

REPORT BY THE

Comptroller General

OF THE UNITED STATES

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Public And Private Coordination Needed If Auto Repair Problems Are To Be Reduced

Consumers' auto repair problems are persistent, costly, and troublesome. The Federal Government could help reduce these problems by encouraging national coordination among consumer, industry, and public organizations.

A Federal agency coordinating committee is being developed but the Congress could strengthen this action by establishing it as a national committee representing all concerned parties.

The Senate Committee on Commerce, Science, and Transportation and its Consumer Subcommittee requested GAO to make this study.



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HRD-80-30

JANUARY 11, 1980



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WASHINGTON, D.C. 20548

B-196831

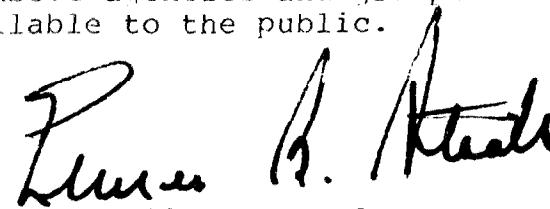
The Honorable Howard W. Cannon
Chairman, Committee on Commerce,
Science, and Transportation - 06202
United States Senate

The Honorable Wendell H. Ford
Chairman, Consumer Subcommittee
Committee on Commerce, Science, - 06203
and Transportation
United States Senate

In response to your December 18, 1978, request, we reviewed ways in which the Congress could strengthen the Federal role in reducing consumers' auto repair problems. Although Federal agencies could do more on their own, we believe the most essential Federal role is to assure the cooperation and coordination of the various levels of government, industry, and consumer groups.

We met with officials and reviewed programs of 11 Federal agencies, 7 States, 4 U.S. automobile manufacturers, and several other industry and consumer groups. In addition to personal contacts, we received questionnaire returns from over 250 government and industry officials. At your request, we did not take the time to obtain written comments on the report from these officials. We did, however, discuss matters in the report with some of the officials and have included their comments in the report where appropriate.

As arranged with your office, we are sending copies of this report to the Chairman of the Consumer Protection and Finance Subcommittee, House Committee on Interstate and Foreign Commerce, and to the above agencies and groups. We will also make the report available to the public.


Comptroller General
of the United States

COMPTROLLER GENERAL'S
REPORT TO THE
SENATE COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION AND
ITS CONSUMER SUBCOMMITTEE

PUBLIC AND PRIVATE
COORDINATION NEEDED IF
AUTO REPAIR PROBLEMS
ARE TO BE REDUCED

D I G E S T

Cooperation among consumers, government, and industry is essential for reducing consumers' auto repair problems. The Congress could strengthen the Federal role in reducing these problems by establishing a national coordinating committee. This committee would evaluate current activities and identify the best areas for future support.

THE PROBLEMS

Federal, State, and local officials say that consumers' auto repair problems are serious, persistent, and increasing. The most common problems are faulty repairs, unnecessary repairs, and unanticipated repair costs due to unauthorized work and/or charges in excess of the estimate. (See pp. 4 to 9.)

Industry officials acknowledge some problems, but claim that they are exaggerated. While some disagreement is understandable, the problems are serious enough to warrant more action by all concerned parties. (See p. 9.)

THE CAUSES

Auto repair problems are caused, to some extent, by the increasing complexity of cars and the failure of consumers to properly maintain them. However, GAO believes the most direct causes are the shortage of skilled mechanics and unfair or questionable business practices used by some repair facilities. (See pp. 11 to 14.)

THE SOLUTIONS

Some State, local, and industry organizations have adopted or are experimenting with programs to

- inform and educate consumers about their rights and how to select repair shops and determine their vehicles' repair needs,
- help consumers resolve any disputes with repair facilities, and
- improve mechanic competency and industry repair practices.

These programs provide some consumer benefit, particularly in helping consumers resolve disputes with repair facilities. However, their effectiveness in reducing auto repair problems has not been evaluated, and it is not clear which approaches work best. (See p. 15.)

THE FEDERAL INVOLVEMENT

Despite annual consumer auto repair losses estimated in the billions, the Federal Government has done little to reduce them. Only the National Highway Traffic Safety Administration and the Federal Trade Commission have ongoing programs specifically directed at these problems. (See p. 25.)

The National Highway Traffic Safety Administration funded demonstration projects focusing on vehicle inspections designed to diagnose repair problems. It is also trying to develop information to help consumers compare new autos for ease-of-diagnosis and repair. The Commission has three active cases addressing questionable business practices used by some auto repair facilities; has examined new auto warranties, dispute resolution mechanisms, and manufacturing or design defects; and is doing some economic analysis. (See pp. 25 to 28.)

Several other Federal agencies are indirectly involved in consumers' auto repair problems. The Departments of Labor and Health, Education, and Welfare support mechanic training and employment programs. The Environmental Protection Agency wants to keep cars properly repaired so they do not pollute the air; the Small Business Administration makes or guarantees loans to repair shops; the Law Enforcement Assistance Administration has helped law enforcement officials deal with auto repair fraud; and the Office of Consumer Education helps others educate consumers. (See pp. 28 to 30.)

Unfortunately, these agencies have had little measurable effect on reducing consumer auto repair problems. (See p. 30 and app. XI.)

THE FEDERAL ROLE

Improvements are needed in many aspects of auto repair, particularly

- mechanic training,
- consumer education and information,
- auto repair business practices, and
- dispute resolution.

GAO believes that Federal agencies could do more to reduce consumers' auto repair problems by evaluating the existing approaches, providing technical and research assistance to State and local governments, and encouraging development of new ideas for solving auto repair problems. (See p. 37.)

However, the most essential Federal role at this time is to coordinate efforts of the various public and private organizations. Although no one is now doing this, the National Highway Traffic Safety Administration is developing an Interagency Coordinating Committee to involve these parties in planning and coordinating Federal programs dealing with the inspection, maintenance,

and repair of motor vehicles. This is a step in the right direction, but the Committee lacks congressional input and its own funds and staff to operate. (See p. 34.)

RECOMMENDATION TO THE CONGRESS

The Congress should strengthen the concepts of the Interagency Coordinating Committee by

- establishing the Committee as a national auto repair coordinating committee. This new committee would evaluate the effectiveness of current efforts to reduce consumers' auto repair problems and identify areas for future support;
- expanding the Committee's objectives to cover more than just Federal programs and activities;
- encouraging State and local governments, consumer groups, and private industry to actively participate in the committee;
- directing the Federal agencies to make firm commitments to support the committee; and
- providing adequate resources to operate the committee.

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ABBREVIATIONS

AAA	American Automobile Association
ACSC	Automobile Club of Southern California
AMC	American Motors Corporation
AUTOCAP	Automotive Consumer Action Panel
BBB	Better Business Bureau
CIC	Consumer Information Center
DOL	Department of Labor
DOT	Department of Transportation
EPA	Environmental Protection Agency
FTC	Federal Trade Commission
GAO	General Accounting Office
GM	General Motors Corporation
HEW	Department of Health, Education, and Welfare
I/M	inspection/maintenance
LEAA	Law Enforcement Assistance Administration
MMWA	Magnuson-Moss Warranty Act
MPG	miles per gallon
MVMA	Motor Vehicle Manufacturers Association
NADA	National Automobile Dealers Association
NHTSA	National Highway Traffic Safety Administration
NIASE	National Institute for Automotive Service Excellence
OCE	Office of Consumer Education
OJT	on-the-job training
PMVI	periodic motor vehicle inspection
SBA	Small Business Administration

CHAPTER 1

INTRODUCTION

The Chairmen of the Senate Committee on Commerce, Science, and Transportation and its Consumer Subcommittee, by letter dated December 18, 1978, requested that we study issues related to the Federal role in dealing with consumers' auto repair problems, including the relationship of the Federal agencies with State and local governments. (See app. I.) The request was based on congressional concerns about the difficulty consumers have in trying to get their automobiles repaired effectively and economically. Both the House and Senate held hearings in 1978 on auto repair problems.

BACKGROUND ON THE AUTO REPAIR INDUSTRY

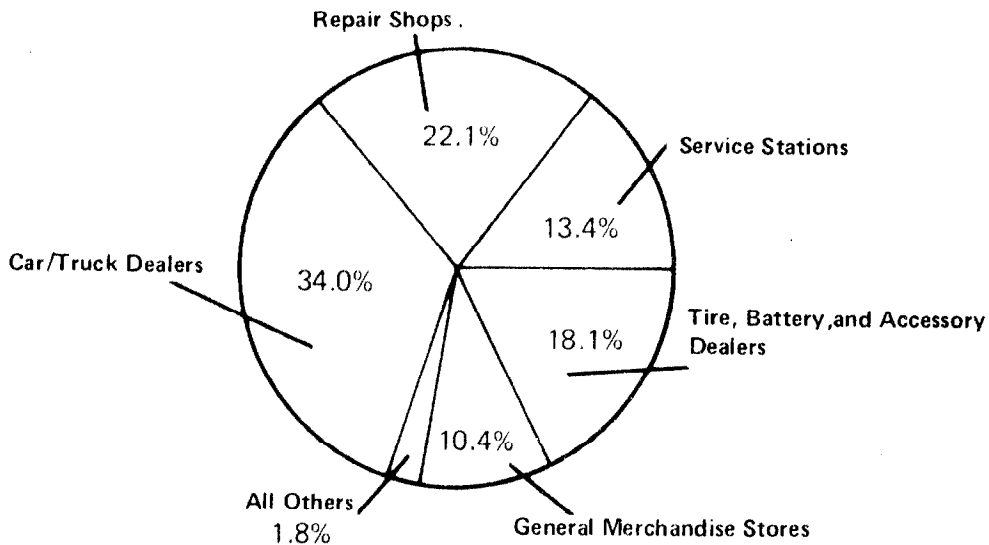
Today, more than ever before, the American consumer is dependent on the automobile. In 1977, of American income expenditures, operating the automobile was the fourth largest, after food, housing, and "other services." The National Highway Traffic Safety Administration (NHTSA) estimated that motorists spend \$50 billion annually on repairs and maintenance for 124 million cars or trucks.

The market for automobile repairs is distributed among several types of businesses. Based on the latest available data supplied by the National Automotive Dealers Association (NADA), about 431,000 facilities are active in the repair service and parts market.

Total Service and Parts Facilities

Franchised new car and truck dealers	29,000
Automotive repair shops	127,000
Gasoline service stations	185,000
Tire, battery, and accessory dealers	40,000
General merchandise stores	50,000
Total	<u>431,000</u>

MARKET SHARE (1978)



SCOPE OF REVIEW

During our study, we examined the extent of automobile repair-related activities at several Federal agencies, including the Department of Transportation (DOT), its National Highway Traffic Safety Administration, the Department of Labor (DOL), the Department of Health, Education, and Welfare (HEW), and its Office of Consumer Education (OCE), the Federal Trade Commission (FTC), the Environmental Protection Agency (EPA), the Small Business Administration (SBA), and the Law Enforcement Assistance Administration (LEAA).

In performing the study, we obtained information on State and industry efforts related to automobile repairs. In this regard we contacted State officials in seven States: Arizona, California, Massachusetts, Michigan, New York, Rhode Island, and Wisconsin. In addition, we held discussions with representatives of the four domestic auto manufacturers: American Motors Corporation (AMC), Chrysler Corporation, Ford Motor Company, and General Motors Corporation (GM). We also held discussions with other industry and consumer-oriented organizations including some Better Business Bureaus (BBBs).

In addition to personal contacts, we received a total of 257 completed questionnaires from officials of State Attorneys General offices (44), other State agencies which handle consumer auto repair problems (33), local and county consumer protection agencies (82), and industry representatives (98), including officials of State automobile trade associations, State automobile dealers associations and State automotive service councils. We also reviewed literature on the auto repair industry and legislation pertaining to consumer automobile repair problems.

Chapter 2 discusses the nature and extent of consumer auto repair problems. Chapters 3, 4, and 5 discuss State, industry, and Federal auto repair-related activities. Chapter 6 presents our conclusions and recommendations. In addition, we prepared separate appendixes covering a wide range of auto repair topics and solution approaches. The appendixes also provide more detailed information on Federal agency auto repair-related activities.

CHAPTER 2

AUTO REPAIR IS A MAJOR

CONSUMER PROBLEM

Auto repair is not only a major American industry but a major source of consumer complaints. Information from Federal, State, and local governments indicates that auto repair problems are serious, persistent, and increasing. In 1978 NHTSA estimated that consumers lose about \$20 billion annually on auto repair problems. Common problems include faulty and unnecessary repairs and unanticipated repair costs.

The repair problem is not simple; it is multifaceted and complex. In our opinion, two major direct causes are the shortage of skilled mechanics and unfair or questionable business practices.

Industry officials acknowledge that consumers have problems with auto repair, but they believe that the extent of the problems is exaggerated. Results of our questionnaire show substantial differences of opinion between industry and State and local government officials on the extent of specific auto repair problems. In our opinion, the problems are clearly serious enough to warrant substantially increased efforts by all parties concerned.

CONSUMERS ARE BOTHERED BY FAULTY REPAIRS, UNNECESSARY REPAIRS, AND UNANTICIPATED REPAIR COSTS

Rather than being a single difficulty, auto repair problems include a variety of unfavorable situations experienced by consumers. The most common problems, 1/ and actual examples from State files, follow:

Faulty repair

Faulty repair is work performed on new and used vehicles which fails to fix the identified problem, and results in the related inconvenience of return trips. For example, after purchasing a new auto the consumer noticed a stalling problem.

1/Because of variations in data systems and terminology, our identification and definition of these common problems is based on a composite of information obtained from a wide variety of organizations handling auto repair problems.

The consumer repeatedly returned the auto to the dealer over a period of several months in an attempt to have it corrected. During this period the consumer estimated that the auto was in the service shop for about 30 days. The problem was eventually corrected by replacing the carburetor.

Unnecessary repair

Unnecessary repair is work performed or recommended which is not required. For example, a consumer had his daughter's auto towed to a repair facility because it failed to start. The problem was identified as a cracked piston, costing about \$100 to \$125 to repair. The repair facility contacted the consumer the next day requesting authorization for additional repairs that would increase the total estimate to \$510. The consumer refused to authorize any additional work and decided to obtain a second opinion which disclosed that the starting problem could be corrected by changing the battery. The consumer had the auto towed to a second repair facility where the battery was replaced, and the problem was corrected.

Unanticipated repair costs

Unanticipated repair costs--sometimes known as 5 o'clock surprises--are charges for unauthorized work and/or charges in excess of the repair estimate. For example, one consumer brought her auto in for repair work and was given an estimate of \$355. However, when she returned to pick up the auto, she was told that prices had increased and the final total would be \$540. In such a case, the consumer may not have been able to afford the extra cost, may not have wanted to put the extra money into repairing the auto, or may have wanted to get an estimate at another repair shop.

GOVERNMENT OFFICIALS AND CONSUMERS SEE AUTO REPAIR PROBLEMS AS SERIOUS, EXPENSIVE, PERSISTENT, AND INCREASING

Most of the States responding to a congressional committee inquiry in December 1977 reported that autos were at or near the top of their list of consumer problems. The auto repair problem, including difficulties with new autos under warranty, was generally cited as the largest category among consumer auto problems. Sample comments included:

--"As in the rest of the country this area has also experienced the auto complaints [repair, warranties, availability of parts and car design] as a #1 priority. They are both the most numerous and most serious in terms of aggravation, dollars and difficulty in resolving."

--"Our experience supports the claim that auto repair complaints constitute the largest single group of consumer complaints in our country today. In our State they are more numerous than any others, more difficult to resolve satisfactorily, and they appear to be increasing."

Information on the extent of the auto repair problem also comes from additional sources. According to a spokesperson for State, county, and city government offices of consumer affairs, all member agencies report auto repair as one of the top three complaint categories, and in many areas, it tops the list. Agency investigators who handle consumer problems on a daily basis find that consumers' complaints about auto repairs are legitimate, serious, and among the most difficult to mediate. Complaints reported to consumer agencies may only be the "tip of the iceberg," according to some State officials. They note that in many instances consumers do not detect a repair problem, do not complain at all, or complain only to the repair facility involved.

Various consumer polls also indicate consumer dissatisfaction with auto repair. A poll commissioned by the Sentry Insurance Company in 1976 showed that consumers ranked garages, auto mechanics, and auto manufacturers as the worst industry categories in terms of serving consumers. From a 1975 poll on consumer attitudes concerning various products and services, researchers from the University of Illinois and the Western New England College School of Law concluded that:

"* * * the worst offender from the consumer's standpoint is the automobile repair industry. More than one out of three of these purchases yielded protests such as 'poor workmanship' and 'wasn't done right in the first place.'"

A negative consumer perception of the auto repair industry was found in a 1978 poll conducted by the Roper Organization, Inc. Specifically, the poll showed that a majority of

consumers believe that occasionally those in auto repair purposely gave the wrong information or overcharged them. The auto repair industry's rating was the worst of 13 job categories.

Estimated consumer loss

DOT focused on auto repair in two recent studies, one dealing with auto repair problems in general and the other with the ability of repair facilities to diagnose and correct repair problems. In May 1978, NHTSA published its study estimating the annual consumer loss on auto repairs to be \$20 billion. Since there was no single body of data from which a reliable calculation could be made on overall losses, NHTSA used a simulation model to develop the following estimate. The model was constructed using 14 studies conducted by a variety of organizations.

<u>Consumer loss</u>	(billions)
Unneeded parts of package deals	\$ 3
Unneeded repairs due to inadequate diagnosis	1.5
Faulty repairs for which owners did not get their money back	3
Unneeded repairs sold with fraudulent intent	2
Wasteful overfrequent preventive maintenance	2
Vehicle design requiring use of overly modularized parts, highly nonstandard parts or excessively laborious repair techniques	<u>2</u>
Total excessive repair expenses	13.5
Accidents due to undermaintenance or faulty repairs	2
Pollution and wasted fuel due to undermaintenance	2
Cars prematurely retired due to undermaintenance or faulty repairs	<u>2</u>
Total	<u>\$19.5</u>

NHTSA's study defined consumer loss as including direct out-of-pocket costs (repair and maintenance costs) and readily quantifiable societal costs (accidents and pollution costs due to improper maintenance and repair). Other costs, such as time lost getting repairs, time without one's vehicle, and frustration, were excluded because they had not been adequately quantifiable.

More recently, in May 1979 DOT released the results of its undercover survey of auto repair shops in seven cities.

--The survey found that chances of overrepair--that is, the shop would fix something that didn't need fixing--turned out to be 25 percent for brakes, 19 percent for suspensions, 78 percent for engines, and 39 percent overall.

--The chances of underrepair--that is, the shop would fail to fix the real problem--turned out to be 11 percent for brakes, 31 percent for suspensions, 28 percent for engines, and 21 percent overall.

--The combined chances of overrepair and underrepair--that is, that the shop would either fix something that didn't need fixing or fail to fix the real problem, or both--turned out to be 32 percent for brakes, 44 percent for suspensions, 89 percent for engines, and 51 percent overall.

The Secretary of Transportation noted:

"That indicates we had about a 50-50 chance of getting the car fixed right and for the right price, and it was almost a sure thing that the shop would do something wrong on the engine."

According to a DOT official, this survey was the most scientific attempt at an undercover study of auto repair practices. Similar studies have been conducted by local investigators or the news media.

Problem trends

Various sources indicate that auto repair problems are both persistent and increasing. Based on 1970 statistics, HEW's Office of Consumer Affairs found that the majority of State and local consumer offices ranked auto problems among the top consumer complaint categories. Since 1974, when the Office began compiling annual consumer complaints statistics, auto-related problems--primarily warranties and service---have topped the list. In addition, NHTSA noted that its 1978 estimate of consumer loss was conservative compared with the \$8 billion to \$10 billion consumer loss estimate made during the 1968-70 Senate hearings covering auto repair problems. And finally, about two-thirds of the officials in State and local consumer protection offices responding to our 1979 questionnaire believe that, over the last 5 years, auto

repair problems increased either slightly or substantially. Only 6 percent believe the problems are decreasing.

INDUSTRY OFFICIALS BELIEVE AUTO REPAIR PROBLEMS ARE EXAGGERATED

While industry officials acknowledge that consumers have auto repair problems, they contend that most consumers are satisfied with repair service. The Automotive Information Council, a national organization serving all segments of the motor vehicle industry, believes that the number of consumer complaints is small when related to the hundreds of millions of repair transactions made annually.

Industry groups, including the Motor and Equipment Manufacturers Association and NADA, have criticized NHTSA's estimate of consumer losses. The manufacturer association's officials consider the \$20 billion amount grossly inflated and are preparing a more detailed response for NHTSA. NADA prepared a detailed critique of NHTSA's report and stated that its conclusions were based on questionable assumptions and that its findings were reached using faulty logic. The report, according to NADA, does not reflect real world experience within the auto repair industry. NADA also said the NHTSA study failed to adequately distinguish between losses caused by consumers and those caused by the auto industry, nor did it differentiate between actual consumer expenditures and theoretical costs.

Industry members were also sharply critical of DOT's undercover survey. They questioned some of the survey methods; in particular, they believed that the survey size was too small to be reliable. They stated that a test including only 62 repair shops was not representative of the hundreds of millions of auto repairs made annually in several hundred thousand repair facilities.

INDUSTRY AND GOVERNMENT VIEWS DIFFER ON SPECIFIC REPAIR PROBLEMS

The substantial difference of opinion between consumer protection agency officials and industry officials concerning the extent of various auto repair problems is shown on the next page by the results of our questionnaire. While differences exist, the available evidence clearly indicates that the problems are serious enough to warrant substantially improved efforts by all concerned parties to reduce the effect of these problems.

Percentage of Respondents Who Believe the Problem Exists

to a Moderate, Substantial, or Very Great Extent

<u>Problem</u>	<u>Percent of State and local officials</u>	<u>Percent of industry officials</u>
New autos under manufacturer warranty:		
1. Length of the warranty period too short	48	7
2. Completeness of the warranty coverage inadequate	61	23
3. Autos with problems the dealer/manufacturer cannot or will not correct (lemons)	85	17
4. Inconvenience of return trips to get problems fixed	86	42
5. Lack of adequate substitute transportation during repair period	78	37
Autos no longer under manufacturer warranty (repairs by auto dealers and nondealers):		
6. Misleading or deceptive repair advertisements	38	18
7. Failure to provide an estimate	63	9
8. Fraudulent repair--work charged but not done	61	6
9. Fraudulent repair--work done where mechanic knew the repair was not needed	60	2
10. Unnecessary repair work done as part of package deals, such as work done for tune-ups and brake specials	51	11
11. Unnecessary repair work due to faulty diagnosis	75	22
12. Failure to properly repair the problem	87	34
13. Repairs made without authorization by the consumer	71	12
14. Use of used or rebuilt parts without consumer's knowledge.	34	4
15. Failure to return old parts	43	6
16. Unreasonable charges for work done	72	9
17. Final bill for a specific repair is higher than the consumer authorized.	71	12
18. Lack of repair warranty	64	13
19. Damage to vehicle while in repair shop	21	0
20. Inconvenience caused by repairs being delayed beyond time promised	74	27
21. Inconvenience to consumer caused by need for return trips	81	23

PROBLEMS ARE CAUSED IN PART BY THE
SHORTAGE OF SKILLED MECHANICS AND
QUESTIONABLE BUSINESS PRACTICES

Auto repair problems are not simple; they involve a number of interrelated factors. For example, NHTSA cites some automobile design decisions and undermaintenance by consumers as contributing factors to consumer losses. While there are multiple causes, in our opinion two stand out as being the most direct causes of consumer auto repair problems: shortage of skilled mechanics and unfair or questionable business practices.

Shortage of skilled mechanics

A variety of sources agree that there is a shortage of skilled (competent) mechanics, even though these terms have no precise definition. According to the president of the National Institute for Automotive Service Excellence (NIASE), competent mechanics are "those who are able to diagnose most problems most of the time and fix them right the first time." Some government and industry views on this problem follow:

- NIASE estimates that only 50 percent of the auto mechanics working on consumers' cars are ready to take even one of the NIASE certification tests. By this they mean 50 percent of the mechanics are fully competent to work on total subsystems rather than just replacement of individual components.
- State and local officials consider mechanic incompetence to be a major cause of consumer auto repair problems.
- The Independent Garage Owners of Illinois stated that 20 to 40 percent of auto repair facilities now in operation have inadequate and untrained mechanics.

The shortage of skilled mechanics is related to other factors, such as the lack of adequate mechanic training and motor vehicle complexity which can be expected to increase in the years ahead. The current shortage of skilled mechanics is evidence of the need for improvement in training mechanics. 1/

1/Appendix II discusses the mechanic shortage and the mechanic training efforts of industry and State, local, and Federal agencies.

The automobile contains about 15,000 parts and can be difficult to repair properly. The complexity of the automobile engine, for example, is summarized well by the following excerpt from "Chilton's Basic Auto Maintenance," 1976:

"The modern automobile engine is certainly the most complex and highly stressed of all household machines. Its parts are subjected to higher temperatures, greater pressures and vibration, and more extreme frictional loads and changes in velocity than those of other common machines. It has also been developed and refined to a greater extent than most machines. As a result, while the basic operating principles are fairly simple, the specifics are quite complex, and even the smallest deviation from the norm in the dimensions or the condition of a part, or in the setting of an individual adjustment can result in an obvious operating defect."

The trend toward increased use of sophisticated electronics that began in the 1970s will continue in the 1980s with use of microprocessors (small, highly specialized computers) becoming more common. 1/ Many industry and State and local government officials agree that the increasing complexity of motor vehicles is one of the causes of consumers' auto repair problems. In March 1978 testimony before the Consumer Subcommittee of the Senate Commerce Committee, the Automotive Service Councils, representing about 5,000 independent repair shops, expressed particular concern about the repair problem in future years:

"New technology bursting into the automotive industry in the form of electronic systems and components is compounding what is already a monumental task. Responding to the Federal Emission, Safety and Fuel Economy Standards, the auto industry is experiencing a revolution in its embracement of electronic devices.

* * * The avalanche of this new technology at a rate that is unparalleled in the history of this gigantic industry will bring with it a torrent of rising consumer complaints.

1/Appendix III discusses automotive trends and their effect on the repair process.

There will be a level of dissatisfaction never perceived by even the most zealous consumer protection advocates."

Questionable business practices

FTC and most States have authority to challenge questionable business practices, such as false advertising or misrepresentation by salespeople. Similarly, if a State can prove that a particular auto repair practice is unfair or deceptive, it can get the repairer to stop the practice. Some States have taken a further step and specifically defined prohibited auto repair practices. For example, in Massachusetts it is unfair or deceptive for a repair facility to

- state that repairs are necessary when they are not,
- charge for a repair that was not authorized by a customer,
- fail to obtain customer approval for repairs costing at least \$10 more than what was originally authorized or what was posted on a schedule of repair charges,
- fail to remedy promptly, at no charge, any repairs not performed in a good and workmanlike manner in accordance with accepted trade standards, and
- charge for repairs not actually performed.

Industry practices, such as sale of package deals, use of "flat rate" manuals to set labor charges, and service writer compensation systems based on repair order volume, also contribute to consumer auto repair problems, according to consumer protection officials contacted at the Federal, State, and local level. Though these practices may be considered questionable, to our knowledge they have not been found to be illegal. Most industry officials contacted strongly disagree with consumer officials, contending that these practices do not contribute to auto repair problems.

DOT and NHTSA officials criticize "package deals" (generally a group of related parts and services offered together for a single price) as being wasteful. For example, NHTSA estimates that consumers lose \$2 billion annually on unnecessary repairs that are part of package deals. DOT also cited this problem in its undercover survey described previously.

(See p. 8.) The former DOT Secretary, commenting on package deals observed during the survey, stated "* * * even though only one part may have been needed, you wind up buying the whole batch." Most industry officials do not believe package deals are a significant problem. NADA officials believe that, since most engine components have a fairly predictable useful life, it is often in the best interests of time, money, and convenience to have certain maintenance performed as package deals. For example, they believe spark plugs should generally be changed as a group, rather than one at a time.

Many large repair facilities compute their labor charges from "flat rate" manuals which set specific times for each repair job. Customers are charged for the time listed in this schedule and not the actual repair time which may be less. This may mislead the consumer. Also, it may encourage fast rather than accurate repairs and parts replacement rather than repair. Most industry officials contacted do not believe that the use of "flat rate" manuals is a cause of auto repair problems. They maintain that the system is fair and that it enables repair facilities to provide the consumer with an accurate cost estimate before the work is started. Also, it is seen as a logical pricing system for a product containing thousands of parts. They note that the use of the system is not unique when compared to other services, such as hair cutting or house painting where the price is set in advance and is not changed to reflect actual labor time.

FTC is investigating whether the use of sales incentives--including quotas--to compensate auto mechanics and service writers increases the rate of unnecessary repairs. Most industry officials contacted do not believe that compensation systems are a cause of consumer auto repair problems.

CHAPTER 3

THE EFFECTIVENESS OF STATE AND INDUSTRY

EFFORTS TO REDUCE AUTO REPAIR PROBLEMS

NEEDS TO BE EVALUATED

Some State and local governments and consumer and industry groups are trying to deal with auto repair problems. Though some aspects overlap, their programs fit into three major categories:

- Informing and educating consumers about exercising their legal rights, selecting repair shops, and determining their vehicles' repair needs.
- Assisting consumers in resolving disputes with repair facilities.
- Improving mechanic competency and industry repair practices.

Clearly these programs provide some benefits to consumers, particularly in resolving their auto repair disputes; however, the extent of their effectiveness in reducing the problems has not been clearly established. In some instances the programs are relatively new and in others the available data are inconclusive. Further, we found no evaluations comparing programs using similar or different approaches.

Better information is important because about half of the States have no specific auto repair regulations and could benefit from the experience of other groups. Since this information is lacking, existing program funds may not be used as effectively as possible. About two-thirds of the State and local officials believe that their jurisdictions' authority to control all types of auto repair problems is less than adequate.

CONSUMER INFORMATION/EDUCATION CAN MAKE THE MARKETPLACE WORK BETTER

If consumers were well informed, they could exert a positive force in the marketplace by favoring repair facilities offering advantages in quality and price. Unfortunately, consumers are generally not well informed about auto repair. Most of the State, local, and industry officials responding

to our questionnaire agreed that lack of consumer knowledge is a substantial or very great factor in the auto repair problem.

An internal FTC staff report noted that despite the size and diversity of the auto repair industry, market forces alone appear to be unable to solve the problem. It attributed the market's failure to solve consumer auto repair problems primarily to the public's inability to evaluate the quality of service and to obtain satisfaction when poor work is detected. Consumers frequently lack the technical knowledge to judge when a repair is necessary or whether the work is done satisfactorily. Some economists theorize in published papers that the failure of the market to routinely reward facilities performing only necessary repair may even encourage unnecessary repairs or fraud.

As discussed in the following sections, a variety of attempts have been made to help the consumer.

Disclosure laws

Twenty-four States and the District of Columbia have auto repair regulations generally known as disclosure laws. These regulations require repair facilities to disclose certain information to the consumer or take specific actions relative to the repair transaction. Disclosure laws vary among States, but often involve

- written repair cost estimates,
- customer authorization before making repairs,
- written invoices detailing parts and labor supplied,
- return of replaced parts, and
- written warranties.

Disclosure laws give the consumer a better understanding of what repairs are needed, how much they will cost, when they will be finished, and what warranties accompany the work. State officials believe that disclosure laws are helping control some auto repair problems. However, they are not sure to what extent these laws are effective in reducing the problems. For further information about disclosure laws, see appendix IV.

Consumer education

Some of the States reviewed actively educate consumers about their rights under various State laws. For example, New York, Michigan, and California require repair facilities to display signs telling consumers what their rights are and where to complain if a problem arises. Massachusetts distributes pamphlets informing consumers what their rights are and whom to contact if these rights have been violated.

Private industry and consumer groups also educate consumers. For instance, the auto manufacturers provide consumers with owner's manuals; Shell Oil Company publishes a series of pamphlets on car repair shopping, emergency repairs, and tuneups; the Council of Better Business Bureaus has a comprehensive booklet entitled, "Tips on Car Repair"; and the Boston Consumer's Council is developing a glove-compartment sized "automobile owner's survival manual," which will provide information on auto maintenance, repair, and purchase.

The success of consumer education materials and approaches depends upon whether consumers become better educated. None of the organizations contacted were aware of any evaluations dealing with auto repair consumer education efforts. Furthermore, consumer educators disagree on the best methods of educating consumers about auto repairs. Some favor repeating information frequently, while others favor giving consumers information only when it is needed. Some educators also believe television and radio are the best communication media. Nearly every official contacted agreed that consumers need auto repair education to overcome disadvantages in the marketplace. See appendix V for further information on consumer education.

Shop rating systems

Shop rating systems are intended to provide consumers with meaningful data for selecting a repair facility. The Washington Center for the Study of Services and the American Automobile Association (AAA) operate shop rating programs. The Center rates metropolitan Washington, D.C., area facilities based on (1) direct consumer polling about factors, such as the shop's overall performance and its ability to repair a car properly on the first attempt, (2) complaints filed at a local consumer agency, and (3) personnel qualifications (number of certified mechanics).

The AAA approach is to approve repair facilities requesting endorsement and meeting program standards and conditions. These include

- guaranteeing repair work,
- meeting standards for shop equipment and tools,
- employing certified mechanics,
- maintaining a satisfactory community reputation and financial standing, and
- agreeing to submit disputes to AAA arbitration and abide by the decision.

AAA's approved auto repair program operates in Washington, D.C., and in parts of Florida, California, Texas, Wisconsin, Kentucky, Minnesota, and Maryland.

Shop rating proponents believe that consumers provided with such information are more likely to obtain consistent and high quality repair services and note that motorists who use them are satisfied with the rating systems. Conversely, shop rating critics contend that shop rating systems tend to discriminate against smaller shops and have difficulty maintaining current data. For further information on shop rating, see appendix VI.

Diagnostic centers

While repair facilities typically use a variety of diagnostic equipment in repairing autos, some automotive facilities provide a separate service known as a diagnostic inspection. Diagnostic inspections provide a comprehensive check of an auto's operating condition.

The private sector has offered diagnostic inspection for many years, with a peak of about 500 facilities in 1969. Since then it appears that the number has declined.

Some AAA-affiliated auto clubs operate independent diagnostic centers and one provides approval for private diagnostic/repair centers. The Automobile Club of Missouri operates two diagnostic centers located in Kansas City and St. Louis. The centers offer motorists diagnostic inspections and specific repair instructions identifying solutions to existing and potential problems in the order of their urgency.

The Southern California Automobile Club takes a different approach by approving diagnostic/repair facilities which meet its standards. To be approved by the Club, the facilities must have, among other things, all of the types of diagnostic equipment specified. In addition, the Club monitors the quality of diagnostic inspection by periodically sending through the facilities vehicles that were first checked on the Club's own diagnostic equipment.

Club officials report that member usage is high in both types of diagnostic inspection programs. See page 26 and appendix VII for further information on diagnostic centers.

DISPUTE RESOLUTION PROGRAMS HELP CONSUMERS SETTLE AUTO REPAIR COMPLAINTS

Consumer dissatisfaction with auto repairs created a demand for quick, effective, and inexpensive ways to settle disputes. In response, States and consumer and industry groups established many dispute resolution approaches. Generally, consumers with auto repair problems can contact State agencies and consumer groups for assistance. Depending on the State in which they live and the type of auto repair problem, consumers can also participate in an industry dispute resolution program. Finally, consumers can always elect the legal approach and sue in court to get their problems resolved.

Many consumers using these programs have resolved their auto repair disputes. Some States have surveyed consumers about their programs and received favorable responses. Existing programs, however, have one or more limitations which hamper their effectiveness, such as lack of enforcement authority, limited resources, inability to award consumer redress, or limited availability or applicability. Furthermore, information is lacking on which programs are most successful in resolving consumer auto repair disputes. For further information, see appendix VIII.

State programs

While each of the States contacted uses some form of mediation to resolve complaints, their procedures are not standardized. Mediation involves having a third party help the consumer and a repair facility settle their dispute. Differences in State programs include organizational structure, staff size and experience, and the extent of auto repair legislation and authority to obtain consumer redress. Some

States have established separate auto repair units, use investigators previously employed as mechanics, and rely on specific auto repair legislation; other States handle auto repair dispute resolution in an agency using staff responsible for a wide variety of consumer problems, and have no special auto repair legislation.

Industry programs

All major domestic auto manufacturers handle consumer complaints through their dealers and manufacturer representatives. In addition, they are currently experimenting with new dispute resolution programs. In contrast to State programs, industry programs use some form of arbitration in addition to mediation efforts. Arbitration involves having a third party decide how the dispute should be resolved. The decision is binding on the industry member and, in some cases, it is also binding on the consumer.

Although these programs are new, officials believe they provide some assistance. For instance, Ford officials contend their program motivates dealership personnel to improve customer relations. Chrysler officials believe their program has made everyone try harder to settle complaints quickly and fairly. GM officials stated that reaction to their program has been favorable and that customers are generally satisfied with the process.

NADA established Automotive Consumer Action Panels (AUTOCAPs) which are intended to provide a swift, accessible, and inexpensive forum for resolving any sales or service problems consumers may have with participating member dealers. AUTOCAPs use mediation panels composed of both industry and consumer representatives. As of July 1979, there were 44 AUTOCAPs across the country. Other industry groups also have systems to resolve consumer complaints.

Other groups provide a variety of services

Other groups include local consumer protection agencies, Better Business Bureaus, and local divisions of the AAA. These groups assist consumers by mediating complaints, providing consumer information, and referring consumers to State or industry programs. These groups generally handle a wide variety of consumer complaints and have no enforcement authority. Most of the groups contacted estimate they successfully mediate the majority of all consumer complaints.

BBB's and some affiliates of the AAA also offer arbitration services. BBB programs are available to all consumers, while the AAA programs are limited to AAA members.

MECHANIC COMPETENCY AND
INDUSTRY REPAIR PRACTICES ARE
RECEIVING INCREASED ATTENTION

The auto repair problem is compounded by the fact that people can enter the repair industry with little or no auto repair knowledge. One does not have to be a trained mechanic to work in a repair shop. Various government and industry officials acknowledge a serious shortage of skilled mechanics. States are beginning to take a more active role in industry repair practices by certifying (licensing) mechanics and regulating repair standards. In addition, mechanic training programs and industry-supported voluntary certification programs are also receiving increased attention.

Mechanic training

Mechanic training helps to provide a source of new mechanics, upgrade the existing skills of working mechanics, and communicate new auto technology. The primary mechanic training opportunities are in vocational education programs, industry-sponsored programs, and government-funded employment training programs.

Vocational education programs range from high school courses to associate degree programs offered through local vocational schools, State community colleges, and private vocational schools. The Industry Planning Council, formed by the Motor Vehicle Manufacturers Association and the American Vocational Association, is working toward improving the quality and curriculum of automotive vocational training programs.

Private industry programs also include in-service and apprenticeship training programs. Motor vehicle manufacturers, for example, have developed a variety of training approaches and offer training in several locations. In addition, the Chrysler Corporation operates an automotive education center known as MoTech.

Despite the collective mechanic training efforts supported by industry and various levels of government, there is a shortage of skilled mechanics. Since autos are becoming more complex, the need for more and better

mechanic training will become even more important in the years ahead. For further information on mechanic training, see appendix II.

Mechanic certification

NIASE started certifying mechanics in 1972. It provides a voluntary certification program that is supported by the automotive industry. It operates nationally, and as of November 1978 had certified 133,000 mechanics.

Mandatory mechanic certification programs have been developed by two States --Michigan and Hawaii--to help alleviate the problem of mechanic incompetence. Both States began mechanic certification testing in 1976. The District of Columbia has enacted, but not fully implemented, a statute which includes a mandatory mechanic licensing provision.

Because these programs have not been evaluated, their effectiveness in reducing auto repair problems and improving the auto repair industry is uncertain. For additional information on mechanic certification, see appendix IX.

Repair standards

Several States have laws which in one form or another require repairs be done properly or in accordance with accepted trade standards. For example, California law states that it is unlawful to perform repairs which represent "any willful departure from or disregard of accepted trade standards for good and workmanlike repair." Massachusetts has a similar provision and one that prohibits a repair shop from stating that repairs are necessary when they are not, but the State has not yet developed any repair standards for enforcement purposes. New York State laws require that repair shops provide "quality" repairs. Quality is not specifically defined. Interpretations are made on a case-by-case basis.

California has specific regulations in effect on ball joints and transmissions. For example, in 1976 California required repair shops to record the measurement of wear and the manufacturer's tolerance for wear on the invoice for all ball joint repairs. State officials have received some information indicating that ball joint repairs dropped substantially after the regulation became effective. California recently adopted regulations describing the minimum parts and procedures necessary to call an automatic transmission

"rebuilt." State officials believe that this approach will provide a better legal basis for dealing with facilities misrepresenting that used or repaired transmissions were rebuilt.

STATE AND LOCAL OFFICIALS BELIEVE THEIR
REGULATORY AUTHORITY MAY BE TOO LIMITED

While about half of the States have some form of auto repair regulation, they are generally limited to disclosure type laws. Further, about two-thirds of the State and local officials responding to our questionnaire stated that their jurisdictions' authority to control all types of auto repair problems was less than adequate. The lack of authority was considered by 60 percent of them to be a substantial or very great limiting factor. State and local officials cited industry opposition, lack of gubernatorial/legislative support, and cost considerations as the major obstacles to obtaining adequate authority.

We asked State and local government and industry officials to indicate to what extent use of or improved actions in a variety of areas would help reduce auto repair problems. Their responses are shown on the following page.

Percentage of Respondents Who Believe That Use of or Improved Actions
in The Following Areas Would Help Reduce Auto Repair Problems to
a Moderate, Substantial, or Very Great Extent

<u>Program areas</u>	<u>Percent of State and local officials</u>	<u>Percent of industry officials</u>
1. Standards for wear measurement indicators on key auto parts such as brake components and ball joints	71	40
2. Disclosure of information on repairability for various models	81	32
3. Mechanic training	95	83
4. Voluntary mechanic certification	50	70
5. Mandatory mechanic certification	88	26
6. Repair shop rating systems	84	28
7. Repair shop registration (revokable for law violations)	92	35
8. Independent auto repair diagnostic centers	80	17
9. Consumer education	88	88
10. Consumer rights disclosures (return parts, repair estimates, etc.)	92	38
11. Training staff in your jurisdiction working on auto repair problems	79	47
12. Use of undercover cars to monitor auto repair practices and/or to detect fraud	91	16
13. Dispute resolution mechanisms	89	44
14. Improved warranty protection laws	86	23
15. Increased enforcement of unfair and deceptive acts or practices' statutes	89	35
16. Increased enforcement of existing State and local auto repair regulations	77	35
17. Evaluating the effectiveness of various approaches to solving auto repair problems	69	44
18. Developing model legislation for State or local governments	72	15
19. Clearinghouse for consumer auto complaints with output available to local, State, and Federal agencies	75	33
20. Coordinate efforts among consumers, manufacturers, sellers, and repairers of autos and government agencies dealing with specific problems	78	57

CHAPTER 4

FEDERAL EFFORTS HAVE HAD LITTLE EFFECT

Despite consumers' losses estimated to be billions of dollars annually, the Federal Government has done little to reduce consumers' auto repair problems. In fact, only two Federal agencies--NHTSA and FTC--have ongoing programs (with expenditures of less than \$1 million in fiscal year 1979) specifically directed at reducing such problems. Several other Federal agencies indirectly touch on auto repair in their programs for training mechanics and controlling pollution. There was no practical way to identify the total amount of funds spent on the auto repair-related aspects of these programs.

To date, Federal agency activities have had very little measurable effect on reducing consumers' repair problems. Until recently, Federal agencies have not tried to provide overall coordination of their activities among themselves or with State and local governments. While they differ on the specifics, most of the industry, State, and local officials contacted believe the Federal Government should have some involvement in efforts to reduce consumers' auto repair problems.

FEDERAL INVOLVEMENT IS MOSTLY INDIRECT

To identify the Federal role in addressing auto repair problems, we contacted numerous Federal agencies whose activities in some way involve auto repair. Only two Federal agencies--NHTSA and FTC--have ongoing programs specifically directed at consumers' auto repair problems. Agencies, such as EPA, DOL, HEW, SBA, LEAA, and OCE, have sponsored programs or projects involving auto repair in some way. These efforts were directed at accomplishing the agencies' primary missions, which do not include consumers' auto repair problems, or were one-time efforts. The auto repair-related activities of all these agencies are described in detail in appendix XI--Federal Agency Activities.

NHTSA

NHTSA's primary responsibilities are motor vehicle and highway safety. The National Traffic and Motor Vehicle Safety Act of 1966 (15 U.S.C. 1381, et seq.) and the Highway Safety Act of 1966 (23 U.S.C. 401, et seq.) require NHTSA to establish motor vehicle safety standards, conduct safety research, establish a national program to reduce motor vehicle accidents, injuries, and fatalities, and improve highway safety programs.

The Motor Vehicle Information and Cost Savings Act (15 U.S.C. 1901, et seq.) authorized DOT to address automobile-related factors other than safety. Specifically, the act required DOT to

- develop bumper standards to reduce accident damage (title I),
- provide consumers with automobile comparability information (title II),
- establish motor vehicle diagnostic inspection projects (title III),
- prevent odometer tampering (title IV), and
- develop national fuel economy standards (title V).

Although all five titles are important and do relate to the cost of owning and operating a motor vehicle, titles II and III are most directly related to the common types of consumers' auto repair problems such as faulty and unnecessary repairs described in chapter 2.

Title II (15 U.S.C. 1941) requires DOT to develop and provide consumers with comparability information on crash-worthiness, damageability, and ease-of-diagnosis and repair. The intent of title II is to increase consumer awareness of differences in safety and performance among motor vehicles and to make the marketplace more effective by encouraging manufacturers to build safer and easier-to-repair autos. However, within title II requirements, only information on ease-of-diagnosis and repair relates directly to obtaining automobile repair services. Crashworthiness and damageability relate to occupant protection and vehicle damage during a crash. Although efforts on crashworthiness and damageability may affect auto repairs through design changes and insurance costs, their primary emphasis is on improving safety and reducing structural damage caused by accidents.

Title III (15 U.S.C. 1961) required DOT to establish motor vehicle diagnostic demonstration projects. Each of the five projects established inspected vehicle emission control and safety systems. Consumers participating in the projects received information on their vehicles' operating condition. NHTSA found that the participants experienced less unnecessary repair, increased fuel economy, and reduced vehicle emissions. (See app. VII.) NHTSA concluded from these projects that vehicle diagnostic centers independent of repair facilities

are feasible, effective, and publicly acceptable. NHTSA completed the demonstration phase of the title III projects in 1977. However, NHTSA is currently conducting some follow-on studies related to auto repair diagnosis and the diagnostic and test equipment problems faced by automobile garages. Along with FTC, NHTSA has also funded a study of the repair data from the diagnostic inspection centers to determine the incidences of unnecessary and unsatisfactory auto repair and the resulting economic loss to consumers.

NHTSA's activities directed at improving vehicle safety may also have secondary benefits in auto repair. These activities include setting motor vehicle safety standards and recalling vehicles with safety defects. In addition, NHTSA provides consumers with educational material on a wide range of auto topics including auto repair problems.

For more details, see appendix XI, page 129.

FTC

Under the Federal Trade Commission Act (15 U.S.C. 41, et seq.), FTC has broad investigative and enforcement powers to stop unfair and deceptive acts or practices in a wide range of business activities including auto repair. Although FTC has not been very active in consumers' auto repair problems and has not clearly defined a role for itself, it has maintained an auto repair program since fiscal year 1975. In addition, FTC has pursued or is pursuing individual cases or programs specifically related to auto repair, including new auto warranties, dispute resolution mechanisms, manufacturing or design defects, and complaint handling. FTC is also performing some economic analysis of the nature and extent of consumers' auto repair problems. Although these problems are a major consumer concern, FTC spent less than 1 percent of its consumer protection funds on such problems.

Until recently, FTC's auto repair program centered on a comprehensive project with two objectives: identifying specific problems consumers were having with auto repairs, and evaluating the success of public and private programs to resolve those problems. Through March 1979, FTC spent about \$188,000 on this project which produced several internal studies.

In addition, as of July 1979, FTC had three active auto repair investigations. The first involves an industrywide investigation of whether the use of sales incentives--including

quotas--to compensate auto mechanics and service writers increases the rate of unnecessary repair. The second, also an industrywide investigation, concerns the need for a standard definition for rebuilt transmission service. The third case involves one firm's alleged "lowballing"--offering a repair package deal at an enticingly low price but routinely charging consumers significantly more in the end.

In April 1978 the FTC Commissioners held a policy session to consider the agency's commitment to auto-related areas. The staff report noted that FTC efforts on automobiles did not appear to be based on the relative importance of automobile problems. FTC's coordinator for automobile activities said that, although FTC did not formally act on any of the matters proposed at the policy session, the mere scheduling of the session signaled to the staff that auto repair was a priority area.

However, several events occurring since that session have, in our opinion, negated any perceptions of priority which the session may have created. First, the Commissioners turned down the major output of the auto repair program--the staff's recommendation for a \$1.2 million study of existing programs. Second, one of the investigations started after the policy session was killed by budget cuts. Third, the resources available for auto repair work have not increased.

For more details, see appendix XI, page 140.

Other Federal agencies

The activities of the other Federal agencies touch on auto repair issues. However, these activities were not specifically directed at reducing consumers' auto repair problems or they were one-time efforts.

DOL and HEW fund various training and vocational education programs which include auto mechanic training. The actual recipients of DOL and HEW assistance--States, schools, and prime sponsors--are allowed considerable autonomy in developing and administering training programs. Because of this decentralization, DOL maintains little national data on its programs. However, HEW data on vocational education programs it helped support showed that, in fiscal year 1977, about 369,000 students were enrolled in auto mechanic courses, and about 92,000 students completed these courses.

In addition to funding training programs, DOL funded three, one-time contracts to promote automotive mechanic apprenticeships. Federal funds for these programs are not used for the actual training of mechanics but rather for promoting the program and recruiting apprentices.

For more details, see appendix II.

EPA was given responsibility under the 1970 Clean Air Act (42 U.S.C. 7401, et seq.) to implement the National Ambient Air Quality Standards with the overall goal of reducing air pollution. A major approach EPA uses in reducing air pollution is to identify areas throughout the Nation which exceed the ambient air quality standards. For those areas which cannot meet the standards by December 31, 1982, a motor vehicle inspection and maintenance (I/M) program will be required. Motor vehicle emissions are a significant contributor to air pollution. An I/M program will require mandatory motor vehicle emissions inspection and repair for those vehicles failing the inspection.

Although as of September 1979 only five areas have mandatory I/M programs which cover an estimated 6.5 million autos, the I/M program will grow. EPA has identified 50 to 60 areas throughout the Nation which will require I/M programs and about 40 million autos that will be subjected to periodic emissions inspections. Results of some of these first programs indicate that the repair industry may be having some difficulty properly repairing cars which fail the emissions inspection. For example, a May 1978 New Jersey study concluded that 25 percent of the vehicles that fail emissions tests were not repaired well enough to pass the reinspection.

To keep the emission control devices on cars functioning properly, EPA is providing mechanic training in diagnosis and repair of emission control systems. EPA is training the instructors of mechanic training courses, who in turn train individual mechanics.

Sections 207(a) and (b) of the Clean Air Act (42 U.S.C. 7541(a) and (b)) authorize EPA to develop regulations requiring that auto manufacturers warrant their emissions systems for specified periods of time. Section 207(a), which is already in effect, requires manufacturers to warrant catalytic converters and other components installed on autos specifically for reducing emissions for 5 years or 50,000 miles.

Regulations proposed under section 207(b) would provide for a 2-year or 24,000 mile warranty on any part of a vehicle which could cause excessive emissions. EPA officials expect that the regulations will be adopted by early spring of 1980.

For more details, see appendix XI, page 150.

SBA makes or guarantees loans to many types of small businesses, including new and used car dealers, general automotive repair shops, and auto supply stores. The assistance helps these facilities finance things such as equipment purchases or facility expansion.

For more details, see appendix XI, page 155.

LEAA funded the Economic Crime Project of the National District Attorney's Association. The objective of the program is to improve the capability of local district attorneys to detect, investigate, and prosecute white-collar crimes and to increase public awareness of and cooperation with such efforts. One of the areas receiving attention under this program was auto repair fraud. To help district attorneys with this problem, the Economic Crime Project created an Auto Repair Fraud Task Force which prepared the Auto Repair Fraud Manual in 1978. The manual is intended to serve as a guide for prosecutors and police in conducting auto repair fraud investigations and prosecutions.

For more details, see appendix XI, page 157.

OCE funds various projects to educate consumers and teachers and to develop educational materials. Of about 245 projects funded by OCE through fiscal year 1979, five relate specifically to auto repair. These include developing (1) public radio announcements encouraging consumers to request written estimates before approving repair work and (2) glove-compartment sized manuals for consumers on auto maintenance, repair, and purchasing.

For more details, see appendix XI, page 159.

FEDERAL ACTIVITIES HAVE LITTLE MEASURABLE EFFECT

Federal agency activities have had very little measurable effect on reducing consumers' auto repair problems. In part, this appears related to the lack of an attempt to address the problems directly on an overall basis. However, even where there were specific program attempts to make direct contributions, the results to date have not been very extensive. These programs are still underway and may in future

years produce significant consumer benefits. Other efforts have been relatively recent or have not been evaluated in terms of their effect.

The ongoing programs directed at consumers' auto repair problems at NHTSA and FTC have not yet produced results having any significant effect on these problems. NHTSA is still studying the feasibility and consumer acceptance of automobile rating information on ease-of-diagnosis and repair. Demonstration diagnostic centers showed promising results for reducing auto repair problems and potential for improving vehicle safety, fuel economy, and emission control. However, none of the States sponsoring the projects currently provide funds to support formal, public diagnostic inspection centers. The projects' diagnostic equipment is being used for other purposes, including mechanic training and inspection of vehicle emissions.

As noted previously, Federal agencies have conducted or sponsored auto repair-related activities, such as complaint handling, consumer education, and prosecution of auto repair fraud. While these efforts have some positive benefits, they are relatively small compared to the size of the auto repair problem as a whole.

In contrast with most auto repair-related activities of other Federal agencies, DOL and HEW support mechanic training programs involving several hundred thousand students. HEW officials told us that they do not have information on a national basis concerning the effectiveness of this mechanic training. For the most part, HEW evaluations focus on State compliance with statutory requirements and do not cover specific types of training programs such as mechanic training. Based on the 1976 amendments to the Vocational Education Act of 1963 (20 U.S.C. 2301, *et seq.*), States are required to evaluate their vocational programs. The States are performing effectiveness evaluations, but HEW officials do not expect the results until the end of 1980.

Despite the lack of evaluation data, there is some indication of problems with mechanic training. It is questionable as to how many students completing vocational automotive programs actually become employed as auto mechanics. The Director of HEW's Vocational Education Data System believes that 50 to 60 percent of those who complete vocational education programs do not pursue the occupation for which they were trained. He said that many students enroll in auto mechanic training programs for reasons other than career development, such as to pursue the field as a hobby or to learn "do-it-yourself" skills to apply to privately owned cars.

DOL officials told us that due to the decentralized nature of the programs under the Comprehensive Employment and Training Act of 1973, as amended in 1978 (29 U.S.C. 801, et seq.), they were unable to provide us with any information on the number of programs offering auto mechanic training, the number of persons receiving such training, or its effectiveness. The only information available was job placement statistics for Job Corps training programs.

OFFICIALS OF STATE AND LOCAL GOVERNMENTS
AND INDUSTRY SEE A NEED FOR SOME
FEDERAL INVOLVEMENT

Industry and government officials responding to our questionnaire agree that the Federal Government should be involved to some extent in a range of activities addressing consumers' auto repair problems. The officials also agree that the type of Federal Government involvement should be mainly financial, research, and technical assistance. For the most part, they do not believe the Federal Government should regulate the auto repair industry. Disagreements between industry and government officials center on the extent of Federal involvement in specific areas of auto repair. (See the table on p. 33.)

Industry officials see a need for some, but not substantial, Federal involvement in auto repair activities. We asked their opinion on the extent of the Federal role in the categories listed on page 33. Most of these officials believe that there should be no Federal involvement in 9 of the 20 role categories. For example, 80 percent of them do not want the Federal Government involved in using undercover cars to monitor auto repair practices and/or to detect fraud, and 74 percent do not want Federal involvement in mandatory mechanic certification. However, in 11 of the 20 categories, most industry officials see a need for at least some Federal involvement. For example, 85 percent see a need for at least some Federal involvement in consumer education, and 70 percent see a need for at least some Federal effort in mechanic training.

Compared to industry, State and local government officials see a need for a more substantial Federal role in auto repair activities. Fifty percent or more of the government officials believe that the Federal Government should have at least some involvement in all 20 categories. In six of these categories, most government officials believe the Federal role should be substantial or very great. These include improved warranty protection laws, standards for wear measurement indicators, disclosure of repairability information, and consumer education.

Views of State and Local Government and Industry Officials
on the Extent of the Role the Federal Government
Should Assume in Various Areas in Attempting
To Reduce Auto Repair Problems

Categories for a Federal role	Extent of Federal involvement					
	None		Some or moderate		Substantial or very great	
	Government	Industry	Government	Industry	Government	Industry
1. Standards for wear measurement indicators	6	41	25	46	69	13
2. Repairability information	5	48	25	39	70	13
3. Mechanic training	30	30	42	40	28	30
4. Voluntary mechanic certification	50	38	39	29	11	33
5. Mandatory mechanic certification	36	74	35	14	28	12
6. Shop rating systems	30	62	43	29	27	9
7. Shop registration (revokable for law violations)	44	62	29	24	27	14
8. Independent diagnostic centers	32	72	39	23	29	5
9. Consumer education	4	16	30	41	65	44
10. Consumer rights disclosures (estimates, etc.)	15	41	35	50	49	9
11. Training law enforcement staff	15	34	46	44	39	22
12. Use of undercover cars	26	80	39	19	35	1
13. Dispute resolution mechanisms	33	54	48	43	18	3
14. Improved warranty protection laws	1	60	26	34	73	5
15. Increased enforcement of unfair and deceptive acts or practices statutes	16	40	42	48	42	12
16. Increased enforcement of State and local auto repair laws	44	49	30	42	26	9
17. Effectiveness evaluations of existing programs	6	31	53	58	40	11
18. Model legislation for State or local governments	8	67	49	27	44	6
19. Consumer complaint clearinghouse	12	53	34	42	54	5
20. Coordination among consumers, industry, and government on specific problems	6	27	40	52	54	21

CHAPTER 5

THE INTERAGENCY COORDINATING COMMITTEE

IS A STEP IN THE RIGHT DIRECTION

Individual Federal agencies have coordinated some of their auto repair-related activities with each other and with State and local governments. However, instances of coordination were directed only at specific aspects of auto repair problems. Until recently, no attempt was made to coordinate overall Federal, State, and local governments and industry interests in auto repair.

In May 1979, NHTSA sponsored a national conference on auto inspection, maintenance, and repair. Also, NHTSA is developing an Interagency Coordinating Committee designed to facilitate the planning and coordinating of the Federal programs involving inspection, maintenance, and repair of motor vehicles. Despite some significant limitations involving lack of congressional direction, lack of funding, and a narrow scope of operations, the Committee is a step in the right direction.

COORDINATION OF FEDERAL AUTO REPAIR ACTIVITIES

Until recently, Federal agencies had not coordinated overall Federal auto repair-related activities. Federal agencies limited their coordination efforts to specific activities, such as mechanic training, and to specific aspects of the auto repair problem, such as the extent of unnecessary and unsatisfactory auto repair.

To coordinate Federal auto mechanic training activities, NHTSA initiated an effort in December 1978 to establish an interagency task force with DOL, HEW, and EPA. In demonstrating the need for coordination, NHTSA noted that the mechanic training programs of various Federal agencies, States, auto manufacturers, and the auto repair industry have not succeeded in addressing the shortage of skilled mechanics. The task force is focusing its activities on defining the Federal role and identifying which programs should be pursued.

NHTSA is also involved with FTC in a joint contract to analyze the data from the diagnostic inspection demonstration projects to determine the incidence and causes of unnecessary and unsatisfactory auto repair work and the

resulting economic loss to customers. FTC suggested that the study be made and hopes the contract results will help identify unfair or deceptive auto repair practices. NHTSA does not have specific plans to use these results. A NHTSA official stated that without specific congressional interest the agency would not have contracted for the study.

NATIONAL CONFERENCE ADDRESSES NHTSA'S ROLE
IN AUTO INSPECTION, MAINTENANCE, AND REPAIR

In May 1979, NHTSA and the Transportation Research Board sponsored a conference on auto inspection, maintenance, and repair. NHTSA's objective was to obtain input on the need for and direction of future program efforts in these areas. Representatives from other Federal agencies, State and local governments, consumer groups, auto equipment manufacturers, and the auto repair industry participated in conference activities.

To meet this overall objective, participants were asked to reach a consensus on the principal problems affecting the inspection, maintenance, and repair process; to develop a series of recommendations for programs; and to establish priorities for the most feasible initiatives. NHTSA set up panel workshops covering a range of topics including standardizing auto design and equipment, consumer self-help programs, and auto mechanic training. At the final session, participants ranked in order of priority the combined program solutions developed by each of the panels.

The results were presented in a variety of ways, including group affiliation, which showed some differences in priorities. For example, consumer group representatives gave highest priority to programs directed at improving technical and training information for mechanics, communication between consumers and industry, consumer education, and complaint resolution mechanisms. Auto sales and service personnel gave highest priority to programs directed at improving cooperative efforts for training mechanics, additional Federal support for mechanic training, ways to recruit for and enhance the mechanic profession, and technical and training information for mechanics.

THE INTERAGENCY COORDINATING COMMITTEE--
A LIMITED APPROACH

NHTSA is developing an Interagency Coordinating Committee. The stated purpose of the Committee is to facilitate the planning and coordinating of Federal programs

involving the inspection, maintenance, and repair of motor vehicles. However, one Federal official told us that the scope of Committee activities will address overall auto repair problems and programs and not just those related to Federal activities.

Its executive committee is composed of Federal agency representatives and will provide broad policy guidance, goals, and objectives. The Committee will also have a coordinating workgroup and various technical workgroups. The technical groups will study and analyze individual issues of concern, such as mechanic training, standardization, diagnostics, consumer protection, and auto repair procedures. The technical group will propose specific actions to address the issues including government regulations, industry standards, or demonstration projects. The various technical groups will report to a coordinating workgroup consisting of government, industry, and consumer representatives. The coordinating workgroup will develop and provide policy and action recommendations to the executive committee based on input from the various technical groups.

We consider the proposed Committee to be a good first step. However, there are limitations which hinder its potential effectiveness:

- The Committee does not have its own budget or staff.
- The success of the Committee will depend heavily on the individual members' initiative and the willingness of the agencies to provide support.
- The executive committee does not have representation from State and local governments, consumer groups, or industry.
- Congressional input is lacking. Even though some of the Committee's recommendations may require additional legislation or congressional approval, the Congress has not endorsed this attempt at interagency coordination to address auto repair problems.
- The stated purpose of the Committee is specifically directed at Federal programs. There is no assurance that the Committee will address the repair issues of consumers, industry, and State and local governments.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATION--

A NATIONALLY COORDINATED APPROACH TO

AUTO REPAIR PROBLEMS IS NEEDED

Auto repair problems are among the most troublesome of all consumer problems. Their persistence over the years is testimony to their complexity. NHTSA's estimate of the annual consumer loss at \$20 billion indicates that they are also among the most costly. Even if the consumer loss is not as large as NHTSA projected, information from other sources, including State and local governments, clearly indicates that the auto repair problems are increasing and serious enough to warrant corrective actions by all parties concerned.

Improvements are needed in many aspects of auto repair, but in our opinion the following four areas need special attention:

- Mechanic training--with the shortage of skilled mechanics and the increasing use of sophisticated technology in auto design, ways must be found to produce better trained mechanics.
- Consumer education and information--whether it is in the form of diagnostic inspection results, shop rating systems, or media advertisements, more and better consumer information is needed to make the auto repair marketplace function as it should.
- Auto repair business practices--questionable business practices used by some repair facilities need to be evaluated to determine whether they are fair or unfair to the consumer.
- Dispute resolution--increased industry activity in resolving consumer auto repair problems presents an outstanding opportunity for effective coordination among all concerned parties for the consumer's benefit.

To various extents, Federal agencies are already involved in these areas, either directly or indirectly. Federal agencies could do more in these areas without specific congressional direction. Specifically, they could

- evaluate the existing approaches to reducing consumers' auto repair problems,
- provide technical and research assistance to State and local governments, and
- encourage development and demonstration of new ideas for solving auto repair problems.

Completion or expansion of existing Federal agency efforts may provide some help in dealing with auto repair problems. However, we believe the most essential Federal role at this time lies in the area of coordinating public and private efforts to reduce consumers' auto repair problems.

State and local government, consumer, and industry groups have the most contact with auto repair problems and are in the best position to take direct corrective actions. This view is consistent with our questionnaire results which showed relatively little support for direct Federal regulation in many aspects of auto repair. However, officials of State and local governments and industry gave substantial support to some Federal involvement, particularly research and technical assistance and financial support.

No one party can solve all the consumer auto repair problems. Cooperation among various levels of government and industry is essential. What is needed is an effective way to coordinate the activities of these groups. NHTSA and other Federal agencies are taking a step in the right direction by forming the Interagency Coordinating Committee.

We believe that this action does not go far enough. Some of its features limit its potential effectiveness. Specifically, the Committee lacks its own resources to operate, representation by all interested groups on the executive committee, and most important--congressional input. In addition, the Committee's success will depend heavily on the extent to which its members can assure that specific amounts of resources will be available.

RECOMMENDATION TO THE CONGRESS

We recommend that the Congress strengthen the concepts of the Interagency Coordinating Committee by

- establishing the Committee as a national auto repair coordinating committee. This new committee would evaluate the effectiveness of current efforts to

reduce consumers' auto repair problems and identify areas for future support,

- expanding the Committee's objectives to cover more than just Federal programs and activities,
- encouraging State and local governments, consumer groups, and private industry to actively participate in the committee,
- directing the Federal agencies to make firm commitments to support the committee, and
- providing adequate resources to operate the committee.

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United States Senate

COMMITTEE ON COMMERCE, SCIENCE,
 AND TRANSPORTATION
 WASHINGTON, D.C. 20510

December 13, 1978

The Honorable Elmer B. Staats
 Comptroller General of the United States
 U.S. General Accounting Office
 441 G. Street, N.W.
 Washington, D.C. 20548

Dear Mr. Staats:

For some time, we have been concerned about the difficulty consumers have in trying to get their automobiles repaired effectively and economically. In fact, our hearings demonstrated that auto repair is the number one consumer complaint area.


Our Committee has held detailed hearings on the auto repair industry, where we explored the many auto repair and maintenance problems faced by the consumer, and a range of private, local, and State programs and remedies. These hearings have shown us that the problem is widespread and not susceptible to simple assignment of blame and simple solutions.

Several Federal agencies such as the Federal Trade Commission, the Department of Transportation, the Environmental Protection Agency, and the Department of Labor have programs or activities directly affecting the auto repair industry. However, most of the activity attempting to correct the problem is occurring at the State and local levels. With the automobile expected to be the major means of transportation in the foreseeable future, it is important to clarify the Federal role in dealing with the auto repair problem including the relationship of the Federal agencies with the State and local government.

While we recognized that GAO alone will not be able to solve the multibillion dollar auto repair problem, we believe that your organization can provide our Committee with useful information and objective analysis. Specifically, we request that you:

- identify and determine the extent of Federal agency actions affecting the auto repair industry;
- evaluate the adequacy and need for inter-agency coordination of these activities;
- evaluate the adequacy of existing Federal agency coordination with, and assistance given to State and local governments working on auto repair problems;
- identify and analyze ways where Federal agencies acting within the scope of their current activities could improve assistance to consumers and State and local governments; and
- identify and analyze opportunities for further assistance that would help consumers and State and local governments more effectively handle auto repair problems.

Sincerely,


HOWARD W. CANNON, Chairman
Committee on Commerce, Science,
and Transportation


WENDELL H. FORD, Chairman
Consumer Subcommittee

WHF/HWC:djm

AUTO MECHANIC TRAINING--A SERIOUS PROBLEM

Government and industry officials agree that a serious shortage of skilled (competent) auto mechanics is a problem, resulting in part from low wages, poor working conditions, inadequate fringe benefits, and a lack of mechanic training. Our analysis deals primarily with mechanic training. The shortage of skilled mechanics is important because it affects the quality of repairs. Mechanic incompetence is a direct cause of faulty repair work, resulting in numerous consumer complaints.

Collectively, the mechanic training programs supported by industry and various levels of government have been unsuccessful in eliminating the shortage of skilled mechanics. Since autos are becoming more complex, the need for more and better mechanic training will become even more important in the future.

Industry and government sources cite many factors that have a negative effect on training efforts, such as the high cost of equipment and training facilities, the lack of motivation or aptitude for mechanic training in some vocational school students, and the reluctance of some repair facilities to adequately train mechanics.

The Federal Government has very little information on the effectiveness of auto mechanic (or other individual occupational) training programs it supports and their potential for reducing the shortage of skilled mechanics. The evaluations which have occurred have been limited, and generally focused on grant recipients' overall plans, performance, and compliance with appropriate statutory requirements.

AUTO MECHANICS--THEIR WORK
AND WORK ENVIRONMENT

Consumers take their vehicles to repair facilities for routine maintenance or because of malfunctions. Symptoms of malfunctions are described to the mechanic or a service manager. The mechanic may then have to test drive the car or use testing equipment, such as motor analyzers, spark plug testers, or compression gauges to locate the problem. This requires good reasoning ability as well as a thorough knowledge of automobiles. This knowledge is acquired in training courses and/or through on-the-job training (OJT). Some mechanics use this training to become generalists and perform a variety of repairs; others specialize in the following areas:

- Transmissions.
- Tuneups.
- Air-conditioning.
- Front-end work.
- Brakes.
- Cooling and heating systems.

Once the cause of the problem is found, the mechanic will either make necessary adjustments or replace parts to complete the repair.

Auto mechanics must perform significant amounts of manual labor. They work with dirty and greasy parts, and in awkward positions. Many automobile parts and tools that may be used are heavy. Mechanics also are susceptible to minor cuts and bruises.

Auto mechanics are generally required to supply their own tools and most learn the trade on the job. Beginners usually start as helpers, lubrication workers, or gas station attendants and acquire skills by working with experienced mechanics. The Department of Labor estimated it takes 3 to 4 years to become familiar with all types of repairs. An additional 1 or 2 years is necessary to learn a specialty.

Most mechanics work in shops that employ from one to five mechanics, although some of the largest employ more than 100. Generally, automobile dealer shops employ more mechanics than independent garages do, yet one in seven auto mechanics is self-employed.

DOL's April 1979 data showed that skilled auto mechanics earn between \$2.90 and \$17.50 per hour; the average is \$4.58 per hour. These figures are calculated from wage data 40 States submitted to DOL.

SHORTAGE OF SKILLED MECHANICS

A variety of sources agree that there is a shortage of skilled (competent) mechanics even though these terms are not precisely defined. According to the president of the National Institute for Automotive Service Excellence, competent mechanics are "those who are able to diagnose most problems most of the time and fix them right the first time."

The following comments were made by government and industry sources:

- DOL's Employment and Training Administration believes that consumer complaints indicate there is an insufficient number of qualified mechanics.
- The National Highway Traffic Safety Administration refers to a critical shortage of qualified automobile mechanics needed to adequately maintain and repair the Nation's motor vehicle population.
- NIASE estimates that only 50 percent of the auto mechanics working on consumers' cars are ready to take even one of the NIASE tests. By this they mean 50 percent of the mechanics are fully competent to work on total subsystems rather than just replacement of individual components.
- The Automobile Service Council of California believes the "level of competency for a large percentage of auto mechanics is very low."
- The Independent Garage Owners of Illinois said that 20 to 40 percent of auto repair facilities in operation have inadequate and untrained mechanics.

Some government and industry officials cite a strong relationship between consumer complaints involving faulty repair work and the shortage of competent mechanics. As the shortage continues and autos become more and more complex, the need for expert service technicians will grow, and these service people will have to be better trained.

TRAINING OPPORTUNITIES

Training serves three major purposes--providing a steady source of new mechanics, upgrading existing skills of working mechanics, and teaching them the new technology used in repairing cars. Training generally should result in better diagnoses and repairs. The primary opportunities for training are

- vocational education programs,
- industry-sponsored programs, and
- government-funded employment training programs.

Vocational education programs

Vocational, technical, and adult education provides opportunities for people of all ages. These programs directly prepare individuals for employment. They include instruction, as well as acquisition, maintenance, and repair of instructional supplies, teaching aides, and equipment. Vocational education programs receive funding and assistance from the Federal Government; however, they are usually operated by either State, local, or private groups. State programs are usually operated in community colleges and technical schools.

Federal efforts

The Department of Health, Education, and Welfare assists State vocational education programs with technical assistance and grants. The Education Amendments of 1976 (20 U.S.C. 2301) mandate a Federal effort in vocational education:

"* * * to assist States in improving planning in the use of all resources available to them for vocational education and manpower training by involving a wide range of agencies and individuals * * * in the development of vocational education plans."

Although HEW does provide grants to States, it does not require specific vocational programs or courses. Each State submits a 5-year plan of courses to be offered based on its current and future job skill needs. In fiscal year 1977, about 369,000 students were enrolled in, and about 92,000 completed, federally supported vocational programs in auto mechanics.

<u>Type of training</u>	<u>Students</u>
<u>Secondary</u> (high schools)	219,987
<u>Postsecondary</u> (technical schools, community colleges)	62,128
<u>Adult</u> (evening schools apprenticeship)	<u>86,605</u>
Total enrollments	<u>368,720</u>
Completions	91,698

HEW has little data on the effectiveness of auto mechanic vocational training programs it supports. Under the Vocational Education Act of 1963, as amended in 1976 (20 U.S.C. 2312), States are evaluating the effectiveness of vocational training programs. HEW officials estimate that the States will not begin submitting data until the end of 1980. Consequently, HEW has not done much reviewing and analyzing of the strengths and weaknesses of these federally assisted State programs in producing competent auto mechanics. HEW's evaluations do not focus on specific program areas such as mechanic training. Instead they are directed at State compliance with the provisions of the act and the regulations.

HEW also is involved with auto mechanic training indirectly through participation on various industry-sponsored organizations. An HEW program specialist is a member of the Motor Vehicle Manufacturers Association/American Vocational Association-sponsored Industry Planning Council. Its purpose is to provide relevant information on teacher education, curriculum, and research to State supervisors and teacher educators of trade and industrial education in the occupational field of automotive mechanic and technology. An HEW program specialist is also an ex officio member of the Vocational Industrial Clubs of America and helps establish policy and direction.

State and industry vocational education programs

Vocational education programs in automotive mechanics range from high school courses to associate degree programs.

These programs are offered through State community colleges, local vocational programs, or private vocational schools.

These programs have a number of limitations. According to industry and State officials, many students lack the aptitude or motivation to become competent mechanics. Some officials estimated that only about one-third of the students in vocational programs have a genuine interest in automotive mechanics. Another problem is that many of the new diagnostic tools are expensive and vocational schools may not be able to afford them.

Currently, there is no standard curriculum for vocational automotive courses. The Industry Planning Council is trying to improve this situation. The Council has worked with other organizations to develop standards which help schools establish automotive training programs and standardize existing programs. Two booklets have been issued and are currently being combined and reprinted for distribution to all those associated with automotive vocational programs:

- Career Development Standards for Automotive Service Instruction is a complete guide to establishing an automotive training program. It covers such subjects as curriculum, selection of students, teachers, training, shop layout, and tool equipment recommendations.
- Action Handbook for Automotive Service Instruction is, in effect, a roadmap for guiding anyone wanting to develop an effective automotive-service education program (or improving one already in existence). It describes the curriculum, advisory committee, instructors, students, facilities and tools, tests and measurements, and ongoing training.

MVMA is also developing a national program for voluntary accreditation of postsecondary motor vehicle mechanics training. MVMA has contracted with the Southern Association of Colleges and Schools to research and develop criteria for accreditation. The model accreditation program will be tested in 60 schools over a 2-year period. It is expected to be operational by 1981 and will be provided to all regional accreditation groups. MVMA believes everyone will benefit from their efforts:

- Schools will be supported in their desire to offer quality programs; they will be assured that their graduates possess necessary competency; and they will know that their programs, in addition to educational excellence, are in line with such other national goals as affirmative action, energy conservation, and environmental protection.
- Students will be confident that they are receiving quality education in an adequate facility, and that, upon graduation, they will possess the necessary skills to take their places in the world of work.
- Consumers will have greater assurance that their automobiles will be serviced by competent mechanics.
- Manufacturers, dealers, and garage owners will be able to hire graduates with known competencies from certified programs, they will be better able to provide input to the preparation of automotive training materials, and they will be assured that continual updating is being implemented as the state-of-the-art changes.

Industry-run mechanic training programs

Private industry programs vary from seminars and in-service training to apprenticeship programs. They have had only limited success in eliminating the shortage of skilled mechanics because, according to various industry and government sources

- the high costs involved in training--tools, diagnostic equipment, facilities, and salaries for instructors and students--limit training opportunities;
- some repair facilities are reluctant to adequately train mechanics because it takes productive time from working mechanics and gives no assurance the trainee will remain with the facility after training; and
- formal training courses for mechanics can last from 1 to 4 years. This may require too large of a commitment for many repair facilities.

Auto manufacturer programs

American Motors Corporation, Ford Motor Company, General Motors Corporation, and Chrysler Corporation provide dealer-mechanic training programs. These programs are offered in several locations, including

- dealerships,
- mobile training facilities, and
- regional training centers.

In addition, they use several different types of training, such as

- films and video programs,
- formal classroom instruction,
- self-programed courses, and
- mechanics' demonstration of tasks.

In 1978 Ford instructors conducted training for 38,000 mechanics employed by repair facilities other than Ford dealerships. A GM subsidiary provides automotive repair clinics for vocational schools and various automotive repair associations.

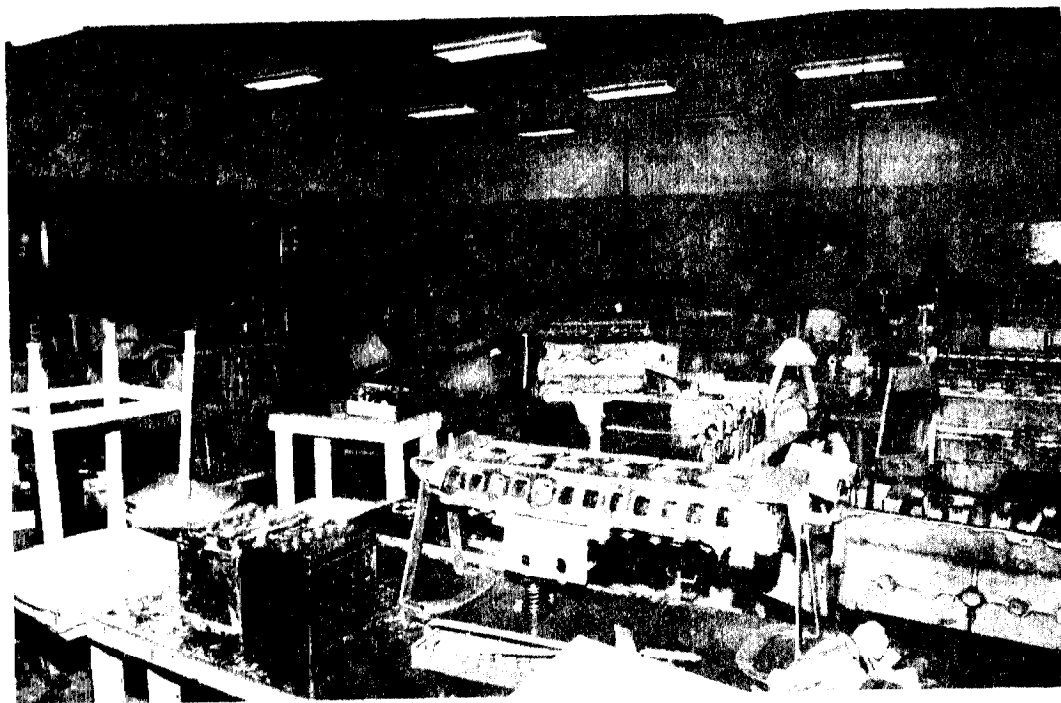
In addition, Chrysler Corporation operates the MoTech Automotive Education Center (MoTech). The MoTech objective is to prepare a student for a beginning position in auto mechanics or auto body repair with an adequate background in theory and shop work.

The MoTech program was designed to provide hands-on, performance based training and to allow students to progress at their own rate. It covers a comprehensive range of repair situations. All instructors at MoTech are NIASE-certified.

In addition to classroom training, MoTech uses OJT which determines if the student passes or fails the program. OJT simulates the automotive repair shop atmosphere with three instructors acting as service managers. Students work on cars brought in by other MoTech students and employees. The student is given the car's repair order and expected to correct the problem.



IN MoTECH'S CHASSIS ROOM, STUDENTS BALANCE TIRE AND WHEEL ASSEMBLIES.



IN THE POWER PLANTS ROOM, SHOWN HERE, EACH STUDENT IS REQUIRED TO DISASSEMBLE A 6 CYLINDER ENGINE, CHECK ITS OPERATING SPECIFICATIONS, REPLACE WORN PARTS, AND THEN REASSEMBLE IT BEFORE RUNNING IT ON A TEST STAND.



THE STUDENTS SHOWN HERE ARE IN THE PROCESS OF OVERHAULING AN AUTOMATIC TRANSMISSION.

MoTech's general auto mechanic program enrolls about 600 students each year. The program can be completed in 1,500 to 3,000 hours; classes run 6 hours a day, 5 days a week; and tuition is \$3,600. Necessary tools may be purchased from MoTech for \$500.

MoTech is costly in terms of capitalization and program curriculum. It uses 60,000 square feet to train 200 students per shift. The classrooms are fitted with expensive equipment and parts. To keep pace with product changes, MoTech spends about \$150,000 annually to upgrade its programs.

Industry apprenticeship programs

The National Automobile Dealers Association, Automotive Service Councils, and International Association of Machinists and Aerospace Workers have developed apprenticeship programs for auto mechanics. These apprenticeship programs received almost \$2.5 million in fiscal year 1978 and about \$1.3 million

in fiscal year 1979 from DOL's New Initiatives Program, which was set up to spur development of apprenticeship programs in industries without ongoing programs. The contracts funded the associations' efforts to promote their programs and to recruit apprentices. DOL did not pay for any of the training. These costs are shared by the apprentice, the repair facility providing OJT, and the school providing the classroom training.

The automobile dealers and services council contracts have been re-funded for fiscal year 1980. The machinist and aerospace workers association contract is being funded through May 16, 1980.

DOL is evaluating how well the associations promoted these programs. It will not attempt to assess the effectiveness of the contractors' apprenticeship programs or to determine how many enrollees successfully complete the programs and become competent mechanics.

These programs use national standards for auto mechanic apprenticeships developed cooperatively by DOL and the three associations. These standards cover the entire range of auto mechanic jobs in each of these industries.

Apprenticeship programs may prove to be one of the better ways for training mechanics. They are labor intensive and rely on existing facilities. Apprenticeship programs are thorough. They combine OJT with classroom instruction in an effort to turn out mechanics who are competent in the theory and procedure for repairs. This should result in mechanics who are diagnosticians as well as competent mechanics. It should also improve their public image and their ability to command higher wages. Because apprenticeship programs may also include business courses, mechanics may be able to better understand some of the problems faced by repair facility owners.

Independent training efforts

In addition to the manufacturer and apprenticeship training programs, many other industry groups are involved in training mechanics. NIASE has developed syllabi and sample

tests for review courses to prepare mechanics for certification tests. Shell Oil Company, FMC Corporation, DANA Corporation, and Wagner Electric Company, among others, also offer their own training courses or materials to institutions providing mechanic training courses.

Government-funded employment training programs

DOL administers the Comprehensive Employment and Training Act of 1973 (29 U.S.C. 801, et seq.) which provides training opportunities for prospective auto repair mechanics. The purpose of CETA is to provide training activities and services needed to enable individuals to secure and retain employment at their maximum capacity. While CETA requires that training activities under title I be designed for occupations in which skill shortages exist, the main objective is not specifically to reduce or eliminate skill or occupational shortages.

To finance training under the act, DOL awards grants to prime sponsors, generally State and local governments. DOL also provides technical assistance, approves plans, and monitors prime sponsors to ensure that the act's provisions are complied with and that training services are available to designated target groups.

DOL's Job Corps for economically disadvantaged young men and women provides for participation in intensive programs of education, vocational training, work experience, counseling, and other activities. According to DOL statistics, 1,669 persons completed Job Corps training in auto mechanics in 1976.

A recent DOL study covering various occupational areas showed that, of a sample of 428 students completing training in auto repair during fiscal year 1977, only 129 were placed in auto service repair work. A DOL official told us that the evaluation was very limited and did not include the quality of training.

AUTO TRENDS: EFFECT ON REPAIR

The car of the future will be much more complex than the car of today. We are in the midst of a technological revolution spurred by engineering advancements, competition, consumer demands, and government regulations for increased safety and fuel economy and decreased pollution. Automobiles have been reduced in size, are made from lighter and stronger materials, and have more fuel-efficient engines of lower horsepower. Further down-sizing and improvements in engine efficiency can be expected so manufacturers can meet future fuel economy standards. This appendix briefly discusses some of these changes and their expected effect on consumers' auto repair problems.

ELECTRONIC CONTROLS

Engineers expect the greatest effect on the automobile during the next decade to result from the extensive use of electronics and microprocessors (small, highly specialized computers). The phenomenal development of electronics has been used for some years in a number of commercial, industrial, and home applications. The 1973 Chrysler electronic ignition system was one of the first conspicuous uses of electronics in cars in the United States.

Since 1975, U.S. automobile manufacturers have introduced or announced a number of engine control technology improvements using relatively sophisticated microprocessors. At least one manufacturer is contemplating introduction in the 1980s of a distributor-less ignition system engine with computerized fuel metering. It appears that the revolutionary change to totally computer-controlled, spark ignition engines will occur in about 1 decade.

The auto industry is now using electronic ignition systems for increased operating reliability and longer component life, and some car makers are using a microprocessor to help control emissions and conserve fuel. Microprocessors are also used to regulate spark timing, exhaust recirculation, and air fuel mixture. Within several years, most new passenger automobiles and light trucks are likely to be equipped with some form of microprocessor.

Ford Motor Company expects to move into the future with its stratified-charge "proco" (programed combustion) engine. In it, the fuel is divided into two mixtures of gas and air, one is "rich" (high in gas) and one "lean" (high in air).

The two mixtures are burned in sequence in the combustion chamber and this reportedly increases fuel economy by 20 percent and results in fewer emissions than conventional engines. The proco requires electronic, high-pressure fuel pumps and precise fuel injection.

In addition, toward the latter 1980s, engine control systems featuring a single wire or specialized cable (fiber-optic) may replace portions of conventional wiring systems.

DIESEL ENGINES

The most likely supplement to the gasoline engine is the diesel, which is being manufactured domestically by General Motors and is being developed by Chrysler and Ford.

The push toward diesel engines began because of rising gasoline prices and the need for improved fuel economy. A few years ago diesel fuel was substantially cheaper than gasoline, but that difference is now almost insignificant. Some diesels offer significant advantages in fuel economy. For example, according to the Environmental Protection Agency, the 1979 Volkswagen Rabbit with a gas engine averaged 26 miles per gallon (MPG) and one with a comparably sized diesel engine got 41 MPG. GM's large diesel engine (350 cubic inch displacement) averaged 21 MPG in 1979 compared to 15 MPG for the same size gas engine.

The transition from gas to diesel engines should not be too difficult because the engines are similar. The diesel is a take-off on the gasoline engine using a conventional fuel injection pump. An important difference lies in the diesel ignition system. Diesel engines have no spark plugs, no distributor or points, no carburetor, or condensor.

Diesel engine characteristics, however, are not all positive. Compared to cars with conventional engines, they are costlier, noisier, harder to start in cold weather, and have slower acceleration. Also, diesel engines give off tiny specks of soot known as particulates. EPA has proposed limits on diesel particulates--0.6 grams per mile for 1981 and 0.2 grams per mile for 1983.

AUTOMOBILE CHANGES HAVE
POSITIVE AND NEGATIVE
EFFECTS ON REPAIRS

With design changes autos need less scheduled maintenance for certain parts. Also with the introduction of sophisticated equipment, mechanics should be better able to diagnose vehicle malfunctions. Some changes, however, require more maintenance, some repairs cost more and are more difficult, and there will be a greater demand for skilled mechanics.

Diagnostic equipment

By 1985 many cars will probably use some form of built-in diagnostic capability, including monitoring certain critical engine, emission, brake, and lighting systems, and other functions, such as low tire air pressure, air filter condition, and catalyst condition. In fact, the National Highway Traffic Safety Administration is considering issuing safety standards for brakes and tires which will incorporate diagnostic features. (See app. XI.)

Chrysler Corporation has indicated its intention to continue marketing to new car dealers a computerized engine analyzer capable of fully diagnosing its "lean burn" engine control system.

Effect on small garages

The increased sophistication of automobile systems, the costly equipment which will probably be needed to diagnose and repair them, and the lack of standardization of that equipment pose special problems for small garages. The Congress was concerned whether these changes would hamper small garages' ability to check for compliance with Federal, State, and local safety, emissions, and noise standards. It required NHTSA to report on the research and development necessary to make small garage equipment compatible with State motor vehicle inspection and diagnostic equipment. NHTSA issued that report in July 1978 (see app. XI) and is currently preparing a followup report based on an evaluation of equipment at 300 repair facilities, personal interviews of 1,800 repair and diagnostic facility owners and operators, and 600 mechanics and inspectors.

Scheduled maintenance

Auto manufacturers have devoted more and more design effort to reduce scheduled maintenance and its consequent cost to car owners. Intervals for changing engine oil and oil filters are now generally 7,500 miles, compared to 3,000 miles only a few years ago. Spark plug life has tripled. GM reports that a 1956 Chevrolet required 47 trips to a service facility in order to satisfy the recommended maintenance schedule for 50,000 miles or 5 years. Over the same span of time, GM recommended only seven trips for a 1978 Chevrolet. Another example is the 1979 Ford Mustang which has 30 scheduled maintenance procedures for 50,000 miles, compared to 125 procedures required on the 1974 Mustang for the same mileage.

Even though manufacturers have eliminated or reduced maintenance on many items, maintenance requirements for some systems have increased. For example, in modern emission control systems, manufacturers recommend that consumers periodically maintain air pumps, catalytic converters, oxygen sensors, evaporative cannisters, and other components.

More costly and more difficult repairs

Auto industry officials acknowledge that some design changes have contributed to higher repair costs. In the case of electronic ignition systems, for example, points and condensers are no longer needed and spark plugs last three times as long as before, but the electronic ignition system is more expensive to repair. Also, manufacturers are designing smaller cars in response to the fuel economy demands of the government and consumers, and to their competition. According to Ford officials, down-sizing generally results in tighter packaging of various components and may worsen component accessibility because other nonrelated components may have to be removed to get at the problem component. This is particularly true for instrument panel and engine compartments.

More demand for better trained mechanics

The auto repair industry is already experiencing a shortage of skilled mechanics. The addition of more complex repairs and test equipment will accentuate the problem. As a GM official stated in May 1979:

"There is no question that the car and truck in the immediate years ahead will be an even more intricate piece of machinery. On-board computers will be commonplace. The need for expert service technicians will grow, and these service people will have to be better trained than ever before."

See appendix II for a more detailed discussion of problems associated with mechanic training.

STATE AUTO REPAIR REGULATIONS AND ENFORCEMENT

State and local governments are attempting to deal with auto repair problems by applying basic consumer protection statutes or by drafting specific auto repair legislation. As of May 1979, 25 States had enacted legislation and regulations intended to reduce consumer abuses in the auto repair area. The basic types of auto repair laws are: (1) disclosure laws, (2) facility licensing laws, and (3) laws addressing mechanic competency and the quality of industry repairs.

State officials believe their auto repair programs are effective in reducing auto repair problems in general and helping consumers with specific problems. They cite hundreds of thousands of consumers that receive information or dispute resolution services as one indication of success. However, due to the newness of some regulatory approaches, lack of complete data, and the complexity of auto repair problems, it is not clear to what extent these approaches are effective in reducing repair problems and which approaches work best.

DISCLOSURE LAWS ARE THE MOST COMMONLY ENACTED AUTO REPAIR LEGISLATION

Disclosure laws, designed to protect the consumer from unfair and deceptive trade practices, are the most frequently adopted auto repair legislation. Disclosure provisions require that the repair facility give the consumer certain information relating to the repair transaction so the consumer will know what repairs are going to be done and how much they will cost. Disclosure laws vary between States but usually contain one or more of the following provisions. The analysis was drawn from contacts with State officials and from reports on auto repair regulation by the University of Georgia's Institute of Government (1977) and a federally sponsored study by the National Association of Attorneys General (1976):

(1) Written estimate

Repair facilities are required to give consumers a written estimate of the cost of repairing their autos, including in some States, separate itemizations for labor, parts, disassembly, and reassembly.

Some States, New York for example, require an estimate only if one is requested by consumers; others anticipate the difficulties which may arise in emergency repair

situations by permitting consumers to execute a waiver of the written estimate or to accept an oral estimate. In order to allow repair facilities a certain amount of flexibility in dealing with repairs, some provisions of this type permit the estimate to be exceeded by a limited amount, such as 10 percent, or allow consumers to authorize additional repair work orally or in writing.

Some industry representatives charge that written estimate requirements are detrimental to consumers in that they cause overcharging. They contend that, if mechanics are required to give an estimate, they will inflate this estimate to protect themselves if repairs are more extensive than originally estimated. The response to this argument is that estimate requirements do not threaten adequate pricing since repair facilities are not absolutely limited to the original estimate; they are merely required to obtain the customers' consent before making repairs not covered by the original estimate.

(2) Authorization of repairs

Upon receiving an estimate of the cost of repairs, consumers must authorize the repairs before they may be commenced. Some laws require that these authorizations be in writing.

(3) Written invoice

Consumers are entitled to receive a written invoice detailing all parts and labor supplied.

(4) Return of parts

Parts replaced in repairing consumers' vehicles must be returned to them. In those instances where parts must be returned to the manufacturer, where parts were sold on an exchange basis, or where return would be impractical because of size or weight, most provisions require that consumers be given the opportunity to examine the parts.

(5) Warranties

Any express warranties must be in writing. In some jurisdictions, that writing must include the nature, extent, and duration of the warranty. In others, it must indicate

what consumers must do to secure warranty service. Michigan requires warranty extensions under certain conditions and prohibits disclaimers of implied warranties.

(6) Mechanic's liens

Repair facilities may not refuse to return consumers' autos by using a mechanic's lien if they have failed to comply with the law's disclosure provisions.

(7) General misrepresentation

Repair facilities are prohibited from making false or misleading statements to consumers as to any aspect of an auto repair transaction.

(8) Posting of provisions

A listing of the specific disclosures required to be made to consumers under the law must be displayed on a sign conspicuously posted on the repair facility's premises. Some States also require that the name, address, and telephone number of the enforcing authority be disclosed.

(9) Records requirements

Records of all auto repair transactions must be retained by the facility. Most laws containing such a requirement specify a retention period from 1 to 2 years.

These provisions have been adopted to curtail commonly identified deceptive practices, such as the "5 o'clock surprise" which occurs when consumers leave their cars with a facility for repairs without any indication of the extent of repairs needed or what they will cost. Then, when consumers arrive to pick up their autos, a repair bill is presented for extensive repairs costing hundreds of dollars. Before disclosure requirements, consumers had little recourse but to pay the bill or lose their auto under a mechanic's lien.

The implementation of disclosure laws generally requires a limited expenditure of funds, and can often be enforced in conjunction with already existing deceptive practices laws. Wisconsin, for example, has adopted disclosure regulations pursuant to its consumer protection statutes, while Michigan has enacted specific auto repair legislation that includes disclosure provisions.

FACILITY LICENSING (REGISTRATION)
IS MANDATED IN SOME STATES

Facility licensing legislation, another method of State regulation, requires auto repair facilities to obtain licenses to conduct business. Some States with facility licensing laws only require repair facilities to register with the State. For example, to be registered in California and New York, a repair facility need pay only a registration fee and submit necessary informational forms. Michigan, however, requires facilities to employ at least one mechanic with State certification in each category of repair provided.

Registration systems identify the location of a repair facility and provide a legal record of ownership which aids enforcement authorities. Revenues from registration provide a large percentage of the financial support needed to operate some State auto repair regulatory programs. Legislation of this type is usually implemented in conjunction with auto repair disclosure requirements, and specific prohibitions concerning fraud, deceptive practices, and negligence.

New York and California exempt from registration shops which solely perform minor services, such as pumping gas and changing water, oil, batteries, tires, filters, and windshield wiper blades. Under California law, services are not to be designated as minor if they require mechanical expertise, have given rise to a high incidence of fraud or deceptive practices, or involve parts of the vehicle essential to its safe operation.

SOME STATE LAWS ADDRESS THE
QUALITY OF REPAIR SERVICES

Some States have enacted various types of legislation that deal with the quality of repairs by becoming more involved with industry repair practices.

The Michigan law addresses the problem of faulty repairs due to incompetence by requiring mechanics to pass an examination designed to test their competency to correctly diagnose and repair motor vehicles. Currently, all major service and repair work done by a noncertified mechanic requires inspection and approval by a certified mechanic. Also, the statute requires all auto mechanics to be certified by January 1981. (See appendix IX for further details.)

The licensing of mechanics is not part of California's statute; as a result, the State's Bureau of Automotive Repair cannot always deal with incompetently performed repairs. According to California's Auto Repair Act, it is unlawful to perform repairs which represent any willful departure from or disregard of accepted trade standards for good and workmanlike repair. A California Deputy Attorney General believes this section of the statute provides jurisdiction over incompetently performed repairs. A Bureau official noted, however, that it is often not practical to use this authority, particularly where industry trade practices have not been defined. He also noted that workmanlike repair has not been adequately defined and willful departure is almost impossible to prove.

California is addressing the problem by adopting trade standards and proposing a shop rating system which will require facilities to meet stringent standards and provide quality repairs as a condition for approval. (See app. VI.) While California's trade standards do not tell mechanics how to perform a repair, they do require them to disclose certain information, thereby reducing one of the main problems resulting from incompetence--unnecessary repairs or replacement of unneeded parts. For example, in 1976 California promulgated regulations requiring a measurement of the actual wear and the manufacturer's tolerance for wear be recorded on the invoice for all ball joint repairs. While they have no conclusive proof, California officials said they received information indicating that ball joint sales have declined as much as 85 percent as a result of the regulation. Recently, California adopted trade standards describing the minimum parts and procedures necessary to represent an automotive transmission as "rebuilt." Trade standards such as these provide legal grounds for disciplining facilities that have made unnecessary repairs, whether they result from incompetence or fraud.

New York's auto repair legislation addresses the problem of incompetent repairs by requiring repair facilities to perform quality repairs and have adequate equipment, facilities, and personnel competent to perform the services it offers. Quality repairs, even though determined and enforced on a case-by-case basis, are broadly defined as those repairs necessary to bring a motor vehicle to its pre malfunction or predamage condition. New York's regulations do not set minimum requirements for personnel competence or for equipment and facilities.

Regulations in Massachusetts make it illegal for repair shops to fail to remedy promptly, at no charge, any repairs not performed in a good and workmanlike manner in accordance with accepted trade standards. However, as of July 1979, the State had not developed any repair standards for enforcement purposes.

REGULATION AND ENFORCEMENT RESPONSIBILITY

The type of State agency responsible for regulation and enforcement of auto repair laws varies among the States. For example, in Massachusetts, the responsible agency is the Department of the Attorney General. In Wisconsin regulatory and enforcement authority is split among the Department of Agriculture's Trade and Consumer Protection Division, the Department of Transportation, and the Department of Justice. Some States, such as Michigan and California, established administrative bureaus to regulate State auto repair practices.

For example, Michigan's Motor Service and Repair Act (1974) empowers the Bureau of Automotive Regulation to receive, investigate, and mediate auto repair complaints, review cases in an administrative hearing to determine liability, and impose penalties. An industry group filed suit in March 1976 to restrain the State from enforcing the act. The group questioned whether a single agency should have investigative, enforcement, and judicial authority. The suit delayed full implementation of administrative authority under the act until November 1978.

In California, the Bureau of Automotive Repair receives and mediates auto repair complaints, but lacks direct authority to discipline facilities. As a result, serious violations requiring criminal or civil prosecution are referred to the Attorney General and district attorneys' offices. Although authorities such as these play an important role in enforcing auto repair legislation, the additional automotive cases added to their existing workload has created a backlog of auto repair cases. According to the Attorney General's office, there is not enough time or staff to develop cases from all complaints. They must select exemplary cases and use penalties as a deterrent to other violators. Also, according to a Bureau official, auto repair cases often receive low prosecution priority at district attorneys' offices.

Undercover car operation

When a pattern of fraud or abuse is revealed through consumer complaints or an enforcement agency suspects that a repair facility is violating a State regulation, it may use an undercover car operation to gather evidence of illegal activity. In California, undercover car operations are conducted with a fleet of agency-owned cars that are carefully inspected and repaired to like-new condition. New auto parts undergo an aging process and are identified with coded markings. A known defect is introduced into the vehicle and it is taken to a suspect repair facility. When repairs are complete, the agency compares the defect with the diagnosis and the invoice showing the actual parts replaced and labor performed.

California's Bureau of Automotive Repair conducted 132 undercover car operations in fiscal years 1977 and 1978; 92 of these confirmed violations. Although costly to undertake, Bureau officials said undercover runs provide the regulation deterrence necessary for enforcement of the act.

AVAILABLE REMEDIES AND
PUNISHMENTS VARY AMONG STATES

A number of enforcement tools are available to State and local authorities dealing with violations of auto repair legislation. The authority to deny, suspend, or revoke auto repair facility licenses and registrations is considered to be one of the most effective methods. Since a facility's operations may be halted either temporarily or permanently as a result of this action, facility licensing laws may have a greater potential for improving the relative position of consumers with respect to auto repair transactions than do laws which merely permit the imposition of traditional civil and criminal penalties.

Other provisions include stipulated agreements, fines, injunctions, cease and desist orders, and/or jail terms. For example, in California civil penalties usually filed by the Attorney General provide for stipulated agreements where the facility promises to do certain things as an alternative to prosecution in a criminal action, which might result in fines and imprisonment. In Massachusetts, the Attorney General may sue for injunctive relief or for restitution to the injured party. New York's penalties include suspension or revocation of a facility's license and/or a civil penalty of \$100 for the first offense and \$350 for additional offenses.

New York officials believe the \$350 maximum penalty is too low to be a deterrent.

THE ENFORCEMENT PROCESS:

A CASE EXAMPLE

Due to numerous complaints about a brake overhaul advertisement by a large mass merchandiser, California's Bureau of Automotive Repair conducted a statewide investigation to confirm violation of its Automotive Repair Act.

The investigation, which took several months to complete, involved the use of undercover cars and a comprehensive study of complaints made by consumers. Fourteen undercover operations, conducted at 12 stores within several counties, identified violations of the act in 9 stores. Investigators found violations, such as false statements, failure to provide a written estimate, failure to provide the customer with a copy of the invoice, and fraud.

Upon completing the investigation, the Bureau referred the case to one county district attorney for civil action. The district attorney referred the remaining cases to the district attorneys of the other counties. However, they all declined to prosecute. Bureau officials told us this was due to auto repair cases having low prosecution priority. The first county district attorney was successful in getting a judgment for \$17,600 in penalties and costs against the mass merchandiser which did not admit to any of the alleged violations. The remaining portion of the investigation (the other counties) was forwarded by the Bureau to the Attorney General for civil action. During the investigation the Attorney General's office received an allegation from one of the mass merchandiser's shop managers that his superiors were requiring him and managers at other locations to sell certain repairs to every customer requiring front end repairs. While in his opinion these repairs were worthless and unnecessary, he had instructions to fire mechanics who did not meet a sales quota.

This investigation resulted in a suit alleging that the mass merchandiser sold unnecessary repairs, engaged in false advertising, failed to provide written estimates, and refused to honor warranties. Without admitting any wrong doing, the mass merchandiser agreed to pay \$100,000 in civil penalties and costs. Subsequently, the mass merchandiser closed down its statewide auto repair operation.

EXTENT OF AUTO REPAIR
PROGRAM EFFECT IS UNCLEAR

The State officials contacted tended to focus on the results of dispute resolution efforts when discussing the effectiveness of their auto repair programs. They point to the large numbers of consumer complaints resolved, the amount or value of refunds and repair services obtained through their assistance, and positive feedback from consumers. (Specific details on dispute resolution are discussed in appendix VIII.) State officials also believe that their programs have helped to reduce the extent of auto repair problems. However, available data on the various programs do not show the extent to which they are effective in reducing repair problems. Consequently, it is not clear which approaches are best. Also, we found no evaluation comparisons among States with similar programs or with States using different approaches.

In commenting on the limited amount of evaluation information, State officials cited the overall complexity of auto repair problems which makes effectiveness evaluations very difficult. They also noted that the relative newness of some auto repair programs and the cost of making evaluations were also factors.

The data problem is also an important factor. Accurate comparative data on the extent of repair problems existing before regulations became effective is not generally available. Also, consumer complaints, a main source of data, do not always correlate with the extent of repair problems. Consumer complaints can increase while industry compliance with regulations reduces the extent of the problems. This can happen when consumers are made aware of their rights and of the availability of assistance when problems occur. Another complicating factor is that collecting and reporting program data varies among the States.

CONSUMER EDUCATION

As economists view the auto repair problem, consumers lack adequate information to let the marketplace operate properly. Consumers often decide to use a particular repair facility without knowing very much about the quality or the price of its service. More important, consumers often lack the information to determine whether the repairs were necessary and if they were done correctly.

Every group we contacted, from the U.S. Department of Transportation to the mechanic at the corner service station, was trying to educate consumers. Their efforts involved a wide range of topics, used a variety of approaches, and were aimed at different target populations.

Our contacts with industry and government officials did not disclose any evaluations of consumer education efforts dealing with auto repairs. Also, consumer educators disagreed about "best" methods for educating consumers. Some favored "repetitious inundation"--bombarding consumers with essential bits of information, such as the existence of a State law or the desirability of requesting a written estimate. Others favored giving consumers information only when it was needed, such as through posters at repair shops.

LACK OF CONSUMER KNOWLEDGE AS A
CAUSE AND CONSUMER EDUCATION AS A
SOLUTION TO AUTO REPAIR PROBLEMS

Our survey of consumer protection officials in State and local governments and industry representatives confirmed that consumers are a part of the auto repair problem. When asked to identify the causes of today's auto repair problems, government and industry officials rated the following as contributing to a substantial or very great extent:

<u>Cause</u>	<u>Government</u>	<u>Industry</u>
	(percent)	
Lack of consumer knowledge	66.9	57.1
Undermaintenance	26.1	65.9
Difficulty in selecting repair shop	68.1	27.8

Over 60 percent of officials of both groups also believe that consumer education will help reduce auto repair problems to a substantial or very great extent.

CONSUMER EDUCATION IN GENERAL

Consumer education, as we know it today, probably had its genesis in President Kennedy's 1962 message to the Congress listing the four rights of consumers:

- The right to safety.
- The right to be informed.
- The right to choose.
- The right to be heard.

The President's Consumer Advisory Council, also in 1962, recommended that executive departments and agencies explore methods of developing and improving programs of consumer education.

The efforts were formalized in 1972 when the Congress, recognizing the shortage of "resources for educating and informing consumers about their role as participants in the marketplace," set up a consumer education grant program in the Office of Education. In 1974 the program became the Office of Consumer Education and in 1975 President Ford added the fifth consumer right: the right to be educated. 1/

FEDERAL ACTIVITIES

The Congress has authorized \$145 million for OCE (through fiscal year 1980) but has only appropriated \$14 million (through fiscal year 1979). During its 4 years of operation, OCE has supported about 245 projects to educate consumers and teachers and to develop educational materials. Most of the OCE-funded projects have been designed to provide

1/There is a difference between educating consumers, usually thought of as classroom or textbook learning with the goal of changing consumers' behavior, and informing consumers, usually by distributing pamphlets or through the media. However, we consider both as consumer education because both have the same goal--making the consumer a better participant in the marketplace.

general consumer education to a wide range of target populations. Some of the projects list consumers' problems with auto repairs as one of the topics to be covered, but only five projects have dealt specifically with auto repair.

The first project, a grant awarded in fiscal year 1977 to a private organization, was to provide trainers with sufficient information to develop classes in "Preventive Maintenance and Auto Repair" and to provide those who advise consumers with simplified technical information and sufficient expertise to improve their service. OCE contracted with the same group in fiscal year 1978 to provide technical assistance to 8 to 10 other OCE grantees, for training sessions in automotive marketplace decisions, using the materials developed with the 1977 grant. In fiscal year 1978, OCE awarded a contract to a Chicago advertising agency to develop public service announcements for radio. One of the announcements concerned auto repairs; it advises consumers to ask the repair facility for a written estimate before authorizing the repair. OCE has distributed the announcements to about 6,000 radio stations around the country.

The two other projects were funded in fiscal year 1979. One grantee is to develop a glove-compartment sized "automobile owner's survival manual" which will include "everything an enlightened consumer needs to know about auto maintenance, repair, and purchasing." The other grantee is to develop, test, and disseminate three 50-minute learning modules for use with driving age high school students. One of the modules is to cover how consumers can protect themselves against unnecessary or improper auto repairs.

Several Federal agencies distribute educational materials on auto repair directly to consumers. The Federal Consumer Information Center (CIC) in Pueblo, Colorado, has several publications; the Department of Transportation and its National Highway Traffic Safety Administration have a few; and the Environmental Protection Agency has some that relate to the car's emission system. The following table describes these publications:

Consumer Education Materials Published by Federal Agencies

<u>Agency</u>	<u>Title</u>	<u>Description</u>
CIC	The Backyard Mechanic (Vol. I) (note a)	How to inspect your car for repairs; various do-it-yourself maintenance items.
CIC	The Backyard Mechanic (Vol. II) (note a)	More involved do-it-yourself main- tenance items.
CIC	Car Care and Service (note a)	How to recognize symptoms of common problems; tips on working with your mechanic.
DOT	Consumer Problems with Auto Repair--Fact Sheet June 1978	Description of problems and various State and industry approaches.
DOT	Tips on Car Care and Safety for Deaf Drivers July 1975	Signs of car trouble and what to do.
NHTSA	Auto Repair and Main- tenance: A Program to Reduce Consumer Loss May 1978 (note b)	Analysis of the problem and a description of alternative action programs for reducing losses.
EPA	Mechanics...A New Law Affects You November 1977	Restrictions on tampering with a car's emission system.
EPA	Do You Own a Car? January 1978	Restrictions on tampering with a car's emission system.
EPA	Information Document on Automobile Emissions, Inspection and Maintenance Program February 1978 (note c)	Processes, procedures, and methods to reduce or control emissions through inspection and maintenance programs.

a/CIC charges for these publications.

b/Although NHTSA lists this as a publication for consumers, the report was written by a NHTSA task force as a technical report.

c/Although this is listed as a consumer publication, section 108(f)(1)(A)(i) of the Clean Air Act, as amended, required EPA to prepare it for "appropriate Federal agencies, States, and air pollution control agencies."

EPA has also supported others' development of consumer education publications. For example, EPA and the American Lung Association put out a pamphlet urging motorists to have their cars' exhausts checked.

STATE ACTIVITIES

Some States we reviewed were actively educating consumers about their rights and responsibilities under various State laws. In Michigan, for example, the Bureau of Automotive Regulation published an information leaflet on consumers' rights and distributed 6-1/2 million copies, mainly with vehicle registration mailings. The Bureau has placed posters in public buildings throughout the State, and Bureau officials have explained the State's auto repair law on television and radio and before industry and consumer groups. The Michigan law requires repair facilities to display a sign in the cashier area and at each location where customer service orders are written, informing customers of basic rights under the law and providing the Bureau's address and phone number.

OTHER ACTIVITIES

Private industry and national organizations also contribute to the wealth of information available to consumers. Owner's manuals can help consumers discover that what appears to be a major problem may be something they can correct themselves. The Council of Better Business Bureaus publishes a comprehensive booklet, "Tips on Car Repair." The Automotive Information Council has a pamphlet suggesting ways for consumers to communicate more effectively with their mechanics. Shell Oil Company's series of "answer books" includes pamphlets on car repair shopping, emergency repairs, and tuneups. The Automobile Club of Southern California sponsors car care classes to educate consumers about car operation and maintenance. And the list goes on...

LACK OF CONSISTENCY IN EDUCATIONAL MATERIAL

The extent of information that educational material gives to consumers varies. We reviewed the advice of six pamphlets on how to select a repair shop. About 12 different tips were offered all together but only 2 of these tips were included in all 6 pamphlets: talk to your friends, neighbors, or co-workers to determine the shop's reputation; and check to see if the shop employs certified mechanics. The following chart illustrates this point:

Consumer Advice on How To Select a Repair Shop

<u>Tip</u>	<u>BBB</u>	<u>Shell</u>	<u>CES</u>	<u>CT</u>	<u>AOAC</u>	<u>AIC</u>
1. Check reputation with friends, neighbors, etc.	x	x	x	x	x	x
2. Check for certified mechanics	x	x	x	x	x	x
3. Match the type of facility to the type of repair	x		x	x	x	
4. Determine if shop gives written estimates		x			x	
5. Check with BBB for complaints against shop		x	x	x		x
6. Check for experienced mechanics		x				
7. Check for proper equipment		x	x		x	x
8. Check for neatness		x	x			x
9. Consider convenience (close to home, etc.)		x				
10. Determine if shop gives written guarantees		x			x	
11. Determine if shop uses flat-rate manuals					x	
12. Check for a facility approval or evaluation guide					x	

LEGEND:

BBB--Better Business Bureau, "Tips on Car Repair."

Shell--Shell Oil Co. answer book #8 "The Car Repair Shopping Book."

CES--Cooperative Extension Service of the Northeastern States, "Auto Repairs."

CT--Connecticut Governors Consumer Advisory Council, "Auto Repairs: The Case of a Traveler."

AOAC--Automobile Owners' Action Council, Monograph 3A, "Problems and Solutions Involved in Preventive Maintenance and Automobile Repairs."

AIC--Automotive Information Council, "Handbook for Automobile Maintenance" and "Communicate with Your Mechanic and Save."

VALUE AND EFFECT OF CONSUMER EDUCATION

Regardless of the range and variety of consumer education materials and approaches, the effectiveness of any consumer education project is whether the target population becomes better educated.

None of the people we spoke with were aware of any such evaluations for consumer education efforts dealing with auto repairs. An OCE official told us that even though OCE grants require the grantees to evaluate their projects, such evaluations concern whether the material was developed or distributed as planned, not whether the material had any effect on consumers.

Our discussions with consumer educators produced little consensus about "best" methods for educating consumers about auto repairs. Some favored "repetitious inundation"--bombarding consumers with essential bits of information, such as the existence of a State law or the desirability of requesting a written estimate. Others favored giving consumers information only when it was needed, such as through posters at repair shops. Yet, making the information available doesn't assure that consumers will use it. An official of one of the auto manufacturers has stated, somewhat tongue-in-cheek, that the automobile industry is the largest publisher of unread literature in the world.

Some educators favored television and radio as the best media for communicating with consumers but others recognized that the costs of such communications are usually prohibitive. One study done for the Consumer Product Safety Commission concluded that an intensive, interpersonal, community-based outreach program was effective, while media-only efforts had no noticeable effect on the target groups.

SHOP RATING SYSTEMS DESIGNED TO HELP
CONSUMERS SELECT REPAIR FACILITIES

When consumers need auto repair services, they have to select a repair facility. In many cases, data upon which to make an informed decision are unavailable. In an attempt to remedy this situation, shop rating systems have been implemented or proposed. While these systems use different methods to rate auto repair shops, their common goal is to provide the consumer with meaningful data for selecting a repair facility.

Proponents of these systems believe that consumers provided with such data are more likely to obtain consistent and high quality repair services. They also contend that increased business for rated shops will prompt nonrated shops to adopt the standards and practices of the rated shops, thus upgrading the repair industry as a whole. Critics believe that rating systems tend to discriminate against small repair shops and keeping the systems updated would be difficult.

WASHINGTON CENTER FOR
THE STUDY OF SERVICES

Direct polling of consumers is the approach used in the metropolitan Washington, D.C., area by the Washington Center for the Study of Services. The Center published a 1976 guide for auto repair services and a 1978 update. Shops were rated by returns of about 70,000 questionnaires sent to its members and local subscribers of a leading consumer magazine. Of about 1,600 repair shops which were mentioned by respondents in the metropolitan Washington, D.C., area, 212 were fully rated (at least 10 consumer responses). A smaller number of shops, with positive but statistically too few responses to evaluate, were listed as having potential for providing quality service. The Center claims the shops it rated perform 60 to 65 percent of auto repairs in the survey area. A system to allow smaller shops which did not receive enough responses for rating to voluntarily provide access to invoices for random polling is being considered.

Consumer response data presented on rated shops include, among other factors, overall performance, doing work properly on the first try, and starting and completing work promptly. In addition, the Center presents other information including: number of complaints on file at local government consumer affairs offices, number of mechanics certified by the National

Institute of Automotive Service Excellence compared to the total number of mechanics, and shops' hourly labor rate. Shop rating information was disseminated through subscription and newsstand sales of guides (about 25,000 copies) and copies provided to libraries and public and government institutions.

The Center claims a nationwide system covering medium and large cities would reach half the country's population and cost less than \$3.5 million annually. For Washington, D.C., one system under consideration would cost about \$100,000 annually.

AMERICAN AUTOMOBILE ASSOCIATION'S
APPROVED AUTO REPAIR SERVICES PROGRAM

A different approach, endorsement of repair shops, is presently being used by affiliates of the American Automobile Association in Washington, D.C., and in parts of Florida, California, Texas, Wisconsin, Kentucky, Maryland, and Minnesota. The Approved Auto Repair Services program is being expanded to AAA affiliates in other areas of the country. While there are minor differences among affiliates' programs, the Automobile Club of Southern California (ACSC) program for approved repair shops is typical.

The ACSC Approved Auto Repair Services program is voluntary and available to any interested "full service" repair facility (unlike other AAA programs which include specialty shops) which can meet program standards and conditions. Qualified shops may display an "AAA approved" logo on their premises or in their advertising. ACSC will not refer members to specific participating repair facilities or set prices to be charged for repairs.

Participating shops must meet stringent contract provisions. These include, among other requirements, guarantee of repair work for 90 days or 4,000 miles, standards for shop equipment and tools, employment of at least one certified mechanic for each area of service offered, a training program for keeping employees up to date on new automotive systems, satisfactory community reputation and financial standing, and insurance acceptable to the Club.

In addition to other contract provisions, each approved auto repair service facility is required to agree to the designation of Club automotive experts as the arbitrator when

a dispute, other than cost of repairs, arises between an approved facility and a Club member. (The Club does not arbitrate for nonmembers.)

The repair facility must agree to accept the decision of the Club's automotive experts, and where deemed to be at fault, must agree to redo the repair at no additional cost or to refund the members' money. Arbitration is not binding on members, although experience has shown they generally accept the Club's determination. Participating shops are subject to annual and "spot" inspections and can be dropped from the program within 10 days' notice without cause, and 1 day's notice with cause.

California State officials are considering a statewide "Approved Auto Repair Dealer" program to be administered by the Bureau of Automotive Repair. It would be similar to the ACSC system and would allow volunteering shops to advertise State approval after meeting stringent program standards. In addition, shops would contractually agree to guarantee repairs, post a performance bond, and abide by Bureau complaint resolution recommendations.

SHOP RATING SYSTEMS HAVE RECEIVED MIXED REVIEWS

The shop rating systems we reviewed have received both praise and criticism. The AAA and the Washington Center claim their systems are highly effective and accepted by consumers. A summary of consumer responses (from January 1976 to June 1979) to three AAA affiliates' Approved Auto Repair Services programs revealed about 96 percent of the customers were satisfied with repairs and services and would return to the approved facility for future service work. The Washington Center reports that, among their top-rated repair facilities, most reported "big," "substantial," or "valuable" increases in business volume.

Specific criticisms of shop rating systems include their tendency to discriminate against small shops (not being able to meet specific program standards because of a lack of equipment or offering less than full service, or receiving too few responses in a statistical survey), and the difficulty of measuring meaningful distinctions among repair facilities and keeping ratings up-to-date. (California, New York, and Michigan, for example, have about 33,000, 24,500, and 13,000 registered repair facilities, respectively.) According to an industry official, rating systems might lead to higher repair charges if these systems have equipment and facility requirements that do not add to the quality of repairs.

DIAGNOSTIC CENTERS--AN IDEA
WHICH HAS YET TO CATCH ON

The concept of diagnostic inspection--providing motorists with a comprehensive check on their vehicle's operating condition separately from repair work--is not new. It grew in private industry during the 1960s and apparently has declined during the 1970s. In addition to the repair industry, some affiliates of the American Automobile Association are involved in either operation of their own diagnostic inspection centers or approval of private diagnostic centers.

Federal support of the diagnostic center concept began in 1972 under title III of the Motor Vehicle Information and Cost Saving Act. The demonstration projects funded by the act showed promising results for reducing auto repair problems, particularly the idea of having an inspection system addressing several inspection areas including vehicle safety, fuel economy, and emission control. While project results were favorable, it is significant to note that none of the States sponsoring the projects currently provide funds to support formal, public diagnostic inspection centers independent of repair facilities.

Many State officials contacted through our questionnaire believe that independent diagnostic centers could substantially help reduce auto repair problems. However, in personal contacts, several States' officials expressed concern about the high costs involved with establishing such centers. This concern indicates that funding will be a major obstacle to State development of such centers. Industry groups generally expressed negative comments about independent diagnostic centers, citing a variety of factors including high costs and a shortage of skilled mechanics.

The National Highway Traffic Safety Administration supports the independent diagnostic center concept and is currently conducting and planning efforts to evaluate and develop practical ways for States, local governments, and consumer groups to finance diagnostic centers. NHTSA also plans to analyze other issues related to diagnosing vehicle problems.

WHAT IS A DIAGNOSTIC INSPECTION?

While repair facilities typically use a variety of diagnostic equipment to repair autos, some automotive facilities provide a special service known as a diagnostic inspection.

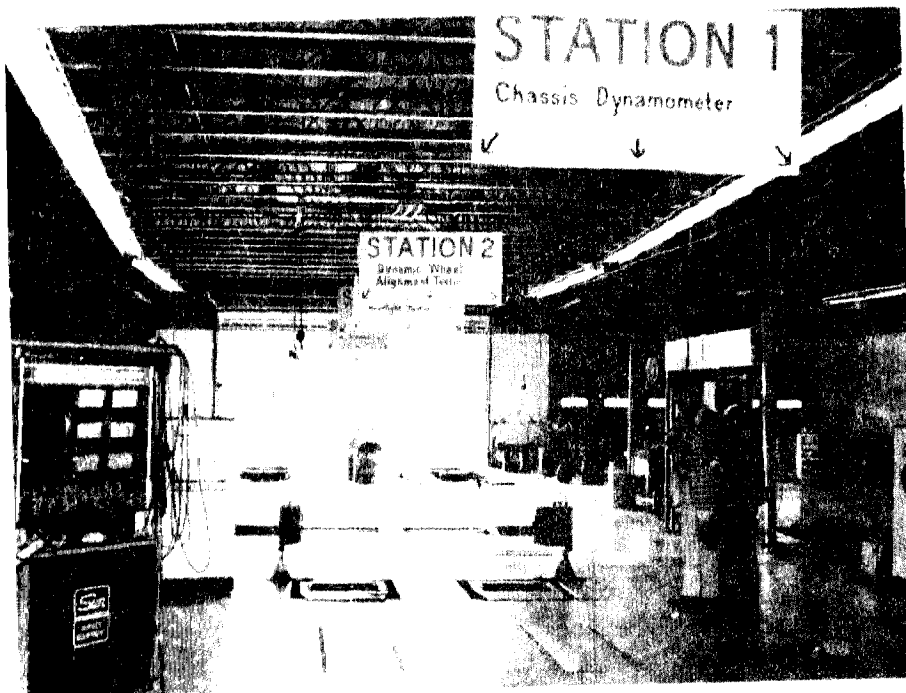
A diagnostic inspection provides a comprehensive check of a vehicle's operating condition including identification of problem areas and their causes. The diagnostic inspection, typically costing the consumer about \$20 to \$30, is made in facilities containing an extensive set of automotive test equipment. Diagnostic inspectors use this equipment to check major vehicle systems, such as brakes, steering, suspension, tires and wheels, engine, electrical, and some general items. The photographs on the next page show a piece of engine analysis equipment and the layout of a lane at the University of Alabama's Auto Check facility used in a Federal diagnostic inspection project (see p. 88).

Typically, a consumer arrives at the diagnostic center on an appointment basis and waits in a reception area during the inspection period. Once completed, the results of the diagnostic inspection are explained to the consumer. The following pages show examples of the forms used for this purpose by the University of Alabama during its diagnostic inspection project. The first form shows the items and systems inspected while the second provides the results in a simpler format for consumer use in contacts with repair facilities.

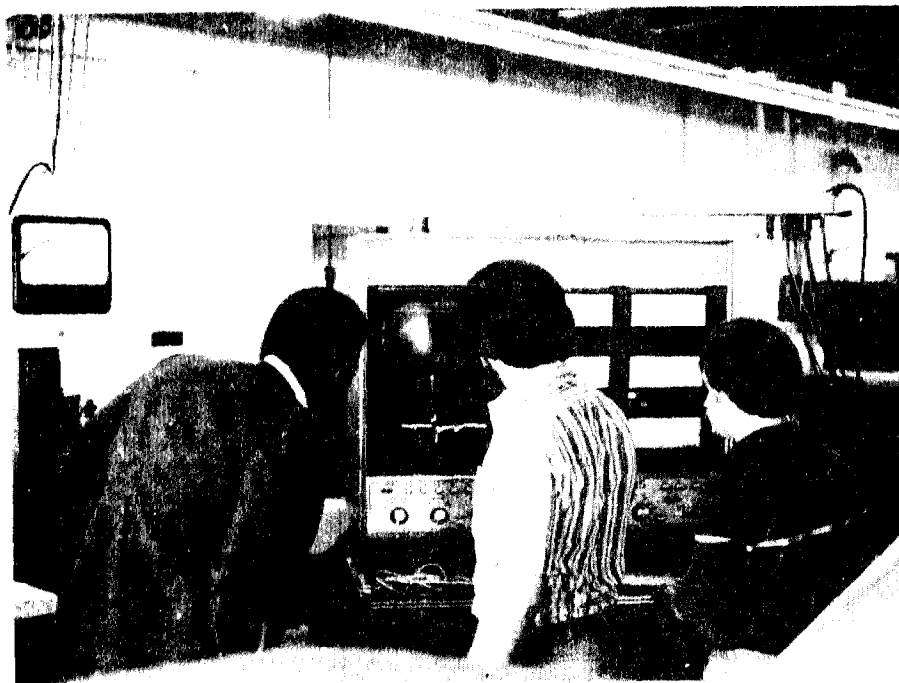
A basic objective of diagnostic inspection is that consumers supplied with precise information on their vehicle's repair needs are more likely to avoid faulty or unnecessary repairs and thereby reduce their repair costs. Underlying this objective is the recognition that today's automobiles are a highly complex combination of electronics, hydraulics, mechanical, and other related systems containing about 15,000 parts, of which about 5,000 are moving parts. With the complexity of vehicles and the shortage of skilled mechanics, diagnosing the causes of vehicle repair problems is often difficult for the repair industry. Thus, diagnostic inspection information is a communication aid that can be beneficial to both consumers and the repair facilities.

APPARENT DECLINE IN PRIVATE DIAGNOSTIC CENTERS

Automobile diagnostic centers, increasing in number during the 1960s, appear to have decreased in the 1970s. By 1970 about 500 private diagnostic centers were in operation, according to a survey done by "Motor Age," a publication of Chilton Publications. Most of these centers also provided repairs or repair parts, in addition to diagnostic inspection services. We were unable to obtain a current estimate, but discussions with some officials in and familiar with the industry indicate that the number of private diagnostic centers is below the 1970 total.



ONE OF THREE INSPECTION LANES AT THE AUTOCHECK FACILITY.
PHOTOGRAPH COURTESY OF UNIVERSITY OF ALABAMA AT HUNSTVILLE



AUTOCHECK INSPECTORS DEMONSTRATE THE USE OF AN ENGINE ANALYZER
PHOTOGRAPH COURTESY OF UNIVERSITY OF ALABAMA AT HUNSTVILLE



AUTOMOBILE DIAGNOSTIC INSPECTION

PLEASE PRINT

1 [] 2 [] 3 [] 4 [] 5 [] 6 [] 7 [] 8 [] 9 [] 10 [] 11 [] 12 [] 13 [] 14 [] 15 [] 16 [] 17 [] 18 [] 19 [] 20 [] 21 [] 22 [] 23 [] 24 [] 25 [] 26 [] 27 [] 28 [] 29 [] 30 [] 31 [] 32 [] 33 [] 34 [] 35 [] 36 [] 37 [] 38 [] 39 [] 40 [] 41 [] 42 [] 43 [] 44 [] 45 [] 46 [] 47 [] 48 [] 49 [] 50 [] 51 [] 52 [] 53 [] 54 [] 55 [] 56 [] 57 [] 58 [] 59 [] 60 [] 61 [] 62 [] 63 [] 64 [] 65 [] 66 [] 67 [] 68 [] 69 [] 70 [] 71 [] 72 [] 73 [] 74 [] 75 [] 76 [] 77 [] 78 [] 79 [] 80 [] 81 [] 82 [] 83 [] 84 [] 85 [] 86 [] 87 [] 88 [] 89 [] 90 [] 91 [] 92 [] 93 [] 94 [] 95 [] 96 [] 97 [] 98 [] 99 [] 100 []

11 [] 12 [] 13 [] 14 [] 15 [] 16 [] 17 [] 18 [] 19 [] 20 [] 21 [] 22 [] 23 [] 24 [] 25 [] 26 [] 27 [] 28 [] 29 [] 30 [] 31 [] 32 [] 33 [] 34 [] 35 [] 36 [] 37 [] 38 [] 39 [] 40 [] 41 [] 42 [] 43 [] 44 [] 45 [] 46 [] 47 [] 48 [] 49 [] 50 [] 51 [] 52 [] 53 [] 54 [] 55 [] 56 [] 57 [] 58 [] 59 [] 60 [] 61 [] 62 [] 63 [] 64 [] 65 [] 66 [] 67 [] 68 [] 69 [] 70 [] 71 [] 72 [] 73 [] 74 [] 75 [] 76 [] 77 [] 78 [] 79 [] 80 [] 81 [] 82 [] 83 [] 84 [] 85 [] 86 [] 87 [] 88 [] 89 [] 90 [] 91 [] 92 [] 93 [] 94 [] 95 [] 96 [] 97 [] 98 [] 99 [] 100 []

ITEM	FAIL	CONDITION	MARKING	NOT INSP
TIRES				
1 TREAD DEPTH		LF /32" RF /32" LR /32" RR /32"		
2 PRESSURE		PSI ¹ PSI ² PSI ³ PSI ⁴		
3 SIZE		OVERLOADED* INTERFERE*		
4 MISMATCH		SIZE DIFF* CONSTR DIFF* RADIAL BIAS MIX* F ¹ R ² F-R ¹		
5 DAMAGE		CUTS* BULGES* EXP CORDS* LF ¹ RF ² LR ³ RR ⁴		
6 VALVE STEMS		CRACKED* SKEWED* LF ¹ RF ² LR ³ RR ⁴		
7 TIRE WEAR PATTERN		FRONT CAMBER* TOE* LOOSENESS* BAL* U* O* INFLAT. LF ¹ RF ² LR ³ RR ⁴		
GLASS AND BODY				
8 FRONT/REAR GLASS		MISSING* CRACKED* DISCOLORED* F ¹ R ²		
9 SIDE GLASS		MISSING* CRACKED* DISCOLORED* INOPERATIVE* LF ¹ RF ² LR ³ RR ⁴		
10 OUTSIDE MIRRORS		MISSING* CRACKED* DISCOLORED* L ¹ R ²		
11 W/S WASHER OPER		INOPERATIVE*		
12 W/S WIPER OPER		SWEEP RESTRICTED* INOPERATIVE* L ¹ R ²		
13 W/S WIPER BLADES		POOR CONTACT* HARD RUBBER* L ¹ R ²		
14 FENDERS		LOOSE* PROTRUSIONS* MISSING*		
15 BUMPERS		DAMAGED* LOOSE* MISSING*		
16 DOORS		KINGES* LATCH* LOCK* MISSING* PANEL DAMAGE*		
17 HOOD LATCHES		INOPERATIVE* PRIMARY* SAFETY*		
STEERING HANDLING				
18 STEERING FREE TURN		BINDING*		
19 STEERING WHEEL PLAY		STEERING WHEEL PLAY EXCEEDS 2-1/4 IN.*		
INTERIOR				
20 SEAT MOUNTING		LOOSE*		
21 SEAT BACK		LOOSE* LOCK*		
22 SEAT ADJUSTER		JAMMED* SLIPS*		
23 SEAT BELT FRONT		FRAYED* ANCHOR LOOSE* MISSING* BUCKLE*		
24 INSIDE MIRROR		BROKEN* LOOSE* MISSING*		
25 HD RESTRAINT & PADDING		DAMAGED* LOOSE* MISSING* PADDING* HEAD RESTRAINT*		
26 SUN VISORS		DAMAGED* LOOSE* MISSING* L ¹ R ²		
27 DEFROSTER OPER		AIR RESTRICTION* INOPERATIVE*		
28 STR WHEEL & COLUMN		WHEEL DAMAGED* COLUMN COLLAPSED* CAPSULE SHEARED* LOOSE*		
29 HORN		INOPERATIVE* WEAK*		
STATION 0, INSPECTOR NO. []				
UNDERHOOD				
30 ENGINE OIL		LEVEL ADVISE IF SIGNIFICANTLY BELOW ADD LINE		
31 FUEL LEAKS		CARB* LINES* PUMP* FILTER*		
32 MASTER CYLINDER		FAIL 90% EMPTY* LEAKS*		
33 POWER STEERING		NO FLUID VISIBLE* BELTS OR HOSES DAMAGED* LEAKS* N/A*		
34 FAN BELT		TENSION* CRACKS* MISSING*		
35 LEAKS (COOLANT)		HOSES* RADIATOR* WATER PUMP* NOT APPLICABLE*		
36 BATTERY CONNECTORS		BURNED* VERY SEVERE CORROSION*		
37 PWR BR VACUUM HOSE		ADVISE CRACKED* BRITTLE* FAIL-LOOSE* COLLAPSED* WORN* N/A*		
38 BATTERY TEST		WEAK* OR UNDERCHARGED*		
EMISSIONS				
39 HIGH CRUISE	31	HC PPM CO% FAIL HC 450 OR ABOVE* CO 3.8 OR ABOVE*		
40 LOW CRUISE		FAIL HC 450 OR ABOVE* CO 4.3 OR ABOVE*		
41 IDLE		FAIL HC 600 OR ABOVE* CO 7.0 OR ABOVE*		
STATION 1, INSPECTOR NO. []				
ALIGNMENT				
42 CAMBER		MVMA MAX REC TOLERANCE MEASURED		
43 CASTER		LF () / () TO () / () RF () / () TO () / ()		
44 TOE		LF () / () TO () / () RF () / () TO () / ()		
STATION 2, INSPECTOR NO. []				
HEADLIGHT ALIGNMENT				
45 LOW BEAM		L/LAMP* LOW HIGH* R/LAMP* LOW HIGH* MISSING* L ¹ R ²		
46 HIGH BEAM		L/LAMP* LOW HIGH* R/LAMP* LOW HIGH* MISSING* L ¹ R ²		
STATION 3, INSPECTOR NO. []				
ILLUMINATION & SIGNAL				
47 TAIL LAMPS		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* L ¹ R ²		
48 STOP LAMPS		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* L ¹ R ²		
49 BACK UP LAMPS		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* L ¹ R ²		
50 PARKING LAMPS FRONT		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* L ¹ R ²		
51 LICENSE PLATE LAMP		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* L ¹ R ²		
52 SIGNAL LAMPS		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* LF ¹ RF ² LR ³ RR ⁴		
53 SIDE MARKER LAMPS		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* LF ¹ RF ² LR ³ RR ⁴		
54 TURN INDICATOR		MISS* OUT*		
55 HAZARD WARN		MISS* OUT* WRONG LOC* / COLOR* BKN LENS* LF ¹ RF ² LR ³ RR ⁴		
56 INST LAMPS		MISS* OUT*		

FORM 100 REV. 11-75

Check Into
PRESCRIPTION

for year _____ Date _____

The following safety related repairs are recommended. Generally, the lower the number in the left hand column, the more important is that repair. The circled words represent the proper repair instructions to your repair shop foreman.

Priority _____

SPARES
 Repair brake master cylinder.
 Refill front and rear brakes.
 Add brake fluid.
 Repair front right & left & rear right & left structural brake parts.
 Replace leaking rear wheel seals.
 Replace or rebuild front right & left and rear right & left brake cylinders.
 Clean and adjust brakes.
 Turn, replace front and rear drums, discs.

Priority _____

TIRES & WHEELS
 Replace front right & left & rear right & left tires.
 Replace front right & left & rear right & left wheels.
 Replace missing nuts on front right & left & rear right & left wheels.

Priority _____

STEERING
 Repair tie/steer arm, control arm pivot, tie rod ends, steering gear box, binding, excessive looseness in steering linkage and align front wheels.

Priority _____

SUSPENSION
 Repair front and rear springs.
 Replace upper, lower ball joints and align wheels.
 Lubricate ball joints every 5000 miles.
 Replace front, rear shocks.
 Repair stabilizer bar, rear control arms.

Priority _____

WHEEL ALIGNMENT
 Set toe.
 Align front wheels.

The following safety related repairs are suggested.

Check Into
PRESCRIPTION

for year _____ Date _____

The following repairs are suggested for the engine of your vehicle to increase fuel economy. The circled words represent the proper repair instructions to your repair shop foreman. Generally, the lower the number in the left hand column, the more important is that repair.

Priority _____

Repairs
 Replace all spark plugs, numbers _____ (in firing order) are faulty.
 Tune-up ignition system.
 Replace ignition wires, numbers _____ (in firing order) are faulty.
 Check and repair choke if necessary; if choke is o.k., rebuild or replace carburetor.

Priority _____

Compression check cylinders for burned exhaust valves or worn piston rings.

Priority _____

Replace coil, condenser.
 Repair vacuum, centrifugal advance.
 Replace and set points.

Priority _____

Adjust idle timing.
 Adjust idle mixture ratio.

Priority _____

Rebuild distributor to correct excessive dwell variation.
 Replace or clean air filter.

Priority _____

Replace PCV valve.
 Set idle speed to specification.

Neither the motorist nor the automotive repair industry has much confidence in diagnostic centers that also make repairs and sell parts and other related products, according to Automobile Club of Missouri officials. This observation was made by the Club based on 10 years of experience operating independent automobile diagnostic centers. They observed that nationwide and in the St. Louis area, a significant number had come into business, advertised, promoted heavily, and then went out of business. An official of the Automobile Club of Southern California has observed a decline in the number of private diagnostic centers in Southern California since 1969. He cited profitability problems as a major reason and noted one instance where a diagnostic center with 22 bays found that it was more profitable to close the operation and lease the land to a bank.

An official of The Clayton Manufacturing Company, El Monte, California, provided a different explanation for the apparent decline in private diagnostic centers. The Clayton Company, which manufactures automotive diagnostic equipment, was very active in supplying diagnostic centers in the 1960s. Based on this experience, a company official believed the decline resulted from the public's unwillingness to pay for diagnosis without also receiving some repair work.

AAA--OPERATION AND APPROVAL OF DIAGNOSTIC CENTERS

Two AAA-affiliated auto clubs operate independent diagnostic centers, and one provides Club approval for private diagnostic/repair centers meeting its standards. These centers provide diagnostic services to Club members and are also open to the general public. Though the types of centers which provide diagnostic inspection differ, Club officials indicate that each is well accepted by Club members.

The Automobile Club of Missouri operates two diagnostic centers. The centers, located in St. Louis and Kansas City, have been in operation for 12 years and 5 years, respectively. The Club established the centers as a service to its members, other motorists, the automobile industry, and Federal, State, and local governmental agencies. The centers maintain their independence by not performing automotive repairs, endorsing any specific brand name products, nor recommending any specific repair facilities. The Automobile Club of Missouri, a not-for-profit corporation, tries to recover the centers' costs through user fees. However, according to Club officials, revenue falls several thousand dollars short of

operating expenses each year. The charge for a complete diagnostic inspection in 1978 for members was \$22.50, and \$30.50 for other motorists.

The Missouri Club officials believe that independent automotive diagnostic centers are a practical means of providing motorists with accurate and unbiased information about the condition of their automobiles. The centers offer motorists a complete inspection, system/component inspection, recheck or post-repair inspection, and periodic motor vehicle safety inspection. Their primary objective is to provide vehicle owners with specific repair instructions identifying solutions to existing and potential problems in the order of their urgency.

The Club concludes that, with this information, motorists are in a better position to obtain the maintenance and repair work for safe, economical, and reliable operation of their cars. Consumers using the Club's diagnostic facility cite several occasions for obtaining a diagnosis:

- Before repairs are scheduled.
- Before an important trip.
- After repairs and a chronic malfunction is still present.
- Before purchase of a used car.
- Before warranties expire.
- After buying a new car.

The California State Automobile Association operates two diagnostic centers in Northern California. The centers, located in San Francisco and San Jose, have been in operation for 11 and 5 years, respectively. The centers do not perform automotive repairs or recommend motorists to any specific repair facility. The Club members are charged about \$28 to obtain a diagnostic inspection. The charge covers operating costs only, and does not include the cost of the land and buildings. Club officials said that both centers have a high demand, and motorists must wait a minimum of a week to obtain a diagnostic inspection.

Since 1970, the Southern California Automobile Club has operated an Approved Diagnostic/Repair program. Under this program, private facilities may be approved in one of three forms:

- A center that only offers diagnostic inspections.
- A center that offers diagnostic inspections and limited repairs.
- A center that offers diagnostic inspections and complete automotive service and repairs.

To qualify, private facilities must have all of the types of diagnostic equipment specified by the Club. If the facility also offers repair services, it must have the necessary equipment and a sufficient number of qualified diagnosticians and mechanics to provide high quality repairs. In addition, the Club monitors the quality of diagnostic inspections by periodically sending undercover vehicles, first checked on its own diagnostic equipment, through the approved diagnostic centers.

According to a Club official, member usage of the 21 participating centers is high. Of these, 11 provide complete automotive service and repairs and 10 provide limited repairs. None of the participating centers provide diagnostic testing only. Center participation in the program has remained relatively unchanged over the years and the Club does not see a trend toward expansion.

DEMONSTRATION DIAGNOSTIC PROJECTS SHOW
POTENTIAL BUT LACK STATE FINANCIAL SUPPORT

Title III of the Motor Vehicle Information and Cost Savings Act, enacted on October 20, 1972, established a program to conduct diagnostic inspection demonstration projects. The act required the Secretary of Transportation to make grants and provide technical assistance to States for diagnostic projects. Title III authorized the establishment of 5 to 10 projects, with each project being designed, established, and operated to conduct emission control inspections and periodic motor vehicle safety inspections (PMVI).

Specific objectives of title III included:

"Each project shall provide to the Secretary information and data relating to the development of diagnostic testing equipment designed to maximize the interchangeability and interface capability of test equipment and vehicles, and information, and data relating to the costs and benefits of such projects, including information and data relating to vehicle-in-use standards, vehicle designs which facilitate or hinder inspection and repair, the standardization of diagnostic systems and test equipment, the capability of the motor vehicle repair industry to correct diagnosed deficiencies or malfunctions and the costs of such repairs, the relative costs and benefits of the project, the efficiency of facility designs employed, recommendations as to feasible reject levels which may be employed, in any such project and such other information and data as the Secretary may require."

Background on program operation

NHTSA was delegated the responsibility to provide the basic support needed to establish uniform criteria and procedures for the design and development of the improved inspection systems which included emphasis on diagnosis. Private industry assisted NHTSA in providing the States with technical assistance.

NHTSA approved demonstration grants to establish diagnostic vehicle inspection centers in Alabama, Arizona, Puerto Rico, Tennessee, and Washington, D.C. The total Federal funds expended for the projects was about \$12 million. The projects operated on a voluntary basis, and the inspections were free to interested motorists. Two States, Alabama and Arizona, had no mandatory PMVI program, and while the other projects operated in jurisdictions that had mandatory PMVI programs, the diagnostic inspections were separate programs. All five projects operated independently in that they did not provide repair services to motorists. The centers received a total participation of about 66,000 motorists and performed about 125,000 inspections as of June 1976, which was initially established as the completion date for the projects. Three of the five projects were given continuing funding to operate up to September 1, 1977, from the remainder of the original appropriation.

NHTSA believes that diagnostic inspections are feasible, effective, and publicly acceptable

Based on the results of the diagnostic demonstration projects, the Administrator of NHTSA believes that diagnostic inspections are feasible, effective, and publicly acceptable, and a principal means of providing consumers with information about the deficiencies of their autos. However, she also contended that, to be effective and efficient, a State-administered nationwide vehicle inspection program can succeed only if it includes vehicle safety, fuel economy, noise, emission control, and other auto repair needs and if the inspection facilities are totally separated from the repair industry. Separation from the repair industry would foster greater public credibility toward the inspection process.

In October 1977, NHTSA published a report on the results of the Motor Vehicle Diagnostic Inspection Demonstration Projects. The report shows improvements in the condition of safety-related equipment, emission levels, and fuel economy after cars were diagnostically inspected. The following is a brief summary of several major conclusions reached from the NHTSA demonstration projects:

Vehicle condition: About 75 percent of the vehicles in the program failed the initial inspection. For brakes alone it was found that 36 percent of the cars failed the initial inspection. On the average, a rejected vehicle had about three defects. For items considered important for safety, such as brakes and tires, the failure rates dropped by half over the life of the program.

Emissions: Hydrocarbon and carbon monoxide levels decreased 22 percent and 12 percent, respectively, in the diagnostic program. The vehicle inspection failure rate for emissions decreased from 23 percent to 10 percent over a 1-year period.

Fuel economy: Gasoline mileage of the diagnosed cars improved by 4.7 percent immediately after performance of emission repairs, which means, projected nationally, savings of 1.8 billion gallons of gasoline per year.

Unnecessary repairs: Analysis of a small sample of repair receipts from the Alabama project indicated that unnecessary repairs were being performed. The diagnostic findings suggest a potential for reducing the occurrence and magnitude of these repairs.

Consumer reaction: Consumer reaction to the program was positive. A total of 93 percent of program participants surveyed said that they would rejoin the program if offered again. Over 85 percent of the participants said that the inspection should be required by law and 63 percent said they were willing to pay \$10 or more for diagnostic services.

There is no average cost figure for establishing a typical independent diagnostic facility. A NHTSA official stated that this was due to potential variations, such as size, design equipment, and location. Officials at the University of Alabama at Huntsville estimate that the cost to establish a three-lane diagnostic center in their State would be about \$250,000 to \$300,000.

Huntsville project officials cite positive benefits and a need for more testing

We visited the federally sponsored diagnostic center (Auto Check) in Huntsville, Alabama. Auto Check was established by the University of Alabama in Huntsville for the Alabama Office of Highway and Traffic Safety. The original Federal project grant of about \$2.8 million was awarded on October 5, 1974, and lasted until June 1, 1976. The University funded the center from June 1, 1976, to December 31, 1976, and received additional Federal funding of about \$200,000 from January 1, 1977, to September 30, 1977. The center, designed, constructed, and equipped to support the NHTSA demonstration project, had three diagnostic inspection lanes. The overall inspection capacity was 228 vehicles in an 8-hour day. The center served 18,000 motorists and performed about 30,000 inspections.

Auto Check maintained its own computerized data base for storing all diagnostic inspection results. The data base provided Auto Check with the capability of conducting a variety of consumer-related studies based on the Huntsville's environment and 1968 through 1973 model year vehicles. Some conclusions about diagnostic motor vehicle inspections made from this data base by Auto Check officials include:

1. The unnecessary repair rate for the diagnostic critical systems was reduced in half--from 26 percent to 13 percent.
2. The annual repair cost savings for only two systems, brakes and engine, was estimated to be a minimum of \$19 per year.

3. A mandatory inspection program could reduce accidents up to about 12 percent over a noninspection environment.
4. Persons not skilled in auto mechanics can make excellent diagnostic inspectors. However, lane supervisors and motorist counselors need to have a good knowledge of automobiles.

Auto Check officials are confident that diagnostic inspections are feasible, but believe that additional testing of the concept is needed. They cited the following limitations of the demonstration projects:

- The demonstration diagnostic project test data are now somewhat obsolete because of changes in automobile design, which include more electronics and more front wheel drive vehicles. The average model year in the diagnostic tests was 1971.
- The diagnostic demonstration test was relatively short, and more time to see the effect of the centers over several years is needed.
- The NHTSA study performed insufficient diagnostic testing in large metropolitan areas and cold weather climates.

The officials believe that additional testing would further prove the value of diagnostic inspections and that such testing would be appropriate before the centers are introduced on a national scale.

A representative of the Chrysler Corporation's Huntsville Electronics Division, which provided Auto Check with training, technical, and general engineering support, expressed mixed feelings about the independent diagnostic center concept. While he believes the concept shows good potential, he is not as confident that results similar to those of the NHTSA study would be obtained if diagnostic centers were established on a national scale. In addition to the limitations mentioned by University of Alabama at Huntsville officials, he noted that the tests were strictly voluntary and no fees were charged to motorists. The Chrysler representative also stated that some motorists with diagnostic information could obtain better automotive service because the automobile repair facility may give them special attention by assigning one of the shop's best mechanics. However, he noted that, if everyone had a diagnostic report, the automobile repair facility

might not be able to give such special attention. In contrast, NHTSA officials believe that the presence of a high quality diagnostic center which circulates diagnostic reports throughout the local repair community helps to upgrade repair services in the area served.

Title III demonstration projects have not led to implementation of the independent diagnostic center concept

Though the demonstration projects showed some positive results, the five diagnostic inspection centers established under title III of the act are no longer involved in a formal, public diagnostic inspection program. However, the University of Alabama at Huntsville is currently using one of its three diagnostic lanes to provide diagnostic inspections, for a fee of \$10, as a public service. A proposal is currently under consideration in Alabama to use all three lanes in a vehicle inspection program directed at safety and emission control systems. A University official said that motorists would receive information similar to that provided under the demonstration projects.

The other centers are being used for a variety of purposes. Two of the three centers established in Puerto Rico are being used by the University of Puerto Rico to train mechanics. The other is being used by the Municipality of Bayamon for safety inspections of its vehicles. In Arizona, the diagnostic centers emission analyzers are used in conjunction with the State's emission control program. The Tennessee center is being operated by the City of Chattanooga for periodic motor vehicle safety inspections. The Washington, D.C., facility is being used for periodic vehicle safety inspections and some diagnostic inspections of city-owned vehicles.

Some officials who were involved with the diagnostic centers said that the future of State-sponsored diagnostic inspection centers is not favorable. The basic reasons the centers ceased diagnostic inspections included lack of State funding to continue operations and lack of receptivity by State legislatures.

INDUSTRY GROUPS GENERALLY OPPOSE ESTABLISHING INDEPENDENT DIAGNOSTIC CENTERS

We obtained industry views on establishing independent diagnostic centers. Most views were negative for many reasons, such as the large investment cost needed for plant and

equipment, lack of trained diagnosticians, and a belief that problem diagnosis should remain with private industry at locations where repairs are also provided. Examples of negative and positive industry comments follow.

The Independent Garage Owners of Massachusetts does not favor establishing independent diagnostic centers because of the belief that initial costs would be prohibitive. The initial capital outlay would include the cost to obtain land, building, and equipment. The group's director also questions whether enough consumers would use the centers to make the concept financially feasible. Officials of the National Automobile Dealers Association see a problem with staffing diagnostic centers with qualified mechanics. These officials believe that the centers would need many qualified mechanics at a time when they see a shortage of mechanics. NADA also believes that if a small portion of the money needed to establish diagnostic centers was placed into mechanic training, it would alleviate the training problems of the entire automobile industry. In addition, NADA officials do not see diagnostic centers eliminating the problem of misdiagnosis.

The Automotive Parts and Accessories Association believes that private industry should perform diagnostic inspections and repairs at the same location. They do not favor separate diagnostic inspection centers by any level of government. They believe that separation of repair and diagnosis would create additional inconveniences for the motorist because of traveling back and forth between the diagnostic center and the repair facility.

In contrast with some industry groups, the Automotive Service Councils, representing about 5,000 independent repair shops in 44 States, favors a nationwide diagnostic inspection program. Its position is based, in part, on its observation that the rapid rate of new technology and the shortage of skilled mechanics will result in more auto repair problems and an increasing amount of consumer complaints in the years ahead. The Council estimates the capital outlay at about \$1.5 billion to establish a comprehensive nationwide diagnostic system, and that over the long run consumer benefits would well exceed this cost and the estimated annual operating costs of \$800 million. The Council believes such a system would include support from private industry, States, and the Federal Government.

STATE VIEWS REFLECT CONCERN
ABOUT DIAGNOSTIC CENTER COSTS

In response to our questionnaire, most State officials believe that independent diagnostic centers would help reduce auto repair problems. Specifically, 75 percent of the State officials responding believed that the centers would help to a moderate, substantial, or very great extent.

In personal contacts, however, several State officials expressed considerable concern about the high costs involved in establishing diagnostic centers. A Michigan official believes that the costs would be too high to make them feasible in that State. A Rhode Island official believes they could be feasible, provided the Federal Government helped fund the startup costs.

Wisconsin does not currently operate diagnostic inspection centers, but the State's Department of Transportation studied diagnostic inspections as an alternative to periodic mandatory vehicle inspections during the late 1960s and early 1970s. Proposals were developed on the basis of the study for a network of State-established diagnostic inspection facilities. Based on one proposal, the State estimated annual operating costs at about \$9.5 million and the number of employees at about 1,100. Recovery of center costs would have been achieved by charging motorists a \$5.31 fee per vehicle.

The proposals to establish the centers, however, were never acted upon by the State legislature. According to one State official, the legislators viewed inspections of vehicles as an imposition on consumers, with little benefit. In addition, a State official noted that establishing diagnostic facilities lacked support by the Governor because of high startup costs and the need to place about 1,100 staff on the State payroll, even though the costs of the program would be recovered by user fees.

NHTSA IS CONTINUING ITS
ANALYSIS OF DIAGNOSTIC CENTERS

The Administrator of NHTSA believes the Federal role in diagnostic inspection is suggesting ways for States and localities to find the capital to put diagnostic inspection stations in place and recommending useful diagnostic models for States to follow. Consequently, NHTSA is conducting and planning efforts to compile, analyze, and document a practical set of alternatives so that States and local governments or consumer groups can make unbiased automobile diagnostic

inspections more available to motorists. The evaluation will cover the technical features of operation, including facility layout, architectural considerations, equipment requirements, inspection procedures and sequences, organization, personnel, training, and cost.

NHTSA will also study and recommend ways to finance the centers. The study will address the implementation costs for various alternative types of combined vehicle inspection and maintenance programs which include safety, emissions and noise inspections, and fuel and maintenance economy. The study will also examine funding possibilities and financing methods and evaluate existing diagnostic programs and services.

NHTSA will also evaluate the trade-offs between providing more diagnostic equipment built into new automobiles versus more sophisticated and versatile diagnostic equipment for the repair and service industry. NHTSA will assess the automobile's engine and safety components and control systems, and the characteristics and availability of suitable sensors and computer equipment.

NHTSA will work with States that plan to expand their present motor vehicle inspection programs, which includes emission control testing, to obtain information concerning program costs and problems. One of EPA's requirements for States using private repair facilities in their vehicle emission testing program is to provide motorists with a referee lane in cases where the owner disagrees with the test. In the States where the referee lanes are established, NHTSA believes that it may be useful to perform emission, noise and fuel economy inspections, and to provide diagnostic information for motorists. NHTSA has selected sites in Rhode Island and Florida to gather information about referee lanes' startup costs and problems. The startup cost information and problems experienced from the two projects will be documented and provided to States contemplating such expansions.

MORE ANALYSIS IS NEEDED TO DETERMINE WHICH
DISPUTE RESOLUTION APPROACHES WORK BEST

Consumer dissatisfaction with auto repairs has created a demand for quick, effective, and inexpensive dispute resolution mechanisms. In response, States, consumer groups, and the automotive industry established a variety of approaches to help consumers with auto disputes, which are among the most difficult to resolve. While these programs help many consumers, their effectiveness is hampered because they have weaknesses in one or more areas, such as lack of enforcement authority, limited staff and resources, inability to provide consumer redress, or limited availability or applicability. In addition, legal alternatives can be too expensive and/or time consuming. Most State and local government officials responding to our questionnaire indicated that improved dispute resolution efforts would help reduce auto repair problems to a substantial or very great extent. But, there is a lack of information showing which types of programs are most successful in resolving consumer auto repair disputes.

STATE PROGRAMS VARY BUT
PRIMARILY RELY ON MEDIATION

State complaint handling activities provide consumers with information on their legal rights and serve as a forum for airing consumer problems. They also provide State agencies with information on complaint trends and the need for law enforcement actions. Some States use radio and television advertisements, information pamphlets, posters in repair shops, and general mailings to licensed drivers or auto registrants to publicize their programs. Advertising focuses on making consumers aware of the State program and how to contact the agency if they have a complaint.

Procedures to handle consumer complaints are not standardized among the States reviewed. Some States allow the immediate recording of complaints received over the telephone while others require consumers to submit complaints in writing.

Each of the seven States reviewed use some form of mediation to resolve disputes. However, most of these States first suggest that consumers contact the repair facilities to resolve the dispute. If the consumer is unsuccessful, State officials attempt to mediate the dispute. Mediation

is a process whereby a third party intervenes to reconcile the differences between the consumer and the business and tries to obtain a settlement. If mediation fails, States generally refer the consumer to small claims court.

Differences in State dispute resolution approaches include organizational structure, staff size and experience, and extent of auto repair legislation. While some States have established a separate auto repair unit, use investigators previously employed as mechanics, and can rely on specific auto repair legislation, other States handle dispute resolution in an agency using staff responsible for a wide variety of consumer problems and/or have no special auto repair legislation.

Massachusetts

In Massachusetts, the Consumer Protection Division of the Attorney General's Public Protection Bureau is the State regulatory agency responsible for enforcing the auto repair regulations. Auto repair, however, is just one of many consumer complaint categories handled by the Division staff. Accordingly, no staff members are specifically responsible for handling auto repair complaints.

The Department of the Attorney General encourages the formation of local consumer groups throughout the State. In 1978 there were 30 such groups in operation. The State established a \$200,000 fund to supplement local funding and volunteer efforts of these groups. Local consumer groups ease the caseload of the Consumer Protection Division by mediating consumer complaints referred to them by the Division.

The Consumer Protection Division mediates those consumer complaints that cannot be referred to a local consumer group and those complaints referred but unsuccessfully mediated. The Division employs on a part-time basis about 100 volunteer college students to mediate consumer disputes. For example, a Massachusetts consumer complained to the Division that she was given an estimate of \$80 to \$95, but charged \$117 for a brake repair. The Division mediated the complaint by contacting the owner of the repair facility which agreed to refund the \$22 difference.

If Division mediation is unsuccessful and there are no similar violations, the Division will suggest the consumer seek a private attorney or consider small claims court. For

example, a Massachusetts consumer brought his vehicle to a facility for repair of a leaky radiator, which the facility estimated would cost \$35 to \$75. Subsequently, the consumer was charged \$175 for radiator replacement which the consumer stated he did not authorize. The consumer then filed a complaint with the Consumer Protection Division seeking a refund. The Division attempted to mediate the dispute, but the facility refused to refund any money. The Division closed the case by referring the consumer to small claims court. The Division will generally take further action (sue the repair facility) only if there is a pattern of fraud or unfair and deceptive practices.

A Division official estimated that of the 15,000 complaints received annually about 40 to 50 percent are automobile repair-related. He also stated that because of their complexity, the auto repair resolution rate is lower than for other consumer disputes (50 percent versus 70 percent). Division officials noted that staff and resource limitations restrict their auto repair involvement but believed they are doing a good job, considering the large size of the problem.

Michigan

The principal agency responsible for handling consumer auto repair complaints in Michigan is the Bureau of Automotive Regulation. The Bureau's field investigative staff of about 30 members is composed equally of ex-police and ex-auto mechanics. The investigator mechanics are required to pass the State's mechanic certification tests and the National Institute of Automotive Service Excellence mechanic certification tests. (See appendix IX for further detail on these tests.)

The Bureau's authority under the Motor Vehicle Service and Repair Act of 1974 was not fully enforceable until November 1978. The Bureau receives, investigates, and mediates complaints and reviews cases in an administrative hearing. The Bureau tries to resolve consumer disputes on a voluntary basis through mediation. In cases involving a violation of the act, the facility may agree to a voluntary settlement, including consumer redress, or have the case presented in an administrative hearing. If the hearing officer's decision goes against the facility, it may have its registration suspended or revoked.

Because the act has only been fully in effect since November 1978, Bureau officials state they have not been able to adequately assess the effectiveness of its dispute resolution process. But Bureau officials do believe their staff is suffi-

cient and adequately trained to handle all complaints. According to Bureau officials, however, complaints alleging poor workmanship (a common complaint) are not a violation under their Motor Vehicle Service and Repair Act. Although Bureau officials will attempt to mediate these disputes, further action will not be taken if mediation fails. Consumers would then be referred to small claims court.

Bureau officials estimated that during fiscal year 1978 they received about 36,000 inquiries and complaints. Most of these were calls for information and not actual complaints. During this period the Bureau also closed about 6,600 complaints and referred the remainder to other agencies or small claims courts. In about 1,800 of these cases, consumers either received a monetary adjustment or had their vehicles re-repaired.

New York

Since November 1975, the New York Department of Motor Vehicles, Division of Vehicle Safety has been the principal State agency responsible for resolving consumer auto repair disputes. The Division's central office is responsible for mediating disputes and its six regional offices are responsible for investigating complaints unsuccessfully mediated. The Division employs 97 automotive facilities inspectors, all having a minimum of 5 years' experience as auto mechanics. During their investigation the inspectors try to informally settle the dispute. Even if a dispute is eventually mediated, the Division may still issue a warning letter officially putting the repair facility on notice for its violation. If mediation is unsuccessful, the inspectors will refer all valid complaints to formal hearings.

An administrative hearing is a process whereby both the Division and the repair facility present their case before an administrative law judge. While the administrative law judges can directly impose fines and/or suspend or revoke registrations, they cannot award consumer redress. Division officials identified the inability to order consumer redress as a major program weakness. They noted that fines and license suspensions or revocations penalize repair facilities, but do not directly help the consumers get their money returned or vehicle repaired properly. For example, a New York consumer brought her vehicle to a repair facility because her oil warning light came on, indicating a problem. The repair facility agreed to repair the vehicle for \$125 but subsequently charged the consumer an additional \$95 for work she did not authorize. After the repairs were made, the oil light continued to remain

lit, and an oil leak developed which had not been observed previously. This condition persisted, even though the consumer returned the vehicle to the facility several times and the shop spent 11 days trying to repair it. The administrative law judge determined that the repair facility failed to perform quality work, overcharged the consumer, and performed unauthorized repairs. Although the repair shop was penalized for these violations, the judge did not have the authority to order the facility to refund her money. Division officials stated that legislation had been proposed that would authorize the judges to award consumer redress.

From April 1, 1978, to March 31, 1979, the Division recorded the following statistics:

<u>Complaints related to practices covered by State law</u>	<u>Complaints</u>
No action (consumer did not cooperate or had no basis for the complaint)	1,232
Resolved centrally	2,014
Sent for investigation	<u>4,025</u>
Total	<u>7,271</u>
<u>Action involving shops (after field investigation)</u>	<u>Actions</u>
No action	1,381
Warnings issued	1,304
Hearings recommended	<u>539</u>
Total	<u>3,224</u>
<u>Action for consumers</u>	<u>Cases</u>
Money returned	730 (\$160,380)
Vehicles re-repaired	<u>438</u>
Total	<u>1,168</u>

The Division has no written evaluation demonstrating the extent of program effectiveness. However, Division officials do examine operating results: complaints processed, disputes resolved, money refunded, vehicles re-repaired, and actions taken against repair facilities. Division officials believe they are achieving positive results by helping

consumers resolve their auto repair disputes and are reducing auto repair abuse by enforcing State auto repair laws.

California

California established its Bureau of Automotive Repair in 1971. The Bureau's principal duties are registering auto repair facilities, protecting consumers, handling complaints, and enforcing State laws. The Bureau assists consumers by mediating complaints, negotiating settlements, and investigating violations of the California Automotive Repair Act. The Bureau has 136 staff assigned to auto repair activities. It employs generalists to handle and process consumer complaints and inquiries, and personnel with auto mechanic experience to investigate complaints.

The Bureau's objectives are to resolve at least 50 percent of the complaints handled to the consumers' satisfaction. In fiscal year 1978, about 2,200 consumers responded to the Bureau's consumer satisfaction survey. Fifty-three percent of the consumers indicated they were satisfied with the Bureau's handling of their complaints and 80 percent said they would use the Bureau's services again.

During fiscal years 1977 and 1978 the Bureau recorded the following statistics:

	7/77 to <u>6/78</u>	7/76 to <u>6/77</u>
Complaints received	<u>26,660</u>	<u>27,472</u>
Complaints closed related to auto repair problems covered by State law:		
Refund/adjustment		
Rework		
Nonmonetary settlement		
Refer and/or cooperate with another agency	5,516	3,080
Refer for disciplinary action	31	77
Complaint registered/withdrawn	<u>1,105</u>	<u>1,838</u>
Subtotal	<u>12,151</u>	<u>11,550</u>
Complaints closed related to problems not covered by State law:		
Refund/adjustment	841	816
Rework	605	757
Nonmonetary settlement	114	476
Refer and/or cooperate with another agency	5,454	5,036
Data recorded	4,554	7,177
Complaint registered/withdrawn	<u>1,837</u>	<u>1,469</u>
Subtotal	<u>13,405</u>	<u>15,731</u>
Total closures	<u>25,556</u>	<u>27,281</u>

Results of complaint closures

Monetary settlement of repair-
related complaints:

Total amount in dispute	\$2,992,281	\$2,416,380
Total amount of refund/ adjustment/rework	\$658,864	\$799,155

Unsatisfactory or faulty repair work--the number one complaint received by the Bureau--is not specifically addressed by the act and is considered by Bureau officials to be "non-jurisdictional." The Bureau attempts to mediate disputes involving unsatisfactory or faulty repair work, but if it is not resolved, the Bureau refers the consumer to small claims court.

Wisconsin

The Department of Agriculture's Consumer Protection Division resolves auto repair disputes, other than warranty complaints which are handled by the Department of Transportation, through mediation. When mediation is unsuccessful, the Division refers consumers to small claims courts to recover their losses and, if warranted, may also refer the case to the Department of Justice for criminal action. During 1978 the Division received about 1,400 auto-related complaints. Information on the number of complaints resolved was not available, but a Division official noted they recovered about \$11,000 for consumers.

Rhode Island

The Consumer Protection Division of the Department of the Attorney General is the primary agency for resolving consumer auto repair disputes. In 1978 the Division received about 1,100 auto repair complaints and obtained cash or value for consumers in about one-third of those cases. The Division relies primarily upon mediation to resolve disputes. If mediation fails, the Division takes formal action only if a pattern of fraud or unfair and deceptive practices exists against that facility. The Rhode Island Consumers' Council and the Rhode Island Department of Business Regulation also assist consumers with auto repair disputes. A Council official estimated that it received about 75 to 80 auto repair complaints in 1978 and helped resolve most of them. The Auto Body Division of the Department of Business Regulation in 1978 received and resolved 71 consumer complaints.

Arizona

The Department of the Attorney General attempts to resolve consumer disputes through mediation. If mediation is unsuccessful, the Department generally suggests other alternatives, such as small claims court. In 1978 the Department received about 400 auto repair complaints, but information on the number of auto complaints resolved was not available.

INDUSTRY TAKES A STEP IN THE RIGHT DIRECTION

The automotive industry has taken some measures to resolve auto-related disputes. Domestic auto manufacturers have begun dispute settlement mechanisms and the National Automobile Dealers Association has had a similar mechanism for over 6 years. These mechanisms use a form of arbitration

whereby the consumer and dealer and/or manufacturer present their dispute to a third party for resolution. The decision is binding on the industry member and, in some cases, it is also binding on the consumer. Although these programs are somewhat limited considering the universe of auto repairs, they are certainly a step in the right direction.

Auto manufacturers' dispute resolution programs use arbitration

All four major domestic auto manufacturers use similar procedures to initially handle consumer complaints. Consumers are first urged to contact the dealer if they have not done so. Complaints still unresolved are then referred to a manufacturer's representative for investigation and mediation. In addition, domestic auto manufacturers are currently experimenting with new dispute resolution mechanisms.

In September 1977 Ford Motor Company established its pilot dispute resolution program in North Carolina to resolve disputes between consumers and Ford or its dealers. Ford's program uses a panel consisting of two dealers and three consumers who are public consumer officials, community leaders, consumer advocates, or educators. The panel's decision is binding on Ford and/or its dealers, but not on the consumer.

Ford officials believe their experience with the North Carolina program was very positive and led them to expand the program to Oregon, Washington, New Jersey, Maryland, Virginia, the District of Columbia, and California. Ford officials noted that with their expansion, the programs cover markets representing about 23 percent of their U.S.-vehicle population. Ford officials also believe that these programs motivate dealership personnel to take a greater interest in improving customer relations.

A Ford official stated that consumers filed about 1,600 complaints with Ford panels between September 1977 and August 1979. The panels reviewed 920 cases with the following results:

Judgment against consumer	529
Judgment against Ford	255
Judgment against dealer	17
Judgment against Ford/dealer	31
Case deferred	<u>88</u>
Total	<u>920</u>

General Motors Corporation was the second auto manufacturer to establish an experimental dispute resolution mechanism. GM began its program in the Minneapolis-St. Paul area in June 1978, with the assistance of the Better Business Bureau and the American Arbitration Association. Arbitrators are chosen from a list prepared by the BBB.

GM has committed itself to binding arbitration with respect to any issue involving the interpretation or coverage of the new vehicle warranty. In addition, GM dealers are offered the opportunity to use this program for disputes involving service transactions exclusively between the dealer and the consumer.

A GM official stated that the program received 373 complaints from its inception in 1978 through August 1979. Of these, 276 disputes were resolved through mediation while 77 were sent to formal arbitration (the remaining 20 were still pending). Specific results were not readily available. GM has expanded the program to Buffalo, San Francisco, Philadelphia, and the entire State of Minnesota. The arbitrator's decision is binding on GM in each of the programs. The decision is not binding on the consumer in the Buffalo and San Francisco programs, but it is binding on the consumer in the other programs. GM officials believe that results of their arbitration programs are encouraging. GM officials note that reaction to the programs has been favorable and that customers generally have been satisfied with the process and, in some cases, were extremely complimentary.

In March 1979, Chrysler Corporation established a new arbitration mechanism in Nassau County, New York. Chrysler is the first auto manufacturer to establish a dispute resolution program in line with Federal Trade Commission regulations. FTC Rule 703 (16 C.F.R. 703) implements section 110 of the Magnuson-Moss Warranty Act (15 U.S.C. 2310) by establishing minimum standards for dispute resolution procedures. These standards include independent panel members to decide disputes, a deadline of 40 days for resolving disputes, and recordkeeping requirements that will allow auditors and FTC staff to

measure the program's success. However, adoption of dispute resolution mechanisms under the act is strictly voluntary.

Chrysler's arbitration panel was organized with assistance from the Nassau County BBB and consists of five members: a consumer advocate, a mechanic certified by the National Institute for Automotive Service Excellence, a representative of the public, a Chrysler zone office manager, and a Chrysler/Dodge dealer. Chrysler officials do not vote on panel decisions. Similar to Ford, panel decisions are binding on the company but not on the consumer. A Chrysler official stated that, as of December 13, 1979, the panel received 17 complaints, resolved 11 to the consumer's satisfaction, and had 6 pending. Chrysler officials noted that, while it is still too early to draw any firm conclusions, results look promising. Chrysler officials believe the program has made everyone try harder to settle complaints quickly and fairly. Chrysler officials plan to expand their program to other areas.

American Motors is the only domestic auto manufacturer that has not developed a dispute resolution mechanism using an arbitration format. According to AMC officials, however, they will participate in a program currently being implemented by the Motor Vehicle Manufacturers Association and the Council of Better Business Bureaus in Washington, D.C. This program is intended to resolve disputes with any of the auto manufacturers.

National Automobile Dealers Association's Automotive Consumer Action Panels

The National Automobile Dealers Association (NADA) is also active in dispute resolution efforts. In 1973 NADA along with State and local dealer associations established Automobile Consumer Action Panels (AUTOCAPS) to provide a swift, accessible, and inexpensive forum for resolving any sales or service problems consumers may have with participating member dealers. As of July 1979, there were 44 AUTOCAPS across the country.

Until recently AUTOCAP could use either a single member arbitrator or a committee panel consisting of both dealer and consumer representatives. In October 1979, however, NADA announced minimum operating standards for all AUTOCAP programs. Under the standards, all AUTOCAPS must have mediation panels composed of both industry and consumer representatives. The standards stipulate that consumer representation be no less than 50 percent. In addition, the panel's decisions are now binding on participating dealers, but will continue to be nonbinding on consumers.

AUTOCAP staff initially attempt to mediate consumer complaints before they are forwarded to the panel. According to NADA officials, during 1977 the AUTOCAPs received about 7,000 complaints. Of these, about 5,800 were resolved through mediation and another 900 with panel intervention. Of those remaining, 100 could not be resolved and 200 were pending.

AUTOCAPs' effect on the overall auto repair problem is limited because the program only resolves disputes against member dealers. Also, a NADA official did not believe it was likely for the AUTOCAP concept to be expanded to independent auto repair facilities because of the difficulty that would be involved in such an organizational effort.

According to NADA officials, one of the most successful AUTOCAP programs in the country is the Massachusetts AUTOCAP. The panel is composed of four consumer representatives and three automobile dealers. The four consumers have a variety of experience:

- The consumer affairs adviser to the Speaker of the Massachusetts House of Representatives who is also the president of the Massachusetts Association of Consumers.
- A lawyer active in consumer issues.
- A former vice president of the Massachusetts Association of Consumers.
- A former State representative who was also a past member of the President's Consumer Council.

From its inception in 1977 to June 18, 1979, the Massachusetts AUTOCAP received about 2,300 written complaints and resolved about 2,100. About 8 percent of the total cases reviewed have gone before the panel. The panel decided 60 percent of these cases in the consumers' favor. Not all AUTOCAPs, however, handle as many complaints as Massachusetts.

Other industry groups also have dispute resolution programs

Other industry groups also have systems to resolve consumer disputes. For example, Shell Oil Company tries to resolve complaints against its dealers on a case-by-case basis, as does the Service Station Dealers Association of Michigan, the Automotive Service Councils, and some chapters of the Automotive Legislative Council of America.

OTHER GROUPS ALSO PROVIDE ASSISTANCE

In addition to State regulatory agencies and industry mechanisms, we contacted other groups who also resolve consumer disputes. These included local consumer groups (e.g., Boston Consumers' Council and Concerned Consumers League of Milwaukee), Better Business Bureaus, and American Automobile Associations. These groups handle a wide range of consumer complaints and assist consumers by opening lines of communication, providing information, and where appropriate referring them to the proper organizations. These groups generally have no enforcement authority, and some are affected by limited staff, restricted membership, or lack of public awareness.

Most groups contacted estimated they successfully mediate the majority of all consumer complaints. While mediation can resolve most disputes involving simple misunderstandings, more complex problems often require additional efforts or authority. For example, the Director of the National Association of Consumer Agency Administrators noted that consumer auto repair complaints are among the most difficult to resolve.

The AAA is experimenting with binding arbitration as part of its Approved Auto Repair Services program. Under the program's requirements, repair facilities seeking AAA approval must agree to submit disputes to binding arbitration and abide by the decisions which are not binding upon the consumer. The arbitration is only available to AAA members. As of December 1979, AAA had approved 500 repair facilities in seven States and the District of Columbia.

LEGAL ALTERNATIVES:
CONSUMERS' LAST RESORT

When third party attempts fail at resolving consumer disputes, consumers are often referred to small claims court.

Small claims courts were developed to provide quick, inexpensive, fair, and effective resolution of smaller civil claims. Small claims courts, however, have been criticized by various studies as being ineffective for providing consumer redress. Deficiencies that have been noted include: (1) some court sessions are inconveniently scheduled, thereby requiring consumers to miss work and lose income, (2) some courts are inconveniently located, (3) maximum claim limitations are often too low, and (4) collection of judgments is frequently difficult. Bringing suit in civil courts also has its disadvantages.

DESIRABLE FEATURES IN A MODEL AUTO
REPAIR DISPUTE RESOLUTION MECHANISM

From examining existing dispute resolution mechanisms, we believe the features described below would be desirable in a model auto repair dispute resolution system. Although none of the mechanisms reviewed contain all of these features, it does not mean the mechanisms are ineffective. Statistics clearly show that existing mechanisms do successfully resolve many consumer disputes. However, we believe that the effectiveness of existing mechanisms can be substantially improved and that the confusion, frustration, and dissatisfaction experienced by many consumers having auto repair disputes can be reduced. A model auto repair dispute resolution mechanism should include most of the following features:

- Low cost to consumers.
- Applicability to all repair facilities.
- Availability in all States.
- Authority to award consumer redress.
- Ability to identify patterns or trends.
- Industry input and participation.
- Periodic evaluations.

Low cost to consumers

Of the individual auto repair disputes reviewed, the amounts involved were generally less than \$500. Therefore, the consumer's cost to resolve these disputes should be kept

to a minimum. Additionally, low-income consumers more frequently experience unresolved complaints or disputes than other groups, according to the Director of the U.S. Office of Consumer Affairs.

Applicability to all repair facilities

Auto repairs are performed by independent automobile repair shops, service stations, dealerships, retail outlets, and tire, battery, and accessory stores. Ideally, auto repair resolution mechanisms should be able to resolve consumer complaints against any of these facilities. While this is true for many State, local, and independent consumer groups, formal industry dispute resolution efforts primarily address new autos.

Availability in all States

A major limitation of the automotive industry's dispute resolution mechanisms is that they have been available only in a limited number of States. All consumers having auto repair disputes should have the opportunity to take advantage of effective dispute resolution mechanisms.

Authority to award consumer redress

Consumers seeking assistance in resolving auto repair disputes generally desire either their money returned or their vehicle repaired properly. Dispute resolution mechanisms rendering decisions in the consumers' favor should have a means to award consumer redress and to get commitment from repair facilities to abide by the decisions. Without effective redress provisions, both the consumers' and repair facilities' time may be wasted.

Ability to identify trends

A dispute resolution mechanism should monitor consumers' complaints on an overall basis. This information could indicate problem trends or patterns and identify industry practices needing attention. Thus, in addition to resolving disputes on a case-by-case basis, dispute resolution mechanisms could help prevent similar disputes from occurring in the future.

Industry input and participation

Industry should cooperate with consumers and State officials in establishing and operating mechanisms to resolve auto repair disputes. Industry participation also provides a balancing viewpoint as well as technical expertise to resolve some of the more complex disputes.

Periodic evaluations

Periodic evaluations identify program areas needing improvements as well as focusing attention on specific auto repair problems. Program officials could use information, such as consumer surveys, statistical data (including number and type of complaints, number resolved, and results of resolution), followup review of consumer referrals, and information on repeat violators to assess the program's effect on the auto repair problem.

THE DISPUTE RESOLUTION ACT: AN ATTEMPT TO IMPROVE DISPUTE RESOLUTION MECHANISMS

The Congress is currently working on dispute resolutions through the proposed Dispute Resolution Act (S. 423). The legislation is based on the findings that, for the majority of Americans, mechanisms for resolution of disputes involving consumer goods and services, as well as numerous other types of disputes involving small amounts of money, are largely unavailable, inaccessible, ineffective, expensive, or unfair. Accordingly, the proposed act is intended to

- strengthen dispute resolution mechanisms, including small claims courts, arbitration, and mediation and conciliation efforts in the country;
- develop a dispute resolution resource center to facilitate the systematic exchange of information concerning the improvement of existing and development of dispute resolution mechanisms;
- survey existing systems to help determine what mechanisms have been effective and ineffective in the past; and
- provide modest levels of financial assistance to strengthen existing systems and to develop new dispute resolution systems.

The proposed Dispute Resolution Act was originally introduced as the Consumer Controversies Resolution Act which was intended to improve the resolution of consumer disputes. The proposed act includes all minor civil disputes including those with criminal aspects. The current version also permits use of the mechanism by small businesses, corporations, partnerships, assignees, and collection agencies. The Senate passed the legislation on April 5, 1979. The House passed a different version on December 12, 1979. The differences will be resolved by a conference committee.

MECHANIC CERTIFICATION

Faulty auto repairs have become one of the most common problems for consumers in recent years. As noted in chapter 2, many groups believe that a lack of skilled mechanics is a direct cause of these faulty repairs.

Mandatory and voluntary mechanic certification programs have been developed to help alleviate the problem of mechanic incompetence. Two States, Michigan and Hawaii, have enacted legislation which mandates mechanic certification. One organization, the National Institute for Automotive Service Excellence, provides a voluntary certification program that is supported by the entire automotive service industry. The District of Columbia has enacted but not fully implemented a statute which includes a mandatory mechanic licensing provision. Because some of these programs have not been operational very long, their effect in reducing auto repair problems is uncertain.

INDUSTRY-SPONSORED VOLUNTARY MECHANIC CERTIFICATION

NIASE was established by domestic automotive manufacturers and the National Automobile Dealers Association in June 1972 as a nonprofit corporation. Since that time, independent garage owners, service station operators, wholesalers, manufacturers, and other sectors of the industry have added their encouragement and support to NIASE, making it an industrywide program. NIASE's purpose is to organize and promote the highest standards of automotive service in the public interest. NIASE does this by promoting and operating a voluntary mechanic certification program and by encouraging development of training programs for mechanics.

Testing

NIASE uses a written test to determine which mechanics have the technical ability required for certification. The NIASE certification tests were developed with technical input from industry experts and automotive educators and test development input from the Educational Testing Service (ETS) of Princeton, New Jersey. The questions are problem-oriented, multiple-choice questions and are revised annually to assure accuracy and validity.

Anyone can be tested at one of the semiannual testing sessions conducted at over 250 locations throughout the country. ETS administers tests in eight automobile service fields, such as engine repair, automatic transmission repair, and engine tuneup. Tests are also given in six heavy-duty truck and two body repair categories. The exams are written, rather than hands-on performance tests. This may pose difficulties for some mechanics who are more comfortable in action than at a desk. Mechanics may pay \$7 for each test plus a \$10 registration fee for each testing date.

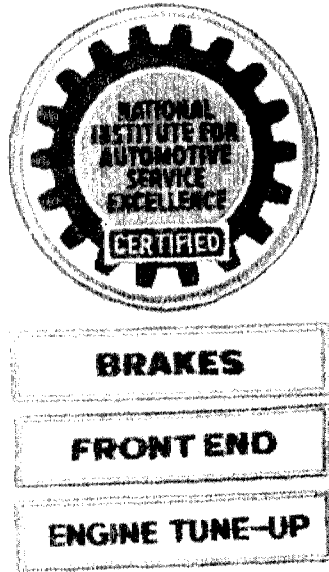
Certified mechanics are considered to be competent in their ability to perform repairs. NIASE defines a competent mechanic as "someone who can diagnose most problems correctly, most of the time, and fix them right the first time." Officials said "most of the time" was 80 to 85 percent of the time. Certified mechanics are allowed to wear NIASE patches, as shown in the photographs on the following page. The shops in which they work can advertise that they employ NIASE-certified mechanics.

NIASE officials provided the following information on their mechanic certification efforts:

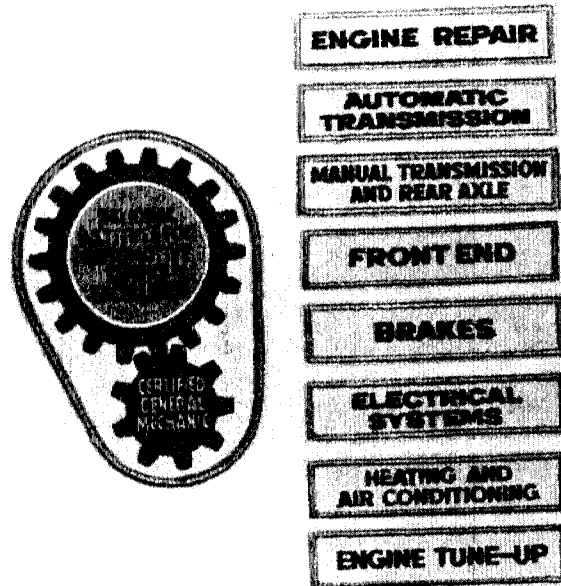
--Mechanics working on consumer vehicles (Excludes service personnel not actually diagnosing or repairing cars, such as service writers, carburetor rebuilders, etc.)	514,316
--Mechanics considered "test ready" (Those considered competent to perform a full range of diagnostic and repair functions in one or more vehicle systems-- engine repair, brakes, etc.)	257,171
--Mechanics registered to take one or more NIASE test (through November 1978)	187,716
--Mechanics certified by NIASE in at least one test area (through November 1978)	133,292

Recertification

NIASE certificates expire in July of the fifth year after a mechanic is certified; mechanics must take the regular NIASE tests or the NIASE recertification tests to remain certified. The recertification tests cost \$15 and



EXAMPLE OF PATCH A MECHANIC CAN WEAR AFTER PASSING THE THREE TESTS ILLUSTRATED.



A MECHANIC WHO PASSES ALL EIGHT TESTS MAY WEAR THE CERTIFIED GENERAL MECHANIC'S PATCH AND EACH OF THE SPECIALTY BARS.

are given every May. Recertification tests contain only half the number of questions of the initial certification test. NIASE has no way to pull a mechanic's patch if the mechanic does not pass the recertification tests; however, all credentials contain an expiration date.

Benefits of voluntary certification

Almost half of the industry officials responding to our questionnaire believe that voluntary mechanic certification will substantially help reduce consumers' auto repair problems. Certification may improve the quality of work by allowing consumers to identify competent mechanics--information to use in choosing a repair facility. Not only should this lead to better repair jobs, according to some industry officials, but it should encourage other mechanics to upgrade their skills in order to become certified. They also speculate that certification may help attract many highly capable and badly needed recruits to the industry by improving the status and pay of mechanics.

Limitations of voluntary certification

Despite its benefits, industry and consumer groups also pointed out several criticisms of the NIASE voluntary certification. One concern was a written test might not be a valid judge of mechanical ability because while it would indicate that a mechanic is good at reading, writing, and passing tests, it would not necessarily mean that the mechanic is competent in actually repairing cars. NIASE officials believe that hands-on testing would be desirable but not feasible because of the costs involved.

Another criticism is that NIASE has only limited ability to penalize mechanics who perform incompetently or fraudulently during the 5 years their certification is valid. NIASE may revoke a mechanic's certification if the mechanic has been found to be incompetent. However, any voluntary certification program, by its nature, cannot prevent the incompetent mechanic from operating in the marketplace.

According to a NIASE official, another limitation is that many consumers are not yet familiar with the program, and as a result, are not fully able to enjoy its benefits.

Evaluation

There have been no formal evaluations of the NIASE certification program. NIASE has attempted to develop a design for evaluating their program, but they have been limited by a reluctance of repair shops to allow access to records. NIASE does receive feedback on their program and they interpret this as indicating that their program is effective. This feedback includes:

- Mechanics' and employers' opinions indicating that competent mechanics are being certified and incompetent mechanics are not.
- Advertisements for "mechanics wanted" are frequently requesting that only NIASE-certified mechanics apply. This indicates, according to NIASE officials, that NIASE certification is a good marketing tool or that employers have had good experience with NIASE-certified mechanics.

GOVERNMENT-SPONSORED MANDATORY
MECHANIC CERTIFICATION

Mandatory mechanic certification is a controversial issue. During our review, we found that support for it is mixed. Only 23 percent of the State and local government officials responding to our questionnaire felt that voluntary certification would have a substantial effect on auto repair problems but 67 percent felt that mandatory certification would. Yet, only two States and the District of Columbia have enacted mandatory mechanic certification laws.

Officials of some consumer and industry groups and several of the States without mandatory certification programs were concerned that such programs could

- create bureaucratic nightmares and excessive administrative costs,
- increase labor costs consumers pay by placing restrictions on mechanics entering the labor market,
- result in "grandfathering"--certifying all practicing mechanics without testing for their competency, and
- remove incentives for mechanics to continue their training if recertification were not included in the program.

On the other hand, State officials from Michigan and Hawaii believe that their mandatory certification programs protect consumers by assuring a minimum competency for mechanics.

Michigan

In 1974, Michigan passed a comprehensive auto repair law which, among other things, established a Bureau of Automotive Regulation, dispute resolution procedures, and required mandatory mechanic certification. The catalyst for this law was a study done by the Detroit Testing Laboratory in November 1973 for the Michigan Attorney General and the Michigan Citizens Lobby. During this study, 35 new car dealers were asked to repair a car with a simple defect--a broken spark plug wire. Twenty-seven of those dealers failed to detect the defect, made improper repairs, or charged for repairs which were not performed.

To achieve mechanic certification, Michigan established tests to certify mechanics in 16 different categories--8 automobile, 6 heavy-duty truck, and 2 for other on-road vehicles. A certified mechanic is defined as one able to correctly diagnose and repair motor vehicles.

All auto repair facilities are required to employ one certified mechanic for every category of repair work performed. All major work performed by noncertified mechanics is required to be inspected and approved by a certified mechanic. By January 1981, all mechanics (except trainees) in the State of Michigan must be certified. This includes those mechanics who were working prior to the legislation's passage. There are no provisions for "grandfathering" these mechanics.

Testing

Michigan officials sought to develop a test that would be a good measure of mechanic competence. Initially, they looked at the test given by NIASE to certify mechanics. State officials believed that the passing scores for this test were set too high for Michigan's purpose--to assure minimum competence, rather than to acknowledge excellence. Michigan officials also decided that the Michigan certification test should be given more than twice a year since it was mandatory that mechanics become certified. Michigan officials also believed it would be preferable to have their own system which could be adjusted to meet their own needs.

Michigan initially developed its tests with assistance from mechanics and industry experts. The tests measure such items as diagnostic ability, repair skills, tool usage, and tool identification. Michigan officials said tests are continually revised in an attempt to assure accurate measures of competency. In addition to the Michigan tests, mechanics can be certified on the basis of their performance on the NIASE test.

Michigan gives its tests several times a year. Between December 1, 1976, and December 31, 1978, Michigan administered 164,281 tests in the various certification categories. These tests include 162,228 written, 1,783 oral, and 270 practical exams. Tests are given twice a week by the Bureau in Lansing; the Bureau and the State Civil Service Commission give tests three times a year, each at various locations around the State. Special testing arrangements are also made for requesting groups. Tests cost \$5 each.

The results of the tests given through December 31, 1978, are as follows:

<u>Name of test</u>	<u>Number of tests admin- istered</u>	<u>Number of tests passed</u>	<u>Percent of tests passed</u>
Automobile:			
Engine repair	21,972	17,122	77.93
Engine tuneup	25,126	19,971	79.48
Front end and steering	18,261	14,537	79.61
Brakes	23,226	18,228	78.48
Automatic transmission	12,501	8,781	70.24
Manual transmission	13,456	10,496	78.00
Electrical	16,142	12,654	78.39
Heating and air condi- tioning	13,853	10,768	77.73
Heavy-duty truck:			
Engine repair--gas	2,467	1,983	80.38
Engine repair--diesel	2,755	2,289	83.09
Drive trains	2,694	2,235	82.96
Brakes	2,911	2,376	81.62
Suspension and steering	2,635	2,043	77.53
Electrical	2,169	1,713	78.98
Other on-road vehicles:			
Motorcycle	2,517	2,028	80.57
Recreational trailer	<u>1,596</u>	<u>1,412</u>	88.47
Total	<u>164,281</u>	<u>128,636</u>	78.30

Larger percentages of applicants passed the automobile test when it was first offered (February 1977) than did as of October 1978 (83.03 percent to 75.97 percent). Michigan officials believe the most competent took the test first and others waited to become more competent in the area.

Recertification

Michigan has not developed any testing for recertification. Certifications are valid for 12 months and are renewed upon receipt of fees. Michigan officials said that they are in the process of looking at the recertification issue. They are adding a section to complaint forms for the mechanic's identification number. This will be used to evaluate the role the mechanic had in the complaint. This information will also be analyzed to determine whether cutoff scores were set too low and incompetent mechanics were being certified. Officials do not expect any certification to be revoked until their evaluation system is operational in late 1979, unless extreme violations occur.

Evaluation

Michigan's certification program will not be fully implemented until January 1981 when all mechanics except trainees must be certified. As a result, there has not been any evaluation of the program. Michigan officials, however, believe that the program is improving the quality of auto repair and helping to decrease the number of consumer repair problems.

Hawaii

The Hawaii legislature enacted a bill on May 27, 1975, requiring certification of all mechanics through written and practical tests. The University of Hawaii's Department of Vocational Education developed the certification program using services obtained from other universities around the United States. Hawaii updates the tests periodically to assure validity. Working mechanics were given the opportunity to be exempted from certification requirements based on their work experience. According to Hawaii officials, there were 8,000 applicants for "grandfathering" protection but only 5,000 were exempted from the certification requirement. Some of those exempted have gone on to take the tests for promotional benefits.

Testing, recertification, and evaluation

The Hawaii certification test is a combination of written and practical sections. Tests cost \$10 each and are offered five times a year. Applicants need to pass the written portion of the exam before they can take the practical section. The Director of the State Department of Vocational Education estimated that 50 percent taking the written test go on to take the practical, and only 50 percent of these are certified. Mechanics need to have 3 years of work experience before they can take the certification tests.

The practical portion of Hawaii's test emphasizes diagnostics and troubleshooting. Components are presented to the applicant with the parts exposed so that the emphasis is on solving the problem rather than disassembling and assembling the part. This also allows the test to be portable so that it can be transported from island to island. Hawaii uses its Motor Vehicle Repair Industry Board to assure uniform administration of the tests.

There is currently no recertification testing in Hawaii. Renewal of certification is automatic biannually upon receipt of \$20. However, complaints received against specific mechanics can be used as a basis for license suspension or revocation.

Because the Hawaii program was enacted only a few years ago, there has been no systematic evaluation of it.

District of Columbia

The District of Columbia Consumer Goods Repair Regulation was passed on March 15, 1974, and specifies conditions that must be met for all repair shops in Washington, D.C., including those for auto repair. The specific provisions require a shop to employ at least one licensed supervisory mechanic for each area of repair specialty. But, according to District officials in December 1979, the District government has not been able to enforce this part of the act because of a staff shortage. They also remarked that they have yet to develop tests to be used in certifying mechanics and had no plans to do so for the same reason.

AUTO REPAIR UNDER WARRANTY

Since the mid-1960s, dissatisfaction with auto repair under warranty coverage has been a major consumer complaint. The Federal Government and the Congress have investigated warranty repair, compiled complaints, determined problems, analyzed causes, proposed solutions, and taken various steps to deal with this major consumer problem. Despite the Federal effort, very little has changed. According to recent congressional testimony, the new car purchaser still has trouble getting warranty problems corrected in a timely, efficient manner. Consumers and the Federal Government still rank auto repair under warranty as a major problem.

Recent actions by the automobile industry and a proposed legislative change may in time reduce the auto warranty repair problem.

WARRANTY PERFORMANCE: STILL
A MAJOR CONSUMER PROBLEM

Automobile manufacturers offer warranties to assure consumers that the cars are quality engineered and built and that if a problem does occur within a stated time, it will be fixed. However, consumer complaints received by Federal and State governments, national and local consumer groups, and the automobile industry itself, indicate that all too often the assurances and promises implied or made by the warranty are not met. As a result, consumers suffer losses.

In late 1968, a Federal Trade Commission staff report on automobile warranties concluded, among other things, that manufacturer and dealer performance was below the levels implied by the warranty, and an excessive amount of service did not meet consumer acceptability.

Ten years later, in March and September 1978, FTC testified before the Consumer Protection Subcommittees of the House and Senate Commerce Committees that auto repair under warranty was still one of the major car problems confronting consumers. An FTC study presented at those hearings showed that:

- Nearly 30 percent of motor vehicles were delivered with problems covered by warranty, compared with 7 percent of warranted consumer products overall.
- About 30 percent of automobile warranty problems took over a month to resolve, compared to 14 percent for other products.

--About 25 percent of those who had warranty service on new vehicles were dissatisfied, compared to 8 percent for other products.

--Nearly 40 percent of motor vehicles required more than two trips to the dealer to get problems corrected, compared to 8 percent for other products.

CONSUMER PROBLEMS WITH POOR
WARRANTY PERFORMANCE

At the September hearing, the Director of FTC's Bureau of Consumer Protection synthesized the problems and losses consumers have with poor warranty performance:

--"* * * Consumers frequently discover to their loss that these promises are not kept, and in fact the system for auto warranty performance often results in great losses for consumers."

--"These are what we see most often as the problems that the current system creates for consumers: long delays, repeated unsatisfactory repairs, insufficient temporary repairs until the warranty expires, refusal to recognize a problem as a covered defect, failure to provide any remedy for nonrepairable lemons, and obstructionist tactics in handling complaints."

--"* * * the extensive losses that consumers suffer as a result of the existing warranty procedures: the loss of time, loss of wages, troublesome or expensive substitute transportation, hotel and food bills for stranded travelers, the cost of repairs which should be covered by the warranty, and in the case of a lemon, often the difference between the purchase price and the trade-in value as owners give up and trade in the lemon for another new car."

Following are the various causes of consumers' problems with auto warranties identified by officials of Federal and State governments, consumer groups, and industry:

--Changes in automobile design and complexity over the last decade have added to manufacturer and dealer problems in diagnosing and correcting deficiencies.

- The increasing volume of automobiles has strained dealer service facilities to keep up with warranty and nonwarranty repair work.
- Even though the dealer is responsible for providing new car service to meet the terms and conditions of the warranty, the manufacturer controls the warranty service system: approval of warranty repairs, dealer reimbursement for warranty service, and parts availability.
- Consumers do not understand warranties and expect that problems, regardless of their complexity, will be solved correctly on the first try.
- Consumers lack quick, inexpensive, and effective means of dispute settlement.

MANUFACTURERS' EFFORTS TO REDUCE CONSUMER PROBLEMS WITH AUTO WARRANTY REPAIR

The automobile manufacturers are aware of the problems consumers have with auto warranty repair. Recently, they have taken several steps aimed at reducing these problems. Following are examples cited by manufacturers:

- General Motors Corporation and Ford Motor Company have changed their dealer warranty reimbursement procedures to increase dealers' incentives to do warranty work.
- Ford has instituted a new system to improve parts availability for its dealers.
- American Motors Corporation has offered a "full" warranty (see below).
- GM, Ford, and AMC have simplified their warranties to make them easier to understand and expanded them to offer better warranty protection.
- Ford, GM, Chrysler Corporation, and the National Automobile Dealers Association have started or expanded efforts in experimental informal dispute settlement mechanisms to increase consumer satisfaction and reduce consumer complaints. (See app. VIII.)

--NADA and the manufacturers have developed various mechanic training programs to provide better service. (See app. II.)

--Chrysler plans to use new computer technology to speed up and simplify dealer warranty claims.

MAGNUSON-MOSS WARRANTY ACT:
AN INEFFECTIVE APPROACH

The Federal Government's main effort to remedy consumers' auto warranty problems has been the Magnuson-Moss Warranty-Federal Trade Commission Improvement Act of 1975 (15 U.S.C. 2301, et seq.).

In March 1978 testimony before the Senate Subcommittee on Consumers, FTC's Chairman said:

"Unfortunately, in the case of autos, it now appears that these remedies are neither solving the problems nor lessening their severity."

The act's provisions

The act deals with written warranties for all consumer products. Its provisions include:

--All written warranties are required to be labeled either "full" or "limited." A "full" warranty lets consumers know the product's warranty provides the maximum protection against defects or malfunctions provided by law and meets all federally established minimum standards. A "limited" warranty means something is missing; it is not as good as a "full" warranty.

--Consumers were given the right to sue warrantors for breach of warranty and were allowed to collect attorneys' fees in successful suits.

--Warrantors were encouraged to establish voluntary informal dispute settlement mechanisms.

The act also attempted to do such things as

--establish disclosure standards for written warranties,

--encourage greater competition with product warranties,

- prevent deception by prohibiting disclaimers of implied warranties,
- make warranties easier to read, and
- assure warranties were available at the point-of-sale.

FTC, responsible for enforcing the act, promulgated rules on what a warranty must say, how and where warranties must be displayed, and what procedures any informal dispute settlement mechanisms established under the act must contain.

FTC's Bureau of Consumer Protection Director explained the approach taken by the act in September 1978:

"The * * * Act dealt with ways of improving warranty systems in all consumer product industries. Its main thrust was to increase warranty competition through improving the warranty information available before the purchase decision is made * * *."

The assumptions behind this approach are that if warranties are available and easy to read and understand, then consumers will read the warranty before purchase and be in a better position to ensure the full value of their purchase.

Auto warranty problems:
a major basis for the act

To a large extent, the act was based on studies, prior hearings, and complaints on consumer problems with automobile warranty performance. Studies of the consumer product warranties, such as home appliances, mobile homes, and home entertainment equipment were also important in supporting the need for legislation. However, no other product matches the automobile in its importance to consumers, the volume of complaints, the inconvenience caused by repeated or faulty repairs, or the safety implications which arise from improperly repaired cars.

Despite this, neither the act nor FTC's rules directly address automobiles or some of the specific problems and causes of poor auto warranty performance identified before the act's passage. Instead, automobiles are treated the same as other consumer products.

FTC claims that the act's provisions
discourage consumer initiative to sue

A major way the Congress attempted to improve warranty performance was to make it easier for consumers to sue warrantors who failed to honor warranty promises. First, section 110(d)(2) allowed consumers to collect costs and expenses including attorneys' fees if their suits were successful. Second, section 110(d)(3) allowed for class action suits.

However, the specific provisions of these sections limit their effectiveness. FTC identified these limitations before the House and Senate in 1978:

--Award of attorneys' fees is discretionary, not mandatory.

--Class action suits are restricted by a minimum number of plaintiffs (100).

FTC concluded that the discretionary nature of any award made for costs and fees is a major deterrent to consumer suits. Even though a consumer may have a valid reason for bringing suit, the costs of bringing the suit may outweigh any benefits received. In addition, a consumer may have a difficult time finding a lawyer to take the case. In a survey of attorneys and consumers contemplating suit for automobile warranty problems, FTC found this discretionary award provision was cited as a major obstacle in deciding whether to bring suit.

FTC's Chairman also noted another possible reason why consumers have not used the remedies available to them. For consumers to pursue their rights, they are faced with the legal system. In short, the Chairman said, "Most people do not want to become involved with lawyers and courts--they just want a resolution."

Also, FTC recognized that most warranty problems are unique to a given situation, and that getting 100 people together with the same problem is difficult.

On January 18, 1979, a bill, H. R. 1005, the "Automobile Warranty and Repair Act" was introduced in the Congress. Its purpose was to improve warranty protection for new motor vehicle owners by amending the act.

The proposed act would do several things to make it easier for consumers to sue:

--It would make award of costs and expenses including attorneys' fees mandatory in successful consumer suits.

--The minimum number of consumers required for class action suits would be removed.

FTC endorsed the above changes in an April 27, 1979, letter to the Chairman, House Subcommittee on Consumer Protection and Finance.

Manufacturers objected to H. R. 1005's consumer right of action provisions. GM and Ford said more litigation and more crowded courts could result. Ford also said manufacturers' legal fees would increase and would be passed on to consumers. NADA added that "class action involved a staggering amount of time of the courts and the parties involved." GM and Ford agreed, stating class actions were "notoriously slow" and the legal process "too cumbersome to provide the quick and equitable resolution required in warranty disputes."

Only AMC offers "full" warranties

Section 104(a) sets the minimum standards a warranty must meet to be called "full." This is significant because even though auto warranty problems of delay, frustration, repeated and unsatisfactory repairs, and lack of remedies for "lemons" are not directly addressed, the standards in section 104(a) do deal with these problems generally. Section 104(a) states that a full warranty must provide, among other things, the following in case of a defect or malfunction:

--The warrantor must remedy--repair or replace--the product in a reasonable time without charge.

--If, after a reasonable number of attempts by the warrantor to remedy the problem, the problem remains, the warrantor must permit the consumer to elect either a refund or replacement of the product without charge.

However, only AMC, with about 1.4 percent of the passenger car market, offers a "full" warranty. Therefore, these provisions of section 104(a) are not enforceable for most auto warranty problems. As a result, "lemon" owners may be left without any real protection.

The consumer with a "lemon" is not totally without help. In 49 States plus the District of Columbia, the Uniform Commercial Code contains warranty laws which provide a method for consumers to "revoke acceptance" of their cars and get refunds. However, according to FTC, the use of the UCC lemon provision has proven difficult for consumers because of the conditions which must be met: criteria for complaint timeliness; form of the complaint; varying precedents on the seriousness of the defect; the circumstances under which the consumer is permitted to revoke acceptance; and the fact that the consumer must give up use of the car during the dispute.

In addition, "full" warranties offer other protection to consumers against financial loss or inconvenience. A "full" warranty requires that, if a remedy for a defective product or component cannot be made within a "reasonable time," the warrantor is responsible for "incidental expenses" incurred by the consumer. In the case of autos, such expenses may include costs of a rental car, telephone calls, and hotel bills for stranded travelers. Again, since auto warranties, except AMC's, are not "full," these expenses are borne by the consumer.

The proposed Auto Warranty and Repair Act would require all written automobile warranties to be "full" warranties. This means "lemon" protection would be available for new car owners and that auto manufacturers would be required to reimburse owners for other costs, such as rental cars and hotel bills, if the remedy is not made within a reasonable time. The proposed act also provides for additional "lemon" protection by allowing the consumer to keep and use the vehicle if the consumer does bring action against a manufacturer.

In July 1979 testimony, the four domestic manufacturers objected to H. R. 1005's "full" warranty provision for two basic reasons. First, they contended that the original intent of the act was not to require any manufacturer to offer a warranty or to offer a "full" warranty. This should be left up to the manufacturer's discretion. Mandating a "full" warranty would be directly opposed to the earlier congressional intent.

Second, the manufacturers questioned if anyone could define "reasonable time" and "reasonable number of attempts to repair." These definitions are crucial if the proposed act's full warranty requirements are to mean anything. They noted that although the act authorized FTC to define those terms, FTC has not done it.

Dispute resolution

Section 110 of the act encouraged warrantors to establish informal methods of settling disputes fairly and quickly. FTC issued a rule setting minimum standards for these informal mechanisms. Chrysler is the only auto warrantor to adopt a dispute resolution program in line with the FTC rule. For additional information on dispute settlement, see appendix VIII.

FEDERAL AGENCY ACTIVITIES

This appendix details the activities of the several Federal agencies discussed in chapter 4, except for the training and vocational education efforts of the Departments of Labor and Health, Education, and Welfare which are in appendix II--Mechanic Training.

NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION

NHTSA's past and present auto repair-related activities have, to some extent, been designed to provide consumers and States with some direct assistance in solving auto repair problems. However, these activities have had limited effect. Nevertheless, NHTSA's planned coordination efforts with other Federal agencies, consumer groups, States, and industry should help to address auto repair and maintenance problems.

NHTSA's major auto repair activities have included the design and funding of a program of demonstration diagnostic inspection centers, studies of the extent and nature of consumers' problems and losses associated with unnecessary and fraudulent repairs, and a study of equipment available to small automotive repair facilities to diagnose and correct auto deficiencies.

In addition, NHTSA has several other programs which eventually could have some effect on auto repair. Its automotive rating program may provide consumers with repairability information for comparison shopping purposes. NHTSA's attempts to develop practical and feasible alternative diagnostic inspection programs may assist States, local governments, and consumers to reduce unnecessary and fraudulent repairs.

NHTSA'S basic responsibilities--
motor vehicle safety and highway safety--
indirectly affect auto repair

In 1966, the Congress passed two acts aimed at reducing the number and seriousness of highway accidents. The National Traffic and Motor Vehicle Safety Act (15 U.S.C. 1381, et seq.) and the Highway Safety Act (23 U.S.C. 401, et seq.) were enacted to address what the Congress considered to be the primary causes of motor vehicle accidents: driver error or misjudgment, roadway conditions, and vehicle conditions. Each act created an agency to administer its provisions; by 1970 these agencies had become NHTSA.

Even though NHTSA and its predecessor agencies had been closely connected with automobiles, the prime emphasis was on safety--motor vehicle safety and highway safety.

Motor vehicle safety

Federal Motor Vehicle Safety Standards called for by the National Traffic and Motor Vehicle Safety Act deal directly with automobiles. However, their emphasis is on the operational characteristics or structural features of vehicles. This includes such things as improving the vehicle's crash avoidance characteristics, protecting the occupants during the crash, and helping them survive after the crash. The initial standards were not designed to facilitate, nor did they address, auto repair. According to the Director of NHTSA's Office of Vehicle Safety Standards, no direct consideration was given to the possible effect on auto repair during the standards development process. However, NHTSA officials believe there are indirect benefits to consumers from a number of standards that upgrade system or component performance and reduce collision damage. The director also stated that if a proposed standards, such as crashworthiness standards, would have hindered auto repair, the manufacturers would have raised the issue.

NHTSA has recently stated, however, that motor vehicle safety standards can have secondary effects of reducing maintenance and repair, providing warnings of impending failure, indicating the need for maintenance, or facilitating problem diagnosis.

NHTSA is considering several motor vehicle safety standards which will have these secondary auto repair-related effects. The first standard would require that brakes be designed so that the components can be inspected without removing the wheel. This would improve diagnosis to detect defective brakes. It would also reduce unnecessary repair or replacement of components because of owner or repair shop ignorance of brake condition. The standard is expected to become effective by 1983. The second standard, expected to become effective in 1981, would require new vehicles to be equipped with low tire pressure warning devices. The warning device would help ensure longer tire life and better gas mileage and would reduce accidents from tire failures caused by underinflated tires. A third initiative involves upgrading the reliability and performance of brake shoe and pad assemblies used to replace original parts. This would increase the longevity of replacement brakes and reduce the

number of subsequent repairs. A related proposal involves new vehicle brake systems. NHTSA would require original brake systems to have a significantly longer life than present systems. Again this would reduce the number of replacements. However, both efforts are not expected to result in standards until the mid 1980s.

Defects investigation: emphasis on safety

One of NHTSA's more widely known activities is its automobile recall campaign program. When a vehicle or component is found by either the manufacturer or NHTSA to violate a safety standard or contain a safety-related defect, the manufacturer is required to correct the defect. The correction can be a repair or a replacement without charge to the motorist or a refund of the purchase price with a reasonable allowance for depreciation.

Highway safety

The highway safety standards developed under the 1966 Highway Safety Act were designed to reduce injuries, deaths, and damage from traffic accidents. The major emphases were on the driver, the highway, accident investigation, and recordkeeping. The act also required vehicle inspections to be a part of each State's highway safety program. To accomplish this, NHTSA developed Highway Safety Program Standard 1--Periodic Motor Vehicle Inspection (PMVI). This standard required each State to inspect every registered vehicle in the State at the time of registration and then at least once a year. The purpose of PMVI is to increase the likelihood that every vehicle operated on the public highways is properly equipped and is being maintained in reasonably safe working order. 1/

NHTSA's PMVI standard dealt primarily with the scope and frequency of vehicle safety inspections. The National Traffic and Motor Vehicle Safety Act also required NHTSA to deal with the quality of inspection. As a result, NHTSA developed a standard which specified procedures and criteria State inspectors were to use in detecting defects and passing or rejecting cars. This standard was called the Vehicle-In-Use Standard and was issued in September 1973. Its purpose--improve the safety of vehicles in use on the Nation's highways.

1/GAO previously reviewed the effectiveness of NHTSA's PMVI program, CED-78-18, Dec. 20, 1977, "Effectiveness of Vehicle Safety Inspections Neither Proven Nor Unproven."

Both the PMVI standard and the Vehicle-In-Use Standard do have an indirect role in auto repair. Motorists in a State with a PMVI program must get their cars inspected. If the vehicles fail, the owner must get the car repaired.

An additional role: auto problems beyond safety

Most of NHTSA's activities relating to auto repair and the problems States and consumers have in dealing with repair problems have occurred since 1972 when the Congress passed the Motor Vehicle Information and Cost Savings Act. The act and later amendments required NHTSA to

- develop comparative information on ease-of-diagnosis and repair;
- establish diagnostic demonstration projects; and
- evaluate diagnostic analysis and test equipment available to small repair establishments and the ability of private industry to supply low cost equipment to monitor compliance with Federal safety, noise, and emissions standards.

In addition, NHTSA has

- studied and reported on the problems and losses consumers have with auto repair and maintenance and
- undertaken several interagency coordination efforts to address auto related problems and national goals of economy, safety, and cleaner air.

Auto repairability ratings

Title II of the Cost Savings Act requires DOT to compile and disseminate comparative information on motor vehicles' damage susceptibility, crashworthiness, and ease-of-diagnosis and repair. The intent of this comparative information is twofold: first, to increase consumer awareness of differences in safety and performance among motor vehicles; and second, to use marketplace forces rather than regulation to stimulate manufacturers to make safer, more damage resistant, and easier to repair cars.

Of the three areas covered by title II, only one--ease-of-diagnosis and repair--relates directly to auto repair. Although crashworthiness and damageability may be important

and may eventually affect cars through design changes, they will not have an immediate effect on auto repair. Crashworthiness describes how occupants are protected from injury or death during a crash. The emphasis is on safety, not repair. Damageability involves physical damage to the car. Repairs resulting from crashes are most often covered by some form of liability or no-fault insurance.

Ease-of-diagnosis and repair ratings: what NHTSA did; what they are doing--To date, NHTSA is still studying the feasibility of the ratings and whether consumers will use this information if provided. As a result, very little comparative information has been compiled, and nothing has been disseminated.

NHTSA first attempted from 1973-76 to develop ease-of-diagnosis and repair ratings. NHTSA recognized that the success of any ratings' program depended on the ability to determine costs and estimate frequency of part or component failures. Although developing costs for preventive maintenance could be done, estimating costs for repair would be very difficult. In fact, because of the lack of data to estimate frequency of failure and the effect of such variables as age and wear on parts failure for both past model years and especially for present model years, ratings could not be developed using current state-of-the-art techniques.

In addition, two mid-1970s studies for NHTSA on the overall effect of title II information concluded, among other things, that consumers would be influenced more by crashworthiness data than damageability or ease-of-diagnosis and repair information.

Following the early 1977 appointment of NHTSA's present Administrator, interest in automotive ratings was revived. NHTSA has since started several projects aimed at developing ease-of-diagnosis and repair ratings.

Similar to its previous efforts, NHTSA still believes ease-of-diagnosis and repair ratings depend on obtaining the frequency of component or system failure. In a draft report on the status of the title II program, a NHTSA official stated that the lack of a data source to develop component system failure frequencies for all makes and models is the foremost problem in developing ease-of-diagnosis and repair ratings.

In short, NHTSA is faced with the same problems in developing ease-of-diagnosis and repair ratings as it was

under its previous efforts. However, it has recently completed or is planning several projects to develop needed data and determine consumers' need and acceptance of comparability ratings:

- NHTSA recently reviewed various flat-rate manuals used by the repair industry to compare preventive and corrective maintenance costs for selected repairs for different classes of cars. NHTSA found differences between the flat-rate manuals in estimated time and costs to complete repairs. In November 1979, NHTSA awarded a contract to examine how labor rates are developed for selected repairs and makes and models of cars. In addition to flat-rate manuals used, such factors as the type of facility where the repair is performed and the geographic location of the facility will be considered.
- In May 1979 a contract was awarded to review maintenance records of various vehicle fleet operators to determine whether these records could be used as an information source to develop automotive ratings. One part of the contract will be to determine whether frequency of failure can be determined from the records of various government and commercial fleets.
- In March 1979 NHTSA completed a survey of domestic and foreign car manufacturers to determine the level of durability and maintenance data they collect and how they are collected. The survey concluded, in part, that much data are available and the responses warranted further exploring of industry test programs. Followup meetings were held in August 1979 with industry representatives. NHTSA is currently estimating the cost to conduct the kind of durability testing necessary to rate new cars. Testing will be completed in January 1980.
- NHTSA also plans to conduct, by contract, a survey to determine the usefulness and need of title II ratings to the consumers. The contract, expected to be awarded in December 1979, will also include information on the most effective means of giving consumers the rating information. NHTSA wants to know, in part, what type of automobile ratings consumers will use, how important they are, and what effect ratings will have on purchase behavior.

--A final activity planned is a proposed automobile ratings symposium to gather information from experienced technical experts, rating groups, representatives from the automobile and insurance industries, and consumers on current and proposed automobile rating systems. NHTSA hopes the symposium will provide good technical input about the automobile ratings program. NHTSA plans to hold the symposium in April 1980.

NHTSA spent about \$150,000 on these activities in fiscal year 1979.

Diagnostic demonstration projects

Title III of the Cost Savings Act established a program to conduct diagnostic inspection demonstration projects. The act required the Secretary of Transportation to make grants and provide technical assistance to States for diagnostic projects. Title III authorized the establishment of 5 to 10 projects, with each project being designed, established, and operated to conduct emission control inspections and periodic motor vehicle safety inspections.

NHTSA was delegated the responsibility to provide the basic support needed to establish uniform criteria and procedures for the design and development of the improved inspection systems which included emphasis on diagnosis.

NHTSA believes that diagnostic inspections are feasible, effective, and publicly acceptable. Based on the results of five diagnostic demonstration projects in Alabama, Arizona, Tennessee, Puerto Rico, and the District of Columbia, the Administrator of NHTSA believes that diagnostic inspections are also a principal means of providing consumers with information about the deficiencies of their autos. However, the Administrator also contended that to be effective and efficient, a State-administered, nationwide vehicle inspection program can only succeed if it includes vehicle safety, fuel economy, noise, emission control, and other auto repair needs with the inspection facilities totally separated from the repair industry. She added that separation from the repair industry would foster greater public credibility toward the inspection process. In October 1977, NHTSA published its report on the results of the motor vehicle diagnostic inspection demonstration projects documenting improvements in the condition of safety-related equipment, emission levels, and fuel economy after cars were diagnostically inspected.

While the equipment of the five diagnostic inspection projects established under title III are still involved in some form of inspection, these demonstration projects have not led to implementation of the independent diagnostic center concept. The Alabama project is using one of its three lanes to provide a comprehensive diagnostic inspection. The District of Columbia and Tennessee lanes have been converted to perform mandatory safety inspections. The Arizona facilities are used for research and development studies and provide engine emission analysis for hard-to-repair vehicles. The Puerto Rico facilities are used for a variety of vehicle inspection functions and to train diagnostic technicians. Since hands-on training is provided, many vehicles are diagnosed in the process. Some of the reasons the centers ceased diagnostic inspections included the lack of State funding to continue operations and the lack of receptivity by State legislatures.

NHTSA is continuing its efforts in diagnostic inspection. The Administrator of NHTSA believes that the Federal role in diagnostic inspection is suggesting ways for States and localities to find the capital to put diagnostic inspection stations in place and recommending useful diagnostic models for the States to follow. Consequently, NHTSA is currently conducting and planning efforts to compile, analyze, and document a practical set of alternatives so that States and local governments or consumer groups can make unbiased automobile diagnostic inspections more available to motorists. Some of NHTSA's diagnostic efforts will be to evaluate existing diagnostic inspection concepts and diagnostic equipment alternatives, and review State and community inspection maintenance programs directed at reducing vehicle emissions. NHTSA spent about \$310,000 on these activities in fiscal year 1979.

NHTSA also has a joint contract with FTC to analyze a portion of the original repair receipts from the Alabama center.

Appendix VII on diagnostic inspection discusses NHTSA's efforts in much more detail.

Small garage study

The Congress recognized that the success of any vehicle inspection process depends on two things: first, the ability to diagnose problems and second, the ability to correct diagnosed problems. The demonstration diagnostic inspection projects under title III addressed the diagnosis of repairs by using independent inspection facilities with no connection to the repair industry. A 1976 amendment to title III

required NHTSA to address the small garage 1/ industry's ability to correct the diagnosed problems. The amendment also required NHTSA to evaluate existing diagnostic and test equipment available in small automotive repair establishments and to report these findings to the Congress.

NHTSA issued its report "Evaluation of Diagnostic Analysis and Test Equipment for Small Automotive Repair Establishments" in July 1978. Among other things, the report concluded that:

"* * * Given the rapid advances in automotive technology and the potential for increasingly comprehensive and stringent vehicle inspection, the current equipment complement of many repair establishments might become (or may already be) inadequate. New equipment may therefore be required to test the new technology automobiles, as well as to address a wider range of inspection standards."

The report also addressed the cost of test equipment available now or which may be required in the future:

"The cost of such equipment is of concern to the Congress since such equipment may become too costly for widespread implementation. In particular, the small automotive garages and service stations, which now account for some 46 percent of all auto service labor and parts, may not be able to afford this equipment. Their budgets for equipment and training are severely limited, with the average small garage grossing approximately \$79,000 in annual sales for parts and labor, and the average service station only \$33,000. These compare with the average annual sales volumes in parts and labor of \$375,000 for new car dealerships and \$285,000 for retail stores of the Sears/Wards/Penneys/K-Mart variety."

NHTSA is continuing its efforts in this area with the following activities:

1/NHTSA defines a small garage as a facility which provides automotive maintenance and repair services, which is not affiliated with vehicle manufacturers or major mass merchandizing organizations, and which has gross annual sales of service, labor, and parts used in repairs of \$185,000 or less.

--An equipment evaluation from 300 repair facilities nationwide.

--A national survey of 1,800 repair establishments' owner/operators, 600 mechanics/inspectors, and 3,000 consumers to assess the characteristics, capabilities, and overall satisfaction provided by automobile repair facilities and diagnostic centers.

As of November 1979, no results were available, but a NHTSA official said the information may be available in April 1980.

Auto repair and maintenance study:
consumers lose \$20 billion annually

In March and September 1978, NHTSA's Administrator testified before Subcommittees of the Senate and House Commerce Committees that improper or unnecessary auto repair and maintenance practices and vehicle design decisions cost consumers about \$20 billion annually. NHTSA's report--"Auto Repair and Maintenance: Program to Reduce Consumer Loss"--estimated consumer losses, as shown in the following table.

NHTSA-Estimated Consumer Losses

	(billions)
Unneeded parts of package deals	\$ 3.0
Unneeded repairs due to inadequate diagnosis	1.5
Faulty repairs for which owners did not get their money back	3.0
Unneeded repairs sold with possible fraudulent intent	2.0
Wasteful overfrequent preventive maintenance	2.0
Vehicle design requiring use of overly modularized parts, highly nonstandard parts, or excessively laborious repair techniques	<u>2.0</u>
Total excessive repair expenses	13.5
Accidents due to undermaintenance or faulty repairs	2.0
Pollution and wasted fuel due to undermaintenance	2.0
Cars prematurely retired due to undermaintenance or faulty repairs	<u>2.0</u>
Total	<u>\$19.5</u>

NHTSA's task force developed its information on problems and losses by first breaking down the repair process into a series of events affecting the vehicle, the owner, and repair shop decisions made at each event. Second, a simulation model was developed on the basis of this repair process. At each stage, assumptions were made about losses from improper actions. The model also provided for benefits assumed from the various remedies developed to reduce these losses.

The report also proposed various remedies for the problems and estimated the associated benefits and costs of each remedy. These estimates included costs which would be incurred by the Federal Government, States, and consumers if the remedy was adopted.

NHTSA's auto repair coordination

NHTSA has taken several steps to coordinate its activities with other Federal agencies in an attempt to deal with auto repair problems. Its efforts include interagency task forces, joint contracts, and interagency agreements. To date, little has occurred in terms of coordinating specific activities, but the basis has been laid for future coordinated programs aimed directly at auto repair problems.

Proposed Interagency Coordinating Committee--In March 1979, NHTSA proposed an interagency group to provide a coordinated approach to address the auto repair and maintenance problems faced by consumers, auto manufacturers, the repair industry, and States and local governments. Participating Federal agencies would include, but not be limited to, NHTSA, EPA, DOE, and FTC.

The work of the Interagency Coordinating Committee would focus attention on the most important current and projected problems in automobile inspection, maintenance, and repair, including safety, emissions, fuel economy, and repair. The executive committee, composed of Federal agency representatives, would receive input from several technical work groups composed of representatives of Federal, State, and local governments; consumers; public and special interest groups; the auto service industry; parts and equipment manufacturers; auto manufacturers; and education groups. Chapter 5 of this report has more detail on this group.

Auto inspection, maintenance, and repair conference--In May 1979 NHTSA, in cooperation with the Transportation Research Board, sponsored a 3-day public conference to examine consumers' auto repair and maintenance problems. The conference consisted of representatives from Federal, State, and

local governments, consumer groups, the auto service industry, equipment manufacturers, and education groups. Its purpose was to identify major problems, establish priorities, and make recommendations for NHTSA action in the coming 5 years.

The conference consisted of panel workshops on such topics as standardizing car designs and equipment to ease inspection, consumer self-help programs, and auto mechanic training. Chapter 5 of this report also has more detail on this conference.

Auto mechanic training task force--In a December 1978 letter to officials of the Departments of Labor and Health, Education, and Welfare and the Environmental Protection Agency, NHTSA's Administrator proposed an interagency task force to define the Federal Government's role in reducing the shortage of qualified mechanics. The task force met for the first time in early 1979. Followup sessions were planned for mid-1979.

Joint contract with the Federal Trade Commission--NHTSA and the FTC are jointly funding an analysis of data from NHTSA's diagnostic inspection project. The purpose is to determine economic loss to consumers from unnecessary repairs and to identify unfair or deceptive auto repair practices. This contract is discussed in more detail in the section of this appendix devoted to FTC.

Coordinating NHTSA's safety and EPA's emissions inspections--The Clean Air Act Amendments of 1977 require State and local governments to develop inspection and maintenance programs for areas not meeting national air quality standards by December 31, 1982. This means vehicles within these areas must be inspected. If the vehicle fails inspection, it must be repaired. This program is discussed in more detail in the section of this appendix devoted to EPA.

The Department of Transportation and EPA have entered into a memorandum of understanding to integrate transportation and air quality planning. Both EPA and the Department will review State implementation plans for inspection and maintenance programs.

FEDERAL TRADE COMMISSION

The Congress has charged the Federal Trade Commission with protecting consumers from "unfair or deceptive acts or practices in or affecting commerce." FTC's role in protecting consumers from auto repair abuse has been rather limited, with most of activity being fairly recent.

Even though auto repair problems are a major consumer concern and complaint, the most indicative statistic about FTC's role is that over the last 5 years FTC has spent less than 1 percent of its consumer protection funds on auto repair problems. FTC's staff are pursuing a few cases and other matters but have not become a major Federal force in reducing consumers' auto repair problems.

FTC is in a unique position to do more
to help reduce auto repair problems

FTC has extremely broad investigative powers under the Federal Trade Commission Act (FTC Act) (15 U.S.C. 41, et seq.). In addition, through the years FTC has developed expertise in defining unfair or deceptive acts or practices. Both of these characteristics place FTC in a unique position to investigate auto repair problems, determine whether any of the problems are being caused by unfair or deceptive acts or practices, and take whatever corrective action it finds appropriate.

Section 6 of the FTC Act (15 U.S.C. 46) gives FTC the power to require firms to submit specific written information, special or routine reports, or oral testimony. FTC uses this authority in connection with general economic surveys, to gather data in the trial of specific cases, as well as to investigate a firm's compliance with existing FTC orders. FTC also uses this authority to conduct general investigations of alleged widespread violations throughout an entire industry. For example, in fiscal year 1978, FTC investigated the home insulation industry to identify companies making false or misleading energy savings claims.

Section 18 of the FTC Act (15 U.S.C. 57a) authorizes FTC to issue rules which define with specificity unfair or deceptive acts or practices in or affecting commerce, including requirements to prevent such acts or practices.

Over the years, Federal courts have recognized, reiterated, and relied on FTC's expertise in defining whether a particular act or practice was unfair or deceptive, and therefore in violation of the FTC Act. In one landmark case the Supreme Court stated:

"* * * Moreover, as an administrative agency which deals continually with cases in this area, the Commission is often in a better position than are courts to determine when a practice is 'deceptive' within the meaning of the Act.

This Court has frequently stated that the Commission's judgment is to be given great weight by reviewing courts." (FTC v. Colgate-Palmolive Co., 380 U.S. 374, 385.)

FTC has only played a limited role in reducing consumers' auto repair problems

FTC's Bureau of Consumer Protection has had an auto repair program for over 5 years and has some investigations in other programs which relate to auto repairs. In addition, FTC's Bureau of Economics is performing analyses of the problems. But FTC does not have a working plan or a clearly defined role for its auto repair activities.

Auto repair program

In fiscal year 1975, FTC began an auto repair program with an initial goal of defining an appropriate role for FTC in helping to minimize unsatisfactory and unnecessary repairs. Until then FTC had issued only a few orders which could be connected in one way or another with auto repairs. These had to do with automatic transmission repairs.

Until recently, the major effort of the auto repair program had been one comprehensive project with two objectives: first, to identify the specific problems consumers were having with auto repairs and second, to evaluate the success of public and private programs to resolve those problems. Through March 1979 FTC had spent about 8.5 work-years and \$188,000 on the project. The project has resulted in several internal studies and a staff request in July 1978 for \$1.2 million in contract funds to evaluate several State and private programs dealing with auto repair problems. The staff conceded that such an evaluation was not a typical FTC activity, but agreed that it might be "the only action within FTC's legal and practical power with the potential for solving auto repair problems on a national scale." The Commissioners denied the request without comment. According to the staff, the Commissioners did so because (1) the \$1.2 million was over half of the Bureau of Consumer Protection's request for contract funds, (2) the staff had conceded that the evaluation might fail to produce any useful information, and (3) the Commissioners thought NHTSA would be a better agency to conduct such an evaluation.

In addition, FTC began an investigation to determine whether requiring repair shops to make standard disclosures before performing certain repairs would reduce unnecessary

parts replacement related to those repairs. Specifically, the staff began to examine California's regulation requiring shops to measure the looseness of a ball joint, compare that to manufacturer's specifications, and disclose that information to consumers before replacing the ball joint. But, according to the assistant director responsible for the auto repair program, the investigation was halted because the Bureau cut off its funding.

In September 1979 FTC had three active investigations in this area. The first involves an industrywide investigation of the use of sales incentives--including quotas--to compensate auto mechanics and service writers, and whether their use increases the rate of unnecessary repair. The second, also an industrywide investigation, concerns a standard definition for rebuilt transmissions. The third involves one firm's alleged "lowballing"--offering a repair package deal at an enticing low price but routinely charging consumers significantly more in the end. FTC spent about \$150,000 on this program in fiscal year 1979.

Warranties program

FTC has implemented the Federal Magnuson-Moss Warranty Act (15 U.S.C. 2301, et seq.) by promulgating interpretive rules, providing advice to businesses and consumers, checking businesses' compliance with the law and rules, and when necessary, issuing cease and desist orders against violators.

FTC has made a special effort to check warranties offered by automobile manufacturers. FTC's staff found mostly minor violation which the manufacturers quickly corrected. In only one case did the staff find a violation serious enough to issue an order.

In an April 1979 agreement with Renault U. S. A., Inc., FTC alleged that the carmaker's warranties were in violation of the Federal Magnuson-Moss Warranty Act. Renault offered a limited warranty on its vehicles for 12 months or 12,000 miles, whichever came first. It also offered a limited warranty of 24 months or 24,000 miles, whichever came first, on the drive train of its vehicles. But the written warranty limited all implied warranties, including those on the drive train, to 12 months or 12,000 miles, whichever came first.

Implied warranties--which are not written into contracts--exist automatically under most State laws, and promise that a product will be fit for ordinary use. This protection, which is in addition to a written warranty, may give consumers stronger rights for some problems. Under its written warranty,

the company would have to repair or replace a defective part. Under an implied warranty, the customer could (1) cancel the sale of the product, (2) get back the purchase price and any additional costs incurred in obtaining a new product, and (3) be reimbursed for economic loss and inconvenience.

The Magnuson-Moss Act allows warrantors to limit the duration of implied warranties, but only to the duration of the written warranty. Therefore, Renault's limitation on its implied warranty on the drive train was invalid, and the implied warranty would remain in effect for as long as each State's law allowed--usually 4 years.

FTC ordered Renault to notify all customers who purchased its cars after July 3, 1975 (the date the Magnuson-Moss Act became effective), that the limitation of the drive train's implied warranty was extended.

Therefore, if consumers who purchased a Renault car after July 3, 1975, had drive train problems after the written warranty had expired but before the State limit on implied warranties was reached, they could have Renault make the repairs and avoid both the risk of encountering usual auto repair problems and the cost of those repairs.

FTC has also commented on auto warranty legislation before the Congress. In 1978, FTC officials testified before Consumer Protection Subcommittees of the House and Senate Commerce Committees calling for changes in the Magnuson-Moss Warranty Act to provide better protection for new car purchasers. FTC has continued its efforts this year in connection with H. R. 1005, the proposed Automobile Warranty and Repair Act.

For more detailed information on H. R. 1005 and auto warranties, see appendix X.

Dispute resolution mechanisms program

FTC established this program to encourage businesses to develop adequate systems for resolving minor consumer disputes. Staff are developing guidelines for "model" systems and have worked with the warranty program staff in developing FTC's position on H. R. 1005.

For more detailed information on dispute resolution mechanisms in use for auto repair problems, see appendix VIII.

Disclosure of substantial risk program

FTC's efforts in this area have been to get businesses to disclose material facts about their products so that consumers, informed about product benefits and risks, can make better marketplace decisions.

In a case which could have a significant effect on the auto repair industry, FTC charged Ford Motor Company in January 1978 with failing to disclose that some of its cars had a defect 1/ and that the company had an adjustment program to repair or compensate for the defect. FTC is seeking to require Ford to (1) repay owners who have had their defective cars repaired at their own expense, (2) disclose to current owners and prospective purchasers the existence of the defect, and (3) disclose the existence of Ford's adjustment program. Ford, on the other hand, contends that FTC is seeking to require Ford to offer a different, longer warranty than it has been offering, and that this requirement would be contrary to State law, the Uniform Commercial Code, and the Federal Magnuson-Moss Warranty Act.

If FTC determines that Ford is indeed responsible for major defects in its cars beyond its stated warranty period, consumers' auto repair problems could be greatly affected. First, FTC could probably apply the ruling to other automobile manufacturers. 2/ Second, such a ruling could mean that if any breakdown in a car could be traced to a design or manufacturing defect, the manufacturer would pay for the repair. Warranty repairs are not without their own problems for consumers. (See app. X.) Nevertheless, consumers would be relieved of the major direct costs involved in the repair because the manufacturer would have to fix the car at no cost to the consumer.

1/FTC's concern for defects in automobiles relates to the economic harm the defect may cause the consumer, in this case repair costs. FTC's concern does not duplicate the role of the National Highway Traffic Safety Administration, which is to prevent the physical harm a defect may cause.

2/Section 5 (m)(1)(B) of the FTC Act (15 U.S.C. 45(m)(1)(B)) enables FTC to enforce a litigated order against other businesses engaged in the same acts or practices as the defendant.

The case is being argued before an FTC administrative law judge. The case has been in litigation since January 1978. FTC staff had expected to go to trial in November 1979, but a change in law judges in May 1979 delayed that until January 1980. Staff could not predict when the law judge would decide the case. After that decision, however, either side may appeal his decision to the Commissioners. The case could then be appealed to the U.S. Court of Appeals and then to the U.S. Supreme Court. These appeals can take several years.

Study of extent of unnecessary auto repair

FTC, along with NHTSA, is funding an analysis of the incidence and causes of unnecessary and unsatisfactory auto repair work and the resulting economic loss to consumers. Using data generated by NHTSA's diagnostic inspection program (see app. VII), the FTC/NHTSA contractor is comparing original inspection reports, repair invoices, and reinspection reports from the diagnostic centers. Although the contractor was supposed to be completed by September 1979, it has met delays and, as of November 1979 the expected completion date had slipped to June 1980.

FTC staff hope that the results of this contract will help them identify unfair or deceptive auto repair practices by giving them information on the extent of unnecessary repairs, the types of components that are more likely to be replaced prematurely, the type of repair shop that is more likely to make an unnecessary repair, and whether the likelihood of getting an unnecessary repair is related to the characteristics of the customers. NHTSA staff does not have any specific plans to use the contract results. In fact, NHTSA's technical manager for the contract told us that if FTC had not been interested in analyzing the data, NHTSA would not have contracted for the study. The contract will cost FTC about \$30,000 and NHTSA about \$72,800.

FTC's Bureau of Economics staff is also analyzing data from other diagnostic centers to confirm, supplement, or supersede existing data on the economic losses from incompetent or unnecessary repair. Staff expect this to result in a staff study to be published in the spring of 1980.

Complaint handling

FTC encourages and directly receives complaints from consumers but generally does not act on the basis of these individual complaints. According to a form letter used to

respond to these complaints, FTC considers how widespread the practice is, how many consumers are hurt, how much harm is done, how much evidence it has, whether the case is important for the whole industry, and how much staff time is available.

FTC has a central staff which either responds to consumer complaints or refers the complaint to the professional staff. The central staff is informed of the particular areas in which the professional staff are working or interested. All complaints are cataloged by firm, product, and type of practice leading to the complaint. In fiscal year 1977, FTC logged in 13,963 complaints; 1,039 dealt with auto service and repair, and 764 of these dealt with unsatisfactory performance or quality. FTC staff in charge of its auto repair program told us that FTC receives relatively few complaints on auto repair problems not covered by warranty.

Consumer education

The only formal effort by FTC to educate consumers about unfair or deceptive auto repair practices has been a factsheet explaining how to use a credit card as a protection against faulty or unnecessary repairs.

According to the factsheet, if consumers have a problem with an auto repair purchased with their credit card, they have the same legal rights against the credit card issuer as they have against the auto mechanic. If consumers have the right, under State law, to withhold payment from the auto mechanic for sloppy or incorrect repairs, consumers also have the right to refuse to pay the credit card company.

In order to use this important right, the factsheet acknowledges that consumers must first try to work things out with the auto mechanic. Also, unless the card issuer owns or operates the repair shop (as might be the case with service stations and gasoline credit cards), two other conditions must be met:

- The auto mechanic's shop must be in the consumer's home State, or within 100 miles of the consumer's current address.
- The cost of repairs must be over \$50.

Interagency coordination

Despite its rather limited role in protecting consumers from auto repair abuse, FTC has been fairly active with other Federal agencies and with congressional committees. FTC will be part of the formal Interagency Coordinating Committee which NHTSA recently proposed. (See p. 35.) FTC staff have worked with NHTSA staff informally for a number of years. FTC recently filed formal comments with the Environmental Protection Agency about its proposed 5-year/50,000 mile warranty of auto emission systems.

FTC staff have also cooperated with staffs of the House and Senate Commerce Committees preparing for the Committees' 1978 hearings on auto repair. In July 1979, the FTC Chairman reiterated FTC's views on auto warranties and warranty repair problems before the Subcommittee on Consumer Protection and Finance of the House Interstate and Foreign Commerce Committee, in support of H. R. 1005, as discussed earlier in this section and in appendix X.

FTC had a coordination problem with NHTSA and the Department of Transportation in 1977. FTC was interested in further analysis of the data generated by NHTSA's diagnostic center demonstration project and asked the Department to perform the analysis. The Department refused, stating that staff had been reassigned and all funds had been spent. It did offer the raw data to FTC for its analysis. But FTC could not provide the \$200,000 needed for the analysis. The matter was finally settled when, after FTC brought the matter to the attention of the House Commerce Committee's Subcommittee on Consumer Protection and Finance, FTC agreed to pay \$30,000 and NHTSA agreed to pay the remaining \$70,000 necessary to analyze half of the project data.

Automotive policy session failed to accelerate FTC's role

The Commissioners formally considered FTC's role in resolving consumers' problems with auto repairs during an April 1978 policy session on FTC's commitment in auto-related areas. FTC staff who presented the policy session reported that, in fiscal year 1977, automobile-related matters took up about

5.2 percent of FTC's program resources. ^{1/} They acknowledged that the allocation did not appear to be based on a strategic decision about the relative importance of automobiles or automobile problems. The staff recommended that FTC emphasize three closely related areas: defects, warranty performance, and repair.

After reviewing auto repair problems, their causes, and the various State and private programs, the Commissioners considered two types of Federal assistance: first, measuring what programs are effective and cost effective and secondly, recommending that the Congress provide funds for State and local programs. Finally, the Commissioners considered several staff suggestions for specific FTC investigations:

- (1) The need for trade regulation rules which would
 - (a) require wear disclosures,
 - (b) require written disclosure of what work must be performed for transmissions or other parts to be sold as rebuilt,
 - (c) prohibit shops from setting quotas for mechanics or require disclosure of the existence of such quotas,
 - (d) compel shops to provide binding estimates or disclose whether estimates given are binding, and
 - (e) require shops to disclose whether or not work performed is guaranteed to correct the malfunction.
- (2) The effect of the flat-rate manual on repair costs (if the California Bureau of Auto Repairs adopts regulations on the use of flat-rate manuals).

^{1/}The bulk of these resources were spent on matters which were not directly related to auto repair. For example, about 68 percent were spent on an indepth investigation of the entire automobile industry, a complaint against General Motors' replacement part distribution system, a rule to regulate used car sales, and three cases about surpluses involved when creditors sell repossessed cars.

- (3) Whether manufacturers should be required to state a specific time for parts availability when they sell their cars.
- (4) The extent of and problems caused by unavailability of manufacturers' service bulletins to independent garages.
- (5) The magnitude and problems of the auto repair service contract industry.
- (6) The prevalence of deceptive practices in the sale of transmission repairs.
- (7) The effectiveness of the California regulation requiring specific disclosures be made in the sale of ball joints.
- (8) The extent of consumer losses from under maintenance and over maintenance and whether there are cost-effective ways of making consumers more aware of the importance of proper maintenance.

FTC's coordinator for its automobile activities told us that, although the Commissioners did not formally act on any of the matters proposed at the policy session, the mere scheduling of the session signaled to the staff that auto repair was a priority area.

However, several events occurring since that session have, in our opinion, negated any perceptions of priority which the session may have created. First, the Commissioners turned down the major output of the auto repair programs-- staff's recommendation for a \$1.2 million study of existing programs. Second, one of the investigations started after the policy session was killed by budget cuts. Third, the resources available for auto repair work have not increased. Finally, the output of the auto repair program over 5 years has been very limited and several FTC officials have agreed that FTC has not yet defined a role for itself.

ENVIRONMENTAL PROTECTION AGENCY

The Clean Air Act, administered by EPA, will affect the demand for auto repair and maintenance services for millions of car owners. By 1983, Federal regulations will require car owners in certain areas to maintain and, if necessary, repair their cars to improve air quality. Results of the first programs being implemented indicate that the repair

industry is having some difficulty repairing cars properly the first time.

Clean Air Act

The Clean Air Act has resulted in EPA programs that affect each general phase of a car's overall life--design, production, and in-use service. These programs include:

- Setting automobile emissions standards that require manufacturers to produce cars that do not exceed these Federal standards.
- Testing selected cars as they come off the assembly line to determine their compliance with Federal emission standards.
- Recalling automobiles that prove to have defective emission control systems.
- Approving State and local inspection and maintenance (I/M) programs for reducing auto emissions in areas where needed to meet national ambient air quality standards.

In addition, the act required EPA to develop emission testing that could be coordinated with Federal emission standards and to prescribe regulations requiring automobile manufacturers to guarantee auto emission control systems for 5 years or 50,000 miles.

The act requires each State to submit to EPA plans which describe how the State will control each designated pollutant to meet national ambient air quality standards. Those States, or particular areas within the State, that cannot demonstrate to EPA the ability to meet these standards by December 31, 1982, must conduct an I/M program.

EPA's best estimate to date is that 50 to 60 areas will be required to implement I/M programs. According to an EPA official familiar with the I/M program, about 40 million cars will be subjected to periodic inspections when I/M becomes mandatory in 1983.

Inspection and maintenance programs

Inspection and maintenance programs are designed to identify cars that are exceeding predetermined emission standards and to require the owners of such cars to make

repairs necessary to meet the standards. A normal emission inspection consists of a visual check of the vehicle's exhaust for excessive smoke and an instrument test of the exhaust to determine its content of carbon dioxide and hydrocarbons.

The most common type of test used is the idle test where the vehicle is placed near the emission test equipment and operated at idle speed. A small probe from the test equipment is inserted in the vehicle's tailpipe, and after about 20 seconds, when the analyzer has stabilized, emissions can be read.

While the idle test cannot duplicate fully the 19-hour test procedure EPA uses to certify cars coming off the assembly line, EPA believes it is capable of determining which cars are emitting at much higher levels than they would if they were operating properly.

Cost of inspection

Several States currently require car owners to submit to periodic I/M programs. According to EPA, data on these programs show that an inspection fee of \$5 is adequate to cover the operating costs of I/M programs.

In addition to the inspection fee, automobiles which fail to pass the emissions test must be adjusted to bring them into compliance with emission standards.

Who pays for repairs?

In a January 1979 report, 1/ we concluded that the primary reason for State and general public resistance of I/M programs was the cost to the individual car owners. We also concluded that this resistance would continue until owners are assured that, where appropriate, the cost will be incurred by the manufacturer.

EPA realizes that the public's acceptance of I/M is determined not only by the amount of out-of-pocket expenses incurred and the perceived benefits but by the guarantee of consumer protection and the relative convenience of the

1/"Better Enforcement of Emission Standards--A Way to Improve Air Quality," CED-78-180, Jan. 23, 1979.

program. EPA also recognizes that a key component in the degree of public acceptability of an I/M program is the quality and reliability of work provided by the automobile repair industry.

Sections 207(a) and (b) of the act authorize EPA to require auto manufacturers to warrant their vehicles for specified periods of time. Already implemented, section 207(a) requires auto manufacturers to warrant for 5 years or 50,000 miles (whichever comes first) the repair or replacement of the catalytic converter, thermal reactor, or other components installed on the vehicle for the primary purpose of reducing emissions. This warranty means that a manufacturer would pay for repair or replacement of the above components if their failure caused a car to fail the inspection. Section 207(b) would require the auto manufacturers to warrant for 2 years or 24,000 miles (whichever comes first) any other part that could cause excessive emissions. This warranty would make the manufacturer liable for the cost of any repairs needed to bring a car--which has been properly operated and maintained--into compliance with Federal emission standards.

On May 25, 1977, EPA published its proposed regulations for implementing the warranty. Because of certain revisions made to the warranty provisions by the 1977 amendments to the act, EPA redrafted its warranty proposal and published new proposals on April 20, 1979.

EPA's proposed regulations to implement section 207(b) have been met with resistance from both industry and government sources. For example:

- A spokesman for independent repair businesses stated that the 2-year/24,000 mile warranty will result in lost work and sales for independents because car owners will have nonwarranty repairs done while their cars are in the dealerships for warranty repairs.
- General Motors stated that the proposed regulations are overly detailed, extremely difficult to enforce, place additional financial obligations and burdens on manufacturers, and would not materially improve air quality.
- The Federal Trade Commission stated that several key provisions of the proposed regulations could have significant adverse effects on competition in the repair service industry that are not outweighed by the environmental benefits.

According to EPA, these comments are being considered and final regulations are expected to be prescribed by early spring of 1980. Officials stated that they expect the final regulations to be similar to the proposals published in April 1979.

Reinspection failure

Studies of the ongoing I/M programs show that about 18 percent of the cars initially fail to pass the emission test, with the average cost of resulting repairs ranging from \$16 in one program to \$32 in another. According to EPA, most failing cars required relatively simple corrective measures to bring them back into compliance--repairs or adjustments, such as correcting the idle mixture, resetting the idle speed and timing to manufacturer's specifications, and replacing disconnected or rerouted vacuum lines.

Even though EPA states that most corrective measures are relatively simple, studies indicate that many vehicles are not being repaired adequately enough to pass reinspection.

For example, the New Jersey Motor Vehicle Inspection System Study Commission reported on May 31, 1978, that 23.5 percent of the vehicles it studied failed to pass the emissions reinspection test. For comparison, it cited a 24.5-percent reinspection failure rate for a similar study conducted by the National Highway Traffic Safety Administration. The New Jersey Commission concluded that, since the percentages for the two studies were so close, in the United States in general 25 percent of the vehicles that fail emissions tests are apparently not getting repaired adequately enough to pass reinspection.

A University of Alabama study shows the rate of unsatisfactory emission repairs in the sample of vehicles tested in California, Missouri, and Alabama to be 47, 43, and 35 percent, respectively.

I/M increases demands for skilled mechanics

According to the automotive industry, skilled mechanics are in short supply. EPA has recognized the need for better trained mechanics in the area of emissions and has initiated emissions training on a limited scale. However, EPA's motive for supporting mechanic training programs is not primarily to address consumers' auto repair problems but to keep emission control devices on automobiles working properly.

EPA training programs train
instructors--not mechanics

EPA decided to upgrade skills of auto mechanics in the areas of emission-related diagnosis and repairs by offering training courses to professional instructors--such as teachers and supervisors--who, in turn, could train other instructors or mechanics. According to EPA, it is less costly to train one person who in turn can pass on training to many more, and more efficient to use the present structure of educational systems than to try and set up one of its own.

To implement this program, EPA awarded over \$825,000 in grants to Colorado State University for developing a packaged emissions training course that could be used to train the professionals. According to EPA, the University has developed several packaged emissions control courses, conducted workshops and seminars that have resulted in hundreds of trained instructors, and provided educational assistance and training to EPA staff, States, and private industries on an "ad hoc" basis.

One EPA official familiar with the program stated that, since the program's beginning in 1974, the University has trained over 300 instructors who either directly or indirectly have resulted in thousands of trained mechanics.

SMALL BUSINESS ADMINISTRATION

The Small Business Administration may have a role to play in resolving consumers' auto repair problems by helping repair facilities buy improved diagnostic and repair equipment.

SBA--an independent Federal agency--counsels, assists, and provides financial aid to small businesses, including auto repair-related establishments. One of its loan programs--the Regular Business Loans program--provides financial aid to business concerns that are not dominant in their fields. To qualify for aid under this program, a business must

- not be able to obtain financial assistance from other sources,
- have good character and repayment ability, and
- have sufficient equity and collateral.

Businesses qualifying for SBA assistance may receive loans directly from SBA or by SBA's guaranteed loan repayment plan. Under the guarantee plan, SBA agrees to purchase, from banks or other lending institutions, the guaranteed portion 1/ of the loan if the business defaults.

In those cases where banks' or lending institutions' participation is not available, businesses may still qualify for a direct loan from SBA.

Loans to auto repair establishments

Over the years SBA has provided financial aid to hundreds of thousands of small businesses. In the Regular Business Loan program alone, SBA's cumulative total through December 31, 1978, is 292,396 loans totaling \$21.6 billion.

Table 1 summarizes SBA loans granted to five general categories of auto repair businesses over a period of about 2-1/2 years. Although these figures do not include all of the loans SBA has provided to auto repair establishments, they serve to illustrate that millions of dollars in SBA loans are available to auto repair businesses in need of financial assistance.

Small garage equipment problem

According to the National Highway Traffic Safety Administration, the rapid advances in automobile technology, the potential for increasingly comprehensive and stringent vehicle inspection, and the new equipment which may be required to test and repair new technology automobiles will financially and technically strain the small automotive repair garages. NHTSA's small garage study was discussed earlier in this appendix on page 136.

1/SBA's guarantee authority is limited to a maximum of 90 percent for these loans.

Table 1

SBA Loans To Auto Repair-Related Businesses

(Figures Rounded to Nearest \$1)

Type of business	Fiscal year						Total	
	1977		1978		1979		No.	Dollars
	No.	Dollars	No.	Dollars	No.	Dollars	No.	Dollars
New and used motor vehicle dealers	392	\$ 60,514,752	373	\$ 64,122,609	a/118	\$19,663,700	883	\$144,301,061
Auto and home supply stores	479	34,160,975	465	36,707,600	a/182	13,474,900	1,126	84,343,475
General automotive repair shops	453	23,213,130	503	31,649,865	b/214	13,677,186	1,170	68,540,181
Automotive repair shops not elsewhere classified	192	10,644,510	208	14,111,650	b/106	9,045,700	506	33,801,860
Automotive services except repair and car washes	23	1,479,320	27	1,836,850	b/18	982,100	68	4,298,270
Total	<u>1,539</u>	<u>\$130,012,687</u>	<u>1,576</u>	<u>\$148,428,574</u>	<u>638</u>	<u>\$56,843,586</u>	<u>3,753</u>	<u>\$335,284,847</u>

a/Up to April 30, 1979.

b/Up to May 10, 1979.

LAW ENFORCEMENT ASSISTANCE ADMINISTRATION

The Law Enforcement Assistance Administration has an indirect role in solving consumers' auto repair problems. LEAA's grant program has provided funds to the National District Attorneys Association. In turn, NDAA supports an economic crime project that works to identify and prevent fraudulent auto repairs.

Background

LEAA was established in 1968 by the Omnibus Crime Control and Safe Streets Act (42 U.S.C. 3711). Under the general authority of the Department of Justice, LEAA's purpose is to help State and local governments strengthen and improve law enforcement and criminal justice. LEAA has awarded funds--at its discretion--to support criminal justice projects, one of which is the Economic Crime Project organized in 1973 by the NDAA.

Economic Crime Project

The project was organized by NDAA in response to both the growing threat of white-collar crime and the complexity of its prosecution. To help improve the capability of local district attorneys to detect, investigate, and prosecute white-collar crimes and to increase public awareness and cooperation, LEAA awarded about \$4.8 million to the project. Currently, there are 72 units in 34 States helping the investigation and prosecution of economic crimes within their jurisdictions.

During the last 2 years, several economic crime units have combined efforts and established five task forces. The goals of these task forces include developing investigative and prosecutorial approaches to specific areas of fraud which have national impact on law enforcement. One of these task forces--auto repair fraud--was created to address the problem of auto repair fraud and abuse.

Auto Repair Fraud Task Force

In early 1977, project officials determined that auto repair fraud and abuse constituted one of the most common sources of citizens' complaints brought to the attention of prosecutors' offices and other consumer agencies. In recognition of this problem, the officials established an Auto Repair Fraud Task Force to

- create model guidelines for successful detection, investigation, and prosecution of auto repair fraud and abuse,
- establish a program to screen and resolve consumer complaints,
- develop civil alternatives to prosecution,
- establish lines of communication and access to the business community, and
- coordinate with local, State, and Federal Government agencies to resolve auto fraud and abuse complaints.

As a result of the task force's efforts, the project published the "Auto Repair Fraud Manual" in 1978. The manual is intended to serve as a guide for prosecutors and police in conducting auto repair fraud investigations and prosecutions. According to project officials, 600 manuals were printed and distributed to interested parties.

LEAA has also sponsored a study by the National Association of Attorneys General of the various State auto repair regulations. We used that study in preparing appendix IV.

OFFICE OF CONSUMER EDUCATION

In June 1972, the Congress found that there were inadequate resources for educating and informing consumers about their role as participants in the marketplace. It created the Office of Consumer Education to fund research and demonstration projects which would fill this gap. Since its inception through fiscal year 1980, OCE has been authorized to spend \$145 million but has only received (through fiscal year 1979) \$14 million. With those funds, OCE has supported about 245 grants and contracts.

OCE projects generally fall into one of three categories. Some grantees educate other educators; that is, the grantees conduct workshops for teachers. Other grantees may directly educate consumers by conducting seminars or publishing and distributing pamphlets. The third category includes grantees who develop resources for others to use in educating consumers. For example, one grantee is developing a consumer-oriented reporting service for college newspapers; another is producing a Spanish/English financial resources guide.

Some of these general projects may deal with auto repairs as one of several consumer problems. For example, one grantee is mailing to families in a suburban community a newsletter containing consumer information on food and nutrition, insurance, credit, warranties, medical care, as well as auto repair.

OCE has only funded five projects dealing specifically with auto repairs. Each was a one-time effort; OCE does not have a specific program to educate consumers about auto repair. One organization received a grant in fiscal year 1977 to prepare educational materials dealing with automotive marketplace decisions. The same organization received a contract in fiscal year 1978 to train other OCE grantees using the materials developed with the previous year's grant funds.

OCE awarded a contract to a Chicago advertising agency to develop a public service announcement about the auto repair "5 o'clock surprise." The announcement, which has been distributed to about 6,000 radio stations around the country, advises consumers to get written estimates before authorizing repairs.

A second grantee received funds during fiscal year 1979 to develop, test, and disseminate three 50-minute learning modules for use with driving age high school students. One module is supposed to discuss how consumers can protect themselves against unnecessary or improper auto repairs. The other grantee, also funded during fiscal year 1979, is developing an "Automobile Owner's Survival Manual"--a glove-compartment sized, comprehensive guide including "everything an enlightened consumer needs to know about auto maintenance, repair, and purchasing."

OTHER FEDERAL GOVERNMENT AGENCIES

We reviewed several other Federal agencies to examine their involvement, if any, with consumers' auto repair problems. We determined that the consumer auto repair-related activities of these agencies were very limited.

These agencies are the:

- Office of Consumer Affairs--processes most of the general consumer inquiries to the Federal Government regarding automobiles. In 1976, the Office processed 2,320 automobile-related complaints, of which about 35 percent related to repair problems. For 1977, the figures were 1,494 and 29, respectively.
- Department of Energy--prepares and distributes pamphlets to consumers informing them that an automobile will get better miles per gallon if maintained properly.
- Office of Personnel Management--sets standards and levels of experience needed for auto mechanics employed by Federal agencies but does not require a written competency test to evaluate applicants.
- Department of Defense--operates and maintains a large fleet of vehicles. Records are maintained detailing the types, frequencies, and costs of repairs. However, the Department of Defense's fleet is not representative of the U.S. auto population; also, the information is limited and information retrieval would have to be done manually. Air Force officials expect to have a more sophisticated computerized system available in 1980 which would expedite analysis of repair and maintenance information. This kind of information may aid the National Highway Traffic Safety Administration in developing automobiles' ease-of-diagnosis and repair ratings.

--General Services Administration--operates and maintains a large fleet of vehicles. Fleet operators are required to inspect vehicles prior to accepting them and to prepare reports for all deficiencies found, including safety and emission systems. Although the agency potentially could provide data on costs and frequency of repairs, much needs to be done to gather, centralize, code, and disseminate the data. Also, the agency's fleet is not representative of the U.S. auto population.

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