

STATEMENT OF JOAN CLAYBROOK, ADMINISTRATOR, NATIONAL HIGHWAY
TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION,
BEFORE THE SENATE SUBCOMMITTEE ON SCIENCE, TECHNOLOGY
AND SPACE, MAY 9, 1980

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before you today to discuss automobile fuel economy in the period after 1985. I am accompanied by Howard Dugoff, Administrator of the Research and Special Projects Administration, and Dr. Kennerly Digges, Director of our Office of Passenger Vehicle Research.

The materials accompanying your letter of invitation specified that this hearing would take up the following issues relating to the automobile fuel economy program:

- (1) the necessity or desirability of new legislation extending mandatory corporate average fuel economy standards beyond 1985;
- (2) the level at which such standards should be set;
- (3) the inclusion of provisions relating to the effect on fuel economy of motor oils and tires; and
- (4) the level of appropriations needed in future years to support administration and management of the fuel economy program by the National Highway Traffic Safety Administration (NHTSA) of the Department of Transportation.

First I want to assure the Committee that the Department of Transportation shares the concern of the Congress about the need for energy conservation, particularly in the automotive sector. At the direction of Secretary Goldschmidt, we are

working to develop a sound base to exercise our authority to mandate post-1985 fuel economy standards. In reaching decisions in this area, the Department is considering a broad range of factors, including potential future energy shortages, capital requirements and other economic demands, as well as the effects on workers and the safety of the driving public. Before any particular fuel economy standard is mandated, these matters and their interrelationship need to be explored.

The Department of Transportation is proud of the fact that the automotive fuel economy program has produced great benefits. Largely as a result of the Federally-mandated standards, we anticipate an overall savings to this country in the next five years of approximately 53 billion gallons of gasoline compared with the average fuel consumption of 1977 model year vehicles. And gasoline consumption is going down. Between 1978 and 1979, for example, gasoline consumption decreased by about 3.7 billion gallons.

To the extent that past experience may serve as a guide, there are strong arguments for standards beyond 1985. Analyses of the cost-effectiveness of the pre-1985 standards show, for example, that the higher "front-end" costs of fuel efficient cars are repaid many times over by the fuel savings.

For example, the purchaser of a 1985 model car will realize a net savings over the vehicle's lifetime of \$1540 compared to a 1977 model. Also, the domestic manufacturers, despite their current economic difficulties, were in a better position to compete with fuel-efficient imports in 1979-1980 than they might otherwise have been if they had relied solely on the marketplace to determine their product plans. Since the future may bring further severe and unexpected dislocations in the marketplace, there is a need for continued long-range planning for the nation and the industry.

That there is a strong national interest in higher levels of automotive fuel efficiency is beyond debate. The nation's vulnerability to oil import disruptions and the direct importance of such considerations to our nation's economic welfare and national security require such direct governmental concern. It is clear, therefore, that the Federal Government has a role to play and must use an effective combination of options to perform its proper role in this difficult area. What that combination of options should be is now the only relevant question.

The task we face as a nation is the crafting of a multi-dimensional response that makes the most sense in employing regulations, tax incentives, employment and labor policies, trade policies, capital investment strategies, innovation and technological advancement and other tools to safeguard our energy security and our economic competitiveness.

While we believe that a corporate average fuel economy of 40 mpg or higher is technologically feasible by 1995, technological changes required in order to attain that level have to be considered together with many other concerns, including economic practicability as required by the law.

A difficult and complex set of questions surround the economic and social consequences of post-1985 fuel economy, regardless of whether the drive comes from Federal standards, market forces or a combination of the two. What capital resources can the industry call on to produce the necessary fuel efficient vehicles? How should we treat manufacturers with limited product lines? How will plant closings and modernization affect employment patterns and the economy of different regions? How will we make sure that the occupants of the new smaller fuel efficient vehicles will be

given adequate safety protection?

These questions illustrate our belief that there is now, more than before, a need to consider the broader picture. We all recognize that the domestic automakers are experiencing financial difficulty in a world where the fundamentals of energy cost and availability and international economic competition have recently undergone unprecedented re-definition.

In the next five years, they will spend an estimated \$70 billion to re-tool the auto industry. These expenditures, moreover, will be made during a period when profits are down, thus increasing the need to borrow at higher interest rates. The market for large cars has shrunk significantly thereby reducing the segment of the new car market which might, in other times, have been relied on to support industry profitability. In 1977, sales of full-sized cars in the U.S. held a solid 30% of the market. Today, that share has shrunk to 14%. Sales of small cars today, on the other hand, account for 60% of the market and nearly half of these small cars are imports.

The result of this shift in the market has been reduced profitability for the industry, and financial uncertainty for the workers, for the regions in which the companies' operations are located, and for the nation as a whole.

In recognition of far-reaching energy and economic concerns, the Congress, as a part of the Chrysler legislation, directed the Department of Transportation to examine the future of the auto industry. Specifically, under the terms of the Chrysler Loan Guarantee Act of 1979, Secretary Goldschmidt is required to make an assessment of the impact of likely energy trends on the auto industry. The Secretary is required to include information on long-term capital requirements, rates of technological change, shifting market characteristics, regional employment impacts, and the capability of the industry as a whole to respond to the requirements of the 1980's. This study, which is due in January 1981 is to be followed by annual reports on the state of the auto industry and its interaction with the economy.

In addition to that change, the Department received direction from the White House Domestic Policy office to examine this set of issues in its broadest context -- looking at the industrial base, trade, productivity, employment and more -- to develop policy choices for the Government which could assure the production of fuel-efficient vehicles as well as the future health of the auto industry and our manufacturing base.

We believe that these studies now underway in DOT and others at DOE can point the way to the kind of integrated strategy we need. The role of fuel economy standards in the future will be determined within this overall framework.

In addition to specific studies, there is a continual need to collect data and conduct on-going analyses of the technology available for further fuel economy improvement and what improvements are economically practicable. The National Highway Traffic Safety Administration is the agency responsible within the Department for these activities. As a result of this responsibility, we have established a technology assessment program to complement the existing Automotive Fuel Economy Research Program and to address technologies emerging in the next five to ten years. The plans for this program include the evaluation, testing and demonstration of a full range of options for the improvement of fuel economy of motor vehicles and motor vehicle components. The resulting data from this program will illustrate what can be achieved with known technology.

The three major parts of the program deal with (a) improved engines and drivetrains; (b) structural design improvements; and (c) fuel efficient prototype vehicles.

We need to look at as many options for improvements in engines as we can to evaluate means for dealing with the problem of diesel emissions and for maximizing the fuel economy potential for both spark ignition and diesel engines and other components for both passenger cars and light and heavy duty trucks. Use of improved power trains may make it unnecessary to make drastic reductions in the weight and size of vehicles to meet the goal of high fuel economy.

Furthermore, there are many new materials such as metal plastic composites and concepts of structural design such as monocoque construction that should be looked at not only from the point of view of saving weight, as well as crashworthiness, durability, producibility, and the cost of future motor vehicles. Once promising technology options in power trains and structures have been identified and evaluated, they must be synthesized in prototype vehicles of different concepts to demonstrate their performance and producibility.

In the materials accompanying the invitation, you mentioned the availability of improved motor oils and tires. Both can improve fuel economy, although we defer to the Environmental Protection Agency as to the best method of improving motor oil. The DOT has done extensive work on tire safety, quality

and fuel economy potential. Tires can make a significant contribution if properly designed and maintained. We have already considered including tire rolling resistance as a factor in the uniform tire quality grading system under the existing authority of the Motor Vehicle Safety Act.

Because of the critical need to restrain Federal spending, our request for appropriations to carry out this program in 1981 has been cancelled. However, the President's proposal for \$200 million dollars over eight years for this technology assessment program will be initiated with our appropriations request for Fiscal Year 1982. It will be requested under the existing legislative authority of the Department which is sufficient to carry out the program. Originally, new legislative authority had been requested as Title IV of S. 2015, the "Transportation Energy Efficiency Act of 1979." This legislation was contingent upon the establishment of the Energy Security Trust Fund, but since it will not become law, we no longer seek this legislation.

This concludes my statement. We would be pleased to answer any questions you may have.

