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SUPPLEMENT TO THE REPORT BY THE

Comptroller General

OF THE UNITED STATES

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Highway Safety Research And Development— Better Management Can Make It More Useful

GAO has issued concurrently with this supplement a report with the above title. The Department of Transportation commented on the draft of that report, and this supplement contains GAO's evaluation of and response to those comments.



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GED-80-87A
JULY 28, 1980

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REPORT SUPPLEMENT:

GAO COMMENTS ON THE DEPARTMENT OF

TRANSPORTATION'S REPLY TO THE

MARCH 17, 1980, GAO DRAFT REPORT ENTITLED

"HIGHWAY SAFETY RESEARCH AND DEVELOPMENT--

BETTER MANAGEMENT CAN MAKE IT MORE USEFUL"

Note field

This supplement to the report entitled "Highway Safety Research and Development--Better Management Can Make It More Useful" (CED-80-87) contains the Department of Transportation's reply to our March 17, 1980, draft report that was submitted to the agency for its comments, and our comments on that reply. We are addressing the Department's reply in this separate supplement because of the reply's great length (56 pages). We have addressed the Department's summary comments in the body of the report.

Our approach in this supplement is to respond to the Department's reply on a comment-by-comment basis in the same order that the Department made the comments. We have left the Department's reply intact, inserting our comments where appropriate. Where possible, we respond by restating portions of our March 17, 1980, draft on which the Department's reply is based, 1/ rather than from our final report. "Draft report" as mentioned in this supplement refers to the draft of that date. "Final report" refers to the report of which this is a supplement.

Any changes to the draft report which were due to Department comments are incorporated in the final report. Other minor changes were made to the draft report during our own internal review process.

1/Page number references quoted by the Department refer to pages in the March 17, 1980, draft and are not necessarily the same as those of the final report.

DEPARTMENT OF TRANSPORTATION

REPLY TO THE

GAO DRAFT REPORT OF MARCH 17, 1980

HIGHWAY SAFETY RESEARCH AND DEVELOPMENT--

BETTER MANAGEMENT CAN MAKE IT MORE USEFUL

Over the last 3 years, the National Highway Traffic Safety Administration (NHTSA) has devoted extensive efforts to planning initiatives covering each of its major programs. This GAO survey was undertaken after the agency's rulemaking plan for motor vehicle safety and for fuel economy was completed and a corollary plan for highway safety research, development, and demonstration (403 Program) had been drafted for public comment, prior to final issuance.

On March 16, 1978, NHTSA published a Notice of Proposed Rulemaking (NPRM) entitled, "Five Year Plan for Motor Vehicle Safety and Fuel Economy Rulemaking, Calendar Year 1980-1984." For each proposed rulemaking action, the plan specified associated research requirements. This plan was subsequently updated and republished April 20, 1979, to reflect docket comments, views, and concerns.

In March 1978, NHTSA provided a report to the Senate Appropriations Committee which discussed its 1978-1979 priorities for highway safety and committed the agency to a major effort to develop a 403 program plan, the first one ever prepared for this program. This report responded to the Senate Report on the FY 1978 Appropriation which requested that NHTSA identify its highest 403 Program priorities, provide a mechanism for incorporating State and local contributions, and develop a plan for implementing the more promising products developed through research and development.

In April 1979, consistent with the NHTSA report to the Senate, NHTSA contracted for a conference held under the auspices of the National Academy of Sciences, Transportation Research Board (TRB) at Dulles Airport to discuss and assess the NHTSA draft 403 plan.

Members of the research community, key State and community highway safety officials, and selected highway safety advocates examined and commented on the plan. While the major focus for discussion was 403 priorities and program strategies, the conference, at NHTSA's urging, also addressed issues such as the following:

1. How can and should the highway safety research and demonstration efforts be made more responsive to the State's highway safety needs?
2. How can the highway safety research community best be provided with adequate opportunity to make a contribution into Federal research planning?
3. How can the research activities funded by private and State or local government sources be reflected in the Federal Government's plan so that it can be a truly National Traffic Safety Program Plan?

4. How can Federal research results best be disseminated and submitted for review and critique by non-Federal researchers?
5. How can program products be assured of widespread adoption?

NHTSA was asking for help and constructive criticism. The Conference fulfilled those objectives. GAO was a welcomed participant at that Conference, and its report presents some views and conclusions which were thoroughly and openly discussed more than a year ago. Many readers of the GAO report might draw the conclusion that much of the thinking and analysis about the 403 program originated with the GAO report when, in fact, the Appropriations Committee and the agency itself were the initiators.

[GAO COMMENT: Our draft report discussed, among other matters, NHTSA's highway research plan over the last few years. We pointed out that the latest program plan is a step in the right direction, but more needs to be done. Some of the needed improvements have been discussed for many years, although many of the problems are still unresolved. Our conclusions about the plan are based on an analysis of available documents and comments from NHTSA and the highway safety community.

Because of congressional concern about the NHTSA section 403 program, we were requested to conduct this review, as the draft report stated.

"* * *the House Committee on Public Works and Transportation, Subcommittee on Oversight and Review, requested us to review highway safety research and development which has been or is being conducted by NHTSA and the Federal Highway Administration (FHWA) under the Highway Safety Act of 1966. The program is commonly referred to as the section 403 program. NHTSA is responsible for the majority of this work. The subcommittee requested us to determine how research and development funds are spent and to be especially attentive to NHTSA's management to determine if changes can be made to improve research efforts and increase the use of research results. This report addresses these and other areas concerned with highway safety research and development."]

With the impetus provided by the Conference, and assisted by a complete TRB Conference report published in December 1979, NHTSA is now completing an internal review of substantive areas to prepare an Updated 5-Year 403 Program Plan. It is expected that this updated plan will be published no later than September 30, 1980.

GAO acknowledges that the NHTSA planning for the 403 program has improved, describing the agency's developing a 5-year plan as "a step in the right direction." GAO then proceeds to offer sweeping criticism as though nothing meaningful has been achieved, claiming that NHTSA still suffers from weak planning and a credibility gap.

[GAO COMMENT: We have given NHTSA credit for the 5-year plan it is developing. However, we have also pointed out remaining problems which we believe may adversely affect the new plan's successful implementation. Our report is constructive and does not offer sweeping criticisms.

Our draft report stated:

"* * * we believe that developing a 5-year plan is a step in the right direction and that NHTSA should use the plan to determine what work will be done when the plan is finalized. If external comments are received and given adequate consideration, NHTSA should be able to improve the plan and design research programs which will benefit States' highway safety programs.

* * * * *

"NHTSA's Offices of Research and Traffic Safety Programs have developed a 5-year highway safety research plan for fiscal years 1980-84. To provide the highway safety community an opportunity for comment on the plan, NHTSA published a draft of the plan and held a conference to discuss it. Although the 5-year plan is a step in the right direction, more needs to be done to make it a useful working document, such as analyzing available information, systematically setting priorities, and including outside sources in the planning process."

Concerning the credibility gap, our draft report stated:

"Some potential users told us that they do not use NHTSA section 403 research because they lack confidence in NHTSA's research program. Part of the problem is that NHTSA's past research plans were developed without involving potential users and researchers, making the potential users unwilling to implement results which they did not consider worthwhile."

The 1979 Transportation Research Board conference report stated:

"Both highway safety practitioners and researchers voiced concern about the way that 403 programs have been developed and implemented. According to practitioners, NHTSA at times appears to support projects that do not address topics user communities perceive as most important. The problems with research designs and results are even more critical. The failure to involve users in developing and designing RD&D efforts often results in projects that could not be implemented effectively at local levels. Thus, even if the research is well done, the results are useless."]

On a continuing basis, the new 403 Program planning process, which is actually a new way of operating in terms of coordination of projects, will --

- o Incorporate into periodic up-dated plans an analysis of available information (or establish the state-of-the-art).
- o Assure full coordination of research and organizational priorities within the Agency.
- o Coordinate and communicate more effectively with the user community.
- o Provide a sound methodology for describing requirements, setting priorities, and allocating resources.
- o Involve peer review by the highway safety research community and by highway safety practitioners.

[GAO COMMENT: We believe that NHTSA has not demonstrated that the section 403 planning process as designed will accomplish the above. Although the plan is a definite improvement over past plans, the research community still has reservations about the plan as we have stated in the draft report.

"Traditionally, NHTSA section 403 plans have been developed internally. The new 5-year plan was developed in the same manner, and although the users and researchers have been given the opportunity to comment on the plan, the general opinion of the highway safety community is that NHTSA has designed its plan and will not make substantial changes."]

Not only will this process enhance our relationship with the user community, but it will result in more accurate and thorough identification of State and local needs. The initial plan which the agency published March 30, 1979, was entitled "Proposed Plan for Highway Safety Research, Development, and Demonstration (Section 403, Title 23, USC), Fiscal Years 1980-1984." The GAO criticized NHTSA for having "had little working relationship with users and researchers before preparing the plan." The plan was not developed "by committee" as the GAO suggests it should have been, for several obvious reasons:

1. The agency had an obligation to take the "first step" to prepare an initial draft plan and to organize its own house without asking outside interests to undertake that task.
2. Development by committee takes longer and is usually less productive and undoubtedly would have required numerous lengthy conferences.
3. The opportunity for outside interests to critique and to recommend additions or deletions to the proposed plan was openly provided by NHTSA.
4. The agency has ultimate responsibility for carrying out all functions identified in the proposed plan.

[GAO COMMENT: Our draft report stated that NHTSA officials "need to make every effort to include States in the planning process, including exploring avenues such as user advisory or review boards for formal user input and plan evaluation." We make the following comments in relation to the four specifics mentioned by NHTSA.

1. We agree that NHTSA had to take the first step; however, because of its credibility gap with the highway safety community, NHTSA could have solicited and incorporated ideas from outside sources.
2. NHTSA has already taken over 2 years to develop its plan, but it is not yet completed nor does it have the general confidence of the highway safety community. We believe that increased participation by the highway safety community would have been a greater advantage to the program than the disadvantage perceived by the Department.
3. We stated in the draft report that "the general opinion of the highway safety community is that NHTSA has designed its plan and will not make substantial changes."
4. A plan acceptable to users would make it easier for NHTSA to carry out its functions.]

GAO continually suggests that NHTSA produce draft documents by a committee of government and private sector officials, in lieu of having such individuals and organizations comment on draft agency plans. GAO implies that, once the Agency publishes something, it is cast in concrete and changes will not be made. This is an unfair allegation and has no basis in fact.

[GAO COMMENT: The comment that the plan will not substantially change comes from the highway safety community and NHTSA itself. According to the research community, dealing with NHTSA is a problem, particularly with its record of not accepting outside comments and suggestions.]

The report implicitly criticizes several NHTSA research projects for lack of positive results, suggesting that a project, whose net result is the determination that a proposed line of development is not feasible, has thereby wasted its funds. NHTSA does not concur with this suggestion, nor does the research community in general. Negative results are the inevitable byproduct of an active and demanding pursuit of usable research products. Such results are meaningful in themselves and serve to reduce waste in expenditures by identifying false leads or counterproductive developments. Similarly, highway safety research must be expected to conclude occasionally, after investigation, that certain proposed measures are impractical, or unjustifiably expensive, or legally inadvisable, or simply unacceptable to the public. The lack of occasional negative results would either suggest that the research was unnecessary, since its results were perfectly predictable, or cast doubts upon the integrity of the research effort.

[GAO COMMENT: Our draft report recognized that all research results will not be implementable, as excerpts below show.

"NHTSA's research is not always used because many section 403 contracts have led to unimplementable results. State and local officials and researchers said that often NHTSA's research results in disproving proposed solutions. This can be useful in contributing to knowledge and showing users what does not work, but users also need new and innovative methods to improve highway safety." (Under-scoring added.)

* * * * *

"It can be expected that some research will have unimplementable results or take a long time to complete. However, potential users said these kinds of contracts occur too frequently. NHTSA should be especially conscious of these limitations because of its position as a research leader and should try to minimize these types of projects. Initial discussions with users to determine their needs will aid the selection of ideas for research which are most applicable."]

Emphasis on sound, long-range planning is a continuing NHTSA commitment. As the GAO knows, the rulemaking and 403 plans are steering both budget preparation and program execution. NHTSA is also extending its efforts to include a Data Plan for its National Center for Statistics and Analysis (NCSA). Also, a data plan for crashworthiness rulemaking has been completed and one is being developed for crash avoidance rulemaking. In the near future, the agency also expects to develop a data plan to meet 403 program needs. The agency is not looking for praise, but it certainly does not believe that such clear commitment to improved program planning and management deserves the attacks and critical tone that pervade this GAO draft report.

[GAO COMMENT: Our draft report both credits and criticizes NHTSA. We believe that areas within the section 403 program need improvement. As pointed out throughout the draft report, the NHTSA 403 program has problems. We were requested to review this program because of congressional concern about the effectiveness and efficiency of the program.

We reported that better management in the following areas can make research more useful.

- Highway safety research has many financial management problems. NHTSA acknowledged in a November 1979 letter responding to our September 1979 inquiry about financial matters in the section 403 program that some problems existed and stated it has taken steps to correct them.
- Planning for highway safety research is improving but still has many weaknesses including NHTSA's credibility gap with the highway safety community, its failure to include certain factors in designing the section 403 program plan, and the confusion between the two research Offices as to what their roles should be in highway safety.
- Use of highway safety research results is undetermined. NHTSA agreed in principle with the recommendations made in this area.
- Contract management needs improvement because of extensive modifications which extend delivery dates and increase contract costs and because of excessive yearend contracting.]

DEPARTMENT OF TRANSPORTATION REPLY
TO GAO DRAFT REPORT OF MARCH 17, 1980
ON
HIGHWAY SAFETY RESEARCH AND DEVELOPMENT--
BETTER MANAGEMENT CAN MAKE IT MORE USEFUL

SUMMARY OF GAO FINDINGS AND RECOMMENDATIONS

The Department of Transportation's management of highway research and development could be strengthened to increase its effectiveness as a resource for State and local highway safety programs. The Department's National Highway Traffic Safety Administration (NHTSA) would be more responsive to users of highway safety research if it routinely included the users in all phases of its planning processes. The Safety Administration's research results would also be more valuable if these results were evaluated and disseminated.

The Safety Administration needs to improve its financial management to increase its ability to identify how highway safety research funds are spent. Contract management can be made more efficient through improved contract design and monitoring.

The GAO report states that State and local governments have little confidence in NHTSA's highway safety research because of poor planning, promotion, and evaluation of its highway safety research program.

The Safety Administration has not known whether its highway safety research funds have been properly used. The Administration's financial management system does not provide readily accessible information to differentiate highway safety research funds from other program funds.

Highway safety research program contract management practices have resulted in unmet time schedules, added costs, and general lack of continuity in many contracts.

The Federal Highway Administration needs to accurately identify annual obligations for all highway safety research contracts.

RECOMMENDATIONS

GAO recommends that the Secretary of Transportation direct the National Highway Traffic Safety Administration to:

- (1) identify highway safety research and other program obligations and expenditures, (2) make clear budget presentations to the Congress, and (3) use highway safety research funds only for that program's activity unless specifically authorized by the Congress to do otherwise.
- Define the roles of the agency's two research offices to establish who will have the responsibility for the highway safety research program and ensure that work is carried out accordingly.
- Establish a formal planning process consistent with internal and external input including (1) compiling and analyzing available research in each program area, (2) prioritizing programs and projects, and (3) incorporating all highway safety research activities.

- Use the successful planning processes of other highway safety research groups as a guide for its planning.
- Formally evaluate successful and unsuccessful research results and identify the use of these results.
- Comment on and make available to the highway safety community research results and closely monitor contracts so that usable results can be developed with fewer delays.
- direct the Safety Administration to initiate a system of contract design and monitoring that will reduce modifications and award contracts throughout the year. GAO also recommends that the Administration maintain accurate contract listings and take steps to reduce unnecessary contract technical manager turnovers. NHTSA should give closer consideration to including a level of effort in its requests for proposal.

[GAO COMMENT: This is a summary of our findings and recommendations and therefore no comment is necessary.]

SUMMARY OF DEPARTMENT OF TRANSPORTATION POSITION

The Department of Transportation does not concur in the majority of the findings and conclusions of the draft report. We believe that GAO has reached faulty conclusions based on limited information. In its report, GAO seeks to support their conclusions through a liberal use of anonymous quotations and statements taken out of context. We recommend that GAO carefully review and consider the facts and the following comments prior to writing their final report.

[GAO COMMENT: The Department has provided us with 56 pages of detailed and summary comments. The tenor of the Department's comments is argumentative, and the Department is not receptive to most of our suggestions. To support some of its positions, the Department misquotes the draft report and attributes statements to us that were made by the highway safety community.

Many of the Department's comments are irrelevant because they address subjects not related to our report and avoid the issues being discussed. In many cases the Department attempts to rebut our statements by elaborating on specific examples without proving the examples to be wrong. Many rebuttals provide inadequate information on which to comment.

We believe that the amount of information we obtained could not in any way be construed as limited. We examined over 100 contract files which included both research and demonstration contracts covering various highway safety program standards and various funding levels. We also talked with members of the highway safety research community who are highly regarded and prominent in their fields as well as members of the highway safety user community who are responsible for

highway safety in their States. Information on NHTSA was obtained directly from the Associate Administrators or officials designated by them. Our conclusions are based on the overwhelming, consistent evidence from these sources of the difficulties NHTSA has had in managing its highway safety research and development program.

As stated in our scope:

"We determined specific questions to ask and potential problems to review by (1) talking further with the Subcommittee, (2) attending the national section 403 conference attended by safety research experts from across the Nation and hosted by the Transportation Research Board, (3) visiting two prominent research contractors, and (4) interviewing NHTSA and FHWA officials. We also reviewed the Department of Transportation's Office of Inspector General's June 1979 audit report of traffic safety research, development, and demonstration program, NHTSA.

"To obtain information concerning various contracting procedures, we selected a sample of section 403 contracts from lists provided by NHTSA and FHWA officials, keeping in view that NHTSA administered the major portion of the program and that the Subcommittee was primarily interested in that portion of the program. The lists were to contain only current contracts. We decided, based on time constraints, that we could review between 100-150 contracts. Therefore, we selected 128 (about 34 percent) of the active contracts from NHTSA's lists and 34 (about 17 percent) from FHWA's. Because many selected contracts had been completed and closed and the files sent to storage, the sample was narrowed to 94 of NHTSA's contracts and 20 of FHWA's. Although this was not a statistical sample, we endeavored to include both research and demonstration contracts covering various highway safety program standards and various funding levels.

"From this sample we selected contractors to visit based on number and type of contracts, dollar amounts, and geographical locations. We visited some NHTSA regional offices, State officials, and private contractors because of

the close proximity to the contractors chosen from the sample. We visited NHTSA regional offices and interviewed State officials and/or private contractors in California, Connecticut, Massachusetts, Michigan, New York, North Carolina, Tennessee, and Texas."

We have carefully reviewed the Department's 56 pages of comments and made those changes that were warranted, including those for the sake of clarity. But the Department did not provide new or additional information that would warrant changing our conclusions or recommendations.]

With regard to the draft report recommendations, specifically:

Chapter 2 - Highway Safety Research Financial Management

GAO recommended that NHTSA "(1) identify highway safety research and other program obligations and expenditures,"

DOT Response:

We would like to point out that this information is readily available. It has been provided in summary form in the appendix to the President's budget, beginning in FY 1972. In that document, we include a table which provides a breakdown of funding for the 3 years covered by the budget request by enabling authorization. The table is further broken down into budget authority, obligations and outlays attributable to each authorization. Since the Congressional justifications incorporate the schedules which are printed in the Budget appendix, the information is also furnished to the Appropriation Subcommittee.

We think that it may be desirable to provide an addendum to the Congressional justifications for the Operations and Research to show how the resource components of each budget activity break down by enabling authorization. While this detailed breakdown is compiled in the formulation process, and is available as backup information for Congressional hearings, it has not been presented in the budget justifications basically because the Appropriation Subcommittees have not requested it. However, we would have no objection to providing this supplementary information.

[GAO COMMENT: Our draft report stated that:

"* * *when we began this review, NHTSA was unable to furnish us with a list of section 403 projects. We had to compile a list of about 100 codes which identified section 403 projects since 1975."

This list was compiled from documents supplied by the operating groups, the Office of Finance, and the Office of Budget. Our conclusions stated that NHTSA cannot readily identify section 403 annual obligations and expenditures except by broad categories.

"In the National Center for Statistics and Analysis, NHTSA cannot identify what projects section 403 funds are being used for. These are examples of problems which NHTSA has in managing its section 403 program. These problems indicate a need for improvement in the financial management of the program."

In addition, the summary information in the appendix to the President's budget provides only total obligations and expenditures, and these are not broken down by office or program. The congressional budget presentations, although more detailed, scatter the specific information throughout various tables, schedules, and narrative, making it difficult to identify section 403 funds. NHTSA does not compile its section 403 financial information in both summary and detailed form, presenting many difficulties in analyzing the program.

NHTSA's proposal could provide more of the type of information we believe is necessary. However, unless this information is available on a regular basis, we believe the financial management problems mentioned in our conclusions will not be solved, particularly for the National Center for Statistics and Analysis.]

GAO's recommendation (2) stated that NHTSA should make clear budget presentations to the Congress with respect to:

- o mission support positions
- o the increase requested for grant administration in 1980
- o changes in salaries and supporting expenses requirements for the Section 403 program (1978 - 1980)

[GAO COMMENT: The three items above are examples of unclear budget presentations which we use as illustrations and should not be viewed as being the only problems in the budget presentation. The overall recommendation is that the Secretary of Transportation require the Administrator, NHTSA, to make clearer budget presentations to the Congress. The budget presentation should provide the Congress with schedules and narration depicting specific areas where section 403 funds will be spent, including administration. For example, the presentation does not give an accounting of all section 403 funds in one schedule.]

DOT Response:

We do not agree that the concept of Mission Support positions is unclear. These positions represent an allocation of the legal and planning staffs which provide direct support for the Section 403 program. This is explained in the narrative justifications for the Section 403 program and the General Administration budget activity where the positions reside organizationally. This is budgetary concept that was initiated in FY 1979 to provide the Appropriation Subcommittees more information about the nature of General Administration requirements. The Subcommittees' staff have not expressed any difficulties with the Mission Support concept.

[GAO COMMENT: Our draft report adequately demonstrated that the clarification is needed by stating that:

"The 1980 budget identifies 80 staff positions in the Office of Traffic Safety Programs funded at a cost of \$3.8 million from that office's section 403 administrative allocation. However, officials can only identify 69 positions actually supported by the \$3.8 million. The budget presentation shows 11 other positions in the Office of Traffic Safety Programs but these are actually supported from the NHTSA general administration allocation. To add to the confusion, the \$3.8 million does not support only section 403 administrative expenses but is used to subsidize section 402 administrative expenses * * *."]

We do not agree that the request for additional funds for grant administration in 1980 was not clearly explained. Components of the increase were detailed in the justifications for the appropriation being increased (State and community) and the appropriation being decreased (Operations and Research). We acknowledge that there was an inadvertent error in one of the summary schedules, but the error was minor and did not invalidate the budget request.

[GAO COMMENT: Our draft report actually stated that "parts of the budget presentation show this increase and others do not." In the State and Community Highway Safety FY 1980 budget justification, general administration for that program is stated as \$5.904 million. In the schedule in question and at least one other schedule in the budget justification, the section 402 expenses are stated as \$4.904 million. This is a difference of \$1 million, which is reflected in one place and not in the other. In our opinion, this is not a minor error.

Our draft report briefly summarized the administrative funding by stating:

"* * * the financial management records do not readily disclose the amount of funds spent on research and administration activities. We had difficulty in obtaining NHTSA's financial information and found that various financial documents were not accurate or clear. We estimate that since 1976, at least 13 percent of section 403 funds were used to support other programs. Without NHTSA having accurate financial management, the Congress is unable to determine if funds appropriated have been spent for the purposes intended."]

Changes in salaries and supporting expense requirements were occasioned principally by the determination through analysis that these expenses were not correctly distributed by budget activity and between Regional Offices and Headquarters within the Highway Safety Programs activity. However, the request for these expenses at the appropriation level was accurate. A significant amount of additional analysis has gone into the development of the 1981 budget request, as GAO knows, to establish a correct internal distribution of these costs.

[GAO COMMENT: We have acknowledged in the report that NHTSA officials stated that an updated methodology was used in formulation of the 1981 budget request. However, NHTSA does not discuss the error in the budget that the 1979 adjusted requirement was overstated by about \$1.8 million and the 1980 budget request was also overstated by about the same amount, as stated in our draft report. As shown below, NHTSA budget requests can be confusing.

--The fiscal year 1978, 1979, and 1980 section 403 budgets for salaries and supporting expenses for the Office of Traffic Safety Programs showed the following.

	Budget request at beginning of year	Adjusted require- ment at end of year
FY 1978	\$2,928,000	\$3,238,000
FY 1979	1,634,000	3,928,000
FY 1980	3,852,000	-

"It would seem logical that if NHTSA needed \$3,238,000 in salaries and support for the section 403 program in fiscal year 1978, a similar amount would be needed in fiscal year 1979--not so with NHTSA budgets, as shown above. The fiscal year 1979 budget

request of \$1,634,000 was a reduction of \$1,604,000 from the previous year's adjusted requirement of \$3,238,000. The \$1,604,000 reduction is identical to a fiscal year 1979 budget request increase for the section 402 program (State and community grants). Section 403 funds have been used on a continual basis to support the section 402 administrative costs as discussed earlier in this chapter.

"However, as can be seen above, neither the budget request in fiscal year 1980 nor the adjusted requirement (end of the year adjustment for factors such as increased salaries) for fiscal year 1979 reflected the \$1,604,000 decrease. Budget officials told us that the 1979 adjusted requirement should have been \$2,046,000 instead of \$3,928,000 and the balance of \$1,882,000 should have been in the section 402 program. They also said that the fiscal year 1980 budget request should have been about \$2,046,000 instead of \$3,852,000."

GAO's recommendation (3) states that NHTSA should "use highway safety research funds only for that program's activity...."

[GAO COMMENT: The recommendation actually states that NHTSA should use highway safety research funds only for that program's activity "* * * unless specifically authorized by the Congress to do otherwise." (Under-scoring added.)]

DOT Response:

We agree with recommendation (3) on the use of Section 403 funds, and believe that actions taken in formulating our 1981 Budget request have taken care of this point, as GAO knows.

[GAO COMMENT: To be certain that highway safety research funds are used only for section 403 activities, NHTSA must be certain that it can identify how section 403 funds are being used. At the time of our review:

--NHTSA could not give us a list of section 403 projects.

--NHTSA could not readily identify section 403 annual obligations and expenditures except by broad categories.

--In NCSA, NHTSA could not identify what projects section 403 funds were being used for.

The recommendation was made as a result of the continuous use of section 403 program funds for other activities and the recommendation is aimed at correcting this practice not only for one budget presentation but for budget and actual usage in the future. The steps NHTSA has taken are in the right direction but have not solve all the problems, such as identifying all section 403 projects in the National Center for Statistics and Analysis.]

Chapter 3 - Planning For Highway Safety Research

GAO's recommendation states that the roles of NHTSA's "two research offices" should be defined.

[GAO COMMENT: The complete recommendation stated:

"--Explicitly define the roles of the Office of Research and the Office of Traffic Safety Programs and ensure they operate within their roles. In doing so, the Administrator should determine who will have overall responsibility for the section 403 highway safety research program and delegate authority to carry out the program."]

DOT Response:

The roles and organizational and functional responsibilities are well defined. Each NHTSA Administrator, since establishment of the agency, has focused on the roles and responsibilities of R&D and TSP and has concluded that there must be two separate and distinct offices sharing responsibilities for 403 program management. The role of the Office of Research and Development focuses on research and discovery, and the role of the Office of Traffic Safety Programs focuses on demonstration and application. The present Administrator, prior to the preparation of the proposed 5-Year 403 Plan, also thoroughly examined those functions and responsibilities and confirmed that two separate and distinct offices were essential.

During the last 2 years, in preparing the proposed 403 Plan, significant effort has been devoted to addressing and better defining these roles; for each project in the Plan, there is a clear assignment of organizational responsibility.

There are some projects where reasonable minds can differ as to whether it should be assigned to R&D or to TSP. The 403 planning process identifies not only what is to be done but also who is to do it. Any disagreements are resolved by the Administrator. If either Associate Administrator so requests, any such decision is again reviewed during the budget process or at a later time.

[GAO COMMENT: Our draft report stated:

" * * * research responsibilities of the Office of Research and the Office of Traffic Safety Programs have not been defined. Friction between the two offices has contributed negatively to an already complex research area and has made effective planning and priority setting difficult or impossible.

"Although a more formal planning process has been established, there is no assurance that it will continue, especially since the friction still exists between the two offices."

The draft report also stated:

"In talking separately with officials of both offices, it was evident that their roles in research were unclear and that they disagreed on various philosophies. They both felt that the other office was encroaching into areas where it should not be."

We believe that problems still exist as noted above and that it is necessary to identify who, besides the Administrator, will have overall responsibility for the highway safety research program.]

All major TSP procurement efforts are coordinated with staff of R&D and R&D is provided with copies of all other TSP procurements. Additionally, meetings are initiated by both organizations to inform each other of planned activities for the fiscal year in question. This is an extension of the 403 Plan Development effort. The GAO report does not recognize nor does it give credit to NHTSA for instituting a planning process which facilitates better internal coordination as well as external participation.

[GAO COMMENT: The report recognized and gave credit to NHTSA for its efforts in developing a much-needed revised program plan, but problems still remain which may hinder the efficiency and effectiveness of the NHTSA highway safety research program. As stated in the draft report:

"* * * both offices have done research with few demonstrations being done. The two offices have had problems coordinating programs."

This was documented primarily from conversations with NHTSA personnel, including the two Associate Administrators involved. We recognized in the report that

there are procedures for approving research; however, the procedures have not alleviated the problems that exist between the two Offices.]

GAO recommends that a formal planning process be established consistent with internal and external input, and that successful planning processes of other highway safety research groups should be used as a guide.

DOT Response:

Two years ago, NHTSA initiated a formal planning process for its highway safety research, development and demonstration activities which includes (1) internal preparation of a plan for presentation to the highway safety community and solicitation of their views (views have been and will be obtained by way of Conferences, Program Area Workshops, Methodological Workshops, Regional Workshops, seminars and the docket), (2) compilation and analysis of available research in each program area, (3) setting of priorities for program areas and program area projects and (4) the incorporation of all highway safety research activities and (5) notification and presentation to interested persons of a revised or updated plan which reflects the views of the highway safety community.

[GAO COMMENT: As of the date of NHTSA's comments, most of the above activities were still in process; however, the final plan is scheduled to be issued in September 1980. Our draft report addressed each of these five points as follows.

1. Our draft report stated that:

"NHTSA's Offices of Research and Traffic Safety Programs have developed a 5-year highway safety research plan for fiscal years 1980-84. To provide the highway safety community an opportunity for comment on the plan, NHTSA published a draft of the plan and held a conference to discuss it."

* * * * *

"The 5-year highway safety research plan is the first such plan on which NHTSA has ever asked for formal comment from the highway safety community. The plan was designed to provide an internal document to guide NHTSA officials and program managers in preparing strategies and estimating resource requirements.

"NHTSA officials said that they plan to involve States more closely in research planning by (1) gearing their technology development program to correspond better to the

highway safety plans that States develop in response to section 402 requirements, (2) holding conferences and seminars that involve the highway safety community in the planning process, and (3) making research plans public before implementing them. The Transportation Research Board conference report stated that users also want to have a continuing dialogue with NHTSA as the plan is implemented."

We also stated that:

"Although the 5-year plan is a step in the right direction, more needs to be done to make it a useful working document * * *."

2. The draft report stated that:

"NHTSA has given the Office of Research the task of advancing the state of the art in research areas, and much research has been pulled together by that office and the Office of Traffic Safety Programs. There is a need to pull this information together before planning/approving a project or going on to new areas. However, NHTSA officials told us that there are few highway safety research areas in which a "state of the art" has been developed which tells what research has been done, what has succeeded, and what has failed. Three areas mentioned as having a state of the art were alcohol, drivers licensing, and pedestrian safety. However, * * * there is doubt even in these areas."

* * * * *

"Compiling such knowledge in each highway safety area will enable NHTSA to more efficiently plan its work and set priorities. NHTSA officials told us it would enable them to develop work statements and contracts without having to do a complete background study for each.

"NHTSA needs to compile a state of the art for each highway safety area including both successful and unsuccessful countermeasures to be used in planning future highway safety research."

3. The draft report discussed how NHTSA set its priorities. Also, the section 403 conference participants

" * * * stated that NHTSA did not present sufficient rationale for the criteria used in setting priorities within and among projects. The plan, they said, does not adequately present problem identification information, and effectiveness measures are not detailed enough to assess the potential of many proposed projects."

* * * * *

"Conference participants said that NHTSA should carefully concentrate its limited section 403 resources on high priority areas. Participants proposed reducing low priority program funding to provide more resources to high priority programs but offered no suggestions for eliminating or reducing overall areas, only projects within areas."

4. Our draft report stated:

"NHTSA needs to include other section 403 activities in the plan. NHTSA did not include two important activities--the National Center for Statistics and Analysis, the data collection center for the Office of Research, and the National Driver Register, a program for uniform national driver registration--in the 5-year plan. Yet these two programs comprised over \$3 million (about 12 percent) of the fiscal year 1979 section 403 appropriation and \$4 million (about 15 percent) of fiscal 1980 budgeted funds. NHTSA officials stated that these will eventually be included in the section 403 plan; however, no time schedule has been set."

5. We believe NHTSA has not demonstrated that the section 403 planning process as designed will alleviate the credibility gap problem, especially since the research community still has reservations about the plan, as stated in the draft report:

"Traditionally, NHTSA section 403 plans have been developed internally. The new 5-year plan was developed in the same manner, and although the users and researchers have been given the opportunity to comment on the plan, the general opinion of the highway safety community is that NHTSA has designed its plan and will not make substantial changes."]

NHTSA has reviewed the process by which FHWA generates the Federally Coordinated Program of Highway Research and Development (FCP), determined the relevant features pertinent to this Agency and have developed a system which we believe is more productive and appropriate for our program. Our system provides more independence, assures fair competition in the procurement process, more mechanisms of interaction with users, and provides greater program review.

[GAO COMMENT: Our draft report recommended that the Secretary of Transportation require the Administrator to:

"Review FHWA and the National Cooperative Highway Research Program plans, incorporating beneficial procedures for analyzing available information, setting research priorities, and obtaining outside views on those priorities."

As our draft report stated, the research community does not have confidence in NHTSA making changes to the draft program plan as a result of external comments or suggestions. Since the Department did not identify the portions of the FHWA planning process which it considered relevant nor state that it is going to use them, we cannot evaluate the response. The Department agreed with the principle of involvement in the National Cooperative Highway Research Program planning process. However, in its detailed comments, the Department stated that it does not envision utilizing any aspects of the National Cooperative Highway Research Program.]

Chapter 4 - Use of Highway Safety Research Results

GAO recommends the formal evaluation and dissemination of research results (successful or unsuccessful) and the identification of its usage.

[GAO COMMENT: Our draft report recommendations were:

"We recommend that, to improve the use of highway safety research results, the Secretary of Transportation require the Administrators, NHTSA and FHWA, to develop formal processes to assess the impact or use of their research results."

"Also, the Secretary of Transportation should require the Administrator, NHTSA, to

--comment on all research to assist users in determining good, fair, or poor research,

--disseminate all results, and

--closely monitor contracts so that usable results can be developed with fewer delays."

The Department, in its response, did not state that it has a formal process to assess the impact or use of research results, nor that NHTSA and FHWA were planning on establishing one. We believe that such action is necessary to know what is worthwhile in research.]

DOT Response:

GAO states that research results would be more valuable if the results were evaluated and disseminated, implying that this is not now being done. NHTSA evaluates all research, and is constantly attempting to improve dissemination. NHTSA now disseminates technical summaries of 403 research results to a free mailing list of researchers in advance of the printing of the final report. Printed final reports are sent free to researchers on existing, special mailing lists and to those designated by the Contract Technical Managers as having an interest in the subject area of the report. Also, the Highway Safety Literature (HSL) prints an index of the final reports, and copies can be ordered. Currently the HSL is distributed to a 1,800 person mailing distribution.

[GAO COMMENT: We acknowledge in the report that NHTSA does some evaluation; however, it is not adequate.

"NHTSA has two ways of evaluating its effectiveness in accomplishing its overall mission. First, it compares national traffic accidents and deaths to its motor vehicle program. Second, the agency compares the section 402 traffic safety program to State and local safety efforts, using indicators which reflect growth in (1) implementation of safety standards, (2) funding levels in various activities, and (3) total output for various program areas. We pointed out in an April 1979 report, 'Evaluation Of Programs In The Department Of Transportation--An Assessment' (PAD-79-13), that such measures do not distinguish the extent to which NHTSA is responsible for the States' efforts. Section 403 research fits into this category because the agency has no formal means of determining how research and demonstration results are used. The only user

feedback comes informally to contract technical managers and other agency officials. NHTSA does not compile or assess cases where the research is used."

However, the draft report also stated that according to a 1977 overall evaluation of the highway safety program by the Secretary of Transportation, the

"* * * need to take positive action in highway safety research has often resulted in the creation of demonstration projects without thorough prior field testing of countermeasures. The report said because of the lack of evaluation, 'large efforts in applied research were made without a clear need toward practical use.' Evaluating individual section 403 projects will lead to a determination of who uses the results and how they are used. This will give planners a rational tool for determining the kinds of research projects which have the best chances of successful implementation."

Our draft report also stated that NHTSA's 5-year plan recognized that the research program suffered because of the agency's difficulty in disseminating results and that the agency has developed an elaborate dissemination method.

NHTSA's plan stated that:

"* * * throughout its history, this technology development program has suffered from two major limitations. It has encountered difficulties in developing adequate information on the nature of State and local highway safety problems; and it has failed to develop a comprehensive system for reflecting the needs of the States in research, development and demonstration planning. An additional limitation has been the difficulty in finding effective ways to disseminate the results of research and demonstrations, and to provide the means by which these results can be implemented by the States."

Chapter 5 - Contract Management

GAO recommends that NHTSA initiate a system of contract design and monitoring that will reduce modifications; that awards be made throughout the year; that the agency should maintain accurate listings; reduce contract technical manager turnover; and, give close consideration to using level of effort in requests for proposal.

DOT Response:

We disagree with GAO's assertion that contract management practices have resulted in unmet time schedules, added costs, and general lack of continuity in many contracts. Our practices on contract modification demonstrate sound management principles in that modifications are made to recognize interim results, and their impact on work specification and expected products.

Sound management dictates the need to modify contracts when the need becomes apparent rather than to accept less usable results or engage in another time and manpower-consuming competitive procurement where the current contractor is highly likely to win because of previous work in the same area.

[GAO COMMENT: Concerning unmet time schedules, our draft report stated that:

"Contracts are rarely completed by the originally estimated date. In our Office of Research sample, 33 of the 40 modified contracts--or 83 percent--had extended completion dates. Of the 34 Office of Traffic Safety Programs, 27--or 79 percent--were modified to extend the completion dates. These time extensions range from 1 month up to 23 months."

Concerning added costs, our draft report stated that:

"Of the sample contracts, 85 percent of the Office of Research contracts and 67 percent of the Office of Traffic Safety Programs' contracts were modified for additional work or to change or continue previously stated work. Most of these modifications increased the cost of the contract. One modification from our sample of contracts increased the cost of the contract by \$756,844."

Concerning general lack of continuity, our draft report stated that:

"A contract technical manager who initiates a research contract is often not the same one who receives the final product. This leads to loss of continuity and contract delays."

* * * * *

"In the sample of Office of Research contracts, the contract technical manager changes were greater than in the Office of Traffic Safety Programs sample. Of the Office of Research sample, 54 percent of the contracts had one or more contract technical manager changes and contract age was not a factor in the number of contract technical manager turnovers. Of the Office of Traffic Safety Programs sample, 25 percent had one or more contract technical manager changes. In this Office, contract age was a factor, with an older contract having three times as many changes."

Concerning modifications, our draft report stated that:

"Although some modifications are justified because of the difficulty of research and development, the number of modifications indicates poor planning."

The draft report also stated that:

"The Office of Traffic Safety Programs' Associate Administrator told us that modifications were due to time extensions with or without money and to such causes as shifting funds, changing directions, salary increases, and demand for more people. The Associate Administrator also told us he did not believe 50 to 60 percent of the contracts having modifications was abnormally high. The Associate Administrator, Office of Research, told us that most modifications are due to unforeseen findings. He also said that most contracts are cost-reimbursable and if a contractor has overruns, the Government has to pay--'NHTSA cannot force a contractor to stick to the cost estimate,' i.e., the original negotiated contract cost. He said that some overruns are excusable and some are not. NHTSA officials do not appear overly concerned with contract modifications although modifications change the contract's scope and increase its cost."

"We believe that NHTSA needs to (1) do better planning of individual contracts, (2) keep modifications to a minimum, and (3) closely monitor contract modifications to keep research on track and to lower contracting costs. Until this is done, NHTSA will continue to have large numbers of modifications which increase costs and delay results."]

A current listing of 403 contracts will be updated by the end of April. NHTSA does not change contract technical managers in an arbitrary manner but change is obviously required based on attrition of personnel.

[GAO COMMENT: Our final report incorporates a statement by NHTSA officials that they are updating contract lists. We recognized in the draft report that there are reasons for CTM changes--"The turnovers include staff changes, retirements, and promotions." However, our review showed that 54 percent of the Office of Research contracts had one or more contract technical manager changes, which we believe is cause for concern. Our recommendation is that NHTSA "make every attempt to reduce contract technical manager turnovers."]

We have supported publicizing level of effort estimates in solicitations for basic research and whenever any very broadly stated tasks could benefit from publicizing such an estimate for a specific task. With this exception we oppose publicizing level of effort because it would result in substantially increased cost to NHTSA in executing its contract program. Based on evidence currently available, we believe that publishing level of effort would result in increased cost and obtaining less for our research dollar. The average award has been less than the Government estimate. If we publish the Government estimate, we are sure that all bids will be at or very near that figure.

[GAO COMMENT: The draft report recommended that NHTSA give closer consideration to including level of effort in its requests for proposals. We believe NHTSA has not shown that publicizing level of effort would substantially increase cost or obtain less for the research dollar. We agree that the average award has been less than the Government estimate. However, neither of these includes the cost of modifications, and the NHTSA Associate Administrator for Administration stated that the estimates can grossly underestimate true project costs. NHTSA states in its response that it is pilot testing level of effort. Our draft report also stated:

"Contractors we talked with agreed that level of effort is needed. They told us that NHTSA is simplistic in thinking that

if a request for proposal does not indicate the magnitude of the work, it will get better bids. Contractors also said that because NHTSA does not indicate a level of effort, they spend an unnecessary amount of time on proposal efforts which may be rejected because they are different from the level of effort NHTSA intended. Researchers at the Transportation Research Board section 403 conference recommended that NHTSA include in its request for proposals some indication of level of personnel or maximum dollars budgeted for the projects. In addition, both the Associate Administrator for Research and Development and the Associate Administrator for Traffic Safety Programs told us that they would like to have a level of effort indicated on the request for proposals."

In addition, FHWA requests for proposals contain an estimated level of effort (staff-years) to do the work. An FHWA official said level of effort estimates limit the number and improve the quality of the proposals.]

CHAPTER I: INTRODUCTION

The report begins by quoting the Administrator of the National Highway Traffic Safety Administration: "In 1966, when the Highway Safety Act was passed, just over 50,000 people died on our Nation's highways. Last year after 12 years and hundreds of millions of dollars of federal aid to the cause, just over 50,000 still died." The GAO's quotation of that comment, without placing it in context and without further clarification, is most inappropriate. This speech by the Administrator to the Governors' Representatives was intended to motivate the States to improve their performance under the Highway Safety Act by pointing out there remains a very large number of deaths on the highway. However, it was not misleading, as is the extract of this quotation in the GAO report.

Almost immediately after the sentence quoted, the Administrator pointed out that there has been a significant decline in the death rate since enactment of the Highway Safety Act, while clearly conveying the message that it gave no basis for complacency:

"I agree the fatality rate is down--from 5½ in 1966 to 3¼ in 1978. But while the rate is down, more people are driving more miles and we're still killing 50,000 human beings each year."

Any fair assessment of this speech would recognize that the Administrator was stressing the bottom line of lives lost in seeking to spur NHTSA's State partners to commit themselves to renewed and intensified effort and to strengthen the management of State and local programs. She emphasized that NHTSA was working to get its house in order, and she pledged to do all in her power to help this program grow and save lives.

The GAO report suggests by use of the single quotation of the Administrator that the Highway Safety Act has had little effect since the number of deaths has not declined since 1966.

[GAO COMMENT: The opening quote was included to show the significance of the problem in highway safety. The draft report stated that:

"In 1966 when the Highway Safety Act was passed, just over 50,000 people died on our nation's highways. Last year after 12 years and hundreds of millions of dollars of Federal aid to the cause, just over 50,000 still died.'

"The Administrator of the National Highway Traffic Safety Administration (NHTSA) made this statement in September 1979 to illustrate the necessity of effective highway safety programs across this Nation. She further stated that even though the fatality rate has declined from 1966 (5.48 fatalities per 100 million miles traveled) to 1976 (3.22 fatalities), this rate has consistently risen since 1977 to 3.33 fatalities in 1979. The bottom line, she said, is that 'we're losing lives.'"

NHTSA criticizes the draft report by implying that we ignored the significant decline in death rates. Yet the paragraph following the quote properly points out this declining rate. Again, NHTSA criticizes us in stating that any fair assessment of this speech would recognize that the Administrator was stressing the bottom line of lives lost in seeking to spur States to renew and strengthen their programs. We question the rationale for NHTSA's extensive comments on this one quote and paragraph in the report introduction, particularly when the comments are not valid.

The subcommittee requested us to review the section 403 program, as stated in our draft report:

"On April 30, 1979, the House Committee on Public Works and Transportation, Subcommittee on Oversight and Review, requested us to review highway safety research and development which has been or is being conducted by NHTSA and the Federal Highway Administration (FHWA) under the Highway Safety Act of

1966. The program is commonly referred to as the section 403 program. NHTSA is responsible for the majority of this work. The subcommittee requested us to determine how research and development funds are spent and to be especially attentive to NHTSA's management to determine if changes can be made to improve research efforts and increase the use of research results. This report addresses these and other areas concerned with highway safety research and development."

Our report did not address what effect the entire Highway Safety Act has had on the number of fatalities.]

This distorts the actual fatality and fatality rate picture since the program's inception in 1966. Enormous improvements have occurred in highway safety and safety program delivery in the years since 1966. The fatality rate in 1966 was 5.58 deaths per 100 million vehicle miles of travel. By 1978, this rate had fallen to 3.25. Although it increased slightly to 3.33 in 1979, this represents a 40 percent reduction in the fatal accident rate. A significant drop in the fatality level was continuous over the 15-year history of the program. Fatalities, which hovered in the 53,000-to-55,000 range in the mid to late 1960's, dropped to 50,745 in 1979. While this toll is still tragic, it would have been substantially higher without the advent of Federal safety programs. During this period, we witnessed:

- (a) a 40 percent increase in licensed drivers;
- (b) a 67 percent increase in registered vehicles;
- (c) a 65 percent increase in miles traveled; and,
- (d) a 16 percent increase in population.

This put added pressure on safety programs, and threatened to intensify the dangers inherent in driving. The large drop in the fatality rate alone is a significant indicator that motor vehicle usage is now much safer than it was in 1966.

GAO also ignores the fact that a number of events outside Federal control directly accounted for fatality increases over the past few years. From 1973 to 1974, fatalities dropped from 54,052 to 45,196, in part due to implementation of a National Maximum Speed Limit law, and solid driver conformance with it. As long as motorists attempted to stay reasonably close to 55 mph, the fatality level stayed in the lower range (44,525 in 1975 and 45,523 in 1976). Despite significant Federal and State efforts, average speeds on highways increased, and the percent of drivers conforming to 55 mph fell. We found that fatality increases tracked this non-conformance. Roads in Western and Southwestern States (where non-conformance with 55 mph was highest) witnessed the greatest increase in deaths. Recently, this situation has improved, and the Section 403 Program has continued 55 mph work as one of its highest priorities.

While examining the nature of safety problems to explain why fatalities remain at the 50,000 level, GAO should consider the role of motorcycle accidents,

large growth in use of vehicles weighing 4000-6000 pounds, such as light trucks and vans, which do not have the safety features that passenger cars have, and the large increase in downsized vehicles, and the low usage of occupant restraints. Work in all these areas constitutes our highest priority work in NHTSA. Motorcyclists deaths have increased 52 percent since 1975. During this period 27 States repealed or weakened their helmet usage laws because of Congressional action removing our penalty authority. This trend has virtually stopped in the last year as the agency has published reports of the resulting devastating increase in head injuries.

Safety belt usage remains in the 11-14 percent range, and proper child restraint usage remains under 7 percent -- despite intense Federal efforts to persuade vehicle occupants to belt up. Section 213 of the Surface Transportation Act of 1978 required that 2 percent of the Section 402 funds apportioned to the States be dedicated to the encouragement of safety belt usage. NHTSA has beefed up vehicle safety rulemaking to improve both crash effectiveness and comfort and convenience to users. Nevertheless, manufacturers often install inferior belt designs that undercut their perceived value and frustrate people's desire to use them. Inferior design, placement and operational features clearly retard higher usage rates. NHTSA has mounted continuing public education campaigns, and worked with States and localities to mobilize grassroots organizations, health specialists, insurance groups and others to promote belt use. A recent study conducted by the National Academy of Sciences, and sponsored by NHTSA at Congressional direction, came up with a number of approaches to promote higher usage. These included: technical assistance and grants to States requiring children up to 18 to use restraints; Federal requirements for their own employees to use them; better State use of Section 402 grants for safety belt programs; identification of the economic costs of not using belts, and publicizing these costs to those who sustain the loss; on-the-job belt use required by employers; and education of the public that traffic deaths and injuries constitute a leading health problem in the United States. If these actions can be brought about, fatalities should diminish. The problem of low belt use is too formidable to attribute it to the deficiencies of a single program. Promotion of higher usage will remain a top 403 priority.

It should also be noted that the GAO Study on occupant protection (B-164497(3), July 7, 1976, page 34, showed an estimated 28,230 lives saved from 1966-1974 due to safety improvements.

For these and other reasons, we recommend GAO's introductory remarks be redrafted with care.

[GAO COMMENT: While we recognize that NHTSA has had successes in highway safety, the above remarks generally have no relevance to our report's subject matter-- the operation of the section 403 highway safety research program. NHTSA has included the information above to attempt to prove the positive effects of the highway safety program. However, NHTSA has

--discussed decreasing fatality rates but did not mention that these were decreasing even before 1966,

--described lives saved because of motor vehicle safety improvements rather than highway safety improvements, and

--implied the 55-mile-per-hour speed limit was designed as a safety measure when in fact the program was initiated to conserve energy.

We believe our introductory report remarks are appropriate and adequately deal with the subject of the request.]

Also in Chapter 1, GAO lists three activities as examples of State programs which are initiated and funded under Section 402. These activities do not, in any way, accurately communicate the substantive nature and scope of the State highway safety programs which are implemented and enhanced with 402 funding. These three activities are limited, discrete efforts which have to be aggregated with other related efforts before they achieve program status. If the 402 program is to be characterized by GAO, NHTSA recommends that the GAO list more substantive examples, using major 402 program goals and objectives, and then supplement these with a description of discrete activities. For example:

- Improving the overall quality and skill level of beginning drivers by upgrading driver education courses. This might include funding training programs for driver education instructors.
- Controlling the drinking driver through development of comprehensive, coordinated alcohol safety programs in all large metropolitan areas. This might include funding a core management staff to coordinate ongoing local activities.
- Fostering development of community pedestrian and bicycle safety programs. This might include an elementary school component supported in part by the hiring, equipping and training of adult crossing guards.

We recommend the GAO use a listing of major 402 program goals and objectives, such as those on page 104 of NHTSA's FY 1981 Budget Submission to Congress.

[GAO COMMENT: A detailed description of section 402 activities is not essential because this report deals primarily with section 403. The section 402 material is included to indicate the relationship of section 402 to section 403. Nevertheless, in our final report we have listed the major section 402 goals and objectives from NHTSA's FY 1981 budget submission.]

CHAPTER 2 : HIGHWAY SAFETY RESEARCH FINANCIAL MANAGEMENT

Chapter two of the draft report complains that NHTSA's highway safety financial management system needs to be improved to assure that all expenditures are being made for the purposes appropriated and to update methods of allocating general administration expenses.

We take exception to these statements. The NHTSA financial management system has been organized to provide accounting identification for research and demonstration contracts chargeable to the 403 program. Traffic Safety Programs and Research and Development personnel have been properly instructed by NHTSA administration to use established accounting codes in processing 403 contracts.

[GAO COMMENT: NHTSA has a system to provide this date but, as stated in our draft report:

"The operation of NHTSA's section 403 financial management system does not provide for readily accessible information. Because of this, NHTSA has difficulty in ascertaining that section 403 funds are used for section 403 activities. In fact, section 403 and section 402 funds are used for the same projects and types of projects even though this is not authorized."

* * * * *

"In general, NHTSA is able to account for total section 403 funds but NHTSA's Office of Finance does not separate individual section 403 obligations and expenditures from other programs.

"NHTSA has a process of identifying specific research and development program projects and contracts by assigning codes to each. However, when we began this review, NHTSA was unable to furnish us with a list of section 403 projects. We had to compile a list of about 100 codes which identified section 403 projects since 1975. The list was compiled from available documents supplied by the operating groups, the Office of Finance, and the Office of Budget. This list was supplied to the Office of Finance to obtain a universe of section 403 contracts and financial information. Finance officials said they had never been asked to compile this type of information before and had felt no need for it. They said that they could make changes which would enable identification of each contract as section 403, Traffic and Motor Vehicle Safety activities, or any other NHTSA programs. This would provide ready access to financial data--obligations and expenditures--for individual section 403 contracts, programs, and categories, as well as for the total program and enable them to more accurately separate expenditures under the proper appropriations. However, they have no plans for making such changes."]

Each year, following appropriation enactment, the Office of Budget advises the Office of Financial Management of the amount of administrative funds and the proportionate share of expenses of the National Center for Statistics and Analysis authorized to be charged to the 403 program. These amounts are based on detailed estimates developed in support of the 403 budget request, adjusted by Congressional action on the budget request.

[GAO COMMENT: Our review showed that the methods used to accomplish this were inappropriate and that NHTSA changed these methods as a result of our review, as explained in the draft report.

"NHTSA's National Center for Statistics and Analysis is administered by the Associate Administrator for Research and Development. The Center's activities support projects in both motor vehicle and highway safety research and development programs. Some of the Center's projects are primarily related to one or the other of these safety areas while other projects relate to both. Funds from the two safety programs are pooled for use in the Center's projects, and no effort had been made to identify which safety program should be funding specific Center projects. NHTSA's Office of Budget determined that section 403's share of the Center's projects' cost was about 40 percent based on a comparison of highway safety research (section 403) and motor vehicle safety annual appropriations. However, there was no documentation to show that 40 percent was fair and reasonable for the Center's section 403 activities. Therefore, we recommended in a September 20, 1979, letter that the Administrator formulate a method of determining the appropriate share of section 403 funds used by the Center to support section 403 activities.

"The Administrator responded in November 1979 that NHTSA made an analysis of the funding of the Center as we recommended. The analysis indicated that 53 percent of the cost of the Center's operations should be assigned to the National Traffic and Motor Vehicle Safety Act and that 47 percent should be assigned to section 403 of the Highway Safety Act as compared to the present allocation of 60 percent and 40 percent, respectively. The analysis

also disclosed that the Center's efforts dedicated to programs authorized under the Motor Vehicle Information and Cost Savings Act were negligible, thus no costs should be assigned to this legislation."]

We, therefore, believe that the financial management records are properly geared to provide a full accounting of all administrative and contractual obligations incurred under the 403 Program.

[GAO COMMENT: Until we requested it, NHTSA had not made an analysis of administrative costs for the National Center for Statistics and Analysis, and it still cannot readily identify section 403 products coming out of NCSA. Until this is done, there cannot be a full accounting of all administrative and contractual obligations incurred under the section 403 program.]

In addition, our draft report stated that:

"The allocation of section 403 funds for NHTSA's general administration was outdated and overstated. Also, section 403 funds have been used to support the administration of the State and community grant program (section 402) which has its own funds for such purposes. The end result is that NHTSA has not known how much it costs to administer its highway safety research program."]

The draft report, describes the various components of Section 403 program appropriations and the Operations and Research Appropriation structures, and contends that breaking the 403 program down into so many components contributes to the difficulties of financial management.

NHTSA organizations, in many cases, provide services for programs that come under different authorizations. For this reason, we have always analyzed each organization to identify the operations attributable to respective authorizations. We agree that some of the methodology used had become somewhat outdated, but as the GAO knows, steps were taken last year to update the basis of allocation. The updated methodology was used in the formulation of the 1981 budget request. We believe the audit report should acknowledge that progress has been made on this point.

[GAO COMMENT: In September 1979 we sent a letter to the NHTSA Administrator regarding section 403 and the Center's administrative expenses. The Administrator responded with a new allocation methodology. We acknowledged this in our draft report. Our final report also mentions that NHTSA stated that the updated methodology was used in the formulation of the 1981 budget request.]

The report suggests that NHTSA might consider establishing a separate appropriation for administration, similar to the FHWA appropriation structure as a means to identify administrative costs attributable to various programs. Recognizing that FHWA has a multitude of programs to administer, all of which are authorized some kind of administrative expenses, we believe a separate administrative appropriation is logical in their case. Since NHTSA programs fall under three enabling Acts, we don't believe a separate administrative appropriation is necessary. Also, it would probably be difficult to obtain OMB approval for an additional appropriation since they consistently strive to limit the number of individual agency appropriations.

An analysis of the assignment of administrative costs to enabling Acts could be easily added to the Congressional justifications. We are already developing this information to arrive at the summary breakdown of Appropriation requests by enabling Act which is shown in the President's Budget each year. We believe this would be a more practical solution and should be mentioned as an option in the report.

[GAO COMMENT: Because of NHTSA's administrative problems as noted in our report, we believe that separate administrative funding could be beneficial to both the Congress and NHTSA.]

In a letter of September 20, 1979, from Mr. Hugh J. Wessinger of the General Accounting Office, we were asked to reexamine the basis of assigning administrative expenses to the Section 403 program. We responded to the letter on November 2, 1979, and indicated that current estimates of the amount of staff time being afforded to each enabling Act had been obtained from supervisory personnel in the General Administration area. This survey indicated that 26 rather than 43 percent of General Administration costs should be ascribed to Section 403, and the updated percentage has been used in the formulation of the 1981 budget request.

[GAO COMMENT: This information was contained in the draft report and therefore no comment is warranted.]

The draft report states that NHTSA has used Section 403 and other funds to finance administrative expenses of the Section 402 program and that NHTSA officials did not believe it practical to ask employees to account for their time spent on various programs and that there was a difference in the estimate of additional funds that should be attributed to the 402 program to cover all costs of grant administration.

Our reasons for not increasing the allocation of administrative expenses attributable to the 402 program for several years have been quoted in the report. However, as GAO knows, steps have been taken, beginning in 1979 and ending with the 1981 budget request, to reassign all administrative expenses to the grant program for accuracy. This should be acknowledged in the report.

[GAO COMMENT: NHTSA officials said they have taken steps to reassign all administrative expenses in its 1981 budget to the grant program. This statement has been incorporated into the final report.]

The report indicated that we did not believe it was practical to ask employees to account for their time. In the process of reviewing the basis for allocating administrative expenses to various authorizations, we established a methodology for determining the amount of staff time being devoted to different programs. NHTSA has used to a work sample basis whereby personnel in Headquarters and the Regional Offices keep track of the amount of time they afford each program for one week in each quarter. These samples are then averaged as a basis to establish the staff year allocation. Since the pattern of work does not fluctuate widely, we believe this is an acceptable method, and that a system for constant timekeeping would unnecessarily increase paperwork and waste precious staff time.

[GAO COMMENT: It appears that some steps have been taken, and this has been noted in the final report. In our opinion, it is possible to have a system of constant timekeeping which would not necessarily increase paperwork nor waste staff time.]

The report states that NHTSA told the Senate Appropriations Committee that an estimated additional \$1 million in FY 1981 will take care of all Section 402 administrative costs, but the actual increase in the 1981 budget is \$1.9 million. The \$1 million estimate was actually included in response to a question asked by the House Appropriations Subcommittee in the course of the hearing on the FY 1980 budget request. We categorized the \$1 million estimate as preliminary and also indicated that it was based on pay rates prevalent at that time.

We believe the report should indicate that the change in the estimate was influenced by increased pay costs, which became effective subsequently, and a refinement in the methodology for identifying 402 administrative expenses. As it reads now, the report tends to suggest that we misled the Congress. Indeed, we did just the contrary. Our budget request reflects the actual expenses of the program.

[GAO COMMENT: NHTSA states that the increase was influenced by increased pay costs and a refinement in the methodology for identifying 402 administrative expenses. This justification has been incorporated into the final report.]

As indicated in the report, we reviewed the basis for distributing administrative expenses and arrived at the new percentages shown in the Table on page 12. However, we do not agree with the assessment that if the new percentages had been used to distribute 1979 General Administrative expenses, \$2.6 million additional would have been available for Section 403 activities.

The reason we do not agree is that OST and OMB considered the 403 contract program request, and approved a specific level for that segment of the budget. They also approved a total amount for General Administration expenses without considering the funding source. Therefore, if the allocation of General Administration expenses to the 403 program has been determined to be too high in the review of the 1979 request, the excess would have been reassigned to other authorization since it would still be required to finance the total allowance for General Administration. This would have merely resulted in a redistribution of the General Administration Allowance by funding source. It could not be assumed that any excess allocation of administrative expenses would automatically have been added to the 403 contract program.

[GAO COMMENT: Here is another example of why separate funding for NHTSA's administration would be desirable, since there seems to be confusion on what should be spent on administration. We recognize the OST and OMB involvement, but the Congress has the final say. If the administrative expense was charged \$2.6 million more than it incurred, logic dictates that the \$2.6 million should have been available for section 403 activities, since that is what the Congress appropriated the money for. NHTSA believes the \$2.6 million would still be needed for its overall administrative costs, which in effect supports our suggestion for separate funding. NHTSA must present its entire administrative cost needs to the Congress in a clear and concise manner.]

The report contends that the budget justification for Highway Safety Program positions is confusing, and that officials could only identify 69 positions while the justification referred to 80 positions.

The 1980 budget justifications for the Headquarters component of the Highway Safety Programs budget activity identified 69 positions that are organizationally assigned to the Associate Administrator for Traffic Safety Programs. The justification also identified eleven Mission Support positions that are organizationally assigned to the Chief Counsel and the Associate Administrator for Plans and Programs.

We believe that the concept of Mission Support positions is clearly explained in the Congressional budget justifications. They represent an allocation of legal and planning positions that provide direct support for the Traffic Safety Programs (403) budget activity.

This point is explained in the narrative justification for both the Traffic Safety Programs and General Administration budget activities. This is a budgetary concept that was initiated in the FY 1979 submission to provide the Appropriation Subcommittees more information about the nature of General Administration position requirements. The Subcommittees' staff have not expressed any difficulties with the Mission Support concept.

[GAO COMMENT: NHTSA is not responsive to the draft report statement that:

"--The 1980 budget identifies 80 staff positions in the Office of Traffic Safety Programs funded at a cost of \$3.8 million from that office's section 403 administrative allocation. However, officials can only identify 69 positions actually supported by the \$3.8 million. The budget presentation shows 11 other positions in the Office of Traffic Safety Programs but these are actually supported from the NHTSA general administration allocation. To add to the confusion, the \$3.8 million does not support only section 403 administrative ex-

penses but is used to subsidize section 402 administrative expenses * * *."]

The report stated that the requested increase of \$1 million in 1980 for additional administrative expenses of the 402 program was not clearly explained.

[GAO COMMENT: Our draft report stated that:

"Parts of the budget presentation show this increase and others do not."]

Detailed support for the request of \$1 million was provided in the Congressional justifications, under the State and Community section. The increase consisted of \$729 thousand for the cost of 29.5 staff years of General Administration positions; \$76 thousand for Headquarters Highway Safety Program travel; and \$195 thousand for Regional Office operating expenses. These amounts were also identified as reductions in the areas of the Operations and Research Appropriations, that had previously provided for funding since financing was being assumed under the 402 program. We believe that cross referencing the items in that manner provided the Congress a clear explanation of the \$1 million refinancing between appropriations. We are mystified at GAO's failure to find this simple explanation satisfactory.

The report also states that one schedule for the Office of Traffic Safety Programs (actually the "Highway Safety Programs" budget activity) shows that 402 administrative cost totals for FY 1979 and FY 1980 are the same. We acknowledge that this statement was in error. The totals for the 402 Program for 1980 shown on that schedule should have reflected the increases of \$76 thousand for Headquarters travel, and the \$195 thousand for Regional Office operating expenses referred to above. However, the error in that table was minor and did not change the fact that total funds of \$1 million were being reassigned between appropriations.

[GAO COMMENT: In the State and Community Highway Safety (section 402) program FY 1980 budget justification, general administration for that program is stated as \$5.904 million. In the schedule in question and at least one other schedule in the budget justification, the section 402 expenses are stated as \$4.904 million. This is a difference of \$1 million, which is reflected in one place and not in the other. We believe that this is not a minor error, particularly in light of the problems with NHTSA's administrative expenses.]

The report questions the variations shown in salaries and supporting expense requirements for the Section 403 program from FY 1978 through FY 1980.

The trends reflected in the table on page 17 of the draft result from several factors which influenced the formulation of budget requests from 1978 to 1980. Some of these are: (1) the NHTSA reorganization of January 1978, (2) the reassignment of administrative costs from the Operations and Research Appropriation to the 402 Program, (3) increased pay costs (4) the assignment of Mission Support positions to program areas and (5) the determination, through analysis, that salaries and supporting expenses were not correctly distributed by budget activity, and between Regional Offices and Headquarters

within the Highway Safety Programs activity. Pertaining to the GAO comment that salaries and supporting expenses were incorrectly distributed, it should be noted by GAO that any minor internal distribution problem did not cause misstatement of the overall requirement for this budget category.

[GAO COMMENT: The draft report stated that:

"Budget officials told us that the 1979 adjusted requirement should have been \$2,046,000 instead of \$3,928,000 and the balance of \$1,882,000 should have been in the section 402 program. They also said that the fiscal year 1980 budget request should have been about \$2,046,000 instead of \$3,852,000."

We believe that errors of about \$1.8 million, as discussed above, are not a minor internal distribution problem and contribute to the confusion in NHTSA's budget.]

A significant amount of analysis has gone into the development of 1981 budget request salaries and supporting expenses for individual activities to establish a correct internal distribution of these costs.

[GAO COMMENT: This has been recognized in our discussions on section 403 administrative costs in the draft report, and the final report states that NHTSA officials said that an updated methodology was used in formulation of the 1981 budget request.]

The draft GAO report indicates that NHTSA's financial management system does not provide readily accessible information to differentiate highway safety research funds from other funds, and recommends that the Administration should identify highway safety research and other program obligations and expenditures.

The financial management accounting system does have the capability and does separately identify Section 403 contract program obligations and expenditures. However, since 403 program funds are included in NHTSA's Operations and Research Appropriation, the Agency has not seen a viable need to prepare separate accounting and budgetary statements for the 403 program only.

[GAO COMMENT: Our draft report stated that NHTSA has a system to provide this data. It also said, however, that:

"The operation of NHTSA's section 403 financial management system does not provide for readily accessible information. Because of this, NHTSA has difficulty in ascertaining that section 403 funds are used for section 403 activities. In fact, section 403 and section 402 funds are used

for the same projects and types of projects even though this is not authorized."

* * * * *

"In general, NHTSA is able to account for total section 403 funds but NHTSA's Office of Finance does not separate individual section 403 obligations and expenditures from other programs.

"NHTSA has a process of identifying specific research and development program projects and contracts by assigning codes to each. However, when we began this review, NHTSA was unable to furnish us with a list of section 403 projects. We had to compile a list of about 100 codes which identified section 403 projects since 1975. The list was compiled from available documents supplied by the operating groups, the Office of Finance, and the Office of Budget. This list was supplied to the Office of Finance to obtain a universe of section 403 contracts and financial information. Finance officials said they had never been asked to compile this type of information before and had felt no need for it. They said that they could make changes which would enable identification of each contract as section 403, Traffic and Motor Vehicle Safety activities, or any other NHTSA programs. This would provide ready access to financial data--obligations and expenditures--for individual section 403 contracts, programs, and categories, as well as for the total program and enable them to more accurately separate expenditures under the proper appropriations. However, they have no plans for making such changes."]

Section 10.6, Chapter 2 of the GAO Manual states: "In accordance with the Anti-Deficiency Act, subdivisions of fund authorizations for budgetary control purposes should be established at the highest practical level, consistent with assignments of responsibility, and should be limited to those essential for effective control. For example, a single allotment of funds to the head of an operating unit, within the amounts apportioned for each appropriation or fund affecting such unit, should usually provide an appropriate basis for fund control without making further subdivisions by object classes of expenditure or other categories."

"Reliance on systems of multiple and detailed allotments for financial control results in primary emphasis on spending available funds and operating so as to avoid overspending the amounts allotted for various purposes rather than on the essential management objectives of operating efficiently and economically, judged in terms of cost."

NHTSA has always operated within those guidelines and has kept allotment of funds to the bare minimum consistent with good management practice.

The audit report suggests additional subdivision of funds made available to NHTSA under our Operations and Research Appropriation and suggests that a separate Appropriation should be established for the 403 program. A separate Appropriation would require OMB approval, would not improve administrative efficiency, and is contrary to GAO policy to hold fund subdivisions to a bare minimum.

[GAO COMMENT: In responding to the recommendation that it identify section 403 and other program obligations and expenditures, the agency apparently concluded that this could be achieved only through additional subdivisions of fund authorizations. This is not necessarily true. Accounting transactions can be, and often are, summarized in much more detail than that used to control funds. For example, whereas the funds allotted for travel are often controlled by organization, travel costs are frequently recorded by organization, program, project, cost center, etc.

The agency implied that the establishment of additional allotments of fund authorizations would violate requirements prescribed by 2 GAO 10.6. Although we encourage allotments to be established at the highest practical level and the number be limited to those essential for effective control, title 2 does not discourage the establishment of needed subdivisions.]

The GAO report, page 26, asserts that "NHTSA cannot determine the amount of travel funds used in the Section 403 program." The finding is based on the auditor's discussion with officials from financial management, research and development, and budget. Financial management has prescribed codes for identifying the purpose and location of travel for the section 403 program. Operating group personnel do not have a clear understanding of the use of the prescribed codes resulting in some confusion. "Although there is a system for accounting for travel, the system is not followed by NHTSA officials."

NHTSA's accounting system and budgetary process establish allotments for travel consistent with requirements of the General Accounting Office "Policy and Procedures Manual for Guidance of Federal Agencies," NHTSA's Office of Budget maintains one travel allotment and issues allowances for travel to each major operating element. Obligations, accruals and expenditures are recorded in the NHTSA accounting system consistent with the prescribed principles and standards enunciated by the General Accounting Office.

Additional coding classifications are provided for identifying the purpose and location of the travel performed. This coding is an adjunct of the accounting system serving management as an information source concerning the application of funds.

The system for control of travel funds by appropriation, allotment, and allowance is functioning properly and in full compliance with accepted accounting standards. NHTSA holds periodic training sessions for secretarial and clerical employees relating to control accountability of travel funds. As with any system, there are human errors and with turnover of staffs there is always a need to train and retrain employees involved in coding data.

[GAO COMMENT: NHTSA acknowledges that operating group personnel do not clearly understand the prescribed codes for travel and that errors occur. Therefore no comment is required.]

GAO states that the operation of NHTSA's Section 403 financial management system does not provide for readily accessible information. GAO recommends the Secretary of Transportation require the NHTSA to identify highway safety research and other program obligations and expenditures.

Obligation and expenditure data relating to the use of Section 403 and other contract program funds are clearly identified in the financial reports produced by the Financial Management Information and Accounting System (FMIAS) employed by the NHTSA.

The FMIAS system employed by NHTSA to account for appropriations and all other funds is a computerized system which utilizes a four digit Constant Data Code (CDC) as the basic identifying code element for recording transactions in the system. Each obligation, accrual and expenditure under funds available to NHTSA is recorded using the CDC which applies to the individual transaction.

CDC's, as used in the FMIAS system, identify the appropriation, allotment and allowance to which the obligation or expenditure is to be charged. Certain CDC's relate to Section 403 program funds and will cause all obligations coded with these CDC's to be charged to the Operations and Research Appropriation, and the allotment and allowance under which Section 403 funds are made available to the program offices responsible for administering these funds.

Monthly financial reports produced by the FMIAS show summaries of Section 403 contract program activities for each allowance established by the NHTSA Office of Budget under Section 403. These summaries show for each allowance line item by object class, the amount of the allowance and the obligations and expenditures to date for the individual line item in the current fiscal year. Other reports produced on a weekly basis show the individual transactions affecting the allowance (contracts, purchase orders and payments), by document number. Contrary to GAO's statements, these reports do provide adequate separate identification of Section 403 obligations and expenditures and the status of allotments and allowances made from Section 403 in each fiscal year.

The system does not prepare a separate listing of active Section 403 obligations because no need has been established for such a listing. If such a need should arise, the system can be programmed to print such a report. Likewise, the individual contract program obligations are not filed in separate physical areas for Section 403 items because it is impractical and inefficient to do so. Contractor billings do not identify the provision of law under which a billing is being submitted. These billings are identified only by contract

number. For this reason all contract program obligations are filed in numeric sequence, irrespective of the provision of law under which the contract was let. To do otherwise would unnecessarily increase the administrative costs of identifying and processing contractor claims under all program funds administered by the Office of Financial Management. Since there is a ready cross reference to these files from the contract number, the GAO suggestion would achieve no advantage but would be a waste of time. We believe that the present system of handling individual Section 403 obligations and related expenditures is the most efficient way of handling these obligations.

[GAO COMMENT: On previous pages of our comments, we have addressed this by stating that we recognized in the report that NHTSA has these capabilities. But NHTSA cannot readily identify section 403 projects as we stated in the draft report.

"* * * when we began this review, NHTSA was unable to furnish us with a list of section 403 projects. We had to compile a list of about 100 codes which identified section 403 projects since 1975."

In addition, our draft report stated that in NCSA,

"* * * Section 403 funds cannot be identified by project * * *."

We concluded in the draft report that:

"NHTSA cannot properly administer section 403 funds until it can readily identify section 403 obligations, expenditures, projects, and contracts."]

On pages 13-16 of the draft report, GAO objects to the use of section 402 funds for activities which might be characterized as "research," and insists that no section 402 funds be used in conjunction with a section 403 project. We agree with the GAO that some distinctions must be observed between "action" programs (402) and "research" programs (403), but we do not agree that the statute requires a rigid line to be drawn between the two. Rather, because of the considerable overlap in coverage between the two sections (noted below in detail), the distinction must be more flexible to comport with the Act's goals of securing maximum highway safety. We find no basis in the law, or in the intent of Congress for the strict segregation of funding which the GAO suggests. The examples listed by the GAO on pages 14-15 do not seem objectionable under our more thorough analysis of the statute. We conclude the GAO objections in this matter to be baseless.

GAO's objection originated in a simplistic reading of subsection 402(g) which provides: "Nothing in this section authorizes the appropriation or expenditure of funds for...any purpose for which funds are authorized by section 403 of this title." At first glance, this section seems simple to apply: decide if the activity can be funded under section 403, if so, no section 402 funds may be used. Nevertheless, GAO recognizes that some activities may be susceptible to description as either section 402 or section 403. In such an instance, they recommend that a choice be made.

We disagree with the interpretation of sub-section 402(g) that the presence of "research" should dictate grant refusal under section 402 projects. The correct distinction, based upon a reading of section 402(g) in context and proper interpretation of the legislative history, is between national research goals for section 403 and State highway safety programs for section 402.

A literal reading of section 402(g)'s restriction results in a contradiction in the statute, a result surely not contemplated by the Congress. Section 402 directs actions which are also directed by section 403. Literally interpreting 402(g) makes implementation the other portions of section 402 impossible. Yet statutory construction must endeavor to give each word meaning, and if a literal interpretation of the words of an Act create a result contrary to the apparent intention of the Congress, and if the words can be construed to admit a better construction, that must be done. (Sutherland, Statutory Construction, 4th Ed. Vol. 2A, section 46.07 and cited cases). To see the scope of the problem, we must first look to the statute and then to the legislative history.

Sections 402 and 403 overlap significantly. In particular, 402(a) authorizes the Secretary to amend or waive highway safety standards on a temporary basis for the purpose of evaluating programs on an "experimental, pilot or demonstration basis", but 403(a) generally gives the Secretary authority for demonstration programs. Section 402(b)(1)(E)(2) requires Federally supported State plans to include training of qualified school instructors, but 403(a)(1) also provides for the training or education of highway safety personnel. Section 402(b)(1)(E)(5) requires States to have "adequate research, development, and procurement of practice driving facilities, simulators, and other similar teaching aids..." but 403(a) and (F) also grant similar authority to the Secretary. Section 402(c) provides that "manpower" training be developed, although 403(a) includes training or education of highway safety personnel. These overlaps have increased over the years without Congressional cognizance of conflict with 402(g). A fair interpretation of the whole Act must effectively harmonize the parts.

Chapter 4 of Title 23 enacts a scheme to reduce highway accidents. The centerpiece of the legislation is section 402 which establishes the grant-in-aid State highway safety programs and standards. Section 403 was meant to compliment these programs by removing the burden of research from any one State and placing the national government in position to coordinate the results of research to benefit all. Where research or training would need to be part of one or more programs at the State level, the Act includes authority in section 402, i.e., driver training, inspection personnel, etc.

The House bill included sub-section 402(g) in part to prevent lengthy research slowing immediate implementation of vital State highway safety programs. The Congress was afraid that instead of spending the section 402 money immediately for highway safety, the States would wait for further research results. Of course, in 1966, many new "action" programs could be established without further research. Today, fourteen years later, State highway safety programs are in place everywhere. The States' finance an increasing share of costs, and new projects must be useful enough to compete with the existing programs for funds. Pressure on the Federal government to reduce bureaucratic red tape increases steadily. When a State submits a proposal to increase highway safety, including integrated research or training features as a necessary preliminary or coincident to action, a Federal directive requiring elimination of the research and training will only alienate and confuse the State and thwart the purpose of the Act. For example, the State may need a piece of information with only short term applicability in order to carryout their

proposed action. Waiting for Federal research to ferret out the information would lead to the ridiculous result that the overall program could not be funded because the information was stale before it could be used.

Neither the statute nor the legislative history prohibit or intend to prohibit coordinating section 402 and section 403 projects. With highway safety programs established in all States, section 403 money must be used primarily, as it indeed is, to improve existing standards or countermeasures rather than striking out into new unexplored areas as was necessary in 1966.

Since a 1967 opinion by NHTSA's Office of Chief Counsel, we have interpreted section 402(g) to permit State initiated programs to include incidental research, development, and training purposes. We have insisted that general research applicable to national needs be done only with section 403 funds. State or local use of incidental research, development and training such as authorized specifically in section 402, remains outside the scope of section 403 activity.

[GAO COMMENT: Our Office of General Counsel made the following comments:

"NHTSA disagreed with our discussion of the operation and interrelation of sections 402 and 403 of title 23, United States Code. The Department argued that the two sections overlap significantly and that the proscription of section 402(g) merely raises a distinction between funding national research goals (section 403) and funding State highway safety programs (section 402). NHTSA's analysis of sections 402 and 403 is that States can conduct research with section 402 funds so long as it is incidental to a State program; whereas section 403 moneys are to be used for general research applicable to national needs. Reading the sections in this light, NHTSA minimized the difficulties in the five examples of funding questions we offered in our draft report.

"NHTSA focused upon parts of our discussion of sections 402 and 403 and did not discuss others. We did not suggest strict segregation of funding between sections 402 and 403. Indeed, we specifically noted that there are activities 'susceptible to being described as either section 402 or section 403 projects.' Where this occurs we said 'a choice should be made for funding exclusively under one or the other sections.'

"Actually the NHTSA analysis is not very different from ours since it concedes that the research element must be 'incidental' in order for a project to be funded under

section 402. In any event, NHTSA's analysis does not adequately respond to the examples cited in the draft report.

"Our first example (the NHTSA anti-dart-out program) illustrated how two jurisdictions were conducting similar programs, one under section 402 and the other under section 403. NHTSA's justification that the program 'is at a point of transition' does not address either analysis as explained above.

"In connection with our second example (marijuana detection), NHTSA focused on the fact that different research techniques were used by Missouri and California to conduct the detection program. Our point is that, regardless of the specific techniques used, the two projects appear to have identical purposes yet were funded differently. NHTSA's response is only that California's 402 program was 'incidental to the intended state actions.' What NHTSA leaves unanswered is what specific State action the program was incidental to and how this varies from Missouri's intended State action.

"In the third example (motorcycle skill tests) NHTSA's comments did not address why the second contract was not, like the first test, 'incidental' to the State's highway safety program objectives insofar as motorcycle safety is concerned.

"Our purpose in offering examples 4 and 5 (locating rescue vehicles and California's DUI project) was not to suggest that section 402 and 403 funds could not be used to complement each other. Rather, we merely attempted to illustrate the fact that NHTSA was using funds appropriated under both sections to conduct one project."]

With a more balanced interpretation of section 402(g), most of the difficulties in GAO's five examples (beginning on page 14 of their report) are minimized.

In the first example, the NHTSA anti-dart-out program presently falls in the grey area between an established concept which jurisdictions can establish with section 402 money and an idea requiring further research findings. Thus, the Denver program and the Dade County, Florida program reflect the fact that the program is at the point of transition. Naturally, if the program were to be accepted and established state-wide in Florida, section 402 funds would be used.

In the second example, the California use of section 402 funds for a method to detect marijuana in the blood, following an earlier study in Missouri with section 403 funds for a different method, is hardly surprising. In the usual instance, general feasibility in a safety area is first established in a 403 study, followed by implementation in various States with 402 funds. Since California did not use the identical method used in Missouri, preliminary study of the difference was needed to assure that the action California intended could proceed. The subject having already been looked into the Missouri study, California's further research logically builds upon the data and is incidental to the intended State action.

[GAO COMMENT: The purpose of these two examples is to show "activities that are susceptible to being described as section 402 or section 403 projects." NHTSA calls the California section 402 project "research," which indicates it should have been a section 403 project according to NHTSA's agreement that "action" programs are section 402 and "research" programs are section 403.]

The third example, concerning the North Carolina motorcycle skill tests, seems a perfect example of careful rather than improper division of use of 402 and 403 funds. Development of practice driving facilities is specifically authorized in section 402(b)(1)(E)(5). Thus, the first grant could clearly be section 402. Based upon national research considerations, North Carolina was then asked to use their experience gained in the first grant to develop a different skill test method. Since North Carolina obviously did not need a new test for local use, this second activity required a section 403 contract.

[GAO COMMENT: North Carolina did not perform the second contract, and the work statement for the second contract does not mention North Carolina's work. It therefore appears that the second was not built on the first. Nevertheless, the two projects were similar.]

The fourth and fifth examples involve States using section 402 money for non-research items which support a section 403 contract. The GAO report objects to this, apparently because it could cause messy bookkeeping, but bookkeeping complexities cannot be the guiding policy of the program designed to save lives. In these two cases, the State money supports a valid section 402 program, but is integrated into a section 403 contract. In this way, when the section 403 project ends, the State can easily assume complete responsibility for the activity. These are examples of positive, complementary use of 402 and 403 funds.

[GAO COMMENT: Our objection to using section 402 funds for section 403 projects is based on the question of using funds appropriated under both sections to conduct one project and has nothing to do with NHTSA's bookkeeping complexities.]

A detailed look at the California Comprehensive DUI Offender Treatment project (GAO's example five) illustrates how use of 403 and 402 funds should compliment each other. Congress has repeatedly indicated that the States should give priority to increasing investment in alcohol countermeasures. On one occasion, in fact, the House Appropriations Committee expressly encouraged the combining of sections 402 and 403 efforts. See House Report 94-331, June 26, 1975, "DOT and Related Agencies Appropriation Bill," 1976. In that Report, the Committee noted:

Under this program, Federal grants are provided to assist the States and their political subdivisions in the establishment of highway safety programs such as driver licensing, motor vehicle registrations, police traffic services, and driver education. This funding is also available to supplement Federally financed alcohol safety action projects. (Emphasis supplied)

In keeping with the committee's views, the project was an adjunct to the Alcohol Safety Action Project and was designed as an advanced alcohol countermeasure. A significant portion of the project is devoted to the demonstration and evaluation of specific alcohol treatment modes (i.e., section 403). Another portion is intended to be a permanent improvement of the State's ongoing alcohol program, which is a regular component of the State's highway safety program (i.e., section 402).

[GAO COMMENT: Our recommendation stated that the Secretary require the Administrator, NHTSA, to "use section 403 funds only for that program's activity unless specifically authorized by the Congress to do otherwise."

In its summary comments on our findings and recommendations, the Department said it agreed that "NHTSA should use highway safety research funds only for that program's activity * * *" but did not acknowledge the rest of our recommendation which stated that exceptions should be specifically authorized by the Congress.

Our draft report stated that:

"In fiscal year 1979, NHTSA spent at least \$3.5 million of its \$26.3 million section 403 appropriations on other than section 403 programs. This has been a practice that has been going on since at least fiscal year 1971 with even larger amounts in fiscal years 1976 through 1978. These amounts have never been clearly presented in the budget."

Therefore, the Congress has not had an accurate budget presentation of the section 403 program.]

The GAO example characterized the section 402 portion of this project as merely paying probation clerks. This is erroneous. Rather, the section 402 money expanded a monitoring system which applied to the entire alcohol treatment program. Use of local and section 402 funds to improve monitoring of offenders could have proceeded regardless of the section 403 activity. Section 403 projects would be severely handicapped if new organizations had to be established for each case and the Federal government was prohibited, as GAO suggests, from accomplishing its research work in a cost effective manner in combination with State projects. In fact, to deny use of section 402 funds to a county because of its participation in a demonstration project would be discriminatory.

An improvement to a State or county alcohol countermeasure program is a proper use of section 402 funds; investigation of different countermeasures is a proper use of section 403 funds. The combination in Sacramento County furthered efficient Federal management.

[GAO COMMENT: The above comments were reflected in our final report. Nevertheless section 402 funds were used to create a new organization, and the county project director told us that the section 402 money was used to pay probation clerks.]

In summary, we agree that careful analysis of projects must be made to comply with sub-section 402(g). We believe that the focus of the distinction between sections 402 and 403 must lie with the purpose to be served by the research and project activities at the national and local levels. We do not think a strict prohibition on use of section 402 and section 403 activities in the same project or projects which have a similar goal would foster highway safety, but rather would harm both our relations with the States, and program flexibility. We recommend that GAO eliminate their heading, "Section 402 and 403 Funds are used For the Same Projects and Types of Projects," and their comments on pages 13-16 of the draft report.

[GAO COMMENT: We cannot accept the Department's suggestion that these report segments be deleted because the Congress must be apprised of these types of situations so that it may act accordingly. Our position is clearly explained in the report and in the preceding pages of this evaluation of the Department's comments.]

GAO RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION- CHAPTER 2

We recommend that the Secretary require the Administrator, NHTSA, to (1) identify section 403 and other program obligations and expenditures, (2) make more clear budget presentations to the Congress, and (3) use section 403 funds only for that program's activity unless specifically authorized by the Congress to do otherwise.

We also recommend that the Secretary require the Administrator, FHWA to account annually for obligations to section 403 contracts.

DEPARTMENT OF TRANSPORTATION RESPONSE

The Department of Transportation, as the GAO knows, already provides specific identification of obligations, expenditure and outlay requirements for Section 403 and other programs in its budget submission to Congress. We presume

that recommendation intends to refer to a desire for more detailed information relative to the summary data we are already providing. As previously mentioned, we would propose to add more detailed information as an addendum to the Operations and Research Appropriation justifications, rather than seek a separate appropriation for administration. A detailed analysis of program and administrative costs in support of each enabling authorization would be provided.

[GAO COMMENT: Our conclusions stated that NHTSA cannot readily identify section 403 annual obligations and expenditures except by broad categories.

"In the National Center for Statistics and Analysis, NHTSA cannot identify what projects section 403 funds are being used for. These are examples of problems which NHTSA has in managing its section 403 program. These problems indicate a need for improvement in financial management of the program."

NHTSA's proposal could provide more of the type of information we believe is necessary. However, unless this information is available on a regular basis, we believe the financial management problems mentioned in our report will not be solved, particularly for the Center.]

Relative to recommendation (2), having to do with clearer budget presentation, we have previously indicated our disagreement with the sections of the draft report dealing with this issue. The GAO recommendation is obsolete and fails to acknowledge actions taken by the agency in its 1981 budget submission. We believe that the action we propose to take in responding to recommendation (1) should be all that is necessary to further clarify budget presentations, considering the improvements that were made in the 1981 Congressional submission.

[GAO COMMENT: Our final report acknowledged that the agency states it has taken actions in the FY 1981 budget submission. Although NHTSA disagreed with the three examples of unclear budget presentations, we believe that our report and evaluation of NHTSA's comments provided sufficient evidence that a problem exists with its budget presentations, and without our review, it is quite possible that corrective action would not have been planned. We still believe that NHTSA must pay close attention to its budget presentation to see that it is clear and to be certain that section 403 funds are clearly identified. We believe that NHTSA's future budget presentations will provide sufficient evidence of any corrective action taken. As stated in our recommendation number three, NHTSA should

"use section 403 funds only for that program's activity unless specifically authorized by Congress to do otherwise."

We made that recommendation because:

"In fiscal year 1979, NHTSA spent at least \$3.5 million of its \$26.3 million section 403 appropriation on other than section 403 programs. This has been a practice that has been going on since at least fiscal year 1971 with even larger amounts in fiscal years 1976 through 1978. These amounts have never been clearly presented in the budget. Therefore, Congress has not had an accurate presentation of the situation because the necessary analysis was not done until we asked. Section 403 funds are used as a source for other programs which NHTSA considers more important than the highway safety research program."

The \$3.5 million was used to administer section 402 activities and to pay general administrative costs attributable to the Motor Vehicle Information and Cost Savings Act. The Department stated that NHTSA has instituted some new methodologies to attempt to correct these problems. We noted however that the 1981 budget presentation still does not itemize section 403 allocations in a manner that makes them readily identifiable.]

CHAPTER 3: PLANNING FOR HIGHWAY SAFETY RESEARCH

Chapter three of the draft report discusses highway safety research planning and states that though improvements are being made many weaknesses exist in the planning process and that NHTSA's past planning was inadequate.

On page 20 of the report, GAO states: "NHTSA's highway safety research is conducted by the Office of the Associate Administrator for Research and Development and the Office of the Associate Administrator for Traffic Safety Programs." This is a misstatement which equates Section 403 contracting activity exclusively with research. On page 2 of the report, GAO lists all of the items authorized under Section 403. Nonetheless, throughout the report, GAO drops the concept of the broader use of 403 funds and concentrates only on "research." This limited interpretation by GAO appears to be the basic misunderstanding on which GAO bases its finding that research responsibilities have not been well defined, and the recommendation that the Secretary define the roles of Research and Development and Traffic Safety Programs.

[GAO COMMENT: This is not a misstatement but is part of a summary paragraph, followed by the paragraph below, which clearly points out responsibilities of the two Offices.

"The Office of Research's responsibilities in highway safety are to administer programs in researching, developing, testing, evaluating, and processing information concerning the 14 highway safety standards which NHTSA administers. The Office of Traffic Safety Programs' responsibility in highway safety is generally to demonstrate the results of research in new highway safety systems or techniques. However, both offices have done research with few demonstrations being done. The two offices have had problems in coordinating programs. These situations have contributed to the difficulties in planning section 403 research."

The term "highway safety research" throughout our report refers to the total section 403 program as defined in the introduction to the draft report. This is not a misstatement nor a limited interpretation of the section 403 program. Our recommendation to the Secretary is well founded, as mentioned in this supplement and detailed in our report. To say that such problems do not exist seems to limit the chance for improvements.]

Traffic Safety Programs utilizes Section 403 funds in a variety of ways including the packaging and dissemination of training programs, conduct of training, studies of existing administrative procedures, evaluation of State and community highway safety programs, operation of the National Driver Register, the conduct of national and regional workshops and seminars, and the support of national safety organizations for program implementation. None of these activities can be classified as research and development in the context of the development of new knowledge or new countermeasures. It is all designed to enhance the implementation of the most efficient and effective techniques which are within the current state-of-the-art. Undertakings that could be classified within the typical Research, Development, Test and Evaluation (RDT&E) scheme would be the large scale demonstration projects and the evaluation efforts which are initiated to determine the effectiveness of ongoing State and/or community highway safety programs. The evaluation function is a legitimate extension of the roles of Research and Development and Traffic Safety Programs. In fact, the recent reorganization of TSP highlights this function by creating a new Office of Program and Demonstration Evaluation.

[GAO COMMENT: We did not state that Traffic Safety Programs is not legitimately carrying out some of its functions; however, we are stating that TSP is doing research in addition to its normal responsibilities. For example, NHTSA officials, contractors, and State personnel told us that projects such as the Dade County, Florida, pedestrian project, and the DeKalb County, Georgia, driver education program are primarily research. Both of these

projects are administered by the Office of Traffic Safety Programs.]

On page 21, the GAO seems to be advocating that demonstration projects be limited to only showing whether something works. The GAO says "... demonstration projects have consisted of extensive field tests to determine whether a new technique or method will work in an operational situation rather than to show someone that it does work. Field tests of this type usually are associated with research rather than demonstration." This limited definition can be applied to demonstration projects but it should not be limited to that concept. Many government agencies implement field evaluation projects under the title of Demonstration Project. Therefore, to limit demonstrations to this narrow scope is incorrect. The best way to determine whether highway safety programs work is to implement a project through an experimental design, with a large enough sample over a sufficient time period. This effort is clearly the next step after the research and development phase as the concept moves into one of operational evaluation. This is the distinction which is made as programs flow from R&D to TSP or from research and development to operational evaluation. The GAO, for unexplained reasons does not seem to understand this logical progression used so routinely by industry and Government and it was simply not recognized in the report.

[GAO COMMENT: Since research, field testing, and demonstration are similar and sometimes difficult to define, these activities should be coordinated by a single office or individual. The quote and the Department's comments thereon demonstrate the difficulties in defining these activities. Therefore, it seems reasonable to appoint someone with overall responsibility for the section 403 program. NHTSA has not demonstrated to us that there is always a logical progression of research results from the Office of Research to the Office of Traffic Safety Programs. As stated in the draft report, Office of Traffic Safety Programs officials

"said that the Office of Research has provided little which could be used in demonstrating what works because much of its research is not implementable by State or local users in its final form."]

The comment to the effect that "TSP officials stated that the Office of Research has provided little which could be used in demonstrating what works" appears to be taken out of context when put in relationship to the need for large scale projects, with sufficient sample size, over a sufficient time frame to demonstrate results. The TSP staff comment should be interpreted to imply that it is difficult for "research" to produce documented accident reduction results, because of the limitations in the size of their projects and the time frame within which they operate. Most significant research results have been accepted by TSP and incorporated into Demonstration Projects in order to document their crash reduction potential and to develop recommendations for State highway safety activities -- i.e., Safe Performance Curricula, Motorcycle Licensing, Motorcycle Rider Education, etc.

[GAO COMMENT: The quote is not taken out of context and accurately describes the situation. Saying "it is difficult for research to produce documented accident reduction results" does not significantly differ from saying that "they have not known what works in highway safety." NHTSA has not shown that most significant results are accepted by TSP, as stated in its response. The fact remains as stated in the draft report:

"Office of Traffic Safety Programs officials told us that generally they have not known what 'works' in highway safety and, therefore, they have had little to demonstrate. They said that the Office of Research has provided little which could be used in demonstrating what works because much of its research is not implementable by State or local users in its final form."]

The assertion that confusion exists between the two offices, vis-a-vis their respective responsibilities is undocumented and therefore difficult to respond to. The notion that this alleged confusion is aggravated by the fact that TSP must concur in R&D generated 403 research, whereas R&D has no similar concurrence on TSP generated contract activity does not make sense. If the Associate Administrator for R&D has problems with a TSP 403 program procurement he may obtain a temporary suspension of the procurement process by informing the Associate Administrator for Administration. The Associate Administrators involved subsequently resolve the difference or it is escalated to the Administrator for resolution. By so doing, the Associate Administrator for Research and Development, in essence, has an avenue for concurrence.

[GAO COMMENT: The word "confusion" has been changed to "uncertainty" in the final report. As stated previously, both Offices have done research with few demonstrations being done and the Offices have had problems coordinating programs. During our review we observed and documented coordination problems and other problems between the two Offices. The procedures mentioned above have been less than successful in solving these problems.]

The comments on page 22 which are used to demonstrate confusion or unclearness in the respective roles of TSP and R&D staff are not adequate to demonstrate the allegations and in fact when taken separately, as staff response, merely show the perspective of the interviewees. In some cases the comments were taken out of context.

[GAO COMMENT: The statements should be taken collectively, as together they demonstrate that a problem does exist between the two Offices. We do not believe that the comments were taken out of context. We have classified this problem as one of uncertainty of responsibility because after conducting our review, we

can only conclude that the two Offices do not work well together. The Department states that the NHTSA staff statements merely show the perspective of the interviewees, but the Associate Administrator for Administration told us after we had received these comments that the two Associate Administrators (Office of Research and Office of Traffic Safety Programs) spoke for NHTSA policy in their respective areas. These two Associate Administrators either made these statements or were present when these statements were made concerning their respective Offices.]

GAO Comment #1:

TSP: Although we are supposed to approve all Office of Research section 403 projects, the Office has done work which we have not approved.

R&D: The Office of Traffic Safety Programs approves all our section 403 projects. Any work which the Office of Traffic Safety Programs has not approved was probably done by previous Associate Administrators under a NHTSA order giving them authority to use 10 percent of funds for basic research for which they need no approval. This Associate Administrator does not use that 10 percent.

DOT Response:

Certainly in any organization there can be found exceptions to the normal processing of actions and that appears to be the situation in the first comment attributed to TSP staff.

[GAO COMMENT: The Department states that exceptions to the normal processing have occurred. Therefore no comment is warranted.]

GAO Comment #2:

TSP: There is doubt that we will do any more section 403 "large" demonstrations. Mostly we will do small projects or piggyback off of State or local projects.

R&D: The Office of Traffic Safety Programs should do large-scale projects to test countermeasures.

DOT Response:

The second comment by both TSP staff and R&D staff need not be viewed as conflicting if the term "large" is defined as used by the respective staff. TSP uses "large" in this context as it relates to "dollars" while R&D uses "large" to relate to project size and length. TSP recognizes that it should be involved in large scale projects, but proposes to do this in the future by evaluating projects that would be primarily funded by States and communities, rather than thru Section 403 funds. This would result in smaller dollar value 403 projects but would not reduce the size of the project to be evaluated. The comment by R&D was taken out of context by GAO. This was stated as an appropriate distinction of the role of TSP vis-a-vis R&D, not a recommendation that large scale projects need to be done in all areas. R&D would include a state funded demonstration in this category as well.

[GAO COMMENT: Individual definitions of the term "large" as stated above have been added to the final report. We did not state that Office of Research officials said large-scale projects need to be done in all areas as the Department states above, but that Office of Traffic Safety Programs officials said

"There is doubt that we will do any more section 403 'large' demonstrations. Mostly we will do small projects or piggyback off of State or local projects."

On the other hand, Office of Research officials said "The Office of Traffic Safety Programs should do large-scale projects to test countermeasures."]

GAO Comment #3:

TSP: We should have authority and responsibility for section 403 research but there is a constant fight with the Office of Research on that point.

R&D: The Office of Traffic Safety Programs directs our section 403 program by writing up a proposed statement of work and then negotiating.

DOT Response:

Comment number three merely indicates that periodically there may be a difference of professional opinion on a specific approach or concept. To take this singular staff input as a basis to demonstrate wide scale confusion appears to reflect biased reporting. In fact, NHTSA not only believes that this diversity of views is healthy, the NHTSA Administrator encourages diverse views in order to assure that the agency does not become narrowminded and exclusionary.

[GAO COMMENT: The Department has misunderstood what we meant. The Office of Research said that the Office of Traffic Safety Programs directs the section 403 research subject to some negotiation, while the Office of Traffic Safety Programs said it should have the authority and responsibility for section 403 but constantly argues with the Office of Research on that point. NHTSA said that a diversity of views is healthy, but the problem is one of defining responsibility and authority for conducting the section 403 program. We believe this adversely affects the effective operation of the section 403 research program.]

GAO Comment #4:

TSP: The Office of Research does not summarize its reports, and States cannot understand some of the more technical reports.

R&D: If it is possible for users to read a research report and get a wrong impression, we put an addendum on it to prevent this from happening.

DOT Response:

The fourth comment reflects a situation which existed in the past, but one which has been remedied by requiring each research contractor to prepare an Executive Summary, which can be used by each practitioner to ascertain the conclusions and results of the research without having to read and digest the whole report. The R&D comment addresses a totally different point and should not be used to depict a difference of opinion with TSP.

[GAO COMMENT: NHTSA admits that research reports can be technical and difficult to understand. We believe the executive summary is a step in the right direction but are not certain it will resolve the problem.]

GAO Comment #5:

TSP: There is not much from the Office of Research that can be demonstrated because their results are not implementable in their final form. It would help considerably if we know what was going on in the States.

R&D: We know from the Office of Traffic Safety Programs what States are doing with our research results.

DOT Response:

The first part of the final comment attributed to TSP staff has already been addressed -- R&D results should not necessarily be demonstrable in the narrow context of "show only," as the report writers imply. The last part, dealing with a need for improved information flow, is a concern which has been recognized and for which actions have been taken. A project reporting system was planned in 1978 and implemented by TSP in early 1979, and that information will add considerably to the TSP knowledge base. Additionally, a clearinghouse for training materials has been established, as well as one for public information materials. Also, relationships with the American Association of Motor Vehicle Administrators and the International Association of Chiefs of Police as well as other groups of officials provide a mechanism to ascertain what is being done, what is being used and what needs to be developed.

[GAO COMMENT: Nowhere in our report did we state that all results should be demonstrable. The fact remains that TSP told us that it does not know what is going on in the States, and R&D said that TSP told it what States are doing with the research results. Further, on page 38 of its comments, the Department agreed that "it is difficult to determine the extent section 403 research is used."]

The comment by the Associate Administrator, TSP, that organizational differences between TSP and R&D have hindered program coordination at the working level, has been improved by the appointment of various staff as focal points within the divisions of the Office of Driver and Pedestrian Research. These staff now function to keep the program area plans up to date and to coordinate work statements between TSP and R&D. This information should be incorporated in the report to give recognition to problem identification and resolution by the management of R&D and TSP. Similarly, the recognition of the positive attributes of the 403 5-year planning effort should be placed in a much more positive vein than appears to be the case throughout the report.

[GAO COMMENT: We have added information to the final report to recognize that NHTSA is taking steps to resolve the problem.]

On page 23 of the report it is alleged that there is some confusion and lack of coordination in dealing with the States. However, the discussion which attempts to demonstrate this confusion and lack of coordination relates solely to the need to do a better job. NHTSA, in its 403 5-year planning effort and in its report to the Senate Appropriations Committee agreed 2 years ago that it needed to do a better job of obtaining comments from State practitioners and researchers. The need to do better certainly does not equate with confusion. TSP is the principal contact with State and local users, but R&D staff are involved in this process and they are becoming more involved. As GAO well knows, this reflects a management decision by TSP and R&D long before the initiation of the GAO study.

[GAO COMMENT: Further explanation has been added to the final report which refers the reader back to comments by the two Offices on availability of State information. We gave NHTSA credit in the draft report for doing more to alleviate the problem but pointed out that more needs to be done, particularly with respect to NHTSA's relationship with the highway safety community. The draft report stated: "The Associate Administrator for the Office of Research told us his Office is doing a better job of interacting with the States now and is spending more time with the States trying to understand their problems."]

The Report goes on to state "The Section 402 state grant program also has added to the confusion in the planning process since this program is the basic reason for doing highway safety research." There are three things wrong with this statement and they are:

1. First, it is not clear what it means or how the 402 Program adds to confusion.

[GAO COMMENT: Our draft report stated that:

"The Office of Traffic Safety Programs has not always been aware of State activities in the section 402 program, and this has resulted at times in the office planning and/or carrying out similar programs."

This statement, plus the examples given, makes it clear that it is difficult to plan research if the planners do not know what States have done under section 402. Unless TSP knows what activities have taken place under section 402, it is difficult to plan section 403 activities without duplicating past work. The two programs need to be coordinated so that future research can build on what was done in the past.]

2. The examples given to document uncoordinated work effort are incorrect, and

[GAO COMMENT: The Department did not provide information to support its statement nor contribute facts that show our examples to be incorrect.]

3. The concept that the 403 program only exists to support the 402 program is incorrect.

[GAO COMMENT: Our draft report stated that the section 402 program is the basic reason for doing highway safety research. This statement is supported by NHTSA material and by congressional references. Being the "basic" reason, as stated in our draft report, and the "only" reason, as the Department claims we said, are not the same thing. NHTSA's section 403 5-year plan stated that:

"The ultimate goal of the section 403 program * * * is to improve the ability of safety programs conducted with the use of section 402 grants and State/local revenues to save lives and reduce injuries; as well as to improve the efficiency of State and local highway safety programs."

The plan also stated that section 403 activities were intended to develop new methods and techniques that will benefit State and local safety programs and to work as a catalyst to upgrade the use of annual section 402 grants.]

On page 23 of the report, two projects are identified, which allegedly are reflective of confusion in the planning process. If the facts as presented were correct they would be reflective of poor coordination not confusion in the planning process. However, the facts are: the Dade County, Florida pedestrian program is a multi-year evaluation program -- with control groups -- designed and implemented to document the crash reduction benefits of educational, regulatory and informational programs developed by NHTSA research efforts. The Denver program utilizes some of the concepts of the training programs embodied in the Dade County project, but does not include the specific counter-measures which are being evaluated in Dade County. Additionally, the Denver project was not designed -- nor did it have to be -- to experimentally answer the questions that the Dade County project is designed to answer. The use of these two projects for comparison purposes is similar to implying that because a State is providing driver education, NHTSA has created confusion or demonstrates poor coordination by implementing and evaluating the SPC Curriculum in DeKalb County, Georgia. In essence the comment reflects a lack of in depth analysis of the content of the projects and the goals and objectives of each.

[GAO COMMENT: The NHTSA response does not refute the facts in our example. As shown in our draft report, these two programs are similar. The examples are used to show that confusion in planning has led to similar section 402/403 programs. NHTSA documents and statements by NHTSA officials show that the officials did not visit the Denver site until more than a year after the Dade County, Florida, contract was awarded. The Associate Administrator of TSP said that NHTSA should have piggybacked off the Denver project instead of creating its own, as stated in the draft report. As background for our example, we reviewed contract files and work statements; talked with CTMs, NHTSA regional people, and a Governor's representative; and got comments from several State and private contractors.]

The second example is intended to demonstrate lack of coordination, but again the facts are that it is currently being coordinated and that both projects, the one being conducted by the State of California and the one by NHTSA Research and Development will contribute to the state-of-the-art and are not duplicative or uncoordinated.

[GAO COMMENT: The Department does not rebut the finding of lack of coordination but states that the project is "currently being coordinated." We are saying that better planning would have precluded the problem from occurring in the first place. NHTSA states that the projects are not duplicative but provides no further information to support its point.]

Contrary to GAO's assertion regarding "weak planning", the 403 5-year Plan which was initiated two years ago addresses the major national highway safety problems in the United States. NHTSA, working in concert with States and localities, has fashioned a program which should satisfy both their program and management needs. The program contains a balance among problem identification, research, demonstration and evaluation. The program contains elements to strengthen State planning, management and data systems. We would remind GAO that although some interesting and important recommendations were put forward by the National Academy of Sciences-TRB Conference at Dulles in April 1979, the Conference participants endorsed the bulk of the program. The GAO, for reasons which are not evident, fails to acknowledge this endorsement and fails to recognize or give credit to NHTSA for instituting a planning process which facilitates better internal coordination as well as external participation.

[GAO COMMENT: On three consecutive pages of the draft report, we gave the agency credit for designing the plan and including major national highway safety problems. However, although NHTSA claims it has the endorsement of the conference participants, we could find no evidence in the TRB report to support this.]

The GAO statement that "much of its research results are unsuccessful" (page 1 of the report Digest) is unsupported, and we recommend GAO either delete this statement or provide sufficient documentation to prove its case. Contrary to GAO's assertion, a wide variety of 403 results are in use today in States and localities. Again, GAO's statement is not an accurate portrayal of the true situation.

[GAO COMMENT: The Department did not provide support for its statement. Our support for the statement that "much of its research results are unsuccessful" is found in the draft report as follows:

"NHTSA's research is not always used because many section 403 contracts have led to unimplementable results. State and local officials and researchers said that often NHTSA's research results in disproving proposed solutions. This can be useful in contributing to knowledge and showing users what does not work, but users also need new and innovative methods to improve highway safety. Our sample shows that NHTSA develops some usable and some unusable research and that some research takes a long time to complete.

"Of the 23 completed Office of Research contracts in our sample, 12 were for data collection purposes. Of the remaining 11 completed contracts, 2 disproved proposed solutions and 2 led to products States could use. The remaining seven contracts created additional projects in the Office of Research or the Office of Traffic Safety Programs. These seven research projects started between 1974 and 1976 and have not produced implementable results for State and local officials 4 to 6 years later.

"It can be expected that some research will have unimplementable results or take a long time to complete. However, potential users said these kinds of contracts occur too frequently. NHTSA should be especially conscious of these limitations because of its position as a research leader and should try to minimize these types of projects. Initial discussions with users to determine their needs will aid the selection of ideas for research which are most applicable."

In addition to the statements above, we gave five specific examples in the draft report of "unsuccessful research results."]

GAO asserts that the NHTSA's new highway safety research plan was less than adequate to meet the needs because the agency neglected to:

- o request suggestions from the highway safety community before drafting the plan;
- o analyze what research has been done, what has succeeded, and what has failed;
- o verify criteria for establishing research priorities; and
- o include two other programs (the National Center for Statistics and Analysis and the National Driver Register) which use about 15 percent of highway safety research funds.

The report also states that the Federal Highway Administration and the National Cooperative Highway Research Program have successful planning processes which could be used as a guide for planning.

[GAO COMMENT: This merely restates what is contained in our draft report and therefore no comment is warranted.]

The GAO criticizes NHTSA for having "had little working relationship with users and researchers before preparing the plan." The plan was not developed "by committee" as the GAO suggests it should have been, for several obvious reasons:

1. The agency had an obligation to take the "first step" to prepare an initial draft plan and to organize its own house without asking outside interests to undertake that task.
2. Development by committee takes longer and is usually less productive and undoubtedly would have required numerous lengthy conferences.
3. The opportunity for outside interests to critique and to recommend additions or deletions to the proposed plan was openly provided by NHTSA.
4. The agency has ultimate responsibility for carrying out all functions identified in the proposed plan.

[GAO COMMENT: Our report did not recommend or suggest that the plan be developed by committee, but that NHTSA had little working relationship with users and researchers before preparing the plan. NHTSA must take action to get the research community involved in its plans and eliminate the credibility gap that now exists between it and the research community. We will comment on each of the four points in order.

1. We agree that NHTSA had to take the first step; however, because of its credibility gap with the highway safety community, NHTSA could have solicited and incorporated ideas from outside sources.

2. NHTSA has already taken over 2 years to develop its plan, and it is not yet completed nor does it have the general confidence of the highway safety community. We believe that increased participation by the highway safety community would be a greater advantage to the program than the disadvantage perceived by the Department.
3. We stated in the draft report that "the general opinion of the highway safety community is that NHTSA has designed its plan and will not make substantial changes."
4. A plan acceptable to users and the highway safety community in general would make it easier for NHTSA to carry out the plan.]

The new highway safety research plan to which GAO refers is the Proposed Plan for Highway Safety Research, Development and Demonstration (Section 403 of Title 23, USC), Fiscal Years 1980-1984, March 30, 1979 (DOT-HS-804-031). The most constructive and meaningful approach for opening the agency's 403 planning process for participation by the highway safety community was to first conduct an internal review and then publish a proposed 5-year plan for public scrutiny, review, and comment. This is the usual method the agency follows in order to operate most effectively. If the agency did not at least define the parameters and pull together an organized document, the conference would have been disorganized and the quality of the comments from outside elements of the highway safety community would have been substantially reduced. This assertion that the agency should have sought suggestions before drafting the proposed 403 Plan demonstrates extreme naivete about planning processes which involve broad-based, outside participation. To have solicited suggestions beforehand would have been totally premature and wasted considerable time on the part of NHTSA's research and practitioner community. The updated 5-year 403 Program Plan to be published during FY 1980, however, will reflect peer review particularly in view of the April 1979 403 Conference and docket comments. Preparation of the plan required thorough assessment and analysis by NHTSA of what research had been done, what research had succeeded as well as what research had failed. A state-of-the-art assessment was implicit in proposing the project areas which NHTSA has presented in the 5-year plan. The criteria which the agency used in establishing program area priorities depended on the sound engineering judgment, combined experience, and expertise of NHTSA management personnel because the process was qualitative in nature and unfortunately did not lend itself to rigorous verification.

[GAO COMMENT: Generally, NHTSA section 403 plans have been developed internally. The new 5-year plan was developed in the same manner. Although the users and researchers have been given the opportunity to comment on it, our conversations with members of the highway safety community indicate that the general opinion is that NHTSA will not make substantial changes.

Also, the Transportation Research Board report stated that:

"There should be some formal mechanism for considering the needs and knowledge of practitioners and for receiving the advice of researchers as 403 research goals are set."

We believe outside opinion could have been solicited before designing the plan which went to the conference for comment. Because of the lack of a state of the art in all research areas, it would have been advantageous to involve the highway safety community in the planning process rather than relying solely on NHTSA internal expertise.]

Two program areas (National Center for Statistics and Analysis (NCSA) and the National Driver Register (NDR)), which are an integral part of the 403 program, were not included in the proposed 5-year plan because the future operations of the NCSA were dependent on an equally complex and time-consuming review of 403 program accident data needs and the future operation of the NDR will be dependent on decisions resulting from a Congressional Report on the NDR. A NCSA/403 Program data plan is currently being developed and the NDR Study is being reviewed within the Department prior to being sent to Congress.

NHTSA currently is conducting an internal review of 403 program data needs and the support provided by National Center for Statistics and Analysis (NCSA). This will result in a more cost effective utilization of 403 funds by NCSA and closely align 403 program needs with NCSA projects. At this point, it would appear that this effort will be focusing on the problem identification needs of the 403 program. In addition, other data needs which NCSA may not be able to address will also be identified from management action. The NCSA/403 planning effort will serve to greatly improve communications between NCSA and 403 program managers; particularly relative to data analysis techniques, results, and data base needs. These data plans will support NCSA budgeting as well as 403 plan update activities. For internal planning purposes, the agency recently completed the development of a Crashworthiness Data Plan which relates current NCSA activities to future rulemaking data needs. Underway at the present time is the development of a similar plan for the Agency's Crash Avoidance rulemaking activities.

Although a National Driver Register Study is currently being reviewed within the Department for submission to Congress, it is unknown if the Congressional decisions emanating from that report will have been solidified for the Updated 5-Year 403 Program Plan to be published during 1980.

[GAO COMMENT: No comment necessary. This is additional information which does not contradict the information in our report.]

NHTSA has examined the process by which FHWA conducts the Federally Coordinated Program of Highway Research and Development (FCP), identified the relevant features pertinent to this agency's operations, and has developed a system which we believe is more productive and appropriate for our 403 program.

[GAO COMMENT: We cannot comment on the adequacy of NHTSA's examination of FCP because such information was not provided in its comments. However, we have included NHTSA's comment that it has identified relevant features of FHWA planning methods in the final report. NHTSA does not state that these methods are used--just identified.]

On page 24 of the report, GAO infers that NHTSA is "unwilling" to assume the risks involved in setting priorities by committing resources in one area at the expense of another area. This statement should be deleted because it is untrue.

NHTSA does not agree with the statement that the agency is unwilling to assume the risk of making resource trade-offs between and within program areas. Limited 403 program resources make this a management reality and therefore a necessity because there are far more program needs than there are resources. The 5-year 403 Program Plan is proof of the innumerable resource allocation decisions and trade-offs which had to be made in order to present a realistically budgeted program to the public.

[GAO COMMENT: As stated in the draft report, we were told by contractors and State officials "that NHTSA has been unwilling to assume this risk." They said NHTSA "preferred to do work in many areas and to emphasize those projects or countermeasures which appeared to have the greatest congressional or public interest."

We have added NHTSA's objection to the text of the final report by stating that:

"NHTSA, in response to these statements, stated that the 5-year plan is proof that the agency is willing to assume risks in setting priorities."]

In order to support each years' budget cycle, NHTSA has conducted internal planning to assure the coordination of Traffic Safety Program's (TSP) and Research and Development's (R&D) 403 project activities. These internal reviews have been formalized in the past with the preparation of multi-year plans. Outside involvement of the highway safety community or periodic peer review were not components of this important planning exercise. However, the new planning approach which NHTSA began implementing two years ago for the 403 program, not only requires considerable internal planning on the Agency's part, but requires presentation of that plan to the highway safety community, on a periodic basis so that outside views, opinions, and comments can be considered by NHTSA management and reflected in subsequent plan updates.

The new 403 program planning process, which NHTSA management is implementing, will incorporate the analysis of available information (or establishment of the state-of-the-art), a methodology for setting priorities and allocating resources, as well as involve the peer review of the highway safety research and practitioner constituencies. Not only will this process enhance our relationship with the user community but will result in more accurate and thorough identification of State and local needs and thus make valuable input to NHTSA's 403 planning process. The initial plan which the agency published March 30, 1979, entitled "Proposed Plan for Highway Safety Research, Development

and Demonstration (Sec. 403 Title 23 USC), Fiscal Years 1980-1984" was developed without the benefit of outside comment because it was felt that it was the Agency's responsibility to take the "first step" and that relying on a committee or group of outsiders would be too cumbersome initially. To not take the first step in developing the 5-year 403 Program Plan would abrogate our responsibilities to administer the program. We are concerned that the GAO continually suggests that NHTSA produce draft documents by a committee of government and private sector officials, in lieu of having such individuals or organizations comment on draft plans. GAO's inference is that once the Agency publishes something, it is cast in concrete and changes will not be made. This is an unfair allegation and has no place in the GAO report. By opening our planning process to outside scrutiny and review subsequent 5-year 403 program plans will reflect many outside views and opinions.

[GAO COMMENT: We agree with NHTSA that past plans were generated internally. Our draft report stated that the 5-year plan is a step in the right direction. However, NHTSA should have included external participation in its draft plan to obtain a better perspective of highway safety problems, particularly in view of its credibility gap. The statement that the plan will not substantially change comes from members of the highway safety community and NHTSA officials. The belief by the highway safety community that the plan will not change is evidence of a credibility gap. NHTSA's reluctance to recognize the credibility gap will not eliminate the problem.]

GAO stated that with one exception, no attempt was made to prioritize the areas or projects based on the benefits to highway safety. GAO also indicates that most NHTSA, State, and contract officials told GAO that the section 403 program funds were spread too thin and that it would be better to work only in a few areas and that no one has designed criteria to decide which areas should be eliminated or postponed.

NHTSA disagrees with this statement. The benefits to highway safety were taken into account in setting program priorities by NHTSA management. Specifically, criterion No. 1 and 2, Accident Impact and Effectiveness respectively, represent benefits to highway safety. Unfortunately, many other factors had to be considered by NHTSA management in setting program priorities. These additional criteria included implementation cost, probability of implementation, increased efficiency of current State safety systems and implementation time.

The proposed 5-year plan does in fact focus on the most promising safety areas. The plan addresses the most serious safety issues we face nationally. Even National Academy of Sciences, TRB did not dispute that in the great majority of its comments. In fact, TRB stated its belief in other sections of the report that the 403 plan should broaden its scope even further and be far better funded, and include all direct and indirect needs of the States. It was the Agency which stressed at the TRB conference the importance of choosing priorities because it was unrealistic to presume that sufficient funding would be provided to support all projects.

[GAO COMMENT: We have added a statement to the report recognizing that NHTSA thinks its funds are not spread too thin. In its report, the Transportation Research Board stated that NHTSA

"* * * should limit 403 resources to a few promising areas rather than try to address every safety-related issue that has high visibility or that will further some DOT policy."

We recognize that it would be ideal to have enough funds to address all direct and indirect needs of the States; however, this would be unrealistic and was not suggested by TRB in its comments.]

With reference to the National Highway Safety Needs Report of 1976 on page 25 of the draft report, NHTSA does not plan to update the National Highway Safety Needs Report, 1976 because, for all practical purposes, the process by which that report was prepared has been superseded by the 5-year 403 program planning exercise and those internal efforts needed to periodically update that plan. Subsequent exercises which update the 5-year 403 program plan will result in a published document similar to the Proposed Plan for Highway Safety Research, Development, and Demonstration (Sec. 403 of Title 23, USC) Fiscal Years 1980-1984, March 30, 1979 (DOT-HS-804-031).

[GAO COMMENT: No comment necessary. This information in essence was already contained in the report.]

The statement made that the 55 mph enforcement program duplicates previous efforts is incorrect. Prior work done assessed the impact of enforcement on accident fatalities and certain violations (driving while intoxicated, traditional speed limits, etc.). However, to our knowledge, no one has yet studied in depth, and within acceptable research community standards, the precise impact of various levels of police enforcement on 55 mph compliance, and the specific costs involved. At the 403 Program conference in April 1979, enforcement officials in attendance strongly endorsed this project -- citing the importance of the impact information in their need to make resource allocation decisions. We are aware of only one contractor representative who has consistently made the claim that the 1979 study duplicates the previous studies, and he continues to make this claim despite the obvious difference in the studies, and in the face of the police enforcement officials who are responsible for and seeking methods of achieving 55 mph compliance.

[GAO COMMENT: We have added a statement to the report that NHTSA officials stated this 55-mph program does not duplicate the previous studies.]

GAO states that some members of the highway safety community question the high priority ranking of the 55 mph area and the value of the funding ranking of "systems support."

NHTSA's support to 55 mph is the Plan's highest priority area. It is in fact a near-term and a continuing goal because it has impact in saving lives each and every day right now. The issue of State enforcement of 55 mph to reverse motorist non-compliance with the speed limit law will remain a critical area for 403 support for at least several years to come. Compliance standards

established by Congress in 1978 intensify this need. Given the size of the 55 mph problem, its impact on fatalities and injuries, the level of Section 402 grants assisting States and localities, and the specific allocation of 402 funding by the Congress, we can expect support to 55 mph to remain among the top safety issues in the U.S.

[GAO COMMENT: The report has been changed to read as follows:

"Some members of the highway safety community question the priority and/or funding rankings of various program areas."

This does include the 55-mph program but specific references were taken out of the final report.]

GAO stated that NHTSA officials mentioned three areas as having a state of the art -- alcohol, drivers licensing, and pedestrian safety -- but that GAO has doubt even in these areas. GAO notes that the ASAP Program summary stated that because of this (ASAP) program, what needs to be done and how to do it is now known. GAO then cites a study released by NHTSA which says that the state of knowledge in alcohol problems is totally inadequate to design and operate drinking driver programs. Finally, GAO reports that NHTSA officials say that neither report is a true state of the art for alcohol and highway safety.

NHTSA contends that all three views are correct, with the statement by the NHTSA officials being the most accurate. Enough is known for communities to initiate programs to address the drinking-driver problem. The study is correct in that very much more is needed to be known. However, one need not wait until all questions are answered before starting a program. As a result of ASAP and the programs currently being implemented, there will be a framework in existence within which to apply the new knowledge as it becomes available. The NHTSA officials are saying that there are a lot of knowledge gaps, but that we know enough to get busy. That statement summarizes the state of the art.

[GAO COMMENT: Our draft report defined state of the art as "telling what research has been done, what has succeeded and what has failed." NHTSA does not respond to this definition, and its statement does not define state of the art. Also, NHTSA has not disagreed with us concerning the lack of a state of the art for alcohol and highway safety. Our draft report stated that:

"The Congress originally intended that section 403 be used partially to pull together research information into a coherent fund of accessible information. NHTSA has given the Office of Research the task of advancing the state of the art in research areas, and much research has been pulled together by that office and the Office of Traffic Safety Programs. There is a need to pull this information together before planning/

approving a project or going on to new areas. However, NHTSA officials told us that there are few highway safety research areas in which a "state of the art" has been developed which tells what research has been done, what has succeeded, and what has failed. Three areas mentioned as having a state of the art were alcohol, drivers licensing, and pedestrian safety. However, as shown below, there is doubt even in these areas.

"The NHTSA Alcohol Safety Action Program summary published in November 1979 states that because of this program what needs to be done and how to do it is now known. Yet a study which NHTSA released to the public at the same time says that the state of knowledge in alcohol problems is totally inadequate to design and operate drinking-driving programs. NHTSA officials said that neither report is a true state of the art for alcohol and highway safety."

We believe the information contained in our report and NHTSA's own comments clearly demonstrate that NHTSA needs to do more to develop a state of the art in these areas, particularly alcohol. If the information on which the plan is based is incomplete, the implementation of the plan will probably not produce the most worthwhile and needed results.]

NHTSA disagrees with the claim that it prepared the 403 Plan on Driver Licensing with insufficient background research. It is always desirable to have as much information as possible before planning begins. We presume that this is the context in which the statement was made to GAO. However, practical program considerations dictate that planning be initiated at some point to include where the knowledge and information available is thought to be sufficient, but not necessarily exhaustive.

[GAO COMMENT: Our draft report stated:

"NHTSA drivers licensing officials said that in many areas of drivers licensing, they need to know what is going on in the States to get a true state of the art. They said it would have been good to have background research done before the section 403 plan was put together."

We believe having adequate information on State activities would have been beneficial to NHTSA in preparing its plan. We have tried to point out to NHTSA the need to have the research community and the users--mainly the States--involved in the early preparation of the plan. This is an example of where that involvement would help.]

The need for "State-of-the-Art" papers has long been recognized by both TSP and R&D.

Traffic Safety Programs has the assigned responsibility of assembling program papers which address the state-of-the-art in the highway safety area. This responsibility has been fulfilled in a variety of ways: through issuance of Program Manuals, Issue Papers, Position Papers, and conduct of technology transfer workshops. In the last two years, for example, the agency has conducted workshops on Child Restraints, 55 mph and Policy Traffic Services, Citizen Participation, and Non-resident Violators. Research and Development staff are consulted at various stages in the development of these materials. (See listing on following page).

To emphasize this point further, this responsibility for providing state-of-the-art information is part of an ongoing process. GAO's characterization of these ongoing efforts, and our own recognition of the need for constantly improving the process, needs to be placed in a more objective and more positive light in the report.

Selected Recent Publications

- Evaluation of the Alcohol Safety Action Projects (ASAP), August 1979 (4 Volumes)
- Proposed 403 Program Five Year Plan for Research, Development and Demonstration, March 1979
- Materials on Motorcycle Operator Licensing. A state of the art compendium, August 1979
- Brochure on "Child Restraint Systems for Your Automobile"
- 1979 Issue of 55 MPH Fact Book
- Manual for Managing Community Alcohol Safety Education Campaigns, January 1978
- 55 MPH Model Plan for Public Communications, September 1979
- Brochure "Judge Yourself"
- A complete Training Program for Emergency Vehicle Operators including a special component for Police Pursuit Driving, July 1979
- Speed Enforcement Guidelines for Police Administrators, June 1979
- Report on Bus Carbon Monoxide Intrusion, September 1978
- Three Public Service Announcements on General Occupant Restraint Use distributed to States.

Selected Recent Workshops

- Four Technology Transfer Workshops for State and Local Officials (currently in progress)
- Ten Regional Workshops on Child Restraints conducted in 1979. Over 300 persons attended.
- Ten Regional Workshops on General Occupant Restraint Usage conducted in 1979. Over 400 persons attended.
- National Conference on Child Restraint Systems held in Washington, D.C., December 1979. Four hundred delegates attended.

- Non-Resident Violators Compact developed and presented to States during all four American Association of Motor Vehicle Administrators 1979 regional meetings
- Workshops on Citizen Participation planned with Women Highway Safety Leaders, 1979
- Presented and discussed 55 MPH and Police Traffic Service programs at all four 1979 regional meetings of the International Association of Chief of Police

[GAO COMMENT: This random list of publications and activities does not alter the fact that NHTSA needs to develop a state of the art, as stated in our draft report, "before planning/approving a project or going on to new areas." However, NHTSA has not done so. That it has not is evident from the information we obtained and presented in our report.]

GAO stated that NHTSA did not present sufficient rationale for the criteria used in setting priorities within and among projects. The plan, they said, does not adequately present problem identification information, and effectiveness measures are not detailed enough to assess the potential of many proposed projects (pg. 30).

[GAO COMMENT: These statements were made in the Transportation Research Board report--not by us--as follows:

"The conference report stated that the general view of conference participants was that the plan is a start but cannot be used as a working document for a number of reasons. They stated that NHTSA did not present sufficient rationale for the criteria used in setting priorities within and among projects. The plan, they said, does not adequately present problem identification information, and effectiveness measures are not detailed enough to assess the potential of many proposed projects."]

NHTSA recognizes that outsiders may have difficulty in replication of 403 priorities using the criteria stated on page 12 of the proposed 403 plan. In many cases, 403 program managers engaged in a qualitative assessment of priorities using best professional judgment, when numerical assessments were not possible due to the lack of data. It is this same professional judgment in assessing priorities that was sought in holding the 403 Conference in April 1979. We recognize that the priority setting process is not as analytically rigorous as auditors would like but it is one in which the judgment of outside experts is a needed and an invaluable asset.

[GAO COMMENT: NHTSA recognizes that the priority setting process requires the judgment of outside experts; however, outside opinions were not solicited until after priorities were set. We described the "Needs" study in our draft report because it appears to be more analytical. Documentation should be available for

the Congress and its auditors to review the manner in which the agency has utilized its funds.]

The 5-Year 403 Program Plan proposes conferences, workshops, and seminars to facilitate the participation of users in the priority setting process. NHTSA wants to share discussions and views with the user community in the priority setting area as well as in the resource allocation and intra-program priority setting areas. But, NHTSA management does not believe it should abdicate its decisionmaking responsibility. Rather users should have an opportunity to voice and share their views so that their opinions can be reflected in the agency's planning.

The National Academy of Sciences TRB Conference solicited views on priority setting and resource allocation both between program areas and within program areas. The extent to which the conferees were able to manage resolving these complex issues is demonstrated in TRB's final report and, in fact, was shown to be difficult to accomplish. Through those 403 program conferences scheduled in 1981 and 1983, we will continue our dialogue with the users relative to the setting of priorities.

The agency shares TRB's perception of the need to involve State and local agencies, and researchers. All parties generally understand the safety issues and localities are normally involved in performing effectiveness evaluations within their own defined jurisdictions.

Our current plans for involving State and local agencies and researchers in the 403 planning process include the following:

1. The 403 RD&D Conference at Dulles was only the first of many such conferences where the highway safety community at large may participate in the program-planning phase. For those who could not participate in the conference itself, there was and will continue to be, a docket to receive their comments and suggestions.
2. R&D and TSP will be holding Program Area Workshops for researchers and users to discuss specific projects. These workshops will provide a forum for exchange of ideas at all phases of research -- methodology as well as interpretation of results.
3. Technology Transfer Workshops are also being held regularly to provide State and local officials the opportunity to learn first hand of our RD&D results and products, as well as to provide us with an assessment of their needs and problems.
4. At the conclusion of every research project performed for NHTSA, a final technical report is due to this agency which is a capsule of what the contractor did. These final reports are available to anyone who wants them. We recognize that these technical reports sometimes may not be in the most desirable form for both the user or researcher, and that there is a need to translate the technical reports into a user ready document. We also hold contractor briefings which R&D and State officials can attend.
5. When problems arise that present particularly difficult methodological questions, we will hold a "Research Methodology Workshop" which will be designed to solicit comments and recommendations concerning significant research design issues. These workshops would be scheduled and conducted as the need arises and as appropriate.

[GAO COMMENT: We do not advocate the abdication of NHTSA's decisionmaking responsibility but do advocate a closer working relationship with the highway safety community in developing the plan. Our draft report stated that:

"Traditionally, NHTSA section 403 plans have been developed internally. The new 5-year plan was developed in the same manner, and although the users and researchers have been given the opportunity to comment on the plan, the general opinion of the highway safety community is that NHTSA has designed its plan and will not make substantial changes.

"NHTSA's acceptance in the past of input to the section 403 program has been limited. For example, States were asked several years ago for their opinions on what was needed in highway safety research, and about 35 States responded. NHTSA subsequently said that the responses were too varied to use.

"Other comments concerning section 403 programs in general and the new plan in particular were as follows.

--States, who are supposedly users of section 403 research results, say they do not know what NHTSA is doing with the section 403 program and consider it a Federal program with no input from them.

--NHTSA has not accepted or, in many cases, acknowledged unsolicited proposals for section 403 research from users or researchers. In fact, NHTSA has discouraged States and others or told them not to submit such proposals. This has contributed to reducing State interest in section 403 research programs and results which States might otherwise use.

--Some users had not seen the new plan until they arrived at the conference to discuss it.

--The present section 402 planning process has a provision that asks Governors' highway safety representatives to identify research needs. The representatives have not done this because (1) NHTSA has ignored this provision and (2) representatives feel their comments have not been given enough attention.

--Users and researchers state that NHTSA will not change its plan based on their comments, so why bother to comment."

Our draft report also recognized NHTSA's plans to involve States.

"NHTSA officials said that they plan to involve States more closely in research planning by (1) gearing their technology development program to correspond better to the highway safety plans that States develop in response to section 402 requirements, (2) holding conferences and seminars that involve the highway safety community in the planning process, and (3) making research plans public before implementing them. The Transportation Research Board conference report stated that users also want to have a continuing dialogue with NHTSA as the plan is implemented."

We also stated in our draft report that:

"* * * we believe that developing a 5-year plan is a step in the right direction and that NHTSA should use the plan to determine what work will be done when the plan is finalized. If external comments are received and given adequate consideration, NHTSA should be able to improve the plan and design research programs which will benefit States' highway safety programs."]

Regarding the statement that goal-setting should encompass both short-and long-term research, NHTSA conducts "programmatic" research (e.g., driver education, driver licensing, alcohol) and many of our programs have evolved over the last decade. The agency has a mission orientation on highway safety projects, and resulting products must be capable of application by practitioners and users.

The proposed 5-year 403 Program Plan provides for behavioral and driver-related research for which products can be specified in the near-term but which contribute towards solving long-term problems. These project areas include driver task analysis (Young Driver Program area), safe driver conformance (55 MPH Noncompliance and Unsafe Driving Actions program area) and motorcycle rider analysis (Motorcycle/Moped program area). In this sense the agency is conducting long-term research.

However, fundamental research, unsolicited proposals, and centers of excellence are important avenues which NHTSA wishes it had the funds to pursue in the course of highway safety product development. Unless funds for these areas are specifically earmarked by Congress, it is difficult for them to compete in the 403 program priority-setting process.

(NOTE: NHTSA has assumed that the terms "fundamental research," "basic research," and "long-term research," used by TRB in their conference proceedings reports, December 1979, are equivalent in meaning.)

[GAO COMMENT: The comments about goal-setting and short- and long-term research are from the conference report and are so attributed in our report.]

GAO infers that States do not know what NHTSA is doing with the section 403 program and consider it a Federal program with no input from them. (pg. 32)

The primary rationale behind NHTSA's publishing of the 5-year 403 Program Plan, and holding a conference to discuss the details of the plan, was to assure NHTSA's management that the 403 program does, in fact, address topics and needs user communities perceive as most important. The conference provided an opportunity for users to put forward their views on the direction of the 403 program in responding to specific 403 program proposals made by NHTSA. Using this formal mechanism of peer review, user views will be considered by NHTSA management during the agency's planning and budgeting process and be reflected in the updated Five-Year Program Plan to be published during Fiscal Year 1980.

[GAO COMMENT: On pages 32 to 34 in the draft report, we pointed out that outside sources need to be included in the planning process and proceeded to show that a problem currently exists. NHTSA, in our opinion, has not given sufficient recognition to this very serious problem, and this reluctance can only perpetuate the problem. The pertinent paragraphs referred to by NHTSA, which demonstrate the problem, are as follows:

"NHTSA's acceptance in the past of input to the section 403 program has been limited. For example, States were asked several years ago for their opinions on what was needed in highway safety research, and about 35 States responded. NHTSA subsequently said that the responses were too varied to use.

"Other comments concerning section 403 programs in general and the new plan in particular were as follows.

--States, who are supposedly users of section 403 research results, say they do not know what NHTSA is doing with the section 403 program and consider it a Federal program with no input from them.

--NHTSA has not accepted or, in many cases, acknowledged unsolicited proposals for section 403 research from users or researchers. In fact, NHTSA has discouraged States and others or told them not to submit such proposals. This has contributed to reducing State interest in section 403 research programs and results which States might otherwise use.

--Some users had not seen the new plan until they arrived at the conference to discuss it.

--The present section 402 planning process has a provision that asks Governors' highway safety representatives to identify research needs. The representatives have not done this because (1) NHTSA has ignored this provision and (2) representatives feel their comments have not been given enough attention.

--Users and researchers state that NHTSA will not change its plan based on their comments, so why bother to comment.

"Because of comments, situations, and opinions such as those above, many researchers and users did not submit written comments to NHTSA on the plan. In fact, NHTSA received only 26 responses to the docket published in the Federal Register. NHTSA officials told us that this was because most users and researchers felt that they made their comments at the conference. Although that may be true in some cases, a large part of the nonresponse may be that the highway safety community does not believe NHTSA will use their suggestions.

"This is substantiated to a degree because NHTSA officials from both Offices of Research and Traffic Safety Programs told us that they did not foresee any substantial changes in the 5-year plan as a result of docket comments. They said (1) the commentors did not understand NHTSA's reasoning; however, NHTSA did not provide that reasoning, (2) many comments were unrealistic, (3) the contractors were biased, and (4) the comments are too directed toward broad basic results.

"On December 31, 1979, NHTSA received a report from the Transportation Research Board encompassing comments, conclusions, and recommendations made during the section 403 conference. NHTSA officials were uncertain what changes would be made in the plan as a result of the report and said that NHTSA would respond to the report in May 1980.

"The report stated that a major concern of conference participants centered on how to involve State and local highway safety operating groups and researchers in planning NHTSA's section 403 program to (1) avoid duplication of effort among the States, all levels of Government, and between section 402 and 403 programs and (2) to ensure that Federal programs are relevant and can be applied to State and local needs."]

With regard to the GAO statement concerning unsolicited proposals, NHTSA has a formal review process but does not have a formal funding process. As a result very few unsolicited proposals are funded in any given year.

Funds for Section 403 work have never been adequate for financing projects conceived outside our national planning exercise. In fact, funds are not fully adequate for indepth work on all known direct and indirect safety concerns of the States and localities. Hence, the agency has never had the flexibility or opportunity to set aside funding for work that is essentially unspecified during the actual planning and priority setting process. If additional funds to properly focus on unsolicited project proposals and fundamental research were earmarked and made available, NHTSA would implement such a procedure as TRB recommends. Provided that the requested funds are made available to NHTSA in FY 81, Innovative Project Grants (sec. 407, Surface Transportation Assistance Act of 1978) will provide a new avenue for unsolicited proposals from State/local jurisdictions as well as all non-profit organizations.

[GAO COMMENT: Our draft report stated that:

"--NHTSA has not accepted or, in many cases, acknowledged unsolicited proposals for section 403 research from users or researchers. In fact, NHTSA has discouraged States and others or told them not to submit such proposals. This has contributed to reducing State interest in section 403 research programs and results which States might otherwise use."]

NHTSA considers the Governors' Representatives, law enforcement and motor vehicle administrators and others in the highway safety community to be important participants in the priority setting process and every opportunity will be made available to them to provide their views. The Regional 403 Program Review workshops proposed in the 403 plan were designed specifically for the Governors' Representatives and their staffs. Representatives from each of the major groups making up the highway safety community participated in the 403 Conference in April 1979, and to the extent possible, participated in priority setting at that time. Also, Appendix G of the Highway Safety Plan, prepared annually by the States for submission to NHTSA, provides an excellent opportunity for States and local jurisdictions to describe their research needs to the agency. In addition, administrative procedures which have been proposed to support the Innovative Project Grants (Section 407, Surface Transportation Assistance Act of 1978) will involve the Governors' Representatives and others in a review role.

GAO says that participants stated that the conference provided an opportunity for all the highway safety community to get together and discuss the priorities and the criteria for setting priorities. This interface should make the research output more acceptable to users. Conference workshops suggested adding several criteria to set priorities for NHTSA's programs in its 5-year Plan. These are as follows. (pg. 31)

1. Is the project relevant to other state-of-the-art activities?
2. Does the project's probability of success currently justify the time and money already invested in it?
3. What will be the impact of social and economic change on any counter-measure the project might produce?
4. Will the project's end result be maximum safety with minimum impact on mobility?

We agree with all of these and they are considered as we set priorities.

NHTSA has devised a comprehensive and rational set of criteria for its 5-year plan, and these are fully documented in the plan. TRB's first criterion regarding state-of-the-art is among our original criteria. We also consider the implications of the second criterion as we make programmatic decisions. This was implicit in our plan. The third and fourth criteria were major

factors within our criterion regarding "probability of implementation." We do assess social and economic consequences in order to improve odds of State and local acceptance and use of our technical assistance. Safety and mobility are obviously important factors in setting priorities; but cost, utility, existing State infrastructure, and other factors are considered as well, precluding the maximization of safety and mobility. The GAO report should acknowledge these facts rather than emphasizing a failure of the Agency to set sufficient criteria for determining priorities.

[GAO COMMENT: In its comments, NHTSA omitted the paragraph following the four suggested criteria in our draft report. The paragraph follows.

"However, NHTSA officials indicated that the criteria listed in the 5-year plan is the criteria which will be used for prioritizing. A NHTSA planning official said that the first three criteria were already included in NHTSA's criteria and that he did not think the fourth would be included."

We believe this paragraph adequately points out NHTSA's position. However, we have revised the paragraph's last sentence in our final report to reflect NHTSA's comments on the fourth criterion.]

In a real sense, the Section 407 Innovative Grants Program is a useful response to the idea of unsolicited proposals. Section 407 will offer new and separate funding for unsolicited proposals from States and localities and non-Government organizations or individuals. Researchers will be eligible as well, although our initial development of Section 407 processes indicates that this program will be more operational in nature than experimental. Basic research will thus constitute a lower priority. In initially recommending an innovative grants mechanism in our Report to Congress on Highway Safety Standards (July 1977), the issue of unsolicited proposals was a significant factor. The objective was to encourage States, localities, universities, private researchers and other experts to propose innovative approaches for solving highway safety problems. We recognized that the incentive grants program was subject to criticism, and an innovative grants approach satisfied many concerns. Section 407 also alleviates the impractical concept of fitting unsolicited proposals into a developed Section 403 Program.

[GAO COMMENT: Because the section 407 program is not operational, no comment is necessary.]

GAO states that the present section 402 planning process has a provision that asks Governors' Highway Safety Representatives to identify research needs. But GAO suggests that the representatives have not done this because (1) NHTSA has ignored this provision and (2) representatives feel their comments have not been given enough attention.

NHTSA has amended the time frame for the submission of research needs (Appendix G, Highway Safety Plan) so that adequate time is available to support the identification of each State's highway safety needs, and that the identification of such needs does not compete with manpower required for HSP preparation. Beginning with FY 1981, Governor's Representatives will be allowed to submit Appendix G six months after their HSP submission.

[GAO COMMENT: The NHTSA/FHWA highway safety program manual dated February 1978 states that appendix G "may be submitted with the HSP (highway safety plan) or at any other time during the year." We asked in April 1980 for the amendment mentioned above and were told by a NHTSA Associate Administrator for Administration official that the manual had not been amended since February 1978. Moreover, it appears that States were free to submit appendix G whenever they wanted under the 1978 manual.

The problem that "representatives feel their comments have not been given enough attention" is more serious and contributes to the previously mentioned credibility gap. NHTSA should work in a cooperative attitude and accept suggestions and comments for improvements.]

On pages 32 and 33 of the draft report, GAO states that anonymous users and researchers believe that NHTSA will not change its plan based on their comments, so why bother to comment. (pg. 33).

NHTSA is concerned that the outside community view affirmatively our decision to "open up" the 403 planning process to peer scrutiny and review with skepticism and reservations. Generally, new innovations are received with skepticism until they are proven to be of utility and value. NHTSA is confident that the publication of the updated 5-year 403 program plan during the summer of 1980 will make believers out of many researchers and practitioners. The net result, we hope, will be improved communications with the highway safety community, a desire on their part to offer new ideas, as well as the ability on their part to constructively criticize. NHTSA is one of very few agencies which has opened up the planning process for a major program to public scrutiny and review. Indeed, it is surprising that GAO has not lauded the agency for its actions. Based on the 403 Conference held in April 1979 and the TRB Report delivered December 1979, we believe that this new policy is working. The insinuation by GAO and others that NHTSA is insincere in advancing this new policy is unfounded.

Naturally, this new procedure had to begin somewhere and it began with this Agency taking responsibility for conducting an internal 403 program review. NHTSA did not believe that "outside committees" were appropriate in drafting the original 5-year plan in that ample opportunity would be given to researchers and practitioners to voice their opinions once NHTSA had formalized its own plans by means of a published document. This plan represented the "best shot" and NHTSA management then asked for outside comment so that warranted adjustments can be made and the views of the community can be reflected in subsequent updated plans.

[GAO COMMENT: We talked with responsible officials within the highway safety community who gave substantial evidence to support the concern about NHTSA's future actions on the section 403 program. On the other hand, we have given NHTSA credit for what it has done so far; however, a final verdict will depend on future NHTSA actions. As stated in our draft report:

"* * * we believe that developing a 5-year plan is a step in the right direction and that NHTSA should use the plan to determine what work will be done when the plan is finalized. If external comments are received and given adequate consideration, NHTSA should be able to improve the plan and design research programs which will benefit States' highway safety programs."]

GAO believes that NHTSA, in any effort to redesign its planning process, should take a close look at the FHWA and National Cooperative Highway Research Program Planning methods.

NHTSA agrees with the principle of involvement represented by the NCHRP process which was praised by the Conferees. But, as a procedure or process, the agency does not envision utilizing any aspects of NCHRP.

It is our understanding that NCHRP involves the pooling of the State's own resources for purposes of solving problems of mutual interest and hence is not a Federal program. It is also our understanding that NCHRP participants sit down under the leadership of TRB and AASHTO to decide priority needs and proposed projects to be funded. To our knowledge, no States have volunteered to pool their 402 resources to accomplish this end.

Relative to administering the agency's contract program, NHTSA does not agree with these other aspects of the NCHRP process; specifically, (1) peer involvement in research design, and (2) selection of methodological approaches. We do not believe that it is appropriate for the research community to write the RFP's they will ultimately bid on, or for that matter, participate in the selection of contract recipients. This procedure appears to be a conflict of interest.

[GAO COMMENT: Our draft report stated:

"We believe NHTSA, in any effort to redesign its planning process, should take a close look at the FHWA and National Cooperative Highway Research Program planning methods. These two planning systems can provide valuable guidance to NHTSA's formulation of highway safety research."

NHTSA agrees with the principle of involvement represented by the NCHRP planning process, which was praised by the conferees. However, it does not envision utilizing any

aspect of NCHRP. Based on NHTSA's comments, it appears that NHTSA has not taken a close enough look at the NCHRP planning process. Federal funds--actually from one of the Department's own organizations--are used under NCHRP, as shown in the following from the 1979 Federally Coordinated Program of Highway Research and Development (FHWA, January 1980).

"The NCHRP results from a contract between the American Association of State Highway and Transportation Officials (AASHTO), the Federal Highway Administration, and the Transportation Research Board (TRB). Research activities are selected by a special committee of AASHTO and are administered by TRB by contract with approval by the State highway officials.

"Under this program, 4.5 percent of Federal-aid HP&R funds is pooled voluntarily by the States to fund research activities structured to respond to the needs of State highway departments. Because FHWA is technically responsible for Federal-aid funds used in NCHRP programs, it reviews contractor selection and program content. However, program selection and composition remain the prerogative of AASHTO and the participating State highway agencies. Research efforts that contribute to FCP objectives are integrated into the FCP."

We believe that incorporating some of the NCHRP planning process, which includes State involvement, would not necessarily be a conflict of interest.]

GAO RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION - CHAPTER 3

- Explicitly define the roles of the Office of Research and the Office of Traffic Safety Programs and ensure they operate within their roles.
- Establish a formal planning process consistent with internal and external input to (1) help analyze all available information and develop a state-of-the-art in the area, (2) prioritize program areas and projects within the areas, and (3) include all section 403 activities.
- Review FHWA and the National Cooperative Highway Research Program Plans, incorporating beneficial procedures for analyzing available information, setting research priorities, and obtaining outside views on those priorities.

[GAO COMMENT: NHTSA has omitted an important part of the first recommendation, which reads as follows:

"We recommend that the Secretary of Transportation require the Administrator, NHTSA, to:

--Explicitly define the roles of the Office of Research and the Office of Traffic Safety Programs and ensure they operate within their roles. In doing so, the Administrator should determine who will have overall responsibility for the section 403 highway safety research program and delegate authority to carry out the program."
(Underscoring shows portion omitted by NHTSA.)]

DEPARTMENT OF TRANSPORTATION POSITION

The roles and organizational and functional responsibilities are well defined. Each NHTSA Administrator, since establishment of the agency, has focused on the roles and responsibilities of R&D and TSP and has concluded that there must be two separate and distinct offices sharing responsibilities for 403 program management. The role of the Office of Research and Development focuses on research and discovery, and the role of the Office of Traffic Safety Programs focuses on demonstration and application. The present Administrator, prior to the preparation of the proposed 5-Year 403 Plan also thoroughly examined those functions and responsibilities and confirmed that two separate and distinct offices were essential.

During the last 2 years, in preparing the proposed 403 Plan, significant effort has been devoted to addressing and better defining these roles; for each project in the Plan there is a clear assignment of organizational responsibility.

There are some projects where reasonable minds can differ as to whether it should be assigned to R&D or to TSP. The 403 planning process identifies not only what is to be done but also who is to do it. Any disagreements are resolved by the Administrator. If either Associate Administrator so requests, any such decision is again reviewed during the budget process.

[GAO COMMENT: Our draft report conclusions stated that:

"* * * research responsibilities of the Office of Research and the Office of Traffic Safety Programs have not been defined. Friction between the two offices has contributed negatively to an already complex research area and has made effective planning and priority setting difficult or impossible.

"Although a more formal planning process has been established, there is no assurance that it will continue, especially since the friction still exists between the two offices."

The draft report also stated that:

"In talking separately with officials of both offices, it was evident that their roles in research were unclear and that they disagreed on various philosophies. They both felt that the other office was encroaching into areas where it should not be."

We believe we have adequately demonstrated that problems still exist, as noted above, and that it is necessary to identify who besides the Administrator will have overall responsibility for the highway safety research program.]

As GAO knows the agency has established a formal planning process which will involve peer review and community input in helping to analyze the state-of-the-art, establishing intra-program and inter-program priorities, as well as allocating resources between and among program areas. The updated 403 program plan proposed 12 months ago to be published in final form in the near future will focus more closely on the relation between the National Center for Statistics and Analysis (NCSA) and the 403 program data needs, as well as reflect Congressional decisions with respect to the National Driver Register (NDR). NHTSA has examined the process by which FHWA conducts the Federally Coordinated Program of Highway Research and Development (FCP), identified the relevant features pertinent to this agency's operations, and have developed a system which we believe is more productive and appropriate for our 403 program. The NHTSA system will provide more independence, assure fair competition in the procurement process, more mechanisms of interaction with users, and provide greater program review.

[GAO COMMENT: We recognized the new formal planning process in our draft report conclusions. We also recognized that:

"The research plan that has been developed is not adequate because NHTSA did not

--analyze all available information,

--systematically prioritize proposed programs,

--include the outside highway safety community in the planning process, and

--include all section 403 activities in the plan."

In addition, we stated in our conclusions that:

"However, we believe that the plan is a step in the right direction and potentially could help to develop programs with results States could use in their highway safety programs. This cannot be accomplished until NHTSA closes its credibility gap with States and the highway safety community in general."

From NHTSA's overall comments, we cannot help concluding that NHTSA believes all is well between it and the States, users, and the research community. This lack of acceptance of the extent of the dissatisfaction with NHTSA will not, in our opinion, contribute to solving the problems. Our review demonstrated that a problem exists, and we believe NHTSA should make every effort to resolve it.

Since NHTSA did not describe how it examined FHWA's planning process and did not specify why it considers its own system better, we cannot comment. However, it appears that there are beneficial procedures in both the FHWA and NCHRP systems which could be used.]

CHAPTER 4: USE OF HIGHWAY SAFETY RESEARCH RESULTS

Chapter 4 of the GAO report discusses the impact of the highway safety research program and the availability of the methods used to determine the extent of the impact on State and local safety programs.

The GAO comment, that it is difficult to determine the extent section 403 research is used, is valid. Further, NHTSA does not have a formal mechanism for collecting that information, although the working relationship that NHTSA maintains with Governor's Highway Safety Representatives, national organizations of police, the judiciary, motor vehicle administrators and other elements of the highway safety community does provide a reasonable amount of information. 403 produced materials which have user relevance, i.e., that have reasonable applicability for operational use (positive or negative), are published and disseminated to the elements of the highway safety community listed in the GAO report. These publications are also distributed to Governor's Representatives, and other State and local operating officials, as a result of the planning interaction that occurs at the Federal, State and local levels under the 402 program.

The establishment of a formal mechanism for collecting this information is being approached with delicacy by the agency. The paperwork implications and cost effectiveness ramifications of formally collecting data on State use of 403 results needs to be thoroughly evaluated. The informal network to provide wide sharing and collection of knowledge in use of 403 results is very effective. NHTSA experts in various facets of safety share and widely disseminate their knowledge with safety experts and practitioners throughout the country. Also, the Highway Safety Literature (HSL) includes and disseminates information on all finished research on a world-wide basis.

[GAO COMMENT: Our draft report recognized that there is an informal process for collecting information on use of section 403 results. On the basis of our review, we believe this informal process is not as effective as NHTSA believes it is. Our draft report stated

"NHTSA officials said there is always a final report on each research project; however, they said that they have difficulty finding effective ways to disseminate the results of research. The agency recognized promotion and dissemination of results as a key element in the 1980 plan.

"The 1979 Transportation Research Board conference report which examined NHTSA highway safety research problems, stated that some section 403 reports are not available to users at State and local levels. Many education, public information, and training materials seem not to be released at all, and obtaining past work or work in progress is difficult, according to the conference report."]

NHTSA also agrees that users are not concerned with the funding source of highway safety innovations, and cannot necessarily provide information related to the use of any particular program results. Notwithstanding, it is disconcerting to review what the State and local highway safety officials from eight States are reported as saying in the GAO report. Each of those States have several alcohol safety programs currently in operation, with substantial operating elements grounded in the 403 findings of the ASAP program. Each of those States have an emergency medical services program which uses 403 findings and products in communications, personnel training and ambulance design. Each of those States have a number of officials and operations personnel who have recently attended one of NHTSA's workshops on passenger and child restraints, on police traffic services, on highway safety public education campaigns, and on highway safety data analysis programs and evaluation techniques.

[GAO COMMENT: Our draft report stated that

"* * * the users do not always know where an innovation originates and cannot necessarily provide information related to the use of any particular program results."

We also believe this is evidence that NHTSA's informal mechanism for collecting information on the extent to which section 403 research is used is not as effective as NHTSA believes it is.]

However, strong objection is made to the GAO statement that "further indication that much research is not used comes from NHTSA itself." GAO claims that, when NHTSA was asked to provide a description of how contract results were used, only one of the TSP office responses indicated that specific States used the results. This is incorrect, GAO is misusing the information that it requested to address an issue which it did not pose in the request. In the request to TSP of October 10, 1979, the GAO asked the following for 49 contracts:

"--Did the results lead to further research and/or to a TSP demonstration project and/or to use by States, local governments, etc.?"

Because of the phrasing of the request, TSP responded to that request with a description of the generalized use. The identification of some specific users was included as an incidental or gratuitous piece of information. TSP could provide much more information as to specific users of 403 products had it been asked, even though TSP does not have a formal mechanism for collecting this information. Further, of the contracts on which TSP provided information, there were several instances where specific State users were listed, in addition to the "one" noted by GAO. Finally, not all of the project efforts anticipated products for direct State and local use. Some were for data to provide a report to Congress, some were for problem identification or process examination efforts, and others for legal research services, all of which have potential or indirect application to users--but not direct utilization.

[GAO COMMENT: We did not misuse the information. Our request was for detailed information from NHTSA as follows:

"--Did the results lead to further research (list title and contract number) and/or to a TSP demonstration project (list title and contract number) and/or to use by States, local governments, etc.?" (Underscoring shows portion of quote omitted by NHTSA above.)

We believe that our request was clear and thought that detailed responses to the extent known would be provided. We accepted the responses as being complete. However, because of NHTSA's objections to our reference to specific numbers of contracts and use of results, we have deleted those numbers and have revised the paragraph in the final report. It should be noted that in its extensive comments, the Department did not provide a listing of the specific users of the results of the 94 research contracts in question.]

Another finding in this chapter was that users and researchers lack confidence in highway safety research results because the potential users have not been involved in planning research efforts that they consider most important. In addition, the GAO report cited examples of "unrealistic" studies identified as such by researchers and potential users.

The GAO report lists a number of factors surrounding the solicitation of a project to demonstrate 55 mph enforcement, using it as an example of unrealistic planning which has lead to users and researchers having a lack of confidence

in highway safety research. These factors, and the basis behind them are as follows:

- GAO stated that: "When NHTSA solicited States -- only two States responded."

Prior to solicitation, this project was discussed with all State law enforcement administrators during the four regional conferences of their national organization. They all expressed support for, and interest in the objectives of the project. Many expressed their intention to submit a proposal. It was known that not all States would be able to bid because the periods of maximum manpower need required 24 officers on patrol. It was known that not all States are capable of fielding that number at once -- however, there are many States which could. Also, during the planning phase and discussion with the State law enforcement administrators, no one anticipated that all the patrol personnel involved in the project would have to be paid on an overtime basis. This was not a requirement, but it turned out to be a budgetary fact-of-life when the States began to consider their manpower costs. In effect, when considering whether to bid on the projects, the States were faced with either using overtime for the project and charging Federal 403 funds, or of using overtime for their other duties and charging their own budgets with increased payroll costs. The States, which were considering a bid, determined that the costs far exceeded the funding available under 403, so they didn't bid.

- The draft report also stated that: "One of the (two) States (responding) withdrew its bid."

The State withdrew when it realized that in order to test the increased driver compliance with the 55 mph speed limit, that it would have to stop -- and at least warn -- drivers who were exceeding 55, i.e., 57/58 or above. As a policy that State did not want to stop at speeds less than 65. Stopping drivers only at 65 and over would have had no effect on promoting compliance with the 55 limit. If this State had not withdrawn, NHTSA would have had to declare their bid unresponsive.

- Finally, GAO stated that: "NHTSA's original proposal included both urban and rural speed enforcement as well as a public information and education campaign."

This is true. These aspects of the original design had to be reduced to get the project costs down to a level which could be supported with the amount of 403 monies available. The overtime situation described above, as well as a doubling in the price of gasoline, required these adjustments. Our second RFP was corrected to meet these increased cost levels.

Also, note that the TRB Conference committee on the "55 MPH Non-Compliance and Other Unsafe Driving Actions" program area (which included a number of representatives from State Highway Safety and State Police agencies) rated this project their number one priority.

[GAO COMMENT: NHTSA does not dispute our facts but only elaborates on various parts of the example. Overall, the added facts illustrate that the study was, in effect, unrealistic.]

Another example of an "unrealistic" study was provided which involves NHTSA's "program to prevent drunks from driving".

The GAO Report statement referencing NHTSA's "program to prevent drunks from driving" is misinformed; although the costs cited for conducting all NHTSA in-vehicle alcohol safety systems research over the past decade are substantially correct.

The following statement concerning NHTSA research on in-vehicle alcohol safety devices and systems was provided to the GAO representative during his interview with NHTSA R&D management and staff personnel in January 1980. The same information was provided to the GAO office, in writing, shortly after the January 1980 interview.

From 1969 to 1972 NHTSA and TSC tested several marketed alcohol safety performance and breath test devices, the purpose being to test the first generation devices to determine their ability to discriminate between sober and alcohol impaired subjects, and their susceptibility to cheating. Tests were conducted in a laboratory setting. No automobiles were involved. None of these devices demonstrated acceptable differentiation between sober and alcohol impaired subjects. All of the devices including the breath testers demonstrated susceptibility to cheating.

From 1973 to 1975 subsequent improvements claimed for later devices led NHTSA and TSC to test four second generation performance devices and a breath test device for the same purpose as that of first generation devices. Alternative scoring strategies and individualized scoring baselines were also investigated in an attempt to improve devices discriminability to an acceptable level. Finally, an initial attempt was made to identify potential methods for cheating on each device, and to suggest countermeasures for responding to each cheating method identified. Test results indicated that one of the performance devices, Critical Task Tester (CTT), demonstrated promise as a discriminator between sober and alcohol impaired subjects, and with minor modifications, resistance to cheating. Additionally, legal and public acceptability issues ostensibly associated with the implementation of the device on a vehicle were identified. Thus legal and public acceptability issues review led NHTSA to abandon the interlock concept (vehicle cannot be started if the driver is determined to be impaired), and to recommend a warning system concept (vehicle may be operated if the test is not successfully completed but other drivers (and the police) are alerted by blinking emergency lights and at speeds above approximately 10 miles per hour by the horn honking). Finally, due to their susceptibility to cheating, breath test devices were eliminated from further testing. Tests of second generation devices, as was the case with the earlier first generation devices, were conducted in a laboratory setting. No automobiles were involved.

1976-77--NHTSA participated in the development of an in-vehicle alcohol safety system known as the Drunk Driving Warning System (DDWS), whose primary potential use would be as a penalty to be given by a judge to persons convicted of drunk driving. The DDWS emerged, in part, from the earlier research conducted by NHTSA and TSC.

The 1979 project referred to by GAO was awarded by NHTSA in September 1978 under Contract DOT-HS-8-02052 "Field Test of the Drunk Driving Warning System". The purpose of this project is to pilot field test the DDWS concept as a penalty for persons convicted of DWI to assess its: (1) effectiveness in discriminating between sober and alcohol impaired drivers and to deter drunk driving trips, (2) usefulness in a judicial setting, and (3) public acceptability. Project results will be used by the NHTSA Administrator in deciding whether or not to conduct a full scale field test of the DDWS concept. The current

DDWs being tested during the project is not an interlock but rather a warning system.

Although the work to date has not led to usable results so far, it has provided data to reject funding for test, development or application of various devices and concepts by various levels of government and has directed research efforts towards the more promising approach. Should this activity result in an effective and useful product in the future, it would have a very big payoff with the drunken-driving problem that has been difficult to ameliorate with traditional approaches.

The current project is proceeding with the support and cooperation of State and local officials. Interest in this project has been shown by numbers of the House Appropriation Committee during NHTSA budget hearings.

[GAO COMMENT: NHTSA does not dispute our facts but only elaborates on various parts of the example. We have incorporated NHTSA's terminology into our final report.]

The report cites reasons for potential users not using NHTSA research: (a) the users not always included in the actual research itself, (b) many section 403 contracts have led to results that cannot be used, and (c) assess NHTSA's research results in disproving proposed solutions. Examples of each reason were provided.

[GAO COMMENT: The Department has misquoted our statements. The correct quote from our draft report for section (a) is:

"State and local officials have not been interested in implementing NHTSA research results because the potential users have not been involved in planning research efforts that they consider most important."

In section (c) our draft report used the word "often" and not the word "assess."]

In response to these findings, the report implicitly criticizes several NHTSA projects for lack of positive results, suggesting that a project, whose net result is the determination that a proposed line of development is not feasible, was a waste of its funds. NHTSA does not concur with this criticism, nor does the research community in general. Negative results are the inevitable byproduct of an active and demanding pursuit of usable research products. Such results are meaningful in themselves, and serve to reduce expenditures by identifying false leads or counterproductive developments.

Similarly, highway safety research must expect to conclude occasionally, after investigation, that certain proposed safety measures are impractical, or unjustifiably expensive, or legally inadvisable, or simply unacceptable to the public. The lack of occasional negative results would either suggest that the research was unnecessary, since its results were perfectly predictable, or cast doubts upon the integrity of the research effort. It is surprising that GAO is not aware of these obvious assessments of research findings.

[GAO COMMENT: As excerpts below show, we recognized in our draft report that all research results will not be implementable and that lessons can be learned from such results, but it is very important that research show what works.

"NHTSA's research is not always used because many section 403 contracts have led to unimplementable results. State and local officials and researchers said that often NHTSA's research results in disproving proposed solutions. This can be useful in contributing to knowledge and showing users what does not work, but users also need new and innovative methods to improve highway safety. Our sample shows that NHTSA develops some usable and some unusable research and that some research takes a long time to complete."

* * * * *

"It can be expected that some research will have unimplementable results or take a long time to complete. However, potential users said these kinds of contracts occur too frequently. NHTSA should be especially conscious of these limitations because of its position as a research leader and should try to minimize these types of projects. Initial discussions with users to determine their needs will aid the selection of ideas for research which are most applicable."]

The NHTSA study in "Sobering Agents" referred to in the report was a relatively small scale study which assessed the effectiveness or ineffectiveness of pharmaceutical agents which appeared to reduce the impairing effects of alcohol. Data collected under carefully controlled conditions in a laboratory setting, however, indicated that none was effective in reducing significantly the impairing effects of alcohol. These data permitted NHTSA to eliminate large scale research on pharmaceutical agents, at a savings of several hundred thousand dollars to the government.

[GAO COMMENT: This is one of three examples which illustrate our point that research has led to proposed solutions being disproved.]

The report cited a University of Michigan study which referenced some NHTSA research projects which are not available, some not easily obtainable, and some not known to the research community and the public for months or years after project completion due to delays in NHTSA's dissemination process.

We are in agreement with the statement that awareness of research is necessary for its use and that negative results should be published to avoid duplicative research. To this end NHTSA abstracts and routinely announces final reports released by CTM's and report results, positive or negative, by means of Highway Safety Literature (HSL). All final contract reports are listed in HSL upon release and the final reports are available at the agency. HSL is a monthly publication and is widely disseminated to some 1,800 subscribers.

The Training Clearinghouse, set up in 1977 has, as its purpose, the collection of curricula materials and adding them to HSL. NHTSA-funded training materials under 403 funds have in the past been abstracted and announced, along with other NHTSA research reports, in HSL. However, it has never been part of the acquisition policy of HSL to abstract and announce anything but final reports or complete publications. Limitations of space, personnel and other resources require this kind of selectivity. It cannot be estimated how greatly space, budget and personnel requirements would have to be expanded to include reports of work in progress (i.e., Status Reports, Progress Reports, etc.)

If the HSRI study includes in its survey progress reports as well as final reports, they are surveying documents that have never been included in HSL for reasons cited above. Nor does NTIS include progress reports in its collections. This organization requires that publications submitted to them fulfill certain requirements before they are accepted. In every NHTSA annual report there appears a listing of research in progress. From time to time a section in HSL, entitled contracts awarded announces and abstracts new contracts. Both of these are intended to keep the public up-to-date on on-going research.

The cited University of Michigan study came up with the discrepancy between "reports resulting" and "reports available" largely as a result of the annual-quarterly reports generated during the ASAP program, consisting of 35 projects. NHTSA never intended to publish the individual annual and quarterly reports for all 35 projects, since the individual reports would have only a limited audience--based on sheer volume. Only a researcher working in that area of alcohol programs might have an occasional need for that level of detail--and then, only for perhaps a selected few of the documents comprising a single ASAP project report.

The final ASAP Report prepared and published by NHTSA (consolidated to 4 volumes) consists of an analysis of the aggregate results of the individual projects. It is designed to meet the information needs of a much wider audience--State and local program officials primarily. Reports which contain results which are newsworthy are flagged at the time the Contract Analysis Form is signed off by the Office of Public Affairs and Consumer Participation. If appropriate, a press release will be drafted and/or a press conference held. However, recognizing the occasional need of researchers for the individual reports, the vast majority of ASAP Quarterly, Annual and Final Reports have now been placed on microfiche, and are available to researchers in this form.

[GAO COMMENTS: We recognize that NHTSA does have several methods of disseminating reports and that there are a number of different types of reports which should not necessarily be available to everyone. However, the study done by Michigan University shows that there are many reports which should be available and are not. Concerning the ASAP reports mentioned by NHTSA, the Michigan report stated that, excluding the ASAP program reports, only 51 percent of all reports were contained in the better known and more easily accessible National Technical Information Service.]

GAO cited an example from the Michigan study that NHTSA had not produced training materials for motor vehicle inspectors although the \$50,000 contract had been completed 2 1/2 years earlier. The comment is incorrect. The training package was published and distributed to all appropriate State authorities through the Regional Offices and State highway safety agencies. Five courses, using the package, were held and close to 100 instructor trainers completed it. The package has not been used beyond those first five courses, primarily because all but 2 States and the District use private garages for inspection, and they are reluctant to require private garage owners to send their employees to a course which requires 3-5 days of training -- at their expense. However, the package was designed as a State-of-the-art program and, even though NHTSA believes that 3 - 5 days of training is not overkill for training inspectors to perform this critical function, NHTSA has decided that it would be better to shorten the course than provide no training. Accordingly, NHTSA is about to publish an eight-hour version, which can be self-taught. This short course was developed from the full package after consultation with all officials in charge of State inspection programs. GAO in this example and others, has apparently taken a comment from one outside source and printed it without any checking or verification with the agency or other officials.

[GAO COMMENT: The Department's comments do not contradict the Michigan study. In the case above, NHTSA did produce training materials, but they were not available to the public even though the \$50,000 contract had been completed 2-1/2 years ago. The Department's comment below is reflected in the final report.

"The package has not been used beyond those first five courses, primarily because all but 2 States and the District use private garages for inspection, and they are reluctant to require private garage owners to send their employees to a course which requires 3-5 days of training--at their expense."

It would seem to us that the study's objective should have been to develop results that could have been used by most States having an inspection system. The information contained in our report has been well documented by adequate evidence. Other examples in our report were verified with NHTSA contract technical managers and/or contract files.]

GAO RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION - CHAPTER 4

GAO recommends that the Secretary of Transportation require the Administrator, NHTSA, to develop formal processes to assess the impact or use of their research results and to:

- comment on all research to assist users in determining good, fair, or poor research,

- disseminate all results, and
- closely monitor contracts so that useable results can be developed with fewer delays.

[GAO COMMENT: This is a restatement of our recommendations and therefore no comment is necessary.]

DEPARTMENT OF TRANSPORTATION POSITION

NHTSA agrees with the principle of the recommendations and we have as our objective the development of these formal processes for all areas of internal review and research as listed in the recommendations. An interim system for the dissemination of all research results has been developed and is currently being implemented throughout the program offices.

The system includes:

1. The timely submission of draft reports and draft technical summaries by the contractor.
2. The preparation of report-specific mailing lists by the Contract Technical Managers prior to receipt of the final report.
3. The submission of final reports and final technical summaries by the contractor and their expedited review by the Contract Technical Manager. (The CTM has two weeks to review these reports and summaries).
4. The expedited release of final reports and technical summaries to users with a critical and immediate need for the information.

It is the policy of NHTSA to publish all final reports on 403 efforts (positive or negative) for use by program officials and/or researchers.

We believe that the above mentioned steps should be a giant step forward in the rapid dissemination of research results to users with a critical and immediate need, and improvement in the dissemination of completed research.

[GAO COMMENT: These are steps in the right direction and if properly implemented should improve the use of NHTSA research results. NHTSA did not comment on the lack of formal evaluation of the section 403 program and individual projects, which we believe is necessary to know what is worthwhile in highway safety and to plan further research.]

CHAPTER 5: CONTRACT MANAGEMENT

Chapter 5 of the GAO draft report discusses NHTSA's 403 contract management practice involving extended delivery dates, increase in contract costs, the situations causing them and resulting from them.

GAO states that extensive modifications extend delivery dates and increase costs and work needed to complete a contract.

Some, but not all, modifications result in increased costs and extended delivery dates. However, it is more efficient to modify the contract when the need becomes apparent than it is to accept less usable results. It is often not

possible to predict the exact tasks nor the exact amount of effort required to complete a specific research project and good management requires that changes be made. Contract modifications also allow the government to respond to things that are learned during the conduct of the research, thus we feel that the appropriate use of contract modifications is in the government's interest. They should not be minimized as recommended by GAO.

The report does not consider that contract modifications can and do save the government time, manpower, and money due to a much shortened procurement cycle and by avoiding the need for a new contractor to "get up to speed." There are other advantages to contract modifications. They save the time and effort of other contractors who might propose who are not likely to win. (Note: Some modifications must be approved by the Sole Source Review Board). Modifications help the CTM to maintain continuity. They build on expertise developed by the contractor, and procurement time is shortened for modification. Contractors who have contracts modified respond to knowledge learned during the basic contract which increases scope and/or make results (products) more useful.

[GAO COMMENT: Our draft report recognized that some modifications can be justified. However, NHTSA believes the high rate of modifications is not a problem, as shown in the following quote.

"The Office of Traffic Safety Programs' Associate Administrator told us that modifications were due to time extensions with or without money and to such causes as shifting funds, changing directions, salary increases, and demand for more people. The Associate Administrator also told us he did not believe 50 to 60 percent of the contracts having modifications was abnormally high. The Associate Administrator, Office of Research, told us that most modifications are due to unforeseen findings. He also said that most contracts are cost-reimbursable and if a contractor has overruns, the Government has to pay-- 'NHTSA cannot force a contractor to stick to the cost estimate,' i.e., the original negotiated contract cost. He said that some overruns are excusable and some are not. NHTSA officials do not appear overly concerned with contract modifications although modifications change the contract's scope and increase its cost."

Our draft report also showed the extent of the modifications as shown below.

"Of the 94 NHTSA contracts, 55 contracts were from the Office of Research and 39 contracts were from the Office of Traffic

Safety Programs. Of the 55 contracts in our Office of Research sample, 40--or about 72 percent--were modified one or more times for an average of about 5 modifications per contract. Of the 39 contracts in our Office of Traffic Safety sample, 34--or about 87 percent--were modified one or more times for an average of about 4.4 modifications per contract. Types of modifications include completion time extensions, additional work, and miscellaneous others."]

GAO has included a section entitled "Extensive modifications extend delivery dates and increase contract costs" which has two subsections, "Contract completion dates are often extended" and "Contract modifications add work and increase costs." An analysis of the contract modifications done by GAO is contained in this section, which GAO uses to support the contention that the number of modifications, suggests poor agency planning.

NHTSA disputes this conclusion as unfounded. The GAO has done a simple number count of the modifications without looking into the purpose and effect of each modification. NHTSA believes that closer scrutiny of the modifications demonstrates close monitoring of contract operations by the contract technical managers, and the implementation of NHTSA's policy of keeping the work statements of all contracts up to date and clearly specified at all times.

[GAO COMMENT: In reviewing NHTSA contract files, we compiled data on the modifications and the reasons for the modifications as follows:

"Some reasons for time extensions include adding new work to a contract, needing more time to write the final report, continuing investigations of accidents, getting a lower than expected sample of accidents, and awaiting clearance from other Government agencies for public tests and surveys. Because of the extensions to contract completion dates, NHTSA is not receiving its research on a timely basis."

The above quote shows that we analyzed the purpose of the contract modifications reviewed and the effect these modifications had on the original delivery dates. Also, the following examples from the draft report contained detailed information as follows:

--A 26-month contract for experimental field test of proposed antidart-out (e.g., not crossing the street between parked cars) training programs was modified to extend it five times: 13 months, 2 months, 3 months, 5 months, and 5 months--for a total of 28

months. (Total modification cost was \$32,291, and total contract cost was \$373,746.)

"--A 12-month contract for field test of a motorcycle safety education course was modified to extend it twice: 10-1/2 months and 14-1/2 months--for a total of 25 months. (Total modification cost was \$101,891, and total contract cost was \$214,935.)"]

Traffic Safety Programs has reviewed the "worst" cases of the 39 contracts which GAO used to draw their conclusions. This subsample is composed of 16 contracts which had a total of 102 modifications, or 6.4 per contract. The following findings are made:

- The 102 modifications directed 141 changes, which is consistent with our policy of combining actions, wherever possible, to reduce administrative effort.

[GAO COMMENT: This comment further supports our finding of many modifications per contract, which indicates poor planning.]

- The most frequent action was to keep the contract statement of work up to date (49 of the 141, or 35%). These actions consisted of incorporating detailed work plans, specific schedules of performance adjustments to contract effort to accommodate preliminary findings, etc., into the contract statement of work. These actions are in accordance with NHTSA policy of clearly specifying at all times, for the contractor, what he is expected to do, and of protecting Government interests by specifying what it expects to receive. NHTSA believes that these figures demonstrate that it is providing the close monitoring and management attention which GAO claims is not provided. These are not actions indicative of poor planning.

[GAO COMMENT: We believe that what the contractor is expected to do should be clearly specified initially. We certainly agree that the contracts should be clear and carefully monitored; however, the extent of the changes in NHTSA contracts indicates poor planning.]

- The second most frequent action was to provide funding increments to contractors (35 of the 141, or 25%). It is NHTSA policy, for moderate to large cost contracts to not obligate the total contract cost, but, rather, to spread it out over time. NHTSA believes that this permits more effective use of funds available for obligation by not obligating the funds until they are needed. NHTSA believes that this policy demonstrates prudence in the manner in which it handles its obligational authority.

[GAO COMMENT: Our report did not criticize this type of modification.]

- Only four actions were taken to change the scope of the work, three to increase the scope and one to decrease the scope based on interim findings. These four actions comprise 3% of the total.

[GAO COMMENT: We could not determine from the contract file information how many modifications changed the scope. However, 4 contracts out of 16, with changes in scope, represent 25 percent of contracts requiring change, which indicates poor planning. Also, we did not review changes in scope as a separate topic and have not verified NHTSA's analysis. Our draft report stated:

"Of the sample contracts, 85 percent of the Office of Research contracts and 67 percent of the Office of Traffic Safety Programs' contracts were modified for additional work or to change or continue previously stated work. Most of these modifications increased the cost of the contract. One modification from our sample of contracts increased the cost of the contract by \$756,844."]

- Twenty seven of the actions (19%) provided time extensions and fifteen of the actions (11%) added additional funds to the contract. Given the difficulties which can arise in any research and development effort, NHTSA believes that these actions are representative of the nature of the work and are not excessive. Of the time extensions, most were for 30 day extensions, and 15 of the 27 occurred in just 4 contracts. A review of these 4 contracts indicates that the reasons for the large number of extensions for these four were consistent with the highly developmental nature of the work being performed.

[GAO COMMENT: As our draft report stated:

"Although some modifications are justified because of the difficulty of research and development, the number of modifications indicates poor planning."

We believe the following examples which were included in our draft report clearly illustrate the problem.

--A \$444,426 contract, titled 'Safety Belt Usage in the Traffic Population,' was modified at a cost of \$19,943 toward the end of its contract period to obtain data on position of passengers. The original contract only collected data on driver seat belt usage. The modification was needed to determine if out-of-position passengers would be a problem when passive restraints were used. This contract was

also modified to add a survey of driver/owners to obtain attitudes toward passive restraint systems in the VW Rabbit and GM Chevette at a cost of \$33,555. This modification appears not to be in line with the original purpose of the contract, i.e., to observe and record belt usage. (Total contract cost, including other modifications, \$555,822.)

--A \$97,049 contract for a truck and bus safety inspection demonstration project was modified to increase the number of vehicles inspected at a cost of \$32,543. (Total contract cost \$129,592.)

--A \$17,600 contract was modified to a total value of \$106,082. The sole source contract's objective was to inform NHTSA Office of Traffic Safety Programs' staff of all major pending and recently enacted State legislation on drugs and alcohol as they relate to highway safety and to provide an analysis of these laws. The original contract was for 1 year, from May 1975 to May 1976 but was extended for \$9,627 to continue the contract work to March 1977. It was again extended to March 1978 to continue the work at a cost of \$28,870, more than the cost of the original contract. The contract was extended again to March 1979 for \$24,990 for the same reason. The contracting officer noted that the next requirement should go out competitively in fiscal year 1979. However, the contract was modified for \$24,995 to extend it to March 1980. (Total contract cost \$106,082.)"]

- Eleven of the actions were to change contract technical managers (CTM's). On page 56 of the report, GAO claims that 25% of the TSP sample had one or more CTM changes. We interpret this to mean 10 contracts had CTM changes in the GAO sample. By inference, eight of these 10 contracts were included in the TSP subsample of 16. Except for two contracts in which more than one CTM change was made (both as a result of a series of staff reassignments) all the other 6 contracts has only a single CTM change. Of these 6 changes, one was the result of retirement, one the result of staff reassignment, two were to change the CTM from a person with technical expertise to one with management expertise (once the technical effort has been specified in final form), one was to shift management to a Regional Office staff person to provide closer management, one was to add a Co-CTM to provide for co-management in a complex technical data management

system study. As was stated by the Associate Administrator for TSP, turnover in contract technical management should be kept to a minimum. However, some changes are unavoidable, and some are in the best interests of contract management.

[GAO COMMENT: The Department discussed the 25 percent of TSP contracts which had contract technical manager changes, but did not discuss the 54 percent of Office of Research contracts which had contract technical manager changes. Moreover, the draft report recognized that there are reasons for manager changes-- "turnovers include staff changes, retirements, and promotions." We concluded in our draft report that manager turnover results in loss of continuity and recommended that the Offices of Research and Traffic Safety Programs "make every attempt to reduce contract technical manager turnovers."]

The visual information processing project referenced in the draft report was modified on five occasions; as is often the case in research studies where information gained early in the study influences later activities. In the present instance these modifications involved four no cost time extensions which could not have been forecast at the time the work was initiated, and a modification involving funds and time for computer support and maintenance. The four no cost time extensions resulted from difficulties in: (1) developing a unique sophisticated computer program for compiling and analyzing project data; (2) recruiting subjects under very stringent requirements, i.e., males, heavy drinkers, capacity for easily drinking beyond the legal blood alcohol limit, uncorrected vision, and availability to participate in data collection seven times over a one month period; (3) analyzing an extremely large data set which exceeded the one foreseen as becoming available at the time that the work was initiated; and, (4) writing a satisfactory final report incorporating the total data set collected during the project. The fifth modification, a cost overrun of \$22,895., represented approximately 15% of the original project total, and was used in support and maintenance of the PDP-8 computer on which data were stored and analyzed.

[GAO COMMENT: NHTSA does not dispute the facts in the draft report.]

The field test of a motorcycle education course, cited on page 49 of the draft as an example of how research results are delayed by contract modification, is, in fact, a good example of how time and money were saved.

The contract, awarded in July 1977, was scheduled to be completed twelve months later, and would have been completed then if the results had not shown the need for extensive course revisions. NHTSA could have directed the contractor to deliver the revised, but untested course, and closed out the contract on time. Instead, NHTSA chose to modify the contract, extending the completion date and adding money to field test the revised course during the 1978 riding season. Had NHTSA closed out the contract on schedule, the cost of agency staff time for soliciting bids and awarding a new contract would have to be considered in the overall costs associated with delivering the research product, the field test of the revised course would have been delayed by one full year, or until the 1979 riding season, and the government would have had to pay the start-up costs associated with the field test amounting to \$60,000 for such things as instructor preparation, construction of motorcycle storage facilities, and purchase of training equipment.

[GAO COMMENT: The Department does not dispute that the contract was extended 2 years. This example was one of three given to show that time extensions are made on 79 percent of Office of Traffic Safety Programs contracts in our sample. The additional information provided above is not relevant to the purpose of presenting this example.]

In response to the GAO finding regarding the contract which compared drug use in driver fatalities, we agree that this modification increased the cost of the study. However, this was based on a technical review of the validity of the data and the need to improve a weakness in the original plan.

[GAO COMMENT: NHTSA's comment further supports our contention that the high number of modifications indicates poor planning.]

The "Public Acceptability" project is considered an important project in that it will provide information regarding the expected public reaction to a number of potential highway safety countermeasures. Some highway safety countermeasures have won the overwhelming support of the public, while others, that have documented lifesaving ability, have nevertheless been rejected by a major segment of the public. This situation has significantly limited the agency's ability to develop or apply effective programs. It has become increasingly apparent that successful implementation of these programs can be seriously undermined when public reaction to them is negative. In addition, public objections to a particular program may carry over and endanger the success of other highway safety programs. Furthermore, we recognize that not all knowledge resides in Washington, and feel that both specialists and the lay public can often provide useful and innovative suggestions. It is clear that determining public opinion, and the basis for any negative reaction, at an early stage in the development process, is cost effective. The "Public Acceptability" project is such an endeavor.

The reasons for the modifications cited in the GAO report are incorrect. The modifications were necessary because of the following:

- o A decision to more than double the number of potential counter measures considered (\$62K). This modification was not for a public survey which was already included as a basic part of the study.
- o Because of the importance of this project to NHTSA and the fact that approximately twice as many potential countermeasures were to be considered (result of the first modification), some questionnaire redesign work was required. The additional funds devoted to this are justified in the improved quality of the final product and its expected utility to Federal, State and local highway safety program planners. Also, because of the expanded content of the study, it was not possible to use a brief special interest group (e.g., State automobile associations, State Police, etc.) survey as originally planned. Instead it was necessary to use a procedure involving personal interviews. This approach provided additional valuable information that will enable us to identify countermeasure approaches for which each special interest group has particular concern, suggestions as how best to implement or change these programs to ensure the greatest payoff, and an indication of the kinds of special interest support or non-support we might encounter in a particular State or geographic region. These additional activities required additional funds (Mods

2 and 3- \$36K and \$37K). It should be pointed out that this modification was an attempt to respond to criticism (included in the GAO report) that NHTSA does not involve researchers and users in R&D on countermeasures.

The activities added as a result of the cost modifications should make it obvious as to why additional time was required to complete this project.

[GAO COMMENT: The example has been changed to reflect the reason for the \$62,000 modification. The Department does not contest the other facts supporting our contention that the number of modifications indicates poor planning.]

In response to the GAO finding regarding the modification of the \$43,123 contract to study motorcycle helmet usage, the modification was required in order to provide additional data, and an economic impact study, in order to respond to a request by Congress in the 1978 Surface Transportation Assistance Act for DOT to report on motorcycle helmet usage. The report to Congress was not requested until after the original contract, with a more limited scope of work, was awarded.

[GAO COMMENT: Reasons for modification--for example, in response to the Congress--have been added to the final report.]

The \$17,600 contract which was modified to a total of \$106,082 was not modified just to expand the effort, as would be surmised from the manner in which it is described by the GAO report. The modifications were done to extend the effort on overtime, i.e., succeeding years, because of a continuing program need to keep TSP and NHTSA regional staff, and State highway safety, law enforcement and judicial officials, informed of recently enacted State legislation on drugs and alcohol. In the third year the annual costs rose to the current level because of need to expand the scope of the service to provide information on 55 MPH and traffic infraction legislation, and to provide more detailed information analysis.

The effort in question consists of a national legislative information service, which is a function provided by only a few suppliers. Continuity of information and effort is an essential program requirement.

The contracting officer who commented that the award for the fifth year would be competitive was, in our interpretation, stating our general procurement preference for competition and our regular practice of carefully screening all sole source requests. In this case, a sole source justification was reconsidered for the 5th year award, and it was approved.

It is our intent to continue to cover this program requirement for a legislative information service as long as there is a need, and to continue with the current supplier as long as that approach continues to provide an advantage to the government.

[GAO COMMENT: We stated in the draft report that the contract "was extended * * * to continue the contract work * * *." We did not state that the contract was modified just to expand the effort. We have included in the final report the statement that NHTSA

stated there was a sole source justification for the fifth year award. We did not include this in our review.]

The report states that end-of-year contracting increases costs and adversely affects contractors. The reason given in the report was that NHTSA program offices do not adhere to the procurement leadtime established by the OCP.

The standard leadtimes are based upon the average times which are required, and they do not allow for unusual situations, or problems which may arise. Many of the problems are not within the control of the Office of Contracts and Procurement. However, every effort is made to meet the schedules.

The leadtimes currently are being revised to allow time to meet new requirements for audit and socio-economic program goals, and to spread contracting over the whole year.

[GAO COMMENT: Our draft report stated that over 60 percent of NHTSA's contracts which we reviewed were awarded at the end of the fiscal year. This results in contracting costs being increased and contractors being uncertain whether they will be awarded contracts. Delays in contracting also increase the number of end-of-year contract awards. The draft report also stated:

"Instead of awarding contracts throughout the fiscal year, 62 percent of the sample contracts we selected from the Office of Research and 60 percent of the sample contracts from the Office of Traffic Safety Programs were awarded in the last month of the fiscal year. Because of the large rush of end-of-year contracting, NHTSA's Contracts and Procurement Office incurred \$11,000 of overtime for fiscal year 1979. We were told that the Offices of Research and of Traffic Safety Programs were trying to spread out contracting; however, officials said they had not been successful in 1979."

NHTSA does not disagree with the statements in our draft report. Also, we did give other reasons for yearend contracting, such as requests for proposals being issued in clusters and NHTSA's inability to spread contracting throughout the year. NHTSA's comments on revising leadtimes will be incorporated into the report, but we believe that changing leadtimes is not a viable solution to yearend contracting. This will merely allow for longer contracting timeframes so that NHTSA can stay within them, but this will not necessarily improve performance.]

In addition to the aforementioned practices affecting contract management, GAO cited other management practices that affect efficient contracting such as a lack of:

- (1) An up-to-date and accurate list of contracts for the 403 program,
- (2) level of effort statement in contracts, and
- (3) contract technical management continuity.

In response to the GAO statement regarding a lack of a current listing of 403 contracts, NHTSA has a list of 403 contracts which is presently being updated to include all awards made through FY 79. This will be completed by the end of April. The list then will be revised by the end of June so that it will be current and will accurately reflect all awards and modifications. From that time on, the list will be maintained on a monthly basis.

Up-to-date listings of R&D 403 projects in the areas of Alcohol and Driver Pedestrian Factors are available but NCSA contracts with 403 are not listed separately because the same contracts usually provided information to the 403 program and to the Motor Vehicle Safety Program.

Errors in the Listing of Alcohol and Driver Pedestrian 403 contracts occurred because the completion dates of the contracts were not up-to-date. A task to up-date the entries has recently been completed. In addition, the computer program which stores and produces the lists has been modified to include entries for the completion of the Summary/Evaluation forms for contract completion and for the completion of the contract close-out process by the Office of Contracts and Procurement.

Contracts are often listed under more than one program code because the funds are contributed from different program areas. It is often more efficient to perform different tasks or portions of tasks under one contract than it is to award a separate contract or purchase order for each individual task. In addition, several groups from different disciplines may have an interest in a particular task and so provide a portion of the funds.

[GAO COMMENT: NHTSA's comment that it is updating and correcting its contract lists has been incorporated into the final report.]

GAO states that publication of level of effort estimates has been a subject of analysis by NHTSA for the last four years. It is our view that we have supported publicizing level of effort estimates in solicitations for basic research and whenever any very broadly stated tasks could benefit from publicizing such an estimate for a specific task. Comments on this subject in the report do not add any supportive rationale for GAO's recommendations or any new insights which would lead to any other reasonable conclusion. The report's recommendations appear to be based primarily on the opinions of our NHTSA contractors who have not been able to demonstrate to NHTSA how the publication of estimates would improve either their understanding of a specific procurement's objectives or their technical approach to accomplishing the objectives.

[GAO COMMENT: We did not state how long NHTSA has been analyzing level of effort. As can be seen from the statement in our draft report, even high-level NHTSA officials are in favor of level of effort.]

"Contractors we talked with agreed that level of effort is needed. They told us that NHTSA is simplistic in thinking that if a request for proposal does not indicate the magnitude of the work, it will get better bids. Contractors also said that because NHTSA does not indicate a level of effort, they spend an unnecessary amount of time on proposal efforts which may be rejected because they are different from the level of effort NHTSA intended. Researchers at the Transportation Research Board section 403 conference recommended that NHTSA include in its request for proposals some indication of level of personnel or maximum dollars budgeted for the projects. In addition, both the Associate Administrator for Research and Development and the Associate Administrator for Traffic Safety Programs told us that they would like to have a level of effort indicated on the request for proposals."

In addition, FHWA includes an estimated level of effort necessary to complete the contract requirements in its request for proposals. Also, use of level of effort could improve NHTSA's relationship with the highway safety research community.]

The report correctly identifies a half a million dollar savings realized by NHTSA in FY 75 by not publicizing Government estimates of levels of effort. The report does not add that in FY 77, NHTSA net savings were three and one half million dollars. Nor does the report recognize that in both years, awards were made below NHTSA internal estimates, to offerors who submitted technically acceptable proposals.

[GAO COMMENT: Our draft report also stated that:

"However, the Associate Administrator's cost savings estimates above are questionable because (1) he used these same engineering estimates and (2) according to NHTSA and contract personnel, the half million dollar savings did not consider modifications which added to the cost and may have been due to the lack of level of effort."

We have included the \$3.5 million along with the \$0.5 million in the final report.]

The report repeats a challenge that the savings estimates are questionable and that "...savings did not consider modifications which added to the cost and may have been due to the lack of level of effort." To further document our view that the Government should not reveal its estimate of cost with the RFP, NHTSA has already initiated a study of completed contracts; to analyze contract results in terms of award amounts vs. Government estimates vs. completion costs.

[GAO COMMENT: NHTSA's study will be noted in the final report.]

In response to recommendations by the National Motor Vehicle Safety Advisory Council and the Transportation Research Board of the National Academy of Sciences that NHTSA publicize a level of effort in its solicitations, we are testing the concept this year in a limited number of our procurements. While we recognize the opinions of the research community in this area, we intend to evaluate objectively our test results to determine whether the publication of level of effort offers any true benefits to the Government and to our research programs.

We welcome any additional information the report's author may offer regarding the extent of publicizing level of effort estimates throughout other Government agencies and any proven benefits experienced by the Government through such publication. This information would be helpful in conducting our current study of completed contracts and in our pilot test evaluation.

[GAO COMMENT: We have noted NHTSA's test and evaluation of a limited number of procurements this year. As mentioned in the draft report, FHWA uses level of effort in its procurements.]

Some amount of changeover in Contract Technical Managers (CTMs) is unavoidable and NHTSA management does what is necessary to minimize the undesirable effects of these changes.

NHTSA does not change CTM's in an arbitrary manner. Most of the changes are triggered by a professional staff person leaving the agency. This may require that a contract be temporarily assigned to a CTM that already has a full complement of contracts until such time as a replacement can be hired. Thus, the departure of one CTM may cause a contract to have three different CTM's.

It is true that some slight delays may be caused by a changeover in CTM; however, the example cited on page 56 to illustrate this problem was not appropriate. The delay in award was caused by the fact that only one proposal was received, and it was judged unacceptable. The time between August and December 1978 was spent trying to discover alternative bidders. During this time frame, the original CTM did leave the agency and the procurement action was assigned to a caretaker CTM.

There was a one month delay when the permanent CTM was assigned in December. Once this occurred, the remaining delays were caused by difficulties of the prospective contractor preparing a proposal that was acceptable and the need for a site visit.

[GAO COMMENT: NHTSA's comments on the reason for the delay have been included in the final report. NHTSA did not comment on the other example in the draft report.]

"The completion of another contract was delayed due to contract manager changes. In this case the contract manager changed two times. The contractor's letter requesting an extension of the completion date noted that contract manager changes were one reason for requesting the extension. The original completion date was April 1979 but was changed to June 1979."]

GAO RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION - CHAPTER 5

GAO recommends that the Secretary of Transportation direct the Administrator, NHTSA, to instruct the Associate Administrators for Research and Development and for Traffic Safety Programs to initiate a system of contract design and monitoring that

- will ensure better initial planning of contracts and reduce the necessity for modifications,
- will reduce the number of modifications, and
- will allow contract awards to be spread throughout the year.

GAO also recommends that these offices maintain accurate contract listings and make every attempt to reduce contract technical manager turnovers, and that the NHTSA Contracts and Procurement office should give closer consideration to including a level of effort in its requests for proposals.

DEPARTMENT OF TRANSPORTATION POSITION

NHTSA disagrees with the recommendation that a new system of contract design and monitoring is needed. A system exists, which has been undergoing some refinement, to provide better initial planning and to spread contract award throughout the year. Reduction of contract modification is not necessarily desirable because sound management practice dictates change when results are questionable, rather than producing non-useable results, as has already been stated in detail earlier in these comments.

R&D, TSP, and C&P are involved in a coordinated effort to issue the RFP's evenly throughout the year, and we are extremely pleased with the results. For FY 80, \$15 million in R&D contracts were awarded by February 1, 1980 representing more than a third of contract budget being awarded during the first third of the fiscal year.

[GAO COMMENT: We are not necessarily recommending a "new" system of contract design and monitoring but rather any system (new or refined) which will improve initial planning, spread contracting throughout the year, and reduce modifications. NHTSA recognizes that it needs better initial planning and needs to spread contracting throughout the year. It says it is taking steps to accomplish these goals, and we believe that such actions, if adequately designed and properly implemented, should lead to fewer modifications.]

The NHTSA list of 403 contracts presently is being updated to include all awards made through FY 79. This will be completed by the end of April. The list then will be revised by the end of June so that it will be current and will accurately reflect all awards and modifications. From that time on, the list will be maintained on a monthly basis.

[GAO COMMENT: We have noted this change in the final report.]

We disagree with the recommendation that contract technical manager turnover, must be reduced. We feel that some turnover is unavoidable. In time, any agency of the government experiences personnel turnover. However, agencies are prepared to deal with this event by assigning other personnel to perform their work. While this may cause some delay, the delay is not inordinate. One has to remember that there is a senior staff available who is familiar with ongoing projects who can brief the CTM on the newly assigned contract.

The major reasons for CTM departures are promotions, retirements, reassignments, etc. Turnovers often bring fresh minds to approach persistent problems with another tack, more experienced personnel, and brings the contracts under closer scrutiny by both management and a new CTM. Any delays incurred with CTM turnover are manageable and programs, projects and results continue.

Each contract to be monitored by a CTM has a purpose, objectives, goals and other considerations (e.g. justification) for performing the work. If a CTM departs, all the records he maintains, e.g. status reports, schedule, problems, funding, etc., are passed on to the next CTM assigned either as a caretaker CTM or a replacement. In most cases the CTM who is departing or who has departed will fully cooperate in the transfer of his individual knowledge of a contract either through visits or by telephone. Each individual office is geared to assist in the transfer of contract responsibilities from one CTM to another. NHTSA minimizes any lack of continuity with contract monitoring responsibility transfer.

The impetus of research and the availability of CTMs to replace departed CTMs, as well as their research acumen allow for little if any discontinuity in the research itself.

The regimen of contract monitoring and the availability of expertise both in-house and with the contractor offer a quick-reaction capability to address contract problems. All CTMs are required to take a minimum of 24 hours of training in contract management. Project management courses are also available and CTMs have already started to attend them.

[GAO COMMENT: Our draft report concluded that there is loss of continuity in contracts due to contract technical manager turnovers; therefore, we recommended that NHTSA make every attempt to reduce such turnovers. Our draft report also recognized that some turnovers may be unavoidable. In the response above, NHTSA does not give consideration to the disruption to contractors caused by turnovers.]

We have supported publicizing level of effort estimates in solicitations for basic research and whenever any very broadly stated tasks could benefit from publicizing such an estimate for a specific task. NHTSA is currently pilot testing the publication of level of effort estimates in a limited number of FY 80 procurements. Evaluation of this test will be lengthy and time consuming, since it must cover contract performance through completion.

If estimated costs are published, we are confident that bids would be submitted at or very near that figure. In other words, even if intrinsically inaccurate, the Government estimate once published virtually dictates and controls the ultimate award amount. Our experience has been that on the average, actual awards are less than the Government estimates. Therefore, we believe it is perfectly appropriate to cite the difference between the estimates and awards as savings.

[GAO COMMENT: We believe that NHTSA estimates cannot be used to calculate the difference between estimates and awards as savings. Our report quoted NHTSA's Associate Administrator for Administration, who said:

"My objection to publicizing our levels of funding or effort also relates to the quality of our Government estimates, which are, more often than not, budgetary figures established over a year earlier. They are not adequate engineering estimates for procurement purposes, and they can grossly underestimate true project costs."

Further, other organizational elements in the Department of Transportation use level of effort. Also, such a change might help NHTSA's image among the research community and reduce contract modifications.]



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