



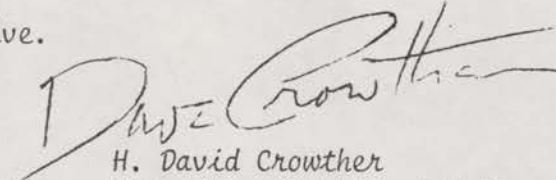
OFFICE OF THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

October 12, 1973

TAD-493
3a)

ATTENTION: EDITORS

Enclosed is a copy of a speech written by Secretary of Transportation Claude S. Brinegar for delivery to the Annual Meeting of the Society of Automotive Engineers, White Sulphur Springs, West Virginia, October 12, 1973. The speech discusses the dominant role the automobile plays in the Nation's transportation system. It reviews the energy, environment urban congestion and safety issues. I think you will find it informative.


H. David Crowther
Director of Public Affairs

Enclosure



**DEPARTMENT OF
TRANSPORTATION**

NEWS

OFFICE OF THE SECRETARY
WASHINGTON, D. C. 20590

19-S-73

REMARKS BY SECRETARY OF TRANSPORTATION CLAUDE S. BRINEGAR
TO ANNUAL MEETING OF SOCIETY OF AUTOMOTIVE ENGINEERS,
WHITE SULPHUR SPRINGS, WEST VIRGINIA, OCTOBER 12, 1973.

It's a great personal honor to be asked to speak to the Annual Meeting of the Society of Automotive Engineers. And, I must add, it's a welcome opportunity to shift my thoughts from railroads to automobiles.

Since becoming Secretary of Transportation last February the urgency of the short-term problems of Penn Central and the related Northeast rail bankruptcies have occupied much of my time. Though railroads are a vital link in our National transportation system--especially to those firms who rely almost wholly on Penn Central for rail

freight service--when viewed in the larger perspective, it's the automobile that truly dominates the Nation's transportation system.

Of the Nation's annual transportation bill of some \$200 billion, nearly 80% is spent either on the automobile, on the infrastructure to support the automobile, or on the various side effects of the automobile. Extending our thoughts a little farther, we soon realize that the automobile--with its wonderful package of personal comfort, mobility, and security--has, in fact, subtly shaped our Nation. The enormous post-war growth of our cities and suburbs has been designed around the automobile and its mobility. No wonder it's so easy to argue that the automobile is vital to our way of life. We have made it part of our life. Almost literally, in the majority of our urban areas, unless you have an automobile "You can't get there from here."

The Society of Automotive Engineers' enormous influence on the past and future directions of the automobile--both in your individual careers and as a world-respected organization--is well recognized. What is perhaps not so well recognized,

and the subject I would like to discuss today, is the strength of the issues that are now forcing a re-thinking of these future directions.

Chiseled in granite at the National Archives is Shakespeare's phrase, "What is Past is Prologue." Though the thought is appropriate to many of America's historical and social trends, I hope it's not chiseled in the heads of the designers and engineers who will help plan the coming decade of America's automobiles. Consider, for example, the following:

- Between 1962 and 1972 automobiles in use increased by over 30 million. Auto ownership is now approaching 1½ per household.
- During this past decade our new cars have increased in weight by about 5% but have decreased in fuel efficiency by at least 10%.
- Over 80% of urban area home-to-work commuting is by car. Average occupancy is under 1.5 per car and average commuting speeds, at least in

the centers of our larger urban areas, is in the 10-15 mph range. Over half the Nation's vehicle miles are jammed into urban centers that occupy less than 1% of our land area.

- Automobiles are by far the largest sources of urban pollution resulting from carbon monoxide, hydrocarbons, and oxides of nitrogen.

- Between 1962 and 1972 deaths due to automobile accidents rose by nearly 40%. Deaths from automobile accidents for the full decade exceeded one-half million.

To put it mildly, these are sobering offsets to the recognized strengths of our automotive sector. I cite them not to place blame, for the causes are complex, nor to prove that I'm "anti-car," for I'm not. But I am "anti" these trends, as I believe you are. Certainly, I'm sure you agree the Nation cannot tolerate a simple trend extrapolation for another decade.

Fortunately, major changes are underway--some dictated by market forces (as is the shift to small cars), some by industry innovations, and some by government actions.

Since our department is heavily involved in many of these government actions, I'd like to offer a few comments on where we stand in three key areas that significantly affect the vehicle. These are the areas of safety, environmental controls, and efficiency of operations. After that, I will briefly discuss some of the emerging trends in urban mass transportation. I believe that, in time, these trends will quite significantly affect the role of the automobile in our urban centers.

Our department's interest in automobile safety and the activities of our National Highway Traffic Safety Administration are, of course, well known to this group--some might even say painfully well known. Equally well known is the strong interest of Congress in seeing that we succeed in our efforts.

Our mission is, of course, to save lives, to reduce injuries, and to cut the direct and social costs resulting from accidents. Our programs are aimed, in varying

proportions, at the three variables in the accident equation: the driver, the vehicle, and the highway. I regret that I can't tell you yet in any very precise numerical way to what extent we are succeeding or to what extent the emphasis should shift in the years ahead. Clearly, we have made some progress but just as clearly we have a long way to go. Dr. James B. Gregory, the new National Highway Traffic Safety Administrator, and I have started a thorough review of our various present and anticipated programs with the aim of finding ways to sharpen the effectiveness of this effort.

In general terms, I would expect to see increased emphasis on driver problems, especially those of the drinking and the young drivers who are responsible for a high percentage of all fatalities. We also expect to concentrate more on the vehicle's structural integrity and crash survivability, especially in light-weight vehicles. In addition, as a result of the 1973 Highway Bill, we will put increased emphasis on several new highway safety programs.

While environmental controls are not a direct responsibility of our department, we do, of course, have a strong interest in what is happening because of their

direct impacts on vehicle efficiency and on the need for expanded urban transportation systems. We are working with the EPA in helping to develop reasonable programs to meet the stringent criteria specified in the legislation that the EPA must enforce.

I must note that it's my personal view that some of these criteria are too strict--especially those on allowable levels of oxides of nitrogen--and too inflexible. Revisions and flexibility are now especially urgent because the energy shortage has clearly shifted the cost/benefit relationship.

Congress has started a re-examination of the criteria. I am hopeful that we will be able, in an unemotional and fact-based way, to quickly add needed flexibility to the EPA's regulatory authority. I am confident that this can be done without compromising our long-term objectives in achieving needed health standards.

This brings me to the third item--automobile efficiency. This subject--especially the energy aspect of it--has emerged as a top-priority National issue in the past 12 months. I predict that it will be a substantially hotter issue in the next 12.

It was just about a year ago that Congress passed, and the President signed, the "Motor Vehicle Information and Cost Savings Act." This Act, which was prompted by the growing complaints about the costs and problems of automobile ownership and operations, is basically a consumer-protection measure. One section deals with odometer tampering; another with bumper standards; and another with Federal experimentation with diagnostic centers to help motorists cut repair bills. Perhaps the most important provision--one that puts us in the middle of the efficiency issue--is the one that requires our department to develop and publish information on new cars' relative damage susceptibility, crashworthiness, ease of repair, and comparative insurance costs. We will be working with many of the companies represented here today as we move ahead in developing the procedures to comply with this section of the Act.

But the heart of the automotive efficiency issue is energy usage. Although petroleum industry spokesmen, as well as a few others, have been raising red flags about future energy supplies for several years, only quite recently

has the Nation itself begun to face up to the seriousness of the situation. And it is indeed serious. Consider these facts:

First, fossil fuels--oil, gas and coal--are truly a limited, non-renewable energy source. When viewed over the long-sweep of historical perspective, the fossil-fuel age will, in retrospect, have proven itself to be a fairly brief period in world history.

Second, liquid petroleum--the almost sole energy source for transportation--is rapidly becoming extremely scarce. Our Nation is now in a substantial deficit oil position--over 40% of our total usage must be imported--and this position will worsen as U.S. oil production continues to decline. Even Alaska's probable oil reserves hold little hope of stopping this trend. Of the world's present known oil reserves of about 500 billion barrels, the U.S. possesses less than 10% but uses over 30% of current world production. Unfortunately, worldwide oil exploration over the past five years has been generally disappointing. Our confidence in unknown but hoped-for future very large oil discoveries is beginning to fade.

Since the only region with a present capability to fill our growing oil needs is the Middle East, we obviously must be prepared for sharply increasing prices, as well as

increasing difficulties in securing adequate and reliable oil supplies. Good quality Middle East oil now brings, in U.S. markets, over \$5 a barrel. This compares with some \$2 a barrel less than 5 years ago. I believe we should base our long-term plans on a level of \$8-\$10 a barrel by 1980. At that point substitutes from large North American reserves of coal, oil shale, and tar sands should help to put a ceiling on further sharp increases.

Third, because the United States has been blessed with low-cost energy for decades we have been lulled into complacency. We have built our life styles and our economy around this abundance. But we must now recognize that changes are called for and move forward to accommodate ourselves to them. The Nation should stop looking for the energy "conspiratorial culprit," for there is none, and stop seeking simple answers, for none exist. Energy is a complex, worldwide issue, and can only be dealt with if approached on that basis.

Fourth, the time has come for our Nation to urgently and cooperatively move forward with two obvious steps: do all it can to increase domestic oil supplies--through increased crude oil exploration and increased refinery capacity, and to decrease unnecessary oil usage--through

stepped-up energy conservation. The former will require increased incentives to the private companies that are best able to carry out these programs, and the latter will require a public acceptance of the need for a new ethic--the ethic of energy conservation.

While our department's programs to expand energy-efficient transportation, such as mass transit and long-haul rail, are worthwhile steps, nothing can really make the necessary fuel savings until we significantly improve the energy efficiency of the automobile--the user of over 50% of our transportation fuels. Clearly, we must find ways to cut the car's weight, increase engine efficiency, curtail unnecessary driving, and increase occupancy in necessary driving. Though I hope voluntary action can do this job, the situation is becoming so serious that specific National goals and possibly even that most unwanted of events, fuel rationing, may be necessary. As I'm sure you know, a number of bills have already been introduced in Congress that are directed to these ends. The unfortunate fact is that even if the auto manufacturers would right now accept the mandate that, starting in 1976, they would improve the average fuel efficiency of all future new cars by, say, 25%, it would take 5 years before the flow of these cars would make

up even one-quarter of the Nation's total fleet of nearly 100 million automobiles. Obviously, we'd better get going.

This brings me to an idea. I've outlined three important aspects of the vehicle that now are, or are likely soon to be, subject to various Federal standards and guidelines. It's not difficult to foresee conflicting tugging and pulling as we work to achieve the individually worthy but jointly difficult goals of safety, environmental protection, and operational efficiency. Pity the design engineer trying to apply the outcome to a single vehicle.

I believe that we should now undertake engineering and cost/benefit analyses aimed at finding the optimum balance of these goals in our future vehicles. To explore this idea we have recently started looking at ways to set combined standards for what we are calling the "S3E" family of vehicles. The "S" is for safety, and the "E's" are for environmental protection, economy of operations in the sense of low overall consumer costs, and energy conservation. I invite the cooperation of the automotive engineering community in this effort.

Finally, I'd like to conclude with a few brief observations on the coming changes in urban mass

transportation and how these changes could impact on the future of the automobile. In broad terms, we see a gradual but accelerating public acceptance of the need for our large urban areas to adopt really good mass transportation systems. And by "good," I mean of such quality as to offer the passenger a reasonable trade-off to the alternative of an expensive-to-operate and hard-to-park automobile.

Our department is helping the cities by providing capital assistance for transit plant and equipment (about \$1 billion a year) through our Urban Mass Transportation Administration and now also through the recently achieved flexibility in the uses of a part of the Highway Trust Fund. We're pleased to see that total transit ridership has now reversed its long-term downtrend and is now turning upward.

We are encouraging--even forcing where we have the clout--urban areas to embrace community and transportation planning for all modes under a single planning structure. We want them to stop thinking "just cars", or "just trains," or "just buses," and to think instead of combined solutions that fit into planned growth patterns.

We are monitoring the results of various urban transit experimental programs--as with exclusive bus lanes-- and also carrying out or sponsoring research programs on various new technologies, including "dual-mode" vehicles, new kinds of rail transit cars, and even such advanced concepts as magnetically levitated "people movers."

Looking a decade or so hence I see most cities moving toward really high-quality bus systems, using exclusive bus lanes and tied to feeder lines using fringe parking lots and even mini-bus-type pick-up and delivery service. Fares will be low and likely will be subsidized by local taxes.

I expect a limited number of the larger urban areas to upgrade existing subway and rail transit systems or to install completely new ones. Some--such as Atlanta--have programs underway. But the large capital costs and inflexibility of use should limit this development to the really densely populated metropolitan areas. I also see, in time, a good chance that the larger cities will fit various kinds of automobile-like "people movers" into their

downtown areas--areas that will then sharply limit the use of the personal automobile.

Clearly, we have before us much change and much new thinking on the structure and the role of the automobile. These changes will bring us both perplexing and exciting times. I seek your support in approaching these changes in an open-minded and public-spirited way.

#####

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE SECRETARY

Washington, D.C. 20590

Official Business

PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID

DEPARTMENT OF

TRANSPORTATION

DOT 518

FIRST CLASS

