February 3, 1981

Mr. Donald A. Trilling
Director, Office of Industry Policy
Department of Transportation
400 7th Street, S.W., Room 9222
Washington, D. C. 20590

Dear Mr. Trilling:

As per your letter this date requesting a copy of MVMFA's letter to The President of the United States dated February 3, 1981 regarding the motor vehicle manufacturers' views as to issues and recommendations, attached is a copy of such letter.

We appreciate your interest in this matter.

Very truly yours,

[Signature]

J. Adduci

MVMFA: jb
Attachment
MOTOR VEHICLE MANUFACTURERS ASSOCIATION
of the United States, Inc.
300 Madison Avenue
New York, New York 10017

GERALD C. MEYERS, Chairman
Y. J. ADJUUU, President and Chief Executive Officer
THOMAS H. HARRIS, Senior Vice President

February 3, 1981

The President
The White House
Washington, DC 20500

Mr. President:

On behalf of the companies that manufacture more than 99 percent of all domestically produced motor vehicles we are writing to you on a matter of grave concern.

The condition of U.S. motor vehicle manufacturing grows increasingly urgent day by day, not only for the industry itself but also for the U.S. economy as a whole. Today, the critical problem is the depressed volume of domestic vehicle sales, production, and employment. It is caused by a number of key factors, including the increasingly large share of U.S. sales claimed by imports from Japan, exceedingly high interest rates and skyrocketing inflation, recession, and excessive government regulations.

Beyond this immediate issue lies the fundamental challenge of restoring U.S. competitiveness in automotive production, so that the industry once again can become a leading source of economic strength and vitality for our country.

Immediate Problem

The symptoms of the depression of the motor vehicle industry are plain to see in the statistics on production, financial performance, and employment. U.S. car production in 1980 was 31 percent below 1978 (before the revolution in Iran) and domestic car sales in 1980 were only 6.4 million units -- both the lowest levels since 1961. U.S. truck production has suffered even more; production in 1980 was down 56 percent from 1978.

- In the automotive and related industries, this decline in output has resulted in the layoff of almost 900,000 employees.

- In auto manufacturing alone, nearly 200,000 workers are on indefinite layoff. The hardship of these job losses is especially severe in the industrial states of the Midwest and among minority groups.
Profitability has collapsed. In the second half of 1979, the domestic auto companies lost $700 million before taxes; in the first nine months of 1980, pretax losses exceeded $4.6 billion.

The situation among auto dealers is equally serious. Approximately 2,300 domestic dealers have gone out of business since January 1979; almost 83,000 dealership employees have lost their jobs.

Suppliers to U.S. auto manufacturers also have been hit hard. Some 140 supplier plants have been closed in the past two years and unemployment in industries such as steel and rubber is distressingly high.

Several factors have converged to produce these results. Inflation, extraordinarily high interest rates and their effect on consumer confidence have sharply reduced automotive demand. These effects are typical of cyclical downturns in the past, but the fall in automotive demand that began two years ago has been more severe and has persisted much longer than normal.

The dramatic difference now, however, is the sudden and substantial shift in U.S. demand away from family-sized cars and conventional light trucks toward smaller, more fuel-efficient models as U.S. gasoline prices belatedly have begun to increase toward world levels. The abruptness of this shift in demand provided a sizeable opportunity for Japanese cars and trucks developed in a home environment where expensive gasoline has been a long-standing national policy.

In 1980, the Japanese share of U.S. car sales was over 21 percent compared with 12 percent in 1978 and 9 percent in 1976. The growth in the Japanese share of U.S. light truck sales has been even sharper—increasing to more than a 21 percent share for 1980 from 9 percent in 1978 and 8 percent in 1976. These light truck sales are being reduced by the recent enforcement of the existing light truck tariff. With regard to cars, however, growing foreign barriers to Japanese car exports make the open U.S. car market increasingly attractive to Japan. In Europe, for example, governments are alarmed by the recent increase in Japan's share to 10 percent. Officials of the Commission of the European Communities have just concluded two days of discussions with the Japanese government intended to persuade Japan to limit its exports to Western Europe.

Finally, there is the burden of excessive U.S. government regulations. These have continuously added to the cost and price of cars and trucks, magnifying the effects of inflation and further depressing the volume of cars and trucks U.S. consumers can afford to buy each year. They also drain badly needed human and financial resources at a time when the motor vehicle industry can least afford it, and they compromise the fuel efficiency of our vehicles.
U.S. Competitiveness

The issue of cost competitiveness with Japan is of deep concern within the industry; increasingly, it has become a national concern as well. As the recent Department of Transportation report has pointed out so clearly, the auto industry sits at the center of the U.S. manufacturing economy and has played a central role in the definition and accomplishment of the broadest goals of the nation.

This makes competitive auto production one of the cornerstones of the U.S. industrial base. The fundamental issue is whether the United States can afford to accept a permanent shrinkage of this national asset. Japan, West Germany, and most other developed and newly industrialized countries long ago decided they needed a vital auto sector upon which to build their national prosperity. The question, then, is how the United States can expect to enhance its economic strength without a healthy auto sector of its own.

The recent Department of Transportation study is correct in making the following points:

- The structure of the U.S. car market has changed permanently — small cars are here to stay — and we face intense competition from Japan.

- U.S. auto production costs are not competitive with Japan mainly because of differences in productivity and compensation — which result in part from the exchange value of the yen and unique social and geographic factors in Japan. Most of these advantages can be overcome, however, with aggressive programs by management and labor and by effective U.S. government policies.

- U.S. producers, their suppliers and their dealers face at least five years of transition, during which capital spending programs will be enormous.

How the United States found itself in this position is not really the issue any longer. There is blame enough to be shared by everyone. The issue now is what management, labor and government must do to get the industry healthy and competitive once more.

Management and labor have major tasks in costs, productivity, quality and in delivering the right products for our country's needs in the 1980's. Substantial progress is being made. The average fuel economy of the 1981 model domestic car fleet is more than 75 percent better than 1974 models, for example, and the U.S. small car fleet has fuel economy almost as good as the Japanese fleet.

Conversion to the production of greater volumes of small cars is proceeding as rapidly as machine tools can be procured, new plants can be built and new models can be designed. In fact, a substantial surplus of U.S. small car capacity exists today and availability will increase by another 1.5 million units in model year 1982. U.S. producers must sell this capacity of fuel-efficient cars to generate the capital needed to finance the $70 to $80 billion investment committed through 1985 to complete the fleet conversion.
Government Actions

Government actions are also vital to success and they carry the same urgency as those under way in the private sector. MVMA member companies urge the Administration and Congress to move swiftly and aggressively in four critical areas:

- First, reduce the pressure on capital markets, interest rates, and consumer confidence through substantial reductions in Federal spending. We are heartened that you have made this a high priority; small businesses, including auto dealers and suppliers, have been especially hard-hit by high interest rates.

- Second, undertake initiatives to persuade the government of Japan to demonstrate responsible international behavior by taking action which would result in a voluntary, immediate and substantial reduction in passenger car exports to the United States for a meaningful period of time. For the long run, the Japanese government should actively encourage its auto companies to make the necessary investments to contribute jobs, taxes and capital to the U.S. economy in view of the sales benefits they expect to obtain here. These steps clearly would be in Japan's national interest in order to help abate the growing protectionist pressures which threaten the fragile structure of international trade.

- Third, eliminate excessive and counterproductive government regulations where it has been demonstrated that changes would produce large cost savings and that the impact on specific concerns would be modest. Additionally, extend the temporary moratorium on the issuance of new regulations to include those already approved but not yet effective. Re-examine antitrust policy to assure that it is promoting competition and not stifling progress. Furthermore, as part of the antitrust policy re-examination, withdraw the "Smog Consent Decree".

- Fourth, encourage vitally needed investment in U.S. business through improved capital recovery allowances; make the investment tax credit refundable so it will do the job Congress intended for the industries that need it most; encourage research and development through tax incentives including refundability; and extend energy savings tax credits, (also refundable) to investments made to produce more energy-efficient products.

More specific treatment of our recommendations on regulations and capital formation is provided in the attachments; member companies also will be furnishing more detailed proposals on their own to the appropriate agencies.

The four-step program described above, together with aggressive action being pursued in the private sector, will importantly contribute to the solution of both short-term and long-term problems in the U.S.
motor vehicle industry. The U.S. economy will thus gain a dual benefit — immediately, in added jobs and output, and, in the future, by reviving the industrial strength upon which the international position of the United States ultimately depends.

We are delighted by the Administration's desire to work with us on these urgent issues and your prompt action in appointing an Automotive Task Force headed by Secretary Drew Lewis. NVMA member companies wish to emphasize that they are most anxious to cooperate fully with the Secretary and other members of your Administration. We know how important it is to reach a national consensus to support the decisive action needed to revitalize the automotive sector and the entire national economy.

Sincerely yours,

Gerald C. Meyers, Chairman
and Chief Executive Officer
American Motors Corporation

Lee A. Iacocca, Chairman
and Chief Executive Officer
Chrysler Corporation

Philip Caldwell, Chairman
and Chief Executive Officer
Ford Motor Company

Ronald E. Burbank, Chief
Executive Officer
Freightliner Corporation

Roger B. Smith, Chairman
and Chief Executive Officer
General Motors Corporation

Archie R. McCardell, Chairman
and Chief Executive Officer
International Harvester Company

Alfred W. Pelletier, Chairman
and Chief Executive Officer
Mack Trucks, Inc.

James W. McLernon, President
and Chief Executive Officer
Volkswagen of America, Inc.

Clint W. Moss, Chairman
and Chief Executive Officer
White Motor Corporation

V. J. Adduci, President
and Chief Executive Officer
Motor Vehicle Manufacturers Association

cc: The Vice President
February 3, 1981

RECOMMENDED FEDERAL TAX POLICY INITIATIVES TO AID CAPITAL FORMATION BY DOMESTIC MOTOR VEHICLE MANUFACTURERS

"The domestic motor vehicle manufacturers are in the midst of an extensive and rapid product restructuring. As they seek the capital needed to redeploy product lines, unprecedented financial difficulties are forcing financial restructuring of the major companies as well as affecting their relative future competitive positions. Capital investment over the next few years will be two or three times historical trends in real terms. In the past, capital spending could be deferred when sales turned down, but the rapid product introduction schedule required for survival in the changed vehicle market now precludes this.

"The economic downturn and the shift in consumer demand have resulted in the most massive losses ever reported by any industry. The drop in sales in the face of the need to finance new product lines has resulted in cash drains so large that they are affecting the ability of the major companies to continue their long-term production and product development plans. The interest and repayment burdens of the major external financing will continue to represent a major burden on domestic producers into the mid-1980's."


Most recent published estimates of the capital investment requirements of U.S. motor vehicle manufacturers over the 1980-85 period range from $70 to $80 billion. If such requirements are to be met, motor vehicle manufacturers will need to be able to raise unprecedented amounts of capital rapidly and efficiently. This capital formation process could be assisted substantially by a number of changes in Federal tax policy. While not every domestic motor vehicle manufacturer would benefit from all of the following policy recommendations (owing to obvious existing and forecast differences in profit and loss positions), these recommendations would, as a complete package, offer both short-term and long-term capital formation aid:
Initiatives Which Would Aid All Industries

A. Adopt an Accelerated Capital Cost Recovery System

Motor vehicle manufacturers, together with all industry in general, would benefit greatly from the adoption of a broadly based, simplified, accelerated capital cost recovery system in place of the current Asset Depreciation Range (ADR) system. An example of such a capital cost recovery system is the approach set forth by Representatives James Jones (D-OK) and Barber Conable (R-NY) during the 96th Congress in the form of their proposed "Capital Cost Recovery Act" (H.R. 4646):

Under this approach, buildings would be written off over ten years, machinery and equipment (including special tools) over five years (with full 10% investment tax credit provided), and vehicles over three years. The shorter recovery periods would be phased in over a five-year period.

An important additional provision is that the depreciation deduction and eligibility for investment tax credit would commence with the earlier of the year in which eligible costs are incurred or the year in which the asset is placed in service, rather than only on a "placed-in-service" basis, as at present.

Recommended Action

Congress should enact legislation establishing a broadly based, simplified, accelerated capital cost recovery system, such as the Jones-Conable approach, especially including the provision that depreciation deductions and investment tax credits apply with the earlier of the year in which eligible costs are incurred or the year in which the asset is placed in service, rather than only on the present "placed-in-service" basis.

* * * *

B. Make Investment Tax Credit Refundable

Present law provides a 10% investment tax credit for investments in certain tangible property. To be eligible for this credit, property must be depreciable or amortizable and must have a useful life of three years. If the property has a useful life of three or four years, a credit of 3-1/3% is allowed; if the useful life is five or six years, a credit of 6-2/3% is allowed; and if the useful life is seven years or more, a full 10% credit is allowed.
The investment tax credit may be used to offset the first $25,000 of tax liability plus a percentage of tax liability in excess of $25,000. This percentage is 80% in 1981 and 90% for 1982 and later years. Excess investment tax credits from a taxable year may be carried back to apply against tax liability for the three preceding years and carried over against the tax liability for the seven succeeding years on a first in, first out basis.

The investment tax credit is a highly valuable means of stimulating capital formation for taxpayers who are in a profit situation and incur a tax liability, but is of no immediate value to taxpayers who are in a loss situation and thus incur no liability. The latter situation generally applies to most domestic motor vehicle manufacturers.

**Recommended Action**

Legislation should be enacted by Congress making unused investment tax credits refundable.

---

**C. Establish a Refundable Research and Development Tax Credit.**

Under present law, a taxpayer may elect to deduct currently, or to amortize over 60 months or more, certain "research or experimental expenditures" incurred in the taxpayer's trade or business which otherwise would have to be capitalized.

Because of the heavy research and development costs being incurred by motor vehicle manufacturers as the result of a rapid shift in market demand for more fuel efficient motor vehicles, the establishment of a research and development tax credit could be very beneficial to domestic automobile and truck manufacturers, especially if it were made refundable. Such a credit could be used both to stimulate and to reward new R&D efforts by all industries.

**Recommended Action**

Legislation should be enacted by Congress establishing a refundable research and development tax credit designed to stimulate and reward new R&D efforts by industry. In enacting such legislation, "research and development" should be defined in substantially the same fashion as it is in the Financial Accounting Standards Board Statement No. 2.
D. Extend the Amount of Time Allowed For Carry Forward of Net Operating Loss and Investment Tax Credit

Under the present law, excess investment tax credits from a taxable year may be applied against the tax liability for the three preceding and the seven succeeding years, on a first in, first out basis. Net operating loss deductions are treated similarly.

Extending the time available to use excess investment tax credits and new operating loss carryovers would enable firms facing prolonged periods of low to non-existent profits to conserve capital once more normal levels of profit were achieved—a situation facing most domestic motor vehicle manufacturers during the early 1980's.

Recommended Action

Congress should enact legislation extending the amount of time allowed to carry forward excess investment tax credits and net operating loss deductions from the existing limit of seven years to a new limit of ten years.

* * * *

E. Reduce the Maximum Corporate Income Tax Rate

Under present law, taxable corporate income over $100,000 is subject to a tax rate of 46%. A lower maximum corporate tax rate would obviously enable motor vehicle manufacturers and other large employers to retain more funds for capital formation.

During the 96th Congress, the Senate Finance Committee proposed reductions in the maximum corporate tax, beginning in 1981, as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Taxable Income</th>
<th>Tax Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>Over $150,000</td>
<td>45</td>
</tr>
<tr>
<td>1982</td>
<td>Over $200,000</td>
<td>44</td>
</tr>
</tbody>
</table>

Recommended Action

Congress should enact legislation reducing the existing maximum corporate tax rate, effective with the first taxable year beginning on or after January 1, 1981. The rate should be reduced in increments of 1% per annum until a new tax rate of 40% is reached, effective with the first taxable year beginning on or after January 1, 1986.
II. Initiatives Targeted at Motor Vehicle Manufacturers

A. Accelerate Depreciation of Certain Machinery and Equipment Lives and Allow Immediate Expensing of Certain Special Tools

As an alternative to the above-recommended capital cost recovery system, a change in guideline depreciation lives under the present ADR system would be beneficial to motor vehicle manufacturers.

Under present law, taxpayers may elect to depreciate their assets under the Asset Depreciation Range (ADR) system. Guideline depreciation lives under this system are established for each industry by the Treasury Department, and the taxpayer may use any life within a range 20% above or below the guideline life (rounded to the nearest one-half year). Presently, the guideline life established for machinery and equipment (M&E) used in motor vehicle manufacturing is 12 years. Within this framework, motor vehicle manufacturers generally use 9-1/2 years for M&E (the lower end of the 20% range).

A credit against tax is allowed for 10% of the cost of machinery and equipment placed in service during the year which has a depreciable life of seven years or more.

Capital formation by motor vehicle manufacturers would be aided if a new guideline with a depreciation life of nine years were established for M&E used to manufacture motor vehicles or component parts for motor vehicles. Motor vehicle manufacturers could elect to use a life at the lower end of the 20% range, resulting in a tax depreciation life of seven years. The full 10% investment tax credit would continue to apply at this depreciation life.

The guideline life established under the ADR system for deferred special tools (those with a useful life of more than one year) used in motor vehicle manufacturing is 3 years. Within this framework, motor vehicle manufacturers use three years for special tools in order to qualify for a 3-1/3% investment tax credit which is available for the cost of assets placed in service during the year having a depreciable life of at least three years. A portion of the funds presently being invested in special tools goes to the purchase of tools having an estimated useful life of one year or less.

The extensive product changes necessary to meet market demands for fuel efficient vehicles and Federal safety and environmental regulatory requirements are causing massive special tooling costs. An elective option to take a current deduction for the cost of all such special tools in the year placed in service would help provide cash needed to fund this large investment.
It should be noted that on a long-term discounted cash flow basis, the net result under this new approach would be approximately similar to present law because the manufacturer electing to take a current deduction would lose the permanent benefit of the 3-1/3% investment tax credit in exchange for the acceleration of a deduction which reverses in later years.

Recommended Action

The Treasury Department should establish a new ADR guideline life of nine years for machinery and equipment used to manfacture motor vehicles or component parts.

Necessary governmental action also should be taken to allow special tools used to manufacture motor vehicles or component parts for motor vehicles to be written-off in the taxable year they are placed in service. Such a write-off should be an elective option under which the electing company could choose to forego the benefit of the present 3-1/3% investment tax credit in order to be able to write off special tools (both one year and those presently deferred) in the taxable year placed in service.

* * * * *

5. Expand Application of Business Energy Investment Tax Credit

The Crude Oil Windfall Profit Tax Act of 1980 (Public Law 96-223) established a number of new business energy investment tax credits for: solar and wind energy property; geothermal equipment; ocean thermal equipment; qualifying hydroelectric generating property; cogeneration equipment; specially defined energy property; petroleum coke and petroleum pitch; coke and coke gas equipment; biomass property; and intercity buses. These investment tax credits range from 10% to 15%.

None of these numerous new incentives for investment in energy saving processes and equipment applies to the machinery, equipment, and tooling used to manufacture the new generations of fuel-efficient automobiles and trucks which the marketplace is now demanding. Extension of the business energy investment tax credit to the machinery, equipment, and tooling used to manufacture motor vehicles with increased fuel economy would not only help meet the enormous anticipated capital needs of domestic motor vehicle manufacturers, but would also aid in the more rapid creation and production of energy conserving new vehicles.
Recommended Action

Congress should enact legislation expanding the application of business energy investment tax credits to cover investments in the machinery, equipment and tooling used to produce motor vehicles with increased fuel economy.

As recommended earlier in this paper, this new investment tax credit should also be made refundable, along with other investment tax credits.
I. The Clean Air Act, as administered by the Environmental Protection Agency contains a number of provisions which add little or nothing to improving the nation's air quality, but do cost the nation billions of dollars. The following identifies these issues and recommends actions which would accomplish these purposes.

1. Air Quality Criteria and Standards

National Ambient Air Quality Standards (NAAQS) express the basic goals of the Act. The manner in which these goals are set is crucial for the Act to safeguard the environment with minimum disruption of the nation's economy. It is essential that they be based upon sound, verifiable scientific data. The present Act, as interpreted by EPA, allows the NAAQS to be established based upon "identifiable" thresholds of physiological effects with no requirement that such effects be harmful or even irritating. Ambient air standards are based on "worst case," and frequently invalidated, medical data combined with an arbitrary safety factor. There is no clear definition of "public health" but it has been interpreted by EPA as including the most sensitive segment of the population plus an additional safety factor.

Standards must be based on adverse health effects, not detectable physiological effects. It is important that adverse health effects, as distinct from other effects, be used in establishing NAAQS.

To compensate for the problems which are inherent in a situation where an agency, such as EPA, is responsible for both prescribing and enforcing a body of standards, the agency should submit its research findings, analyses, and proposed standards to independent scientific review and approval prior to promulgation. This independent scientific review group may be the Science Advisory Board or Clean Air Act Advisory Committee with appropriate safeguards to insure independence, or it may be a body named by and responsible to the National Academy of Sciences or other responsible legislative or administrative agency.
Control measures are applied to various pollution sources without due regard for cost or cost/effectiveness and frequently employing "forcing" technology. The adoption of risk-analysis techniques will permit a more equitable evaluation of the health and economic factors involved in setting a reasonable NAAQS.

Recommended Action

- Require NAAQS to protect the public against unreasonable risk of significant health effects. Define an adverse health effect as a medically significant physiologic or pathologic change, generally evidenced by permanent damage or incapacitatory illness to the individual.

- Require NAAQS to be based upon studies which use the best data available to quantify the risk of adverse health effects.

- Create an independent review group for critical evaluation of the relevancy, quality, and accuracy of each study and data sources and the EPA analysis of the studies used to establish the NAAQS.

- Require risk-analysis to be an integral part of the NAAQS setting process.

- Provide for adequate peer review of all proposed air quality criteria and NAAQS.

- Require each short term NAAQS to allow five exceedances per year to allow for natural or meteorological conditions if current NAAQS rationale is retained.

2. Passenger Car Hydrocarbon Standard

The Clean Air Act requires that hydrocarbon (HC) exhaust emissions for 1981 and subsequent model year passenger vehicles not exceed a level representing a 90% reduction from baseline (1970 model year) vehicles. HC emission standards were instituted because certain species of HC react with other chemicals and compounds in the atmosphere to form harmful pollutants. Early state-of-the-art measurement techniques and relatively low levels of non-reactive HC species in automobile exhaust made it more practical to measure Total Hydrocarbons (THC) present in automobile exhaust. Current emission control hardware, such as catalytic converters, preferentially treat reactive hydrocarbons, leaving a higher percentage of non-reactive HC in the discharged exhaust.
Hydrocarbons are controlled because of their reactive behavior; i.e., only reactive hydrocarbons need to be included in the BC standards. Non-reactive hydrocarbons, such as methane, that can now be easily measured and are present in sufficient quantities in automobile exhaust to warrant exclusion, ought not be regulated. EPA's ambient standard excludes methane and focuses on control of non-methane hydrocarbons.

Recommended Action

- EPA should adopt an exhaust non-methane BC 90% reduction standard of 0.39 gpm as an option to the present 0.41 gpm THC exhaust standard.

Passenger Car CO, NOx and Particulate Exhaust Emission Standards

a. Passenger Car CO Emission Standard

Current EPA projections over-predict CO emissions when compared to trends measured at 50 air monitoring stations. On this basis, the current emission standard goes beyond the levels necessary to protect health and meet NAAQS. In setting standards, the emission levels should be justified on the basis of air quality needs.

Nationally, ambient CO levels in center-city locations have shown a steady decline at the rate of 7% per year with an overall reduction of 35% in ambient levels from 1972 to 1978. Locations traditionally having the worst CO problems have improved at an even faster rate. For example, the 16 U.S. monitoring stations reporting the highest CO concentrations during the five years, 1973 to 1978, have experienced a reduction in ambient CO levels on the average of 45% or about 9% per year. The rate of improvement has been so rapid that a National Academy of Sciences panel report concluded that "the need for the federal 3.4 gpm CO light-duty vehicle standard deserves re-evaluation."

A report from the CO Control Assessment Panel of the National Research Council to EPA, dated June 30, 1980, found the possibility exists that emissions from current California cars, built to either a 7.0 gpm or 9.0 gpm CO standard, will be sufficiently controlled for attainment of the federal CO air quality standard. On the basis of this finding, the Panel recommended that the need for the 3.4 gpm CO emission standard be re-evaluated.
Recommended Action

A less stringent standard, consistent with demonstrable air quality needs, should be established.

b. Passenger Car NOx Emission Standard

Current EPA projections over-predict NOx emissions when compared to trends measured at 50 air monitoring stations. On this basis, the current emission standard goes beyond the levels necessary to protect health and meet air quality standards. In setting standards, the emission levels should be justified on the basis of air quality needs.

Only two urban areas outside of California, Denver and Chicago, failed to achieve the annual-average NOx NAAQS of 100 ug/m³ in 1978, according to an April 1980 EPA draft report on ambient monitoring activities. Both locations are close to the standard with the highest value reported in Chicago at 119 ug/m³ with Denver essentially at the standard. Because ambient NOx concentrations are either close to or below the NAAQS, the need for a 1 gpm NOx standard deserves re-evaluation. Based on available air quality data, a standard as high as 2.0 gpm NOx may provide an adequate margin of safety for public health needs.

c. Passenger Car Diesel Particulate Emission Standards

In March, 1980, the EPA established a final particulate standard for 1982 and subsequent model year light-duty diesel vehicles. These are 0.6 gpm for 1982-84 diesel cars and light-duty trucks, 0.2 gpm for 1985 diesel cars and 0.25 gpm for 1985 diesel trucks below 8500# GVW. EPA has issued a Notice of Proposed Rulemaking for particulate regulations covering heavy-duty engines for vehicles over 8500# GVW with a proposed standard of 0.25 gm/bhp hr.

EPA has found that current diesel cars emit from 0.3 to 1.0 gpm particulates depending on the size of engine utilized. However, the Agency has acknowledged that any attempt to control the NOx emissions to future NOx standard levels causes significant increases in particulate emissions. Thus, for larger diesel engines, EPA has concluded that controlling the particulates to a 0.2 gpm level will be quite difficult because effective hardware has not been demonstrated which will provide adequate particulate control at the more stringent NOx levels. Moreover, manufacturers have publicly expressed great concern about the 0.2 gpm 1985 standard.
More importantly, there is no established evidence to indicate the need for particulate control at 1985 standard levels. An October 1980 National Academy of Sciences study emphatically states that there has been no demonstrated adverse health effect from diesel exhaust.

**Recommended Action**

- Until EPA determines that a need for control to levels more stringent than the 1982 standard is required to meet established public health needs, the Agency should retain the 1982 standard for future model years.

4. **Heavy Truck Standards**

a. **Heavy Duty 1984 Test Procedure**

In February, 1980, EPA issued a final rule for 1984 model heavy duty engines (HDE's) and with it imposed a new transient test procedure and 90% reduction in emissions for HC and CO. The basic issue is whether the adoption of a new transient test procedure and the associated emission standards is appropriate for gasoline and diesel engines. The new transient test procedure, of a limited number of HDE's would not contribute to any significant or commensurate air quality benefit.

Test cycle verification which has been ignored by EPA is particularly important and appropriate since this is the first time that the Agency has relied on computer analytical techniques using data from many different types and sizes of trucks in many different driving usages to develop a single representative certification test cycle. This is completely different from the light-duty certification test cycle which is a real life driving pattern from a specific car operating on a specific road route.

In-use HD vehicle surveillance data are available which show excellent correlation between the current HD test cycle and a "real world" transient cycle.

**Recommended Action**

- The Administrator should retain the heavy duty test procedures currently in use.

b. **Heavy Duty Definition of Useful Life**

EPA has promulgated the definition of useful life as the "full life" of the engine, in contrast to the half life intended by Congress and used in passenger cars and light trucks in the Act. By so doing, EPA is ignoring the intent of Congress.
The Act provides that in the case of vehicles other than light duty, useful life shall be a period of use of five years or 100,000 miles (half life)—or the equivalent unless the Administrator determines that a period of use of greater duration or mileage is appropriate.

Congress believed that the useful life, i.e., half life, for emissions control systems of heavy duty vehicles or engines may be longer than for light duty vehicles, and left this determination up to the Administrator. However, Congress clearly intended that it be the half life, not the full life promulgated by EPA.

In addition, by changing the concept of half life to full useful life, EPA is also increasing the stringency of the emission standards. For example, if the concept were applied and the full life were assumed to be 100,000 miles, this would greatly increase the stringency of the deterioration factor (DF) due to a doubling of the useful life. This increase in the DF must be compensated for by lower initial emission levels.

Recommended Action

1. Reaffirm the Congressional intent that the "half life" concept be applied in determining useful life. EPA should establish a means for defining useful life of heavy-duty engines within the Congressional concept.

2. Heavy Duty 10% AQL

Acceptable quality level (hereinafter AQL) reflects the percentage of a population which will fail to achieve a given quality criteria. "Passenger vehicles during assembly line testing must meet a 40% AQL, which means that the projected failure rate can be no more than 40% of the vehicle type being tested. The important result of using a 40% AQL is that an engine type meeting this quality level will, on average, meet the emission standards.

However, 1984 model year heavy duty engines are required to meet a 10% AQL, or the failure rate must be less than 10% of those tested.

Should the manufacturer fail to achieve the minimum AQL for any of the three regulated exhaust emissions, the certificate of conformity can be revoked, previously sold engines recalled, and additional vehicles and engines may not be produced.

The change to a 10% AQL from a 40% AQL will have the practical effect of lowering the emission standards by as much as 1 additional 5%. This is so because manufacturers will have to achieve emissions reductions in production much below the standard in order to ensure that all engines will pass.
Because Congress required that the standards be determined on the basis of average results from baseline engines, it follows that compliance with the standards was intended by Congress to be on the basis of averaging. This strongly suggests that an average emission level should be used to determine compliance.

Recommended Action

- EPA should revise its SEA regulations to require a 40% AQL for all heavy-duty engines.

5. Passenger Car High Altitude Standards

The Clean Air Act requires that by 1984 all passenger cars be capable of meeting the emissions standards regardless of the altitude at which the cars are sold. EPA has indicated it will expand this requirement to light trucks as well. Though the final regulations have not been promulgated, the implications of the Clean Air Act requirement are onerous and conflict with national objectives to improve fuel economy. The sale of vehicles at high altitude represents only 3-4% of the U.S. market, yet this rule will require that all vehicles sold must be capable of meeting high altitude emissions standards.

The Clean Air Act authorizes EPA to establish appropriate high altitude emission standards prior to 1984 upon a showing of both need and technological feasibility. On October 3, 1980 EPA announced interim high altitude emission standards for 1982 and 1983 cars and light-duty trucks after concluding that "implementation of these standards will provide significant environmental benefits." However, an examination of EPA's analysis and published air quality data did not indicate any compelling argument for the need of special high altitude interim emission standards for motor vehicles. With regard to 1984 and subsequent model year vehicles, the Clean Air Act requires meeting applicable standards regardless of the altitude at which cars are sold. The intent of the 1984 provision was to preclude manufacturers from offering a greater variety of cars at "sea-level" than in high altitude areas and was not established upon environmental need.

Recommended Action

- Eliminate the 1984 and beyond model year rules and permit continued use of the regulations already established for the 1982 model year. A provision should also be added to allow the sale at high altitude of vehicles exempted from compliance with the unique emission standards if they can meet the current California high altitude compliance criteria.
1984 Light Truck Exhaust Emission Regulations

The Clean Air Act Amendments of 1977 require a 90% reduction of HC and CO emissions for 1983 and later model years, applicable to those light-duty trucks (LDT's) in the 6000-8500# GVW class. On September 25, 1980, the EPA promulgated 1984 and Subsequent Model Year Light Duty Truck (LDT) Emission Regulations. The requirements of the regulations consist of three major separate elements: (1) more stringent HC and CO emission standards (90% reduction from a 1969 base year is required by the Clean Air Act with respect to some of these trucks); (2) an increase in certification durability requirements and associated emission control system warranty; and (3) significantly more stringent assembly line test requirements (10% AQL).

The provisions for increased durability (extended useful life) and the more stringent assembly line testing are not required to be established by the Clean Air Act and have been adopted based on EPA's purportedly discretionary authority to set such requirements. These additional regulatory requirements will have insignificant air quality benefit. Certifying and warranting light-duty trucks to their full useful life will present drastic changes to the fundamental certification program and associated engineering development efforts.

There is no indication anywhere in the legislative history of the 1977 Clean Air Act that the useful life of light-duty trucks should be interpreted as a total life. When useful life definitions for light-duty vehicles were initially established at five years or 50,000 miles (Section 202(3)(1), 1970 CAA), Congress knew full well that the vehicles were actually used for periods or distances as much as twice as long. Consequently, Congress established the mandatory compliance period at approximately the half-life point.

The 10% AQL requirement means essentially that every vehicle must pass the end-of-line test. This effectively increases the emission certification compliance requirements dramatically—resulting in increased costs and, where adequate technology may not be available for compliance, a reduction in product offering.

The provisions of this regulation requiring increased durability and warranty liability (extended useful life) and the more stringent assembly line testing (10% AQL) are not required to be established by the Clean Air Act and have been adopted based on EPA's purportedly discretionary authority to set such requirements.
**Recommended Action**

- EPA should amend the 1984 Light Duty Truck Exhaust Emission Regulations to eliminate the extended useful life durability requirements. The 10% AQL requirement should be changed to the 40% AQL now used for passenger cars.

### 7. Acceptability of Averaging

"Averaging" has been fundamental to motor vehicle emission control regulations and ambient air quality measurements because the ambient air effectively sees the average pollution of the total in-use vehicle fleet. Historically, the EPA used "averaging" in establishing various baseline emission levels on which to base new emission standards. The Clean Air Act Amendments of August, 1977 directed that the 1983 and 1985 heavy-duty engine emission standards be calculated "...from the average of the actually measured emissions from heavy duty gasoline-fueled vehicles...". Thus, the intent of "averaging" is implicit in the Clean Air Act and its legislative history.

The concept of averaging is fundamental to the Clean Air Act starting with the fact that ambient air quality is an average value. However, several emission control guidelines and standards require that every vehicle or engine tested must pass the assigned standard. This applies to certification approval of test vehicles and engines, and to subsequent production line and vehicle-in-use tests such as EPA and 207(m) inspection/maintenance. Abandoning this concept of averaging and requiring that all tested units meet an assigned standard is an administrative tightening of the standard and, in effect, has required an average reduction greater than that which seems apparent in the numbers.

An averaging approach will make the overall emission certification, new car and vehicle-in-use audit programs consistent within themselves, consistent with air quality measurements and with the terms of the Act. Manufacturers would have increased flexibilities of compliance which potentially could reduce the associated costs of compliance and also could result in fuel savings.

**Recommended Action**

- EPA should revise its regulations to provide that all requirements dealing with certification, production, compliance and recall actions be in terms of average values of the units tested, not ceilings which may not be exceeded.
Unregulated Pollutants

The 1977 Amendments to the Clean Air Act require the vehicle manufacturer to establish to the satisfaction of the Administrator that emission control systems do not "cause or contribute to an unreasonable risk to public health, welfare or safety...." Under current law, this could contemplate all kinds of failure modes and non-FTP conditions.

It is fundamentally bad public policy to impose on private parties the duty to determine what may "cause or contribute to an unreasonable risk to public health." Government is uniquely able, and consequently, the most proper entity to bear principal responsibility for determining what is likely to endanger the public health and to establish the actions required to minimize that endangerment. EPA already has adequate authority to regulate troublesome pollutants.

Recommended Action

- The Administrator should impose only a reasonable reporting requirement which could precipitate further EPA study and, if necessary, subsequent consideration in normal rulemaking for new standards.

9. Lead Time

The Clean Air Act directs the Administrator in establishing emissions standards to take into account lead time. On occasion, EPA has claimed that lead time should be measured from the time a manufacturer first has notice of the Agency's intent to propose adoption of a regulation. Because compliance with many of the Agency's regulations has entailed considerable cost, as well as allocation of limited technological expertise, it is unsound to suggest that a manufacturer is obliged to allocate some of these scarce resources to initiating compliance with the requirements of a regulation which the Agency may ultimately not adopt or adopts in such a radically different form that past efforts prove wholly or substantially wasted.

Recommended Action

- The Administrator should calculate the appropriate time for compliance from the date on which the regulation is promulgated.

Economic Impact Assessment

The 1977 Clean Air Act contains a minimal requirement that an economic impact assessment of certain regulations be made by the Administrator before their proposal. However, the requirement has
been easily circumvented. In view of the acknowledged monumental cost involved in compliance with the Act's requirements, the assessment of economic impact (which includes energy impact) is made even more essential today.

Recommended Action.

- The Administrator should make the Economic Impact Assessment (adding cost/benefit and cost effectiveness analyses) of all EPA proposed regulations (not just enumerated provisions). The failure to make such an assessment or the making of an inadequate or erroneous assessment should be grounds for judicial review.

II. Medium and Heavy Truck Noise Standards

Medium and heavy duty trucks are regulated with respect to noise by EPA under authority of the Noise Control Act. The current standard of 83 decibels became effective on January 1, 1978. EPA promulgated a more stringent standard of 80 decibels originally to be effective January 1, 1982. Recently the outgoing EPA Administrator deferred the effective date of the standard one year to January 1, 1983 primarily because of the recent downturn in the economic condition of the truck manufacturing industry.

Two truck manufacturers petitioned EPA to withdraw the standard. EPA analysis methods and data were challenged leading the manufacturers to conclude the 80 decibel standard was not, under present conditions, justified on a cost-benefit basis. Two other manufacturers requested the 80 decibel standard be deferred for 2 to 3 years because of the excessive burden of engineering and compliance costs and the capital investments required.

The cost of meeting the 80 decibel standard according to EPA ranges from $307 to $876 per truck with overall costs in the first three years of implementation totaling $468 million. The community noise impact of medium and heavy truck noise control is one measure of the benefit of noise control. However, there is no evidence that the move from 83 decibels to 80 decibels would afford any "health and welfare" benefit to the community. It involves merely annoyance.

Recommended Action

The EPA Administrator's one year deferral is inadequate. It is recommended that the 80 decibel standard be withdrawn and no further regulation be imposed until the "health and welfare" benefit of such regulation has been fully evaluated. EPA has the authority to make this change administratively.
Safety and Vehicle Fuel Efficiency Standards

1. Passive Restraints

   Federal Motor Vehicle Safety Standard (FMVSS) 208 issued by the Department of Transportation (DOT), National Highway Traffic Safety Administration (NHTSA), as amended on July 5, 1977, requires the installation of passive restraint protection in the front seat of all passenger cars beginning with full-size cars in model year 1982 and including mid-size cars in MY '83 and all cars in MY '84. NHTSA's justification is that too few occupants are using the available active belt systems and that passive restraints will provide automatic protection that will save thousands of lives annually.

   Compliance with this requirement will likely entail either air cushion restraints or passive belt systems. Manufacturers have publicly stated that air cushion restraints will cost from $500 to $1,000 per car depending on production volume. Passive belts are estimated by at least one manufacturer to add approximately $100 per car, or $800 million in total in an 8 million car year. There is no question that passive restraints are effective in reducing injury severity in certain types of collisions, but their effectiveness in the aggregate is not expected to be greater and may be less than that achieved with available lap and shoulder belts if worn on the scale achieved by nations which require their use (this is currently at a level of 70% or greater as reported by NHTSA).

   Recommended Action:

   DOT should promptly reevaluate the need for implementation of the passive restraint requirement (which was promulgated almost four years ago) and reassess its projected safety benefits. Reexamination may well justify delay, modification or even withdrawal of the passive restraint requirement.

2. Bumper Standard

   The Federal motor vehicle bumper standard (49 CFR Part 581) issued by DOT requires bumpers capable of withstanding front and rear impacts at 5 mph without exceeding minimum damage to the vehicle or its bumper system. (Phase II bumper damage criteria became effective September 1, 1979.)

   The need for this regulation has not been substantiated. NHTSA has claimed the standard would produce savings in vehicle damage greater than the additional cost associated with the standard. The NHTSA estimates are based upon data that are not complete enough to permit accurate assessment. On the other hand, publicly available data demonstrate that a 2.5 mph impact...
speed would permit a reduction in vehicle weight that in turn would produce combined initial cost and fuel savings greater than the problematical savings and property damage reductions with bumpers meeting the 5 mph test impact speed. Aside from the savings with the 2.5 mph bumper at least one manufacturer has found that the data produced in the course of rulemaking demonstrate that a 2.5 mph bumper will be both cheaper to buy and cheaper to replace if damaged than a 5 mph bumper. In addition, there is no justification for the stringent Phase II damage criteria.

The industry is complying with the present 5 mph impact speed requirement, but at an additional direct cost of at least the $50 per car NHTSA has estimated. This amounts to $400 million in an 8 million car year. In addition there is an annual fuel penalty of 836 to 990 million gallons for the entire fleet based upon NHTSA's estimate of 80 gallons per car lifetime.

Recommended Action:

It is recommended that NHTSA be required to reduce the bumper impact speed requirement to 2.5 mph in longitudinal impacts and 1.5 mph in corner impacts as proposed in S.1159 offered by Senator Byrd (D-WV) in the 96th Congress. In addition, the property damage criteria should be held at the 1979 level (Phase I).


In 1975 with the passage of the Energy Policy and Conservation Act (EPCA), Congress rejected the thesis that the market would be the most efficient and equitable allocator of crude oil and petroleum products. Attempting to "manage" the market by maintaining oil price controls while limiting demand through legislated conservation measures, Congress established fuel economy standards for passenger automobiles and authorized the Secretary of Transportation to establish standards for "non-passenger automobiles." The pertinent sections of the Motor Vehicle Information and Cost Savings Act as amended by EPCA are Sections 502(a)(1) and 502(b).

Section 502(a)(1) of the Motor Vehicle Information and Cost Savings Act established 27.5 mpg as the corporate average fuel economy (CAFE) standard for passenger automobiles for 1985 and thereafter. The Secretary of Transportation may, by rule, amend the post-1985 standards. However, any amendment which increases the standard above 27.5 mpg or decreases it below 26.0 mpg must be submitted to Congress. The amendment would take effect at the end of 60 calendar days of continuous session of Congress unless either House passes a resolution of disapproval.
Section 502(b) of the Motor Vehicle Information and Cost Savings Act requires the Secretary of Transportation to prescribe corporate average fuel economy standards for "non-passenger automobiles," that is light-duty trucks up to 6,000 lbs. gross vehicle-weight rating (GVWR), for each model year beginning with the 1979 model year. The Secretary was also given authority to set standards on trucks up to 10,000 lbs. GVWR provided that (a) the regulation of such vehicles will result in significant energy conservation, or (b) such vehicle will be used for the same purpose as vehicles below 6,000 lbs. GVWR. Mandatory standards have been established on trucks up to 8,500 lbs. GVWR through model year 1985.

**Recommended Action:**

Establishing new post-1985 standards, either by regulation or legislation is unnecessary because market forces are now (and shall in the future be) demanding the production of fuel-efficient vehicles.

4. **Economic Impact Analysis**

The National Traffic and Motor Vehicle Safety Act (Section 2) requires that Federal Motor Vehicle Safety Standards be practicable as well as meeting a safety need. Practicability includes a reasonable balance between improvement in safety performance as a result of a standard or regulation and the economic cost of the regulation.

**Recommended Action**

The National Highway Traffic Safety Administration should not only subject proposed new standards to a rigorous economic impact analysis but should also undertake a systematic assessment of the economic consequences of existing standards and weigh them against realized safety benefits. NHTSA's performance in both these regards has fallen far short of its past commitments.