

Past and Future Trends in Light Truck Sales

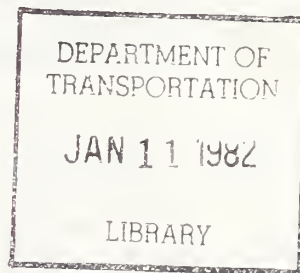
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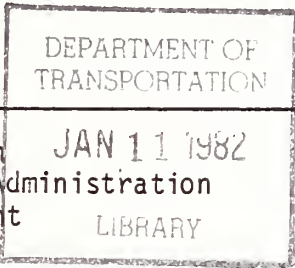
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16. Abstract This report uses the Wharton EFA Motor Vehicle Demand Model (Mark II) and its associated databases to discuss and analyze past and future trends in the Light Duty Truck market. The dynamic historical growth in this market and its implications for energy, safety, and emissions policies in transportation enhance the value of increased information and understanding concerning these trends. Part A analyzes the historical trends, generally covering the 1955-77 period, its three chapters presenting and discussing data on new registrations, physical characteristics, and prices and costs. The discussion focuses on trends by manufacturer and by truck type. Part B presents preliminary projections of disaggregate truck and car sales, prices, fuel economy, etc., based upon certain economic, energy, demographic, and policy assumptions. In addition, simulation results are presented, indicating the likely impacts of changes in some of those assumptions.					
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PREFACE

This report uses the Wharton EFA Motor Vehicle Demand Model (Mark II) and its associated databases to discuss and analyze past and future trends in the Light Duty Truck market. The dynamic historical growth in this market and its implications for energy, safety, and emissions policies in transportation enhances the value of increased information and understanding concerning these trends.

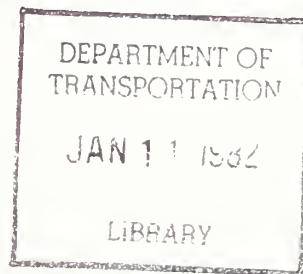


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PART A
ANALYSIS OF HISTORICAL TRENDS

INTRODUCTION

This section analyzes historical trends in the market for light duty trucks (under 10,000 lbs Gross Vehicle Weight (GVW)) over the period 1955 to 1977. The data for this study were provided by the Chilton Company^{1/} and were developed for use in incorporating light trucks into the Wharton EFA Motor Vehicle Demand Model.^{2/} Additional data based upon R.L. Polk and other sources^{3/} are used in some sections. The historical trend analysis focuses on three subject areas, each comprising a separate chapter:

New Registrations
Physical Characteristics
Prices and Costs.

The Chilton data contain such detail that we have a number of points of comparison to examine. One basic aim is an analysis of the data by manufacturer in which we use six categories:

General Motors Corporation (GMC)
Dodge (Chrysler)
Ford
Jeep (American Motors Corporation (AMC))
International Harvester Corporation (IHC)
Foreign.

Another important point of comparison is body type, which consists of five classes (definitions of these body types are given in Appendix A):

^{1/} C. Cantwell, for Chilton Company, Light Duty Truck Characteristics Historical Data Base. A report DOT-TSC-NHTSA-79-37/DOT-HS-804-787, prepared for the US Department of Transportation, National Highway Traffic Safety Administration, Office of Research and Development, December 1979.

^{2/} Colin Loxley, Priscilla Luce, Tim Osiecki, and Kate Rodenrys, the Demand for Light Trucks--The Wharton EFA Motor Vehicle Demand Model (Mark II). Final Report DOT-TSC-NHTSA-80-32/DOT-HS-805 667, to the Department of Transportation, Transportation Systems Center, January 1981.

^{3/} Such as Ward's Automotive Yearbook, Automotive News, etc.

Pickup
Suburban
Utility
Van (Passenger or Cargo)
Multi-stop.

It should be noted here that the compact passenger vans are considered to be light trucks rather than automobiles both in this report and in the Wharton EFA Motor Vehicle Demand Model. A related characteristic which will provide another dimension of comparison is the option of four-wheel-drive available on some of these body types.

A traditional categorization for trucks is by weight, usually stated as Gross Vehicle Weight (GVW). Our weight classifications are 0-6000 lbs, 6001-8500 lbs, and 8501-10,000 lbs, and they prove to be interesting and informative divisions in analyzing trends in the truck market. Although all of the above divisions of the data are possible for analysis, the Wharton EFA Motor Vehicle Demand Model uses a more aggregated classification scheme for modeling light duty truck demand: personal versus commercial (see definitions in Appendix A). Therefore, we compare historical trends for these broad classes of demand.

1. NEW REGISTRATIONS

1.1 TOTAL

Due to the greater availability of detailed characteristics information, the Chilton historical data base for light duty trucks (LDTs) concentrates on production figures, rather than providing sales or new registrations data. Since production typically follows new registrations quite closely on an annual, long-term basis, we will use these data without adjustment for the sake of simplicity and consistency.

In general, new sales^{1/} of light trucks have been increasing rapidly over our historical period. In fact, there have been several years where sales grew by between 20 percent and 35 percent, although a few years with large decreases counteract the boom years to produce an average annual growth rate of 8.9 percent over the period 1955-1977. It is notable that the boom has been concentrated in recent years: the 1960-1977 annual average growth rate is 10.1 percent, while that for 1970-1977 is 12.9 percent. The years when sales declined (1957-8, 1960, 1967, 1970, and 1974-5) closely correspond to auto sales downturns and general economic recessions. (See Figure 1-1) Positive growth rates are, in general, higher for trucks than for autos, while their rates of decline are very close, indicating more extreme cycles, but a consistently higher average growth rate for trucks than for automobiles. The influence of the introduction of many new LDT models in the mid-1960s can also be seen.

^{1/} Given the long-term focus, the text uses new sales, new registrations, and production synonymously.

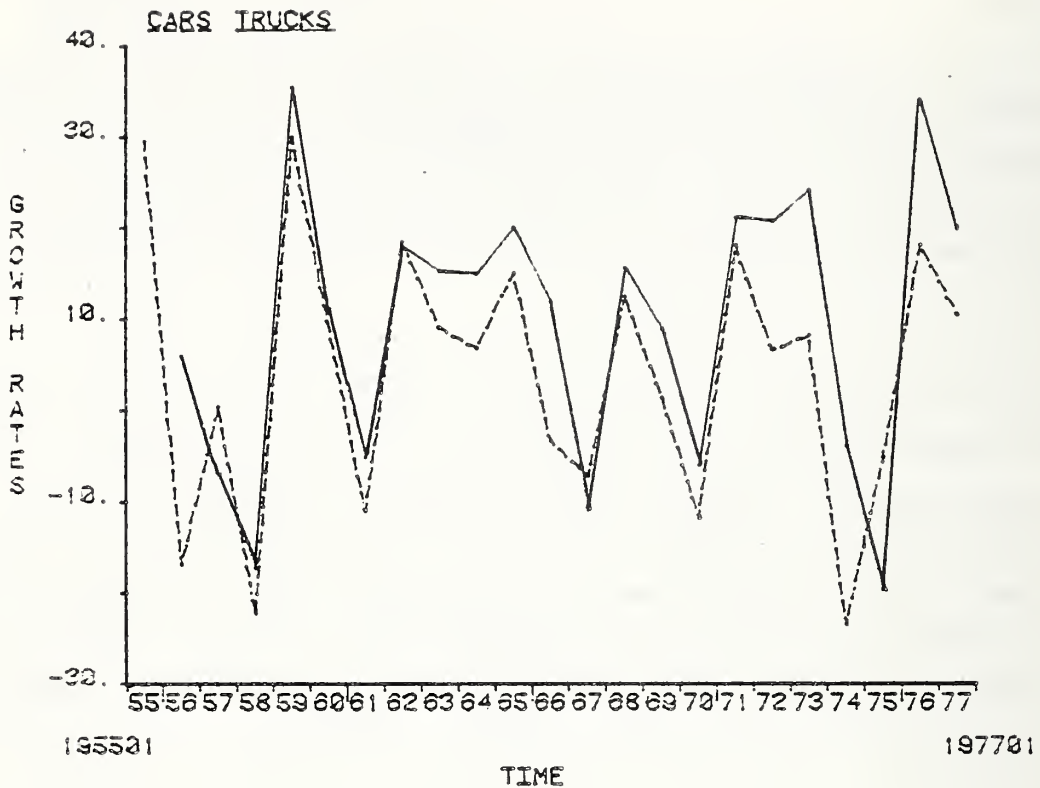


FIGURE 1-1. GROWTH RATES, NEW REGISTRATIONS

1.2 COMPARISON BY MANUFACTURER

As can be seen in Figures 1-2A and 1-2B, the shares of total new registrations by manufacturer are cyclical (like the overall total), although obviously the cycles are offsetting between manufacturers. GM has been traditionally dominant, just as in the automobile market, keeping Ford 13 percentage points behind at times. The exceptions are a tie in 1956 and 2 consecutive years of Ford dominance in 1969 and 1970, a result of the strike which caused GM to drop 9 percentage points in one year.

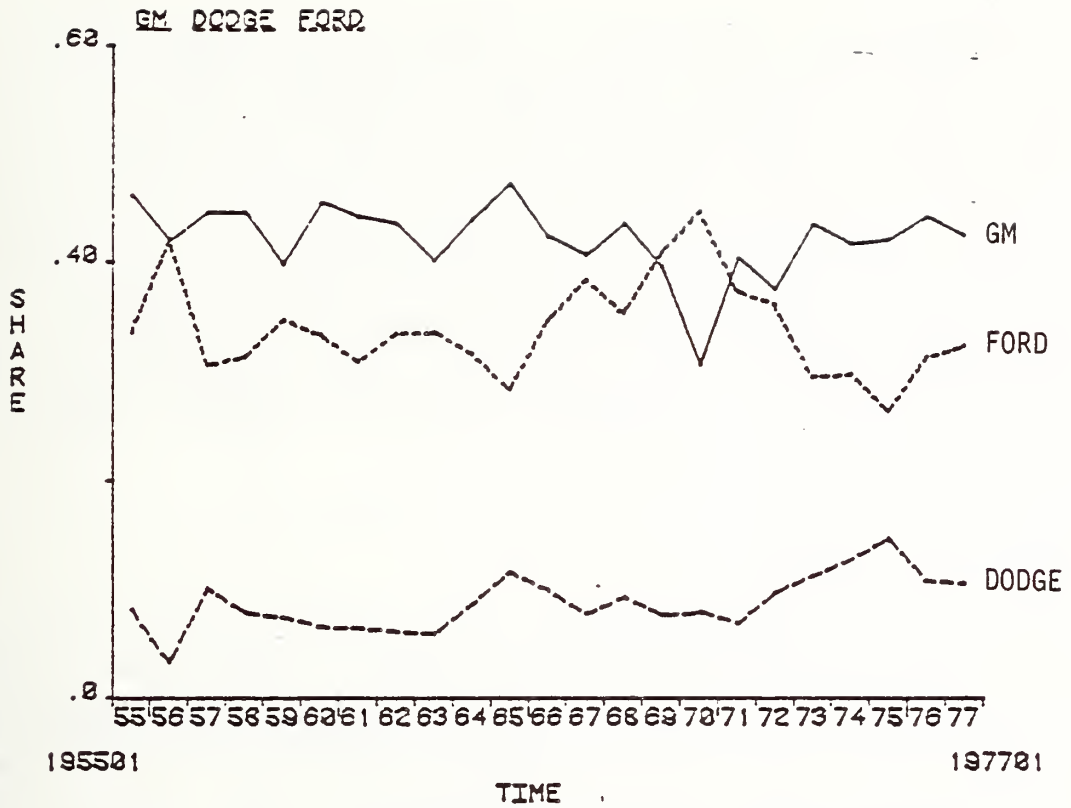


FIGURE 1-2A. NEW REGISTRATIONS, SHARE BY MANUFACTURER

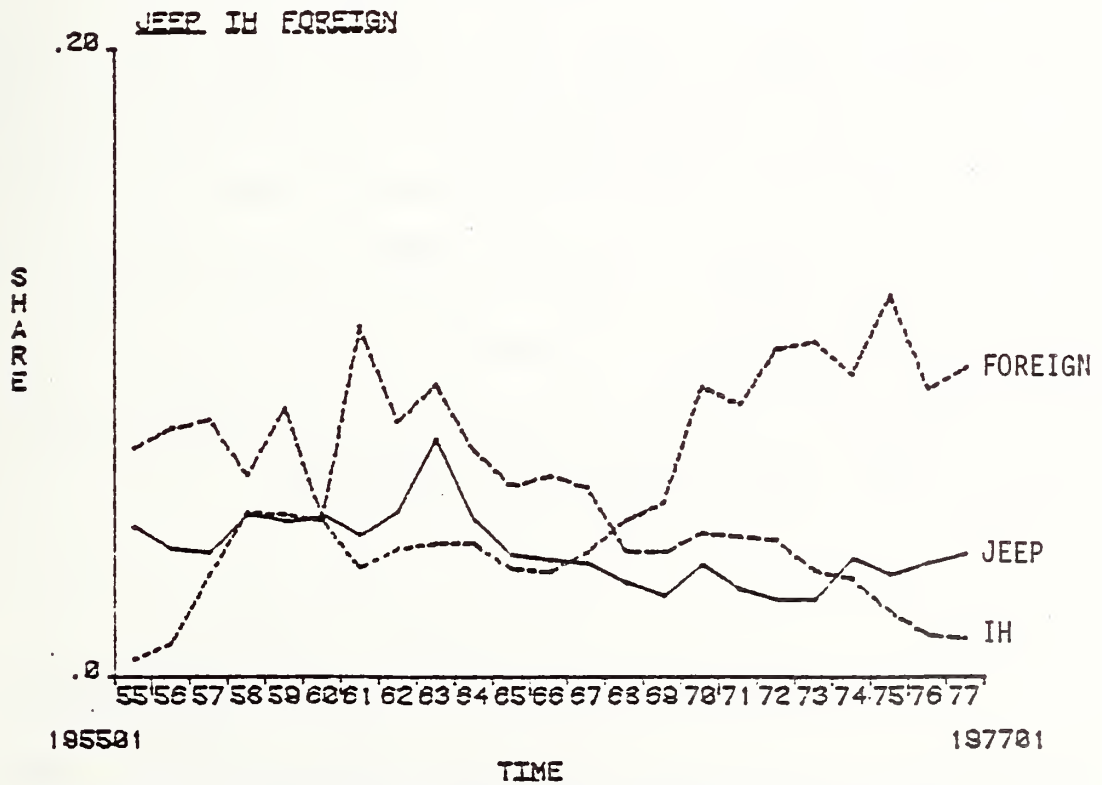


FIGURE 1-2B. NEW REGISTRATIONS, SHARE BY MANUFACTURER

Behind GM and Ford came Dodge, IH, and Jeep in the domestic market. This hierarchy has been preserved through most of the 1955-77 period, with the foreign manufacturers' share gradually growing. Recent trends have shown IH losing ground since the 1960s (and being overtaken by Jeep in the mid-1970s) and a doubling of the foreign truck share between 1969 and 1972. The foreign manufacturers seem to have captured some of GM's traditional share in 1970 with their new models and then maintained their share with GM's comeback. Ford and IH are the domestic manufacturers which seem to have yielded ground, with IH's new registrations declining absolutely as well as relatively in the last few years.

1.3 COMPARISON BY BODY TYPE

Light trucks have traditionally been dominated by the pickup body style. In 1955, pickups were almost 90 percent of GVW Classes 1 and 2 new registrations, and, despite a steady decline since then, still had a 70 percent share in 1977. The pickups' losses have meant gains for utilities, and cargo and passenger vans, with cargo vans gaining the most. (See Figures 1-3A and 1-3B.)^{1/}

Suburbans have kept a steady 2.5 to 4 percent share, particularly since the mid-1960s. It is interesting to note that GM and Jeep have been the only manufacturers of this body type since 1976, when IH discontinued its suburbans. Ford produced this body type at one time, but has not since 1960.

The cargo van body type has the most dramatic graph of share of new registrations of all the LDTs. This is a result of GM and Ford joining Dodge (originally the sole producer) in production of cargo vans in the same year (1961) and boosting the style's share by 7.5 percentage points. Cargo vans have gained another 5 percent since then with steady growth, and GM is close to surpassing Ford's leading share in their production.

^{1/} This may be misrepresented, since the distinction is based on the manufacturers' production, not allowing for "conversions."



FIGURE 1-3A. NEW REGISTRATIONS, SHARE BY BODY TYPE

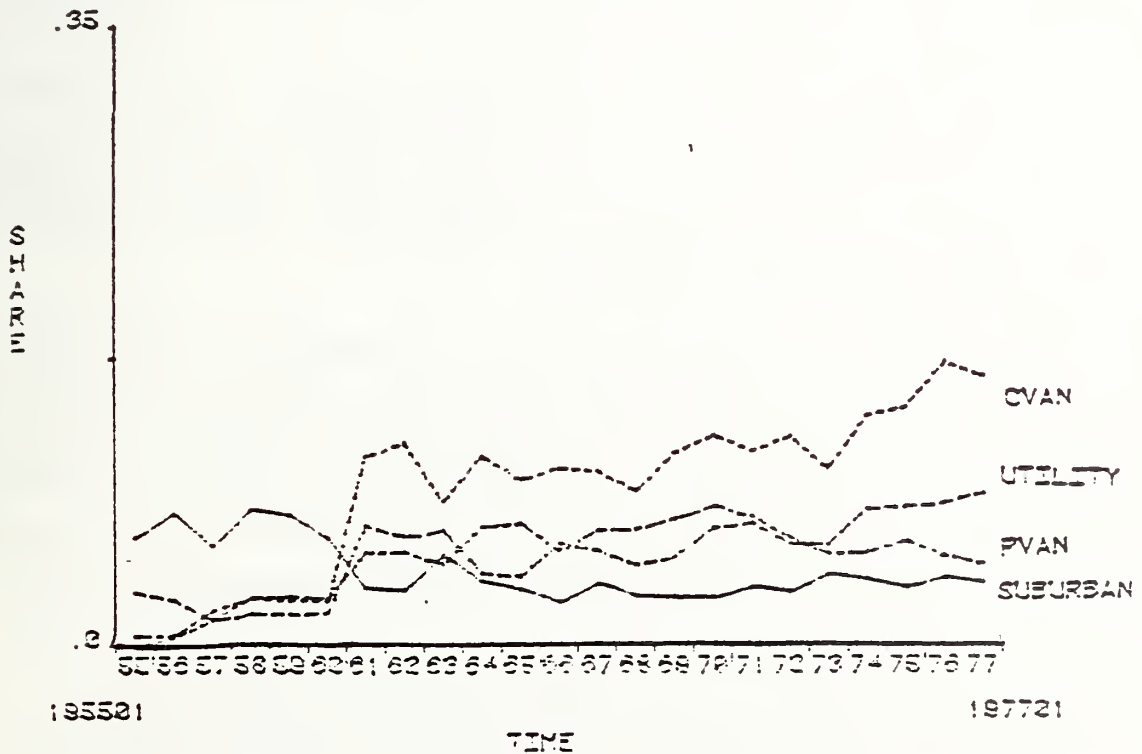


FIGURE 1-3B. NEW REGISTRATIONS, SHARE BY BODY TYPE

Multistops have seen 22 years of almost constantly declining share of new registrations of light trucks since 1955. Their share is currently less than 1 percent and GM has been the sole producer since 1971, when IH discontinued production.

The passenger van is the only LDT body type other than the cargo van which is not dominated by GM. Although GM is a close second in production of cargo vans, in passenger vans it is merely a close third behind Ford which is led by Dodge. The style saw steady growth through the late 1950s and the 1960s, peaking in 1970 with over 7 percent of LDT new registrations. Its share has been declining ever since, however, due to a drop in Dodge's production and a large drop in foreign production. If these trends continue, GM and Ford may well dominate the passenger van market also.

The general conclusions to be drawn from a comparison of new registrations by body type are that pickups dominate the other types and that GM dominates in production of most types.

1.4 COMPARISON BY WEIGHT

The most obvious point to be observed in the historical trends of new registrations by size class (See Figure 1-4) is that there is a sudden break in 1975 both in the 0 to 6000 lbs share and 6000 to 8500 lbs share series. In 1975, the steadily declining (losing 22 percentage points from 1955 until 1974) 0 to 6000 lbs share of LDT registrations dropped 20 points to 51.3 percent and was down to 42.2 percent in 1977. The 6000 to 8500 share, on the other hand, which was steadily increasing between 1955 and 1974, suddenly gained almost 20 percentage points in 1975.

This redistribution is clearly the result of the interim Federal emissions standards for trucks under 6000 lbs which were effective in 1975. The manufacturers' strategy was simply to increase the rated weight of many of their light truck models, which were, for the most part, just under 6000 lbs, to just over the 6000 lbs limit. Our data clearly show that the weight changes could not have been very large; average GVW rating seems hardly disturbed from its historical trend in 1975.

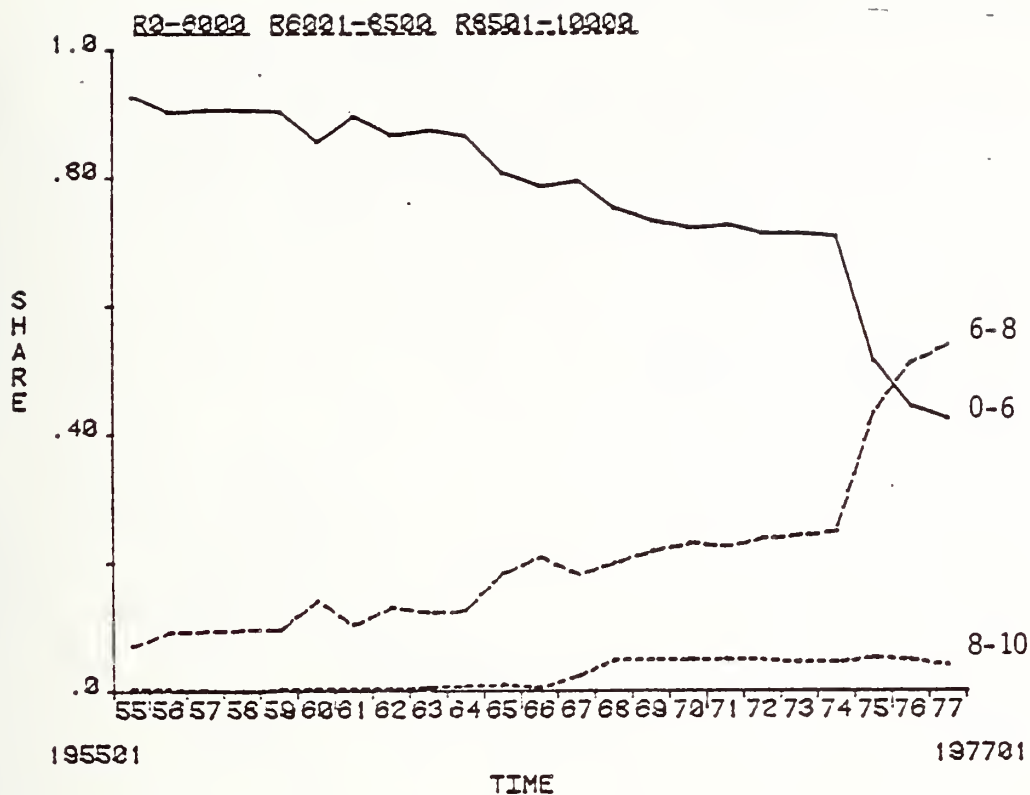


FIGURE 1-4. NEW REGISTRATIONS, SHARE BY WEIGHT

The 8500 to 10,000 weight class is much less dramatic; it shows steady growth, starting at less than one-half of one percent in 1955 and ending in the 1970s between 4 and 5 percent.

An additional interesting dimension of new registrations by weight is new registrations by weight by body style. Some body styles (pickups, suburbans, and utilities in particular) were almost exclusively less than 6000 lbs before 1975 and are now almost exclusively in the 6000 to 8500 class. Cargo and passenger vans display the regulation avoidance also, but not in such absolute terms. Multistops have been made in all three weight classes by GM, but only in the under 6000 lbs class by the other manufacturers. Multistops, cargo vans, and pickups are the only body styles made in the 8500 to 10,000 lbs weight class.

Thus, the new registrations comparisons by weight clearly demonstrate the well known regulation avoidance in the light duty truck industry in 1975.

1.5 PERSONAL VERSUS COMMERCIAL COMPARISONS

The distinction between personal and commercial trucks^{1/} used in the Wharton EFA Motor Vehicle Demand Model sheds yet another interesting light on the historical analysis of LDT new registrations. It should be noted here that the data used for this section are our estimates of new registrations derived from R.L. Polk data.

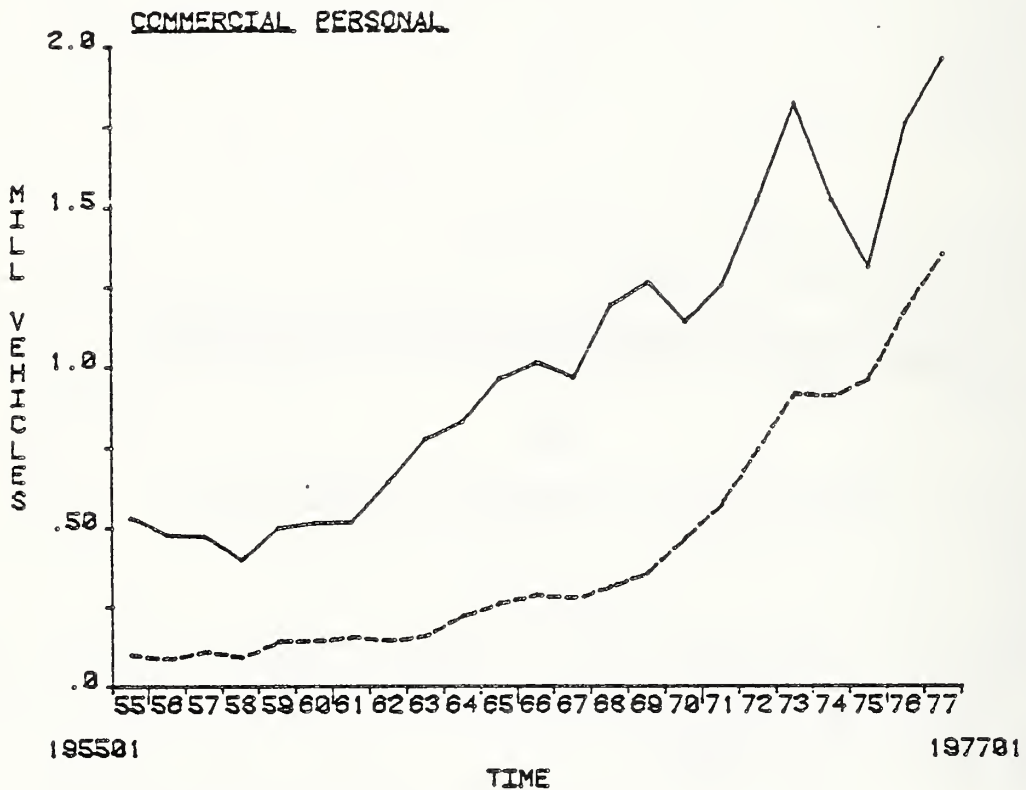


FIGURE 1-5. NEW REGISTRATIONS, PERSONAL VERSUS COMMERCIAL TRUCKS

^{1/} "Personal" LDTs are defined as: all compact vans; all imports; Chevrolet vans, El Camino, Luv, Suburban, Blazer; Dodge vans, Trail Duster, Ramcharger; Ford Econoline, Ranchero, Bronco, Courier; GMC Vandura, Suburban, Jimmy, Sprint; IH Scout; and Jeep CJ5, CJ7, Commando. Hence the "commercial" group includes most of the pickups, an unknown proportion of which are undoubtedly used in whole or in part for personal transportation.

The most self-evident observation to be made about Figure 1-5 is that historically there have been usually two or three times as many commercial trucks as personal trucks registered. This status seems to have changed since around 1973, however, when personal trucks' new registrations continued to increase as those of commercial trucks fell by close to 29 percent.

The gap between personal and commercial trucks has, in fact, narrowed almost every time that total new registrations of trucks has fallen. Thus the cyclical downturns in LDT registration mentioned in Section 1.1 primarily seem to originate in the commercial truck market, while the otherwise steady growth over the 22 year period seems to be shared between the two classifications.

So the new registrations data by personal versus commercial trucks indicate a cyclical but steadily increasing pattern for the well established commercial truck market and a boom with few interruptions in the still developing personal truck market.

2. PHYSICAL CHARACTERISTICS

2.1 TOTAL

Our LDT data from the Chilton Co. contain a large amount of detail on the physical characteristics of the trucks. In this section we will examine the data on the fraction of LDTs made with the most important of these options; the fraction with four, six and eight cylinders, automatic transmission, overdrive, and four wheel drive will be studied. Other characteristics of interest, average wheelbase, cargo volume, and displacement, will also be included. It should be noted that we have no Chilton data concerning one of our comparisons; the personal versus commercial trucks section will thus be excluded.

Overall trends in physical characteristics are fairly easy to spot and understand. The cylinder data shows the percentage with four cylinders staying mostly constant from 1955 to 1977, the percentage with six cylinders falling by 25 to 50 percent over the historical period, and the percentage with eight cylinders growing to 75 to 80 percent in the 1970s. This trend is clearly the result of domestic manufacturers' production, as will be seen in Section 2.2.

Average displacement has been on an increasing trend over the historical period, too. The overall average has grown by almost 100 cubic inches, in fact. A similar, but more extreme, trend is found in the fraction with automatic transmission, which has grown from 0 percent in 1955 to 65 percent in 1977.

The percentage of LDTs with overdrive was 0 for all but 1964 to 1970, when it was hovering around one half of one percent, these all came from one manufacturer.

The fraction with four wheel drive has been growing rapidly over the historical period, from 4.9 percent in 1955 to 23.3 percent in 1977, reflecting the trends for the individual manufacturers. Average wheel base and average cargo volume have also been on the rise, with the former gaining about 10 inches and the latter gaining about 80 cubic feet from 1955 to 1977.

Thus, we see that trucks, like the auto market, show a trend towards being larger and more highly powered, with increasing penetration of the "luxury" (and less fuel-efficient) automatic transmission. We note that this is associated with increasing personal-use LDTs.

2.2 COMPARISON BY MANUFACTURER

The most notable observation to be made about the distribution of the number of cylinders used in LDTs by manufacturer is that the larger the number of cylinders, the more likely it is that the manufacturer is a domestic one. In fact, Jeep and IH are the only domestic manufacturers to have produced four cylinder trucks, and the percentage of their trucks thus equipped has been falling. Foreign manufacturers, on the other hand, made all their trucks with four cylinders until 1965, and in 1977 were still producing 94 percent that way, with the rest equipped with six cylinders and none with eight.

The American manufacturers have been producing not only few four-cylinder trucks, but also few six-cylinder ones. GM, Dodge, Ford, and IH have all concentrated over 80 percent of their LDT production on eight-cylinder trucks since the late 1960s and early 1970s. Jeeps were made in 1955 entirely with four cylinders, but by 1977 63 percent were produced with eight cylinders.

A similar trend toward more powerful engines may be seen in the average displacement data; all of the American manufacturers have kept their average engine displacements two to three times as large as those of the foreign producers.

There is a significant domestic-foreign split in the data on the fraction of trucks with automatic transmission also. The domestic manufacturers all equip at least half of their trucks this way, although these percentages have grown very rapidly since the mid-1960s, when the domestic average was around 20 percent. Foreign producers, on the other hand, still made less than 20 percent with automatic transmission in 1977. Dodge, GM, and Ford produced between 65 percent and 85 percent this way in the mid-1970s, with Jeep and IH having around 50 percent.

One quite interesting physical characteristic available on LDTs is four wheel drive, an option whose production has been rapidly rising. The manufacture of four wheel drive vehicles has clearly been dominated by two domestic companies. Jeep is the undisputed leader with production for four wheel drive under 90 percent only three times in 22 years and equal to 100 percent for 8 years. IH is the second runner with over 80 percent in 1976 and 1977, although they have traditionally stayed below 50 percent.

The other three domestic manufacturers have been making gradually more and more four wheel drive trucks through the period with the maximum around 20 percent in the mid-1970s. Foreign producers, on the other hand, have cut their four wheel drive percentage from 6.5 percent in 1966 to just over 3 percent in 1977.

The average wheel base data are not as dramatic as the others. They show gradual increases for all manufacturers, with GM, Dodge, and, Ford growing more than Jeep, IH, and the foreign manufacturers. In the 1970s the former group averaged wheel bases about 20 inches longer than the latter group, which was clustered just over 100 inches.

The average cargo volume data show a similar trend, with the "big three" averaging 60 to 100 cubic feet larger than foreign manufacturers. It is notable that Jeep and IH averaged 80 cubic feet less the foreign makers in the mid-1970s, and, unlike all the others, have been averaging decreasing cargo volumes since the mid-1960s. This is obviously due to a heavier mix of body types with small cargo space.

2.3 COMPARISON BY BODY TYPE

Most of the physical characteristics that have been examined have different trends from the overall or even from the trends by manufacturers when viewed for certain body styles. This arises from the fact that many LDT styles were developed for a particular purpose which requires certain capabilities. The most obvious example of this is the utility vehicle, which was developed to carry people and small cargo volumes over rough terrain. Utilities, therefore, are small in wheelbase and cargo volume, have a much lower fraction produced with an automatic transmission, and have a much higher fraction (typically 100 percent) produced with four wheel drive.

The cylinder analysis by body style is less varied than that by manufacturer; all light truck body styles have been trending toward more cylinders. Multistops, cargo and passenger vans, and domestic pickups are particularly turning toward eight cylinders.

The average displacement data show a definite hierarchy of body styles, with suburbans and multistops having the largest average displacement. The other styles, in descending order, are cargo vans, pickups, utilities, and

finally passenger vans. It is interesting that the sequence is almost the same for average cargo volume. There are two body styles which are in different places in the cargo volume series: the suburban, which has the second to the smallest cargo volume although it has the largest displacement; and the passenger van, which is in the middle of the sequence for cargo volume and at the bottom of the displacement sequence.

The fraction of trucks with automatic transmission has some interesting differences from the overall upward trend for some body styles. The utilities' comparatively low percentage has already been discussed, but heavy (8500 to 10,000 lbs) pickups also have fewer automatics. On the other hand, many manufacturers have produced all their suburbans with automatic transmissions over the historical period. These differences can certainly be viewed as utilitarian, since manual transmissions are clearly an advantage on rough terrain or in a vehicle used for heavy work. The high rate of automatics in suburbans is logical considering the nature of the body type as the truck version of a station wagon. It should be noted on a related matter that all of the LDTs with overdrive were light (0 to 6000 lbs GW) Ford pickups in the 1960s.

The exception to the overall average wheelbase trend are utilities and Jeep suburbans, both of which are comparatively short. Utilities in fact average about 20 inches shorter than pickup and suburbans, and this probably is an advantage for their off-road driving.

The main exception to the rule in the fraction with four wheel drive has already been discussed in the note on utilities, but there is another interesting experiment with the option. In the 1960s, Dodge made many of its 6000 to 10,000 lb pickups with four wheel drive, but apparently didn't like the result since this is no longer true.

So, we have seen some interesting deviations from the overall trends in physical characteristics and have found that many of them are rooted in utilitarian considerations clearly related to their expected use and marketing position.

2.4 COMPARISON BY WEIGHT

The main observation to be made about physical characteristics by GVW rating of the trucks is that the various engine measurements get bigger as the weight of the truck goes up. The reasons are obvious for the higher incidence of eight cylinders and the larger displacements and wheel bases found on the larger trucks.

It is noteworthy that the trend toward longer wheel bases on heavier trucks is highly pronounced for cargo vans and multistops, both of which are used mainly for their cargo space. Increased cargo volume is clearly the motive for making these models heavier. Another interesting and somewhat puzzling trend is that as time goes on and weight goes up the fraction of trucks equipped with automatic transmission goes up. However, as noted previously, heavy pickups are clearly an exception to the rule. This suggests that automatics are usually purchased by personal-use buyers rather than commercial operators.

3. PRICES AND COSTS

3.1 TOTAL

The average price for light duty trucks increased almost four-fold over the 1955-1977 period, reflecting a three-fold rise in base price to \$4923, and an increase to \$500 from virtually \$0 in the average price of options. More interesting than the price levels, however, are their growth rate patterns by year.

As Figure 3-1 shows, the growth rate in the base price of trucks has exceeded that of the base price of cars and the overall Consumer Price Index for most years in the historical period. At least part of this increase can certainly be attributed to the change which occurred in the production mix by body type and weight. As will be seen in Section 3.3, the pickup truck is the least expensive body type, so the decrease in the percentage of trucks produced that were pickups would tend to raise prices. Similarly, as will be seen in Section 3.4, heavier trucks are more expensive than light ones, so the increased percentage of trucks over 6,000 lbs would have a similar effect. These production mix changes probably account for a large amount of the differences in the growth rates, and reflect the shifts in market tastes which have thus led to relatively rapid average truck price increases.

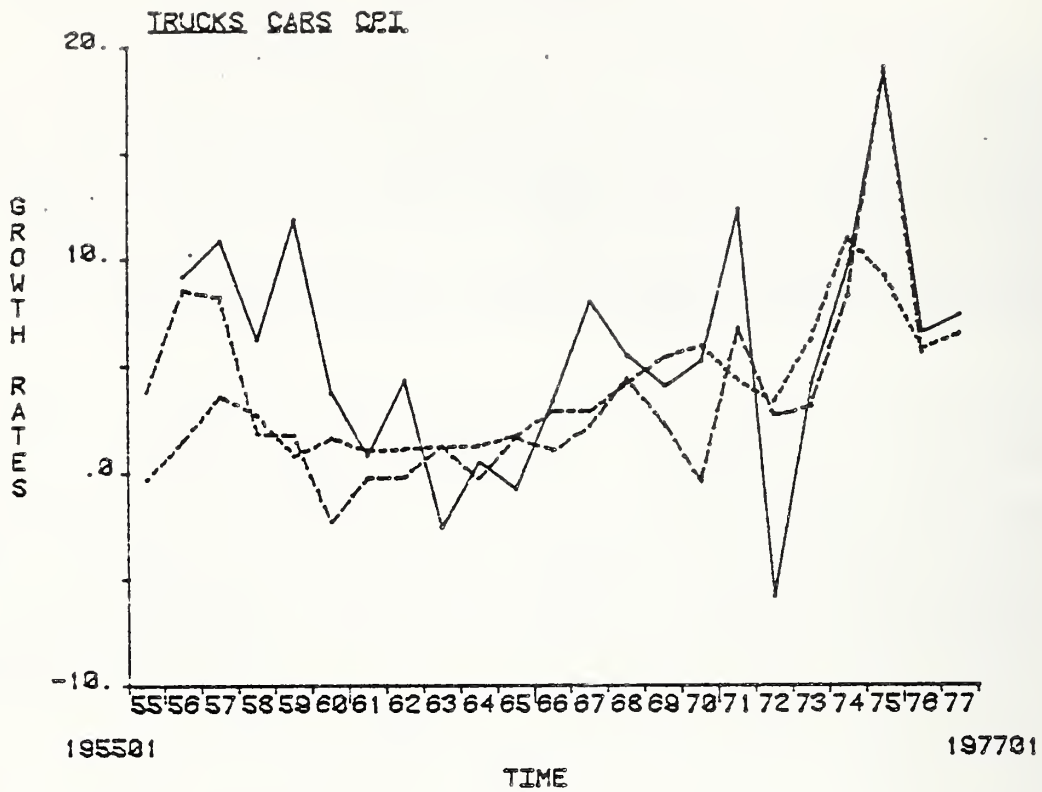


FIGURE 3-1. GROWTH RATES, AVERAGE BASE PRICE AND CPI

3.2 COMPARISON BY MANUFACTURER

As can be seen in Figures 3-2A and 3-2B, three of the five domestic manufacturers have had almost identical base price averages over the historical period. GM, Dodge, and Ford have consistently kept their average prices within about \$300 of each other's and have usually kept them even closer. The other domestic producers, Jeep and IH, have made more expensive trucks, with IH having the highest prices, between \$200 and \$1000 above the big three average. This difference has been able to be maintained because of their different mixes of production by body type.

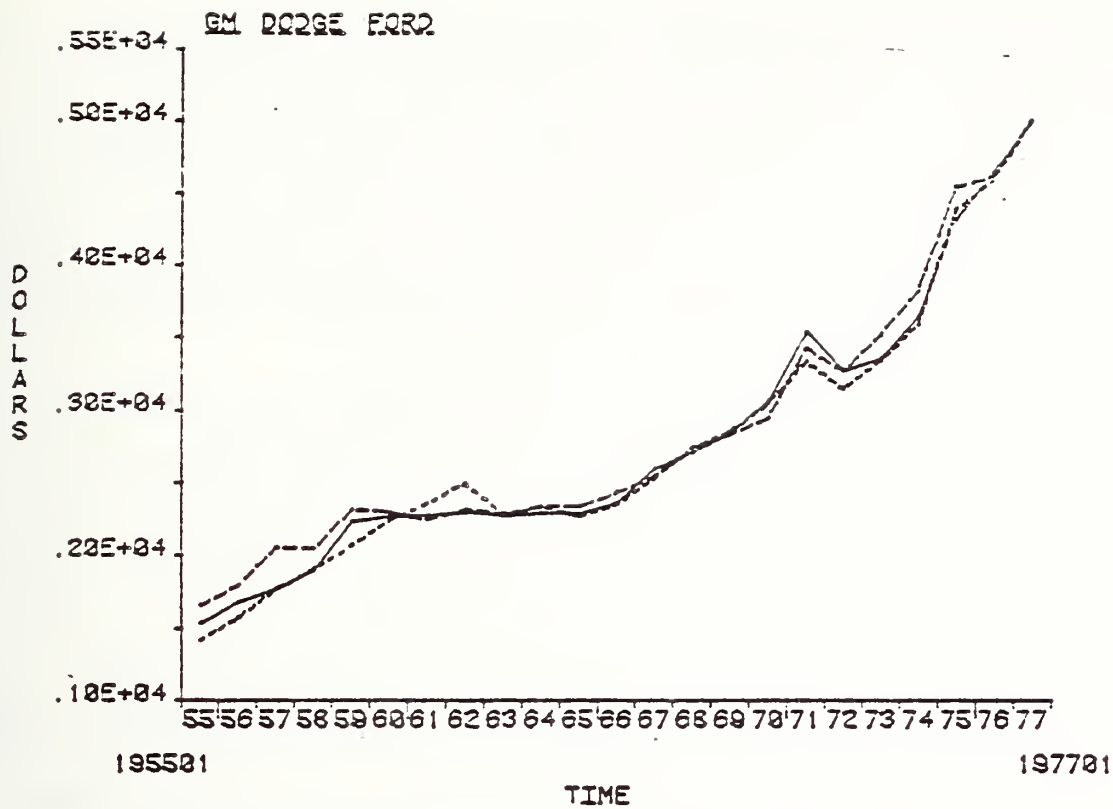


FIGURE 3-2A. AVERAGE BASE PRICE BY MANUFACTURER

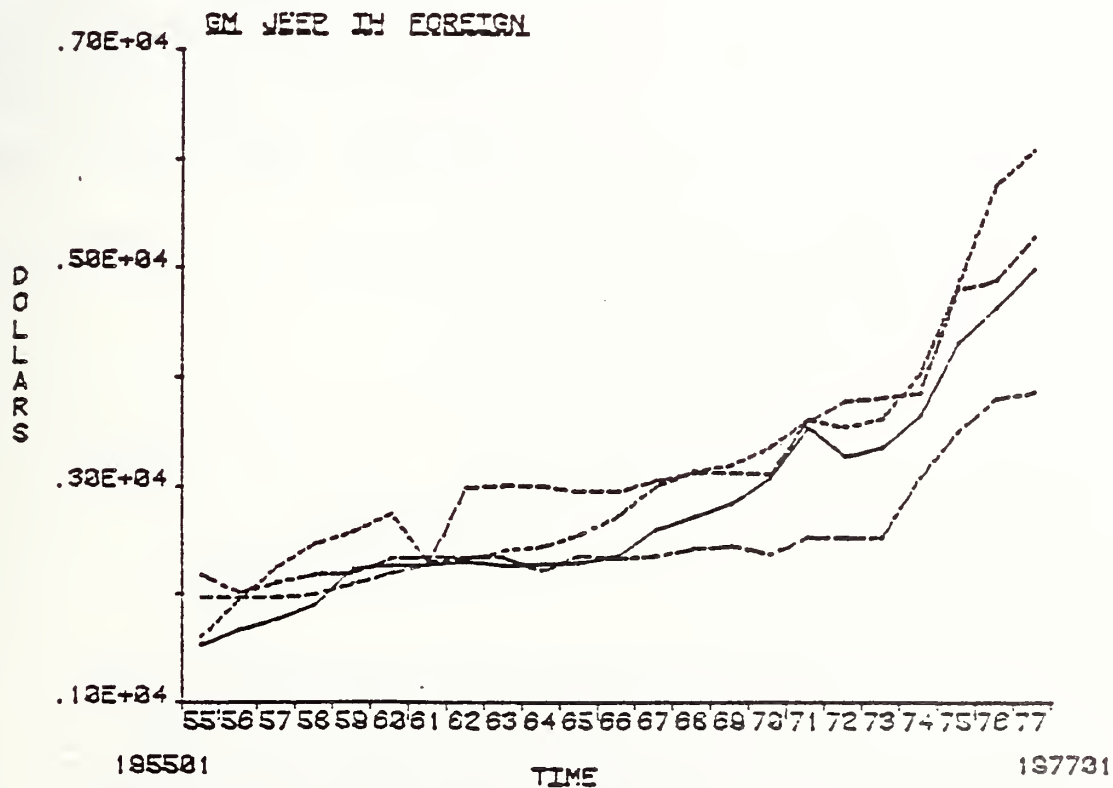


FIGURE 3-2B. AVERAGE BASE PRICE BY MANUFACTURER

The addition of the average price of options onto the base price changes matters somewhat. (See Figures 3-3A and 3-3B.) First, although Dodge's and Ford's average prices are close once again, GM's averaged \$100-\$200 higher in the 1970s, which is almost the only time period when the average options price data are non-zero. Thus, GM has slightly higher prices paid for its LDTs on the average than the other two. IH's average price of options was also higher than Dodge's, Ford's, and Jeep's, so its trucks were the most expensive overall.

Foreign manufacturers' average prices have been a different matter altogether. In 1955 the average foreign base price was about \$500 higher than the domestic big three's prices, but by 1977 they were more than \$1000 lower. In addition, the average foreign price of options is about one-sixth that of the domestic average, so comparably equipped foreign trucks were even less expensive.

The reason for this difference lies in the foreign manufacturers' production mix by body style. In the early part of the period they produced a large percentage of vans, which are more expensive than the pickups upon which the domestic producers were concentrating. In the later years foreign producers shifted their production mix toward small pickups as domestic producers were diversifying toward other body types, and since pickups are the least expensive body type, and since the foreign pickups are in general comparatively small, average foreign LDT prices are considerably lower than the domestic average.

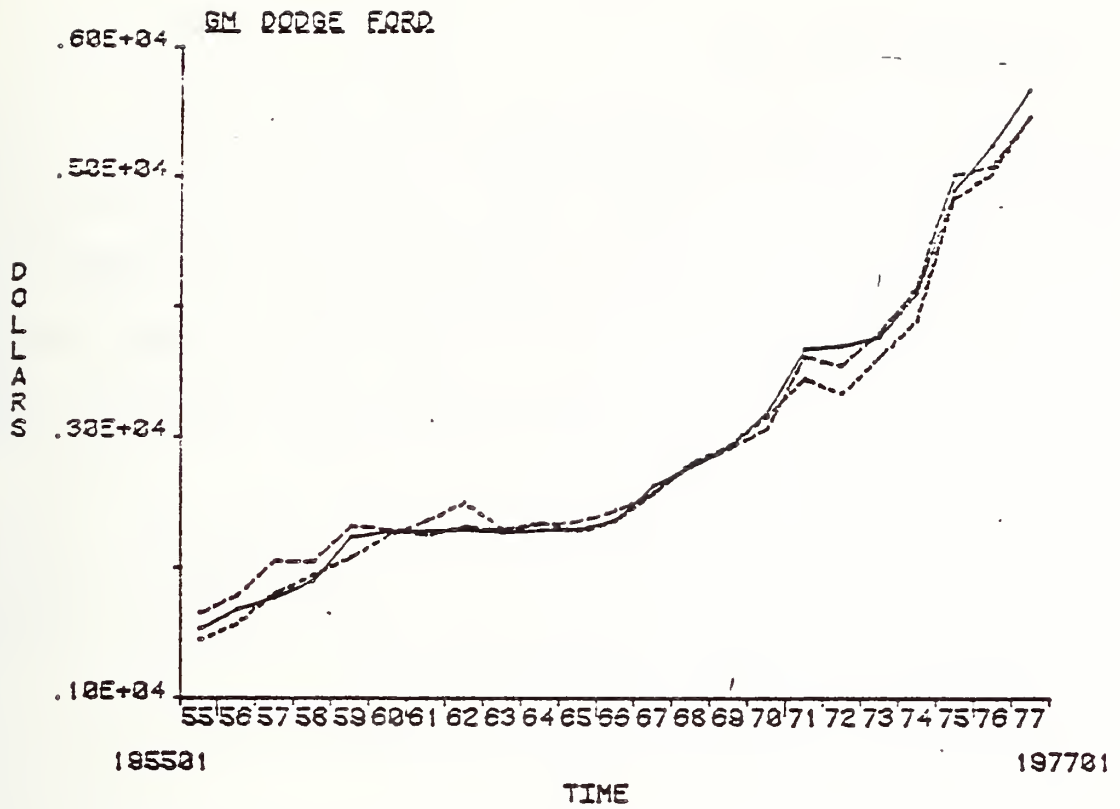


FIGURE 3-3A. AVERAGE BASE + OPTIONS PRICE BY MANUFACTURER

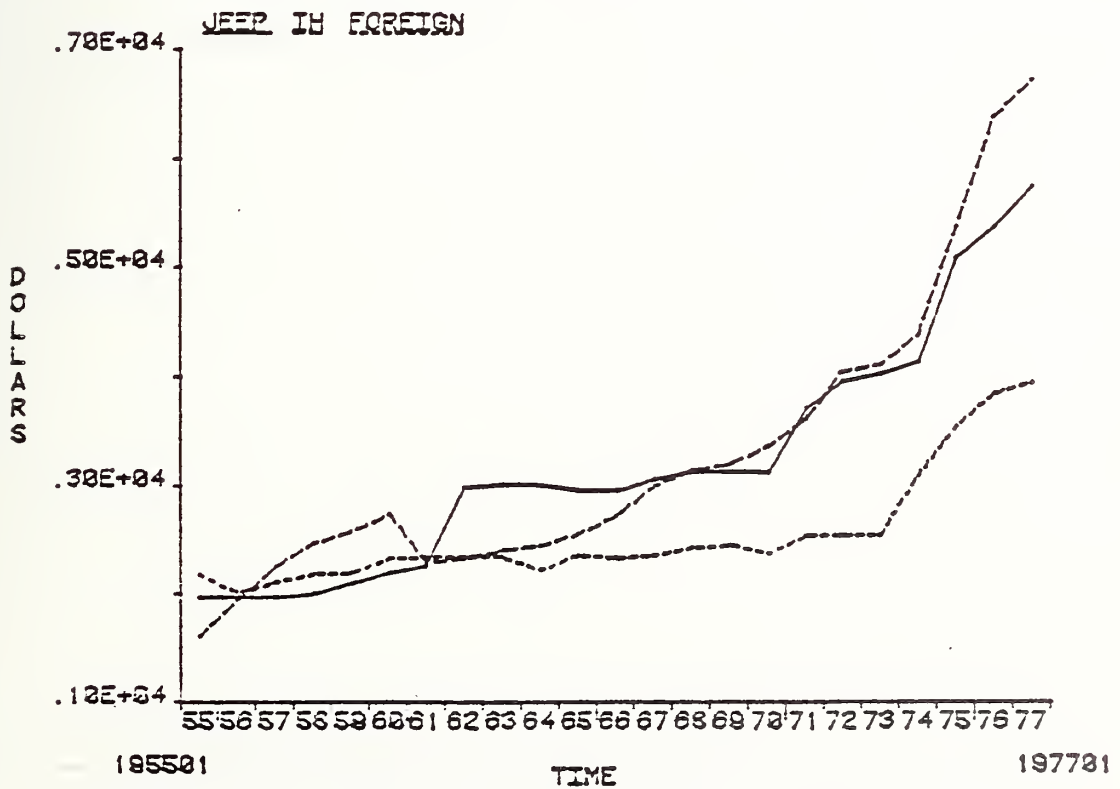


FIGURE 3-3B. AVERAGE BASE + OPTIONS PRICE BY MANUFACTURER

3.3 COMPARISON BY BODY TYPE

In comparing the average base price of LDTs by body type, there are a few qualities in the various types which seem to raise the price; they are the comforts and size which are added to make a truck primarily a passenger vehicle. This conclusion was reached by observing that the body types with the highest average base prices are multistops and suburbans. Continuing down the list of descending prices are passenger vans and utilities (about even), and then pickups and cargo vans (about even for the lowest base price, although pickups were cheaper in the early part of the period). (See Figures 3-4A and 3-4B).

Adding on the average price of options to the average base price really only changes the position of the two most expensive body styles; suburbans are sold with so many options and multistops with so few that suburbans become the most expensive LDT type over the multistops.

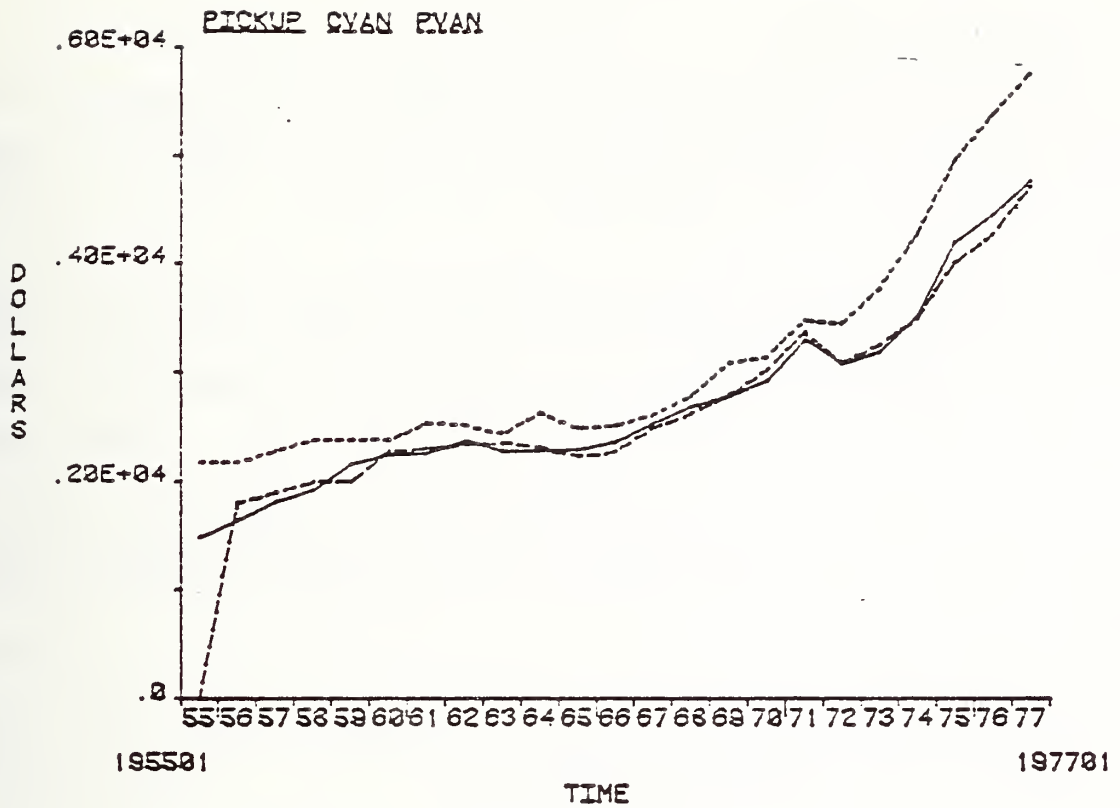


FIGURE 3-4A. AVERAGE BASE PRICE BY BODY TYPE

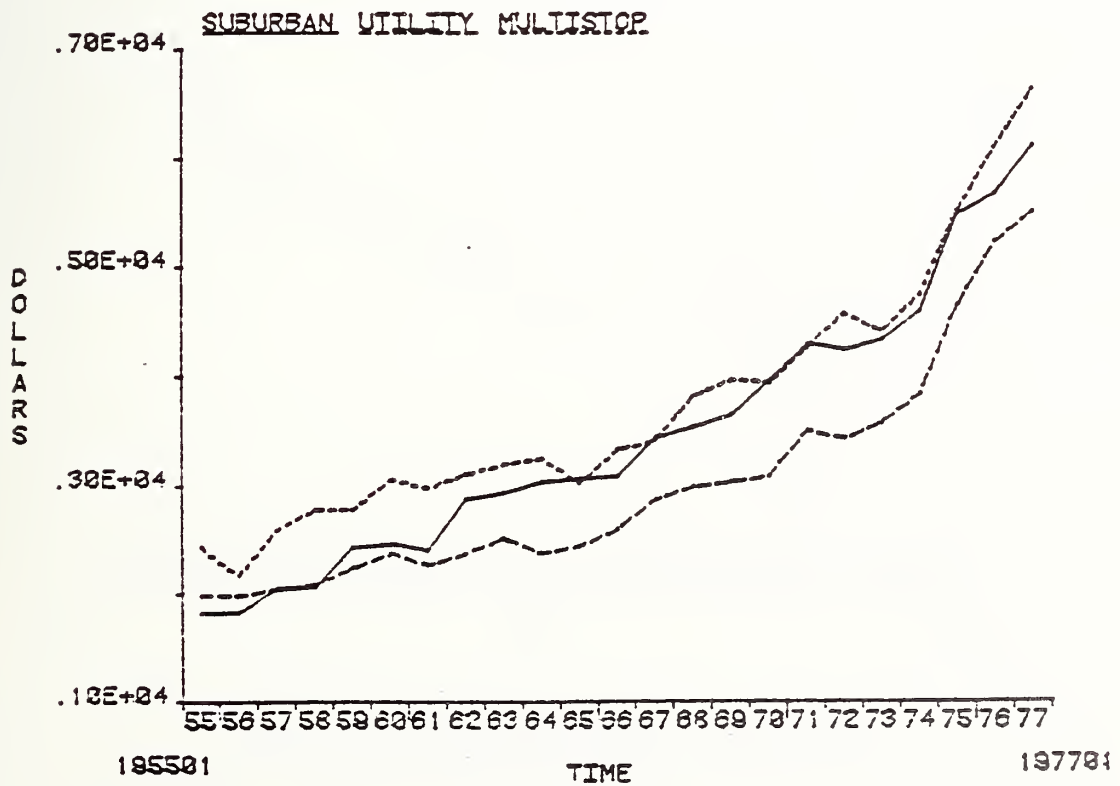


FIGURE 3-4B. AVERAGE BASE PRICE BY BODY TYPE

3.4 COMPARISON BY WEIGHT

There is one basic law in comparing average base price by the GVW classes of LDTs; the heavier the truck, the higher its price. In addition, it seems that the average price of options doesn't vary enough to alter the rule for overall price.

This is true for almost all truck models and types, and simply reflects their higher production cost, especially from a materials standpoint. It is a generally accepted principle that the heavier models of trucks have higher profit margins and lower sales volume. The higher volume, lighter, trucks within a particular style are generally sold with lower profit margins. Hence, the price differential is disproportionate to the higher production cost, but not necessarily with respect to retailing cost, or presumably, their market value.

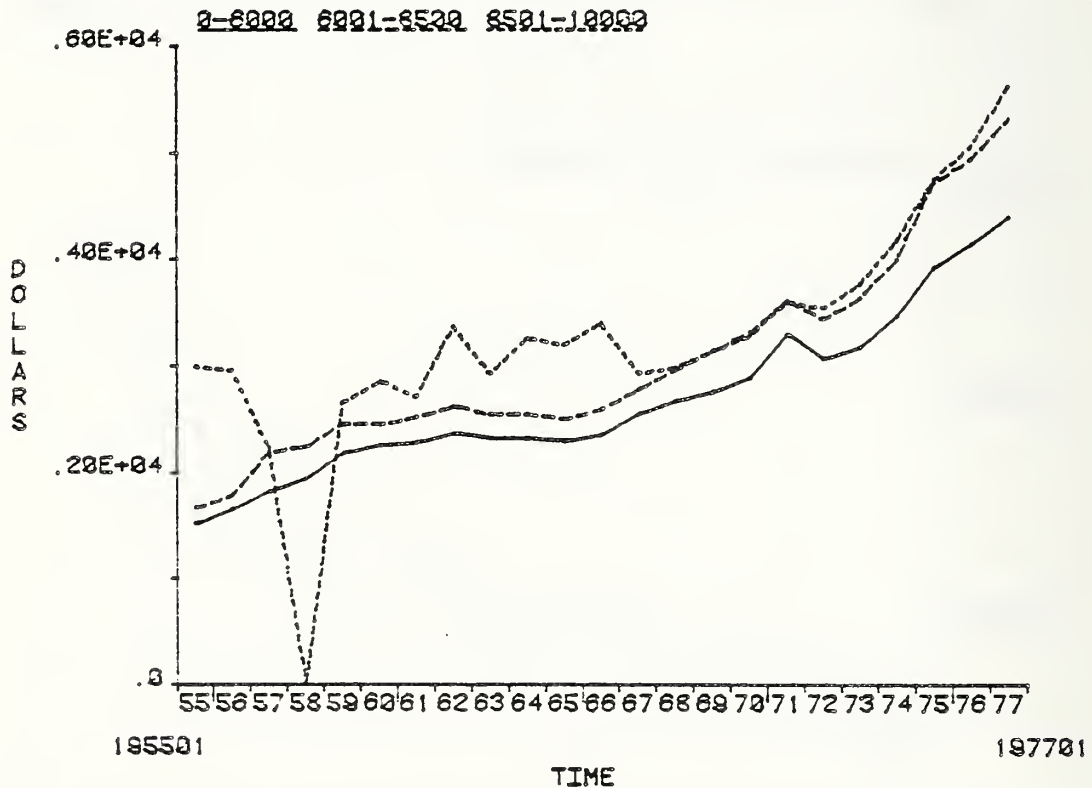


FIGURE 3-5. AVERAGE BASE PRICE BY WEIGHT

3.5 PERSONAL VERSUS COMMERCIAL COMPARISON

The data used for this comparison are those developed for the Wharton EFA Motor Vehicle Demand Model using 1976 prices for domestic LDTs and the wholesale price index for light trucks. This series can be seen in Figure 3-6A.

Commercial trucks are seen here to be more expensive than personal ones. This is due to the body style and weight distributions; commercial trucks include the expensive multistops and heavy pickups, while personal trucks include enough light pickups, utilities, and vans to offset the expensive suburbans.

An additional dimension is added to the personal versus commercial analysis by the capitalized cost per mile developed for the model. As can be seen in Figure 3-6B, personal trucks are more expensive per mile than commercial trucks despite their opposite positions in base + option price. This reversal is due to the differing formulations of capitalized cost per mile, which assume a longer life for commercial trucks, and the fact that commercial trucks are driven more miles on the average than personal ones.

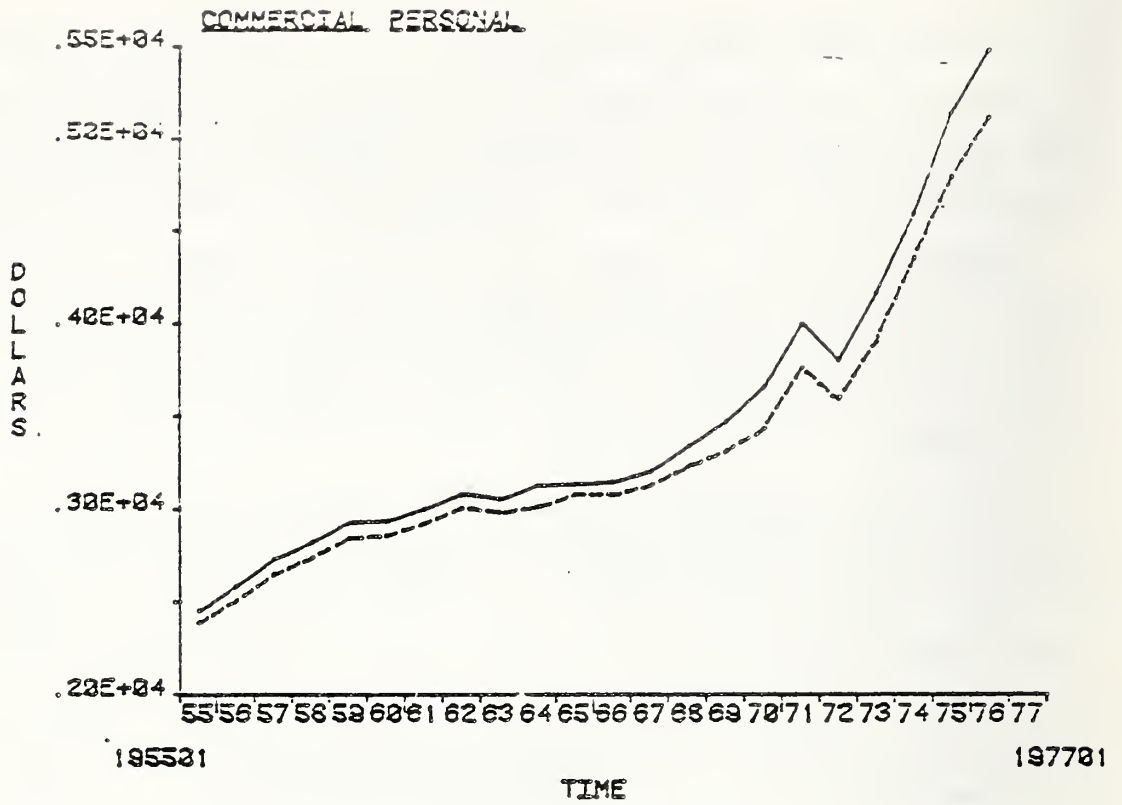


FIGURE 3-6A. AVERAGE BASE + OPTIONS PRICE, PERSONAL VERSUS COMMERCIAL

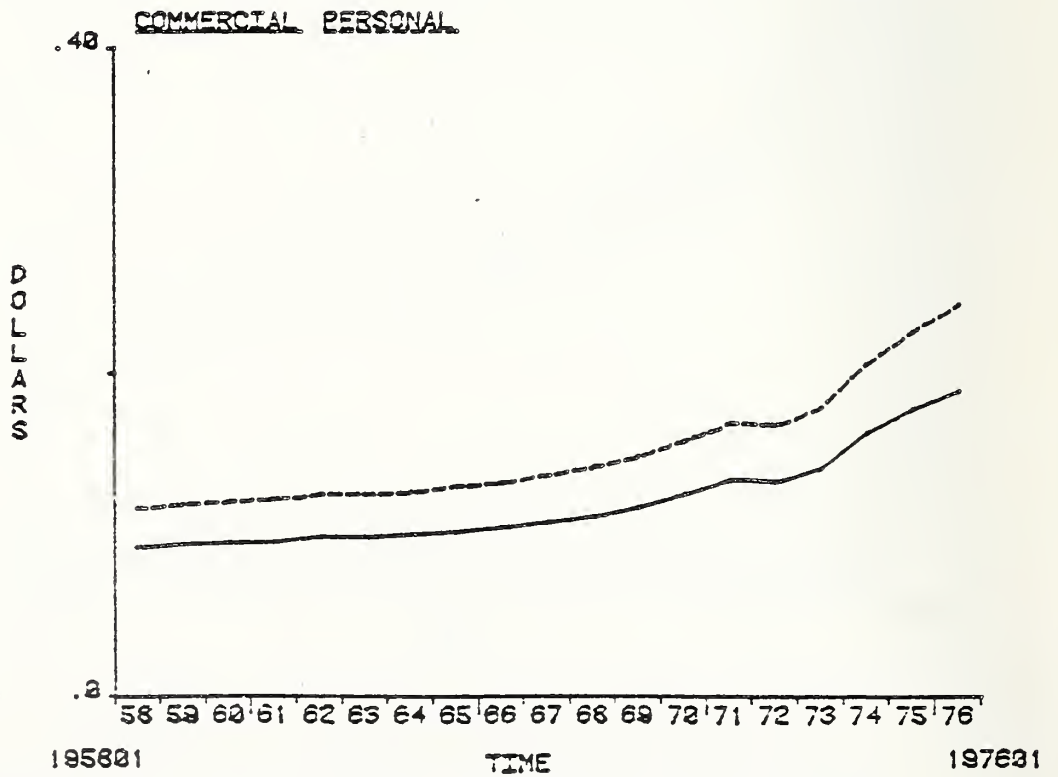


FIGURE 3-6B. CAR COST PER MILE, PERSONAL VERSUS COMMERCIAL

PART B
PROJECTIONS OF FUTURE TRENDS

INTRODUCTION

This section presents some initial projections made with the integrated automobile and truck model, the Wharton EFA Motor Vehicle Demand Model (Mark II). Since this version of the model is only recently completed and has not been subjected to thorough testing and validation, we emphasize the preliminary nature of these projections. Given the many changes likely in future economic trends as well as energy developments and public policy, the control forecast should be viewed strictly as conditional upon the particular assumptions used, and as an indicator of general trends rather than precise point estimates.

Section 4 presents the assumptions and results of the control forecast from 1978 to 1988. Included are a discussion of demographic trends, fiscal and monetary policy, energy trends, auto and truck fuel economy, imports, and air bag assumptions, as well as a summary of results with accompanying graphs. The detailed tables of results and inputs are presented in Appendix B. Section 5 indicates how the model reacts to changes in input assumptions. These simulations include changes in income, truck prices, gasoline prices, and truck mpg standards. These impacts are evaluated over the 1980-1990 period, with detailed results presented in Appendix C.

4. FORECAST RESULTS

4.1 ASSUMPTIONS

The economic inputs utilized for this forecast come from the Wharton Annual Model Control Forecast of September 1978. Important macroeconomic assumptions are:

(1) Demographic

Higher population growth projections, as estimated in Current Population Report P-20, Series B-II, Bureau of the Census, July 1978. The Annual Model and the Motor Vehicle Model are consistent in utilizing these projections for total population, family formation, and age distribution.^{1/}

(2) Fiscal and Monetary Policy

An income tax cut of \$16 billion is assumed, effective January 1, 1979, with a further cut of \$16 billion in 1980. The federal deficit was projected at \$26 billion in 1979 and \$40 billion in 1980, with defense expenditures rising only slightly in real terms, while non-defense expenditures (in 1972\$) increase by over 7 percent per year in 1979-80. Monetary policy is relatively restrictive, with negative free reserves through 1980 and a discount rate assumed to rise to 7.45 percent by 1981.

(3) Energy Trends

The final energy bill was assumed to include the tax credits for conservation measures, and for investment in co-generation and energy consumption equipment, plus the increase in the interstate natural gas ceiling price and "new gas" deregulation. Crude oil imports prices were assumed to rise by 6.5

^{1/} Details are shown in Table 17 of the Forecast Tables, Appendix A.

percent and 7.4 percent in 1979-80, and 5.5 percent thereafter. Alaskan production is assumed to rise to 1.2 million bbls/day in 1979 and 2.0 million bbls/day in 1980.

(Since these assumptions were made, recent policy changes have led to greater fiscal and monetary restraint, and OPEC policies and the Iranian production loss have led to very rapid price increases and supply shortages. Hence, the cyclical pattern of the forecast can be expected to shift significantly, with the 1979-80 results changing substantially.)

Key assumptions specific to the Motor Vehicle Model are:

(1) Autos Fuel Economy

The annual CAFE requirements through 1985 are met without substantial market distortions. In order to accomplish this, we have projected a "downsizing" program by class of car through 1985, along with assumed technical efficiency gains in fuel economy--due to electronics, dieselization, transmission improvements, varying displacement engines, and so on. The 1985 curb weights for domestics are about 20 percent below their 1978 levels, engine displacements are reduced 30 to 40 percent, while the efficiency gains increase "on the road" mpgs by 18 percent compared to 1978.^{1/} No further mpg improvements after 1985 are assumed.

(2) LDT Fuel Economy

We have assumed compliance with the recently announced LDT CAFE standards through 1982, with no change projected thereafter. The new vehicle "on the road" mpg projections for 1982 are:

^{1/} These assumptions are shown in detail in Tables 20, 21, and 22 of the Forecast Tables, Appendix B.

- Personal LDT (MPGPT) 15.48 (+ 41% over 1977 level)
- Commercial GVW1 (MPGC1) 16.20 (+ 41% over 1977 level)
- Commercial GVW2 (MPGC2) 12.71 (+ 19% over 1977 level)^{1/}

(3) Imports

Imported subcompacts are reduced some 250,000 units, taking effect in 1979-80, below what they would otherwise have been, to account for Volkswagen of America production and loss of "captives." Domestic sales are correspondingly increased.

(4) Air Bags

It has been assumed that air bags will be required to meet the passive restraint safety standards coming into effect in 1982-84. This has a significant impact, since this adds about 3.5 percent to base purchase prices for each vehicle class. This is a "pessimistic" assumption insofar as automatic safety belts, etc., may be found to be an effective and cheaper alternative for some sizes or types of cars.

4.2 SUMMARY OF RESULTS

General economic trends of importance are the lack of growth in real disposable family income and the surge in inflation in the 1979-81 period. After 1981 growth in real income per family averages only 1 percent per annum, while the consumer price index grows by over 5.8 percent on average. (See Figures 4-1 and 4-2.)^{2/}

^{1/} Assuming that over half the Commercial GVW2 LDTs are unaffected by the standards, due to being over 8500 lbs. Annual values are given in Table 32.10 of Appendix B.

^{2/} See Table 18, Appendix B, for details of economic trends.

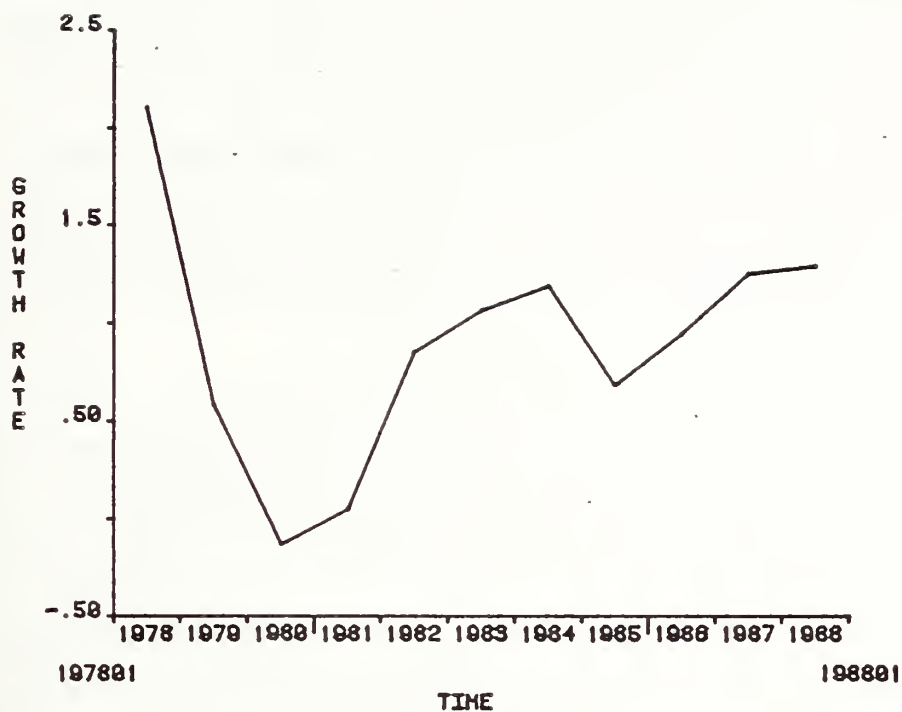


FIGURE 4-1. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
 --REAL DISPOSABLE INCOME PER FAMILY

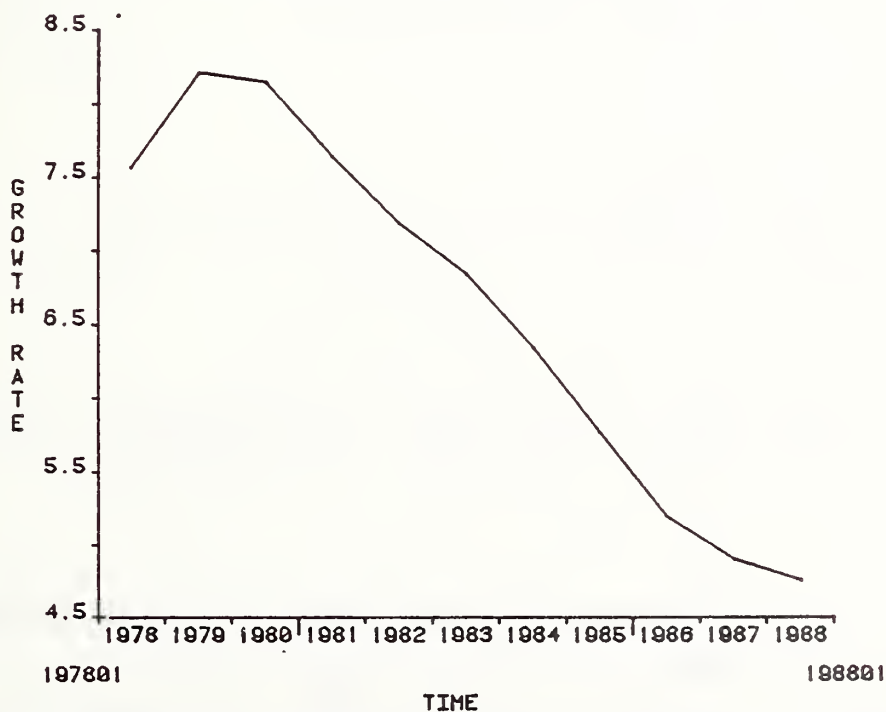


FIGURE 4-2. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
 --CONSUMER PRICE INDEX

Looking first at total new registrations of cars and light trucks, 1978 is a record year at 14.7 million vehicles, 11 million of these being autos and vans registered as autos--very close to our forecast made in 1976. The 1979-81 period shows weak demand, with 1981 sales being only 1.6 percent above 1978. Recent policy initiatives and energy trends will probably result in a more significant decline in 1979-80. There is a strong recovery cycle in 1982-84, followed by a downturn in 1985-86, with sales recovering moderately thereafter. The overall average annual rate of growth, 1978 to 1988, is 2.1 percent.

As can be seen from the growth rates (Figure 4-3), personal LDT sales continue to lead the market, although at somewhat slower rates than in the past. The 1988 peak of nearly 3 million new registrations represents an annual average growth rate of 6.2 percent. In contrast, automobile sales register sharper declines in 1979 (down 2.6 percent) and 1985 (2.2 percent), averaging only 1 percent per annum growth over the next decade. The outlook for commercial LDTs parallels the personal truck pattern, but is weaker, especially during periods of economic weakness. The overall growth averages 3.3 percent per year.

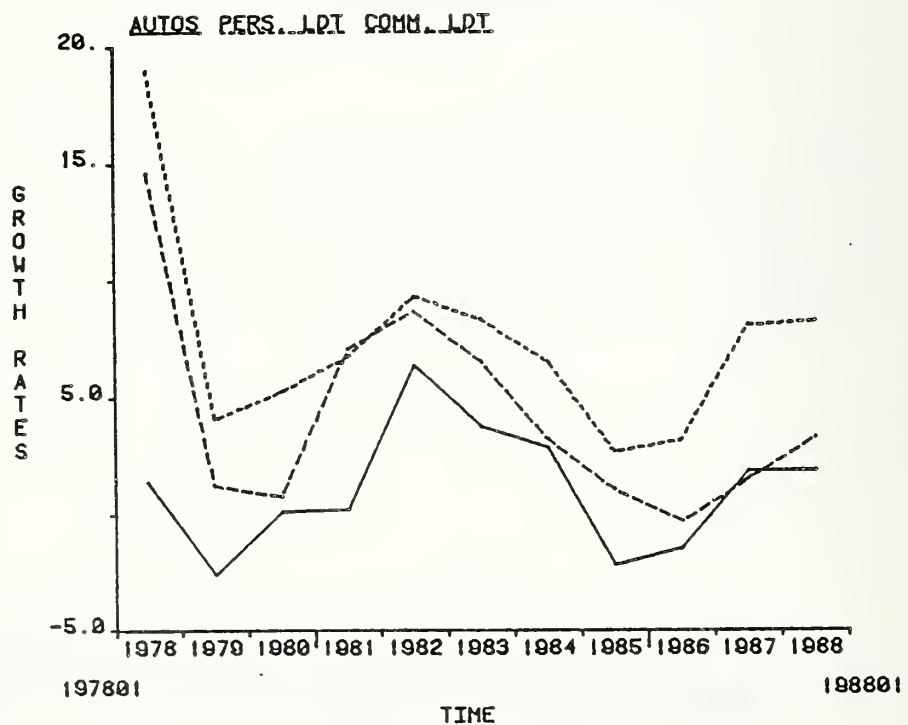


FIGURE 4-3. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
--NEW REGISTRATIONS

The growth of vehicles in operation, year-end (Figure 4-4) follows the new registrations trends. We estimate the 1978 total to be 129.3 million, with 101.3 million cars (78 percent), 18.6 million commercial LDTs (14 percent), and 9.5 million personal LDTs (7 percent). By 1988 we project total vehicles to reach 172.2 million, an average annual growth rate of 2.9 percent, slightly below the 1968-78 rate of 3.8 percent. Of this total, 69 percent will be cars (1.6 percent annual growth), 13 percent will be personal LDTs (9.2 percent per annum), with commercial LDTs accounting for 18 percent (5.2 percent per annum).

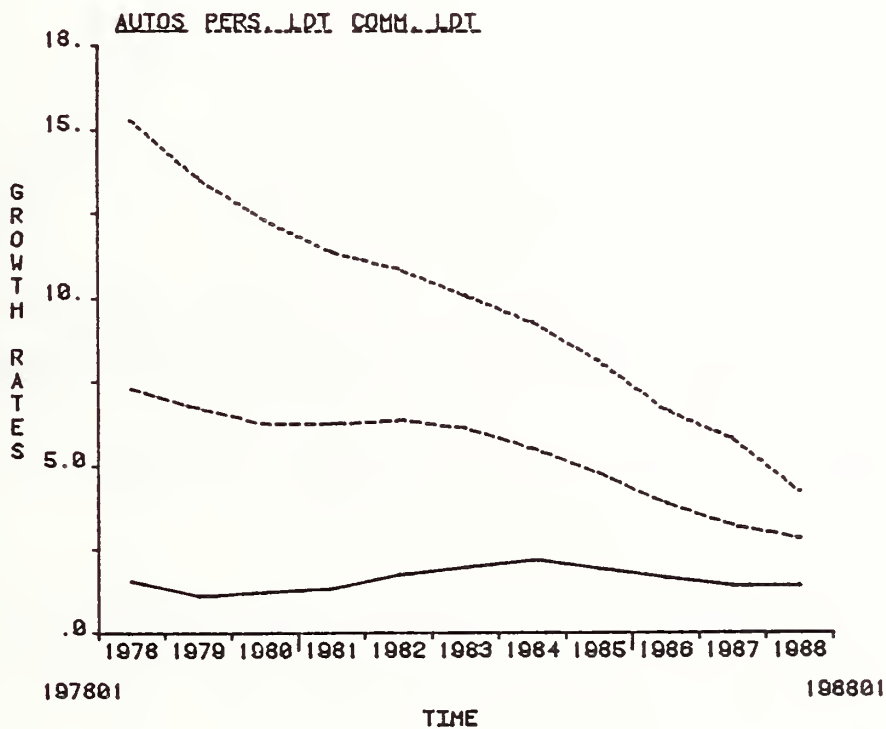


FIGURE 4-4. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
 --VEHICLE STOCKS

A major factor acting to slow growth below historical trends is the high growth of purchase prices. Figure 4-5 shows that prices increase annually 9 percent or more through 1982. While growth rates thereafter trend downwards, the increases continue to exceed the general inflation rate.

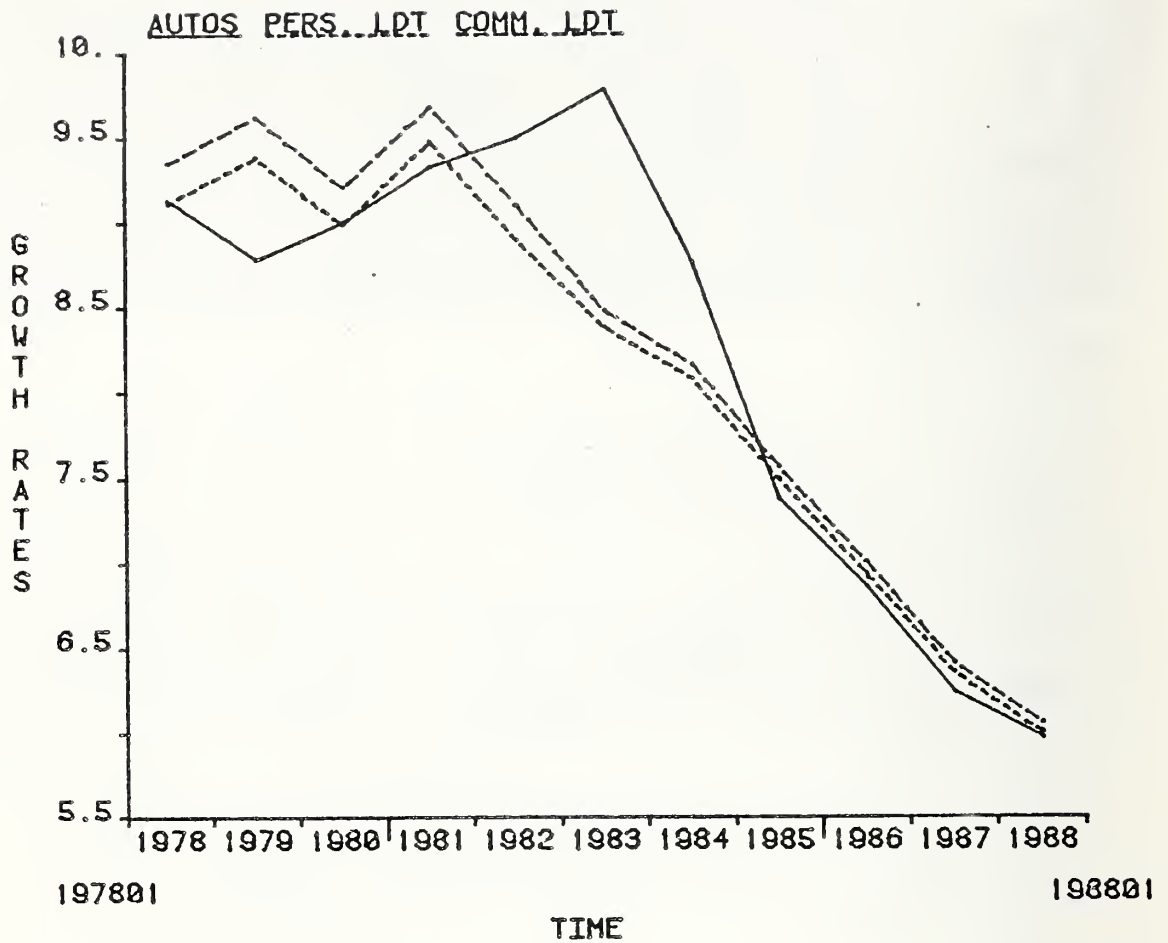


FIGURE 4-5. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
 --PURCHASE PRICES

From the viewpoint of assessing current and future policy the key question is the projection of fuel consumption. Here there are three components: the change in the vehicle stock, the change in miles driven per vehicle, and the change in fleet average fuel economy. Miles driven per vehicle (Figure 4-6) by personal LDTs grow most rapidly at just under 0.7 percent per year with autos a close second, averaging over 0.5 percent. Commercial LDTs are the slowest, with miles per vehicle growing by just over 0.3 percent per year.

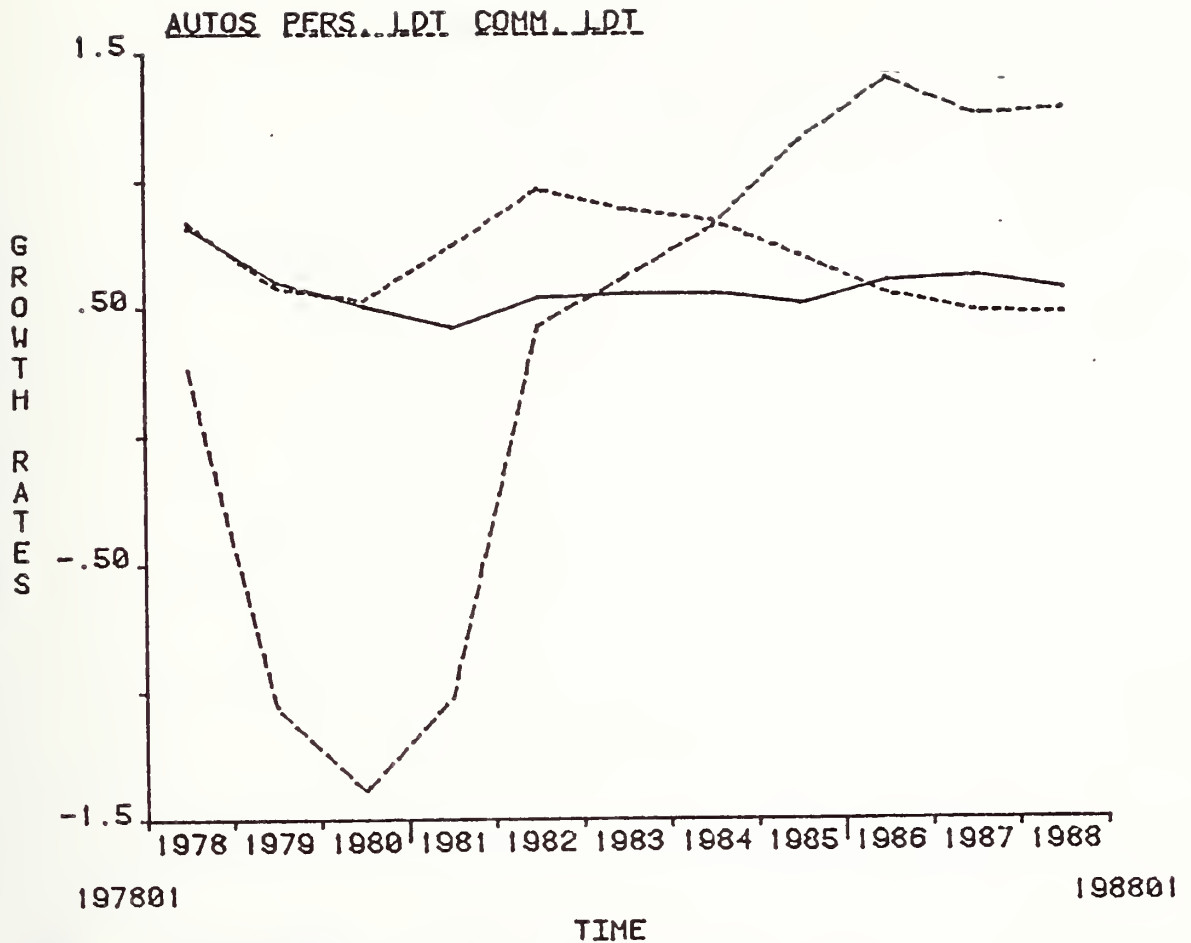


FIGURE 4-6. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
 --MILES PER VEHICLE

Combining the above trends with the vehicle stock projections, total miles driven by all cars and light trucks grow from an estimated 1.4 trillion miles in 1978 to over 2 trillion by 1988, a 3.5 percent growth rate. In forecasting average fuel economy for each vehicle we estimate mpg for each vintage, and hence changes in the fleet average will depend upon the new vehicle mpg, the sales rate, and the scrappage rate. We have projected design parameters for automobiles which do imply compliance with the CAFE standards for the industry as a whole. Hence, the auto's overall fleet average grows rapidly, especially from 1982 onward, averaging 3.5 percent per year for the 1978-88 period. The current standards for LDTs have been incorporated without any extensions beyond 1982. On this basis, the personal LDT fleet average grows by 2.5 percent per year, while commercial LDTs register a 1.5 percent rate (Figure 4-7).

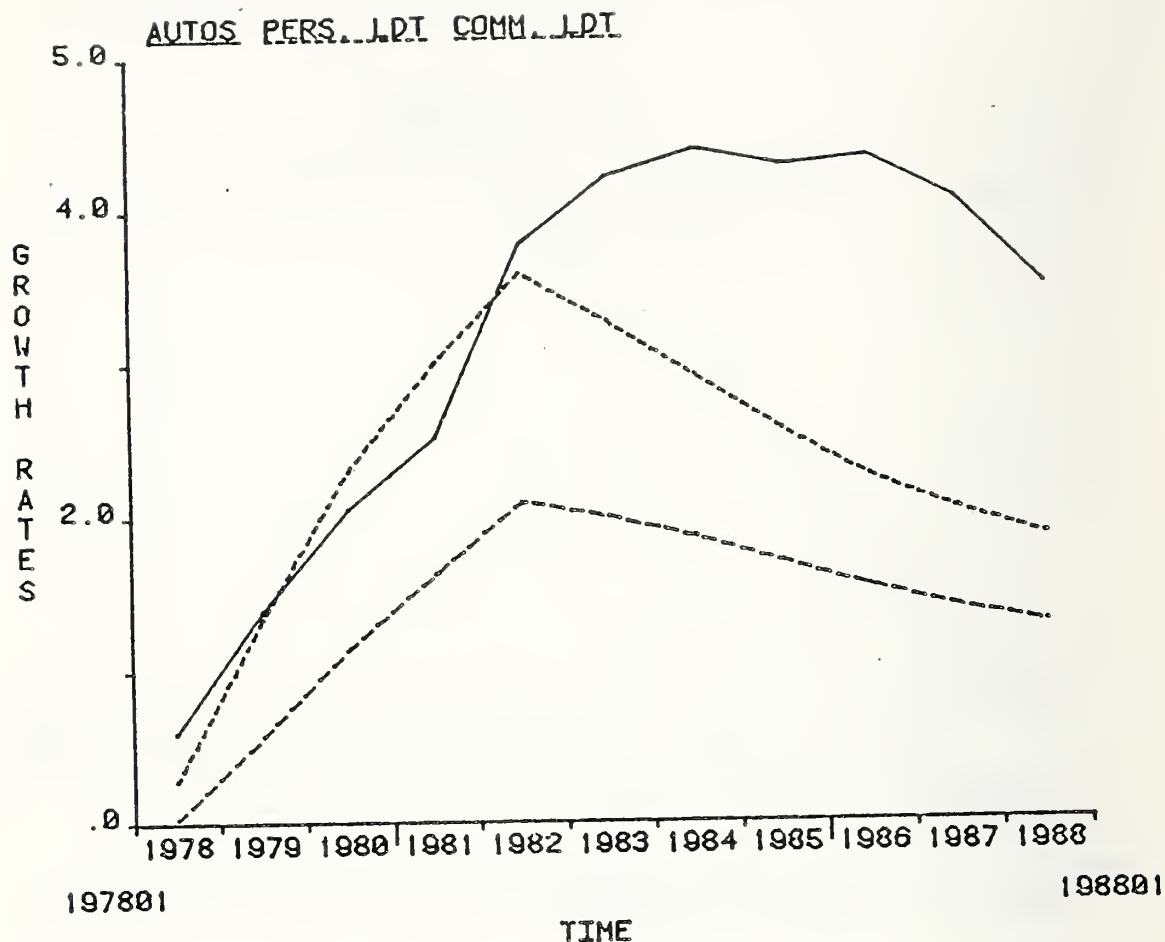


FIGURE 4-7. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
AVERAGE FLEET MPG

As a result of these trends, total fuel consumption by all cars and light trucks continues to grow throughout the forecast period (Figure 4-8). The average growth rate is 0.8 percent, however, by 1988 the annual increase is only 0.3 percent. The trends by vehicle type are, of course, quite divergent. Fuel consumption by automobiles begins to decline significantly in 1981. By 1988 consumption is down 10 billion gallons from the 1978 estimate, an average annual decline of 1.2 percent. Fuel consumed by LDTs, on the other hand, increases by 19 billion gallons over the decade, increasing at a 5.4 percent rate. A general summary of key results is given in Table 4-1.

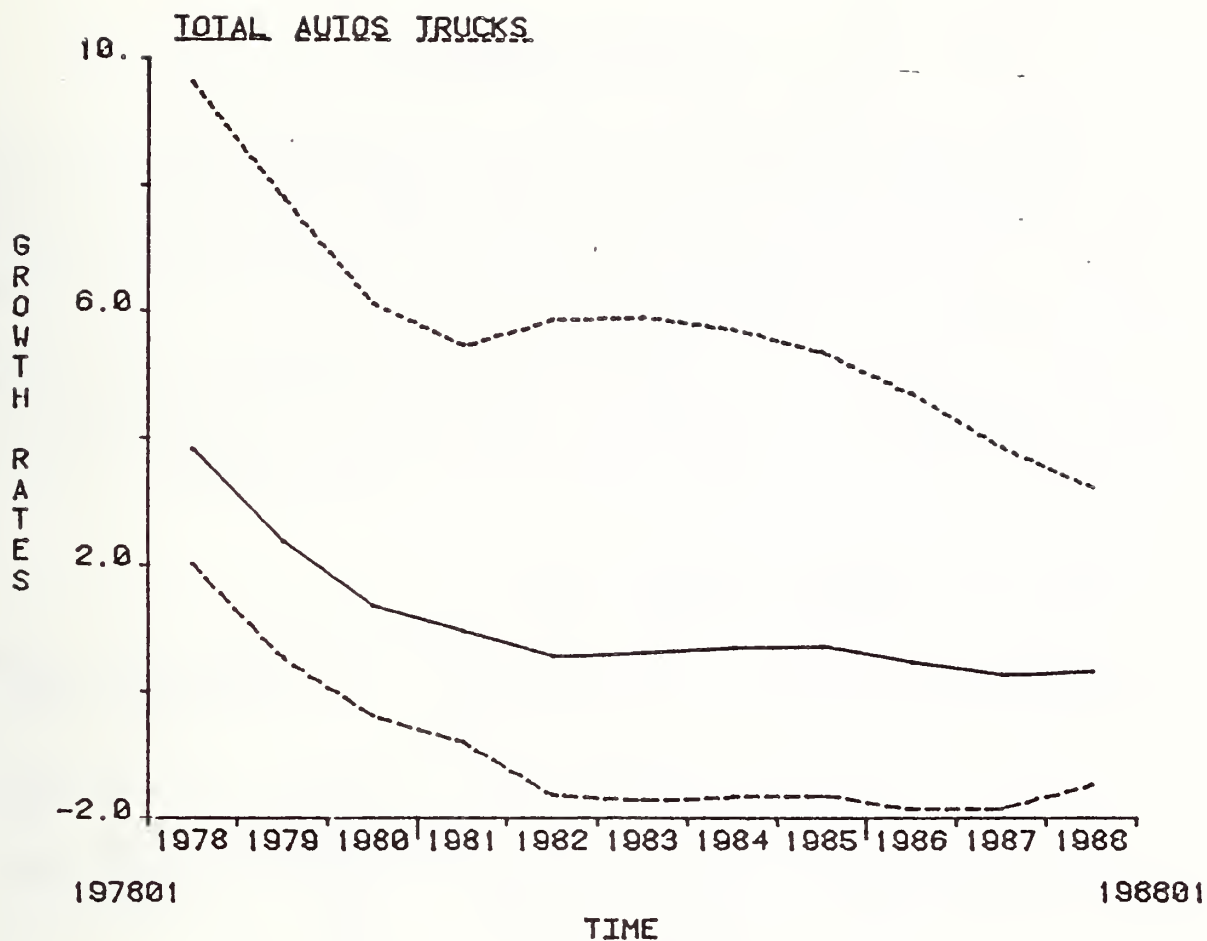


FIGURE 4-8. WHARTON EFA MOTOR VEHICLE MODEL, NOVEMBER 1978 FORECAST
 --FUEL CONSUMPTION

TABLE 4-1. FORECAST RESULTS SUMMARY

	Automobiles		Personal LDTs		Commercial LDTs		All Vehicles	
Mid-Year Stock	1.6	(2.9)	9.7	(14.7)	5.4	(6.9)	3.0	(3.9)
Miles per Vehicle	0.5	(0.5)	0.7	(0.7)	0.3	(0.9)	0.5	(0.5)
Fuel Economy	3.5	(-0.1)	2.5	(0.0)	1.5	(-0.1)	2.7	(-0.1)
Fuel Consumed	-1.3	(3.5)	7.7	(15.4)	4.2	(7.9)	0.8	(4.7)
Purchase Prices	8.1	(6.4)	8.0	(6.4)	8.1	(6.8)	-	-
Consumer Prices					6.5	(6.5)		
Fuel Prices					6.8	(6.8)		

5. SIMULATION ANALYSIS

The simulations reported here are initial experiments with the current model. Therefore, some of the results summarized in the following sections, and the detailed results contained in Appendix C, are subject to change as anomolous results are identified and corrected. All of the input changes occur in 1980, except for the Extended Truck MPG Standards, and are a shift in the level of the value (as opposed to a continuing change in the rate of growth). Hence short-term and long-term impacts are very different, and it is primarily the 5-year and 10-year changes which are reported here.

5.1 TWO PERCENT INCREASE IN PERSONAL INCOME

A two percent increase in personal income leads to changes in the following selected variables:

		<u>% Change from Control</u> ^{1/}	<u>Year</u>
<u>New Registrations:</u>	Autos	8.36	(1980)
	Personal LDTs	15.60	
	Commercial LDTs	15.97	
<u>Mid-Year Stock:</u>	Autos	0.62	(1985)
	Personal LDTs	4.48	
	Commercial LDTs	3.02	
<u>Miles per Vehicle:</u>	Autos	0.58	(1985)
	Personal LDTs	0.60	
	Commercial LDTs	5.23	
<u>Fleet Average MPG:</u>	Autos	-0.12	(1985)
	Personal LDTs	0.32	
	Commercial LDTs	0.22	
<u>Fuel Consumed:</u>	Autos	1.31	(1985)
	Personal LDTs	4.77	
	Commercial LDTs	8.17	
	Total	3.24	

^{1/} The Control forecast used for these simulations is slightly different from the forecast described in Section 4. Hence the tables in Appendix B do not contain the same "Control" results as those in Appendix C.

The sales impacts are a short-run response, with rapid decay; since scrappage also rises the stock effects are less dramatic. In addition to increasing personal income by 2 percent, the ratio of income earned in agriculture, construction, trade, and services relative to the total was also raised 2 percent, hence the large impacts for commercial LDTs.

5.2 FIVE PERCENT INCREASE IN TRUCK PRICES

A five percent increase in truck prices leads to changes in the following selected variables:

		<u>% Change from Control</u>	<u>Year</u>
<u>New Registrations:</u>	Personal LDTs	-6.22	(1980)
	Commercial LDTs	-5.27	
<u>Mid-Year Stock:</u>	Personal LDTs	-1.15	(1985)
	Commercial LDTs	-0.97	
<u>Capitalized Cost per Mile:</u>	Personal LDTs	2.27	(1985)
	Commercial GVW1	1.96	
	Commercial GVW2	1.78	
<u>Fuel Consumed:</u>	Personal LDTs	-1.11	(1985)
	Commercial LDTs	-0.94	
	Total	-0.35	

The only deficiency in the current system is the lack of impact on autos, which "a priori" might occur with a truck price change.

5.3 TEN PERCENT INCREASE IN GASOLINE PRICES

A ten percent increase in gasoline prices leads to changes in the following selected variables:

		<u>% Change from Control</u>	<u>Year</u>
<u>Mid-Year Stock:</u>	Autos	-0.47	(1990)
	Personal LDTs	-0.40	
	Commercial LDTs	0.23	
<u>Capitalized Cost per Mile:</u>	Autos	1.21	(1990)
	Personal LDTs	1.44	
	Commercial GVW1	1.73	
	Commercial GVW2	2.33	
<u>Miles per Vehicle:</u>	Autos	-2.27	(1990)
	Personal LDTs	-2.60	
	Commercial LDTs	-5.46	
<u>Fuel Consumed:</u>	Autos	-2.74	(1990)
	Personal LDTs	-2.97	
	Commercial LDTs	-5.24	
	Total	-3.40	

A problem with this simulation is that scrappage falls an unlikely amount in response to the VMT changes, which causes the perverse commercial stock response.

5.4 EXTENDED TRUCK MPG STANDARDS

New truck mpgs were increased after 1982, as follows:

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986-90</u>
Personal	15.48	16.48	17.48	18.48
Commercial GVW1	16.20	17.20	18.20	19.20
Commercial GVW2	12.71	13.21	13.71	14.21

These assumptions lead to changes in the following selected variables:

		<u>% Change from Control</u>	<u>Year</u>
<u>Mid-Year Stock:</u>	Personal LDTs	0.62	(1985)
	Commercial LDTs	0.26	
<u>Mid-Year Stock:</u>	Personal LDTs	-0.09	(1985)
	Commercial LDTs	0.04	
<u>Capitalized Cost per Mile:</u>	Personal LDTs	-2.35	(1985)
	Commercial GVW1	-2.70	
	Commercial GVW2	-2.46	
<u>Miles per Vehicle:</u>	Personal LDTs	2.76	(1980)
	Commercial LDTs	4.14	
<u>Fleet Average MPG:</u>	Personal LDTs	10.37	(1990)
	Commercial LDTs	7.12	
<u>Fuel Consumed:</u>	Personal LDTs	-7.58	(1990)
	Commercial LDTs	-2.92	
	Total	-1.98	

The simulation does not incorporate the higher LDT prices which presumably would accompany these mpg improvements. Again, the stock values may be too low if the impacts of VMT changes are overstated, since the capitalized costs per mile have relatively weak impacts.

APPENDIX A

BODY CLASS DEFINITIONS
AND LDT CLASSIFICATION BY TYPE

<u>Body Class</u>	<u>Definition</u>
Pickup, Two or Four Wheel Drive	A conventional truck with a two- or four-door cab and an open top cargo carrying bed.
Suburban, Two or Four Wheel Drive	A conventional cab vehicle with extended hood on light truck chassis with passenger and cargo room within the body. A truck version of a passenger station wagon.
Utility, Two or Four Wheel Drive	Any vehicle normally referred to as a rough terrain or "Jeep" type. This type of vehicle is characterized as having a high ramp breakover angle and very little front and rear overhang, and equipped for off-highway as well as on-highway use.
Van (Passenger or Cargo)	A somewhat rectangular vehicle without the traditional long hood of conventional trucks, having passenger and cargo capacity contained within the body. Has relatively high cargo capacity.
Multistop	Similar to a van but much higher and with standard seating capacity limited to 1 or 2 passengers including the driver (i.e., the typical bread van or commercial laundry delivery van). Vehicle has none of the qualities of a passenger car--it is intended, primarily, for low speed intracity delivery.

Personal-use LDTs comprise:

- (1) Passenger vans usually included in automobile registrations: Voyager, Sportsman, Club Wagon, Sportvan, VW Bus.

(2) The following GW Class 1 and 2 truck models (1977):

Chevrolet Vans, El Camino, LUV, Suburban, Blazer

Dodge Vans, Trail Duster, Ramcharger

Ford Econoline, Ranchero, Bronco, Courier

GMC Vandura, Suburban, Jimmy, Sprint

International Scout

Jeep CJ5, CJ7, Commando

All imports

Commercial use LDTs comprise all other GW1 and GW2 trucks, almost all of these being pickups, with a few panel vans and multistops.

APPENDIX B

FORECAST RESULTS TABLES
 THE WHARTON EFA MOTOR VEHICLE DEMAND MODEL
 CONTROL SOLUTION, NOVEMBER 1978

I N D E X O F T A B L E S

TABLE NUMBER	FIRST PAGE	LAST PAGE	T A B L E T I T L E
1.00	1	1	1 SELECTED MARKET INDICATORS
2.00	2	2	2 NEW REGISTRATIONS (MILL AUTOS)
2.10	2	2	2 TOTAL DOMESTIC NEW REGISTRATIONS (MILL AUTOS)
2.20	2	2	2 FOREIGN NEW REGISTRATIONS (MILL AUTOS)
3.00	3	3	3 GROWTH RATES, NEW REGISTRATIONS
3.10	3	3	3 GROWTH RATES, DOMESTIC NEW REGISTRATIONS
3.20	3	3	3 GROWTH RATES, FOREIGN NEW REGISTRATIONS
4.00	4	4	4 PASSENGER CARS IN OPERATION: YEAR-END (MILL AUTOS)
4.10	4	4	4 DOMESTIC CARS IN OPERATION: YEAR-END (MILL AUTOS)
4.20	4	4	4 FOREIGN CARS IN OPERATION: YEAR-END (MILL AUTOS)
5.00	5	5	5 GROWTH RATES, CARS IN OPERATION: YEAR-END
5.10	5	5	5 GROWTH RATES, DOMESTIC CARS IN OPERATION: YEAR-END
5.20	5	5	5 GROWTH RATES, FOREIGN CARS IN OPERATION: YEAR-END
6.00	6	6	6 CARS IN OPERATION BY AGE: MID YEAR (MILL AUTOS)
6.10	6	6	6 CARS IN OPERATION: SHARES BY AGE (PERCENT)
7.00	7	7	7 GROWTH RATES, CARS IN OPERATION: MID-YEAR
7.10	7	7	7 GROWTH RATES, CARS IN OPERATION: SHARES BY AGE
8.00	8	8	8 SCRAPPAGE (MILL AUTOS)
8.10	8	8	8 GROWTH RATES, SCRAPPAGE
9.00	9	9	9 MISCELLANEOUS MARKET VARIABLES
9.10	9	9	9 GROWTH RATES, MISCELLANEOUS MARKET VARIABLES
10.00	10	10	10 DOMESTIC AUTO PRICES (DOLLARS)
11.00	11	11	11 GROWTH RATES, DOMESTIC AUTO PRICES
12.00	12	12	12 FOREIGN AUTO PRICES (DOLLARS)
12.10	12	12	12 GROWTH RATES, FOREIGN AUTO PRICES
13.00	13	13	13 CAPITALIZED COSTS PER MILE (DOLLARS PER MILE)
13.10	13	13	13 GROWTH RATES, CAPITALIZED COSTS PER MILE
14.00	14	14	14 MILES PER GALLON (WEFA)
14.10	14	14	14 NEW AUTO MILES PER GALLON (EPA)
15.00	15	15	15 GROWTH RATES, MILES PER GALLON (WEFA)
15.10	15	15	15 GROWTH RATES, NEW AUTO MILES PER GALLON (EPA)
16.00	16	16	16 USED CAR MARKET
16.10	16	16	16 GROWTH RATES, USED CAR MARKET
17.00	17	17	17 DEMOGRAPHIC VARIABLES
17.10	17	17	17 GROWTH RATES, DEMOGRAPHIC VARIABLES
18.00	18	18	18 ECONOMIC VARIABLES
19.00	19	19	19 GROWTH RATES, ECONOMIC VARIABLES
20.00	20	20	20 AUTO CHARACTERISTICS
21.00	21	21	21 GROWTH RATES, AUTO CHARACTERISTICS
22.00	22	22	22 FUEL CONSUMPTION EFFICIENCY FACTORS
23.00	23	23	23 MISCELLANEOUS ASSUMPTIONS
23.10	23	23	23 GROWTH RATES, MISCELLANEOUS ASSUMPTIONS
24.00	24	24	24 LIGHT TRUCKS SECTOR (MILL VEHICLES)
25.00	25	25	25 GROWTH RATES, LIGHT TRUCK SECTOR
26.00	26	26	26 TRUCKS IN OPERATION BY AGE: MID-YEAR (MILL TRUCKS)
27.00	27	27	27 GROWTH RATES, TRUCKS IN OPERATION BY AGE MID-YEAR
28.00	28	28	28 PRICES AND CAPITALIZED COSTS (DOLLARS)
29.00	29	29	29 GROWTH RATES, PRICES AND CAPITALIZED COSTS
30.00	30	30	30 MISCELLANEOUS ENDOGENOUS VARIABLES
31.00	31	31	31 GROWTH RATES, MISCELLANEOUS ENDOGENOUS VARIABLES
32.00	32	32	32 CONSTANT ADJUSTMENTS
32.10	32	32	32 EXOGENOUS ASSUMPTIONS

TABLE 1.00 SELECTED MARKET INDICATORS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	CARS IN OPERATION	101,314	102,428	103,686	105,056	106,893	109,004	111,404	113,538	115,404	117,019	118,672
2	%GROWTH	1.6	1.1	1.2	1.3	1.7	2.0	2.2	1.9	1.6	1.4	1.4
3												
4	NEW CAR RETAIL SALES	11,153	10,866	10,884	10,911	11,600	12,028	12,364	12,100	11,925	12,147	12,372
5	%GROWTH	1.3	-2.6	0.2	0.2	6.3	3.7	2.8	-2.1	-1.4	1.9	1.9
6												
7	TOTAL NEW CAR REGISTRATIONS	10,855	10,574	10,590	10,612	11,290	11,708	12,039	11,778	11,608	11,823	12,042
8	%GROWTH	1.3	-2.6	0.1	0.2	6.4	3.7	2.8	-2.2	-1.4	1.9	1.9
9												
10	DOMESTIC	8,904	8,692	8,675	8,621	9,187	9,516	9,805	9,563	9,441	9,576	9,728
11	%GROWTH	2.1	-2.4	-0.2	-0.6	6.6	3.6	3.0	-2.5	-1.3	1.4	1.6
12	FOREIGN	1,952	1,882	1,914	1,991	2,102	2,192	2,234	2,215	2,167	2,247	2,314
13	%GROWTH	-2.0	-3.6	1.7	4.0	5.6	4.2	1.9	-0.8	-2.2	3.7	3.0
14												
15	% FOREIGN	17.98	17.80	18.08	18.77	18.62	18.72	18.56	18.81	18.67	19.00	19.21
16	%GROWTH	-3.3	-1.0	1.6	3.8	-0.8	0.5	-0.9	1.4	-0.8	1.8	1.1
17	% SMALL CARS (SUH + COMP)	48.15	48.14	48.23	48.36	48.37	47.91	47.29	47.89	48.04	48.38	48.70
18	%GROWTH	3.9	-0.0	0.2	0.3	0.0	-1.0	-1.3	1.3	0.3	0.7	0.7
19												
20	TOTAL AUTOS SCRAPPED	9,303	9,461	9,331	9,242	9,452	9,597	9,639	9,644	9,742	10,208	10,390
21	%GROWTH	6.4	1.7	-1.4	-1.0	2.3	1.5	0.4	0.1	1.0	4.8	1.8
22												
23	VEHICLE MILES TRAVELLED	1127.84	1149.68	1168.91	1188.78	1213.57	1243.04	1276.08	1308.99	1340.35	1369.16	1396.32
24	%GROWTH	2.6	1.9	1.7	1.7	2.1	2.4	2.7	2.6	2.4	2.1	2.0
25												
26	TOTAL FLEET MPG (WEFA EST.)	13.73	13.92	14.21	14.57	15.12	15.75	16.44	17.14	17.89	18.61	19.26
27	%GROWTH	0.6	1.4	2.1	2.5	3.8	4.2	4.4	4.3	4.3	4.0	3.5
28												
29	AUTO MOTOR FUEL CONSUMPTION	82.14	82.58	82.27	81.61	80.29	78.92	77.61	76.35	74.94	73.57	72.51
30	%GROWTH	2.0	0.5	-0.4	-0.8	-1.6	-1.7	-1.7	-1.6	-1.8	-1.8	-1.4
31	AUTO MOTOR FUEL EXPENDITURES	26.98	27.76	28.32	28.09	27.64	27.16	26.71	26.28	25.79	25.32	24.96
32	%GROWTH	3.0	2.9	2.0	-0.8	-1.6	-1.7	-1.7	-1.6	-1.8	-1.8	-1.4
33												
34	NEW CAR FLEET MPG (EPA EST.)	19.43	20.33	21.17	23.24	25.23	27.30	28.32	28.86	28.87	28.90	29.04
35	%GROWTH	3.8	4.6	4.1	9.8	8.6	8.2	3.7	1.9	0.0	0.1	0.5
36												
37	DOMESTIC	18.37	19.32	20.12	22.07	24.05	26.10	27.10	27.63	27.64	27.65	27.77
38	%GROWTH	4.4	5.1	4.1	9.7	9.0	8.5	3.9	1.9	0.1	0.0	0.4
39	FOREIGN	26.32	26.79	27.71	30.18	32.12	34.13	35.29	35.79	35.78	35.78	35.94
40	%GROWTH	1.7	1.8	3.4	8.9	6.4	6.2	3.4	1.4	-0.0	0.0	0.4
41												
42	AVERAGE NEW CAR PURCHASE COST	6896.	7502.	8177.	8940.	9790.	10748.	11689.	12550.	13410.	14246.	15096.
43	%GROWTH	9.1	8.8	9.0	9.3	9.5	9.8	8.8	7.4	6.8	6.2	6.0
44	NEW CAR EXPENDITURES	35.57	34.76	35.18	36.68	40.70	43.99	46.85	47.07	47.56	49.61	51.68
45	%GROWTH	0.2	-2.3	1.2	4.3	10.9	8.1	6.5	0.5	1.1	4.3	4.2
46												
47	AVG CAP. COST PER MILE	24.90	26.94	29.23	31.56	34.15	36.83	39.52	42.24	45.09	47.92	50.84
48	%GROWTH	8.0	8.2	8.5	8.0	8.2	7.8	7.3	6.9	6.7	6.3	6.1
49												
50	AVG USED CAR WHOLESALE PRICE	3047.	3416.	3788.	4199.	4626.	5173.	5677.	6172.	6648.	7104.	7569.
51	%GROWTH	13.3	12.1	10.9	10.9	10.2	11.8	9.7	8.7	7.7	6.9	6.5
52	TOTAL USED CAR PURCHASES	16,402	17,465	18,476	18,628	18,947	18,644	18,960	19,362	20,227	20,773	20,654
53	%GROWTH	-1.7	6.5	5.8	0.8	1.7	-1.6	1.7	2.1	4.5	2.7	-0.6

TABLE 2.00 NEW REGISTRATIONS (MILL AUTOS)		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
LINE	I T E M	10,855	10,574	10,590	10,612	11,290	11,708	12,039	11,778	11,608	11,823	12,042
1	TOTAL NEW REGISTRATIONS											
2		2,857	2,763	2,788	2,807	2,955	3,083	3,077	3,058	3,009	3,090	3,173
3	SUBCOMPACT	26,32	26,13	26,33	26,45	26,18	26,33	25,56	25,97	25,92	26,14	26,35
4		2,369	2,327	2,320	2,325	2,506	2,527	2,616	2,582	2,567	2,630	2,692
5	COMPACT	21,83	22,01	21,91	21,91	22,20	21,58	21,73	21,92	22,12	22,24	22,36
6		2,800	2,750	2,741	2,737	2,985	3,011	3,113	3,045	3,013	3,085	3,156
7	MID-SIZE	25,79	26,01	25,88	25,79	26,44	25,71	25,86	25,85	25,95	26,09	26,21
8		1,794	1,743	1,753	1,749	1,803	1,982	2,071	1,932	1,868	1,834	1,800
9	FULL SIZE	16,53	16,49	16,56	16,48	15,97	16,93	17,21	16,40	16,09	15,51	14,95
10		1,035	0,991	0,988	0,994	1,040	1,106	1,161	1,161	1,151	1,184	1,222
11	LUXURY	9,54	9,37	9,33	9,37	9,22	9,44	9,65	9,86	9,92	10,01	10,14
12												

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TABLE 2.10 TOTAL DOMESTIC NEW REGISTRATIONS (MILL AUTOS)		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
LINE	I T E M	8,904	8,692	8,675	8,621	9,187	9,516	9,805	9,563	9,441	9,576	9,728
1	TOTAL DOMESTIC NEW REGISTRATIONS											
2		1,116	1,055	1,058	1,007	1,062	1,112	1,080	1,086	1,082	1,091	1,109
3	SUBCOMPACTS	12,54	12,14	12,19	11,68	11,56	11,68	11,02	11,35	11,46	11,39	11,40
4		2,271	2,234	2,231	2,241	2,426	2,450	2,544	2,513	2,502	2,568	2,634
5	COMPACT	25,51	25,70	25,72	25,99	26,40	25,75	25,94	26,28	26,50	26,81	27,07
6		2,800	2,750	2,741	2,737	2,985	3,011	3,113	3,045	3,013	3,085	3,156
7	MID-SIZE	31,44	31,64	31,59	31,74	32,49	31,64	31,75	31,84	31,91	32,21	32,44
8		1,794	1,743	1,753	1,749	1,803	1,982	2,071	1,932	1,868	1,834	1,800
9	FULL SIZE	20,15	20,06	20,21	20,29	19,62	20,83	21,13	20,20	19,78	19,15	18,50
10		0,923	0,909	0,892	0,887	0,911	0,962	0,997	0,987	0,976	0,999	1,031
11	LUXURY	10,36	10,46	10,29	10,29	9,92	10,11	10,17	10,32	10,34	10,43	10,59
12												

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TABLE 2.20 FOREIGN NEW REGISTRATIONS (MILL AUTOS)		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
LINE	I T E M	1,952	1,882	1,914	1,991	2,102	2,192	2,234	2,215	2,167	2,247	2,314
1	TOTAL FOREIGN NEW REGISTRATIONS											
2		1,741	1,708	1,730	1,800	1,893	1,972	1,997	1,973	1,927	2,000	2,064
3	SUBCOMPACT	89,18	90,72	90,38	90,38	90,05	89,96	89,40	89,04	88,91	89,00	89,20
4		0,098	0,093	0,089	0,084	0,080	0,076	0,072	0,069	0,065	0,062	0,059
5	COMPACT	5,04	4,97	4,64	4,24	3,81	3,47	3,24	3,10	3,01	2,76	2,55
6		0,113	0,081	0,095	0,107	0,129	0,144	0,165	0,174	0,175	0,185	0,191
7	LUXURY	5,78	4,32	4,98	5,38	6,14	6,57	7,36	7,86	8,08	8,24	8,26
8												
9												
10	FOREIGN MARKET SHARES	17,98	17,80	18,08	18,77	18,62	18,72	18,56	18,81	18,67	19,00	19,21
11	% OF SUBCOMPACT	60,93	61,80	62,06	64,13	64,07	63,95	64,90	64,50	64,03	64,70	65,05
12	% OF COMPACT	4,15	4,02	3,83	3,63	3,20	3,01	2,76	2,66	2,54	2,36	2,19
13	% OF LUXURY	10,89	8,20	9,66	10,78	12,40	13,01	14,17	15,00	15,21	15,64	15,64

TABLE 3.00 GROWTH RATES, NEW REGISTRATIONS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL NEW REGISTRATIONS	1.3	-2.6	0.1	0.2	6.4	3.7	2.8	-2.2	-1.4	1.9	1.9
2												
3	SUBCOMPACT	3.6	-3.3	0.9	0.7	5.3	4.3	-0.2	-0.6	-1.6	2.7	2.7
4												
5	COMPACT	7.3	-1.8	-0.3	0.2	7.8	0.8	3.5	-1.1	-0.6	2.4	2.4
6												
7	MID-SIZE	-2.8	-1.8	-0.3	-0.2	9.1	0.9	3.4	-2.2	-1.1	2.4	2.3
8												
9	FULL SIZE	-0.6	-2.8	0.6	-0.2	3.1	9.9	4.5	-6.7	-3.3	-1.8	-1.9
10												
11	LUXURY	-2.4	-4.3	-0.3	0.6	4.6	6.3	5.0	-0.1	-0.8	2.8	3.2

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TABLE 3.10 GROWTH RATES, DOMESTIC NEW REGISTRATIONS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL DOMESTIC NEW REGISTRATIONS	2.1	-2.4	-0.2	-0.6	6.6	3.6	3.0	-2.5	-1.3	1.4	1.6
2												
3	SUBCOMPACTS	12.4	-5.5	0.2	-4.8	5.5	4.7	-2.8	0.5	-0.3	0.8	1.6
4												
5	COMPACT	7.9	-1.6	-0.1	0.4	8.2	1.0	3.8	-1.2	-0.5	2.6	2.6
6												
7	MID-SIZE	-2.8	-1.8	-0.3	-0.2	9.1	0.9	3.4	-2.2	-1.1	2.4	2.3
8												
9	FULL SIZE	-0.6	-2.8	0.6	-0.2	3.1	9.9	4.5	-6.7	-3.3	-1.8	-1.9
10												
11	LUXURY	-1.5	-1.5	-1.9	-0.6	2.7	5.5	3.6	-1.0	-1.1	2.3	3.2

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TABLE 3.20 GROWTH RATES, FOREIGN NEW REGISTRATIONS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL FOREIGN NEW REGISTRATIONS	-2.0	-3.6	1.7	4.0	5.6	4.2	1.9	-0.8	-2.2	3.7	3.0
2												
3	SUBCOMPACT	-1.3	-1.9	1.3	4.0	5.2	4.1	1.3	-1.2	-2.3	3.8	3.2
4												
5	COMPACT	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0	-5.0
6												
7	LUXURY	-8.5	-27.9	17.4	12.3	20.4	11.5	14.3	5.8	0.6	5.7	3.2

LINE	I T E M	4.00 PASSENGER CARS IN OPERATION: YEAR-END (MILL AUTOS)										
		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL CARS IN OPERATION YEAR-END	101,314	102,428	103,686	105,056	106,893	109,004	111,404	113,538	115,404	117,019	118,672
2												
3	SUBCOMPACT	20,870	22,330	23,662	24,851	25,985	27,081	28,033	28,865	29,555	30,153	30,735
4		20,60	21,80	22,82	23,65	24,31	24,84	25,16	25,42	25,61	25,77	25,90
5	COMPACT	19,783	20,461	21,105	21,730	22,461	23,134	23,841	24,454	24,995	25,472	25,947
6		19,53	19,98	20,36	20,68	21,01	21,22	21,40	21,54	21,66	21,77	21,86
7	MID-SIZE	24,359	24,880	25,450	26,057	26,858	27,615	28,420	29,110	29,699	30,202	30,711
8		24,04	24,29	24,54	24,80	25,13	25,51	25,73	25,64	25,73	25,81	25,88
9	FULL SIZE	26,959	25,248	23,797	22,582	21,577	20,940	20,608	20,345	20,155	19,973	19,820
10		26,61	24,65	22,95	21,50	20,19	19,21	18,50	17,42	17,46	17,07	16,70
11	LUXURY	9,343	9,509	9,672	9,836	10,012	10,233	10,502	10,763	11,000	11,220	11,458
12		9,22	9,28	9,33	9,36	9,37	9,39	9,43	9,48	9,53	9,59	9,65

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LINE	I T E M	4.10 DOMESTIC CARS IN OPERATION: YEAR-END (MILL AUTOS)										
		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL CARS IN OPERATION	86,593	86,890	87,377	87,965	89,007	90,314	91,937	93,371	94,647	95,723	96,848
2												
3	SUBCOMPACTS	7,993	8,685	9,291	9,742	10,128	10,465	10,694	10,880	11,030	11,137	11,241
4		9,23	9,99	10,63	11,07	11,38	11,59	11,63	11,65	11,65	11,63	11,61
5	COMPACTS	18,804	19,456	20,088	20,709	21,448	22,140	22,872	23,516	24,089	24,603	25,116
6		21,71	22,39	22,99	23,54	24,10	24,51	24,88	25,19	25,45	25,70	25,93
7	MID-SIZE	24,359	24,880	25,450	26,057	26,858	27,615	28,420	29,110	29,699	30,202	30,711
8		28,13	28,63	29,13	29,62	30,17	30,58	30,91	31,18	31,38	31,55	31,71
9	FULL SIZE	26,959	25,248	23,797	22,582	21,577	20,940	20,608	20,345	20,155	19,973	19,820
10		31,13	29,06	27,24	25,67	24,24	23,19	22,42	21,79	21,29	20,86	20,46
11	LUXURY	8,478	8,621	8,751	8,874	8,996	9,153	9,342	9,519	9,673	9,809	9,960
12		9,79	9,92	10,01	10,09	10,11	10,13	10,16	10,19	10,22	10,25	10,28

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LINE	I T E M	4.20 FOREIGN CARS IN OPERATION: YEAR-END (MILL AUTOS)										
		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL FOREIGN CARS IN OPERATION	14,722	15,538	16,309	17,092	17,886	18,690	19,467	20,167	20,757	21,296	21,823
2												
3	SUBCOMPACTS	12,877	13,645	14,370	15,109	15,857	16,616	17,339	17,985	18,525	19,016	19,495
4		87,47	87,82	88,11	88,40	88,66	88,90	89,07	89,18	89,25	89,29	89,33
5	COMPACTS	0,980	1,004	1,018	1,021	1,013	0,994	0,968	0,938	0,906	0,869	0,831
6		6,66	6,46	6,24	5,97	5,66	5,32	4,97	4,65	4,36	4,08	3,81
7	LUXURY	0,865	0,888	0,921	0,961	1,016	1,080	1,160	1,245	1,327	1,411	1,497
8		5,87	5,72	5,65	5,63	5,68	5,78	5,96	6,17	6,39	6,63	6,86
9												
10	FOREIGN SHARES: % OF TOTAL	14,53	15,17	15,73	16,27	16,73	17,15	17,47	17,76	17,99	18,20	18,39
11	% OF SUBCOMPACT	61,70	61,11	60,73	60,80	61,02	61,36	61,85	62,31	62,68	63,06	63,43
12	% OF COMPACT	4,95	4,91	4,82	4,70	4,51	4,30	4,06	3,84	3,62	3,41	3,20
13	% OF LUXURY	9,25	9,34	9,53	9,77	10,15	10,56	11,04	11,56	12,06	12,58	13,07

TABLE 5.00 GROWTH RATES, CARS IN OPERATION: YEAR-END

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL CARS IN OPERATION YEAR-END	1.6	1.1	1.2	1.3	1.7	2.0	2.2	1.9	1.6	1.4	1.4
2												
3	SUBCOMPACT	9.0	7.0	6.0	5.0	4.6	4.2	3.5	3.0	2.4	2.0	1.9
4												
5	COMPACT	4.2	3.4	3.2	3.0	3.4	3.0	3.1	2.6	2.2	1.9	1.9
6												
7	MID-SIZE	2.3	2.1	2.3	2.4	3.1	2.8	2.9	2.4	2.0	1.7	1.7
8												
9	FULL SIZE	-6.2	-6.3	-5.7	-5.1	-4.5	-3.0	-1.6	-1.3	-0.9	-0.9	-0.8
10												
11	LUXURY	2.7	1.8	1.7	1.7	1.8	2.2	2.6	2.5	2.2	2.0	2.1

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TABLE 5.10 GROWTH RATES, DOMESTIC CARS IN OPERATION: YEAR-END

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL DOMESTIC CARS IN OPERATION	0.6	0.3	0.6	0.7	1.2	1.5	1.8	1.6	1.4	1.1	1.2
2												
3	SUBCOMPACTS	11.4	8.6	7.0	4.8	4.0	3.3	2.2	1.7	1.4	1.0	0.9
4												
5	COMPACTS	4.2	3.5	3.2	3.1	3.6	3.2	3.3	2.8	2.4	2.1	2.1
6												
7	MID-SIZE	2.3	2.1	2.3	2.4	3.1	2.8	2.9	2.4	2.0	1.7	1.7
8												
9	FULL SIZE	-6.2	-6.3	-5.7	-5.1	-4.5	-3.0	-1.6	-1.3	-0.9	-0.9	-0.8
10												
11	LUXURY	2.2	1.7	1.5	1.4	1.4	1.7	2.1	1.9	1.6	1.4	1.5

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TABLE 5.20 GROWTH RATES, FOREIGN CARS IN OPERATION: YEAR-END

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL FOREIGN CARS IN OPERATION	7.3	5.5	5.0	4.8	4.6	4.5	4.2	3.6	2.9	2.6	2.5
2												
3	SUBCOMPACTS	7.5	6.0	5.3	5.1	5.0	4.8	4.4	3.7	3.0	2.6	2.5
4												
5	COMPACTS	3.9	2.5	1.3	0.3	-0.8	-1.8	-2.6	-3.1	-3.5	-4.1	-4.3
6												
7	LUXURY	7.7	2.8	3.7	4.3	5.7	6.3	7.3	7.3	6.6	6.4	6.1

TABLE 6.00 CARS IN OPERATION BY AGE: MID YEAR (MILL AUTOS)

LINE	ITEM	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	CARS IN OPERATION: ALL VINTAGES	100,483	101,827	102,999	104,306	105,914	107,874	110,119	112,377	114,362	116,107	117,750
21	LESS THAN 1 YEAR OLD	5,418	5,277	5,285	5,297	5,635	5,844	6,009	5,879	5,794	5,901	6,011
41	AGE: 1 YEAR OLD	10,662	10,805	10,525	10,542	10,565	11,239	11,656	11,986	11,727	11,557	11,770
51	AGE: 2 YEARS OLD	9,590	10,576	10,719	10,444	10,461	10,483	11,153	11,567	11,895	11,637	11,468
61	AGE: 3 YEARS OLD	8,030	9,461	10,436	10,580	10,310	10,327	10,350	11,012	11,422	11,744	11,498
71	AGE: 4 YEARS OLD	8,309	7,864	9,268	10,228	10,371	10,106	10,124	10,147	10,799	11,199	11,512
81	AGE: 5 YEARS OLD	10,565	8,053	7,624	8,992	9,927	10,066	9,810	9,829	9,855	10,484	10,869
91	AGE: 6 YEARS OLD	9,350	10,082	7,689	7,289	8,600	9,495	9,629	9,387	9,409	9,429	10,027
101	AGE: 7 YEARS OLD	8,202	8,699	9,389	7,174	6,804	8,029	8,866	8,995	8,775	8,789	8,802
111	AGE: 8 YEARS OLD	6,335	7,417	7,875	8,527	6,518	6,182	7,297	8,063	8,188	7,981	7,986
121	AGE: 9 YEARS OLD	6,310	5,505	6,456	6,881	7,455	7,013	5,411	6,393	7,073	7,174	6,982
131	AGE: 10 YEARS OLD	5,132	5,118	4,477	5,280	5,639	6,110	4,677	4,444	5,261	5,810	5,879
141	AGE: 11 YEARS OLD	3,531	3,893	3,893	3,432	4,062	4,338	4,705	3,608	3,438	4,062	4,478
151	AGE: 12 YEARS OLD	2,869	2,589	2,861	2,887	2,557	3,026	3,235	3,515	2,704	2,572	3,026
161	AGE: 13 YEARS OLD	2,232	2,081	1,882	2,100	2,130	1,885	2,234	2,393	2,609	2,004	1,897
171	AGE: 14 YEARS OLD	1,427	1,619	1,513	1,382	1,549	1,571	1,392	1,652	1,776	1,933	1,478
181	AGE: 15 YEARS OLD	0,953	1,035	1,177	1,111	1,019	1,142	1,159	1,030	1,226	1,316	1,426
191	AGE: 16 YEARS OLD	0,616	0,691	0,752	0,864	0,819	0,751	0,843	0,858	0,764	0,909	0,971
201	AGE: 17 YEARS OLD	0,367	0,447	0,503	0,552	0,637	0,604	0,555	0,624	0,636	0,566	0,670
211	AGE: 18 YEARS OLD	0,293	0,266	0,325	0,369	0,407	0,446	0,446	0,410	0,463	0,472	0,418
221	AGE: 19 YEARS OLD	0,190	0,213	0,194	0,239	0,272	0,300	0,347	0,330	0,305	0,343	0,348
231	AGE: 20 YEARS OLD	0,103	0,138	0,155	0,142	0,176	0,201	0,222	0,257	0,245	0,226	0,253

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TABLE 6.10 CARS IN OPERATION: SHARES BY AGE (PERCENT)

LINE	ITEM	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	LESS THAN 1 YEAR OLD	5.39	5.18	5.13	5.08	5.32	5.42	5.46	5.23	5.07	5.08	5.10
21	AGE: 1 YEAR OLD	10.61	10.61	10.22	10.11	9.97	10.42	10.58	10.67	10.25	9.95	10.00
31	AGE: 2 YEARS OLD	9.54	10.39	10.41	10.01	9.88	9.72	10.13	10.29	10.40	10.02	9.74
41	AGE: 3 YEARS OLD	7.99	9.29	10.13	10.14	9.73	9.57	9.40	9.80	9.99	10.11	9.76
51	AGE: 4 YEARS OLD	8.27	7.72	9.00	9.81	9.79	9.37	9.19	9.03	9.44	9.65	9.78
61	AGE: 5 YEARS OLD	10.51	7.91	7.40	8.62	9.37	9.33	8.91	8.75	8.62	9.03	9.23
71	AGE: 6 YEARS OLD	9.31	9.90	7.47	6.99	8.12	8.80	8.74	8.35	8.23	8.12	8.52
81	AGE: 7 YEARS OLD	8.16	8.54	9.12	8.68	6.42	7.44	8.05	8.00	7.67	7.57	7.48
91	AGE: 8 YEARS OLD	6.30	7.28	7.65	8.17	6.15	5.73	6.63	7.17	7.16	6.87	6.78
101	AGE: 9 YEARS OLD	6.28	5.41	6.27	6.60	7.04	5.29	4.91	5.69	6.18	6.18	5.93
111	AGE: 10 YEARS OLD	5.11	5.03	4.35	5.06	5.32	5.66	4.25	3.95	4.60	5.00	4.99
121	AGE: 11 YEARS OLD	3.51	3.82	3.78	3.29	3.84	4.02	4.27	3.21	3.01	3.50	3.80
131	AGE: 12 YEARS OLD	2.86	2.54	2.78	2.77	2.41	2.81	2.94	3.13	2.36	2.22	2.57
141	AGE: 13 YEARS OLD	2.22	2.04	1.83	2.01	2.01	1.75	2.03	2.13	2.28	2.22	1.61
151	AGE: 14 YEARS OLD	1.42	1.59	1.47	1.32	1.46	1.46	1.26	1.47	1.55	1.67	1.25
161	AGE: 15 YEARS OLD	0.95	1.02	1.14	1.06	0.96	1.06	0.92	0.92	1.07	1.13	1.21
171	AGE: 16 YEARS OLD	0.61	0.68	0.73	0.83	0.77	0.70	0.77	0.76	0.67	0.78	0.82
181	AGE: 17 YEARS OLD	0.37	0.44	0.49	0.53	0.60	0.56	0.50	0.56	0.56	0.49	0.57
191	AGE: 18 YEARS OLD	0.29	0.26	0.32	0.35	0.38	0.44	0.40	0.37	0.40	0.41	0.35
201	AGE: 19 YEARS OLD	0.19	0.21	0.19	0.23	0.26	0.28	0.32	0.29	0.27	0.30	0.30
211	AGE: 20 YEARS OLD	0.10	0.14	0.15	0.14	0.17	0.19	0.20	0.23	0.21	0.19	0.21

TABLE 7.00 GROWTH RATES, CARS IN OPERATION: MID-YEAR

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	11CARS IN OPERATIONS: ALL VINTAGES	1.6	1.3	1.2	1.3	1.5	1.9	2.1	2.1	1.8	1.5	1.4
21	LESS THAN 1 YEAR OLD	1.3	-2.6	0.2	0.2	6.4	3.7	2.8	-2.2	-1.4	1.8	1.9
31	AGE: 1 YEAR OLD	10.3	1.3	-2.6	0.2	0.2	6.4	3.7	2.8	-2.2	-1.4	1.8
41	AGE: 2 YEARS OLD	17.9	10.3	1.3	-2.6	0.2	6.4	3.7	2.8	-2.2	-1.4	1.8
51	AGE: 3 YEARS OLD	-5.3	17.8	10.3	1.3	-2.6	0.2	6.4	3.7	2.8	-2.2	1.8
61	AGE: 4 YEARS OLD	-23.7	-5.4	17.9	10.4	-2.6	0.2	6.4	3.7	2.8	-2.2	1.8
71	AGE: 5 YEARS OLD	7.9	-23.8	-5.3	17.9	10.4	-2.6	0.2	6.4	3.7	2.8	1.8
81	AGE: 6 YEARS OLD	6.2	7.8	-23.7	-5.2	18.0	10.4	-2.5	0.2	0.3	6.4	3.7
91	AGE: 7 YEARS OLD	17.3	6.1	7.9	-23.6	-5.2	18.0	10.4	-2.5	0.2	0.2	6.3
101	AGE: 8 YEARS OLD	-12.5	17.1	6.2	8.2	-23.5	18.0	10.5	10.5	1.6	-2.5	0.1
111	AGE: 9 YEARS OLD	0.2	-12.8	17.3	6.6	8.4	-23.5	18.1	10.6	1.4	-2.7	0.1
121	AGE: 10 YEARS OLD	11.0	-0.3	12.5	17.9	6.8	8.4	-23.5	18.4	10.4	10.4	1.2
131	AGE: 11 YEARS OLD	-9.0	10.2	0.0	-11.8	18.4	6.8	8.5	-23.3	-4.7	18.2	10.0
141	AGE: 12 YEARS OLD	-5.9	-9.8	10.5	0.9	-11.4	18.4	6.9	8.7	-23.1	-4.9	17.6
151	AGE: 13 YEARS OLD	14.5	-6.8	-9.5	11.6	1.4	-11.5	18.5	7.1	9.0	-23.2	-5.3
161	AGE: 14 YEARS OLD	9.5	13.5	-6.5	-8.7	12.1	1.4	18.5	7.1	7.5	8.9	-23.6
171	AGE: 15 YEARS OLD	13.2	8.6	13.8	-5.6	-8.3	12.1	1.5	-11.2	19.1	7.3	8.3
181	AGE: 16 YEARS OLD	22.7	12.2	8.8	14.8	-5.2	-8.3	12.2	1.7	-10.9	18.9	6.8
191	AGE: 17 YEARS OLD	-8.2	21.6	12.5	9.9	15.4	-5.2	12.5	1.7	2.0	-11.0	18.4
201	AGE: 18 YEARS OLD	13.0	-9.1	22.0	13.5	10.4	15.4	-5.1	1.9	12.8	12.7	11.5
211	AGE: 19 YEARS OLD	34.3	12.0	-8.8	23.1	14.1	10.4	15.5	-4.9	-7.7	12.7	11.4
221	AGE: 20 YEARS OLD	-20.2	33.1	12.3	-8.0	23.7	14.1	10.5	15.7	-4.6	-7.8	12.1

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LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	11CARS IN OPERATIONS: ALL VINTAGES	1.6	1.3	1.2	1.3	1.5	1.9	2.1	2.1	1.8	1.5	1.4
21	LESS THAN 1 YEAR OLD	-0.4	-3.9	-1.0	-1.0	4.8	1.8	0.7	-4.1	-3.2	0.3	0.4
31	AGE: 1 YEAR OLD	8.4	-0.0	-3.7	-1.1	-1.3	4.5	1.6	0.8	-3.9	-2.9	0.4
41	AGE: 2 YEARS OLD	15.8	8.8	0.2	-3.8	-1.4	-1.6	4.2	1.6	-1.0	-3.6	-2.8
51	AGE: 3 YEARS OLD	-7.0	16.3	9.1	0.1	-4.0	-1.7	1.8	4.3	1.9	1.3	-3.5
61	AGE: 4 YEARS OLD	-25.1	-6.6	16.5	9.0	-0.1	-4.3	-1.9	-1.8	4.6	2.1	1.4
71	AGE: 5 YEARS OLD	6.0	-24.8	-6.4	16.5	8.7	-0.4	-4.5	-1.8	-1.5	4.8	2.2
81	AGE: 6 YEARS OLD	15.3	4.7	6.7	-24.6	16.2	8.4	-0.7	-4.5	-1.5	-1.3	4.9
91	AGE: 7 YEARS OLD	-14.0	15.5	5.0	6.9	-6.6	15.9	8.2	-0.6	-4.1	-1.3	1.2
101	AGE: 8 YEARS OLD	-1.6	-13.9	15.9	5.2	6.7	-6.9	15.6	8.3	-0.2	-4.0	-1.3
111	AGE: 9 YEARS OLD	9.1	-1.6	-13.5	16.5	5.2	6.4	-7.0	15.8	8.7	-4.0	1.3
121	AGE: 10 YEARS OLD	-10.6	8.8	-1.1	-13.0	16.6	6.4	-25.0	16.3	16.3	8.8	-0.2
131	AGE: 11 YEARS OLD	12.5	-8.0	9.3	-0.4	-12.6	4.9	6.2	-24.9	-6.4	16.4	8.5
141	AGE: 12 YEARS OLD	7.6	12.0	-7.6	-9.8	10.4	-0.5	4.7	6.5	-24.4	-6.3	16.0
151	AGE: 13 YEARS OLD	11.2	7.1	12.5	-6.8	-9.6	10.1	16.1	5.0	7.1	-24.4	-6.6
161	AGE: 14 YEARS OLD	20.6	10.7	7.6	13.4	-6.6	8.9	17.0	5.6	5.6	7.2	-24.6
171	AGE: 15 YEARS OLD	-9.8	20.0	11.2	8.5	13.6	-6.9	12.4	17.1	12.4	17.1	5.3
181	AGE: 16 YEARS OLD	11.0	-10.3	20.6	12.1	8.7	13.3	-10.0	0.3	0.3	-12.4	16.7
191	AGE: 17 YEARS OLD	31.9	10.5	-9.9	21.6	12.4	8.4	-9.8	10.9	10.9	0.3	-12.7
201	AGE: 18 YEARS OLD	-21.6	31.3	11.0	-9.1	21.8	12.0	8.2	-6.8	-6.2	11.0	-0.0
211	AGE: 19 YEARS OLD	-21.6	31.3	11.0	-9.1	21.8	12.0	8.2	-6.8	-6.2	11.0	-0.0
221	AGE: 20 YEARS OLD	-21.6	31.3	11.0	-9.1	21.8	12.0	8.2	-6.8	-6.2	11.0	-0.0

TABLE 8.00 SCRAPPAGE (MILL AUTOS)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL SCRAPPAGE DOMESTIC AND FOREIGN	9,303	9,461	9,331	9,242	9,452	9,597	9,639	9,644	9,742	10,208	10,390
21	SURCOMPACT DOMESTIC	0,296	0,364	0,451	0,556	0,676	0,775	0,851	0,900	0,932	0,984	1,005
31	SURCOMPACT FOREIGN	0,842	0,939	1,005	1,061	1,145	1,213	1,274	1,327	1,367	1,509	1,585
41	SURCOMPACT TOTAL	1,138	1,304	1,456	1,616	1,821	1,988	2,124	2,227	2,319	2,493	2,590
61	COMPACT DOMESTIC	1,509	1,581	1,600	1,620	1,687	1,758	1,811	1,869	1,929	2,054	2,121
71	COMPACT FOREIGN	0,061	0,069	0,075	0,081	0,089	0,094	0,098	0,099	0,098	0,099	0,096
81	COMPACT TOTAL	1,570	1,650	1,675	1,701	1,775	1,853	1,910	1,969	2,027	2,153	2,217
101	MID-SIZE	2,241	2,229	2,171	2,129	2,184	2,253	2,308	2,355	2,424	2,582	2,646
111	FULL SIZE	3,561	3,454	3,204	2,964	2,808	2,619	2,403	2,195	2,058	2,016	1,953
141	LUXURY DOMESTIC	0,742	0,767	0,763	0,763	0,790	0,805	0,808	0,810	0,821	0,863	0,879
151	LUXURY FOREIGN	0,051	0,057	0,062	0,067	0,074	0,080	0,085	0,089	0,093	0,101	0,105
161	LUXURY TOTAL	0,793	0,824	0,825	0,830	0,864	0,885	0,893	0,899	0,914	0,964	0,984

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TABLE 8.10 GROWTH RATES, SCRAPPAGE

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL SCRAPPAGE DOMESTIC AND FOREIGN	6,4	1,7	-1,4	-1,0	2,3	1,5	0,4	0,1	1,0	4,8	1,8
21	SURCOMPACT DOMESTIC	22,0	23,1	23,8	23,4	21,4	14,7	9,8	5,8	3,6	5,6	2,1
31	SURCOMPACT FOREIGN	17,1	11,6	7,0	5,6	7,9	5,9	5,0	4,2	4,5	8,8	5,1
41	SURCOMPACT TOTAL	18,3	14,6	11,7	11,1	12,6	9,2	6,9	4,8	4,1	7,5	3,9
61	COMPACT DOMESTIC	9,0	4,8	1,2	1,3	4,1	4,3	3,0	3,2	3,2	6,5	3,3
71	COMPACT FOREIGN	17,8	12,5	8,9	7,4	9,5	6,6	4,1	0,9	-1,5	1,1	-2,5
81	COMPACT TOTAL	9,3	5,1	1,5	1,5	4,4	4,4	3,1	3,1	3,0	6,2	3,0
101	MID-SIZE	3,8	-0,6	-2,6	-1,9	2,6	3,2	2,4	2,0	2,9	6,5	2,5
111	FULL SIZE	2,9	-3,0	-7,2	-7,5	-5,3	-6,8	-8,2	-8,7	-6,3	-2,0	-3,2
141	LUXURY DOMESTIC	8,7	3,3	-0,5	0,1	3,5	1,9	0,4	0,2	1,4	5,1	1,9
151	LUXURY FOREIGN	18,0	13,3	8,5	7,8	10,2	8,0	6,5	4,8	4,3	8,2	4,1
161	LUXURY TOTAL	9,3	3,9	0,1	0,7	4,0	2,4	1,0	0,7	1,7	5,4	2,1

LINE	ITEM	9.00 MISCELLANEOUS MARKET VARIABLES																
		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988						
1	LONG-RUN EQUILIBRIUM (IDEASURED) VALUES																	
2	DESIRED STOCK	97.830	100.367	102.697	104.335	106.491	108.947	111.599	112.707	113.843	115.924	117.975						
3	DESIRED STOCK PER DRIVER	0.693	0.696	0.698	0.696	0.698	0.703	0.710	0.707	0.704	0.706	0.710						
4																		
5	DESIRED SHARE BY SIZE=CLASS (PERCENT)																	
6	TOTAL DOMESTIC	86.06	86.21	85.85	85.23	85.18	84.95	84.93	84.69	84.71	84.43	84.23						
7	SUBCOMPACT	11.00	10.82	11.00	10.94	11.04	11.19	10.91	11.05	11.10	11.02	10.98						
8	COMPACT	18.60	18.87	18.97	19.11	19.17	19.26	19.51	19.71	19.92	20.07	20.22						
9	MID-SIZE	24.21	24.46	24.56	24.67	25.17	25.02	25.23	25.29	25.41	25.51	25.60						
10	FULL SIZE	23.67	23.41	22.74	21.96	21.06	21.00	20.75	20.06	19.68	19.20	18.75						
11	LUXURY	8.57	8.65	8.58	8.55	8.40	8.49	8.53	8.58	8.61	8.63	8.69						
12																		
13	TOTAL FOREIGN	13.94	13.79	14.15	14.77	14.82	15.05	15.07	15.31	15.29	15.57	15.77						
14	SUBCOMPACT	12.22	12.26	12.55	13.12	13.14	13.34	13.29	13.47	13.44	13.70	13.91						
15	COMPACT AND LUXURY	1.72	1.53	1.60	1.65	1.68	1.71	1.77	1.84	1.85	1.87	1.86						
16																		
17	AVG AGE OF AUTO STOCK	5.731	5.724	5.727	5.741	5.744	5.721	5.691	5.680	5.696	5.719	5.734						
18																		
19	YEAR-END STOCK PER FAMILY	1.269	1.258	1.250	1.243	1.242	1.244	1.250	1.253	1.254	1.253	1.253						
20	VEHICLE MILES PER AUTO: TOTAL	11.22	11.29	11.34	11.39	11.45	11.52	11.58	11.64	11.71	11.78	11.85						
21	URBAN	6.467	6.513	6.552	6.582	6.620	6.664	6.711	6.755	6.800	6.845	6.888						
22	RURAL	4.751	4.773	4.791	4.807	4.832	4.851	4.868	4.884	4.909	4.936	4.961						
23	NEW REGIS. TO BEGINNING STOCK	0.109	0.104	0.103	0.102	0.107	0.110	0.110	0.106	0.102	0.102	0.103						
24	SCRAPAGE TO BEGINNING STOCK	0.093	0.093	0.091	0.089	0.090	0.090	0.088	0.087	0.086	0.088	0.089						

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LINE	ITEM	9.10 GROWTH RATES, MISCELLANEOUS MARKET VARIABLES																
		1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988						
1	LONG-RUN EQUILIBRIUM (IDEASURED) VALUES																	
2	DESIRED STOCK	2.3	2.6	2.3	1.6	2.1	2.3	2.4	1.0	1.0	1.8	1.8						
3	DESIRED STOCK PER DRIVER	-0.1	0.4	0.3	-0.2	0.3	0.7	0.9	-0.4	-0.5	0.4	0.5						
4																		
5	DESIRED SHARE BY SIZE=CLASS (PERCENT)																	
6	TOTAL DOMESTIC	1.2	0.2	-0.4	-0.7	-0.1	-0.3	-0.0	-0.3	0.0	-0.3	-0.2						
7	SUBCOMPACT	7.2	-1.7	1.7	-0.6	0.9	1.4	-2.5	1.2	0.5	-0.7	-0.3						
8	COMPACT	2.2	1.5	0.5	0.8	2.0	-1.3	1.3	1.0	1.1	0.8	0.7						
9	MID-SIZE	3.6	1.0	0.4	0.5	2.0	-0.6	0.8	0.3	0.4	0.4	0.7						
10	FULL SIZE	-3.2	-1.1	-2.9	-3.4	-4.1	-0.3	-1.2	-3.3	-1.9	-2.4	-2.4						
11	LUXURY	-2.3	0.9	-0.8	-0.3	-1.8	1.0	0.6	0.6	0.3	0.2	0.7						
12																		
13	TOTAL FOREIGN	-6.6	-1.1	2.6	4.4	0.4	1.5	0.1	1.6	-0.2	1.9	1.3						
14	SUBCOMPACT	-6.3	0.3	2.4	4.5	0.1	1.5	-0.4	1.3	-0.3	2.0	1.5						
15	COMPACT AND LUXURY	-8.9	-11.0	4.3	3.1	2.3	1.5	3.8	3.6	0.6	0.9	-0.3						
16																		
17	AVG AGE OF AUTO STOCK	-0.2	-0.1	0.0	0.2	0.1	-0.4	-0.5	-0.2	0.3	0.4	0.3						
18																		
19	YEAR-END STOCK PER FAMILY	-0.4	-0.8	-0.7	-0.6	-0.1	0.2	0.5	0.3	0.1	-0.1	-0.0						
20	VEHICLE MILES PER AUTO: TOTAL	0.8	0.6	0.5	0.4	0.5	0.6	0.6	0.5	0.6	0.6	0.6						
21	URBAN	0.9	0.7	0.6	0.5	0.6	0.7	0.7	0.6	0.7	0.7	0.6						
22	RURAL	0.7	0.5	0.4	0.3	0.5	0.4	0.5	0.3	0.5	0.5	0.5						
23	NEW REGIS. TO BEGINNING STOCK	-4.1	-0.9	-0.9	-1.0	5.0	1.9	0.8	-4.3	-3.3	0.2	0.4						
24	SCRAPAGE TO BEGINNING STOCK	0.1	0.1	-2.4	-2.2	0.9	-0.2	-1.5	-2.1	-0.9	3.1	0.4						

TABLE 10.00 DOMESTIC AUTO PRICES (DOLLARS)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL AUTO PRICES:											
21	SUBCOMPACT	4782.	5262.	5779.	6357.	6956.	7588.	8418.	9100.	9785.	10456.	11138.
31	COMPACT	5908.	6474.	7073.	7742.	8427.	9350.	10092.	10843.	11585.	12314.	13058.
41	MID-SIZE	6967.	7593.	8271.	9033.	9814.	10868.	11710.	12555.	13391.	14211.	15047.
51	FULL SIZE	7391.	8081.	8800.	9628.	10765.	11648.	12563.	13478.	14389.	15273.	16178.
61	LUXURY	11217.	12234.	13298.	14534.	16112.	17415.	18771.	20125.	21469.	22791.	24141.
71												
8	STATE AND LOCAL TAXES:											
91	SUBCOMPACT	212.	241.	272.	307.	345.	387.	440.	488.	537.	588.	644.
101	COMPACT	262.	295.	331.	373.	418.	477.	529.	583.	638.	696.	759.
111	MID-SIZE	310.	348.	390.	439.	490.	558.	618.	679.	743.	808.	881.
121	FULL SIZE	329.	371.	416.	469.	540.	600.	665.	731.	801.	871.	950.
131	LUXURY	507.	570.	638.	717.	818.	909.	1006.	1106.	1210.	1317.	1436.
141												
15	TRANSPORTATION CHARGES:											
161	SUBCOMPACT	204.	229.	256.	288.	325.	366.	410.	454.	500.	547.	590.
171	COMPACT	262.	299.	339.	373.	406.	441.	478.	514.	551.	587.	620.
181	MID-SIZE	273.	307.	343.	373.	406.	441.	478.	514.	551.	587.	620.
191	FULL SIZE	293.	317.	343.	373.	406.	441.	478.	514.	551.	587.	620.
201	LUXURY	293.	317.	343.	373.	406.	441.	478.	514.	551.	587.	620.
211												
22	BASE PRICE: FIXED WTD AVERAGE TOTAL											
231	SUBCOMPACT	5372.	5878.	6404.	7021.	7651.	8292.	8960.	9632.	10298.	10945.	11603.
241	COMPACT	3876.	4235.	4609.	5049.	5498.	5956.	6593.	7088.	7578.	8050.	8535.
251	MID-SIZE	4476.	4892.	5325.	5835.	6354.	7089.	7651.	8223.	8789.	9359.	9900.
261	FULL SIZE	5242.	5691.	6180.	6754.	7339.	8175.	8807.	9445.	10076.	10691.	11318.
271	LUXURY	5499.	6019.	6561.	7195.	8116.	8789.	9488.	10189.	10883.	11559.	12248.
281		8970.	9794.	10657.	11669.	12999.	14064.	15172.	16279.	17376.	18452.	19547.
29	MAX OPTIONS PRICE: FIXED WTD AVERAGE											
301	SUBCOMPACT	1490.	1590.	1690.	1801.	1910.	2018.	2127.	2233.	2336.	2435.	2534.
311	COMPACT	1373.	1465.	1558.	1660.	1761.	1860.	1960.	2059.	2154.	2245.	2336.
321	MID-SIZE	1443.	1540.	1637.	1745.	1851.	1955.	2060.	2164.	2264.	2360.	2455.
331	FULL SIZE	1515.	1616.	1718.	1831.	1942.	2052.	2162.	2271.	2376.	2476.	2576.
341	LUXURY	1510.	1612.	1713.	1826.	1936.	2046.	2156.	2264.	2369.	2469.	2569.
351		1540.	1643.	1747.	1862.	1975.	2086.	2199.	2309.	2416.	2518.	2620.
36	VALUE OF OPTIONS INSTALLED:											
371	SUBCOMPACT	489.	557.	642.	712.	787.	880.	975.	1070.	1169.	1272.	1369.
381	COMPACT	908.	988.	1077.	1161.	1249.	1342.	1434.	1523.	1607.	1692.	1779.
391	MID-SIZE	1142.	1246.	1357.	1467.	1579.	1694.	1807.	1917.	2021.	2125.	2229.
401	FULL SIZE	1269.	1373.	1481.	1591.	1703.	1817.	1932.	2044.	2151.	2256.	2361.
411	LUXURY	1448.	1553.	1660.	1775.	1888.	2001.	2115.	2225.	2332.	2435.	2538.

TABLE 11.00 GROWTH RATES, DOMESTIC AUTO PRICES

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	TOTAL AUTO PRICES											
21	SUBCOMPACT	9.0	10.0	9.8	10.0	9.4	9.1	10.9	8.1	7.5	6.9	6.5
31	COMPACT	9.1	9.6	9.3	9.5	8.9	10.9	7.9	7.4	6.8	6.3	6.0
41	MID-SIZE	9.3	9.0	8.9	9.2	8.6	10.7	7.7	7.2	6.7	6.1	5.9
51	FULL SIZE	9.3	9.3	8.9	9.4	11.8	8.2	7.9	7.3	6.7	6.2	5.9
61	LUXURY	9.0	9.1	8.7	9.3	10.9	8.1	7.8	7.2	6.7	6.2	5.9
71												
8	BISTATE AND LOCAL TAXES											
91	SUBCOMPACT	12.1	13.3	13.0	13.1	12.3	11.9	13.9	10.8	10.1	9.4	9.5
101	COMPACT	12.1	12.7	12.3	12.6	11.9	14.1	10.9	10.2	9.6	8.9	9.1
111	MID-SIZE	12.5	12.2	12.1	12.4	11.7	13.9	10.7	10.0	9.4	8.7	9.0
121	FULL SIZE	12.7	12.7	12.6	12.6	15.1	11.2	10.6	10.0	9.5	8.6	9.0
131	LUXURY	12.4	12.4	12.0	12.5	14.1	11.1	10.7	10.0	9.4	8.8	9.0
141												
151	TRANSPORTATION CHARGES											
161	SUBCOMPACT	16.1	12.0	11.6	12.8	12.9	12.5	12.0	10.8	10.0	9.4	7.9
171	COMPACT	16.8	13.9	13.5	9.9	8.9	8.7	8.3	7.6	7.0	6.6	5.6
181	MID-SIZE	16.7	12.5	11.6	8.8	8.9	8.7	8.3	7.6	7.0	6.6	5.6
191	FULL SIZE	10.6	8.2	8.0	8.8	8.9	8.7	8.3	7.6	7.0	6.6	5.6
201	LUXURY	10.8	8.2	8.0	8.8	8.9	8.7	8.3	7.6	7.0	6.6	5.6
211												
22	BASE PRICE: FIXED WTD AVERAGE TOTAL											
231	SUBCOMPACT	9.0	9.4	9.0	9.6	9.0	8.4	8.1	7.5	6.9	6.3	6.0
241	COMPACT	8.5	9.3	8.8	9.6	8.9	8.3	10.7	7.5	6.9	6.2	6.0
251	MID-SIZE	8.7	9.3	8.9	9.6	8.9	11.6	7.9	7.5	6.9	6.3	6.0
261	FULL SIZE	9.0	8.6	8.6	9.3	8.7	11.4	7.7	7.2	6.7	6.1	5.9
271	LUXURY	9.4	9.5	9.0	9.7	12.6	8.3	8.0	7.4	6.8	6.2	6.0
281		9.1	9.2	8.8	9.5	11.4	8.2	7.9	7.3	6.7	6.2	5.9
29	MAX OPTIONS PRICE: FIXED WTD AVERAGE											
301	SUBCOMPACT	6.6	6.7	6.3	6.6	6.1	5.6	5.4	5.0	4.6	4.2	4.0
311	COMPACT	6.6	6.7	6.3	6.6	6.1	5.6	5.4	5.0	4.6	4.2	4.0
321	MID-SIZE	6.6	6.7	6.3	6.6	6.1	5.6	5.4	5.0	4.6	4.2	4.0
331	FULL SIZE	6.6	6.7	6.3	6.6	6.1	5.6	5.4	5.0	4.6	4.2	4.0
341	LUXURY	6.6	6.7	6.3	6.6	6.1	5.6	5.4	5.0	4.6	4.2	4.0
351												
36	VALUE OF OPTIONS INSTALLED:											
371	SUBCOMPACT	8.6	13.8	15.3	10.9	10.5	11.8	10.6	9.7	9.3	8.8	7.6
381	COMPACT	7.6	8.8	9.0	7.8	7.6	7.4	6.9	6.2	5.5	5.3	5.1
391	MID-SIZE	8.5	9.1	8.9	8.1	7.6	7.2	6.7	6.1	5.5	5.1	4.9
401	FULL SIZE	7.8	8.2	7.8	7.5	7.0	6.7	6.3	5.8	5.3	4.9	4.7
411	LUXURY	7.0	7.3	6.9	6.9	6.4	6.0	5.7	5.2	4.8	4.4	4.2

TABLE 12.00 FOREIGN AUTO PRICES (DOLLARS)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	TOTAL AUTO PRICES											
21	SURCOMPACT	5666,	6150,	6644,	7157,	7711,	8295,	9056,	9657,	10291,	10893,	11499,
31	COMPACT	9556,	10364,	11157,	12007,	12924,	14102,	15066,	16030,	17045,	17992,	18990,
41	LUXURY	19417,	21492,	23574,	25875,	28407,	31306,	34037,	36819,	39828,	42648,	45678,
51												
61	STATE AND LOCAL TAXES											
71	SURCOMPACT	253,	283,	314,	348,	385,	424,	475,	519,	566,	613,	666,
81	COMPACT	431,	481,	534,	591,	654,	733,	804,	877,	956,	1034,	1124,
91	LUXURY	888,	1013,	1145,	1293,	1460,	1654,	1847,	2050,	2275,	2497,	2752,
101												
111	TRANSPORTATION CHARGES											
121	SURCOMPACT	206,	230,	257,	290,	327,	368,	412,	457,	503,	550,	581,
131	COMPACT	259,	293,	317,	346,	378,	412,	447,	481,	515,	550,	581,
141	LUXURY	270,	293,	317,	346,	378,	412,	447,	481,	515,	550,	581,
151												
161	BASE PRICES											
171	SURCOMPACT	4718,	5080,	5431,	5808,	6213,	6622,	7194,	7611,	8053,	8457,	8882,
181	COMPACT	7958,	8601,	9229,	9909,	10643,	11616,	12381,	13148,	13966,	14715,	15506,
191	LUXURY	16811,	18632,	20451,	22461,	24681,	27239,	29628,	32062,	34705,	37166,	39807,

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TABLE 12.10 GROWTH RATES, FOREIGN AUTO PRICES

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	TOTAL AUTO PRICES											
21	SURCOMPACT	13.4	8.5	8.0	7.7	7.7	7.6	9.2	6.6	6.6	5.8	5.6
31	COMPACT	13.7	8.5	7.7	7.6	7.6	9.1	6.8	6.4	6.3	5.6	5.6
41	LUXURY	17.1	10.7	9.7	9.8	9.8	10.2	8.7	8.2	8.2	7.1	7.1
51												
61	STATE AND LOCAL TAXES											
71	SURCOMPACT	16.9	11.8	11.1	10.7	10.6	10.3	12.0	9.2	9.1	8.3	8.6
81	COMPACT	17.2	11.7	10.9	10.7	10.6	12.1	9.7	9.1	9.0	8.2	8.6
91	LUXURY	20.9	14.1	13.0	13.0	12.9	13.3	11.7	11.0	11.0	9.8	10.2
101												
111	TRANSPORTATION CHARGES											
121	SURCOMPACT	16.1	12.0	11.6	12.8	12.9	12.5	12.0	10.8	10.0	9.4	5.8
131	COMPACT	18.2	13.2	8.2	9.1	9.2	8.9	8.5	7.7	7.2	6.7	5.7
141	LUXURY	11.2	8.5	8.2	9.1	9.2	8.9	8.5	7.7	7.2	6.7	5.7
151												
161	BASE PRICES											
171	SURCOMPACT	13.6	7.7	6.9	6.9	7.0	6.6	8.6	5.8	5.8	5.0	5.0
181	COMPACT	14.1	8.1	7.3	7.4	7.4	9.1	6.6	6.2	6.2	5.4	5.4
191	LUXURY	18.0	10.8	9.8	9.8	9.9	10.4	8.8	8.2	8.2	7.1	7.1

TABLE 13.00 CAPITALIZED COSTS PER MILE (DOLLARS PER MILE)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	AVG NOMINAL CAP. COST PER MILE	0.249	0.269	0.292	0.316	0.342	0.368	0.395	0.422	0.451	0.479	0.508
2												
3	AVG REAL CAP. COST PER MILE	0.160	0.160	0.160	0.161	0.162	0.164	0.165	0.167	0.170	0.172	0.174
4												
5	CAPITALIZED COST PER MILE BY SIZE:											
6	SUBCOMPACTS	0.200	0.219	0.238	0.258	0.279	0.301	0.325	0.348	0.372	0.395	0.420
7	COMPACTS	0.229	0.247	0.269	0.291	0.314	0.341	0.365	0.390	0.416	0.443	0.470
8	MID-SIZE	0.253	0.274	0.297	0.321	0.345	0.374	0.400	0.427	0.456	0.484	0.514
9	FULL SIZE	0.268	0.290	0.314	0.339	0.370	0.396	0.424	0.453	0.483	0.514	0.544
10	LUXURY	0.352	0.378	0.413	0.449	0.493	0.532	0.573	0.614	0.657	0.700	0.743
11												
12	CAP. COST PER MILE BY FOR/DOM:											
13	TOTAL DOMESTIC	0.251	0.272	0.295	0.320	0.346	0.373	0.401	0.428	0.457	0.486	0.515
14	SUBCOMPACT	0.195	0.213	0.232	0.252	0.274	0.296	0.321	0.344	0.369	0.394	0.419
15	COMPACT	0.227	0.245	0.267	0.289	0.312	0.338	0.362	0.388	0.414	0.441	0.468
16	LUXURY	0.339	0.367	0.398	0.431	0.470	0.505	0.540	0.576	0.614	0.652	0.692
17												
18	TOTAL FOREIGN	0.222	0.238	0.261	0.283	0.309	0.334	0.364	0.391	0.419	0.446	0.473
19	SUBCOMPACT	0.204	0.222	0.241	0.261	0.282	0.303	0.327	0.350	0.373	0.397	0.420
20	COMPACT	0.277	0.301	0.326	0.352	0.380	0.412	0.440	0.468	0.499	0.528	0.559
21	LUXURY	0.454	0.500	0.548	0.600	0.657	0.717	0.773	0.831	0.894	0.955	1.020

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TABLE 13.10 GROWTH RATES, CAPITALIZED COSTS PER MILE

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	AVG NOMINAL CAP. COST PER MILE	8.0	8.2	8.5	8.0	8.2	7.8	7.3	6.9	6.7	6.3	6.1
2												
3	AVG REAL CAP. COST PER MILE	0.4	-0.0	0.3	0.3	1.0	0.9	0.9	1.1	1.5	1.3	1.3
4												
5	CAPITALIZED COST PER MILE BY SIZE:											
6	SUBCOMPACTS	9.6	9.1	8.8	8.3	8.3	7.7	8.1	7.0	6.9	6.4	6.2
7	COMPACTS	8.0	7.8	8.9	8.2	7.8	8.5	7.0	7.0	6.8	6.3	6.2
8	MID-SIZE	6.8	6.3	8.3	8.0	7.6	8.2	7.0	6.9	6.7	6.3	6.1
9	FULL SIZE	8.2	8.0	8.5	7.9	9.1	7.0	6.9	6.9	6.7	6.3	6.1
10	LUXURY	9.1	7.4	9.2	8.8	9.9	7.9	7.6	7.3	6.9	6.5	6.2
11												
12	CAP. COST PER MILE BY FOR/DOM:											
13	TOTAL DOMESTIC	7.1	8.3	8.5	8.2	8.1	8.1	7.3	6.8	6.7	6.3	6.1
14	SUBCOMPACT	8.4	9.3	9.2	8.7	8.6	7.9	8.4	7.4	7.1	6.7	6.4
15	COMPACT	7.9	7.7	9.0	8.2	7.9	8.5	7.1	7.0	6.8	6.4	6.2
16	LUXURY	8.5	8.1	8.6	8.2	9.2	7.3	6.9	6.8	6.6	6.2	6.0
17												
18	TOTAL FOREIGN	10.5	7.2	9.4	8.6	9.1	8.3	8.9	7.5	7.1	6.4	6.1
19	SUBCOMPACT	10.5	8.9	8.6	8.0	8.1	7.6	7.9	6.8	6.7	6.2	6.0
20	COMPACT	11.4	8.8	8.3	8.0	8.0	8.3	6.7	6.5	6.5	5.9	5.9
21	LUXURY	14.5	10.3	9.5	9.5	9.4	9.2	7.8	7.5	7.6	6.8	6.8

TABLE 14.00 MILES PER GALLON (NEFA)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	OVERALL FLEET MILES PER GALLON	13.73	13.92	14.21	14.57	15.12	15.75	16.44	17.14	17.89	18.61	19.26
2												
3	NEW AUTO MILES PER GALLON:											
4	TOTAL DOMESTIC AND FOREIGN	13.78	14.47	15.02	16.34	17.58	18.82	19.64	19.99	19.98	20.01	20.02
5	SUBCOMPACT	19.44	19.78	20.33	21.86	22.99	24.19	25.18	25.46	25.45	25.46	25.46
6	COMPACT	14.02	15.16	15.56	16.84	18.09	19.34	20.20	20.53	20.53	20.52	20.52
7	MID-SIZE	12.50	13.04	13.69	14.93	16.28	17.63	18.45	18.71	18.71	18.70	18.70
8	FULL SIZE	11.57	12.27	12.77	13.98	15.13	16.39	17.22	17.55	17.55	17.54	17.54
9	LUXURY	11.13	11.72	12.17	13.34	14.36	15.31	16.08	16.43	16.43	16.45	16.44
10												
11	TOTAL DOMESTIC	12.89	13.61	14.15	15.38	16.64	17.87	18.69	19.03	19.04	19.04	19.04
12	SUBCOMPACT	17.89	18.26	18.78	20.23	21.40	22.74	23.78	24.11	24.11	24.10	24.10
13	COMPACT	13.90	15.07	15.47	16.76	18.03	19.29	20.16	20.50	20.49	20.49	20.49
14	LUXURY	10.75	11.45	11.84	12.96	13.92	14.84	15.56	15.88	15.87	15.87	15.87
15												
16	TOTAL FOREIGN	20.04	20.41	20.91	22.36	23.40	24.47	25.32	25.55	25.53	25.53	25.53
17	SUBCOMPACT	20.58	20.85	21.40	22.90	23.99	25.10	26.01	26.27	26.27	26.26	26.26
18	COMPACT	17.56	17.76	18.17	19.38	20.24	21.11	21.80	21.95	21.95	21.94	21.94
19	LUXURY	15.63	15.95	16.41	17.61	18.33	19.46	20.22	20.48	20.47	20.47	20.47

CONTROL SOLUTION - NOVEMBER 7, 1978

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	OVERALL FLEET MILES PER GALLON	19.43	20.33	21.17	23.24	25.23	27.30	28.32	28.86	28.87	28.90	29.04
2												
3	NEW AUTO MILES PER GALLON:											
4	TOTAL DOMESTIC AND FOREIGN	25.71	26.12	27.08	29.64	31.69	33.84	35.17	35.71	35.69	35.71	35.86
5	SUBCOMPACT	19.52	20.92	21.65	23.70	25.70	27.84	28.99	29.55	29.55	29.54	29.66
6	COMPACT	18.09	18.76	19.63	21.47	23.48	25.66	26.68	27.17	27.17	27.17	27.27
7	MID-SIZE	16.75	17.76	18.50	20.41	22.26	24.26	25.19	25.63	25.63	25.63	25.73
8	FULL SIZE	16.07	16.95	17.69	19.67	21.43	23.05	23.98	24.41	24.42	24.44	24.54
9	LUXURY											
10												
11	TOTAL DOMESTIC	18.37	19.32	20.12	22.07	24.05	26.10	27.10	27.63	27.64	27.65	27.77
12	SUBCOMPACT	23.90	24.32	25.23	27.64	29.71	31.97	33.37	33.91	33.91	33.91	34.05
13	COMPACT	19.40	20.84	21.57	23.62	25.64	27.80	28.96	29.52	29.52	29.52	29.64
14	LUXURY	15.65	16.66	17.33	19.29	20.94	22.52	23.37	23.75	23.75	23.75	23.84
15												
16	TOTAL FOREIGN	26.32	26.79	27.71	30.18	32.12	34.13	35.29	35.79	35.78	35.78	35.94
17	SUBCOMPACT	27.02	27.38	28.35	30.89	32.92	34.99	36.23	36.78	36.78	36.78	36.92
18	COMPACT	22.90	23.17	23.91	25.97	27.58	29.21	30.15	30.50	30.50	30.50	30.62
19	LUXURY	20.70	21.10	21.92	23.98	25.66	27.39	28.47	28.99	28.99	28.99	29.10

TABLE 15.00 GROWTH RATES, MILES PER GALLON (WEFA)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	OVERALL FLEET MILES PER GALLON	0.59	1.39	2.06	2.52	3.77	4.21	4.39	4.27	4.32	4.05	3.48
2	NEW AUTO MILES PER GALLON:											
3	TOTAL DOMESTIC AND FOREIGN	4.2	5.0	3.8	8.8	7.6	7.0	4.3	1.8	-0.0	0.1	0.1
4	SURCOMPACT	1.3	1.8	2.8	7.6	5.2	5.2	4.1	1.1	-0.1	0.0	0.0
5	COMPACT	2.8	8.1	2.6	8.2	7.4	6.9	4.5	1.6	-0.0	-0.0	-0.0
6	MID-SIZE	8.4	4.3	5.0	9.0	9.1	8.3	4.7	1.4	-0.0	-0.0	-0.0
7	FULL SIZE	1.7	6.1	4.1	9.4	8.3	8.3	5.0	1.9	-0.0	-0.0	-0.0
8	LUXURY	0.9	5.3	3.8	9.6	7.7	6.6	5.0	2.2	0.0	0.1	-0.0
10	TOTAL DOMESTIC	4.8	5.6	3.9	8.7	8.2	7.4	4.6	1.8	0.0	0.0	0.0
11	SURCOMPACT	1.7	2.0	2.9	7.7	5.8	6.3	4.6	1.4	-0.0	-0.0	-0.0
12	COMPACT	3.0	8.4	2.7	8.3	7.6	7.0	4.5	1.7	-0.0	-0.0	-0.0
13	MID-SIZE	1.0	6.5	3.4	9.4	7.4	6.6	4.8	2.1	-0.0	-0.0	-0.0
14	FULL SIZE	1.9	1.8	2.5	6.9	4.6	4.6	3.4	0.9	-0.1	-0.0	0.0
15	LUXURY	1.7	1.3	2.6	7.0	4.8	4.6	3.6	1.0	-0.0	-0.0	-0.0
16	TOTAL FOREIGN	1.2	1.2	2.3	6.6	4.5	4.3	3.3	0.7	-0.0	-0.0	-0.0
17	SURCOMPACT	2.1	2.0	2.9	7.3	5.2	5.0	3.9	1.3	-0.0	-0.0	-0.0
18	COMPACT											
19	MID-SIZE											
20	FULL SIZE											
21	LUXURY											

CONTROL SOLUTION - NOVEMBER 7, 1978

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	OVERALL FLEET MILES PER GALLON	3.8	4.6	4.1	9.8	8.6	8.2	3.7	1.9	0.0	0.1	0.5
2	NEW AUTO MILES PER GALLON (EPA)											
3	TOTAL DOMESTIC AND FOREIGN	1.0	1.6	3.7	9.4	6.9	6.8	4.0	1.5	-0.0	0.1	0.4
4	SURCOMPACT	2.2	7.2	3.5	9.5	8.5	8.3	4.1	1.9	-0.0	-0.0	0.4
5	COMPACT	8.4	3.7	4.6	9.4	9.4	9.3	4.0	1.8	0.0	0.0	0.4
6	MID-SIZE	3.4	6.0	4.2	10.3	9.1	9.0	3.9	1.7	0.0	0.0	0.4
7	FULL SIZE	0.9	5.5	4.4	11.2	9.0	7.6	4.0	1.8	0.0	0.1	0.4
8	LUXURY	4.4	5.1	4.1	9.7	9.0	8.5	3.9	1.9	0.1	0.0	0.4
10	TOTAL DOMESTIC	1.0	1.8	3.8	9.5	7.5	7.6	4.4	1.6	0.0	0.0	0.4
11	SURCOMPACT	2.4	7.4	3.5	9.5	8.6	8.4	4.2	1.9	0.0	0.0	0.4
12	COMPACT	1.0	6.5	4.0	11.0	8.8	7.5	3.8	1.6	0.0	0.0	0.4
13	MID-SIZE	1.7	1.8	3.4	8.9	6.4	6.2	3.4	1.4	-0.0	0.0	0.4
14	FULL SIZE	3.6	3.3	3.6	9.0	6.6	6.3	3.6	1.5	0.0	0.0	0.4
15	LUXURY	1.2	1.2	3.2	8.6	6.2	5.9	3.2	1.1	0.0	0.0	0.4
16	TOTAL FOREIGN	1.9	1.9	3.9	9.4	7.0	6.7	3.9	1.8	0.0	0.0	0.4
17	SURCOMPACT											
18	COMPACT											
19	MID-SIZE											
20	FULL SIZE											
21	LUXURY											

TABLE 16.00 USED CAR MARKET

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	AVERAGE WHOLESALE PRICE	3047.	3416.	3788.	4199.	4626.	5173.	5677.	6172.	6608.	7104.	7569.
2												
3	PRICE OF 1 YR OLD CAR/NEW CAR (%)											
4	SUBCOMPACT	80.13	80.71	81.22	81.26	80.83	80.48	80.21	80.78	81.17	81.28	81.09
5	COMPACT	71.23	71.82	72.17	72.32	71.81	71.43	70.91	71.27	71.73	71.64	71.33
6	MID-SIZE	64.04	65.11	65.48	65.51	65.38	64.39	64.86	65.24	65.80	65.94	65.77
7	FULL SIZE	59.04	61.86	63.88	63.69	60.43	61.60	61.52	63.31	65.51	66.19	65.68
8	LUXURY	69.01	71.79	71.76	71.77	70.25	70.40	70.23	71.38	72.82	73.16	72.93
9												
10	TOTAL USED CARS PURCHASED	16,402	17,465	18,476	18,628	18,947	18,644	18,960	19,362	20,227	20,773	20,654

TABLE 16.10 GROWTH RATES, USED CAR MARKET

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	AVERAGE WHOLESALE PRICE	13.28	12.14	10.89	10.65	10.17	11.81	9.74	8.72	7.71	6.86	6.54
2												
3	PRICE OF 1 YR OLD CAR/NEW CAR (%)											
4	SUBCOMPACT	-0.66	0.73	0.63	0.04	-0.53	-0.43	-0.33	0.71	0.48	0.14	-0.24
5	COMPACT	2.14	0.82	0.50	0.21	-0.71	-0.53	-0.73	0.51	0.64	-0.12	-0.45
6	MID-SIZE	-0.15	1.67	0.57	0.03	-0.19	-1.52	0.73	0.58	0.86	0.22	-0.25
7	FULL SIZE	-3.18	4.77	3.28	-0.31	-5.12	1.94	-0.13	2.90	3.48	1.03	-0.77
8	LUXURY	-0.90	4.02	-0.04	0.01	-2.12	0.22	-0.25	1.64	2.02	0.47	-0.32
9												
10	TOTAL USED CARS PURCHASED	-1.71	6.48	5.79	0.82	1.72	-1.60	1.70	2.12	4.47	2.70	-0.57

TABLE 18.00 ECONOMIC VARIABLES

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GENERAL:											
21	PERSONAL INCOME	1709.41	1900.75	2096.59	2307.04	2547.96	2808.40	3080.10	3340.21	3608.44	3895.69	4205.34
31	PERSONAL INCOME TAXES	256.46	287.78	315.15	349.10	390.28	435.57	481.96	524.23	568.11	616.36	673.06
41	TRANSFER PAYMENTS	227.55	253.23	284.85	315.66	349.40	385.25	422.53	461.32	501.42	542.69	586.94
51	REAL DISP. INCOME/FAMILY	9.85	9.91	9.90	9.90	9.99	10.09	10.21	10.28	10.38	10.51	10.65
61	FAMILIES WITH INCOME OVER \$15,000											
81	IN 1970 \$	25.93	25.69	25.62	25.84	26.27	26.55	26.99	27.38	27.70	28.04	28.63
91	PERCENT											
101	EMPLOYMENT	94.45	97.18	99.20	100.94	102.50	104.11	105.67	107.13	108.50	110.15	111.63
111	UNEMPLOYMENT RATE	6.04	5.86	6.04	5.84	5.75	5.62	5.43	5.32	5.32	5.12	4.94
121	CONSUMER INSTALL. CREDIT RATE,											
131	NEW AUTOS	11.95	12.14	12.21	12.48	12.63	12.45	12.06	11.75	11.61	11.50	11.43
141	PERCENT											
151	CONSUMER PRICE INDICES (1967=100)											
161	TOTAL	195.2	211.3	228.5	245.9	263.6	281.6	299.5	316.7	333.2	349.5	366.1
171	AUTO REPAIRS	221.3	242.7	266.5	292.2	318.9	346.4	374.3	401.8	428.5	454.7	481.5
191	AUTO INSURANCE PREMIUMS	231.8	259.5	291.9	329.6	369.7	412.0	455.6	499.0	542.1	587.4	635.3
201	TIRES	146.0	154.7	164.0	173.8	184.3	195.3	207.0	219.5	232.6	246.6	261.4
211	MOTOR OIL	179.2	194.0	209.8	226.4	243.1	260.1	276.8	293.0	308.3	323.5	339.0
221	PARKING FEES	237.5	260.4	284.9	312.8	343.9	376.3	409.6	443.0	475.9	508.8	542.5
231	OTHER COSTS AND PRICES											
241	NEW AUTO UNIT PRICE	4.56	4.57	4.62	4.81	5.01	5.22	5.40	5.55	5.69	5.82	5.95
251	NEW AUTOS PRICE INDEX	138.8	148.9	159.0	167.6	176.7	186.9	196.8	206.1	215.0	223.5	232.0
261	DOM. AUTO INPUT PRICE INDEX	147.9	159.6	171.7	185.6	199.5	213.6	228.0	242.4	256.5	270.0	283.7
271	TRANSPORTATION PRICE INDEX	146.9	155.7	164.6	175.1	186.3	197.8	209.6	220.8	231.8	242.7	252.3
281	AVG RETAIL PRICE OF GASOLINE	65.31	70.22	76.17	82.37	88.63	94.93	101.16	107.31	113.40	119.56	125.98
291	EXCLUDING TAXES	52.71	57.42	63.17	69.19	75.28	81.40	87.45	93.40	99.29	105.25	111.47
301	FEDERAL TAX	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
311	STATE AND LOCAL TAX	8.60	8.80	9.00	9.18	9.35	9.53	9.71	9.91	10.11	10.31	10.51
321	STEEL SCRAP PRICE	85.08	91.46	98.32	105.69	113.09	120.44	127.66	134.69	141.42	148.49	155.91
331												
341												
351												

TABLE 19.00 GROWTH RATES, ECONOMIC VARIABLES

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	GENERAL											
21	PERSONAL INCOME	11.8	11.2	10.3	10.0	10.4	10.2	9.7	8.4	8.0	8.0	7.9
31	PERSONAL INCOME TAXES	13.5	12.2	9.5	10.8	11.8	11.6	10.6	8.8	8.4	8.5	9.2
41	TRANSFER PAYMENTS	9.0	11.3	12.5	10.8	10.7	10.3	9.7	9.2	8.7	8.2	8.2
51												
61	REAL DISP. INCOME/FAMILY	2.1	0.6	-0.1	0.1	0.9	1.1	1.2	0.7	0.9	1.3	1.3
71	FAMILIES WITH INCOME OVER \$15,000											
81	IN 1970 \$	3.2	0.6	-0.3	0.9	1.7	1.1	1.7	1.4	1.1	1.2	2.1
91												
101	EMPLOYMENT	4.3	2.9	2.1	1.8	1.6	1.6	1.5	1.4	1.3	1.5	1.3
111	UNEMPLOYMENT RATE	-13.7	-2.6	2.7	-3.2	-1.6	-2.3	-3.4	-1.9	-0.1	-3.7	-3.5
121												
131	CONSUMER INSTALL. CREDIT RATE,											
141	NEW AUTOS	3.7	1.6	0.6	2.2	1.2	-1.4	-3.1	-2.6	-1.2	-0.9	-0.6
151												
161	CONSUMER PRICE INDICES (1967=100)											
171	TOTAL	7.6	8.2	8.1	7.6	7.2	6.8	6.3	5.8	5.2	4.9	4.8
181	AUTO REPAIRS	8.6	9.7	9.8	9.6	9.2	8.6	8.0	7.4	6.6	6.1	5.9
191	AUTO INSURANCE PREMIUMS	10.1	12.0	12.5	12.9	12.2	11.4	10.6	9.5	8.6	8.4	8.1
201	TIRES	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
211	MOTOR OIL	7.8	8.2	8.1	7.9	7.4	7.0	6.4	5.8	5.2	4.9	4.8
221	PARKING FEES	12.4	9.6	9.4	9.8	9.9	9.4	8.9	8.2	7.4	6.9	6.6
231												
241	OTHER COSTS AND PRICES											
251	NEW AUTO UNIT PRICE	0.1	0.4	1.1	4.0	4.1	4.1	3.5	2.7	2.6	2.4	2.2
261	NEW AUTOS PRICE INDEX	7.9	7.3	6.8	5.4	5.5	5.7	5.3	4.7	4.3	4.0	3.8
271	DOM. AUTO INPUT PRICE INDEX	7.6	7.9	7.5	8.1	7.5	7.0	6.8	6.3	5.8	5.3	5.1
281	TRANSPORTATION PRICE INDEX	7.9	5.9	5.8	6.3	6.4	6.2	5.9	5.4	5.0	4.7	4.0
291												
301	AVG RETAIL PRICE OF GASOLINE	3.6	7.5	8.5	8.1	7.6	7.1	6.6	6.1	5.7	5.4	5.4
311	EXCLUDING TAXES	4.0	8.9	10.0	9.5	8.8	8.1	7.4	6.8	6.3	6.0	5.9
321	FEDERAL TAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
331	STATE AND LOCAL TAX	2.7	2.3	2.3	2.0	1.9	1.9	1.9	2.1	2.0	2.0	1.9
341												
351	STEEL SCRAP PRICE	7.5	7.5	7.5	7.5	7.0	6.5	6.0	5.5	5.0	5.0	5.0

TABLE 20.00 AUTO CHARACTERISTICS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	CURB WEIGHT (POUNDS):											
21	DOMESTIC SUBCOMPACT	2650.	2600.	2550.	2500.	2440.	2380.	2330.	2300.	2300.	2300.	2300.
31	FOREIGN SUBCOMPACT	2328.	2293.	2258.	2224.	2191.	2158.	2126.	2094.	2094.	2094.	2094.
41	DOMESTIC COMPACT	3400.	3100.	3050.	3000.	2900.	2800.	2750.	2700.	2700.	2700.	2700.
51	FOREIGN COMPACT	2894.	2865.	2837.	2808.	2780.	2752.	2725.	2698.	2698.	2698.	2698.
61	MID-SIZE	3710.	3550.	3450.	3400.	3250.	3100.	3050.	3000.	3000.	3000.	3000.
71	FULL SIZE	4100.	3800.	3700.	3600.	3450.	3300.	3250.	3200.	3200.	3200.	3200.
81	DOMESTIC LUXURY	4450.	4100.	4000.	3850.	3700.	3600.	3550.	3500.	3500.	3500.	3500.
91	FOREIGN LUXURY	3234.	3169.	3106.	3044.	2983.	2923.	2865.	2808.	2808.	2808.	2808.
101												
111	ENGINE DISPLACEMENT (CUBIC INCHES):											
121	DOMESTIC SUBCOMPACT	152.0	143.0	135.0	130.0	125.0	115.0	110.0	105.0	105.0	105.0	105.0
131	FOREIGN SUBCOMPACT	95.8	93.9	92.1	90.2	88.4	86.6	84.9	83.2	83.2	83.2	83.2
141	DOMESTIC COMPACT	248.0	217.0	207.0	198.0	183.0	168.0	158.0	150.0	150.0	150.0	150.0
151	FOREIGN COMPACT	116.2	114.5	112.8	111.1	109.4	107.8	106.2	104.6	104.6	104.6	104.6
161	MID-SIZE	282.0	263.0	248.0	238.0	218.0	198.0	189.0	180.0	180.0	180.0	180.0
171	FULL SIZE	316.0	287.0	274.0	259.0	242.0	224.0	216.0	210.0	210.0	210.0	210.0
181	DOMESTIC LUXURY	387.0	351.0	336.0	318.0	298.0	283.0	272.0	265.0	265.0	265.0	265.0
191	FOREIGN LUXURY	173.6	171.0	168.4	165.9	163.4	160.9	158.3	156.1	156.1	156.1	156.1
201												
211	PERCENT WITH AUTOMATIC TRANSMISSION:											
221	DOMESTIC SUBCOMPACT	62.50	60.00	57.50	55.00	52.50	47.50	42.50	40.00	40.00	40.00	40.00
231	FOREIGN SUBCOMPACT	40.00	35.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
241	DOMESTIC COMPACT	90.00	87.50	85.00	80.00	75.00	70.00	67.50	67.50	67.50	67.50	67.50
251	FOREIGN COMPACT	65.00	55.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00	45.00
261	MID-SIZE	95.00	90.00	85.00	80.00	77.50	75.00	72.50	72.50	72.50	72.50	72.50
271	FULL SIZE	99.00	98.00	97.00	95.00	92.50	90.00	87.50	85.00	85.00	85.00	85.00
281	DOMESTIC LUXURY	98.00	97.00	96.00	95.00	94.00	92.00	90.00	88.00	88.00	88.00	88.00
291	FOREIGN LUXURY	70.00	60.00	50.00	49.00	47.00	45.00	45.00	45.00	45.00	45.00	45.00
301												
311	PERCENT WITH 4 CYLINDERS:											
321	DOMESTIC SUBCOMPACT	72.50	75.00	77.50	80.00	82.50	85.00	87.50	90.00	90.00	90.00	90.00
331	FOREIGN SUBCOMPACT	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00	95.00
341	DOMESTIC COMPACT	10.00	15.00	20.00	30.00	40.00	45.00	50.00	55.00	55.00	55.00	55.00
351	FOREIGN COMPACT	90.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00	85.00
361	MID-SIZE	0.0	0.0	2.50	5.00	7.50	10.00	15.00	19.00	19.00	15.00	15.00
371	FULL SIZE	0.0	0.0	2.50	5.00	7.50	10.00	12.50	15.00	15.00	15.00	15.00
381	DOMESTIC LUXURY	0.0	0.10	0.50	1.00	2.00	5.00	10.00	15.00	15.00	15.00	15.00
391	FOREIGN LUXURY	55.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00
401												
411	PERCENT WITH 6 CYLINDERS:											
421	DOMESTIC SUBCOMPACT	25.50	25.00	22.50	20.00	17.50	15.00	12.50	10.00	10.00	10.00	10.00
431	FOREIGN SUBCOMPACT	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
441	DOMESTIC COMPACT	50.00	60.00	55.00	50.00	45.00	40.00	35.00	30.00	30.00	30.00	30.00
451	FOREIGN COMPACT	10.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
461	MID-SIZE	11.50	20.00	35.00	50.00	65.00	70.00	70.00	70.00	70.00	70.00	70.00
471	FULL SIZE	5.00	10.00	20.00	30.00	40.00	50.00	60.00	65.00	65.00	65.00	65.00
481	DOMESTIC LUXURY	0.0	5.00	10.00	15.00	20.00	25.00	30.00	35.00	35.00	35.00	35.00
491	FOREIGN LUXURY	45.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00

TABLE 21.00 GROWTH RATES, AUTO CHARACTERISTICS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	CURB WEIGHT (POUNDS):											
21	DOMESTIC SUBCOMPACT	-0.9	-1.9	-1.9	-2.0	-2.4	-2.5	-2.1	-1.3	0.0	0.0	0.0
31	FOREIGN SUBCOMPACT	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	0.0	0.0	0.0
41	DOMESTIC COMPACT	-2.7	-8.8	-1.6	-1.6	-3.3	-3.4	-1.8	-1.8	0.0	0.0	0.0
51	FOREIGN COMPACT	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	0.0	0.0	0.0
61	MID-SIZE	-9.8	-4.3	-2.8	-1.4	-4.4	-4.6	-1.6	-1.6	0.0	0.0	0.0
71	FULL SIZE	-1.6	-7.3	-2.6	-2.7	-4.2	-4.3	-1.5	-1.5	0.0	0.0	0.0
81	DOMESTIC LUXURY	-1.2	-7.9	-2.4	-3.8	-3.9	-2.7	-1.4	-1.4	0.0	0.0	0.0
91	FOREIGN LUXURY	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	0.0	0.0	0.0
101												
111	ENGINE DISPLACEMENT (CUBIC INCHES):											
121	DOMESTIC SUBCOMPACT	-4.7	-5.9	-5.6	-3.7	-3.8	-8.0	-4.3	-4.5	0.0	0.0	0.0
131	FOREIGN SUBCOMPACT	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	0.0	0.0	0.0
141	DOMESTIC COMPACT	-4.9	-12.5	-4.6	-4.3	-7.6	-8.2	-6.0	-5.1	0.0	0.0	0.0
151	FOREIGN COMPACT	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	0.0	0.0	0.0
161	MID-SIZE	-12.4	-6.7	-5.7	-4.0	-8.4	-9.2	-4.5	-4.8	0.0	0.0	0.0
171	FULL SIZE	-3.9	-9.2	-4.5	-5.5	-6.6	-7.4	-3.6	-2.8	0.0	0.0	0.0
181	DOMESTIC LUXURY	-2.9	-9.3	-4.3	-5.4	-6.3	-5.0	-3.9	-2.6	0.0	0.0	0.0
191	FOREIGN LUXURY	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	0.0	0.0	0.0
201												
211	PERCENT WITH AUTOMATIC TRANSMISSION:											
221	DOMESTIC SUBCOMPACT	-4.04	-4.00	-4.17	-4.35	-4.55	-9.52	-10.53	-5.88	0.0	0.0	0.0
231	FOREIGN SUBCOMPACT	-20.00	-12.50	-28.57	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
241	DOMESTIC COMPACT	-4.07	-2.78	-2.86	-5.88	-6.25	-6.67	-3.57	0.0	0.0	0.0	0.0
251	FOREIGN COMPACT	-13.33	-15.38	-18.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
261	MID-SIZE	-4.78	-5.26	-5.56	-5.88	-3.13	-3.23	-3.33	0.0	0.0	0.0	0.0
271	FULL SIZE	-1.00	-1.01	-1.02	-2.06	-2.63	-2.70	-2.78	-2.86	0.0	0.0	0.0
281	DOMESTIC LUXURY	-1.29	-1.02	-1.03	-1.04	-1.05	-2.13	-2.17	-2.22	0.0	0.0	0.0
291	FOREIGN LUXURY	-12.50	-14.29	-16.67	-2.00	-4.08	-4.26	0.0	0.0	0.0	0.0	0.0
301												
311	PERCENT WITH 4 CYLINDERS:											
321	DOMESTIC SUBCOMPACT	4.06	3.45	3.33	3.23	3.13	3.03	2.94	2.86	0.0	0.0	0.0
331	FOREIGN SUBCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
341	DOMESTIC COMPACT	82.33	50.00	33.33	50.00	33.33	12.50	11.11	10.00	0.0	0.0	0.0
351	FOREIGN COMPACT	-5.26	-5.56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
361	MID-SIZE				100.00	50.00	33.33	50.00	0.0	0.0	0.0	0.0
371	FULL SIZE				100.00	50.00	33.33	25.00	20.00	0.0	0.0	0.0
381	DOMESTIC LUXURY			400.00	100.00	100.00	150.00	100.00	50.00	0.0	0.0	0.0
391	FOREIGN LUXURY	22.22	9.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
401												
411	PERCENT WITH 6 CYLINDERS:											
421	DOMESTIC SUBCOMPACT	15.28	-1.96	-10.00	-11.11	-12.50	-14.29	-16.67	-20.00	0.0	0.0	0.0
431	FOREIGN SUBCOMPACT	42.86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
441	DOMESTIC COMPACT	-8.04	20.00	-8.33	-9.09	-10.00	-11.11	-12.50	-14.29	0.0	0.0	0.0
451	FOREIGN COMPACT	100.00	50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
461	MID-SIZE	79.41	73.91	75.00	42.86	30.00	7.69	0.0	0.0	0.0	0.0	0.0
471	FULL SIZE	254.61	100.00	100.00	50.00	33.33	25.00	20.00	8.33	0.0	0.0	0.0
481	DOMESTIC LUXURY			100.00	50.00	33.33	25.00	20.00	16.67	0.0	0.0	0.0
491	FOREIGN LUXURY	-18.18	-11.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 22.00 FUEL CONSUMPTION EFFICIENCY FACTORS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
	CITY EFFICIENCY FACTOR: ALL CLASSES	1.00	1.00	2.00	8.00	12.00	16.00	19.00	19.00	19.00	19.00	19.00
21	DOMESTIC SUBCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	FOREIGN SUBCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	DOMESTIC COMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	FOREIGN COMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	MID-SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	FULL SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
81	DOMESTIC LUXURY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91	FOREIGN LUXURY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101	HIGHWAY EFFICIENCY FACTOR: ALL CLASSES	1.00	1.00	2.00	8.00	12.00	16.00	19.00	19.00	19.00	19.00	19.00
121	DOMESTIC SUBCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	FOREIGN SUBCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	DOMESTIC COMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151	FOREIGN COMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161	MID-SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171	FULL SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
181	DOMESTIC LUXURY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
191	FOREIGN LUXURY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 23.00 MISCELLANEOUS ASSUMPTIONS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	DOMESTIC CLASS BASE PRICE/AVG (RATIO)											
21	SUBCOMPACT	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729
31	COMPACT	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833
41	MID-SIZE	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929
51	FULL SIZE	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019
61	LUXURY	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621
71												
81	DOM CLASS MAX OPT PRICE/AVG (RATIO)											
91	SURCOMPACT	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922
101	COMPACT	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969
111	MID-SIZE	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017
121	FULL SIZE	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014
131	LUXURY	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034
141												
151	CITY DRIVING, URBAN MILES / TOTAL	0.577	0.577	0.578	0.578	0.578	0.579	0.580	0.580	0.581	0.581	0.581
161												
171	EXPONENTIAL DECAY RATE, USED CAR PRICES											
181	SURCOMPACT	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192
191	COMPACT	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163
201	MID-SIZE	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189
211	FULL SIZE	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265
221	LUXURY	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229

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TABLE 23.10 GROWTH RATES, MISCELLANEOUS ASSUMPTIONS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	DOMESTIC CLASS BASE PRICE/AVG (RATIO)											
21	SUBCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	COMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	MID-SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	FULL SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	LUXURY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71												
81	DOM CLASS MAX OPT PRICE/AVG (RATIO)											
91	SURCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101	COMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	MID-SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	FULL-SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	LUXURY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141												
151	CITY DRIVING, URBAN MILES / TOTAL	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0
161												
171	EXPONENTIAL DECAY RATE, USED CAR PRICES											
181	SURCOMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
191	COMPACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
201	MID-SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
211	FULL SIZE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
221	LUXURY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
I. T. E. M.											
EQUILIBRIUM (DESIRED) STOCKS											
21	110,247	113,038	115,579	117,409	119,767	122,393	125,291	126,662	128,025	130,351	132,670
31	97,830	100,367	102,697	104,335	106,491	108,947	111,599	112,707	113,843	115,024	117,975
41	12,417	12,671	12,882	13,074	13,276	13,446	13,692	13,955	14,183	14,426	14,695
51	28,853	29,140	29,466	29,760	29,997	30,130	30,429	30,695	30,765	30,895	31,201
61	12,417	12,671	12,882	13,074	13,276	13,446	13,692	13,955	14,183	14,426	14,695
71	16,446	16,469	16,584	16,685	16,721	16,683	16,737	16,740	16,582	16,469	16,506
81											
9. NEW REGISTRATIONS											
101	12,457	12,241	12,345	12,486	13,338	13,927	14,401	14,204	14,111	14,528	14,970
111	10,855	10,574	10,590	10,612	11,290	11,708	12,039	11,778	11,608	11,823	12,042
121	11,033	10,756	10,780	10,810	11,499	11,930	12,273	12,026	11,870	12,101	12,336
131	1,424	1,485	1,565	1,676	1,839	1,996	2,128	2,178	2,241	2,427	2,634
141	3,842	3,935	4,041	4,322	4,708	5,051	5,285	5,380	5,447	5,693	6,013
151	1,602	1,667	1,755	1,874	2,048	2,218	2,362	2,426	2,503	2,705	2,928
161	2,241	2,268	2,285	2,447	2,659	2,832	2,923	2,954	2,944	2,987	3,086
171											
18. SCRAPPAGE											
191	9,653	9,847	9,769	9,747	10,044	10,319	10,485	10,617	10,959	11,718	12,390
201	9,304	9,461	9,331	9,242	9,452	9,597	9,639	9,644	9,742	10,208	10,390
211	0,350	0,386	0,438	0,505	0,592	0,721	0,847	0,973	1,216	1,510	2,001
221	1,330	1,410	1,490	1,636	1,832	2,103	2,380	2,652	3,074	3,563	4,242
231	0,350	0,386	0,438	0,505	0,592	0,721	0,847	0,973	1,216	1,510	2,001
241	0,981	1,023	1,052	1,131	1,240	1,382	1,534	1,680	1,858	2,053	2,242
251											
26. YEAR END STOCK											
271	110,767	113,161	115,737	118,477	121,771	125,378	129,294	132,882	136,034	138,845	141,424
281	101,314	102,428	103,686	105,056	106,893	109,004	111,404	113,538	115,404	117,019	118,672
291	9,453	10,733	12,051	13,420	14,877	16,374	17,890	19,344	20,630	21,826	22,752
301	28,018	30,543	33,094	35,780	38,656	41,604	44,508	47,236	49,609	51,738	53,509
311	9,453	10,733	12,051	13,420	14,877	16,374	17,890	19,344	20,630	21,826	22,752
321	18,565	19,810	21,044	22,360	23,779	25,230	26,618	27,892	28,978	29,912	30,756
331											
34. MID YEAR STOCK											
351	109,310	111,921	114,391	117,042	120,063	123,500	127,251	130,994	134,349	137,335	140,030
361	100,483	101,827	102,999	104,306	105,914	107,874	110,119	112,377	114,362	116,107	117,750
371	8,827	10,093	11,392	12,736	14,149	15,626	17,132	18,617	19,987	21,228	22,289
381	26,762	29,281	31,819	34,437	37,218	40,130	43,056	45,878	48,422	50,673	52,623
391	8,827	10,093	11,392	12,736	14,149	15,626	17,132	18,617	19,987	21,228	22,289
401	17,935	19,147	20,427	21,702	23,070	24,504	25,924	27,255	28,435	29,445	30,334

TABLE 25.00 GROWTH RATES, LIGHT TRUCK SECTOR

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	EQUILIBRIUM (DESTROYED) STOCKS											
21	PERSONAL VEHICLES	2.1	2.5	2.2	1.6	2.0	2.2	2.4	1.1	1.1	1.8	1.81
31	AUTOMOBILES	2.3	2.6	2.3	1.6	2.1	2.3	2.4	1.0	1.0	1.8	1.81
41	MEMO TRUCKS AND VANS REG AS AUTOS	1.2	2.0	1.7	1.5	0.8	1.3	1.8	1.0	1.6	1.7	1.91
51	LIGHT TRUCKS	0.8	1.0	1.1	1.0	0.5	0.4	1.0	0.9	0.2	0.4	1.01
61	MEMO TRUCKS AND VANS REG AS AUTOS	1.2	2.0	1.7	1.5	1.5	1.1	1.8	1.9	1.6	1.7	1.91
71	NONMEMO TRUCKS	0.5	0.1	0.7	0.6	0.2	-0.2	0.3	0.0	-0.9	-0.7	0.21
81	NEW REGISTRATIONS											
101	PERSONAL VEHICLES	3.3	-1.7	0.8	1.1	6.8	4.4	3.4	-1.4	-0.7	3.0	3.01
111	AUTOMOBILES	1.3	-2.6	0.1	0.2	6.4	3.7	2.8	-2.2	-1.4	1.9	1.91
121	MEMO TRUCKS AND VANS REG AS AUTOS	1.5	-2.5	0.2	0.3	6.4	3.8	2.9	-2.0	-1.3	1.9	1.91
131	LIGHT TRUCKS	19.9	4.3	5.4	7.1	9.7	8.5	6.6	2.9	2.9	8.3	8.31
141	MEMO TRUCKS AND VANS REG AS AUTOS	16.4	2.4	2.7	6.9	8.9	7.3	4.6	1.8	1.2	4.5	5.61
151	NONMEMO TRUCKS	19.0	4.1	5.3	6.8	9.3	8.3	6.5	2.7	3.2	8.1	8.21
161	PERSONAL VEHICLES	14.6	1.2	0.8	7.1	8.7	6.5	3.2	1.1	-0.3	1.5	3.31
171	AUTOMOBILES											
181	MEMO TRUCKS AND VANS REG AS AUTOS											
191	LIGHT TRUCKS	6.8	2.0	-0.8	-0.2	3.0	2.7	1.6	1.3	3.2	6.9	5.71
201	MEMO TRUCKS AND VANS REG AS AUTOS	6.4	1.7	-1.4	-1.0	2.3	1.5	0.4	0.1	1.0	4.8	1.81
211	LIGHT TRUCKS	18.7	10.6	13.4	15.2	17.3	21.9	17.4	14.9	25.0	24.1	32.51
221	MEMO TRUCKS AND VANS REG AS AUTOS	12.0	5.9	5.7	9.8	12.0	14.8	13.2	11.4	15.9	15.9	19.11
231	NONMEMO TRUCKS	18.7	10.6	13.4	15.2	17.3	21.9	17.4	14.9	25.0	24.1	32.51
241	PERSONAL VEHICLES	9.8	4.3	2.8	7.5	9.6	11.5	11.0	9.5	10.6	10.5	9.21
251	AUTOMOBILES											
261	MEMO TRUCKS AND VANS REG AS AUTOS											
271	LIGHT TRUCKS	2.6	2.2	2.3	2.4	2.8	3.0	3.1	2.8	2.4	2.1	1.91
281	MEMO TRUCKS AND VANS REG AS AUTOS	1.6	1.1	1.2	1.3	1.7	2.0	2.2	1.9	1.6	1.4	1.41
291	LIGHT TRUCKS	15.3	13.5	12.3	11.4	10.9	10.1	9.3	8.1	6.7	5.8	4.21
301	MEMO TRUCKS AND VANS REG AS AUTOS	9.8	9.0	8.4	8.1	8.0	7.6	7.0	6.1	5.0	4.3	3.41
311	NONMEMO TRUCKS	15.3	13.5	12.3	11.4	10.9	10.1	9.3	8.1	6.7	5.8	4.21
321	PERSONAL VEHICLES	7.3	6.7	6.2	6.3	6.3	6.1	5.5	4.8	3.9	3.2	2.81
331	AUTOMOBILES											
341	MEMO TRUCKS AND VANS REG AS AUTOS											
351	LIGHT TRUCKS	2.7	2.4	2.2	2.3	2.6	2.9	3.0	2.9	2.6	2.2	2.01
361	MEMO TRUCKS AND VANS REG AS AUTOS	1.8	1.3	1.2	1.3	1.5	1.9	2.1	2.1	1.8	1.5	1.41
371	LIGHT TRUCKS	15.0	14.3	12.9	11.8	11.1	10.4	9.6	8.7	7.4	6.2	5.01
381	MEMO TRUCKS AND VANS REG AS AUTOS	9.5	9.4	8.7	8.2	8.1	7.8	7.3	6.5	5.6	4.6	3.81
391	NONMEMO TRUCKS	15.0	14.3	12.9	11.8	11.1	10.4	9.6	8.7	7.4	6.2	5.01
401	PERSONAL VEHICLES	6.9	7.0	6.5	6.2	6.3	6.2	5.8	5.1	4.3	3.6	3.01
	AUTOMOBILES											
	MEMO TRUCKS AND VANS REG AS AUTOS											
	LIGHT TRUCKS											
	MEMO TRUCKS AND VANS REG AS AUTOS											
	NONMEMO TRUCKS											

TABLE 26,00 TRUCKS IN OPERATION BY AGE: MID-YEAR (MILL TRUCKS)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PERSONAL TRUCKS: ALL VINTAGES	8.827	10.093	11.392	12.736	14.149	15.626	17.132	18.617	19.987	21.228	22.2891
21	LESS THAN ONE YEAR OLD	1.346	1.466	1.554	1.644	1.774	1.921	2.047	2.119	2.150	2.228	2.3411
31	AGE: 1 YEAR OLD	1.208	1.415	1.556	1.626	1.717	1.846	1.942	2.117	2.185	2.205	2.2621
41	AGE: 2 YEARS OLD	0.873	1.191	1.395	1.534	1.602	1.688	1.811	1.951	2.067	2.119	2.1171
51	AGE: 3 YEARS OLD	0.873	1.007	1.173	1.374	1.509	1.673	1.654	1.772	1.902	2.001	2.0311
61	AGE: 4 YEARS OLD	0.834	0.858	0.990	1.153	1.349	1.478	1.537	1.614	1.723	1.838	1.9141
71	AGE: 5 YEARS OLD	0.752	0.816	0.840	0.969	1.127	1.316	1.439	1.495	1.564	1.659	1.7511
81	AGE: 6 YEARS OLD	0.576	0.733	0.795	0.818	0.943	1.095	1.276	1.393	1.442	1.499	1.5731
91	AGE: 7 YEARS OLD	0.447	0.559	0.709	0.769	0.791	0.910	1.054	1.226	1.334	1.371	1.4111
101	AGE: 8 YEARS OLD	0.360	0.428	0.536	0.679	0.736	0.755	0.867	1.002	1.162	1.256	1.2781
111	AGE: 9 YEARS OLD	0.265	0.341	0.406	0.508	0.642	0.694	0.711	0.815	0.939	1.082	1.1571
121	AGE: 10 YEARS OLD	0.222	0.248	0.320	0.381	0.475	0.600	0.647	0.661	0.756	0.865	0.9851
131	AGE: 11 TO 15 YEARS OLD	0.666	0.745	0.828	0.942	1.091	1.311	1.612	1.910	2.139	2.381	2.6241
141	AGE: 16 TO 20 YEARS OLD	0.191	0.203	0.224	0.266	0.314	0.354	0.397	0.442	0.506	0.584	0.6871
151	AGE: 21 TO 25 YEARS OLD	0.049	0.051	0.054	0.061	0.067	0.072	0.075	0.083	0.102	0.123	0.1381
161	AGE: 26 TO 30 YEARS OLD	0.013	0.013	0.013	0.013	0.013	0.014	0.014	0.015	0.017	0.018	0.0191
171												
181	COMMERCIAL TRUCKS: ALL VINTAGES	17.935	19.187	20.427	21.702	23.070	24.504	25.924	27.255	28.435	29.445	30.3341
191	LESS THAN ONE YEAR OLD	2.018	2.160	2.177	2.260	2.434	2.607	2.716	2.751	2.733	2.715	2.7381
201	AGE: 1 YEAR OLD	1.766	1.988	2.132	2.151	2.231	2.398	2.563	2.665	2.694	2.670	2.6451
211	AGE: 2 YEARS OLD	1.440	1.739	1.961	2.105	2.121	2.197	2.356	2.514	2.608	2.629	2.5991
221	AGE: 3 YEARS OLD	1.310	1.416	1.713	1.934	2.073	2.086	2.159	2.307	2.456	2.542	2.5561
231	AGE: 4 YEARS OLD	1.524	1.285	1.391	1.684	1.900	2.034	2.042	2.105	2.249	2.388	2.4651
241	AGE: 5 YEARS OLD	1.494	1.489	1.258	1.363	1.649	1.856	1.983	1.987	2.044	2.178	2.3071
251	AGE: 6 YEARS OLD	1.212	1.453	1.450	1.226	1.327	1.603	1.801	1.920	1.919	1.970	2.0941
261	AGE: 7 YEARS OLD	1.013	1.169	1.404	1.402	1.185	1.281	1.543	1.730	1.841	1.836	1.8791
271	AGE: 8 YEARS OLD	0.974	0.967	1.117	1.343	1.340	1.130	1.219	1.466	1.641	1.741	1.7321
281	AGE: 9 YEARS OLD	0.942	0.916	0.913	1.056	1.268	1.264	1.063	1.145	1.374	1.533	1.6231
291	AGE: 10 YEARS OLD	0.774	0.877	0.857	0.853	0.985	1.181	1.174	0.986	1.060	1.268	1.4121
301	AGE: 11 TO 15 YEARS OLD	2.420	2.605	2.836	2.990	3.088	3.292	3.614	3.838	3.870	3.955	4.1481
311	AGE: 16 TO 20 YEARS OLD	0.707	0.791	0.897	1.013	1.142	1.238	1.328	1.438	1.501	1.531	1.6151
321	AGE: 21 TO 25 YEARS OLD	0.259	0.249	0.243	0.247	0.252	0.267	0.299	0.338	0.379	0.422	0.4501
331	AGE: 26 TO 30 YEARS OLD	0.083	0.080	0.078	0.075	0.073	0.071	0.068	0.066	0.067	0.068	0.0711

TABLE 27.00 GROWTH RATES, TRUCKS IN OPERATION BY AGE MID-YEAR

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PERSONAL TRUCKS: ALL VINTAGES	15.0	14.3	12.9	11.8	11.1	10.4	9.6	8.7	7.4	6.2	5.0
2	LESS THAN ONE YEAR OLD	17.4	10.4	4.6	5.8	7.9	8.3	6.6	3.5	1.5	3.6	5.1
3	AGE: 1 YEAR OLD	16.4	17.1	10.0	4.5	5.6	7.5	7.9	6.3	3.2	0.9	2.6
4	AGE: 2 YEARS OLD	15.3	16.4	17.1	9.9	4.0	5.4	7.3	7.8	5.9	2.5	-0.1
5	AGE: 3 YEARS OLD	2.8	15.3	16.5	17.1	9.0	4.2	5.2	7.1	7.4	5.2	1.5
6	AGE: 4 YEARS OLD	8.5	2.8	15.4	16.5	17.0	9.6	4.0	5.0	6.7	6.7	4.1
7	AGE: 5 YEARS OLD	26.7	8.5	2.9	15.4	16.3	16.8	9.4	3.9	4.6	6.0	5.6
8	AGE: 6 YEARS OLD	25.2	26.7	8.6	2.9	15.3	16.1	16.5	9.2	3.5	4.0	5.0
9	AGE: 7 YEARS OLD	19.0	25.1	26.7	8.5	2.8	15.1	15.8	16.4	8.8	2.8	2.9
10	AGE: 8 YEARS OLD	28.8	18.9	25.1	26.7	8.4	2.6	14.8	15.7	15.9	8.1	1.8
11	AGE: 9 YEARS OLD	11.8	11.8	29.0	25.0	26.5	8.1	2.3	14.7	15.2	15.2	7.0
12	AGE: 10 YEARS OLD	17.2	11.9	29.3	18.9	24.8	26.2	2.2	14.7	14.3	14.4	14.0
13	AGE: 11 TO 15 YEARS OLD	12.3	11.9	11.1	13.8	15.8	20.2	23.0	18.5	12.0	11.4	10.2
14	AGE: 16 TO 20 YEARS OLD	7.6	6.2	10.4	19.2	17.7	12.8	12.1	11.4	14.6	15.2	17.7
15	AGE: 21 TO 25 YEARS OLD	3.3	2.7	6.4	12.3	10.6	7.0	5.1	9.9	23.1	20.3	12.3
16	AGE: 26 TO 30 YEARS OLD	-0.5	1.3	2.6	0.7	0.5	3.0	2.2	6.2	11.9	8.9	4.1
17	PERSONAL TRUCKS: ALL VINTAGES	6.9	7.0	6.5	6.2	6.3	6.2	5.8	5.1	4.3	3.6	3.0
18	LESS THAN ONE YEAR OLD	12.6	7.0	0.8	3.8	7.7	7.1	4.2	1.3	-0.6	-0.7	0.9
19	AGE: 1 YEAR OLD	20.7	12.6	7.2	0.9	3.7	7.5	6.9	4.0	1.1	-0.9	-0.9
20	AGE: 2 YEARS OLD	8.1	20.8	12.8	7.3	0.8	3.5	7.3	6.7	3.8	0.8	-1.1
21	AGE: 3 YEARS OLD	-15.7	6.1	21.0	12.9	7.2	0.6	3.3	7.1	6.5	3.5	0.6
22	AGE: 4 YEARS OLD	-0.4	-15.7	8.3	21.1	12.8	7.0	0.4	3.1	6.8	6.2	3.2
23	AGE: 5 YEARS OLD	19.9	-0.4	-15.5	8.4	21.0	12.6	6.8	0.2	2.9	6.5	5.9
24	AGE: 6 YEARS OLD	15.3	19.9	-0.2	-15.5	8.3	20.7	12.4	6.6	-0.0	2.6	6.3
25	AGE: 7 YEARS OLD	-0.7	15.4	20.1	-0.1	-15.5	8.1	20.5	12.1	6.4	2.4	2.4
26	AGE: 8 YEARS OLD	-2.6	0.7	15.5	20.2	20.2	-15.7	7.9	20.3	11.9	6.1	-0.5
27	AGE: 9 YEARS OLD	13.3	-2.5	-0.5	15.6	20.1	-0.4	-15.9	7.7	20.0	11.6	5.8
28	AGE: 10 YEARS OLD	8.8	13.4	-2.4	-0.5	15.6	19.9	-0.6	-16.0	7.4	19.7	11.3
29	AGE: 11 TO 15 YEARS OLD	8.9	7.7	8.8	5.4	3.3	6.6	9.8	8.2	0.8	2.2	4.9
30	AGE: 16 TO 20 YEARS OLD	5.4	11.9	13.3	13.0	12.8	6.4	7.2	8.3	4.4	2.0	5.5
31	AGE: 21 TO 25 YEARS OLD	-2.1	3.7	-2.4	1.8	1.9	9.8	12.2	12.9	12.1	11.4	6.7
32	AGE: 26 TO 30 YEARS OLD	-2.8	-3.5	-3.2	-3.8	-2.7	-2.2	-4.3	-2.9	1.5	1.2	5.0
33	COMMERCIAL TRUCKS: ALL VINTAGES	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1

TABLE 28.00 PRICES AND CAPITALIZED COSTS (DOLLARS)

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	TOTAL PRICE											
21	AUTOMOBILES	6896.2	7501.6	8177.0	8940.0	9789.6	10747.5	11689.4	12550.3	13409.6	14245.9	15096.31
31	PERSONAL TRUCKS	5997.7	6560.7	7150.1	7827.4	8523.7	9238.1	9984.3	10732.1	11475.8	12204.7	12937.01
41	COMMERCIAL TRUCKS	6454.3	7075.4	7727.0	8475.2	9246.2	10030.0	10848.6	11669.3	12485.4	13285.7	14090.51
51	GVW 1	5992.5	6558.9	7152.1	7831.9	8530.9	9248.3	9997.4	10747.6	11493.5	12224.8	12959.61
61	GVW 2	6800.6	7451.3	8133.2	8916.7	9723.1	10551.1	11416.1	12283.7	13146.7	13993.0	14844.41
71												
81	TRANSPORTATION CHARGES											
91	AUTOMOBILES	257.4	287.0	318.4	349.9	384.5	421.2	460.3	498.4	537.0	576.2	609.61
101	PERSONAL TRUCKS	289.0	319.9	352.1	385.9	421.6	461.3	504.3	543.8	585.3	628.1	663.31
111	COMMERCIAL TRUCKS	316.2	349.7	384.7	421.8	461.2	504.3	551.0	594.0	639.0	685.3	723.71
121	GVW 1	289.0	319.9	352.1	385.9	421.6	461.3	504.3	543.8	585.3	628.1	663.31
131	GVW 2	336.7	371.5	407.7	446.5	487.6	533.0	582.0	627.4	674.8	723.4	764.01
141												
151	BASE PRICE											
161	AUTOMOBILES	5361.1	5810.4	6315.1	6904.8	7568.0	8319.9	9046.8	9710.2	10367.1	11002.0	11649.71
171	PERSONAL TRUCKS	4949.3	5398.6	5865.0	6410.8	6965.5	7529.1	8114.4	8702.8	9283.6	9846.6	10418.91
181	COMMERCIAL TRUCKS	5167.2	5652.0	6156.4	6747.4	7349.7	7955.6	8585.4	9219.0	9845.0	10452.1	11069.61
191	GVW 1	4779.7	5218.8	5674.8	6208.7	6751.4	7303.0	7876.0	8452.1	9021.1	9572.7	10133.51
201	GVW 2	5457.8	5967.2	6496.7	7117.2	7748.5	8390.7	9058.4	9730.3	10394.2	11038.4	11693.61
211												
221	OPTIONS INSTALLED											
231	AUTOMOBILES	969.3	1058.9	1156.2	1249.7	1346.8	1453.4	1564.5	1661.6	1760.6	1857.0	1952.81
241	PERSONAL TRUCKS	474.7	513.4	553.7	595.0	636.9	679.6	722.5	764.2	804.4	843.6	882.91
251	COMMERCIAL TRUCKS	664.7	719.3	776.1	834.4	893.6	953.4	1013.7	1072.2	1128.6	1183.6	1238.71
261	GVW 1	639.3	691.5	745.7	801.3	857.8	915.2	973.1	1029.3	1083.4	1136.2	1189.11
271	GVW 2	683.8	739.6	797.6	857.1	917.4	978.9	1040.8	1100.9	1158.7	1215.2	1271.81
281												
291	CAPITALIZED COST PER MILE											
301	PERSONAL VEHICLES	0.2583	0.2793	0.3026	0.3269	0.3537	0.3818	0.4101	0.4386	0.4682	0.4976	0.52801
311	AUTOMOBILES	0.2553	0.2762	0.2996	0.3236	0.3503	0.3778	0.4056	0.4335	0.4626	0.4916	0.52151
321	PERSONAL TRUCKS	0.2820	0.3038	0.3267	0.3535	0.3813	0.4140	0.4468	0.4798	0.5129	0.5461	0.58001
331	COMMERCIAL TRUCKS	0.2197	0.2367	0.2545	0.2749	0.2961	0.3214	0.3469	0.3725	0.3981	0.4238	0.45001
341	GVW 1	0.2283	0.2451	0.2627	0.2832	0.3047	0.3308	0.3571	0.3835	0.4100	0.4365	0.46361
351	GVW 2	0.2103	0.2280	0.2463	0.2670	0.2883	0.3129	0.3378	0.3626	0.3875	0.4125	0.43811

TABLE 29.00 GROWTH RATES, PRICES AND CAPITALIZED COSTS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
11	TOTAL PRICE											
21	AUTOMOBILES	9.1	8.8	9.0	9.3	9.5	9.8	8.8	7.4	6.8	6.2	6.0
31	PERSONAL TRUCKS	9.1	9.4	9.0	9.5	8.9	8.4	8.1	7.5	6.9	6.4	6.0
41	COMMERCIAL TRUCKS	9.4	9.6	9.2	9.7	9.1	8.5	8.2	7.6	7.0	6.4	6.0
51	GVW 1	9.2	9.5	9.0	9.5	8.9	8.4	8.1	7.5	6.9	6.4	6.0
61	GVW 2	9.3	9.6	9.2	9.6	9.0	8.5	8.2	7.6	7.0	6.4	6.1
71												
81	TRANSPORTATION CHARGES											
91	AUTOMOBILES	14.9	11.5	10.9	9.9	9.9	9.5	9.3	8.3	7.8	7.3	5.8
101	PERSONAL TRUCKS	14.4	10.7	10.1	9.6	9.3	9.4	9.3	7.8	7.6	7.3	5.6
111	COMMERCIAL TRUCKS	14.2	10.6	10.0	9.6	9.3	9.3	9.3	7.8	7.6	7.2	5.6
121	GVW 1	14.4	10.7	10.1	9.6	9.3	9.4	9.3	7.8	7.6	7.3	5.6
131	GVW 2	13.9	10.3	9.8	9.5	9.2	9.3	9.2	7.8	7.6	7.2	5.6
141												
151	BASE PRICE											
161	AUTOMOBILES	9.1	8.4	8.7	9.3	9.6	9.9	8.7	7.3	6.8	6.1	5.9
171	PERSONAL TRUCKS	8.7	9.1	8.6	9.3	8.7	8.1	7.8	7.3	6.7	6.1	5.8
181	COMMERCIAL TRUCKS	9.0	9.4	8.9	9.6	8.9	8.2	7.9	7.4	6.8	6.2	5.9
191	GVW 1	8.8	9.2	8.7	9.4	8.7	8.2	7.8	7.3	6.7	6.1	5.9
201	GVW 2	8.9	9.3	8.9	9.6	8.9	8.3	8.0	7.4	6.8	6.2	5.9
211												
221	OPTIONS INSTALLED											
231	AUTOMOBILES	7.1	9.2	9.2	8.1	7.8	7.9	7.6	6.2	6.0	5.5	5.2
241	PERSONAL TRUCKS	7.8	8.2	7.8	7.5	7.0	6.7	6.3	5.8	5.3	4.9	4.7
251	COMMERCIAL TRUCKS	7.8	8.2	7.9	7.5	7.1	6.7	6.3	5.8	5.3	4.9	4.7
261	GVW 1	7.8	8.2	7.8	7.5	7.0	6.7	6.3	5.8	5.3	4.9	4.7
271	GVW 2	7.8	8.2	7.8	7.5	7.0	6.7	6.3	5.8	5.3	4.9	4.7
281												
291	CAPITALIZED COST PER MILE											
301	PERSONAL VEHICLES	8.1	8.1	8.4	8.0	8.2	7.9	7.4	7.0	6.8	6.3	6.1
311	AUTOMOBILES	8.0	8.2	8.5	8.0	8.2	7.9	7.3	6.9	6.7	6.3	6.1
321	PERSONAL TRUCKS	8.6	7.7	7.6	8.2	7.9	8.6	7.9	7.4	6.9	6.5	6.2
331	COMMERCIAL TRUCKS	8.1	7.7	7.5	8.0	7.7	8.5	7.9	7.4	6.9	6.5	6.2
341	GVW 1	8.4	7.3	7.2	7.8	7.6	8.6	8.0	7.4	6.9	6.5	6.2
351	GVW 2	8.1	8.4	8.0	8.4	8.0	8.5	7.9	7.3	6.9	6.5	6.2

TABLE 50.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	J T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	OVERALL FLEET MILES PER GALLON											
2	AUTOMOBILES	13.7	13.9	14.2	14.6	15.1	15.8	16.4	17.1	17.9	18.6	19.3
3	PERSONAL TRUCKS	10.8	11.0	11.2	11.5	12.0	12.3	12.7	13.0	13.3	13.6	13.8
4	COMMERCIAL TRUCKS	11.0	11.0	11.2	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8
5												
6	TOTAL FUEL CONSUMPTION	109,696	112,287	113,792	114,858	115,488	116,198	117,023	117,878	118,426	118,742	119,134
7	AUTOMOBILES	82,142	82,584	82,272	81,615	80,288	78,917	77,611	76,350	74,940	73,574	72,508
8	PERSONAL TRUCKS	8,512	9,661	10,716	11,717	12,688	13,690	14,708	15,693	16,570	17,333	17,953
9	COMMERCIAL TRUCKS	19,042	20,042	20,603	21,527	22,511	23,590	24,704	25,834	26,916	27,835	28,673
10												
11	AVERAGE AGE											
12	PERSONAL VEHICLES	5.636	5.619	5.619	5.634	5.642	5.629	5.614	5.621	5.655	5.697	5.731
13	AUTOMOBILES	5.731	5.724	5.727	5.741	5.744	5.721	5.691	5.680	5.696	5.719	5.734
14	TRUCKS	4.550	4.564	4.642	4.754	4.875	4.996	5.122	5.264	5.425	5.580	5.713
15	COMMERCIAL TRUCKS	6.221	6.181	6.188	6.211	6.224	6.230	6.247	6.288	6.357	6.447	6.542
16												
17	MILES PER VEHICLE											
18	PERSONAL VEHICLES	11,154	11,214	11,263	11,306	11,366	11,427	11,489	11,546	11,610	11,676	11,738
19	AUTOMOBILES	11,218	11,266	11,342	11,390	11,451	11,515	11,579	11,638	11,709	11,782	11,849
20	TRUCKS	10,426	10,487	10,542	10,620	10,723	10,817	10,908	10,985	11,046	11,100	11,152
21	COMMERCIAL TRUCKS	11,656	11,533	11,374	11,258	11,306	11,376	11,469	11,601	11,763	11,911	12,063
22												
23	NEW REGISTRATIONS TO BEGINNING STOCK											
24	PERSONAL VEHICLES	0.115	0.111	0.109	0.108	0.113	0.114	0.115	0.110	0.106	0.107	0.108
25	AUTOMOBILES	0.109	0.104	0.103	0.102	0.107	0.110	0.110	0.106	0.102	0.102	0.103
26	TRUCKS	0.195	0.176	0.164	0.156	0.153	0.149	0.144	0.136	0.129	0.131	0.134
27	COMMERCIAL TRUCKS	0.129	0.122	0.115	0.116	0.119	0.119	0.116	0.111	0.106	0.103	0.103
28												
29	SCRAPAGE TO BEGINNING STOCK											
30	PERSONAL VEHICLES	0.089	0.089	0.086	0.084	0.085	0.085	0.084	0.082	0.082	0.086	0.089
31	AUTOMOBILES	0.093	0.093	0.091	0.089	0.090	0.090	0.088	0.087	0.086	0.088	0.089
32	TRUCKS	0.043	0.041	0.041	0.042	0.044	0.048	0.052	0.054	0.063	0.073	0.092
33	COMMERCIAL TRUCKS	0.057	0.055	0.053	0.054	0.055	0.058	0.061	0.063	0.067	0.071	0.075
34												
35	ACTIVITIES AS SHARE OF INCOME	28.8	28.3	27.9	28.0	28.0	28.1	28.3	28.5	28.6	28.8	29.1
36												
37	FARM PROPRIETOR'S INCOME	24,275	26,046	28,081	30,081	32,081	34,081	36,081	38,081	40,081	42,081	44,532
38	EMPLOYEE COMPENSATION											
39	AGRICULTURE	12,372	14,204	15,583	17,223	18,931	20,797	22,569	24,225	25,749	27,419	29,202
40	CONTRACT CONSTRUCTION	64,625	69,518	74,001	80,756	88,011	97,070	105,456	113,895	122,077	131,352	142,042
41	SERVICES	186,930	206,204	227,209	253,393	283,896	318,412	355,562	394,044	433,549	476,854	525,792
42	WHOLESALE AND RETAIL TRADE	203,437	222,405	240,921	264,515	290,891	319,996	350,551	381,187	411,800	444,411	480,553
43												
44	AUTO REG. FEES INDEX (1967=100)	150.0	159.1	168.8	179.8	190.9	202.1	213.1	223.6	233.6	243.6	253.6
45	PERCENT OF FAMILIES WITH INCOME OVER											
46	\$15,000 (1975 DOLLARS)	49.7	50.0	50.1	50.4	50.9	51.4	52.1	52.7	53.1	53.4	54.1
47	COMMERCIAL BANK RATE ON NEW AUTO LOANS	10.9	11.1	11.2	11.4	11.6	11.4	11.1	10.8	10.7	10.6	10.5

TABLE 31.00 GROWTH RATES, MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	OVERALL FLEET MILES PER GALLON											
21	AUTOMOBILES	0.6	1.4	2.1	2.5	3.8	4.2	4.4	4.3	4.3	4.0	3.51
31	PERSONAL TRUCKS	0.3	1.3	2.3	3.0	3.6	3.3	2.9	2.6	2.2	2.0	1.91
41	COMMERCIAL TRUCKS	0.0	0.6	1.1	1.6	2.1	2.0	1.9	1.7	1.5	1.4	1.31
51	TOTAL FUEL CONSUMPTION											
61	AUTOMOBILES	3.8	2.4	1.3	0.9	0.5	0.6	0.7	0.7	0.5	0.3	0.31
71	PERSONAL TRUCKS	2.0	0.5	-0.4	-0.8	-1.6	-1.7	-1.7	-1.6	-1.8	-1.8	-1.41
81	COMMERCIAL TRUCKS	15.6	13.5	10.9	9.3	8.3	7.9	7.4	6.7	5.6	4.6	3.61
91	TOTAL FUEL CONSUMPTION	7.2	5.3	3.8	3.5	4.6	4.8	4.7	4.6	4.2	3.4	3.01
101												
111	AVERAGE AGE											
121	PERSONAL VEHICLES	-0.4	-0.3	-0.0	0.3	0.1	-0.2	-0.3	0.1	0.6	0.7	0.61
131	AUTOMOBILES	-0.2	-0.1	0.0	0.2	0.1	-0.4	-0.5	-0.2	0.3	0.4	0.31
141	TRUCKS	-0.6	0.3	1.7	2.4	2.6	2.5	2.5	2.8	3.1	2.9	2.41
151	COMMERCIAL TRUCKS	-0.8	-0.6	0.1	0.4	0.2	0.1	0.3	0.7	1.1	1.4	1.51
161												
171	MILES PER VEHICLE											
181	PERSONAL VEHICLES	0.8	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.51
191	AUTOMOBILES	0.8	0.6	0.5	0.4	0.5	0.6	0.6	0.5	0.6	0.6	0.61
201	TRUCKS	0.8	0.6	0.5	0.7	1.0	0.9	0.8	0.7	0.6	0.5	0.51
211	COMMERCIAL TRUCKS	0.3	-1.1	-1.4	-1.0	0.4	0.6	0.8	1.2	1.4	1.3	1.31
221												
231	NEW REGISTRATIONS TO BEGINNING STOCK											
241	PERSONAL VEHICLES	-4.2	-4.2	-1.3	-1.1	4.4	1.6	0.4	-4.4	-3.3	0.6	1.01
251	AUTOMOBILES	-4.1	-4.1	-0.9	-1.0	5.0	1.9	0.8	-4.3	-3.3	0.2	0.41
261	TRUCKS	-9.7	-9.7	-7.3	-4.9	-1.9	-2.3	-3.3	-6.0	-4.6	1.3	2.31
271	COMMERCIAL TRUCKS	-5.7	-5.7	-5.6	0.8	2.3	0.2	-2.7	-4.2	-4.9	-2.3	0.11
281												
291	SCRAPPAGE TO BEGINNING STOCK											
301	PERSONAL VEHICLES	-0.6	-0.6	-2.9	-2.4	0.7	-0.0	-1.1	-1.8	0.4	4.4	3.61
311	AUTOMOBILES	0.1	0.1	-2.4	-2.2	0.9	-0.2	-1.9	-2.1	3.1	3.1	0.41
321	TRUCKS	-4.1	-4.1	-0.2	2.6	5.3	9.9	6.6	5.2	15.6	16.4	25.21
331	COMMERCIAL TRUCKS	-2.8	-2.8	-3.7	1.2	3.2	4.8	4.6	3.8	5.6	6.4	5.81
341												
351	ACTIVITIES AS SHARE OF INCOME	0.1	-1.5	-1.4	0.2	0.2	0.3	0.4	0.8	0.5	0.6	0.91
361												
371	FARM PROPRIETOR'S INCOME	20.0	7.3	7.8	7.1	6.6	6.2	5.9	5.5	5.1	5.0	5.81
381	EMPLOYEE COMPENSATION											
391	AGRICULTURE	10.5	14.8	9.7	10.5	9.9	9.9	8.5	7.3	6.3	6.5	6.51
401	CONTRACT CONSTRUCTION	10.2	7.6	6.4	9.1	10.0	9.3	8.6	8.0	7.2	7.6	8.11
411	SERVICES	14.6	10.3	10.2	11.5	12.0	12.2	11.7	10.8	10.0	10.0	10.31
421	WHOLESALE AND RETAIL TRADE	9.3	9.3	8.3	9.8	10.0	10.0	9.5	8.7	8.0	7.9	8.11
431												
441	AUTO REG. FEES INDEX (1967=100)	6.4	6.1	6.1	6.5	6.2	5.8	5.4	4.9	4.5	4.3	4.11
451	PERCENT OF FAMILIES WITH INCOME OVER \$15,000 (1975 DOLLARS)	0.8	0.5	0.2	0.6	1.1	0.9	1.3	1.1	0.8	0.7	1.31
461		3.0	1.7	0.6	2.3	1.3	-1.5	-2.5	-2.8	-1.3	-1.0	-0.61
471	COMMERCIAL BANK RATE ON NEW AUTO LOANS											

LINE	VAR LABEL	I	T	E	M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	AVAGECT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	AVAGEPT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	AVAGEPV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	AVAGE0-20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	CTGSC0H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	EPACDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	EPACDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	EPACFMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	EPACFMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	EPAFDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	EPAFDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	EPALDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	EPALDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	EPALFMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	EPALFMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	EPAMDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	EPAMDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	EPASDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	EPASDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	EPASEMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	EPASEMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	FRMCICB	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	0.0	0.0	0.0	0.0	0.0
23	FRMCICR	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	0.0	0.0	0.0	0.0	0.0	0.0
24	GASAUTDADJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	KENDACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	KENDAY/FM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	KENDAY/LD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	KENDAPT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	KENDAPV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	OLDVMT/K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	OMVUJANR	-0.365	-1.100	-1.100	-1.100	-1.100	-0.600	-0.600	-0.600	-0.600	-0.500	-0.500	-0.500	-0.500	-0.500	-0.500
32	OMVICINROK	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220	0.220
33	OMVIPTNROK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	OMVIPTNROK	-0.137	-0.760	-0.520	-0.200	-0.520	0.400	0.700	0.900	1.000	1.000	1.100	1.100	1.100	1.350	1.600
35	OPMVUAC+LFYEND	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	PC4112-1741	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8	-8.8
37	PC4121-1000	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
38	PC4122-1001	-7.9	-7.9	-6.7	-7.9	-6.7	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9	-7.9
39	PC4122-1780	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4	-16.4
40	PC4122-1783	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0	-3.0
41	PCCEDAVN	3.000	5.500	7.500	6.800	6.000	6.000	5.300	5.000	5.300	5.300	5.000	5.000	5.000	5.000	5.000
42	PER15+	4.800	4.500	3.500	3.000	3.500	3.000	3.000	3.000	3.000	3.000	2.700	2.700	2.200	1.700	1.400
43	PER15+Y75	6.000	5.500	4.500	4.000	4.500	4.000	4.000	4.000	4.000	4.000	4.000	3.700	3.100	2.400	2.000
44	PTNPUTA	0.0	0.5	1.0	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
45	PRC1PURASE	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.	-11.
46	PRC1PUOPT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	PRC1PUTRN	9.	17.	25.	30.	25.	34.	40.	48.	40.	48.	53.	53.	60.	68.	72.
48	PRC2PURASE	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.	-39.
49	PRC2PUOPT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	PRC2PUTRN	9.	17.	25.	30.	25.	34.	40.	48.	40.	48.	53.	53.	60.	68.	72.
51	PRPTPURASE	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.	28.

TABLE 32.00 CONSTANT ADJUSTMENTS

LINE	VAR LABEL	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	PAPTUOPT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	PAPTUPTN	0.0	17.	25.	30.	34.	40.	46.	53.	60.	68.	72.
3	PYGSCUN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	PU/NCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	PU/NFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	PU/NLT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	PU/NMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	PU/NST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	PICEDAVN	-0.050	-0.100	-0.150	-0.150	-0.150	-0.150	-0.150	-0.150	-0.150	-0.150	-0.150
10	PURMVJIA	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
11	PUSEDW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	SAWRDVA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	SAWRDVA-D-V	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.110
14	SAWRDVA-F-V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	SCMVUA	-1.100	-0.600	-0.600	-0.800	-0.800	-0.800	-0.900	-1.100	-1.300	-1.300	-1.500
16	SCMVUAC+LF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	SCMVUACD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	SCMVUACF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	SCMVUACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	SCMVUAFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	SCMVUALD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	SCMVUALF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	SCMVUALT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	SCMVUAMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	SCMVUASD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	SCMVUASF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	SCMVUAST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	SCMVUATD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	SCMVUATF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	SCMVUACT	0.040	0.040	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	SCMVUPT	-1.245	-0.846	-1.007	-1.340	-1.590	-1.790	-2.110	-2.520	-2.860	-3.035	-3.220
32	SHRC+LFTNR	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
33	SHRCD*A	0.020	0.019	0.020	0.020	0.021	0.020	0.020	0.020	0.021	0.022	0.022
34	SHRCDTNR	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060
35	SHRCF*A	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	SHRFD*A	-0.050	-0.052	-0.051	-0.054	-0.051	-0.052	-0.052	-0.053	-0.053	-0.054	-0.055
37	SHRFDTNR	-0.0400	-0.0525	-0.0550	-0.0550	-0.0550	-0.0550	-0.0550	-0.0550	-0.0530	-0.0550	-0.0550
38	SHRLD*A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	SHRLDTHR	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005
40	SHRLF*A	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
41	SHRMD*A	0.049	0.050	0.050	0.050	0.051	0.051	0.051	0.051	0.052	0.053	0.053
42	SHRMDTHR	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027
43	SHRSD*A	0.015	0.016	0.018	0.018	0.019	0.019	0.019	0.021	0.023	0.024	0.025
44	SHRSDTNR	-0.0060	0.0025	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050	0.0050
45	SHRSF*A	-0.006	-0.005	-0.007	-0.006	-0.009	-0.013	-0.014	-0.017	-0.020	-0.021	-0.023
46	SHRSFTNR	0.0242	0.0272	0.0272	0.0272	0.0272	0.0272	0.0272	0.0272	0.0272	0.0272	0.0272
47	SPLTADJ	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	TXRFC1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	TXRFC2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	TXRFT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	USCDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 32.00 CONSTANT ADJUSTMENTS

LINE	VAR LABEL I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	USCOMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	USCDPPTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	USCDPURASE=2	0.0	-5.0	-10.0	-15.0	181.0	186.0	186.0	198.0	209.0	221.0	233.0
4	USCDPIIPT=2	66.0	60.0	54.0	48.0	42.0	36.0	30.0	24.0	18.0	12.0	6.0
5	USCDPUTRN	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0
6	USCFMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	USCFMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	USCFPURASE=2	886.0	886.0	886.0	886.0	886.0	1111.0	1122.0	1134.0	1146.0	1156.0	1170.0
9	USCFPUTRN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	USFDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	USFDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	USFDPTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	USFNPURASF=2	24.0	29.0	34.0	39.0	319.0	338.0	357.0	372.0	388.0	405.0	423.0
14	USFDPIIPT=2	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
15	USFDPUTRN	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
16	USLDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	USLDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	USLDPPTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	USLDPURASE=2	260.0	265.0	275.0	285.0	595.0	620.0	646.0	662.0	680.0	708.0	736.0
20	USLDPIIPT=2	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
21	USLDPUTRN	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
22	USLFMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	USLFMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	USLFPURASE=2	1300.0	1300.0	1300.0	1300.0	1300.0	1550.0	1563.0	1576.0	1589.0	1603.0	1617.0
25	USLFPUTRN	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
26	USMDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	USMDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	USMDPPTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	USMDPURASE=2	250.0	230.0	230.0	230.0	470.0	482.0	482.0	495.0	508.0	522.0	537.0
30	USMDPIIPT=2	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0	-33.0
31	USMDPUTRN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	USSDMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	USSDMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	USSDPPTM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	USSDPURASE=2	-41.0	-50.0	-60.0	-70.0	-80.0	-90.0	-60.0	65.0	70.0	70.0	75.0
36	USSDPIIPT=2	-3.0	-7.0	-11.0	-15.0	-19.0	-23.0	-27.0	-31.0	-31.0	-31.0	-31.0
37	USSDPUTRN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	USSEMPGC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	USSEMPGH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	USSEPURASF=2	361.0	361.0	361.0	361.0	361.0	361.0	522.0	530.0	538.0	547.0	556.0
41	USSEPUTRN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	USTDPTMFW	39.0	59.0	79.0	99.0	119.0	139.0	159.0	179.0	199.0	219.0	239.0
43	USTDPURASEFW	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
44	VMCT/K	0.600	0.600	0.700	0.800	0.800	0.800	0.600	0.500	0.400	0.300	0.200
45	VMT/K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
46	VMT/FM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	VMT/K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	VMTVA=MC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	VMTA/K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	VMTI*/K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51	WRCCCS\$	2.800	2.800	4.000	3.500	3.000	2.500	2.000	2.000	2.000	2.000	2.000
52	WRCSVS\$	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000	9.000
53	WRCSRS\$	11.000	11.000	11.000	11.000	11.000	11.000	11.000	11.000	11.000	11.000	11.000

TABLE 32.10 EXOGENOUS ASSUMPTIONS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	DIUAUTOS	0	0	0	0	0	0	0	0	0	0	0
2	EFFC	1	1	2	8	12	16	19	19	19	19	19
3	EFFC*	1	1	3	11	17	23	26	27	27	27	27
4	EFFCCD	0	0	0	0	0	0	0	0	0	0	0
5	EFFCCD*	0	0	0	0	0	0	0	0	0	0	0
6	EFFCCF	0	0	0	0	0	0	0	0	0	0	0
7	EFFCCF*	0	0	0	0	0	0	0	0	0	0	0
8	EFFCFD	0	0	0	0	0	0	0	0	0	0	0
9	EFFCFD*	0	0	0	0	0	0	0	0	0	0	0
10	EFFCLD	0	0	0	0	0	0	0	0	0	0	0
11	EFFCLD*	0	0	0	0	0	0	0	0	0	0	0
12	EFFCLF	0	0	0	0	0	0	0	0	0	0	0
13	EFFCLF*	0	0	0	0	0	0	0	0	0	0	0
14	EFFCMD	0	0	0	0	0	0	0	0	0	0	0
15	EFFCMD*	0	0	0	0	0	0	0	0	0	0	0
16	EFFC8D	0	0	0	0	0	0	0	0	0	0	0
17	EFFCSDA	0	0	0	0	0	0	0	0	0	0	0
18	EFFCSF	0	0	0	0	0	0	0	0	0	0	0
19	EFFCSF*	0	0	0	0	0	0	0	0	0	0	0
20	EFFH	1	1	2	8	12	16	19	19	19	19	19
21	EFFH*	1	1	3	11	17	23	26	27	27	27	27
22	EFFHCD	0	0	0	0	0	0	0	0	0	0	0
23	EFFHCD*	0	0	0	0	0	0	0	0	0	0	0
24	EFFHCF	0	0	0	0	0	0	0	0	0	0	0
25	EFFHCF*	0	0	0	0	0	0	0	0	0	0	0
26	EFFHFD	0	0	0	0	0	0	0	0	0	0	0
27	EFFHFD*	0	0	0	0	0	0	0	0	0	0	0
28	EFFHLD	0	0	0	0	0	0	0	0	0	0	0
29	EFFHLD*	0	0	0	0	0	0	0	0	0	0	0
30	EFFHLF	0	0	0	0	0	0	0	0	0	0	0
31	EFFHLF*	0	0	0	0	0	0	0	0	0	0	0
32	EFFHMD	0	0	0	0	0	0	0	0	0	0	0
33	EFFHMD*	0	0	0	0	0	0	0	0	0	0	0
34	EFFHSD	0	0	0	0	0	0	0	0	0	0	0
35	EFFHSD*	0	0	0	0	0	0	0	0	0	0	0
36	EFFHSF	0	0	0	0	0	0	0	0	0	0	0
37	EFFHSF*	0	0	0	0	0	0	0	0	0	0	0
38	FRMPC	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
39	GMTWO/NER	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943
40	GRPIU/NER	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974
41	GRPIU/PTR	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994
42	LDMY	141.20	140.30	141.20	140.90	152.50	154.90	157.20	159.40	161.80	164.10	166.10
43	MPGC1	11.44	12.40	13.61	14.68	16.20	16.20	16.20	16.20	16.20	16.20	16.20
44	MPGC2	10.71	11.03	11.58	12.13	12.71	12.71	12.71	12.71	12.71	12.71	12.71
45	MPGPT	10.97	11.69	13.01	14.22	15.48	15.48	15.48	15.48	15.48	15.48	15.48
46	NCFM34/FM	0.308	0.309	0.312	0.313	0.315	0.316	0.317	0.318	0.318	0.318	0.319
47	NCFM54/FM	0.336	0.330	0.322	0.317	0.311	0.306	0.302	0.296	0.294	0.290	0.287
48	NCHOC/NCH	0.378	0.383	0.388	0.393	0.398	0.403	0.408	0.413	0.418	0.423	0.428
49	NPMT	73.270	73.270	73.270	73.270	73.270	73.270	73.270	73.270	73.270	73.270	73.270
50	NPR	216.00	219.770	221.770	223.740	225.870	228.030	230.210	232.480	234.580	236.750	238.880

TABLE 32.10 EXOGENOUS ASSUMPTIONS

LINE	I T E M	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	NPRENC/R	0.192	0.193	0.193	0.194	0.195	0.195	0.196	0.197	0.197	0.198	0.198
2	NPRESC/R	0.062	0.061	0.060	0.059	0.059	0.058	0.057	0.057	0.056	0.055	0.055
3	IPRMTN/R	0.048	0.049	0.050	0.051	0.052	0.053	0.054	0.055	0.056	0.055	0.058
4	NPNEW/R	0.057	0.057	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.055	0.055
5	HPRPAC/R	0.136	0.137	0.138	0.139	0.140	0.141	0.142	0.144	0.144	0.145	0.147
6	HPRSA/R	0.157	0.157	0.156	0.156	0.156	0.155	0.155	0.154	0.154	0.154	0.153
7	HPRWNC/R	0.077	0.077	0.077	0.076	0.076	0.076	0.076	0.076	0.075	0.075	0.074
8	HPRWSC/R	0.100	0.101	0.101	0.102	0.103	0.103	0.104	0.104	0.105	0.106	0.106
9	NPRT0.29	38.23	38.89	39.54	40.13	40.55	40.81	40.91	40.78	40.39	39.76	38.89
10	NPRT65+	23.950	24.440	24.920	25.370	25.780	26.230	26.720	27.300	27.820	28.380	28.890
11	OMVUACFNR	0.098	0.093	0.089	0.084	0.080	0.076	0.072	0.069	0.065	0.062	0.059
12	OMVUVR	0.1780	0.1820	0.1900	0.1980	0.2091	0.2220	0.2340	0.2480	0.2619	0.2779	0.2935
13	PC4111-2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	PC4113-1747	146.0	154.7	164.0	173.8	184.3	195.3	207.0	219.5	232.6	246.6	261.4
15	PSCRAPAV	85.08	91.46	98.32	105.69	113.09	120.44	127.66	134.69	141.42	148.49	155.91
16	PU/MADJCT	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163	0.163
17	PU/MADJFD	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265	0.265
18	PIU/MADJLT	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229	0.229
19	PU/MADJMD	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189
20	PU/MADJST	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192	0.192
21	RPOLK/UISYEND	0.9729	0.9748	0.9768	0.9787	0.9807	0.9826	0.9846	0.9866	0.9886	0.9905	0.9925
22	RWMNV	3857.4	3857.4	3857.4	3857.4	3857.4	3857.4	3857.4	3857.4	3857.4	3857.4	3857.4
23	RWMNVI	42.580	42.580	42.580	42.580	42.580	42.580	42.580	42.580	42.580	42.580	42.580
24	RWMNVR	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7	3260.7
25	SHRC1/CT	0.520	0.509	0.498	0.488	0.478	0.476	0.474	0.472	0.470	0.469	0.467
26	SHRC1/CTNR	0.428	0.421	0.414	0.407	0.400	0.400	0.400	0.400	0.400	0.400	0.400
27	TXPTIC	0.00901	0.00901	0.00901	0.00901	0.00901	0.00901	0.00901	0.00901	0.00901	0.00901	0.00901
28	TXPTLC	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929	0.00929
29	TXPTLT	0.93	0.98	1.04	1.10	1.16	1.22	1.29	1.35	1.40	1.46	1.50
30	TXPTSC	0.01040	0.01040	0.01040	0.01040	0.01040	0.01040	0.01040	0.01040	0.01040	0.01040	0.01040
31	TXR0WN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	TXR0WNCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	TXR0WNFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	TXR0WNHLT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	TXR0WNMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	TXR0WNST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37	TXRPUCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
38	TXRPUFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39	TXRPULT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40	TXRPUMD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41	TXRPUST	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	TXRWTAUTO	4.86	5.02	5.18	5.34	5.50	5.66	5.82	5.98	6.14	6.30	6.50
43	TXSTLT	5.25	5.56	5.91	6.22	6.57	6.92	7.28	7.62	7.95	8.29	8.60
44	USC0CURR	3400.	3100.	3050.	3000.	2900.	2800.	2750.	2700.	2700.	2700.	2700.
45	USC0DTPS	248.0	217.0	207.0	198.0	183.0	168.0	158.0	150.0	150.0	150.0	150.0
46	USC0FAUTO	0.900	0.875	0.850	0.800	0.750	0.700	0.675	0.675	0.675	0.675	0.675
47	USC0FRD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	USC0FCYL	0.100	0.150	0.200	0.300	0.400	0.450	0.500	0.550	0.550	0.550	0.550
49	USC0FCYL	0.500	0.600	0.550	0.500	0.400	0.400	0.350	0.300	0.300	0.300	0.300
50	USC0DPTM/T	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969

TABLE 32.10 EXOGENOUS ASSUMPTIONS

LINE	ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1	USCDPIRASE-2/T	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833	0.833
2	USCFCIARR	2894.	2865.	2837.	2808.	2780.	2752.	2725.	2698.	2670.	2642.	2614.
3	USCFDISP	116.2	114.5	112.8	111.1	109.4	107.8	106.2	104.6	103.0	101.4	99.8
4	USCFFAUTO	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850
5	USCFFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	USCFF4CYL	0.900	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850	0.850
7	USCFF6CYL	0.100	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150
8	USFDCIARR	4100.	3800.	3600.	3400.	3200.	3000.	2800.	2600.	2400.	2200.	2000.
9	USFDDISP	316.0	287.0	274.0	259.0	242.0	224.0	216.0	210.0	204.0	198.0	192.0
10	USFDFAUTO	0.990	0.980	0.970	0.950	0.925	0.900	0.875	0.850	0.825	0.800	0.775
11	USFDFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	USFDF4CYL	0.0	0.0	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225
13	USFDF6CYL	0.050	0.100	0.200	0.300	0.400	0.500	0.600	0.700	0.800	0.900	1.000
14	USFDRPTM/T	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014	1.014
15	USFDRPTMASE-2/T	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019
16	USLDCIARR	4150.	4100.	4000.	3850.	3700.	3500.	3300.	3100.	2900.	2700.	2500.
17	USLDDISP	387.0	351.0	336.0	318.0	298.0	283.0	272.0	265.0	258.0	251.0	244.0
18	USLDFAUTO	0.980	0.970	0.960	0.950	0.940	0.920	0.900	0.880	0.860	0.840	0.820
19	USLDFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	USLDF4CYL	0.0	0.001	0.005	0.010	0.020	0.050	0.100	0.150	0.200	0.250	0.300
21	USLDF6CYL	0.0	0.050	0.100	0.200	0.300	0.400	0.500	0.600	0.700	0.800	0.900
22	USLDRPTM/T	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034
23	USLDRPTMASE-2/T	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621	1.621
24	USLFCIARR	3234.	3169.	3106.	3044.	2983.	2923.	2865.	2808.	2751.	2694.	2637.
25	USLFDISP	173.6	171.0	168.4	165.9	163.4	160.9	158.5	156.1	153.6	151.1	148.6
26	USLFFAUTO	0.700	0.600	0.500	0.490	0.470	0.450	0.450	0.450	0.450	0.450	0.450
27	USLFFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	USLFF4CYL	0.550	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600
29	USLFF6CYL	0.450	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400
30	USMDCIARR	3710.	3550.	3450.	3400.	3350.	3300.	3250.	3200.	3150.	3100.	3050.
31	USMDDISP	282.0	263.0	248.0	238.0	228.0	218.0	208.0	198.0	188.0	178.0	168.0
32	USMDFAUTO	0.950	0.900	0.850	0.800	0.775	0.750	0.725	0.725	0.725	0.725	0.725
33	USMDFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	USMDF4CYL	0.0	0.0	0.025	0.050	0.075	0.100	0.150	0.200	0.250	0.300	0.350
35	USMDF6CYL	0.115	0.200	0.350	0.500	0.650	0.800	0.950	1.100	1.250	1.400	1.550
36	USMDRPTM/T	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017
37	USMDRPTMASE-2/T	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929
38	USSDCIARR	2650.	2600.	2550.	2500.	2440.	2380.	2330.	2300.	2280.	2260.	2240.
39	USSDDISP	152.0	143.0	135.0	130.0	125.0	115.0	110.0	105.0	105.0	105.0	105.0
40	USSDFAUTO	0.825	0.600	0.575	0.550	0.525	0.475	0.425	0.400	0.400	0.400	0.400
41	USSDFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	USSDF4CYL	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.900	0.900	0.900
43	USSDF6CYL	0.255	0.250	0.225	0.200	0.175	0.150	0.125	0.100	0.100	0.100	0.100
44	USSDRPTM/T	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922
45	USSDRPTMASE-2/T	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729	0.729
46	USSFCIARR	2328.	2293.	2258.	2224.	2191.	2158.	2126.	2094.	2062.	2030.	1998.
47	USSFDISP	95.8	93.9	92.1	90.2	88.4	86.6	84.9	83.2	81.5	79.8	78.1
48	USSFFAUTO	0.400	0.350	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250
49	USSFFD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	USSFF4CYL	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
51	USSFF6CYL	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050

APPENDIX C
SIMULATION RESULTS TABLES

TWO PERCENT INCREASE IN PERSONAL INCOME

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	EQUILIBRIUM ('DESTROYED') STOCKS											
21	PERSONAL VEHICLES											
31	31YPS UP 2%	116.027	117.828	119.924	122.308	124.895	126.018	127.298	128.642	132.032	134.174	135.943
41	CONTROL	115.710	117.540	119.814	122.298	124.941	126.119	127.433	128.805	132.203	134.321	136.036
51	DIFFERENCE	0.317	0.288	0.110	0.010	-0.046	-0.101	-0.135	-0.163	-0.171	-0.148	-0.093
61	DIFFERENCE	0.27	0.25	0.09	0.01	-0.04	-0.08	-0.11	-0.13	-0.13	-0.11	-0.07
71	AUTOMOBILES											
81	81YPS UP 2%	103.164	104.786	106.694	108.909	111.274	112.139	113.200	115.326	117.471	119.304	120.726
91	CONTROL	102.842	104.499	106.594	108.930	111.348	112.275	113.379	115.539	117.695	119.505	120.871
101	DIFFERENCE	0.322	0.287	0.100	-0.021	-0.073	-0.136	-0.179	-0.213	-0.224	-0.201	-0.145
111	DIFFERENCE	0.31	0.27	0.09	-0.02	-0.07	-0.12	-0.16	-0.18	-0.19	-0.20	-0.12
121	MEMO TRUCKS AND VANS REG AS AUTOS											
131	131YPS UP 2%	12.863	13.042	13.230	13.399	13.621	13.879	14.099	14.316	14.561	14.870	15.217
141	CONTROL	12.868	13.041	13.221	13.368	13.593	13.844	14.054	14.266	14.508	14.816	15.165
151	DIFFERENCE	-0.005	0.001	0.010	0.031	0.027	0.035	0.044	0.050	0.053	0.054	0.052
161	DIFFERENCE	-0.04	0.01	0.07	0.23	0.20	0.25	0.32	0.35	0.36	0.36	0.34
171	LIGHT TRUCKS											
181	181YPS UP 2%	29.617	29.849	30.053	30.177	30.444	30.691	30.733	30.806	31.051	31.402	31.805
191	CONTROL	29.452	29.726	29.941	30.052	30.329	30.572	30.602	30.670	30.914	31.268	31.676
201	DIFFERENCE	0.165	0.122	0.112	0.126	0.116	0.120	0.130	0.136	0.137	0.134	0.129
211	DIFFERENCE	0.56	0.41	0.37	0.42	0.38	0.39	0.43	0.44	0.44	0.43	0.41
221	MEMO TRUCKS AND VANS REG AS AUTOS											
231	231YPS UP 2%	12.863	13.042	13.230	13.399	13.621	13.879	14.099	14.316	14.561	14.870	15.217
241	CONTROL	12.868	13.041	13.221	13.368	13.593	13.844	14.054	14.266	14.508	14.816	15.165
251	DIFFERENCE	-0.005	0.001	0.010	0.031	0.027	0.035	0.044	0.050	0.053	0.054	0.052
261	DIFFERENCE	-0.04	0.01	0.07	0.23	0.20	0.25	0.32	0.35	0.36	0.36	0.34
271	NONMEMO TRUCKS											
281	281YPS UP 2%	16.754	16.807	16.823	16.778	16.820	16.812	16.634	16.490	16.490	16.532	16.588
291	CONTROL	16.584	16.685	16.721	16.683	16.735	16.727	16.548	16.404	16.406	16.452	16.512
301	DIFFERENCE	0.170	0.122	0.102	0.095	0.089	0.085	0.086	0.086	0.084	0.080	0.077
311	DIFFERENCE	1.03	0.73	0.61	0.57	0.53	0.51	0.52	0.53	0.51	0.49	0.47
321												
331	NEW REGISTRATIONS											
341	PERSONAL VEHICLES											
351	351YPS UP 2%	13.668	13.184	13.462	13.908	14.508	14.452	14.380	14.804	15.162	15.299	15.463
361	CONTROL	12.486	12.640	13.302	13.920	14.529	14.477	14.404	14.829	15.184	15.314	15.468
371	DIFFERENCE	1.182	0.545	0.160	-0.012	-0.024	-0.024	-0.024	-0.025	-0.022	-0.015	-0.005
381	DIFFERENCE	0.46	4.31	1.21	-0.08	-0.14	-0.17	-0.17	-0.17	-0.14	-0.10	-0.03
391	AUTOMOBILES											
401	401YPS UP 2%	11.477	10.986	11.149	11.461	11.904	11.733	11.554	11.763	12.000	11.992	12.012
411	CONTROL	10.591	10.617	11.101	11.546	11.980	11.798	11.608	11.811	12.039	12.019	12.023
421	DIFFERENCE	0.886	0.369	0.048	-0.085	-0.076	-0.064	-0.054	-0.048	-0.039	-0.027	-0.011
431	DIFFERENCE	8.36	3.48	0.43	-0.74	-0.63	-0.55	-0.47	-0.40	-0.33	-0.22	-0.09
441	AUTOMOBILES AND VANS REG AS AUTOS											
451	451YPS UP 2%	11.667	11.184	11.358	11.683	12.138	11.981	11.816	12.041	12.293	12.301	12.338
461	CONTROL	10.781	10.815	11.310	11.768	12.214	12.046	11.870	12.089	12.332	12.328	12.349
471	DIFFERENCE	0.886	0.369	0.048	-0.085	-0.076	-0.064	-0.054	-0.048	-0.039	-0.027	-0.011
481	DIFFERENCE	8.22	3.41	0.42	-0.72	-0.62	-0.53	-0.46	-0.40	-0.32	-0.22	-0.09
491	MEMO TRUCKS											
501	501YPS UP 2%	2.002	2.000	2.104	2.225	2.370	2.471	2.564	2.763	2.869	2.998	3.126
511	CONTROL	1.706	1.824	1.991	2.152	2.315	2.431	2.534	2.740	2.852	2.986	3.119
521	DIFFERENCE	0.296	0.176	0.112	0.073	0.055	0.040	0.030	0.023	0.018	0.012	0.006
531	DIFFERENCE	17.34	9.63	5.64	3.41	2.39	1.65	1.17	0.83	0.62	0.41	0.20

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11 LIGHT TRUCKS											
21YPS UP 2X	4.842	4.860	5.088	5.345	5.626	5.857	6.070	6.402	6.644	6.882	7.105
31CONTROL	4.181	4.470	4.860	5.206	5.500	5.742	5.963	6.300	6.543	6.787	7.018
41DIFFERENCE	0.661	0.390	0.228	0.139	0.125	0.115	0.106	0.102	0.101	0.094	0.087
51X DIFFERENCE	15.80	8.73	4.69	2.67	2.28	2.00	1.79	1.63	1.54	1.39	1.24
61 MEMO TRUCKS AND VANS REG AS AUTOS											
71YPS UP 2X	2.192	2.198	2.313	2.447	2.604	2.719	2.826	3.041	3.163	3.307	3.452
81CONTROL	1.896	2.022	2.200	2.374	2.549	2.679	2.796	3.018	3.145	3.295	3.445
91DIFFERENCE	0.296	0.176	0.112	0.073	0.055	0.040	0.030	0.023	0.018	0.012	0.006
101X DIFFERENCE	15.60	8.68	5.10	3.10	2.17	1.50	1.06	0.76	0.56	0.37	0.18
111 NONMEMO TRUCKS											
121YPS UP 2X	2.650	2.662	2.775	2.898	3.022	3.138	3.244	3.362	3.481	3.575	3.653
131CONTROL	2.285	2.447	2.659	2.832	2.952	3.063	3.167	3.282	3.398	3.493	3.573
141DIFFERENCE	0.365	0.215	0.116	0.065	0.070	0.074	0.077	0.080	0.083	0.082	0.080
151X DIFFERENCE	15.97	8.77	4.35	2.31	2.38	2.43	2.42	2.43	2.44	2.35	2.25
161											
171SCRAPAGE											
181 PERSONAL VEHICLES											
191YPS UP 2X	9.624	9.825	10.223	10.910	11.218	11.048	11.005	11.527	12.050	12.421	12.864
201CONTROL	9.621	9.963	10.282	10.807	10.968	10.792	10.769	11.301	11.834	12.208	12.646
211DIFFERENCE	0.003	-0.138	-0.059	0.103	0.250	0.256	0.236	0.226	0.215	0.213	0.219
221X DIFFERENCE	0.03	-1.39	-0.58	0.95	2.28	2.37	2.19	2.00	1.82	1.71	1.73
231 AUTOMOBILES											
241YPS UP 2X	9.202	9.355	9.662	10.206	10.324	9.960	9.715	9.961	10.326	10.534	10.804
251CONTROL	9.188	9.438	9.660	10.065	10.080	9.746	9.551	9.837	10.241	10.473	10.752
261DIFFERENCE	0.014	-0.083	0.002	0.141	0.244	0.214	0.164	0.123	0.085	0.061	0.052
271X DIFFERENCE	0.15	-0.89	0.02	1.40	2.42	2.20	1.71	1.25	0.83	0.59	0.48
281 MEMO TRUCKS AND VANS REG AS AUTOS											
291YPS UP 2X	0.422	0.471	0.561	0.705	0.894	1.088	1.290	1.567	1.723	1.887	2.061
301CONTROL	0.433	0.525	0.623	0.742	0.888	1.046	1.217	1.464	1.594	1.735	1.894
311DIFFERENCE	-0.011	-0.054	-0.062	-0.038	0.006	0.041	0.072	0.103	0.130	0.152	0.167
321X DIFFERENCE	-2.60	-10.36	-9.89	-5.09	0.66	3.96	5.93	7.04	8.14	8.73	8.84
331 LIGHT TRUCKS											
341YPS UP 2X	1.469	1.595	1.827	2.118	2.428	2.756	3.145	3.621	3.972	4.332	4.728
351CONTROL	1.485	1.656	1.862	2.125	2.422	2.723	3.063	3.490	3.796	4.116	4.477
361DIFFERENCE	-0.016	-0.061	-0.036	-0.006	0.007	0.034	0.082	0.131	0.176	0.216	0.251
371X DIFFERENCE	-1.09	-3.71	-1.92	-0.29	0.27	1.25	2.66	3.75	4.64	5.26	5.60
381 MEMO TRUCKS AND VANS REG AS AUTOS											
391YPS UP 2X	0.422	0.471	0.561	0.705	0.894	1.088	1.290	1.567	1.723	1.887	2.061
401CONTROL	0.433	0.525	0.623	0.742	0.888	1.046	1.217	1.464	1.594	1.735	1.894
411DIFFERENCE	-0.011	-0.054	-0.062	-0.038	0.006	0.041	0.072	0.103	0.130	0.152	0.167
421X DIFFERENCE	-2.60	-10.36	-9.89	-5.09	0.66	3.96	5.93	7.04	8.14	8.73	8.84
431 NONMEMO TRUCKS											
441YPS UP 2X	1.047	1.124	1.266	1.414	1.534	1.669	1.855	2.054	2.249	2.445	2.667
451CONTROL	1.052	1.131	1.240	1.382	1.534	1.676	1.846	2.027	2.202	2.381	2.584
461DIFFERENCE	-0.005	-0.007	0.026	0.032	0.001	-0.008	0.009	0.028	0.046	0.065	0.083
471X DIFFERENCE	-0.47	-0.62	2.08	2.28	0.05	-0.45	0.51	1.36	2.10	2.72	3.23
481											
491VFAR END STOCK											
501 PERSONAL VEHICLES											
511YPS UP 2X	117.546	120.905	124.144	127.142	130.432	133.837	137.212	140.489	143.601	146.480	149.079
521CONTROL	116.367	119.088	122.063	125.175	128.736	132.420	136.056	139.584	142.933	146.039	148.862
531DIFFERENCE	1.179	1.816	2.081	1.966	1.696	1.417	1.156	0.905	0.668	0.440	0.217
541X DIFFERENCE	1.01	1.56	1.70	1.57	1.32	1.07	0.85	0.65	0.47	0.30	0.15

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
AUTOMOBILES											
21YPS UP 2X	104.989	106.621	108.108	109.363	110.943	112.717	114.555	116.358	118.031	119.490	120.698
31CONTROL	104.117	105.296	106.738	108.219	110.118	112.170	114.227	116.201	117.999	119.546	120.816
41DIFFERENCE	0.872	1.324	1.370	1.144	0.825	0.546	0.328	0.157	0.032	-0.056	-0.119
51X DIFFERENCE	0.84	1.26	1.28	1.06	0.75	0.49	0.29	0.14	0.03	-0.05	-0.10
MEMO TRUCKS AND VANS REG AS AUTOS											
61	12.557	14.284	16.036	17.779	19.489	21.120	22.657	24.130	25.570	26.990	28.381
71YPS UP 2X	12.250	13.747	15.325	16.957	18.617	20.250	21.829	23.383	24.934	26.494	28.046
81CONTROL	0.307	0.537	0.711	0.822	0.872	0.870	0.828	0.748	0.636	0.497	0.335
91DIFFERENCE	2.51	3.91	4.64	4.85	4.68	4.30	3.79	3.20	2.55	1.87	1.20
LIGHT TRUCKS											
111	33.970	37.236	40.497	43.724	46.921	50.022	52.947	55.729	58.400	60.950	63.327
121YPS UP 2X	33.293	36.107	39.104	42.186	45.265	48.285	51.185	53.995	56.742	59.413	61.954
131CONTROL	0.677	1.129	1.392	1.538	1.657	1.737	1.762	1.734	1.659	1.537	1.373
141DIFFERENCE	2.03	3.11	3.56	3.64	3.66	3.60	3.44	3.21	2.92	2.59	2.22
MEMO TRUCKS AND VANS REG AS AUTOS											
161	12.557	14.284	16.036	17.779	19.489	21.120	22.657	24.130	25.570	26.990	28.381
171YPS UP 2X	12.250	13.747	15.325	16.957	18.617	20.250	21.829	23.383	24.934	26.494	28.046
181CONTROL	0.307	0.537	0.711	0.822	0.872	0.870	0.828	0.748	0.636	0.497	0.335
191DIFFERENCE	2.51	3.91	4.64	4.85	4.68	4.30	3.79	3.20	2.55	1.87	1.20
MINI-MEMO TRUCKS											
211	21.413	22.951	24.461	25.945	27.432	28.901	30.291	31.598	32.830	33.960	34.946
221YPS UP 2X	21.044	22.360	23.779	25.230	26.647	28.035	29.356	30.617	31.807	32.920	33.909
231CONTROL	0.370	0.592	0.682	0.719	0.785	0.867	0.934	0.986	1.023	1.040	1.037
241DIFFERENCE	1.76	2.65	2.87	2.84	2.95	3.09	3.18	3.22	3.22	3.16	3.06
251X DIFFERENCE											
261											
271MD YEAR STOCK											
281 PERSONAL VEHICLES											
291YPS UP 2X	115.465	119.159	122.463	125.567	128.702	132.044	135.421	138.753	141.955	144.940	147.678
301CONTROL	114.876	117.639	120.492	123.544	126.871	130.486	134.133	137.719	141.166	144.382	147.346
311DIFFERENCE	0.589	1.520	1.971	2.024	1.831	1.557	1.288	1.033	0.789	0.558	0.332
321X DIFFERENCE	0.51	1.29	1.64	1.64	1.44	1.19	0.96	0.75	0.56	0.39	0.23
AUTOMOBILES											
331	103.793	105.738	107.303	108.660	110.068	111.739	113.533	115.359	117.105	118.660	119.993
341YPS UP 2X	103.357	104.640	105.956	107.403	109.084	111.053	113.094	115.114	117.007	118.669	120.076
351CONTROL	0.436	1.098	1.347	1.257	0.985	0.686	0.439	0.245	0.098	-0.008	-0.084
361DIFFERENCE	0.42	1.05	1.27	1.17	0.90	0.62	0.39	0.21	0.08	-0.01	-0.07
MEMO TRUCKS AND VANS REG AS AUTOS											
381	11.672	13.421	15.160	16.907	18.634	20.305	21.889	23.394	24.850	26.280	27.685
391YPS UP 2X	11.519	12.998	14.536	16.141	17.787	19.434	21.039	22.606	24.159	25.714	27.270
401CONTROL	0.154	0.422	0.624	0.767	0.847	0.871	0.849	0.788	0.692	0.566	0.416
411DIFFERENCE	1.33	3.25	4.29	4.75	4.76	4.48	4.04	3.49	2.86	2.20	1.53
421X DIFFERENCE											
431 LIGHT TRUCKS											
441YPS UP 2X	32.284	35.603	38.866	42.110	45.323	48.472	51.485	54.338	57.065	59.675	62.138
451CONTROL	31.945	34.700	37.606	40.645	43.726	46.775	49.735	52.590	55.368	58.077	60.684
461DIFFERENCE	0.339	0.903	1.261	1.465	1.597	1.697	1.750	1.748	1.696	1.598	1.455
471X DIFFERENCE	1.06	2.60	3.35	3.60	3.65	3.63	3.52	3.32	3.06	2.75	2.40
MEMO TRUCKS AND VANS REG AS AUTOS											
481	11.672	13.421	15.160	16.907	18.634	20.305	21.889	23.394	24.850	26.280	27.685
491YPS UP 2X	11.519	12.998	14.536	16.141	17.787	19.434	21.039	22.606	24.159	25.714	27.270
501CONTROL	0.154	0.422	0.624	0.767	0.847	0.871	0.849	0.788	0.692	0.566	0.416
511DIFFERENCE	1.33	3.25	4.29	4.75	4.76	4.48	4.04	3.49	2.86	2.20	1.53
521X DIFFERENCE											

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	J T F M	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	NONMEMO TRUCKS	20.612	22.182	23.706	25.203	26.689	28.167	29.596	30.944	32.214	33.398	34.451
21	YPS UP 2X	20.427	21.702	23.070	24.504	25.939	27.341	28.695	29.984	31.210	32.364	33.414
31	CONTRAI	0.185	0.481	0.637	0.698	0.750	0.826	0.901	0.960	1.005	1.032	1.039
41	DIFFERENCE	0.91	2.22	2.76	2.85	2.89	3.02	3.14	3.20	3.22	3.19	3.11

TABLE 28.00 PRICES AND CAPITALIZED COSTS (DOLLARS)

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	21 CAPITALIZED COST PER MILE											
31	PERSONAL VEHICLES											
41	YPS UP 2X	0.3030	0.3273	0.3540	0.3820	0.4103	0.4388	0.4685	0.4980	0.5285	0.5604	0.5936
51	CONTROL	0.3027	0.3270	0.3538	0.3818	0.4102	0.4387	0.4684	0.4979	0.5283	0.5603	0.5935
61	DIFFERENCE	0.0003	0.0003	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002
71	DIFFERENCE	0.10	0.09	0.07	0.04	0.03	0.03	0.03	0.02	0.03	0.03	0.03
81	AUTOMOBILES											
91	YPS UP 2X	0.3000	0.3240	0.3504	0.3781	0.4058	0.4338	0.4630	0.4921	0.5221	0.5535	0.5862
101	CONTROL	0.2997	0.3237	0.3504	0.3779	0.4057	0.4337	0.4629	0.4920	0.5220	0.5534	0.5860
111	DIFFERENCE	0.0004	0.0003	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
121	DIFFERENCE	0.12	0.11	0.08	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02
131	PERSONAL TRUCKS											
141	YPS UP 2X	0.3267	0.3535	0.3813	0.4140	0.4468	0.4798	0.5129	0.5461	0.5800	0.6157	0.6530
151	CONTROL	0.3267	0.3535	0.3813	0.4140	0.4468	0.4798	0.5129	0.5461	0.5800	0.6157	0.6530
161	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
181	COMMERCIAL TRUCKS											
191	YPS UP 2X	0.2545	0.2749	0.2961	0.3214	0.3469	0.3725	0.3981	0.4238	0.4500	0.4776	0.5065
201	CONTROL	0.2545	0.2749	0.2961	0.3214	0.3469	0.3725	0.3981	0.4238	0.4500	0.4776	0.5065
211	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
221	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
231	GVW 1	0.2627	0.2832	0.3047	0.3308	0.3571	0.3835	0.4100	0.4365	0.4636	0.4922	0.5220
241	YPS UP 2X	0.2627	0.2832	0.3047	0.3308	0.3571	0.3835	0.4100	0.4365	0.4636	0.4922	0.5220
251	CONTROL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
261	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
271	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
281	GVW 2	0.2463	0.2670	0.2883	0.3129	0.3378	0.3626	0.3875	0.4125	0.4381	0.4650	0.4931
291	YPS UP 2X	0.2463	0.2670	0.2883	0.3129	0.3378	0.3626	0.3875	0.4125	0.4381	0.4650	0.4931
301	CONTROL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
311	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
321	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990

11 OVERALL FLEET MILES PER GALLON											

11 AUTOMOBILES											
31YPS UP 2%	14.2	14.5	15.0	15.7	16.4	17.1	17.8	18.6	19.2	19.8	20.31
41CONTROL	14.2	14.5	15.1	15.7	16.4	17.1	17.8	18.5	19.2	19.8	20.31
51DIFFERENCE	0.0	-0.1	-0.1	-0.1	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.01
61X DIFFERENCE	0.04	-0.52	-0.54	-0.33	-0.18	-0.12	-0.02	0.04	0.06	0.08	0.131

71 PERSONAL TRUCKS											
81YPS UP 2%	11.2	11.6	12.1	12.5	12.8	13.1	13.4	13.7	13.9	14.2	14.41
91CONTROL	11.2	11.6	12.0	12.4	12.8	13.1	13.4	13.7	13.9	14.1	14.31
101DIFFERENCE	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.01
111X DIFFERENCE	0.17	0.43	0.51	0.47	0.40	0.32	0.25	0.19	0.13	0.09	0.061

121 COMMERCIAL TRUCKS											
131YPS UP 2%	11.2	11.4	11.6	11.8	12.1	12.3	12.5	12.6	12.8	13.0	13.11
141CONTROL	11.2	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.11
151DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
161X DIFFERENCE	0.08	0.23	0.29	0.28	0.25	0.22	0.19	0.17	0.14	0.12	0.091

171 TOTAL FUEL CONSUMPTION											
181 BILL GAL											
191YPS UP 2%	116.477	120.025	122.010	123.112	124.206	125.449	126.690	127.888	129.292	130.941	132.5201
201CONTROL	115.585	117.128	118.170	119.146	120.242	121.512	122.794	124.035	125.468	127.160	128.8211
211DIFFERENCE	0.892	2.897	3.839	3.967	3.965	3.937	3.896	3.853	3.824	3.781	3.6981
221X DIFFERENCE	0.77	2.47	3.25	3.33	3.30	3.24	3.17	3.11	3.05	2.97	2.871

231 AUTOMOBILES											
241YPS UP 2%	84.277	84.933	84.219	82.895	81.549	80.328	79.140	78.067	77.273	76.662	76.0561
251CONTROL	83.957	83.668	82.663	81.464	80.313	79.286	78.274	77.331	76.612	76.061	75.5171
261DIFFERENCE	0.320	1.265	1.557	1.431	1.236	1.042	0.866	0.736	0.661	0.601	0.5381
271X DIFFERENCE	0.38	1.51	1.88	1.76	1.54	1.31	1.11	0.95	0.86	0.79	0.711

281 PERSONAL TRUCKS											
291YPS UP 2%	10.960	12.302	13.544	14.773	15.971	17.093	18.128	19.091	20.019	20.938	21.8481
301CONTROL	10.825	11.934	12.996	14.092	15.212	16.315	17.367	18.378	19.380	20.393	21.4181
311DIFFERENCE	0.135	0.368	0.548	0.681	0.759	0.778	0.761	0.713	0.639	0.543	0.4301
321X DIFFERENCE	1.25	3.08	4.21	4.83	4.99	4.77	4.38	3.88	3.29	2.66	2.011

331 COMMERCIAL TRUCKS											
341YPS UP 2%	21.240	22.791	24.246	25.445	26.687	28.028	29.422	30.731	32.001	33.341	34.6161
351CONTROL	20.803	21.527	22.511	23.590	24.717	25.911	27.152	28.326	29.476	30.704	31.8861
361DIFFERENCE	0.436	1.264	1.735	1.854	1.970	2.117	2.270	2.404	2.524	2.637	2.7301
371X DIFFERENCE	2.10	5.87	7.71	7.86	7.97	8.17	8.36	8.49	8.56	8.59	8.461

381											

391 AVERAGE AGE											
401 PERSONAL VEHICLES											
411YPS UP 2%	5.599	5.579	5.581	5.570	5.546	5.542	5.577	5.630	5.679	5.724	5.7721
421CONTROL	5.628	5.638	5.639	5.616	5.582	5.570	5.597	5.642	5.683	5.721	5.7641
431DIFFERENCE	-0.029	-0.059	-0.057	-0.046	-0.036	-0.028	-0.020	-0.012	-0.004	0.003	0.0081
441X DIFFERENCE	-0.51	-1.04	-1.02	-0.82	-0.64	-0.50	-0.36	-0.22	-0.08	0.05	0.141

451 AUTOMOBILES											
461YPS UP 2%	5.718	5.709	5.713	5.695	5.654	5.630	5.644	5.678	5.706	5.728	5.7511
471CONTROL	5.743	5.758	5.758	5.727	5.678	5.648	5.658	5.687	5.710	5.728	5.7491
481DIFFERENCE	-0.025	-0.048	-0.044	-0.032	-0.023	-0.018	-0.014	-0.009	-0.005	-0.000	0.0031
491X DIFFERENCE	-0.43	-0.84	-0.77	-0.56	-0.41	-0.33	-0.25	-0.17	-0.08	-0.00	0.041

501 TRUCKS											
511YPS UP 2%	4.541	4.555	4.646	4.770	4.909	5.061	5.228	5.392	5.550	5.708	5.8621
521CONTROL	4.597	4.672	4.770	4.879	4.996	5.125	5.268	5.411	5.550	5.692	5.8311
531DIFFERENCE	-0.056	-0.117	-0.124	-0.109	-0.087	-0.063	-0.040	-0.019	0.000	0.017	0.0311
541X DIFFERENCE	-1.22	-2.51	-2.60	-2.24	-1.74	-1.23	-0.76	-0.35	0.01	0.30	0.531

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
----- I T E M -----											
11 COMMERCIAL TRUCKS											
21YPS UP 2X	6.135	6.093	6.092	6.110	6.142	6.185	6.240	6.304	6.373	6.448	6.510
31CONTROL	6.188	6.211	6.224	6.230	6.243	6.270	6.309	6.358	6.414	6.477	6.541
41DIFFERENCF	-0.052	-0.118	-0.132	-0.120	-0.102	-0.085	-0.069	-0.054	-0.041	-0.028	-0.017
51X DIFFERENCE	-0.85	-1.90	-2.12	-1.93	-1.63	-1.35	-1.10	-0.86	-0.64	-0.44	-0.26
61											
71MILES PFR VEHICLE											
81 PERSONAL VEHICLES											
91YPS UP 2X	11.410	11.503	11.647	11.808	11.967	12.091	12.209	12.315	12.408	12.491	12.567
101CONTROL	11.410	11.509	11.638	11.779	11.917	12.027	12.132	12.229	12.315	12.394	12.464
111DIFFERENCE	0.000	-0.006	0.009	0.029	0.051	0.064	0.076	0.086	0.092	0.098	0.103
121X DIFFERENCE	0.00	-0.05	0.08	0.25	0.42	0.53	0.63	0.70	0.75	0.79	0.83
131 AUTOMOBILES											
141YPS UP 2X	11.506	11.611	11.769	11.950	12.112	12.276	12.417	12.544	12.657	12.759	12.853
151CONTROL	11.506	11.618	11.762	11.921	12.078	12.206	12.331	12.447	12.552	12.648	12.736
161DIFFERENCF	0.000	-0.007	0.007	0.030	0.054	0.070	0.086	0.098	0.105	0.111	0.117
171X DIFFERENCE	0.00	-0.06	0.06	0.25	0.45	0.58	0.69	0.78	0.84	0.88	0.92
181 TRUCKS											
191YPS UP 2X	10.555	10.657	10.781	10.891	10.991	11.067	11.128	11.181	11.231	11.280	11.325
201CONTROL	10.546	10.628	10.735	10.832	10.924	11.002	11.064	11.118	11.169	11.219	11.265
211DIFFERENCF	0.009	0.029	0.046	0.060	0.067	0.065	0.064	0.063	0.062	0.061	0.060
221X DIFFERENCE	0.09	0.27	0.43	0.55	0.61	0.60	0.58	0.57	0.55	0.54	0.53
231 COMMERCIAL TRUCKS											
241YPS UP 2X	11.517	11.687	11.885	11.964	12.066	12.210	12.388	12.552	12.719	12.935	13.155
251CONTROL	11.374	11.258	11.306	11.376	11.470	11.604	11.769	11.921	12.076	12.277	12.482
261DIFFERENCE	0.144	0.430	0.579	0.587	0.596	0.607	0.619	0.631	0.643	0.658	0.672
271X DIFFERENCE	1.26	3.82	5.12	5.16	5.20	5.23	5.26	5.29	5.33	5.36	5.39
281											
291NEW REGISTRATIONS TO BEGINNING STOCK											
301 PERSONAL VEHICLES											
311YPS UP 2X	0.120	0.112	0.111	0.112	0.114	0.111	0.107	0.108	0.108	0.107	0.106
321CONTROL	0.110	0.109	0.112	0.111	0.116	0.112	0.109	0.109	0.109	0.107	0.106
331DIFFERENCE	0.010	0.004	-0.000	-0.002	-0.002	-0.002	-0.001	-0.001	-0.001	-0.001	-0.000
341X DIFFERENCE	9.46	3.26	-0.35	-1.76	-1.69	-1.47	-1.23	-1.01	-0.79	-0.56	-0.33
351 AUTOMOBILES											
361YPS UP 2X	0.112	0.105	0.105	0.106	0.109	0.106	0.103	0.103	0.103	0.102	0.101
371CONTROL	0.103	0.102	0.105	0.108	0.111	0.107	0.103	0.103	0.104	0.102	0.101
381DIFFERENCE	0.009	0.003	-0.001	-0.002	-0.002	-0.001	-0.001	-0.001	-0.000	-0.000	-0.000
391X DIFFERENCE	6.36	2.62	-0.81	-2.00	-1.67	-1.29	-0.95	-0.69	-0.46	-0.25	-0.05
401 TRUCKS											
411YPS UP 2X	0.203	0.175	0.162	0.153	0.146	0.140	0.134	0.134	0.131	0.129	0.128
421CONTROL	0.176	0.165	0.160	0.155	0.150	0.144	0.138	0.138	0.135	0.132	0.130
431DIFFERENCE	0.027	0.010	0.002	-0.002	-0.004	-0.004	-0.004	-0.004	-0.003	-0.003	-0.002
441X DIFFERENCE	15.60	6.03	1.15	-1.48	-2.55	-3.04	-3.10	-2.93	-2.55	-2.12	-1.66
451 COMMERCIAL TRUCKS											
461YPS UP 2X	0.134	0.124	0.121	0.118	0.116	0.114	0.112	0.111	0.110	0.109	0.108
471CONTROL	0.115	0.116	0.119	0.119	0.117	0.115	0.113	0.112	0.111	0.110	0.109
481DIFFERENCE	0.018	0.008	0.002	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
491X DIFFERENCE	15.97	6.89	1.66	-0.54	-0.65	-0.50	-0.65	-0.73	-0.76	-0.84	-0.88
501											
511SCHAPAGE TO BEGINNING STOCK											

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
----- T I T E M -----											
----- VEHICLES -----											
11	0.085	0.084	0.085	0.088	0.088	0.085	0.082	0.084	0.086	0.086	0.088
21YPS UP 2%	0.085	0.086	0.086	0.089	0.088	0.084	0.081	0.083	0.085	0.085	0.087
31CONTROL	0.000	-0.002	-0.002	-0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
41DIFFERENCE	0.003	-2.37	-2.11	-0.74	0.69	1.04	1.11	1.14	1.16	1.27	1.83
51X DIFFERENCE											
----- AUTOMOBILES -----											
61	0.090	0.089	0.091	0.094	0.094	0.090	0.086	0.087	0.089	0.089	0.090
71YPS UP 2%	0.089	0.091	0.092	0.094	0.093	0.089	0.085	0.086	0.088	0.089	0.090
81CONTROL	0.000	-0.002	-0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000	0.000
91DIFFERENCE	0.15	-1.71	-1.22	0.11	1.35	1.44	1.22	0.96	0.70	0.56	0.53
101X DIFFERENCE											
----- TRUCKS -----											
111	0.039	0.037	0.039	0.044	0.050	0.056	0.061	0.069	0.071	0.074	0.076
121YPS UP 2%	0.040	0.043	0.045	0.048	0.052	0.056	0.060	0.067	0.068	0.070	0.071
131CONTROL	-0.001	-0.005	-0.006	-0.005	-0.002	-0.000	0.001	0.002	0.003	0.004	0.005
141DIFFERENCE	-2.60	-12.55	-13.28	-9.29	-4.00	-0.69	1.56	3.13	4.79	6.03	6.84
151X DIFFERENCE											
----- COMMERCIAL TRUCKS -----											
161	0.053	0.052	0.055	0.058	0.059	0.061	0.064	0.068	0.071	0.074	0.079
171YPS UP 2%	0.053	0.054	0.055	0.058	0.061	0.063	0.066	0.069	0.072	0.075	0.078
181CONTROL	-0.000	-0.001	-0.000	-0.000	-0.002	-0.002	-0.002	-0.001	-0.001	-0.000	0.000
191DIFFERENCE	-0.47	-2.33	-0.55	-0.57	-2.71	-3.30	-2.51	-1.76	-1.08	-0.48	0.06
201X DIFFERENCE											
----- ACTIVITIES AS SHARE OF INCOME -----											
211	28.5	28.5	28.6	28.7	28.8	29.0	29.2	29.4	29.6	29.8	30.1
221ACTIVITIES AS SHARE OF INCOME	27.9	28.0	28.0	28.1	28.3	28.5	28.6	28.8	29.1	29.3	29.5
231YPS UP 2%	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
241CONTROL	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
251DIFFERENCE											
261X DIFFERENCE											
----- FARM PROPRIETOR'S INCOME -----											
271	29.205	31.285	33.365	35.445	37.525	39.605	41.685	43.765	46.314	49.156	52.157
281FARM PROPRIETOR'S INCOME	28.081	30.081	32.081	34.081	36.081	38.081	40.081	42.081	44.532	47.265	50.151
291YPS UP 2%	1.123	1.203	1.283	1.363	1.443	1.523	1.603	1.683	1.781	1.891	2.006
301CONTROL	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
311DIFFERENCE											
321X DIFFERENCE											
----- EMPLOYEE COMPENSATION -----											
331	16.206	17.912	19.688	21.629	23.472	25.194	26.778	28.511	30.370	32.124	33.939
341	15.583	17.223	18.931	20.797	22.569	24.225	25.749	27.415	29.202	30.888	32.634
351YPS UP 2%	0.623	0.689	0.757	0.832	0.903	0.969	1.030	1.097	1.168	1.236	1.305
361CONTROL	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
371DIFFERENCE											
381X DIFFERENCE											
----- CONTRACT CONSTRUCTION -----											
391	76.961	83.986	92.363	100.953	109.675	118.451	126.960	136.606	147.724	157.428	167.496
401YPS UP 2%	74.001	80.756	88.811	97.070	105.456	113.895	122.077	131.352	142.042	151.373	161.054
411CONTROL	2.960	3.230	3.552	3.883	4.218	4.556	4.883	5.254	5.682	6.055	6.442
421DIFFERENCE	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
431X DIFFERENCE											
----- SERVICES -----											
441	236.297	263.529	295.251	331.148	369.784	409.805	450.891	495.928	546.823	598.781	654.990
451YPS UP 2%	227.209	253.393	283.896	318.412	355.562	394.044	433.549	476.854	525.792	575.751	629.798
461CONTROL	9.088	10.136	11.356	12.736	14.222	15.762	17.342	19.074	21.031	23.030	25.192
471DIFFERENCE	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
481X DIFFERENCE											
----- WHOLESALE AND RETAIL TRADE -----											
491	250.558	275.095	302.527	332.796	368.573	396.434	428.271	462.188	499.775	537.447	577.537
501YPS UP 2%	240.921	264.515	290.891	319.996	350.551	381.187	411.800	444.411	480.553	516.776	555.324
511CONTROL	9.637	10.581	11.635	12.800	14.022	15.247	16.472	17.776	19.222	20.671	22.213
521DIFFERENCE	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
531X DIFFERENCE											

FIVE PERCENT INCREASE IN TRUCK PRICES

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL. VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
I. T. E. M.											
EQUILIBRIA (DEFINITIONS) STOCKS											
21 PERSONAL VEHICLES											
31TRUCK PR UP 5%	115.595	117.420	119.703	122.187	124.828	126.002	127.313	129.682	132.079	134.196	135.908
41CONTROL	115.710	117.540	119.814	122.298	124.941	126.119	127.433	129.805	132.203	134.321	136.036
51DIFFERENCE	-0.115	-0.110	-0.112	-0.112	-0.113	-0.117	-0.121	-0.122	-0.123	-0.125	-0.127
61% DIFFERENCE	-0.10	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09	-0.09
71 AUTOMOBILES											
81TRUCK PR UP 5%	102.842	104.499	106.594	108.930	111.348	112.275	113.379	115.539	117.695	119.505	120.871
91CONTROL	102.842	104.499	106.594	108.930	111.348	112.275	113.379	115.539	117.695	119.505	120.871
101DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121 HEAVY TRUCKS AND VANS REG AS AUTOS											
131TRUCK PR UP 5%	12.753	12.930	13.109	13.257	13.481	13.727	13.934	14.144	14.385	14.691	15.038
141CONTROL	12.868	13.041	13.221	13.368	13.593	13.844	14.054	14.266	14.508	14.816	15.165
151DIFFERENCE	-0.115	-0.110	-0.112	-0.112	-0.113	-0.117	-0.121	-0.122	-0.123	-0.125	-0.127
161% DIFFERENCE	-0.89	-0.85	-0.84	-0.84	-0.83	-0.85	-0.86	-0.86	-0.85	-0.84	-0.84
171 LIGHT TRUCKS											
181TRUCK PR UP 5%	29.162	29.448	29.659	29.772	30.050	30.291	30.320	30.388	30.633	30.987	31.396
191CONTROL	29.452	29.726	29.941	30.052	30.329	30.572	30.602	30.670	30.914	31.268	31.676
201DIFFERENCE	-0.290	-0.278	-0.282	-0.280	-0.279	-0.281	-0.282	-0.282	-0.281	-0.281	-0.281
211% DIFFERENCE	-0.98	-0.94	-0.94	-0.93	-0.92	-0.92	-0.92	-0.92	-0.91	-0.90	-0.89
221 HEAVY TRUCKS AND VANS REG AS AUTOS											
231TRUCK PR UP 5%	12.753	12.930	13.109	13.257	13.481	13.727	13.934	14.144	14.385	14.691	15.038
241CONTROL	12.868	13.041	13.221	13.368	13.593	13.844	14.054	14.266	14.508	14.816	15.165
251DIFFERENCE	-0.115	-0.110	-0.112	-0.112	-0.113	-0.117	-0.121	-0.122	-0.123	-0.125	-0.127
261% DIFFERENCE	-0.89	-0.85	-0.84	-0.84	-0.83	-0.85	-0.86	-0.86	-0.85	-0.84	-0.84
271 MEDIUM TRUCKS											
281TRUCK PR UP 5%	16.409	16.517	16.550	16.515	16.569	16.564	16.387	16.245	16.249	16.296	16.358
291CONTROL	16.584	16.685	16.721	16.683	16.735	16.727	16.548	16.404	16.406	16.452	16.512
301DIFFERENCE	-0.175	-0.168	-0.170	-0.168	-0.166	-0.163	-0.161	-0.159	-0.157	-0.155	-0.154
311% DIFFERENCE	-1.05	-1.01	-1.02	-1.01	-0.99	-0.98	-0.97	-0.97	-0.96	-0.95	-0.94
321 REGISTRATIONS											
331 PERSONAL VEHICLES											
351TRUCK PR UP 5%	12.369	12.629	13.291	13.910	14.518	14.465	14.393	14.817	15.172	15.302	15.456
361CONTROL	12.486	12.640	13.302	13.920	14.529	14.477	14.404	14.829	15.184	15.314	15.468
371DIFFERENCE	-0.118	-0.011	-0.010	-0.010	-0.011	-0.011	-0.011	-0.012	-0.012	-0.012	-0.012
381% DIFFERENCE	-0.94	-0.09	-0.08	-0.07	-0.07	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08
391 AUTOMOBILES											
401TRUCK PR UP 5%	10.591	10.617	11.101	11.546	11.980	11.798	11.608	11.811	12.039	12.019	12.023
411CONTROL	10.591	10.617	11.101	11.546	11.980	11.798	11.608	11.811	12.039	12.019	12.023
421DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
431% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
441 AUTOMOBILES AND VANS REG AS AUTOS											
451TRUCK PR UP 5%	10.769	10.810	11.309	11.767	12.213	12.045	11.869	12.088	12.331	12.327	12.347
461CONTROL	10.781	10.815	11.310	11.768	12.214	12.046	11.870	12.089	12.332	12.328	12.349
471DIFFERENCE	-0.012	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
481% DIFFERENCE	-0.11	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
491 HEAVY TRUCKS											
501TRUCK PR UP 5%	1.600	1.814	1.982	2.143	2.305	2.421	2.524	2.720	2.841	2.975	3.109
511CONTROL	1.706	1.824	1.991	2.152	2.315	2.431	2.534	2.740	2.852	2.986	3.119
521DIFFERENCE	-0.106	-0.010	-0.009	-0.009	-0.010	-0.010	-0.010	-0.010	-0.011	-0.011	-0.011
531% DIFFERENCE	-6.22	-0.56	-0.47	-0.42	-0.42	-0.42	-0.41	-0.41	-0.41	-0.41	-0.41

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11 LIGHT TRUCKS											
21TRUCK PR UP 5%	3.943	4.442	4.829	5.173	5.464	5.704	5.923	6.258	6.499	6.742	6.971
31CONTROL	4.181	4.470	4.860	5.206	5.500	5.742	5.963	6.300	6.543	6.787	7.018
41DIFFERENCE	-0.238	-0.028	-0.030	-0.033	-0.036	-0.039	-0.040	-0.042	-0.045	-0.046	-0.047
51% DIFFERENCE	-5.70	-0.62	-0.63	-0.64	-0.66	-0.67	-0.67	-0.67	-0.68	-0.67	-0.67
61 MFD TRUCKS AND VANS REG AS AUTOS											
71TRUCK PR UP 5%	1.778	2.011	2.190	2.364	2.538	2.668	2.785	3.006	3.133	3.283	3.433
81CONTROL	1.896	2.022	2.200	2.374	2.549	2.679	2.796	3.018	3.145	3.295	3.445
91DIFFERENCE	-0.118	-0.011	-0.010	-0.010	-0.011	-0.011	-0.011	-0.012	-0.012	-0.012	-0.012
101% DIFFERENCE	-6.22	-0.56	-0.47	-0.42	-0.42	-0.42	-0.41	-0.38	-0.38	-0.36	-0.36
111 TOWING TRUCKS											
121TRUCK PR UP 5%	2.165	2.431	2.639	2.809	2.926	3.036	3.138	3.252	3.365	3.459	3.588
131CONTROL	2.285	2.447	2.659	2.832	2.952	3.063	3.167	3.282	3.398	3.493	3.573
141DIFFERENCE	-0.120	-0.017	-0.020	-0.023	-0.026	-0.028	-0.029	-0.031	-0.033	-0.034	-0.035
151% DIFFERENCE	-5.27	-0.68	-0.75	-0.82	-0.87	-0.90	-0.91	-0.93	-0.97	-0.97	-0.97
161											
171SCRAPAGE											
181 PERSONAL VEHICLES											
191TRUCK PR UP 5%	9.631	9.989	10.300	10.816	10.967	10.783	10.752	11.278	11.806	12.176	12.611
201CONTROL	9.621	9.963	10.282	10.807	10.968	10.792	10.769	11.301	11.834	12.208	12.646
211DIFFERENCE	0.010	0.026	0.018	0.009	-0.001	-0.009	-0.016	-0.023	-0.028	-0.032	-0.035
221% DIFFERENCE	0.11	0.26	0.18	0.08	-0.01	-0.09	-0.15	-0.20	-0.24	-0.26	-0.27
231 AUTO VEHICLES											
241TRUCK PR UP 5%	9.188	9.438	9.660	10.065	10.080	9.746	9.551	9.837	10.241	10.473	10.752
251CONTROL	9.188	9.438	9.660	10.065	10.080	9.746	9.551	9.837	10.241	10.473	10.752
261DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
271% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
281 MFD TRUCKS AND VANS REG AS AUTOS											
291TRUCK PR UP 5%	0.443	0.551	0.641	0.751	0.887	1.037	1.201	1.441	1.566	1.703	1.859
301CONTROL	0.433	0.525	0.623	0.742	0.888	1.046	1.217	1.464	1.594	1.735	1.894
311DIFFERENCE	0.010	0.026	0.018	0.009	-0.001	-0.009	-0.016	-0.023	-0.028	-0.032	-0.035
321% DIFFERENCE	2.40	4.93	2.90	1.17	-0.11	-0.88	-1.33	-1.54	-1.76	-1.85	-1.83
331 LIGHT TRUCKS											
341TRUCK PR UP 5%	1.500	1.695	1.891	2.142	2.427	2.717	3.047	3.464	3.760	4.072	4.426
351CONTROL	1.485	1.656	1.862	2.125	2.422	2.723	3.063	3.490	3.796	4.116	4.471
361DIFFERENCE	0.016	0.039	0.028	0.017	0.005	-0.006	-0.016	-0.026	-0.036	-0.044	-0.051
371% DIFFERENCE	1.05	2.33	1.53	0.81	0.22	-0.21	-0.52	-0.75	-0.95	-1.08	-1.15
381 MFD TRUCKS AND VANS REG AS AUTOS											
391TRUCK PR UP 5%	0.443	0.551	0.641	0.751	0.887	1.037	1.201	1.441	1.566	1.703	1.859
401CONTROL	0.433	0.525	0.623	0.742	0.888	1.046	1.217	1.464	1.594	1.735	1.894
411DIFFERENCE	0.010	0.026	0.018	0.009	-0.001	-0.009	-0.016	-0.023	-0.028	-0.032	-0.035
421% DIFFERENCE	2.40	4.93	2.90	1.17	-0.11	-0.88	-1.33	-1.54	-1.76	-1.85	-1.83
431 TOWING TRUCKS											
441TRUCK PR UP 5%	1.057	1.144	1.250	1.391	1.549	1.680	1.846	2.023	2.195	2.368	2.567
451CONTROL	1.052	1.131	1.240	1.382	1.534	1.676	1.846	2.027	2.202	2.381	2.584
461DIFFERENCE	0.005	0.013	0.010	0.009	0.006	0.003	0.000	-0.004	-0.008	-0.012	-0.017
471% DIFFERENCE	0.49	1.12	0.84	0.62	0.42	0.20	0.01	-0.18	-0.36	-0.51	-0.65
481											
491YEAR END STOCK											
501 PERSONAL VEHICLES											
511TRUCK PR UP 5%	116.259	118.878	121.869	124.963	128.514	132.196	135.836	139.375	142.741	145.867	148.712
521CONTROL	116.367	119.044	122.063	125.175	128.736	132.420	136.056	139.588	142.933	146.039	148.862
531DIFFERENCE	-0.128	-0.165	-0.194	-0.213	-0.222	-0.224	-0.219	-0.208	-0.192	-0.172	-0.150
541% DIFFERENCE	-0.11	-0.14	-0.16	-0.17	-0.17	-0.17	-0.16	-0.15	-0.13	-0.12	-0.10

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11 AUTOMOBILES											
21TRUCK PR UP 5%	104.117	105.296	106.738	108.219	110.118	112.170	114.227	116.201	117.999	119.546	120.816
31CONTROL	104.117	105.296	106.738	108.219	110.118	112.170	114.227	116.201	117.999	119.546	120.816
41DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 LIGHT TRUCKS AND VANS REG AS AUTOS											
71TRUCK PR UP 5%	12.122	13.582	15.131	16.744	18.395	20.026	21.609	23.174	24.742	26.322	27.896
81CONTROL	12.250	13.747	15.325	16.957	18.617	20.250	21.829	23.383	24.934	26.494	28.046
91DIFFERENCE	-0.128	-0.165	-0.194	-0.213	-0.222	-0.224	-0.219	-0.208	-0.192	-0.172	-0.150
101% DIFFERENCE	-1.05	-1.20	-1.27	-1.25	-1.19	-1.11	-1.00	-0.89	-0.77	-0.65	-0.53
111 LIGHT TRUCKS											
121TRUCK PR UP 5%	33.040	35.787	38.725	41.757	44.794	47.780	50.656	53.450	56.189	58.859	61.404
131CONTROL	33.293	36.107	39.104	42.186	45.265	48.285	51.185	53.995	56.742	59.413	61.954
141DIFFERENCE	-0.254	-0.320	-0.379	-0.430	-0.471	-0.504	-0.528	-0.544	-0.553	-0.555	-0.550
151% DIFFERENCE	-0.76	-0.89	-0.97	-1.02	-1.04	-1.04	-1.03	-1.01	-0.97	-0.93	-0.89
161 LIGHT TRUCKS AND VANS REG AS AUTOS											
171TRUCK PR UP 5%	12.122	13.582	15.131	16.744	18.395	20.026	21.609	23.174	24.742	26.322	27.896
181CONTROL	12.250	13.747	15.325	16.957	18.617	20.250	21.829	23.383	24.934	26.494	28.046
191DIFFERENCE	-0.128	-0.165	-0.194	-0.213	-0.222	-0.224	-0.219	-0.208	-0.192	-0.172	-0.150
201% DIFFERENCE	-1.05	-1.20	-1.27	-1.25	-1.19	-1.11	-1.00	-0.89	-0.77	-0.65	-0.53
211 LIGHT TRUCKS											
221TRUCK PR UP 5%	20.918	22.205	23.594	25.012	26.398	27.754	29.047	30.276	31.446	32.537	33.504
231CONTROL	21.044	22.360	23.779	25.230	26.647	28.035	29.356	30.612	31.807	32.920	33.909
241DIFFERENCE	-0.126	-0.155	-0.185	-0.217	-0.249	-0.280	-0.309	-0.336	-0.361	-0.383	-0.400
251% DIFFERENCE	-0.60	-0.69	-0.78	-0.86	-0.94	-1.00	-1.05	-1.10	-1.13	-1.16	-1.18
261 27TH YEAR STOCK											
281 PERSONAL VEHICLES											
291TRUCK PR UP 5%	114.812	117.492	120.312	123.340	126.654	130.263	133.911	137.505	140.966	144.200	147.185
301CONTROL	114.876	117.639	120.492	123.544	126.871	130.486	134.133	137.719	141.166	144.382	147.346
311DIFFERENCE	-0.064	-0.147	-0.180	-0.203	-0.217	-0.223	-0.222	-0.214	-0.200	-0.182	-0.161
321% DIFFERENCE	-0.06	-0.12	-0.15	-0.16	-0.17	-0.17	-0.17	-0.16	-0.14	-0.13	-0.11
331 AUTOMOBILES											
341TRUCK PR UP 5%	103.357	104.640	105.956	107.403	109.084	111.053	113.094	115.114	117.007	118.669	120.076
351CONTROL	103.357	104.640	105.956	107.403	109.084	111.053	113.094	115.114	117.007	118.669	120.076
361DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
371% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
381 LIGHT TRUCKS AND VANS REG AS AUTOS											
391TRUCK PR UP 5%	11.454	12.852	14.356	15.938	17.570	19.211	20.818	22.392	23.958	25.532	27.109
401CONTROL	11.519	12.998	14.536	16.141	17.787	19.434	21.039	22.606	24.159	25.714	27.270
411DIFFERENCE	-0.064	-0.147	-0.180	-0.203	-0.217	-0.223	-0.222	-0.214	-0.200	-0.182	-0.161
421% DIFFERENCE	-0.56	-1.13	-1.24	-1.26	-1.22	-1.15	-1.05	-0.95	-0.83	-0.71	-0.59
431 LIGHT TRUCKS											
441TRUCK PR UP 5%	31.818	34.413	37.256	40.241	43.275	46.287	49.218	52.053	54.819	57.524	60.131
451CONTROL	31.945	34.700	37.606	40.645	43.726	46.775	49.735	52.590	55.368	58.077	60.684
461DIFFERENCE	-0.127	-0.287	-0.350	-0.404	-0.450	-0.488	-0.516	-0.536	-0.549	-0.554	-0.552
471% DIFFERENCE	-0.40	-0.83	-0.93	-0.99	-1.03	-1.04	-1.04	-1.02	-0.99	-0.95	-0.91
481 LIGHT TRUCKS AND VANS REG AS AUTOS											
491TRUCK PR UP 5%	11.454	12.852	14.356	15.938	17.570	19.211	20.818	22.392	23.958	25.532	27.109
501CONTROL	11.519	12.998	14.536	16.141	17.787	19.434	21.039	22.606	24.159	25.714	27.270
511DIFFERENCE	-0.064	-0.147	-0.180	-0.203	-0.217	-0.223	-0.222	-0.214	-0.200	-0.182	-0.161
521% DIFFERENCE	-0.56	-1.13	-1.24	-1.26	-1.22	-1.15	-1.05	-0.95	-0.83	-0.71	-0.59

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	20.364	21.561	22.899	24.303	25.705	27.076	28.401	29.662	30.861	31.992	33.023
21	20.427	21.702	23.070	24.504	25.939	27.341	28.695	29.984	31.210	32.364	33.414
31	-0.063	-0.140	-0.170	-0.201	-0.233	-0.265	-0.295	-0.323	-0.349	-0.372	-0.391
41	-0.131	-0.665	-0.74	-0.82	-0.90	-0.97	-1.03	-1.08	-1.12	-1.15	-1.17
51											

TABLE 28.00 PRICES AND CAPITALIZED COSTS (DOLLARS)

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	CAPITALIZED COST PER PILE											
31	PERSONAL VEHICLES											
41	TRUCK PP UP 5%	0.3034	0.3278	0.3547	0.3828	0.4112	0.4399	0.4697	0.4992	0.5297	0.5617	0.5951
51	CARTRAIL	0.3027	0.3270	0.3534	0.3818	0.4102	0.4387	0.4684	0.4979	0.5283	0.5603	0.5935
61	DIFFERENCE	0.0008	0.0008	0.0009	0.0010	0.0011	0.0011	0.0012	0.0013	0.0014	0.0015	0.0016
71	% DIFFERENCE	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.27
81	AUTOMOBILES											
91	TRUCK PP UP 5%	0.2997	0.3237	0.3504	0.3779	0.4057	0.4337	0.4629	0.4920	0.5220	0.5534	0.5860
101	CARTRAIL	0.2997	0.3237	0.3504	0.3779	0.4057	0.4337	0.4629	0.4920	0.5220	0.5534	0.5860
111	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131	PERSONAL TRUCKS											
141	TRUCK PP UP 5%	0.3339	0.3614	0.3900	0.4234	0.4570	0.4906	0.5245	0.5585	0.5931	0.6296	0.6677
151	CARTRAIL	0.3267	0.3535	0.3813	0.4140	0.4468	0.4798	0.5129	0.5461	0.5800	0.6157	0.6530
161	DIFFERENCE	0.0072	0.0079	0.0087	0.0094	0.0101	0.0109	0.0116	0.0124	0.0131	0.0139	0.0147
171	% DIFFERENCE	2.20	2.25	2.28	2.27	2.27	2.27	2.27	2.27	2.26	2.26	2.26
181	CORPORATE TRUCKS											
191	TRUCK PP UP 5%	0.2591	0.2800	0.3017	0.3274	0.3534	0.3794	0.4055	0.4317	0.4584	0.4866	0.5160
201	CARTRAIL	0.2545	0.2749	0.2961	0.3214	0.3469	0.3725	0.3981	0.4238	0.4500	0.4776	0.5065
211	DIFFERENCE	0.0046	0.0051	0.0055	0.0060	0.0065	0.0070	0.0075	0.0079	0.0084	0.0090	0.0095
221	% DIFFERENCE	1.80	1.84	1.87	1.87	1.87	1.87	1.87	1.88	1.87	1.88	1.87
231	GVW 1	0.2677	0.2887	0.3107	0.3373	0.3641	0.3910	0.4180	0.4451	0.4727	0.5019	0.5322
241	TRUCK PP UP 5%	0.2627	0.2832	0.3047	0.3308	0.3571	0.3835	0.4100	0.4365	0.4636	0.4922	0.5220
251	CARTRAIL	0.0050	0.0055	0.0060	0.0065	0.0070	0.0075	0.0081	0.0086	0.0091	0.0097	0.0103
261	DIFFERENCE	1.89	1.93	1.97	1.97	1.96	1.96	1.97	1.97	1.97	1.97	1.96
271	% DIFFERENCE											
281	GVW 2	0.2505	0.2716	0.2934	0.3185	0.3438	0.3690	0.3944	0.4199	0.4459	0.4733	0.5020
291	TRUCK PP UP 5%	0.2463	0.2670	0.2883	0.3129	0.3378	0.3626	0.3875	0.4125	0.4381	0.4650	0.4931
301	CARTRAIL	0.0042	0.0047	0.0051	0.0056	0.0060	0.0064	0.0069	0.0074	0.0078	0.0083	0.0088
311	DIFFERENCE	1.71	1.74	1.77	1.77	1.78	1.78	1.78	1.79	1.79	1.79	1.79
321	% DIFFERENCE											

TABLE 30.00 MISCELLANEOUS ENDGENEOUS VARIABLES

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
LITERS PER GALLON											
1000 ALL FIFT MILLS PER GALLON											
21 AUTOMOBILES											
31 TRUCK PR UP 5%	14.2	14.5	15.1	15.7	16.4	17.1	17.8	18.5	19.2	19.8	20.31
41 CONTROL	14.2	14.5	15.1	15.7	16.4	17.1	17.8	18.5	19.2	19.8	20.31
51 DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71 PERSONAL TRUCKS											
81 TRUCK PR UP 5%	11.2	11.6	12.0	12.4	12.8	13.1	13.4	13.7	13.9	14.1	14.31
91 CONTROL	11.2	11.6	12.0	12.4	12.8	13.1	13.4	13.7	13.9	14.1	14.31
101 DIFFERENCE	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
11% DIFFERENCE	-0.07	-0.13	-0.11	-0.08	-0.06	-0.05	-0.04	-0.03	-0.02	-0.01	-0.001
121 COMMERCIAL TRUCKS											
131 TRUCK PR UP 5%	11.2	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.11
141 CONTROL	11.2	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.11
151 DIFFERENCE	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0
161% DIFFERENCE	-0.03	-0.06	-0.06	-0.06	-0.06	-0.05	-0.05	-0.04	-0.04	-0.04	-0.031
171											
GALLONS											
180 TOTAL FUEL CONSUMPTION											
191 TRUCK PR UP 5%	115.469	116.872	117.860	118.789	119.847	121.086	122.343	123.565	124.986	126.669	128.3261
201 CONTROL	115.585	117.128	118.170	119.146	120.242	121.512	122.794	124.035	125.468	127.160	128.8211
211 DIFFERENCE	-0.116	-0.257	-0.310	-0.356	-0.395	-0.426	-0.451	-0.470	-0.482	-0.491	-0.4951
221% DIFFERENCE	-0.10	-0.22	-0.26	-0.30	-0.33	-0.35	-0.37	-0.38	-0.38	-0.39	-0.381
231 AUTOMOBILES											
241 TRUCK PR UP 5%	83.957	83.668	82.663	81.464	80.313	79.286	78.274	77.331	76.612	76.061	75.5171
251 CONTROL	83.957	83.668	82.663	81.464	80.313	79.286	78.274	77.331	76.612	76.061	75.5171
261 DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
271% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
281 PERSONAL TRUCKS											
291 TRUCK PR UP 5%	10.770	11.811	12.846	13.923	15.033	16.133	17.189	18.207	19.222	20.252	21.2031
301 CONTROL	10.825	11.934	12.996	14.092	15.212	16.315	17.367	18.378	19.380	20.395	21.4181
311 DIFFERENCE	-0.055	-0.123	-0.151	-0.169	-0.179	-0.182	-0.178	-0.170	-0.158	-0.143	-0.1261
321% DIFFERENCE	-0.51	-1.03	-1.16	-1.20	-1.18	-1.11	-1.03	-0.93	-0.82	-0.70	-0.591
331 COMMERCIAL TRUCKS											
341 TRUCK PR UP 5%	20.742	21.394	22.352	23.403	24.501	25.667	26.880	28.027	29.152	30.356	31.5161
351 CONTROL	20.803	21.527	22.511	23.590	24.717	25.911	27.152	28.326	29.476	30.704	31.8881
361 DIFFERENCE	-0.061	-0.133	-0.160	-0.188	-0.216	-0.245	-0.273	-0.299	-0.324	-0.348	-0.3701
371% DIFFERENCE	-0.30	-0.62	-0.71	-0.80	-0.87	-0.94	-1.01	-1.06	-1.10	-1.13	-1.161
381											
391 AVERAGE AGE											
401 PERSONAL VEHICLES											
411 TRUCK PR UP 5%	5.631	5.643	5.643	5.620	5.585	5.572	5.599	5.643	5.683	5.721	5.7631
421 CONTROL	5.628	5.638	5.639	5.616	5.582	5.570	5.597	5.642	5.683	5.721	5.7641
431 DIFFERENCE	0.003	0.005	0.005	0.004	0.003	0.002	0.002	0.001	0.000	-0.001	-0.0011
441% DIFFERENCE	0.05	0.09	0.09	0.07	0.06	0.04	0.03	0.01	0.00	-0.01	-0.021
451 AUTOMOBILES											
461 TRUCK PR UP 5%	5.743	5.758	5.758	5.727	5.677	5.648	5.658	5.687	5.710	5.728	5.7491
471 CONTROL	5.743	5.758	5.758	5.727	5.677	5.648	5.658	5.687	5.710	5.728	5.7491
481 DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
491% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
501 TRUCKS											
511 TRUCK PR UP 5%	4.619	4.710	4.800	4.901	5.012	5.135	5.274	5.413	5.549	5.688	5.8261
521 CONTROL	4.597	4.672	4.770	4.879	4.996	5.125	5.268	5.411	5.550	5.692	5.8311
531 DIFFERENCE	0.023	0.038	0.029	0.022	0.016	0.011	0.006	0.003	-0.001	-0.003	-0.0051
541% DIFFERENCE	0.49	0.81	0.62	0.45	0.32	0.21	0.12	0.05	-0.01	-0.06	-0.091

TABLE 30.00 MISCELLANEOUS ENDEMICUS VARIABLES

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	COMMERCIAL TRUCKS											
31	TRUCK PR UP 5%	6.205	6.244	6.254	6.257	6.268	6.293	6.330	6.376	6.430	6.491	6.559
32	CONTROL	6.188	6.211	6.224	6.230	6.243	6.270	6.309	6.358	6.414	6.477	6.547
33	DIFFERENCE	0.018	0.033	0.030	0.027	0.025	0.023	0.021	0.018	0.016	0.014	0.012
34	% DIFFERENCE	0.28	0.52	0.48	0.44	0.40	0.36	0.33	0.29	0.25	0.21	0.18
61												
71	TRUCKS PER VEHICLE											
81	PERSONAL VEHICLES											
91	TRUCK PR UP 5%	11.410	11.509	11.639	11.780	11.918	12.028	12.134	12.230	12.317	12.395	12.465
101	CONTROL	11.410	11.509	11.638	11.779	11.917	12.027	12.132	12.229	12.315	12.394	12.464
111	DIFFERENCE	0.000	0.001	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.001	0.001
121	% DIFFERENCE	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
131	AUTOMOBILES											
141	TRUCK PR UP 5%	11.506	11.618	11.762	11.921	12.078	12.206	12.331	12.447	12.552	12.648	12.736
151	CONTROL	11.506	11.618	11.762	11.921	12.078	12.206	12.331	12.447	12.552	12.648	12.736
161	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
181	TRUCKS											
191	TRUCK PR UP 5%	10.544	10.624	10.732	10.829	10.922	11.000	11.063	11.117	11.169	11.219	11.265
201	CONTROL	10.546	10.628	10.735	10.832	10.924	11.002	11.064	11.118	11.169	11.219	11.265
211	DIFFERENCE	-0.002	-0.004	-0.003	-0.003	-0.002	-0.001	-0.001	-0.001	-0.001	-0.000	-0.000
221	% DIFFERENCE	-0.02	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00
231	COMMERCIAL TRUCKS											
241	TRUCK PR UP 5%	11.372	11.254	11.302	11.373	11.466	11.600	11.766	11.918	12.074	12.275	12.480
251	CONTROL	11.374	11.258	11.306	11.376	11.470	11.604	11.769	11.921	12.076	12.277	12.482
261	DIFFERENCE	-0.002	-0.004	-0.004	-0.004	-0.004	-0.004	-0.003	-0.003	-0.003	-0.003	-0.002
271	% DIFFERENCE	-0.01	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.02
281												
291	REGISTRATIONS TO BEGINNING STOCK											
301	PERSONAL VEHICLES											
311	TRUCK PR UP 5%	0.109	0.109	0.112	0.114	0.116	0.113	0.109	0.109	0.109	0.107	0.106
321	CONTROL	0.110	0.109	0.112	0.114	0.116	0.112	0.109	0.109	0.109	0.107	0.106
331	DIFFERENCE	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
341	% DIFFERENCE	-0.94	0.02	0.06	0.09	0.10	0.10	0.09	0.08	0.07	0.06	0.04
351	AUTOMOBILES											
361	TRUCK PR UP 5%	0.103	0.102	0.105	0.108	0.111	0.107	0.103	0.103	0.104	0.102	0.101
371	CONTROL	0.103	0.102	0.105	0.108	0.111	0.107	0.103	0.103	0.104	0.102	0.101
381	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
391	% DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
401	TRUCKS											
411	TRUCK PR UP 5%	0.165	0.166	0.161	0.156	0.152	0.145	0.139	0.139	0.135	0.133	0.130
421	CONTROL	0.176	0.165	0.160	0.155	0.150	0.144	0.138	0.138	0.135	0.132	0.130
431	DIFFERENCE	-0.011	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
441	% DIFFERENCE	-6.22	0.50	0.74	0.86	0.85	0.79	0.71	0.63	0.52	0.41	0.30
451	COMMERCIAL TRUCKS											
461	TRUCK PR UP 5%	0.109	0.116	0.119	0.119	0.117	0.115	0.113	0.112	0.111	0.110	0.109
471	CONTROL	0.115	0.116	0.119	0.119	0.117	0.115	0.113	0.112	0.111	0.110	0.109
481	DIFFERENCE	-0.006	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000	0.000	0.000	0.000
491	% DIFFERENCE	-5.27	-0.08	-0.06	-0.04	-0.01	0.04	0.09	0.12	0.13	0.17	0.20
501												
511	DISCOUNTAGE TO BEGINNING STOCK											

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
II PERSONAL VEHICLES											
21000000 PP UP SZ	0.085	0.086	0.087	0.089	0.088	0.084	0.081	0.083	0.085	0.085	0.0861
31000000	0.085	0.086	0.086	0.089	0.088	0.084	0.081	0.083	0.085	0.085	0.0871
40000000 REFERENCE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.000	-0.000	-0.000	-0.0001
50000000 REFERENCE	0.11	0.17	0.12	0.24	0.16	0.09	0.02	-0.04	-0.09	-0.13	-0.16
III AUTOMOBILES											
71000000 PP UP SZ	0.089	0.091	0.092	0.094	0.093	0.089	0.085	0.086	0.088	0.089	0.0901
81000000	0.089	0.091	0.092	0.094	0.093	0.089	0.085	0.086	0.088	0.089	0.0901
91000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
III TRUCKS											
121000000 PP UP SZ	0.041	0.045	0.047	0.050	0.053	0.056	0.050	0.067	0.068	0.069	0.071
131000000	0.040	0.043	0.045	0.048	0.052	0.056	0.060	0.067	0.068	0.070	0.071
141000000 REFERENCE	0.001	0.003	0.002	0.001	0.001	0.000	-0.000	-0.000	-0.001	-0.001	-0.001
151000000 REFERENCE	2.40	6.04	4.16	2.47	1.16	0.32	-0.23	-0.54	-0.88	-1.09	-1.19
III COMMERCIAL TRUCKS											
171000000 PP UP SZ	0.053	0.055	0.056	0.059	0.062	0.064	0.067	0.070	0.072	0.075	0.0791
181000000	0.053	0.054	0.055	0.058	0.061	0.063	0.066	0.069	0.072	0.075	0.0781
191000000 REFERENCE	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.0001
201000000 REFERENCE	0.49	1.72	1.54	1.41	1.29	1.15	1.02	0.88	0.75	0.63	0.52
IV ACTIVITIES AS SHARE OF TRUCKS											
21000000 PP UP SZ	27.9	28.0	28.0	28.1	28.3	28.5	28.6	28.8	29.1	29.3	29.51
22000000	27.9	28.0	28.0	28.1	28.3	28.5	28.6	28.8	29.1	29.3	29.51
23000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
V RETAIL PROPERTY'S INCOME											
29100000 PP UP SZ	28.081	30.081	32.081	34.081	36.081	38.081	40.081	42.081	44.532	47.265	50.151
301000000	28.081	30.081	32.081	34.081	36.081	38.081	40.081	42.081	44.532	47.265	50.151
311000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
321000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VI AGRICULTURE											
351000000 PP UP SZ	15.583	17.223	18.931	20.797	22.569	24.225	25.749	27.415	29.202	30.888	32.634
361000000	15.583	17.223	18.931	20.797	22.569	24.225	25.749	27.415	29.202	30.888	32.634
371000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
381000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VII CONTRACT CONSTRUCTION											
401000000 PP UP SZ	74.001	80.756	88.811	97.070	105.456	113.895	122.077	131.352	142.042	151.373	161.054
411000000	74.001	80.756	88.811	97.070	105.456	113.895	122.077	131.352	142.042	151.373	161.054
421000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
431000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VIII SERVICES											
451000000 PP UP SZ	227.209	253.393	283.896	318.412	355.562	394.044	433.549	476.854	525.792	575.751	629.798
461000000	227.209	253.393	283.896	318.412	355.562	394.044	433.549	476.854	525.792	575.751	629.798
471000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
481000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IX RETAIL AND DETAIL TRADE											
501000000 PP UP SZ	240.921	260.515	290.891	319.996	350.551	381.187	411.800	444.411	480.553	516.776	555.324
511000000	240.921	260.515	290.891	319.996	350.551	381.187	411.800	444.411	480.553	516.776	555.324
521000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
531000000 REFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
EQUILIBRIUM (DESIRE'D) STOCKS											
PERSONAL VEHICLES											
21	115,053	117,265	119,820	122,311	124,728	125,687	126,849	129,134	131,498	133,621	135,358
31	115,710	117,540	119,814	122,298	124,941	126,119	127,433	129,805	132,203	134,321	136,036
41	-0,657	-0,274	0,006	0,013	-0,213	-0,433	-0,584	-0,671	-0,704	-0,700	-0,678
51	-0,57	-0,23	0,00	0,01	-0,17	-0,34	-0,46	-0,52	-0,53	-0,52	-0,50
AUTOMOBILES											
61	102,338	104,375	106,757	109,109	111,298	111,992	112,934	115,001	117,121	118,935	120,326
71	102,842	104,499	106,594	108,930	111,348	112,275	113,379	115,519	117,695	119,505	120,871
81	-0,504	-0,124	0,163	0,179	-0,050	-0,283	-0,445	-0,538	-0,574	-0,570	-0,545
91	-0,49	-0,12	0,15	0,16	-0,05	-0,25	-0,39	-0,47	-0,49	-0,48	-0,45
MEMO TRUCKS AND VANS REG AS AUTOS											
101	12,715	12,890	13,063	13,202	13,431	13,694	13,915	14,132	14,377	14,686	15,032
111	12,868	13,041	13,221	13,368	13,593	13,844	14,054	14,266	14,508	14,816	15,165
121	-0,153	-0,150	-0,157	-0,166	-0,163	-0,150	-0,139	-0,133	-0,131	-0,131	-0,133
131	-1,119	-1,115	-1,119	-1,124	-1,120	-1,108	-0,99	-0,94	-0,90	-0,88	-0,87
LIGHT TRUCKS											
141	29,053	29,343	29,564	29,668	29,949	30,207	30,252	30,329	30,577	30,932	31,340
151	29,452	29,726	29,941	30,052	30,329	30,572	30,602	30,670	30,914	31,268	31,676
161	-0,399	-0,383	-0,377	-0,384	-0,380	-0,365	-0,350	-0,341	-0,337	-0,336	-0,337
171	-1,35	-1,29	-1,26	-1,28	-1,25	-1,19	-1,14	-1,11	-1,09	-1,07	-1,06
MEMO TRUCKS AND VANS REG AS AUTOS											
181	12,715	12,890	13,063	13,202	13,431	13,694	13,915	14,132	14,377	14,686	15,032
191	12,868	13,041	13,221	13,368	13,593	13,844	14,054	14,266	14,508	14,816	15,165
201	-0,153	-0,150	-0,157	-0,166	-0,163	-0,150	-0,139	-0,133	-0,131	-0,131	-0,133
211	-1,119	-1,115	-1,119	-1,124	-1,120	-1,108	-0,99	-0,94	-0,90	-0,88	-0,87
NONMEMO TRUCKS											
221	16,338	16,453	16,500	16,465	16,510	16,512	16,337	16,196	16,200	16,246	16,307
231	16,584	16,685	16,721	16,683	16,735	16,727	16,548	16,404	16,406	16,452	16,512
241	-0,246	-0,233	-0,220	-0,218	-0,217	-0,215	-0,211	-0,208	-0,206	-0,205	-0,204
251	-1,48	-1,39	-1,32	-1,31	-1,30	-1,29	-1,28	-1,27	-1,26	-1,25	-1,24
321											
33 NEW REGISTRATIONS											
PERSONAL VEHICLES											
341	12,390	12,592	13,288	13,913	14,501	14,430	14,344	14,761	15,113	15,245	15,402
351	12,486	12,640	13,302	13,920	14,529	14,477	14,404	14,829	15,144	15,314	15,488
361	-0,096	-0,048	-0,013	-0,007	-0,028	-0,047	-0,060	-0,068	-0,071	-0,069	-0,067
371	-0,77	-0,38	-0,10	-0,05	-0,19	-0,32	-0,42	-0,46	-0,47	-0,45	-0,43
AUTOMOBILES											
381	10,438	10,511	11,046	11,542	11,974	11,776	11,572	11,763	11,983	11,961	11,965
391	10,591	10,617	11,101	11,546	11,980	11,798	11,608	11,811	12,039	12,019	12,023
401	-0,153	-0,107	-0,055	-0,004	-0,006	-0,021	-0,036	-0,048	-0,056	-0,058	-0,058
411	-1,44	-1,01	-0,49	-0,04	-0,05	-0,18	-0,31	-0,41	-0,47	-0,48	-0,48
MEMO TRUCKS AND VANS REG AS AUTOS											
421	10,628	10,708	11,255	11,764	12,208	12,024	11,834	12,041	12,276	12,270	12,291
431	10,781	10,815	11,310	11,768	12,214	12,046	11,870	12,089	12,332	12,328	12,349
441	-0,153	-0,107	-0,055	-0,004	-0,006	-0,021	-0,036	-0,048	-0,056	-0,058	-0,058
451	-1,42	-0,99	-0,48	-0,04	-0,05	-0,18	-0,31	-0,41	-0,47	-0,48	-0,47
NONMEMO TRUCKS											
461	1,762	1,883	2,033	2,149	2,294	2,405	2,510	2,720	2,836	2,974	3,111
471	1,706	1,824	1,991	2,152	2,315	2,431	2,534	2,740	2,852	2,986	3,119
481	0,057	0,059	0,041	-0,003	-0,021	-0,026	-0,024	-0,020	-0,015	-0,011	-0,009
491	3,32	3,23	2,08	-0,15	-0,92	-1,05	-0,94	-0,72	-0,53	-0,38	-0,28
501											
511											
521											
531											

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	LIGHT TRUCKS											
21	GAS UP 10X	4.233	4.530	4.909	5.210	5.485	5.722	5.944	6.283	6.530	6.777	7.009
31	CONTROL	4.181	4.470	4.860	5.206	5.500	5.742	5.963	6.300	6.543	6.787	7.018
41	DIFFERENCE	0.052	0.060	0.050	0.004	-0.015	-0.020	-0.020	-0.017	-0.013	-0.010	-0.009
51	X DIFFERENCE	1.25	1.35	1.02	0.07	-0.28	-0.36	-0.33	-0.26	-0.20	-0.15	-0.13
61	MEMO TRUCKS AND VANS REG AS AUTOS											
71	GAS UP 10X	1.952	2.081	2.242	2.371	2.528	2.653	2.772	2.998	3.110	3.283	3.437
81	CONTROL	1.896	2.022	2.200	2.374	2.549	2.679	2.796	3.018	3.145	3.295	3.445
91	DIFFERENCE	0.057	0.059	0.041	-0.003	-0.021	-0.026	-0.024	-0.020	-0.015	-0.011	-0.009
101	X DIFFERENCE	2.99	2.91	1.89	-0.14	-0.84	-0.95	-0.85	-0.65	-0.46	-0.34	-0.26
111	MEMO TRUCKS											
121	GAS UP 10X	2.281	2.449	2.667	2.840	2.958	3.068	3.171	3.285	3.400	3.493	3.572
131	CONTROL	2.285	2.447	2.659	2.832	2.952	3.063	3.167	3.282	3.398	3.493	3.573
141	DIFFERENCE	-0.004	0.002	0.008	0.007	0.006	0.005	0.004	0.003	0.002	0.001	-0.000
151	X DIFFERENCE	-0.20	0.06	0.31	0.25	0.21	0.16	0.13	0.09	0.06	0.02	-0.01
161												
171	SCRAPPAGE											
181	PERSONAL VEHICLES											
191	GAS UP 10X	8.790	9.303	10.125	11.521	11.536	11.192	10.980	11.356	11.796	12.125	12.549
201	CONTROL	9.621	9.963	10.282	10.807	10.968	10.792	10.769	11.301	11.834	12.208	12.646
211	DIFFERENCE	-0.831	-0.660	-0.157	0.714	0.568	0.400	0.211	0.055	-0.038	-0.083	-0.096
221	X DIFFERENCE	-8.64	-8.63	-1.53	6.60	5.18	3.70	1.96	0.49	-0.32	-0.68	-0.76
231	AUTOMOBILES											
241	GAS UP 10X	8.389	8.858	9.569	10.736	10.997	10.089	9.709	9.848	10.167	10.362	10.636
251	CONTROL	9.188	9.438	9.660	10.065	10.080	9.746	9.551	9.837	10.241	10.473	10.752
261	DIFFERENCE	-0.799	-0.580	-0.090	0.671	0.516	0.343	0.158	0.010	-0.074	-0.111	-0.116
271	X DIFFERENCE	-8.70	-8.15	-0.94	6.67	5.12	3.52	1.66	0.11	-0.72	-1.06	-1.08
281	MEMO TRUCKS AND VANS REG AS AUTOS											
291	GAS UP 10X	0.401	0.445	0.556	0.785	0.939	1.102	1.270	1.508	1.629	1.763	1.914
301	CONTROL	0.433	0.525	0.623	0.742	0.888	1.046	1.217	1.464	1.594	1.735	1.894
311	DIFFERENCE	-0.032	-0.080	-0.066	0.043	0.051	0.056	0.053	0.044	0.036	0.027	0.020
321	X DIFFERENCE	-7.40	-15.27	-10.67	5.77	5.79	5.37	4.33	3.03	2.25	1.58	1.07
331	LIGHT TRUCKS											
341	GAS UP 10X	1.445	1.506	1.729	2.184	2.487	2.791	3.128	3.547	3.845	4.156	4.511
351	CONTROL	1.485	1.656	1.862	2.125	2.422	2.723	3.063	3.490	3.796	4.116	4.471
361	DIFFERENCE	-0.040	-0.150	-0.134	0.059	0.065	0.068	0.065	0.057	0.048	0.040	0.034
371	X DIFFERENCE	-2.68	-9.04	-7.17	2.78	2.69	2.51	2.12	1.62	1.28	0.98	0.76
381	MEMO TRUCKS AND VANS REG AS AUTOS											
391	GAS UP 10X	0.401	0.445	0.556	0.785	0.939	1.102	1.270	1.508	1.629	1.763	1.914
401	CONTROL	0.433	0.525	0.623	0.742	0.888	1.046	1.217	1.464	1.594	1.735	1.894
411	DIFFERENCE	-0.032	-0.080	-0.066	0.043	0.051	0.056	0.053	0.044	0.036	0.027	0.020
421	X DIFFERENCE	-7.40	-15.27	-10.67	5.77	5.79	5.37	4.33	3.03	2.25	1.58	1.07
431	MEMO TRUCKS											
441	GAS UP 10X	1.044	1.061	1.173	1.398	1.547	1.688	1.858	2.039	2.215	2.394	2.597
451	CONTROL	1.052	1.131	1.240	1.382	1.534	1.676	1.846	2.027	2.202	2.381	2.584
461	DIFFERENCE	-0.008	-0.070	-0.067	0.016	0.014	0.012	0.012	0.012	0.013	0.013	0.014
471	X DIFFERENCE	-0.74	-6.15	-5.42	1.18	0.89	0.73	0.66	0.61	0.57	0.55	0.53
481												
491	MEMO STOCK											
501	PERSONAL VEHICLES											
511	GAS UP 10X	117.102	120.391	123.554	125.945	128.910	132.149	135.513	138.918	142.234	145.354	148.207
521	CONTROL	116.367	119.044	122.063	125.175	128.736	132.420	136.056	139.584	142.933	146.039	148.862
531	DIFFERENCE	0.735	1.347	1.491	0.770	0.175	-0.272	-0.543	-0.666	-0.699	-0.685	-0.655
541	X DIFFERENCE	0.63	1.13	1.22	0.62	0.14	-0.21	-0.40	-0.48	-0.49	-0.47	-0.44

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	TYPE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	AUTOMOBILES											
21	GAS UP 10X	104.764	106.416	107.893	108.699	110.076	111.763	113.626	115.541	117.356	118.956	120.285
31	CONTROL	104.117	105.296	106.738	108.219	110.118	112.170	114.227	116.201	117.999	119.546	120.816
41	DIFFERENCE	0.646	1.120	1.155	0.480	-0.042	-0.407	-0.601	-0.660	-0.643	-0.590	-0.531
51	DIFFERENCE	0.62	1.06	1.08	0.44	-0.04	-0.36	-0.53	-0.57	-0.54	-0.49	-0.44
61	MEMO TRUCKS AND VANS REG AS AUTOS											
71	GAS UP 10X	12.339	13.975	15.661	17.246	18.834	20.385	21.887	23.378	24.878	26.399	27.922
81	CONTROL	12.250	13.747	15.325	16.957	18.617	20.250	21.829	23.383	24.934	26.494	28.046
91	DIFFERENCE	0.089	0.228	0.336	0.290	0.217	0.135	0.059	-0.005	-0.056	-0.095	-0.124
101	DIFFERENCE	0.72	1.66	2.19	1.71	1.16	0.67	0.27	-0.02	-0.23	-0.36	-0.44
111	LIGHT TRUCKS											
121	GAS UP 10X	33.385	36.409	39.590	42.616	45.615	48.546	51.361	54.090	56.783	59.404	61.902
131	CONTROL	33.293	36.107	39.104	42.186	45.265	48.285	51.185	53.995	56.742	59.413	61.954
141	DIFFERENCE	0.092	0.302	0.485	0.430	0.350	0.261	0.176	0.103	0.041	-0.010	-0.053
151	DIFFERENCE	0.28	0.84	1.24	1.02	0.77	0.54	0.34	0.19	0.07	-0.02	-0.08
161	MEMO TRUCKS AND VANS REG AS AUTOS											
171	GAS UP 10X	12.339	13.975	15.661	17.246	18.834	20.385	21.887	23.378	24.878	26.399	27.922
181	CONTROL	12.250	13.747	15.325	16.957	18.617	20.250	21.829	23.383	24.934	26.494	28.046
191	DIFFERENCE	0.089	0.228	0.336	0.290	0.217	0.135	0.059	-0.005	-0.056	-0.095	-0.124
201	DIFFERENCE	0.72	1.66	2.19	1.71	1.16	0.67	0.27	-0.02	-0.23	-0.36	-0.44
211	MEMO TRUCKS											
221	GAS UP 10X	21.047	22.434	23.929	25.370	26.780	28.160	29.474	30.720	31.905	33.005	33.980
231	CONTROL	21.044	22.360	23.779	25.230	26.647	28.035	29.356	30.612	31.807	32.920	33.909
241	DIFFERENCE	0.003	0.074	0.150	0.141	0.133	0.126	0.118	0.108	0.098	0.085	0.071
251	DIFFERENCE	0.02	0.33	0.63	0.56	0.50	0.45	0.40	0.35	0.31	0.26	0.21
261	MEMO TRUCKS											
271	MEMO YEAR STOCK											
281	PERSONAL VEHICLES											
291	GAS UP 10X	115.243	118.678	121.907	124.668	127.338	130.433	133.722	137.112	140.481	143.688	146.673
301	CONTROL	114.876	117.639	120.492	123.544	126.871	130.486	134.133	137.719	141.166	144.382	147.346
311	DIFFERENCE	0.368	1.039	1.416	1.125	0.467	-0.053	-0.411	-0.607	-0.685	-0.695	-0.673
321	DIFFERENCE	0.32	0.84	1.17	0.91	0.37	-0.04	-0.31	-0.44	-0.49	-0.48	-0.46
331	AUTOMOBILES											
341	GAS UP 10X	103.680	105.521	107.089	108.215	109.298	110.052	112.585	114.479	116.353	118.049	119.517
351	CONTROL	103.357	104.640	105.956	107.403	109.084	111.054	113.094	115.114	117.007	118.669	120.076
361	DIFFERENCE	0.323	0.881	1.134	0.812	0.214	-0.229	-0.508	-0.634	-0.654	-0.619	-0.564
371	DIFFERENCE	0.31	0.84	1.07	0.76	0.20	-0.21	-0.45	-0.55	-0.56	-0.52	-0.47
381	MEMO TRUCKS AND VANS REG AS AUTOS											
391	GAS UP 10X	11.563	13.157	14.818	16.453	18.040	19.610	21.136	22.632	24.128	25.638	27.160
401	CONTROL	11.519	12.998	14.536	16.141	17.787	19.434	21.039	22.606	24.159	25.714	27.270
411	DIFFERENCE	0.044	0.158	0.282	0.313	0.253	0.176	0.097	0.027	-0.031	-0.076	-0.109
421	DIFFERENCE	0.39	1.22	1.94	1.94	1.42	0.91	0.46	0.12	-0.13	-0.29	-0.40
431	LIGHT TRUCKS											
441	GAS UP 10X	31.991	34.897	37.999	41.103	44.116	47.080	49.953	52.729	55.440	58.093	60.653
451	CONTROL	31.945	34.700	37.606	40.645	43.726	46.773	49.735	52.590	55.368	58.077	60.684
461	DIFFERENCE	0.046	0.197	0.394	0.458	0.390	0.305	0.219	0.140	0.072	0.016	-0.031
471	DIFFERENCE	0.14	0.57	1.05	1.13	0.89	0.65	0.44	0.27	0.13	0.03	-0.05
481	MEMO TRUCKS AND VANS REG AS AUTOS											
491	GAS UP 10X	11.563	13.157	14.818	16.453	18.040	19.610	21.136	22.632	24.128	25.638	27.160
501	CONTROL	11.514	12.998	14.536	16.141	17.787	19.434	21.039	22.606	24.159	25.714	27.270
511	DIFFERENCE	0.044	0.158	0.282	0.313	0.253	0.176	0.097	0.027	-0.031	-0.076	-0.109
521	DIFFERENCE	0.39	1.22	1.94	1.94	1.42	0.91	0.46	0.12	-0.13	-0.29	-0.40

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	NONMEMPH TRUCKS											
2	GAS UP 10X	20,428	21,741	23,182	24,650	26,075	27,470	28,817	30,097	31,313	32,455	33,492
3	CONTROL	20,427	21,702	23,070	24,504	25,939	27,341	28,695	29,984	31,210	32,364	33,414
4	DIFFERENCE	0.002	0.039	0.112	0.145	0.137	0.129	0.122	0.113	0.103	0.091	0.078
5	SIX DIFFERENCE	0.01	0.18	0.49	0.59	0.53	0.47	0.42	0.38	0.33	0.28	0.23

TABLE 28.00 PRICES AND CAPITALIZED COSTS (DOLLARS)

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	21 CAPITALIZED COST PER MILE											
31	PERSONAL VEHICLES											
41	GAS UP 10X	0.3078	0.3321	0.3588	0.3869	0.4153	0.4441	0.4741	0.5039	0.5347	0.5669	0.60051
51	CONTROL	0.3027	0.3270	0.3538	0.3818	0.4102	0.4387	0.4684	0.4979	0.5283	0.5603	0.59351
61	DIFFERENCE	0.0051	0.0051	0.0051	0.0051	0.0052	0.0054	0.0057	0.0060	0.0063	0.0066	0.00701
71	DIFFERENCE	1.68	1.55	1.43	1.33	1.26	1.23	1.22	1.21	1.20	1.19	1.181
81	AUTOMOBILES											
91	GAS UP 10X	0.3047	0.3287	0.3554	0.3829	0.4107	0.4389	0.4684	0.4978	0.5281	0.5590	0.59281
101	CONTROL	0.2997	0.3237	0.3509	0.3779	0.4057	0.4337	0.4629	0.4920	0.5220	0.5534	0.58601
111	DIFFERENCE	0.0050	0.0050	0.0050	0.0050	0.0051	0.0052	0.0055	0.0058	0.0061	0.0064	0.00681
121	DIFFERENCE	1.68	1.55	1.43	1.32	1.25	1.21	1.19	1.18	1.17	1.16	1.151
131	PERSONAL TRUCKS											
141	GAS UP 10X	0.3326	0.3593	0.3870	0.4201	0.4534	0.4867	0.5202	0.5538	0.5881	0.6243	0.66201
151	CONTROL	0.3267	0.3535	0.3813	0.4140	0.4468	0.4798	0.5129	0.5461	0.5800	0.6157	0.65301
161	DIFFERENCE	0.0059	0.0058	0.0057	0.0061	0.0065	0.0069	0.0073	0.0077	0.0081	0.0086	0.00901
171	DIFFERENCE	1.79	1.64	1.50	1.48	1.46	1.44	1.43	1.41	1.40	1.39	1.381
181	COMMERCIAL TRUCKS											
191	GAS UP 10X	0.2606	0.2811	0.3024	0.3281	0.3541	0.3800	0.4061	0.4322	0.4589	0.4870	0.51641
201	CONTROL	0.2545	0.2749	0.2961	0.3214	0.3469	0.3725	0.3981	0.4238	0.4500	0.4776	0.50651
211	DIFFERENCE	0.0061	0.0062	0.0063	0.0067	0.0071	0.0076	0.0080	0.0085	0.0089	0.0094	0.00991
221	DIFFERENCE	2.39	2.25	2.11	2.09	2.06	2.04	2.01	2.00	1.98	1.96	1.951
231	GVW 1											
241	GAS UP 10X	0.2683	0.2880	0.3101	0.3366	0.3634	0.3901	0.4170	0.4439	0.4714	0.5004	0.53061
251	CONTROL	0.2627	0.2832	0.3047	0.3308	0.3571	0.3835	0.4100	0.4365	0.4636	0.4922	0.52201
261	DIFFERENCE	0.0056	0.0055	0.0055	0.0059	0.0062	0.0066	0.0070	0.0074	0.0078	0.0082	0.00861
271	DIFFERENCE	2.13	1.95	1.80	1.77	1.75	1.73	1.71	1.69	1.68	1.66	1.651
281	GVW 2											
291	GAS UP 10X	0.2529	0.2738	0.2953	0.3204	0.3457	0.3710	0.3964	0.4219	0.4480	0.4754	0.50411
301	CONTROL	0.2463	0.2670	0.2883	0.3129	0.3378	0.3626	0.3875	0.4125	0.4381	0.4650	0.49311
311	DIFFERENCE	0.0066	0.0068	0.0070	0.0075	0.0080	0.0084	0.0089	0.0094	0.0099	0.0104	0.01101
321	DIFFERENCE	2.67	2.54	2.42	2.39	2.36	2.33	2.30	2.28	2.26	2.24	2.221

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
BILL GALS												
1	OVERALL FLEET MILES PER GALLON											
21	AUTOMOBILES											
3	GAS UP 10%	14.2	14.5	15.1	15.7	16.4	17.1	17.6	16.5	19.2	19.8	20.31
4	CONTROL	14.2	14.5	15.1	15.7	16.4	17.1	17.6	16.5	19.2	19.8	20.31
5	DIFFERENCE	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
6	% DIFFERENCE	-0.11	0.03	0.06	0.06	0.04	0.03	0.03	0.03	0.03	0.03	0.021
7	PERSONAL TRUCKS											
8	GAS UP 10%	11.2	11.6	12.0	12.4	12.8	13.1	13.4	13.7	13.9	14.1	14.31
9	CONTROL	11.2	11.6	12.0	12.4	12.8	13.1	13.4	13.7	13.9	14.1	14.31
10	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.01
11	% DIFFERENCE	0.03	0.10	0.14	0.12	0.08	0.04	0.01	-0.00	-0.01	-0.02	-0.021
12	COMMERCIAL TRUCKS											
13	GAS UP 10%	11.2	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.11
14	CONTROL	11.2	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.11
15	DIFFERENCE	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
16	% DIFFERENCE	-0.00	-0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
17												
BILL GAL												
18	TOTAL FUEL CONSUMPTION											
19	GAS UP 10%	112.473	114.279	115.514	116.319	117.021	117.949	118.964	120.016	121.307	122.679	124.443
20	CONTROL	115.585	117.128	118.170	119.146	120.242	121.512	122.794	124.035	125.468	127.160	128.821
21	DIFFERENCE	-3.112	-2.849	-2.656	-2.827	-3.221	-3.564	-3.830	-4.019	-4.161	-4.480	-4.379
22	% DIFFERENCE	-2.69	-2.43	-2.25	-2.37	-2.68	-2.93	-3.12	-3.24	-3.32	-3.37	-3.401
23	AUTOMOBILES											
24	GAS UP 10%	82.152	82.051	81.150	79.826	78.441	77.246	76.143	75.175	74.468	73.948	73.4061
25	CONTROL	83.957	83.668	82.663	81.464	80.313	79.286	78.274	77.331	76.612	76.061	75.5171
26	DIFFERENCE	-1.804	-1.617	-1.512	-1.637	-1.872	-2.040	-2.131	-2.156	-2.144	-2.113	-2.0711
27	% DIFFERENCE	-2.15	-1.93	-1.83	-2.01	-2.33	-2.57	-2.72	-2.79	-2.80	-2.78	-2.741
28	PERSONAL TRUCKS											
29	GAS UP 10%	10.582	11.758	12.692	13.980	15.020	16.031	16.993	17.923	18.856	19.810	20.7831
30	CONTROL	10.825	11.934	12.996	14.092	15.212	16.319	17.367	18.378	19.380	20.395	21.4181
31	DIFFERENCE	-0.243	-0.176	-0.105	-0.112	-0.192	-0.284	-0.374	-0.455	-0.525	-0.584	-0.6361
32	% DIFFERENCE	-2.24	-1.48	-0.81	-0.79	-1.26	-1.74	-2.15	-2.47	-2.71	-2.86	-2.971
33	COMMERCIAL TRUCKS											
34	GAS UP 10%	19.738	20.471	21.472	22.513	23.560	24.672	25.827	26.917	27.983	29.121	30.2141
35	CONTROL	20.803	21.527	22.511	23.590	24.717	25.911	27.152	28.326	29.476	30.704	31.8661
36	DIFFERENCE	-1.065	-1.056	-1.039	-1.078	-1.157	-1.240	-1.325	-1.409	-1.493	-1.583	-1.6721
37	% DIFFERENCE	-5.12	-4.91	-4.62	-4.57	-4.68	-4.78	-4.88	-4.97	-5.06	-5.15	-5.241
38												
39 AVERAGE AGE												
40	PERSONAL VEHICLES											
41	GAS UP 10%	5.645	5.647	5.705	5.675	5.617	5.587	5.602	5.641	5.680	5.720	5.764
42	CONTROL	5.628	5.638	5.630	5.616	5.582	5.570	5.597	5.642	5.683	5.721	5.764
43	DIFFERENCE	0.018	0.009	0.067	0.059	0.035	0.017	0.005	-0.001	-0.003	-0.002	-0.001
44	% DIFFERENCE	0.31	0.48	1.19	1.05	0.63	0.30	0.08	-0.02	-0.05	-0.03	-0.001
45	AUTOMOBILES											
46	GAS UP 10%	5.764	5.817	5.839	5.800	5.722	5.669	5.663	5.684	5.704	5.721	5.7441
47	CONTROL	5.743	5.758	5.758	5.727	5.677	5.648	5.658	5.687	5.710	5.728	5.7491
48	DIFFERENCE	0.021	0.060	0.082	0.073	0.045	0.021	0.005	-0.004	-0.007	-0.007	-0.0091
49	% DIFFERENCE	0.36	1.03	1.42	1.27	0.79	0.37	0.08	-0.07	-0.12	-0.12	-0.081
50	TRUCKS											
51	GAS UP 10%	4.586	4.646	4.738	4.853	4.982	5.123	5.276	5.425	5.568	5.712	5.8521
52	CONTROL	4.597	4.672	4.770	4.879	4.996	5.125	5.268	5.411	5.550	5.692	5.8311
53	DIFFERENCE	-0.010	-0.026	-0.032	-0.027	-0.014	-0.002	0.008	0.014	0.018	0.020	0.0211
54	% DIFFERENCE	-0.22	-0.55	-0.67	-0.54	-0.28	-0.03	0.15	0.27	0.33	0.36	0.361

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	COMMERCIAL TRUCKS											
21	GAS UP 10X	6,188	6,212	6,223	6,228	6,240	6,266	6,305	6,354	6,411	6,474	6,546
31	CONTROL	6,188	6,211	6,224	6,230	6,243	6,270	6,309	6,358	6,414	6,477	6,547
41	DIFFERENCE	0,001	0,001	-0,001	-0,002	-0,003	-0,004	-0,004	-0,004	-0,003	-0,002	-0,001
51	% DIFFERENCE	0,01	0,01	-0,01	-0,04	-0,05	-0,06	-0,06	-0,06	-0,05	-0,04	-0,02
61												
71	TRUCKS PER VEHICLE											
81	PERSONAL VEHICLES											
91	GAS UP 10X	11,117	11,197	11,313	11,463	11,617	11,739	11,851	11,949	12,033	12,108	12,174
101	CONTROL	11,410	11,509	11,638	11,779	11,917	12,027	12,132	12,229	12,315	12,394	12,464
111	DIFFERENCE	-0,293	-0,312	-0,323	-0,316	-0,300	-0,288	-0,281	-0,280	-0,282	-0,285	-0,289
121	% DIFFERENCE	-2,57	-2,71	-2,78	-2,68	-2,51	-2,39	-2,32	-2,29	-2,29	-2,30	-2,32
131	AUTOMOBILES											
141	GAS UP 10X	11,211	11,302	11,433	11,601	11,778	11,920	12,053	12,170	12,273	12,365	12,447
151	CONTROL	11,506	11,610	11,762	11,921	12,078	12,206	12,331	12,447	12,552	12,648	12,736
161	DIFFERENCE	-0,295	-0,316	-0,329	-0,320	-0,301	-0,286	-0,279	-0,277	-0,279	-0,284	-0,289
171	% DIFFERENCE	-2,57	-2,72	-2,80	-2,69	-2,49	-2,34	-2,26	-2,23	-2,22	-2,24	-2,27
181	TRUCKS											
191	GAS UP 10X	10,273	10,356	10,461	10,555	10,643	10,710	10,777	10,830	10,879	10,927	10,972
201	CONTROL	10,546	10,628	10,735	10,832	10,924	11,002	11,064	11,118	11,169	11,219	11,265
211	DIFFERENCE	-0,273	-0,273	-0,274	-0,277	-0,281	-0,284	-0,287	-0,288	-0,290	-0,291	-0,293
221	% DIFFERENCE	-2,58	-2,57	-2,56	-2,56	-2,57	-2,58	-2,59	-2,59	-2,60	-2,60	-2,60
231	COMMERCIAL TRUCKS											
241	GAS UP 10X	10,790	10,686	10,732	10,793	10,876	10,997	11,148	11,287	11,428	11,612	11,801
251	CONTROL	11,374	11,258	11,306	11,376	11,470	11,604	11,769	11,921	12,076	12,277	12,482
261	DIFFERENCE	-0,583	-0,571	-0,574	-0,583	-0,593	-0,606	-0,621	-0,634	-0,648	-0,665	-0,682
271	% DIFFERENCE	-5,13	-5,08	-5,08	-5,12	-5,17	-5,22	-5,27	-5,32	-5,37	-5,42	-5,46
281												
291	NEW REGISTRATIONS TO BEGINNING STOCK											
301	PERSONAL VEHICLES											
311	GAS UP 10X	0,109	0,108	0,110	0,113	0,115	0,112	0,109	0,109	0,109	0,107	0,106
321	CONTROL	0,110	0,109	0,112	0,114	0,116	0,112	0,109	0,109	0,109	0,107	0,106
331	DIFFERENCE	-0,001	-0,001	-0,001	-0,001	-0,001	-0,001	-0,000	-0,000	0,000	0,000	0,000
341	% DIFFERENCE	-0,77	-1,01	-1,22	-1,26	-0,80	-0,46	-0,21	-0,06	0,01	0,04	0,04
351	AUTOMOBILES											
361	GAS UP 10X	0,102	0,100	0,104	0,107	0,110	0,107	0,104	0,104	0,104	0,102	0,101
371	CONTROL	0,103	0,102	0,105	0,108	0,111	0,107	0,103	0,103	0,104	0,102	0,101
381	DIFFERENCE	-0,001	-0,002	-0,002	-0,001	-0,001	-0,000	0,000	0,000	0,000	0,000	0,000
391	% DIFFERENCE	-1,44	-1,62	-1,54	-1,11	-0,49	-0,14	0,05	0,12	0,10	0,06	0,01
401	TRUCKS											
411	GAS UP 10X	0,181	0,169	0,160	0,151	0,147	0,141	0,136	0,137	0,134	0,132	0,130
421	CONTROL	0,176	0,165	0,160	0,153	0,150	0,144	0,138	0,138	0,135	0,132	0,130
431	DIFFERENCE	0,005	0,004	0,000	-0,004	-0,004	-0,003	-0,002	-0,001	-0,001	-0,000	0,000
441	% DIFFERENCE	2,99	2,17	0,23	-2,28	-2,50	-2,09	-1,51	-0,92	-0,46	-0,12	0,10
451	COMMERCIAL TRUCKS											
461	GAS UP 10X	0,115	0,116	0,119	0,119	0,117	0,115	0,113	0,111	0,111	0,109	0,108
471	CONTROL	0,115	0,116	0,119	0,119	0,117	0,115	0,113	0,112	0,111	0,110	0,109
481	DIFFERENCE	-0,000	0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000	-0,000
491	% DIFFERENCE	-0,20	0,05	-0,03	-0,37	-0,35	-0,33	-0,32	-0,31	-0,29	-0,28	-0,27
501												
511	SCRAPPAGE TO BEGINNING STOCK											

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11 PERSONAL VEHICLES											
21GAS UP 10X	0,077	0,079	0,084	0,093	0,092	0,087	0,083	0,084	0,085	0,085	0,086
31CONTROL	0,085	0,086	0,086	0,089	0,088	0,084	0,081	0,083	0,085	0,085	0,087
41DIFFERENCE	-0,007	-0,006	-0,002	0,005	0,004	0,003	0,002	0,001	0,000	-0,000	-0,001
51X DIFFERENCE	-8,64	-7,21	-2,63	5,32	4,53	3,56	2,17	0,89	0,15	-0,20	-0,29
61 AUTOMOBILES											
71GAS UP 10X	0,082	0,085	0,090	0,100	0,097	0,092	0,087	0,087	0,088	0,088	0,089
81CONTROL	0,089	0,091	0,092	0,094	0,093	0,089	0,085	0,086	0,088	0,089	0,090
91DIFFERENCE	-0,008	-0,006	-0,002	0,005	0,004	0,003	0,002	0,001	-0,000	-0,000	-0,001
101X DIFFERENCE	-8,70	-6,72	-1,98	5,52	4,66	3,56	2,03	0,64	-0,15	-0,52	-0,59
111 TRUCKS											
121GAS UP 10X	0,037	0,036	0,040	0,050	0,054	0,059	0,062	0,069	0,070	0,071	0,072
131CONTROL	0,040	0,043	0,045	0,048	0,052	0,056	0,060	0,067	0,068	0,070	0,071
141DIFFERENCE	-0,003	-0,007	-0,005	0,002	0,002	0,002	0,002	0,002	0,002	0,001	0,001
151X DIFFERENCE	-7,40	-15,88	-12,12	3,51	4,01	4,16	3,64	2,76	2,27	1,81	1,43
161 COMMERCIAL TRUCKS											
171GAS UP 10X	0,053	0,050	0,052	0,058	0,061	0,063	0,066	0,069	0,072	0,075	0,079
181CONTROL	0,053	0,054	0,055	0,058	0,061	0,063	0,066	0,069	0,072	0,075	0,078
191DIFFERENCE	-0,000	-0,003	-0,003	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
201X DIFFERENCE	-0,74	-6,16	-5,73	0,54	0,34	0,23	0,21	0,21	0,22	0,24	0,27
211											
221ACTIVITIES AS SHARE OF INCOME											
231GAS UP 10X	27,9	28,0	28,0	28,1	28,3	28,5	28,6	28,8	29,1	29,3	29,5
241CONTROL	27,9	28,0	28,0	28,1	28,3	28,5	28,6	28,8	29,1	29,3	29,5
251DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
261X DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
271											
281FARM PROPRIETOR'S INCOME											
291GAS UP 10X	28,081	30,081	32,081	34,081	36,081	38,081	40,081	42,081	44,532	47,265	50,151
301CONTROL	28,081	30,081	32,081	34,081	36,081	38,081	40,081	42,081	44,532	47,265	50,151
311DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
321X DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
331EMPLOYEE COMPENSATION											
341 AGRICULTURE											
351GAS UP 10X	15,583	17,223	18,931	20,797	22,569	24,225	25,749	27,415	29,202	30,888	32,634
361CONTROL	15,583	17,223	18,931	20,797	22,569	24,225	25,749	27,415	29,202	30,888	32,634
371DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
381X DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
391 CONTRACT CONSTRUCTION											
401GAS UP 10X	74,001	80,756	88,811	97,070	105,456	113,895	122,077	131,352	142,042	151,373	161,054
411CONTROL	74,001	80,756	88,811	97,070	105,456	113,895	122,077	131,352	142,042	151,373	161,054
421DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
431X DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
441 SERVICES											
451GAS UP 10X	227,209	253,393	283,896	318,412	355,562	394,044	433,549	476,854	525,792	575,751	629,798
461CONTROL	227,209	253,393	283,896	318,412	355,562	394,044	433,549	476,854	525,792	575,751	629,798
471DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
481X DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
491 WHOLESALE AND RETAIL TRADE											
501GAS UP 10X	240,921	264,515	290,891	319,996	350,551	381,187	411,800	444,411	480,553	516,776	555,324
511CONTROL	240,921	264,515	290,891	319,996	350,551	381,187	411,800	444,411	480,553	516,776	555,324
521DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
531X DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0

EXTENDED TRUCK MPG STANDARDS

TABLE 20.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
I T E M											
EQUILIBRIUM ('DESTROYED') STOCKS											
PERSONAL VEHICLES											
1	115,710	117,540	119,814	122,351	125,041	126,261	127,573	129,942	132,338	134,454	136,166
3	115,710	117,540	119,814	122,298	124,941	126,119	127,433	129,805	132,203	134,321	136,036
4	0.0	0.0	0.0	0.053	0.099	0.142	0.140	0.138	0.135	0.133	0.130
5	0.0	0.0	0.0	0.04	0.08	0.11	0.11	0.11	0.10	0.10	0.10
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AUTOMOBILES											
7	102,842	104,499	106,594	108,930	111,348	112,275	113,379	115,539	117,695	119,505	120,871
8	102,842	104,499	106,594	108,930	111,348	112,275	113,379	115,539	117,695	119,505	120,871
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEMO TRUCKS AND VANS REG AS AUTOS											
12	12,868	13,041	13,221	13,421	13,693	13,986	14,194	14,403	14,643	14,949	15,295
13	12,868	13,041	13,221	13,368	13,593	13,844	14,054	14,266	14,508	14,816	15,165
14	0.0	0.0	0.0	0.053	0.099	0.142	0.140	0.138	0.135	0.133	0.130
15	0.0	0.0	0.0	0.39	0.73	1.02	0.99	0.96	0.93	0.90	0.86
LIGHT TRUCKS											
17	29,452	29,726	29,941	30,207	30,623	30,990	31,012	31,071	31,311	31,660	32,064
18	29,452	29,726	29,941	30,052	30,329	30,572	30,602	30,670	30,914	31,268	31,676
19	0.0	0.0	0.0	0.155	0.298	0.419	0.409	0.401	0.397	0.392	0.387
20	0.0	0.0	0.0	0.52	0.97	1.37	1.34	1.31	1.28	1.25	1.22
MEMO TRUCKS AND VANS REG AS AUTOS											
22	12,868	13,041	13,221	13,421	13,693	13,986	14,194	14,403	14,643	14,949	15,295
23	12,868	13,041	13,221	13,368	13,593	13,844	14,054	14,266	14,508	14,816	15,165
24	0.0	0.0	0.0	0.053	0.099	0.142	0.140	0.138	0.135	0.133	0.130
25	0.0	0.0	0.0	0.39	0.73	1.02	0.99	0.96	0.93	0.90	0.86
NONMEMO TRUCKS											
27	16,584	16,685	16,721	16,786	16,930	17,004	16,818	16,668	16,667	16,711	16,769
28	16,584	16,685	16,721	16,683	16,735	16,727	16,548	16,404	16,406	16,452	16,512
29	0.0	0.0	0.0	0.103	0.195	0.277	0.270	0.264	0.261	0.259	0.257
30	0.0	0.0	0.0	0.62	1.16	1.65	1.63	1.61	1.59	1.57	1.56
32											
NEW REGISTRATIONS											
PERSONAL VEHICLES											
34	12,486	12,640	13,302	13,926	14,541	14,493	14,420	14,846	15,201	15,330	15,484
35	12,486	12,640	13,302	13,920	14,529	14,477	14,404	14,829	15,184	15,314	15,468
36	0.0	0.0	0.0	0.006	0.012	0.017	0.016	0.017	0.017	0.016	0.016
37	0.0	0.0	0.0	0.03	0.08	0.12	0.11	0.11	0.11	0.11	0.10
38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AUTOMOBILES											
39	10,591	10,617	11,101	11,546	11,980	11,798	11,608	11,811	12,039	12,019	12,023
40	10,591	10,617	11,101	11,546	11,980	11,798	11,608	11,811	12,039	12,019	12,023
41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEMO TRUCKS AND VANS REG AS AUTOS											
44	10,781	10,815	11,310	11,768	12,214	12,046	11,870	12,089	12,332	12,328	12,349
45	10,781	10,815	11,310	11,768	12,214	12,046	11,870	12,089	12,332	12,328	12,349
46	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEMO TRUCKS											
49	1,706	1,824	1,991	2,158	2,327	2,448	2,551	2,756	2,868	3,002	3,136
50	1,706	1,824	1,991	2,152	2,315	2,431	2,534	2,740	2,852	2,986	3,119
51	0.0	0.0	0.0	0.006	0.012	0.017	0.016	0.017	0.017	0.016	0.016
52	0.0	0.0	0.0	0.29	0.52	0.69	0.65	0.60	0.58	0.55	0.52
53	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	I T E M	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	LIGHT TRUCKS											
21	EXTEND MPG	4,181	4,470	4,860	5,216	5,518	5,767	5,987	6,123	6,565	6,808	7,0371
31	CONTROL	4,181	4,470	4,860	5,206	5,500	5,742	5,963	6,300	6,543	6,787	7,0181
41	DIFFERENCE	0.0	0.0	0.0	0.009	0.018	0.025	0.024	0.023	0.022	0.020	0.0191
51	X DIFFERENCE	0.0	0.0	0.0	0.118	0.32	0.43	0.39	0.36	0.33	0.30	0.271
61	MEMO TRUCKS AND VANS REG AS AUTOS											
71	EXTEND MPG	1,896	2,022	2,200	2,380	2,561	2,696	2,812	3,034	3,162	3,311	3,4621
81	CONTROL	1,896	2,022	2,200	2,374	2,549	2,679	2,796	3,018	3,145	3,295	3,4451
91	DIFFERENCE	0.0	0.0	0.0	0.006	0.012	0.017	0.016	0.017	0.017	0.016	0.0161
101	X DIFFERENCE	0.0	0.0	0.0	0.27	0.47	0.62	0.59	0.55	0.53	0.50	0.471
111	NONMEMO TRUCKS											
121	EXTEND MPG	2,285	2,447	2,659	2,835	2,957	3,071	3,174	3,288	3,403	3,497	3,5761
131	CONTROL	2,285	2,447	2,659	2,832	2,952	3,063	3,167	3,282	3,398	3,493	3,5731
141	DIFFERENCE	0.0	0.0	0.0	0.003	0.006	0.008	0.007	0.006	0.005	0.004	0.0031
151	X DIFFERENCE	0.0	0.0	0.0	0.10	0.19	0.26	0.22	0.18	0.15	0.12	0.081
161												
171	SCRAPAGE											
181	PERSONAL VEHICLES											
191	EXTEND MPG	9,621	9,963	10,282	10,812	10,987	10,832	10,824	11,360	11,890	12,259	12,6911
201	CONTROL	9,621	9,963	10,282	10,807	10,968	10,792	10,769	11,301	11,834	12,208	12,6841
211	DIFFERENCE	0.0	0.0	0.0	0.004	0.019	0.040	0.055	0.060	0.056	0.051	0.0461
221	X DIFFERENCE	0.0	0.0	0.0	0.04	0.18	0.37	0.51	0.53	0.47	0.41	0.361
231	AUTOMOBILES											
241	EXTEND MPG	9,188	9,438	9,660	10,065	10,080	9,746	9,551	9,837	10,241	10,473	10,7521
251	CONTROL	9,188	9,438	9,660	10,065	10,080	9,746	9,551	9,837	10,241	10,473	10,7521
261	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
271	X DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
281	MEMO TRUCKS AND VANS REG AS AUTOS											
291	EXTEND MPG	0,433	0,525	0,623	0,747	0,907	1,087	1,272	1,523	1,649	1,786	1,9391
301	CONTROL	0,433	0,525	0,623	0,742	0,888	1,046	1,217	1,464	1,594	1,735	1,8941
311	DIFFERENCE	0.0	0.0	0.0	0.004	0.019	0.040	0.055	0.060	0.056	0.051	0.0461
321	X DIFFERENCE	0.0	0.0	0.0	0.60	2.16	3.85	4.51	4.07	3.49	2.91	2.411
331	LIGHT TRUCKS											
341	EXTEND MPG	1,485	1,656	1,862	2,127	2,441	2,770	3,134	3,570	3,871	4,185	4,5411
351	CONTROL	1,485	1,656	1,862	2,125	2,422	2,723	3,063	3,490	3,796	4,116	4,4771
361	DIFFERENCE	0.0	0.0	0.0	0.002	0.019	0.047	0.071	0.080	0.075	0.070	0.0641
371	X DIFFERENCE	0.0	0.0	0.0	0.11	0.79	1.73	2.31	2.29	1.98	1.69	1.431
381	MEMO TRUCKS AND VANS REG AS AUTOS											
391	EXTEND MPG	0,433	0,525	0,623	0,747	0,907	1,087	1,272	1,523	1,649	1,786	1,9391
401	CONTROL	0,433	0,525	0,623	0,742	0,888	1,046	1,217	1,464	1,594	1,735	1,8941
411	DIFFERENCE	0.0	0.0	0.0	0.004	0.019	0.040	0.055	0.060	0.056	0.051	0.0461
421	X DIFFERENCE	0.0	0.0	0.0	0.60	2.16	3.85	4.51	4.07	3.49	2.91	2.411
431	NONMEMO TRUCKS											
441	EXTEND MPG	1,052	1,131	1,240	1,380	1,534	1,683	1,861	2,047	2,222	2,400	2,6021
451	CONTROL	1,052	1,131	1,240	1,382	1,534	1,676	1,846	2,027	2,202	2,381	2,5841
461	DIFFERENCE	0.0	0.0	0.0	-0.002	-0.000	0.007	0.016	0.020	0.020	0.019	0.0181
471	X DIFFERENCE	0.0	0.0	0.0	-0.16	-0.00	0.40	0.86	1.00	0.89	0.80	0.711
481												
491	YEAR END STOCK											
501	PERSONAL VEHICLES											
511	EXTEND MPG	116,367	119,044	122,063	125,177	128,730	132,391	135,988	139,473	142,784	145,856	148,6491
521	CONTROL	116,367	119,044	122,063	125,175	128,736	132,420	136,056	139,584	142,933	146,039	148,8621
531	DIFFERENCE	0.0	0.0	0.0	0.002	-0.005	-0.029	-0.067	-0.110	-0.149	-0.184	-0.2131
541	X DIFFERENCE	0.0	0.0	0.0	0.00	-0.00	-0.07	-0.05	-0.08	-0.10	-0.13	-0.141

TABLE 24.00 LIGHT TRUCKS SECTOR (MILL VEHICLES)

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11 AUTOMOBILES											
21EXTEND MPG	104,117	105,296	106,738	108,219	110,118	112,170	114,227	116,201	117,999	119,546	120,816
31CONTROL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
51X DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61 MEMO TRUCKS AND VANS REG AS AUTOS											
71EXTEND MPG	12,250	13,747	15,325	16,959	18,612	20,221	21,761	23,272	24,785	26,310	27,832
81CONTROL	12,250	13,747	15,325	16,957	18,617	20,250	21,829	23,383	24,934	26,494	28,046
91DIFFERENCE	0.0	0.0	0.0	0.002	-0.005	-0.029	-0.067	-0.110	-0.149	-0.213	-0.216
101X DIFFERENCE	0.0	0.0	0.0	0.01	-0.03	-0.14	-0.31	-0.47	-0.60	-0.69	-0.76
111 LIGHT TRUCKS											
121EXTEND MPG	33,293	36,107	39,104	42,193	45,270	48,268	51,121	53,873	56,567	59,189	61,685
131CONTROL	33,293	36,107	39,104	42,186	45,265	48,285	51,185	53,995	56,742	59,413	61,950
141DIFFERENCE	0.0	0.0	0.0	0.007	0.005	-0.017	-0.064	-0.121	-0.175	-0.224	-0.269
151X DIFFERENCE	0.0	0.0	0.0	0.02	0.01	-0.04	-0.13	-0.22	-0.31	-0.38	-0.43
161 MEMO TRUCKS AND VANS REG AS AUTOS											
171EXTEND MPG	12,250	13,747	15,325	16,959	18,612	20,221	21,761	23,272	24,785	26,310	27,832
181CONTROL	12,250	13,747	15,325	16,957	18,617	20,250	21,829	23,383	24,934	26,494	28,046
191DIFFERENCE	0.0	0.0	0.0	0.002	-0.005	-0.029	-0.067	-0.110	-0.149	-0.184	-0.213
201X DIFFERENCE	0.0	0.0	0.0	0.01	-0.03	-0.14	-0.31	-0.47	-0.60	-0.69	-0.76
211 NORMED TRUCKS											
221EXTEND MPG	21,044	22,360	23,779	25,235	26,658	28,046	29,359	30,601	31,782	32,879	33,851
231CONTROL	21,044	22,360	23,779	25,230	26,647	28,035	29,356	30,612	31,807	32,920	33,909
241DIFFERENCE	0.0	0.0	0.0	0.005	0.011	0.012	0.003	-0.011	-0.025	-0.040	-0.056
251X DIFFERENCE	0.0	0.0	0.0	0.02	0.04	0.04	0.01	-0.04	-0.08	-0.12	-0.16
261											
271MID YEAR STOCK											
281 PERSONAL VEHICLES											
291EXTEND MPG	114,876	117,639	120,492	123,544	126,869	130,469	134,045	137,630	141,036	144,216	147,147
301CONTROL	114,876	117,639	120,492	123,544	126,871	130,486	134,133	137,719	141,166	144,382	147,304
311DIFFERENCE	0.0	0.0	0.0	0.001	-0.002	-0.017	-0.048	-0.089	-0.130	-0.166	-0.191
321X DIFFERENCE	0.0	0.0	0.0	0.00	-0.00	-0.01	-0.04	-0.06	-0.09	-0.12	-0.13
331 AUTOMOBILES											
341EXTEND MPG	103,357	104,640	105,956	107,403	109,084	111,053	113,094	115,114	117,007	118,669	120,076
351CONTROL	103,357	104,640	105,956	107,403	109,084	111,053	113,094	115,114	117,007	118,669	120,076
361DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
371X DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
381 MEMO TRUCKS AND VANS REG AS AUTOS											
391EXTEND MPG	11,519	12,998	14,536	16,142	17,785	19,417	20,991	22,517	24,029	25,547	27,071
401CONTROL	11,519	12,998	14,536	16,141	17,787	19,434	21,039	22,606	24,159	25,714	27,270
411DIFFERENCE	0.0	0.0	0.0	0.001	-0.002	-0.017	-0.048	-0.089	-0.130	-0.166	-0.191
421X DIFFERENCE	0.0	0.0	0.0	0.01	-0.01	-0.09	-0.23	-0.39	-0.54	-0.65	-0.73
431 LIGHT TRUCKS											
441EXTEND MPG	31,945	34,700	37,606	40,649	43,732	46,769	49,694	52,497	55,220	57,878	60,437
451CONTROL	31,945	34,700	37,606	40,645	43,726	46,775	49,735	52,590	55,368	58,077	60,684
461DIFFERENCE	0.0	0.0	0.0	0.003	0.006	-0.006	-0.041	-0.093	-0.148	-0.199	-0.244
471X DIFFERENCE	0.0	0.0	0.0	0.01	0.01	-0.01	-0.08	-0.18	-0.27	-0.34	-0.41
481 MEMO TRUCKS AND VANS REG AS AUTOS											
491EXTEND MPG	11,519	12,998	14,536	16,142	17,785	19,417	20,991	22,517	24,029	25,547	27,071
501CONTROL	11,519	12,998	14,536	16,141	17,787	19,434	21,039	22,606	24,159	25,714	27,270
511DIFFERENCE	0.0	0.0	0.0	0.001	-0.002	-0.017	-0.048	-0.089	-0.130	-0.166	-0.191
521X DIFFERENCE	0.0	0.0	0.0	0.01	-0.01	-0.09	-0.23	-0.39	-0.54	-0.65	-0.73

TABLE 24,00 LIGHT TRUCKS SECTOR (MILL. VEHICLES)

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	NONMEMO TRUCKS	20,427	21,702	23,070	24,507	25,946	27,352	28,703	29,980	31,192	32,331	33,366
21	EXTEND MPG	20,427	21,702	23,070	24,504	25,939	27,341	28,695	29,968	31,210	32,364	33,414
31	CONTROL	0,0	0,0	0,0	0,003	0,008	0,011	0,008	-0,004	-0,018	-0,033	-0,048
41	DIFFERENCE	0,0	0,0	0,0	0,01	0,03	0,04	0,03	-0,01	-0,06	-0,10	-0,14
51	DIFFERENCE	0,0	0,0	0,0	0,01	0,03	0,04	0,03	-0,01	-0,06	-0,10	-0,14

TABLE 2A.00 PRICES AND CAPITALIZED COSTS (DOLLARS)

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	21 CAPITALIZED COST PER MILE											
31	PERSONAL VEHICLES											
41	EXTEND MPG	0,3027	0,3270	0,353A	0,3814	0,4094	0,4375	0,4672	0,4966	0,5269	0,5588	0,5919
51	CONTROL	0,3027	0,3270	0,353A	0,381A	0,4102	0,43A7	0,4684	0,4979	0,52A3	0,5603	0,5935
61	DIFFERENCE	0,0	0,0	0,0	-0,0004	-0,0008	-0,0012	-0,0013	-0,0013	-0,0014	-0,0015	-0,0016
71	DIFFERENCE	0,0	0,0	0,0	-0,10	-0,19	-0,27	-0,27	-0,27	-0,27	-0,27	-0,27
81	AUTOMOBILES											
91	EXTEND MPG	0,2997	0,3237	0,3504	0,3779	0,4057	0,4337	0,4629	0,4920	0,5220	0,5514	0,5860
101	CONTROL	0,2997	0,3237	0,3504	0,3779	0,4057	0,4337	0,4629	0,4920	0,5220	0,5534	0,5860
111	DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
121	DIFFERENCE	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
131	PERSONAL TRUCKS											
141	EXTEND MPG	0,3267	0,3535	0,3813	0,4103	0,4394	0,4685	0,5010	0,5336	0,5667	0,601A	0,6384
151	CONTROL	0,3267	0,3535	0,3813	0,4140	0,446A	0,479A	0,5129	0,5461	0,5800	0,6157	0,6510
161	DIFFERENCE	0,0	0,0	0,0	-0,0037	-0,0075	-0,0113	-0,0119	-0,0125	-0,0132	-0,0139	-0,0146
171	DIFFERENCE	0,0	0,0	0,0	-0,90	-1,67	-2,35	-2,32	-2,30	-2,28	-2,26	-2,24
181	COMMERCIAL TRUCKS											
191	EXTEND MPG	0,2545	0,2749	0,2961	0,3183	0,3406	0,3629	0,3879	0,4131	0,4388	0,465A	0,4941
201	CONTROL	0,2545	0,2749	0,2961	0,3214	0,3469	0,3725	0,3981	0,423A	0,4500	0,4776	0,5065
211	DIFFERENCE	0,0	0,0	0,0	-0,0031	-0,0063	-0,0096	-0,0101	-0,0107	-0,0113	-0,011A	-0,0124
221	DIFFERENCE	0,0	0,0	0,0	-0,97	-1,82	-2,58	-2,55	-2,52	-2,50	-2,4A	-2,45
231	GVW 1											
241	EXTEND MPG	0,2627	0,2832	0,3047	0,3274	0,3503	0,3731	0,3990	0,4250	0,4515	0,4794	0,5086
251	CONTROL	0,2627	0,2832	0,3047	0,330A	0,3571	0,3835	0,4100	0,4365	0,4636	0,4922	0,5220
261	DIFFERENCE	0,0	0,0	0,0	-0,0034	-0,0069	-0,0104	-0,0109	-0,0115	-0,0122	-0,012A	-0,0134
271	DIFFERENCE	0,0	0,0	0,0	-1,03	-1,92	-2,70	-2,67	-2,64	-2,62	-2,60	-2,57
281	GVW 2											
291	EXTEND MPG	0,2463	0,2670	0,2883	0,3101	0,3320	0,3537	0,3781	0,4026	0,4276	0,4540	0,4816
301	CONTROL	0,2463	0,2670	0,2883	0,3129	0,3378	0,3626	0,3875	0,4125	0,4381	0,4650	0,4931
311	DIFFERENCE	0,0	0,0	0,0	-0,0028	-0,0058	-0,0089	-0,0094	-0,0099	-0,0105	-0,0110	-0,0116
321	DIFFERENCE	0,0	0,0	0,0	-0,90	-1,72	-2,46	-2,43	-2,41	-2,39	-2,37	-2,35

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

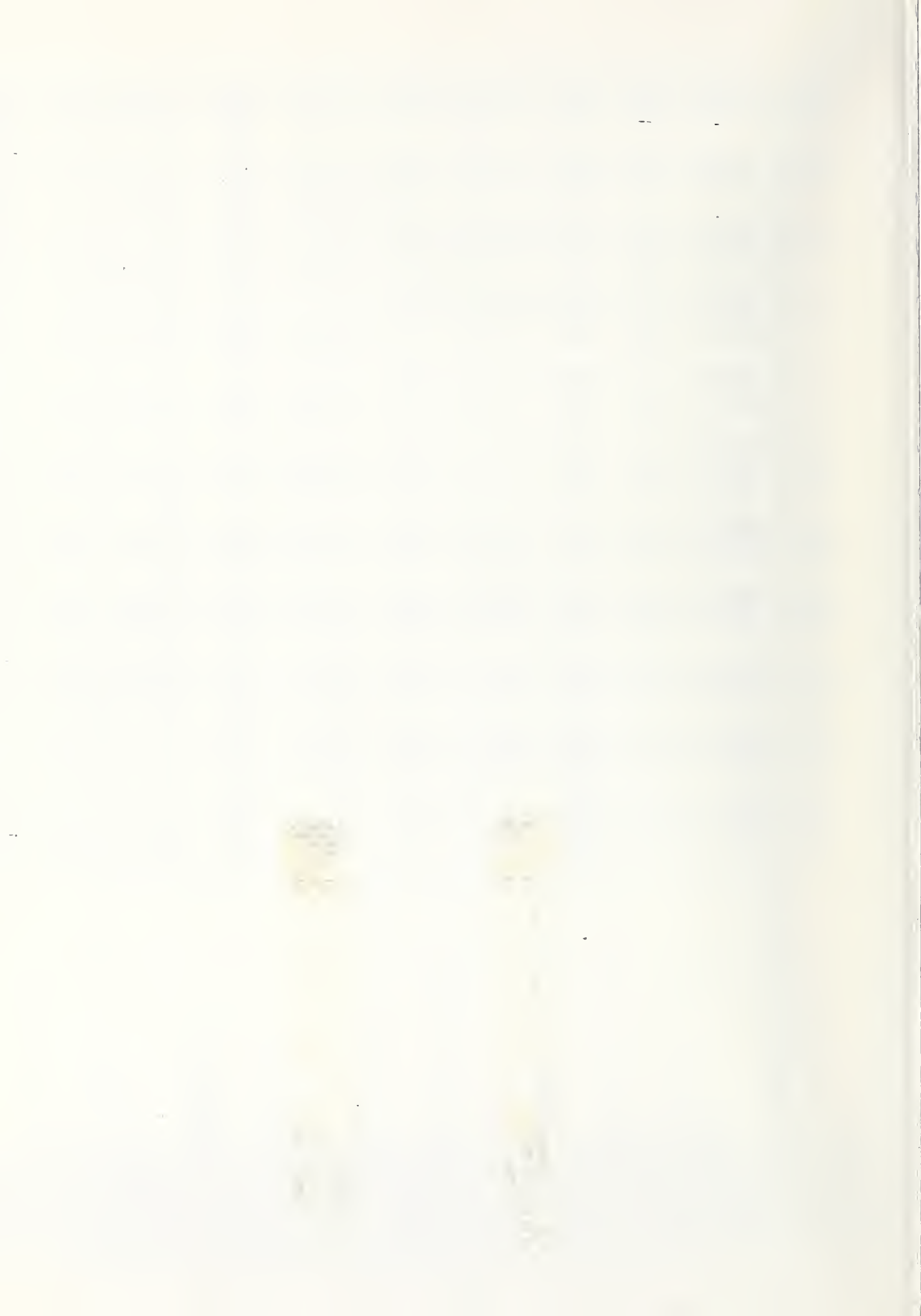
LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
1	OVERALL FLUET MILFS PER GALLON											
21	AUTOMOBILES											
31	EXTEND MPG	14.2	14.5	15.1	15.7	16.4	17.1	17.8	18.5	19.2	19.8	20.31
41	CONTROL	14.2	14.5	15.1	15.7	16.4	17.1	17.8	18.5	19.2	19.8	20.31
51	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
61	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
71	PERSONAL TRUCKS											
81	EXTEND MPG	11.2	11.6	12.0	12.5	13.0	13.6	14.1	14.6	15.0	15.4	15.81
91	CONTROL	11.2	11.6	12.0	12.5	13.0	13.6	14.1	14.6	15.0	15.4	15.81
101	DIFFERENCE	0.0	0.0	0.0	0.1	0.2	0.5	0.7	0.9	1.1	1.3	1.51
111	DIFFERENCE	0.0	0.0	0.0	0.63	1.82	3.47	5.02	6.49	7.87	9.17	10.371
121	COMMERCIAL TRUCKS											
131	EXTEND MPG	11.2	11.3	11.6	11.9	12.2	12.5	12.9	13.2	13.5	13.7	14.01
141	CONTROL	11.2	11.3	11.6	11.8	12.0	12.2	12.4	12.6	12.8	12.9	13.11
151	DIFFERENCE	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.5	0.7	0.8	0.91
161	DIFFERENCE	0.0	0.0	0.0	0.41	1.18	2.28	3.33	4.34	5.31	6.24	7.121
171												
181	TOTAL FUEL CONSUMPTION											
191	EXTEND MPG	115.585	117.128	118.170	119.042	119.923	120.858	121.777	122.638	123.684	124.989	126.2671
201	CONTROL	115.585	117.128	118.170	119.146	120.242	121.512	122.794	124.035	125.468	127.160	128.8211
211	DIFFERENCE	0.0	0.0	0.0	-0.104	-0.319	-0.654	-1.017	-1.398	-1.784	-2.171	-2.5551
221	DIFFERENCE	0.0	0.0	0.0	-0.09	-0.27	-0.54	-0.83	-1.13	-1.42	-1.71	-1.981
231	AUTOMOBILES											
241	EXTEND MPG	83.957	83.668	82.663	81.444	80.313	79.286	78.274	77.331	76.612	76.061	75.5171
251	CONTROL	83.957	83.668	82.663	81.464	80.313	79.286	78.274	77.331	76.612	76.061	75.5171
261	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
271	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
281	PERSONAL TRUCKS											
291	EXTEND MPG	10.825	11.934	12.996	14.028	15.013	15.903	16.723	17.491	18.246	19.016	19.7951
301	CONTROL	10.825	11.934	12.996	14.092	15.212	16.315	17.367	18.378	19.380	20.395	21.4181
311	DIFFERENCE	0.0	0.0	0.0	-0.063	-0.199	-0.412	-0.644	-0.887	-1.134	-1.379	-1.6231
321	DIFFERENCE	0.0	0.0	0.0	-0.45	-1.31	-2.52	-3.71	-4.83	-5.85	-6.76	-7.581
331	COMMERCIAL TRUCKS											
341	EXTEND MPG	20.803	21.527	22.511	23.550	24.596	25.649	26.780	27.816	28.826	29.912	30.9541
351	CONTROL	20.803	21.527	22.511	23.590	24.717	25.911	27.152	28.376	29.476	30.704	31.8861
361	DIFFERENCE	0.0	0.0	0.0	-0.040	-0.120	-0.242	-0.373	-0.510	-0.650	-0.792	-0.9321
371	DIFFERENCE	0.0	0.0	0.0	-0.17	-0.49	-0.93	-1.37	-1.80	-2.21	-2.58	-2.921
381												
391	AVERAGE AGE											
401	PERSONAL VEHICLES											
411	EXTEND MPG	5.628	5.638	5.639	5.616	5.582	5.569	5.596	5.641	5.681	5.720	5.7621
421	CONTROL	5.628	5.638	5.639	5.616	5.582	5.570	5.597	5.642	5.683	5.721	5.7641
431	DIFFERENCE	0.0	0.0	0.0	-0.000	-0.000	-0.001	-0.001	-0.001	-0.002	-0.002	-0.0021
441	DIFFERENCE	0.0	0.0	0.0	-0.00	-0.01	-0.01	-0.02	-0.02	-0.03	-0.03	-0.031
451	AUTOMOBILES											
461	EXTEND MPG	5.743	5.758	5.758	5.727	5.677	5.648	5.658	5.687	5.710	5.728	5.7491
471	CONTROL	5.743	5.758	5.758	5.727	5.677	5.648	5.658	5.687	5.710	5.728	5.7491
481	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
491	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
501	TRUCKS											
511	EXTEND MPG	4.597	4.672	4.770	4.878	4.993	5.119	5.260	5.401	5.540	5.681	5.8211
521	CONTROL	4.597	4.672	4.770	4.879	4.996	5.125	5.268	5.411	5.550	5.692	5.8311
531	DIFFERENCE	0.0	0.0	0.0	-0.001	-0.003	-0.006	-0.008	-0.009	-0.010	-0.010	-0.0101
541	DIFFERENCE	0.0	0.0	0.0	-0.02	-0.06	-0.11	-0.15	-0.17	-0.18	-0.18	-0.171

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11 COMMERCIAL TRUCKS											
21EXTEND MPG	6.188	6.211	6.224	6.230	6.242	6.248	6.306	6.354	6.410	6.473	6.544
31CONTROL	6.188	6.211	6.224	6.230	6.243	6.270	6.309	6.358	6.414	6.477	6.547
41DIFFERENCE	0.0	0.0	0.0	-0.000	-0.001	-0.002	-0.003	-0.004	-0.004	-0.004	-0.003
51X DIFFERENCE	0.0	0.0	0.0	-0.01	-0.02	-0.04	-0.05	-0.06	-0.06	-0.06	-0.05
61											
71MILS PER VEHICLE											
81 PERSONAL VEHICLES											
91EXTEND MPG	11.410	11.509	11.638	11.781	11.924	12.042	12.156	12.261	12.356	12.444	12.522
101CONTROL	11.410	11.509	11.638	11.779	11.917	12.027	12.132	12.229	12.315	12.394	12.464
111DIFFERENCE	0.0	0.0	0.0	0.002	0.008	0.016	0.024	0.032	0.041	0.050	0.059
121X DIFFERENCE	0.0	0.0	0.0	0.02	0.06	0.13	0.20	0.27	0.33	0.40	0.47
131 AUTOMOBILES											
141EXTEND MPG	11.506	11.618	11.762	11.921	12.078	12.206	12.331	12.447	12.552	12.648	12.736
151CONTROL	11.506	11.618	11.762	11.921	12.078	12.206	12.331	12.447	12.552	12.648	12.736
161DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171X DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
181 TRUCKS											
191EXTEND MPG	10.546	10.628	10.735	10.851	10.978	11.106	11.214	11.312	11.403	11.493	11.576
201CONTROL	10.546	10.628	10.735	10.832	10.924	11.002	11.064	11.118	11.169	11.219	11.265
211DIFFERENCE	0.0	0.0	0.0	0.019	0.054	0.104	0.150	0.194	0.236	0.274	0.311
221X DIFFERENCE	0.0	0.0	0.0	0.17	0.50	0.94	1.36	1.75	2.11	2.45	2.76
231 COMMERCIAL TRUCKS											
241EXTEND MPG	11.374	11.258	11.306	11.402	11.545	11.752	11.990	12.216	12.444	12.719	12.999
251CONTROL	11.374	11.258	11.306	11.376	11.470	11.604	11.769	11.921	12.076	12.277	12.482
261DIFFERENCE	0.0	0.0	0.0	0.026	0.076	0.148	0.222	0.295	0.368	0.442	0.516
271X DIFFERENCE	0.0	0.0	0.0	0.23	0.66	1.28	1.88	2.47	3.05	3.60	4.14
281											
291NEW REGISTRATIONS TO BEGINNING STOCK											
301 PERSONAL VEHICLES											
311EXTEND MPG	0.110	0.109	0.112	0.114	0.116	0.113	0.109	0.109	0.109	0.107	0.106
321CONTROL	0.110	0.109	0.112	0.114	0.116	0.112	0.109	0.109	0.109	0.107	0.106
331DIFFERENCE	0.0	0.0	0.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
341X DIFFERENCE	0.0	0.0	0.0	0.05	0.08	0.12	0.14	0.16	0.19	0.21	0.23
351 AUTOMOBILES											
361EXTEND MPG	0.103	0.102	0.105	0.108	0.111	0.107	0.103	0.103	0.104	0.102	0.101
371CONTROL	0.103	0.102	0.105	0.108	0.111	0.107	0.103	0.103	0.104	0.102	0.101
381DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
391X DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
401 TRUCKS											
411EXTEND MPG	0.176	0.165	0.160	0.155	0.151	0.145	0.139	0.139	0.136	0.134	0.132
421CONTROL	0.176	0.165	0.160	0.155	0.150	0.144	0.138	0.138	0.135	0.132	0.130
431DIFFERENCE	0.0	0.0	0.0	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.002
441X DIFFERENCE	0.0	0.0	0.0	0.27	0.46	0.65	0.73	0.86	1.01	1.10	1.17
451 COMMERCIAL TRUCKS											
461EXTEND MPG	0.115	0.116	0.119	0.119	0.117	0.115	0.113	0.112	0.111	0.110	0.109
471CONTROL	0.115	0.116	0.119	0.119	0.117	0.115	0.113	0.112	0.111	0.110	0.109
481DIFFERENCE	0.0	0.0	0.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
491X DIFFERENCE	0.0	0.0	0.0	0.10	0.17	0.22	0.18	0.17	0.19	0.20	0.20
501											
511SCRAPAGE TO BEGINNING STOCK											

TABLE 30.00 MISCELLANEOUS ENDOGENOUS VARIABLES

LINE	ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
11	PERSONAL VEHICLES											
21	EXTEND MPG	0.085	0.086	0.086	0.089	0.088	0.084	0.082	0.084	0.085	0.086	0.087
31	CONTROL	0.085	0.086	0.086	0.089	0.088	0.084	0.081	0.083	0.085	0.085	0.087
41	DIFFERENCE	0.0	0.0	0.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
51	DIFFERENCE	0.0	0.0	0.0	0.04	0.17	0.38	0.53	0.58	0.55	0.52	0.49
61	AUTOMOBILES											
71	EXTEND MPG	0.089	0.091	0.092	0.094	0.093	0.089	0.085	0.086	0.088	0.089	0.090
81	CONTROL	0.089	0.091	0.092	0.094	0.093	0.089	0.085	0.086	0.088	0.089	0.090
91	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111	TRUCKS											
121	EXTEND MPG	0.040	0.043	0.045	0.049	0.054	0.058	0.063	0.070	0.071	0.072	0.074
131	CONTROL	0.040	0.043	0.045	0.048	0.052	0.056	0.060	0.067	0.068	0.070	0.071
141	DIFFERENCE	0.0	0.0	0.0	0.000	0.001	0.002	0.003	0.003	0.003	0.002	0.002
151	DIFFERENCE	0.0	0.0	0.0	0.60	2.15	3.88	4.66	4.39	3.98	3.54	3.13
161	COMMERCIAL TRUCKS											
171	EXTEND MPG	0.053	0.054	0.055	0.058	0.061	0.063	0.066	0.070	0.073	0.075	0.079
181	CONTROL	0.053	0.054	0.055	0.058	0.061	0.063	0.066	0.069	0.072	0.075	0.078
191	DIFFERENCE	0.0	0.0	0.0	-0.000	-0.000	0.000	0.001	0.001	0.001	0.001	0.001
201	DIFFERENCE	0.0	0.0	0.0	-0.16	-0.02	0.36	0.81	0.99	0.92	0.88	0.84
211												
221	ACTIVITIES AS SHARE OF INCOME											
231	EXTEND MPG	27.9	28.0	28.0	28.1	28.3	28.5	28.6	28.8	29.1	29.3	29.5
241	CONTROL	27.9	28.0	28.0	28.1	28.3	28.5	28.6	28.8	29.1	29.3	29.5
251	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
261	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
271												
281	FARM PROPRIETOR'S INCOME											
291	EXTEND MPG	28.081	30.081	32.081	34.081	36.081	38.081	40.081	42.081	44.532	47.265	50.151
301	CONTROL	28.081	30.081	32.081	34.081	36.081	38.081	40.081	42.081	44.532	47.265	50.151
311	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
321	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
331	EMPLOYEE COMPENSATION											
341	AGRICULTURE											
351	EXTEND MPG	15.583	17.223	18.931	20.797	22.569	24.225	25.749	27.415	29.202	30.888	32.634
361	CONTROL	15.583	17.223	18.931	20.797	22.569	24.225	25.749	27.415	29.202	30.888	32.634
371	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
381	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
391	CONTRACT CONSTRUCTION											
401	EXTEND MPG	74.001	80.756	88.811	97.070	105.456	113.895	122.077	131.352	142.042	151.373	161.054
411	CONTROL	74.001	80.756	88.811	97.070	105.456	113.895	122.077	131.352	142.042	151.373	161.054
421	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
431	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
441	SERVICES											
451	EXTEND MPG	227.209	253.393	283.896	318.412	355.562	398.044	433.549	476.854	525.792	575.751	629.798
461	CONTROL	227.209	253.393	283.896	318.412	355.562	398.044	433.549	476.854	525.792	575.751	629.798
471	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
481	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
491	WHOLESALE AND RETAIL TRADE											
501	EXTEND MPG	240.921	264.515	290.891	319.996	350.551	381.187	411.800	444.411	480.553	516.776	555.324
511	CONTROL	240.921	264.515	290.891	319.996	350.551	381.187	411.800	444.411	480.553	516.776	555.324
521	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
531	DIFFERENCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



APPENDIX D
REPORT OF NEW TECHNOLOGY

The work performed under this contract has led to an econometric model which is both innovative and state of the art. It provides long-run policy analysis and forecasting of annual trends in the U.S. motor vehicle market, given various policy options and alternative socioeconomic futures.

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