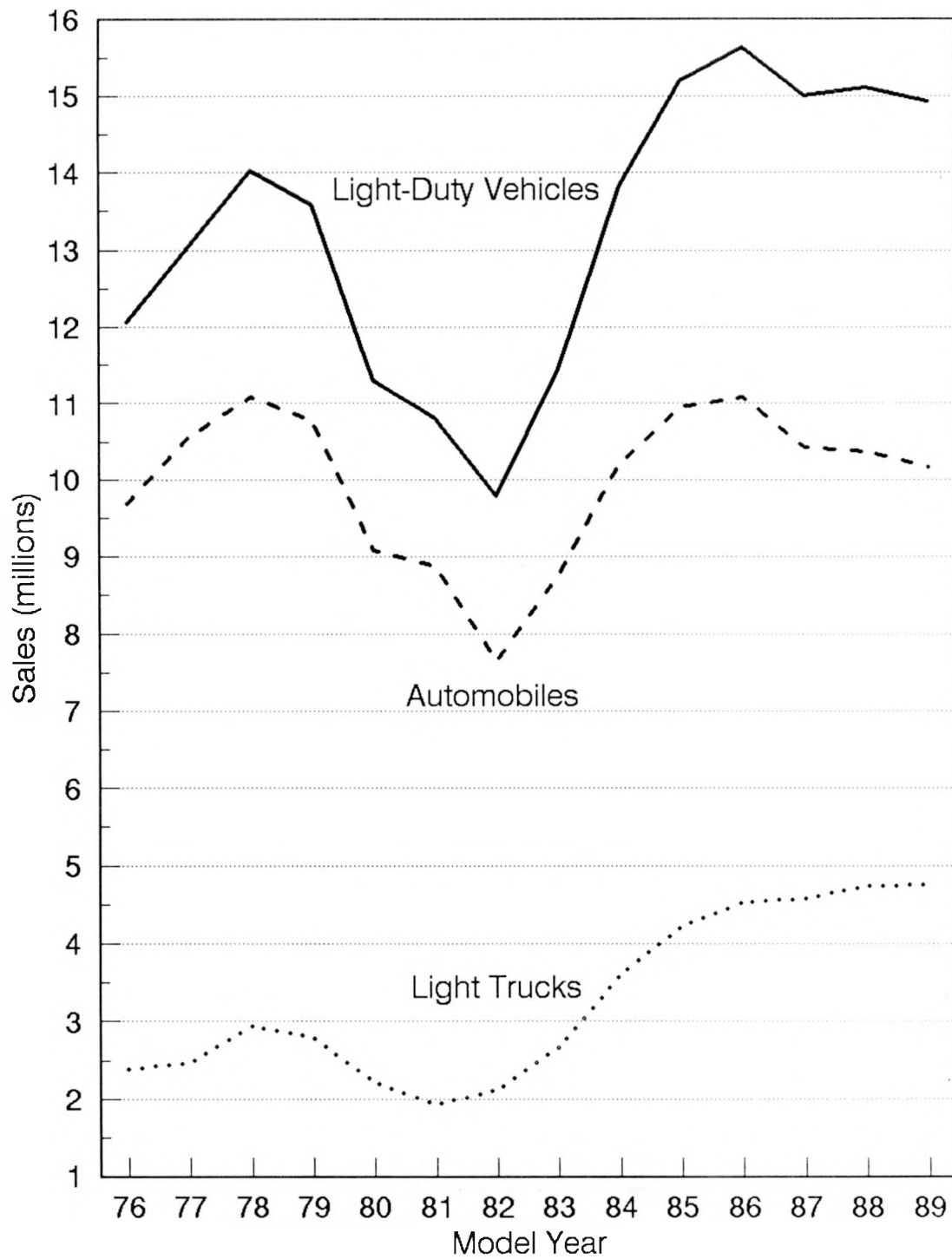
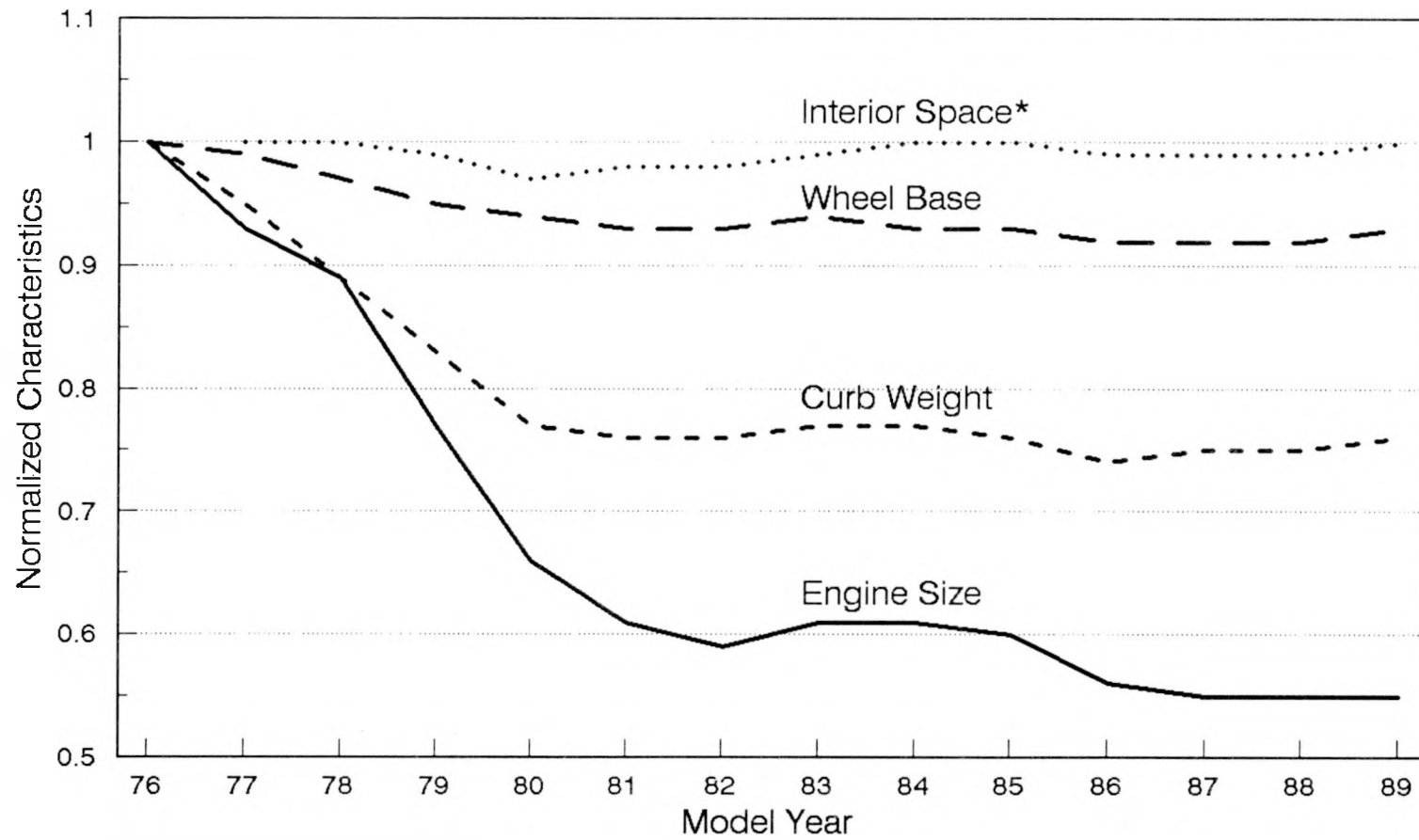


Fig. 4. Sales of Light-Duty Vehicles, Model Years 1976-1989.



* Data not available for 1976.

Fig. 5. Trend of Normalized *Vehicle Characteristics* for Domestic and Import Automobiles, Model Years 1976-1989.

ABSTRACT

This issue of *Light-Duty Vehicle MPG and Market Shares Report: Model Year 1989* reports the estimated sales-weighted fuel economies, sales, market shares, and other vehicle characteristics of automobiles and light trucks. The estimates are made on a make and model basis (e.g., Chevrolet is a make and Corsica is a model), from model year 1976 to model year 1989. Vehicle sales data are used as weighting factors in the sales-weighted estimation procedure. Thus, the estimates represent averages of the overall new vehicle fleet, reflecting the composition of the fleet. Highlights are provided on the trends in the vehicle characteristics from one model year to the next. Analyses are also made on fuel economy changes to determine what caused the changes.

Both new automobile and new light truck fleets experienced fuel economy losses of 0.5 mpg from the previous model year, dropping to 28.0 mpg for automobiles and 20.2 mpg for light trucks. This is the first observed decline in fuel economy of new automobiles since model year 1983 and the largest decline since model year 1976. The main reason for the fuel economy decline in automobiles was that every automobile size class showed either losses or no change in their fuel economies. The fuel economy decline in light trucks was primarily due to the fact that two popular size classes, large pickup and small utility vehicle, both experienced losses in their fuel economies. Overall, the sales-weighted fuel economy of the entire light-duty vehicle fleet (automobiles and light trucks) dropped to 25.0 mpg, a reduction of 0.5 mpg from model year 1988.

This is the first time since model year 1985 that total sales of light-duty vehicles fell below 15 million units. Despite record high light truck sales, automobile sales dropped for the third consecutive year. Consequently, the trend of light trucks gaining a larger portion of the entire new light-duty vehicle market continued, reaching a record high of 31.9% in model year 1989.

1. INTRODUCTION

This report covers fourteen years of light-duty vehicle data (i.e., automobiles and light trucks combined) from model year 1976 to model year 1989, on a nameplate level (a nameplate is a make, e.g., Chevrolet, and model, e.g., Corsica). Included in this report are the estimated sales-weighted fuel economies, sales, and market shares of new automobiles and new light trucks sold for each model year. Comparisons and observations are made on the trends from one model year to the next. Several conventions have been adopted to facilitate these comparisons: use of sales-weighted averages, "sales" model years, unadjusted fuel economies, domestic and import categories, and vehicle size classification.

While there are other sources of new vehicle fuel economy estimates, a unique feature of this report is that it provides estimated average fuel economies weighted by actual vehicle sales by month (refer to Appendix G for a detailed description of the sales-weighted methodology). Fleet fuel economy is estimated by calculating the *harmonic* mean of individual vehicle fuel economies weighted by their corresponding market shares, and other vehicle characteristics (such as weight, interior volume, etc.) are the *arithmetic* mean weighted by the market shares. These estimates reflect the market shifts, consumer preferences, and manufacturer technological changes that affect vehicle market dynamics. Consequently, these data are useful in describing and analyzing market trends observed in the new light-duty vehicles sold.

The definition of model year used in this report is the "sales" model year, instead of the "manufacturer" model year. Therefore, a model year is defined as the period from October through the next September. Also, the way in which some nameplates are presented sometimes differs among sources. For example, this report presents the import Honda Accord and the U.S.-built Honda Accord-American as two vehicles, rather than one. One is, therefore, advised to be cautious when comparing the statistics in this report to the ones from other sources.

Data are reported separately for domestic and import vehicles, and for automobiles and light trucks. "Domestic" vehicles are both domestic, and domestically manufactured, foreign-sponsored vehicles, such as Honda's

Civic-American and Volkswagen's Golf; and "import" vehicles are both imports and foreign manufactured, domestic-sponsored vehicles, such as Chevrolet's Sprint and Dodge's Raider. The automobile size classification system is the one used by the *Gas Mileage Guide* produced by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE). However, the light truck classification system used in this report is the one defined in a Society of Automotive Engineers (SAE) paper series by EPA staff [1]-[6]. Under this modified classification system, light trucks can be categorized as: small and large pickups, small and large vans, and small and large utility vehicles (see Appendix A for detailed glossary).

It has been known for years that the EPA's mpg values for individual new cars over-predicted actual consumer on-the-road fuel economies. Hence, a decision was made by the EPA in 1985 to adjust the city and highway mpg values which appeared in the *Gas Mileage Guide* (GMG) in order to better reflect actual on-the-road fuel economies. Many sophisticated adjustment methodologies were developed. However, uniform constant adjustment factors were preferred because "...they would preserve the overall mpg ranking of vehicles, and the marginal improvement of the more accurate adjustment methodology was not considered worth the perceived added complexity" [7]. Beginning in model year 1985, the EPA city mpg values were lowered by a factor of 10%, and highway mpg values were lowered by 22%. For example, if the unadjusted EPA city and highway mpg values are 20 mpg and 25 mpg, respectively, then the adjusted values will correspondingly be 18 mpg and 20 mpg. These adjustments do not apply when dealing with Corporate Average Fuel Economy (CAFE) standards. To preserve the capability of comparing sales-weighted fuel economies in a consistent manner throughout all model years, the *unadjusted* mpg values are used in this report.

Several modifications were made to the data system that altered some of the historical data. Most of the modifications were made to improve the estimate of the sales-weighted fuel economies based on recently available information. As described in [8], there are two steps in estimating the composite sales-weighted fuel economy

of any vehicle fleet (e.g., domestic automobile fleet, entire light truck fleet, etc). The first step is to calculate **nameplate-specific** fuel economy based on fuel economies and sales of individual engine/transmission combinations of that nameplate (e.g., a 4 cylinder gasoline engine with an automatic transmission is one engine/transmission combination of the Toyota Camry). Since sales at the engine/transmission level are not available, production figures at this level are used as a proxy. The second step is to calculate composite fleet fuel economy based on nameplate-specific fuel economy and sales for all of the nameplates in that fleet. Therefore, improvements on estimating fuel economy can be achieved either at the nameplate level or at the fleet level.

Prior to 1989, production figures of vehicles with turbocharged engines and without turbocharged engines were combined at the engine/transmission level. As a result, the turbo and non-turbo engine were given equal weight when nameplate-specific fuel economy was calculated. In order to achieve more accurate fuel economy estimates, beginning with model year 1988, turbo and non-turbo engines are weighted individually for fuel economy calculations. Previously reported model year 1988 fuel economy figures have been adjusted to reflect this change.

According to EPA's modified light truck classification scheme as reflected in the *Gas Mileage Guide*, some of the pickup trucks are classified both as "small" pickups, usually for two-wheel drive (2wd) models, as well as "large" pickups for four-wheel drive (4wd) models. Since neither sales nor production figures distinguish 2wd from 4wd models, import pickup trucks have been primarily classified as "small" pickups and domestic as "large" as described in [1]. However, since production figures report the percent of 4wd versions of the model built, sales of pickup trucks with 2wd models in the "small" pickup category and 4wd models in the "large" pickup category can be split between two distinct nameplates. For example, since 17.2% of the Chevrolet S-10 pickups produced in 1989 are 4wd and 82.8% are 2wd, 1989 model year sales of 241,866 units are divided as: 41,601 "large" pickups and 200,265 "small" pickups. With the recognition of the growing popularity of 4wd models, modifications

were made in the data as far back as model year 1984. The following trucks are affected:

<u>Nameplate</u>	<u>First Model Year Affected</u>
Toyota Pickup	84
Nissan Pickup	85
Nissan-American Pickup	85
Dodge Ram 50	87
Mitsubishi Pickup	87
Isuzu Pickup	88
Chevrolet S-10	89
GMC S-15	89

When more detailed information becomes available, it becomes apparent that fuel economies can be more accurately estimated by either separating one nameplate into several nameplates or combining several nameplates into one. *Subaru* (as a nameplate) is a good example of separating a nameplate into several, such as: *Subaru Hatchback*, *Subaru Justy*, *Subaru XJ*, and *Subaru Sedan*. Sales of these individual Subaru nameplates were previously not separately available. A case of combining nameplates is *Audi 200* combined with *Audi 200 Quattro* to form one nameplate, *Audi 200/200 Quattro*.

The reporting period for this issue is from model year 1976 to model year 1989. This report is organized into five sections. Following this section, Section 2 highlights the sales, market shares, and sales-weighted fuel economies of automobiles as well as individual automobile nameplates by EPA size class.

Section 3 discusses the sales, market shares, and sales-weighted fuel economies of light trucks, and individual light truck nameplates. Section 4 presents light-duty vehicle (both automobile and light truck) sales and the twenty most popular light-duty vehicles of model year 1989. Section 5 includes and highlights selected vehicle characteristics, such as interior volume, curb weight, and wheel base, of automobiles and light trucks separately.

Included in the appendices are the glossary, the data sources of the ORNL MPG and Market Shares PC Data System (for detailed description of the data structure, see [9]), a list of automobile nameplates by size classification, a list of light truck nameplates by size classification, a description of the methodology for estimating sales-weighted fuel economy, and a description of the methodology for estimating sales-weighted vehicle characteristics.

2. AUTOMOBILE FUEL ECONOMIES, SALES, AND MARKET SHARES

2.1 FUEL ECONOMIES OF *ALL* AUTOMOBILES

- o The sales-weighted fuel economy of all new automobiles decreased 0.5 mpg in model year 1989, changing from 28.5 mpg in model year 1988 to 28.0 in 1989. This is the first observed decline in automobile fuel economy since model year 1983 and the largest decline during the reporting period, 1976 through 1989 (Table 1).
- o Two factors contributed to the 0.5 mpg loss. First, virtually every automobile size class experienced a fuel economy reduction of at least 0.3 mpg. The only exception was the compact class, which did not change its fuel economy from the previous year. Furthermore, the subcompact, midsize and large classes increased their combined market share to 62% in model year 1989, from 57% in 1988. The combination of decreased fuel economy for these classes and increased market share contributed greatly to the overall decline in fuel economy.
- o The sales-weighted fuel economy of minicompacts dropped 12.9 mpg in model year 1989 (Table 1 and Figure 6). This notable decrease can be attributed to the fact that the interior space of the most fuel efficient light-duty vehicle, the Chevrolet Sprint, increased, causing its size classification to change from minicompact to subcompact.
- o Table 2 summarizes the fuel economies of automobiles classified by production location and sponsorship. Captive imports (autos built abroad by U.S. based companies) have had the highest fuel economy of the four categories since model year 1984. In model year 1989, fuel economy of all four categories declined (Figure 7).

2.2 SALES AND MARKET SHARES OF *ALL* AUTOMOBILES

- o Automobile sales dropped 1.9% from the previous model year, from 10,372,985 units to 10,173,827 units. This is the third consecutive year in which automobile sales decreased (Table 1).
- o The change in size class of the Chevrolet Sprint, from minicompact to subcompact, resulted in a record low sales volume in the minicompact class. Chevrolet Sprint had accounted for 65% of the minicompact sales in model year 1988.
- o Midsize and large were the only size classes to increase absolute sales in model year 1989 (Table 1). The size class changes of Chevrolet Corsica, Ford Thunderbird, Nissan Maxima, and Mercury Cougar XR-7 from compact to midsize contributed to the sales gain in midsizes, and consequently, the sales loss in compacts from model year 1988.
- o The market shares of automobiles built in the United States by transplant and joint venture firms (e.g., Honda Accord-American) have steadily increased since model year 1983, reaching a record high of 7.3% in model year 1989 (Table 3 and Figure 9). The trend of foreign-owned companies building an increasing number of automobiles within the United States rather than abroad is strengthened by a 1.5% market share shift from traditional imports to transplants and joint ventures in 1989.
- o As transplants become increasingly popular, a larger number of compacts and midsizes are built, instead of only subcompacts (Table 4). This shift toward larger automobiles partly explains the trend of decreasing fuel economies observed in the transplant category (Table 2 and Figure 7).
- o Figure 10 illustrates the automobile market shares of selected manufacturers for three model years. Shares for each manufacturer include vehicles built in the U.S. and abroad (e.g., "Chrysler" consists of U.S. built cars and captive imports).

Table 1
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic and Import Automobiles*, Model Years 1976-1989^a

	1976	1977	1978	1979	1980	1981	1982
MINICOMPACT							
Total sales, units		852,556	947,327	590,043	428,346	296,702	221,699
Market share, %		8.1	8.5	5.5	4.7	3.3	2.9
Fuel economy, mpg		27.3	27.3	27.5	29.4	33.5	36.5
SUBCOMPACT							
Total sales, units	2,625,929	2,015,641	2,106,954	3,312,825	3,441,480	2,927,574	2,404,489
Market share, %	27.1	19.1	19.0	30.7	37.8	33.0	31.4
Fuel economy, mpg	23.5	24.6	24.7	25.2	27.3	29.3	30.2
COMPACT							
Total sales, units	2,839,603	2,840,635	1,684,964	905,786	599,423	1,191,194	1,300,372
Market share, %	29.3	26.9	15.2	8.4	6.6	13.4	17.0
Fuel economy, mpg	17.1	17.8	20.2	19.9	22.3	27.8	30.1
MIDSIZE							
Total sales, units	1,815,505	2,033,250	3,664,381	3,651,304	3,073,103	3,113,806	2,533,121
Market share, %	18.7	19.2	33.0	33.8	33.8	35.1	33.1
Fuel economy, mpg	15.3	16.6	18.7	19.0	21.3	22.9	24.1
LARGE							
Total sales, units	2,206,102	2,603,017	2,472,877	2,097,084	1,336,190	1,107,627	995,561
Market share, %	22.8	24.6	22.3	19.4	14.7	12.5	13.0
Fuel economy, mpg	13.9	16.1	16.3	17.1	19.3	20.6	20.6
TWO SEATER							
Total sales, units	199,716	220,698	214,146	231,215	215,964	242,961	202,929
Market share, %	2.1	2.1	1.9	2.1	2.4	2.7	2.6
Fuel economy, mpg	20.1	21.0	19.6	19.4	21.0	24.1	25.1
FLEET							
Total sales, units	9,686,855	10,565,797	11,090,649	10,788,257	9,094,506	8,879,864	7,658,171
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	17.2	18.6	19.7	20.5	23.2	25.3	26.3



Table 1 (Continued)
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic and Import Automobiles*, Model Years 1976-1989^a



	1983	1984	1985	1986	1987	1988	1989
MINICOMPACT							
Total sales, units	230,547	41,368	52,295	191,490	146,872	84,186	20,677
Market share, %	2.6	0.4	0.5	1.7	1.4	0.8	0.2
Fuel economy, mpg	36.5	29.0	32.7	31.9	33.1	37.8	24.9
SUBCOMPACT							
Total sales, units	2,353,847	2,510,929	2,248,965	2,350,081	1,903,092	1,983,353	1,963,385
Market share, %	26.8	24.6	20.5	21.2	18.2	19.1	19.3
Fuel economy, mpg	30.7	30.5	30.0	30.7	30.7	31.7	31.3
COMPACT							
Total sales, units	1,927,460	2,768,056	3,659,492	3,829,093	4,205,922	4,199,638	3,690,419
Market share, %	22.0	27.1	33.4	34.5	40.3	40.5	36.3
Fuel economy, mpg	29.9	30.6	29.7	30.0	29.9	29.8	29.8
MIDSIZE							
Total sales, units	2,779,178	3,059,647	3,117,817	2,985,835	2,535,712	2,550,964	2,939,948
Market share, %	31.7	30.0	28.4	26.9	24.3	24.6	28.9
Fuel economy, mpg	24.3	24.1	24.9	25.6	26.3	26.9	26.4
LARGE							
Total sales, units	1,275,939	1,502,097	1,516,249	1,467,077	1,396,687	1,368,717	1,400,514
Market share, %	14.5	14.7	13.8	13.2	13.4	13.2	13.8
Fuel economy, mpg	19.5	20.2	22.3	23.8	23.9	24.2	23.9
TWO SEATER							
Total sales, units	203,442	328,968	373,697	275,470	245,852	186,127	158,884
Market share, %	2.3	3.2	3.4	2.5	2.4	1.8	1.6
Fuel economy, mpg	23.7	26.5	27.6	28.4	26.9	27.3	27.0
FLEET							
Total sales, units	8,770,413	10,211,065	10,968,515	11,099,046	10,434,137	10,372,985	10,173,827
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	26.1	26.3	27.0	27.9	28.1	28.5	28.0

^aThese figures represent only those sales that could be matched to corresponding EPA fuel economy values.

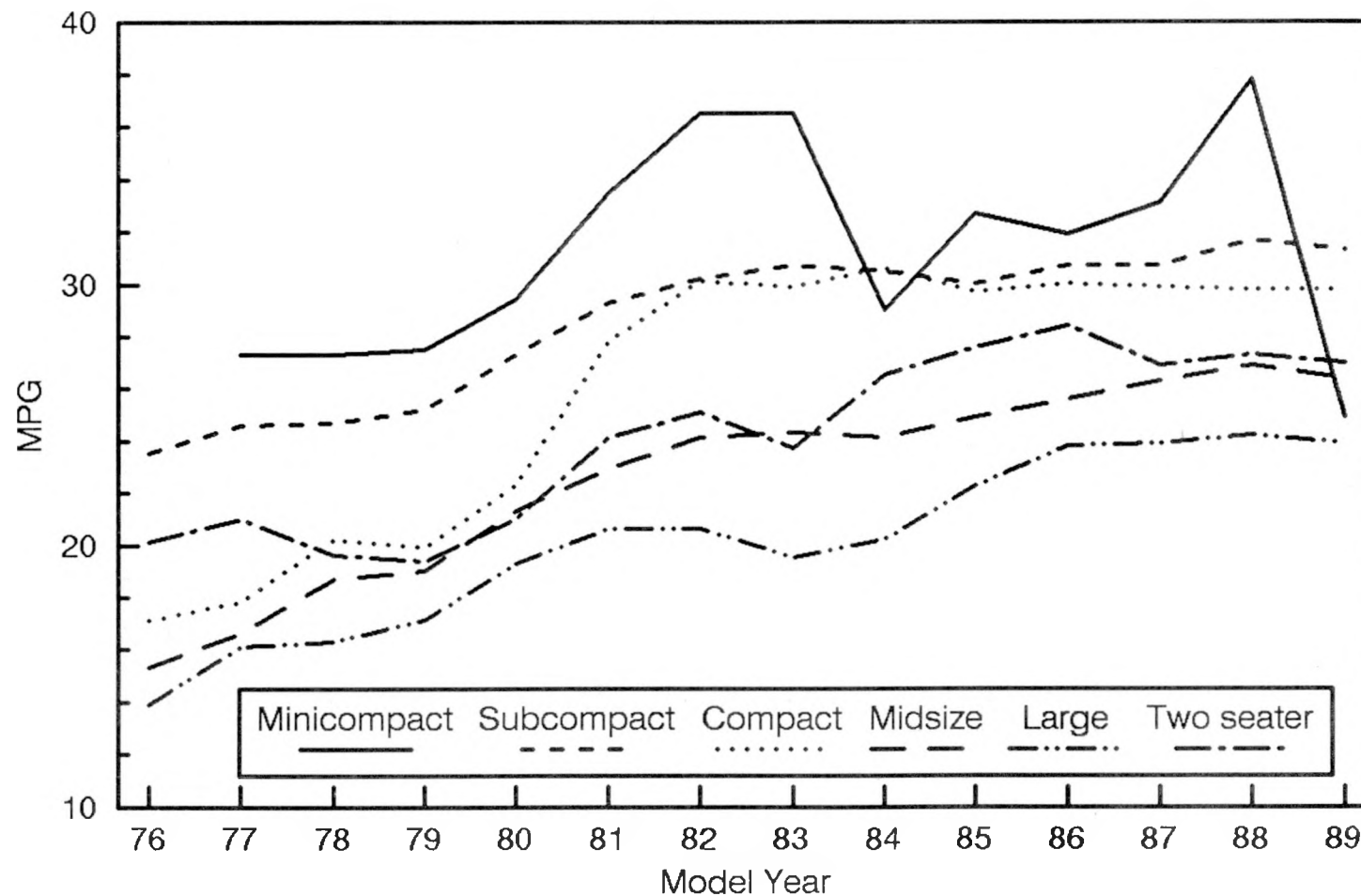


Fig. 6. Fuel Economies of Domestic and Import Automobiles by EPA Size Classification, Model Years 1976-1989.

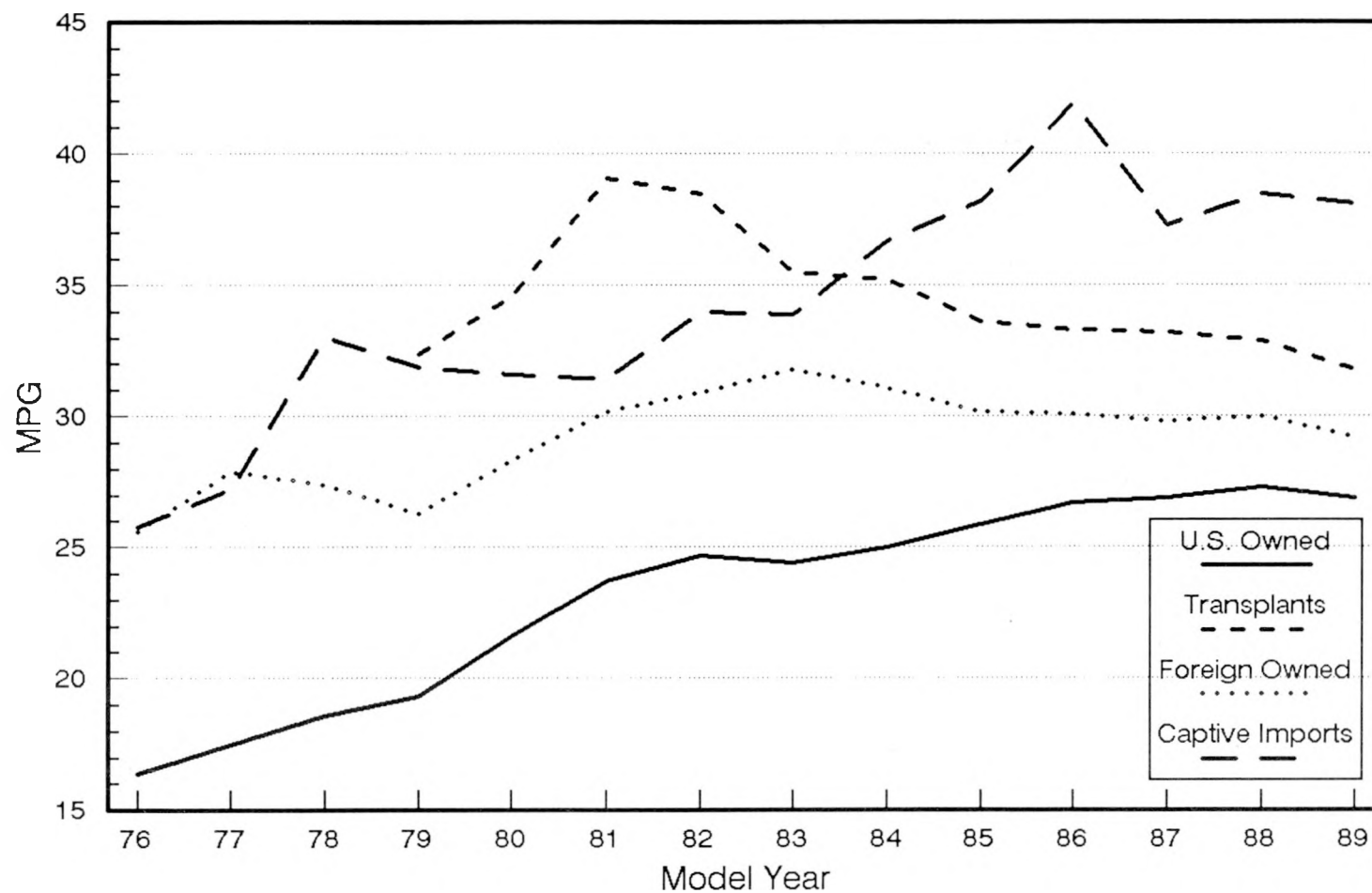




Table 2
Fuel Economies of *Automobiles*
 by Production Location and Sponsorship^a
 Model Years 1976-1989

Model year	Manufactured in U.S. (Domestic)		Manufactured abroad (Import)	
	U.S. owned	Transplants & joint ventures	Foreign owned	Captive imports
1976	16.4	--	25.6	25.8
1977	17.5	--	27.9	27.2
1978	18.6	--	27.4	33.0
1979	19.3	32.4	26.3	31.9
1980	21.6	34.6	28.3	31.6
1981	23.7	39.1	30.2	31.4
1982	24.7	38.5	30.9	34.0
1983	24.4	35.5	31.8	33.9
1984	25.0	35.2	31.1	36.7
1985	25.9	33.6	30.2	38.2
1986	26.7	33.3	30.1	41.9
1987	26.9	33.2	29.8	37.3
1988	27.3	32.9	30.0	38.5
1989	26.9	31.8	29.2	38.1

^aRefer to Appendix A for classification of each automobile nameplate.



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Fig. 7. Fuel Economies of *Automobiles* by Production Location and Sponsorship, Model Years 1976-1989.



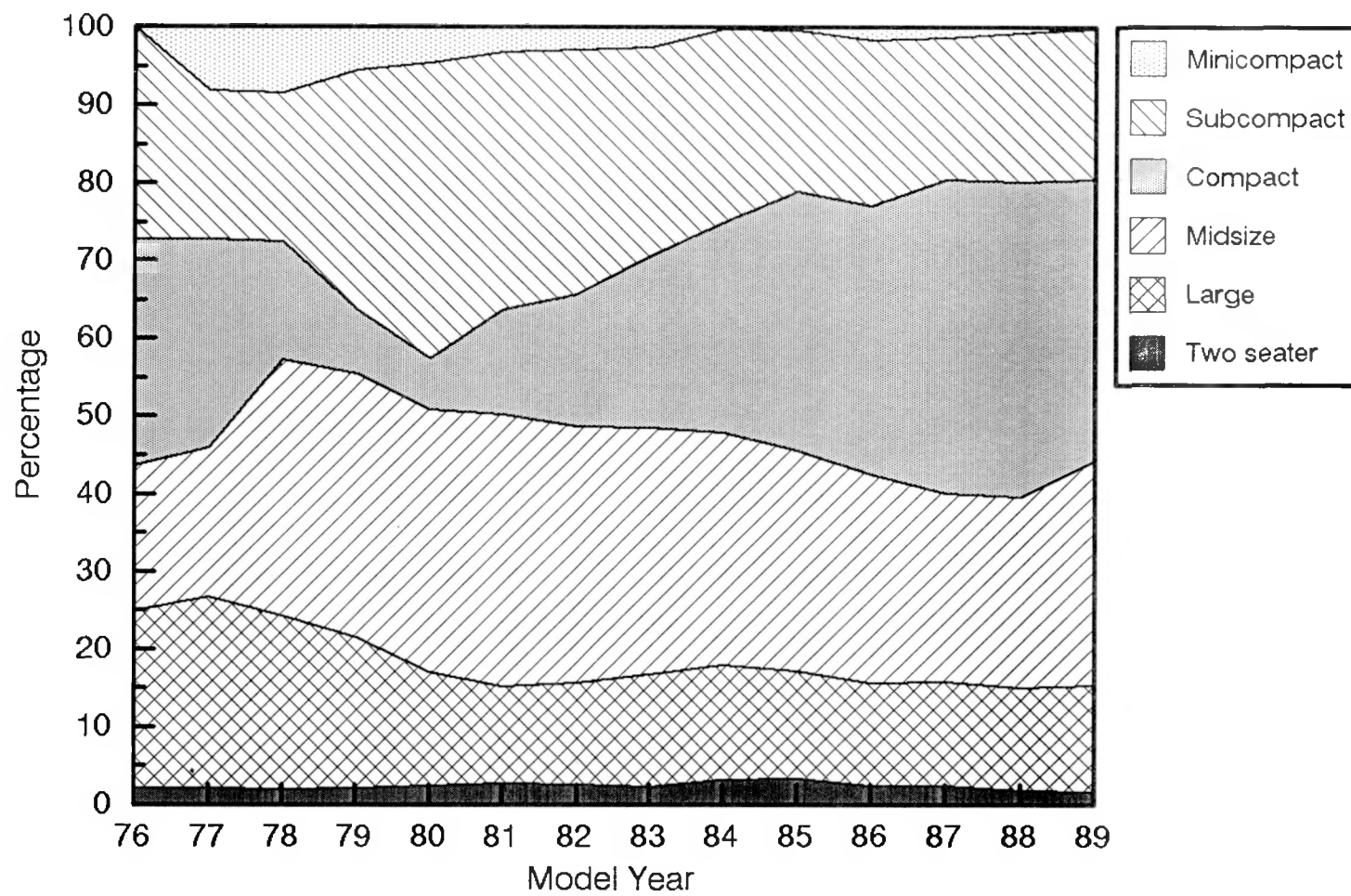


Fig. 8. *Market Shares of Domestic and Import Automobiles by EPA Size Classification, Model Years 1976-1989.*



Table 3
Market Shares of *Automobiles*
 by Production Location and Sponsorship^a
 Model Years 1976-1989

Model year	Manufactured in U.S. (Domestic)		Manufactured abroad (Import)	
	U.S. owned	Transplants & joint ventures	Foreign owned	Captive imports
1976	87.3	0.0	11.9	0.8
1977	83.6	0.0	15.0	1.4
1978	82.4	0.0	15.8	1.8
1979	78.7	1.3	17.8	2.2
1980	72.2	2.1	23.4	2.2
1981	72.4	1.8	24.1	1.7
1982	71.0	1.4	26.2	1.4
1983	72.5	1.3	25.1	1.1
1984	75.5	2.0	21.7	0.8
1985	74.2	2.2	22.3	1.3
1986	69.8	2.8	24.8	2.6
1987	65.2	5.2	26.8	2.8
1988	65.0	5.8	25.8	3.4
1989	65.3	7.3	24.0	3.4

^aRefer to Appendix A for classification of each automobile nameplate.

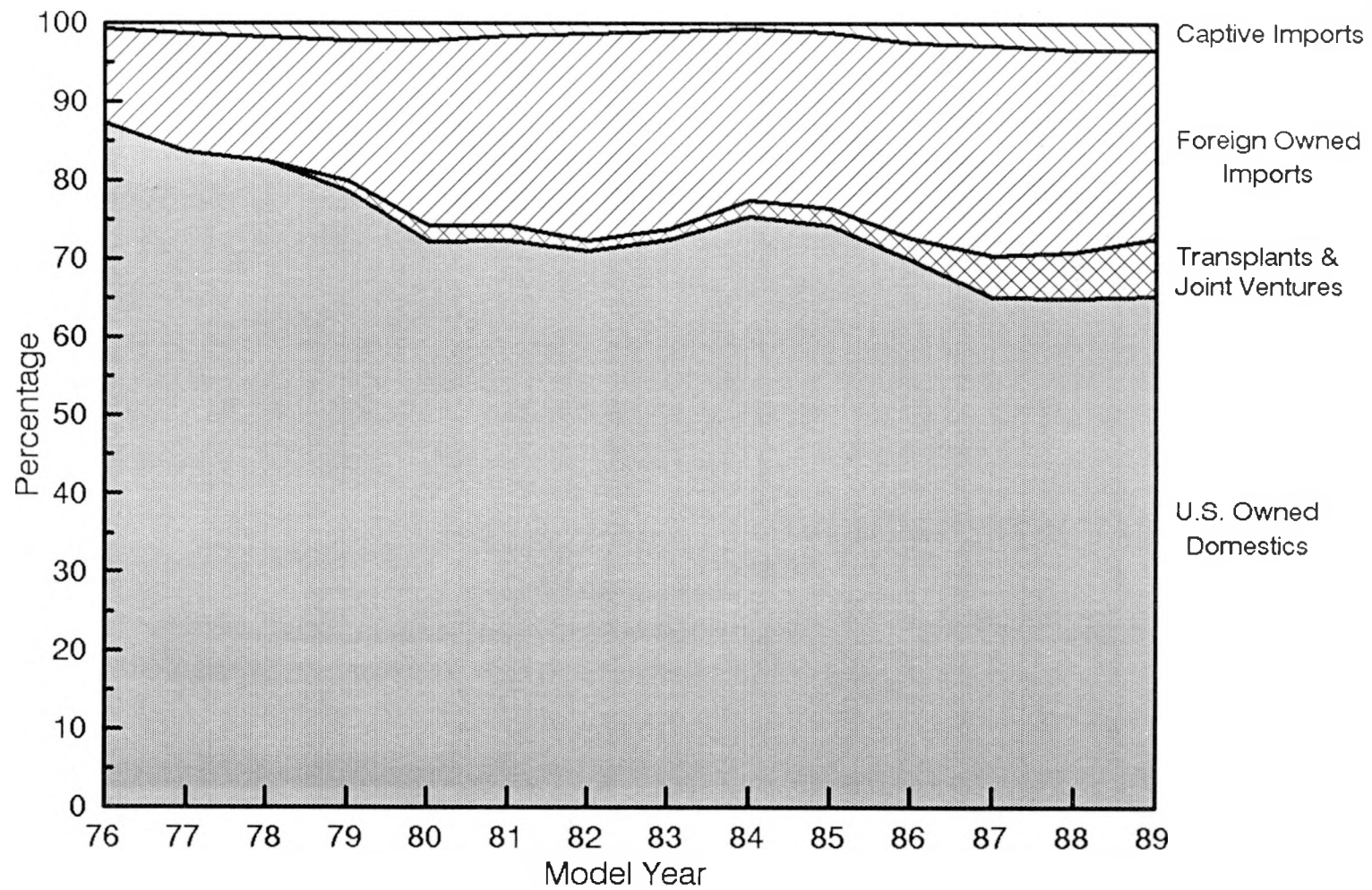


Fig. 9. Market Shares of *Automobiles* by Production Location and Sponsorship, Model Years 1976-1989.

Table 4
Market Shares of Automobiles by Size Class and Source

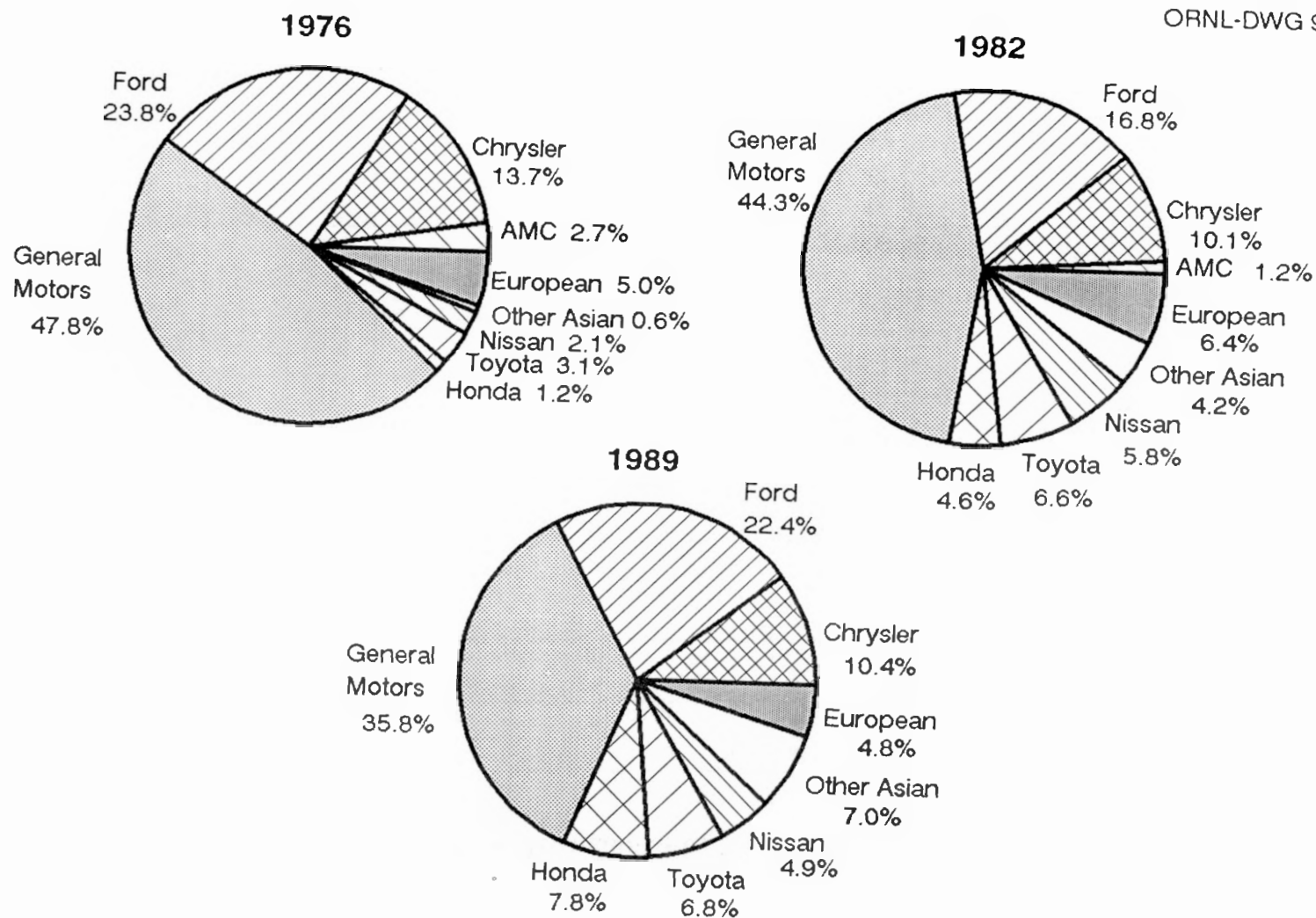
	Model Year 1976				Model Year 1982				Model Year 1989			
	Domestic		Import		Domestic		Import		Domestic		Import	
	U.S. owned	Trans- plants	Foreign owned	Captive imports	U.S. owned	Trans- plants	Foreign owned	Captive imports	U.S. owned	Trans- plants	Foreign owned	Captive imports
Minicompact							2.9				0.2	
Subcompact	17.2		9.1	0.8	10.2	1.4	18.3	1.4	4.5	2.6	9.7	2.5
Compact	28.2		1.1		13.7		3.3		21.4	4.3	9.8	0.8
Midsize	18.6		0.1		33.0				25.3	0.4	3.1	0.1
Large	22.8				13.0				13.7		0.1	
Two seater	0.4		1.6		1.0		1.6		0.4		1.2	
Fleet	87.2		11.9	0.8	70.9	1.4	26.1	1.4	65.3	7.3	24.1	3.4

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Fig. 10. Market Shares of Selected *Automobile* Manufacturers.

2.3 FUEL ECONOMIES OF *DOMESTIC* AUTOMOBILES

- o Domestic automobiles experienced a 0.4 mpg decrease in their sales-weighted fuel economy, changing from 27.7 mpg in model year 1988 to 27.3 mpg in model year 1989 (Table 5).
- o Two of the three most popular domestic car classes experienced decreased fuel economies from the previous model year (Table 5 and Figure 11). These reduced fuel economies combined with increased market shares, contributed to an overall decline in fuel economy of 0.4 mpg. Although compact, the other one of the three most popular domestic car size classes, had an improvement of 0.3 mpg compared to last year, it had a reduced market share.
- o The Ford Escort, which claimed 14% of the domestic compact market in model year 1989, showed an increase of 0.7 mpg while most of the other top selling domestic compacts experienced decreased fuel economies, resulting in a 0.3 mpg increase for compacts (Table 5 and Figure 11).
- o Two seaters experienced the greatest change in their sales-weighted fuel economy dropping 1.5 mpg in model year 1989 (Table 5 and Figure 11). Two of the four domestic two seaters showed a decrease in fuel economy, while the other two remained constant. The Cadillac Allante decreased 2 mpg due in part to the larger engine size of the 1989 model.

2.4 SALES AND MARKET SHARES OF *DOMESTIC* AUTOMOBILES

- o Domestic auto sales increased slightly in model year 1989 reaching 7,384,778 units (Table 5). The growing sales of transplants is responsible for this increase. Sales of automobiles built by the Big 3 U.S. automobile manufacturers within the United States decreased in model year 1989.

- o Compacts, which in 1988 held the largest share of the domestic automobile market, shared that position with midsize cars in 1989. Compacts lost 6% of the market while midsize gained 3.7%, resulting in each holding 35.4% of the domestic automobile market in model year 1989 (Table 5 and Figure 12).
- o The 6% share loss for compacts is mainly the result of the Chevrolet Corsica, Ford Thunderbird and Mercury Cougar XR-7 changing from compact to the midsize classification in 1989.
- o The tremendous increase in popularity of the Honda Civic-American (72% increase in sales) and the introduction of three new domestic subcompacts (Geo Prizm, Mitsubishi Eclipse, and Plymouth Laser) were responsible for the 2.3% market share gain of the domestic subcompact size class (Table 5 and Figure 12).

Table 5
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic Automobiles*, Model Years 1976-1989^a

	1976	1977	1978	1979	1980	1981	1982
MINICOMPACT							
Total sales, units		161,654	394,528	234,432	191,128	33,514	
Market share, %		1.8	4.3	2.7	2.8	0.5	
Fuel economy, mpg		21.7	23.2	24.1	26.9	26.9	
SUBCOMPACT							
Total sales, units	1,670,282	1,274,777	1,011,474	1,879,393	1,687,997	1,199,474	891,038
Market share, %	19.8	14.4	11.1	21.8	25.0	18.2	16.1
Fuel economy, mpg	21.7	22.3	21.2	23.4	25.1	27.1	27.7
COMPACT							
Total sales, units	2,729,379	2,728,547	1,562,138	742,627	447,214	1,042,988	1,047,620
Market share, %	32.3	30.9	17.1	8.6	6.6	15.8	18.9
Fuel economy, mpg	17.0	17.7	20.2	19.6	22.2	28.5	30.7
MIDSIZE							
Total sales, units	1,809,197	2,026,189	3,659,146	3,635,847	3,057,885	3,113,806	2,530,583
Market share, %	21.4	22.9	40.0	42.1	45.2	47.3	45.6
Fuel economy, mpg	15.4	16.6	18.7	19.0	21.3	22.9	24.1
LARGE							
Total sales, units	2,206,102	2,603,017	2,472,877	2,097,084	1,336,190	1,107,627	995,561
Market share, %	26.1	29.5	27.0	24.3	19.8	16.8	18.0
Fuel economy, mpg	13.9	16.1	16.3	17.1	19.3	20.6	20.6
TWO SEATER							
Total sales, units	41,027	40,764	43,106	39,816	37,471	88,969	79,724
Market share, %	0.5	0.5	0.5	0.5	0.6	1.4	1.4
Fuel economy, mpg	15.8	16.6	16.5	15.1	16.9	24.4	27.4
FLEET							
Total sales, units	8,455,987	8,834,948	9,143,269	8,629,199	6,757,885	6,586,378	5,544,526
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	16.4	17.5	18.6	19.4	21.8	23.9	24.9



Table 5 (Continued)
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic Automobiles*, Model Years 1976-1989^a

	1983	1984	1985	1986	1987	1988	1989
MINICOMPACT							
Total sales, units							
Market share, %							
Fuel economy, mpg							
SUBCOMPACT							
Total sales, units	835,891	1,066,496	1,033,918	958,978	625,189	559,744	727,659
Market share, %	12.9	13.5	12.3	11.9	8.5	7.6	9.9
Fuel economy, mpg	26.6	27.6	27.0	28.1	27.7	27.9	28.2
COMPACT							
Total sales, units	1,529,311	2,187,539	2,651,206	2,664,854	2,885,780	3,036,988	2,611,562
Market share, %	23.6	27.7	31.6	33.1	39.3	41.4	35.4
Fuel economy, mpg	30.3	30.5	29.8	30.1	30.0	30.0	30.3
MIDSIZE							
Total sales, units	2,772,300	2,999,888	3,023,986	2,867,062	2,377,311	2,324,670	2,615,703
Market share, %	42.8	37.9	36.1	35.6	32.4	31.7	35.4
Fuel economy, mpg	24.3	24.2	24.9	25.7	26.5	27.1	26.6
LARGE							
Total sales, units	1,275,939	1,502,097	1,516,249	1,459,034	1,385,494	1,357,109	1,390,425
Market share, %	19.7	19.0	18.1	18.1	18.9	18.5	18.8
Fuel economy, mpg	19.5	20.2	22.3	23.8	23.9	24.2	23.9
TWO SEATER							
Total sales, units	61,309	152,274	155,019	107,878	72,422	58,990	39,429
Market share, %	0.9	1.9	1.8	1.3	1.0	0.8	0.5
Fuel economy, mpg	25.6	28.5	29.3	26.2	25.3	25.1	23.6
FLEET							
Total sales, units	6,474,750	7,908,294	8,380,378	8,057,806	7,346,196	7,337,501	7,384,778
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	24.5	25.2	26.0	26.9	27.3	27.7	27.3

^aThese figures represent only those sales that could be matched to corresponding EPA fuel economy values.



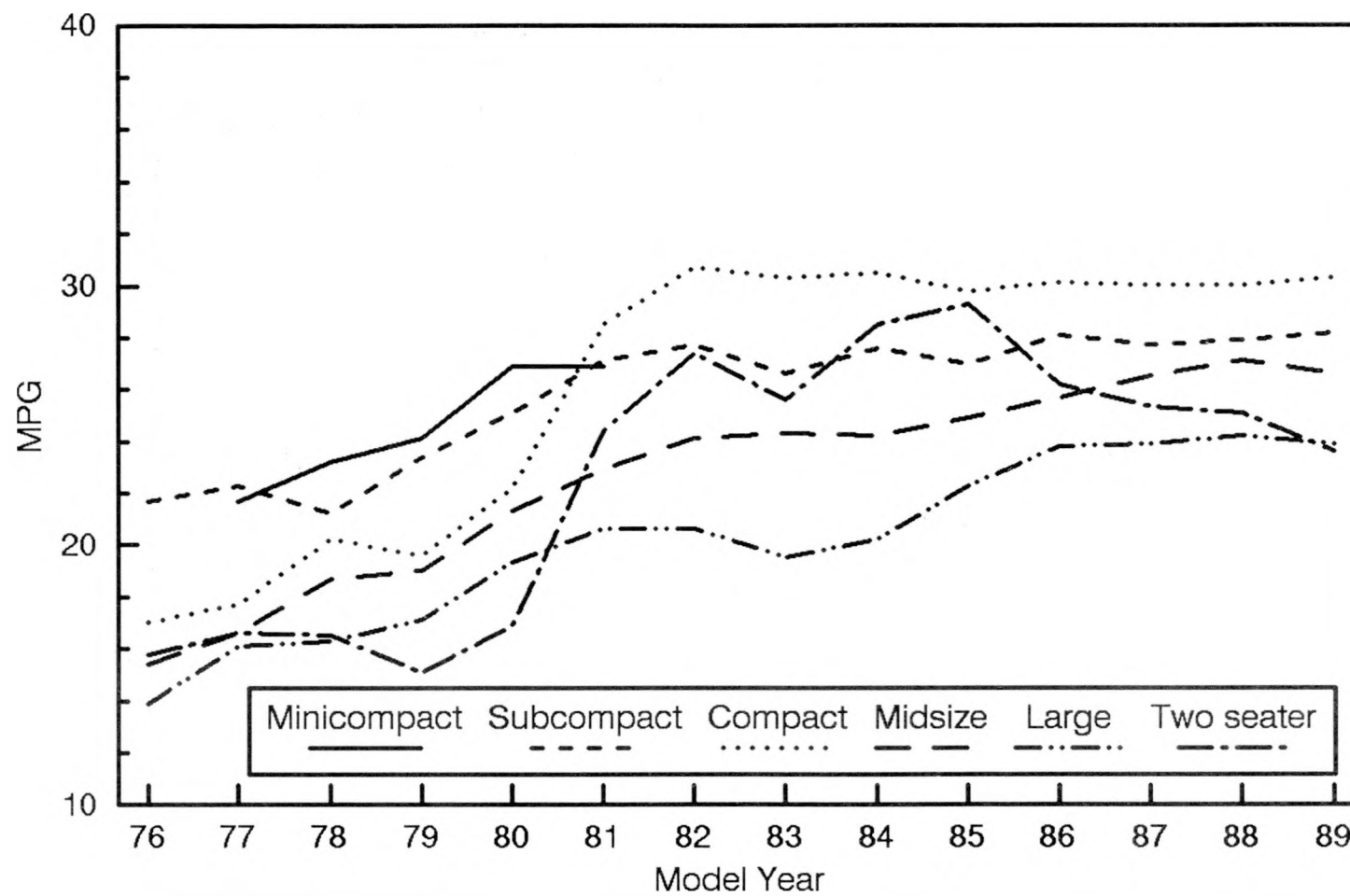


Fig. 11. *Fuel Economies of Domestic Automobiles by EPA Size Classification, Model Years 1976-1989.*



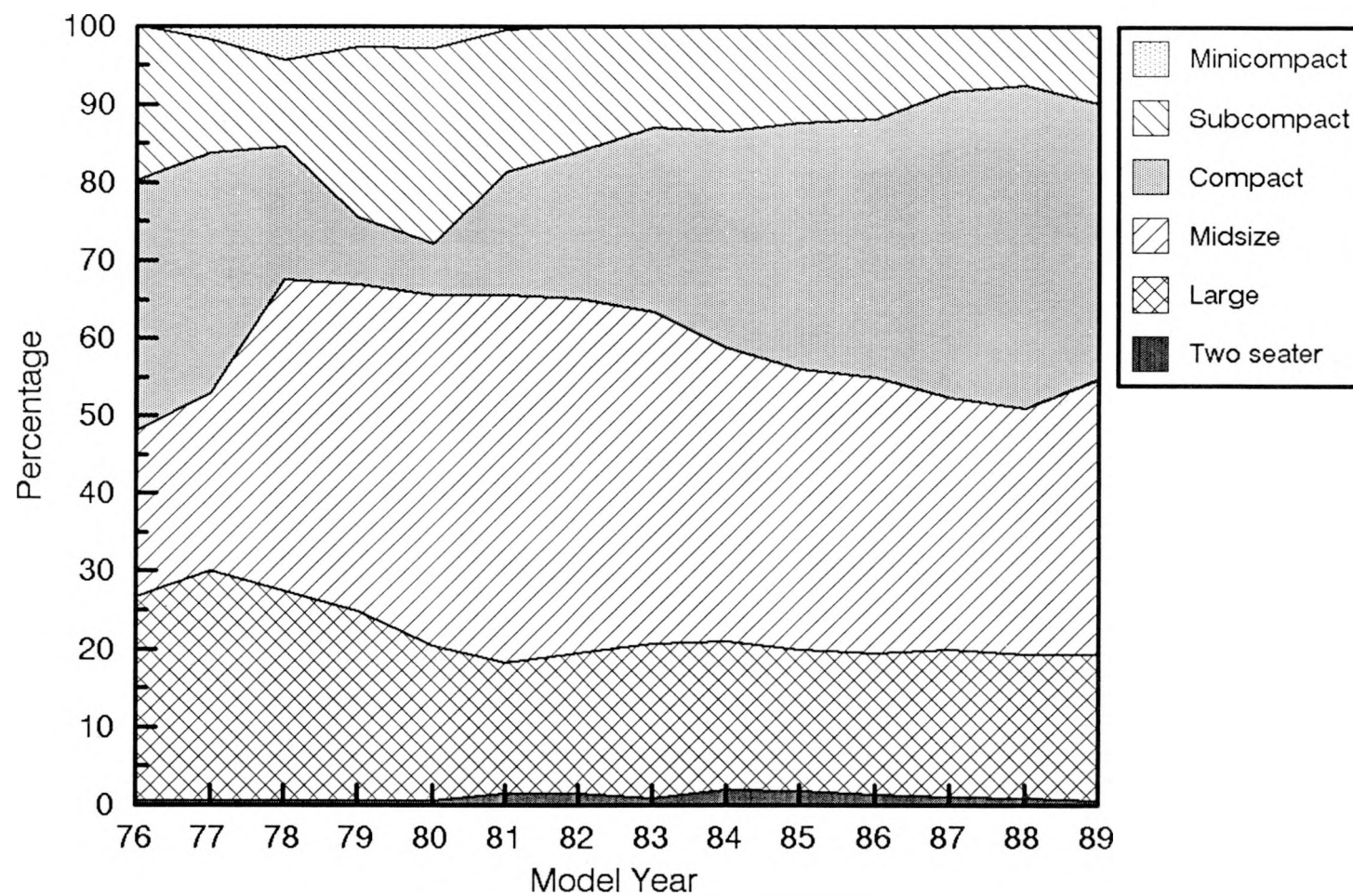


Fig. 12. *Market Shares of Domestic Automobiles by EPA Size Classification, Model Years 1976-1989.*



2.5 FUEL ECONOMY OF *IMPORT* AUTOMOBILES

- o The sales-weighted fuel economy of import automobiles decreased 0.7 mpg in model year 1989, changing from 30.8 mpg in model year 1988 to 30.1 mpg (Table 6). The two most popular import size classes, subcompact and compact, accounted for a combined share of 83% of the import car market, and both of the size classes showed decreased fuel economies from the previous model year (Table 6 and Figure 13).
- o The dramatic 12.9 mpg drop in the sales-weighted fuel economy experienced by the import minicompacts was a result of two factors. First, the most fuel efficient light-duty vehicle, the Chevrolet Sprint (50.1 mpg), changed size class from minicompact to subcompact. This automobile had previously dominated the minicompact class with its high fuel economy and more than half of the minicompact sales. Second, four of the six remaining minicompact nameplates experienced fuel economy reductions.
- o Since the Chevrolet Sprint claimed only 4.1% of the 1989 import subcompact market, its high fuel economy does not have much of an impact on the sales-weighted fuel economy of the subcompact class.
- o Five of the ten most popular import compacts decreased at least 1.1 mpg in model year 1989, contributing to the 0.4 mpg decrease for import compacts.

2.6 SALES AND MARKET SHARES OF *IMPORT* AUTOMOBILES

- o Sales of import automobiles decreased 8% from 3,035,484 units in model year 1988 to 2,789,049 units in model year 1989 (Table 6). This is the second consecutive year that import automobile sales have decreased.
- o The only size class to show a sales increase from the previous model year was midsize, which increased 43%.

- o Minicompact and subcompact were the only two size classes to lose shares of the import automobile market (Table 6 and Figure 14). Chevrolet Sprint changed size classes from minicompact to subcompact contributing, to the 2.1% market share loss for minicompacts.
- o The interior volume of the Nissan Maxima increased in model year 1989, causing its size classification to change from compact to midsize. This change in size class enabled the midsize class to gain 4.1% of the import market. The Maxima claimed 33% of the sales in that class.

Table 6
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Import Automobiles*, Model Years 1976-1989^a

	1976	1977	1978	1979	1980	1981	1982
MINICOMPACT							
Total sales, units		690,902	552,799	355,611	237,218	263,188	221,699
Market share, %		39.9	28.4	16.5	10.2	11.5	10.5
Fuel economy, mpg		29.1	31.3	30.3	31.8	34.6	36.5
SUBCOMPACT							
Total sales, units	955,647	740,864	1,095,480	1,433,432	1,753,483	1,728,100	1,513,451
Market share, %	77.6	42.8	56.3	66.4	75.0	75.3	71.6
Fuel economy, mpg	27.5	30.1	29.2	28.1	29.9	31.1	31.9
COMPACT							
Total sales, units	110,224	112,088	122,826	163,159	152,209	148,206	252,752
Market share, %	9.0	6.5	6.3	7.6	6.5	6.5	12.0
Fuel economy, mpg	20.0	20.9	20.5	21.7	22.5	23.9	27.5
MIDSIZE							
Total sales, units	6,308	7,061	5,235	15,457	15,218		2,538
Market share, %	0.5	0.4	0.3	0.7	0.7		0.1
Fuel economy, mpg	13.0	14.8	14.4	18.1	21.1		19.0
LARGE							
Total sales, units							
Market share, %							
Fuel economy, mpg							
TWO SEATER							
Total sales, units	158,689	179,934	171,040	191,399	178,493	153,992	123,205
Market share, %	12.9	10.4	8.8	8.9	7.6	6.7	5.8
Fuel economy, mpg	21.6	22.4	20.6	20.7	22.1	23.9	23.8
FLEET							
Total sales, units	1,230,868	1,730,849	1,947,380	2,159,058	2,336,621	2,293,486	2,113,645
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	25.6	27.8	27.9	26.8	28.6	30.3	31.0



Table 6 (Continued)
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Import Automobiles*, Model Years 1976-1989^a

	1983	1984	1985	1986	1987	1988	1989
MINICOMPACT							
Total sales, units	230,547	41,368	52,295	191,490	146,872	84,186	20,677
Market share, %	10.0	1.8	2.0	6.3	4.8	2.8	0.7
Fuel economy, mpg	36.5	29.0	32.7	31.9	33.1	37.8	24.9
SUBCOMPACT							
Total sales, units	1,517,956	1,444,433	1,215,047	1,391,103	1,277,903	1,423,609	1,235,726
Market share, %	66.1	62.7	46.9	45.7	41.4	46.9	44.3
Fuel economy, mpg	33.5	33.1	33.1	32.8	32.4	33.5	33.4
COMPACT							
Total sales, units	398,149	580,517	1,008,286	1,164,239	1,320,142	1,162,650	1,078,857
Market share, %	17.3	25.2	39.0	38.3	42.8	38.3	38.7
Fuel economy, mpg	28.6	31.1	29.5	29.8	29.6	29.3	28.9
MIDSIZE							
Total sales, units	6,878	59,759	93,831	118,773	158,401	226,294	324,245
Market share, %	0.3	2.6	3.6	3.9	5.1	7.5	11.6
Fuel economy, mpg	23.0	22.1	23.6	23.5	24.2	24.6	24.9
LARGE							
Total sales, units				8,043	11,193	11,608	10,089
Market share, %				0.3	0.4	0.4	0.4
Fuel economy, mpg				28.0	27.1	25.7	25.9
TWO SEATER							
Total sales, units	142,133	176,694	218,678	167,592	173,430	127,137	119,455
Market share, %	6.2	7.7	8.4	5.5	5.6	4.2	4.3
Fuel economy, mpg	22.9	25.1	26.5	30.0	27.6	28.4	28.4
FLEET							
Total sales, units	2,295,663	2,302,771	2,588,137	3,041,240	3,087,941	3,035,484	2,789,049
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	31.9	31.3	30.5	30.9	30.3	30.8	30.1

^aThese figures represent only those sales that could be matched to corresponding EPA fuel economy values.



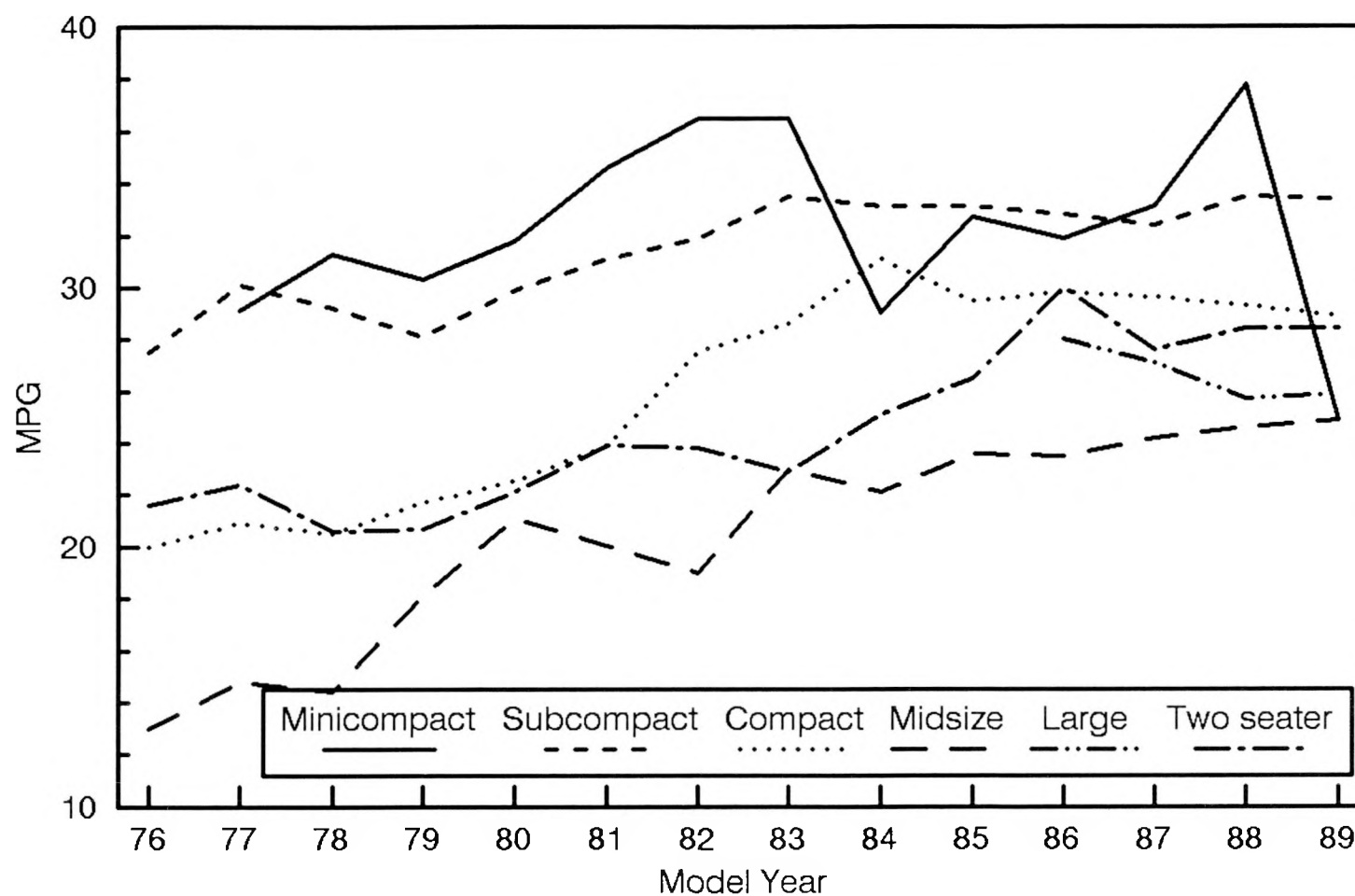


Fig. 13. *Fuel Economies of Import Automobiles by EPA Size Classification, Model Years 1976-1989.*



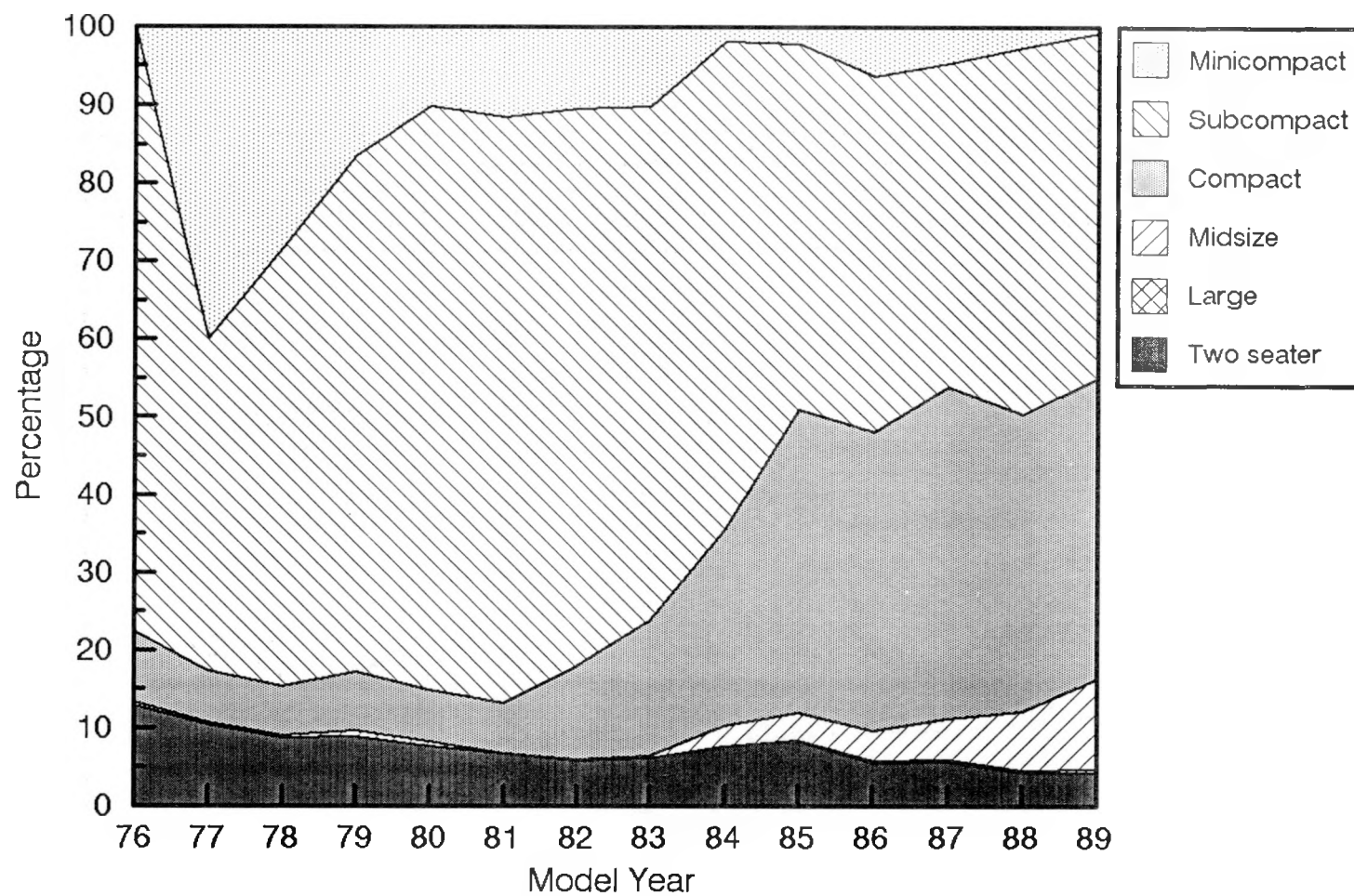


Fig. 14. *Market Shares of Import Automobiles by EPA Size Classification, Model Years 1976-1989.*

2.7 AUTOMOBILE SALES AND FUEL ECONOMIES BY MAKE AND MODEL, MODEL YEAR 1989

- o The sales of the 20 most popular automobiles for model year 1989 accounted for a record low 40.1% of the total car sales. Their sales-weighted fuel economy was 28.4 mpg (Tables 7 and 8).
- o Among the 20 most popular automobiles, 8 were compact, 5 midsize, 4 large, and 3 subcompact automobiles; 17 were domestic and 3 were import; 11 were GMC, 4 were Ford and 3 were Honda (Table 7).
- o Ford Escort and Ford Taurus have occupied the top two positions since model year 1987. Ford Escort has consistently been ranked first or second since model year 1982 (Table 7).
- o The sales of the 20 most fuel efficient automobiles accounted for 14.2% of total car sales. Only three of these automobiles ranked among the 20 most popular automobiles (Table 9).
- o Among the 20 most fuel efficient automobiles, 16 were subcompact, 3 compact, and 1 two seater. Only 3 were domestic; 17 were import. Among the imports, 5 were captive imports (Table 9).
- o Automobile nameplates and their sales, market shares, and sales-weighted fuel economies for model year 1989 by EPA size class are summarized in Tables 10 through 15. Appendix E includes all of the automobile nameplates ranked by sales for individual model years since 1976.



Table 7
Twenty Most Popular Cars^a
 Model Year 1989

	Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1) Ford Escort	366,354	0.036	34.1	Compact
2) Ford Taurus	360,237	0.035	26.9	Midsize
3) Chevrolet Cavalier	306,518	0.030	32.0	Compact
4) Ford Tempo	241,608	0.024	26.2	Compact
5) Honda Accord-American	218,108	0.021	30.1	Compact
6) Pontiac Grand AM	217,169	0.021	30.5	Compact
7) Oldsmobile Ciera	215,579	0.021	27.6	Midsize
8) Chevrolet Celebrity	194,830	0.019	27.9	Midsize
9) Chevrolet Corsica	193,854	0.019	28.4	Midsize
10) Cadillac DeVille/Fleetwood	177,907	0.017	23.0	Large
11) Hyundai Excel	175,208	0.017	35.0	Subcompact
12) Honda Civic-American	173,001	0.017	35.2	Subcompact
13) Ford Mustang	172,218	0.017	25.2	Subcompact
14) Chevrolet	171,435	0.017	23.0	Large
15) Chevrolet Beretta	158,820	0.016	27.7	Compact
16) Toyota Camry (Corona)	158,808	0.016	29.8	Compact
17) Buick LeSabre	148,407	0.015	25.0	Large
18) Oldsmobile 88	148,173	0.015	25.0	Large
19) Honda Accord	144,327	0.014	30.1	Compact
20) Buick Century	142,078	0.014	27.4	Midsize
	4,084,639	0.401	28.4	

^aNameplates in bold are also among the twenty most fuel efficient automobiles.

Table 8
Sales-Rankings, Fuel Economies and Market Shares
of *Top Twenty Automobile Nameplates*
1976-1989

Nameplate	Model year													
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Buick Century (midsize)	8 17.7 3.0%	10 17.9 2.7%				20 22.0 1.7%	11 26.4 2.0%	13 25.5 1.9%	9 25.8 2.0%	7 25.3 2.2%	7 27.6 2.2%	14 28.2 1.6%		20 27.4 1.4%
Buick LeSabre (large)	20 14.6 1.5%	20 18.2 1.7%	19 17.5 1.8%					20 20.6 1.6%	16 20.7 1.6%			16 25.0 1.5%	18 26.0 1.3%	17 25.0 1.5%
Buick Regal (midsize)			17 20.8 1.9%	9 20.9 2.5%	9 20.7 2.1%	9 22.6 2.4%	13 22.5 1.9%	7 23.0 2.3%	11 22.4 2.0%					
Buick Skylark (compact)					16 24.3 1.8%	10 26.0 2.3%	10 28.0 2.1%							
Cadillac DeVille/Fleetwood (large)	12 13.3 2.2%	14 14.9 2.3%	12 14.5 2.2%	13 15.1 2.1%	19 18.7 1.6%		15 18.5 1.9%	11 15.1 2.0%	12 20.1 1.9%		17 24.0 1.5%	17 22.5 1.4%	16 22.0 1.4%	10 23.0 1.7%
Chevrolet (large)	2 14.2 4.7%	1 17.5 5.9%	1 17.3 5.7%	2 18.0 4.7%	4 20.2 3.4%	8 21.4 2.4%	5 21.3 2.7%	3 21.3 2.6%	5 20.2 2.6%	6 23.2 2.3%	8 21.6 2.1%	10 21.8 1.8%	13 23.8 1.6%	14 23.0 1.7%
Chevrolet Beretta (compact)												12 28.5 1.7%	3 28.1 3.4%	15 27.7 1.6%
Chevrolet Camaro (subcompact)	18 17.0 1.7%	18 17.6 1.9%	11 17.0 2.2%	12 17.9 2.2%			14 22.2 1.9%	10 21.5 2.0%	10 22.6 2.0%	10 22.2 1.9%	14 24.0 1.6%			
Chevrolet Cavalier (compact)								5 30.4 2.5%	1 32.2 3.6%	1 28.4 3.9%	3 28.9 3.5%	4 31.4 2.8%	4 31.2 2.9%	3 32.0 3.0%



Table 8 (Continued)
Sales-Rankings, Fuel Economies and Market Shares
of *Top Twenty Automobile Nameplates*
1976-1989



Nameplate	Model year													
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Chevrolet Celebrity (midsize)								15 27.8 1.8%	4 26.0 3.0%	3 26.9 3.3%	2 27.3 3.6%	3 28.2 3.2%	8 28.8 2.5%	8 27.9 1.9%
Chevrolet Chevette (subcompact)			9 30.2 2.4%	4 29.5 3.3%	3 28.3 4.1%	2 30.6 4.2%	3 32.6 3.1%	8 33.2 2.1%	15 34.7 1.8%					
Chevrolet Citation (midsize)					2 25.0 4.1%	3 26.0 3.6%	4 28.5 2.7%							
Chevrolet Corsica (midsize)														9 28.4 1.9%
Chevrolet Malibu (midsize)	6 15.9 3.4%	9 17.4 2.8%	4 20.4 3.2%	3 19.7 3.4%	6 21.2 3.0%	6 22.2 2.7%	20 23.4 1.6%							
Chevrolet Monte Carlo (midsize)	5 15.6 3.7%	3 16.5 3.6%	5 20.4 3.2%	7 19.9 2.7%	12 20.3 1.9%	13 21.7 2.0%								
Chevrolet Nova (compact)	7 18.5 3.2%	6 18.8 3.1%	8 19.2 2.4%								15 36.1 1.5%	18 36.1 1.3%		
Chrysler Cordoba (midsize)	13 13.3 1.9%													
Dodge Aspen (compact)	16 18.2 1.8%	12 17.6 2.4%												

Table 8 (Continued)
Sales-Rankings, Fuel Economies and Market Shares
of *Top Twenty Automobile Nameplates*
1976-1989

Nameplate	Model year													
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Ford Escort (compact)						4 32.4 3.2%	1 33.8 4.2%	1 33.0 3.7%	2 34.2 3.3%	2 34.5 3.7%	1 34.2 3.7%	1 34.6 3.8%	1 33.4 3.7%	1 34.1 3.6%
Ford Fairmont (midsize)			3 21.7 3.8%	5 20.7 3.2%	5 23.2 3.2%	7 23.5 2.5%	18 23.2 1.7%							
Ford Granada (compact)	3 17.3 4.3%	5 18.2 3.4%	13 20.3 2.2%											
Ford LTD II (compact)	15 14.3 1.8%	17 16.0 1.9%												
Ford LTD 83 (midsize)								19 23.5 1.6%	13 24.0 1.9%	11 24.0 1.9%				
Ford LTD Crown Victoria (large)	4 14.0 4.0%	4 14.9 3.6%	6 15.9 3.0%	8 16.5 2.6%	15 19.2 1.8%				18 18.4 1.5%	13 19.5 1.6%				
Ford Mustang (subcompact)	14 21.8 1.8%			6 22.1 2.8%	8 23.5 2.7%	14 24.7 2.0%				16 24.0 1.5%	13 26.2 1.6%	15 28.1 1.6%	12 26.2 1.6%	13 25.2 1.7%
Ford Pinto (minicompact)	9 26.3 2.6%	16 26.3 2.0%	20 25.4 1.7%	17 24.1 1.8%	17 27.0 1.8%									
Ford Taurus (midsize)											18 23.0 1.5%	2 26.3 3.6%	2 26.5 3.5%	2 26.9 3.5%



Table 8 (Continued)
Sales-Rankings, Fuel Economies and Market Shares
of *Top Twenty Automobile Nameplates*
1976-1989



Nameplate	Model year													
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Ford Tempo (compact)									7 31.3 2.5%	5 31.3 2.7%	5 30.1 2.3%	7 27.7 2.2%	6 26.4 2.6%	4 26.2 2.4%
Ford Thunderbird (compact)		8 16.0 2.9%	7 15.6 2.9%	14 14.3 2.0%	14 20.6 1.8%				19 23.3 1.5%	14 23.1 1.5%			20 25.5 1.2%	
Honda Accord (subcompact)					13 27.5 1.9%	11 28.4 2.1%	6 32.0 2.4%	9 35.5 2.0%						19 30.1 1.4%
Honda Accord-American (compact)										18 32.6 1.4%	12 31.6 1.6%	8 31.9 2.2%	7 31.3 2.5%	5 30.1 2.1%
Honda Civic (minicompact)						18 36.1 1.8%	17 39.6 1.8%			20 37.0 1.3%	19 36.9 1.4%			
Honda Civic-American (subcompact)														12 35.2 1.7%
Hyundai Excel (subcompact)												6 34.5 2.5%	5 35.0 2.6%	11 35.0 1.7%
Lincoln Town Car (large)												19 24.0 1.3%	20 23.0 1.2%	
Mercury Grand Marquis (large)										19 21.0 1.3%				

Table 8 (Continued)
Sales-Rankings, Fuel Economies and Market Shares
of *Top Twenty Automobile Nameplates*
1976-1989

Nameplate	Model year													
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Nissan Sentra (compact)				15 30.6 1.9%	11 33.6 2.1%	16 35.2 1.8%	7 36.3 2.3%	6 37.6 2.4%	14 37.6 1.9%	12 36.6 1.7%	16 36.9 1.5%		17 33.6 1.4%	
Oldsmobile 88 (large)	19 15.0 1.6%	15 18.0 2.1%	10 17.1 2.4%	10 19.4 2.3%	18 20.7 1.7%	15 22.0 1.8%	9 21.0 2.2%	4 20.4 2.5%	6 20.7 2.5%	9 22.6 1.9%	6 25.5 2.2%	11 25.0 1.8%	15 26.0 1.5%	18 25.0 1.5%
Oldsmobile Ciera (midsize)								12 26.8 1.9%	8 26.7 2.5%	4 26.7 2.9%	4 27.7 3.0%	5 28.3 2.5%	9 28.2 2.3%	7 27.6 2.1%
Oldsmobile Supreme (midsize)	1 16.6 5.0%	2 18.2 5.3%	2 21.5 4.5%	1 20.6 5.0%	1 20.9 5.1%	1 22.4 5.5%	2 23.9 3.8%	2 23.3 3.6%	3 23.7 3.3%	8 24.5 2.1%	9 23.6 1.8%			
Plymouth Reliant (midsize)						12 27.4 2.0%	12 27.7 2.0%	14 28.6 1.8%						
Plymouth Volare (compact)	10 18.3 2.5%	7 17.6 3.0%	15 20.1 2.0%	18 19.6 1.7%										
Pontiac (large)		18 18.0 1.8%	18 17.3 1.9%	19 18.0 1.7%										
Pontiac A6000 (midsize)										17 26.9 1.4%	10 27.2 1.8%	20 28.1 1.3%		
Pontiac Firebird (subcompact)			20 17.6 1.6%											



Table 8 (Continued)
Sales-Rankings, Fuel Economies and Market Shares
of *Top Twenty Automobile Nameplates*
1976-1989



Nameplate	Model year													
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Pontiac Grand Am (compact)											11 29.0 1.7%	9 27.8 2.1%	10 31.2 2.1%	6 30.5 2.1%
Pontiac Grand Prix (midsize)	11 16.2 2.3%	11 17.6 2.4%	16 17.6 2.4%	16 20.0 2.0%	20.4 1.8%									
Subaru Hatchback (subcompact)						19 32.0 1.7%	16 33.6 1.9%	16 34.3 1.7%	20 33.4 1.5%					
Toyota Camry (compact)												13 32.6 1.7%	11 31.7 2.1%	16 29.8 1.6%
Toyota Celica (subcompact)					20 24.6 1.6%									
Toyota Corolla (subcompact)	17 27.4 1.8%	13 33.1 2.4%	14 33.2 2.1%	11 29.1 2.3%	7 30.4 2.8%	5 31.1 2.9%	8 31.0 2.3%	18 35.7 1.6%	17 37.6 1.6%	15 37.0 1.5%	20 37.0 1.4%		14 33.9 1.5%	
Toyota Tercel (subcompact)							19 35.4 1.7%	17 38.7 1.7%						
Volkswagen Rabbit-American (subcompact)					10 34.6 2.1%	17 39.1 1.8%								
Fuel economy	16.4	17.8	19.3	20.0	23.5	26.1	27.1	26.1	25.7	26.7	28.2	28.4	28.7	28.4
Market share	54.8%	57.2%	53.2%	51.4%	50.9%	50.5%	46.1%	43.4%	44.7%	42.0%	41.3%	42.0%	43.0%	40.1%



Table 9
Twenty Most Fuel Efficient Automobiles^a
 Model Year 1989

		Sales weighted MPG	Model year sales	Ratio of total car sales	Sales ranking	EPA size class
1)	Chevrolet Sprint	48.5	50,693	0.005	73	Subcompact
2)	Ford Festiva	46.6	71,683	0.007	53	Subcompact
3)	Daihatsu	46.0	13,763	0.001	117	Subcompact
4)	Honda Civic CRX	43.4	44,548	0.004	78	Two Seater
5)	Suzuki Swift	42.0	5,152	0.001	146	Subcompact
6)	Geo Spectrum	40.3	62,831	0.006	59	Subcompact
7)	Subaru Justy	38.8	25,168	0.002	95	Subcompact
8)	Toyota Tercel	38.2	107,755	0.011	32	Subcompact
9)	Isuzu I-Mark	37.3	14,783	0.001	114	Subcompact
10)	Plymouth Colt	37.1	29,121	0.003	89	Subcompact
11)	Dodge Colt Hatchback	37.1	31,859	0.003	88	Subcompact
12)	Honda Civic	36.6	21,418	0.002	101	Subcompact
13)	Mercedes Benz 190 D 2.2	36.0	7,563	0.001	130	Subcompact
14)	Honda Civic-American	35.2	173,001	0.017	12	Subcompact
15)	Mitsubishi Precis	35.0	19,108	0.002	107	Subcompact
16)	Hyundai Excel	35.0	175,208	0.017	11	Subcompact
17)	Nissan Sentra-American	34.6	102,080	0.010	36	Compact
18)	Yugo GV/GVX	34.6	13,864	0.001	116	Subcompact
19)	Nissan Sentra (210)	34.5	122,808	0.012	23	Compact
20)	Ford Escort	34.1	366,354	0.036	1	Compact
		36.5	1,458,760	0.142		

^aNameplates in bold are also among the twenty most popular cars.



Table 10
Minicompact Cars
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total car sales
1)	Volkswagen Cabriolet	10,065	28.8	0.487	0.001
2)	Porsche 924S	375	26.9	0.018	0.000
3)	Alfa Romeo GTV-6	1	24.0	0.000	0.000
4)	Porsche 944	3,549	23.7	0.172	0.000
5)	Porsche 911	5,696	21.5	0.275	0.001
6)	Porsche 928	991	19.5	0.048	0.000
		20,677	24.9	1.000	0.002



Table 11
Subcompact Cars
 Model Year 1989
 Ranked by Sales-Weighted MPG

	Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total car sales
1)	Chevrolet Sprint	50,693	48.5	0.005
2)	Ford Festiva	71,683	46.6	0.007
3)	Daihatsu	13,763	46.0	0.001
4)	Suzuki Swift	5,152	42.0	0.001
5)	Geo Spectrum	62,831	40.3	0.006
6)	Subaru Justy	25,168	38.8	0.002
7)	Toyota Tercel	107,755	38.2	0.011
8)	Isuzu I-Mark	14,783	37.3	0.001
9)	Plymouth Colt	29,121	37.1	0.003
10)	Dodge Colt Hatchback	31,859	37.1	0.003
11)	Honda Civic	21,418	36.6	0.002
12)	Mercedes Benz 190 D 2.2	7,563	36.0	0.001
13)	Honda Civic-American	173,001	35.2	0.017
14)	Mitsubishi Precis	19,108	35.0	0.002
15)	Hyundai Excel	175,208	35.0	0.017
16)	Yugo GV/GVX	13,864	34.6	0.001
17)	Mitsubishi Mirage	18,979	34.1	0.002
18)	Toyota FX16-American	72,670	32.6	0.007
19)	Toyota Corolla	137,111	32.6	0.013
20)	Acura Integra	72,702	32.0	0.007
21)	Volkswagen Fox	42,490	32.0	0.004
22)	Geo Prizm	35,285	31.1	0.003
23)	Toyota Celica	57,794	30.9	0.006
24)	Subaru Hatchback	3,240	30.4	0.000
25)	Nissan Pulsar NX	26,271	30.3	0.003
26)	Audi 4000	33	30.2	0.000
27)	Mitsubishi Cordia	1,164	29.2	0.000
28)	Plymouth Laser	14,576	29.2	0.001
29)	Volkswagen Scirocco	1,681	29.0	0.000
30)	Dodge Daytona	68,032	28.8	0.007
31)	Audi 80/80 Quattro	4,514	28.4	0.000
32)	Mitsubishi Eclipse	21,576	28.4	0.002
33)	Mitsubishi Tredia	4	28.3	0.000
34)	Honda Prelude	52,335	27.9	0.005
35)	Subaru XT	12,413	27.0	0.001
36)	Volkswagen Corrado	507	27.0	0.000
37)	Nissan 200SX	68,993	26.5	0.007
38)	Audi 90/90 Quattro	4,963	26.3	0.000
39)	Isuzu Impulse	4,440	26.2	0.000
40)	Ford Mustang	172,218	25.2	0.017
41)	Mercedes Benz 190 E 2.3	7,563	25.0	0.001
42)	Audi Coupe	35	24.5	0.000
43)	Pontiac Firebird	60,267	24.2	0.006
44)	Chevrolet Camaro	110,034	24.1	0.011
45)	BMW M3	1,293	24.0	0.000
46)	Alfa Romeo Milano	1,443	24.0	0.000
47)	Chrysler Conquest	6,223	23.4	0.001
48)	Mitsubishi Starion	1,011	23.3	0.000
49)	BMW 325	34,933	23.2	0.003
50)	Toyota Supra	16,715	23.0	0.002
51)	Audi 4000S Quattro	15	23.0	0.000
52)	Audi Coupe Quattro	251	23.0	0.000
53)	BMW 635 CSi	1,749	19.2	0.000
54)	Jaguar XJ-S	4,395	17.0	0.000
55)	BMW M6	497	15.0	0.000
		1,963,385	31.3	0.193



Table 12
Compact Cars
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total car sales
1)	Nissan Sentra-American	102,080	34.6	0.028	0.010
2)	Nissan Sentra (210)	122,808	34.5	0.033	0.012
3)	Ford Escort	366,354	34.1	0.099	0.036
4)	Mercury Lynx	62,693	33.7	0.017	0.006
5)	Pontiac LeMans Import	59,236	33.4	0.016	0.006
6)	Buick Skyhawk	20,658	33.1	0.006	0.002
7)	Oldsmobile Firenza	1,219	32.6	0.000	0.000
8)	Mazda GLC/323	75,079	32.4	0.020	0.007
9)	Chevrolet Nova	37,811	32.2	0.010	0.004
10)	Mercedes Benz 300 D/300 CD	5,861	32.0	0.002	0.001
11)	Chevrolet Cavalier	306,518	32.0	0.083	0.030
12)	Eagle Summit	19,344	32.0	0.005	0.002
13)	Dodge Omni	45,933	31.8	0.012	0.005
14)	Plymouth Horizon	45,341	31.7	0.012	0.004
15)	Volkswagen Jetta	51,000	30.6	0.014	0.005
16)	Pontiac Grand AM	217,169	30.5	0.059	0.021
17)	Pontiac J2000/Sunbird	97,447	30.4	0.026	0.010
18)	Subaru Sedan	79,562	30.4	0.022	0.008
19)	Volkswagen Golf	13,119	30.3	0.004	0.001
20)	Volkswagen Golf - American	9,653	30.3	0.003	0.001
21)	Volkswagen Jetta - American	886	30.1	0.000	0.000
22)	Oldsmobile Calais	100,580	30.1	0.027	0.010
23)	Honda Accord	144,327	30.1	0.039	0.014
24)	Honda Accord-American	218,108	30.1	0.059	0.021
25)	Toyota Camry - American	105,790	29.8	0.029	0.010
26)	Toyota Camry (Corona)	158,808	29.8	0.043	0.016
27)	Ford Probe	139,225	29.3	0.038	0.014
28)	Plymouth Sundance	90,637	29.3	0.025	0.009
29)	Dodge Shadow	85,758	29.2	0.023	0.008
30)	Buick Somerset	60,935	29.1	0.017	0.006
31)	Mitsubishi Galant	27,686	29.0	0.008	0.003
32)	Subaru Loyale	10,128	28.7	0.003	0.001
33)	Chevrolet Beretta	158,820	27.7	0.043	0.016
34)	Subaru Legacy	20,188	27.7	0.005	0.002
35)	Nissan Stanza (510)	43,829	27.3	0.012	0.004
36)	Chrysler LeBaron	2,000	27.1	0.001	0.000
37)	Cadillac Cimarron	991	27.0	0.000	0.000
38)	Saab 900	24,362	26.4	0.007	0.002
39)	Ford Tempo	241,608	26.2	0.065	0.024



Table 12 (Continued)
Compact Cars
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total car sales
40)	Peugeot 405	4,039	26.1	0.001	0.000
41)	Mercedes Benz 300 SDL/300 SD	31	26.0	0.000	0.000
42)	Mercury Topaz	93,348	25.7	0.025	0.009
43)	Volvo DL	37,516	25.2	0.010	0.004
44)	Volvo GL	5,186	25.2	0.001	0.001
45)	BMW 528 I	2,987	25.0	0.001	0.000
46)	Lexus ES250	1,115	25.0	0.000	0.000
47)	Mercedes Benz 260E	4,843	24.9	0.001	0.000
48)	Toyota Cressida	25,321	24.0	0.007	0.002
49)	Peugeot 505 (Gas)	2,247	23.8	0.001	0.000
50)	Volkswagen Quantum	1,531	23.8	0.000	0.000
51)	Austin Rover Sterling 825SL	5,951	23.6	0.002	0.001
52)	Acura Legend	68,011	23.2	0.018	0.007
53)	Mitsubishi Galant Sigma	2,643	23.0	0.001	0.000
54)	Jaguar XJ6	15,301	23.0	0.004	0.002
55)	BMW 525 I	7,331	23.0	0.002	0.001
56)	Mercedes Benz 300 E	16,607	23.0	0.005	0.002
57)	Merkur XR4Ti	5,384	23.0	0.001	0.001
58)	Volvo 780	1,823	21.0	0.000	0.000
59)	Mercedes Benz 300 SE	5,071	21.0	0.001	0.000
60)	BMW 535 I	8,710	20.4	0.002	0.001
61)	BMW M5	366	20.0	0.000	0.000
62)	Mercedes Benz 560 SEC	1,506	17.0	0.000	0.000
		3,690,419	29.8	1.000	0.363



Table 13
Midsized Cars
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total car sales
1)	Dodge Aries	53,309	30.0	0.018	0.005
2)	Plymouth Reliant	51,481	30.0	0.018	0.005
3)	Mazda 626	57,495	29.6	0.020	0.006
4)	Mazda MX6	2,655	29.5	0.001	0.000
5)	Dodge 600	1,752	29.0	0.001	0.000
6)	Mazda MX-6 American	40,867	29.0	0.014	0.004
7)	Plymouth Caravelle	1,556	29.0	0.001	0.000
8)	Chevrolet Corsica	193,854	28.4	0.066	0.019
9)	Plymouth Acclaim	69,243	28.4	0.024	0.007
10)	Dodge Lancer	4,172	28.2	0.001	0.000
11)	Chevrolet Celebrity	194,830	27.9	0.066	0.019
12)	Oldsmobile Ciera	215,579	27.6	0.073	0.021
13)	Dodge Spirit	57,664	27.4	0.020	0.006
14)	Eagle Medallion	7,288	27.4	0.002	0.001
15)	Buick Century	142,078	27.4	0.048	0.014
16)	Chrysler LeBaron GTS	94,395	27.0	0.032	0.009
17)	Buick Regal	91,312	27.0	0.031	0.009
18)	Oldsmobile Supreme	107,747	27.0	0.037	0.011
19)	Mercury Sable	114,884	27.0	0.039	0.011
20)	Pontiac Grand Prix	118,870	26.9	0.040	0.012
21)	Ford Taurus	360,237	26.9	0.123	0.035
22)	Pontiac A6000	77,556	26.8	0.026	0.008
23)	Chevrolet Lumina	59,533	26.3	0.020	0.006
24)	Chrysler New Yorker-E Class	406	26.0	0.000	0.000
25)	Hyundai Sonata	26,150	25.6	0.009	0.003
26)	Nissan Maxima (810)	105,982	25.2	0.036	0.010
27)	Volvo 740 GLE	46,473	25.1	0.016	0.005
28)	Buick Riviera	20,020	25.0	0.007	0.002
29)	Oldsmobile Toronado	9,343	25.0	0.003	0.001
30)	Dodge Dynasty	112,407	24.0	0.038	0.011
31)	Chrysler New Yorker C-Car	92,578	24.0	0.031	0.009
32)	Mazda 929	20,794	24.0	0.007	0.002
33)	Audi 100/100 Quattro	6,816	24.0	0.002	0.001
34)	Mercury Cougar XR-7	97,246	23.8	0.033	0.010
35)	Ford Thunderbird	118,107	23.8	0.040	0.012
36)	Audi 5000S	643	23.5	0.000	0.000
37)	Chevrolet Monte Carlo	3,360	23.5	0.001	0.000
38)	Audi 200/200 Turbo Quattro	2,673	23.3	0.001	0.000
39)	Volvo 760 GLE	11,051	23.2	0.004	0.001
40)	Lincoln Mercury Mark VII	27,030	23.0	0.009	0.003
41)	Cadillac Seville	23,583	23.0	0.008	0.002
42)	Cadillac Eldorado	32,410	23.0	0.011	0.003
43)	Lexus LS400	3,439	23.0	0.001	0.000
44)	Merkur Scorpio	4,425	23.0	0.002	0.000
45)	Chrysler 5th Ave	17,779	21.0	0.006	0.002
46)	Plymouth Gran Fury	4,123	21.0	0.001	0.000
47)	Dodge Diplomat	6,392	21.0	0.002	0.001
48)	Mercedes Benz 300 SEL	4,278	21.0	0.001	0.000
49)	BMW 735 i	5,715	20.0	0.002	0.001
50)	Audi V8 Sedan	482	19.0	0.000	0.000
51)	Mercedes Benz 420 SEL	7,247	19.0	0.002	0.001
52)	Mercedes Benz 560 SEL	4,924	17.0	0.002	0.000
53)	BMW 750 iL	5,715	16.5	0.002	0.001
		2,939,948	26.4	1.000	0.289



Table 14
Large Cars
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total car sales
1)	Saab 9000	10,089	25.9	0.007	0.001
2)	Eagle Premier	46,476	25.0	0.033	0.005
3)	Buick Electra	81,959	25.0	0.059	0.008
4)	Buick LeSabre	148,407	25.0	0.106	0.015
5)	Oldsmobile 88	148,173	25.0	0.106	0.015
6)	Oldsmobile 98	70,486	25.0	0.050	0.007
7)	Pontiac Bonneville	94,761	25.0	0.068	0.009
8)	Lincoln Continental	59,054	24.0	0.042	0.006
9)	Pontiac	4,875	23.5	0.003	0.000
10)	Chevrolet	171,435	23.0	0.122	0.017
11)	Ford LTD Crown Victoria	114,257	23.0	0.082	0.011
12)	Lincoln Town Car	117,806	23.0	0.084	0.012
13)	Mercury Grand Marquis	117,186	23.0	0.084	0.012
14)	Cadillac Fleetwood Brougham	37,643	23.0	0.027	0.004
15)	Cadillac DeVille/Fleetwood	177,907	23.0	0.127	0.017
		1,400,514	23.9	1.000	0.138



Table 15
Two Seater Cars
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total car sales
1)	Honda Civic CRX	44,548	43.4	0.280	0.004
2)	Toyota MR-2	5,819	31.6	0.037	0.001
3)	Mazda Miata	13,525	31.0	0.085	0.001
4)	Alfa Romeo Spider	1,865	28.0	0.012	0.000
5)	Pontiac Fiero	4,477	28.0	0.028	0.000
6)	Buick Reatta	7,911	25.0	0.050	0.001
7)	Nissan 300ZX	23,918	23.7	0.151	0.002
8)	Chevrolet Corvette	23,975	23.0	0.151	0.002
9)	Chrysler TC by Maserati	1,339	23.0	0.008	0.000
10)	Mazda RX-7	18,690	22.1	0.118	0.002
11)	Cadillac Allante	3,066	20.0	0.019	0.000
12)	Mercedes Benz 560 SL	8,902	17.0	0.056	0.001
13)	Ferrari	849	15.4	0.005	0.000
		158,884	27.0	1.000	0.016

3. LIGHT TRUCK FUEL ECONOMIES, SALES, AND MARKET SHARES

3.1 FUEL ECONOMIES OF *ALL* LIGHT TRUCKS

- o Every light truck size class showed either a sales-weighted fuel economy reduction or no change in model year 1989, resulting in an overall decrease of 0.5 mpg, changing from 20.7 mpg in model year 1988 to 20.2 mpg in model year 1989 (Table 16).
- o There were two main reasons for the 0.5 mpg drop. The fuel economy of the most popular size class, the large pickup, decreased 0.3 mpg from the previous model year. This decrease was compounded by a 2.6% gain in market share for large pickups. Furthermore, there was a 0.7 mpg drop and 0.9% market share gain by small utility vehicles (Table 16 and Figure 15).
- o Small utility vehicles (SUVs) experienced the largest change in sales-weighted fuel economy, dropping 0.7 mpg in model year 1989. Two factors contributed to this fuel economy reduction: (1) four of the five best selling SUVs, making up more than half of the SUV sales, had lower fuel economy than in model year 1988; and (2) the vehicle with the highest mpg in this size class, the Suzuki Samurai, claimed a considerably smaller portion of the market than last model year, 10.2% and 1% in model years 1988 and 1989, respectively.
- o Only 4 of the 24 large pickups showed fuel economy increases. All others showed decreases or no change in their 1989 fuel economies, resulting in a 0.3 mpg decrease for the class.
- o The Ford Ranger and the Chevrolet S-10, which together hold 54% of the small pickup market, each dropped 0.7 mpg or more, resulting in a 0.4 mpg reduction for the small pickup class.

- o Table 17 summarizes the fuel economies of light trucks by production location and sponsorship. The category with the highest fuel economy, captive imports (trucks built abroad by a U.S. based company), was the only one to show a fuel economy improvement in 1989 (Figure 16).

3.2 SALES AND MARKET SHARES OF *ALL* LIGHT TRUCKS

- o Unlike automobiles, sales of light trucks increased slightly in model year 1989, continuing the upward trend that began in 1982 (Table 16).
- o Small pickups and small vans were the only light truck size classes to decrease in sales volume (Table 16).
- o Utility vehicles and large pickups gained shares of the light truck market in model year 1989, while small vans leveled off at 18% after five years of steady growth (Table 16 and Figure 17).
- o The share of small pickups dropped to its lowest level since model year 1980. The share decrease of 3.2% in small pickups was the result of the sales decrease for every vehicle in this class except the domestic Nissan pickup and the Isuzu pickup.
- o In contrast to small pickups, large pickups gained 2.6% of the light truck market. Domestic large pickups, in particular, were in demand as nearly every domestic large pickup nameplate showed an increase in sales volume.
- o Table 18 and Figure 18 show market shares of light trucks for each of the production location/sponsorship categories. Like automobiles, both of the domestic categories gained shares of the market in model year 1989.
- o The 1989 market shares of U.S. sponsored domestic light trucks (e.g., Ford F100) steadily increased for the second consecutive year and reached the highest level (83.6%) since model year 1979 (Table 18).

- o Although the market share of "captive import" light trucks in 1989 was less than that of 1976 or 1982, a more diverse mixture of vehicle classes was built as "captive imports" in 1989 (Table 19).
- o Figure 19 illustrates the light truck market shares of selected manufacturers for three model years. Shares for each manufacturer include vehicles built in the U.S. and abroad (e.g., "Nissan" consists of transplants and trucks built in Japan).

Table 16
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic and Import Light Trucks*, Model Years 1976-1989^a



	1976	1977	1978	1979	1980	1981	1982
SMALL PICKUP							
Total sales, units	170,351	275,217	308,790	451,548	516,412	472,611	579,263
Market share, %	7.1	11.1	10.5	16.1	23.3	24.4	27.2
Fuel economy, mpg	23.9	26.7	26.9	23.6	25.5	28.1	28.1
LARGE PICKUP							
Total sales, units	1,586,020	1,718,306	1,886,782	1,635,745	1,115,248	967,242	1,000,772
Market share, %	66.4	69.3	64.0	58.4	50.3	50.0	46.9
Fuel economy, mpg	15.1	16.6	16.6	15.8	17.0	18.5	18.6
SMALL VAN							
Total sales, units	18,651	24,547	24,755	18,153	13,649	11,007	11,964
Market share, %	0.8	1.0	0.8	0.6	0.6	0.6	0.6
Fuel economy, mpg	19.5	22.7	19.5	17.9	19.6	18.8	22.5
LARGE VAN							
Total sales, units	574,745	415,733	670,453	580,883	328,065	327,730	379,110
Market share, %	24.1	16.8	22.8	20.7	14.8	16.9	17.8
Fuel economy, mpg	15.4	17.0	16.4	14.9	16.3	17.4	17.0
SMALL UTILITY							
Total sales, units	4,716	4,682	10,731	55,908	75,875	40,762	28,376
Market share, %	0.2	0.2	0.4	2.0	3.4	2.1	1.3
Fuel economy, mpg	15.5	15.6	15.9	17.5	16.9	19.9	20.9
LARGE UTILITY							
Total sales, units	32,427	41,028	44,948	58,926	167,288	116,064	133,355
Market share, %	1.4	1.7	1.5	2.1	7.5	6.0	6.3
Fuel economy, mpg	14.7	16.6	15.4	15.0	14.6	16.2	16.9
FLEET							
Total sales, units	2,386,910	2,479,513	2,946,459	2,801,163	2,216,537	1,935,416	2,132,840
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	15.6	17.5	17.2	16.5	18.1	19.8	20.0

Table 16 (Continued)
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic and Import Light Trucks*, Model Years 1976-1989^a

	1983	1984	1985	1986	1987	1988	1989
SMALL PICKUP							
Total sales, units	894,432	1,012,298	1,135,666	1,225,570	1,153,704	1,026,551	877,839
Market share, %	33.3	28.0	26.8	27.0	25.2	21.6	18.4
Fuel economy, mpg	27.2	27.2	27.3	26.1	26.6	26.1	25.7
LARGE PICKUP							
Total sales, units	958,408	1,218,972	1,407,153	1,325,547	1,324,839	1,453,255	1,580,916
Market share, %	35.7	33.7	33.2	29.2	28.9	30.6	33.2
Fuel economy, mpg	18.3	17.5	18.1	18.4	18.2	18.5	18.2
SMALL VAN							
Total sales, units	13,716	222,798	437,660	640,936	733,504	851,384	859,311
Market share, %	0.5	6.2	10.3	14.1	16.0	18.0	18.0
Fuel economy, mpg	21.0	25.0	23.9	23.8	23.4	22.9	22.9
LARGE VAN							
Total sales, units	484,349	545,595	536,242	510,558	473,268	486,981	471,762
Market share, %	18.0	15.1	12.7	11.3	10.3	10.3	9.9
Fuel economy, mpg	17.2	16.3	16.4	17.3	16.6	17.0	16.7
SMALL UTILITY							
Total sales, units	170,519	398,000	485,670	598,652	689,318	701,005	747,550
Market share, %	6.3	11.0	11.5	13.2	15.1	14.8	15.7
Fuel economy, mpg	23.0	23.0	22.3	21.5	22.9	22.4	21.7
LARGE UTILITY							
Total sales, units	165,875	215,271	232,974	233,625	205,403	223,824	228,664
Market share, %	6.2	6.0	5.5	5.2	4.5	4.7	4.8
Fuel economy, mpg	16.8	15.7	16.5	15.9	16.1	16.2	16.2
FLEET							
Total sales, units	2,687,299	3,612,934	4,235,365	4,534,888	4,580,036	4,743,000	4,766,042
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	20.5	20.0	20.5	20.8	20.9	20.7	20.2

^aThese figures represent only those sales that could be matched to corresponding EPA fuel economy values.



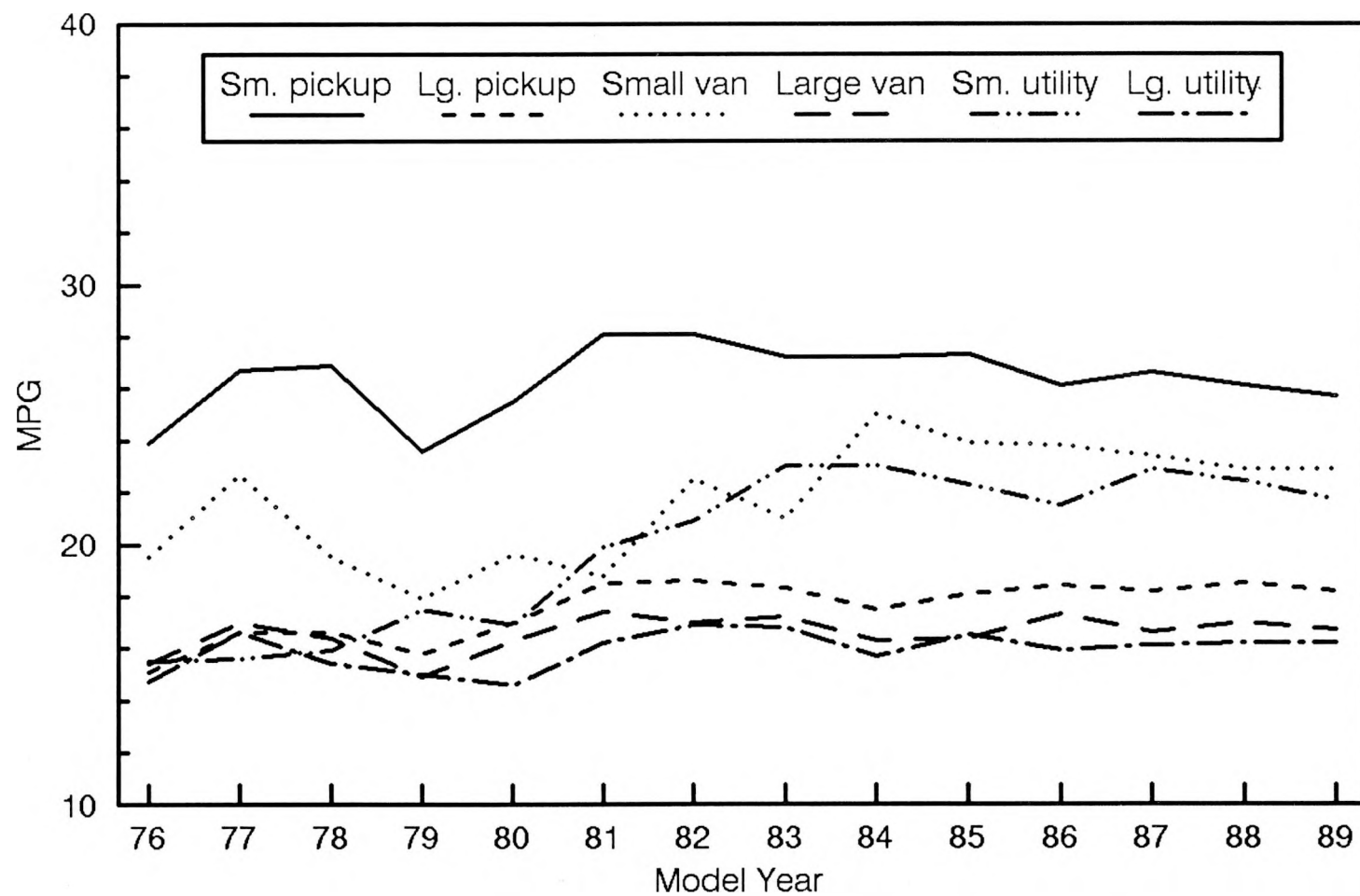


Fig. 15. *Fuel Economies of Domestic and Import Light Trucks by Size Classification, Model Years 1976-1989.*



Table 17
Fuel Economies of *Light Trucks*
 by Production Location and Sponsorship^a
 Model Years 1976-1989

Model year	Manufactured in U.S. (Domestic)		Manufactured abroad (Import)	
	U.S. owned	Transplants & joint ventures	Foreign owned	Captive imports
1976	15.2	--	21.2	24.1
1977	16.7	--	24.6	27.2
1978	16.5	--	25.2	27.8
1979	15.6	--	21.4	25.5
1980	16.6	15.7	24.5	26.2
1981	18.1	--	28.5	26.3
1982	18.7	--	28.1	28.2
1983	19.3	--	27.9	28.3
1984	18.7	31.9	27.9	28.5
1985	19.1	27.3	27.9	27.7
1986	19.5	27.5	26.9	25.5
1987	19.7	24.8	26.2	25.7
1988	20.0	24.2	24.4	25.8
1989	19.7	23.6	23.6	25.9

^aRefer to Appendix B for classification of each light truck nameplate.

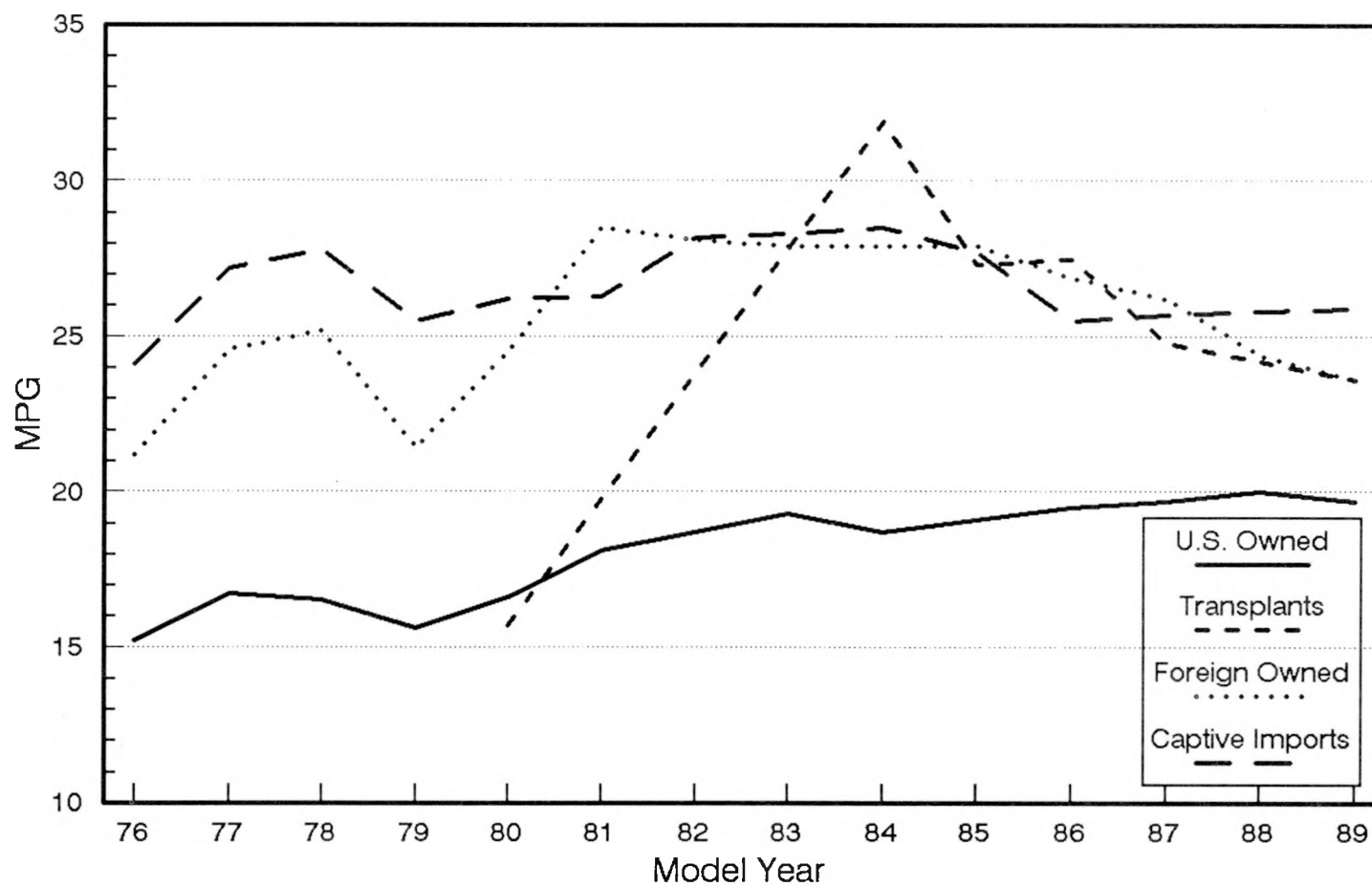


Fig. 16. Fuel Economies of *Light Trucks* by Production Location and Sponsorship, Model Years 1976-1989.

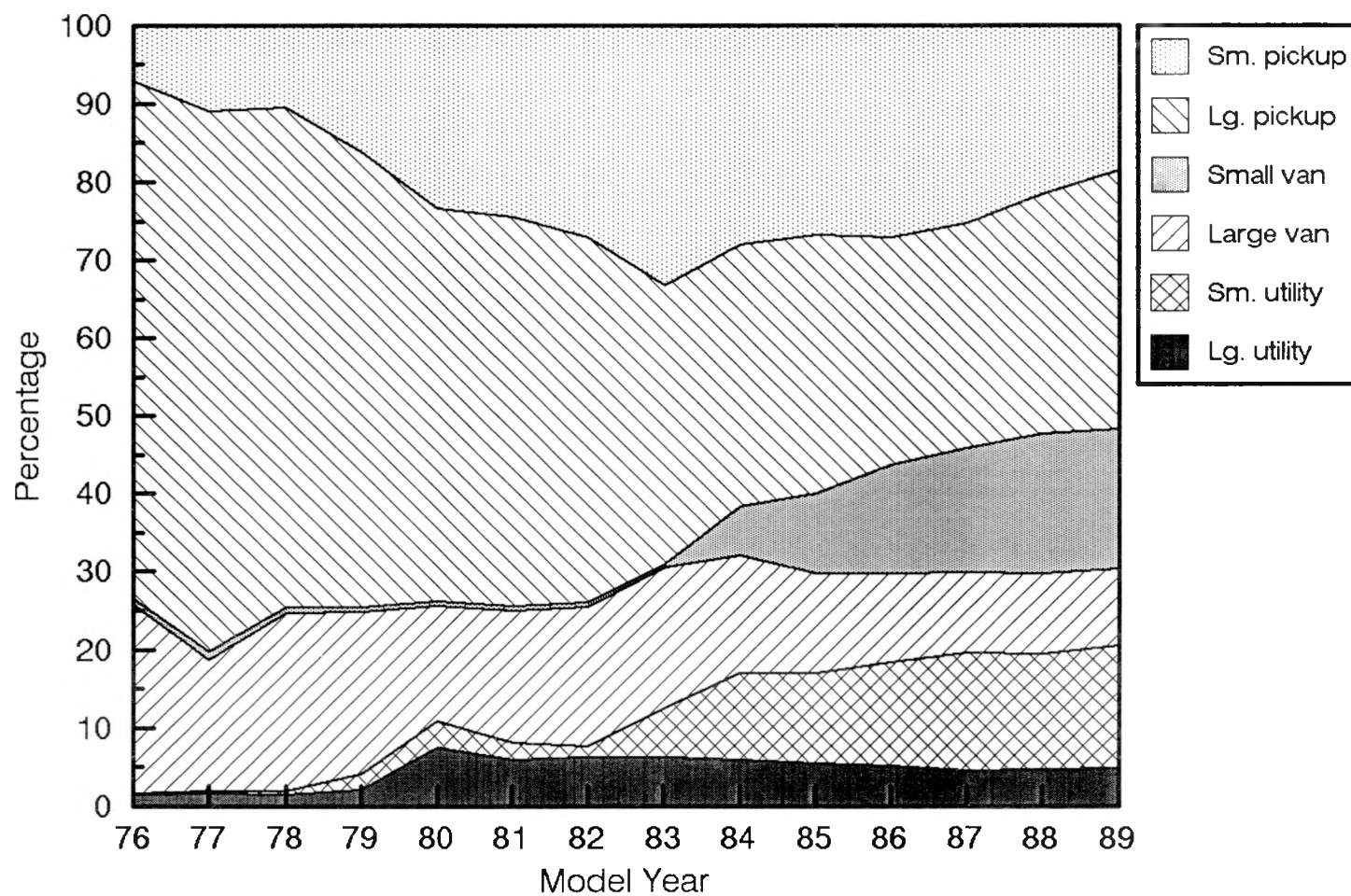


Fig. 17. *Market Shares of Domestic and Import Light Trucks by Size Classification, Model Years 1976-1989.*

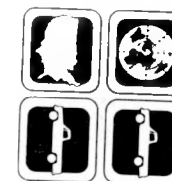




Table 18
Market Shares of *Light Trucks*
 by Production Location and Sponsorship^a
 Model Years 1976-1989

Model year	Manufactured in U.S. (Domestic)		Manufactured abroad (Import)	
	U.S. owned	Transplants & joint ventures	Foreign owned	Captive imports
1976	91.8	0.0	4.3	3.9
1977	87.5	0.0	7.2	5.3
1978	88.7	0.0	6.8	4.5
1979	83.0	0.0	9.3	7.7
1980	75.0	0.9	13.7	10.4
1981	74.9	0.0	15.9	9.2
1982	80.3	0.0	14.9	4.8
1983	81.3	0.0	16.2	2.5
1984	80.2	2.0	15.9	1.8
1985	77.8	2.6	17.5	2.1
1986	76.8	2.3	18.6	2.4
1987	76.4	1.7	19.1	2.8
1988	81.7	2.4	14.1	1.8
1989	83.6	2.6	12.4	1.4

^aRefer to Appendix B for classification of each light truck nameplate.

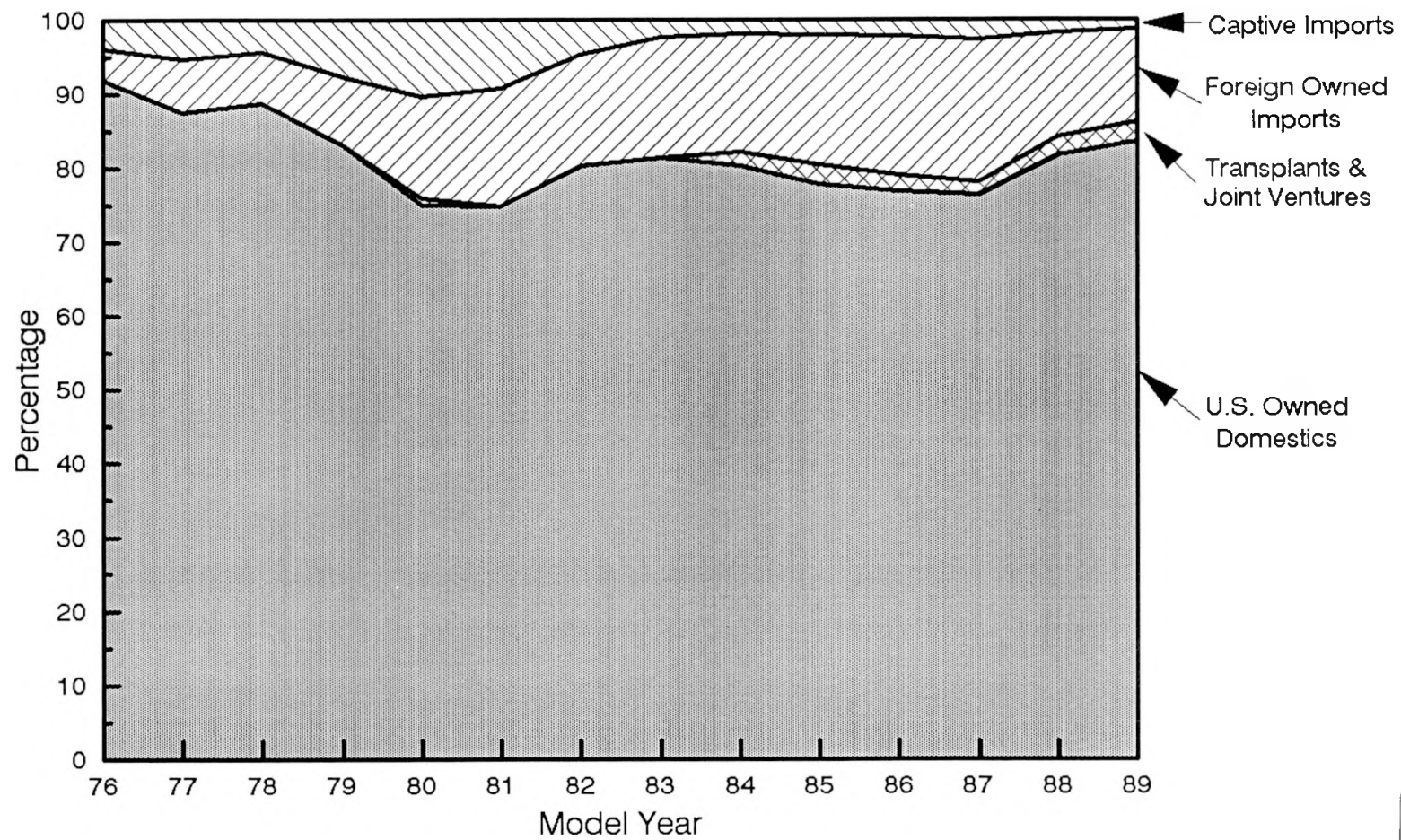


Fig. 18. Market Shares of *Light Trucks* by Production Location and Sponsorship, Model Years 1976-1989.





Table 19
Market Shares of Light Trucks by Size Class and Source

	Model Year 1976				Model Year 1982				Model Year 1989			
	Domestic		Import		Domestic		Import		Domestic		Import	
	U.S. owned	Trans- plants	Foreign owned	Captive imports	U.S. owned	Trans- plants	Foreign owned	Captive imports	U.S. owned	Trans- plants	Foreign owned	Captive imports
Small pickup			3.2	3.9	8.2		14.2	4.8	10.8	1.8	5.2	0.5
Large pickup	66.4				46.9				29.9	0.8	2.3	0.2
Small van			0.8				0.6		16.4		1.4	0.3
Large van	24.1				17.8				9.9			
Small utility	0.2				1.3				12.0		3.3	0.4
Large utility	1.1		0.3		6.1		0.1		4.6		0.2	
Fleet	91.8		4.3	3.9	80.3		14.9	4.8	83.6	2.6	12.4	1.4

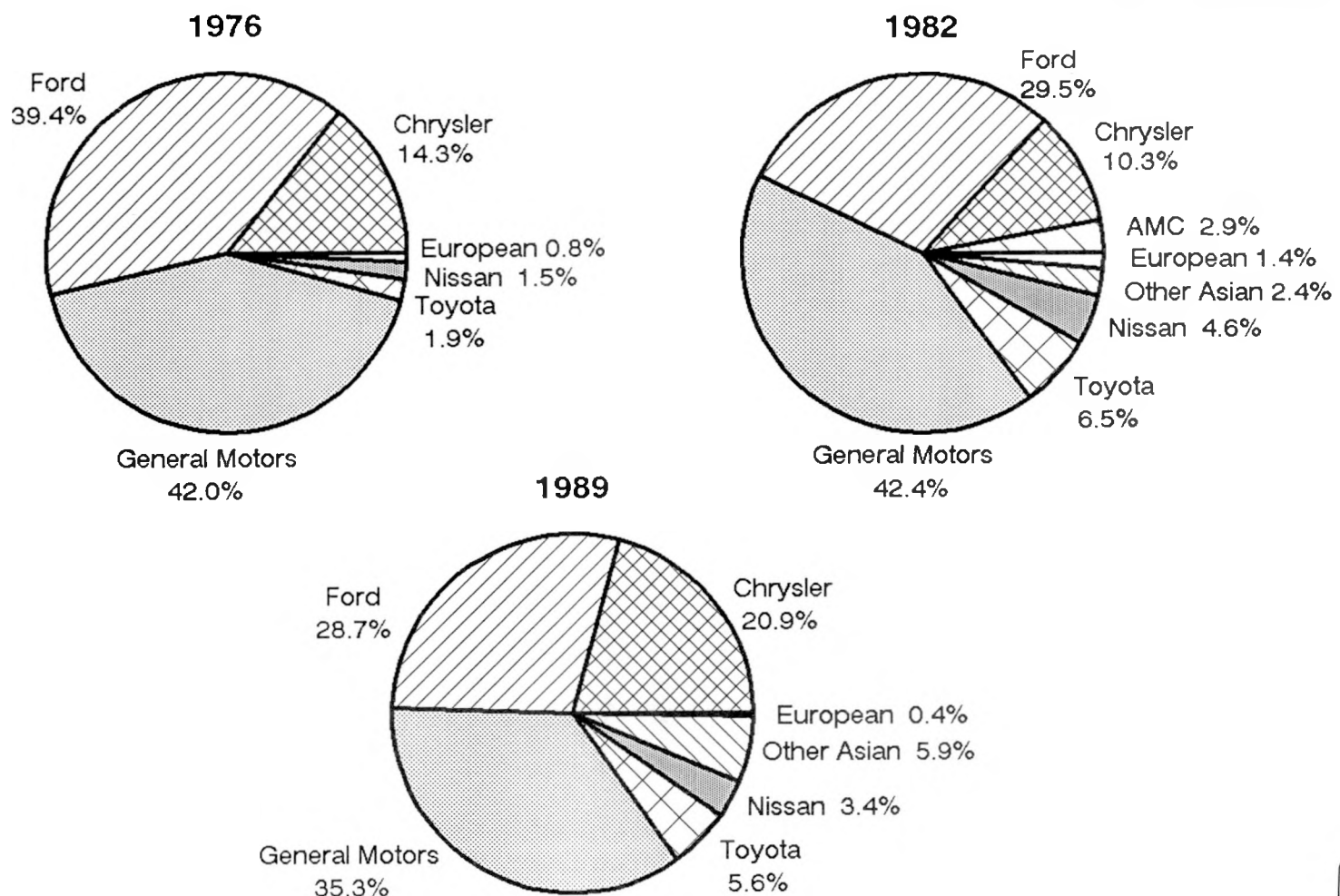


Fig. 19. Market Shares of Selected *Light Truck* Manufacturers.



3.3 FUEL ECONOMIES OF *DOMESTIC* LIGHT TRUCKS

- o The sales-weighted fuel economy of domestic light trucks decreased from 20.1 mpg in model year 1988 to 19.8 mpg in model year 1989. This is the first time since model year 1984 that sales-weighted fuel economy has decreased (Table 20).
- o A major reason for this 0.3 mpg decrease for domestic light trucks was the combination of decreased fuel economy and increased market share by the most popular domestic truck class, large pickup (Table 20 and Figure 20).
- o Every domestic light truck size class experienced a reduction in sales-weighted fuel economy, except small vans and large utility vehicles, which showed no change (Table 20 and Figure 20).
- o The domestic small pickup size class contains only 4 vehicles. As a result, the fuel economy of this class is quite volatile. In 1989, all four trucks showed fuel economy reductions, resulting in a 0.8 mpg drop for the class.

3.4 SALES AND MARKET SHARES OF *DOMESTIC* LIGHT TRUCKS

- o Sales of domestic light trucks increased in model year 1989, changing from 3,989,658 units in 1988 to 4,108,899 units in 1989 (Table 20).
- o Domestic manufacturers first started producing small vans in 1984. This is the first year since that time that sales volume has decreased (Table 20). All of the domestic small vans showed reductions in sales volume from the previous model year, except the Ford Aerostar.
- o Large pickups and small utility vehicles were the only size classes to gain shares of the domestic light truck market in 1989 (Table 20 and Figure 21).

- o Large pickups gained 2.7% of the domestic light truck market in 1989, while small pickups lost 2.2% (Table 20 and Figure 21). This shift from small pickups to large pickups was mainly due to the reclassification of some four-wheel drive (4wd) small pickups to the large pickup category. New four-wheel drive versions of the Chevrolet S-10 pickup and the GMC S-15 pickup, classified as large pickups, took a portion of sales away from the two-wheel drive small pickup versions of the S-10 and S-15.

Table 20
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic Light Trucks*, Model Years 1976-1989^a

	1976	1977	1978	1979	1980	1981	1982
SMALL PICKUP							
Total sales, units							174,956
Market share, %							10.2
Fuel economy, mpg							26.9
LARGE PICKUP							
Total sales, units	1,586,020	1,718,306	1,886,782	1,635,745	1,115,248	967,242	1,000,772
Market share, %	72.4	79.2	72.2	70.3	66.3	66.7	58.4
Fuel economy, mpg	15.1	16.6	16.6	15.8	17.0	18.5	18.6
SMALL VAN							
Total sales, units							
Market share, %							
Fuel economy, mpg							
LARGE VAN							
Total sales, units	574,745	415,733	670,453	580,883	328,065	327,730	379,110
Market share, %	26.2	19.2	25.7	25.0	19.5	22.6	22.1
Fuel economy, mpg	15.4	17.0	16.4	14.9	16.3	17.4	17.0
SMALL UTILITY							
Total sales, units	4,716	4,682	10,731	55,908	75,875	40,762	28,376
Market share, %	0.2	0.2	0.4	2.4	4.5	2.8	1.7
Fuel economy, mpg	15.5	15.6	15.9	17.5	16.9	19.9	20.9
LARGE UTILITY							
Total sales, units	25,536	30,708	44,091	53,038	163,387	114,013	130,505
Market share, %	1.2	1.4	1.7	2.3	9.7	7.9	7.6
Fuel economy, mpg	16.2	17.2	15.5	15.2	14.6	16.2	17.0
FLEET							
Total sales, units	2,191,017	2,169,429	2,612,057	2,325,574	1,682,575	1,449,747	1,713,719
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	15.2	16.7	16.5	15.6	16.6	18.1	18.7



Table 20 (Continued)
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Domestic Light Trucks*, Model Years 1976-1989^a

	1983	1984	1985	1986	1987	1988	1989
SMALL PICKUP							
Total sales, units	409,847	533,068	565,073	625,099	623,703	673,772	603,507
Market share, %	18.8	17.9	16.6	17.4	17.4	16.9	14.7
Fuel economy, mpg	25.8	25.3	25.6	24.3	25.6	26.1	25.3
LARGE PICKUP							
Total sales, units	958,408	1,151,696	1,292,268	1,178,326	1,189,389	1,313,554	1,461,531
Market share, %	43.9	38.7	37.9	32.9	33.3	32.9	35.6
Fuel economy, mpg	18.3	17.2	17.6	17.9	17.8	18.1	17.9
SMALL VAN							
Total sales, units		146,877	341,491	542,776	627,816	784,072	779,680
Market share, %		4.9	10.0	15.1	17.6	19.7	19.0
Fuel economy, mpg		25.0	23.4	23.6	23.2	22.8	22.8
LARGE VAN							
Total sales, units	484,349	545,595	536,242	510,558	473,268	486,981	471,762
Market share, %	22.2	18.4	15.7	14.2	13.2	12.2	11.5
Fuel economy, mpg	17.2	16.3	16.4	17.3	16.6	17.0	16.7
SMALL UTILITY							
Total sales, units	170,128	384,376	441,966	499,208	461,340	517,909	573,285
Market share, %	7.8	12.9	13.0	13.9	12.9	13.0	14.0
Fuel economy, mpg	23.0	23.0	22.1	20.8	21.8	22.0	21.7
LARGE UTILITY							
Total sales, units	161,412	211,178	229,242	228,450	200,850	213,370	219,134
Market share, %	7.4	7.1	6.7	6.4	5.6	5.3	5.3
Fuel economy, mpg	16.9	15.7	16.6	15.9	16.1	16.2	16.2
FLEET							
Total sales, units	2,184,144	2,972,790	3,406,282	3,584,417	3,576,366	3,989,658	4,108,899
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	19.3	18.9	19.3	19.6	19.8	20.1	19.8

^aThese figures represent only those sales that could be matched to corresponding EPA fuel economy values.



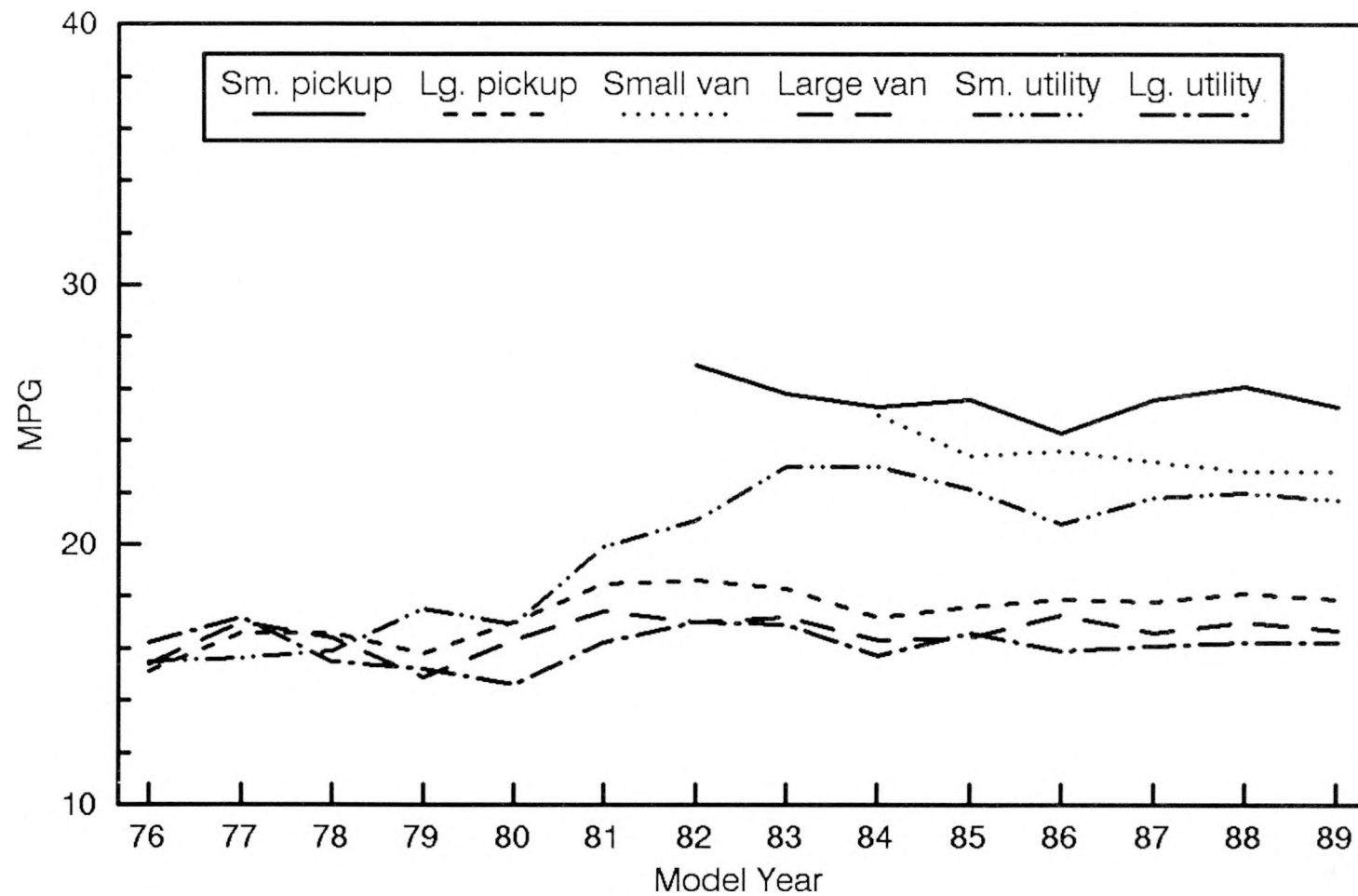


Fig. 20. Fuel Economies of Domestic Light Trucks by Size Classification, Model Years 1976-1989.

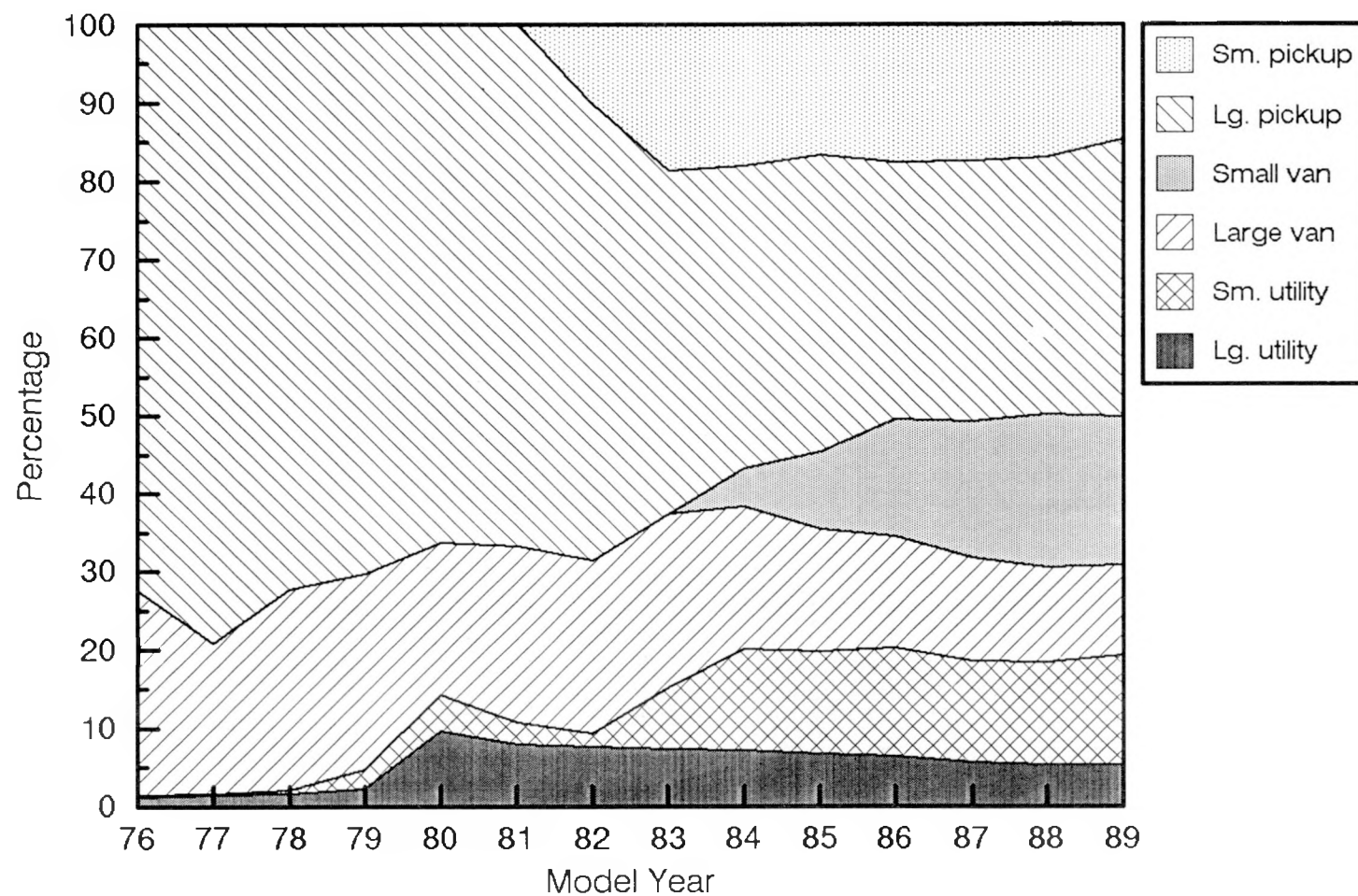


Fig. 21. *Market Shares of Domestic Light Trucks by Size Classification, Model Years 1976-1989.*



3.5 FUEL ECONOMIES OF *IMPORT* LIGHT TRUCKS

- o The sales-weighted fuel economy of import light trucks has been decreasing since model year 1985. Fuel economy for 1989 was 23.8 mpg, a decrease of 0.8 mpg since model year 1988 (Table 21).
- o Although small pickup, the most popular import truck size class, showed a fuel economy improvement over the previous model year, its reduced market share neutralized the influence of its increased fuel economy on overall import light truck fuel economy. Consequently, the fuel economy improvement in small pickups did not compensate for the mpg decreases experienced by all of the other import truck classes.
- o The four-wheel drive Toyota Pickup, which claimed 79% of the total import large pickup sales in 1989, experienced a 1.5 mpg decrease in fuel economy, contributing to a 1.2 mpg decrease for the class.
- o Fuel economy of small utility vehicles (SUVs) decreased 1.5 mpg in 1989 (Table 21 and Figure 22). Two factors led to this large change. First, the sales-weighted fuel economy of the Isuzu Trooper, 1989's most popular import SUV, dropped 0.7 mpg. Second, sales of the Suzuki Samurai, which had the highest fuel economy rating in this class, plummeted in 1989. This vehicle, which claimed 36% of the import SUV sales in 1988, only held 4% in 1989.

3.6 SALES AND MARKET SHARES OF *IMPORT* LIGHT TRUCKS

- o Sales of import light trucks decreased 13% from the previous model year as every size class but small van experienced a sales volume reduction (Table 21).

- o Small and large pickups together lost 5.4% of the import light truck market (Table 21). Every vehicle in these two size classes, except the Isuzu Pickup, had fewer sales in model year 1989 than in the previous year. Nissan Pickup's import sales were considerably lower since Nissan decided to build all of its pickups in U.S. plants rather than Japan.
- o The Mazda MPV, which was introduced at the end of model year 1988, dominated the import small van market in 1989 with sales more than four times larger than the next most popular small van. The sales growth of the Mazda MPV, and to a lesser extent, the March 1989 introduction of the Nissan Axxess, led to a 3.2% market share gain for import small vans in spite of the fact that all other small vans experienced sales reductions.

Table 21
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Import Light Trucks*, Model Years 1976-1989^a

	1976	1977	1978	1979	1980	1981	1982
SMALL PICKUP							
Total sales, units	170,351	275,217	308,790	451,548	516,412	472,611	404,307
Market share, %	87.0	88.8	92.3	94.9	96.7	97.3	96.5
Fuel economy, mpg	23.9	26.7	26.9	23.6	25.5	28.1	28.6
LARGE PICKUP							
Total sales, units							
Market share, %							
Fuel economy, mpg							
SMALL VAN							
Total sales, units	18,651	24,547	24,755	18,153	13,649	11,007	11,964
Market share, %	9.5	7.9	7.4	3.8	2.6	2.3	2.9
Fuel economy, mpg	19.5	22.7	19.5	17.9	19.6	18.8	22.5
LARGE VAN							
Total sales, units							
Market share, %							
Fuel economy, mpg							
SMALL UTILITY							
Total sales, units	6,891	10,320	857	5,888	3,901	2,051	2,850
Market share, %	3.5	3.3	0.3	1.2	0.7	0.4	0.7
Fuel economy, mpg	11.0	15.0	13.5	13.5	13.5	14.0	14.0
LARGE UTILITY							
Total sales, units							
Market share, %							
Fuel economy, mpg							
FLEET							
Total sales, units	195,893	310,084	334,402	475,589	533,962	485,669	419,121
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	22.5	25.7	26.1	23.1	25.2	27.7	28.2



Table 21 (Continued)
Model Year Sales, Market Shares, and Sales-Weighted Fuel Economies
of *Import Light Trucks*, Model Years 1976-1989^a

	1983	1984	1985	1986	1987	1988	1989
SMALL PICKUP							
Total sales, units	484,585	479,230	570,593	600,471	530,001	352,779	274,332
Market share, %	96.3	74.9	68.8	63.2	52.8	46.8	41.7
Fuel economy, mpg	28.4	29.7	29.4	28.2	27.9	26.1	26.4
LARGE PICKUP							
Total sales, units		67,276	114,885	147,221	135,450	139,701	119,385
Market share, %		10.5	13.9	15.5	13.5	18.5	18.2
Fuel economy, mpg		24.1	25.1	24.4	23.7	24.1	22.9
SMALL VAN							
Total sales, units	13,716	75,921	96,169	98,160	105,688	67,312	79,631
Market share, %	2.7	11.9	11.6	10.3	10.5	8.9	12.1
Fuel economy, mpg	21.0	25.2	26.2	24.7	24.1	24.0	23.7
LARGE VAN							
Total sales, units							
Market share, %							
Fuel economy, mpg							
SMALL UTILITY							
Total sales, units	391	13,624	43,704	99,444	227,978	183,096	174,265
Market share, %	0.1	2.1	5.3	10.5	22.7	24.3	26.5
Fuel economy, mpg	21.5	21.2	24.4	25.9	25.3	23.3	21.8
LARGE UTILITY							
Total sales, units	4,463	4,093	3,732	5,175	4,553	10,454	9,530
Market share, %	0.9	0.6	0.5	0.5	0.5	1.4	1.5
Fuel economy, mpg	14.0	14.0	14.0	14.0	14.0	15.6	15.0
FLEET							
Total sales, units	503,155	640,144	829,083	950,471	1,003,670	753,342	657,143
Market share, %	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fuel economy, mpg	27.9	28.0	27.9	26.8	26.1	24.6	23.8

^aThese figures represent only those sales that could be matched to corresponding EPA fuel economy values.



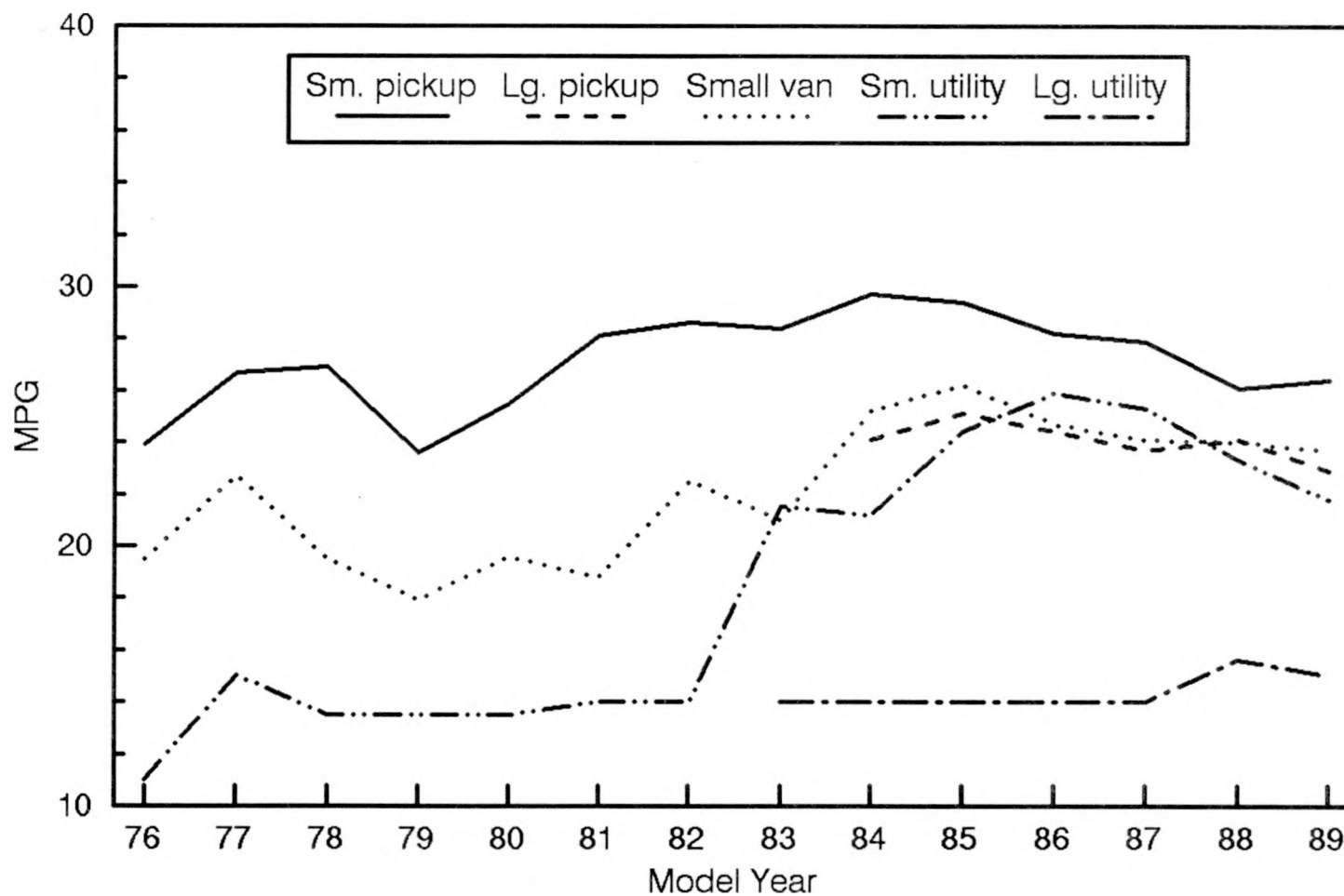


Fig. 22. *Fuel Economies of Import Light Trucks by Size Classification, Model Years 1976-1989.*



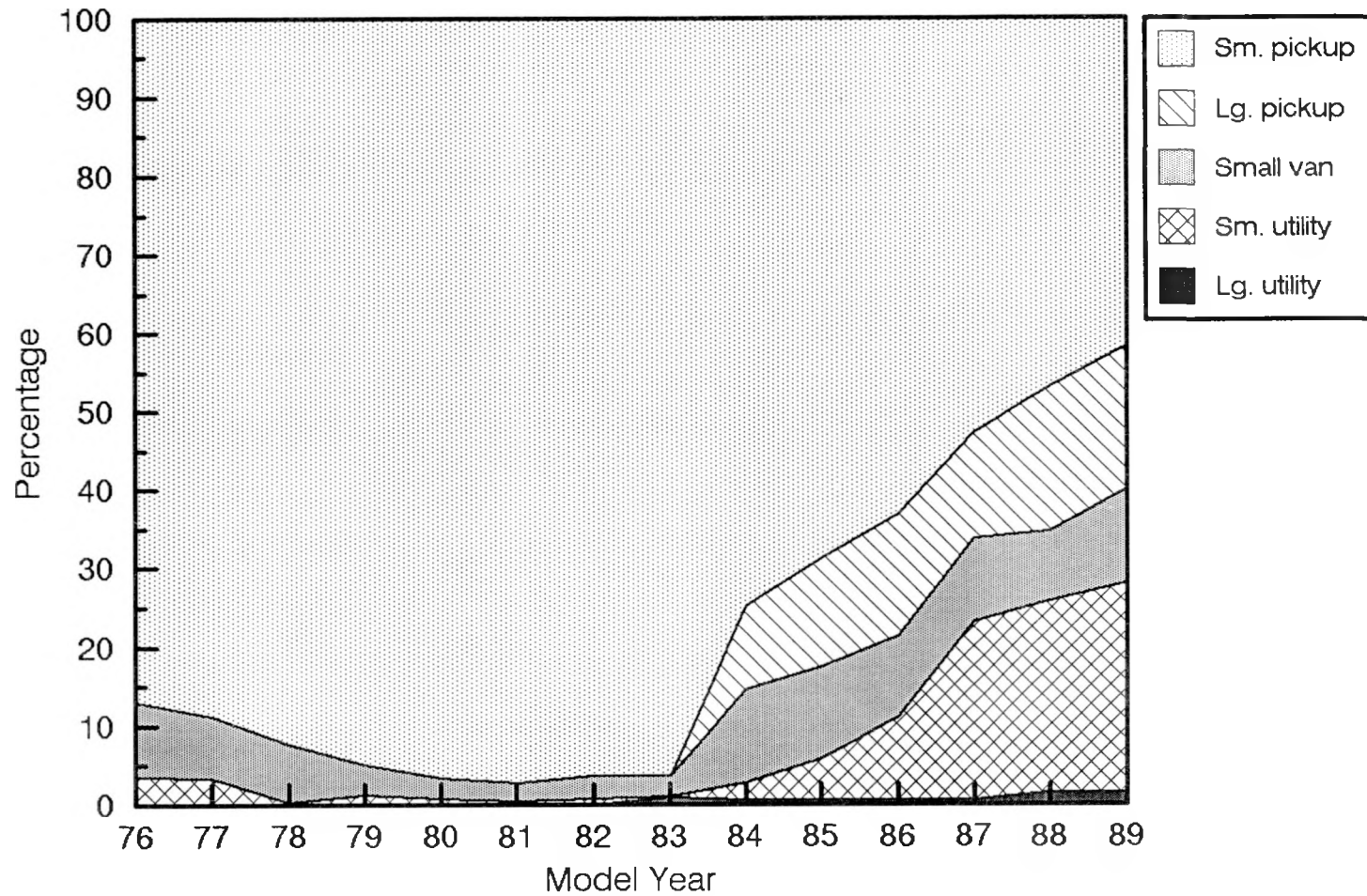


Fig. 23. *Market Shares of Import Light Trucks by Size Classification, Model Years 1976-1989.*



3.7 LIGHT TRUCK SALES AND FUEL ECONOMIES BY MAKE AND MODEL, MODEL YEAR 1989

- o The sales of the 20 most popular light trucks accounted for 70.6% of the total light truck sales in model year 1989 (Table 22).
- o Among the 20 most popular light trucks, 6 were large pickups, 5 were small pickups, and 4 were small vans; 17 were domestic and 3 were import. Ford and GMC each claimed 6 trucks and Chrysler claimed four (Table 22). Ford F100/F150 has been the most popular light truck for more than ten years.
- o Sales of the 20 most fuel efficient light trucks for model year 1989 accounted for 23.6% of total light truck sales. Six of these were among the 20 most popular light trucks for this model year (Table 23).
- o Four of the 20 most fuel efficient light trucks (Geo Tracker, Suzuki Sidekick, Mazda MPV, and Nissan Axxess) were new nameplates, introduced either in the final months of model year 1988 or in model year 1989.
- o Light truck nameplates and their sales, market shares, and fuel economies for model year 1989 are summarized by size class in Tables 24 through 29.
- o Appendix F includes all of the light truck nameplates ranked by sales for individual model years since 1976.



Table 22
Twenty Most Popular Light Trucks^a
 Model Year 1989

	Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1) Ford F100/F150	355,150	0.075	17.5	Large Pickup
2) Ford Ranger	273,336	0.057	24.5	Small Pickup
3) Dodge Caravan	203,786	0.043	23.4	Small Van
4) Chevrolet C-10	202,278	0.042	19.0	Large Pickup
5) Chevrolet K-10	202,278	0.042	17.4	Large Pickup
6) Chevrolet S-10	200,265	0.042	26.0	Small Pickup
7) Chevrolet Blazer "S"	193,092	0.041	22.5	Small Utility
8) Ford Aerostar Van	192,685	0.040	22.5	Small Van
9) Plymouth Voyager	184,694	0.039	23.4	Small Van
10) Ford Econoline	176,961	0.037	15.9	Large Van
11) Ford F250	166,976	0.035	16.5	Large Pickup
12) Jeep Cherokee XJ	163,236	0.034	20.7	Small Utility
13) Chevrolet Astro Van	150,136	0.032	22.1	Small Van
14) Chevrolet Van	120,240	0.025	18.3	Large Van
15) Toyota Pickup	116,099	0.024	27.1	Small Pickup
16) Ford Bronco II	111,108	0.023	22.2	Small Utility
17) Toyota Pickup 4wd	94,607	0.020	23.3	Large Pickup
18) Dodge Dakota	88,673	0.019	20.9	Large Pickup
19) Nissan Pickup-American	86,974	0.018	26.0	Small Pickup
20) Mazda Pickup	81,016	0.017	25.6	Small Pickup
	3,363,590	0.706	20.8	

^aNameplates in bold are also among the twenty most fuel efficient light trucks.



Table 23
Twenty Most Fuel Efficient Light Trucks^a
 Model Year 1989

		Sales weighted MPG	Model year sales	Ratio of total truck sales	Sales ranking	Size class
1)	Suzuki Samurai	33.0	7,483	0.002	67	Small Utility
2)	Suzuki Sidekick	31.7	19,114	0.004	51	Small Utility
3)	Geo Tracker	31.4	9,448	0.002	61	Small Utility
4)	Dodge Ram 50	27.5	24,146	0.005	45	Small Pickup
5)	Plymouth Vista	27.3	7,019	0.001	69	Small Van
6)	Dodge Vista	27.3	7,711	0.002	65	Small Van
7)	Toyota Pickup	27.1	116,099	0.024	15	Small Pickup
8)	Mitsubishi Pickup	27.0	22,856	0.005	47	Small Pickup
9)	Nissan Pickup	26.1	1,621	0.000	80	Small Pickup
10)	Nissan Pickup-American	26.0	86,974	0.018	19	Small Pickup
11)	Chevrolet S-10	26.0	200,265	0.042	6	Small Pickup
12)	GMC S-15	25.8	42,932	0.009	31	Small Pickup
13)	Mazda Pickup	25.6	81,016	0.017	20	Small Pickup
14)	Isuzu Pickup	25.2	28,591	0.006	38	Small Pickup
15)	Toyota Cargo Van	25.2	6,851	0.001	70	Small Van
16)	Toyota Van	25.1	4,771	0.001	75	Small Van
17)	Nissan Axxess	24.9	6,123	0.001	71	Small Van
18)	Ford Ranger	24.5	273,336	0.057	2	Small Pickup
19)	Mitsubishi Van	24.0	1,190	0.000	81	Small Van
20)	Plymouth Voyager	23.4	184,694	0.039	9	Small Van
		25.4	1,132,240	0.236		

^aNameplates in bold are also among the twenty most popular light trucks.



Table 24
Small Pickup Trucks
 Model Year 1989
 Ranked by Sales-Weighted MPG

	Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total truck sales
1) Subaru Brat	3	30.5	0.000	0.000
2) Dodge Ram 50	24,146	27.5	0.028	0.005
3) Toyota Pickup	116,099	27.1	0.132	0.024
4) Mitsubishi Pickup	22,856	27.0	0.026	0.005
5) Nissan Pickup	1,621	26.1	0.002	0.000
6) Nissan Pickup-American	86,974	26.0	0.099	0.018
7) Chevrolet S-10	200,265	26.0	0.228	0.042
8) GMC S-15	42,932	25.8	0.049	0.009
9) Mazda Pickup	81,016	25.6	0.092	0.017
10) Isuzu Pickup	28,591	25.2	0.033	0.006
11) Ford Ranger	273,336	24.5	0.311	0.057
	877,839	25.7	1.000	0.184



Table 25
Large Pickup Trucks
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total truck sales
1)	Toyota Pickup 4wd	94,607	23.3	0.060	0.020
2)	Chevrolet S-10 4wd	41,601	23.1	0.026	0.009
3)	GMC S-15 4wd	10,071	23.0	0.006	0.002
4)	Isuzu Pickup 4wd	14,728	21.9	0.009	0.003
5)	Jeep Comanche	27,399	21.9	0.017	0.006
6)	Dodge Power Ram 50	7,793	21.7	0.005	0.002
7)	Mitsubishi Pickup 4wd	1,987	21.1	0.001	0.000
8)	Dodge Dakota	88,673	20.9	0.056	0.019
9)	Nissan Pickup 4wd-American	38,529	19.5	0.024	0.008
10)	Nissan Pickup 4wd	270	19.3	0.000	0.000
11)	Chevrolet C-10	202,278	19.0	0.128	0.042
12)	GMC C-15	50,406	19.0	0.032	0.011
13)	GMC C-25	19,929	17.9	0.013	0.004
14)	Chevrolet C-20	56,281	17.9	0.036	0.012
15)	Ford F100/F150	355,150	17.5	0.225	0.075
16)	Chevrolet K-10	202,278	17.4	0.128	0.042
17)	GMC K-15	50,406	17.4	0.032	0.011
18)	GMC K-25	19,929	17.0	0.013	0.004
19)	Chevrolet K-20	56,281	17.0	0.036	0.012
20)	Dodge D150	40,403	16.6	0.026	0.008
21)	Dodge D250	9,339	16.5	0.006	0.002
22)	Ford F250	166,976	16.5	0.106	0.035
23)	Dodge W150	16,421	14.0	0.010	0.003
24)	Dodge W250	9,181	13.6	0.006	0.002
		1,580,916	18.2	1.000	0.332



Table 26
Small Vans
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total truck sales
1)	Plymouth Vista	7,019	27.3	0.008	0.001
2)	Dodge Vista	7,711	27.3	0.009	0.002
3)	Toyota Cargo Van	6,851	25.2	0.008	0.001
4)	Toyota Van	4,771	25.1	0.006	0.001
5)	Nissan Axxess	6,123	24.9	0.007	0.001
6)	Plymouth Town & Country	968	24.0	0.001	0.000
7)	Mitsubishi Van	1,190	24.0	0.001	0.000
8)	Plymouth Voyager	184,694	23.4	0.215	0.039
9)	Dodge Caravan	203,786	23.4	0.237	0.043
10)	Dodge Mini Ram Van	14,913	23.4	0.017	0.003
10)	Chevrolet Lumina APV	68	23.0	0.000	0.000
11)	Mazda MPV	33,237	22.6	0.039	0.007
12)	Ford Aerostar Van	192,685	22.5	0.224	0.040
13)	Nissan Van	5,196	22.2	0.006	0.001
14)	Chevrolet Astro Van	150,136	22.1	0.175	0.032
15)	GMC Safari	32,430	22.0	0.038	0.007
16)	Mitsubishi Wagon	2,518	22.0	0.003	0.001
17)	Volkswagen Vanagon	5,015	21.1	0.006	0.001
		859,311	22.9	1.000	0.180



Table 27
Large Vans
Model Year 1989
Ranked by Sales-Weighted MPG

	Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total truck sales
1) Chevrolet Van	120,240	18.3	0.255	0.025
2) GMC Vandura/Rally	42,014	17.9	0.089	0.009
3) Chevrolet Sport Van	10,402	17.6	0.022	0.002
4) Dodge Ram Van	69,788	16.4	0.148	0.015
5) Ford Econoline	176,961	15.9	0.375	0.037
6) Ford Club Wagon	27,065	15.5	0.057	0.006
7) Dodge Ram Wagon	25,292	14.9	0.054	0.005
	471,762	16.7	1.000	0.099



Table 28
Small Utility Vehicles
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total truck sales
1)	Suzuki Samurai	7,483	33.0	0.010	0.002
2)	Suzuki Sidekick	19,114	31.7	0.026	0.004
4)	Geo Tracker	9,448	31.4	0.013	0.002
5)	Chevrolet Blazer "S"	193,092	22.5	0.258	0.041
6)	GMC Jimmy "S"	46,388	22.5	0.062	0.010
7)	Isuzu Amigo	4,575	22.3	0.006	0.001
8)	Ford Bronco II	111,108	22.2	0.149	0.023
9)	Toyota 4Runner SR-5	26,077	21.8	0.035	0.005
10)	Toyota 4Runner Truck	10,852	21.8	0.015	0.002
11)	Mitsubishi Montero	12,404	21.0	0.017	0.003
12)	Dodge Raider	9,703	21.0	0.013	0.002
13)	Jeep Cherokee XJ	163,236	20.7	0.218	0.034
14)	Jeep Wrangler	51,788	20.5	0.069	0.011
15)	Jeep Wagoneer XJ	7,673	20.3	0.010	0.002
16)	Isuzu Trooper	50,260	19.3	0.067	0.011
17)	Nissan Pathfinder E	24,349	18.7	0.033	0.005
		747,550	21.7	1.000	0.157



Table 29
Large Utility Vehicles
 Model Year 1989
 Ranked by Sales-Weighted MPG

		Model year sales	Sales weighted MPG	Ratio of class sales	Ratio of total truck sales
1)	GMC Jimmy	7,036	17.1	0.031	0.001
2)	Chevrolet Blazer	24,597	17.1	0.108	0.005
3)	Chevrolet Suburban	68,414	17.0	0.299	0.014
4)	GMC Suburban	23,393	17.0	0.102	0.005
5)	Ford Bronco	62,913	15.8	0.275	0.013
6)	Toyota Land Cruiser	5,068	15.0	0.022	0.001
7)	Range Rover	4,462	15.0	0.020	0.001
8)	Dodge Ram Charger	20,443	14.7	0.089	0.004
9)	Jeep Grand Wagoneer	12,338	14.0	0.054	0.003
		228,664	16.2	1.000	0.048

4. LIGHT-DUTY VEHICLE FUEL ECONOMIES, SALES, AND MARKET SHARES

4.1 *ALL* LIGHT-DUTY VEHICLES

- o With automobiles and light trucks both showing 0.5 mpg losses from the previous model year, the sales-weighted fuel economy of new light-duty vehicles dropped to 25.0 mpg, a reduction of 0.5 mpg from the previous model year (Table 30).
- o In spite of the slight increase in sales of light trucks, overall 1989 sales of new light-duty vehicles decreased slightly from the previous model year reaching its lowest level since 1985 (Table 30).
- o Light trucks continued to gain a larger portion of the light-duty vehicle market with 31.9% in model year 1989. The market share of light trucks has steadily risen since model year 1982 (Table 30 and Figure 25).
- o Import light-duty vehicles, after claiming a record high 27.3% of the light-duty vehicle market in model year 1987, have decreased substantially in the past two years, claiming 23.1% of the market in model year 1989 (Table 31 and Figure 26).
- o Although import light-duty vehicles have consistently achieved higher sales-weighted fuel economies than domestics, the gap between domestics and imports has been narrowing since model year 1984 (Table 32).
- o For the first time in our reporting period (1976-1989), all of the 20 most popular light duty-vehicles were domestic (Table 33). Among the 20 most popular light-duty vehicles, the number of automobiles and light trucks was evenly divided.
- o Ford Motor Company took 5 of the top 6 positions with a total of 7 among the top 20 rankings. General Motors Corporation claimed 10 of the top 20 positions (Table 33).

Table 30
 Light-Duty Vehicle Sales, Market Shares, and Sales-Weighted Fuel Economies,
Domestic and Import
 Model Years 1976-1989



Model year	Automobiles			Light trucks			Fleet		
	Sales	Market shares	MPG	Sales	Market shares	MPG	Sales	Market shares	MPG
76	9,686,855	80.2	17.2	2,386,910	19.8	15.6	12,073,765	100.0	16.8
77	10,565,797	81.0	18.6	2,479,513	19.0	17.5	13,045,310	100.0	18.4
78	11,090,649	79.0	19.7	2,946,459	21.0	17.2	14,037,108	100.0	19.1
79	10,788,257	79.4	20.5	2,801,163	20.6	16.5	13,589,420	100.0	19.5
80	9,094,506	80.4	23.2	2,216,537	19.6	18.1	11,311,043	100.0	22.0
81	8,879,864	82.1	25.3	1,935,416	17.9	19.8	10,815,280	100.0	24.1
82	7,658,171	78.2	26.3	2,132,840	21.8	20.0	9,791,011	100.0	24.6
83	8,770,413	76.5	26.1	2,687,299	23.5	20.5	11,457,712	100.0	24.5
84	10,211,065	73.9	26.3	3,612,934	26.1	20.0	13,823,999	100.0	24.3
85	10,968,515	72.1	27.0	4,235,365	27.9	20.5	15,203,880	100.0	24.8
86	11,099,046	71.0	27.9	4,534,888	29.0	20.8	15,633,934	100.0	25.4
87	10,434,137	69.5	28.1	4,580,036	30.5	20.9	15,014,173	100.0	25.5
88	10,372,985	68.6	28.5	4,743,000	31.4	20.7	15,115,985	100.0	25.5
89	10,173,827	68.1	28.0	4,766,042	31.9	20.2	14,939,869	100.0	25.0

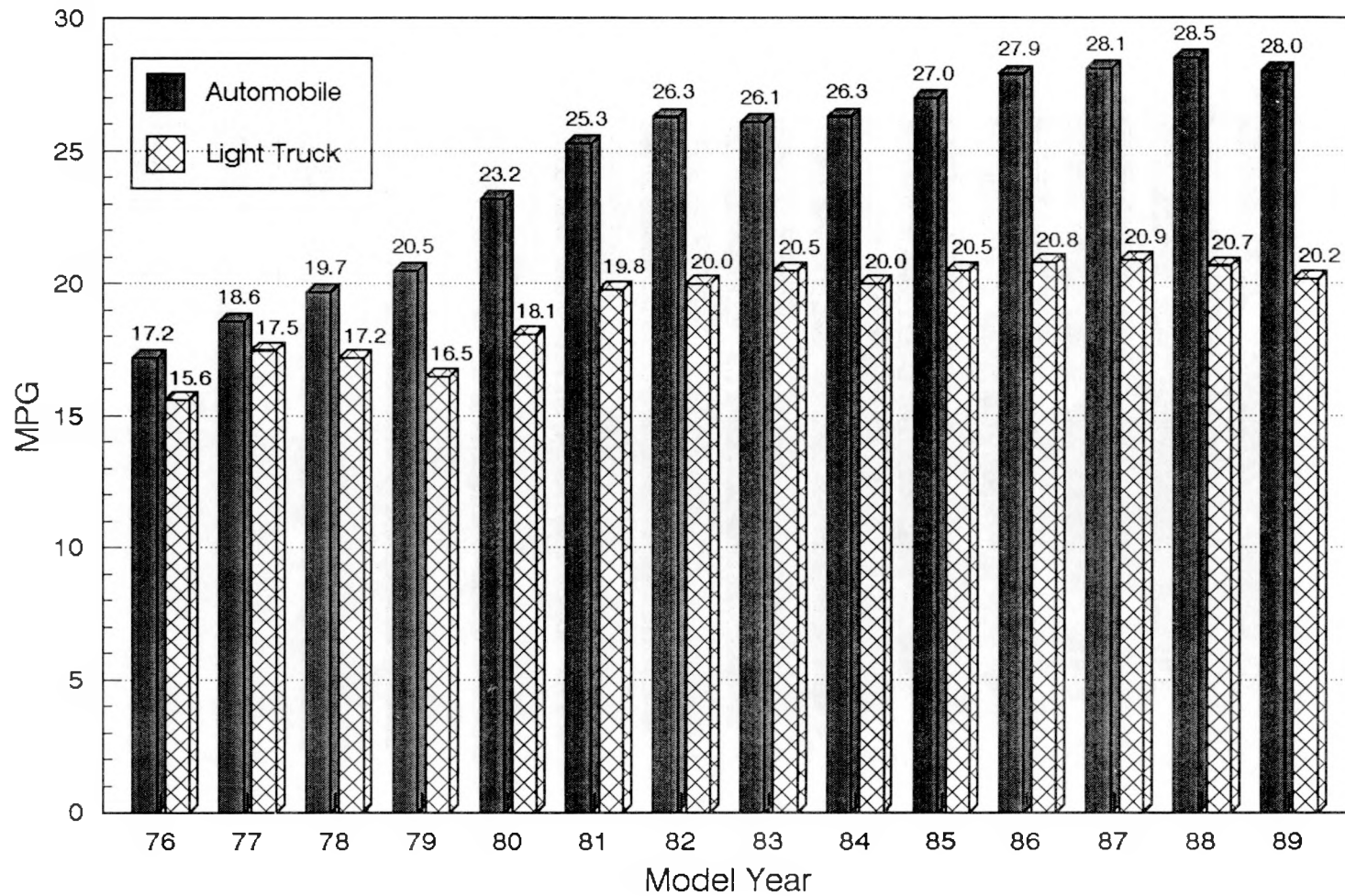
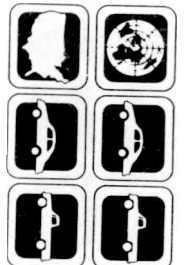


Fig. 24. *Fuel Economies of Domestic and Import Light-Duty Vehicles, Model Years 1976-1989.*



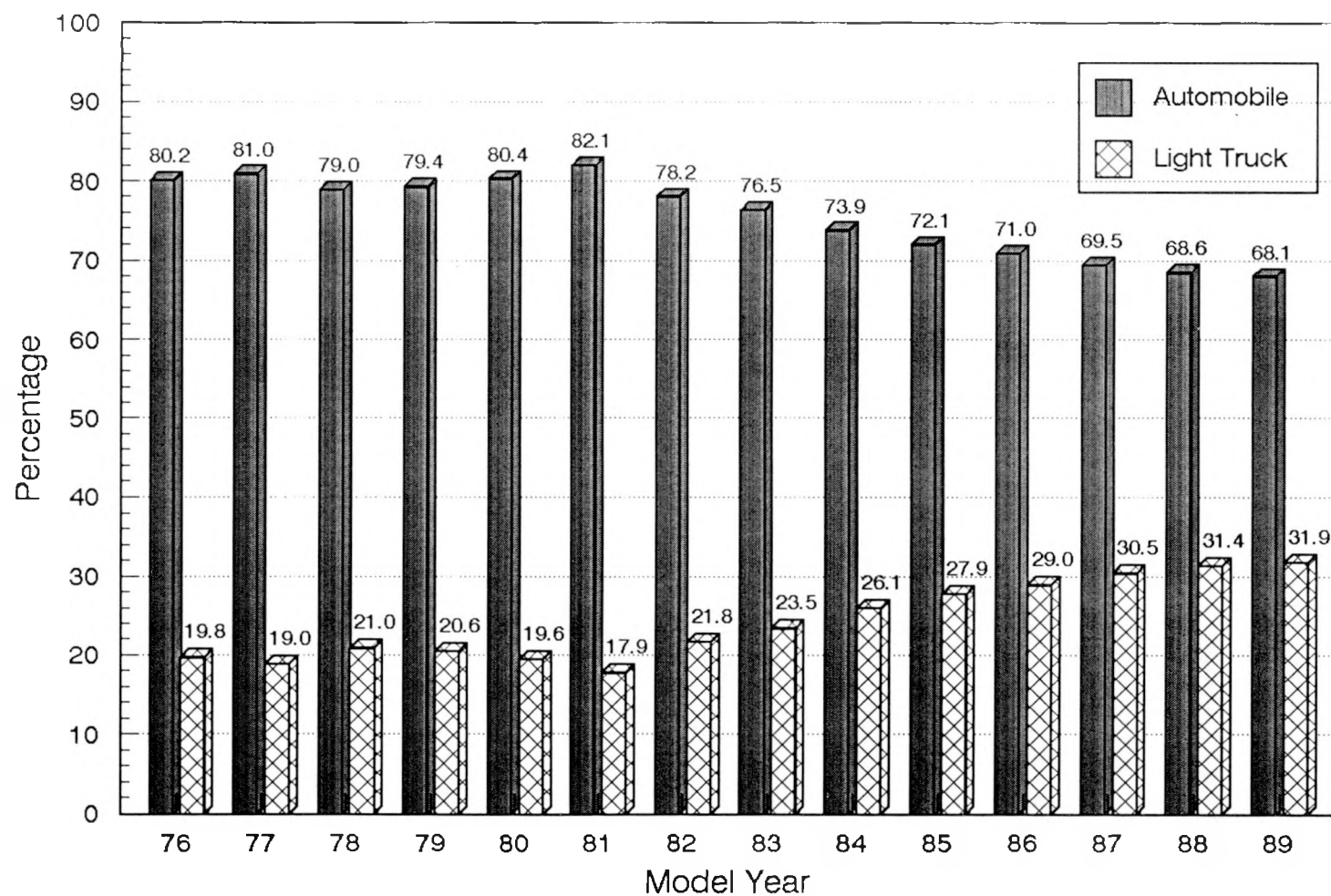


Fig. 25. Market Shares of Domestic and Import Light-Duty Vehicles, Model Years 1976-1989.



Table 31
Market Shares of Light-Duty Vehicles
 by Domestic and Import, and by Automobile and Light Truck
 Model Years 1976-1989

	Domestic			Import		
	Auto- mobile	Light truck	Light-duty vehicle	Auto- mobile	Light truck	Light-duty vehicle
76	70.0	18.1	88.2	10.2	1.6	11.8
77	67.7	16.6	84.4	13.3	2.4	15.6
78	65.1	18.6	83.7	13.9	2.4	16.3
79	63.5	17.1	80.6	15.9	3.5	19.4
80	59.7	14.9	74.6	20.7	4.7	25.4
81	60.9	13.4	74.3	21.2	4.5	25.7
82	56.6	17.5	74.1	21.6	4.3	25.9
83	56.5	19.1	75.6	20.0	4.4	24.4
84	57.2	21.5	78.7	16.7	4.6	21.3
85	55.1	22.4	77.5	17.0	5.5	22.5
86	51.5	22.9	74.5	19.5	6.1	25.5
87	48.9	23.8	72.7	20.6	6.7	27.3
88	48.5	26.4	74.9	20.1	5.0	25.1
89	49.4	27.5	76.9	18.7	4.4	23.1

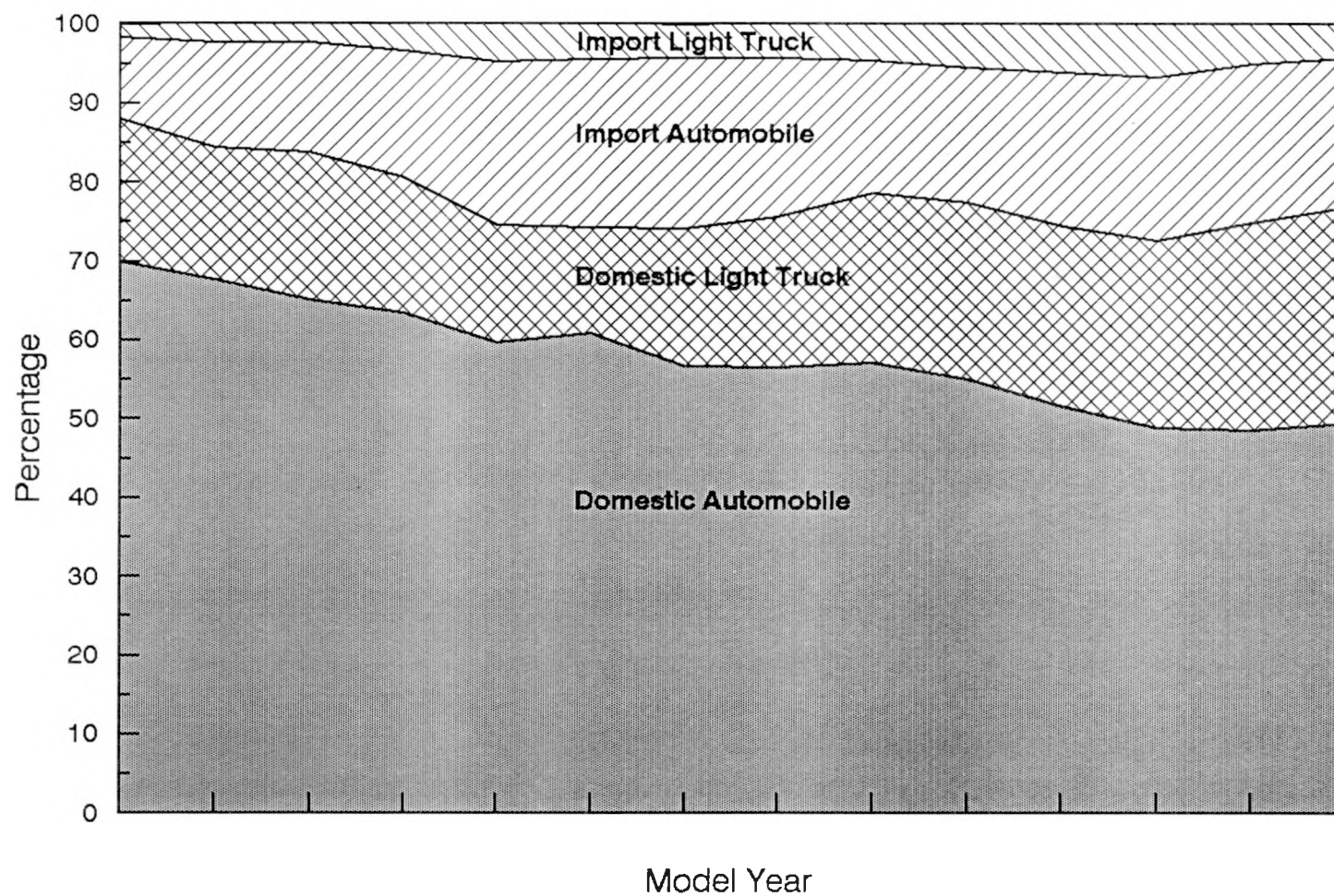


Fig. 26. Market Shares of *Light-Duty Vehicles* by Domestic and Import and by Automobile and Light Truck, Model Years 1976-1989.



Table 32
Sales-Weighted Fuel Economies of Light-Duty Vehicles
 by Domestic and Import, and by Automobile and Light Truck
 Model Years 1976-1989

	Domestic			Import		
	Auto- mobile	Light truck	Light-duty vehicle	Auto- mobile	Light truck	Light-duty vehicle
76	16.4	15.2	16.1	25.6	22.5	25.1
77	17.5	16.7	17.3	27.8	25.7	27.5
78	18.6	16.5	18.1	27.9	26.1	27.6
79	19.4	15.6	18.4	26.8	23.1	26.1
80	21.8	16.6	20.5	28.6	25.2	27.9
81	23.9	18.1	22.6	30.3	27.7	29.8
82	24.9	18.7	23.1	31.0	28.2	30.5
83	24.5	19.3	23.0	31.9	27.9	31.1
84	25.2	18.9	23.1	31.3	28.0	30.5
85	26.0	19.3	23.6	30.5	27.9	29.9
86	26.9	19.6	24.1	30.9	26.8	29.8
87	27.3	19.8	24.3	30.3	26.1	29.2
88	27.7	20.1	24.4	30.8	24.6	29.3
89	27.3	19.8	24.0	30.1	23.8	28.6



Table 33
Twenty Most Popular Vehicles
 Model Year 1989

		Model year sales	Ratio of total sales	Sales weighted MPG	Size class
1)	Ford Escort	366,354	0.025	34.1	Compact
2)	Ford Taurus	360,237	0.024	26.9	Midsize
3)	Ford F100/F150	355,150	0.024	17.5	Large Pickup
4)	Chevrolet Cavalier	306,518	0.021	32.0	Compact
5)	Ford Ranger	273,336	0.018	24.5	Small Pickup
6)	Ford Tempo	241,608	0.016	26.2	Compact
7)	Honda Accord-American	218,108	0.015	30.1	Compact
8)	Pontiac Grand AM	217,169	0.015	30.5	Compact
9)	Oldsmobile Ciera	215,579	0.014	27.6	Midsize
10)	Dodge Caravan	203,786	0.014	23.4	Small Van
11)	Chevrolet C-10	202,278	0.014	19.0	Large Pickup
12)	Chevrolet K-10	202,278	0.014	17.4	Large Pickup
13)	Chevrolet S-10	200,265	0.013	26.0	Small Pickup
14)	Chevrolet Celebrity	194,830	0.013	27.9	Midsize
15)	Chevrolet Corsica	193,854	0.013	28.4	Midsize
16)	Chevrolet Blazer "S"	193,092	0.013	22.5	Small Utility
17)	Ford Aerostar Van	192,685	0.013	22.5	Small Van
18)	Plymouth Voyager	184,694	0.012	23.4	Small Van
19)	Cadillac DeVille/Fleetwood	177,907	0.012	23.0	Large Car
20)	Ford Econoline	176,961	0.012	15.9	Large Van
		4,676,689	0.313	25.2	

4.2 DOMESTIC LIGHT-DUTY VEHICLES

- o The sales-weighted fuel economy of domestic light-duty vehicles decreased to 24.0 mpg, after five years of continuous improvement (Table 34). Fuel economy reductions experienced by both automobiles and light trucks contributed to the overall mpg change.
- o For the eighth consecutive year, light trucks' share of the domestic light-duty vehicle market increased (Table 34).
- o Sales of domestic automobiles and light trucks both increased in 1989, leading to an increase in sales of domestic light-duty vehicles (Table 34).

4.3 IMPORT LIGHT DUTY VEHICLES

- o The sales-weighted fuel economy of import light-duty vehicles decreased 0.7 mpg due to the 0.7 mpg and 0.6 mpg decrease of automobiles and light trucks, respectively (Table 35).
- o Unlike the domestics, import light trucks lost 0.8% of the import light-duty vehicle market to automobiles (Table 35).
- o For the second consecutive year, sales of import vehicles decreased. In recent years, foreign manufacturers have built more and more vehicles in the United States leading to an increase in domestic sales at the expense of import sales.

Table 34
Light-Duty Vehicle Sales, Market Shares, and Sales-Weighted Fuel Economies,
Domestic
Model Years 1976-1989

Model year	Automobiles			Light trucks			Fleet		
	Sales	Market shares	MPG	Sales	Market shares	MPG	Sales	Market shares	MPG
76	8,455,987	79.4	16.4	2,191,017	20.6	15.2	10,647,004	100.0	16.1
77	8,834,948	80.3	17.5	2,169,429	19.7	16.7	11,004,377	100.0	17.3
78	9,143,269	77.8	18.6	2,612,057	22.2	16.5	11,755,326	100.0	18.1
79	8,629,199	78.8	19.4	2,325,574	21.2	15.6	10,954,773	100.0	18.4
80	6,757,885	80.1	21.8	1,682,575	19.9	16.6	8,440,460	100.0	20.5
81	6,586,378	82.0	23.9	1,449,747	18.0	18.1	8,036,125	100.0	22.6
82	5,544,526	76.4	24.9	1,713,719	23.6	18.7	7,258,245	100.0	23.1
83	6,474,750	74.8	24.5	2,184,144	25.2	19.3	8,658,894	100.0	23.0
84	7,908,294	72.7	25.2	2,972,790	27.3	18.9	10,881,084	100.0	23.1
85	8,380,378	71.1	26.0	3,406,282	28.9	19.3	11,786,660	100.0	23.6
86	8,057,806	69.2	26.9	3,584,417	30.8	19.6	11,642,223	100.0	24.1
87	7,346,196	67.3	27.3	3,576,366	32.7	19.8	10,922,562	100.0	24.3
88	7,337,501	64.8	27.7	3,989,658	35.2	20.1	11,327,159	100.0	24.4
89	7,384,778	64.3	27.3	4,108,899	35.7	19.8	11,493,677	100.0	24.0



Table 35
Light-Duty Vehicle Sales, Market Shares, and Sales-Weighted Fuel Economies,
Import
Model Years 1976-1989

Model year	Automobiles			Light trucks			Fleet		
	Sales	Market shares	MPG	Sales	Market shares	MPG	Sales	Market shares	MPG
76	1,230,868	86.3	25.6	195,893	13.7	22.5	1,426,761	100.0	25.1
77	1,730,849	84.8	27.8	310,084	15.2	25.7	2,040,933	100.0	27.5
78	1,947,380	85.3	27.9	334,402	14.7	26.1	2,281,782	100.0	27.6
79	2,159,058	81.9	26.8	475,589	18.1	23.1	2,634,647	100.0	26.1
80	2,336,621	81.4	28.6	533,962	18.6	25.2	2,870,583	100.0	27.9
81	2,293,486	82.5	30.3	485,669	17.5	27.7	2,779,155	100.0	29.8
82	2,113,645	83.5	31.0	419,121	16.5	28.2	2,532,766	100.0	30.5
83	2,295,663	82.0	31.9	503,155	18.0	27.9	2,798,818	100.0	31.1
84	2,302,771	78.2	31.3	640,144	21.8	28.0	2,942,915	100.0	30.5
85	2,588,137	75.7	30.5	829,083	24.3	27.9	3,417,220	100.0	29.9
86	3,041,240	76.2	30.9	950,471	23.8	26.8	3,991,711	100.0	29.8
87	3,087,941	75.5	30.3	1,003,670	24.5	26.1	4,091,611	100.0	29.2
88	3,035,484	80.1	30.8	753,342	19.9	24.6	3,788,826	100.0	29.3
89	2,789,049	80.9	30.1	657,143	19.1	23.8	3,446,192	100.0	28.6



5. TRENDS IN SELECTED VEHICLE CHARACTERISTICS

5.1 TRENDS IN AUTOMOBILE ENGINE SIZE

- o The sales-weighted engine size of new automobiles remained relatively constant, increasing 0.6 cubic inches in model year 1989 (Table 36).
- o The sales-weighted engine size of the second most popular automobile size class, the midsize, increased 0.4 cubic inches from the previous model year (Table 36 and Figure 27). This increase, along with a market share gain for the class, contributed to the overall 0.6 cubic inch increase for automobiles.
- o The sales-weighted engine size of minicompacts increased 68% in 1989 due to the shift in the size class of the Chevrolet Sprint to subcompact in 1989. The Chevrolet Sprint dominated the minicompact market in 1988 with more than half of the sales and with the smallest engine size of any light-duty vehicle (tied with Diahatsu at 61 cubic inches).
- o The relationship between automobile sales-weighted engine size and sales-weighted fuel economy is illustrated in Figure 28. Changes in engine size appear to substantially influence fuel economy.
- o The sales-weighted engine size of domestic automobiles decreased 1.2 cubic inches in model year 1989, continuing a five year trend of decreasing engine sizes (Table 37).
- o The 15.5 cubic inch decrease for domestic subcompacts was, in part, a result of the three most popular domestic subcompacts, Honda Civic-American, Ford Mustang, and Chevrolet Camaro, having smaller engines in 1989 than the previous year.

- o Engine size of domestic two seaters increased 47.9 cubic inches as a result of two factors. First, for the second consecutive year, the domestic two seater with the smallest engine, the Pontiac Fiero, lost a substantial share of the market. Second, the engine size of the Cadillac Allante increased 24.0 cubic inches in 1989.
- o Import automobiles showed a sales-weighted engine size increase of 3.5 cubic inches in model year 1989 (Table 38). Import midsize cars claimed a larger share of the import car market while the engine size of this class increased 6.3 cubic inches. This situation, along with the fact that the size class change of the vehicle with the smallest engine, the Chevrolet Sprint, from minicompact to subcompact caused the engine size of import minicompacts to increase 62.7 cubic inches, contributed to the overall 3.5 cubic inch increase.



Table 36
Sales-Weighted *Engine Size of Domestic and Import Automobiles* by Size Class
(cubic inches -- 1 liter = 61.026 cubic inches)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		163.1	304.9	357.0	414.2	176.2	298.5
77	120.8	166.4	292.4	333.5	367.2	171.6	278.3
78	125.5	162.8	241.0	298.6	376.3	183.8	264.4
79	113.2	146.0	228.5	268.9	339.4	168.8	230.8
80	115.8	128.2	184.8	237.9	312.3	170.0	196.5
81	96.1	124.6	134.2	221.2	304.8	151.7	182.0
82	93.5	127.2	129.3	212.0	288.4	147.2	176.1
83	97.8	133.6	134.3	210.3	302.0	153.8	182.1
84	132.7	135.3	135.1	207.3	297.1	152.4	181.2
85	118.8	139.8	138.8	205.5	283.6	150.9	178.3
86	88.4	133.6	134.6	194.9	267.3	172.5	168.3
87	90.2	133.4	134.4	182.4	266.3	157.1	163.5
88	92.5	125.0	135.1	183.1	263.4	167.9	162.9
89	155.2	127.0	128.8	183.5	263.1	171.3	163.5

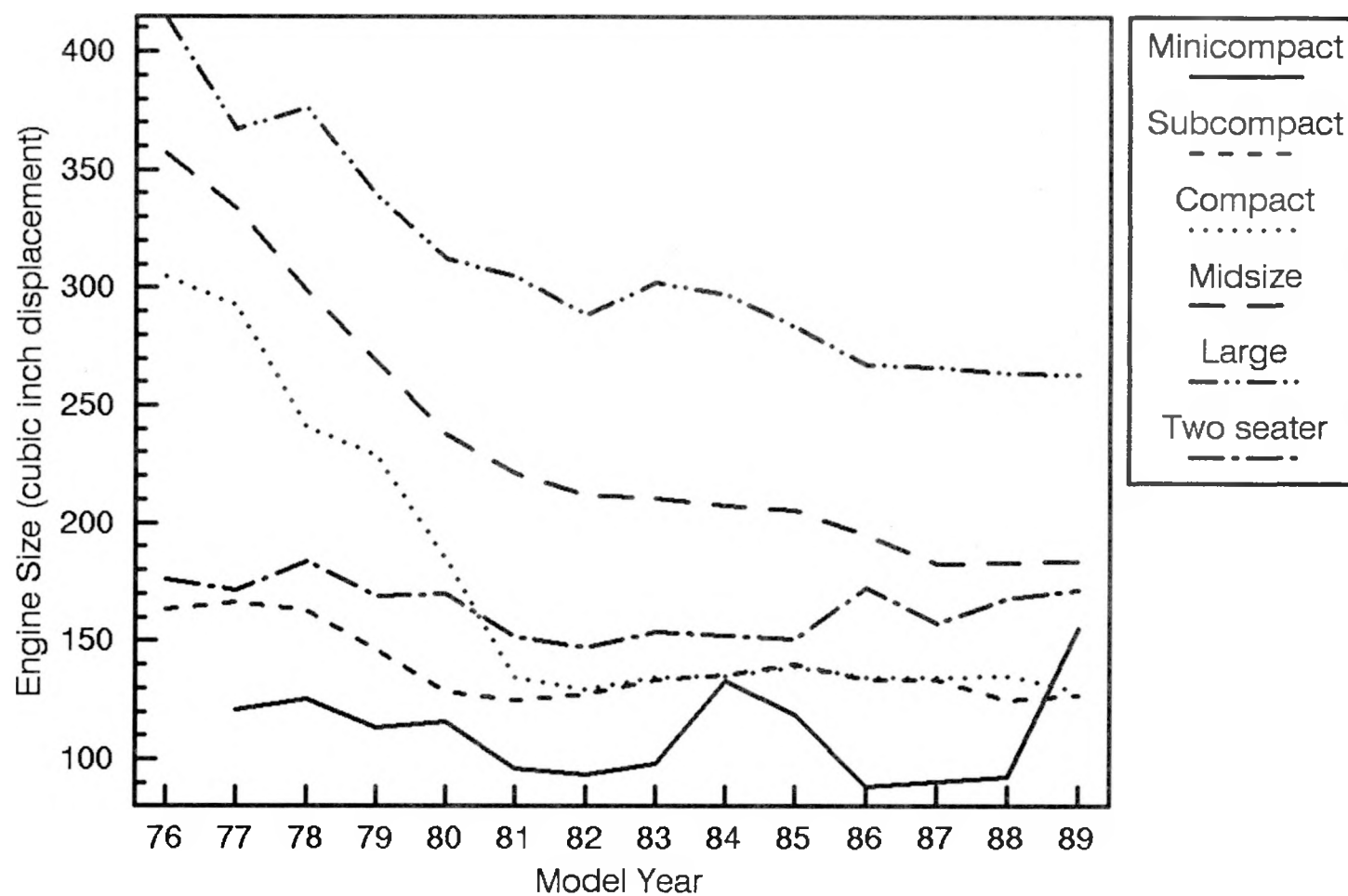
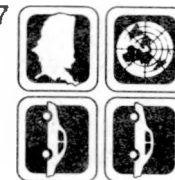


Fig. 27. *Engine Size* of Domestic and Import Automobiles, by Size Classification, Model Years 1976-1989.

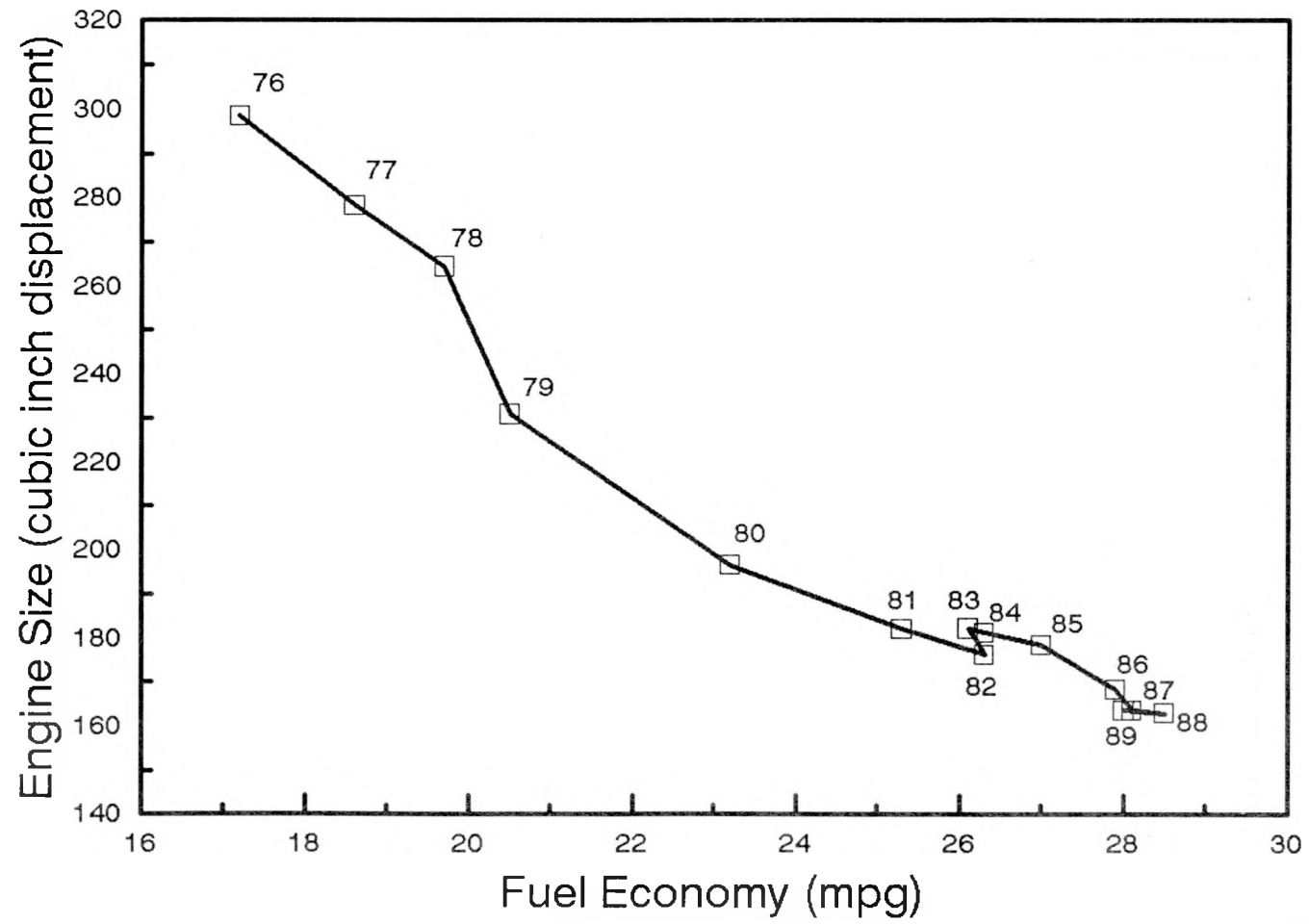


Fig. 28. Automobile Engine Size vs. Fuel Economy.

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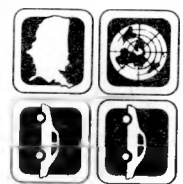




Table 37
Sales-Weighted *Engine Size of Domestic Automobiles* by Size Class
(cubic inches -- 1 liter = 61.026 cubic inches)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		198.7	311.2	357.3	414.2	350.0	325.9
77	188.8	205.3	298.4	333.7	367.2	350.0	311.6
78	171.3	226.8	248.4	298.7	376.3	350.0	297.9
79	141.5	179.2	246.5	269.3	339.4	350.0	261.7
80	140.0	150.7	199.7	238.3	312.3	350.0	226.3
81	140.0	147.5	133.2	221.2	304.8	192.6	207.1
82		153.9	127.9	212.0	288.4	167.8	199.8
83		172.2	134.3	210.3	302.0	206.2	205.5
84		165.2	137.7	208.5	297.1	179.0	199.3
85		173.8	142.5	207.2	283.6	190.6	196.1
86		169.2	137.9	196.1	268.2	224.1	187.1
87		185.1	138.4	183.7	267.5	228.3	182.3
88		185.4	138.4	185.1	264.7	250.7	181.1
89		169.9	130.6	185.4	264.1	298.6	179.9



Table 38
Sales-Weighted *Engine Size of Import Automobiles* by Size Class
(cubic inches -- 1 liter = 61.026 cubic inches)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		100.9	149.0	276.0		131.2	110.1
77	104.9	99.5	146.6	283.2		131.1	108.7
78	92.8	103.7	146.8	265.8		141.9	107.1
79	94.6	102.5	146.4	175.4		131.1	107.6
80	96.4	106.6	140.9	159.9		132.2	110.1
81	90.5	108.8	141.3			128.0	110.1
82	93.5	111.5	134.8	234.0		133.9	113.8
83	97.8	112.4	134.5	198.5		131.3	116.2
84	132.7	113.2	125.4	151.4		129.5	118.9
85	118.8	110.8	129.2	149.8		122.7	120.6
86	88.4	109.0	127.2	164.2	121.0	139.3	118.6
87	90.2	108.1	125.6	163.0	121.0	127.4	118.7
88	92.5	101.2	126.5	161.8	121.0	129.4	116.4
89	155.2	101.7	124.4	168.1	121.0	129.3	119.9

5.2 TRENDS IN AUTOMOBILE CURB WEIGHT

- o Between 1976 and 1980, changes in the sales-weighted curb weight from one year to the next were dramatic, with the smallest change of 184 pounds from 1976 to 1977. However, changes from one year to the next since 1980 have been small, with the largest change, a gain of 58 pounds, from 1982 to 1983 (Table 39).
- o Every size class but subcompact and compact had a higher sales-weighted curb weight in 1989 than the previous model year, leading to a 35.8 pound increase for automobiles (Table 39 and Figure 29).
- o The curb weight of midsize cars increased 102.7 pounds from the previous model year, reaching 2,983.0 pounds (Table 39 and Figure 29). Ford Thunderbird, Nissan Maxima, and Mercury Cougar XR-7 contributed to this increase. These vehicles moved into the midsize class with dominating sales and curb weights of more than 3,000 pounds, causing the sales-weighted curb weight of the midsize class to increase in 1989.
- o The sales-weighted curb weight of minicompacts showed a tremendous increase of 643.1 pounds in 1989 (Table 39 and Figure 29). This increase was a result of the fact that the Chevrolet Sprint, which claimed more than half of the minicompact sales in 1988 and had a very low curb weight of 1,565 pounds, changed its size class in 1989 to subcompact.
- o For the third consecutive year, the sales-weighted curb weight of domestic automobiles increased, reaching 2,865.4 pounds in 1989 (Table 40).

- o Although both domestic subcompacts and compacts were lighter in 1989, these decreases in sales-weighted curb weight were not enough to neutralize the gains experienced by the midsize, large, and two seater classes. The domestic midsize class was primarily responsible for the 39.0 pound increase for domestic cars. The curb weight of midsize cars increased 103.4 pounds and it gained 3.7 % of the domestic car market in 1989.
- o The sales-weighted curb weight of import automobiles has steadily increased since model year 1979. In model year 1989, this trend continued with a 11.9 pound increase (Table 41).



Table 39
Sales-Weighted *Curb Weight of Domestic and Import Automobiles* by Size Class
(pounds)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		2,577.2	3,608.7	4,046.1	4,562.7	2,624.1	3,608.0
77	2,228.0	2,586.3	3,549.8	3,900.3	4,025.8	2,608.1	3,424.4
78	2,199.6	2,444.3	3,137.5	3,426.8	3,955.7	2,762.5	3,196.5
79	2,120.1	2,366.7	3,048.0	3,286.7	3,763.4	2,699.1	3,000.4
80	2,154.3	2,270.4	2,812.5	3,080.9	3,667.4	2,713.6	2,790.3
81	1,919.8	2,370.5	2,381.7	2,995.7	3,671.8	2,583.0	2,744.3
82	2,002.1	2,301.7	2,421.8	2,991.9	3,702.8	2,524.8	2,729.8
83	2,072.0	2,333.9	2,441.3	3,026.5	3,779.0	2,662.5	2,787.9
84	2,375.9	2,371.0	2,453.7	2,990.0	3,733.6	2,559.3	2,786.0
85	2,210.8	2,379.0	2,474.6	2,953.6	3,575.4	2,538.6	2,748.5
86	2,116.2	2,399.4	2,440.7	2,856.7	3,451.2	2,574.5	2,679.2
87	1,959.7	2,413.0	2,483.1	2,856.8	3,483.0	2,601.8	2,694.4
88	1,932.7	2,355.2	2,562.3	2,880.3	3,487.8	2,693.0	2,723.7
89	2,575.8	2,354.9	2,512.2	2,983.0	3,495.7	2,786.3	2,759.5

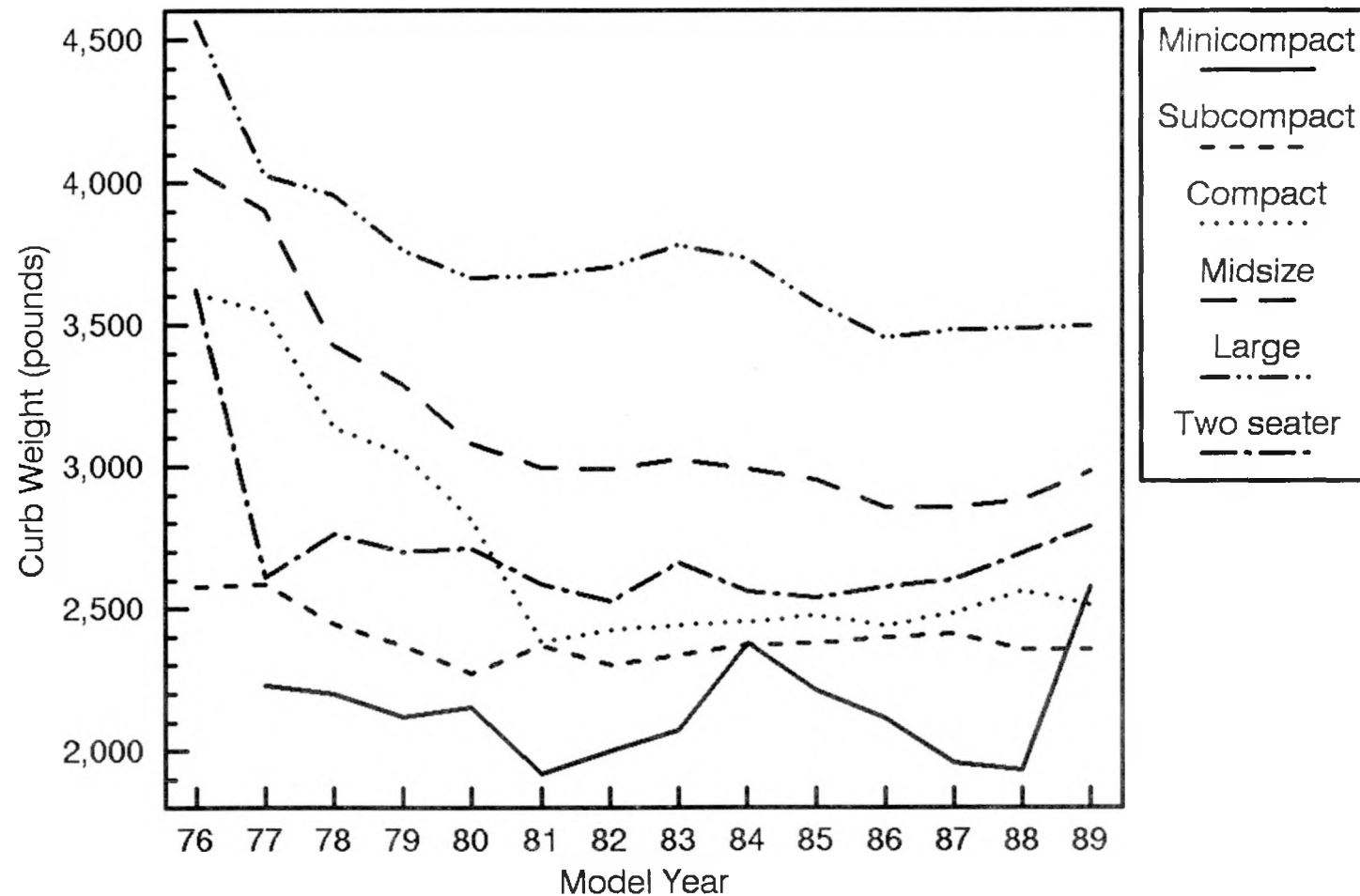


Fig. 29. *Curb Weight* of Domestic and Import Automobiles, by Size Classification, Model Years 1976-1989.

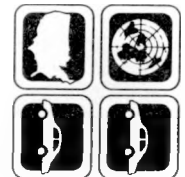




Table 40
Sales-Weighted *Curb Weight of Domestic Automobiles* by Size Class
(pounds)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		2,814.8	3,631.0	4,045.8	4,562.6	3,541.0	3,801.2
77	2,729.0	2,813.5	3,567.8	3,899.6	4,025.8	3,534.0	3,654.5
78	2,554.4	2,799.1	3,147.7	3,426.0	3,955.7	3,572.0	3,415.5
79	2,462.2	2,574.1	3,053.6	3,287.2	3,763.4	3,503.0	3,206.1
80	2,495.7	2,434.5	2,750.5	3,081.3	3,667.4	3,334.0	2,998.6
81	2,496.0	2,626.9	2,289.2	2,995.7	3,671.8	2,576.9	2,922.2
82		2,424.5	2,330.8	2,991.3	3,702.8	2,471.4	2,895.7
83		2,525.1	2,367.0	3,025.5	3,779.0	2,594.2	2,949.8
84		2,552.8	2,420.9	2,987.6	3,733.6	2,553.7	2,905.6
85		2,594.8	2,419.5	2,953.0	3,575.4	2,596.0	2,846.0
86		2,554.3	2,393.1	2,847.5	3,454.1	2,702.5	2,770.2
87		2,672.3	2,429.3	2,851.6	3,487.2	2,786.3	2,789.7
88		2,652.4	2,524.4	2,869.0	3,491.3	3,046.8	2,826.4
89		2,607.9	2,484.0	2,972.4	3,499.2	3,229.1	2,865.4



Table 41
Sales-Weighted *Curb Weight of Import Automobiles* by Size Class
(pounds)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		2,161.9	3,056.1	4,135.0		2,387.0	2,281.1
77	2,110.7	2,195.5	3,113.4	4,080.0		2,398.4	2,249.9
78	1,946.5	2,116.6	3,007.5	3,976.1		2,558.4	2,168.3
79	1,894.6	2,094.7	3,022.4	3,175.2		2,531.3	2,178.2
80	1,879.2	2,112.4	2,994.6	3,001.0		2,583.1	2,187.9
81	1,846.4	2,192.5	3,032.9			2,586.6	2,233.6
82	2,002.1	2,229.4	2,799.3	3,640.0		2,559.3	2,294.6
83	2,072.0	2,228.5	2,727.0	3,422.6		2,692.0	2,331.5
84	2,375.9	2,235.5	2,577.0	3,109.3		2,564.1	2,372.8
85	2,210.8	2,190.9	2,641.7	2,972.8		2,497.9	2,411.8
86	2,116.2	2,289.4	2,564.4	3,077.8	2,935.0	2,492.2	2,422.8
87	1,959.7	2,281.2	2,614.0	2,935.3	2,967.0	2,524.7	2,453.6
88	1,932.7	2,234.9	2,674.0	2,996.6	3,022.0	2,528.8	2,460.5
89	2,575.8	2,217.2	2,584.4	3,074.9	3,004.0	2,621.5	2,472.4

5.3 TRENDS IN AUTOMOBILE INTERIOR SPACE

- o The sales-weighted interior space (passenger and trunk space combined) increased 0.5 cubic feet in model year 1989 to 107.5 cubic feet (Table 42). A market share shift to the larger size classes, midsize and large, led to this 0.5 cubic foot increase.
- o The sales-weighted interior space of domestic automobiles remained constant at 110.6 cubic feet (Table 43).
- o The sales-weighted interior space of import automobiles increased 0.9 cubic feet in 1989 (Table 44) as a result of the minicompact and subcompact size classes losing shares of the import automobile market to the compact and midsize classes.
- o The gap between the sales-weighted interior space of domestic automobiles and import automobiles has been decreasing fairly steadily as the interior space of import automobiles approaches the level of domestic automobiles. In 1977, the difference between domestic and import interior space was 25.6 cubic feet. In 1989, this difference was a record low 11.5 cubic feet (Tables 43 and 44).



Table 42
Sales-Weighted *Interior Space of Domestic and Import Automobiles* by Size Class
(cubic feet)

Model year	Minicompact (< 85)	Subcompact (85-99)	Compact (100-109)	Midsize (110-119)	Large (> 120)	Two seater ^a	Fleet
76 ^b							
77	78.8	89.8	107.1	113.0	128.0		107.9
78	79.4	89.8	105.3	112.9	128.5		107.9
79	80.0	90.2	105.8	113.4	130.1		106.9
80	82.4	89.9	105.4	113.5	130.8		104.9
81	83.3	90.2	103.6	113.7	130.6		105.5
82	83.1	91.3	102.9	113.9	130.4		106.0
83	82.7	93.3	103.0	113.1	131.3		107.3
84	77.0	93.8	103.0	113.3	130.7		108.0
85	77.8	94.1	103.1	113.5	129.7		107.9
86	80.1	94.5	102.8	113.8	127.6		107.0
87	81.6	93.1	103.0	113.9	127.5		106.9
88	81.0	93.5	103.3	113.6	127.2		107.0
89	75.0	93.3	102.7	113.8	127.4		107.5

^aInterior volumes of two seaters are not reported to EPA.

^bData not available.

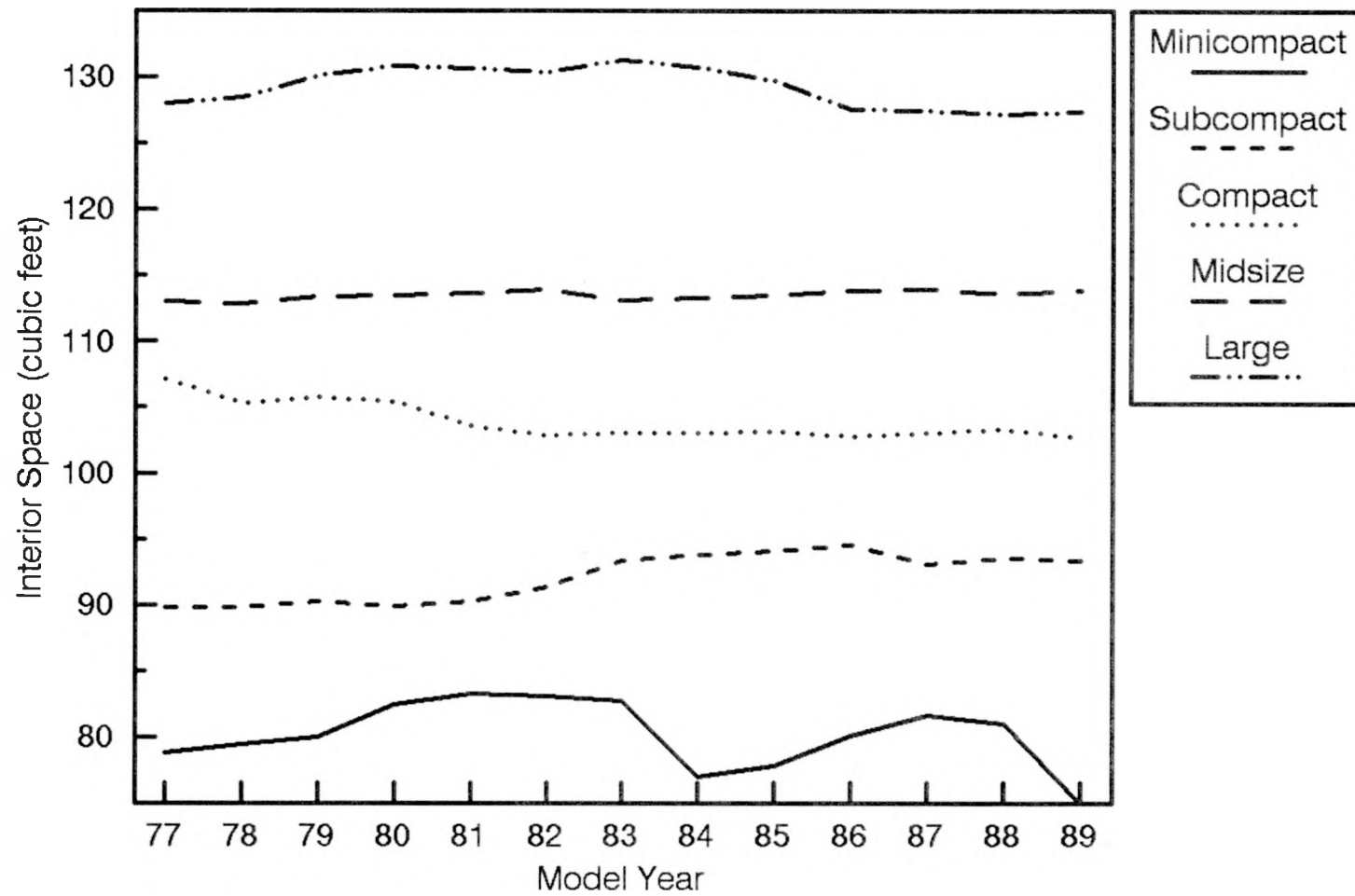


Fig. 30. *Interior Space* of Domestic and Import Automobiles, by Size Classification, Model Years 1977-1989.



Table 43
Sales-Weighted *Interior Space of Domestic Automobiles* by Size Class
(cubic feet)

Model year	Minicompact (< 85)	Subcompact (85-99)	Compact (100-109)	Midsize (110-119)	Large (> 120)	Two seater ^a	Fleet
76 ^b							
77	80.0	89.4	107.2	113.0	128.0		111.7
78	81.6	89.2	105.4	112.9	128.5		111.9
79	83.0	91.6	106.4	113.4	130.1		111.3
80	83.0	90.9	106.6	113.5	130.8		109.9
81	83.0	91.3	103.6	113.7	130.6		110.7
82		92.4	102.5	113.9	130.4		111.4
83		93.1	102.6	113.1	131.3		111.7
84		94.5	102.7	113.3	130.7		111.1
85		95.0	102.9	113.5	129.7		110.7
86		95.9	102.5	113.9	127.6		110.4
87		95.0	102.8	114.1	127.5		110.5
88		96.0	103.4	113.6	127.2		110.6
89		95.3	102.5	113.9	127.4		110.6

^aInterior volumes of two seaters are not reported to EPA.

^bData not available.



Table 44
Sales-Weighted *Interior Space of Import Automobiles* by Size Class
(cubic feet)

Model year	Minicompact (< 85)	Subcompact (85-99)	Compact (100-109)	Midsize (110-119)	Large (> 120)	Two seater ^a	Fleet
76 ^b							
77	78.5	90.3	103.8	111.0			86.1
78	77.9	90.3	104.1	111.0			87.4
79	78.0	88.3	103.0	111.0			87.9
80	81.9	88.9	101.7	111.7			89.2
81	83.3	89.4	103.6				89.6
82	83.1	90.7	104.2	115.0			91.6
83	82.7	93.4	104.6	112.8			94.4
84	77.0	93.3	104.0	113.7			96.5
85	77.8	93.4	103.7	113.2			98.2
86	80.1	93.6	103.5	112.7	126.0		97.6
87	81.6	92.2	103.4	112.1	126.0		98.0
88	81.0	92.6	103.0	113.2	127.0		98.1
89	75.0	92.1	103.3	112.4	124.0		99.1

^aInterior volumes of two seaters are not reported to EPA.

^bData not available.

5.4 TRENDS IN AUTOMOBILE WHEEL BASE

- o The sales-weighted wheel base of the new auto fleet increased 0.4 inches in model year 1989 (Table 45). A 0.5 and 0.2 inch wheel base increase for midsize and large cars, respectively, as well as a market share shift toward these two larger classes, contributed to the 0.4 inch increase (Table 45 and Figure 31).
- o The size classification change of the popular Ford Thunderbird and Mercury Cougar XR-7, from compact in 1988 to midsize in 1989, contributed to the 0.5 inch increase in 1989. Both vehicles had larger wheel bases (113.0 inches) than that of an average midsize automobile.
- o The sales-weighted wheel base of domestic automobiles increased 0.4 inches in model year 1989 (Table 46). An increase of 0.5 inches for midsize cars, compounded by a market share gain for the class, contributed to the wheel base increase for domestic automobiles. The effect of a 0.4 inch decrease for the compact class was lessened by a market share loss for the class.
- o Like domestics, the sales-weighted wheel base of import automobiles increased 0.4 inches (Table 47). The midsize class, which had the largest sales-weighted wheel base of the import size classes, gained 4.1% of the import automobile market in 1989, resulting in the overall increase for the import automobiles.



Table 45
Sales-Weighted *Wheel Base of Domestic and Import Automobiles* by Size Class
(inches)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		97.6	111.6	116.3	122.7	91.6	110.8
77	93.7	98.0	111.7	116.4	118.4	91.6	109.8
78	93.5	97.9	108.5	110.1	118.7	92.1	107.7
79	93.0	97.2	108.0	109.4	117.1	91.9	105.8
80	92.4	96.3	106.5	107.8	116.7	92.8	103.6
81	90.4	96.5	100.8	106.9	116.8	93.3	103.0
82	91.7	96.8	100.4	106.6	117.0	93.7	103.0
83	92.9	97.3	100.4	107.0	117.3	93.7	103.8
84	93.0	97.5	100.2	106.2	116.8	92.8	103.5
85	92.0	97.4	100.2	106.1	114.7	92.6	103.0
86	91.0	97.5	99.8	105.6	113.4	91.6	102.3
87	88.5	96.9	100.0	105.4	113.0	92.2	102.2
88	90.3	96.5	100.3	105.3	112.6	93.4	102.3
89	93.3	96.4	100.0	105.8	112.8	93.4	102.7

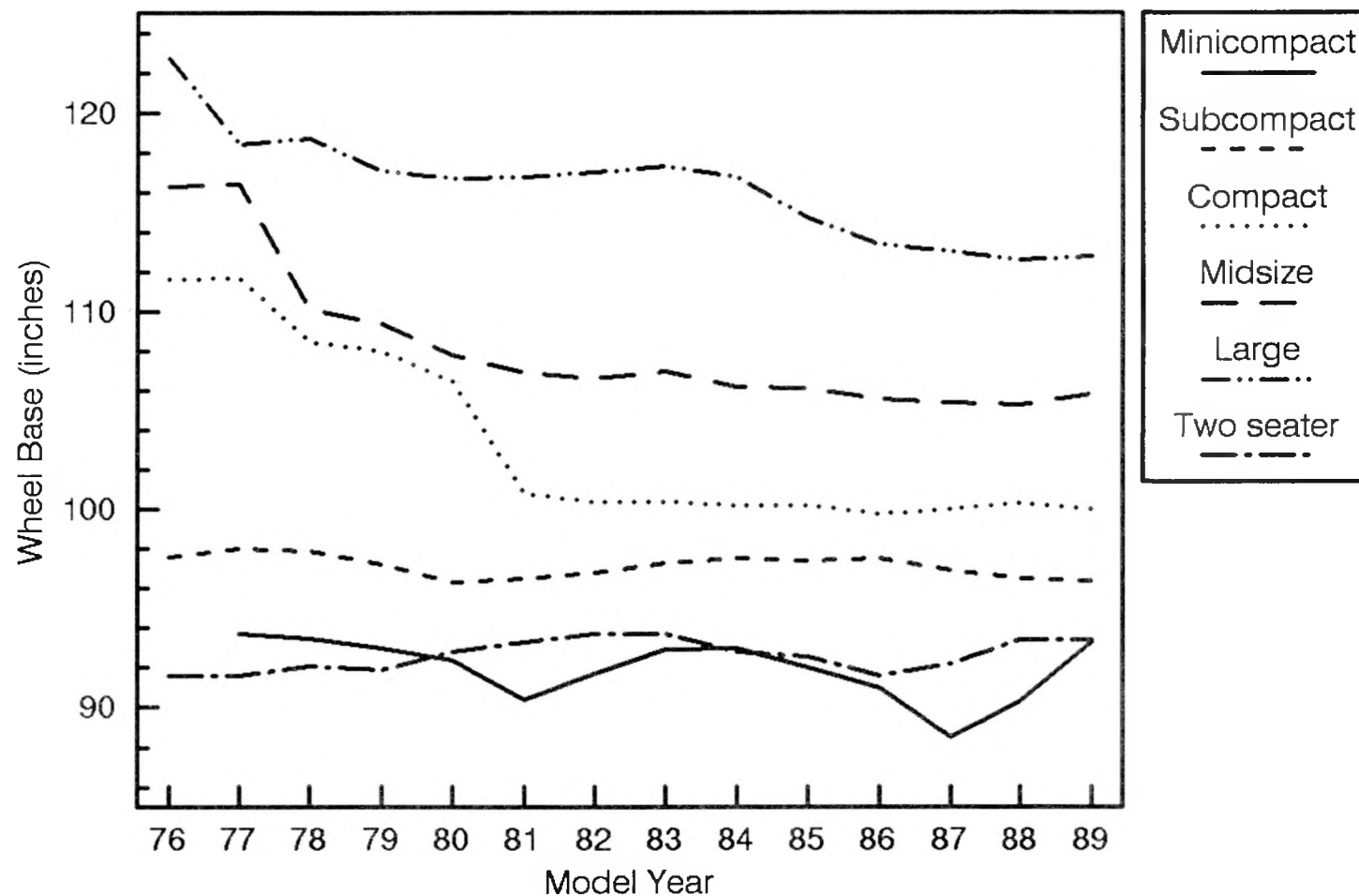


Fig. 31. *Wheel Base* of Domestic and Import Automobiles, by Size Classification, Model Years 1976-1989.





Table 46
Sales-Weighted *Wheel Base of Domestic Automobiles* by Size Class
(inches)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two seater	Fleet
76		99.5	111.8	116.3	122.7	98.0	113.1
77	96.2	99.7	111.9	116.4	118.4	98.0	112.8
78	95.3	100.9	108.7	110.1	118.7	98.0	110.5
79	94.5	99.3	108.4	109.5	117.1	94.3	108.5
80	94.5	98.2	106.8	107.8	116.7	98.0	106.7
81	94.5	98.3	100.0	106.9	116.8	95.6	105.7
82		97.6	99.5	106.6	117.0	95.3	105.5
83		98.6	99.7	107.0	117.3	95.0	106.1
84		98.4	100.0	106.2	116.8	94.0	105.2
85		98.7	100.0	106.0	114.7	94.2	104.6
86		98.6	99.7	105.4	113.4	94.3	104.0
87		99.0	99.8	105.2	113.0	94.4	103.9
88		99.3	100.1	105.2	112.7	95.2	103.9
89		99.1	99.7	105.7	112.8	96.6	104.3



Table 47
Sales-Weighted *Wheel Base of Import Automobiles* by Size Class
(inches)

Model year	Minicompact	Subcompact	Compact	Midsize	Large	Two scater	Fleet
76		94.2	105.5	116.7		90.0	94.8
77	93.1	95.1	106.6	116.7		90.2	94.6
78	92.3	95.0	105.5	110.1		90.7	94.6
79	91.9	94.4	105.8	104.9		91.3	94.7
80	90.8	94.6	105.7	103.8		91.8	94.7
81	89.9	95.3	106.2			92.0	95.1
82	91.7	96.3	103.9	96.9		92.7	96.5
83	92.9	96.6	102.9	115.7		93.1	97.1
84	93.0	96.7	100.8	107.5		91.7	97.6
85	92.0	96.3	100.7	108.1		91.4	97.8
86	91.0	96.6	100.0	109.8	105.2	89.8	97.7
87	88.5	95.8	100.6	108.2	105.2	91.3	97.8
88	90.3	95.3	100.9	106.8	105.2	92.5	98.0
89	93.3	95.0	100.9	106.2	105.2	92.2	98.4

5.5 TRENDS IN LIGHT TRUCK ENGINE SIZE

- o The sales-weighted engine size of the new light truck fleet increased 7.1 cubic inches in model year 1989, changing from 232.8 cubic inches in 1988 to 239.9 in model year 1989 (Table 48). Changes in the small utility class were primarily responsible for this 7.1 cubic inch increase. Engine size of small utility vehicles (SUVs) increased 21.9 cubic inches and market share of the class increased.
- o The engine size of the most popular SUV, the Chevrolet Blazer "S", and the sixth most popular, GMC Jimmy "S", increased 42.4 cubic inches and 42.7 cubic inches, respectively. These increases caused the engine size of the small utility class to increase 21.9 cubic inches (Table 48 and Figure 32).
- o The sales-weighted engine size of domestic light trucks increased 4.8 cubic inches in model year 1989 (Table 49). A 20.1 cubic inch increase in engine size and an increase in market share in the small utility class were responsible for this overall engine size increase.
- o The sales-weighted engine size of import light trucks increased 5.7 cubic inches in model year 1989. Small and large pickup were the only import size classes to show engine size reductions (Table 50).
- o The import SUV with the smallest engine size, the Suzuki Samurai, experienced a substantial sales reduction in model year 1989, contributing to the 17.9 cubic inch increase of import small utility sales-weighted engine size.
- o The Mazda MPV, which was introduced in the final quarter of model year 1988, was 1989's most popular import small van. Since the MPV's engine is larger than the engine of any of the other import small van, its popularity contributed to a 14.9 cubic inch increase in engine size for the class.



Table 48
Sales-Weighted *Engine Size of Domestic and Import Light Trucks* by Size Class
(cubic inches -- 1 liter = 61.026 cubic inches)

Model year	Small pickup	Large pickup	Small van	Large van	Small utility	Large utility	Fleet
76	116.7	339.6	120.0	328.8	329.1	303.1	318.9
77	122.8	334.4	120.0	324.7	333.4	302.1	306.7
78	123.9	332.6	120.0	322.7	310.8	329.7	306.5
79	125.3	314.1	120.0	313.3	275.7	323.3	281.7
80	125.0	308.4	120.0	306.7	261.6	329.0	264.2
81	130.4	294.1	120.0	295.5	240.6	314.3	253.4
82	142.7	304.4	109.4	300.5	237.0	321.3	258.8
83	143.7	303.5	114.3	308.6	186.0	326.1	244.2
84	145.0	301.8	136.2	308.7	171.2	329.0	235.9
85	145.5	290.8	161.9	312.6	172.7	327.5	229.8
86	148.0	285.6	169.8	313.1	169.4	338.6	222.6
87	149.0	286.0	180.8	317.8	171.1	331.0	222.6
88	156.5	285.7	192.2	318.2	191.7	336.3	232.8
89	160.8	286.9	189.5	318.3	213.6	332.8	239.9

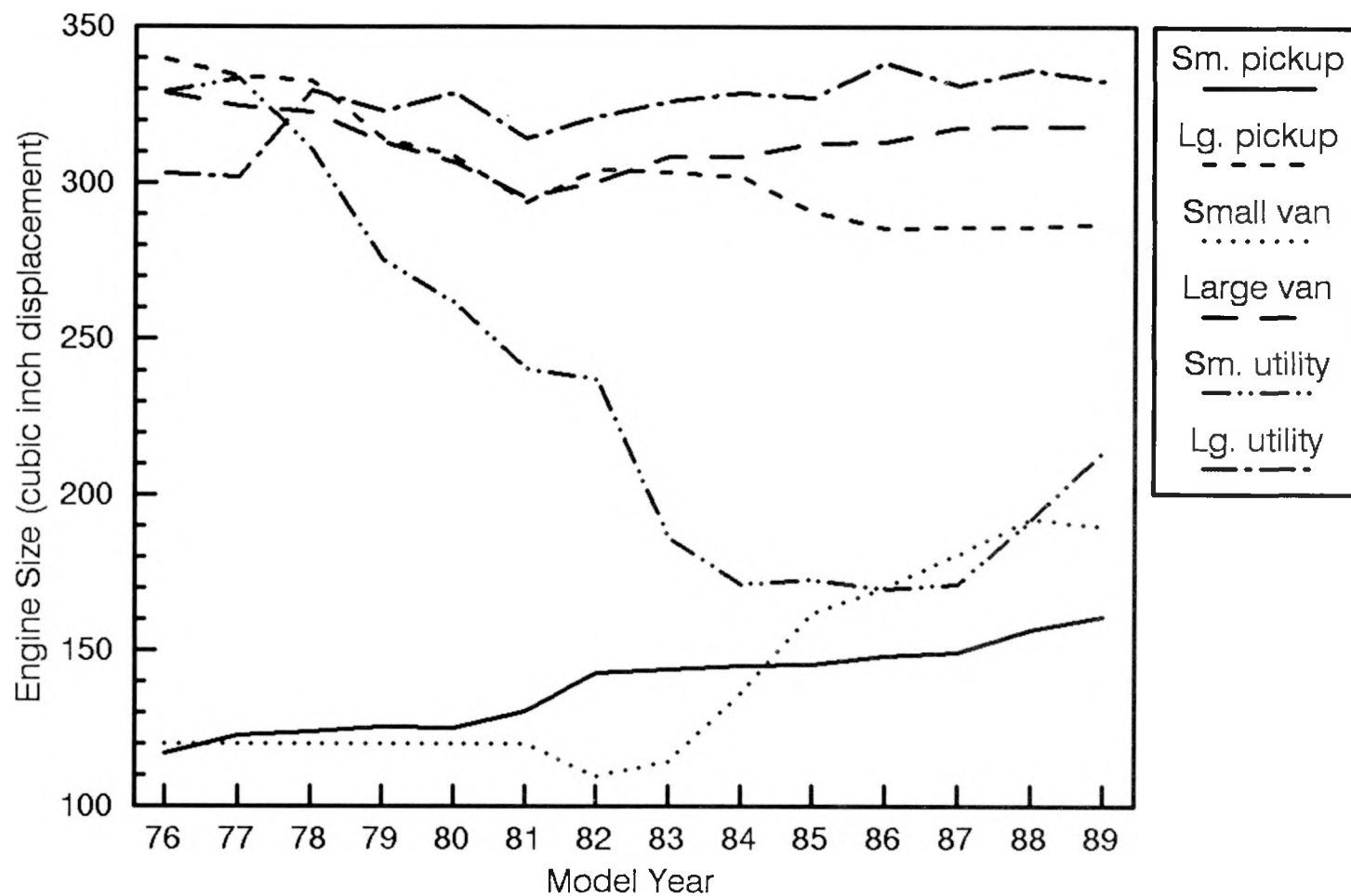


Fig. 32. *Engine Size* of Domestic and Import *Light Trucks*, by Size Classification, Model Years 1976-1989.



Table 49
Sales-Weighted *Engine Size of Domestic Light Trucks* by Size Class
(cubic inches -- 1 liter = 61.026 cubic inches)

Model year	Small pickup	Large pickup	Small van	Large van	Small utility	Large utility	Fleet
76		339.6		328.8	329.1	315.3	336.5
77		334.4		324.7	333.4	316.9	332.3
78		332.6		322.7	310.8	331.1	329.9
79		314.1		313.3	275.7	330.6	313.4
80		308.4		306.7	261.6	330.7	308.1
81		294.1		295.5	240.6	315.3	294.6
82	163.1	304.4		300.5	237.0	322.7	289.4
83	154.7	303.5		308.6	186.0	327.9	269.4
84	155.6	311.0	144.3	308.7	172.4	330.4	257.9
85	157.1	303.8	173.4	312.6	176.8	328.6	252.9
86	160.3	303.3	176.8	313.1	178.7	340.4	245.6
87	159.2	301.7	188.8	317.8	195.1	332.7	247.2
88	162.6	300.2	197.1	318.2	212.6	341.4	249.7
89	168.4	298.2	193.6	318.3	232.7	336.9	254.5



Table 50
Sales-Weighted *Engine Size of Import Light Trucks* by Size Class
(cubic inches -- 1 liter = 61.026 cubic inches)

Model year	Small pickup	Large pickup	Small van	Large van	Small utility	Large utility	Fleet
76	116.7		120.0			258.0	122.0
77	122.8		120.0			258.0	127.1
78	123.9		120.0			258.0	124.0
79	125.3		120.0			258.0	126.8
80	125.0		120.0			258.0	125.9
81	130.4		120.0			258.0	130.7
82	133.8		109.4			258.0	133.9
83	134.3		114.3		156.0	258.0	134.9
84	133.1	144.1	120.8		138.9	258.0	133.7
85	134.1	144.6	121.1		131.7	258.0	134.5
86	135.2	144.3	130.9		122.5	258.0	135.5
87	137.0	148.0	132.9		122.6	258.0	135.3
88	144.8	149.6	134.5		132.7	232.1	143.0
89	144.0	149.0	149.4		150.6	240.5	148.7

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9. Hu, P.S., and L.E. Till, *User's Manual: Oak Ridge National Laboratory MPG and Market Shares Data System*, ORNL-6309, Oak Ridge National Laboratory, Oak Ridge, Tennessee, December 1986.

Appendices

- A. Glossary
- B. Data Sources of ORNL MPG and Market Share Data System
- C. Automobile Nameplates by EPA Size Classification
- D. Light Truck Nameplates by Size Classification
- E. Model Year Automobile Nameplates Ranked by Sales, Model Years 1976-1989
- F. Model Year Light Truck Nameplates Ranked by Sales, Model Years 1976-1989
- G. Methodology for Estimating Sales-Weighted Fuel Economy
- H. Methodology for Estimating Sales-Weighted Vehicle Characteristics

Appendix A

Glossary

- o Curb weight--Weight of a vehicle including all standard equipment, spare tire and wheel, all fluids and lubricants to capacity, full tank of gasoline, and the weight of major optional accessories normally found on the vehicle. Curb weight is 300 pounds less than inertia weight.
- o EPA size classifications for automobiles are derived by the interior size of each vehicle, while size classifications for light-duty trucks are grouped by capacity in terms of gross vehicle weight (GVW) which is truck weight plus carrying capacity. Note that the light truck size classification scheme is not the one cited in *Gas Mileage Guide*, EPA, but the one defined in a SAE paper series by EPA staff [1]-[6].

Automobile Classes

Minicompact---Less than 85 cubic feet of passenger and luggage volume.

Subcompact---Between 85 and 99 cubic feet of passenger and luggage volume.

Compact---Between 100 and 109 cubic feet of passenger and luggage volume.

Midsized---Between 110 and 119 cubic feet of passenger and luggage volume.

Large---120 or more cubic feet of passenger and luggage volume.

Two seater---Cars designed to primarily seat two adults.

Light Truck Classes

Small pickup---2WD and 4WD trucks having Gross Vehicle Weight Ratings (GVWR) under 4,500 pounds.

Large pickup---2WD and 4WD trucks having GVWR of 4,500 to 8,500 pounds.

Small van---As of model year 1989, all import cargo and passenger vans and the following domestic ones:

- o Chevrolet Astro
- o Chevrolet Lumina APV
- o Dodge Caravan/Ram Van
- o Dodge Mini Ram Van
- o Ford Aerostar
- o GMC Safari
- o Plymouth Town & Country
- o Plymouth Voyager

Large van---As of model year 1989, all domestic cargo and passenger vans, with the exceptions as noted in "Small van."

Small utility vehicle---All other light-duty vehicles not in a car or truck class are classified as utility vehicles. As of model year 1989, all import utility vehicles with the exceptions as noted in "Large utility vehicle" and the following domestic ones are small utility vehicles:

- o Chevrolet Blazer "S"
- o Ford Bronco II
- o GMC Jimmy "S"
- o Jeep Cherokee XJ
- o Jeep Wagoneer XJ
- o Jeep Wrangler

Large utility vehicle---All domestic utility vehicles, with the exceptions as noted in "Small utility vehicle" and the following import utility vehicles:

- o Range Rover
- o Toyota Land Cruiser

Appendix B
Data Sources of ORNL MPG and Market Shares Data System

- o Sales for domestic and domestic-sponsored automobiles:
 "Ward's Automotive Reports," monthly, Ward's Communication, Inc.,
 Detroit, Michigan.
- o Sales for import and import-sponsored automobiles:
 "Ward's Automotive Reports," monthly, Ward's Communication, Inc.,
 Detroit, Michigan.
- o Sales for light trucks, domestic and import:
 "Ward's Automotive Reports," monthly, Ward's Communication, Inc.,
 Detroit, Michigan.
- o Fuel economies, annual fuel cost, engine displacement, cylinder, transmission
 type, interior/trunk spaces:
 "Gas Mileage Guide Computer Listing," annual, Environmental Protection
 Agency, Washington, D.C.
- o Wheel base, curb weight, length, width, height:
 "Automotive News Market Data Book," annual, Crain Communication, Inc.,
 Detroit, Michigan.

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two seater</i>
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MODEL YEAR 1989

Alfa Romeo GTV-6	Acura Integra	Acura Legend	Audi 100/100 Quattro	Buick Electra	Alfa Romeo Spider
Porsche 911	Alfa Romeo Milano	Austin Rover Sterling 825SL	Audi 200/200 Turbo Quattro	Buick LeSabre	Buick Reatta
Porsche 924S	Audi 4000	BMW 525 I	Audi 5000S	Cadillac DeVille/Fleetwood	Cadillac Allante
Porsche 928	Audi 4000S Quattro	BMW 528 I	Audi V8 Sedan	Cadillac Fleetwood Brougham	Chevrolet Corvette
Porsche 944	Audi 80/80 Quattro	BMW 535 I	BMW 735 I	Chevrolet	Chrysler TC by Maserati
Volkswagen Cabriolet	Audi 90/90 Quattro	BMW M5	BMW 750 iL	Eagle Premier	Ferrari
	Audi Coupe	Buick Skyhawk	Buick Century	Ford LTD Crown Victoria	Honda Civic CRX
	Audi Coupe Quattro	Buick Somerset	Buick Regal	Lincoln Continental	Mazda Miata
	BMW 325	Cadillac Cimarron	Buick Riviera	Lincoln Town Car	Mazda RX-7
	BMW 635 CSI	Chevrolet Beretta	Cadillac Eldorado	Mercury Grand Marquis	Mercedes Benz 560 SL
	BMW M3	Chevrolet Cavalier	Cadillac Seville	Oldsmobile 88	Nissan 300 ZX
	BMW M6	Chevrolet Nova	Chevrolet Celebrity	Oldsmobile 98	Pontiac Fiero
	Chevrolet Camaro	Chrysler LaBaron	Chevrolet Corsica	Pontiac	Toyota MR-2
	Chevrolet Sprint	Dodge Omni	Chevrolet Lumina	Pontiac Bonneville	
	Chrysler Conquest	Dodge Shadow	Chevrolet Monte Carlo	Saab 9000	
	Daihatsu	Eagle Summit	Chrysler 5th Avenue		
	Dodge Colt Hatchback	Ford Escort	Chrysler LeBaron GTS		
	Dodge Daytona	Ford Probe	Chrysler New Yorker C-Car		
	Ford Festiva	Ford Tempo	Chrysler New Yorker E-Class		
	Ford Mustang	Honda Accord	Dodge 600		
	Geo Prizm	Honda Accord-American	Dodge Aries		
	Geo Spectrum	Jaguar XJ6	Dodge Diplomat		
	Honda Civic	Lexus ES250	Dodge Dynasty		
	Honda Civic-American	Mazda GLC/323	Dodge Lancer		
	Honda Prelude	Mercedes Benz 260E	Dodge Spirit		
	Hyundai Excel	Mercedes Benz 300 D/300 CD	Eagle Medallion		
	Isuzu I-Mark	Mercedes Benz 300 E	Ford Taurus		
	Isuzu Impulse	Mercedes Benz 300 SDL/300 SD	Ford Thunderbird		
	Jaguar XJ-S	Mercedes Benz 300 SE	Hyundai Sonata		
	Mercedes Benz 190 D 2.2	Mercedes Benz 560 SEC	Lexus LS400		
	Mercedes Benz 190 E 2.3	Mercury Lynx	Lincoln Mercury Mark VII		
	Mitsubishi Cordia	Mercury Topaz	Mazda 626		
	Mitsubishi Eclipse	Merkur XR4Ti	Mazda 929		
	Mitsubishi Mirage	Mitsubishi Galant	Mazda MX6		
	Mitsubishi Precis	Mitsubishi Galant Sigma	Mazda MX-6 American		
	Mitsubishi Starion	Nissan Sentra (210)	Mercedes Benz 300 SEL		
	Mitsubishi Tredia	Nissan Sentra-American	Mercedes Benz 420 SEL		
	Nissan 200SX	Nissan Stanza (510)	Mercedes Benz 560 SEL		
	Nissan Pulsar NX	Oldsmobile Calais	Mercury Cougar XR-7		
	Plymouth Colt	Oldsmobile Firenza	Mercury Sable		
	Plymouth Laser	Peugeot 405	Merkur Scorpio		

Automobile Nameplates by Size Classification

Appendix C

Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsized</i>	<i>Large</i>	<i>Two Seater</i>
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MODEL YEAR 1989 (Cont'd)

Pontiac Firebird Subaur Hatchback Subaru Justy Subaru XT Suzuki Swift Toyota Celica Toyota Corolla Toyota FX16-American Toyota Supra Toyota Tercel Volkswagen Corrado Volkswagen Fox Volkswagen Scirocco Yugo GV/GVX	Peugeot 505 (Gas) Plymouth Horizon Plymouth Sundance Pontiac Grand AM Pontiac J2000/Sunbird Pontiac LeMans Import Saab 900 Subaru Legacy Subaru Loyale Subaru Sedan Toyota Camry (Corona) Toyota Camry - American Toyota Cressida Volkswagen Golf Volkswagen Golf-American Volkswagen Jetta Volkswagen Jetta-American Volkswagen Quantum Volvo 780 Volvo DL Volvo GL	Nissan Maxima (810) Oldsmobile Ciera Oldsmobile Supreme Oldsmobile Toronado Plymouth Acclaim Plymouth Caravelle Plymouth Gran Fury Plymouth Reliant Pontiac A6000 Pontiac Grand Prix Volvo 740 GLE Volvo 760 GLE
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New Nameplates for Model Year 1989

Audi Coupe Quattro Geo Prizm Mitsubishi Eclipse Plymouth Laser Suzuki Swift Volkswagen Corrado	BMW 525 i Lexus ES250 Mercedes Benz 300 E Mercedes Benz 300 SE Subaru Legacy Subaru Loyale Volkswagen Golf	Audi V8 Sedan Chevrolet Lumina Dodge Spirit Hyundai Sonata Lexus LS400 Plymouth Acclaim	Chrysler TC by Maserati Mazda Miata
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Changed Size Class in Model Year 1989

Chevrolet Sprint ¹	Chevrolet Sprint ²	Chevrolet Corsica ¹ Ford Thunderbird ¹ Mercury Cougar XR-7 ¹ Nissan Maxima (810) ¹	Chevrolet Corsica ² Ford Thunderbird ² Mercury Cougar XR-7 ² Nissan Maxima (810) ²
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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Nameplates Discontinued for Model Year 1988 to 1989

BMW 320 I BMW 633 CSI Dodge Charger 024 Plymouth Turismo (TC3) Pontiac T1000	AMC Eagle AMC Renault Alliance BMW 524 TD
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MODEL YEAR 1988

New Nameplates for Model Year 1988

Porsche 924S	Audi 80/80 Quattro Audi 90/90 Quattro BMW M3 BMW M6 Daihatsu	BMW M5 Eagle Summit Ford Probe Mercedes Benz 300 SDL/300 SD Mitsubishi Galant Sigma Peugeot 405 Toyota Camry-American	Audi 100/100 Quattro Audi 200/200 Turbo Quattro BMW 750 iL Mazda MX-6 American Mercedes Benz 300 SEL	Eagle Premier	Buick Reatta
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Changed Size Class in Model Year 1988

Alfa Romeo Spider ¹ Yugo GV/GVX ¹	Jaguar XJ6 ¹ Toyota Corolla ² Yugo GY/GVX ²	BMW 735i ¹ Jaguar XJ6 ² Mazda 626 ¹ Pontiac LeMans Import ² Toyota Corolla ¹	BMW 735i ² Cadillac Allante ¹ Lincoln Continental ¹ Mazda 626 ² Pontiac LeMans Import ¹	Lincoln Continental ²	Alfa Romeo Spider ² Cadillac Allante ²
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Nameplates Discontinued for Model Year 1987 to 1988

Chrysler Laser Dodge Conquest Mercury Capri Plymouth Conquest Renault 18i	AMC Renault Encore Austin Rover Sterling 825S Peugeot 505 (Diesel/Turbo)
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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MODEL YEAR 1987

New Nameplates for Model Year 1987

Ford Festiva	Austin Rover Sterling 825S	Cadillac Allante
Mitsubishi Precis	Austin Rover Sterling 825SL	Chrysler New Yorker C-Car
Toyota FX16-American	BMW 535 I	Dodge Dynasty
Volkswagen Fox	Chevrolet Corsica/Beretta	Mazda 929
	Mercedes Benz 260E	Mazda MX6
	Volkswagen Jetta-American	Merkur Scorpio
	Volvo 780	Pontiac LeMans Import
		Renault Medallion

Changed Size Class in Model Year 1987

Mazda RX-7 ¹	Honda Accord ¹	Honda Accord ²	Pontiac Bonneville ¹	Pontiac Bonneville ²	Mazda RX-7 ²
	Honda Accord-American ¹	Honda Accord-American ²			
	Nissan Sentra (210) ¹	Nissan Sentra (210) ²			
	Nissan Sentra-America ¹	Nissan Sentra-American ²			

Nameplates Discontinued from Model Year 1986 to 1987

Porsche 924	Audi Quattro	Acura Legend	Chevrolet Citation (X-Car)	Ford EXP
	Renault Fuego	Buick Skylark (X-Car)	Ford LTD 83	Mercedes Benz 380 SL
		Mercedes Benz 300 E	Maserati	
		Mercedes Benz 380 SE	Mercedes Benz 380 SEL/500 SEL	
		Mercedes Benz 500 SEC	Mercury Marquis	
		Volvo GLT		

Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsized</i>	<i>Large</i>	<i>Two Seater</i>
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MODEL YEAR 1986

New Nameplates for Model Year 1986

Alfa Romeo GTV-6 Yugo GV/GVX	Alfa Romeo Milano Acura Integra Chrysler Conquest Honda Civic-American Hyundai Subaru Justy	Acura Legend Dodge Shadow Mercedes Benz 300 E Mercedes Benz 560 SEC Plymouth Sundance	Ford Taurus Mercedes Benz 420 SEL Mercedes Benz 560 SEL Mercury Sable	Saab 9000	Mercedes Benz 560 SL
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Changed Size Class in Model Year 1986

Mazda RX-7 ²	Mazda GLC/323 ¹	Mazda GLC/323 ²	Mazda RX-7 ¹
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Nameplates Discontinued from Model Year 1985 to 1986

Plymouth Arrow Champ	Oldsmobile Omega (X-Car) Peugeot 604	Pontiac Phoenix (X-Car)
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MODEL YEAR 1985

New Nameplates for Model Year 1985

Chevrolet Spectrum Nissan Sentra-American	BMW 524 TD Chevrolet Nova Merkur XR4Ti Volkswagen Golf-American	Chrysler LeBaron GTS Volvo 740 GLE	Cadillac Fleetwood Brougham Toyota MR-2
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Changed Size Class in Model Year 1985

Nissan Maxima ¹ Toyota Cressida ¹ Volkswagen Jetta ¹	Nissan Maxima ² Toyota Cressida ² Volkswagen Jetta ²
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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Nameplates Discontinued from Model Year 1984 to 1985

Renault Le Car Toyota Starlet	AMC Spirit Audi 4000 (Diesel) Dodge Challenger Lancia Beta Nissan Pulsar (310) Volkswagen Rabbit-American	AMC Concord Audi 5000 (Diesel/Turbo) Mercedes Benz 240D Volvo Diesel Sedan	Chevrolet Malibu		Fiat Spider Fiat X 1/9 Mercury LN7
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MODEL YEAR 1984

New Nameplates for Model Year 1984

Chevrolet Sprint Volkswagen Cabriolet	Audi 4000S Quattro BMW 325 Dodge Conquest Dodge Daytona Mercedes Benz 190E 2.3 Mitsubishi Mirage	Buick Somerset Ford Tempo Mercedes Benz 500 SEC Mercedes Benz 380 SE Mitsubishi Galant Oldsmobile Calais Pontiac Grand AM	Audi 5000S Lincoln Mercury Mark VII Maserati Plymouth Caravelle		Honda Civic Coupe Nissan 300 ZX
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Changed Size Class in Model Year 1984

Honda Civic ¹ Honda Prelude ¹	Honda Civic ² Honda Prelude ² Toyota Corolla ¹	Toyota Corolla ²			
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Nameplates Discontinued from Model Year 1983 to 1984

Porsche 924	Mitsubishi Sapporo Volkswagen Dasher	Audi 5000 (Gas) Mercedes Benz 380 SLC Mercury Cougar	Ford Granada Ford Fairmont Mercury Zephyr	Lincoln Continental Mark VI	Nissan 280 ZX
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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MODEL YEAR 1983

New Nameplates for Model Year 1983

Porsche 944	Audi 4000 (Diesel) Audi Quattro Chrysler Laser Dodge Daytona Honda Accord-American Isuzu Impulse Mercedes Benz 190D 2.2 Mitsubishi Cordia Mitsubishi Starion Mitsubishi Tredia Nissan Pulsar (310) Nissan Pulsar NX	Audi 5000 (Diesel/Turbo) Ford Tempo Mercury Topaz Renault Alliance Renault Encore Volvo Diesel Sedan Volvo GL Volvo GLT	Chrysler New Yorker-E Class Dodge 600 Ford LTD 83 Mercury Marquis Volvo 760 GLE	Lincoln Town Car	Pontiac Fiero
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Changed Size Class in Model Year 1983

Mazda 626 ¹ Oldsmobile Firenza ¹ Toyota Camry ¹	Ford Thunderbird ² Mazda 626 ² Mercury Cougar ² Mercury Cougar XR-7 ² Oldsmobile Firenza ² Toyota Camry ²	Ford Thunderbird ¹ Mercury Cougar ¹ Mercury Cougar XR-7 ¹
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Nameplates Discontinued from Model Year 1982 to 1983

Volkswagen Beetle	Fiat Brava Nissan 310	Fiat Strada JRT Rover	Checker	JRT MG JRT Triumph
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MODEL YEAR 1982

New Nameplates for Model Year 1982

Audi Coupe Oldsmobile Firenza Renault Fuego	Buick Skyhawk Cadillac Cimarron Mercedes Benz 380 SLC Peugeot 505 (Diesel/Turbo) Peugeot 604 Volkswagen Quantum	Chevrolet Celebrity Dodge 400 Oldsmobile Ciera Pontiac A6000 Pontiac Bonneville	Mercedes Benz 380 SL
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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Changed Size Class in Model Year 1982

Ferrari ¹ Porsche 911 ² Porsche 924 ²	BMW 528 i ¹ Chevrolet Cavalier ¹ Jaguar XJ/XJS ² Nissan Stanza (510) ¹ Pontiac J2000 ¹	BMW 528 i ² Chevrolet Cavalier ² Jaguar XJ/XJS ¹ Nissan Stanza (510) ² Pontiac J2000 ²	Chrysler 5th Avenue ² Plymouth Gran Fury ² Lincoln Continental ²	Chrysler 5th Avenue ¹ Plymouth Gran Fury ¹ Lincoln Continental ¹	Ferrari ² Porsche 911 ¹ Porsche 924 ¹
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Nameplates Discontinued from Model Year 1981 to 1982

Ford Pinto Mercury Bobcat Plymouth Arrow	Chevrolet Monza Ford Fiesta Pontiac Sunbird	AMC Pacer Mercury Versailles Mercedes Benz 280 E	Dodge Aspen Mercedes Benz 380 SEL/500 SEL Plymouth Volare Pontiac LeMans	Dodge St. Regis	Porsche 930
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MODEL YEAR 1981

New Nameplates for Model Year 1981

Ferrari Toyota Starlet	Chevrolet Cavalier Dodge Charger 024 Isuzu I-Mark Plymouth Turismo (TC3) Pontiac J2000 Pontiac T1000 Renault 18i	AMC Eagle Ford Escort Mercury Lynx	Chrysler Imperial Dodge Aries Mercury Cougar Plymouth Reliant	Ford EXP Mercury LN7
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Changed Size Class in Model Year 1981

Dodge Omni ¹ Plymouth Horizon ¹	Dodge Omni ² Plymouth Horizon ² Ford Granada ¹ Saab 900 ²	Ford Granada ² Saab 900 ¹
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsized</i>	<i>Large</i>	<i>Two Seater</i>
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Nameplates Discontinued from Model Year 1980 to 1981

	Buick Skyhawk Oldsmobile Starfire Mercedes Benz 450 SLC Volkswagen Rabbit	Mercedes Benz 280 S Mercedes Benz 280 SE Mercury Monarch Volvo GLE	Ford LTD II Mercedes Benz 450 SEL		Mercedes Benz 450 SL(107)
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MODEL YEAR 1980

New Nameplates for Model Year 1980

	Toyota Tercel Volkswagen Jetta	JRT Rover	Dodge Mirada Mercury Cougar XR-7		Plymouth Gran Fury
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Changed Size Class in Model Year 1980

Nissan 200SX ¹ Subaru ¹	Nissan 200SX ² Subaru ² BMW 528i ²	BMW 528i ¹ Cadillac Seville ¹	Cadillac Seville ² Lincoln Continental Mark VI ²		Lincoln Continental Mark VI ¹
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Nameplates Discontinued from Model Year 1979 to 1980

Mazda RX-3 Renault Gordini	Audi Fox Buick Opel Fiat 128 Mazda Cosmo Mazda RX-4	Buick Skylark Chevrolet Nova Peugeot 504 Peugeot 604 Pontiac Phoenix Pontiac Phoenix (X-Car)	AMC Matador Dodge Magnum Dodge Monaco/Coronet Ford LTD II Mercedes Benz 450 SEL 6.9 Mercury Cougar		
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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MODEL YEAR 1979

New Nameplates for Model Year 1979

Honda Prelude	Audi 4000	Buick Skylark (X-Car)	Chevrolet Citation (X-Car)	Lincoln Continental Mark VI
Mazda RX-3	Mazda 626	Fiat 138 Strada	Dodge Mirada	
	Mazda RX-4	Mercedes Benz 280 S		
	Nissan 310	Oldsmobile Omega (X-Car)		
	Plymouth Colt	Peugeot 505 (Gas)		
	Toyota Supra	Pontiac Phoenix (X-Car)		

Changed Size Class in Model Year 1979

Dodge Challenger ¹	Dodge Challenger ²	Dodge Aspen ¹	Buick Riviera ²	Buick Riviera ¹	Mercedes Benz 450 SLC ¹
Dodge Colt Hatchback ¹	Dodge Colt Hatchback ²	Dodge Omni ¹	Dodge Aspen ²	Oldsmobile Toronado ¹	
Fiat 128 ¹	Dodge Omni ²	Plymouth Horizon ¹	Oldsmobile Toronado ²		
Ford Mustang ¹	Fiat 128 ²	Plymouth Volare ¹	Plymouth Volare ²		
Nissan Sentra (210) ¹	Ford Mustang ²				
Plymouth Conquest ¹	Mercedes Benz 450 SLC ²				
	Nissan Sentra (210) ²				
	Plymouth Conquest ²				
	Plymouth Horizon ²				

Nameplates Discontinued from Model Year 1978 to 1979

Mazda 808	AMC Gremlin	Mercedes Benz 116	Plymouth Fury	Dodge Royal Manaco	Fiat 124 Sport
	BMW 530 I	Mercedes Benz 123			
	Fiat Mirafiori	Mercedes Benz 280/280C			
	Mercedes Benz 230				
	Nissan 610				
	Nissan F-10				
	Pontiac Astre				
	Toyota Mark II				

Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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MODEL YEAR 1978

New Nameplates for Model Year 1978

Dodge Challenger Plymouth Conquest Porsche 928	AMC Spirit Fiat Brava Nissan Stanza (510) Toyota Cressida Volkswagen Rabbit-American	AMC Concord BMW 528 I BMW 733 I Dodge Omni Mercedes Benz 300 SDL/300 SD Plymouth Horizon Pontiac Phoenix	Buick Regal Ford Fairmont Mercury Cougar XR-7 Mercury Zephyr Saab 900	Dodge St. Regis	Mazda RX-7 Porsche 930
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Changed Size Class in Model Year 1978

Ford Pinto ² Mercury Bobcat ² Toyota Celica ¹	Ford Pinto ¹ Jaguar XJ/XJS ¹ Mercedes Benz 230 ² Mercury Bobcat ¹ Toyota Celica ²	Chevrolet Monte Carlo ¹ Ford Thunderbird ¹ Jaguar XJ/XJS ² Mercedes Benz 230 ¹ Pontiac Grand Prix ¹	AMC Matador ² Chevrolet Monte Carlo ² Ford Thunderbird ² Pontiac Grand Prix ²	AMC Matador ¹
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Nameplates Discontinued from Model Year 1977 to 1978

Mazda RX-3 Nissan 710 Renault 5 Renault 17	BMW 2002 Chevrolet Vega Dodge Dart Ford Maverick Mazda RX-4 Mercury Comet Plymouth Colt Renault 12 Renault 15	AMC Hornet Audi 100LS Plymouth Valiant Pontiac Ventura Volvo 240 Volvo 260	Dodge Charger 024	Lincoln Continental Mark IV Plymouth Gran Fury	Nissan 280 Z Porsche 912 Porsche 914 Toyota MR-2
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Appendix C (Cont'd)

<i>Minicompact</i>	<i>Subcompact</i>	<i>Compact</i>	<i>Midsize</i>	<i>Large</i>	<i>Two Seater</i>
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MODEL YEAR 1977

New Nameplates for Model Year 1977

Nissan Sentra (210)	BMW 633 CSI	Audi 5000 (Gas)	Chrysler LeBaron	Fiat Spider
Renault Le Car	Fiat Mirafiori	Lincoln Versailles	Dodge Diplomat	Nissan 280 ZX
	Ford Fiesta	Mercedes Benz 116	Dodge Magnum	
	Lancia Beta	Mercedes Benz 123	Lincoln Continental Mark V	
	Mazda GLC/323	Peugeot 604	Mercedes Benz 450 SEL 6.9	
	Nissan Maxima	Volvo 760 GLE		
		Volvo DL		

Changed Size Class in Model Year 1977

Dodge Colt Hatchback ²	Dodge Colt Hatchback ¹	Ford LTD II ¹	Ford LTD II ²
Fiat 128 ²	Fiat 128 ²	Jaguar XJ/XJS ¹	
Ford Mustang ²	Ford Mustang ¹		
Honda Civic ²	Honda Civic ¹		
Mazda 808 ²	Jaguar XJ/XJS ²		
Mazda RX-3 ²	Mazda 808 ¹		
Nissan 710 ²	Mazda RX-3 ¹		
Plymouth Arrow ²	Nissan 710 ¹		
Renault 5 ²	Plymouth Arrow ¹		
Renault 17 ²	Renault 5 ¹		
Subaru ²	Renault 17 ¹		
Toyota Celica ²	Subaru ¹		
Volkswagen Beetle ²	Toyota Celica ¹		
	Volkswagen Beetle ¹		

Nameplates Discontinued from Model Year 1976 to 1977

Chrysler Imperial

¹Old size classification.

²New size classification.

<i>Small Pickup</i>	<i>Large Pickup</i>	<i>Small Van</i>	<i>Large Van</i>	<i>Small Utility</i>	<i>Large Utility</i>
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MODEL YEAR 1989

Chevrolet S-10	Chevrolet C-10	Chevrolet Astro Van	Chevrolet Sport Van	Chevrolet Blazer "S"	Chevrolet Blazer
Dodge Ram 50	Chevrolet C-20	Chevrolet Lumina APV	Chevrolet Van	Dodge Raider	Chevrolet Suburban
Ford Ranger	Chevrolet K-10	Dodge Caravan	Dodge Ram Van	Ford Bronco II	Dodge Ram Charger
GMC S-15	Chevrolet K-20	Dodge Mini Ram Van	Dodge Ram Wagon	GMC Jimmy "S"	Ford Bronco
Isuzu Pickup	Chevrolet S-10 4wd	Dodge Vista	Ford Club Wagon	Geo Tracker	GMC Jimmy
Mazda Pickup	Dodge D150	Ford Aerostar Van	Ford Econoline	Isuzu Trooper	GMC Suburban
Mitsubishi Pickup	Dodge D250	GMC Safari	GMC Vandura/Rally	Jeep Cherokee XJ	Jeep Grand Wagonee
Nissan Pickup	Dodge Dakota	Mazda MPV		Jeep Wagoneer XJ	Range Rover
Nissan Pickup-	Dodge Power Ram 50	Mitsubishi Van		Jeep Wrangler	Toyota Land Cruiser
American	Dodge W150	Mitsubishi Wagon		Mitsubishi Montero	
Subaru Brat	Dodge W250	Nissan Axxess		Nissan Pathfinder E	
Toyota Pickup	Ford F100/F150	Nissan Van		Suzuki Samurai	
	Ford F250	Plymouth Town & Country		Suzuki Sidekick	
	GMC C-15	Plymouth Vista		Toyota 4Runner SR-5	
	GMC C-25	Plymouth Voyager		Toyota 4Runner Truck	
	GMC K-15	Toyota Cargo Van			
	GMC K-25	Toyota Van			
	GMC S-15 4wd	Volkswagen Vanagon			
	Isuzu Pickup 4wd				
	Jeep Comanche				
	Mitsubishi Pickup 4wd				
	Nissan Pickup 4wd				
	Nissan Pickup -				
	American 4wd				
	Toyota Pickup 4wd				

New Nameplates for Model Year 1989

Chevrolet S-10 4wd	Chevrolet Lumina APV	Isuzu Amigo
GMC S-15 4wd	Nissan Axxess	
	Plymouth Town & Country	

Nameplates Discontinued from Model Year 1988 to 1989

Chevrolet El Camino
GMC Caballero
Jeep J10
Jeep J20

Light Truck Nameplates by Size Classification

Appendix D

Appendix D (Cont'd)

<i>Small Pickup</i>	<i>Large Pickup</i>	<i>Small Van</i>	<i>Large Van</i>	<i>Small Utility</i>	<i>Large Utility</i>
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New Nameplates for Model Year 1988

Isuzu Pickup 4wd

Mazda MPV

Geo Tracker
Suzuki Sidekick

Range Rover

Nameplates Discontinued from Model Year 1987 to 1988

Jeep CJ

MODEL YEAR 1987

New Nameplates for Model Year 1987

Dodge Power Ram 50
Mitsubishi Pickup 4wd

Mitsubishi Van
Mitsubishi Wagon
Nissan Van

Nameplates Discontinued from Model Year 1986 to 1987

Jeep Scrambler

MODEL YEAR 1986

New Nameplates for Model Year 1986

Dodge Dakota

Dodge Raider
Jeep Wrangler
Nissan Pathfinder E
Suzuki Samurai

Nameplates Discontinued from Model Year 1985 to 1986

Dodge Rampage
Volkswagen Pickup-
Gasoline
Volkswagen Pickup-
Diesel

Appendix D (Cont'd)

<i>Small Pickup</i>	<i>Large Pickup</i>	<i>Small Van</i>	<i>Large Van</i>	<i>Small Utility</i>	<i>Large Utility</i>
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MODEL YEAR 1985

New Nameplates for Model Year 1985

Jeep Comanche
Nissan Pickup 4wd
Nissan Pickup -
American 4wd

Chevrolet Astro
Ford Aerostar Van
GMC Safari

Nameplates Discontinued from Model Year 1984 to 1985

Chevrolet LUV
Plymouth Scamp

MODEL YEAR 1984

New Nameplates for Model Year 1984

Nissan Pickup-
American

Chevrolet K-10
Chevrolet K-20
GMC K-15
GMC K-25
Toyota Pickup 4wd

Dodge Caravan
Dodge Mini Ram Van
Plymouth Voyager (FWD)
Toyota Cargo Van

Isuzu Trooper
Toyota 4Runner SR-5
Toyota 4Runner Truck

Nameplates Discontinued from Model Year 1983 to 1984

Ford Courier
Plymouth Arrow Pickup

Appendix D (Cont'd)

Small Pickup

Large Pickup

Small Van

Large Van

Small Utility

Large Utility

MODEL YEAR 1983

New Nameplates for Model Year 1983

Dodge Rampage
Ford Ranger
Mitsubishi Pickup
Plymouth Scamp
Subaru Brat

Dodge Vista
Plymouth Vista
Toyota Van

Chevrolet Blazer "S"
Ford Bronco II
GMC Jimmy "S"
Jeep Cherokee XJ
Jeep Wagoneer XJ
Mitsubishi Montero

Nameplates Discontinued from Model Year 1982 to 1983

Plymouth Trail Duster

MODEL YEAR 1982

New Nameplates for Model Year 1982

Chevrolet S-10
GMC S-15
Jeep Scrambler
Volkswagen Pickup-Gas

MODEL YEAR 1981

New Nameplates for Model Year 1981

Isuzu Pickup

Chevrolet Sportvan
Dodge Ram Wagon
Ford Club Wagon

Appendix D (Cont'd)

Small Pickup

Large Pickup

Small Van

Large Van

Small Utility

Large Utility

Nameplates Discontinued from Model Year 1980 to 1981

International Harvester
Scout

MODEL YEAR 1980

New Nameplates for Model Year 1980

Volkswagen Pickup-Diesel

Nameplates Discontinued from Model Year 1979 to 1980

Ford Ranger

MODEL YEAR 1979

New Nameplates for Model Year 1979

Dodge Ram 50
Plymouth Arrow
Pickup

Dodge W150
Dodge W250
Jeep J10
Jeep J20

International Harvester
Scout

Chevrolet Blazer
Chevrolet Suburban
Ford Bronco
Jeep Grand Wagoneer

MODEL YEAR 1978

New Nameplates for Model Year 1978

Jeep CJ

Appendix D (Cont'd)

<i>Small Pickup</i>	<i>Large Pickup</i>	<i>Small Van</i>	<i>Large Van</i>	<i>Small Utility</i>	<i>Large Utility</i>
<u><i>Nameplates Discontinued from Model Year 1977 to 1978</i></u>					
Subaru Brat	Dodge W150 Dodge W250 Ford Ranchero		Chevrolet Sport Van Ford Club Wagon		Chevrolet Blazer Chevrolet Suburban Ford Bronco
<i>MODEL YEAR 1977</i>					
<u><i>New Nameplates for Model Year 1977</i></u>					
Subaru Brat	Ford Ranger				

Appendix E

**Model Year Automobile Namplates Ranked by Sales,
Model Years 1976-1989**

Table E.1
118 Cars for *Model Year 1976* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Oldsmobile Supreme ¹	486,845	0.050	16.6	Midsize
2)	Chevrolet ¹	451,139	0.047	14.2	Large
3)	Ford Granada ¹	414,130	0.043	17.3	Compact
4)	Ford LTD Crown Victoria ¹	389,464	0.040	14.0	Large
5)	Chevrolet Monte Carlo ¹	359,669	0.037	15.6	Compact
6)	Chevrolet Malibu ¹	333,759	0.034	15.9	Midsize
7)	Chevrolet Nova ¹	308,405	0.032	18.5	Compact
8)	Buick Century ¹	286,967	0.030	17.7	Midsize
9)	Ford Pinto ¹	255,883	0.026	26.3	Subcompact
10)	Plymouth Volare ¹	239,528	0.025	18.3	Compact
11)	Pontiac Grand Prix ¹	221,898	0.023	16.2	Compact
12)	Cadillac DeVille/Fleetwood ¹	212,253	0.022	12.5	Large
13)	Chrysler Cordoba ¹	180,968	0.019	13.3	Midsize
14)	Ford Mustang ¹	178,541	0.018	21.8	Subcompact
15)	Ford LTD II ¹	177,600	0.018	14.3	Compact
16)	Dodge Aspen ¹	176,401	0.018	18.2	Compact
17)	Toyota Corolla ³	172,609	0.018	27.4	Subcompact
18)	Chevrolet Camaro ³	163,653	0.017	17.0	Subcompact
19)	Oldsmobile 88 ¹	156,321	0.016	15.0	Large
20)	Buick LeSabre ¹	147,064	0.015	14.6	Large
21)	Chevrolet Chevette ¹	144,912	0.015	29.9	Subcompact
22)	Chevrolet Vega ¹	144,627	0.015	22.9	Subcompact
23)	Dodge Dart ¹	141,710	0.015	20.0	Subcompact
24)	Ford Thunderbird ¹	141,154	0.015	14.0	Compact
25)	Plymouth Valiant ¹	137,815	0.014	20.1	Compact
26)	Pontiac ¹	137,703	0.014	15.0	Large
27)	Ford Maverick ¹	132,774	0.014	19.3	Subcompact
28)	Mercury Monarch ¹	126,742	0.013	17.1	Compact
29)	Buick Electra ¹	121,622	0.013	14.5	Large
30)	Honda Civic ³	114,515	0.012	32.4	Subcompact
31)	Mercury Cougar ¹	110,028	0.011	14.0	Midsize
32)	Mercury Grand Marquis ¹	107,699	0.011	13.5	Large
33)	Chevrolet Monza ¹	107,173	0.011	21.5	Subcompact
34)	Volkswagen Rabbit ³	105,068	0.011	30.5	Subcompact
35)	Buick Skylark ¹	101,398	0.010	19.5	Compact
36)	Plymouth Fury ¹	98,464	0.010	13.4	Midsize
37)	Pontiac Firebird ¹	98,405	0.010	17.4	Subcompact
38)	Chrysler ¹	96,421	0.010	13.2	Large
39)	Pontiac LeMans ¹	95,216	0.010	16.7	Midsize
40)	Oldsmobile 98 ¹	93,631	0.010	14.0	Large
41)	Toyota Celica ³	87,726	0.009	24.0	Subcompact
42)	AMC Hornet ¹	87,719	0.009	16.6	Compact
43)	Nissan B-210 Station Wgn ³	85,280	0.009	31.9	Subcompact

Table E.1 (Continued)
 118 Cars for *Model Year 1976* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	AMC Pacer ¹	81,153	0.008	19.5	Compact
45)	Lincoln Continental ¹	67,400	0.007	13.0	Large
46)	Cadillac Eldorado ¹	59,683	0.006	12.5	Midsize
47)	Pontiac Ventura ¹	59,416	0.006	18.4	Compact
48)	Nissan 280Z ³	55,949	0.006	19.8	Two seater
49)	Oldsmobile Omega ¹	54,689	0.006	18.3	Compact
50)	Dodge Monaco/Coronet ¹	53,153	0.005	12.3	Midsize
51)	Dodge Charger 024 ¹	53,114	0.005	13.8	Midsize
52)	Plymouth Gran Fury ¹	52,549	0.005	13.5	Large
53)	Lincoln Continental Mark ¹	52,269	0.005	13.0	Large
54)	AMC Gremlin ¹	52,232	0.005	21.2	Subcompact
55)	Ford Thunderbird 1876 ¹	46,713	0.005	13.0	Midsize
56)	Pontiac Sunbird ¹	46,533	0.005	22.4	Subcompact
57)	Pontiac Astre ¹	41,759	0.004	23.7	Subcompact
58)	Cadillac Seville ¹	41,662	0.004	17.0	Compact
59)	Chevrolet Corvette ¹	41,027	0.004	15.8	Two seater
60)	Dodge Colt Hatchback ⁴	40,415	0.004	25.5	Subcompact
61)	Mercury Bobcat ¹	40,222	0.004	24.7	Subcompact
62)	AMC Matador ¹	40,082	0.004	13.7	Large
63)	Dodge Royal Monaco ¹	39,047	0.004	13.5	Large
64)	Toyota Camry(Corona) ³	38,013	0.004	24.0	Subcompact
65)	Subaru ³	35,569	0.004	31.5	Subcompact
66)	Nissan 710 ³	34,889	0.004	26.2	Subcompact
67)	Mercury Capri ¹	31,637	0.003	22.0	Subcompact
68)	Mercury Comet ¹	31,446	0.003	19.8	Subcompact
69)	Buick Skyhawk ¹	30,505	0.003	21.0	Subcompact
70)	Volvo 240 ³	30,383	0.003	20.0	Compact
71)	Volkswagen Beetle ³	29,371	0.003	26.0	Subcompact
72)	JRT MG ³	29,370	0.003	22.2	Two seater
73)	Fiat 128 ³	29,302	0.003	24.0	Subcompact
74)	Oldsmobile Starfire ¹	28,270	0.003	21.5	Subcompact
75)	Volkswagen Dasher ³	25,678	0.003	28.6	Subcompact
76)	JRT Triumph ³	24,677	0.003	24.9	Two seater
77)	Audi Fox ³	23,393	0.002	28.6	Subcompact
78)	Oldsmobile Toronado ¹	22,745	0.002	14.0	Large
79)	Plymouth Arrow ⁴	20,769	0.002	26.0	Subcompact
80)	Buick Riviera ¹	18,693	0.002	14.0	Large
81)	Fiat 124 Sport ³	16,790	0.002	22.0	Two seater
82)	BMW 2002 ³	15,721	0.002	21.2	Subcompact
83)	Volkswagen Scirocco ³	15,547	0.002	30.7	Subcompact
84)	Volvo 260 ³	14,249	0.001	18.2	Compact
85)	Nissan 610 ³	13,800	0.001	26.1	Subcompact
86)	Buick Opel ⁴	12,508	0.001	26.6	Subcompact

Table E.1 (Continued)
 118 Cars for *Model Year 1976* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	Audi 100LS ³	12,411	0.001	20.7	Compact
88)	Mazda RX-4 ³	11,708	0.001	21.0	Subcompact
89)	Nissan F-10 ³	11,279	0.001	33.0	Subcompact
90)	Saab 99 ³	10,576	0.001	23.7	Compact
91)	Peugeot 504 ³	10,518	0.001	23.4	Compact
92)	Mercedes Benz 300 D/300 C ³	8,909	0.001	24.0	Compact
93)	Fiat X 1/9 ³	8,233	0.001	25.0	Two seater
94)	Mercedes Benz 240 D ³	8,021	0.001	27.0	Compact
95)	BMW 530 I ³	7,689	0.001	17.0	Subcompact
96)	Jaguar ³	6,962	0.001	13.0	Compact
97)	Mercedes Benz 450 SEL ³	6,308	0.001	13.0	Midsize
98)	Mazda 808 ³	5,867	0.001	26.2	Subcompact
99)	Alfa Romeo ³	5,812	0.001	21.8	Two seater
100)	Mazda RX-3 ³	5,619	0.001	22.0	Subcompact
101)	Porsche 911 ³	4,643		20.7	Two seater
102)	Porsche 914 ³	4,573		24.0	Two seater
103)	Checker ¹	4,287		16.1	Midsize
104)	Toyota Mark II ³	3,882		18.4	Subcompact
105)	Lancia Beta ³	3,517		21.5	Two seater
106)	Renault 5 ³	3,122		32.0	Subcompact
107)	Mazda Cosmo ³	2,794		21.4	Subcompact
108)	Mercedes Benz 280/280 C ³	2,669		16.0	Compact
109)	Porsche 924 ³	2,098		21.0	Two seater
110)	Mercedes Benz 280 E ³	2,090		16.0	Compact
111)	Mercedes Benz 280 SE ³	1,977		16.0	Compact
112)	Renault 12 ³	1,602		26.0	Subcompact
113)	Mercedes Benz 450 SLC ³	1,588		14.0	Two seater
114)	Mercedes Benz 230 ³	1,459		18.0	Compact
115)	Porsche 912 ³	1,439		24.0	Two seater
116)	BMW 320 I ³	1,399		23.4	Subcompact
117)	Renault 17 ³	337		24.8	Subcompact
118)	Renault 15 ³	176		25.1	Subcompact
		9,686,855	1.000	17.2	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.2
118 Cars for *Model Year 1977* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Chevrolet ¹	623,845	0.059	17.5	Large
2)	Oldsmobile Supreme ¹	554,996	0.053	18.2	Midsize
3)	Chevrolet Monte Carlo ¹	379,561	0.036	16.5	Compact
4)	Ford LTD Crown Victoria ¹	379,093	0.036	14.9	Large
5)	Ford Granada ¹	356,745	0.034	18.2	Compact
6)	Chevrolet Nova ¹	329,215	0.031	18.8	Compact
7)	Plymouth Volare ¹	318,555	0.030	17.6	Compact
8)	Ford Thunderbird ¹	309,035	0.029	16.0	Compact
9)	Chevrolet Malibu ¹	298,605	0.028	17.4	Midsize
10)	Buick Century ¹	280,153	0.027	17.9	Midsize
11)	Pontiac Grand Prix ¹	254,574	0.024	17.6	Compact
12)	Dodge Aspen ¹	254,532	0.024	17.6	Compact
13)	Toyota Corolla ³	252,891	0.024	33.1	Subcompact
14)	Cadillac DeVille/Fleetwood ¹	243,988	0.023	14.9	Large
15)	Oldsmobile 88 ¹	217,062	0.021	18.0	Large
16)	Ford Pinto ¹	213,554	0.020	26.3	Subcompact
17)	Ford LTD II ¹	200,908	0.019	16.0	Midsize
18)	Chevrolet Camaro ¹	198,755	0.019	17.6	Subcompact
19)	Pontiac ¹	193,263	0.018	18.0	Large
20)	Buick LeSabre ¹	183,054	0.017	18.2	Large
21)	Chevrolet Chevette ¹	178,487	0.017	31.6	Subcompact
22)	Mercury Cougar ¹	177,424	0.017	16.0	Midsize
23)	Honda Civic ³	177,417	0.017	35.9	Minicompact
24)	Ford Mustang ¹	161,654	0.015	21.7	Minicompact
25)	Toyota Celica ³	160,834	0.015	25.8	Minicompact
26)	Volkswagen Rabbit ³	151,050	0.014	32.5	Subcompact
27)	Chrysler Cordoba ¹	147,814	0.014	15.0	Midsize
28)	Pontiac Firebird ¹	133,154	0.013	18.0	Subcompact
29)	Buick Electra ¹	131,708	0.012	17.3	Large
30)	Mercury Grand Marquis ¹	129,126	0.012	13.9	Large
31)	Oldsmobile 98 ¹	125,967	0.012	18.0	Large
32)	Chrysler ¹	113,279	0.011	12.9	Large
33)	Mercury Monarch ¹	110,206	0.010	17.9	Compact
34)	Buick Skylark ¹	103,007	0.010	19.6	Compact
35)	Ford Maverick ¹	99,519	0.009	19.6	Subcompact
36)	Chevrolet Vega ¹	98,024	0.009	25.2	Subcompact
37)	Plymouth Fury ¹	96,679	0.009	13.6	Midsize
38)	Lincoln Continental ¹	84,186	0.008	13.9	Large
39)	Chevrolet Monza ¹	78,173	0.007	22.0	Subcompact
40)	AMC Hornet ¹	77,231	0.007	19.1	Compact
41)	Subaru ³	72,458	0.007	30.7	Minicompact
42)	Pontiac Ventura ¹	71,955	0.007	20.1	Compact
43)	Dodge Colt Hatchback ⁴	69,963	0.007	27.8	Minicompact

Table E.2 (Continued)
 118 Cars for *Model Year 1977* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Pontiac LeMans ¹	68,941	0.007	17.9	Midsize
45)	Honda Accord ³	65,312	0.006	38.2	Subcompact
46)	Nissan 280ZX ³	64,939	0.006	20.8	Two seater
47)	Dodge Monaco/Coronet ¹	63,745	0.006	13.6	Midsize
48)	AMC Pacer ¹	58,990	0.006	19.3	Compact
49)	Oldsmobile Omega ¹	55,952	0.005	19.9	Compact
50)	Pontiac Sunbird ¹	54,671	0.005	23.9	Subcompact
51)	Lincoln Continental Mark V ¹	52,845	0.005	13.9	Midsize
52)	Plymouth Arrow ⁴	51,849	0.005	26.9	Minicompact
53)	Toyota Camry (Corona) ³	50,788	0.005	24.5	Subcompact
54)	AMC Gremlin ¹	45,803	0.004	20.7	Subcompact
55)	Cadillac Eldorado ¹	43,006	0.004	13.5	Midsize
56)	Cadillac Seville ¹	41,135	0.004	16.0	Compact
57)	Chevrolet Corvette ¹	40,764	0.004	16.6	Two seater
58)	Plymouth Gran Fury ¹	39,613	0.004	13.1	Large
59)	Dodge Royal Monaco ¹	39,353	0.004	13.1	Large
60)	Volvo 240 ³	38,099	0.004	20.1	Compact
61)	Nissan F-10 ³	36,174	0.003	34.0	Subcompact
62)	Nissan 710 ³	35,493	0.003	26.1	Minicompact
63)	Mercury Bobcat ¹	35,433	0.003	25.3	Subcompact
64)	Pontiac Astre ¹	35,364	0.003	26.0	Subcompact
65)	JRT MG ³	34,271	0.003	24.2	Two seater
66)	Dodge Charger 024 ¹	32,576	0.003	15.0	Midsize
67)	Nissan B-210 Station Wgn ³	31,027	0.003	34.6	Minicompact
68)	JRT Triumph ³	30,255	0.003	25.3	Two seater
69)	Nissan 200SX ³	29,676	0.003	25.7	Minicompact
70)	Oldsmobile Toronado ¹	29,284	0.003	15.0	Large
71)	Volkswagen Dasher ³	28,142	0.003	30.8	Subcompact
72)	Buick Opel ⁴	28,114	0.003	26.6	Subcompact
73)	AMC Matador ¹	25,126	0.002	14.6	Large
74)	Buick Skyhawk ¹	24,990	0.002	21.0	Subcompact
75)	Mercury Capri ¹	24,285	0.002	22.0	Subcompact
76)	Volkswagen Beetle ³	23,251	0.002	26.0	Minicompact
77)	Lincoln Continental Mark IV ¹	22,783	0.002	13.9	Large
78)	Buick Riviera ¹	22,287	0.002	17.5	Large
79)	Audi Fox ³	22,113	0.002	28.0	Subcompact
80)	Nissan Maxima (810) ³	21,584	0.002	19.3	Subcompact
81)	Mercury Comet ¹	20,471	0.002	19.5	Subcompact
82)	Oldsmobile Starfire ¹	20,038	0.002	21.2	Subcompact
83)	Volkswagen Scirocco ³	19,580	0.002	30.4	Subcompact
84)	Fiat 128 ³	17,947	0.002	27.0	Minicompact
85)	Volvo 260 ³	16,878	0.002	18.3	Compact
86)	Mazda GLC ³	15,305	0.001	36.3	Subcompact

Table E.2 (Continued)
 118 Cars for *Model Year 1977* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	BMW 320 I ³	15,111	0.001	22.5	Subcompact
88)	Mercedes Benz 300 D/300 C ³	14,161	0.001	25.0	Compact
89)	Dodge Dart ¹	14,056	0.001	20.0	Subcompact
90)	Porsche 924 ³	13,377	0.001	21.0	Two seater
91)	Fiat 124 Sport ³	12,866	0.001	23.0	Two seater
92)	Mercedes Benz 240 D ³	12,300	0.001	28.0	Compact
93)	Renault 5 ³	11,310	0.001	30.0	Minicompact
94)	Fiat X 1/9 ³	11,125	0.001	27.0	Two seater
95)	Mazda RX-4 ³	10,153	0.001	23.6	Subcompact
96)	Audi 100LS ³	9,971	0.001	19.3	Compact
97)	Peugeot 504 ³	8,972	0.001	29.5	Compact
98)	Mazda RX-3 ³	8,354	0.001	21.4	Minicompact
99)	Plymouth Valiant ¹	7,854	0.001	20.1	Compact
100)	BMW 530 I ³	7,622	0.001	17.0	Subcompact
101)	Mercedes Benz 450 SEL ³	6,701	0.001	15.0	Midsize
102)	Porsche 911 ³	6,099	0.001	18.0	Two seater
103)	Lancia Beta ³	5,624	0.001	21.0	Subcompact
104)	Jaguar ³	5,264		12.3	Subcompact
105)	Mercedes Benz 280 SE ³	5,110		16.0	Compact
106)	Alfa Romeo ³	4,878		21.8	Two seater
107)	Mercedes Benz 280 E ³	4,826		16.0	Compact
108)	Checker ¹	4,736		15.8	Midsize
109)	Ford Thunderbird 1876 ¹	3,761		13.0	Midsize
110)	Mazda Cosmo ³	3,115		23.2	Subcompact
111)	Mercedes Benz 450 SLC ³	2,124		15.0	Two seater
112)	Fiat Mirafiori ³	1,887		22.0	Subcompact
113)	Mazda 808 ³	1,286		29.7	Minicompact
114)	Mercedes Benz 230 ³	1,150		19.0	Compact
115)	Renault 12 ³	1,035		24.8	Subcompact
116)	Mercedes Benz 280/280 C ³	621		16.0	Compact
117)	Mercedes Benz 450 SEL 6.9 ³	360		12.0	Midsize
118)	Renault 17 ³	37		23.2	Minicompact
		10,565,797	1.000	18.6	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.3
133 Cars for *Model Year 1978* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Chevrolet ¹	627,480	0.057	17.3	Large
2)	Oldsmobile Supreme ¹	491,346	0.044	21.5	Midsize
3)	Ford Fairmont ¹	417,932	0.038	21.7	Midsize
4)	Chevrolet Malibu ¹	356,070	0.032	20.4	Midsize
5)	Chevrolet Monte Carlo ¹	355,660	0.032	20.4	Midsize
6)	Ford LTD Crown Victoria ¹	327,970	0.030	15.9	Large
7)	Ford Thunderbird ¹	319,328	0.029	15.6	Midsize
8)	Chevrolet Nova ¹	267,268	0.024	19.2	Compact
9)	Chevrolet Chevette ¹	265,689	0.024	30.2	Subcompact
10)	Oldsmobile 88 ¹	259,657	0.023	17.1	Large
11)	Chevrolet Camaro ¹	247,437	0.022	17.0	Subcompact
12)	Cadillac DeVille/Fleetwood ¹	246,781	0.022	14.5	Large
13)	Ford Granada ¹	243,282	0.022	20.3	Compact
14)	Toyota Corolla ³	226,695	0.020	33.2	Subcompact
15)	Plymouth Volare ¹	225,483	0.020	20.1	Compact
16)	Pontiac Grand Prix ¹	220,122	0.020	20.0	Midsize
17)	Buick Regal ¹	211,388	0.019	20.8	Midsize
18)	Pontiac ¹	210,033	0.019	17.3	Large
19)	Buick LeSabre ¹	193,814	0.017	17.5	Large
20)	Ford Pinto ¹	184,667	0.017	25.4	Minicompact
21)	Ford Mustang ¹	179,039	0.016	21.1	Minicompact
22)	Pontiac Firebird ¹	175,607	0.016	17.3	Subcompact
23)	Dodge Aspen ¹	170,606	0.015	19.9	Compact
24)	Toyota Celica ³	164,932	0.015	24.8	Subcompact
25)	Ford LTD II ¹	158,199	0.014	16.4	Midsize
26)	Mercury Cougar XR-7 ¹	152,591	0.014	16.4	Midsize
27)	Volkswagen Rabbit ³	146,139	0.013	32.8	Subcompact
28)	Nissan Sentra (210) ³	143,871	0.013	31.6	Minicompact
29)	Mercury Grand Marquis ¹	142,349	0.013	15.0	Large
30)	Honda Civic ³	138,037	0.012	32.5	Minicompact
31)	Chevrolet Monza ¹	136,333	0.012	23.0	Subcompact
32)	Buick Electra ¹	129,520	0.012	16.9	Large
33)	Mercury Zephyr ¹	121,705	0.011	21.7	Midsize
34)	Chrysler LeBaron ¹	118,583	0.011	17.6	Midsize
35)	Oldsmobile 98 ¹	116,722	0.011	16.7	Large
36)	AMC Concord ¹	116,252	0.010	18.9	Compact
37)	Pontiac LeMans ¹	114,577	0.010	20.7	Midsize
38)	Honda Accord ³	114,252	0.010	35.3	Subcompact
39)	Chrysler Cordoba ¹	112,560	0.010	15.7	Midsize
40)	Buick Skylark ¹	99,494	0.009	20.7	Compact
41)	Subaru ³	99,330	0.009	35.3	Minicompact
42)	Buick Century ¹	99,302	0.009	21.1	Midsize
43)	Lincoln Continental ¹	94,242	0.008	13.9	Large

Table E.3 (Continued)
 133 Cars for *Model Year 1978* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Plymouth Horizon ¹	90,398	0.008	27.2	Compact
45)	Pontiac Sunbird ¹	84,549	0.008	23.2	Subcompact
46)	Mercury Monarch ¹	83,794	0.008	20.1	Compact
47)	Ford Fiesta ⁴	81,273	0.007	38.0	Subcompact
48)	Lincoln Continental Mark V ¹	74,996	0.007	14.5	Midsize
49)	Chrysler ¹	73,465	0.007	13.5	Large
50)	Plymouth Fury ¹	73,241	0.007	14.2	Midsize
51)	Dodge Omni ¹	66,851	0.006	27.2	Compact
52)	Nissan 280ZX ³	65,713	0.006	20.5	Two seater
53)	Pontiac Phoenix ¹	62,455	0.006	19.7	Compact
54)	Dodge Diplomat ¹	59,057	0.005	17.6	Midsize
55)	Nissan Stanza (510) ³	57,674	0.005	27.3	Subcompact
56)	Mazda GLC ³	56,436	0.005	36.8	Subcompact
57)	Cadillac Seville ¹	54,148	0.005	16.3	Compact
58)	Dodge Magnum ¹	51,209	0.005	15.3	Midsize
59)	Dodge Colt Hatchback ⁴	47,931	0.004	32.3	Minicompact
60)	Dodge Monaco/Coronet ¹	47,000	0.004	14.2	Midsize
61)	Cadillac Eldorado ¹	46,292	0.004	11.0	Midsize
62)	Chevrolet Corvette ¹	43,106	0.004	16.5	Two seater
63)	Oldsmobile Omega ¹	42,337	0.004	20.4	Compact
64)	Mercury Cougar ¹	39,927	0.004	16.4	Midsize
65)	Toyota Camry (Corona) ³	37,458	0.003	21.9	Subcompact
66)	Volvo DL ³	37,382	0.003	22.4	Compact
67)	Nissan 200SX ³	32,788	0.003	26.3	Minicompact
68)	Mercury Bobcat ¹	30,822	0.003	24.7	Minicompact
69)	Volkswagen Scirocco ³	29,483	0.003	28.7	Subcompact
70)	JRT MG ³	28,488	0.003	20.0	Two seater
71)	Plymouth Arrow ⁴	26,501	0.002	30.9	Minicompact
72)	Volkswagen Dasher ³	26,417	0.002	25.7	Subcompact
73)	Nissan Maxima (810) ³	25,161	0.002	18.6	Subcompact
74)	Oldsmobile Toronado ¹	25,039	0.002	15.0	Large
75)	AMC Spirit ¹	24,857	0.002	20.9	Subcompact
76)	AMC Pacer ¹	24,709	0.002	18.6	Compact
77)	Nissan F-10 ³	24,638	0.002	33.0	Subcompact
78)	Buick Skyhawk ¹	22,422	0.002	21.1	Subcompact
79)	AMC Gremlin ¹	21,326	0.002	20.8	Subcompact
80)	BMW 320 I ³	21,193	0.002	21.7	Subcompact
81)	Buick Riviera ¹	20,575	0.002	16.9	Large
82)	Audi Fox ³	20,364	0.002	25.8	Subcompact
83)	Fiat Mirafiori ³	18,942	0.002	20.5	Subcompact
84)	JRT Triumph ³	18,812	0.002	22.9	Two seater
85)	Buick Opel ⁴	18,801	0.002	27.0	Subcompact
86)	Mercedes Benz 116 ³	18,293	0.002	19.8	Compact

Table E.3 (Continued)
 133 Cars for *Model Year 1978* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	Audi 5000 (Gas) ³	17,909	0.002	18.7	Compact
88)	Oldsmobile Starfire ¹	17,050	0.002	21.4	Subcompact
89)	Lincoln Versailles ¹	15,061	0.001	18.0	Compact
90)	Fiat Spider ³	14,625	0.001	22.0	Two seater
91)	Saab 99 ³	14,260	0.001	22.7	Compact
92)	Dodge Challenger ⁴	14,196	0.001	28.7	Minicompact
93)	Fiat 128 ³	14,173	0.001	23.0	Minicompact
94)	AMC Matador ¹	13,877	0.001	14.0	Midsize
95)	Renault Le Car ³	13,365	0.001	31.0	Minicompact
96)	Toyota Cressida ³	13,044	0.001	22.0	Subcompact
97)	Volvo 760 GLE ³	12,137	0.001	18.7	Compact
98)	Porsche 924 ³	10,978	0.001	22.8	Two seater
99)	Fiat X 1/9 ³	10,812	0.001	23.0	Two seater
100)	Volkswagen Beetle ³	10,661	0.001	24.0	Minicompact
101)	Plymouth Conquest (Sapporo) ⁴	10,192	0.001	28.5	Minicompact
102)	Mercury Capri ¹	8,914	0.001	22.3	Subcompact
103)	BMW 530 I ³	7,765	0.001	17.0	Subcompact
104)	Mercedes Benz 450 SL(107) ³	7,583	0.001	14.0	Two seater
105)	Mercedes Benz 123 ³	7,010	0.001	22.1	Compact
106)	Peugeot 504 ³	6,880	0.001	23.1	Compact
107)	Alfa Romeo ³	6,452	0.001	23.0	Two seater
108)	Porsche 911 ³	5,100		16.1	Two seater
109)	Dodge Royal Monaco ¹	5,069		13.1	Large
110)	Volkswagen Rabbit-American ²	4,819		32.4	Subcompact
111)	Mercedes Benz 450 SEL ³	4,697		14.0	Midsize
112)	Jaguar ³	4,375		14.0	Compact
113)	Checker ¹	4,184		15.1	Midsize
114)	Lancia Beta ³	3,045		20.0	Subcompact
115)	Pontiac Astre ¹	2,471		26.0	Subcompact
116)	Mazda RX-7 ³	2,335		20.7	Two seater
117)	Peugeot 604 ³	1,785		17.2	Compact
118)	Fiat Brava ³	1,672		25.2	Subcompact
119)	Porsche 928 ³	1,032		13.5	Minicompact
120)	Mercedes Benz 300 D/300 CD ³	882		25.0	Compact
121)	Renault Gordini ³	722		25.0	Minicompact
122)	BMW 528 I ³	632		20.0	Compact
123)	Mercedes Benz 240 D ³	541		30.4	Compact
124)	Saab 900 ³	436		22.0	Midsize
125)	Mercedes Benz 300 SDL/300 SD ³	293		26.0	Compact
126)	Mercedes Benz 280 E ³	227		16.0	Compact
127)	Dodge St Regis ¹	161		15.9	Large
128)	BMW 733 I ³	155		15.6	Compact
129)	Mercedes Benz 450 SLC ³	131		14.0	Two seater

Table E.3 (Continued)
 133 Cars for *Model Year 1978* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
130)	Mercedes Benz 450 SEL 6.9 ³	102		12.0	Midsize
131)	BMW 633 CSI ³	96		15.5	Subcompact
132)	Mercedes Benz 280 SE ³	65		16.0	Compact
133)	Porsche 930 ³	11		15.0	Two seater
		11,090,649	1.000	19.7	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.4
142 Cars for *Model Year 1979* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Oldsmobile Supreme ¹	536,929	0.050	20.6	Midsize
2)	Chevrolet ¹	510,080	0.047	18.0	Large
3)	Chevrolet Malibu ¹	362,103	0.034	19.7	Midsize
4)	Chevrolet Chevette ¹	352,632	0.033	29.5	Subcompact
5)	Ford Fairmont ¹	340,590	0.032	20.7	Midsize
6)	Ford Mustang ¹	302,309	0.028	22.1	Subcompact
7)	Chevrolet Monte Carlo ¹	296,007	0.027	19.9	Midsize
8)	Ford LTD Crown Victoria ¹	284,589	0.026	16.5	Large
9)	Buick Regal ¹	266,168	0.025	20.9	Midsize
10)	Oldsmobile 88 ¹	245,327	0.023	19.4	Large
11)	Toyota Corolla ³	244,714	0.023	29.1	Subcompact
12)	Chevrolet Camaro ¹	233,802	0.022	17.9	Subcompact
13)	Cadillac DeVille/Fleetwood ¹	221,880	0.021	15.1	Large
14)	Ford Thunderbird ¹	219,465	0.020	14.3	Midsize
15)	Nissan Sentra (210) ³	202,005	0.019	30.6	Subcompact
16)	Pontiac Grand Prix ¹	192,272	0.018	20.4	Midsize
17)	Ford Pinto ¹	190,243	0.018	24.1	Minicompact
18)	Plymouth Volare ¹	188,132	0.017	19.6	Midsize
19)	Pontiac ¹	183,471	0.017	18.0	Large
20)	Pontiac Firebird ¹	170,497	0.016	17.6	Subcompact
21)	Ford Granada ¹	160,881	0.015	18.3	Compact
22)	Chevrolet Monza ¹	155,772	0.014	23.5	Subcompact
23)	Honda Civic ³	150,926	0.014	32.4	Minicompact
24)	Toyota Celica ³	147,428	0.014	21.0	Subcompact
25)	Honda Accord ³	147,332	0.014	28.0	Subcompact
26)	Buick LeSabre ¹	145,454	0.013	18.1	Large
27)	Chevrolet Citation (X-Car) ¹	145,323	0.013	23.5	Midsize
28)	Plymouth Horizon ¹	140,145	0.013	28.2	Subcompact
29)	Volkswagen Rabbit-American ²	136,663	0.013	32.4	Subcompact
30)	Dodge Aspen ¹	132,497	0.012	19.5	Midsize
31)	Mercury Cougar XR-7 ¹	130,062	0.012	14.7	Midsize
32)	Chevrolet Nova ¹	128,409	0.012	18.7	Compact
33)	Subaru ³	123,821	0.011	31.0	Minicompact
34)	Pontiac LeMans ¹	119,709	0.011	20.9	Midsize
35)	Dodge Omni ¹	117,998	0.011	28.2	Subcompact
36)	Chrysler LeBaron ¹	115,847	0.011	17.3	Midsize
37)	Oldsmobile 98 ¹	107,235	0.010	17.4	Large
38)	Mercury Grand Marquis ¹	103,891	0.010	17.3	Large
39)	Mercury Zephyr ¹	101,663	0.009	20.5	Midsize
40)	Buick Electra ¹	98,911	0.009	16.5	Large
41)	Pontiac Sunbird ¹	92,404	0.009	23.9	Subcompact
42)	Chrysler ¹	90,932	0.008	15.8	Large

Table E.4 (Continued)
 142 Cars for Model Year 1979 Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
43)	Mercury Capri ¹	89,176	0.008	22.3	Subcompact
44)	AMC Concord ¹	86,461	0.008	19.6	Compact
45)	Mazda GLC ³	82,399	0.008	34.2	Subcompact
46)	Ford Fiesta ⁴	77,733	0.007	32.0	Subcompact
47)	Lincoln Continental ¹	74,037	0.007	12.5	Large
48)	Chrysler Cordoba ¹	70,970	0.007	15.8	Midsize
49)	Nissan 280ZX ³	70,228	0.007	20.2	Two seater
50)	Volkswagen Rabbit ³	69,288	0.006	36.0	Subcompact
51)	Buick Skylark (X-Car) ¹	67,653	0.006	23.5	Compact
52)	Mercury Monarch ¹	62,252	0.006	18.8	Compact
53)	Cadillac Eldorado ¹	61,049	0.006	17.6	Midsize
54)	Dodge Colt Hatchback ⁴	60,646	0.006	37.6	Subcompact
55)	Lincoln Continental Mark V ¹	56,277	0.005	12.5	Midsize
56)	Buick Century ¹	55,509	0.005	20.9	Midsize
57)	Dodge Diplomat ¹	54,837	0.005	18.5	Midsize
58)	Nissan 310 ³	54,722	0.005	31.0	Subcompact
59)	Pontiac Phoenix (X-Car) ¹	50,950	0.005	24.6	Compact
60)	Buick Riviera ¹	50,449	0.005	18.0	Midsize
61)	Nissan Stanza (510) ³	47,463	0.004	26.4	Subcompact
62)	AMC Spirit ¹	47,392	0.004	20.9	Subcompact
63)	Oldsmobile Toronado ¹	46,434	0.004	18.8	Midsize
64)	Cadillac Seville ¹	45,886	0.004	17.1	Compact
65)	Mercury Bobcat ¹	44,189	0.004	24.0	Minicompact
66)	Volvo DL ³	43,735	0.004	21.8	Compact
67)	Ford LTD II ¹	43,523	0.004	14.9	Midsize
68)	Chevrolet Corvette ¹	39,816	0.004	15.1	Two seater
69)	Toyota Camry (Corona) ³	34,329	0.003	21.4	Subcompact
70)	Buick Skylark ¹	32,538	0.003	21.1	Compact
71)	Mazda RX-7 ³	32,476	0.003	20.7	Two seater
72)	Oldsmobile Omega (X-Car) ¹	31,298	0.003	23.5	Compact
73)	Pontiac Phoenix ¹	30,402	0.003	19.6	Compact
74)	Audi 5000 (Gas) ³	28,668	0.003	19.8	Compact
75)	Dodge St Regis ¹	27,816	0.003	15.9	Large
76)	Volkswagen Scirocco ³	27,714	0.003	29.8	Subcompact
77)	Volkswagen Dasher ³	26,826	0.002	30.3	Subcompact
78)	Dodge Magnum ¹	26,401	0.002	15.8	Midsize
79)	JRT MG ³	26,177	0.002	20.6	Two seater
80)	Plymouth Arrow ⁴	23,514	0.002	27.7	Minicompact
81)	BMW 320 I ¹	23,236	0.002	21.8	Subcompact
82)	Plymouth Colt ⁴	21,747	0.002	37.6	Subcompact
83)	Nissan 200SX ³	21,534	0.002	25.7	Minicompact
84)	Toyota Supra ³	20,521	0.002	22.0	Subcompact
85)	Buick Skyhawk ¹	20,373	0.002	21.5	Subcompact

Table E.4 (Continued)
 142 Cars for *Model Year 1979* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
86)	Oldsmobile Starfire ¹	20,230	0.002	22.1	Subcompact
87)	Oldsmobile Omega ¹	20,001	0.002	20.9	Compact
88)	Mazda 626 ³	19,846	0.002	27.7	Subcompact
89)	Dodge Challenger ⁴	19,140	0.002	26.0	Subcompact
90)	Buick Opel ⁴	17,049	0.002	29.3	Subcompact
91)	Plymouth Conquest (Sapporo) ⁴	16,896	0.002	26.0	Subcompact
92)	Renault Le Car ³	16,847	0.002	31.5	Minicompact
93)	Fiat Brava ³	16,307	0.002	25.2	Subcompact
94)	Lincoln Versailles ¹	15,942	0.001	16.0	Compact
95)	Fiat Spider ³	15,530	0.001	23.3	Two seater
96)	Volvo 760 GLE ³	13,256	0.001	19.0	Compact
97)	Nissan Maxima (810) ³	13,188	0.001	22.6	Subcompact
98)	Mercedes Benz 300 D/300 CD ³	12,993	0.001	25.0	Compact
99)	JRT Triumph ³	12,966	0.001	22.3	Two seater
100)	Toyota Cressida ³	11,515	0.001	21.0	Subcompact
101)	Audi Fox ³	10,911	0.001	26.6	Subcompact
102)	Fiat 138 Strada ³	10,607	0.001	31.5	Compact
103)	Saab 900 ³	10,495	0.001	22.0	Midsized
104)	Fiat X 1/9 ³	10,102	0.001	31.0	Two seater
105)	Mercedes Benz 240 D ³	10,039	0.001	30.4	Compact
106)	Volkswagen Beetle ³	9,979	0.001	24.0	Minicompact
107)	AMC Pacer ¹	9,954	0.001	18.7	Compact
108)	Fiat 128 ³	9,614	0.001	24.0	Subcompact
109)	Peugeot 504 ³	9,345	0.001	23.3	Compact
110)	Mercury Cougar ¹	9,293	0.001	14.7	Midsized
111)	Mercedes Benz 300 SD ³	8,984	0.001	26.0	Compact
112)	Porsche 924 ³	8,694	0.001	19.0	Two seater
113)	BMW 528 I ³	6,802	0.001	20.0	Compact
114)	Mercedes Benz 450 SL(107) ³	6,535	0.001	14.0	Two seater
115)	Dodge Monaco ¹	5,982	0.001	14.3	Midsized
116)	Saab 99 ³	4,655		23.3	Compact
117)	Alfa Romeo ³	4,493		20.5	Two seater
118)	Checker ¹	4,490		14.7	Midsized
119)	Mercedes Benz 450 SEL ³	4,455		13.5	Midsized
120)	Jaguar ³	4,237		13.9	Compact
121)	Mazda RX-3 ³	3,568		21.4	Minicompact
122)	Mazda RX-4 ³	3,568		20.4	Subcompact
123)	Porsche 911 ³	3,534		18.0	Two seater
124)	Lincoln Continental Mark VI ¹	3,461		18.5	Large
125)	Dodge Mirada ¹	3,252		17.8	Midsized
126)	BMW 733 I ³	2,841		15.6	Compact
127)	Mercedes Benz 280 E ³	2,781		16.0	Compact
128)	Honda Prelude ³	2,696		27.6	Minicompact

Table E.4 (Continued)
 142 Cars for *Model Year 1979* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
129)	Lancia Beta ³	2,100		22.4	Subcompact
130)	Mercedes Benz 450 SLC ³	1,850		14.0	Subcompact
131)	Porsche 928 ³	1,810		13.4	Minicompact
132)	Mercedes Benz 280 S ³	1,608		16.0	Compact
133)	Mazda Cosmo ³	1,364		20.4	Subcompact
134)	Audi 4000 ³	1,111		25.3	Subcompact
135)	Mercedes Benz 280 SE ³	956		16.0	Compact
136)	Peugeot 604 ³	918		15.0	Compact
137)	Renault Gordini ³	916		25.0	Minicompact
138)	BMW 633 CSI ³	870		15.5	Subcompact
139)	Peugeot 505 (Gas) ³	734		20.3	Compact
140)	Porsche 930 ³	664		15.0	Two seater
141)	AMC Matador ¹	614		14.0	Midsized
142)	Mercedes Benz 450 SEL 6.9 ³	507		11.0	Midsized
		10,788,257	1.000	20.5	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.5
128 Cars for *Model Year 1980* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Oldsmobile Supreme ¹	467,683	0.051	20.9	Midsize
2)	Chevrolet Citation (X-Car) ¹	377,089	0.041	25.0	Midsize
3)	Chevrolet Chevette ¹	375,396	0.041	28.3	Subcompact
4)	Chevrolet ¹	307,395	0.034	20.2	Large
5)	Ford Fairmont ¹	294,277	0.032	23.2	Midsize
6)	Chevrolet Malibu ¹	276,767	0.030	21.2	Midsize
7)	Toyota Corolla ³	257,812	0.028	30.4	Subcompact
8)	Ford Mustang ¹	246,008	0.027	23.5	Subcompact
9)	Buick Regal ¹	192,507	0.021	20.7	Midsize
10)	Volkswagen Rabbit-American ²	191,166	0.021	34.6	Subcompact
11)	Nissan Sentra (210) ³	188,672	0.021	33.6	Subcompact
12)	Chevrolet Monte Carlo ¹	177,124	0.019	20.3	Midsize
13)	Honda Accord ³	176,954	0.019	27.5	Subcompact
14)	Ford Thunderbird ¹	164,795	0.018	20.6	Midsize
15)	Ford LTD Crown Victoria ¹	161,537	0.018	19.2	Large
16)	Buick Skylark (X-Car) ¹	161,310	0.018	24.3	Compact
17)	Ford Pinto ¹	159,709	0.018	27.0	Minicompact
18)	Oldsmobile 88 ¹	156,355	0.017	20.7	Large
19)	Cadillac DeVille/Fleetwood ¹	147,744	0.016	18.7	Large
20)	Toyota Celica ³	145,485	0.016	24.6	Subcompact
21)	Chevrolet Monza ¹	143,609	0.016	24.6	Subcompact
22)	Subaru ³	140,425	0.015	30.5	Subcompact
23)	Plymouth Horizon ¹	134,806	0.015	27.0	Subcompact
24)	Honda Civic ³	133,111	0.015	34.7	Minicompact
25)	Chevrolet Camaro ¹	131,066	0.014	18.9	Subcompact
26)	Buick Century ¹	130,763	0.014	20.2	Midsize
27)	Pontiac Grand Prix ¹	123,283	0.014	21.3	Midsize
28)	Pontiac ¹	119,880	0.013	20.1	Large
29)	Pontiac Sunbird ¹	119,563	0.013	25.3	Subcompact
30)	Dodge Omni ¹	110,708	0.012	27.0	Subcompact
31)	Nissan 310 ³	99,575	0.011	34.2	Subcompact
32)	Pontiac Phoenix (X-Car) ¹	95,506	0.011	25.4	Midsize
33)	Pontiac Firebird ¹	95,449	0.010	18.5	Subcompact
34)	Toyota Tercel ³	94,503	0.010	35.6	Subcompact
35)	Buick LeSabre ¹	94,206	0.010	19.1	Large
36)	Ford Granada ¹	92,410	0.010	19.2	Compact
37)	Plymouth Volare ¹	91,442	0.010	19.5	Midsize
38)	Nissan 200SX ³	86,345	0.009	30.9	Subcompact
39)	Mercury Zephyr ¹	85,946	0.009	23.2	Midsize
40)	Pontiac LeMans ¹	84,975	0.009	21.4	Midsize
41)	Oldsmobile Omega (X-Car) ¹	80,152	0.009	24.7	Compact
42)	Oldsmobile 98 ¹	74,497	0.008	20.0	Large
43)	Nissan 280ZX ³	71,594	0.008	23.5	Two seater

Table E.5 (Continued)
 128 Cars for *Model Year 1980* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	AMC Concord ¹	70,336	0.008	21.8	Compact
45)	Mercury Cougar XR-7 ¹	69,572	0.008	20.7	Midsize
46)	Dodge Aspen ¹	68,898	0.008	19.5	Midsize
47)	Buick Electra ¹	68,890	0.008	18.1	Large
48)	Ford Fiesta ⁴	68,841	0.008	30.0	Subcompact
49)	Mazda GLC ³	68,231	0.008	33.1	Subcompact
50)	Mercury Capri ¹	67,538	0.007	23.7	Subcompact
51)	Nissan Stanza (510) ³	66,468	0.007	32.5	Subcompact
52)	Chrysler LeBaron ¹	66,083	0.007	18.6	Midsize
53)	Mercury Grand Marquis ¹	58,008	0.006	19.2	Large
54)	AMC Spirit ¹	55,392	0.006	22.0	Subcompact
55)	Dodge Colt Hatchback ⁴	54,313	0.006	36.4	Subcompact
56)	Cadillac Eldorado ¹	51,775	0.006	18.3	Midsize
57)	Chrysler Cordoba ¹	50,580	0.006	17.7	Midsize
58)	Mazda 626 ³	47,597	0.005	26.9	Subcompact
59)	Honda Prelude ³	47,041	0.005	27.6	Minicompact
60)	Lincoln Continental Mark VI ¹	44,978	0.005	18.5	Large
61)	Buick Riviera ¹	42,711	0.005	19.0	Midsize
62)	Mazda RX-7 ³	41,500	0.005	19.7	Two seater
63)	Cadillac Seville ¹	39,480	0.004	19.0	Midsize
64)	Volvo DL ³	39,087	0.004	21.7	Compact
65)	Plymouth Colt ⁴	38,941	0.004	36.3	Subcompact
66)	Oldsmobile Toronado ¹	38,289	0.004	20.5	Midsize
67)	Chevrolet Corvette ¹	37,471	0.004	16.9	Two seater
68)	Toyota Camry (Corona) ³	37,352	0.004	23.8	Subcompact
69)	Lincoln Continental ¹	35,845	0.004	18.5	Large
70)	Chrysler ¹	35,089	0.004	15.7	Large
71)	Mercury Monarch ¹	32,628	0.004	19.2	Compact
72)	Dodge Diplomat ¹	32,317	0.004	19.4	Midsize
73)	Mercury Bobcat ¹	31,419	0.003	26.5	Minicompact
74)	Dodge Mirada ¹	27,349	0.003	17.8	Midsize
75)	Audi 5000 (Gas) ³	26,610	0.003	22.7	Compact
76)	BMW 320 I ³	25,771	0.003	28.8	Subcompact
77)	Volkswagen Dasher ³	24,286	0.003	32.3	Subcompact
78)	Toyota Supra ³	23,878	0.003	22.5	Subcompact
79)	Renault Le Car ³	23,201	0.003	33.0	Minicompact
80)	Volkswagen Scirocco ³	21,297	0.002	29.5	Subcompact
81)	Plymouth Arrow ⁴	18,657	0.002	28.7	Minicompact
82)	Dodge St Regis ¹	18,392	0.002	15.6	Large
83)	Fiat 138 Strada ³	15,720	0.002	27.9	Compact
84)	Volvo 760 GLE ³	15,430	0.002	18.6	Compact
85)	JRT MG ³	14,872	0.002	20.0	Two seater
86)	Audi 4000 ³	14,664	0.002	25.3	Subcompact

Table E.5 (Continued)
 128 Cars for *Model Year 1980* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	JRT Triumph ³	14,643	0.002	24.7	Two seater
88)	Plymouth Gran Fury ¹	13,374	0.001	15.6	Large
89)	Mercedes Benz 300 SD ³	13,093	0.001	27.0	Compact
90)	Dodge Challenger ⁴	13,059	0.001	24.7	Subcompact
91)	Toyota Cressida ³	12,193	0.001	23.0	Subcompact
92)	Mercedes Benz 300 D/300 CD ³	11,425	0.001	25.7	Compact
93)	Saab 900 ³	11,374	0.001	22.4	Midsize
94)	Peugeot 505 (Gas) ³	11,094	0.001	20.3	Compact
95)	Plymouth Conquest (Sapporo) ⁴	10,311	0.001	24.7	Subcompact
96)	Mercedes Benz 240 D ³	9,213	0.001	28.4	Compact
97)	Buick Skyhawk ¹	8,746	0.001	21.1	Subcompact
98)	Oldsmobile Starfire ¹	8,550	0.001	22.4	Subcompact
99)	Fiat X 1/9 ³	8,487	0.001	29.0	Two seater
100)	Volkswagen Jetta ³	8,157	0.001	28.9	Subcompact
101)	Fiat Brava ³	7,882	0.001	24.8	Subcompact
102)	Fiat Spider ³	7,711	0.001	26.8	Two seater
103)	Nissan Maxima (810) ³	7,441	0.001	23.3	Subcompact
104)	BMW 528 I ³	7,186	0.001	21.3	Subcompact
105)	Volkswagen Beetle ³	6,995	0.001	24.0	Minicompact
106)	Volkswagen Rabbit-Convertible ³	6,787	0.001	33.9	Minicompact
107)	Lincoln Versailles ¹	6,645	0.001	17.0	Compact
108)	Mercedes Benz 450 SL(107) ³	6,426	0.001	18.0	Two seater
109)	Porsche 924 ³	6,127	0.001	22.4	Two seater
110)	Ford LTD II ¹	5,356	0.001	14.9	Midsize
111)	Mercedes Benz 450 SEL ³	3,844		18.0	Midsize
112)	AMC Pacer ¹	3,733		20.1	Compact
113)	Alfa Romeo ³	3,542		21.0	Two seater
114)	Checker ¹	3,318		16.5	Midsize
115)	Porsche 911 ³	3,226		19.0	Two seater
116)	Jaguar ³	3,033		14.0	Compact
117)	Saab 99 ³	2,634		25.0	Compact
118)	BMW 733 I ³	2,066		19.0	Compact
119)	Lancia Beta ³	1,991		22.4	Subcompact
120)	Mercedes Benz 450 SLC ³	1,643		18.0	Subcompact
121)	Porsche 928 ³	1,426		18.0	Minicompact
122)	Mercedes Benz 280 E ³	1,378		18.0	Compact
123)	Volkswagen Rabbit ³	1,261		33.1	Subcompact
124)	BMW 633 CSI ³	949		19.0	Subcompact
125)	Mercedes Benz 280 S ³	692		17.0	Compact

Table E.5 (Continued)
 128 Cars for *Model Year 1980* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
126)	Mercedes Benz 280 SE ³	539		17.0	Compact
127)	Porsche 930 ³	365		15.0	Two seater
128)	JRT Rover ³	195		18.0	Compact
		9,094,506	1.000	23.2	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.6
133 Cars for *Model Year 1981* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Oldsmobile Supreme ¹	488,657	0.055	22.4	Midsize
2)	Chevrolet Chevette ¹	376,758	0.042	30.6	Subcompact
3)	Chevrolet Citation (X-Car) ¹	321,023	0.036	26.0	Midsize
4)	Ford Escort ¹	284,633	0.032	32.4	Compact
5)	Toyota Corolla ³	254,083	0.029	31.1	Subcompact
6)	Chevrolet Malibu ¹	242,856	0.027	22.2	Midsize
7)	Ford Fairmont ¹	223,591	0.025	23.5	Midsize
8)	Chevrolet ¹	216,630	0.024	21.4	Large
9)	Buick Regal ¹	213,533	0.024	22.6	Midsize
10)	Buick Skylark (X-Car) ¹	202,933	0.023	26.0	Compact
11)	Honda Accord ³	188,044	0.021	28.4	Subcompact
12)	Plymouth Reliant ¹	180,103	0.020	27.4	Midsize
13)	Chevrolet Monte Carlo ¹	175,155	0.020	21.7	Midsize
14)	Ford Mustang ¹	173,329	0.020	24.7	Subcompact
15)	Oldsmobile 88 ¹	161,766	0.018	22.0	Large
16)	Nissan Sentra (210) ³	161,573	0.018	35.2	Subcompact
17)	Volkswagen Rabbit-American ²	159,588	0.018	39.1	Subcompact
18)	Honda Civic ³	158,127	0.018	36.1	Minicompact
19)	Subaru ³	150,884	0.017	32.1	Subcompact
20)	Buick Century ¹	150,267	0.017	22.0	Midsize
21)	Pontiac Grand Prix ¹	138,221	0.016	23.6	Midsize
22)	Dodge Aries ¹	137,066	0.015	27.5	Midsize
23)	Plymouth Horizon ¹	136,909	0.015	30.4	Compact
24)	Cadillac DeVille/Fleetwood ¹	135,747	0.015	18.6	Large
25)	Ford LTD Crown Victoria ¹	120,410	0.014	19.3	Large
26)	Toyota Tercel ³	115,841	0.013	35.8	Subcompact
27)	Dodge Omni ¹	111,147	0.013	30.7	Compact
28)	Chevrolet Camaro ¹	109,707	0.012	20.1	Subcompact
29)	Oldsmobile Omega (X-Car) ¹	109,199	0.012	26.2	Compact
30)	Ford Granada ¹	105,743	0.012	21.3	Midsize
31)	Toyota Celica ³	103,505	0.012	28.6	Subcompact
32)	Pontiac ¹	98,955	0.011	22.1	Large
33)	Pontiac Phoenix (X-Car) ¹	91,209	0.010	26.3	Midsize
34)	Mercury Lynx ¹	90,961	0.010	32.3	Compact
35)	Nissan 310 ³	84,123	0.009	33.4	Subcompact
36)	Oldsmobile 98 ¹	83,332	0.009	22.1	Large
37)	Buick LeSabre ¹	81,244	0.009	21.6	Large
38)	Ford Thunderbird ¹	80,942	0.009	20.8	Midsize
39)	Nissan 200SX ³	79,636	0.009	30.3	Subcompact
40)	Pontiac LeMans ¹	77,642	0.009	23.7	Midsize
41)	Mercury Zephyr ¹	68,283	0.008	23.4	Midsize
42)	Mazda GLC ³	67,434	0.008	37.5	Subcompact

Table E.6 (Continued)
 133 Cars for *Model Year 1981* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
43)	Nissan 280ZX ³	65,479	0.007	23.7	Two seater
44)	AMC Concord ¹	63,740	0.007	23.1	Compact
45)	Pontiac Firebird ¹	61,460	0.007	19.3	Subcompact
46)	Mazda 626 ³	61,047	0.007	30.9	Subcompact
47)	Buick Electra ¹	59,722	0.007	21.1	Large
48)	Cadillac Eldorado ¹	55,268	0.006	19.0	Midsized
49)	Mercury Capri ¹	53,491	0.006	24.7	Subcompact
50)	Pontiac Sunbird ¹	53,131	0.006	22.7	Subcompact
51)	Chrysler LeBaron ¹	53,075	0.006	19.7	Midsized
52)	Mercury Grand Marquis ¹	52,563	0.006	19.2	Large
53)	Mazda RX-7 ³	50,505	0.006	23.6	Two seater
54)	Honda Prelude ³	49,025	0.006	28.7	Minicompact
55)	Buick Riviera ¹	48,487	0.005	19.5	Midsized
56)	Ford Fiesta ⁴	47,707	0.005	30.0	Subcompact
57)	Nissan Stanza (510) ³	47,242	0.005	32.3	Subcompact
58)	Mercury Cougar ¹	45,040	0.005	21.0	Midsized
59)	Chevrolet Cavalier ¹	43,855	0.005	31.6	Subcompact
60)	Pontiac T1000 ¹	43,098	0.005	30.6	Subcompact
61)	AMC Eagle ¹	42,904	0.005	20.4	Compact
62)	Chevrolet Monza ¹	42,014	0.005	22.7	Subcompact
63)	Ford EXP ¹	41,601	0.005	33.1	Two seater
64)	Dodge Colt Hatchback ⁴	41,288	0.005	36.5	Subcompact
65)	Plymouth Colt ⁴	40,050	0.005	36.4	Subcompact
66)	Volvo DL ³	39,752	0.004	22.5	Compact
67)	Oldsmobile Toronado ¹	39,551	0.004	20.6	Midsized
68)	AMC Spirit ¹	38,334	0.004	23.1	Subcompact
69)	Pontiac J2000/Sunbird ¹	37,502	0.004	31.5	Subcompact
70)	Mercury Cougar XR-7 ¹	34,324	0.004	20.2	Midsized
71)	Lincoln Continental Mark VI ¹	34,210	0.004	19.0	Large
72)	Toyota Starlet ³	33,870	0.004	44.0	Minicompact
73)	Chevrolet Corvette ¹	33,414	0.004	17.0	Two seater
74)	Dodge Diplomat ¹	31,066	0.003	19.6	Midsized
75)	Lincoln Continental ¹	31,038	0.003	19.0	Large
76)	Chrysler Cordoba ¹	30,644	0.003	20.0	Midsized
77)	Nissan Maxima (810) ³	29,221	0.003	26.0	Subcompact
78)	BMW 320i ³	28,927	0.003	28.8	Subcompact
79)	Audi 5000 (Gas) ³	28,649	0.003	23.9	Compact
80)	Ford Pinto ¹	27,795	0.003	27.0	Minicompact
81)	Cadillac Seville ¹	26,622	0.003	19.2	Midsized
82)	Toyota Camry (Corona) ³	25,549	0.003	29.0	Subcompact
83)	Volkswagen Jetta ³	24,773	0.003	29.7	Subcompact

Table E.6 (Continued)
 133 Cars for *Model Year 1981* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
84)	Toyota Cressida ³	24,174	0.003	25.0	Subcompact
85)	Volkswagen Dasher ³	23,206	0.003	31.8	Subcompact
86)	Volkswagen Scirocco ³	19,210	0.002	29.9	Subcompact
87)	Audi 4000 ³	18,585	0.002	26.7	Subcompact
88)	Renault Le Car ³	18,217	0.002	33.0	Minicompact
89)	Dodge Mirada ¹	18,096	0.002	20.0	Midsize
90)	Chrysler New Yorker 5th Ave ¹	15,453	0.002	19.0	Large
91)	Peugeot 505 (Gas) ³	15,156	0.002	21.5	Compact
92)	Plymouth Volare ¹	15,113	0.002	19.5	Midsize
93)	Mercury LN7 ¹	13,954	0.002	32.9	Two seater
94)	Toyota Supra ³	13,849	0.002	24.5	Subcompact
95)	Mercedes Benz 300 SDL/300 SD ³	13,468	0.002	28.0	Compact
96)	Isuzu I-Mark ³	13,119	0.001	34.7	Subcompact
97)	Dodge Aspen ¹	12,938	0.001	19.5	Midsize
98)	Plymouth Conquest (Sapporo) ⁴	12,709	0.001	23.0	Subcompact
99)	Dodge Challenger ⁴	12,391	0.001	23.0	Subcompact
100)	Volkswagen Rabbit-Convertible ³	12,162	0.001	34.9	Subcompact
101)	JRT Triumph ³	11,510	0.001	22.5	Two seater
102)	Fiat 138 Strada ³	11,255	0.001	30.6	Compact
103)	Saab 900 ³	10,955	0.001	23.0	Compact
104)	Mercedes Benz 240 D ³	10,731	0.001	29.4	Compact
105)	Renault 181 ³	10,431	0.001	27.8	Subcompact
106)	Mercedes Benz 300 D/300 CD ³	10,403	0.001	26.0	Compact
107)	Plymouth Gran Fury ¹	9,001	0.001	19.0	Large
108)	Fiat Spider ³	8,937	0.001	28.1	Two seater
109)	BMW 528 I ³	8,062	0.001	21.4	Subcompact
110)	Dodge St Regis ¹	7,556	0.001	19.0	Large
111)	Fiat X 1/9 ³	6,994	0.001	30.0	Two seater
112)	Fiat Brava ³	6,822	0.001	26.8	Subcompact
113)	Chrysler Imperial ¹	6,368	0.001	20.0	Midsize
114)	Mercury Bobcat ¹	5,719	0.001	26.4	Minicompact
115)	Porsche 924 ³	4,875	0.001	24.2	Two seater
116)	Jaguar ³	4,081		17.0	Compact
117)	Dodge Charger 024 ¹	4,007		30.9	Subcompact
118)	Porsche 911 ³	3,714		20.0	Two seater
119)	Plymouth Turismo (TC3) ¹	3,200		32.6	Subcompact
120)	Checker ¹	2,923		16.5	Midsize
121)	Alfa Romeo ³	1,951		23.0	Two seater
122)	BMW 733 I ³	1,948		19.0	Compact
123)	Porsche 928 ³	1,745		18.5	Minicompact
124)	Lancia Beta ³	1,354		22.0	Subcompact
125)	Plymouth Arrow ⁴	1,250		28.7	Minicompact

Table E.6 (Continued)
 133 Cars for *Model Year 1981* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
126)	BMW 633 CSI ³	1,099		19.0	Subcompact
127)	Mercedes Benz 280 E ³	931		18.0	Compact
128)	Ferrari ³	899		13.0	Minicompact
129)	JRT Rover ³	877		18.0	Compact
130)	Lincoln Versailles ¹	334		17.0	Compact
131)	AMC Pacer ¹	228		20.1	Compact
132)	Volkswagen Beetle ³	55		24.0	Minicompact
133)	Porsche 930 ³	27		15.0	Two seater
		8,879,864	1.000	25.3	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.7
136 Cars for *Model Year 1982* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Ford Escort ¹	321,952	0.042	33.8	Compact
2)	Oldsmobile Supreme ¹	293,979	0.038	23.9	Midsize
3)	Chevrolet Chevette ¹	233,858	0.031	32.6	Subcompact
4)	Chevrolet Citation (X-Car) ¹	209,545	0.027	28.5	Midsize
5)	Chevrolet ¹	209,514	0.027	21.3	Large
6)	Honda Accord ³	180,407	0.024	32.0	Subcompact
7)	Nissan Sentra (210) ³	176,896	0.023	36.3	Subcompact
8)	Toyota Corolla ³	174,710	0.023	31.0	Subcompact
9)	Oldsmobile 88 ¹	168,550	0.022	21.0	Large
10)	Buick Skylark (X-Car) ¹	157,103	0.021	28.0	Compact
11)	Buick Century ¹	152,658	0.020	26.4	Midsize
12)	Plymouth Reliant ¹	151,279	0.020	27.7	Midsize
13)	Buick Regal ¹	148,893	0.019	22.5	Midsize
14)	Chevrolet Camaro ¹	148,619	0.019	22.2	Subcompact
15)	Cadillac DeVille/Fleetwood ¹	145,075	0.019	18.5	Large
16)	Subaru ³	144,902	0.019	33.6	Subcompact
17)	Honda Civic ³	134,054	0.018	39.6	Minicompact
18)	Ford Fairmont ¹	128,930	0.017	23.2	Midsize
19)	Toyota Tercel ³	127,329	0.017	35.4	Subcompact
20)	Chevrolet Malibu ¹	121,206	0.016	23.4	Midsize
21)	Chevrolet Cavalier ¹	120,587	0.016	31.8	Compact
22)	Ford LTD Crown Victoria ¹	118,527	0.015	20.5	Large
23)	Ford Mustang ¹	116,804	0.015	23.4	Subcompact
24)	Toyota Celica ³	113,599	0.015	28.7	Subcompact
25)	Dodge Aries ¹	112,761	0.015	27.8	Midsize
26)	Ford Granada ¹	111,468	0.015	21.5	Midsize
27)	Volkswagen Rabbit-American ²	107,396	0.014	38.5	Subcompact
28)	Chevrolet Monte Carlo ¹	105,721	0.014	23.0	Midsize
29)	Buick LeSabre ¹	102,424	0.013	20.8	Large
30)	Mercury Lynx ¹	98,052	0.013	33.8	Compact
31)	Pontiac Grand Prix ¹	88,821	0.012	23.2	Midsize
32)	Oldsmobile 98 ¹	86,338	0.011	21.9	Large
33)	Pontiac Firebird ¹	83,810	0.011	22.0	Subcompact
34)	Chrysler LeBaron ¹	81,598	0.011	27.5	Midsize
35)	Oldsmobile Omega (X-Car) ¹	78,707	0.010	28.6	Compact
36)	Oldsmobile Ciera ¹	78,542	0.010	27.4	Midsize
37)	Pontiac Bonneville ¹	74,055	0.010	23.3	Midsize
38)	Volvo DL ³	70,827	0.009	25.7	Compact
39)	Mercury Grand Marquis ¹	69,784	0.009	20.5	Large
40)	Chevrolet Celebrity ¹	67,475	0.009	27.6	Midsize
41)	Mazda 626 ³	60,499	0.008	29.8	Subcompact
42)	Nissan 280ZX ³	59,853	0.008	24.2	Two seater
43)	Pontiac J2000/Sunbird ¹	59,018	0.008	31.7	Compact

Table E.7 (Continued)
 136 Cars for *Model Year 1982* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Buick Electra ¹	57,706	0.008	20.7	Large
45)	Lincoln Continental ¹	56,267	0.007	20.0	Midsize
46)	Nissan Stanza (510) ³	55,897	0.007	37.0	Compact
47)	Mazda GLC ³	55,760	0.007	37.3	Subcompact
48)	Pontiac Phoenix (X-Car) ¹	54,762	0.007	29.0	Midsize
49)	Cadillac Eldorado ¹	54,724	0.007	20.4	Midsize
50)	Nissan 200SX ³	54,622	0.007	29.1	Subcompact
51)	Pontiac T1000 ¹	52,558	0.007	32.0	Subcompact
52)	Chrysler New Yorker 5th Ave ¹	51,757	0.007	20.0	Midsize
53)	Plymouth Horizon ¹	50,699	0.007	32.1	Compact
54)	Nissan 310 ³	50,582	0.007	38.0	Subcompact
55)	Mercury Cougar ¹	49,438	0.006	21.5	Midsize
56)	Ford Thunderbird ¹	47,903	0.006	21.1	Midsize
57)	Nissan Maxima (810) ³	47,630	0.006	25.4	Subcompact
58)	Ford EXP ¹	43,049	0.006	33.1	Two seater
59)	Buick Riviera ¹	43,008	0.006	19.8	Midsize
60)	Mazda RX-7 ³	41,688	0.005	23.6	Two seater
61)	Dodge Colt Hatchback ⁴	41,577	0.005	37.2	Subcompact
62)	Dodge Charger 024 ¹	41,547	0.005	33.0	Subcompact
63)	Plymouth Colt ⁴	40,431	0.005	37.3	Subcompact
64)	Mercury Zephyr ¹	40,146	0.005	23.2	Midsize
65)	Dodge Omni ¹	39,993	0.005	32.2	Compact
66)	Plymouth Turismo (TC3) ¹	38,776	0.005	32.6	Subcompact
67)	AMC Eagle ¹	37,153	0.005	21.3	Compact
68)	Honda Prelude ³	37,137	0.005	31.6	Minicompact
69)	Pontiac A6000 ¹	36,564	0.005	28.4	Midsize
70)	AMC Concord ¹	36,505	0.005	23.6	Compact
71)	BMW 320 I ³	35,190	0.005	28.8	Subcompact
72)	Toyota Cressida ³	34,616	0.005	25.0	Subcompact
73)	Oldsmobile Toronado ¹	33,322	0.004	20.2	Midsize
74)	Buick Skyhawk ¹	32,952	0.004	30.9	Compact
75)	Toyota Supra ³	31,270	0.004	25.7	Subcompact
76)	Mercury Capri ¹	29,956	0.004	23.2	Subcompact
77)	Audi 5000 (Gas) ³	26,298	0.003	22.4	Compact
78)	Lincoln Continental Mark VI ¹	25,386	0.003	20.0	Large
79)	Dodge 400 ¹	24,090	0.003	27.6	Midsize
80)	Dodge Diplomat ¹	23,928	0.003	20.0	Midsize
81)	Cadillac Seville ¹	22,334	0.003	20.5	Midsize
82)	Chevrolet Corvette ¹	22,086	0.003	19.0	Two seater
83)	Volkswagen Jetta ³	21,561	0.003	37.5	Subcompact
84)	Toyota Starlet ³	20,459	0.003	43.0	Minicompact
85)	Renault Le Car ³	19,978	0.003	35.0	Minicompact
86)	Oldsmobile Firenza ¹	19,562	0.003	31.2	Subcompact

Table E.7 (Continued)
 136 Cars for *Model Year 1982* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	AMC Spirit ¹	18,152	0.002	25.3	Subcompact
88)	Plymouth Gran Fury ¹	17,793	0.002	20.0	Midsize
89)	Mercury Cougar XR-7 ¹	17,732	0.002	21.2	Midsize
90)	Saab 900 ³	17,365	0.002	23.6	Compact
91)	Audi 4000 ³	16,364	0.002	30.2	Subcompact
92)	Chrysler Cordoba ¹	16,273	0.002	19.7	Midsize
93)	Mercedes Benz 300 SD ³	16,138	0.002	29.0	Compact
94)	Isuzu I-Mark ³	15,168	0.002	37.3	Subcompact
95)	Mercedes Benz 300 D/300 CD ³	15,115	0.002	28.0	Compact
96)	Cadillac Cimarron ¹	14,899	0.002	31.0	Compact
97)	Mercury LN7 ¹	14,589	0.002	32.6	Two seater
98)	Dodge Challenger ⁴	14,340	0.002	27.0	Subcompact
99)	Mercedes Benz 240 D ³	12,970	0.002	28.5	Compact
100)	Plymouth Conquest (Sapporo) ⁴	12,607	0.002	27.0	Subcompact
101)	Volkswagen Scirocco ³	12,436	0.002	32.5	Subcompact
102)	Pontiac ¹	12,257	0.002	22.1	Large
103)	Peugeot 505 (Diesel/Turbo) ³	10,118	0.001	29.0	Compact
104)	Renault 18I ³	9,693	0.001	27.0	Subcompact
105)	Volkswagen Quantum ³	8,570	0.001	28.9	Compact
106)	Volkswagen Rabbit-Convertible ³	8,531	0.001	31.3	Subcompact
107)	Jaguar ³	8,296	0.001	19.0	Subcompact
108)	Dodge Mirada ¹	8,073	0.001	20.0	Midsize
109)	Mercedes Benz 380 SL ³	7,889	0.001	19.0	Two seater
110)	BMW 528 I ³	7,045	0.001	24.1	Compact
111)	Renault Fuego ³	6,865	0.001	26.0	Subcompact
112)	Toyota Camry (Corona) ³	6,656	0.001	28.0	Subcompact
113)	Fiat Spider ³	6,656	0.001	28.5	Two seater
114)	Porsche 911 ³	4,310	0.001	20.0	Minicompact
115)	Fiat 138 Strada ³	3,732		31.8	Compact
116)	Audi Coupe ³	3,697		26.8	Subcompact
117)	Peugeot 505 (Gas) ³	3,622		24.1	Compact
118)	Porsche 924 ³	3,620		24.4	Minicompact
119)	Fiat Brava ³	3,487		27.6	Subcompact
120)	Fiat X 1/9 ³	3,189		30.0	Two seater
121)	Chrysler Imperial ¹	2,807		19.0	Midsize
122)	Checker ¹	2,731		16.5	Midsize
123)	BMW 733 I ³	2,709		20.4	Compact
124)	Mercedes Benz 380 SEL/500 SEL ³	2,538		19.0	Midsize
125)	Alfa Romeo ³	2,211		24.9	Two seater
126)	Porsche 928 ³	2,136		19.0	Minicompact
127)	Volkswagen Dasher ³	1,826		41.0	Subcompact
128)	Mercedes Benz 380 SLC ³	1,349		19.0	Compact
129)	BMW 633 CSI ³	1,027		21.0	Subcompact

Table E.7 (Continued)
 136 Cars for *Model Year 1982* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
130)	Lancia Beta ³	877		22.0	Subcompact
131)	Peugeot 604 ³	815		26.4	Compact
132)	Ferrari ³	757		13.0	Two seater
133)	JRT Triumph ³	710		22.5	Two seater
134)	JRT MG ³	252		20.0	Two seater
135)	JRT Rover ³	182		18.0	Compact
136)	Volkswagen Beetle ³	5		24.0	Minicompact
		7,658,171	1.000	26.3	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.8
156 Cars for *Model Year 1983* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Ford Escort ¹	323,900	0.037	33.0	Compact
2)	Oldsmobile Supreme ¹	314,473	0.036	23.3	Midsize
3)	Chevrolet ¹	226,750	0.026	21.3	Large
4)	Oldsmobile 88 ¹	218,604	0.025	20.4	Large
5)	Chevrolet Cavalier ¹	216,324	0.025	30.4	Compact
6)	Nissan Sentra (210) ³	212,438	0.024	37.6	Subcompact
7)	Buick Regal ¹	201,872	0.023	23.0	Midsize
8)	Chevrolet Chevette ¹	183,970	0.021	33.2	Subcompact
9)	Honda Accord ³	177,169	0.020	35.5	Subcompact
10)	Chevrolet Camaro ¹	175,004	0.020	21.5	Subcompact
11)	Cadillac DeVille/Fleetwood ¹	173,086	0.020	15.1	Large
12)	Oldsmobile Ciera ¹	169,939	0.019	26.8	Midsize
13)	Buick Century ¹	165,947	0.019	25.5	Midsize
14)	Plymouth Reliant ¹	161,757	0.018	28.6	Midsize
15)	Chevrolet Celebrity ¹	155,765	0.018	27.8	Midsize
16)	Subaru ³	152,427	0.017	34.3	Subcompact
17)	Toyota Tercel ³	150,968	0.017	38.7	Subcompact
18)	Toyota Corolla ³	142,832	0.016	35.7	Subcompact
19)	Ford LTD 83 ¹	142,817	0.016	23.5	Midsize
20)	Buick LeSabre ¹	140,272	0.016	20.6	Large
21)	Honda Civic ³	139,169	0.016	41.1	Minicompact
22)	Ford LTD Crown Victoria ¹	126,821	0.014	20.0	Large
23)	AMC Renault Alliance ¹	124,687	0.014	36.7	Compact
24)	Dodge Aries ¹	124,650	0.014	28.7	Midsize
25)	Toyota Celica ³	119,140	0.014	29.7	Subcompact
26)	Chevrolet Citation (X-Car) ¹	116,460	0.013	29.7	Midsize
27)	Ford Mustang ¹	116,120	0.013	22.2	Subcompact
28)	Oldsmobile 98 ¹	113,794	0.013	20.4	Large
29)	Chevrolet Malibu ¹	107,949	0.012	22.5	Midsize
30)	Buick Skylark (X-Car) ¹	107,363	0.012	28.0	Compact
31)	Ford Thunderbird ¹	99,176	0.011	23.1	Compact
32)	Chevrolet Monte Carlo ¹	98,865	0.011	22.1	Midsize
33)	Mercury Grand Marquis ¹	97,341	0.011	20.0	Large
34)	Pontiac Firebird ¹	93,360	0.011	21.9	Subcompact
35)	Pontiac Grand Prix ¹	87,026	0.010	22.8	Midsize
36)	Pontiac A6000 ¹	84,816	0.010	28.3	Midsize
37)	Volkswagen Rabbit-American ²	83,222	0.009	35.6	Subcompact
38)	Pontiac Bonneville ¹	81,964	0.009	22.7	Midsize
39)	Chrysler LeBaron ¹	80,566	0.009	27.3	Midsize
40)	Mercury Lynx ¹	79,962	0.009	32.8	Compact
41)	Pontiac J2000/Sunbird ¹	79,509	0.009	33.5	Compact
42)	Chrysler New Yorker 5th Ave ¹	77,700	0.009	20.0	Midsize
43)	Ford Fairmont ¹	77,669	0.009	21.4	Midsize

Table E.8 (Continued)
 156 Cars for *Model Year 1983* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Buick Electra ¹	75,691	0.009	19.4	Large
45)	Nissan Maxima (810) ³	71,711	0.008	28.1	Subcompact
46)	Ford Tempo ¹	70,986	0.008	31.3	Compact
47)	Chrysler New Yorker-E Class ¹	70,104	0.008	26.6	Midsize
48)	Buick Skyhawk ¹	69,946	0.008	31.8	Compact
49)	Nissan 280ZX ³	68,575	0.008	23.0	Two seater
50)	Cadillac Eldorado ¹	67,760	0.008	20.1	Midsize
51)	Nissan Stanza (510) ³	66,330	0.008	33.1	Compact
52)	Mercury Cougar XR-7 ¹	63,350	0.007	23.1	Compact
53)	Mazda 626 ³	63,073	0.007	31.9	Compact
54)	Lincoln Town Car ¹	59,335	0.007	20.0	Large
55)	Mercury Marquis ¹	57,688	0.007	23.5	Midsize
56)	Mazda GLC ³	57,251	0.007	38.5	Subcompact
57)	Oldsmobile Omega (X-Car) ¹	56,610	0.006	28.2	Compact
58)	Mazda RX-7 ³	54,453	0.006	22.8	Two seater
59)	Plymouth Horizon ¹	50,861	0.006	33.9	Compact
60)	Buick Riviera ¹	48,803	0.006	20.1	Midsize
61)	Dodge Omni ¹	45,843	0.005	34.3	Compact
62)	Dodge Charger 024 ¹	45,238	0.005	33.5	Subcompact
63)	Volvo DL ³	44,700	0.005	27.2	Compact
64)	Nissan Pulsar NX ³	43,680	0.005	38.0	Subcompact
65)	Oldsmobile Firenza ¹	43,042	0.005	31.5	Compact
66)	Toyota Cressida ³	39,503	0.005	25.0	Subcompact
67)	Oldsmobile Toronado ¹	38,718	0.004	20.4	Midsize
68)	Pontiac T1000 ¹	38,286	0.004	33.1	Subcompact
69)	Nissan 200SX ³	37,189	0.004	29.8	Subcompact
70)	Plymouth Turismo (TC3) ¹	37,079	0.004	33.7	Subcompact
71)	Honda Prelude ³	35,538	0.004	31.6	Minicompact
72)	Toyota Camry (Corona) ³	35,054	0.004	35.0	Compact
73)	Dodge Colt Hatchback ⁴	34,702	0.004	37.9	Subcompact
74)	BMW 320 I ³	33,602	0.004	28.8	Subcompact
75)	Dodge 400 ¹	31,947	0.004	27.5	Midsize
76)	Pontiac Phoenix (X-Car) ¹	31,742	0.004	28.2	Midsize
77)	AMC Eagle ¹	31,604	0.004	23.5	Compact
78)	Plymouth Colt ⁴	31,490	0.004	38.1	Subcompact
79)	Cadillac Seville ¹	30,334	0.003	20.1	Midsize
80)	Dodge 600 ¹	30,042	0.003	26.7	Midsize
81)	Honda Accord-American ²	29,898	0.003	35.5	Subcompact
82)	Lincoln Continental Mark VI ¹	29,786	0.003	20.0	Large
83)	Toyota Supra ³	28,272	0.003	24.3	Subcompact
84)	Ford EXP ¹	26,471	0.003	32.4	Two seater
85)	Chevrolet Corvette ¹	25,891	0.003	20.0	Two seater

Table E.8 (Continued)
 156 Cars for *Model Year 1983* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
86)	Mercury Capri ¹	25,500	0.003	22.6	Subcompact
87)	Dodge Diplomat ¹	25,071	0.003	20.4	Midsize
88)	Saab 900 ³	24,071	0.003	25.4	Compact
89)	Nissan Pulsar (310) ³	22,247	0.003	37.0	Subcompact
90)	Mercury Topaz ¹	21,745	0.002	30.5	Compact
91)	Mercury Zephyr ¹	21,626	0.002	21.3	Midsize
92)	Mercedes Benz 300 D/300 CD ³	20,580	0.002	29.6	Compact
93)	Volkswagen Jetta ³	19,154	0.002	38.4	Subcompact
94)	Cadillac Cimarron ¹	18,958	0.002	28.0	Compact
95)	Audi 5000 (Gas) ³	18,437	0.002	22.3	Compact
96)	Mercedes Benz 300 SD ³	17,223	0.002	29.0	Compact
97)	AMC Concord ¹	16,576	0.002	24.0	Compact
98)	Renault Le Car ³	16,484	0.002	37.0	Minicompact
99)	Lincoln Continental ¹	16,205	0.002	20.0	Midsize
100)	Volkswagen Quantum ³	16,094	0.002	30.3	Compact
101)	Plymouth Gran Fury ¹	15,867	0.002	20.3	Midsize
102)	Ford Granada ¹	15,401	0.002	21.5	Midsize
103)	Dodge Challenger ⁴	14,760	0.002	27.0	Subcompact
104)	Isuzu I-Mark ³	14,727	0.002	37.6	Subcompact
105)	Jaguar ³	14,675	0.002	17.9	Subcompact
106)	Pontiac ¹	14,459	0.002	22.1	Large
107)	BMW 528 I ³	14,298	0.002	22.4	Compact
108)	Mercedes Benz 240 D ³	14,271	0.002	29.8	Compact
109)	Volkswagen Scirocco ³	14,184	0.002	33.6	Subcompact
110)	Chrysler Cordoba ¹	13,569	0.002	20.0	Midsize
111)	Plymouth Conquest (Sapporo) ⁴	13,018	0.001	27.0	Subcompact
112)	Renault Fuego ³	13,003	0.001	30.0	Subcompact
113)	Volvo GL ³	12,956	0.001	26.8	Compact
114)	Porsche 944 ³	12,144	0.001	25.8	Minicompact
115)	Volvo GLT ³	11,823	0.001	22.4	Compact
116)	Audi 4000 ³	11,806	0.001	29.3	Subcompact
117)	Mitsubishi Tredia ³	11,083	0.001	34.3	Subcompact
118)	Mitsubishi Cordia ³	10,422	0.001	34.3	Subcompact
119)	Toyota Starlet ³	9,779	0.001	49.0	Minicompact
120)	Volkswagen Rabbit-Convertible ³	9,768	0.001	33.1	Minicompact
121)	Mercedes Benz 380 SL ³	9,216	0.001	20.0	Two seater
122)	Audi 5000 (Diesel/Turbo) ³	8,889	0.001	24.1	Compact
123)	Volvo Diesel Sedan ³	8,423	0.001	30.1	Compact
124)	Peugeot 505 (Gas) ³	8,122	0.001	23.9	Compact
125)	Mercury LN7 ¹	6,932	0.001	32.3	Two seater
126)	AMC Spirit ¹	6,487	0.001	24.5	Subcompact
127)	Peugeot 505 (Diesel/Turbo) ³	5,721	0.001	28.6	Compact
128)	Isuzu Impulse ³	5,720	0.001	27.7	Subcompact

Table E.8 (Continued)
 156 Cars for *Model Year 1983* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
129)	Mitsubishi Starion ³	5,644	0.001	25.0	Subcompact
130)	Renault 18I ³	5,470	0.001	29.2	Subcompact
131)	Dodge Mirada ¹	5,463	0.001	20.2	Midsize
132)	Porsche 911 ³	5,313	0.001	20.0	Minicompact
133)	BMW 733 I ³	5,289	0.001	20.4	Compact
134)	Mercury Cougar ¹	5,218	0.001	23.1	Compact
135)	Fiat Spider ³	4,190		28.1	Two seater
136)	Mercedes Benz 380 SEL/500 SEL ³	3,801		20.0	Midsize
137)	Audi Coupe ³	3,764		25.3	Subcompact
138)	AMC Renault Encore ¹	3,651		36.1	Compact
139)	Alfa Romeo ³	3,104		27.0	Two seater
140)	Volvo 760 GLE ³	3,077		28.3	Midsize
141)	BMW 633 CSI ³	2,364		21.0	Subcompact
142)	Porsche 928 ³	2,325		19.0	Minicompact
143)	Mercedes Benz 380 SLC ³	2,251		20.0	Compact
144)	Fiat X 1/9 ³	2,053		30.0	Two seater
145)	Pontiac Fiero ¹	2,015		31.0	Two seater
146)	Chrysler Imperial ¹	1,725		19.0	Midsize
147)	Audi 4000 (Diesel) ³	1,711		44.0	Subcompact
148)	Lancia Beta ³	949		22.0	Subcompact
149)	Chrysler Laser ¹	925		26.9	Subcompact
150)	Dodge Daytona ¹	802		27.2	Subcompact
151)	Peugeot 604 ³	544		29.3	Compact
152)	Ferrari ³	542		13.0	Two seater
153)	Mercedes Benz 190 D 2.2 ³	498		33.7	Subcompact
154)	Audi Quattro ³	359		21.0	Subcompact
155)	Porsche 924 ³	27		24.4	Minicompact
156)	Volkswagen Dasher ³	24		41.0	Subcompact
		8,770,413	1.000	26.1	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.9
168 Cars for *Model Year 1984* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Chevrolet Cavalier ¹	371,836	0.036	32.2	Compact
2)	Ford Escort ¹	338,849	0.033	34.2	Compact
3)	Oldsmobile Supreme ¹	334,060	0.033	23.7	Midsize
4)	Chevrolet Celebrity ¹	307,777	0.030	26.0	Midsize
5)	Chevrolet ¹	264,625	0.026	20.2	Large
6)	Oldsmobile 88 ¹	259,937	0.025	20.7	Large
7)	Ford Tempo ¹	255,727	0.025	31.3	Compact
8)	Oldsmobile Ciera ¹	252,669	0.025	26.7	Midsize
9)	Buick Century ¹	208,745	0.020	25.8	Midsize
10)	Chevrolet Camaro ¹	207,285	0.020	22.6	Subcompact
11)	Buick Regal ¹	204,381	0.020	22.4	Midsize
12)	Cadillac DeVille/Fleetwood ¹	198,246	0.019	20.1	Large
13)	Ford LTD 83 ¹	198,109	0.019	24.0	Midsize
14)	Nissan Sentra (210) ³	192,185	0.019	37.6	Subcompact
15)	Chevrolet Chevette ¹	180,341	0.018	34.7	Subcompact
16)	Buick LeSabre ¹	161,763	0.016	20.7	Large
17)	Toyota Corolla ³	159,323	0.016	37.6	Compact
18)	Ford LTD Crown Victoria ¹	157,068	0.015	18.4	Large
19)	Ford Thunderbird ¹	156,583	0.015	23.3	Compact
20)	Subaru ³	150,494	0.015	33.4	Subcompact
21)	Plymouth Reliant ¹	141,377	0.014	27.6	Midsize
22)	Honda Accord ³	139,152	0.014	35.3	Subcompact
23)	Ford Mustang ¹	131,762	0.013	23.8	Subcompact
24)	Mercury Grand Marquis ¹	131,515	0.013	20.0	Large
25)	Chevrolet Monte Carlo ¹	127,875	0.013	21.7	Midsize
26)	Pontiac A6000 ¹	124,407	0.012	26.2	Midsize
27)	Pontiac J2000/Sunbird ¹	123,937	0.012	31.9	Compact
28)	Honda Civic ³	123,185	0.012	38.5	Subcompact
29)	Honda Accord-American ²	117,180	0.011	35.2	Subcompact
30)	Buick Skyhawk ¹	116,276	0.011	31.7	Compact
31)	Mercury Cougar XR-7 ¹	115,546	0.011	23.3	Compact
32)	Dodge Aries ¹	110,939	0.011	27.6	Midsize
33)	Toyota Tercel ³	108,889	0.011	38.7	Subcompact
34)	Oldsmobile 98 ¹	107,335	0.011	21.1	Large
35)	Pontiac Firebird ¹	105,628	0.010	22.6	Subcompact
36)	AMC Renault Alliance ¹	105,340	0.010	35.6	Compact
37)	Buick Skylark (X-Car) ¹	104,561	0.010	26.4	Compact
38)	Pontiac Fiero ¹	99,705	0.010	31.5	Two seater
39)	Mercury Marquis ¹	99,069	0.010	24.0	Midsize
40)	Chrysler LeBaron ¹	96,256	0.009	26.7	Midsize
41)	Chevrolet Citation (X-Car) ¹	93,386	0.009	27.4	Midsize
42)	Toyota Celica ³	90,784	0.009	29.7	Subcompact
43)	Buick Electra ¹	88,397	0.009	20.0	Large

Table E.9 (Continued)
 168 Cars for *Model Year 1984* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Chrysler New Yorker-E Class ¹	87,064	0.009	26.1	Midsize
45)	Toyota Camry (Corona) ³	85,477	0.008	34.7	Compact
46)	Volkswagen Rabbit-American ²	83,084	0.008	35.2	Subcompact
47)	Pontiac Grand Prix ¹	78,673	0.008	22.6	Midsize
48)	Lincoln Town Car ¹	77,475	0.008	20.0	Large
49)	Plymouth Horizon ¹	75,542	0.007	31.5	Compact
50)	Mercury Topaz ¹	74,811	0.007	30.5	Compact
51)	Pontiac Bonneville ¹	73,797	0.007	22.8	Midsize
52)	Chrysler New Yorker 5th Ave ¹	73,399	0.007	19.0	Midsize
53)	Cadillac Eldorado ¹	72,694	0.007	21.0	Midsize
54)	AMC Renault Encore ¹	72,076	0.007	36.1	Compact
55)	Nissan 300ZX ³	71,617	0.007	23.5	Two seater
56)	Mazda 626 ³	68,617	0.007	34.7	Compact
57)	Mercury Lynx ¹	66,572	0.007	34.3	Compact
58)	Honda Prelude ³	65,694	0.006	31.3	Subcompact
59)	Dodge Omni ¹	65,675	0.006	31.6	Compact
60)	Nissan Maxima (810) ³	65,195	0.006	27.0	Subcompact
61)	Oldsmobile Firenza ¹	59,490	0.006	31.7	Compact
62)	Pontiac ¹	55,736	0.005	21.5	Large
63)	Buick Riviera ¹	55,356	0.005	20.0	Midsize
64)	Mazda RX-7 ³	53,598	0.005	21.5	Two seater
65)	Chrysler Laser ¹	52,073	0.005	26.9	Subcompact
66)	Dodge Charger 024 ¹	51,799	0.005	30.7	Subcompact
67)	Nissan 200SX ³	51,056	0.005	33.0	Subcompact
68)	Volvo DL ³	47,781	0.005	26.6	Compact
69)	Nissan Stanza (510) ³	47,265	0.005	32.3	Compact
70)	Mazda GLC ³	46,271	0.005	37.8	Subcompact
71)	Plymouth Turismo (TC3) ¹	46,013	0.005	30.8	Subcompact
72)	Audi 5000S ³	43,721	0.004	22.5	Midsize
73)	Oldsmobile Toronado ¹	43,364	0.004	20.1	Midsize
74)	Dodge Daytona ¹	42,596	0.004	27.2	Subcompact
75)	Nissan Pulsar NX ³	42,319	0.004	37.5	Subcompact
76)	Oldsmobile Omega (X-Car) ¹	41,801	0.004	27.5	Compact
77)	Honda Civic CRX ³	37,938	0.004	43.0	Two seater
78)	Cadillac Seville ¹	37,384	0.004	21.0	Midsize
79)	Dodge 600 ¹	36,864	0.004	27.0	Midsize
80)	Volkswagen Jetta ³	36,636	0.004	32.1	Subcompact
81)	Toyota Cressida ³	35,214	0.003	24.9	Subcompact
82)	Dodge Colt Hatchback ⁴	35,113	0.003	37.8	Subcompact
83)	Lincoln Mercury Mark VII ¹	31,502	0.003	20.0	Midsize
84)	Plymouth Colt ⁴	31,106	0.003	37.9	Subcompact
85)	Saab 900 ³	30,981	0.003	25.8	Compact
86)	BMW 320 I ³	30,868	0.003	30.5	Subcompact

Table E.9 (Continued)
 168 Cars for *Model Year 1984* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	Toyota Supra ³	29,862	0.003	24.4	Subcompact
88)	Pontiac T1000 ¹	28,900	0.003	34.7	Subcompact
89)	Volvo GL ³	28,062	0.003	26.2	Compact
90)	Chevrolet Corvette ¹	27,986	0.003	20.0	Two seater
91)	Lincoln Continental ¹	27,776	0.003	20.0	Midsize
92)	Ford EXP ¹	24,040	0.002	31.8	Two seater
93)	Dodge 400 ¹	23,443	0.002	27.5	Midsize
94)	AMC Eagle ¹	23,137	0.002	22.5	Compact
95)	Dodge Diplomat ¹	21,932	0.002	17.6	Midsize
96)	Mercedes Benz 300 D/300 CD ³	20,053	0.002	29.0	Compact
97)	Mercury Capri ¹	19,499	0.002	24.2	Subcompact
98)	Cadillac Cimarron ¹	19,273	0.002	28.3	Compact
99)	Volkswagen Scirocco ³	17,348	0.002	29.9	Subcompact
100)	Volkswagen Quantum ³	16,955	0.002	26.3	Compact
101)	Pontiac Phoenix (X-Car) ¹	16,224	0.002	27.1	Midsize
102)	BMW 528 I ³	15,758	0.002	24.3	Compact
103)	Audi 4000 ³	15,542	0.002	31.3	Subcompact
104)	Mitsubishi Tredia ³	15,079	0.001	31.5	Subcompact
105)	Mitsubishi Cordia ³	14,938	0.001	31.3	Subcompact
106)	Mercedes Benz 300 SDL/300 SD ³	14,608	0.001	26.1	Compact
107)	Peugeot 505 (Gas) ³	14,223	0.001	23.6	Compact
108)	Plymouth Gran Fury ¹	14,221	0.001	17.6	Midsize
109)	Jaguar XJ6 ³	13,987	0.001	20.0	Subcompact
110)	Mercedes Benz 190 E 2.3 ³	13,108	0.001	30.6	Subcompact
111)	Porsche 944 ³	13,047	0.001	25.8	Minicompact
112)	Isuzu Impulse ³	13,014	0.001	27.7	Subcompact
113)	Renault Fuego ³	12,528	0.001	29.5	Subcompact
114)	Volvo 760 GLE ³	11,270	0.001	24.7	Midsize
115)	Volkswagen Rabbit-Convertible ³	10,830	0.001	29.7	Minicompact
116)	Volvo GLT ³	9,903	0.001	22.4	Compact
117)	BMW 325 ³	9,252	0.001	30.0	Subcompact
118)	Mercedes Benz 380 SL ³	8,393	0.001	20.0	Two seater
119)	BMW 733 I ³	7,702	0.001	23.0	Compact
120)	Chevrolet Sprint ⁴	7,312	0.001	50.0	Minicompact
121)	Mitsubishi Starion ³	6,604	0.001	25.0	Subcompact
122)	Mercedes Benz 190 D 2.2 ³	6,440	0.001	33.7	Subcompact
123)	Mercedes 380 SE ³	5,592	0.001	25.2	Compact
124)	Porsche 911 ³	4,795		24.0	Minicompact
125)	Chevrolet Malibu ¹	4,781		22.5	Midsize
126)	Isuzu I-Mark ³	4,717		35.4	Subcompact
127)	Plymouth Conquest (Sapporo) ⁴	4,239		25.0	Subcompact
128)	Peugeot 505 (Diesel/Turbo) ³	4,171		29.6	Compact
129)	Mercedes Benz 380 SEL/500 SEL ³	4,135		17.0	Midsize

Table E.9 (Continued)
 168 Cars for *Model Year 1984* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
130)	Audi Coupe ³	3,606		25.1	Subcompact
131)	Audi 4000S Quattro ³	3,558		24.0	Subcompact
132)	Renault 18I ³	3,549		28.0	Subcompact
133)	Dodge Conquest ⁴	3,341		25.0	Subcompact
134)	Alfa Romeo ³	3,291		27.0	Two seater
135)	Jaguar XJ-S ³	3,255		17.0	Subcompact
136)	BMW 633 CSI ³	3,103		23.0	Subcompact
137)	Porsche 928 ³	2,440		20.0	Minicompact
138)	Mercedes 500 SEC ³	1,674		17.0	Compact
139)	Volvo Diesel Sedan ³	1,445		30.1	Compact
140)	Dodge Challenger ⁴	1,424		27.0	Subcompact
141)	Volkswagen Cabriolet ³	1,300		25.6	Minicompact
142)	Toyota Starlet ³	1,227		48.0	Minicompact
143)	Plymouth Caravelle ¹	1,007		21.9	Midsized
144)	Mitsubishi Mirage ³	946		28.7	Subcompact
145)	Dodge Mirada ¹	706		20.2	Midsized
146)	Mitsubishi Galant ³	679		23.0	Compact
147)	Maserati ³	633		10.0	Midsized
148)	Ferrari ³	585		13.0	Two seater
149)	Chrysler Cordoba ¹	567		20.0	Midsized
150)	Mercury LN7 ¹	543		22.3	Two seater
151)	Fiat Spider ³	460		28.1	Two seater
152)	Fiat X 1/9 ³	441		30.0	Two seater
153)	Renault Le Car ³	417		37.0	Minicompact
154)	Nissan Pulsar (310) ³	388		37.0	Subcompact
155)	AMC Concord ¹	386		24.0	Compact
156)	AMC Spirit ¹	336		24.5	Subcompact
157)	Audi Quattro ³	287		21.0	Subcompact
158)	I.A.I. Pininfarina ³	227		22.8	Two seater
159)	I.A.I. Bertone ³	144		25.0	Two seater
160)	Peugeot 604 ³	143		29.4	Compact
161)	Lancia Beta ³	105		22.0	Subcompact
162)	Chrysler Imperial ¹	84		19.0	Midsized
163)	Buick Somerset ¹	66		24.2	Compact
164)	Mercedes Benz 240 D ³	61		29.8	Compact
165)	Audi 4000 (Diesel) ³	52		44.0	Subcompact
166)	Audi 5000 (Diesel/Turbo) ³	44		24.1	Compact

Table E.9 (Continued)
 168 Cars for *Model Year 1984* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
167)	Oldsmobile Calais ¹	29		24.2	Compact
168)	Pontiac Grand AM ¹	26		24.2	Compact
		10,211,065	1.000	26.3	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.10
157 Cars for *Model Year 1985* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Chevrolet Cavalier ¹	422,927	0.039	28.4	Compact
2)	Ford Escort ¹	410,978	0.037	34.5	Compact
3)	Chevrolet Celebrity ¹	360,167	0.033	26.9	Midsize
4)	Oldsmobile Ciera ¹	315,569	0.029	26.7	Midsize
5)	Ford Tempo ¹	297,656	0.027	31.3	Compact
6)	Chevrolet ¹	251,666	0.023	23.2	Large
7)	Buick Century ¹	239,570	0.022	25.3	Midsize
8)	Oldsmobile Supreme ¹	234,242	0.021	24.5	Midsize
9)	Oldsmobile 88 ¹	213,833	0.019	22.6	Large
10)	Chevrolet Camaro ¹	206,082	0.019	22.2	Subcompact
11)	Ford LTD 83 ¹	205,889	0.019	24.0	Midsize
12)	Nissan Sentra (210) ³	184,706	0.017	36.6	Subcompact
13)	Ford LTD Crown Victoria ¹	173,509	0.016	19.5	Large
14)	Ford Thunderbird ¹	169,770	0.015	23.1	Compact
15)	Toyota Corolla ³	166,568	0.015	37.0	Compact
16)	Ford Mustang ¹	159,741	0.015	24.0	Subcompact
17)	Pontiac A6000 ¹	153,994	0.014	26.9	Midsize
18)	Honda Accord-American ²	149,674	0.014	32.6	Subcompact
19)	Mercury Grand Marquis ¹	145,242	0.013	21.0	Large
20)	Honda Civic ³	145,074	0.013	37.0	Subcompact
21)	Buick LeSabre ¹	144,684	0.013	22.8	Large
22)	Cadillac DeVille/Fleetwood ¹	140,718	0.013	23.0	Large
23)	Plymouth Reliant ¹	137,074	0.012	28.7	Midsize
24)	Chevrolet Chevette ¹	135,261	0.012	35.0	Subcompact
25)	Subaru Sedan ³	133,374	0.012	32.4	Compact
26)	Mercury Cougar XR-7 ¹	129,997	0.012	23.4	Compact
27)	Buick Regal ¹	127,386	0.012	24.0	Midsize
28)	Pontiac J2000/Sunbird ¹	120,207	0.011	29.7	Compact
29)	Oldsmobile 98 ¹	118,668	0.011	24.5	Large
30)	Dodge Aries ¹	117,742	0.011	28.7	Midsize
31)	Toyota Camry (Corona) ³	116,555	0.011	34.6	Compact
32)	Lincoln Town Car ¹	116,015	0.011	21.0	Large
33)	Oldsmobile Calais ¹	113,280	0.010	29.4	Compact
34)	Chrysler New Yorker 5th Ave ¹	112,137	0.010	21.0	Midsize
35)	Honda Accord ³	106,581	0.010	32.5	Subcompact
36)	Chevrolet Monte Carlo ¹	105,568	0.010	22.5	Midsize
37)	Pontiac Firebird ¹	101,797	0.009	22.4	Subcompact
38)	Pontiac Grand AM ¹	98,567	0.009	29.4	Compact
39)	Mercury Marquis ¹	98,166	0.009	24.1	Midsize
40)	Toyota Tercel ³	97,798	0.009	38.2	Subcompact
41)	Nissan Maxima (810) ³	95,775	0.009	22.5	Compact
42)	Buick Electra ¹	90,922	0.008	24.5	Large
43)	Chrysler LeBaron ¹	90,830	0.008	26.2	Midsize

Table E.10 (Continued)
 157 Cars for *Model Year 1985* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Buick Skyhawk ¹	90,700	0.008	30.0	Compact
45)	Pontiac Fiero ¹	90,691	0.008	33.0	Two seater
46)	Plymouth Horizon ¹	88,513	0.008	32.3	Compact
47)	Buick Somerset ¹	88,103	0.008	29.4	Compact
48)	Mercury Lynx ¹	84,870	0.008	34.9	Compact
49)	Mercury Topaz ¹	79,899	0.007	30.6	Compact
50)	Buick Skylark (X-Car) ¹	78,359	0.007	27.8	Compact
51)	Mazda 626 ³	77,387	0.007	32.0	Compact
52)	AMC Renault Alliance ¹	75,295	0.007	33.4	Compact
53)	Dodge Omni ¹	75,107	0.007	31.1	Compact
54)	Pontiac ¹	73,109	0.007	23.1	Large
55)	Honda Prelude ³	72,011	0.007	31.4	Subcompact
56)	Toyota Celica ³	71,508	0.007	30.3	Subcompact
57)	Volkswagen Golf - American ²	71,496	0.007	35.1	Compact
58)	Volkswagen Jetta ³	69,567	0.006	35.1	Compact
59)	Nissan 300ZX ³	67,555	0.006	23.1	Two seater
60)	Cadillac Eldorado ¹	66,863	0.006	21.0	Midsize
61)	Nissan 200SX ³	66,755	0.006	33.0	Subcompact
62)	Pontiac Grand Prix ¹	61,924	0.006	23.6	Midsize
63)	Chrysler New Yorker-E Class ¹	59,623	0.005	25.0	Midsize
64)	Chevrolet Citation (X-Car) ¹	59,605	0.005	28.8	Midsize
65)	Dodge Charger 024 ¹	58,969	0.005	30.5	Subcompact
66)	Dodge 600 ¹	58,043	0.005	25.9	Midsize
67)	Mazda RX-7 ³	57,158	0.005	22.0	Two seater
68)	Nissan Stanza (510) ³	56,570	0.005	31.2	Compact
69)	Pontiac Bonneville ¹	55,795	0.005	23.4	Midsize
70)	Chrysler LeBaron GTS ¹	55,740	0.005	27.3	Midsize
71)	Buick Riviera ¹	55,546	0.005	22.0	Midsize
72)	Chrysler Laser ¹	54,758	0.005	27.3	Subcompact
73)	Honda Civic CRX ³	54,755	0.005	42.2	Two seater
74)	Plymouth Turismo (TC3) ¹	54,251	0.005	33.1	Subcompact
75)	Oldsmobile Firenza ¹	52,760	0.005	29.4	Compact
76)	Dodge Daytona ¹	51,299	0.005	27.3	Subcompact
77)	Mazda GLC ³	49,503	0.005	37.8	Subcompact
78)	Audi 5000S ³	48,304	0.004	23.2	Midsize
79)	Cadillac Fleetwood Brougham ¹	47,883	0.004	21.0	Large
80)	AMC Renault Encore ¹	46,524	0.004	34.1	Compact
81)	Volvo DL ³	45,975	0.004	24.4	Compact
82)	Nissan Pulsar NX ³	44,825	0.004	36.5	Subcompact
83)	Toyota Cressida ³	43,840	0.004	25.0	Compact
84)	Dodge Lancer ¹	39,984	0.004	26.7	Midsize
85)	Chevrolet Spectrum ⁴	39,424	0.004	43.2	Subcompact
86)	Chevrolet Corvette ¹	37,878	0.003	21.8	Two seater

Table E.10 (Continued)
 157 Cars for Model Year 1985 Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	Oldsmobile Toronado ¹	37,581	0.003	22.1	Midsize
88)	Dodge Diplomat ¹	37,350	0.003	18.2	Midsize
89)	Saab 900 ³	36,948	0.003	25.2	Compact
90)	BMW 320 I ³	36,500	0.003	28.6	Subcompact
91)	Dodge Colt Hatchback ⁴	36,120	0.003	33.6	Subcompact
92)	Plymouth Caravelle ¹	34,528	0.003	25.9	Midsize
93)	Plymouth Colt ⁴	33,302	0.003	39.1	Subcompact
94)	Cadillac Seville ¹	32,986	0.003	21.0	Midsize
95)	Volvo 740 GLE ³	29,455	0.003	25.4	Midsize
96)	Lincoln Continental ¹	28,799	0.003	21.3	Midsize
97)	Toyota Supra ³	27,419	0.002	25.0	Subcompact
98)	Ford EXP ¹	26,450	0.002	32.6	Two seater
99)	Volvo GL ³	25,673	0.002	24.1	Compact
100)	Pontiac T1000 ¹	24,180	0.002	34.7	Subcompact
101)	Toyota MR-2 ³	23,800	0.002	33.0	Two seater
102)	Mercedes Benz 300 D/300 CD ³	23,114	0.002	26.5	Compact
103)	Cadillac Cimarron ¹	22,492	0.002	28.5	Compact
104)	Nissan Sentra-American ²	21,077	0.002	36.6	Subcompact
105)	Lincoln Mercury Mark VII ¹	20,198	0.002	21.4	Midsize
106)	Plymouth Gran Fury ¹	18,734	0.002	18.2	Midsize
107)	Chevrolet Sprint ⁴	18,726	0.002	57.4	Minicompact
108)	Mercedes Benz 190 E 2.3 ³	17,495	0.002	24.4	Subcompact
109)	Mercury Capri ¹	16,829	0.002	25.1	Subcompact
110)	Chevrolet Nova ¹	16,323	0.001	36.9	Compact
111)	Audi 4000 ³	16,263	0.001	30.6	Subcompact
112)	AMC Eagle ¹	15,675	0.001	20.1	Compact
113)	Volkswagen Quantum ³	15,597	0.001	26.2	Compact
114)	BMW 528 I ³	15,348	0.001	25.5	Compact
115)	Jaguar XJ6 ³	15,136	0.001	20.0	Subcompact
116)	Peugeot 505 (Gas) ³	15,010	0.001	24.2	Compact
117)	Isuzu Impulse ³	14,955	0.001	27.6	Subcompact
118)	Mercedes Benz 300 SDL/300 SD ³	14,884	0.001	26.5	Compact
119)	Subaru Hatchback ³	14,785	0.001	30.9	Subcompact
120)	Porsche 944 ³	14,567	0.001	25.8	Minicompact
121)	Volkswagen Scirocco ³	14,481	0.001	30.8	Subcompact
122)	Subaru XT ³	13,428	0.001	30.6	Subcompact
123)	Volkswagen Cabriolet ³	12,009	0.001	30.4	Minicompact
124)	Mitsubishi Galant ³	11,964	0.001	27.0	Compact
125)	Mitsubishi Mirage ³	11,937	0.001	33.6	Subcompact
126)	BMW 325 ³	11,846	0.001	28.6	Subcompact
127)	Volvo 760 GLE ³	10,980	0.001	25.4	Midsize
128)	BMW 524 TD ³	10,829	0.001	25.0	Compact
129)	Mitsubishi Tredia ³	10,546	0.001	30.0	Subcompact

Table E.10 (Continued)
 157 Cars for *Model Year 1985* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
130)	Mercedes Benz 380 SL ³	10,319	0.001	20.0	Two seater
131)	Isuzu I-Mark ³	9,958	0.001	30.1	Subcompact
132)	Mitsubishi Cordia ³	8,662	0.001	30.3	Subcompact
133)	Volvo GLT ³	8,138	0.001	24.5	Compact
134)	Mercedes 380 SE ³	7,598	0.001	20.0	Compact
135)	BMW 633 CSI ³	7,385	0.001	23.0	Subcompact
136)	Mercedes Benz 190 D 2.2 ³	6,483	0.001	37.9	Subcompact
137)	Merkur XR4Ti ⁴	6,384	0.001	24.3	Compact
138)	BMW 733 I ³	6,177	0.001	23.0	Compact
139)	Renault Fuego ³	5,810	0.001	28.4	Subcompact
140)	Mitsubishi Starion ³	5,474		24.0	Subcompact
141)	Mercedes Benz 380 SEL/500 SEL ³	5,092		17.0	Midsized
142)	Porsche 911 ³	4,661		24.0	Minicompact
143)	Alfa Romeo ³	4,486		28.0	Two seater
144)	Audi 4000S Quattro ³	4,134		23.0	Subcompact
145)	Jaguar XJ-S ³	3,504		17.0	Subcompact
146)	Audi Coupe ³	3,388		24.6	Subcompact
147)	Peugeot 505 (Diesel/Turbo) ³	3,077		30.7	Compact
148)	Dodge Conquest ⁴	2,714		24.0	Subcompact
149)	Plymouth Conquest (Sapporo) ⁴	2,634		24.0	Subcompact
150)	Renault 18I ³	2,429		28.0	Subcompact
151)	Pontiac Phoenix (X-Car) ¹	2,353		26.9	Midsized
152)	Porsche 928 ³	2,332		20.0	Minicompact
153)	Mercedes 500 SEC ³	1,921		17.0	Compact
154)	Oldsmobile Omega (X-Car) ¹	1,708		27.2	Compact
155)	Ferrari ³	605		13.0	Two seater
156)	Audi Quattro ³	74		21.0	Subcompact
157)	Peugeot 604 ³	13		29.2	Compact
		10,968,515	1.000	27.0	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.11
174 Cars for *Model Year 1986* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Ford Escort ¹	415,521	0.037	34.2	Compact
2)	Chevrolet Celebrity ¹	395,860	0.036	27.3	Midsize
3)	Chevrolet Cavalier ¹	386,231	0.035	28.9	Compact
4)	Oldsmobile Ciera ¹	330,572	0.030	27.7	Midsize
5)	Ford Tempo ¹	251,618	0.023	30.1	Compact
6)	Oldsmobile 88 ¹	241,417	0.022	25.5	Large
7)	Buick Century ¹	239,278	0.022	27.6	Midsize
8)	Chevrolet ¹	228,706	0.021	21.6	Large
9)	Oldsmobile Supreme ¹	202,158	0.018	23.6	Midsize
10)	Pontiac A6000 ¹	196,209	0.018	27.2	Midsize
11)	Pontiac Grand AM ¹	190,994	0.017	29.0	Compact
12)	Honda Accord-American ²	179,423	0.016	31.6	Subcompact
13)	Ford Mustang ¹	175,598	0.016	26.2	Subcompact
14)	Chevrolet Camaro ¹	173,674	0.016	24.0	Subcompact
15)	Chevrolet Nova ¹	170,661	0.015	36.1	Compact
16)	Nissan Sentra (210) ³	166,467	0.015	36.9	Subcompact
17)	Cadillac DeVille/Fleetwood ¹	164,979	0.015	24.0	Large
18)	Ford Taurus ¹	161,156	0.015	23.0	Midsize
19)	Honda Civic ³	158,240	0.014	36.9	Subcompact
20)	Toyota Corolla ³	150,128	0.014	37.0	Compact
21)	Ford Thunderbird ¹	148,581	0.013	24.5	Compact
22)	Toyota Camry (Corona) ³	142,892	0.013	33.4	Compact
23)	Subaru Sedan ³	140,446	0.013	31.4	Compact
24)	Plymouth Reliant ¹	131,372	0.012	27.9	Midsize
25)	Ford LTD Crown Victoria ¹	128,280	0.012	19.9	Large
26)	Mercury Cougar XR-7 ¹	121,972	0.011	24.4	Compact
27)	Oldsmobile Calais ¹	119,740	0.011	29.2	Compact
28)	Lincoln Town Car ¹	119,180	0.011	24.0	Large
29)	Chevrolet Monte Carlo ¹	117,671	0.011	23.4	Midsize
30)	Honda Accord ³	116,663	0.011	32.2	Subcompact
31)	Oldsmobile 98 ¹	116,615	0.011	26.0	Large
32)	Buick Somerset ¹	113,862	0.010	28.9	Compact
33)	Nissan Maxima (810) ³	113,748	0.010	24.4	Compact
34)	Hyundai Excel ³	112,947	0.010	28.9	Subcompact
35)	Buick Electra ¹	111,245	0.010	26.0	Large
36)	Mercury Grand Marquis ¹	110,035	0.010	24.0	Large
37)	Pontiac J2000/Sunbird ¹	109,807	0.010	29.8	Compact
38)	Toyota Celica ³	107,964	0.010	30.7	Subcompact
39)	Dodge Aries ¹	104,572	0.009	27.9	Midsize
40)	Buick LeSabre ¹	104,570	0.009	26.0	Large
41)	Chrysler 5th Ave ¹	102,747	0.009	22.0	Midsize
42)	Plymouth Horizon ¹	100,968	0.009	31.8	Compact
43)	Chrysler LeBaron ¹	97,450	0.009	27.2	Midsize

Table E.11 (Continued)
 174 Cars for *Model Year 1986* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Volkswagen Jetta ³	96,453	0.009	34.7	Compact
45)	Pontiac Firebird ¹	96,208	0.009	24.0	Subcompact
46)	Mazda 626 ³	95,062	0.009	30.6	Compact
47)	Chevrolet Spectrum ⁴	93,902	0.008	42.7	Subcompact
48)	Dodge Omni ¹	88,087	0.008	30.9	Compact
49)	Buick Regal ¹	82,904	0.007	23.5	Midsize
50)	Mazda GLC ³	79,218	0.007	33.7	Compact
51)	Buick Skyhawk ¹	77,966	0.007	29.2	Compact
52)	Volkswagen Golf - American ²	76,410	0.007	34.7	Compact
53)	Chevrolet Chevette ¹	75,761	0.007	33.1	Subcompact
54)	Honda Prelude ³	75,409	0.007	31.4	Subcompact
55)	Pontiac ¹	73,092	0.007	23.5	Large
56)	Mercury Sable ¹	72,755	0.007	23.0	Midsize
57)	Mercury Lynx ¹	71,753	0.006	33.5	Compact
58)	Chrysler LeBaron GTS ¹	71,542	0.006	27.6	Midsize
59)	Pontiac Fiero ¹	71,283	0.006	28.1	Two seater
60)	Toyota Tercel ³	70,442	0.006	38.6	Subcompact
61)	Nissan Stanza (510) ³	68,716	0.006	29.9	Compact
62)	Chrysler New Yorker-E Class ¹	67,347	0.006	26.4	Midsize
63)	Chevrolet Sprint ⁴	67,144	0.006	59.6	Minicompact
64)	Honda Civic CRX ³	64,013	0.006	44.0	Two seater
65)	Dodge 600 ¹	63,286	0.006	27.2	Midsize
66)	Mercury Topaz ¹	62,089	0.006	30.2	Compact
67)	Cadillac Fleetwood Brougham ¹	60,915	0.005	24.0	Large
68)	Nissan 300ZX ³	56,997	0.005	24.0	Two seater
69)	AMC Renault Alliance ¹	56,120	0.005	33.9	Compact
70)	Mazda RX-7 ³	53,674	0.005	23.0	Minicompact
71)	Dodge Colt Hatchback ⁴	53,256	0.005	39.6	Subcompact
72)	Dodge Charger 024 ¹	51,933	0.005	30.6	Subcompact
73)	Ford LTD 83 ¹	50,717	0.005	24.0	Midsize
74)	Nissan Sentra-American ²	49,325	0.004	38.3	Subcompact
75)	Plymouth Colt ⁴	49,259	0.004	39.6	Subcompact
76)	Nissan 200SX ³	49,162	0.004	28.0	Subcompact
77)	Nissan Pulsar NX ³	48,994	0.004	37.2	Subcompact
78)	Dodge Lancer ¹	48,511	0.004	27.6	Midsize
79)	Plymouth Turismo (TC3) ¹	47,464	0.004	31.4	Subcompact
80)	Volvo DL ³	46,846	0.004	26.8	Compact
81)	Volvo 740 GLE ³	45,638	0.004	27.0	Midsize
82)	Audi 5000S ³	43,362	0.004	23.1	Midsize
83)	Pontiac Bonneville ¹	42,364	0.004	23.9	Midsize
84)	Toyota Cressida ³	41,757	0.004	24.0	Compact
85)	Pontiac Grand Prix ¹	40,842	0.004	23.6	Midsize
86)	Dodge Daytona ¹	40,504	0.004	28.5	Subcompact

Table E.11 (Continued)
 174 Cars for *Model Year 1986* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	Plymouth Caravelle ¹	39,331	0.004	27.2	Midsize
88)	Oldsmobile Firenza ¹	39,212	0.004	28.8	Compact
89)	Saab 900 ³	37,856	0.003	25.6	Compact
90)	Chevrolet Corvette ¹	35,969	0.003	23.0	Two seater
91)	Dodge Diplomat ¹	33,310	0.003	18.3	Midsize
92)	Chrysler Laser ¹	31,458	0.003	28.2	Subcompact
93)	Toyota MR-2 ³	30,865	0.003	32.5	Two seater
94)	Cadillac Eldorado ¹	29,411	0.003	24.0	Midsize
95)	Yugo GV/GVX ³	27,067	0.002	32.0	Minicompact
96)	Toyota Supra ³	26,624	0.002	23.7	Subcompact
97)	Buick Riviera ¹	25,835	0.002	26.0	Midsize
98)	BMW 320 I ³	25,283	0.002	26.2	Subcompact
99)	Cadillac Cimarron ¹	24,209	0.002	24.5	Compact
100)	Mercedes Benz 190 E 2.3 ³	22,845	0.002	25.5	Subcompact
101)	Mercury Marquis ¹	22,652	0.002	24.0	Midsize
102)	Subaru XT ³	21,754	0.002	31.4	Subcompact
103)	Cadillac Seville ¹	20,539	0.002	24.0	Midsize
104)	Lincoln Mercury Mark VII ¹	20,319	0.002	24.0	Midsize
105)	Pontiac T1000 ¹	20,066	0.002	33.1	Subcompact
106)	Lincoln Continental ¹	19,812	0.002	24.0	Midsize
107)	Jaguar XJ6 ³	18,656	0.002	20.0	Subcompact
108)	Isuzu I-Mark ³	18,637	0.002	42.0	Subcompact
109)	BMW 325 ³	18,175	0.002	28.4	Subcompact
110)	Oldsmobile Toronado ¹	18,105	0.002	26.0	Midsize
111)	BMW 528 I ³	17,971	0.002	25.3	Compact
112)	Porsche 944 ³	17,878	0.002	25.6	Minicompact
113)	Mercedes Benz 300 D/300 CD ³	17,862	0.002	26.5	Compact
114)	AMC Renault Encore ¹	17,821	0.002	35.0	Compact
115)	Subaru Hatchback ³	15,989	0.001	31.4	Subcompact
116)	Plymouth Gran Fury ¹	15,944	0.001	18.3	Midsize
117)	Acura Integra ³	15,820	0.001	32.0	Subcompact
118)	Merkur XR4Ti ⁴	14,509	0.001	23.7	Compact
119)	Mitsubishi Galant ³	14,462	0.001	27.0	Compact
120)	BMW 524 TD ³	14,162	0.001	25.3	Compact
121)	Volkswagen Cabriolet ³	13,511	0.001	30.3	Minicompact
122)	Mercury Capri ¹	13,358	0.001	26.3	Subcompact
123)	Mitsubishi Mirage ³	13,349	0.001	37.4	Subcompact
124)	Audi 4000 ³	13,280	0.001	30.4	Subcompact
125)	Acura Legend ³	12,767	0.001	23.8	Compact
126)	Isuzu Impulse ³	12,300	0.001	27.1	Subcompact
127)	Volkswagen Quantum ³	11,732	0.001	23.8	Compact
128)	Peugeot 505 (Gas) ³	11,424	0.001	24.7	Compact
129)	BMW 733 I ³	11,394	0.001	23.0	Compact

Table E.11 (Continued)
 174 Cars for *Model Year 1986* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
130)	Volkswagen Scirocco ³	10,598	0.001	30.8	Subcompact
131)	Volvo 760 GLE ³	10,580	0.001	24.8	Midsize
132)	Mercedes Benz 420 SEL ³	10,472	0.001	19.0	Midsize
133)	Mitsubishi Tredia ³	10,346	0.001	29.9	Subcompact
134)	Mercedes Benz 560 SL ³	10,323	0.001	18.0	Two seater
135)	Volvo GL ³	9,480	0.001	26.4	Compact
136)	AMC Eagle ¹	9,092	0.001	20.1	Compact
137)	Saab 9000 ³	8,043	0.001	28.0	Large
138)	Mercedes Benz 560 SEL ³	7,877	0.001	17.0	Midsize
139)	Porsche 911 ³	7,603	0.001	21.0	Minicompact
140)	Mercedes Benz 300 SDL/300 SD ³	7,178	0.001	26.5	Compact
141)	Jaguar XJ-S ³	5,995	0.001	17.0	Subcompact
142)	Plymouth Sundance ¹	5,698	0.001	27.8	Compact
143)	Mitsubishi Cordia ³	5,398		29.9	Subcompact
144)	Dodge Shadow ¹	5,101		27.8	Compact
145)	Mitsubishi Starion ³	5,018		24.0	Subcompact
146)	Audi 4000S Quattro ³	5,016		23.0	Subcompact
147)	BMW 633 CSI ³	4,661		23.0	Subcompact
148)	Alfa Romeo Spider ³	4,452		28.0	Two seater
149)	Honda Civic-American ²	4,206		38.4	Subcompact
150)	Mercedes Benz 300 E ³	3,954		23.5	Compact
151)	Audi Coupe ³	3,106		24.5	Subcompact
152)	Mercedes Benz 190 D 2.2 ³	3,016		37.1	Subcompact
153)	Dodge Conquest ⁴	2,800		24.0	Subcompact
154)	Plymouth Conquest (Sapporo) ⁴	2,704		24.0	Subcompact
155)	Porsche 928 ³	2,673		23.0	Minicompact
156)	Renault Fuego ³	2,503		28.1	Subcompact
157)	Renault 181 ³	2,502		26.2	Subcompact
158)	Chevrolet Citation (X-Car) ¹	2,491		29.1	Midsize
159)	Peugeot 505 (Diesel/Turbo) ³	1,858		31.6	Compact
160)	Alfa Romeo Milano ³	1,647		24.5	Subcompact
161)	Mercedes Benz 560 SEC ³	1,474		17.0	Compact
162)	Buick Skylark (X-Car) ¹	1,341		28.1	Compact
163)	Porsche 924 ³	1,289		24.4	Minicompact
164)	Mercedes Benz 380 SEL/500 SEL ³	844		17.0	Midsize
165)	Mercedes Benz 380 SE ³	741		20.0	Compact
166)	Alfa Romeo GTV-6 ³	651		26.0	Minicompact
167)	Ferrari ³	643		13.0	Two seater
168)	Ford EXP ¹	626		32.6	Two seater
169)	Chrysler Conquest ⁴	363		24.0	Subcompact
170)	Mercedes Benz 380 SL ³	299		20.0	Two seater
171)	Volvo GLT ³	78		24.5	Compact

Table E.11 (Continued)
 174 Cars for *Model Year 1986* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
172)	Mercedes 500 SEC ³	71		17.0	Compact
173)	Audi Quattro ³	8		23.0	Subcompact
174)	Subaru Justy ³	5		46.0	Subcompact
		11,099,046	1.000	27.9	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.12
179 Cars for *Model Year 1987* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Ford Escort ¹	394,999	0.038	34.6	Compact
2)	Ford Taurus ¹	376,907	0.036	26.3	Midsize
3)	Chevrolet Celebrity ¹	331,647	0.032	28.2	Midsize
4)	Chevrolet Cavalier ¹	295,316	0.028	31.4	Compact
5)	Oldsmobile Ciera ¹	264,860	0.025	28.3	Midsize
6)	Hyundai Excel ³	261,392	0.025	34.5	Subcompact
7)	Ford Tempo ¹	234,663	0.022	27.7	Compact
8)	Honda Accord-American ²	226,907	0.022	31.9	Compact
9)	Pontiac Grand AM ¹	216,065	0.021	27.8	Compact
10)	Chevrolet ¹	189,027	0.018	21.8	Large
11)	Oldsmobile 88 ¹	184,402	0.018	25.0	Large
12)	Chevrolet Corsica/Beretta ¹	179,057	0.017	28.5	Compact
13)	Toyota Camry (Corona) ³	174,876	0.017	32.6	Compact
14)	Buick Century ¹	171,973	0.016	28.2	Midsize
15)	Ford Mustang ¹	163,392	0.016	28.1	Subcompact
16)	Buick LeSabre ¹	153,158	0.015	25.0	Large
17)	Cadillac DeVille/Fleetwood ¹	150,536	0.014	22.5	Large
18)	Chevrolet Nova ¹	140,664	0.013	36.1	Compact
19)	Lincoln Town Car ¹	136,085	0.013	24.0	Large
20)	Pontiac A6000 ¹	133,881	0.013	28.1	Midsize
21)	Subaru Sedan ³	133,520	0.013	29.4	Compact
22)	Ford Thunderbird ¹	126,767	0.012	24.6	Compact
23)	Ford LTD Crown Victoria ¹	125,761	0.012	24.0	Large
24)	Nissan Sentra-American ²	123,113	0.012	34.3	Compact
25)	Mercury Grand Marquis ¹	122,950	0.012	24.0	Large
26)	Chevrolet Camaro ¹	122,761	0.012	23.2	Subcompact
27)	Toyota Corolla ³	116,836	0.011	36.6	Compact
28)	Nissan Sentra (210) ³	112,983	0.011	34.5	Compact
29)	Honda Accord ³	110,169	0.011	32.0	Compact
30)	Mercury Sable ¹	109,394	0.010	26.0	Midsize
31)	Oldsmobile Supreme ¹	106,303	0.010	23.6	Midsize
32)	Plymouth Reliant ¹	105,841	0.010	28.0	Midsize
33)	Oldsmobile Calais ¹	103,510	0.010	29.2	Compact
34)	Mercury Cougar XR-7 ¹	101,480	0.010	24.0	Compact
35)	Dodge Aries ¹	101,161	0.010	28.0	Midsize
36)	Chrysler LeBaron GTS ¹	99,197	0.010	27.2	Midsize
37)	Nissan Maxima (810) ³	98,221	0.009	24.2	Compact
38)	Toyota Tercel ³	95,724	0.009	39.9	Subcompact
39)	Pontiac Bonneville ¹	95,324	0.009	25.0	Large
40)	Honda Civic-American ²	89,905	0.009	36.9	Subcompact
41)	Toyota Celica ³	87,994	0.008	31.8	Subcompact
42)	Honda Civic ³	86,919	0.008	37.4	Subcompact
43)	Mazda 626 ³	85,766	0.008	30.1	Compact

Table E.12 (Continued)
 179 Cars for *Model Year 1987* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Buick Electra ¹	82,939	0.008	25.0	Large
45)	Chevrolet Spectrum ⁴	82,052	0.008	39.2	Subcompact
46)	Pontiac J2000/Sunbird ¹	81,930	0.008	29.8	Compact
47)	Pontiac Firebird ¹	77,635	0.007	23.5	Subcompact
48)	Mazda GLC ³	76,794	0.007	33.5	Compact
49)	Oldsmobile 98 ¹	75,680	0.007	25.0	Large
50)	Dodge Shadow ¹	75,579	0.007	27.1	Compact
51)	Plymouth Sundance ¹	75,080	0.007	26.9	Compact
52)	Buick Somerset ¹	74,549	0.007	28.8	Compact
53)	Honda Prelude ³	69,916	0.007	31.3	Subcompact
54)	Nissan Stanza (510) ³	69,051	0.007	27.8	Compact
55)	Chevrolet Monte Carlo ¹	68,472	0.007	23.4	Midsize
56)	Mercury Topaz ¹	67,722	0.006	27.5	Compact
57)	Mercury Lynx ¹	67,140	0.006	34.9	Compact
58)	Plymouth Horizon ¹	64,563	0.006	30.0	Compact
59)	Nissan Pulsar NX ³	62,303	0.006	31.1	Subcompact
60)	Chrysler LeBaron ¹	59,935	0.006	26.9	Midsize
61)	Volkswagen Jetta ³	59,634	0.006	31.1	Compact
62)	Chrysler New Yorker-E Class ¹	59,062	0.006	26.4	Midsize
63)	Chrysler 5th Ave ¹	58,640	0.006	22.0	Midsize
64)	Cadillac Fleetwood Brougham ¹	57,705	0.006	24.0	Large
65)	Honda Civic CRX ³	55,988	0.005	45.0	Two seater
66)	BMW 325 ³	55,597	0.005	24.9	Subcompact
67)	Buick Regal ¹	54,401	0.005	23.5	Midsize
68)	Dodge Omni ¹	54,172	0.005	29.0	Compact
69)	Volkswagen Golf - American ²	54,163	0.005	33.0	Compact
70)	Acura Integra ³	54,141	0.005	32.0	Subcompact
71)	Chevrolet Sprint ⁴	53,014	0.005	54.2	Minicompact
72)	Yugo GV/GVX ³	51,614	0.005	28.0	Minicompact
73)	Acura Legend ³	49,704	0.005	24.3	Compact
74)	Pontiac Fiero ¹	47,156	0.005	27.6	Two seater
75)	Mazda RX-7 ³	46,183	0.004	22.6	Two seater
76)	Buick Skyhawk ¹	44,431	0.004	30.4	Compact
77)	Dodge Colt Hatchback ⁴	43,445	0.004	35.9	Subcompact
78)	Volvo 740 GLE ³	42,837	0.004	24.3	Midsize
79)	Volvo DL ³	41,351	0.004	26.7	Compact
80)	Plymouth Colt ⁴	39,836	0.004	35.9	Subcompact
81)	Dodge 600 ¹	39,327	0.004	26.9	Midsize
82)	Chevrolet Chevette ¹	39,071	0.004	32.8	Subcompact
83)	Nissan 300ZX ³	38,847	0.004	23.5	Two seater
84)	Plymouth Caravelle ¹	37,866	0.004	26.9	Midsize
85)	Toyota FX16-American ²	37,308	0.004	31.5	Subcompact
86)	Nissan 200SX ³	36,516	0.003	27.6	Subcompact

Table E.12 (Continued)
 179 Cars for *Model Year 1987* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	Isuzu I-Mark ³	36,094	0.003	38.9	Subcompact
88)	Saab 900 ³	34,560	0.003	25.9	Compact
89)	Toyota Supra ³	33,592	0.003	23.0	Subcompact
90)	AMC Renault Alliance ¹	31,988	0.003	34.3	Compact
91)	Dodge Daytona ¹	30,907	0.003	27.2	Subcompact
92)	Audi 5000S ³	30,621	0.003	23.4	Midsize
93)	Toyota Cressida ³	28,452	0.003	24.0	Compact
94)	Dodge Lancer ¹	28,148	0.003	27.1	Midsize
95)	Lincoln Mercury Mark VII ¹	28,093	0.003	24.0	Midsize
96)	Mercedes Benz 300 D/300 CD ³	28,024	0.003	32.0	Compact
97)	Pontiac LeMans Import ⁴	26,948	0.003	34.7	Midsize
98)	Volkswagen Fox ³	26,442	0.003	32.0	Subcompact
99)	Chevrolet Corvette ¹	25,266	0.002	22.0	Two seater
100)	Dodge Charger 024 ¹	24,721	0.002	29.2	Subcompact
101)	Cadillac Seville ¹	22,304	0.002	23.0	Midsize
102)	Plymouth Turismo (TC3) ¹	21,908	0.002	30.2	Subcompact
103)	Cadillac Eldorado ¹	20,587	0.002	23.0	Midsize
104)	Buick Riviera ¹	19,838	0.002	25.0	Midsize
105)	Subaru XT ³	19,347	0.002	30.1	Subcompact
106)	Toyota MR-2 ³	19,121	0.002	32.8	Two seater
107)	Oldsmobile Firenza ¹	18,520	0.002	32.0	Compact
108)	Jaguar XJ6 ³	17,496	0.002	19.0	Subcompact
109)	Oldsmobile Toronado ¹	17,400	0.002	25.0	Midsize
110)	Mercedes Benz 420 SEL ³	17,291	0.002	19.0	Midsize
111)	Pontiac Grand Prix ¹	17,088	0.002	23.6	Midsize
112)	Dodge Diplomat ¹	16,881	0.002	18.3	Midsize
113)	Lincoln Continental ¹	16,534	0.002	24.0	Midsize
114)	Ford Festiva ⁴	16,414	0.002	47.0	Subcompact
115)	Mitsubishi Mirage ³	16,141	0.002	34.8	Subcompact
116)	Mitsubishi Precis ³	16,047	0.002	33.9	Subcompact
117)	Volkswagen Cabriolet ³	14,759	0.001	30.2	Minicompact
118)	Cadillac Cimarron ¹	14,651	0.001	26.0	Compact
119)	BMW 528 I ³	14,582	0.001	22.6	Compact
120)	Volvo 760 GLE ³	12,941	0.001	24.2	Midsize
121)	Mercedes Benz 190 E 2.3 ³	12,572	0.001	26.0	Subcompact
122)	Mercedes Benz 560 SL ³	12,523	0.001	18.0	Two seater
123)	Porsche 944 ³	12,419	0.001	25.5	Minicompact
124)	Mitsubishi Galant ³	12,090	0.001	27.0	Compact
125)	Pontiac ¹	11,927	0.001	23.5	Large
126)	Chrysler Conquest ⁴	11,444	0.001	24.0	Subcompact
127)	Volkswagen Jetta-American ²	11,334	0.001	30.5	Compact
128)	Saab 9000 ³	11,193	0.001	27.1	Large
129)	Audi 4000 ³	11,060	0.001	30.3	Subcompact

Table E.12 (Continued)
 179 Cars for *Model Year 1987* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
130)	Peugeot 505 (Gas) ³	10,814	0.001	24.5	Compact
131)	Subaru Justy ³	10,659	0.001	46.0	Subcompact
132)	Austin Rover Sterling 825 SL ³	10,265	0.001	23.0	Compact
133)	Mercedes Benz 190 D 2.2 ³	10,226	0.001	36.2	Subcompact
134)	Mercedes Benz 560 SEL ³	10,106	0.001	17.0	Midsize
135)	Merkur XR4Ti ⁴	9,968	0.001	22.8	Compact
136)	Plymouth Gran Fury ¹	9,792	0.001	18.3	Midsize
137)	Eagle Medallion ⁴	9,493	0.001	29.1	Midsize
138)	Isuzu Impulse ³	8,755	0.001	26.2	Subcompact
139)	Porsche 911 ³	8,696	0.001	22.4	Minicompact
140)	Volkswagen Quantum ³	8,648	0.001	23.6	Compact
141)	Volkswagen Scirocco ³	8,070	0.001	30.3	Subcompact
142)	Chrysler Laser ¹	8,041	0.001	25.7	Subcompact
143)	Volvo GL ³	7,707	0.001	26.3	Compact
144)	Subaru Hatchback ³	7,663	0.001	31.1	Subcompact
145)	Pontiac T1000 ¹	7,582	0.001	33.1	Subcompact
146)	Mercedes Benz 300 SDL/300 SD ³	7,104	0.001	26.0	Compact
147)	BMW 733 I ³	6,738	0.001	20.0	Compact
148)	BMW 535 I ³	6,678	0.001	22.8	Compact
149)	Mitsubishi Tredia ³	6,345	0.001	30.0	Subcompact
150)	Jaguar XJ-S ³	5,920	0.001	18.0	Subcompact
151)	Mitsubishi Starion ³	5,915	0.001	23.2	Subcompact
152)	AMC Eagle ¹	4,567		20.1	Compact
153)	Audi 4000S Quattro ³	4,398		23.0	Subcompact
154)	Mitsubishi Cordia ³	4,276		30.1	Subcompact
155)	Mercury Scorpio ⁴	4,233		22.5	Midsize
156)	Alfa Romeo Spider ³	3,766		28.0	Minicompact
157)	BMW 320 I ³	3,396		25.0	Subcompact
158)	Alfa Romeo Milano ³	3,339		24.5	Subcompact
159)	Mazda MX6 ³	3,221		27.8	Midsize
160)	AMC Renault Encore ¹	2,850		35.1	Compact
161)	BMW 633 CSI ³	2,749		19.6	Subcompact
162)	Porsche 928 ³	2,374		21.0	Minicompact
163)	Mercedes Benz 560 SEC ³	2,315		17.0	Compact
164)	Audi Coupe ³	2,178		24.6	Subcompact
165)	Mercury Capri ¹	1,958		26.1	Subcompact
166)	BMW 524 TD ³	1,921		22.7	Compact
167)	Cadillac Allante ¹	1,651		22.0	Midsize
168)	Ferrari ³	768		14.7	Two seater
169)	Renault 18I ³	712		26.2	Subcompact
170)	Mazda 929 ³	710		24.0	Midsize
171)	Austin Rover Sterling 825 ³	517		23.0	Compact
172)	Dodge Conquest ⁴	479		24.0	Subcompact

Table E.12 (Continued)
 179 Cars for *Model Year 1987* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
173)	Peugeot 505 (Diesel/Turbo) ³	346		26.0	Compact
174)	Plymouth Conquest (Sapporo) ⁴	339		24.0	Subcompact
175)	Volvo 780 ³	330		22.0	Compact
176)	Alfa Romeo GTV-6 ³	230		24.0	Minicompact
177)	Mercedes Benz 260E ³	178		25.0	Compact
178)	Chrysler New Yorker C-Car ¹	95		26.0	Midsized
179)	Dodge Dynasty ¹	33		25.2	Midsized
		10,434,137	1.000	28.1	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.13
190 Cars for *Model Year 1988* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Ford Escort ¹	381,330	0.037	33.4	Compact
2)	Ford Taurus ¹	367,327	0.035	26.5	Midsize
3)	Chevrolet Corsica/Beretta ¹	355,323	0.034	28.1	Compact
4)	Chevrolet Cavalier ¹	301,809	0.029	31.2	Compact
5)	Hyundai Excel ³	267,099	0.026	35.0	Subcompact
6)	Ford Tempo ¹	264,548	0.026	26.4	Compact
7)	Honda Accord-American ²	259,210	0.025	31.3	Compact
8)	Chevrolet Celebrity ¹	258,601	0.025	28.8	Midsize
9)	Oldsmobile Ciera ¹	233,584	0.023	28.2	Midsize
10)	Pontiac Grand AM ¹	221,438	0.021	31.2	Compact
11)	Toyota Camry (Corona) ³	215,202	0.021	31.7	Compact
12)	Ford Mustang ¹	170,601	0.016	26.2	Subcompact
13)	Chevrolet ¹	165,573	0.016	23.8	Large
14)	Toyota Corolla ³	158,948	0.015	33.9	Subcompact
15)	Oldsmobile 88 ¹	156,232	0.015	26.0	Large
16)	Cadillac DeVille/Fleetwood ¹	148,398	0.014	22.0	Large
17)	Nissan Sentra (210) ³	141,335	0.014	33.6	Compact
18)	Buick LeSabre ¹	137,154	0.013	26.0	Large
19)	Ford Thunderbird ¹	127,356	0.012	25.5	Compact
20)	Lincoln Town Car ¹	126,642	0.012	23.0	Large
21)	Chrysler LeBaron GTS ¹	125,565	0.012	28.2	Midsize
22)	Buick Century ¹	122,230	0.012	28.0	Midsize
23)	Buick Regal ¹	119,234	0.011	27.0	Midsize
24)	Mercury Sable ¹	119,132	0.011	26.4	Midsize
25)	Plymouth Reliant ¹	118,050	0.011	30.5	Midsize
26)	Subaru Sedan ³	116,073	0.011	30.5	Compact
27)	Mercury Grand Marquis ¹	115,302	0.011	23.0	Large
28)	Ford LTD Crown Victoria ¹	114,534	0.011	23.0	Large
29)	Nissan Sentra-American ²	110,517	0.011	34.4	Compact
30)	Pontiac Bonneville ¹	109,862	0.011	26.0	Large
31)	Mercury Cougar XR-7 ¹	109,124	0.011	26.0	Compact
32)	Dodge Aries ¹	105,539	0.010	30.5	Midsize
33)	Pontiac A6000 ¹	103,003	0.010	28.0	Midsize
34)	Honda Accord ³	102,910	0.010	31.2	Compact
35)	Honda Civic-American ²	100,825	0.010	38.3	Subcompact
36)	Oldsmobile Calais ¹	100,810	0.010	30.2	Compact
37)	Toyota Tercel ³	100,767	0.010	37.1	Subcompact
38)	Oldsmobile Supreme ¹	100,608	0.010	26.3	Midsize
39)	Chevrolet Nova ¹	98,154	0.009	32.2	Compact
40)	Chevrolet Camaro ¹	93,617	0.009	23.9	Subcompact
41)	Mazda GLC ³	92,511	0.009	32.1	Compact
42)	Buick Electra ¹	87,798	0.008	26.0	Large
43)	Dodge Shadow ¹	85,537	0.008	29.7	Compact

Table E.13 (Continued)
 190 Cars for *Model Year 1988* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
44)	Plymouth Sundance ¹	81,857	0.008	29.4	Compact
45)	Mercury Topaz ¹	81,210	0.008	26.4	Compact
46)	Pontiac Grand Prix ¹	79,573	0.008	27.0	Midsize
47)	Pontiac J2000/Sunbird ¹	77,864	0.008	32.9	Compact
48)	Oldsmobile 98 ¹	75,441	0.007	26.0	Large
49)	Chevrolet Spectrum ⁴	73,759	0.007	40.1	Subcompact
50)	Honda Civic ³	73,495	0.007	38.8	Subcompact
51)	Nissan Maxima (810) ³	73,439	0.007	24.0	Compact
52)	Dodge Daytona ¹	70,986	0.007	28.6	Subcompact
53)	Acura Legend ³	69,406	0.007	23.2	Compact
54)	Toyota Celica ³	69,357	0.007	30.9	Subcompact
55)	Mazda 626 ³	67,331	0.006	29.2	Midsize
56)	Chrysler New Yorker C-Car ¹	64,803	0.006	25.0	Midsize
57)	Ford Festiva ⁴	63,802	0.006	47.0	Subcompact
58)	Honda Prelude ³	63,258	0.006	27.9	Subcompact
59)	Mercury Lynx ¹	60,845	0.006	32.3	Compact
60)	Pontiac Firebird ¹	59,459	0.006	23.4	Subcompact
61)	Toyota FX16-American ²	59,134	0.006	32.5	Subcompact
62)	Buick Somerset ¹	58,415	0.006	29.4	Compact
63)	Dodge Dynasty ¹	58,248	0.006	25.2	Midsize
64)	Acura Integra ³	58,029	0.006	32.2	Subcompact
65)	Volkswagen Fox ³	57,670	0.006	32.0	Subcompact
66)	Plymouth Horizon ¹	57,007	0.005	32.3	Compact
67)	Pontiac LeMans Import ⁴	54,671	0.005	34.7	Compact
68)	Chevrolet Sprint ⁴	54,279	0.005	50.1	Minicompact
69)	Dodge Omni ¹	53,908	0.005	32.3	Compact
70)	Nissan Stanza (510) ³	52,892	0.005	28.4	Compact
71)	Volkswagen Jetta ³	50,624	0.005	31.0	Compact
72)	Honda Civic CRX ³	49,548	0.005	46.1	Two seater
73)	Chrysler 5th Ave ¹	49,547	0.005	23.0	Midsize
74)	Cadillac Fleetwood Brougham ¹	49,400	0.005	23.0	Large
75)	Nissan Pulsar NX ³	48,998	0.005	30.8	Subcompact
76)	Ford Probe ¹	45,647	0.004	29.3	Compact
77)	Dodge Colt Hatchback ⁴	42,500	0.004	38.7	Subcompact
78)	Chevrolet Monte Carlo ¹	41,788	0.004	23.5	Midsize
79)	Volvo 740 GLE ³	41,448	0.004	24.0	Midsize
80)	BMW 325 ³	41,115	0.004	24.0	Subcompact
81)	Plymouth Colt ⁴	37,673	0.004	38.7	Subcompact
82)	Yugo GV/GVX ³	35,656	0.003	34.0	Subcompact
83)	Lincoln Continental ¹	33,507	0.003	24.0	Large
84)	Volvo DL ³	30,693	0.003	26.5	Compact
85)	Mazda RX-7 ³	30,587	0.003	22.9	Two seater
86)	Eagle Premier ¹	29,878	0.003	24.2	Large

Table E.13 (Continued)
 190 Cars for *Model Year 1988* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
87)	Cadillac Eldorado ¹	29,514	0.003	22.0	Midsize
88)	Buick Skyhawk ¹	29,430	0.003	32.6	Compact
89)	Volkswagen Golf - American ²	28,829	0.003	32.1	Compact
90)	Chrysler LeBaron ¹	28,550	0.003	27.8	Midsize
91)	Saab 900 ³	27,462	0.003	26.1	Compact
92)	Pontiac Fiero ¹	27,304	0.003	28.0	Two seater
93)	Mazda 929 ³	26,827	0.003	24.0	Midsize
94)	Subaru Justy ³	25,444	0.002	44.0	Subcompact
95)	Chevrolet Corvette ¹	25,425	0.002	23.0	Two seater
96)	Mercedes Benz 300 D/300 CD ³	24,938	0.002	32.0	Compact
97)	Mazda MX-6 American ²	24,711	0.002	29.1	Midsize
98)	Lincoln Mercury Mark VII ¹	23,184	0.002	23.0	Midsize
99)	Nissan 200SX ³	22,964	0.002	27.8	Subcompact
100)	Nissan 300ZX ³	22,232	0.002	24.2	Two seater
101)	Toyota Supra ³	22,087	0.002	23.3	Subcompact
102)	Cadillac Seville ¹	21,661	0.002	22.0	Midsize
103)	Chrysler New Yorker-E Class ¹	21,572	0.002	26.0	Midsize
104)	Mitsubishi Precis ³	21,044	0.002	35.0	Subcompact
105)	Isuzu I-Mark ³	20,448	0.002	38.9	Subcompact
106)	Dodge Diplomat ¹	19,968	0.002	23.0	Midsize
107)	Dodge 600 ¹	19,885	0.002	29.2	Midsize
108)	Plymouth Caravelle ¹	19,586	0.002	29.2	Midsize
119)	Jaguar XJ6 ³	16,575	0.002	23.5	Compact
110)	Oldsmobile Toronado ¹	15,623	0.002	26.0	Midsize
111)	Volkswagen Jetta-American ²	15,271	0.001	30.7	Compact
112)	Mazda MX6 ³	14,738	0.001	29.2	Midsize
113)	Subaru XT ³	14,470	0.001	27.6	Subcompact
114)	Toyota Cressida ³	13,799	0.001	24.0	Compact
115)	Mitsubishi Mirage ³	13,370	0.001	36.4	Subcompact
116)	Volvo 760 GLE ³	13,187	0.001	25.2	Midsize
117)	Volkswagen Cabriolet ³	13,119	0.001	29.0	Minicompact
118)	Mercury Scorpio ⁴	12,471	0.001	22.5	Midsize
119)	Plymouth Gran Fury ¹	12,466	0.001	23.0	Midsize
120)	Oldsmobile Firenza ¹	12,166	0.001	32.6	Compact
121)	Dodge Lancer ¹	11,877	0.001	28.6	Midsize
122)	Mitsubishi Galant ³	11,797	0.001	27.0	Compact
123)	Mercedes Benz 560 SL ³	11,731	0.001	17.0	Two seater
124)	Saab 9000 ³	11,608	0.001	25.7	Large
125)	Austin Rover Sterling 825SL ³	10,881	0.001	23.0	Compact
126)	Audi 5000S ³	10,724	0.001	23.9	Midsize
127)	Chrysler Conquest ⁴	10,154	0.001	23.3	Subcompact
128)	Mercedes Benz 420 SEL ³	10,146	0.001	19.0	Midsize
129)	BMW 528 I ³	10,056	0.001	25.0	Compact

Table E.13 (Continued)
 190 Cars for *Model Year 1988* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
130)	Toyota MR-2 ³	9,857	0.001	31.7	Two seater
131)	Mercedes Benz 190 D 2.2 ³	9,265	0.001	37.0	Subcompact
132)	Mercedes Benz 190 E 2.3 ³	9,265	0.001	26.0	Subcompact
133)	Buick Riviera ¹	9,241	0.001	26.0	Midsize
134)	AMC Renault Alliance ¹	8,605	0.001	34.3	Compact
135)	Daihatsu ³	8,566	0.001	46.0	Subcompact
136)	Isuzu Impulse ³	8,396	0.001	26.3	Subcompact
137)	Pontiac ¹	7,388	0.001	23.5	Large
138)	Peugeot 505 (Gas) ³	7,080	0.001	23.8	Compact
139)	Subaru Hatchback ³	6,928	0.001	29.6	Subcompact
140)	Cadillac Cimarron ¹	6,925	0.001	27.0	Compact
141)	Mercedes Benz 260E ³	6,762	0.001	24.9	Compact
142)	Mitsubishi Cordia ³	6,543	0.001	29.3	Subcompact
143)	Porsche 944 ³	6,405	0.001	25.1	Minicompact
144)	Porsche 911 ³	6,361	0.001	23.4	Minicompact
145)	Mitsubishi Galant Sigma ³	6,116	0.001	23.0	Compact
146)	BMW 733 I ³	5,939	0.001	19.0	Midsize
147)	BMW 750 iL ³	5,939	0.001	16.0	Midsize
148)	Volvo GL ³	5,937	0.001	26.5	Compact
149)	Eagle Medallion ⁴	5,773	0.001	30.2	Midsize
150)	Merkur XR4Ti ⁴	5,607	0.001	22.8	Compact
151)	Audi 90/90 Quattro ³	5,512	0.001	26.1	Subcompact
152)	Mercedes Benz 560 SEL ³	5,423	0.001	17.0	Midsize
153)	BMW 535 I ³	5,181		19.7	Compact
154)	Audi 80/80 Quattro ³	5,175		28.0	Subcompact
155)	Jaguar XJ-S ³	4,917		17.0	Subcompact
156)	Mercedes Benz 300 SEL ³	4,886		21.0	Midsize
157)	Volkswagen Scirocco ³	4,154		29.0	Subcompact
158)	Volkswagen Quantum ³	3,745		23.8	Compact
159)	Cadillac Allante ¹	3,502		22.0	Two seater
160)	Mitsubishi Starion ³	3,452		23.3	Subcompact
161)	AMC Eagle ¹	2,911		27.9	Compact
162)	Buick Reatta ¹	2,759		26.0	Two seater
163)	Alfa Romeo Milano ³	2,632		24.0	Subcompact
164)	Porsche 924S ³	2,478		26.9	Minicompact
165)	Alfa Romeo Spider ³	2,318		28.0	Two seater
166)	Plymouth Turismo (TC3) ¹	2,217		30.2	Subcompact
167)	Dodge Charger 024 ¹	1,989		29.2	Subcompact
168)	BMW 633 CSI ³	1,891		18.0	Subcompact
169)	Mercedes Benz 300 SDL/300 SD ³	1,773		26.0	Compact
170)	Volvo 780 ³	1,640		21.0	Compact
171)	Mercedes Benz 560 SEC ³	1,587		17.0	Compact
172)	BMW M3 ³	1,567		24.0	Subcompact

Table E.13 (Continued)
 190 Cars for Model Year 1988 Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
173)	Porsche 928 ³	1,535		21.0	Minicompact
174)	Eagle Summit ⁴	1,275		32.0	Compact
175)	Mitsubishi Tredia ³	1,176		28.4	Subcompact
176)	Toyota Camry - American ²	942		31.7	Compact
177)	Audi 100/100 Quattro ³	888		24.0	Midsize
178)	Ferrari ³	864		14.7	Two seater
179)	Audi Coupe ³	678		24.5	Subcompact
180)	Audi 200/200 Turbo Quattro ³	574		23.3	Midsize
181)	BMW M6 ³	569		15.0	Subcompact
182)	Chevrolet Chevette ¹	550		32.8	Subcompact
183)	Audi 4000 ³	490		30.2	Subcompact
184)	BMW M5 ³	386		20.0	Compact
185)	Pontiac T1000 ¹	366		33.1	Subcompact
186)	Audi 4000S Quattro ³	321		23.0	Subcompact
187)	Peugeot 405 ³	288		26.1	Compact
188)	Alfa Romeo GTV-6 ³	9		24.0	Minicompact
189)	BMW 524 TD ³	9		24.0	Compact
190)	BMW 320 I ³	5		24.0	Subcompact
		10,372,985	1.000	28.5	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table E.14
204 Cars for *Model Year 1989* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
1)	Ford Escort ¹	366,354	0.036	34.1	Compact
2)	Ford Taurus ¹	360,237	0.035	26.9	Midsize
3)	Chevrolet Cavalier ¹	306,518	0.030	32.0	Compact
4)	Ford Tempo ¹	241,608	0.024	26.2	Compact
5)	Honda Accord-American ²	218,108	0.021	30.1	Compact
6)	Pontiac Grand AM ¹	217,169	0.021	30.5	Compact
7)	Oldsmobile Ciera ¹	215,579	0.021	27.6	Midsize
8)	Chevrolet Celebrity ¹	194,830	0.019	27.9	Midsize
9)	Chevrolet Corsica ¹	193,854	0.019	28.4	Midsize
10)	Cadillac DeVille/Fleetwood ¹	177,907	0.017	23.0	Large
11)	Hyundai Excel ³	175,208	0.017	35.0	Subcompact
12)	Honda Civic-American ²	173,001	0.017	35.2	Subcompact
13)	Ford Mustang ¹	172,218	0.017	25.2	Subcompact
14)	Chevrolet ¹	171,435	0.017	23.0	Large
15)	Chevrolet Beretta ¹	158,820	0.016	27.7	Compact
16)	Toyota Camry (Corona) ³	158,808	0.016	29.8	Compact
17)	Buick LeSabre ¹	148,407	0.015	25.0	Large
18)	Oldsmobile 88 ¹	148,173	0.015	25.0	Large
19)	Honda Accord ³	144,327	0.014	30.1	Compact
20)	Buick Century ¹	142,078	0.014	27.4	Midsize
21)	Ford Probe ¹	139,225	0.014	29.3	Compact
22)	Toyota Corolla ³	137,111	0.013	32.6	Subcompact
23)	Nissan Sentra (210) ³	122,808	0.012	34.5	Compact
24)	Pontiac Grand Prix ¹	118,870	0.012	26.9	Midsize
25)	Ford Thunderbird ¹	118,107	0.012	23.8	Midsize
26)	Lincoln Town Car ¹	117,806	0.012	23.0	Large
27)	Mercury Grand Marquis ¹	117,186	0.012	23.0	Large
28)	Mercury Sable ¹	114,884	0.011	27.0	Midsize
29)	Ford LTD Crown Victoria ¹	114,257	0.011	23.0	Large
30)	Dodge Dynasty ¹	112,407	0.011	24.0	Midsize
31)	Chevrolet Camaro ¹	110,034	0.011	24.1	Subcompact
32)	Toyota Tercel ³	107,755	0.011	38.2	Subcompact
33)	Oldsmobile Supreme ¹	107,747	0.011	27.0	Midsize
34)	Nissan Maxima(810) ³	105,982	0.010	25.2	Midsize
35)	Toyota Camry-American ²	105,790	0.010	29.8	Compact
36)	Nissan Sentra-American ²	102,080	0.010	34.6	Compact
37)	Oldsmobile Calais ¹	100,580	0.010	30.1	Compact
38)	Pontiac J2000/Sunbird ¹	97,447	0.010	30.4	Compact
39)	Mercury Cougar XR-7 ¹	97,246	0.010	23.8	Midsize
40)	Pontiac Bonneville ¹	94,761	0.009	25.0	Large
41)	Chrysler LeBaron GTS ¹	94,395	0.009	27.0	Midsize
42)	Mercury Topaz ¹	93,348	0.009	25.7	Compact
43)	Chrysler NewYorker C-Car ¹	92,578	0.009	24.0	Midsize
44)	Buick Regal ¹	91,312	0.009	27.0	Midsize

Table E.14 (Continued)
 204 Cars for Model Year 1989 Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
45)	Plymouth Sundance ¹	90,637	0.009	29.3	Compact
46)	Dodge Shadow ¹	85,758	0.008	29.2	Compact
47)	Buick Electra ¹	81,959	0.008	25.0	Large
48)	Subaru Sedan ³	79,562	0.008	30.4	Compact
49)	Pontiac A6000 ¹	77,556	0.008	26.8	Midsize
50)	Mazda GLC/323 ³	75,079	0.007	32.4	Compact
51)	Acura Integra ³	72,702	0.007	32.0	Subcompact
52)	Toyota FX16-American ²	72,670	0.007	32.6	Subcompact
53)	Ford Festiva ⁴	71,683	0.007	46.6	Subcompact
54)	Oldsmobile 98 ¹	70,486	0.007	25.0	Large
55)	Plymouth Acclaim ¹	69,243	0.007	28.4	Midsize
56)	Nissan 200SX ³	68,993	0.007	26.5	Subcompact
57)	Dodge Daytona ¹	68,032	0.007	28.8	Subcompact
58)	Acura Legend ³	68,011	0.007	23.2	Compact
59)	Geo Spectrum ⁴	62,831	0.006	40.3	Subcompact
60)	Mercury Lynx ¹	62,693	0.006	33.7	Compact
61)	Buick Somerset ¹	60,935	0.006	29.1	Compact
62)	Pontiac Firebird ¹	60,267	0.006	24.2	Subcompact
63)	Chevrolet Lumina ¹	59,533	0.006	26.3	Midsize
64)	Pontiac LeMans Import ⁴	59,236	0.006	33.4	Compact
65)	Lincoln Continental ¹	59,054	0.006	24.0	Large
66)	Toyota Celica ³	57,794	0.006	30.9	Subcompact
67)	Dodge Spirit ¹	57,664	0.006	27.4	Midsize
68)	Mazda 626 ³	57,495	0.006	29.6	Midsize
69)	Dodge Aries ¹	53,309	0.005	30.0	Midsize
70)	Honda Prelude ³	52,335	0.005	27.9	Subcompact
71)	Plymouth Reliant ¹	51,481	0.005	30.0	Midsize
72)	Volkswagen Jetta ³	51,000	0.005	30.6	Compact
73)	Chevrolet Sprint ⁴	50,693	0.005	48.5	Subcompact
74)	Eagle Premier ¹	46,476	0.005	25.0	Large
75)	Volvo 740 GLE ³	46,473	0.005	25.1	Midsize
76)	Dodge Omni ¹	45,933	0.005	31.8	Compact
77)	Plymouth Horizon ¹	45,341	0.004	31.7	Compact
78)	Honda Civic CRX ³	44,548	0.004	43.4	Two seater
79)	Nissan Stanza(510) ³	43,829	0.004	27.3	Compact
80)	Volkswagen Fox ³	42,490	0.004	32.0	Subcompact
81)	Mazda MX-6 American ²	40,867	0.004	29.0	Midsize
82)	Chevrolet Nova ¹	37,811	0.004	32.2	Compact
83)	Cadillac Fleetwood Brougham ¹	37,643	0.004	23.0	Large
84)	Volvo DL ³	37,516	0.004	25.2	Compact
85)	Geo Prizm ¹	35,285	0.003	31.1	Subcompact
86)	BMW 325 ³	34,933	0.003	23.2	Subcompact
87)	Cadillac Eldorado ¹	32,410	0.003	23.0	Midsize
88)	Dodge Colt Hatchback ⁴	31,859	0.003	37.1	Subcompact

Table E.14 (Continued)
 204 Cars for *Model Year 1989* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
89)	Plymouth Colt ⁴	29,121	0.003	37.1	Subcompact
90)	Mitsubishi Galant ³	27,686	0.003	29.0	Compact
91)	Lincoln Mercury Mark VII ¹	27,030	0.003	23.0	Midsize
92)	Nissan Pulsar NX ³	26,271	0.003	30.3	Subcompact
93)	Hyundai Sonata ³	26,150	0.003	25.6	Midsize
94)	Toyota Cressida ³	25,321	0.002	24.0	Compact
95)	Subaru Justy ³	25,168	0.002	38.8	Subcompact
96)	Saab 900 ³	24,362	0.002	26.4	Compact
97)	Chevrolet Corvette ¹	23,975	0.002	23.0	Two seater
98)	Nissan 300 ZX ³	23,918	0.002	23.7	Two seater
99)	Cadillac Seville ¹	23,583	0.002	23.0	Midsize
100)	Mitsubishi Eclipse ²	21,576	0.002	28.4	Subcompact
101)	Honda Civic ³	21,418	0.002	36.6	Subcompact
102)	Mazda 929 ³	20,794	0.002	24.0	Midsize
103)	Buick Skyhawk ¹	20,658	0.002	33.1	Compact
104)	Subaru Legacy ³	20,188	0.002	27.7	Compact
105)	Buick Riviera ¹	20,020	0.002	25.0	Midsize
106)	Eagle Summit ⁴	19,344	0.002	32.0	Compact
107)	Mitsubishi Precis ³	19,108	0.002	35.0	Subcompact
108)	Mitsubishi Mirage ³	18,979	0.002	34.1	Subcompact
109)	Mazda RX-7 ³	18,690	0.002	22.1	Two seater
110)	Chrysler 5th Ave ¹	17,779	0.002	21.0	Midsize
111)	Toyota Supra ³	16,715	0.002	23.0	Subcompact
112)	Mercedes Benz 300 E ³	16,607	0.002	23.0	Compact
113)	Jaguar XJ6 ³	15,301	0.002	23.0	Compact
114)	Isuzu I-Mark ³	14,783	0.001	37.3	Subcompact
115)	Plymouth Laser ¹	14,576	0.001	29.2	Subcompact
116)	Yugo GV/GVX ³	13,864	0.001	34.6	Subcompact
117)	Daihatsu ³	13,763	0.001	46.0	Subcompact
118)	Mazda Miata ³	13,525	0.001	31.0	Two seater
119)	Volkswagen Golf ³	13,119	0.001	30.3	Compact
120)	Subaru XT ³	12,413	0.001	27.0	Subcompact
121)	Volvo 760 GLE ³	11,051	0.001	23.2	Midsize
122)	Subaru Loyale ³	10,128	0.001	28.7	Compact
123)	Saab 9000 ³	10,089	0.001	25.9	Large
124)	Volkswagen Cabriolet ³	10,065	0.001	28.8	Minicompact
125)	Volkswagen Golf-America ²	9,653	0.001	30.3	Compact
126)	Oldsmobile Toronado ¹	9,343	0.001	25.0	Midsize
127)	Mercedes Benz 560 SL ³	8,902	0.001	17.0	Two seater
128)	BMW 535 I ³	8,710	0.001	20.4	Compact
129)	Buick Reatta ¹	7,911	0.001	25.0	Two seater
130)	Mercedes Benz 190 D 2.2 ³	7,563	0.001	36.0	Subcompact
131)	Mercedes Benz 190 E 2.3 ³	7,563	0.001	25.0	Subcompact
132)	BMW 525 I ³	7,331	0.001	23.0	Compact

Table E.14 (Continued)
 204 Cars for Model Year 1989 Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
133)	Eagle Medallion ⁴	7,288	0.001	27.4	Midsize
134)	Mercedes Benz 420 SEL ³	7,247	0.001	19.0	Midsize
135)	Audi 100/100 Quattro ³	6,816	0.001	24.0	Midsize
136)	Dodge Diplomat ¹	6,392	0.001	21.0	Midsize
137)	Chrysler Conquest ⁴	6,223	0.001	23.4	Subcompact
138)	Austin Rover Sterling 825SL ³	5,951	0.001	23.6	Compact
139)	Mercedes Benz 300 D/300 CD ³	5,861	0.001	32.0	Compact
140)	Toyota MR-2 ³	5,819	0.001	31.6	Two seater
141)	BMW 750 iL ³	5,715	0.001	16.5	Midsize
142)	BMW 735 i ³	5,715	0.001	20.0	Midsize
143)	Porsche 911 ³	5,696	0.001	21.5	Minicompact
144)	Merkur XR4Ti ⁴	5,384	0.001	23.0	Compact
145)	Volvo GL ³	5,186	0.001	25.2	Compact
146)	Suzuki Swift ³	5,152	0.001	42.0	Subcompact
147)	Mercedes Benz 300 SE ³	5,071		21.0	Compact
148)	Audi 90/90 Quattro ³	4,963		26.3	Subcompact
149)	Mercedes Benz 560 SEL ³	4,924		17.0	Midsize
150)	Pontiac ¹	4,875		23.5	Large
151)	Mercedes Benz 260E ³	4,843		24.9	Compact
152)	Audi 80/80 Quattro ³	4,514		28.4	Subcompact
153)	Pontiac Fiero ¹	4,477		28.0	Two seater
154)	Isuzu Impulse ³	4,440		26.2	Subcompact
155)	Merkur Scorpio ⁴	4,425		23.0	Midsize
156)	Jaguar XJ-S ³	4,395		17.0	Subcompact
157)	Mercedes Benz 300 SEL ³	4,278		21.0	Midsize
158)	Dodge Lancer ¹	4,172		28.2	Midsize
159)	Plymouth Gran Fury ¹	4,123		21.0	Midsize
160)	Peugeot 405 ³	4,039		26.1	Compact
161)	Porsche 944 ³	3,549		23.7	Minicompact
162)	Lexus LS400 ³	3,439		23.0	Midsize
163)	Chevrolet Monte Carlo ¹	3,360		23.5	Midsize
164)	Subaru Hatchback ³	3,240		30.4	Subcompact
165)	Cadillac Allante ¹	3,066		20.0	Two seater
166)	BMW 528 i ³	2,987		25.0	Compact
167)	Audi 200/200 Turbo Quattro ³	2,673		23.3	Midsize
168)	Mazda MX6 ³	2,655		29.5	Midsize
169)	Mitsubishi Galant Sigma ³	2,643		23.0	Compact
170)	Peugeot 505 (Gas) ³	2,247		23.8	Compact
171)	Chrysler LeBaron ¹	2,000		27.1	Compact
172)	Alfa Romeo Spider ³	1,865		28.0	Two seater
173)	Volvo 780 ³	1,823		21.0	Compact
174)	Dodge 600 ¹	1,752		29.0	Midsize
175)	BMW 635 CSi ³	1,749		19.2	Subcompact
176)	Volkswagen Scirocco ³	1,681		29.0	Subcompact

Table E.14 (Continued)
 204 Cars for *Model Year 1989* Ranked by Sales

		Model year sales	Ratio of total car sales	Sales weighted MPG	EPA size class
177)	Plymouth Caravelle ¹	1,556		29.0	Midsize
178)	Volkswagen Quantum ³	1,531		23.8	Compact
179)	Mercedes Benz 560 SEC ³	1,506		17.0	Compact
180)	Alfa Romeo Milano ³	1,443		24.0	Subcompact
181)	Chrysler TC by Maserati ⁴	1,339		23.0	Two seater
182)	BMW M3 ³	1,293		24.0	Subcompact
183)	Oldsmobile Firenza ¹	1,219		32.6	Compact
184)	Mitsubishi Cordia ³	1,164		29.2	Subcompact
185)	Lexus ES250 ³	1,115		25.0	Compact
186)	Mitsubishi Starion ³	1,011		23.3	Subcompact
187)	Cadillac Cimarron ¹	991		27.0	Compact
188)	Porsche 928 ³	991		19.5	Minicompact
189)	Volkswagen Jetta-America ²	886		30.1	Compact
190)	Ferrari ³	849		15.4	Two seater
191)	Audi 5000S ³	643		23.5	Midsize
192)	Volkswagen Corrado ³	507		27.0	Subcompact
193)	BMW M6 ³	497		15.0	Subcompact
194)	Audi V8 Sedan ³	482		19.0	Midsize
195)	Chrysler New Yorker-E Class ¹	406		26.0	Midsize
196)	Porsche 924S ³	375		26.9	Minicompact
197)	BMW M5 ³	366		20.0	Compact
198)	Audi Coupe Quattro ³	251		23.0	Subcompact
199)	Audi Coupe ³	35		24.5	Subcompact
200)	Audi 4000 ³	33		30.2	Subcompact
201)	Mercedes Benz 300 SDL/300 SD ³	31		26.0	Compact
202)	Audi 4000S Quattro ³	15		23.0	Subcompact
203)	Mitsubishi Tredia ³	4		28.3	Subcompact
204)	Alfa Romeo GTV-6 ³	1		24.0	Minicompact
		10,173,827	1.000	28.0	

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Appendix F

**Model Year Light Truck Namplates Ranked by Sales,
Model Years 1976-1989**

Table F.1
27 Light Trucks for *Model Year 1976* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	449,068	0.188	15.8	Large Pickup
2)	Chevrolet C-10 ¹	448,776	0.188	14.7	Large Pickup
3)	Ford F250 ¹	191,304	0.080	14.8	Large Pickup
4)	Dodge Ram Van ¹	184,584	0.077	16.0	Large Van
5)	Ford Econoline ¹	179,820	0.075	15.1	Large Van
6)	Chevrolet C-20 ¹	168,876	0.071	14.1	Large Pickup
7)	Chevrolet Van ¹	128,040	0.054	15.2	Large Van
8)	Dodge D150 ¹	100,812	0.042	17.1	Large Pickup
9)	GMC C-15 ¹	94,320	0.040	14.5	Large Pickup
10)	Ford Courier ⁴	51,408	0.022	23.2	Small Pickup
11)	Chevrolet El Camino ¹	43,596	0.018	15.7	Large Pickup
12)	Chevrolet LUV ⁴	41,691	0.017	25.4	Small Pickup
13)	GMC C-25 ¹	40,680	0.017	14.1	Large Pickup
14)	Toyota Pickup ³	38,404	0.016	23.0	Small Pickup
15)	Ford Club Wagon ¹	38,126	0.016	14.2	Large Van
16)	Nissan Pickup ³	36,398	0.015	24.7	Small Pickup
17)	GMC Vandura/Rally ¹	31,166	0.013	15.0	Large Van
18)	Dodge D250 ¹	26,100	0.011	15.8	Large Pickup
19)	Volkswagen Vanagon ³	18,651	0.008	19.5	Small Van
20)	Ford Ranchero ¹	17,052	0.007	14.6	Large Pickup
21)	Ford Bronco ¹	13,620	0.006	16.9	Large Utility
22)	Plymouth Voyager ¹	13,009	0.005	15.8	Large Van
23)	Dodge Ram Charger ¹	11,916	0.005	15.5	Large Utility
24)	Toyota Land Cruiser ³	6,891	0.003	11.0	Large Utility
25)	GMC Caballero ¹	5,436	0.002	15.9	Large Pickup
26)	Plymouth Trail Duster ¹	4,716	0.002	15.5	Small Utility
27)	Mazda Pickup ³	2,450	0.001	18.0	Small Pickup
		2,386,910	1.000	15.6	

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Table F.2
27 Light Trucks for *Model Year 1977* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	524,338	0.211	18.1	Large Pickup
2)	Chevrolet C-10 ¹	499,887	0.202	15.8	Large Pickup
3)	Chevrolet C-20 ¹	180,114	0.073	15.4	Large Pickup
4)	Ford F250 ¹	176,934	0.071	17.1	Large Pickup
5)	Chevrolet Van ¹	140,282	0.057	17.2	Large Van
6)	Ford Econoline ¹	138,942	0.056	17.2	Large Van
7)	GMC C-15 ¹	98,483	0.040	15.7	Large Pickup
8)	Dodge D150 ¹	96,916	0.039	17.2	Large Pickup
9)	Toyota Pickup ³	77,867	0.031	27.7	Small Pickup
10)	Chevrolet LUV ⁴	68,234	0.028	25.7	Small Pickup
11)	Ford Courier ⁴	63,327	0.026	29.1	Small Pickup
12)	Nissan Pickup ³	62,994	0.025	24.9	Small Pickup
13)	Dodge Ram Van ¹	55,791	0.023	16.5	Large Van
14)	Chevrolet El Camino ¹	50,220	0.020	16.6	Large Pickup
15)	GMC C-25 ¹	45,613	0.018	15.5	Large Pickup
16)	GMC Vandura/Rally ¹	33,809	0.014	17.1	Large Van
17)	Ford Club Wagon ¹	33,067	0.013	16.4	Large Van
18)	Volkswagen Vanagon ³	24,547	0.010	22.7	Small Van
19)	Dodge D250 ¹	24,291	0.010	16.3	Large Pickup
20)	Ford Ranchero ¹	20,304	0.008	16.0	Large Pickup
21)	Ford Bronco ¹	15,912	0.006	19.0	Large Utility
22)	Dodge Ram Charger ¹	14,796	0.006	15.6	Large Utility
23)	Plymouth Voyager ¹	13,842	0.006	16.1	Large Van
24)	Toyota Land Cruiser ³	10,320	0.004	15.0	Large Utility
25)	Plymouth Trail Duster ¹	4,682	0.002	15.6	Small Utility
26)	Mazda Pickup ³	2,795	0.001	21.9	Small Pickup
27)	GMC Caballero ¹	1,206		16.8	Large Pickup
		2,479,513	1.000	17.5	

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Table F.3
28 Light Trucks for *Model Year 1978* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	597,411	0.203	18.2	Large Pickup
2)	Chevrolet C-10 ¹	554,342	0.188	15.6	Large Pickup
3)	Ford Econoline ¹	229,899	0.078	16.7	Large Van
4)	Chevrolet Van ¹	191,834	0.065	16.3	Large Van
5)	Dodge Ram Van ¹	187,432	0.064	16.4	Large Van
6)	Chevrolet C-20 ¹	179,343	0.061	15.6	Large Pickup
7)	Ford F250 ¹	166,665	0.057	17.2	Large Pickup
8)	GMC C-15 ¹	121,534	0.041	15.5	Large Pickup
9)	Dodge D150 ¹	110,985	0.038	16.6	Large Pickup
10)	Nissan Pickup ³	86,759	0.029	26.6	Small Pickup
11)	Toyota Pickup ³	84,404	0.029	25.8	Small Pickup
12)	Ford Courier ⁴	71,161	0.024	28.6	Small Pickup
13)	Chevrolet LUV ⁴	61,705	0.021	26.8	Small Pickup
14)	Chevrolet El Camino ¹	50,155	0.017	18.2	Large Pickup
15)	GMC C-25 ¹	50,002	0.017	15.1	Large Pickup
16)	GMC Vandura/Rally ¹	47,150	0.016	15.7	Large Van
17)	Dodge D250 ¹	26,742	0.009	16.2	Large Pickup
18)	Volkswagen Vanagon ³	24,755	0.008	19.5	Small Van
19)	Ford Ranger ¹	22,994	0.008	16.4	Large Pickup
20)	GMC Jimmy ¹	17,179	0.006	15.9	Large Utility
21)	Dodge Ram Charger ¹	16,216	0.006	15.9	Large Utility
22)	Plymouth Voyager ¹	14,138	0.005	15.0	Large Van
23)	GMC Suburban ¹	10,696	0.004	14.2	Large Utility
24)	GMC Caballero ¹	6,609	0.002	18.2	Large Pickup
25)	Plymouth Trail Duster ¹	6,485	0.002	15.6	Small Utility
26)	Mazda Pickup ³	4,761	0.002	33.0	Small Pickup
27)	Jeep CJ ¹	4,246	0.001	16.4	Small Utility
28)	Toyota Land Cruiser ³	857		13.5	Large Utility
		2,946,459	1.000	17.2	

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Table F.4
38 Light Trucks for *Model Year 1979* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	524,575	0.187	15.2	Large Pickup
2)	Chevrolet C-10 ¹	477,625	0.171	16.1	Large Pickup
3)	Chevrolet Van ¹	188,255	0.067	14.3	Large Van
4)	Ford Econoline ¹	184,722	0.066	14.7	Large Van
5)	Ford F250 ¹	156,629	0.056	15.5	Large Pickup
6)	Dodge Ram Van ¹	151,070	0.054	16.2	Large Van
7)	Chevrolet C-20 ¹	133,046	0.047	15.8	Large Pickup
8)	Toyota Pickup ³	124,960	0.045	20.4	Small Pickup
9)	GMC C-15 ¹	113,509	0.041	16.1	Large Pickup
10)	Nissan Pickup ³	104,565	0.037	23.9	Small Pickup
11)	Chevrolet LUV ⁴	97,485	0.035	25.7	Small Pickup
12)	Dodge D150 ¹	93,201	0.033	16.6	Large Pickup
13)	Ford Courier ⁴	76,883	0.027	25.8	Small Pickup
14)	Chevrolet El Camino ¹	55,224	0.020	19.9	Large Pickup
15)	Jeep CJ ¹	49,794	0.018	17.7	Small Utility
16)	GMC Vandura/Rally ¹	46,183	0.016	14.2	Large Van
17)	GMC C-25 ¹	39,080	0.014	15.5	Large Pickup
18)	Dodge Ram 50 ⁴	27,517	0.010	24.3	Small Pickup
19)	Volkswagen Vanagon ³	18,153	0.006	17.9	Small Van
20)	Ford Ranger ¹	16,186	0.006	15.7	Large Pickup
21)	Dodge Ram Charger ¹	15,754	0.006	15.9	Large Utility
22)	Dodge D250 ¹	14,335	0.005	16.1	Large Pickup
23)	GMC Jimmy ¹	14,193	0.005	15.9	Large Utility
24)	Plymouth Arrow Pickup ⁴	13,004	0.005	24.3	Small Pickup
25)	Plymouth Voyager ¹	10,653	0.004	16.0	Large Van
26)	GMC Suburban ¹	8,588	0.003	14.2	Large Utility
27)	Mazda Pickup ³	7,134	0.003	30.0	Small Pickup
28)	GMC Caballero ¹	6,952	0.002	18.9	Large Pickup
29)	Plymouth Trail Duster ¹	6,114	0.002	15.9	Small Utility
30)	Toyota Land Cruiser ³	5,888	0.002	13.5	Large Utility
31)	Ford Bronco ¹	5,507	0.002	15.0	Large Utility
32)	Chevrolet Suburban ¹	4,004	0.001	14.0	Large Utility
33)	Jeep Grand Wagoneer ¹	3,546	0.001	14.1	Large Utility
34)	Dodge W150 ¹	2,777	0.001	14.5	Large Pickup
35)	Chevrolet Blazer ¹	1,446	0.001	15.9	Large Utility
36)	Dodge W250 ¹	1,230		13.8	Large Pickup
37)	Jeep J10 ¹	1,153		14.4	Large Pickup
38)	Jeep J20 ¹	223		13.0	Large Pickup
		2,801,163	1.000	16.5	

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⁴Built abroad by U.S. based firm (captive imports).

Table F.5
39 Light Trucks for *Model Year 1980* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	384,658	0.174	16.8	Large Pickup
2)	Chevrolet C-10 ¹	314,679	0.142	18.4	Large Pickup
3)	Toyota Pickup ³	144,055	0.065	23.4	Small Pickup
4)	Ford Econoline ¹	114,645	0.052	16.2	Large Van
5)	Nissan Pickup ³	113,248	0.051	26.5	Small Pickup
6)	Chevrolet Van ¹	100,705	0.045	16.4	Large Van
7)	Chevrolet LUV ⁴	90,815	0.041	26.6	Small Pickup
8)	Ford F250 ¹	88,932	0.040	15.4	Large Pickup
9)	Chevrolet C-20 ¹	87,862	0.040	14.9	Large Pickup
10)	Dodge Ram Van ¹	80,180	0.036	16.3	Large Van
11)	Ford Courier ⁴	78,401	0.035	26.5	Small Pickup
12)	GMC C-15 ¹	65,443	0.030	18.6	Large Pickup
13)	Dodge D150 ¹	59,426	0.027	17.3	Large Pickup
14)	Jeep CJ ¹	51,684	0.023	17.7	Small Utility
15)	Ford Bronco ¹	48,837	0.022	15.0	Large Utility
16)	Chevrolet El Camino ¹	43,896	0.020	19.8	Large Pickup
17)	Dodge Ram 50 ⁴	42,540	0.019	25.1	Small Pickup
18)	Chevrolet Suburban ¹	34,741	0.016	13.7	Large Utility
19)	Jeep Grand Wagoneer ¹	34,600	0.016	14.1	Large Utility
20)	GMC Vandura/Rally ¹	25,271	0.011	16.2	Large Van
21)	Chevrolet Blazer ¹	23,876	0.011	15.9	Large Utility
22)	GMC C-25 ¹	22,968	0.010	14.9	Large Pickup
23)	International Harvester Scout ²	20,025	0.009	15.7	Small Utility
24)	Volkswagen Pickup (Diesel) ³	20,006	0.009	29.7	Small Pickup
25)	Plymouth Arrow Pickup ⁴	18,458	0.008	25.0	Small Pickup
26)	Dodge W150 ¹	14,374	0.006	14.5	Large Pickup
27)	Volkswagen Vanagon ³	13,649	0.006	19.6	Small Van
28)	Dodge D250 ¹	10,708	0.005	14.9	Large Pickup
29)	Dodge Ram Charger ¹	9,411	0.004	14.4	Large Utility
30)	Jeep J10 ¹	9,379	0.004	14.4	Large Pickup
31)	Mazda Pickup ³	8,889	0.004	30.0	Small Pickup
32)	Plymouth Voyager ¹	7,264	0.003	15.1	Large Van
33)	GMC Jimmy ¹	7,113	0.003	15.8	Large Utility
34)	Dodge W250 ¹	6,367	0.003	13.8	Large Pickup
35)	GMC Suburban ¹	4,809	0.002	13.8	Large Utility
36)	GMC Caballero ¹	4,742	0.002	19.8	Large Pickup
37)	Plymouth Trail Duster ¹	4,166	0.002	14.4	Small Utility
38)	Toyota Land Cruiser ³	3,901	0.002	13.5	Large Utility
39)	Jeep J20 ¹	1,814	0.001	13.0	Large Pickup
		2,216,537	1.000	18.1	

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⁴Built abroad by U.S. based firm (captive imports).

Table F.6
42 Light Trucks for *Model Year 1981* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	340,087	0.176	18.1	Large Pickup
2)	Chevrolet C-10 ¹	280,089	0.145	19.7	Large Pickup
3)	Toyota Pickup ³	128,180	0.066	28.1	Small Pickup
4)	Nissan Pickup ³	114,014	0.059	28.6	Small Pickup
5)	Ford Econoline ¹	108,599	0.056	17.1	Large Van
6)	Chevrolet Van ¹	86,757	0.045	18.5	Large Van
7)	Ford F250 ¹	77,632	0.040	16.2	Large Pickup
8)	Chevrolet C-20 ¹	77,346	0.040	18.4	Large Pickup
9)	Chevrolet LUV ⁴	72,052	0.037	27.2	Small Pickup
10)	Ford Courier ⁴	66,155	0.034	26.6	Small Pickup
11)	GMC C-15 ¹	56,970	0.029	19.5	Large Pickup
12)	Dodge Ram Van ¹	48,702	0.025	18.2	Large Van
13)	Dodge D150 ¹	43,456	0.022	18.7	Large Pickup
14)	Jeep CJ ¹	38,772	0.020	20.2	Small Utility
15)	Ford Bronco ¹	37,396	0.019	15.9	Large Utility
16)	Chevrolet El Camino ¹	36,711	0.019	20.5	Large Pickup
17)	Volkswagen Pickup (Diesel) ³	31,160	0.016	38.1	Small Pickup
18)	Dodge Ram 50 ⁴	29,573	0.015	24.5	Small Pickup
19)	Ford Club Wagon ¹	25,051	0.013	14.9	Large Van
20)	Chevrolet Suburban ¹	22,036	0.011	15.4	Large Utility
21)	GMC Vandura/Rally ¹	21,375	0.011	17.5	Large Van
22)	Jeep Grand Wagoneer ¹	20,207	0.010	16.3	Large Utility
23)	Chevrolet Blazer ¹	19,932	0.010	17.9	Large Utility
24)	GMC C-25 ¹	19,794	0.010	18.0	Large Pickup
25)	Dodge Ram Wagon ¹	18,548	0.010	17.0	Large Van
26)	Mazda Pickup ³	14,931	0.008	31.0	Small Pickup
27)	Chevrolet Sport Van ¹	13,849	0.007	17.0	Large Van
28)	Volkswagen Vanagon ³	11,007	0.006	18.8	Small Van
29)	Dodge W150 ¹	10,333	0.005	15.9	Large Pickup
30)	Plymouth Arrow Pickup ⁴	10,270	0.005	24.6	Small Pickup
31)	Dodge D250 ¹	7,703	0.004	16.4	Large Pickup
32)	Isuzu Pickup ³	6,276	0.003	31.4	Small Pickup
33)	Jeep J10 ¹	5,826	0.003	17.0	Large Pickup
34)	Dodge W250 ¹	5,559	0.003	15.2	Large Pickup
35)	Dodge Ram Charger ¹	5,351	0.003	16.0	Large Utility
36)	Plymouth Voyager ¹	4,849	0.003	16.8	Large Van
37)	GMC Jimmy ¹	4,802	0.002	17.9	Large Utility
38)	GMC Caballero ¹	4,380	0.002	20.5	Large Pickup
39)	GMC Suburban ¹	4,289	0.002	15.4	Large Utility

Table F.6 (Continued)
 42 Light Trucks for *Model Year 1981* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
40)	Toyota Land Cruiser ³	2,051	0.001	14.0	Large Utility
41)	Plymouth Trail Duster ¹	1,990	0.001	16.1	Small Utility
42)	Jeep J20 ¹	1,356	0.001	14.5	Large Pickup
		1,935,416	1.000	19.8	

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Table F.7
46 Light Trucks for *Model Year 1982* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	336,547	0.158	17.3	Large Pickup
2)	Chevrolet C-10 ¹	309,303	0.145	20.1	Large Pickup
3)	Toyota Pickup ³	136,478	0.064	27.1	Small Pickup
4)	Chevrolet S-10 ¹	135,710	0.064	27.3	Small Pickup
5)	Ford Econoline ¹	122,399	0.057	16.5	Large Van
6)	Nissan Pickup ³	97,547	0.046	28.1	Small Pickup
7)	Chevrolet Van ¹	94,113	0.044	18.6	Large Van
8)	GMC C-15 ¹	77,557	0.036	20.3	Large Pickup
9)	Chevrolet C-20 ¹	73,972	0.035	20.7	Large Pickup
10)	Ford F250 ¹	63,631	0.030	15.3	Large Pickup
11)	Dodge D150 ¹	59,438	0.028	19.4	Large Pickup
12)	Dodge Ram Van ¹	58,976	0.028	17.4	Large Van
13)	Ford Bronco ¹	38,900	0.018	14.8	Large Utility
14)	Ford Courier ⁴	38,148	0.018	27.3	Small Pickup
15)	Mazda Pickup ³	33,670	0.016	31.6	Small Pickup
16)	GMC S-15 ¹	31,058	0.015	27.2	Small Pickup
17)	Dodge Ram 50 ⁴	30,912	0.014	27.4	Small Pickup
18)	Ford Club Wagon ¹	30,425	0.014	15.2	Large Van
19)	Jeep CJ ¹	27,950	0.013	21.0	Small Utility
20)	Dodge Ram Wagon ¹	27,546	0.013	17.2	Large Van
21)	Chevrolet LUV ⁴	26,359	0.012	30.8	Small Pickup
22)	GMC Vandura/Rally ¹	25,985	0.012	16.2	Large Van
23)	GMC C-25 ¹	25,442	0.012	19.7	Large Pickup
24)	Chevrolet Blazer ¹	24,746	0.012	20.1	Large Utility
25)	Chevrolet El Camino ¹	24,098	0.011	20.7	Large Pickup
26)	Chevrolet Suburban ¹	23,913	0.011	18.0	Large Utility
27)	Jeep Grand Wagoneer ¹	19,780	0.009	17.2	Large Utility
28)	Isuzu Pickup ³	16,705	0.008	32.6	Small Pickup
29)	Chevrolet Sport Van ¹	14,728	0.007	16.8	Large Van
30)	Volkswagen Pickup (Diesel) ³	13,349	0.006	43.7	Small Pickup
31)	Volkswagen Vanagon ³	11,964	0.006	22.5	Small Van
32)	Dodge D250 ¹	10,035	0.005	15.6	Large Pickup
33)	Dodge Ram Charger ¹	9,032	0.004	15.7	Large Utility
34)	Jeep Scrambler ¹	8,188	0.004	21.6	Small Pickup
35)	GMC Suburban ¹	7,921	0.004	17.6	Large Utility
36)	Dodge W150 ¹	7,776	0.004	16.0	Large Pickup
37)	GMC Jimmy ¹	6,213	0.003	19.6	Large Utility
38)	Plymouth Arrow Pickup ⁴	6,187	0.003	27.6	Small Pickup
39)	Volkswagen Pickup ³	4,952	0.002	30.0	Small Pickup
40)	Plymouth Voyager ¹	4,938	0.002	15.8	Large Van
41)	Jeep J10 ¹	4,682	0.002	18.3	Large Pickup
42)	Dodge W250 ¹	4,422	0.002	15.1	Large Pickup
43)	Toyota Land Cruiser ³	2,850	0.001	14.0	Large Utility

Table F.7 (Continued)
 46 Light Trucks for *Model Year 1982* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
44)	GMC Caballero ¹	2,654	0.001	20.7	Large Pickup
45)	Jeep J20 ¹	1,215	0.001	14.4	Large Pickup
46)	Plymouth Trail Duster ¹	426		16.1	Small Utility
		2,132,840	1.000	20.0	

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Table F.8
59 Light Trucks for *Model Year 1983* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	306,721	0.114	17.2	Large Pickup
2)	Chevrolet C-10 ¹	272,715	0.101	19.9	Large Pickup
3)	Chevrolet S-10 ¹	181,162	0.067	26.6	Small Pickup
4)	Toyota Pickup ³	169,104	0.063	28.4	Small Pickup
5)	Ford Ranger ¹	167,874	0.062	24.4	Small Pickup
6)	Ford Econoline ¹	153,477	0.057	16.3	Large Van
7)	Nissan Pickup ³	141,811	0.053	26.5	Small Pickup
8)	Chevrolet Van ¹	131,127	0.049	19.5	Large Van
9)	Ford F250 ¹	92,371	0.034	15.8	Large Pickup
10)	Chevrolet C-20 ¹	83,388	0.031	19.7	Large Pickup
11)	Chevrolet Blazer "S" ¹	79,996	0.030	24.2	Small Utility
12)	GMC C-15 ¹	73,533	0.027	20.0	Large Pickup
13)	Dodge Ram Van ¹	69,528	0.026	17.0	Large Van
14)	Mazda Pickup ³	63,515	0.024	31.2	Small Pickup
15)	Dodge D150 ¹	58,235	0.022	18.5	Large Pickup
16)	GMC Vandura/Rally ¹	43,138	0.016	17.0	Large Van
17)	GMC S-15 ¹	41,345	0.015	27.6	Small Pickup
18)	Ford Bronco ¹	40,719	0.015	15.3	Large Utility
19)	Ford Bronco II ¹	39,780	0.015	21.6	Small Utility
20)	Jeep CJ ¹	34,183	0.013	21.4	Small Utility
21)	Dodge Ram Wagon ¹	33,787	0.013	15.8	Large Van
22)	Dodge Ram 50 ⁴	31,815	0.012	26.5	Small Pickup
23)	Ford Club Wagon ¹	30,735	0.011	15.5	Large Van
24)	Chevrolet Blazer ¹	30,228	0.011	18.9	Large Utility
25)	Chevrolet Suburban ¹	30,164	0.011	17.9	Large Utility
26)	Jeep Grand Wagoneer ¹	24,216	0.009	17.0	Large Utility
27)	GMC C-25 ¹	23,468	0.009	20.3	Large Pickup
28)	Chevrolet El Camino ¹	23,177	0.009	20.6	Large Pickup
29)	Isuzu Pickup ³	22,432	0.008	34.2	Small Pickup
30)	Dodge Ram Charger ¹	19,005	0.007	15.1	Large Utility
31)	Chevrolet LUV ⁴	18,688	0.007	29.3	Small Pickup
32)	Chevrolet Sport Van ¹	17,929	0.007	17.2	Large Van
33)	GMC Jimmy "S" ¹	15,052	0.006	24.2	Small Utility
34)	Ford Courier ⁴	14,541	0.005	31.8	Small Pickup
35)	Volkswagen Vanagon ³	13,619	0.005	20.9	Small Van
36)	Dodge Rampage ¹	11,943	0.004	32.1	Small Pickup
37)	GMC Suburban ¹	10,466	0.004	17.1	Large Utility
38)	Dodge W150 ¹	10,048	0.004	15.3	Large Pickup
39)	Mitsubishi Pickup ³	7,245	0.003	27.3	Small Pickup
40)	Subaru Brat ³	6,855	0.003	29.5	Small Pickup
41)	GMC Jimmy ¹	6,614	0.002	20.5	Large Utility
42)	Dodge D250 ¹	5,463	0.002	15.0	Large Pickup
43)	Jeep Scrambler ¹	4,671	0.002	22.9	Small Pickup

Table F.8 (Continued)
 59 Light Trucks for *Model Year 1983* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
44)	Plymouth Voyager ¹	4,628	0.002	15.2	Large Van
45)	Volkswagen Pickup (Diesel) ³	4,576	0.002	43.5	Small Pickup
46)	Toyota Land Cruiser ³	4,463	0.002	14.0	Large Utility
47)	Jeep J10 ¹	3,243	0.001	18.2	Large Pickup
48)	Plymouth Scamp ¹	2,852	0.001	32.2	Small Pickup
49)	Volkswagen Pickup ³	2,459	0.001	30.0	Small Pickup
50)	Dodge W250 ¹	2,419	0.001	14.5	Large Pickup
51)	GMC Caballero ¹	2,126	0.001	20.9	Large Pickup
52)	Plymouth Arrow Pickup ⁴	1,544	0.001	26.6	Small Pickup
53)	Jeep J20 ¹	1,501	0.001	14.4	Large Pickup
54)	Jeep Cherokee XJ ¹	741		24.0	Small Utility
55)	Mitsubishi Montero ³	391		21.5	Small Utility
56)	Jeep Wagoneer XJ ¹	376		22.7	Small Utility
57)	Dodge Vista ⁴	45		31.0	Small Van
58)	Toyota Van ³	26		27.0	Small Van
59)	Plymouth Vista ⁴	26		31.0	Small Van
		2,687,299	1.000	20.5	

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Table F.9
70 Light Trucks for *Model Year 1984* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	360,620	0.100	17.0	Large Pickup
2)	Ford Ranger ¹	215,432	0.060	24.5	Small Pickup
3)	Chevrolet S-10 ¹	185,726	0.051	24.2	Small Pickup
4)	Ford Econoline ¹	173,630	0.048	15.5	Large Van
5)	Chevrolet Van ¹	159,245	0.044	18.8	Large Van
6)	Toyota Pickup ³	156,976	0.043	28.1	Small Pickup
7)	Chevrolet K-10 ¹	154,639	0.043	18.2	Large Pickup
8)	Chevrolet C-10 ¹	154,638	0.043	19.2	Large Pickup
9)	Chevrolet Blazer "S" ¹	139,453	0.039	23.4	Small Utility
10)	Ford F250 ¹	137,436	0.038	15.5	Large Pickup
11)	Mazda Pickup ³	114,987	0.032	29.6	Small Pickup
12)	Nissan Pickup ³	102,914	0.028	31.9	Small Pickup
13)	Ford Bronco II ¹	98,462	0.027	21.6	Small Utility
14)	Nissan Pickup-American ²	73,943	0.020	31.9	Small Pickup
15)	Dodge D150 ¹	72,744	0.020	16.7	Large Pickup
16)	Dodge Ram Van ¹	71,956	0.020	15.2	Large Van
17)	Dodge Caravan ¹	67,517	0.019	24.9	Small Van
18)	Toyota Pickup 4wd ³	67,276	0.019	24.1	Large Pickup
19)	Plymouth Voyager (FWD) ¹	64,874	0.018	24.8	Small Van
20)	Jeep Cherokee XJ ¹	55,583	0.015	24.0	Small Utility
21)	Chevrolet K-20 ¹	50,961	0.014	15.7	Large Pickup
22)	Chevrolet C-20 ¹	50,961	0.014	18.4	Large Pickup
23)	Chevrolet Suburban ¹	49,203	0.014	16.8	Large Utility
24)	Dodge Ram 50 ⁴	46,937	0.013	27.7	Small Pickup
25)	Ford Bronco ¹	46,544	0.013	14.6	Large Utility
26)	GMC Vandura/Rally ¹	45,541	0.013	17.0	Large Van
27)	Chevrolet Blazer ¹	45,165	0.013	18.3	Large Utility
28)	GMC S-15 ¹	43,594	0.012	24.3	Small Pickup
29)	Dodge Ram Wagon ¹	40,420	0.011	14.1	Large Van
30)	Jeep CJ ¹	38,573	0.011	24.0	Small Utility
31)	GMC K-15 ¹	37,729	0.010	18.2	Large Pickup
32)	GMC C-15 ¹	37,725	0.010	19.3	Large Pickup
33)	Isuzu Pickup ³	35,869	0.010	35.4	Small Pickup
34)	Toyota Van ³	33,787	0.009	27.0	Small Van
35)	GMC Jimmy "S" ¹	33,289	0.009	23.4	Small Utility
36)	Ford Club Wagon ¹	32,056	0.009	15.5	Large Van
37)	Dodge Ram Charger ¹	27,013	0.007	13.6	Large Utility
38)	Chevrolet El Camino ¹	24,926	0.007	20.8	Large Pickup
39)	Chevrolet Sport Van ¹	22,463	0.006	16.7	Large Van
40)	Jeep Grand Wagoneer ¹	19,052	0.005	13.3	Large Utility
41)	Jeep Wagoneer XJ ¹	19,016	0.005	22.7	Small Utility
42)	Volkswagen Vanagon ³	18,823	0.005	20.7	Small Van
43)	Dodge W150 ¹	16,758	0.005	13.7	Large Pickup

Table F.9 (Continued)
 70 Light Trucks for *Model Year 1984* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
44)	GMC Suburban ¹	15,526	0.004	17.4	Large Utility
45)	Dodge Mini Ram Van ¹	14,486	0.004	25.8	Small Van
46)	GMC K-25 ¹	13,997	0.004	16.1	Large Pickup
47)	GMC C-25 ¹	13,996	0.004	18.7	Large Pickup
48)	Mitsubishi Pickup ³	11,805	0.003	28.6	Small Pickup
49)	Dodge D250 ¹	11,711	0.003	14.3	Large Pickup
50)	Dodge Rampage ¹	10,321	0.003	28.9	Small Pickup
51)	GMC Jimmy ¹	8,675	0.002	15.7	Large Utility
52)	Toyota Cargo Van ³	8,504	0.002	23.0	Small Van
53)	Dodge Vista ⁴	7,672	0.002	31.0	Small Van
54)	Plymouth Vista ⁴	7,135	0.002	31.0	Small Van
55)	Dodge W250 ¹	6,412	0.002	13.2	Large Pickup
56)	Subaru Brat ³	6,271	0.002	29.3	Small Pickup
57)	Isuzu Trooper ³	4,188	0.001	20.0	Small Utility
58)	Toyota Land Cruiser ³	4,093	0.001	14.0	Large Utility
59)	Toyota 4Runner SR-5 ³	4,074	0.001	22.0	Small Utility
60)	Jeep Scrambler ¹	3,480	0.001	27.0	Small Pickup
61)	Mitsubishi Montero ³	2,880	0.001	21.5	Small Utility
62)	GMC Caballero ¹	2,751	0.001	20.9	Large Pickup
63)	Chevrolet LUV ⁴	2,533	0.001	29.7	Small Pickup
64)	Toyota 4Runner Truck ³	2,482	0.001	22.0	Small Utility
65)	Jeep J20 ¹	1,847	0.001	13.0	Large Pickup
66)	Jeep J10 ¹	1,845	0.001	15.7	Large Pickup
67)	Volkswagen Pickup ³	590		30.0	Small Pickup
68)	Plymouth Scamp ¹	572		32.2	Small Pickup
69)	Volkswagen Pickup (Diesel) ³	348		43.5	Small Pickup
70)	Plymouth Voyager ¹	284		15.2	Large Van
		3,612,934	1.000	20.0	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table F.10
73 Light Trucks for *Model Year 1985* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	385,537	0.091	17.1	Large Pickup
2)	Ford Ranger ¹	232,298	0.055	26.2	Small Pickup
3)	Chevrolet S-10 ¹	203,234	0.048	24.0	Small Pickup
4)	Toyota Pickup ³	194,244	0.046	29.5	Small Pickup
5)	Ford Econoline ¹	186,333	0.044	15.6	Large Van
6)	Chevrolet C-10 ¹	167,300	0.040	21.4	Large Pickup
7)	Chevrolet K-10 ¹	167,300	0.040	19.4	Large Pickup
8)	Chevrolet Blazer "S" ¹	166,370	0.039	22.4	Small Utility
9)	Ford F250 ¹	152,016	0.036	14.1	Large Pickup
10)	Chevrolet Van ¹	150,190	0.035	18.8	Large Van
11)	Nissan Pickup ³	119,742	0.028	29.4	Small Pickup
12)	Mazda Pickup ³	113,398	0.027	30.1	Small Pickup
13)	Dodge Caravan ¹	108,417	0.026	23.6	Small Van
14)	Plymouth Voyager (FWD) ¹	102,109	0.024	23.2	Small Van
15)	Dodge D150 ¹	98,316	0.023	17.1	Large Pickup
16)	Ford Bronco II ¹	96,906	0.023	21.9	Small Utility
17)	Jeep Cherokee XJ ¹	88,148	0.021	22.0	Small Utility
18)	Toyota Pickup 4wd ³	83,247	0.020	26.0	Large Pickup
19)	Nissan Pickup-American ²	80,040	0.019	29.4	Small Pickup
20)	Chevrolet Astro Van ¹	79,179	0.019	23.2	Small Van
21)	Dodge Ram 50 ⁴	66,745	0.016	26.9	Small Pickup
22)	Dodge Ram Van ¹	64,145	0.015	15.6	Large Van
23)	Chevrolet Suburban ¹	56,479	0.013	17.2	Large Utility
24)	Chevrolet C-20 ¹	54,619	0.013	18.6	Large Pickup
25)	Chevrolet K-20 ¹	54,619	0.013	17.9	Large Pickup
26)	Ford Bronco ¹	51,528	0.012	17.1	Large Utility
27)	Isuzu Pickup ³	49,271	0.012	31.5	Small Pickup
28)	GMC S-15 ¹	45,578	0.011	24.1	Small Pickup
29)	Chevrolet Blazer ¹	44,480	0.011	17.5	Large Utility
30)	GMC Vandura/Rally ¹	41,653	0.010	17.1	Large Van
31)	Dodge Ram Wagon ¹	40,051	0.009	15.1	Large Van
32)	GMC C-15 ¹	39,639	0.009	19.1	Large Pickup
33)	GMC K-15 ¹	39,639	0.009	17.7	Large Pickup
34)	GMC Jimmy "S" ¹	38,883	0.009	22.4	Small Utility
35)	Jeep CJ ¹	36,950	0.009	21.3	Small Utility
36)	Toyota Van ³	34,322	0.008	26.6	Small Van
37)	Dodge Ram Charger ¹	33,644	0.008	14.7	Large Utility
38)	Ford Club Wagon ¹	33,349	0.008	15.1	Large Van
39)	Nissan Pickup 4wd ³	31,638	0.007	23.0	Large Pickup
40)	Nissan Pickup 4wd-American ²	30,208	0.007	23.0	Large Pickup
41)	Dodge Mini Ram Van ¹	25,756	0.006	23.6	Small Van
42)	Toyota Cargo Van ³	24,303	0.006	26.4	Small Van
43)	Dodge W150 ¹	23,574	0.006	14.6	Large Pickup

Table F.10 (Continued)
 73 Light Trucks for *Model Year 1985* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
44)	Isuzu Trooper ³	22,828	0.005	23.0	Small Utility
45)	Mitsubishi Pickup ³	21,902	0.005	28.5	Small Pickup
46)	Chevrolet Sport Van ¹	20,521	0.005	16.4	Large Van
47)	Chevrolet El Camino ¹	20,233	0.005	20.8	Large Pickup
48)	GMC Safari ¹	18,563	0.004	23.2	Small Van
49)	Jeep Grand Wagoneer ¹	17,438	0.004	14.2	Large Utility
50)	GMC Suburban ¹	17,324	0.004	17.7	Large Utility
51)	Dodge D250 ¹	17,292	0.004	14.5	Large Pickup
52)	Volkswagen Vanagon ³	17,089	0.004	21.5	Small Van
53)	Jeep Wagoneer XJ ¹	14,709	0.003	21.2	Small Utility
54)	GMC C-25 ¹	14,030	0.003	18.8	Large Pickup
55)	GMC K-25 ¹	14,029	0.003	16.1	Large Pickup
56)	Toyota 4Runner Truck ³	11,696	0.003	27.0	Small Utility
57)	Dodge Vista ⁴	10,376	0.002	30.6	Small Van
58)	Plymouth Vista ⁴	10,079	0.002	30.6	Small Van
59)	GMC Jimmy ¹	8,349	0.002	17.7	Large Utility
60)	Dodge W250 ¹	8,075	0.002	14.2	Large Pickup
61)	Ford Aerostar Van ¹	7,467	0.002	23.4	Small Van
62)	Toyota 4Runner SR-5 ³	6,373	0.002	27.0	Small Utility
63)	Subaru Brat ³	5,284	0.001	29.4	Small Pickup
64)	Toyota Land Cruiser ³	3,732	0.001	14.0	Large Utility
65)	Mitsubishi Montero ³	2,807	0.001	21.2	Small Utility
66)	GMC Caballero ¹	2,504	0.001	20.9	Large Pickup
67)	Dodge Rampage ¹	2,039		27.4	Small Pickup
68)	Jeep Scrambler ¹	1,884		21.8	Small Pickup
69)	Jeep Comanche ¹	1,123		25.9	Large Pickup
70)	Jeep J10 ¹	1,108		16.0	Large Pickup
71)	Jeep J20 ¹	1,107		14.0	Large Pickup
72)	Volkswagen Pickup ³	5		30.0	Small Pickup
73)	Volkswagen Pickup (Diesel) ³	2		43.5	Small Pickup
		4,235,365	1.000	20.5	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table F.11
75 Light Trucks for *Model Year 1986* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	344,463	0.076	18.1	Large Pickup
2)	Ford Ranger ¹	284,316	0.063	25.1	Small Pickup
3)	Chevrolet S-10 ¹	215,201	0.047	22.4	Small Pickup
4)	Toyota Pickup ³	199,283	0.044	28.8	Small Pickup
5)	Chevrolet Blazer "S" ¹	186,891	0.041	19.2	Small Utility
6)	Ford Econoline ¹	175,103	0.039	16.8	Large Van
7)	Chevrolet C-10 ¹	150,009	0.033	19.7	Large Pickup
8)	Chevrolet K-10 ¹	150,009	0.033	17.1	Large Pickup
9)	Mazda Pickup ³	148,896	0.033	27.5	Small Pickup
10)	Ford F250 ¹	146,787	0.032	16.7	Large Pickup
11)	Chevrolet Van ¹	139,754	0.031	19.7	Large Van
12)	Chevrolet Astro Van ¹	139,141	0.031	22.9	Small Van
13)	Ford Aerostar Van ¹	135,545	0.030	23.6	Small Van
14)	Toyota Pickup 4wd ³	122,141	0.027	24.7	Large Pickup
15)	Dodge Caravan ¹	114,332	0.025	24.2	Small Van
16)	Ford Bronco II ¹	109,245	0.024	23.1	Small Utility
17)	Plymouth Voyager (FWD) ¹	108,284	0.024	24.2	Small Van
18)	Jeep Cherokee XJ ¹	100,242	0.022	22.3	Small Utility
19)	Nissan Pickup ³	94,922	0.021	29.7	Small Pickup
20)	Nissan Pickup-American ²	76,259	0.017	29.5	Small Pickup
21)	Dodge Ram 50 ⁴	72,717	0.016	25.9	Small Pickup
22)	Dodge Ram Van ¹	71,975	0.016	16.0	Large Van
23)	Dodge D150 ¹	63,752	0.014	16.7	Large Pickup
24)	Chevrolet Suburban ¹	62,848	0.014	17.3	Large Utility
25)	Isuzu Pickup ³	54,315	0.012	29.6	Small Pickup
26)	Ford Bronco ¹	51,649	0.011	14.6	Large Utility
27)	GMC S-15 ¹	49,139	0.011	22.4	Small Pickup
28)	Chevrolet C-20 ¹	47,202	0.010	17.3	Large Pickup
29)	Chevrolet K-20 ¹	47,202	0.010	15.8	Large Pickup
30)	Chevrolet Blazer ¹	46,362	0.010	16.8	Large Utility
31)	GMC Jimmy "S" ¹	43,710	0.010	19.2	Small Utility
32)	Dodge Ram Wagon ¹	41,028	0.009	15.0	Large Van
33)	GMC Vandura/Rally ¹	39,099	0.009	19.6	Large Van
34)	GMC C-15 ¹	38,570	0.009	19.7	Large Pickup
35)	GMC K-15 ¹	38,570	0.009	17.1	Large Pickup
36)	Jeep CJ ¹	36,122	0.008	21.4	Small Utility
37)	Jeep Comanche ¹	32,760	0.007	23.6	Large Pickup
38)	Suzuki Samurai ³	32,246	0.007	33.0	Small Utility
39)	Toyota Cargo Van ³	31,755	0.007	26.2	Small Van
40)	Isuzu Trooper ³	30,746	0.007	23.0	Small Utility
41)	GMC Safari ¹	29,743	0.007	22.8	Small Van
42)	Ford Club Wagon ¹	26,548	0.006	16.1	Large Van
43)	Mitsubishi Pickup ³	26,486	0.006	26.9	Small Pickup

Table F.11 (Continued)
 75 Light Trucks for *Model Year 1986* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
44)	Nissan Pickup 4wd-American ²	26,240	0.006	23.0	Large Pickup
45)	Nissan Pickup 4wd ³	25,080	0.006	23.0	Large Pickup
46)	Toyota 4Runner Truck ³	24,252	0.005	28.5	Small Utility
47)	Chevrolet El Camino ¹	23,767	0.005	21.9	Large Pickup
48)	Dodge Ram Charger ¹	21,774	0.005	14.8	Large Utility
49)	Toyota Van ³	21,306	0.005	26.3	Small Van
50)	GMC Suburban ¹	19,287	0.004	16.6	Large Utility
51)	Dodge Vista ⁴	17,308	0.004	25.0	Small Van
52)	Chevrolet Sport Van ¹	17,051	0.004	16.0	Large Van
53)	Dodge W150 ¹	16,966	0.004	14.5	Large Pickup
54)	Jeep Grand Wagoneer ¹	16,844	0.004	14.1	Large Utility
55)	Plymouth Vista ⁴	16,117	0.004	25.0	Small Van
56)	Dodge Mini Ram Van ¹	15,731	0.003	24.4	Small Van
57)	GMC C-25 ¹	13,736	0.003	17.4	Large Pickup
58)	GMC K-25 ¹	13,736	0.003	15.9	Large Pickup
59)	Jeep Wagoneer XJ ¹	13,006	0.003	21.0	Small Utility
60)	Volkswagen Vanagon ³	11,674	0.003	19.0	Small Van
61)	Dodge D250 ¹	10,131	0.002	15.5	Large Pickup
62)	Jeep Wrangler ¹	9,992	0.002	21.3	Small Utility
63)	GMC Jimmy ¹	9,686	0.002	16.9	Large Utility
64)	Toyota 4Runner SR-5 ³	5,787	0.001	23.5	Small Utility
65)	Dodge W250 ¹	5,294	0.001	13.5	Large Pickup
66)	Toyota Land Cruiser ³	5,175	0.001	14.0	Large Utility
67)	Mitsubishi Montero ³	5,152	0.001	21.7	Small Utility
68)	Dodge Dakota ¹	4,533	0.001	22.9	Large Pickup
69)	Subaru Brat ³	3,852	0.001	30.5	Small Pickup
70)	GMC Caballero ¹	2,795	0.001	21.9	Large Pickup
71)	Dodge Raider ⁴	1,066		21.0	Small Utility
72)	Jeep J20 ¹	904		14.0	Large Pickup
73)	Jeep J10 ¹	900		16.5	Large Pickup
74)	Nissan Pathfinder E ³	195		19.0	Small Utility
75)	Jeep Scrambler ¹	184		21.2	Small Pickup
		4,534,888	1.000	20.8	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

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³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table F.12
79 Light Trucks for *Model Year 1987* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	327,202	0.071	16.8	Large Pickup
2)	Ford Ranger ¹	293,333	0.064	25.9	Small Pickup
3)	Chevrolet S-10 ¹	216,693	0.047	25.1	Small Pickup
4)	Ford Econoline ¹	186,166	0.041	16.2	Large Van
5)	Toyota Pickup ³	166,343	0.036	28.6	Small Pickup
6)	Ford Aerostar Van ¹	163,898	0.036	23.3	Small Van
7)	Chevrolet Blazer "S" ¹	153,436	0.034	21.2	Small Utility
8)	Chevrolet Astro Van ¹	149,977	0.033	22.1	Small Van
9)	Chevrolet C-10 ¹	140,016	0.031	18.5	Large Pickup
10)	Chevrolet K-10 ¹	140,016	0.031	17.9	Large Pickup
11)	Mazda Pickup ³	139,390	0.030	28.0	Small Pickup
12)	Dodge Caravan ¹	138,380	0.030	23.9	Small Van
13)	Ford F250 ¹	136,779	0.030	16.7	Large Pickup
14)	Plymouth Voyager (FWD) ¹	130,245	0.028	24.1	Small Van
15)	Ford Bronco II ¹	117,135	0.026	22.9	Small Utility
16)	Chevrolet Van ¹	110,525	0.024	18.3	Large Van
17)	Jeep Cherokee XJ ¹	108,951	0.024	22.0	Small Utility
18)	Toyota Pickup 4wd ³	105,460	0.023	24.4	Large Pickup
19)	Dodge Dakota ¹	104,866	0.023	22.7	Large Pickup
20)	Suzuki Samurai ³	81,560	0.018	33.0	Small Utility
21)	Nissan Pickup ³	79,027	0.017	26.1	Small Pickup
22)	Dodge Ram Van ¹	68,324	0.015	15.8	Large Van
23)	Nissan Pickup-American ²	66,438	0.015	26.1	Small Pickup
24)	Dodge Ram 50 ⁴	63,838	0.014	27.8	Small Pickup
25)	Chevrolet Suburban ¹	54,828	0.012	17.1	Large Utility
26)	Dodge D150 ¹	52,442	0.011	16.6	Large Pickup
27)	Ford Bronco ¹	48,718	0.011	15.7	Large Utility
28)	GMC S-15 ¹	47,239	0.010	25.0	Small Pickup
29)	Isuzu Trooper ³	46,642	0.010	23.7	Small Utility
30)	Isuzu Pickup ³	46,254	0.010	28.4	Small Pickup
31)	Chevrolet C-20 ¹	42,307	0.009	18.2	Large Pickup
32)	Chevrolet K-20 ¹	42,307	0.009	16.9	Large Pickup
33)	Jeep Comanche ¹	38,613	0.008	23.7	Large Pickup
34)	GMC Vandura/Rally ¹	37,476	0.008	17.7	Large Van
35)	GMC C-15 ¹	37,042	0.008	18.4	Large Pickup
36)	GMC K-15 ¹	37,042	0.008	17.1	Large Pickup
37)	GMC Jimmy "S" ¹	36,625	0.008	21.2	Small Utility
38)	Toyota 4Runner Truck ³	35,930	0.008	24.6	Small Utility
39)	Mitsubishi Pickup ³	32,819	0.007	27.5	Small Pickup
40)	GMC Safari ¹	31,844	0.007	22.2	Small Van
41)	Nissan Pathfinder E ³	31,500	0.007	19.7	Small Utility
42)	Dodge Ram Wagon ¹	31,342	0.007	14.7	Large Van
43)	Chevrolet Blazer ¹	30,304	0.007	17.0	Large Utility

Table F.12 (Continued)
79 Light Trucks for *Model Year 1987* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
44)	Jeep Wrangler ¹	28,699	0.006	21.5	Small Utility
45)	Ford Club Wagon ¹	27,420	0.006	15.6	Large Van
46)	Dodge Ram Charger ¹	22,828	0.005	14.5	Large Utility
47)	Dodge W150 ¹	22,286	0.005	14.7	Large Pickup
48)	Toyota Cargo Van ³	21,880	0.005	25.2	Small Van
49)	Dodge Raider ⁴	18,962	0.004	21.0	Small Utility
50)	GMC Suburban ¹	18,886	0.004	17.1	Large Utility
51)	Dodge Vista ⁴	17,761	0.004	26.0	Small Van
52)	Toyota Van ³	17,446	0.004	25.0	Small Van
53)	Plymouth Vista ⁴	16,452	0.004	26.0	Small Van
54)	Jeep Grand Wagoneer ¹	15,965	0.003	14.0	Large Utility
55)	Chevrolet El Camino ¹	15,626	0.003	20.3	Large Pickup
56)	Jeep Wagoneer XJ ¹	14,001	0.003	21.1	Small Utility
57)	Dodge Mini Ram Van ¹	13,472	0.003	23.9	Small Van
58)	Nissan Pickup 4wd ³	13,187	0.003	19.3	Large Pickup
59)	Nissan Van ³	13,084	0.003	22.5	Small Van
60)	Dodge Power Ram 50 ⁴	13,075	0.003	23.9	Large Pickup
61)	GMC C-25 ¹	12,870	0.003	18.2	Large Pickup
62)	GMC K-25 ¹	12,870	0.003	16.9	Large Pickup
63)	Chevrolet Sport Van ¹	12,015	0.003	17.0	Large Van
64)	Volkswagen Vanagon ³	11,137	0.002	19.5	Small Van
65)	Nissan Pickup 4wd-American ²	10,815	0.002	19.3	Large Pickup
66)	Mitsubishi Montero ³	10,583	0.002	21.0	Small Utility
67)	GMC Jimmy ¹	9,321	0.002	17.0	Large Utility
68)	Dodge D250 ¹	8,084	0.002	15.4	Large Pickup
69)	Mitsubishi Wagon ³	5,507	0.001	22.0	Small Van
70)	Dodge W250 ¹	4,964	0.001	13.2	Large Pickup
71)	Toyota Land Cruiser ³	4,553	0.001	14.0	Large Utility
72)	Mitsubishi Pickup 4wd ³	3,728	0.001	23.2	Large Pickup
73)	Toyota 4Runner SR-5 ³	2,801	0.001	24.6	Small Utility
74)	Jeep CJ ¹	2,493	0.001	21.5	Small Utility
75)	Mitsubishi Van ³	2,421	0.001	24.0	Small Van
76)	Subaru Brat ³	2,330	0.001	30.5	Small Pickup
77)	GMC Caballero ¹	1,882		20.3	Large Pickup
78)	Jeep J10 ¹	680		14.5	Large Pickup
79)	Jeep J20 ¹	680		14.0	Large Pickup
		4,580,036	1.000	20.9	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table F.13
83 Light Trucks for *Model Year 1988* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	382,494	0.081	17.9	Large Pickup
2)	Ford Ranger ¹	303,666	0.064	25.2	Small Pickup
3)	Chevrolet S-10 ¹	235,452	0.050	27.1	Small Pickup
4)	Dodge Caravan ¹	205,223	0.043	23.5	Small Van
5)	Plymouth Voyager (FWD) ¹	187,715	0.040	23.5	Small Van
6)	Ford Econoline ¹	187,591	0.040	16.1	Large Van
7)	Chevrolet C-10 ¹	178,547	0.038	19.3	Large Pickup
8)	Chevrolet K-10 ¹	178,547	0.038	17.3	Large Pickup
9)	Ford Aerostar Van ¹	177,039	0.037	22.1	Small Van
10)	Chevrolet Blazer "S" ¹	160,586	0.034	22.3	Small Utility
11)	Chevrolet Astro Van ¹	160,291	0.034	22.1	Small Van
12)	Ford F250 ¹	148,290	0.031	17.0	Large Pickup
13)	Jeep Cherokee XJ ¹	141,279	0.030	21.9	Small Utility
14)	Toyota Pickup ³	130,020	0.027	27.1	Small Pickup
15)	Chevrolet Van ¹	129,148	0.027	19.2	Large Van
16)	Ford Bronco II ¹	124,917	0.026	22.3	Small Utility
17)	Toyota Pickup 4wd ³	105,951	0.022	24.8	Large Pickup
18)	Mazda Pickup ³	98,012	0.021	24.1	Small Pickup
19)	Dodge Dakota ¹	91,850	0.019	21.1	Large Pickup
20)	Nissan Pickup-American ²	84,715	0.018	26.3	Small Pickup
21)	Suzuki Samurai ³	66,406	0.014	33.0	Small Utility
22)	Chevrolet Suburban ¹	64,845	0.014	17.1	Large Utility
23)	Dodge Ram Van ¹	56,634	0.012	16.5	Large Van
24)	Ford Bronco ¹	54,848	0.012	15.7	Large Utility
25)	Dodge D150 ¹	50,983	0.011	16.6	Large Pickup
26)	GMC S-15 ¹	49,939	0.011	27.1	Small Pickup
27)	GMC Vandura/Rally ¹	46,396	0.010	18.3	Large Van
28)	GMC C-15 ¹	45,074	0.010	19.3	Large Pickup
29)	GMC K-15 ¹	45,074	0.010	17.3	Large Pickup
30)	Isuzu Trooper ³	43,150	0.009	20.0	Small Utility
31)	Dodge Ram 50 ⁴	42,595	0.009	27.6	Small Pickup
32)	GMC Jimmy "S" ¹	41,768	0.009	22.3	Small Utility
33)	Jeep Wrangler ¹	39,962	0.008	20.6	Large Utility
34)	Jeep Comanche ¹	39,224	0.008	23.4	Large Pickup
35)	GMC Safari ¹	34,785	0.007	22.1	Small Van
36)	Mitsubishi Pickup ³	34,588	0.007	27.0	Small Pickup
37)	Nissan Pickup 4wd-American ²	28,692	0.006	19.5	Large Pickup
38)	Chevrolet Blazer ¹	28,540	0.006	17.0	Large Utility
39)	Chevrolet C-20 ¹	28,372	0.006	18.6	Large Pickup
40)	Chevrolet K-20 ¹	28,372	0.006	17.0	Large Pickup
41)	Nissan Pathfinder E ³	28,323	0.006	18.2	Small Utility
42)	Ford Club Wagon ¹	27,728	0.006	15.6	Large Van

Table F.13 (Continued)
83 Light Trucks for Model Year 1988 Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
43)	Dodge Ram Wagon ¹	26,642	0.006	15.0	Large Van
44)	Isuzu Pickup ³	26,047	0.005	25.2	Small Pickup
45)	GMC Suburban ¹	22,224	0.005	17.2	Large Utility
46)	Nissan Pickup ³	21,436	0.005	26.1	Small Pickup
47)	Dodge Ram Charger ¹	19,955	0.004	14.6	Large Utility
48)	Dodge Mini Ram Van ¹	19,019	0.004	21.3	Small Van
49)	Toyota 4Runner SR-5 ³	18,858	0.004	23.3	Small Utility
50)	Dodge W150 ¹	18,797	0.004	13.8	Large Pickup
51)	GMC C-25 ¹	16,029	0.003	18.8	Large Pickup
52)	GMC K-25 ¹	16,029	0.003	17.1	Large Pickup
53)	Jeep Grand Wagoneer ¹	14,779	0.003	14.0	Large Utility
54)	Dodge Power Ram 50 ⁴	13,747	0.003	23.5	Large Pickup
55)	Nissan Van ³	13,585	0.003	22.2	Small Van
56)	Isuzu Pickup 4wd ³	13,418	0.003	21.8	Large Pickup
57)	Chevrolet Sport Van ¹	12,842	0.003	17.5	Large Van
58)	Toyota Cargo Van ³	12,161	0.003	25.0	Small Van
59)	Dodge Vista ⁴	10,296	0.002	27.0	Small Van
60)	Toyota 4Runner Truck ³	9,541	0.002	21.3	Small Utility
61)	Plymouth Vista ⁴	9,522	0.002	27.0	Small Van
62)	Jeep Wagoneer XJ ¹	9,397	0.002	21.0	Small Utility
63)	Dodge Raider ⁴	9,382	0.002	20.7	Small Utility
64)	GMC Jimmy ¹	8,179	0.002	17.1	Large Utility
65)	Mitsubishi Montero ³	7,221	0.002	20.7	Small Utility
66)	Dodge W250 ¹	7,005	0.001	13.6	Large Pickup
67)	Toyota Land Cruiser ³	6,891	0.001	15.0	Large Utility
68)	Dodge D250 ¹	6,827	0.001	15.8	Large Pickup
69)	Mitsubishi Wagon ³	6,736	0.001	22.0	Small Van
70)	Volkswagen Vanagon ³	6,449	0.001	20.4	Small Van
71)	Toyota Van ³	6,408	0.001	25.0	Small Van
72)	Nissan Pickup 4wd ³	3,577	0.001	19.3	Large Pickup
73)	Range Rover ³	3,563	0.001	17.0	Large Utility
74)	Mitsubishi Pickup 4wd ³	3,008	0.001	22.2	Large Pickup
75)	Chevrolet El Camino ¹	2,567	0.001	20.3	Large Pickup
76)	Mitsubishi Van ³	2,041		24.0	Small Van
77)	GMC Caballero ¹	325		20.3	Large Pickup
78)	Jeep J10 ¹	228		20.0	Large Pickup
79)	Jeep J20 ¹	228		14.0	Large Pickup
80)	Suzuki Sidekick ³	201		31.7	Small Utility

Table F.13 (Continued)
 83 Light Trucks for *Model Year 1988* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
81)	Mazda MPV ³	114		23.4	Small Van
82)	Subaru Brat ³	81		30.5	Small Pickup
83)	Geo Tracker ⁴	14		31.4	Small Utility
		4,743,000	1.000	20.7	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Table F.14
85 Light Trucks for *Model Year 1989* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
1)	Ford F100/F150 ¹	355,150	0.075	17.5	Large Pickup
2)	Ford Ranger ¹	273,336	0.057	24.5	Small Pickup
3)	Dodge Caravan ¹	203,786	0.043	23.4	Small Van
4)	Chevrolet C-10 ¹	202,278	0.042	19.0	Large Pickup
5)	Chevrolet K-10 ¹	202,278	0.042	17.4	Large Pickup
6)	Chevrolet S-10 ¹	200,265	0.042	26.0	Small Pickup
7)	Chevrolet Blazer "S" ¹	193,092	0.041	22.5	Small Utility
8)	Ford Aerostar Van ¹	192,685	0.040	22.5	Small Van
9)	Plymouth Voyager(FWD) ¹	184,694	0.039	23.4	Small Van
10)	Ford Econoline ¹	176,961	0.037	15.9	Large Van
11)	Ford F250 ¹	166,976	0.035	16.5	Large Pickup
12)	Jeep Cherokee XJ ¹	163,236	0.034	20.7	Small Utility
13)	Chevrolet Astro Van ¹	150,136	0.032	22.1	Small Van
14)	Chevrolet Van ¹	120,240	0.025	18.3	Large Van
15)	Toyota Pickup ³	116,099	0.024	27.1	Small Pickup
16)	Ford Bronco II ¹	111,108	0.023	22.2	Small Utility
17)	Toyota Pickup 4wd ³	94,607	0.020	23.3	Large Pickup
18)	Dodge Dakota ¹	88,673	0.019	20.9	Large Pickup
19)	Nissan Pickup-American ²	86,974	0.018	26.0	Small Pickup
20)	Mazda Pickup ³	81,016	0.017	25.6	Small Pickup
21)	Dodge Ram Van ¹	69,788	0.015	16.4	Large Van
22)	Chevrolet Suburban ¹	68,414	0.014	17.0	Large Utility
23)	Ford Bronco ¹	62,913	0.013	15.8	Large Utility
24)	Chevrolet C-20 ¹	56,281	0.012	17.9	Large Pickup
25)	Chevrolet K-20 ¹	56,281	0.012	17.0	Large Pickup
26)	Jeep Wrangler ¹	51,788	0.011	20.5	Small Utility
27)	GMC C-15 ¹	50,406	0.011	19.0	Large Pickup
28)	GMC K-15 ¹	50,406	0.011	17.4	Large Pickup
29)	Isuzu Trooper ³	50,260	0.011	19.3	Small Utility
30)	GMC Jimmy "S" ¹	46,388	0.010	22.5	Small Utility
31)	GMC S-15 ¹	42,932	0.009	25.8	Small Pickup
32)	GMC Vandura/Rally ¹	42,014	0.009	17.9	Large Van
33)	Chevrolet S-10 4wd ¹	41,601	0.009	23.1	Large Pickup
34)	Dodge D150 ¹	40,403	0.008	16.6	Large Pickup
35)	Nissan Pickup 4wd-American ²	38,529	0.008	19.5	Large Pickup
36)	Mazda MPV ³	33,237	0.007	22.6	Small Van
37)	GMC Safari ¹	32,430	0.007	22.0	Small Van
38)	Isuzu Pickup ³	28,591	0.006	25.2	Small Pickup
39)	Jeep Comanche ¹	27,399	0.006	21.9	Large Pickup
40)	Ford Club Wagon ¹	27,065	0.006	15.5	Large Van

Table F.14 (Continued)
 85 Light Trucks for *Model Year 1989* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
41)	Toyota 4Runner SR-5 ³	26,077	0.005	21.8	Small Utility
42)	Dodge Ram Wagon ¹	25,292	0.005	14.9	Large Van
43)	Chevrolet Blazer ¹	24,597	0.005	17.1	Large Utility
44)	Nissan Pathfinder E ³	24,349	0.005	18.7	Small Utility
45)	Dodge Ram 50 ⁴	24,146	0.005	27.5	Small Pickup
46)	GMC Suburban ¹	23,393	0.005	17.0	Large Utility
47)	Mitsubishi Pickup ³	22,856	0.005	27.0	Small Pickup
48)	Dodge Ram Charger ¹	20,443	0.004	14.7	Large Utility
49)	GMC C-25 ¹	19,929	0.004	17.9	Large Pickup
50)	GMC K-25 ¹	19,929	0.004	17.0	Large Pickup
51)	Suzuki Sidekick ³	19,114	0.004	31.7	Small Utility
52)	Dodge W150 ¹	16,421	0.003	14.0	Large Pickup
53)	Dodge Mini Ram Van ¹	14,913	0.003	23.4	Small Van
54)	Isuzu Pickup 4wd ³	14,728	0.003	21.9	Large Pickup
55)	Mitsubishi Montero ³	12,404	0.003	21.0	Small Utility
56)	Jeep Grand Wagoneer ¹	12,338	0.003	14.0	Large Utility
57)	Toyota 4Runner Truck ³	10,852	0.002	21.8	Small Utility
58)	Chevrolet Sport Van ¹	10,402	0.002	17.6	Large Van
59)	GMC S-15 4wd ¹	10,071	0.002	23.0	Large Pickup
60)	Dodge Raider ⁴	9,703	0.002	21.0	Small Utility
61)	Geo Tracker ⁴	9,448	0.002	31.4	Small Utility
62)	Dodge D250 ¹	9,339	0.002	16.5	Large Pickup
63)	Dodge W250 ¹	9,181	0.002	13.6	Large Pickup
64)	Dodge Power Ram 50 ⁴	7,793	0.002	21.7	Large Pickup
65)	Dodge Vista ⁴	7,711	0.002	27.3	Small Van
66)	Jeep Wagoneer XJ ¹	7,673	0.002	20.3	Small Utility
67)	Suzuki Samurai ³	7,483	0.002	33.0	Small Utility
68)	GMC Jimmy ¹	7,036	0.001	17.1	Large Utility
69)	Plymouth Vista ⁴	7,019	0.001	27.3	Small Van
70)	Toyota Cargo Van ³	6,851	0.001	25.2	Small Van
71)	Nissan Axxess ³	6,123	0.001	24.9	Small Van
72)	Nissan Van ³	5,196	0.001	22.2	Small Van
73)	Toyota Land Cruiser ³	5,068	0.001	15.0	Large Utility
74)	Volkswagen Vanagon ³	5,015	0.001	21.1	Small Van
75)	Toyota Van ³	4,771	0.001	25.1	Small Van
76)	Isuzu Amigo ³	4,575	0.001	22.3	Small Utility
77)	Range Rover ³	4,462	0.001	15.0	Large Utility
78)	Mitsubishi Wagon ³	2,518	0.001	22.0	Small Van
79)	Mitsubishi Pickup 4wd ³	1,987		21.1	Large Pickup
80)	Nissan Pickup ³	1,621		26.1	Small Pickup

Table F.14 (Continued)
 85 Light Trucks for *Model Year 1989* Ranked by Sales

		Model year sales	Ratio of total truck sales	Sales weighted MPG	Size class
81)	Mitsubishi Van ³	1,190		24.0	Small Van
82)	Plymouth Town & Country ¹	968		24.0	Small Van
83)	Nissan Pickup 4wd ³	270		19.3	Large Pickup
84)	Chevrolet Lumina APV ¹	68		23.0	Small Van
85)	Subaru Brat ³	3		30.5	Small Pickup
		4,766,042	1.000	20.2	

¹Built in the U.S. by one of the "Big 3" companies (Chrysler, Ford, General Motors).

²Built in the U.S. by a foreign firm (transplants and joint ventures).

³Built abroad by a foreign firm.

⁴Built abroad by U.S. based firm (captive imports).

Appendix G

Methodology for Estimating Sales-Weighted Fuel Economy

The ORNL MPG and Market Share PC Data System, developed under the sponsorship of the Office of Transportation Systems, DOE, monitors changes in the composition of new car sales, in sales-weighted fuel economies, and in sales-weighted vehicle characteristics. Sales statistics, fuel economies, engine/transmission configurations and other vehicle characteristics for each of the nameplates in a given model year are maintained in the data base system. However, for some imports (Mercedes Benz, BMW) and standard size light trucks (e.g., Ford F100/F150, Chevrolet C-10, Chevrolet C-20) the specific nameplate sales are not available. In order to estimate the sales of the specific makes and models for these vehicles, the previous year's production percentages and the total manufacturer's sales are used to estimate the sales data by make and model.

Sales data are reported by make and model while EPA estimated fuel economies (mpg) are broken down by engine size and transmission type within a given make and model. Prior to 1983, an unweighted harmonic mean of fuel economies was calculated and reported in all the previous publications. A numerical example is given to illustrate how the unweighted fuel economy for a given nameplate was calculated:

- (1) Information from the *Gas Mileage Guide* for each nameplate is entered by engine/transmission configurations as follows:

Table 1.
Engine/Transmission Configurations of
Chevrolet Chevette

Combined MPG	Engine Description		Type	Transmission
	CID	CYL		
36	98	4	FFS	M5
32	98	4	FFS	A3
35	98	4	FFS	M4
48	111	4	CAL DIESEL	M5
49	111	4	DIESEL	M5
40	111	4	DIESEL	A3

- (2) Because sales data are only available for a given nameplate and not by specific engine/transmission configuration, the unweighted harmonic mean of fuel economy for Chevrolet Chevette was calculated as:

$$\left[\frac{1/36 + 1/32 + 1/35 + 1/48 + 1/49 + 1/40}{6} \right]^{-1} = 39 \text{ mpg.}$$

This estimated fuel economy could reflect mpg changes due to sales shifts across models or changes in EPA size classes quite accurately. However, it could not capture the effect of how shifting to a more efficient engine/transmission type within a given nameplate will change the fuel economy. Estimates made in 1982 showed that the error introduced by this approach was small (*Motor Vehicle MPG and Market Shares*, 81/4, March 1982, pp. 38-40).

By 1983, however, it had become apparent that the unweighted approach was producing unreliable estimates of make and model fuel economy. The primary reason for this was the high number of diesel options available combined with the relatively low sales for these vehicles. ORNL solved this problem by estimating the sales percentages for the individual engine and transmission combinations. The fuel economy of a nameplate is therefore estimated by weighting the individual fuel economies of each engine/transmission combination by the corresponding sales percentages. Since sales data are not available at the engine/transmission level, the sales percentages by engine/transmission combination are estimated based on the percentage breakdown by engine type and on the percentage breakdown by transmission type of factory installations. From *Ward's Automotive Reports*, the marginal totals for % factory-installed equipment data are available to form the marginal totals of a matrix of engine vs. transmission type, such as:

		Transmission Type			% installed
		M4	M5	A3	
Engine Type	Gasoline				E1
	Diesel				E2
% installed		T1	T2	T3	

Where it is known that engine/transmission combinations do not exist, a zero is inserted in the appropriate cell (e.g. E2, T1). By employing the **iterative proportional fitting procedure** (IPF), the percentages of each engine/transmission combination installed can be estimated based on the known marginal percentages E1, E1, T1, T2 and T3. Upon completion of this estimating procedure, the sales percentages for each engine/transmission combination can be obtained by multiplying the nameplate's total sales by the corresponding percentages of engine/transmission combinations installed by the factory. The fuel economy of the nameplate can then be estimated by weighting the fuel economies by the corresponding sales percentages at each engine/transmission combination level.

For Chevrolet Chevette, the marginal totals of % factory-installed equipment are as follows:

		Transmission Type			% installed
		M4	M5	A3	
Engine Type	Gasoline				98.8
	Diesel				1.2
% installed		33.8	4.2	62.0	

Applying iterative proportional fitting to this table yields the following estimated installation percentages:

		Transmission Type			% installed
		M4	M5	A3	
Engine Type	Gasoline	33.8	3.54	61.46	98.8
	Diesel	0.0	0.66	0.54	1.2
% installed		33.8	4.2	62.0	

Since no information is available on the split between California and non-California diesel sales, the 0.66 is split evenly between them. Table 1 can be improved as follows:

Chevrolet Chevette

Combined MPG	Engine Description		Type	Transmission	Installation Percentages
	CID	CYL			
36	98	4	FFS	M5	0.035
32	98	4	FFS	A3	0.615
35	98	4	FFS	M4	0.338
48	111	4	CAL DIESEL	M5	0.003
49	111	4	DIESEL	M5	0.003
40	111	4	DIESEL	A3	0.005

Using these installation percentages as weighting factors, the sales-weighted harmonic mean of fuel economy for Chevrolet Chevette is obtained by:

$$\left[\frac{0.035 * (1/36) + 0.615 * (1/32) + \dots + 0.005 * (1/40)}{(0.035 + 0.615 + 0.338 + 0.003 + 0.003 + 0.005)} \right]^{-1} = 33 \text{ mpg.}$$

Appendix H

Methodology for Estimating Sales-Weighted Vehicle Characteristics

The ORNL MPG and Market Shares PC Data System, developed under the sponsorship of the Office of Transportation Systems, U.S. Department of Energy, monitors changes in the composition of new car sales, in sales-weighted fuel economies, and in sales-weighted vehicle characteristics. Sales statistics (updated every quarter), fuel economies, engine/transmission configurations and other vehicle characteristics for each of the nameplates in a given model year are maintained in the data base system.

In order to obtain a reliable estimate of vehicle characteristics for a fleet of vehicles, a sales-weighted methodology is used. Two different calculations are required in this sales-weighted approach depending on at which aggregation level the data are available.

For vehicle characteristics that are specified by given engine and transmission combinations, sales by engine and transmission combinations should be used as the weighting factors. However, complication arises in doing so since sales data broken down in such a detailed level are not available readily. In order to approximate the sales distribution among various engine and transmission configurations of a given make and model, the "factory installation percentages"¹ are used as the estimated shares of engine and transmission configurations of a given make and model.

¹"Percent of Factory-Installed Equipment" published in *Ward's Automotive Reports*, Ward's Communications, Inc., Detroit, Michigan.

Let X_{ij} be the vehicle characteristics (i.e., 125 cubic inches) for a given attribute (e.g., engine size) for engine and transmission configuration j of make and model i . Let F_{ij} be the factory installation percentage for configuration j of make and model i . The sales-weighted vehicle characteristic X_i for make and model i can be calculated as:

$$X_i = \frac{\sum_j X_{ij} F_{ij}}{\sum_j F_{ij}} \quad (1)$$

where $\sum_j F_{ij} = 1.0$.

Vehicle characteristics calculated by (1) and other vehicle characteristics which are already available by make and model use actual sales data as the weighting factors. Let S_i be the sales for make and model i . The sales-weighted vehicle characteristics X of a specific fleet (e.g., domestic cars, import subcompacts, etc.) can be calculated as:

$$X = \frac{\sum_i X_i F_i}{\sum_i S_i} \quad (2)$$

where $F_i = S_i / \sum_i S_i$ and $\sum_i F_i = 1.0$.

A numerical example is given to illustrate this approach. In model year 1987, Dodge Caravan has the following engine type and transmission combinations that have different engine size (in cubic inches):

Dodge Caravan

Transmission & Fuel System	Number of Cylinders	Engine Size (in ³) X_{ij}	Share F_{ij}
A3	4	135	0.472
M5	4	135	0.038
A3/FI	4	152	0.236
M5/FI	4	152	0.019
A3	4	156	0.236
Total			1.000

The sales-weighted engine size for 1987 Dodge Caravan can be calculated as follows:

$$135 \cdot 0.472 + 135 \cdot 0.038 + 152 \cdot 0.236 + 152 \cdot 0.019 + 156 \cdot 0.236 = 144.3 \text{ in}^3 \quad (3)$$

A similar approach will apply to all fourteen mini vans in model year 1987 to calculate their specific engine sizes. Their engine sizes and their market shares are as follows:

Nameplate	Engine Size X_i	Sales	S_i
Ford Aerostar Van	179.2	163,898	0.223
Chevrolet Astro Van	258.8	149,977	0.204
Dodge Caravan	144.3*	138,380	0.189
Plymouth Voyager	155.9	130,245	0.178
GMC Safari	256.5	31,844	0.043
Toyota Cargo Van	137.0	21,880	0.030
Dodge Vista	122.0	17,761	0.024
Toyota Van	137.0	17,446	0.024
Plymouth Vista	122.0	16,452	0.022
Dodge Mini Ram Van	144.3	13,472	0.018
Nissan Van	146.0	13,084	0.018
Volkswagen Vanagon	129.0	11,137	0.015
Mitsubishi Wagon	143.0	5,507	0.008
Mitsubishi Van	143.0	2,421	0.003
Total		733,504	1.000

* is calculated using (3).

The sales-weighted **arithmetic** mean of engine size of 1987 mini vans is:

$$179.2 \cdot 0.223 + 258.7 \cdot 0.204 + 144.3 \cdot 0.189 + \dots + 143.0 \cdot 0.003 = 180.7 \text{ in}^3$$

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