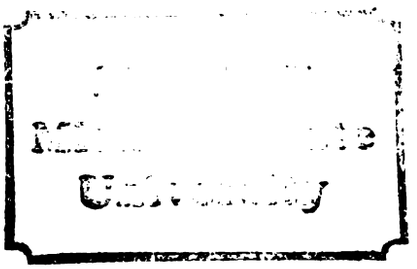

This is to certify that the

dissertation entitled

THE STATUS OF AUTOMOTIVE FLEET SAFETY
IN SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES
IN THE UNITED STATES

presented by

Richard Joseph Hornfeck

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Administration and
Curriculum
(Driver and Traffic Safety
Education)

Major professor

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THE STATUS OF AUTOMOTIVE FLEET SAFETY IN SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES IN THE UNITED STATES

By

Richard Joseph Hornfeck

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
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College of Education

1982

ABSTRACT

THE STATUS OF AUTOMOTIVE FLEET SAFETY
IN SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES
IN THE UNITED STATES

By

Richard Joseph Hornfeck

The researcher's purpose in this study was to determine the current status of automotive fleet safety in selected four-year colleges and universities in the United States.

In order for this objective to be met, the following categories relating to an institution's fleet safety effort had to be carefully examined and assessed: (1) information relative to the educational institution and its automotive fleet, (2) the extent of the automotive fleet policies and procedures, (3) the extent of the educational and/or training programs, (4) factual data concerning the institution's automotive operation during the 1978-1979 and 1979-1980 school years, and (5) opinions of the person(s) responding to the questionnaire.

The primary methods used in researching this study were an extensive review of the literature pertaining to automotive fleet safety and development of the survey questionnaire.

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sample of 295 four-year colleges and universities in the United States. Stratification of the target population was determined by the way the institution was governed and controlled and its student population. The initial mailing of the questionnaire and subsequent follow-up brought a total of 120 returns, or 40.7 percent.

Data analysis involved the use of descriptive statistical techniques that indicated the percentage of response to each question. The findings were placed in tabular form and expressed in percentages to the nearest tenth when applicable, and other responses were noted in descriptive form. A narrative analysis accompanied each table relative to a particular question.

The major findings of the survey indicated that college and university automotive fleet operations were loosely coordinated and managed. Safety practices were a low priority item in the overall fleet operation.

The survey data also indicated that automotive fleets were a necessary part of the day-to-day operation of a college or university; but, institutions did not place much emphasis on their automotive fleet operations.

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DEDICATION

This dissertation is dedicated to my wife, Charlene, whose love, understanding and patience were a major contribution to the completion of this study.

To my daughters, Sandra, Karen, Helen, and Patricia who also provided the necessary support and encouragement to their Dad.

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ACKNOWLEDGEMENTS

This study could not have been undertaken without the encouragement and cooperation of many fine people at Michigan State University.

Special appreciation is extended to Dr. Robert O. Nolan, Professor at Michigan State University and Director of the Highway Traffic Safety Programs, whose continual support, encouragement and guidance as academic advisor have been a constant source of inspiration throughout all phases of my doctoral program and my professional development.

A special thank you is also extended to the other members of my doctoral committee: Dr. Robert E. Gustafson and Dr. Donald L. Smith, Professors in Life Long Education Programs and the College of Education, and Dr. Samuel A. Moore, Professor and Chairperson of the Department of Administration and Curriculum, College of Education. Their suggestions, constructive criticism and constant encouragement were deeply appreciated.

The data for this dissertation were generously supplied by personnel of the selected colleges and universities throughout the United States. Without their unselfish cooperation, this study could not have been completed.

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Chapter I

NATURE OF THE PROBLEM

Introduction

Colleges and universities in the United States have in the past been regarded as institutions separate from the rest of society and governed by their own rules. However, this setting has been altered for most colleges and universities because they have acquired the complexities of an industrial setting by increasing in size and the services they offer to the public.

The major role of the college or university is education with the majority of funding and activities being channeled in that direction. However, college and university personnel are becoming more cognizant of other operations that must occur in support of the educational role; but these support services do not always receive emphasis comparable to those outside of the educational setting. The automotive fleet is one such service that is an integral part of the everyday function of an educational institution.

A review of the literature completed during Michigan

State University's 1977 Automotive Fleet Accident Study[1] revealed minimal information concerning fleet safety efforts being carried on in other colleges and universities in the United States. Most of the literature reviewed related to commercial fleets (public and private) and their respective operations. In contrast to commercial fleets, colleges and universities, in general, do not consider themselves to be in the business of operating automotive fleets.

Colleges and universities depend upon motor vehicles to support their total operation. These motor vehicles are used both on and off campus for a variety of activities and by a variety of operators. The automotive fleet also consumes a substantial amount of the overall operating budget. Management needs to be aware of its overall automotive fleet activity and its responsibility to insure safety and efficiency in its overall operation.

Statisticians surmise that if Americans continue to drive as they do, one of every two persons alive today will be either killed or injured in a motor vehicle accident sometime in the future. If this appalling casualty rate is spread evenly among the population, it would mean that one out of every two members of your family, one out of every two close friends and associates, eventually will

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[1] R. J. Hornfeck, "Michigan State University Automotive Fleet Accident Study for Fiscal Years 1974-1975 and 1975-1976." Final report presented to the Michigan State University Insurance Office and Highway Traffic Safety Center, 18 July 1977.

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become a casualty of America's continuing war of attrition with highway hazards.[2]

In 1980, there were 52,600 deaths and two million disabling injuries that occurred on our nation's highways.[3] The total cost to the nation for these highway accidents was approximately 39.3 billion dollars.[4]

Work related accidents accounted for 13,000 deaths and 2,200,000 disabling injuries in 1980. Of these work related accidents, the motor vehicle accounted for 4,500 deaths and 200 thousand of the disabling injuries.[5] In 1980, the total number of work days lost because of work injuries was 245 million, with the injured worker accounting for 45 million of these lost work days.[6]

Accidents are the leading cause of death among all persons ages one to thirty-eight. Among persons of all ages, accidents are the fourth leading cause of death.[7] The financial cost to the nation for all accidents is a staggering figure. In 1980, the cost of all accidents was 83.2 billion dollars with motor vehicle accidents accounting for 39.3 billion dollars and work accidents for 30.2 billion dollars.[8]

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[2]National Safety Council, Accident Facts (Chicago: National Safety Council, 1980), p. 3.

[3]National Safety Council, Accident Facts (Chicago: National Safety Council, 1981), p. 3.

[4]Ibid, p. 4. [5]Ibid, P. 3. [6]Ibid, p. 24.

[7]Ibid, p. 9. [8]Ibid, p. 4.

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According to 1979 data from the Virginia Department of State Police, professional and business persons comprised 14 percent of the drivers involved in all motor vehicle accidents, while commercial drivers (including salesmen) were involved in only 7.6 percent of all motor vehicle accidents.[9]

All of these statistics point to the fact that accidents are a major problem that directly affect everyone. Motor vehicle accidents and work accidents can be controlled; but it takes time, effort, finances, and concern. The economic-minded businessman learned long ago that it is far less expensive to set up and maintain a program for preventing personal injuries to employees than it is to trust to luck that no one will get hurt.[10]

In an article by M. H. Wooten, it was stated that:

> I've never met an employee who wanted to be injured but I've met a lot who didn't know how to avoid it. People must be taught how to avoid accidents and they must also be taught to believe that it can be done. This is part of management's responsibility, as is motivating the employee to remember and continue to work safely.[11]

The National Safety Council emphasized that:

> The need for teaching safety (as a means of self-preservation) is always with us. This need doesn't end when we leave school. In fact, it increases. On-the-job hazards must be discovered

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[9]National Safety Council, Accident Facts, 1980, p. 48.

[10]National Safety Council, Motor Fleet Safety Manual (Chicago: National Safety Council, 1972), p. 1.

[11]M. H. Wooten, "Know-How Is Top Accident Preventer" Journal of Traffic Safety, December 1978, pp. 12-13.

> by each individual, either "the hard way" (by bitter experience), or "the easy way" (by being pointed out and warned against). If employees know their job hazards and avoid them, they seldom get hurt.[12]

The National Safety Council indicated that the three main areas of automotive fleet accidents were those arising from (1) vehicle accidents, (2) employee injury accidents, and (3) off-the-job accidents.[13] With these three areas of concern, the National Safety Council's definition of a fleet safety program and one which business and industry follow is: "The fleet safety program encompasses all that the fleet does systematically to prevent accidents, all accidents: vehicle accidents, work injury accidents, and off-the-job accidents."[14]

Business and industry cannot afford to operate at a loss; and accidents involving their automotive fleets would surely add to their overall expenses. This is why they feel that by operating a safe driving program, they are not really adding to their duties; but they are actually approaching an inescapable problem in a systematic manner in order to reduce the amount of time, expense, and inconvenience that traffic accidents would otherwise exact.[15]

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[12]National Safety Council, Motor Fleet Safety Manual, p. 1.

[13]National Safety Council, Small Fleet Guide (Chicago: National Safety Council, 1971), p. 5.

[14]National Safety Council, Motor Fleet Safety Manual, p. 9.

[15]Ibid, p. 9.

On the other hand, college and university administrators, unlike commercial fleet administrators, seemingly do not place enough emphasis on automotive fleet safety in their day-to-day operations. With the economy of the 1980's, it is conceivable that colleges and universities should be in the business of operating their automotive fleets in a manner similar to that of business and industry. At the same time, they should also be aware of what other four-year institutions are doing in regard to automotive fleet safety. This research study should enable college and university personnel the opportunity to examine the efforts of other selected institutions of higher education in the area of automotive fleet safety.

Statement of the Problem

The automotive fleets should be an important part of the day-to-day operations of colleges and universities. To assure safe and efficient use of the automotive fleet, the college and university personnel must be cognizant of what other colleges and universities in the United States are doing in the area of automotive fleet safety.

It was found that minimal information was available concerning the automotive fleet safety efforts of colleges and universities in the United States.

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Purpose of the Study

The researcher's purpose in this study was to determine the current automotive fleet safety efforts being conducted in selected four-year colleges and universities in the United States.

The survey instrument elicited data that gave a comprehensive picture of the institution's fleet safety efforts. This descriptive research provided an accurate tabulation of the current automotive fleet safety efforts of those selected four-year colleges and universities in the United States.

Importance of the Study

Very little information was available concerning the automotive fleet safety efforts of colleges and universities in the United States. The only way to determine what was occurring in automotive fleet safety programs in institutions of higher education was to personally correspond with selected schools. In addition to being time consuming, this approach still did not give one an overall picture. It was anticipated that the college and university mode of fleet operation would be entirely different from business and industry. This national survey provided valuable assistance in determining how much emphasis colleges and universities were placing on this phase of their operation.

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Scope of the Study

This research survey was limited to a random stratified sample of 230 four-year colleges and universities in the United States. This sample size represented 25 percent of the 913 four-year colleges and universities that have an enrollment of 1,000 or more students. The target population was selected from The College Blue Book, Macmillan Information, seventeenth edition, 1979.[16]

Stratification of the target population was determined by the way the institution was governed and controlled (private, public or state) and its student population (small, medium or large). A 25 percent sample was randomly selected from each stratum to help insure a representative sample of the target population.

Definition of Terms Used

Automotive Fleet

A group of motor vehicles operated under unified control.

Automotive Fleet Safety Program

"The automotive fleet safety program encompasses all that management does systematically to prevent accidents, all accidents: vehicle accidents, work injury accidents, and off-the-job accidents."[17]

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[16] The College Blue Book, Tabular Data, Seventeenth Edition. (New York: Macmillan Publishing Company, 1979).

[17] National Safety Council, Motor Fleet Safety Manual, p. 9.

Campus Insurance Coordinator

A designated person to receive the questionnaire at the college or university campuses. (It was recommended by personnel from the institutions participating in the pilot study that this individual, "Campus Insurance Coordinator," or someone with a similar title or responsibility would be the logical person to contact.)

Disabling Injury

"An injury which results in death, some degree of permanent impairment, or renders the injured person unable to effectively perform his regular duties or activities for a full day beyond the day of injury."[18]

Educational Institution

A four-year college or university is considered to be an educational institution.

Large College or University

An educational institution whose student enrollment is more than 15,000.

Medium College or University

An educational institution whose student enrollment is more than 5,000 but less than 15,000.

Motor Vehicle

"Any vehicle driven or drawn by mechanical power designed primarily for use on public streets or highways,

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[18]National Safety Council, Accidents Facts, p. 2.

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except a vehicle operated exclusively on a rail or rails."[19]

Private College or University

"An educational institution whose governing board is not subject to public (governmental) control except for charter or statutory provisions, usually because of primary financial support from private rather than public funds."[20]

Public College or University

An educational institution financed largely by public funds but not controlled and/or managed by state government.

Small College or University

An educational institution whose student enrollment is more than 1,000 but less than 5,000.

State College or University

An educational institution financed by public funds and controlled and/or managed by state government.

Limitations of the Study

The following limitations were determined to be inherent in this national survey of colleges and

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[19] American Driver and Traffic Safety Education Association, Sixth National Conference on Safety Education, Volume IV, Dictionary of Safety Education Terms (Washington, D. C.: American Driver and Traffic Education Association, 1980), p. 40.

[20] The International Encyclopedia of Higher Education, Volume 1, (Jossey-Bass Publishers, 1977), p. 488A.

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universities in the United States.

1. In order to acquire as detailed a picture as possible concerning the current status of automotive fleet safety in institutions of higher learning in the United States, the questionnaire was both lengthy and detailed.

2. The questionnaire itself was a limitation because it was dependent upon a selected person taking both the time and effort to respond to the individual questions.

3. The sample population represented 25 percent of the target population. Inferences were made to the target population based upon those returned.

4. Colleges and universities whose student enrollments were less than 1,000 students were not included in the target population. An institution with such a small student enrollment probably would have an automotive fleet of minimal size. Schools of such enrollment were found in the small private school category and this stratum already included 416 schools with a student enrollment greater than 1,000 but less than 5,000.

5. The target population was selected from The College Blue Book which may have eliminated those schools that did not subscribe to this service. This resource was found to be the most extensive and up-to-date publication for listing colleges and universities in the United States.

6. The selection of each college and university for its respective stratum was determined by the information that appeared in The College Blue Book.

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7. Only data collected from the survey questionnaire and information gained from the literature reviewed were included in the study.

8. The study was a descriptive research providing an accurate tabulation of the current automotive fleet safety efforts of selected four-year colleges and universities in the United States. Therefore, it should not be construed to determine what is a good or poor automotive fleet safety program.

Overview

In Chapter II, pertinent literature is reviewed that related to the automotive fleet operations and other related activities of colleges and universities in the United States. Included in Chapter III are the following:

1. Methods and procedures utilized in preparing the survey instrument.

2. Selection procedures for obtaining the colleges and universities in this survey.

3. Detailed description of the sampling technique used.

4. A detailed outline of the sampling distribution.

5. A complete review of methods used in data tabulation and analysis.

Chapter IV contains an analysis of the data and findings, while Chapter V represents the summary, findings,

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conclusions, recommendations, recommendations for future research, and discussion of the research survey.

Chapter II

REVIEW OF LITERATURE

Introduction

It was evident at the beginning of this investigation that there was minimal information available concerning the automotive fleet safety efforts of colleges and universities in the United States. A comprehensive retrieval from the Michigan State University Library for all materials relating to automotive fleet safety programs and their management, a search of the Dissertation Abstracts, a review of the Periodical Index, and a review of the National Safety Council's "Guide to Traffic Safety Literature" disclosed very little information relating to the automotive fleet safety efforts of colleges and universities in the United States.

The literature search did identify some individual studies and information that related directly to automotive fleet safety on individual college and university campuses, but most of the information pertained to automotive fleet safety and its management in the business community. One closely allied research study was identified that involved higher education and the factors that affect college and

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university environmental health and safety programs.[1]

A review of the literature pertinent to this survey was conducted and will be presented in the following sections: (1) Current Automotive Fleet Safety Information Relating to Institutions of Higher Education, (2) Related Studies in Higher Education, and (3) Role of the Private and Public Sector in Automotive Fleet Safety.

Current Automotive Fleet Safety Information Relating to Institutions of Higher Education

In 1977, the researcher conducted a study at the Michigan State University, East Lansing, Michigan, entitled "Michigan State University Automotive Fleet Accident Study for Fiscal Years 1974-1975 and 1975-1976."[2] This was a comprehensive study of all accidents involving vehicles in the University's fleet and was jointly supported by the University Insurance Office and the University's Highway Traffic Safety Center.

The study was initiated by the insurance carrier for the University's automotive fleet because of concern for the high number of accidents involving the automotive

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[1]James R. Glaze, "Factors Affecting the Viability of Environmental Health and Safety Programs in Institutions of Higher Education" (unpublished Ed.D. dissertation, University of Illinois at Urbana-Champaign, 1977; Ann Arbor, Michigan: University Microfilms International, 1977).

[2]R. J. Hornfeck, "Michigan State University Automotive Fleet Accident Study for the Fiscal Years 1974-1975 and 1975-1976."

fleet. The insurance carrier recommended that some type of training program and/or fleet safety program be established for all drivers of University vehicles. A committee of selected University officials decided that before any type of training program could be established certain facts need to be determined and investigated concerning the University's automotive fleet accident rate experience.

The completed two-year automotive fleet accident study demonstrated that Michigan State University was experiencing a serious accident problem. When the accident data involving University vehicles was compared to accident data for similar-sized fleets and operations as shown in the National Safety Council's 1976 Fleet Accident Rates, the University's rate was determined to be extremely high. In addition to pointing out the high number of accidents, the study also attempted to determine the underlying causes that gave rise to these accidents. Many of the underlying problems exhibited in the study were determined to be of a correctable nature. Suggested recommendations presented in the final report described how Michigan State University's automotive fleet accident problem could be improved.

An important aspect that surfaced during this indepth accident study was the difficulty in determining how other institutions of higher education in the United States were coping with the problem of automotive fleet safety. Primarily, the literature related specifically to business and

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industrial automotive fleet operations with very little data available concerning the automotive fleet safety efforts of colleges and universities. Since available information relative to this target group was limited, problems arose when comparisons across institutions were made.

Related Studies in Higher Education

In 1977, James R. Glaze conducted a study at the University of Illinois, Urbana-Champaign, titled "Factors Affecting the Viability of Environmental Health and Safety Programs in Institutions of Higher Education."[3] Two hundred colleges and universities randomly selected from the National Safety Council's Campus Associaton membership were sampled by questionnaire.

The purpose of Glaze's study was to investigate and describe the current state of environmental health and safety programs in institutions of higher education and to identify and explicate some principles, guidelines and procedures which might prove useful for organizing such programs.[4]

It was pointed out in the study that historically speaking, industry has served as the setting for the

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[3]James R. Glaze, "Factors Affecting the Viability of Environmental Health and Safety Programs in Institutions of Higher Education."

[4]National Safety Council, "How Viable Are Our Safety and Health Programs?" College and University Newsletter, December-January-February, 1978, pp. 3-4.

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development of environmental health and safety programs, and that similar programs on campuses have not developed commensurately. Colleges and universities have long viewed themselves as set apart from the rest of society and governed by their own rules. However, this setting has changed for many because by increasing in size and complexity, they have acquired many of the characteristics long associated with industry.

Glaze pointed out that institutions of higher learning in spite of budgetary problems, the energy crisis, and similar distinctions that always seem to exist have a responsibility to implement an effective campus environmental health and safety program. He also stated that the creation of a healthful and safe environment indirectly promotes the educational aims of the institution because accidents and disasters can have adverse affects on campus morale and it can also bring unfavorable publicity upon the institution.[5]

Implications from Glaze's study relevant to the survey of the current status of automotive fleet safety in colleges and universities in the United States were:

1. A lack of finances and personnel and a lack of understanding and support on the part of campus administrators were the major problems for campus environmental health and safety.

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[5]James R. Glaze, "Factors Affecting the Viability of Environmental Health and Safety Programs in Institutions of Higher Education," pp. 22-23.

2. Most respondents felt that environmental health and safety personnel should have strong enforcement authority over persons who violated the rules and that this authority was not available.

3. The reference material for environmental health and safety programs should be rewritten and reorganized to meet the needs of higher education rather than the current industrial setting.[6]

4. Enforcement of the rules and the establishment of standards of environmental health and safety were often more difficult to achieve on a college campus because faculty and staff generally enjoyed more freedom and autonomy than the employees in normal industrial situations.[7]

5. The majority of the respondents felt that campuses were safer settings than industrial plants when in reality, according to many writers and commentators, the opposite was true because of the diversity that existed on college and university campuses.[8]

6. College and university environmental health and safety programs must have the interest and participation of the faculty, staff and students if they are to be effective.[9]

Role of the Private and Public Sector in Automotive Fleet Safety

Upon examination of the overall safety movement, one is made aware that automotive fleet safety programs are relatively new. Historically, the turn of the century was the beginning of the safety movement in heavy industry. With the Workmen's Compensation Law pinpointing the direct

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[6]National Safety Council, "How Viable Are Our Safety and Health Programs?" College and University Newsletter, p. 3.

[7]James R. Glaze, "Factors Affecting the Viability of Environmental Health and Safety Programs in Institutions of Higher Education," p. 99.

[8]Ibid, p. 49. [9]Ibid, p. 106.

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costs of industrial injuries, and management taking a closer look at accident costs, the safety movement experienced rapid development. Safety had at last joined the management team.[10]

With the improvement of highway systems during the early 1930's and subsequent increased commercial vehicle travel between cities, automotive fleet safety programs began to appear. In 1934, large commercial motor fleets became increasingly concerned about costly accidents and the rising cost of insurance; and thus declared that the control of accidents would become a high priority effort. Thus, the responsible position of safety supervisor evolved.[11] The safety supervisor achieved status in motor transportation through the combined efforts of a few far-sighted managers, the public's demand that something be done about commercial accidents, insurance companies' concern, government regulatory agencies and the trucking industry's own concern about unnecessary economic losses.[12]

The National Safety Council assumed a very active role in both supporting and stressing automotive fleet safety. On a regular basis, they wrote and published books, articles, periodicals, newsletters, journals, and statistical reviews pertaining to automotive fleet safety efforts. One such

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[10]James C. Heiken and Mitchell T. Curley, Jr., Motor Fleet Safety Supervision (State College, Pa.: The Pennsylvania State University, 1978), p. 3.

[11]Ibid, p. 1. [12]Ibid, p. 3.

publication was the Motor Fleet Safety Manual.[13] Therein was discussed the establishment and operation of a loss prevention program designed to help fleet management set up accident prevention programs or to strengthen existing ones.

The National Safety Council emphasized that any group or company that had a large fleet (one hundred or more vehicles) or a small fleet should be concerned about a loss prevention program because anytime a company vehicle moved on or off the premises it ran the risk of becoming involved in an accident.[14] Accidents are not only costly in terms of finances and lost work time, they are also damaging to one's public image because of the adverse publicity. The public expects automotive fleets to be operated in a safe and efficient manner. Fleet managers must accept the fact that because their vehicles constantly operate in the public eye, they are subject to close scrutiny.

According to the National Safety Council:

> The cornerstone of any company activity--and especially of a safety program--is management. The success of the fleet safety program depends largely upon the top manager--what he knows about safety, what he thinks and feels about safety, what he expects from the safety program, and how much money, people, and personal participation he will invest in it.[15]

The National Safety Council explicitly stated that safety should be an integral part of a job, any job.

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[13]National Safety Council, Motor Fleet Safety Manual.

[14]Ibid, p. 3. [15]Ibid, p. 9.

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Achieving a job objective is important, but achieving those job objectives without an accident is of equal importance. It further stated that in the training of employees and supervisors, it might be helpful to separate the safety content of the job from the functional aspect and hold it up for inspection, but in actual performance and supervision, safety should blend in with the functional part of doing the job.[16]

Indications of how private and commercial automotive fleets looked upon automotive fleet safety can be determined by reviewing articles found in periodicals, journals and newsletters dedicated to safety and, in particular, automotive fleet safety. Many of the articles were authored by fleet safety supervisors, management and loss control specialists for various insurance companies.

In a special report prepared by Trevor E. Hughes for the Zarda Brothers Dairy, Shawnee, Kansas, it was pointed out that it was the responsibility of all vehicle operators and other responsible persons associated with motor vehicle fleets to join in the effort to reduce vehicle accidents and the human suffering which it caused.[17] Hughes also stated that accidents can occur anywhere and to anybody; therefore, accident control was a company-wide problem

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[16]Ibid, p. 19.

[17]Trevor E. Hughes, "Fleet Safety Program," Report presented to Zarda Brothers Dairy by Royal-Globe Insurance Companies, 21 December 1977.

requiring cooperation at all company levels.[18]

High operation costs, an unfavorable insurance situation, poor public relations, poor customer relations, and poor employee relations are all potential problems that must be faced by the management that has failed to establish an accident prevention program for its motor vehicle fleet.[19] The Huges report was best summed up by saying that accident prevention is not and should not be considered a fringe activity, but it is an activity that will result in controlling operational losses and improving overall operating efficiency.[20]

Charles H. Shaw, Jr., pointed out that there was no logic to the argument that safety hinders production. As a matter of fact, the data showed that safety enhanced production and profits. To cut down on accidents, improve profits, employee morale, public relations, increase production, and improve the company health program, it was suggested that one develop a positive and effective safety program. The cost of safety was always less than the cost of accidents.[21]

Thomas J. Decker stated that aside from the obvious humane reasons for concentrating on accident prevention, common sense dictates that the economic aspects of

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[18]Ibid, p. 2. [19]Ibid, p. 3. [20]Ibid, p. 4.

[21]Charles H. Shaw, Jr., "Positive Results Achieved Through An Effective Safety Program," American Transportation Builder, July/August, 1978, pp. 11 and 13.

accidents absolutely mandate a company's full effort and attention. He also pointed out that accident costs result in losses--money that never gets a chance to become a profit. This is why today's management of virtually all large company fleet operators are convinced that the cost of accident prevention is less than the cost of the accident it prevents.[22]

G. Lincoln Sidwell revealed that most fleet managers were under an ultimatum from top management to cut operating costs. In examining the cost factors of State Automobile Mutual Insurance Company's automotive fleet, it was found that they could divide fleet expenditures into three major areas of cost: operation, maintenance and accidents. Through a fleet safety program that was endorsed by top management, they were able to cut their yearly accident rate of approximately fifteen accidents per million vehicle miles driven to approximately ten accidents per million vehicle miles driven.[23]

In an article appearing in Commercial Car Journal, Rich Cross stated that Agway, Inc., the largest private trucking company in the United States (predominantly short haul), had experienced just 8.7 accidents per million

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[22]Thomas J. Decker, "The Accident That Doesn't Happen Is Money In The Bank For Independent Truckers," Journal of Traffic Safety, September 1976, pp. 8-10 and 38.

[23]G. Lincoln Sidwell, "Insurance Fleet Cuts Accident Rate with DDC," Journal of Traffic Safety, September 1978, pp. 16-17.

vehicle miles driven in 1979. This low accident rate was attributed to the comprehensive fleet safety program that Agway conducted and fully endorsed. It has been estimated that their driver training program has saved them approximately 325 thousand dollars over the past five years. They best summed up their fleet safety philosophy with the thought that it was a lot cheaper to pay for comprehensive driver training than for a poor accident record and high insurance premiums.[24]

An earlier article about Agway, Inc., indicated that their reputation depended largely on what the general public saw and experienced with the Agway automotive fleet. It was pointed out that trained drivers were more economical; insurance costs were less because of fewer accidents; and safe driving also meant less time and goodwill lost. Agway felt that selection and training of drivers was only the beginning of a successful accident prevention program. The continuous molding of a driver's attitude was important, and unless safe driving was made interesting and important to drivers, the accident rate of the fleet would suffer accordingly.[25]

An article describing the Ann Arbor Transportation Authority program stated that their accident rate in 1977 was 31 percent below the national average. In realizing

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[24]Rich Cross, "Agway's 'Double Dose' for Safety's Sake," Commercial Car Journal, March 1980, pp. 119-123.

[25]"Agway Trains Drivers for Safety," Modern Bulk Transporter, June 1977, pp. 16-18.

their low accident rate, it was determined that four elements contributed most: the driving training program, the Accident Review Board, the defensive driving course, and the safe driver awards.[26]

In a recent document by two Michigan State University professors, it was demonstrated that companies with better injury record-keeping systems had noticeably lower injury rates. Where cost analysis of injuries and accidents was the rule, the companies had lower injury frequencies than those who did not perform such analysis. The Dohrn Transfer Company was indicated as one trucking company that cared and had one of the industry's best safety records to prove it. They treated safety as an operational problem, rather than a nuisance. They utilized their insurance carrier as an ally by having the loss control specialist promote ways of thinking about safety. "The loss control specialist offers ideas and methodology; he just doesn't fix things."[27]

In a telephone interview with Mr. John P. Connelly, Director of Fleet Safety Programs for the State of Michigan, he stated that Michigan has been actively involved in conducting driver improvement programs for the past ten years and that these programs are for all state employees who drive state vehicles. The programs utilized by Michigan

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[26]"Well-Designed Training Programs Lower Accident Rate," Passenger Transport, January 27, 1978, p. 1.

[27]"Invest in Safety; Save on Insurance," Fleet Owner, January 1979, pp. 66-69.

are: (1) an initial driver improvement course, (2) a refresher course required every five years, (3) an accident review board, and (4) periodic traffic safety seminars.[28]

The programs have resulted in the rate of preventable accidents per million vehicle miles driven steadily declining from 8.36 in 1973 to a low of 3.95 in 1981. Also, the state's insurance carrier indicated that because of their educational effort in driver improvement, the state of Michigan is realizing a yearly savings of one-half to one million dollars on their insurance premiums. In contrast, the yearly budget for the state's overall driver improvement program is one hundred thousand dollars and, in insurance premiums alone, this program has been shown to be cost effective.[29]

Summary

A review of the literature in this chapter included: (1) current automotive fleet safety information relating to institutions of higher education, (2) related studies in higher education, and (3) role of the private and public sector in automotive fleet safety. The review was conducted and presented within the framework of indicating the need to determine the current status of automotive fleet

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[28]Telephone interview with John P. Connelly, Director of Fleet Safety Programs, Office of Management and Budget, Motor Transportation Division, State of Michigan, Lansing, Michigan, 12 May 1982.

[29]John P. Connelly, telephone interview, 12 May 1982.

safety in colleges and universities in the United States.

It was found that very few studies involved colleges and universities and their automotive fleet safety programs. Specifically, those contributing to a better understanding of what these institutions were doing in this area were: "Michigan State University Automotive Fleet Accident Study for the Fiscal Years 1974-1975 and 1975-1976," and Glaze's dissertation, "Factors Affecting the Viability of Environmental Health and Safety Programs in Institutions of Higher Education."

The Michigan State University study created an awareness of the existing void of readily available information concerning the automotive fleet safety efforts of other colleges and universities in the United States. It also singled out areas that needed to be investigated to determine the extent of an institution's fleet safety program.

Glaze's research reinforced the fact that colleges and universities as a group did not place as much emphasis on environmental health and safety programs as did business and industry. Also indicated was a lack of reference materials for campus environmental health and safety programs coupled with the fact that the major portion of this literature was presented for the industrial setting. This lack of reference material was also evident for college and university automotive fleet safety programs.

General fleet safety information was readily available

with the major sources identified in Chapter II being: the National Safety Council, the National Committee for Motor Fleet Supervisor Training, insurance companies, and professional associations whose primary concern was automotive fleet safety. Even though these sources did not include specifics related directly to the college and university setting, they did support the need and concern for automotive fleet safety programs.

In Chapter III, the research design used in the survey of colleges and universities will be discussed.

Chapter III

METHODS OF PROCEDURE

In this chapter is a detailed presentation of the research design which includes: (1) selection of the sample four-year colleges and universities in the United States, (2) description of the sampling technique used, (3) the questionnaire approach, (4) development of the national survey questionnaire, (5) the pilot study, (6) mailing procedures, (7) follow-up procedures, (8) methods for analysis of the data collected, and (9) summary.

Selection of the Sample

A procedure for selecting the sample population had to be established in order to adequately survey a selected group of four-year colleges and universities in the United States. The most complete and up-to-date listing of all four-year colleges and universities in the United States was found to be The College Blue Book.[1] It proved to be the most comprehensive in terms of listing each school's student enrollment and the manner in which each institution was governed and controlled. Included were 913 four-year

[1] The College Blue Book, Tabular Data, Seventeenth Edition. (New York: Macmillan Publishing Company, 1979).

colleges and universities in the United States identified as having a student enrollment of 1,000 or more students. Those institutions with less than a 1,000 student enrollment were not included in the sample because it was surmised that these schools would have very small automotive fleets, if any at all. Most of the schools that were excluded were identified in the small private school category and this stratum already included 416 schools which was the largest of all the strata.

Random stratified sampling was used to select the sample population from the target population. The rationale for random stratified sampling for four-year colleges and universities in the United States was derived from Sampling Opinions[2] by E. J. Stephen and P. J. McCarthy, and Sample-Size Determination[3] by Arthur E. Mace. As explained in Statistics[4] by William L. Hays, random stratified sampling insures a representative sample so that one can make inferences about the total population that is represented.

Stratification of the sample population was determined by the way in which a college or university was governed or controlled and by its student enrollment. There was a total

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[2]E. J. Stephen and P. J. McCarthy, Sampling Opinions (New York: John Wiley, 1958), pp. 103-118.

[3]Arthur E. Mace, Sample-Size Determination (New York: Reinhold Publishing Company, 1964), pp. 2-3.

[4]William L. Hays, Statistics, Second Edition (New York: Hold, Rinehard and Winston, 1973), p. 290.

of nine strata identified and each of the 913 four-year institutions was placed in their respective stratum. The three categories used to indicate how an institution was governed or controlled were: (1) private, (2) public and (3) state. The institution's enrollment was designated as either (1) small (more than 1,000 but less than 5,000), (2) medium (more than 5,000 but less than 15,000), or (3) large (15,000 or more). All of this information was identified in The College Blue Book.

The data presented in Table 1 represent the size of the sample population for each stratum.

TABLE 1 - Total number of all four-year colleges and universities in the United States within their respective stratum

Category	Number of Schools	Percentage
Private - Small	416	45.6%
Medium	63	6.9
Large	10	1.1
Public - Small	22	2.4
Medium	42	4.6
Large	24	2.6
State - Small	147	16.1
Medium	129	14.1
Large	60	6.6
TOTALS	913	100.0%

Description of the Sampling Technique

Since the stratification being used was to obtain a

representative sample of all four-year colleges and universities in the United States and would not be used as a cross-reference between the different groups, a 25 percent sample size was taken from each stratum to insure a precise estimation of what was occurring in the area of automotive fleet safety in the target population. Random stratified sampling was the statistical method used to select the 25 percent sample size which accounted for 230 selected institutions in the United States.

In order to estimate what was occurring in the area of automotive fleet safety in all four-year colleges and universities in the United States, a representative sample of the target population had to be acquired. In discussing the size of the representative sample with Doctor Jack L. Shepler,[5] a research consultant at Indiana University of Pennsylvania, it was recommended that a 20 percent representative sample size would be sufficient to make inferences about the target population. In order to insure a representative sample for the final analysis, a 25 percent sample population was selected to receive the questionnaire.

The data presented in Table 2 represent the 25 percent sample size of all four-year colleges and universities in each stratum and the number of returns needed to insure a 20 percent representative sample in each stratum.

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[5]Interview with Dr. Jack L. Shepler, Professor and Research Consultant, Indiana University of Pennsylvania, Indiana, Pennsylvania, 5 Janaury 1981.

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TABLE 2 - Total number of all four-year colleges and universities to receive the questionnaire and the number of returns needed to insure a representative sample.

Category	Population	25% Initial Mailing	20% Representative Sample
Private - Small	416	104	83
Medium	63	16	13
Large	10	3	2
Public - Small	22	6	4
Medium	42	11	8
Large	24	6	5
State - Small	147	37	29
Medium	129	32	26
Large	60	15	12
TOTALS	913	230	182

The Questionnaire Approach

The rationale employed in reaching a decision to use the questionnaire approach to gather data from the 230 randomly selected four-year colleges and universities in the United States was as follows:

> The questionnaire is a major instrument for data gathering in descriptive-survey studies and is used to secure information from varied and widely scattered sources. The questionnaire is particularly useful when one cannot readily see personally all of the people from whom he desires responses or where there is no particular reason to see the respondent personally. This technique may be used to gather data from any range of territory, sometimes international or national.[6]

The validity of the questionnaire in a descriptive survey

[6]Carter V. Good and Douglas E. Scates. Methods of Research, (New York: Appleton-Century-Crafts, Inc., 1954), pp. 606-607.

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was described by Spahr and Swenson.[7] Raj[8] also indicated that the questionnaire approach is a useful method for the collection of data.

Development of the Questionnaire

The researcher's purpose in this national survey was to determine the status of automotive fleet safety in selected colleges and universities in the United States. As previously stated in Chapter I, minimal information was available on a national scale in this area of safety related to higher education. Therefore, it was determined that this survey instrument should elicit data that would provide as comprehensive a picture as possible and still not be too time consuming for the recipient to complete and return. Five categories were established for the grouping of questions as they related to an institution's fleet safety operation. Following are the categories and subcategories that guided the development of the questions:

1. General information relative to the educational institution and its automotive fleet.
   a. Type of institution.
   b. Size of institution.
   c. Size, type and use of the automotive fleet.

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[7]Walter E. Spahr and Rinehard J. Swenson, Methods and Status of Scientific Research (New York: Harper and Brothers, 1930), pp. 232-233.

[8]Des Raj. The Design of Sample Surveys (New York: McGraw-Hill Book Company, 1972), pp. 116-117.

2. Extent of the automotive fleet policies and procedures.
    a. Evidence of written policies and procedures.
    b. Type of supervision.
    c. Support given to the fleet safety program.
    d. Insurance information.
    e. Vehicle maintenance and inspection.
    f. Type of records maintained.
    g. Accident reporting procedures.
    h. Safety recognition.
    i. Program evaluation.
3. Extent of the educational and/or training programs.
    a. Availability of such programs.
    b. Overall educational effort.
4. Factual data concerning the institution's automotive fleet operation during the 1978-1979 and 1979-1980 school years.
    a. Number of accidents involving automotive fleet vehicles.
    b. Personal injuries and/or fatalities.
    c. Employee work days lost.
    d. Cost involving automotive fleet accidents.
    e. Total mileage for the automotive fleet.
    f. Lawsuits.
5. Opinions of person(s) responding to the questionnaire.

The original questionnaire included fifty questions

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representing all five categories. Copies of this questionnaire were then submitted to the student's advisory committee for an analysis of wording, content, and specificity of purpose and intent. As a result of this analysis and editing, some questions were rephrased and two questions were deleted. Forty-eight questions were included in the survey that was sent to the educational institutions that participated in the pilot study. Following the pilot study, additional questions were rephrased and rearranged resulting in fifty-two questions being included in the final questionnaire sent to the sample population.

It was decided to send the questionnaire to the "campus insurance coordinator" as this individual would be the most likely to have information concerning the institution's automotive fleet. It was also assumed that the insurance coordinator would have a genuine interest in the safe and efficient operation of the institution's automotive fleet.

Pilot Study

A pilot study was conducted with three institutions of higher education in Pennsylvania. Included in the pilot study was a small private college, a large public university, and a medium state university. The pilot study contributed to the accomplishment of the following objectives: (1) to determine if the campus insurance coordinator understood

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the terminology and intent of each question presented in the questionnaire, (2) to determine the clarity of wording in the questionnaire, and (3) to obtain suggestions, additions and/or deletions needed in the questionnaire.

As previously stated, the questionnaire sent to those schools that participated in the pilot study included forty-eight questions presented in five parts. After carefully studying and evaluating the responses and suggestions from those participating schools, several questions were rephrased for greater clarity which resulted in an increase in the number of questions. Several questions were rearranged in their order of appearance to afford better continuity to the questionnaire.

Mailing Procedures

Prior to mailing the questionnaire to the selected campus insurance coordinators, the following steps were employed: (1) the campus insurance coordinator's school name, address and salutation were typed on the letter of explanation, (2) the return envelope was prepared and (3) the envelope to be mailed out containing the survey questionnaire, return envelope and letter of explanation was addressed. Copies of all the survey material can be found in Appendices A-D.

On May 30, 1981, the questionnaires were sent to 230 colleges and universities in the United States. This

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initial mailing produced a response from sixty-four of the 230 schools; a return of 27.8 percent.

Each stamped, self-addressed envelope that accompanied the letter of explanation and questionnaire was coded to identify the school and the stratum from which it was randomly selected. As each completed questionnaire was returned, the data received were noted and the total number of questionnaires returned in each stratum was recorded. Each questionnaire was also checked in relation to the respondent's name, title, school, and if they desired an abstract of the completed study.

Follow-Up Procedures

After a period of four weeks, a follow-up letter was sent to those campus insurance coordinators that had not responded to the initial mailing. This follow-up letter produced additional responses to the original mailing; however, it also produced responses from some who indicated that they would be willing to complete the questionnaire but they had not received the initial mailing. There were 166 schools contacted in the second mailing which produced a response from thirty-four schools, a return of 20.5 percent.

The small private school stratum was the largest of the strata in the initial and follow-up mailings. It was the one stratum in which a greater number of replies was needed. Five of the respondents in this category indicated

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that they felt their automotive fleet operations were too small to warrant completing the questionnaire. Seventeen schools, or 25 percent of the sixty-eight small private schools that did not respond to the initial and follow-up mailings, were randomly selected for a second follow-up by telephone. These schools indicated that they felt that their automotive fleets were too small to warrant their participation in this national survey and that it would be unrealistic for them to furnish the data required by the questionnaire.

After the initial mailing, follow-up mailing and telephone follow-up, there was still a need to receive a larger number of replies from seven of the strata in order to have a representative sample. It was decided to return to the target population and do another random selection from each strata (excluding small private and the large public schools which already had a representative sample). On September 30, 1981, sixty-five additional colleges and universities received a complete packet of survey materials. This mailing and subsequent telephone follow-up resulted in thirty-one schools responding to the national survey; a return of 47.7 percent.

All three mailing and telephone follow-ups produced a response from 129 schools. Nine of the 129 respondents did not complete the questionnaire for various reasons; two of these reasons were: (1) in their opinion, their respective fleet was too small and (2) their accident

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experience was too low. Because of this, data analysis and tabulation were based upon 120 completed questionnaires.

The percentage of response to the initial mailings and the follow-ups are presented in Table 3. The rate of returns of the questionnaire can be found in Appendix E and a complete list of the respondents can be found in Appendix F.

Methods for Analysis of the Data

The findings presented in Chapter IV attempted to relate systematically the current status of automotive fleet safety in the selected four-year institutions of higher learning in the United States. Data analysis involved the use of descriptive statistical techniques that indicated the percentage of response to each question. The mean served as the primary measure of the central tendency to most of the responses, while the standard deviation was used when applicable.

The findings were put in tabular form and expressed in percentages to the nearest tenth when applicable and other responses were noted in descriptive form. A narrative analysis accompanied each table relative to the question.

Answers to questions relating to the factual data concerning the automotive fleet operation during the two specified school years were used to determine the accident frequency rate at each institution. Frequency

mailings and the number of questionnaires

TABLE 3 - Number and percentage of questionnaires returned from the various mailings and the number of questionnaires used in the analysis of the data.

Category	Initial Mailing	Initial Return	Follow-Up Mailing	Follow-Up Return	Second Mailing	Second Return	Completed Questionnaire	Percentage Sampled
Private - Small	104	23	81	13	0	0	31	7.5
Medium	16	5	11	0	13	5	10	15.9
Large	3	0	3	1	3	1	2	20.0
Public - Small	6	0	6	1	5	3	3	13.6
Medium	11	5	6	3	3	1	9	21.4
Large	6	3	3	2	0	0	5	20.8
State - Small	37	13	24	2	21	10	23	15.6
Medium	32	10	22	5	16	10	25	19.4
Large	15	5	10	7	4	1	12	20.0
TOTALS	230	64 (27.8%)	166	34 (20.5%)	65	31 (47.7%)	120 (40.7%)	

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rates were used for the total number of vehicles and total mileage. Both of these formulas were used by the National Safety Council in determining the accident frequency rate nationally and locally. The formulas for computing these two accident frequencies were:

$$\text{Vehicle Frequency Rate} = \frac{\text{Number of Accidents x 100 Vehicles}}{\text{Total Number of Vehicles}}$$

$$\text{Mileage Frequency Rate} = \frac{\text{Number of Accidents x 1,000,000 Miles}}{\text{Total Mileage}}$$

Summary

Presented in this chapter were the methods of procedure for (1) selecting the sample four-year colleges and universities in the United States, (2) describing the sampling technique used in this research survey, (3) selecting the questionnaire approach in descriptive research, (4) developing the national survey questionnaire, (5) pre-testing of the instrument, (6) survey distribution and follow-up, and (7) data tabulation and analysis.

Presented in Chapter IV are the findings of this research survey.

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Chapter IV

ANALYSIS AND PRESENTATION OF SURVEY DATA

The purpose of this chapter was to report the findings of the national survey of selected four-year colleges and universities in the United States regarding their current automotive fleet safety efforts. In the preceding chapter methods for data analysis of the research were presented. Contained in this chapter is the analysis of the data and presentation of the findings.

This study was designed to identify and describe the current automotive fleet safety efforts being conducted or carried on in the selected population. The instrument that was used to gather these data was the survey questionnaire; a sample of which can be found in Appendix B.

Questionnaires were mailed to 295 selected four-year colleges and universities in the United States. There were 129 responses to the mailings. Nine of the 129 respondents did not complete the questionnaire for various reasons; two of these reasons were: (1) in their opinion, their respective fleet was too small and (2) their accident experience was too low. Because of this, data analysis and tabulation were based upon 120 completed questionnaires; a return of 40.7 percent.

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The respondents completing the survey indicated their name, title, and address of their school on the first page of the questionnaire. Their titles reflected that a variety of departments were assigned the responsibility of completing the questionnaire. The major headings of the departments involved in completing this survey included: business, finance, insurance, personnel, physical plant, safety, and transportation. A complete list of all respondents, their titles and schools can be found in Appendix F.

This chapter was divided into five sections as was the survey questionnaire. The first section contained the general information relative to the educational institution and its automotive fleet. The second section contained the automotive fleet policies and procedures of the responding schools. The automotive fleet safety educational and/or training programs of the respective schools were contained in the third section. The fourth section contained the automotive fleet information for the two school years requested. And, the opinions of the person(s) responding to the questionnaire were contained in the fifth section.

General Information Relative to the Educational Institution and its Automotive Fleet

Type of Educational Institution Responding

The data presented in Table 4 represent the percentage of responses to Question #1--Type of Institution:

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TABLE 4 - Type of Institution (Question #1)

Responses	Number	Percentage
Private	42	35
Public	18	15
State	60	50
TOTALS:	120	100

The data in Table 4 reveal that 35 percent of the respondents indicated that their schools were "private" institutions of higher learning, 15 percent were "public," and 50 percent were "state" institutions of higher learning.

Student Population of
Responding Educational Institution

The data presented in Table 5 indicate the percentage of schools within their respective student-size categories that responded to Question #2--Total Student Population:

TABLE 5 - Total Student Population (Question #2)

Responses	Number	Percentage*
Small	49	43.0
Medium	40	35.1
Large	25	21.9
TOTALS:	114	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 5 reveal that 43.0 percent of the

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respondents indicated their schools would be classified as "small," 35.1 percent would be classified as "medium," and 21.9 percent would be classified as "large." Six respondents did not reply to this question; therefore, the data analysis was based upon 114 schools.

Size of Educational Institution in Relation to Number of Administration, Faculty and Staff

The data presented in Table 6 indicate the percentage of schools within their respective size categories that responded to Question #3--Total Administration, Faculty and Staff:

TABLE 6 - Total Administration, Faculty and Staff* (Question #3)

Responses	Number	Percentage**
Small	42	38.9
Medium	24	22.2
Large	42	38.9
TOTALS:	108	100.0

*Administration, Faculty and Staff population was placed in one of three categories:

Small - An educational institution whose total employees numbered 500 or less.

Medium - An educational institution whose total employees numbered more than 500 but less than 1,000.

Large - An educational institution whose total employees numbered 1,000 or more.

**Actual computed percentage rounded to the nearest tenth.

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Data in Table 6 reveal that 38.9 percent of the respondents indicated their schools would be classified as having a "small" number of employees, 22.2 percent would be classified in the "medium" employee range, and 38.9 percent of the schools would be considered to have a "large" number of employees. Twelve respondents did not reply to this question; therefore, the data analysis was based upon 108 schools.

Size of Automotive Fleet for Responding Institution

The data presented in Table 7 indicate the percentage of schools within their respective size category that responded to Question #4--Total number of vehicles in automotive fleet:

TABLE 7 - Total Number of Vehicles in Automotive Fleet* (Question #4)

Responses	Number	Percentage**
Small	79	71.8
Large	31	28.2
TOTALS:	110	100.0

*Automotive fleet size was placed in one of two categories:
Small - Less than 100 vehicles.
Large - 100 or more vehicles.

**Actual computed percentage rounded to the nearest tenth.

Data in Table 7 reveal that 71.8 percent of the respondents indicated their schools would be considered to

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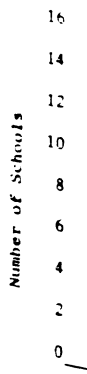

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have a "small" automotive fleet, and 28.2 percent would be considered to have a "large" automotive fleet. Ten respondents did not reply to this question.

Seventy-nine respondents indicated their schools had less than one hundred motor vehicles in their respective automotive fleets. As indicated in Figure 1, the range of vehicles for the seventy-nine schools was as few as three vehicles to as many as eighty-eight vehicles. The median for the distribution in Figure 1 was thirty vehicles and the mean of the distribution was thirty-five vehicles with a standard deviation of 23.5.

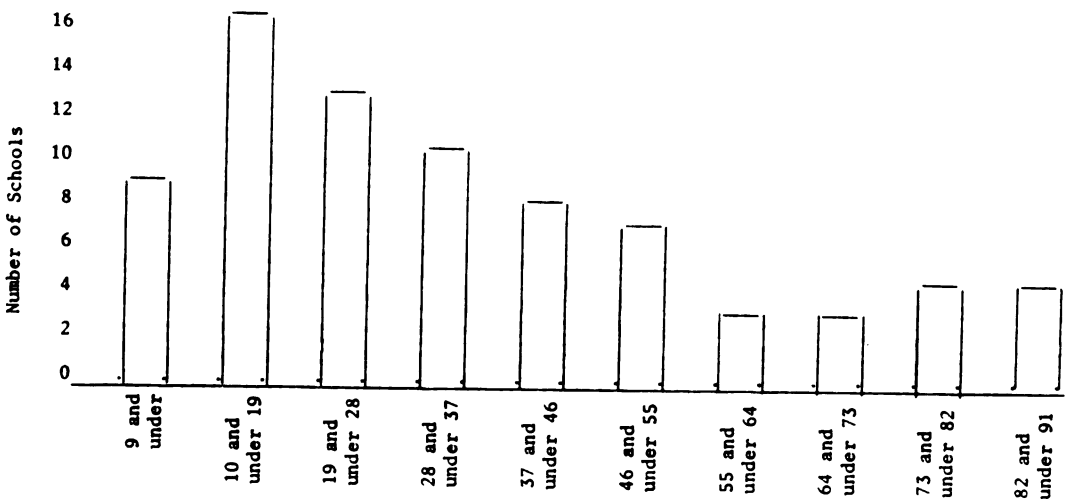

Figure 1

Number of Vehicles in those Schools
Designated as Having Small Fleets (Less than 100 Vehicles)

Thirty-one respondents indicated their schools had one hundred or more vehicles in their respective automotive

fleets. As indicated in Figure 2, the range of vehicles for these thirty-one schools was 130 vehicles to 3,062 vehicles. The median for the distribution in Figure 2 was 172 vehicles and the mean was 426 vehicles with a standard deviation of 588.4.

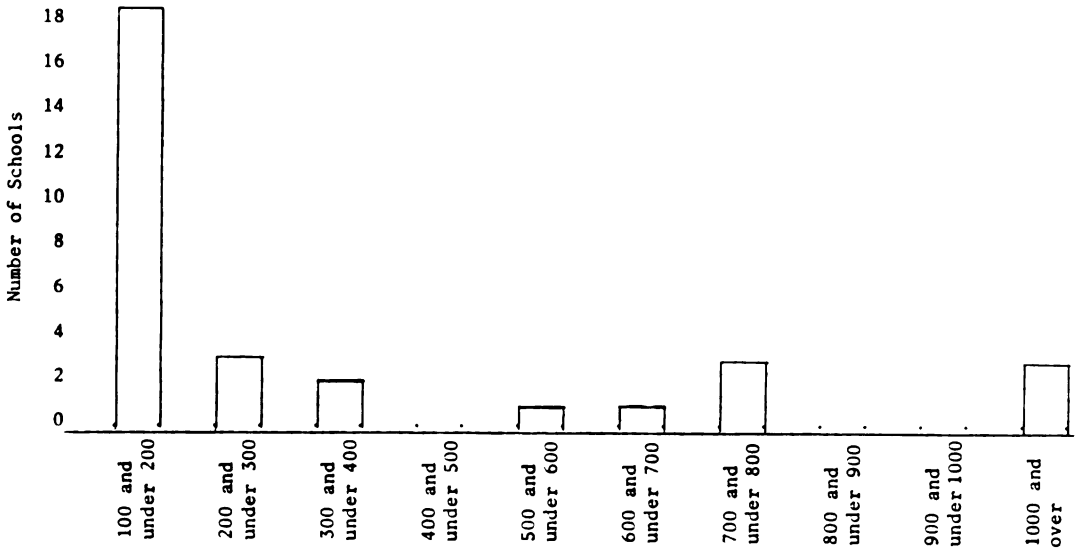

Figure 2

Number of Vehicles in those Schools
Designated as Having Large Fleets (100 or more vehicles)

Type of Vehicles Associated with the Automotive Fleets

The data in Table 8 represent the percentage of responses to Question #5--Please indicate the type(s) of vehicle currently in use as part of your automotive fleet:

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TABLE 8 - Types of Vehicles (Question #5)

Responses	Number*	Percentage**
Sedans	117	97.5
Station Wagons	91	75.8
Passenger Vans	110	91.7
Buses	74	61.7
Motorcycles	25	20.8
Ambulances	19	15.8
Fire Vehicles	14	11.7
Light Trucks/Vans	107	89.2
Large Trucks/Vans	86	71.7
Farm Tractors	80	66.7
Construction and/or Utility	65	54.2
Other	10	8.3

*Question answered by 120 respondents.

**Actual computed percentage rounded to the nearest tenth.

The data in Table 8 reveal that 97.5 percent of the respondents indicated that their educational institutions used sedans in their automotive fleets (included in this category were police cars), 75.8 percent used station wagons, 91.7 percent used passenger vans, 61.7 percent used buses, 20.8 percent used motorcycles (included in this category were two and three-wheel motor scooters and mopeds), 15.8 percent used ambulances, 11.7 percent used fire vehicles, 89.2 percent used light trucks and vans, 71.7 percent used large trucks and vans, 66.7 percent used farm tractors, 54.2 percent used construction and/or utility vehicles, and 8.3 percent indicated other vehicles which

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included motor homes, golf carts, snowmobiles, and trailers.

Types of Service Currently Provided by the Automotive Fleets

The data presented in Table 9 indicate the percentage of responses to Question #6--Please indicate the type(s) of service currently provided by your automotive fleet and whether this service is provided on campus, off campus or both:

Transporting Students

The data in Table 9 reveal that 90.0 percent of the schools provided this service--66.7 percent both on and off campus, 20.8 percent off campus only, and 2.5 percent on campus only.

Recruiting Students

The data in Table 9 reveal that 79.2 percent of the schools provided this service--40.8 percent both on and off campus, and 38.3 percent off campus only.

Academic Travel

The data in Table 9 reveal that 88.3 percent of the schools provided this service--56.7 percent both on and off campus, and 31.7 percent off campus only.

Business

The data in Table 9 reveal that 89.2 percent of the schools provided this service--65.0 percent both on and off campus, 23.3 percent off campus only, and 0.8 percent on campus only.

TABLE 9 - Types of Service Provided by Automotive Fleet (Question #6)

TABLE 9 - Types of Service Provided by Automotive Fleet (Question #6)

Responses	On-Campus		Off-Campus		Both		Total	
	n*	%**	n*	%**	n*	%**	n*	%**
Transporting Students	3	2.5	25	20.8	80	66.7	108	90.0
Recruiting Students	0	0.0	46	38.3	49	40.8	95	79.2
Academic Travel	0	0.0	38	31.7	68	56.7	106	88.3
Business	1	0.8	28	23.3	78	65.0	107	89.2
Driver Education	8	6.7	4	3.3	22	18.3	34	28.3
Delivery Service	25	20.8	3	2.5	76	63.3	104	86.7
Grounds Work	64	53.3	3	2.5	49	40.8	116	96.7
Service & Maintenance	40	33.3	4	3.3	67	55.8	111	92.5
Emergency Service	19	15.8	4	3.3	55	45.8	78	65.0
Construction	28	23.3	1	0.8	25	20.8	54	45.0

*Question was answered by 120 respondents.

**Actual computed percentage rounded to the nearest tenth.

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Driver Education

The data in Table 9 reveal that 28.3 percent of the schools provided this service--18.3 percent both on and off campus, 3.3 percent off campus only, and 6.7 percent on campus only.

Delivery Service

The data in Table 9 reveal that 86.7 percent of the schools provided this service--63.3 percent both on and off campus, 2.5 percent off campus only, and 20.8 percent on campus only.

Grounds Work

The data in Table 9 reveal that 96.7 percent of the schools provided this service--40.8 percent both on and off campus, 2.5 percent off campus only, and 53.3 percent on campus only.

Service & Maintenance

The data in Table 9 reveal that 92.5 percent of the schools provided this service--55.8 percent both on and off campus, 3.3 percent off campus only, and 33.3 percent on campus only.

Emergency Service

The data in Table 9 reveal that 65.0 percent of the schools provided this service--45.8 percent both on and off campus, 3.3 percent off campus only, and 15.8 percent on campus only.

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the schools provided this service--20.8 percent both on and off campus, 0.8 percent off campus only, and 23.3 percent on campus only.

Location of Automotive Fleet

The data presented in Table 10 indicate the percentage of responses to Question #7--Is your automotive fleet located and/or housed in one central location?

TABLE 10 - Whether or not fleet located in one central location (Question #7)

Responses	Number	Percentage*
Yes	73	61.3
No	46	38.7
TOTALS:	119	100.0

*Actual computed percentage rounded to the nearest tenth.

Data in Table 10 reveal that 61.3 percent of the schools' automotive fleets were located and/or housed in one central location while 38.7 percent were not. One respondent did not reply to this question.

Acquisition of Vehicles

The data presented in Table 11 reveal the percentage of responses to Question #8--Are all fleet vehicles currently owned by the institution?

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TABLE 11 - Ownership of Vehicles by University (Question #8)

Responses	Number	Percentage*
Yes	64	53.8
No	55	46.2
TOTALS:	119	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 11 reveal that 53.8 percent of the schools owned all of their vehicles while 46.2 percent did not. One respondent did not reply to the question.

Table 12 indicates the percentage of responses to the second part of Question #8 (those that responded NO)--If NO, please indicate how vehicles are acquired:

TABLE 12 - Acquisition of Vehicles (Second part of Question #8)

Responses:	Some Owned	Leased	Free Loan
Number*:	45	55	15
Percentage**:	81.8	100.0	27.3

*Question answered by 55 respondents.
**Actual computed percentage rounded to the nearest tenth.

The data in Table 12 reveal that 81.8 percent of the fifty-five respondents who answered NO to Question #8 owned some of their fleet vehicles, 100.0 percent leased vehicles, and 27.3 percent acquired vehicles on a free

loan basis.

Status of Driver Permitted to Use Automotive Fleet Vehicles

The data presented in Table 13 indicate the percentage of responses to Question #9--Please indicate the status of driver permitted to use the vehicles in the automotive fleet:

TABLE 13 - Status of driver permitted to use fleet vehicles (Question #9)

Responses	Number*	Percentage**
Administration	119	99.2
Instructional Staff	113	94.2
Non-instructional Staff	120	100.0
Graduate Assistants	75	62.5
Graduate Students	60	50.0
Undergraduate Students	75	62.5
Other	6	5.0

*Question answered by 120 respondents.
**Actual computed percentage rounded to the nearest tenth.

The data in Table 13 reveal that 99.2 percent of the schools permitted their administration to use fleet vehicles, 94.2 percent permitted instructional staff, 100 percent permitted non-instructional staff, 62.5 percent permitted graduate assistants, 50.0 percent permitted graduate students, 62.5 percent permitted undergraduate students, and 5.0 percent indicated "other" (included in this category were volunteers, other state employees, non-employees with permission, and the president's family).

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Automotive Fleet Policies and Procedures

Written Set of Policies and Procedures for the Automotive Fleet

The data in Table 14 reveal the percentage of responses to Question #10--Does your educational institution have a written set of policies and procedures relating to the safe and efficient use of vehicles in the automotive fleet?

TABLE 14 - Whether or not there were written policies and procedures for use of fleet vehicles (Question #10)

Responses	Number	Percentage*
Yes	66	56.9
No	50	43.1
TOTALS:	116	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 14 reveal that 56.9 percent of the schools had a written set of policies and procedures that related to the safe and efficient use of vehicles in the automotive fleet while 43.1 percent did not. Four respondents did not reply to the question.

Table 15 reveals the percentage of responses to the second part of Question #10--If YES, please complete the following:

TABLE 15 - Use of the Automotive Fleet Policies and Procedures (Second Part of

TABLE 15 - Use of the Automotive Fleet Policies and Procedures (Second Part of Question #10)

	Question	Responses	Number*	Percentage**
a.	Are the automotive fleet guidelines in a separate employee's driver manual?	Yes	24	35.9
		No	42	64.1
b.	Are the automotive fleet guidelines made available to all drivers?	Yes	61	92.3
		No	5	7.7
c.	Are the automotive fleet guidelines placed in each vehicle?	Yes	34	50.8
		No	32	49.2

*Question answered by 66 respondents.

**Actual computed percentage rounded to the nearest tenth.

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The data presented in Table 15 reveal that 35.9 percent of the sixty-six respondents that answered YES to the first part of Question #10 indicated that a separate employee's driver manual was available, and 64.1 percent indicated a manual was not available.

The data also reveal that 92.3 percent of the schools made available to all drivers the automotive fleet guidelines while 7.7 percent did not. Also, 50.8 percent of the schools placed the guidelines in each vehicle while 49.2 percent did not follow this procedure.

Responsibility for the Management and Supervision of An Automotive Fleet Safety Program

The data in Table 16 indicate the percentage of responses to Question #11--Is there one person or department on your campus that has direct responsibility for the management and supervision of an automotive fleet program?

TABLE 16 - Whether or not one person or department to manage and supervise automotive fleet program (Question #11)

Responses	Number	Percentage*
Yes	63	54.3
No	53	45.7
TOTALS:	116	100.0

*Actual computed percentage rounded to the nearest tenth.

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The data in Table 16 reveal that 54.3 percent of the schools had one department or person responsible for the automotive fleet safety program while 45.7 percent did not. Four respondents did not reply to the question.

Table 17 reveals the percentage of responses to the second part of Question #11--If YES, please complete the following: a. What is the title of the person or department in charge?

TABLE 17 - Title of Person or Department in Charge (Second part of Question #11)

Responses*	Number	Percentage**
Physical Plant	17	27.0
Maintenance Department	15	23.8
Transportation Department	10	15.9
Health & Safety Office	8	12.7
Buildings & Grounds	6	9.5
Campus Security & Safety	5	7.9
Business Operations	1	1.6
Student Admissions	1	1.6
TOTALS:	63	100.0

*Departments were labelled generically because all titles were not exactly alike.

**Actual computed percentage rounded to the nearest tenth.

The data in Table 17 reveal that sixty-three of the respondents who answered YES to the first part of Question #11 indicated the responsibility for an automotive

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fleet safety program was assigned to one of the following eight categories: (1) physical plant, 27.0 percent, (2) maintenance department, 23.8 percent, (3) transportation department, 15.9 percent, (4) health and safety office, 12.7 percent, (5) buildings and grounds department, 9.5 percent, (6) campus security and safety, 7.9 percent, (7) business operations, 1.6 percent, and (8) student admissions, 1.6 percent.

The data presented in Table 18 reveal the percentage of responses to the remainder of the second part of Question #11--If YES, please complete the following:

b. Is fleet safety this person's or department's only duty?

c. Was specific training or preparation in relation to automotive fleet safety received by this person or department members?

The data in Table 18 reveal that 1.6 percent of the sixty-two respondents who answered YES to the first part of Question #11 indicated that fleet safety was their only responsibility and 98.4 percent indicated it was not. One respondent did not answer this part of the question.

Those that responded NO to Question #11b were asked to indicate other responsibilities. See Appendix G for a complete list of responses.

The data in Table 18 also reveal that 29.8 percent of the fifty-seven respondents who answered YES to the

TABLE 18 - Other assignments and special training for person or department (Questions #11b and #11c)

	Question	Responses	Number	Percentage*
b.	Is fleet safety this person's or department's only duty?	Yes	1	1.6
		No**	61	98.4
	TOTALS:		62	100.0
C.	Was specific training or preparation in relation to automotive fleet safety received by this person or department member?	Yes**	17	29.8
		No	40	70.2
	TOTALS:		57	100.0

*Actual computed percentage rounded to the nearest tenth.

**See Appendix G for complete list of responses.

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first part of Question #11 indicated that special training had been received by the person or department members responsible for automotive fleet safety while 70.2 percent indicated that no specific training or preparation had been received. Six respondents did not reply to this part of the question.

Those that responded YES to Question #11c were asked to indicate the training received. See Appendix G for a complete list of responses.

The data in Table 19 reveal the percentage of responses to the third part of Question #11 (those that responded NO)--If NO, how many persons or departments are responsible for the fleet safety program and what are their titles?

TABLE 19 - Number of persons or departments responsible for fleet safety program (third part of Question #11)

Responses*	Number	Percentage**
None	3	13.6
Two	10	45.5
Three	6	27.3
Four or More	3	13.6
TOTALS:	22	100.0

*See Appendix G for complete list of responses.
**Actual computed percentage rounded to the nearest tenth.

The data in Table 19 reveal that twenty-two of the respondents who answered NO to the first part of Question

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#11 indicated that 13.6 percent had no person or department responsible for fleet safety, 45.5 percent had two persons or departments responsible, 27.3 percent had three persons or departments responsible, and 13.6 percent had four or more persons responsible for fleet safety. Thirty of the fifty-two respondents who answered NO to Question #11 did not reply to this part of the question. Those that responded to the third part of the question were asked to indicate the titles of those in charge. See Appendix G for a complete list of responses.

The data presented in Table 20 indicate the percentage of responses to Question #12--Are the automotive fleet guidelines consistent for all vehicles used in the day-to-day operation of your educational institution?

TABLE 20 - Whether or not consistency in automotive fleet guidelines (Question #12)

Responses	Number	Percentage*
Yes	79	73.8
No	28	26.2
TOTALS:	107	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 20 reveal that 73.8 percent of the schools indicated that fleet guidelines were consistent for all vehicles and 26.2 percent were not. Thirteen respondents did not answer this question.

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The data presented in Tables 21, 22, and 23 indicate the percentage of responses to the second part of Question #12 (those that responded NO)--If NO, please indicate the following:

a. The number of departments and/or groups that have vehicles which are not considered to be part of the automotive fleet: (see table 21)

TABLE 21 - Number of departments and/or groups that had vehicles not considered part of fleet (Question #12a)

Responses	Number	Percentage
One	4	20
Two	6	30
Three	4	20
Four	1	5
Five	1	5
Ten or More	4	20
TOTALS:	20	100

The data in Table 21 reveal that twenty of the respondents who answered NO to Question #12 indicated that 20 percent had one department or group assigned vehicles considered not to be part of the fleet, 30 percent had two departments or groups, 20 percent had three departments or groups, 5 percent had four departments or groups, 5 percent had five departments or groups, and 20 percent had ten or more departments or groups assigned vehicles not considered to be part of the automotive fleet. Eight

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respondents did not reply to this part of the question.

b. The names of those departments and/or groups that have vehicles not included in the automotive fleet: (see table 22)

TABLE 22 - Names of departments and/or groups that had vehicles not included in the automotive fleet. (Question #12b)

Responses	Number*	Percentage
Field & Extension Services	9	45
Administrative and General Campus Services	7	35
Physical Education and Athletics	6	30
President	3	15
Police and Security	3	15
Foundation and Development	3	15
Individual Departments	3	15
Admissions	2	10
Student Government Assoc.	2	10

*Question answered by 20 respondents.

The data in Table 22 reveal that twenty of the respondents who answered NO to Question #12 identified the following departments and/or groups as having vehicles outside of the automotive fleet: (1) field and extension services, 45 percent, (2) administrative and general campus services, 35 percent, (3) physical education and athletics, 30 percent, (4) president, 15 percent, (5) police and security, 15 percent, (6) foundation and development, 15

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percent, (7) individual departments, 15 percent, (8) admissions, 10 percent, and (9) student government associations, 10 percent. Eight respondents did not reply to this part of the question.

c. If known, what is the total number of vehicles considered not to be part of the automotive fleet? (see table 23)

TABLE 23 - Total number of vehicles considered not to be part of automotive fleet (Question #12c)

Responses	Number	Percentage*
Two vehicles	3	18.8
Four vehicles	1	6.3
Five vehicles	1	6.3
Six vehicles	2	12.5
Seven vehicles	2	12.5
Ten vehicles	1	6.3
Eleven vehicles	1	6.3
Twelve vehicles	1	6.3
Fifteen or more vehicles	4	25.0
TOTALS:	16	100.3

*Actual computed percentage rounded to the nearest tenth.

The data in Table 23 reveal that sixteen of the respondents who answered NO to Question #12 indicated the number of vehicles considered not to be a part of the automotive fleet ranged from two to fifteen or more. Twelve respondents did not answer this part of the question.

Insuring the Automotive Fleet and Its Operators

The data in Table 24 reveal the percentage of responses to Question #13--Please indicate how your automotive fleet is insured:

TABLE 24 - How Automotive Fleet Insured (Question #13)

Responses	Number	Percentage*
Self-Insured	32	28.3
Self-Insured and Private Insurance Carrier	20	17.7
Private Insurance Carrier	60	53.1
Other	1	0.9
TOTALS:	113	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 24 reveal that 28.3 percent of the schools (primarily "state" and "public") were totally self-insured, 17.7 percent were both self-insured and insured by a private carrier (the self-insurance primarily covered collision and comprehensive and/or a maximum dollar loss for the school and the private insurance carrier was for liability and/or anything in excess of the maximum self-insurance coverage), 53.1 percent were totally insured by a private carrier (many "state" schools indicated that their state government had one private insurance carrier insure all motor vehicles owned and operated by the various state agencies within their respective states), and 0.9

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percent were insured by a private insurance carrier and leasing agency. Seven respondents did not reply to this question.

Table 25 presents the percentage of responses to Question #14--Are all the vehicles assigned to your automotive fleet insured under the same policy?

TABLE 25 - Whether or not all vehicles were insured under the same policy (Question #14)

Responses	Number	Percentage*
Yes	104	90.4
No	11	9.6
TOTALS:	115	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 25 reveal that 90.4 percent of the respondents indicated their fleets were insured under the same policy, and 9.6 percent were not. Five respondents did not answer this question.

The data in Table 26 reveal the percentage of responses to Question #15--Are all drivers using the automotive fleet fully insured by your educational institution?

Data in Table 26 reveal that 91.4 percent of the respondents indicated all drivers using fleet vehicles were fully insured by the educational institution, and 8.6 percent were not. Four respondents did not reply.

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TABLE 26 - Whether or not all drivers were fully insured (Question #15)

Responses	Number	Percentage*
Yes	106	91.4
No	10	8.6
TOTALS:	116	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 27 reveal the percentage of responses to the second part of Question #15 (those that responded NO)--If NO, indicate whose responsibility this would be:

TABLE 27 - Responsibility for insurance if driver not insured by institution (second part of Question #15)

Responses	Number	Percentage
Driver	9	90
Department or Group Assigned Vehicle	1	10
TOTALS:	10	100

The data in Table 27 reveal that 90 percent of the ten respondents who answered NO to Question #15 indicated that the driver was responsible for his/her insurance coverage, and 10 percent indicated it was the responsibility of the department or group assigned the vehicle.

Inspection and Maintenance of Automotive Fleet Vehicles

The data in Table 28 reveal the percentage of responses to Question #16--Are all vehicles housed on campus periodically inspected and maintained by one department?

TABLE 28 - Whether or not vehicles were periodically inspected and maintained by one department (Question #16)

Responses	Number	Percentage*
Yes	91	75.8
No	29	24.2
TOTALS:	120	100.0

*Actual computed percentage rounded to the nearest tenth.

In Table 28, the data reveal that 75.8 percent of the respondents indicated that all vehicles housed on campus were periodically inspected and maintained by one department, and 24.2 percent indicated that all were not inspected and maintained by one department.

It should be noted that five, or 17.2 percent, of the respondents who answered NO indicated that the majority of their vehicles were inspected and maintained by one department, but not all of the vehicles as indicated in the question.

The data in Table 29 reveal the percentage of responses to the second part of Question #16 (those that responded NO)--If NO, indicate how vehicle maintenance

and inspection are administered:

TABLE 29 - How vehicle maintenance and inspection were administered (Second part of Question #16)

Responses	Number*	Percentage**
Private Garage	7	24.1
Leasing Agency	2	6.9
Department Assigned Vehicle	22	75.9

*Question answered by 29 respondents.

**Actual computed percentage rounded to the nearest tenth.

The data in Table 29 reveal that 24.1 percent of the schools used a private garage for periodic maintenance and inspection of vehicles housed on campus, 6.9 percent used a leasing agency, and 75.9 percent indicated that this was the responsibility of the individual departments assigned vehicles. (Many that indicated this last response also stated that the assigned vehicles were checked and maintained by either the campus garage, a private garage or a leasing agency.)

The twenty-nine respondents who answered NO to Question #16 indicated more than one response and this demonstrated a percentage of reply greater than 100.0 percent.

Type of Automotive Fleet Records Maintained

The data in Table 30 reveal the percentage of responses to Question #17--Please indicate the type of automotive fleet records that are maintained on your campus:

TABLE 30 - Type of Automotive Fleet Records Maintained (Question #17)

Responses	Number*	Percentage**
Accident	108	91.5
Driver	60	50.8
Vehicle Mileage	103	87.3
Insurance	89	75.4
Vehicle Inspection	88	74.6
Vehicle Maintenance	101	85.6
Maintenance Costs	87	73.7
Accident Costs	58	49.2
Other	4	3.4

*Question answered by 118 respondents.
**Actual computed percentage rounded to the nearest tenth.

The data in Table 30 reveal that 91.5 percent of the schools maintained accident records on campus, 50.8 percent maintained driver records, 87.3 percent maintained vehicle mileage records, 75.4 percent maintained insurance records, 74.6 percent maintained vehicle inspection records, 85.6 percent maintained vehicle maintenance records, 73.7 percent maintained maintenance costs records, 49.2 percent maintained accident costs records, and 3.4 percent maintained other records (included were vehicle identification and

registration, and records on the number of students being transported by fleet vehicles). Two respondents did not reply to this question.

Location of Automotive Fleet Records

The data in Table 31 reveal the percentage of responses to Question #18--Are records relative to the fleet operation maintained in a central location?

TABLE 31 - Whether or not fleet records in central location (Question #18)

Responses	Number	Percentage
Yes	75	63
No	44	37
TOTALS:	119	100

Data in Table 31 reveal that 63 percent of the schools maintained fleet operational records in one location, and 37 percent did not. One respondent did not reply.

The data in Table 32 reveal the percentage of responses to the second part of Question #18 (those that responded YES)--If YES, indicate the name of the department or office that maintains these records:

Data in Table 32 reveal that 56.7 percent of the schools maintained fleet operational records in the physical plant operations and maintenance area, 28.4 percent in the transportation and/or motor pool office, 11.9

TABLE 32 - Department or Office that maintained automotive fleet records (Second Part of Question #18)

Responses*	Number	Percentage**
Physical Plant Operations and Maintenance	38	56.7
Transportation and Motor Pool	19	28.4
Business Office	8	11.9
Treasurer's Office	1	1.5
Admissions Office	1	1.5
TOTALS:	67	100.0

*Departments were labelled generically because all titles were not exactly alike.

**Actual computed percentage rounded to the nearest tenth.

percent in the business office, 1.5 percent in the treasurer's office, and 1.5 percent in the admissions office. Eight of the seventy-five respondents who answered YES to Question #18 did not respond to this part of the question. The names of the departments and offices were labelled generically.

The data in Table 33 reveal the percentage of responses to the third part of Question #18 (those that responded NO)--<u>If NO, indicate the number of departments or offices responsible for maintaining these records and their respective names:</u>

The data in Table 33 reveal that 47.4 percent of the schools maintained fleet operational records in two locations, 23.7 percent in three locations, 18.4 percent in four locations, and 10.5 percent in five or more locations.

TABLE 33 - Number of locations that maintained automotive fleet records (Third part of Question #18)

Responses*	Number	Percentage**
Two Locations	18	47.4
Three Locations	9	23.7
Four Locations	7	18.4
Five or More Locations	4	10.5
TOTALS:	38	100.0

*See Appendix G for complete list of departments and/or offices.

**Actual computed percentage rounded to the nearest tenth.

Six of the thirty-four respondents who answered NO to Question #18 did not reply to this part of the question. See Appendix G for the names of the departments and/or offices indicated by the respondents.

Individual Driving Records and Their Use

The data in Table 34 reveal the percentage of responses to Question #19--Is a person's operator license verified prior to their initial operation of a vehicle in the automotive fleet?

TABLE 34 - Whether or not there was verification of a person's operator license (Question #19)

Responses	Number	Percentage*
Yes	86	74.1
No	30	25.9
TOTALS:	116	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 34 reveal that 74.1 percent of the schools verified a person's operator license prior to their initial operation of a vehicle in the automotive fleet, and 25.9 percent did not. Four respondents did not reply to this question.

Two respondents who answered NO had the following comments for further clarification: (1) if a person was a full-time operator of fleet vehicles, then their license was verified, and (2) only maintenance department personnel who used vehicles regularly had their licenses verified.

The data in Table 35 reveal the percentage of responses to Question #20--Is a person's driving record examined prior to their initial operation of a vehicle in the automotive fleet?

TABLE 35- Whether or not driving record examined prior to operation of fleet vehicle (Question #20)

Responses	Number	Percentage*
Yes	34	29.6
No	81	70.4
TOTALS:	115	100.0

*Actual computed percentage rounded to the nearest tenth.

Data in Table 35 reveal that 29.6 percent of the schools examined a person's driving record prior to their initial operation of a vehicle in the automotive fleet,

and 70.4 percent did not. Five respondents did not reply to this question.

Four respondents who answered NO made the following comments:

(1) Two respondents indicated that all full-time operators had their driving records checked at their respective schools.

(2) One respondent indicated that driving records were not checked prior, but were checked within ten days.

(3) One respondent indicated that driving records were checked within three months, but not prior to the initial operation of a fleet vehicle.

The data in Table 36 reveal the percentage of responses to Question #21--If an individual's primary responsibility is operating a fleet vehicle, does anyone at your institution examine that person's driving record prior to their employment?

TABLE 36 - Whether or not driving record was examined if primary responsibility was operating a fleet vehicle (Question #21)

Responses	Number	Percentage*
Yes	69	60.0
No	33	28.7
NA**	13	11.3
TOTALS:	115	100.0

*Actual computed percentage rounded to the nearest tenth.
**NA = not applicable.

The data in Table 36 reveal that 60.0 percent of the schools examined a person's driving record prior to their employment if their primary responsibility was driving a fleet vehicle, 28.7 percent did not, and 11.3 percent indicated a reply of YES or NO was not applicable. Five respondents did not reply to this question.

The data in Table 37 reveal the percentage of responses to Question #22--Are driving records maintained on all persons operating a vehicle in the automotive fleet?

TABLE 37 - Whether or not driving records maintained on all persons operating fleet vehicles (Question #22)

Responses	Number	Percentage*
Yes	30	25.9
No	86	74.1
TOTALS:	116	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 37 reveal that 25.9 percent of the schools maintained driving records on all persons operating fleet vehicles, and 74.1 percent did not. Four respondents did not reply to this question.

Table 38 presents the percentage of responses to the second part of Question #22 (those that responded YES)--If YES, please indicate those categories that are maintained in relation to the active driving records:

TABLE 38 - Categories maintained in relation to the active driving record (Second part of Question #22)

Responses	Number*	Percentage**
Types of Vehicle Qualified to Operate	18	60.0
Mileage Driven	11	36.7
Accident Involvement	20	66.7
Chargeable Accidents	17	56.7
Chargeable Violations	15	50.0
Other	2	6.7

*Question answered by 30 respondents.

**Actual computed percentage rounded to the nearest tenth.

The data in Table 38 reveal that 60.0 percent of the thirty respondents who answered YES to Question #22 maintained records on types of vehicle qualified to operate, 36.7 percent maintained records on mileage driven, 66.7 percent maintained records on accident involvement, 56.7 percent maintained records on chargeable accidents, 50.0 percent maintained records on chargeable violations, and 6.7 percent maintained other records which included: a record of attendance at a Defensive Driving Course, and copies of the Department of Motor Vehicle report.

The data in Table 39 presents the percentage of responses to Question #23--Are driving records maintained on those persons whose primary responsibility is operating a fleet vehicle? (e.g. bus driver, etc.)

TABLE 39 - Whether or not driving records were maintained on person whose primary responsibility was operating a fleet vehicle (Question #23)

Responses	Number	Percentage*
Yes	48	43.6
No	51	46.4
NA**	11	10.0
TOTALS:	110	100.0

*Actual computed percentage rounded to the nearest tenth.
**NA = not applicable.

The data in Table 39 reveal that 43.6 percent of the schools maintained driving records on a person whose primary responsibility was operating a fleet vehicle, 46.4 percent did not, and 10.0 percent indicated that this question was not applicable. Ten respondents did not reply to the question.

Table 40 presents the percentage of responses to the second part of Question #23 (those that responded YES)--If YES, please indicate those categories that are maintained in relation to the active driving record:

The data in Table 40 reveal that 70.8 percent of the forty-eight respondents who answered YES to Question #23 maintained records on type(s) of vehicle qualified to operate, 41.7 percent maintained records on mileage driven, 72.9 percent maintained accident involvement records, 56.3 percent maintained chargeable accident records, 45.8 percent maintained chargeable violation records, and 6.3

TABLE 40 - Categories maintained in relation to active driving record for those persons whose primary job was operating a fleet vehicle (Second part of Question #22)

Responses	Number*	Percentage**
Type(s) of Vehicle Qualified to Operate	34	70.8
Mileage Driven	20	41.7
Accident Involvement	35	72.9
Chargeable Accidents	27	56.3
Chargeable Violations	22	45.8
Other	3	6.3

*Question answered by 48 respondents.

**Actual computed percentage rounded to the nearest tenth.

percent maintained other records which included: records of a person's physical examination, written test and road test scores, and copies of Department of Motor Vehicle report.

Table 41 presents the percentage of responses to Question #24--Does your educational institution use the term "Satisfactory Driving Record?"

TABLE 41 - Whether or not term "Satisfactory Driving Record" was used (Question #24)

Responses	Number	Percentage*
Yes	8	7.3
No	102	92.7
TOTALS:	110	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 41 reveal that 7.3 percent of the schools used the term "Satisfactory Driving Record," and 92.7 percent did not. Ten respondents did not reply to the question.

Those that responded YES were asked to define the term "Satisfactory Driving Record," and six of the eight gave the following definitions:

(1) "Clean" driving record (no violations).

(2) No moving violations

(3) Less than six points in past three years.

(4) Less than eight moving violations in a twelve-month period.

(5) No known serious violations.

(6) Within insurance company's guidelines.

Accident Report Forms

Data in Table 42 presents the percentage of responses to Question #25--Is an accident report form used for fleet accidents?

TABLE 42 - Whether or not accident report form used for fleet accidents (Question #25)

Responses	Number	Percentage*
Yes	114	97.4
No	3	2.6
TOTALS:	117	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 42 reveal that 97.4 percent of the schools used accident report forms for automotive fleet accidents, and 2.6 percent did not. Three respondents did not reply to the question.

Data in Table 43 reveal the percentage of responses to the second part of Question #25 (those that responded YES)--If YES, indicate the type of form used:

TABLE 43 - Type of Accident Report Form Used (Second part of Question #25)

Responses	Number*	Percentage**
Form Used by State Police or Highway Patrol	49	43.8
National Organization	0	0.0
Insurance Company Form	48	42.1
Educational Institution's Own Form	54	47.4

*Question answered by 113 respondents.

**Actual computed percentage rounded to the nearest tenth.

The data in Table 43 reveal that 43.8 percent of the 113 respondents who answered YES to Question #25 used state police or highway patrol accident report forms, 42.1 percent used an insurance form, and 47.4 percent used their educational institution's own form. One respondent did not reply to this question.

Some of the standardized forms used by the schools were often a state form used by all state agencies assigned vehicles in that state.

Procedures to Follow When Involved in an Accident with a Fleet Vehicle

The data in Table 44 reveal the percentage of responses to Question #26--Are all employees involved in an accident with a fleet vehicle required to complete an accident report form?

TABLE 44 - Whether or not employees required to complete accident report form (Question #26)

Responses	Number	Percentage*
Yes**	111	94.1
No	7	5.9
TOTALS:	118	100.0

*Actual computed percentage rounded to the nearest tenth.
**See Appendix G for complete list of responses.

The data in Table 44 reveal that 94.1 percent of the schools required all employees to complete an accident report form when involved in an accident with a fleet vehicle, and 5.9 percent did not. Two respondents did not reply to the question.

One respondent who answered NO stated that the school received a copy of the accident report form from the police.

Those that responded YES were asked to indicate with whom or where the accident report forms were filed. Many indicated that more than one department or office on campus would receive copies of the accident report form. For many of the "state" schools, it was indicated that copies were

sent to the various state agencies or departments within their respective states. See Appendix G for a complete list of responses.

The data in Table 45 reveal the percentage of responses to Question #27--Do you require all accidents involving fleet vehicles to be immediately reported to a police department?

TABLE 45 - Whether or not all accidents reported to a police department (Question #27)

Responses	Number	Percentage*
Yes	78	66.7
No**	39	33.3
TOTALS:	117	100.0

*Actual computed percentage rounded to the nearest tenth.
**See Appendix G for a complete list of responses.

The data in Table 45 reveal that 66.7 percent of the schools immediately reported all accidents involving fleet vehicles to a police department, and 33.3 percent did not. Three respondents did not reply to this question.

Those respondents who answered NO were asked to indicate when an accident should be reported. The responses varied and some respondents indicated more than one reply. See Appendix G for a complete list of all responses.

Data in Table 46 reveal the percentage of responses to Question #28--Are all accidents involving fleet vehicles reported immediately to the fleet supervisor or person in charge?

TABLE 46 - Whether or not all accidents reported to fleet supervisor (Question #28)

Responses	Number	Percentage*
Yes	110	93.2
No	8	6.8
TOTALS:	118	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 46 reveal that 93.2 percent of the schools immediately reported all accidents involving fleet vehicles to the fleet supervisor or person in charge, and 6.8 percent did not. Two respondents did not reply to the question.

Data in Table 47 reveal the percentage of responses to Question #29--Is the driver required to report to a designated person on your campus to discuss all particulars of the accident?

TABLE 47 - Whether or not driver required to report to designated person on campus to discuss particulars of accident (Question #29)

Responses	Number	Percentage*
Yes	85	74.6
No	29	25.4
TOTALS:	114	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 47 reveal that 74.6 percent of the schools required drivers involved in an accident to report

to a designated person on campus to discuss the particulars of an accident, and 25.4 percent did not. Six respondents did not answer the question.

Data in Table 48 reveal the percentage of responses to Question #29a (those that responded YES)--If YES, please indicate the title of the designated person:

TABLE 48 - Title of designated person with whom driver discussed accident (Question #29a)

Responses*	Number**	Percentage***
Director, Plant Operations and/ or Maintenance	20	23.8
Transportation Officer/Motor Pool Manager/Dispatcher	16	19.0
Director, Security and/or Safety	15	17.9
Insurance Director/Risk Manager	10	11.9
Health and Safety Director	10	11.9
Finance Director/Comptroller/ Purchasing Agent	10	11.9
Department Supervisor	4	4.8
Director, Administrative Svcs.	3	3.6
Personnel Director	2	2.4

*Titles were labelled generically because all responses were not exactly alike.

**Question answered by 84 respondents.

***Actual computed percentage rounded to the nearest tenth.

The data in Table 48 reveal that 23.8 percent of the eighty-four respondents who answered YES to Question #29 indicated that drivers met with the Director, Plant Operations and/or Maintenance to discuss an accident, 19.0

percent met with the Transportation Officer/Motor Pool Manager/Dispatcher, 17.9 percent met with the Director, Security and/or Safety, 11.9 percent met with the Insurance Director/Risk Manager, 11.9 percent met with the Health and Safety Officer, 11.9 percent met with the Finance Director/Comptroller/Purchasing Agent, 4.8 percent met with the Department Supervisor, 3.6 percent met with the Director, Administrative Services, and 2.4 percent met with the Personnel Director. One respondent who answered YES did not reply to Question #29a.

Some of the respondents indicated more than one designated person on campus to whom the errant driver was to report. Titles of the designated person(s) were labelled generically to provide easier identification for the reader.

Data in Table 49 reveal the percentage of responses to Question #29b (those that responded YES)--If YES, is this discussion considered to be a learning experience for the errant driver?

TABLE 49 - Whether or not discussion a learning experience (Question #29b)

Responses	Number	Percentage*
Yes	44	59.5
No	30	40.5
TOTALS:	74	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 49 reveal that 59.5 percent of the respondents indicated that the discussion between the errant driver and the person to whom they reported concerning an accident was considered to be a learning experience, and 40.5 percent indicated that it was not. One respondent who answered YES stated that the learning experience was questionable. Eleven of the eighty-five respondents who answered YES to Question #29 did not reply to Question #29b.

Data in Table 50 reveal the percentage of responses to Question #30--Do you have a representative that attempts to investigate all accidents involving the fleet vehicles?

TABLE 50 - Whether or not there was a representative to investigate all accidents (Question #30)

Responses	Number	Percentage
Yes	61	53
No	54	47
TOTALS:	115	100

The data in Table 50 reveal that 53.0 percent of the schools had a representative that attempted to investigate all automotive fleet accidents, and 47.0 percent did not. Five respondents did not reply to the question.

Data in Table 51 reveal the percentage of responses to the second part of Question #30 (those that responded YES)--If YES, please indicate the title of the

representative?

TABLE 51 - Title of representative that investigated all fleet accidents (Second part of Question #30)

Responses*	Number	Percentage**
Director, Security/Safety	21	34.4
Director, Physical Plant/ Maintenance	10	16.4
Health & Safety Officer	10	16.4
Insurance Director/Risk Manager	7	11.5
Automotive Officer/Transportation Officer/Motor Pool Supervisor	5	8.2
Representative of Insurance Company	4	6.6
Purchasing Agent	1	1.6
Director, Administrative Services	1	1.6
Personnel Director	1	1.6
Representative, Admissions Office	1	1.6
TOTALS:	61	99.9

*Titles were labelled generically because all responses were not exactly alike.

**Actual computed percentage rounded to the nearest tenth.

The data in Table 51 reveal that 34.4 percent of the sixty-one respondents that answered YES to Question #30 had all fleet accidents investigated by the Director, Security/ Safety, 16.4 percent by the Director, Physical Plant/ Maintenance, 16.4 percent by the Health and Safety Officer, 11.5 percent by the Insurance Director/Risk Manager, 8.2 percent by the Automotive Officer/Transportation Officer/ Motor Pool Supervisor, 6.6 percent by the representative of an insurance company, 1.6 percent by the Purchasing Agent,

1.6 percent by the Director, Administrative Services, 1.6 percent by the Personnel Director, and 1.6 percent by a representative from the Admissions Office.

Many of the titles were similar and this allowed the titles to be labelled generically to provide easier identification for the reader.

Review of Accident Reports Involving Fleet Vehicles

The data in Table 52 reveal the percentage of responses to Question #31--Is any one person or group on your campus responsible for reviewing all accident reports involving fleet vehicles?

TABLE 52 - Whether or not one person/group responsible for reviewing all accident reports (Question #31)

Responses	Number	Percentage*
Yes	72	64.3
No	40	35.7
TOTALS:	112	100.0

*Actual computed percentage rounded to the nearest tenth.

Data in Table 52 reveal that 64.3 percent of the schools had one person or group responsible for reviewing all accident reports, and 35.7 percent did not. Eight respondents did not answer this question.

The information provided in Tables 53, 54, 55, and 56 is the percentage of responses to the second part of

Question #31 (those that responded YES)--If YES, please complete the following:

a. Title of person or group responsible for reviewing all accident reports: (see table 53)

TABLE 53 - Title of person/group responsible for reviewing all accident reports (Question #31a)

Responses*	Number	Percentage**
Accident Review Committee	5	6.9
Committee of Three	2	2.8
Committee of Two	5	6.9
One Person/Department	60	83.3
TOTALS:	72	99.9

*See Appendix G for complete list of all responses.
**Actual computed percentage rounded to the nearest tenth.

The data in Table 53 reveal that 6.9 percent of the seventy-two respondents who answered YES to Question #31 indicated that an Accident Review Committee reviewed all accident reports, 2.8 percent had a committee of three, 6.9 percent had a committee of two, and 83.3 percent had one person or department. See Appendix G for a complete list of designated person/group(s).

b. How is this person or group designated or selected? (see table 54)

The data in Table 54 reveal that 67.2 percent of the fifty-eight respondents who answered YES to Question #31 designated the responsibility for reviewing all accident

TABLE 54 - How designated person/group selected to review all accident reports (Question #31b)

Responses	Number	Percentage*
Job Description/Responsibility	39	67.2
Appointment	18	31.0
By Default	1	1.7
TOTALS:	58	99.9

*Actual computed percentage rounded to the nearest tenth.

reports as part of the job description or job responsibility, 31.0 percent were appointed by some authority, and 1.7 percent indicated the responsibility was incurred by default. Fourteen of the seventy-two respondents that originally answered YES to Question #31 did not reply to Question #31b.

c. How long does this person or group serve in this capacity? (see table 55)

TABLE 55 - Length of term for person/group selected to review all accident reports (Question #31c)

Responses	Number	Percentage*
Indefinite	47	78.3
Until Replaced	7	11.7
Continuous	3	5.0
One Year (Renewable)	1	1.7
Two-Five Years	1	1.7
Ten Years	1	1.7
TOTALS:	60	100.1

*Actual computed percentage rounded to the nearest tenth.

The data in Table 55 reveal that 78.3 percent of the sixty respondents who answered YES to Question #31 indicated that this person or group had an indefinite length of stay in this position because it was considered to be part of the job description or responsibility, 11.7 percent indicated that the length of term continued until the administration replaced the person/group by assignment, 5.0 percent indicated that the term was continuous, 1.7 percent indicated the term to be for one year and renewable, 1.7 percent indicated the term to be for two to five years, and 1.7 percent indicated the length of term to be ten years. Twelve of the seventy-two respondents that originally answered YES to Question #31 did not respond to Question #31c.

d. Does this person or group have the authority to determine the culpability of errant drivers? (see table 56)

TABLE 56 - Whether or not person/group had authority to determine culpability of errant drivers (Question #31d)

Responses	Number	Percentage*
Yes	35	58.3
No	25	41.7
TOTALS:	60	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 56 reveal that 58.3 percent of the sixty respondents who answered YES to Question #31 indicated the person/group did have the authority to determine the culpability of errant drivers, and 41.7 percent did not. Twelve of the seventy-two respondents who originally answered YES to Question #31 did not reply to Question #31d.

Maintaining All Costs Relative to the Operation of the Fleet

The data in Table 57 reveal the percentage of responses to Question #32--Does your institution maintain an accurate tabulation of all costs related to each fleet accident?

TABLE 57 - Whether or not all accident costs tabulated (Question #32)

Responses	Number	Percentage*
Yes	66	58.4
No	47	41.6
TOTALS:	113	100.0

*Actual computed percentage rounded to the nearest tenth.

Data in Table 57 reveal that 58.4 percent of the schools maintained an accurate tabulation of all costs relative to each fleet accident, and 41.6 percent did not. Seven respondents did not reply to this question.

The data in Table 58 reveal the percentage of responses to Question #33--Does your institution maintain an

accurate tabulation of all costs relative to the operation of the fleet?

TABLE 58 - Whether or not all operational costs tabulated (Question #33)

Responses	Number	Percentage*
Yes	83	72.8
No	31	27.2
TOTALS:	114	100.0

*Actual computed percentage rounded to the nearest tenth.

Data in Table 58 reveal that 72.8 percent of the schools maintained an accurate tabulation of all operational costs of their fleet, and 27.2 percent did not. Six respondents did not answer this question.

Improper Use of Automotive Fleet Vehicles

The data in Table 59 reveal the percentage of responses to Question #34--Is a person or office on your campus cognizant of all chargeable violations against a driver of a fleet vehicle?

Data in Table 59 reveal that 33.0 percent of the schools had a person or office on campus that was cognizant of all chargeable violations against a driver of a fleet vehicle, and 67.0 percent did not. Eight respondents did not reply to this question.

TABLE 59 - Whether or not person/group on campus cognizant of all chargeable violations (Question #34)

Responses	Number	Percentage
Yes	37	33
No	75	67
TOTALS:	112	100

The data in Tables 60 and 61 reveal the percentage of responses to the second part of Question #34 (those that responded YES)--If YES, please complete the following:

a. What is the title of the person or office that initially receives this information? (see table 60)

TABLE 60 - Title of person/office that received information concerning chargeable violations against driver (Question #34a)

Responses*	Number**	Percentage***
Director, Physical Facilities and Operations	11	31.4
Transportation Director and/or Automotive Officer	8	22.9
Campus Police and/or Security	5	14.3
Campus Safety Director	4	11.4
Business Manager	4	11.4
Insurance Director and/or Risk Manager	3	8.6
Director, Administrative Services	2	5.7
President	1	2.9
Accident Review Committee	1	2.9

*Titles were labelled generically because all responses were not exactly alike.
**Question answered by 35 respondents.
***Actual computed percentage rounded to the nearest tenth.

Data in Table 60 reveal that 31.4 percent of the thirty-five respondents who answered YES to Question #34 indicated the Director, Physical Facilities and Operations received information concerning chargeable violations, 22.9 percent indicated the Transportation Director and/or Automotive Officer, 14.3 percent indicated the Campus Police and/or Security, 11.4 percent indicated the Campus Safety Director, 11.4 percent indicated the Business Manager, 8.6 percent indicated the Insurance Director and/or Risk Manager, 5.7 percent indicated the Director, Administrative Services, 2.9 percent indicated the President, and 2.9 percent indicated the Accident Review Committee. The titles of the persons and/or offices were labelled generically for easier identification by the reader.

Some of the respondents indicated that information concerning chargeable violations against a driver of a fleet vehicle was received by more than one person or department. Two of the thirty-seven respondents that answered YES to Question #34 did not reply to Question #34a.

b. <u>What occurs once this information is received?</u> (see table 61)

Data in Table 61 reveal 31.3 percent of the thirty-two respondents who answered YES to Question #34 conducted

TABLE 61 - Action taken once information received concerning chargeable violations (Question #34b)

Responses	Number*	Percentage**
Review & Disciplinary Action Taken	10	31.3
Review & Counsel	6	18.8
Sent to Greater Authority	5	15.6
Placed on File	5	15.6
Reviewed	3	9.4
Accident Review Committee	2	6.3
Review with Department	2	6.3
Review and State Points	2	6.3
Assessment of Driver's Risk	1	3.1
Depends on Circumstances	1	3.1
Traffic Summons	1	3.1
Notify Insurance Carrier	1	3.1

*Question answered by 32 respondents.

**Actual computed percentage rounded to the nearest tenth.

a review of the charges made against the driver and disciplinary action was taken which usually resulted in restrictions upon the driver or dismissal from driving duties, 18.8 percent indicated the charges were reviewed and counseling given, 15.6 percent sent the information to a greater authority within the institution, 15.6 percent placed the information on file, 9.4 percent reviewed the information, 6.3 percent sent the information to an accident review committee, 6.3 percent reviewed the information within the respective departments, 6.3 percent indicated the information was reviewed and evaluated in relation to

the state's point system, 3.1 percent indicated that if a driver's performance was considered marginal, then a decision was made as to whether or not the institution should assume the risk associated with the driver, 3.1 percent indicated the circumstances dictated what action was taken, 3.1 percent indicated that a traffic summons was issued, and 3.1 percent notified the insurance carrier. Some respondents indicated that more than one action was taken when the information was received.

Five of the thirty-seven respondents who answered YES to Question #34 did not reply to Question #34b.

Terminating, Suspending or Restricting Driving Privileges

The data in Table 62 reveal the percentage of responses to Question #35--Can an individual's privilege to drive a fleet vehicle be terminated, suspended or restricted?

TABLE 62 - Whether or not driving privileges could be terminated, suspended or restricted (Question #35)

Responses	Number	Percentage*
Yes	104	92.9
No	8	7.1
TOTALS:	112	100.0

*Actual computed percentage rounded to the nearest tenth.

The data in Table 62 reveal that 92.9 percent of the schools could terminate, suspend or restrict driving privileges while 7.1 percent did not take this action.

Four respondents who answered NO to Question #35 indicated that action of this nature was not warranted because improper use of a fleet vehicle was not a problem. Eight respondents did not answer Question #35.

Data presented in Tables 63 and 64 reveal the percentage of responses to the second part of Question #35 (those that responded YES)--If YES, please answer the following:

a. Who on your campus has the authority to make such a decision? (see table 63)

The data in Table 63 reveal that 27.9 percent of the 104 respondents who answered YES to Question #35 indicated the Director of Physical Plant/Maintenance was authorized to make such a decision, 20.2 percent indicated the President or administration, 11.5 percent indicated the department assigned the vehicle, 10.6 percent indicated an individual's supervisor, 8.7 percent indicated the Financial Manager/Comptroller, 7.7 percent indicated the Automotive Officer/Transportation Supervisor, 5.8 percent indicated the Campus/Police Security, 5.8 percent indicated the Safety Director, 5.8 percent indicated the Business Manager, 4.8 percent indicated the Insurance Director/Risk Manager, 1.9 percent indicated the dean of the driver's school, 1.9

TABLE 63 - Title of person who could terminate, suspend or restrict driving privilege (Question #35a)

Responses	Number*	Percentage**
Director of Physical Plant/ Maintenance	29	27.9
President/Administration	21	20.2
Department Assigned Vehicle	12	11.5
Individual's Supervisor	11	10.6
Financial Manager/Comptroller	9	8.7
Automotive Officer/Transportation Supervisor	8	7.7
Campus Police/Security	6	5.8
Safety Director	6	5.8
Business Manager	6	5.8
Insurance Director/Risk Manager	5	4.8
Dean of School	2	1.9
Accident Review Board	2	1.9
Personnel Director	1	1.0
Director of Administrative Services	1	1.0
Director of Admissions	1	1.0

*Question answered by 104 respondents.

**Actual computed percentage rounded to the nearest tenth.

indicated the Accident Review Board, 1.0 percent indicated the Personnel Director, 1.0 percent indicated the Director of Administrative Services, and 1.0 percent indicated the Director of Admissions. Some respondents indicated that more than one person or department had the authority to terminate, suspend or restrict driving privileges.

b. Indicate reason why such action might be taken against an individual operating a fleet vehicle: (see

table 64)

TABLE 64 - Reasons why action could be taken against an individual operating a fleet vehicle (Question #35b)

Responses	Number*	Percentage**
Arrest & Conviction of Drunken Driving	86	87.8
Alcohol Related Accident Attributed to Driver	83	84.7
Arrest and Conviction of Moving Violation(s)	67	68.4
Number of Chargeable Accidents	81	82.7
Improper Use of Fleet Vehicle	84	85.7
Unauthorized Use of Fleet Vehicle	84	85.7
Other	7	7.1

*Question answered by 98 respondents.

**Actual computed percentage rounded to the nearest tenth.

The data in Table 64 reveal that 87.8 percent of the ninety-eight respondents who answered YES to Question #35 indicated "arrest and conviction of drunken driving" as a reason to restrict driving privileges, 84.7 percent indicated an "alcohol related accident attributed to driver," 68.4 percent indicated "arrest and conviction of moving violation(s)," 82.7 percent indicated the "number of chargeable accidents," 85.7 percent indicated "improper use of fleet vehicle," 85.7 percent indicated "unauthorized use of fleet vehicle," and 7.1 percent indicated other reasons which included: loss of license, exceeding six points,

speeding, improper care of the vehicle, supervisor's discretion, and case by case decision. Some respondents indicated more than one reason for disciplinary action.

Six of the 104 respondents that answered YES to Question #35 did not reply to Question #35b.

Evaluation of the Automotive Fleet Safety Program

The data in Table 65 reveal the percentage of responses to Question #36--Does your institution participate in any type of automotive fleet safety evaluation program?

TABLE 65 - Whether or not institution participated in fleet safety evaluation program (Question #36)

Responses	Number	Percentage*
Yes*	17	14.8
No	98	85.2
TOTALS:	115	100.0

*Actual computed percentage rounded to the nearest tenth.

**See Appendix G for complete list of all responses by those who answered YES.

The data in Table 65 reveal that 14.8 percent of the schools participated in some type of fleet safety evaluation program, and 85.2 percent did not. Five respondents did not reply to this question.

The second part of Question #36 asked those that responded YES to complete the following:

a. How often does this evaluation program occur?

b. Who is responsible for gathering all of the data for evaluation?

c. If applicable, what national organization or association is involved?

d. Please specify any other pertinent information relative to this automotive fleet safety evaluation program.

The responses to these four questions are listed in Appendix G. There were only seventeen respondents that answered YES to Question 36, and not all of these answered the second part of the question.

Driver Recognition for Safe and Efficient Performance

The data in Table 66 reveal the percentage of responses to Question #37--Does your institution participate in any type of driver recognition program in relation to the safe and efficient operation of the fleet vehicle?

TABLE 66 - Whether or not institution participated in driver recognition program (Question #37)

Responses	Number	Percentage*
Yes	8	6.9
No	108	93.1
TOTALS:	116	100.0

*Actual computed percentage rounded to the nearest tenth.

**See Appendix G for complete list of responses for those who answered YES.

The data in Table 66 reveal that 6.9 percent of the schools participated in some type of driver recognition program, and 93.1 percent did not. One respondent who answered YES indicated that the recognition was done in a negative way by pointing out departments that had more than their share of accidents. Another respondent who answered YES stated that the driver recognition was not carried out for all departments. Four respondents did not answer the question.

The second part of Question #37 asked those that responded YES to answer the following questions:

a. What criteria do you use in evaluating your safe and efficient drivers?

b. How do you recognize and reward these drivers?

c. If program is in conjunction with an association or organization, please list or describe.

d. Please specify any other pertinent information relative to your recognition program.

Not all who answered YES to Question #37 responded to the second part of the question. See Appendix G for a complete list of all responses.

Automotive Fleet Safety Educational and/or Training Programs

Crash Prevention Programs

The data in Table 67 reveal the percentage of responses to Question #38--Do you conduct any type of formal

educational or training program(s) relative to avoiding automotive accidents?

TABLE 67- Whether or not formal educational or training programs used (Question #38)

Responses	Number	Percentage*
Yes	30	25.6
No	87	74.4
TOTALS:	117	100.0

*Actual computed percentage rounded to the nearest tenth.

Data in Table 67 reveal that 25.6 percent of the schools conducted formal educational or training programs relative to avoiding automotive accidents, and 74.4 percent did not. Three respondents did not answer this question.

The data in Tables 68, 69 and 70 reveal the percentage of responses to the second part of Question #38 (those that responded YES)--If YES, please answer the following:

a. Indicate the origin of the crash prevention program: (see table 68)

TABLE 68 - Origin of crash prevention program (Question #38a)

Responses	Number*	Percentage**
National Safety Council's Defensive Driving Course	15	50.0
American Automobile Association's Driver Improvement Program	0	0.0
Insurance Company's Own Program	4	13.3
Institution's Own Program***	15	50.0

*Question answered by 30 respondents.
**Actual computed percentage rounded to the nearest tenth.
***See Appendix G for complete list of responses.

Data in Table 68 reveal that 50.0 percent of the thirty respondents who answered YES to Question #38 used the National Safety Council's Defensive Driving Course in their crash prevention program, 0.0 percent used the American Automobile Association's Driver Improvement Program, 13.3 percent used an insurance company's program (See Appendix G), and 50.0 percent used their own crash prevention program (See Appendix G). Some respondents indicated more than one program when answering this question.

b. Is this crash prevention program required of all drivers operating fleet vehicles? (see table 69)

TABLE 69 - Whether or not crash prevention program required of all drivers (Question #38b)

Responses	Number	Percentage*
Yes	14	46.7
No**	16	53.3
TOTALS:	30	100.0

*Actual computed percentage rounded to the nearest tenth.
**See Appendix G for complete list of responses.

Data in Table 69 reveal that 46.7 percent of the thirty respondents who answered YES to Question #38 required all drivers to participate in a crash prevention program, and 53.3 percent did not. Those respondents who answered NO to Question #38b were asked to indicate the recipients, if any, of the crash prevention program since

it was not required of all drivers. See Appendix G for a complete list of recipients.

c. Is this crash prevention program required of a driver who uses his/her own vehicle for school business and is insured by your institution? (see table 70)

TABLE 70 - Whether or not crash prevention program required of driver using own vehicle for school business (Question #38c)

Responses	Number	Percentage*
Yes	4	14.3
No	23	82.1
NA**	1	3.6
TOTALS:	28	100.0

*Actual computed percentage rounded to the nearest tenth.
**NA = not applicable.

Data in Table 70 reveal that 14.3 percent of the twenty-eight respondents who answered YES required a driver using his/her own vehicle to participate in a crash prevention program, 82.1 percent did not, and 3.6 percent indicated the question was not applicable to their institution. Two respondents who answered YES to Question #38 did not respond to Question #38c.

Driver Improvement Program

The data in Table 71 reveal the percentage of responses to Question #39--Is there a driver improvement program for those who demonstrate unsafe and inefficient

operation of the fleet vehicles?

TABLE 71 - Whether or not driver improvement program for those who demonstrated a need (Question #39)

Responses	Number	Percentage*
Yes**	13	11.3
No	102	88.7
TOTALS:	115	100.0

*Actual computed percentage rounded to the nearest tenth.
**See Appendix G for complete list of responses.

Data in Table 71 reveal that 11.3 percent of the schools had a driver improvement program for those drivers who demonstrated unsafe and inefficient operation of fleet vehicles, and 88.7 percent did not. Two respondents who answered YES stated their driver improvement program was part of the state's Bureau of Motor Vehicle's driver improvement program and that a driver who attained a certain number of points was required to attend. Five respondents did not answer this question.

The second part of Question #39 inquired of those respondents that answered YES to reply to the following questions:

a. Who or what department determines if a driver should participate in a driver improvement program?

b. Who or what department is responsible for conducting this driver improvement program?

c. What factors determine if a driver must participate in a driver improvement program?

d. What is the origin and title (if applicable) of this driver improvement program?

e. What is the disposition of the driver who refuses to participate in this driver improvement program?

See Appendix G for a complete list of responses. There were thirteen respondents who answered YES to Question #39 and not all responded to the second part of the question.

Ongoing Informational Programs

The data in Table 72 reveal the percentage of responses to Question #40--Does your institution maintain any type of ongoing informational program relative to the safe and efficient operation of the vehicles in the automotive fleet and/or highway safety in general?

TABLE 72 - Whether or not informational program maintained relative to safe and efficient operation of fleet vehicles and highway safety in general (Question #40)

Responses	Number	Percentage*
Yes	34	29.6
No	81	70.4
TOTALS:	115	100.0

*Actual computed percentage rounded to the nearest tenth.

Data in Table 72 reveal that 29.6 percent of the schools maintained ongoing informational programs relative to the safe and efficient operation of fleet vehicles and/or highway safety in general, and 70.4 percent did not. Five respondents did not answer this particular question.

The data in Tables 73 and 74 reveal the percentage of responses to the second part of Question #40 (those that responded YES)--If YES, please complete the following:

TABLE 73 - Methods used to conduct ongoing informational program (Question #40a)

Responses	Number*	Percentage**
Periodic Driver Refresher Programs	8	23.5
Articles in Campus Literature	15	44.1
Safety Literature	24	70.6
Posters	23	67.6
Other	3	8.8

*Question answered by 34 respondents.

**Actual computed percentage rounded to the nearest tenth.

Data in Table 73 reveal that 23.5 percent of the thirty-four respondents who answered YES to Question #40 used periodic driver refresher programs in their ongoing informational programs, 44.1 percent used articles in the campus literature, 70.6 percent used safety literature, 67.6 percent used posters, and 8.8 percent used other

means, such as: directives from the state department of transportation, directives from the state department of education, and supervisory overview. Some respondents indicated more than one method for conducting an ongoing information program.

b. What is the origin of the majority of your materials and information? (see table 74)

TABLE 74 - Origin of materials and information for ongoing informational program (Question #40b)

Responses	Number*	Percentage*
State Agencies & Departments	12	35.3
Insurance Companies	11	32.4
National Safety Council	6	17.6
Department of Public Safety	5	14.7
Transportation Office	2	5.9
Publications	2	5.9
Highway Traffic Safety Center	1	2.9
Physical Plant	1	2.9
Campus Staff	1	2.9

*Question answered by 34 respondents.
**Actual computed percentage rounded to the nearest tenth.

Data in Table 74 reveal that 35.3 percent of the thirty-four respondents that answered YES to Question #40 used materials that originated from their state agencies and departments for their ongoing informational programs, 32.4 percent used materials from insurance companies, 17.6

used materials from the National Safety Council, 14.7 used materials from their Department of Public Safety, 5.9 percent used materials from their Transportation Office, 5.9 percent used publications, 2.9 percent used materials from their Highway Traffic Safety Center, 2.9 percent used materials from their Physical Plant, and 2.9 percent used materials supplied by their campus staff. Some respondents indicated more than one source for their information and materials.

Specialized Training For Operators of Fleet Vehicles

The data in Table 75 reveal the percentage of responses to Question #41--Is there any type of specialized training for operators of vehicles in the fleet that have limited visibility and/or handling characteristics different from your standard cars and trucks?

TABLE 75 - Whether or not there was specialized training for operators of vehicles with limited visibility and/or handling characteristics (Question #41)

Responses	Number	Percentage*
Yes**	21	18.1
No	53	45.7
NA***	42	36.2
TOTALS:	116	100.0

*Actual computed percentage rounded to the nearest tenth.
**See Appendix G for complete list of responses.
***NA = not applicable.

Data in Table 75 reveal that 18.1 percent of the schools provided special training for drivers of vehicles in the fleet that had limited visibility and/or handling characteristics, 45.7 percent did not, and 36.2 percent stated this question was not applicable to their institution. Four respondents did not reply to the question.

Those respondents who answered YES to Question #41 were asked to indicate the type of special training received and who was responsible for the instruction. See Appendix G for the responses to this question.

Automotive Fleet Information for School Years 1978-1979 and 1979-1980

Fleet Vehicle Accidents for School Years 1978-1979 and 1979-1980

Figures 3 and 4 demonstrate the frequency of accidents for the schools whose respondents answered Question #42--Indicate the number of reported accidents involving fleet vehicles occurring both on and off campus for 1978-1979 and 1979-1980 and where are these records maintained?

Accident Data for the 1978-1979 School Year: (Figure 3)

Eighty respondents (66.7 percent) indicated the number of reported accidents for the 1978-1979 school year (three estimated their total number). There were 1,765 reported accidents during this period of time with the number of accidents ranging from zero to 360.

The median for the distribution in Figure 3 was five accidents, and the mean of the distribution was 22.1 accidents with a standard deviation of 51.0.

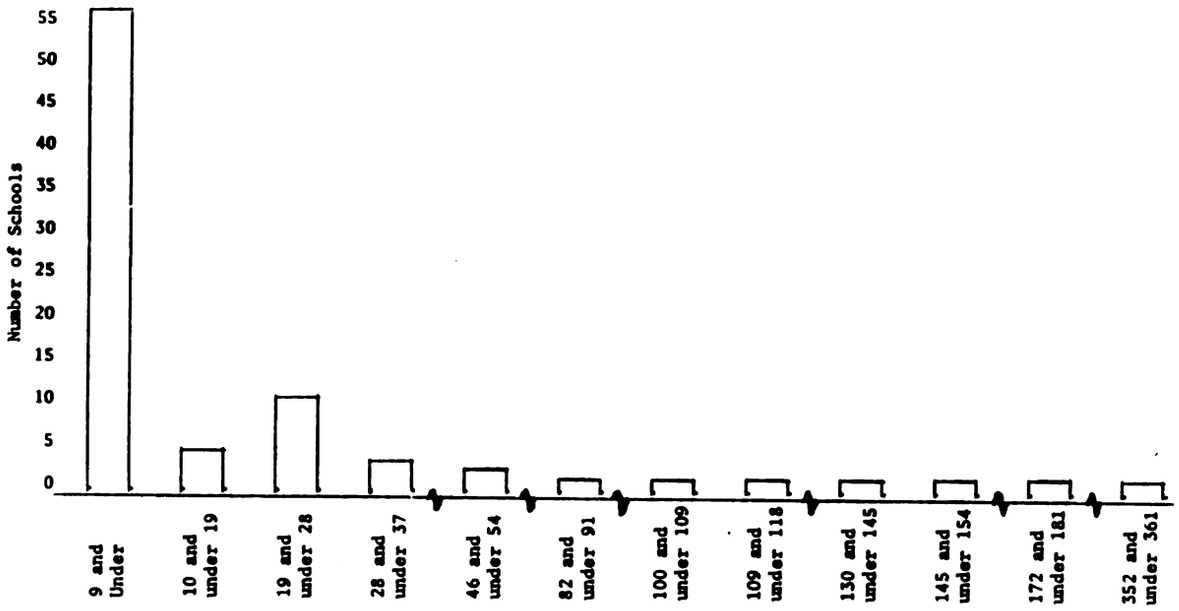


Figure 3

Number of Reported Accidents Involving Fleet Vehicles Both On and Off-Campus for 1978-1979

Accident Data for the 1979-1980 School Year: (Figure 4)

Eighty-six respondents (71.7 percent) indicated the number of reported accidents for the 1979-1980 school year (three estimated their total number). There were 1,814 reported accidents during this period of time with the number of accidents ranging from zero to 360.

The median for the distribution in Figure 4 was five accidents, and the mean of the distribution was 21.1

accidents with a standard deviation of 48.4.

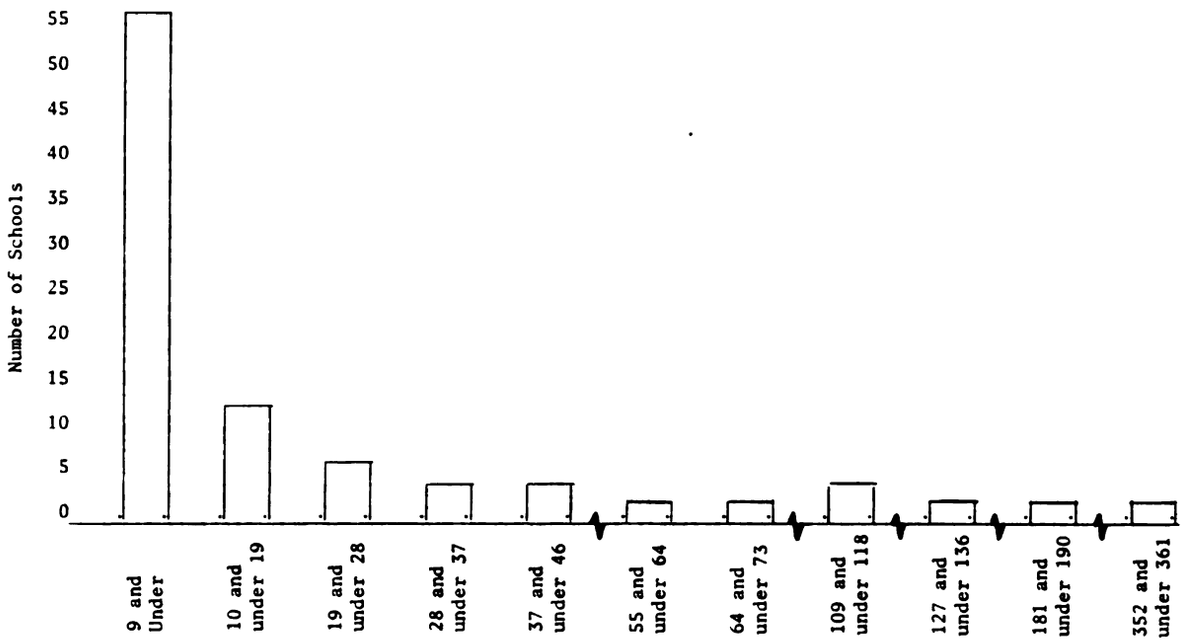


Figure 4

Number of Reported Accidents Involving Fleet Vehicles
Both On and Off-Campus for 1979-1980

The data in Table 76 reveal the accident frequency rate based on the number of vehicles for those schools whose respondents answered Question #42.

TABLE 76 - Accident frequency rate based on the number of vehicles (Question #42)

School Year	No. of Fleets	No. of Vehicles	No. of Accidents	Accidents per 100 vehicles*
1978-79	73	12,141	1,608	13.2
1979-80	79	12,566	1,691	13.5

*Actual computed rates rounded to the nearest tenth.

Data in Table 76 reveal for the 1978-1979 school year that seventy-three schools (60.8 percent) accounted for 12,141 vehicles and 1,608 reported accidents which demonstrated an accident frequency rate of 13.2 accidents per 100 vehicles.

For the 1979-1980 school year, seventy-nine schools (65.8 percent) accounted for 12,566 vehicles and 1,691 reported accidents which demonstrated an accident frequency rate of 13.5 accidents per 100 vehicles.

The data in Table 77 reveal the accident frequency rate based on the mileage driven for those schools whose respondents answered Question #42.

TABLE 77 - Accident frequency rate based on mileage driven (Question #42)

School Year	No. of Fleets	Vehicle Miles	No. of Accidents	Accidents Per 1,000,000 Vehicle Miles
1978-79	57	35,070,860	1,002	28.6
1979-80	61	37,912,482	1,035	27.3

*Actual computed rates rounded to the nearest tenth.

Data in Table 77 reveal for the 1978-1979 school year that fifty-seven schools (47.5 percent) accounted for 35,070,860 vehicle miles driven and 1,002 reported accidents which demonstrated an accident frequency rate of 28.6 per 1,000,000 miles driven.

For the 1979-1980 school year, sixty-one schools (50.8 percent) accounted for 37,912,481 vehicle miles driven and 1,035 reported accidents which demonstrated an accident frequency rate of 27.3 per 1,000,000 miles driven.

Forty-nine respondents did not answer the second part of Question #42 because these records were not available. See Appendix G for the replies of the seventy-one respondents as to where the records were maintained.

Reported Accidents Involving
Either Personal Injury or Fatality for
School Years 1978-1979 and 1979-1980

The data in Table 78 reveal the percentage of responses to Question #43--Indicate the number of reported accidents involving either personal injury or a fatality to the occupant(s) of a fleet vehicle and where are these records maintained?

Data in Table 78 reveal for the 1978-1979 school year that 88.2 percent of the schools had no accidents involving personal injury or fatality, 5.3 percent had one accident, 2.6 percent had two accidents, 2.6 percent had four accidents, and 1.3 percent had six accidents. Forty-four respondents did not answer this part of Question #43.

For the 1979-1980 school year, 81.0 percent of the schools had no accidents involving personal injury or fatality, 12.7 percent had one accident, 1.3 percent had four accidents, 3.8 percent had five accidents, and 1.3

TABLE 78 - Number of reported accidents involving personal injury or fatality for the 1978-1979 and 1979-1980 school years (Question 43)

Number of Accidents	1978-1979 School Year Number	1978-1979 School Year Percentage*	1979-1980 School Year Number	1979-1980 School Year Percentage*
0	67	88.2	64	81.0
1	4	5.3	10	12.7
2	2	2.6	0	0.0
4	2	2.6	1	1.3
5	0	0.0	3	3.8
6	1	1.3	1	1.3
TOTALS:	76	100.0	79	100.0

*Actual computed percentage rounded to the nearest tenth.

percent had six accidents. Forty-one respondents did not answer this part of Question #43. See Appendix G for replies of respondents as to where the records were maintained.

Employee Work Days Lost Because of Fleet Vehicle Accidents for School Years 1978-1979 and 1979-1980

The data in Table 79 reveal the percentage of responses to Question #44--If available, please indicate the number of employee work days lost because of traffic accidents involving fleet vehicles and where are these records maintained?

Data in Table 79 reveal for the 1978-1979 school year that 96.7 percent of the schools had no work days lost because of traffic accidents, 1.8 percent had one work day

TABLE 79 - Number of employee work days lost because of fleet accidents for the 1978-1979 and 1979-1980 school years (Question #44)

No. of Work Days Lost	1978-1979 School Year Number	1978-1979 School Year Percentage*	1979-1980 School Year Number	1979-1980 School Year Percentage*
0	56	96.7	58	93.5
1	1	1.8	0	0.0
2	1	1.8	1	1.7
10	0	0	2	3.5
36	0	0	1	1.7
TOTALS:	58	100.3	62	100.4

*Actual computed percentage rounded to the nearest tenth.

lost, and 1.8 percent had two work days lost. Sixty-two respondents did not answer this part of Question #44.

For the 1979-1980 school year, 93.5 percent of the schools had no work days lost because of fleet accidents, 1.7 percent had two work days lost, 3.5 percent had ten work days lost, and 1.7 percent had thirty-six work days lost. Fifty-eight respondents did not answer this part of Question #44. See Appendix G for replies of respondents as to where the records were maintained.

Cost of Accidents Involving Fleet Vehicles for School Years 1978-1979 and 1979-1980

The data in Table 80 reveal the responses to Question #45--<u>If available, please indicate the cost to your institution for all accidents involving fleet vehicles; where are these records maintained; and what categories are</u>

used to determine the total cost of each accident?

TABLE 80 - Cost of all accidents involving fleet vehicles (Question #45)

School Year	No. of Schools	Total Cost of Accidents	Average Cost Per School
1978-79	34	$135,768.00	$3,993.18
1979-80	36	$153,396.00	$4,261.00

Data in Table 80 reveal that respondents for thirty-four schools indicated a total cost of $135,768.00 for accidents involving their automotive fleet vehicles for the 1978-1979 school year which averaged out to a cost of $3,993.18 per school.

Forty-two respondents did not reply to the question for the 1978-1979 school year, and forty-one of the seventy-eight who did reply indicated this information was not available. Of the remaining thirty-seven schools, three respondents indicated zero accident costs for the school year.

For the 1979-1980 school year, thirty-six respondents indicated a total cost of $153,396.00 for accidents involving their automotive fleet vehicles which averaged out to a cost of $4,261.00 per school.

Thirty-nine respondents did not reply to the question for the 1979-1980 school year, and forty-two of the eighty-one who did reply indicated this information was not

available. Of the thirty-nine remaining schools, three respondents indicated zero accident costs for the school year.

See Appendix G for replies of respondents as to where records were maintained and categories that were used to determine costs.

Automotive Fleet Mileage for
School Years 1978-1979 and 1979-1980

The data in Table 81 reveal the responses to Question #46--What is the approximate number of miles that your automotive fleet has logged and where are these records maintained?

TABLE 81 - Accrued mileage for the automotive fleets (Question #46)

School Year	No. Of Schools	Total Mileage
1978-79	61	37,314,138
1979-80	68	41,124,099

The data in Table 81 reveal that sixty-one schools accounted for 37,314,138 vehicle miles driven for the 1978-1979 school year.

Thirty-six respondents did not reply to the question for the 1978-1979 school year and twenty-three of the eighty-four respondents who did reply indicated this information was not available.

For the 1979-1980 school year, sixty-eight schools accounted for 41,124,099 vehicle miles driven.

Thirty-two respondents did not reply to the question for the 1979-1980 school year, and twenty of the eighty-eight respondents who did reply indicated this information was not available. The responses to this question were needed to determine the accident frequency rate per miles driven as shown in Table 77.

See Appendix G for replies of respondents as to where the records were maintained.

Fleet Vehicle Accidents and Related Lawsuits

The data in Table 82 reveal the percentage of responses to Question #47--Within the past five years, has a lawsuit been brought against your institution relative to a fleet vehicle accident?

TABLE 82 - Lawsuits resulting from fleet accidents (Question #47)

Responses	Number	Percentage
Yes	18	18
No	82	82
TOTALS:	100	100

Data in Table 82 reveal that 18.0 percent of the schools had lawsuits brought against them because of fleet accidents during the past five years, and 82.0 percent had not. Two respondents indicated more than one lawsuit

resulting from a fleet accident. Twenty respondents did not reply to the question.

Opinions of Person(s) Responding to Questionnaire

Administrative Support

The data in Table 83 reveal the percentage of responses to Question #48--Do you feel that your present fleet safety program is actively supported by your administration?

TABLE 83 - Whether or not administration supported present fleet safety program (Question #48)

Responses	Number	Percentage*
Yes	53	48.2
No	7	6.4
NA**	50	45.4
TOTALS:	110	100.0

*Actual computed percentage rounded to the nearest tenth.
**NA = not applicable.

Data in Table 83 reveal that 48.2 percent of the respondents indicated that the present fleet safety program was supported by the administration, 6.4 percent indicated administrative support was not evident, and 45.4 percent indicated that the question was not applicable. Ten respondents did not reply to this question.

Support and Cooperation from Other Departments

The data in Table 84 reveal the percentage of responses to Question #49--Do you feel your present fleet safety program receives support and cooperation from other departments on your campus?

TABLE 84 - Whether or not support and cooperation received from other departments (Question #49)

Responses	Number	Percentages*
Yes	43	41.0
No	11	10.5
NA**	51	48.5
TOTALS:	105	100.0

*Actual computed percentage rounded to the nearest tenth.
**NA = not applicable.

Data in Table 84 reveal that 41.0 percent of the respondents indicated they felt they received support and cooperation from other departments on their campuses, 10.5 percent indicated an absence of support and cooperation, and 48.5 percent indicated the question was not applicable. Fifteen respondents did not reply to this question.

Adequateness of Present Fleet Safety Effort

The data in Table 85 reveal the percentage of responses to Question #50--Do you feel that your present

fleet safety effort is adequate in relation to your total automotive fleet operation?

TABLE 85 - Whether or not present fleet safety effort was adequate (Question #50)

Responses*	Number	Percentage**
Yes	57	52.8
No	50	46.3
NA***	1	0.9
TOTALS:	108	100.0

*See Appendix G for complete list of comments & remarks.
**Actual computed percentage rounded to the nearest tenth.
***NA = not applicable.

Data in Table 85 reveal that 52.8 percent of the respondents felt their current fleet safety efforts were adequate, 46.3 percent felt they were not, and 0.9 percent stated the question was not applicable. Twelve respondents did not reply to this question.

Accident Problem Experience

The data in Table 86 reveal the percentage of responses to Question #51--Do you feel that your automotive fleet operation is experiencing an accident problem?

Data in Table 86 reveal that 9.6 percent of the respondents felt their automotive fleet operations were experiencing an accident problem, 89.5 percent felt they were not, and 0.9 percent indicated they were not sure.

Six respondents did not answer this question.

TABLE 86 - Whether or not automotive fleet operations were experiencing an accident problem (Question #51)

Responses*	Number	Percentages**
Yes	11	9.6
No	102	89.5
Not Sure	1	0.9
TOTALS:	114	100.0

*See Appendix G for complete list of comments & remarks.
**Actual computed percentage rounded to the nearest tenth.

Opinions Concerning a Comprehensive Fleet Safety Program

The data in Table 87 reveal the percentage of responses to Question #52--Do you feel that a comprehensive fleet safety program would reduce the overall operating costs of your automotive fleet?

TABLE 87 - Whether or not comprehensive fleet safety program would reduce operating costs of fleet (Question #52)

Responses*	Number	Percentage**
Yes	46	43.0
No	58	54.2
Not Certain	3	2.8
TOTALS:	107	100.0

*See Appendix G for complete list of comments & remarks.
**Actual computed percentage rounded to the nearest tenth.

Data in Table 87 reveal that 43.0 percent of the respondents indicated it was their opinion that a comprehensive fleet safety program would reduce the overall operating costs of their automotive fleets, 54.2 percent indicated they did not feel it would reduce costs, and 2.8 percent were not certain. Thirteen respondents did not answer this question.

Summary

This chapter presented data obtained by surveying 295 selected four-year colleges and universities in the United States and assessed their current automotive fleet safety efforts.

The chapter was divided into five sections, one for each part of the survey questionnaire. Tables and figures were constructed for the responses to each question, and the major findings in each table and figure were explained.

Chapter V will present the summary, findings, conclusions, recommendations, recommendations for further research, and discussion.

Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The major purpose of this chapter was to present a summary of the study conducted, the findings of the national survey, the conclusions derived from the study, the recommendations, the recommendations for further research, and a discussion of the study.

Summary

It was the researcher's purpose in this study to determine the current automotive fleet safety efforts being conducted in selected four-year colleges and universities in the United States.

In order for this objective to be met, the following categories relating to an institution's fleet safety effort had to be carefully examined and assessed:

1. Information relative to the educational institution and its automotive fleet.

2. The extent of the automotive fleet policies and procedures.

3. The extent of the educational and/or training programs.

4. Factual data concerning the institution's automotive operation during the 1978-1979 and 1979-1980 school years.

5. Opinions of person(s) responding to the questionnaire.

The primary method used in researching the study was the survey technique which consisted of determining the scope of the study, selection of the population and description of the sample, design and revision of the instrument, pretesting the instrument, distribution of the questionnaire and follow-up, and tabulation and analysis of the data.

The research survey was limited to a random stratified sample of 295 four-year colleges and universities in the United States. The sample size represented 32 percent of the target population that had an enrollment of 1,000 or more students. Stratification of the target population was determined by the way the institution was governed and controlled and according to its student population. A 25 percent minimum sample size was selected from each stratum to help insure a representative sample of the target population.

A questionnaire was designed to gather the data. This took place after extensive research and advice from several authorities in the field, and the study committee. The questionnaire (found in Appendix B) consisted of: information relative to the educational institution and its

automotive fleet, extent of the automotive fleet policies, extent of the educational and/or training programs, factual data concerning the institution's automotive fleet operation during the 1978-1979 and 1979-1980 school years, and opinions of the person(s) responding to the questionnaire.

Pretesting the survey instrument before release to the designated colleges and universities took place in three institutions of higher education in Pennsylvania.

Distribution of the questionnaire was accomplished by mailing survey packets to the selected colleges and universities. The initial mailing and follow-up procedures produced 129 returns out of a possible 295. Nine of the 129 respondents did not complete the questionnaire for various reasons. Therefore, the data analysis and tabulation were based upon 120 completed questionnaires, or 40.7 percent of the total sample.

A secondary method used for determining the extent of the automotive fleet safety efforts of colleges and universities in the United States was an extensive search of the literature. It was found that very few studies involved college and university fleet safety programs.

Findings

The summary of the findings pertained to those areas considered essential to assess in order to fulfill the ultimate objective of this study--to determine the current

status of automotive fleet safety efforts in selected four-year colleges and universities in the United States.

The findings were based upon the replies of the respondents to the individual questions of the survey:

1. The majority, 72 percent, had small automotive fleets comprised of less than one hundred vehicles. A wide range existed in the number of vehicles for these schools with 50 percent having thirty or less. A wide range existed for schools designated as having large automotive fleets with 50 percent having between 100 and 172 vehicles.

2. Automotive fleets were composed of many different types and sizes of motor vehicles with over half of them possessing vehicles in at least eight of the eleven categories.

3. The automotive fleets provided a wide range of services with the majority providing services in at least eight of the ten identified areas.

4. The majority indicated a large variety of drivers, ranging from employees to students, were permitted to operate the automotive fleet vehicles.

5. Fifty-seven percent had written policies and procedures relating to the safe and efficient use of vehicles in the automotive fleet with less than half of these possessing a separate employee's driver manual.

6. Fifty-four percent had one person or department responsible for managing and supervising an automotive fleet safety program while assuming other duties and

responsibilities. Thirty percent provided special training and preparation for those responsible for a fleet safety program.

7. More than half, or 53 percent, of the automotive fleets were insured by a private insurance carrier.

8. Ninety-one percent insured all drivers using automotive fleet vehicles.

9. Seventy-six percent carried out periodic inspection and maintenance of all vehicles housed on campus through one assigned department.

10. Eight major categories of automotive fleet records were indicated with the majority maintaining records in six of the eight categories. Driver records and accident costs were the two categories not maintained by most of the schools.

11. Sixty-three percent maintained automotive fleet operational records in one central location.

12. Seventy-four percent verified a person's operator license prior to their initial operation of a vehicle in the automotive fleet.

13. Less than one-third, or 30 percent, examined a person's driving record prior to their initial operation of a fleet vehicle. On the other hand, if an individual's primary responsibility was operating a fleet vehicle, then 60 percent examined the driving record prior to employment.

14. Twenty-six percent maintained active driving records of <u>all</u> persons operating fleet vehicles, while

44 percent maintained active driving records of those persons whose primary responsibility was operating a fleet vehicle.

15. Only seven percent indicated the term "Satisfactory Driving Record" was defined and used. All of these related the definition strictly to violation experience.

16. Ninety-seven percent used some standard type of accident reporting form.

17. Ninety-four percent required all employees involved in an accident with a fleet vehicle to complete an accident report form.

18. Sixty-seven percent required all automotive fleet accidents to be reported to a police department. Ninety-three percent required all drivers involved in an accident to report the incident to their fleet supervisor.

19. Seventy-five percent indicated that all drivers involved in an accident with a fleet vehicle must report to a designated person on campus to discuss all particulars of the accident. Sixty percent considered this practice a learning experience for the errant driver.

20. Fifty-three percent had a representative who attempted to investigate all accidents involving fleet vehicles.

21. Sixty-four percent indicated that one person or group was responsible for reviewing all accident reports involving fleet vehicles and in 58 percent of these the culpability of the errant driver could be determined.

22. Thirty-three percent had a person or department cognizant of all chargeable violations against a driver of a fleet vehicle, and in 53 percent of these a review of the report was made and action against the errant driver was in the form of counseling and disciplinary action.

23. Ninety-three percent maintained the authority to terminate, suspend, or restrict a person's privilege to drive a fleet vehicle. The majority of these schools had this authority charged to one single department or group.

24. Fifteen percent actively participated in some type of automotive fleet safety evaluation and only 7 percent participated in some type of driver recognition program.

25. Twenty-six percent had educational programs relating to the avoidance of automotive accidents. Less than half of these required the attendance of all drivers.

26. Eleven percent provided driver improvement programs for those drivers who demonstrated unsafe and inefficient use of the fleet vehicles.

27. Thirty percent conducted ongoing informational programs relative to the safe and efficient use of fleet vehicles and highway safety in general. The methods most frequently used included: safety literature, posters and safety articles in campus literature. Only 24 percent used periodic driver refresher programs.

28. Eighteen percent provided specialized training for operators of fleet vehicles that possessed limited

visibility and handling characteristics different from standard cars and trucks.

29. Forty-eight percent supplied information for the 1978-1979 school year indicating an accident frequency rate of 28.6 accidents per million miles driven. For the 1979-1980 school year, 51 percent demonstrated an accident frequency rate of 27.3 per million miles driven.

30. Less than 20 percent of the accidents resulted in personal injury or fatality for the 1978-1979 and 1979-1980 school years.

31. Eighteen percent indicated that lawsuits had resulted from accidents involving fleet vehicles during the past five years.

32. Forty-eight percent indicated that, in their opinion, the present fleet safety program was actively supported by the administration, and 45 percent did not respond because of the absence of a fleet safety program.

33. Fifty-three percent indicated that, in their opinion, the present fleet safety efforts were adequate in relation to their total automotive fleet operation.

34. Eighty-nine percent indicated that, in their opinion, their automotive fleet operations were not experiencing an accident problem.

35. Forty-three percent indicated that, in their opinion, a comprehensive fleet safety program would reduce the overall operating costs of the fleet operation.

Conclusions

The following conclusions are based upon the findings of the study:

1. College and university automotive fleets varied in the number of vehicles associated with each fleet. The majority of the schools had what was considered to be a "small" automotive fleet. It was assumed that a substantial amount of the institution's overall operating budget was invested in this day-to-day operation whether a college or university had a "small" or "large" automotive fleet.

2. There was a large variation in the types and sizes of motor vehicles that comprised a college or university automotive fleet. Many of these vehicles were unlike passenger cars because they possessed different handling characteristics for the driver due to limited visibility, increased turning radius, higher center of gravity, and limited maneuverability.

3. There was a wide variety of services provided by the automotive fleets in their day-to-day operations. These services occurred both on and off campus and under a variety of conditions. This daily use under a variety of conditions tended to lend itself to a greater accident exposure.

4. Nearly all full-time employees of a college or university were permitted to drive fleet vehicles and at least half of the schools also permitted both graduate and

undergraduate students to drive fleet vehicles. All of these drivers and potential drivers added up to a large driving population composed of varying knowledge, skills and attitudes toward safe and efficient driving.

5. There was an absence of written policies and procedures relating to the safe and efficient use of fleet vehicles for a large number of the schools which tended to lend itself to an uncertainity of one's responsibility when operating a fleet vehicle.

6. Many of the colleges and universities lacked a central controlling unit responsible for managing and supervising the total automotive fleet safety program. When a controlling unit was present, many indicated a lack of special training and preparation in the area of automotive fleet safety for those in charge.

7. An absence of accurate and up-to-date records or their inaccessibility was demonstrated by the respondents' failure to answer certain questions or their indication that requested information was not available.

8. The majority of the colleges and universities verified a person's operator license prior to their initial operation of a fleet vehicle, but only a small percentage examined the person's driving record unless their primary responsibility was operating a fleet vehicle.

9. The term "Satisfactory Driving Record" was defined and used by a small number of the schools and they related the definition to violation experience only.

10. Most of the colleges and universities required all fleet accidents to be immediately reported to a designated person on campus, but a much smaller percentage required fleet accidents to be reported to a police department.

11. The majority of the respondents indicated that errant drivers reported to a designated person on campus to discuss the particulars of a fleet accident, but not all considered this to be a learning experience.

12. Chargeable violations against drivers of fleet vehicles were probably unnoticed by supervisory personnel because only a small percentage of the schools assigned this responsibility to a person or department.

13. Few schools actively participated in some type of automotive fleet safety evaluation program, and even fewer participated in a driver recognition program.

14. Most colleges and universities did not provide educational and/or training programs as part of their automotive fleet programs. This was made evident by the small number of schools that participated in any type of formal crash prevention program, driver improvement program, training for operators of specialized vehicles, and ongoing informational programs.

15. Contrary to the opinions of the respondents, most colleges and universities were experiencing an accident problem and this was demonstrated by the high accident frequency rate based on the vehicle miles driven.

Recommendations

The following recommendations are based upon the findings of the study:

1. Colleges and universities need to designate one person or department as having the responsibility to manage and supervise the automotive fleet safety program and the overall fleet operation. Training and education in this specialized area should be acquired if not already present.

2. A policies and procedures manual reflecting the needs of the institution in the area of automotive fleet operations and its related safety programs should be developed and made readily available to all personnel.

3. An accurate and up-to-date record keeping system should be developed to incorporate all areas of the automotive fleet operations and it should be centrally located to facilitate entry and retrieval of data.

4. The term "Satisfactory Driving Record' should be defined and established by college and university personnel for standardization purposes to help determine who may or may not operate a fleet vehicle.

5. Colleges and universities should adopt the policy of verifying a person's operator license prior to their initial operation of a fleet vehicle, and the driving record should also be checked, if not prior then as soon as possible, to help identify the high risk and problem drivers.

6. Fleet vehicles should be periodically inspected and maintained by one department. If this is not possible, then guidelines should be established to insure this procedure.

7. Colleges and universities should use a standardized accident report form for all fleet accidents and require all drivers involved in accidents to complete the form in its entirety. This procedure should help in gathering information relevant to an accident countermeasure program.

8. All accidents involving fleet vehicles should be reported to the respective police department in the vicinity of the occurrence. This procedure should help protect the college or university when there is a question of who is liable or responsible for the accident.

9. All errant drivers involved in an accident or moving violation should be required to report to a designated person on campus to discuss all of the particulars relating to the incident, and this discussion should be treated as a learning experience.

10. A representative of the college or university should attempt to investigate all accidents involving fleet vehicles. This procedure would help to insure detailed reporting and investigation of all accidents.

11. The college or university should have an appointed group assigned the responsibility to periodically meet and discuss fleet accident reports. They should attempt to

determine if the accident was preventable and what measures should have been taken to avoid the accident. This type of evaluation would help in developing an accident counter-measure program.

12. Colleges and universities should emphasize safety in their overall fleet operations, and one proven way would be to recognize and reward personnel who have demonstrated safe driving performance over a period of time.

13. College and university automotive fleet safety programs should possess a strong educational component. The educational endeavor should be formal in nature and ongoing. A formal crash prevention program should be required of all drivers, those drivers who operate specialized vehicles should receive appropriate training, ongoing informational programs relative to traffic safety should be initiated, and periodic driver refresher programs could be implemented when the need occurs.

Recommendations for Future Research

Some of the more important areas to be considered for future research became apparent during the course of this study, and they are:

1. A comparative study to determine if there is a significant difference in the automotive fleet operations and related safety efforts of private, public and state institutions of higher education.

2. Identify those colleges and universities that

have ongoing fleet safety programs and identify similar types of colleges and universities that have no fleet safety programs. After identifying both groups, a comparative study could be done examining operational costs, accident rates, and other areas that relate to fleet safety programs.

3. Develop a model automotive fleet safety program that colleges and universities might use as a standard in developing their own operational programs. This program should be developed using methods of colleges and universities that are identified as having proven and successful automotive fleet safety programs.

Discussion

Presented in this section are several underlying assumptions that cannot be supported factually by the survey data, yet they are nonetheless logical deductions based on the findings of this study.

1. Colleges and universities need to consider themselves as being in the automotive fleet business. They should treat their fleet operations in a manner similar to that of business and industry if they wish to achieve maximum safety and efficiency in their operations.

2. Colleges and universities need to develop and administer fleet safety programs. One of the first steps needed in this area is to appoint an individual as fleet safety supervisor. This person must be knowledgeable

concerning automotive fleet safety and must also possess an educational background in highway and traffic safety. The size and operation of the automotive fleet should determine the assignment of other responsibilities in related areas of campus safety. Current automotive fleet safety programs appear to be fragmented in relation to their organization and administration and a single person is needed to pull all of these activities together to insure a more efficient operation.

3. Another initial step in developing a fleet safety program is to establish an accurate and up-to-date record keeping system. Records serve a variety of purposes in a comprehensive fleet safety operation and they must be readily accessible for entering and retrieving various data. Computers should be used for this data processing and analysis, and the the responsibility for this service should be assigned to the fleet safety supervisor. Once an accurate and up-to-date system is put into service, then a needs assessment can be carried out in relation to the safety and efficiency of the automotive fleet operation. It should also be emphasized that program evaluation depends upon an accurate and up-to-date record keeping system.

4. An automotive fleet safety program requires a policies and procedures manual relating to the safe and efficient use of fleet vehicles. The fleet safety supervisor and selected committee should be charged with the responsibility of developing such a manual and it should

reflect the needs of the respective institution. Once the document is completed, it must have the endorsement and support of the administration, faculty and staff, and it must be made available to all drivers.

5. Something that is often overlooked in fleet safety programs is establishing criteria to determine what exactly is a "satisfactory driving record." This term should be established when developing the policies and procedures for automotive fleet safety programs because it will be extremely helpful in determining: (a) eligibility for employment in a position that would require frequent driving of fleet vehicles, and (b) if a person, already employed and experiencing an accident or violation problem, should have their driving privileges restricted until further remedial action is taken.

6. Another important aspect of a comprehensive fleet safety program that is part of the record-keeping system is the maintaining of active driving records for all persons permitted to operate fleet vehicles on a regular or periodic basis. These records should contain the following information: (a) accident and/or violation experience, (b) completion of educational safety programs, (c) types of vehicles qualified to operate, (d) job assignment associated with vehicle use, and (e) number of miles driven in fleet vehicles.

7. Educational programs related to the safe and efficient use of motor vehicles and highway safety in

general are a must in an automotive fleet safety program. There are several nationally used accident avoidance programs currently on the market or a college or university could develop its own crash avoidance program based upon their own needs assessment. All drivers should be required to attend an initial crash avoidance program prior to their use of a fleet vehicle. Other programs in the educational area that need to be considered are: (a) a driver improvement program for drivers who have completed the initial crash avoidance program but continue to demonstrate a need for additional training based on accident and violation experience, (b) specialized training for drivers of vehicles other than regular cars and trucks, and (c) periodic driver refresher programs. All of the educational programs can include both classroom and laboratory instruction and this should be determined with a needs assessment. The educational program must be ongoing if it is to be successful; it cannot be a one-shot approach. These programs can be achieved without making safety obtrusive but it does take knowledge and planning to put together a program that is accepted and practiced by all who are involved.

8. Safety programs must be viewed in a positive light and part of this would be to acknowledge or reward drivers and/or departments who exhibit a positive attitude toward accident prevention.

9. Colleges and universities are very vulnerable in relation to high exposure and visibility from the general

public. Because of this, all accidents involving fleet vehicles should be reported immediately to the respective police departments in the vicinity of the accident. This practice will provide some protection to the college or university in the event a lawsuit results from the accident and it will also provide an accurate police report for the college or university records.

10. A thorough and detailed accident report is a necessity in attempting to determine how and why the accident occurred. Colleges and universities should adopt the use of such accident report forms and require all errant drivers to explain in detail all particulars relating to the accident.

11. All accidents involving fleet vehicles, when feasible, should be investigated thoroughly by a representative of the fleet safety program. This investigation, the police report and the errant driver's report should provide the fleet safety supervisor with the needed information to determine whether the accident was "preventable" or "not preventable" on the part of the fleet driver. The decision should be discussed with the errant driver and, if the accident was avoidable, the driver should be shown how this accident situation could have been avoided.

12. Accident review boards are a necessity in a comprehensive fleet safety program. These boards do not have to examine every fleet accident if a fleet safety supervisor is already in place. They only need to meet

and examine those accidents where a driver feels that the decision made by the fleet safety supervisor is unfair. In essence, the accident review board is an appeals board, and they can either uphold or overturn the decision made by the fleet safety supervisor.

13. State and public colleges and universities in the survey appeared to put more emphasis toward automotive fleet safety than did private institutions of higher education. A possible reason for this occurrence might be the direct or indirect control and influence of the state government.

14. The daily exposure of a college or university's drivers and vehicles can elicit either good public relations or poor public relations. A comprehensive fleet safety program will help to eliminate abuse and misuse of fleet vehicles and, thus, give the college or university a strong source of good public relations.

15. Today, budgets are a major concern on college and university campuses and to suggest a new program at this time could meet with resistance. However, if administrators would closely examine the resources they presently have on their campuses, and also examine the amount of money that is budgeted for the automotive fleet operation, they might find that they can initiate a comprehensive fleet safety program at a very minimal cost. When the program is operational, the money saved in the fleet operation will cause

it to be self-sufficient. This has been demonstrated in private business and industry. There is no reason why a comprehensive fleet safety program would not work for our colleges and universities.

APPENDICES

APPENDIX A

LETTER TO THE CAMPUS INSURANCE COORDINATORS OF SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES

INDIANA, PENNSYLVANIA 15705
School of Continuing and Non-resident Education • 412-357-2227

May 29, 1981

Dear Campus Insurance Coordinator:

It is hoped that you will take some time from your busy schedule to complete the enclosed questionnaire. Approximate completion time is thirty minutes. If you find that some of the questions cannot be readily answered because of lack of information or records, please leave the answer blank and go on to the next question.

The purpose of the survey is to determine the current status of automotive fleet safety on selected college and university campuses in the United States. These fleets are an integral part of an institution's day-to-day function and they also consume a substantial amount of the overall operating budget. Because of the present economic conditions, it is felt that you will probably be exploring ways to insure greater cost efficiency and safety in the operation of your institution's automotive fleet. The information gathered by this national survey will give you, safety experts, and others the opportunity to examine your own program and those of others in this field of operation.

If you are interested in receiving an abstract of this study, please indicate so at the bottom of the cover page of the questionnaire. Your assistance in completing this survey will be greatly appreciated.

Sincerely,

Richard J. Hornfeck, Director
Highway Safety Center
Indiana University of Pennsylvania
Indiana, Pennsylvania 15705

RJH:smh

Enclosure (Survey Questionnaire)

APPENDIX B

SURVEY QUESTIONNAIRE FOR SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES IN THE UNITED STATES

THE STATUS OF AUTOMOTIVE FLEET SAFETY IN
SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES IN THE UNITED STATES

Selected College and University Questionnaire

Attached are a series of questions relating to your automotive fleet operation and your current fleet safety efforts. Please encircle the letter (Y) Yes, (N) No, (NA) Not Applicable, or respond as specified that which best reflects your particular system. This questionnaire was designed to take a minimum of time to complete.

Organizational Procedure

Part I — General Information Relative to the Educational Institution and its Automotive Fleet
Items 1-9

Part II — Automotive Fleet Policies and Procedures
Items 10-37

Part III — Automotive Fleet Safety Educational and/or Training Programs
Items 38-41

Part IV — Automotive Fleet Information for School Years 1978-79 and 1979-80
Items 42-47

Part V — Opinions of Person(s) Responding to Questionnaire
Items 48-52

Please return the completed questionnaire in the stamped, self-addressed envelope provided on or before JULY 1, 1981. Your assistance and cooperation are deeply appreciated. Return to:

Richard J. Hornfeck, Director
Highway Safety Center
Indiana University of Pennsylvania
Indiana, Pennsylvania 15705

Name and title of person completing the questionnaire: _____

_____

Name and address of your educational institution: _____

_____

__ PLEASE SEND AN ABSTRACT.

QUESTIONNAIRE DEFINITIONS

Automotive Fleet - A group of vehicles operated under unified control.

Automotive Fleet Safety Program - Management of the automotive fleet and precautionary measures taken to insure its safe and efficient operation.

Educational Institution - A four-year college or university.

Motor Vehicle - Any vehicle driven or drawn by mechanical power, designed primarily for use on public streets and highways, except a vehicle operated on a rail or rails.

Private College or University - An educational institution whose governing board is not subject to public (governmental) control except for charter or statutory provisions, usually because of primary financial support from private rather than public funds.

Public College or University - An educational institution financed largely by public funds but not controlled and/or managed by state government.

State College or University - An educational institution financed by public funds and controlled and/or managed by the state government.

Part I

General Information Relative to the Educational Institution and its Automotive Fleet

1. Type of Institution: __ Private __ Public __ State
2. Total Student Population: _____
3. Total Administration, Faculty and Staff: _____
4. Total number of vehicles in automotive fleet: _____
5. Please indicate the type(s) of vehicle currently in use as part of your automotive fleet:

__ Sedans	__ Motorcycles	__ *Large Trucks/Vans
__ Station Wagons	__ Ambulances	__ Farm Tractors
__ Passenger Vans	__ Fire Vehicles	__ Construction and/or Utility
__ Buses	__ Light Trucks/Vans	__ Other (Specify) _____

*Vehicle larger than a one-ton pick-up or van.

6. Please indicate the type(s) of service currently provided by your automotive fleet and whether this service is provided on-campus, off-campus or both:

	On-Campus	Off-Campus	Both
__ Transporting Students	____	____	____
__ Recruiting Students	____	____	____
__ Academic Travel	____	____	____
__ Business	____	____	____
__ Driver Education	____	____	____
__ Delivery Service	____	____	____
__ Grounds Work	____	____	____
__ Service & Maintenance	____	____	____
__ Emergency Service	____	____	____
__ Construction	____	____	____
__ Other (Specify) _____	____	____	____

7. Is your automotive fleet located and/or housed in one central location? Y N
8. Are all fleet vehicles currently owned by the institution? Y N

   If NO, please indicate how vehicles are acquired:

   __ Some owned __ Leased __ Free Loan __ Other (Specify) _____

9. Please indicate the status of driver permitted to use the vehicles in your automotive fleet:

__ Administration	__ Graduate Students
__ Instructional Staff	__ Undergraduate Students
__ Non-instructional Staff	__ Other (Specify)
__ Graduate Assistants	_____

Part II

Automotive Fleet Policies and Procedures

10. Does your educational institution have a written set of policies and procedures relating to the safe and efficient use of vehicles in the automotive fleet? Y N

If YES, please complete the following:

a. Are the automotive fleet guidelines in a separate employee's driver manual? Y N

b. Are the automotive fleet guidelines made available to all drivers? Y N

c. Are the automotive fleet guidelines placed in each vehicle? Y N

11. Is there one person or department on your campus that has direct responsibility for the management and supervision of an automotive fleet safety program? Y N

If YES, please complete the following:

a. What is the title of the person or department in charge:

Person: _____

Department: _____

b. Is fleet safety this person's or department's only duty? Y N

If NO, indicate other responsibilities:

_____

c. Was specific training or preparation in relation to automotive fleet safety received by this person or department members? Y N

If YES, specify training received: _____

_____

If NO, how many persons or departments are responsible for the fleet safety program and what are their titles:

___ Persons ___ Departments

Titles: _____ Titles: _____

_____ _____

12. Are the automotive fleet guidelines consistent for all vehicles used in the day-to-day operation of your educational institution? Y N

If NO, please indicate the following:

a. The number of departments and/or groups that have vehicles which are not considered to be part of the automotive fleet: _____

b. The names of these departments and/or groups that have vehicles not included in the automotive fleet: _____

_____

c. If known, what is the total number of vehicles considered <u>not</u> to be part of the automotive fleet? _____ vehicles

13. Please indicate how your automotive fleet is insured:

__ Self-insured __ Private Insurance Carrier __ Other (Specify) _____

14. Are all the vehicles assigned to your automotive fleet insured under the same policy? Y N

15. Are all drivers using the automotive fleet fully insured by your educational institution? Y N

If NO, indicate whose responsibility this would be:

__ Driver __ Department or Group assigned Vehicle __ Other (Specify) _____

16. Are all vehicles housed on campus periodically inspected and maintained by one department? Y N

If NO, indicate how vehicle maintenance and inspection are administered:

__ Private Garage
__ Leasing Agency
__ Responsibility of Department to which vehicle assigned
__ Other (Specify) _____

17. Please indicate the type of automotive fleet records that are maintained on your campus:

__ Accident
__ Driver
__ Vehicle Mileage
__ Insurance
__ Vehicle Inspection
__ Vehicle Maintenance
__ Maintenance Costs
__ Accident Costs
__ Other (Specify) _____

18. Are records relative to the fleet operation maintained in a central location? Y N

If YES, indicate the name of the department or office that maintains these records: _____

If NO, indicate the number of departments or offices responsible for maintaining these records and their respective names:

_____ departments or offices

Names: _____ _____

_____ _____

19. Is a person's operator license verified prior to their initial operation of a vehicle in the automotive fleet? Y N

20. Is a person's driving record examined prior to their initial operation of a vehicle in the automotive fleet? Y N

21. If an individual's primary responsibility is operating a fleet vehicle (e.g. bus driver, etc.), does anyone at your institution examine that person's driving record prior to their employment? Y N

22. Are driving records maintained on <u>all</u> persons operating a vehicle in the automotive fleet? Y N

If YES, please indicate those categories that are maintained in relation to the active driving records:

__ Types of Vehicles Qualified to Operate
__ Mileage Driven
__ Accident Involvement
__ Chargeable Accidents
__ Chargeable Violations
__ Other (Specify) _____

23. Are driving records maintained on those persons whose <u>primary</u> responsibility is operating a fleet vehicle? (e.g. bus driver, etc.) Y N

If YES, please indicate those categories that are maintained in relation to the active driving records:

__ Types of Vehicles Qualified to Operate
__ Mileage Driven
__ Accident Involvement
__ Chargeable Accidents
__ Chargeable Violations
__ Other (Specify) _____

24. Does your educational institution use the term "Satisfactory Driving Record?" Y N

If YES, how is a "Satisfactory Driving Record" defined?

_____

25. Is an accident report form used for fleet accidents: Y N

If YES, indicate the type of form used:

__ Form used by State Police or Highway Patrol
__ National Organization (e.g. National Safety Council)
__ Insurance Company Form
__ Educational Institution's Own Form
__ Other (Specify) _____

26. Are all employees involved in an accident with a fleet vehicle required to complete an accident report form? Y N

If YES, with whom or where is this accident report form filed?

_____

27. Do you require all accidents involving fleet vehicles to be immediately reported to a police department? Y N

If NO, indicate when an accident should be reported to the police:

_____

28. Are all accidents involving fleet vehicles reported immediately to the fleet supervisor or person in charge? Y N

29. Is the driver required to report to a designated person on your campus to discuss all particulars of the accident? Y N

If YES, please complete the following:

a. Title of designated person: _____

b. Is this discussion considered to be a learning experience for the errant driver? Y N

30. Do you have a representative that attempts to investigate all accidents involving the fleet vehicles? Y N

    If YES, title of representative: _____

31. Is any one person or group on your campus responsible for reviewing all accident reports involving fleet vehicles? Y N

    If YES, please complete the following:

    a. Title of person or group responsible for reviewing all accident reports: _____

    b. How is this person or group designated or selected?

    _____

    c. How long does this person or group serve in this capacity?

    _____

    d. Does this person or group have the authority to determine the culpability of errant drivers? Y N

32. Does your institution maintain an accurate tabulation of <u>all</u> costs related to each fleet accident? Y N

33. Does your institution maintain an accurate tabulation of <u>all</u> costs relative to the operation of the fleet? Y N

34. Is a person or office on your campus cognizant of all chargeable violations against a driver of a fleet vehicle? Y N

    If YES, please complete the following:

    a. What is the title of the person or office that initially receives this information?

    _____

    b. What occurs once this information is received?

    _____

35. Can an individual's privilege to drive a fleet vehicle be terminated, suspended or restricted? Y N

    If YES, please answer the following:

    a. Who on your campus has the authority to make such a decision?

    _____

    b. Indicate reason why such action might be taken against an individual operating a fleet vehicle:

    __ Arrest and Conviction of Drunken Driving
    __ Alcohol Related Accident Attributed to Driver
    __ Arrest and Conviction of Moving Violation(s)
    __ Number of Chargeable Accidents
    __ Improper Use of Fleet Vehicle
    __ Unauthorized Use of Fleet Vehicle
    __ Other (Specify) _____

36. Does your institution participate in any type of automotive fleet safety evaluation program? Y N

If YES, please complete the following:

a. How often does this evaluation program occur? _____

b. Who is responsible for gathering all of the data for evaluation?

_____

c. If applicable, what national organization or association is involved? _____

d. Please specify any other pertinent information relative to this automotive fleet safety evaluation program: _____

_____

37. Does your institution participate in any type of driver recognition program in relation to the safe and efficient operation of the fleet vehicles? Y N

If YES, please answer the following:

a. What criteria do you use in evaluating your safe and efficient drivers? _____

b. How do you recognize or reward these drivers?

_____

c. If in conjunction with an association or organization, please describe: _____

d. Please specify any other pertinent information relative to your recognition program: _____

Part III

Automotive Fleet Safety Educational and/or Training Programs

38. Do you conduct any type of formal educational or training program(s) relative to avoiding automotive accidents? Y N

If YES, please answer the following:

a. Indicate the origin of the crash prevention program:

__ National Safety Council's Defensive Driving Course
__ American Automotive Association's Driver Improvement Program
__ Insurance Company's Program (Specify Company & Title of its Program) _____
__ Institution's Own Prepared Program (Please Specify)

_____

b. Is this crash prevention program required of <u>all</u> drivers operating fleet vehicles? Y N

If NO, who are the recipients of this accident avoidance program?

_____

c. Is this crash prevention program required of a driver who uses his/her own vehicle for school business and is insured by your institution? Y N

39. Is there a driver improvement program for those who demonstrate unsafe and inefficient operation of the fleet vehicles? (e.g. accidents, violations, etc.) Y N

If YES, please complete the following:

a. Who or what department determines if a driver should participate in a driver improvement program?

_____

b. Who or what department is responsible for conducting this driver improvement program? _____

c. What factors determine if a driver must participate in a driver improvement program? _____

_____

d. What is the origin and title (if applicable) of this driver improvement program? _____

e. What is the disposition of the driver who refuses to participate in this driver improvement program? _____

40. Does your institution maintain any type of ongoing informational program relative to the safe and efficient operation of the vehicles in the automotive fleet and/or highway safety in general? Y N

If YES, please complete the following:

a. Indicate the methods used:

__Periodic Driver Refresher Programs
__Articles in Campus Literature
__Safety Literature
__Posters
__Other (Specify) _____

b. What is the origin of the majority of your materials and information? _____

41. Is there any type of specialized training for operators of vehicles in the fleet that have limited visibility and/or handling characteristics different from your standard cars and trucks? Y N

If YES, please indicate the type of special training received and who is responsible for the instruction: (e.g. Bus operators - veteran bus operator)

Type of Vehicle Operator	Instructor
_____	_____
_____	_____
_____	_____
_____	_____

Part IV

Automotive Fleet Information for School Years 1978-1979 and 1979-1980

42. Indicate the number of reported accidents involving fleet vehicles occurring both on and off campus (if determinable):

1978-79 On-Campus _____ 1979-80 On-Campus _____

Off-Campus _____ Off-Campus _____

TOTAL _____ TOTAL _____

*Where are these records maintained? _____

43. Indicate the number of reported accidents involving either personal injury or a fatality to the occupant(s) of a fleet vehicle:

1978-79 On-Campus _____ 1979-80 On-Campus _____

Off-Campus _____ Off-Campus _____

TOTAL _____ TOTAL _____

*Where are these records maintained? _____

44. If available, please indicate the number of employee work days lost because of traffic accidents involving fleet vehicles:

1978-79 _____ 1979-80 _____

*Where are these records maintained? _____

45. If available, please indicate the cost to your institution for all accidents involving fleet vehicles:

1978-79 _____ 1979-80 _____

*Where are these records maintained? _____

**What categories are used to determine the total cost of each accident? _____

_____

46. What is the approximate number of miles that your automotive fleet has logged for:

1978-79 _____ miles 1979-80 _____ miles

*Where are these records maintained? _____

47. Within the past five years, has a lawsuit been brought against your institution relative to a fleet vehicle accident? Y N

Part V

Opinions of Person(s) Responding to Questionnaire

48. Do you feel that your present fleet safety program is actively supported by your administration? Y N NA

49. Do you feel your present fleet safety program receives support and cooperation from other departments on your campus? Y N NA

50. Do you feel that your present fleet safety effort is adequate in relation to your total automotive fleet operation? Y N

Comments/Remarks: _____

_____

_____

51. Do you feel that your automotive fleet operation is experiencing an accident problem? Y N

Comments/Remarks: _____

_____

_____

52. Do you feel that a comprehensive fleet safety program would reduce the overall operating costs of your automotive fleet? Y N

Comments/Remarks: _____

_____

_____

APPENDIX C

FOLLOW-UP LETTER TO THE CAMPUS INSURANCE COORDINATORS OF SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES

INDIANA, PENNSYLVANIA 15705
School of Continuing and Non-resident Education • 412-357-2227

June 29, 1981

Dear Campus Insurance Coordinator:

On May 30, 1981, a questionnaire concerning the current status of your institution's automotive fleet safety program was sent to you. There was a cover letter explaining the purpose of this national survey and a self-addressed, stamped return envelope was also enclosed for your convenience. It was requested that the completed questionnaire be returned by July 1, 1981.

If you have not yet completed the questionnaire, I hope you will take the time to do so. Your response is urgently needed to get a more accurate picture of the current status of automotive fleet safety in colleges and universities in the United States.

Your assistance in completing this national survey will be deeply appreciated, and I await your reply.

Sincerely,

Richard J. Hornfeck
Highway Safety Center

RJH:smh

APPENDIX D

LETTER TO SECOND GROUP OF CAMPUS INSURANCE COORDINATORS OF SELECTED FOUR-YEAR COLLEGES AND UNIVERSITIES

INDIANA, PENNSYLVANIA 15705
School of Continuing and Non-resident Education • 412-357-2227

September 30, 1981

Dear Campus Insurance Coordinator:

It is hoped that you will take some time from your busy schedule to complete the enclosed questionnaire. Approximate completion time is thirty minutes. If you find that some of the questions cannot be readily answered because of lack of information or records, please leave the answer blank and go on to the next question.

The purpose of the survey is to determine the current status of automotive fleet safety on selected college and university campuses in the United States. These fleets are an integral part of an institution's day-to-day function and they also consume a substantial amount of the overall operating budget. Because of the present economic conditions, it is felt that you will probably be exploring ways to insure greater efficiency and safety in the operation of your institution's automotive fleet. The information gathered by this national survey will give you, safety experts, and others the opportunity to examine your own program and those of others in this field of operation.

If you are interested in receiving an abstract of this study, please indicate so at the bottom of the cover page of the questionnaire. Please return the questionnaire on or befor October 24, 1981, in the self-addressed, stamped envelope provided. Your assistance in completing this survey will be greatly appreciated.

Sincerely,

Richard J. Hornfeck, Director
Highway Safety Center

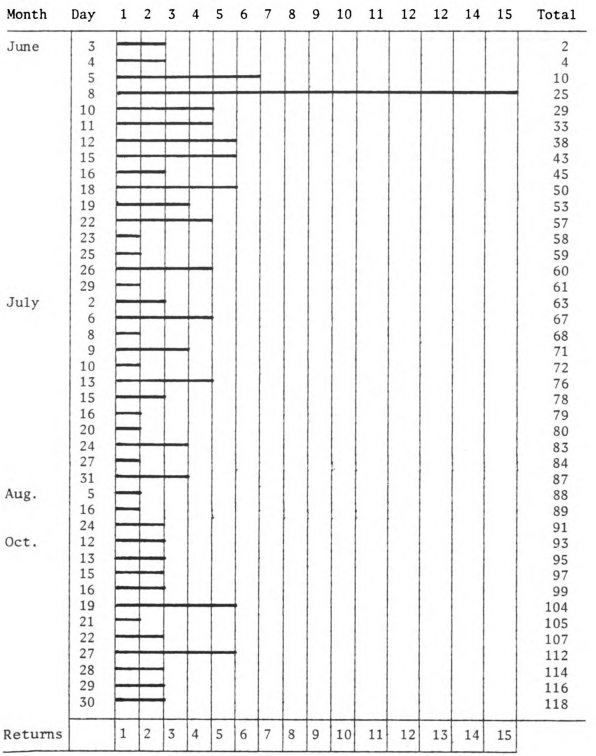
RJH; smh

Enclosure (Survey Questionnaire)

APPENDIX E

QUESTIONNAIRE SURVEY RETURN CHART

QUESTIONNAIRE SURVEY RETURN CHART



QUESTIONNAIRE SURVEY RETURN CHART (continued)

Month	Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
Nov.	2																120
	4																121
	5																122
	9																124
	17																125
	23																126
Dec.	2																127
	8																128
	11																129
Returns		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

APPENDIX F

LIST OF RESPONDENTS

PRIVATE COLLEGES AND UNIVERSITIES

A. Small-Private

Owachita Baptist University
Arkadelphia, AR 71923
Joe Franz, Business Manager

The Colorado College
Colorado Springs, CO 80905
James L. Crossey, Director, Physical Plant

Mercer University
Macon, GA 31207
Charles B. Goodroe, Director of Campus Safety

Concordia College
River Forest, IL 60302
Neal F. Shackel, Operations Manager

Dordt College
Sioux Center, IA 51250
Bernard DeWit, V. P. for Business Affairs

Loyola College
Baltimore, MD 21210
Robert Sedivy, Director of Resource Management

Western Maryland College
Westminster, MD 21157
Philip B. Schaeffer, V. P. for Business Affairs

Assumption College
Worcester, MA 01609
Edward A. Engel, Director of Institutional Affairs

Curry College
Milton, MA 02186
Ernest R. Marchi, Controller

Alma College
Alma, MI 48801
Stephen Meyer, Jr., Vice President - Finance

Andrews University
Berrien Springs, MI 49104
Jim Curry, Transportation Superintendent

Franklin Pierce College
Rindge, NH 03461
Donald T. Anderson, Director Personnel/Risk Insurance

Small-Private (continued)

College of Sante Fe
Sante Fe, NM 87501
Sue D. Leer, Budget Director

Canisius College
Buffalo, NY 14208
Mary Ann D'Amico, Secty. to V. P. Business & Finance

D'Youville College
Buffalo, NY 14201
R. Patricia Smith, Coordinator of Facilities

Manhattanville College
Purchase, NY 10577
Paul R. Foley, Director of Purchasing

Pace University
Pleasantville, NY 10570
Walter E. Nugent, Director of Transportation

College of St. Rose
Albany, NY 12203
Patricia Hayes, V. P. for Administration & Finance

Mars Hill College
Mars Hill, NC 28754
Charles D. Capps, Internal Auditor

Wilberforce University
Wilberforce, OH 45384
Luther T. Lyle, Director of Administrative Services

Lewis & Clark College
Portland, OR
Fred E. Venzke, Buildings and Grounds Superintendent

Geneva College
Beaver Falls, PA 15010
Edward Jackson, Controller

Lycoming College
Williamsport, PA 17701
William L. Baker, Treasurer

Mercyhurst College
Erie, PA 16546
Maureen Walsh, Personnel Director

Small-Private (continued)

Thiel College
Greenville, PA 16125
Thomas P. Douglas, Director of Physical Plant

Trevecca Nazarene College
Nashville, TN 37210
Chief Fiscal Officer

Austin College
Sherman, TX 75090
John H. Boystone, Director, Personnel & Purchasing

Ferrum College
Ferrum, VA 24088
Carroll Rabon, Vice President for Business Affairs

Pacific Lutheran University
Tacoma, WA 98447
Kip W. Fillmore, Director of Campus Safety & Information

West Virginia Wesleyan College
Buckhannon, WV 26201
W. B. Hicks, Jr., Director of Purchasing

Lawrence University
Appleton, WI 54911
Don Stuywenberg, Physical Plant Director

B. Medium-Private

Pepperdine University
Malibu, CA 90265
Tim Pownall, Director Business Services

Stanford University
Stanford, CA 94305
Robert M. Beth, Director, Risk Management

University of Bridgeport
Bridgeport, CT 06601
Raymond I. Builter, Business Manager/Insurance Buyer

Howard University
Washington, D. C. 20059
Leonard A. Williams, Director of Risk & Estate Mgt.

Medium-Private (continued)

Bradley University
Peoria, IL 61625
William S. Wise, Director of General Services

Harvard University
Cambridge, MA 02138
Annemarie Thomas-Esposito, Manager of Insurance

Washington University
St. Louis, MO 63130
Thomas A. Harig, Director, General Services Department

Creighton University
Omaha, NE 68178
J. C. Mason, Director of Purchasing

University of Pennsylvania
Philadelphia, PA 19104
Lorrie J. Woskoff, Insurance and Claims Assistant

Marshall University
Huntington, WV 25701
Leonard E. Bedel, Safety Coordinator

C. Large-Private

University of Delaware
Newark, DE 19711
Mary E. Starkey, Insurance Assistant

Brigham Young University
Provo, UT 84602
Charles E. Greer, Insurance and Risk Manager

PUBLIC COLLEGES AND UNIVERSITIES

A. Small-Public

Gallaudet College
Washington, D. C. 20002
Fred L. Kendrick, Manager Transportation/Motor Pool

Sangamon State University
Springfield, IL 62708
George C. Souther, Insurance Manager

Small-Public (continued)

Lincoln University
Jefferson City, MO 65101
Lucius Warrick, Director of Operations, Phys. Facilities

B. Medium - Public

University of California, San Diego
LaJolla, CA 92093
Kathryn Bennet, Insurance Coordinator
John Stevenson, Manager, Transportation Services

Southeastern Massachusetts University
North Dartmouth, MA 01747
Foster Jacabos, Director of Planning and Plant

University of Minnesota at Duluth
Duluth, MN 55812
O. J. Hauge, Director, Risk and Insurance

University of Missouri at Kansas City
Kansas City, MO 64110
John Ervin, Supervisor Transportation & Garage

Queens College of the City University of New York
Flushing, NY 11367
Pius Ross, Director of Security

University of South Dakota
Vermillion, SD 57069
M. W. Huber, Jr., Director of Purchasing

Texas Southern University
Houston, TX 77004
C. B. Holloway, Director of Transportation

George Mason University
Fairfax, VA 22030
H. J. Panther, Insurance Coordinator

Western Washington University
Bellingham, WA 98225
David Kincaid, Motor Pool Supervisor
Diane Peterson, Program Manager

C. Large-Public

San Francisco State University
San Francisco, CA 94132
Edward F. Kline, Supervising Administrative Assistant

Large-Public (continued)

University of Minnesota
Minneapolis, MN 55455
O. J. Hauge, Director, Risk and Insurance

Pennsylvania State University
University Park, PA
Michael G. Klein, Risk Manager

University of Houston
Houston, TX 77004
Don Hadley, Safety Director

Texas A&M University
College Station, TX
Don Gray, Manager, Insurance & Risk Management

STATE COLLEGES AND UNIVERSITIES

A. Small-State

University of Alaska
Fairbanks, AK 99701
I. A. Charlton, Risk Manager

Eastern Connecticut State College
Willimantic, CT 06226
E. Herbert, Assoc. Dean for Administrative Affairs

North Georgia College
Dahlonega, GA 30597
Bobby Thomas, Vehicle Control Coordinator
Fred Hooper, Public Safety Director

Lewis-Clark College
Lewiston, ID 83501
Willie Harrington, Insurance Coordinator

Emporia State University
Emporia, KS 66801
David M. Dieker, Auto Mechanic II

Pittsburg State University
Pittsburg, KS 66762
Larry Nokes, Director of Physical Plant

Bowie State College
Bowie, MD 20715
William A. Barrington, Service Supervisor

Small-State (continued)

Coppin State College
Baltimore, MD 21216
Donald Carter, Acting Supervisor Motor Pool

Frostburg State College
Frostburg, MD 21532
John C. Durst, Director of Fire and Safety

Northwest Missouri State University
Maryville, MO 64468
Raymond J. Courter, Controller

Keene State College
Keene, NH
Wendell Pollock, Business Administration

Ramapo College of New Jersey
Mahwah, NJ 07430
John P. Schroeder, Assistant V.P. for Administration

Stockton State College
Pomona, NJ o8240
Barton Presti, Engineer in Charge of Maintenance

Winston-Salem State University
Winston-Salem, NC 27110
Fred A. Burke, Comptroller

Minot State College
Minot, ND 58601
Respondent Not Identified

Northwestern State University
Alva, OK 73717
V. K. Curtis

University of Science and Arts of Oklahoma
Chicksha, OK 73018
Dr. Clyde Servell, V. P. for Fiscal Affairs

California State College
California, PA 15419
Paul E. Wickerham, Business Manager

Lyndon State College
Lyndonville, VT 05851
Robert Miclaud Director of Purchasing & Staff

Longwood College
Farmville, VA
Roy Hill, Jr., Director of Physical Plant

Small-State (continued)

Virginia State University
Petersburg, VA 23803
Larry A. Shields, Assistant Director, Physical Plant

University of Wisconsin - Green Bay
Green Bay, WI 54302
Alan Rheinschmidt, Director, Institutional Services

University of Wisconsin - Platteville
Platteville, WI 53818
George White, Administrative Assistant

B. Medium-State

University of North Alabama
Florence, AL 35632
Robert W. Wakefield, Jr., Comptroller

University of Alaska at Anchorage
Anchorage, AK 99504
I. A. Charlton, Risk Manager

University of Arkansas
Fayetteville, AR 72701
Junior Miller, Director, Risk Management & Insurance

Cal State University, Fresno
Fresno, CA 83740
Edward F. Roddy, Environmental Health & Occupational Safety Officer

University of Northern Colorado
Greeley, CO 80639
Julie Swanson, Manager, Administrative Support

Florida Atlantic University
Boca Raton, FL 33432
Frank Szomy, University Safety Officer

Boise State University
Boise, ID 83725
Gordon G. Phillips, Director of Administrative Services

Idaho State University
Pocatello, ID 83209
Philip A. Blomquist, Motor Pool Manager

Medium-State (continued)

Chicago State University
Chicago, IL 60628
Therlow B. Simons, Deputy Chief of Police, Parking and Transportation

Morehead State University
Morehead, KY 40351
Joe Planck, Asst. to Director, Operations & Maintenance

Mankato State University
Mankato, MN 56001
Dr. Clair Faust, Acting Director, Administrative Svcs.

Springfield Missouri State University
Springfield, MO 65802
Conley L. Weiss, Asst. Director, Business Operations

University of Montana
Missoula, MT 59812
Larry B. Rabold, Purchasing Director

University of New Hampshire
Durham, NH o3824
Shirley L. Hamilton, Manager, Transportation Services

S.U.N.Y. College of Brockport
Brockport, NY 14420
Joani Martin, Senior Stenographer

State University College at Geneseo
Geneseo, NY 14454
John J. Nickerson, Jr., Budget Control Office

University of North Dakota
Grand Forks, ND
Jim Uhlir, Manager, Transportation Department

Bloomsburg State College
Bloomsburg, PA
Paul L. Conard, Director of Administrative Services

Indiana University of Pennsylvania
Indiana, PA 15705
Edward Norberg, Executive Director, Financial Affairs

Kutztown State College
Kutztown, PA 19530
John L. Burkhardt, Assistant Business Manager

Medium-State (continued)

West Chester State College
West Chester, PA 19380
Donald A. Hanby, Ass't to Director of Facilities and College Automotive Officer

University of Rhode Island
Kingston, RI 02881
Francis L. McGovern, III, Director of Safety and Health & Insurance Coordinator

Norfolk State University
Norfolk, VA 23504
Harold Newby, Director of Buildings and Grounds

Old Dominion University
Norfolk, VA 23508
J. K. Pegues, Director of Buildings and Grounds

University of Wisconsin - Stout
Menomonie, WI 54751
Larry Kirby, Business Manager - Physical Plant

C. Large-State

California Polytechnic State University
San Luis Obispo, CA 93407
Ray Macias, Procurement and Support Services Officer

University of Connecticut
Storrs, CT 06268
W. A. Massett, Director, Traffic & Transportation Svcs.

University of Georgia
Athens, GA 30602
Jay S. Toci, Manager, Accounts Receivable Department

Eastern Michigan University
Ypsilanti, MI 48197
Mary Brooks, Ass't. to V.P. for Business and Finance

Michigan State University
East Lansing, MI 48824
Jerre Ward, Manager, Property and Casualty Insurance

Western Michigan University
Kalamazoo, MI 49007
Mr. C. Edward Smith, Manager, Communications and Transportation

Large-State (continued)

S.U.N.Y. at Buffalo
Buffalo, NY
John Bagrowski

Bowling Green State University
Bowling Green, OH 43403
Sandy LaBro, Administrative Ass't., Treasurer's Ofc.

Miami University
Oxford, OH 45056
Earl D. Folker, Director of Business Affairs

Oklahoma State University
Stillwater, OK 74078
Benny R. Steele, Ass't. Business Manager & Risk Manager

Memphis State University
Memphis, TN 38152
Cynthia D. Montgomery, Technical Clerk, Motor Pool

University of Wisconsin
Madison, WI 53711
Thomas C. Halvorsen, Risk Manager

APPENDIX G

RESPONSES TO CERTAIN SURVEY QUESTIONS

Questions: 11,b, 11c, 11(third part), 18(third part), 26, 27, 31a, 36a, 36b, 36c, 36d, 37a, 37b, 37c, 37d, 38a, 38b, 39a, 39b, 39c, 39d, 39e, 41, 42, 43, 44, 45, 46, 50, 51, 52

QUESTION #11b: Is fleet safety this person's or department's only duty? If NO, indicate other responsibilities:

RESPONSES: (those that answered NO)

Physical Plant Activities (which included related safety activities)

Grounds and Maintenance

Overall School Safety, Security, Fire Prevention, Accident Prevention, Investigation

Motor Pool, Supervisor Transportation, Automotive Equipment

Purchasing, Supplies, Mail Service

Risk Management, Insurance

Assistant Business Manager

Campus Planning

QUESTION #11c: Was specific training or preparation in relation to automotive fleet safety received by this person or department members? If YES, specify training received:

RESPONSES: (those that answered YES)

Training through the National Safety Council, and the Defensive Driving Course was singled out.

Special courses dealing with fleet management, safety, motor fleet accident investigation, and safety administration.

Personal experience in the automotive fleet area with the United States Armed Services.

Training for responsibility as a licensed state safety inspection station.

Periodic safety information from the state's Department of Transportation.

QUESTION #11: (Third Part) If there are more than one person or department responsible for the management and supervision of an automotive fleet safety program, indicate the number of persons or departments that are responsible and their titles:

RESPONSES:

Two Persons or Departments

Environmental Health and Occupational Safety/ Plant Operations and Automotive Safety

Security/Buildings and Grounds

Public Safety/Training Personnel

Motor Pool Operations/Safety Services

Safety/Fleet Operations

Physical Plant/Athletics

Student Activities/Administrative Services

Safety/Buildings and Grounds

Security/Physical Plant

Three Persons or Departments

Director of Safety and Health/Operations and Maintenance Manager/Individual Departments

Fleet Manager/Risk Manager/Safety Director

VP for Administration/VP for Student Development/ VP for Academic Affairs

VP for Business and Finance/Campus Safety/ Physical Plant

Physical Plant/Athletics/Security

Director of Admissions/Dean of Students/ Director of Maintenance

QUESTION #11 (Third Part - continued)

RESPONSES:

Four or More Persons or Departments

Student Life/Security/Facilities and Maintenance/Warehouse and Mailroom

Each Individual Department

Public Safety/Motor Pool/Insurance Department/ Individual Departments

QUESTION #18: (Third Part) If records relative to the fleet operation are not maintained in a central location, indicate the number of departments or offices responsible for maintaing these records and their respective names:

RESPONSES:

Insurance/Risk Management

Physical Plant Operations and Maintenance

Safety/Security

Student Government

Motor Pool

Administration

Athletics

Individual Departments

Admissions

Business Office

Personnel

QUESTION #26: Are all employees involved in an accident with a fleet vehicle required to complete an accident report form? If YES, with whom or where is this accident report form filed?

RESPONSES: (those that answered YES)

Campus Security and Safety Office

Business Office which included finance, controller, business manager, purchasing, general services

Insurance/Risk Management

Physical Plant and Maintenance

Transportation/Motor Pool/Fleet Dispatcher

Personnel Office

Admissions Office

Insurance Carrier

State Police

Department Concerned

State Department of Motor Vehicles

State Department of Education

State Attorney General's Office

QUESTION #27: Do you require all accidents involving fleet vehicles to be immediately reported to a police department? If NO, indicate when an accident should be reported to the police:

RESPONSES: (those that answered NO)

Personal injury involved

Damage exceeding a certain dollar figure

Another vehicle involved

Accident occurs off-campus

Chargeable accident

QUESTION #27: (those that answered NO)

RESPONSES: (continued)

When appropriate

Anytime, except when on private property

Suspicious circumstances

Needs towing

According to state vehicle code

QUESTION #31a: Title of person or group responsible for receiving all accident reports:

RESPONSES:

<u>One Person or Department</u>

Director of Risk Management and Insurance

Transportation or Automotive Officer

Director of Physical Plant

Director of Safety and/or Security

Environmental Health and Occupational Safety Officer

Campus Police

Business Manager

Vice President for Business

Vice President for Administration

Director of Administrative Services

Vice President for Fiscal Affairs or Treasurer

Director of General Services

Director of Procurement

QUESTION #31a: (continued)

RESPONSES:

Two Persons or Departments

Director of Safety and Director of Insurance

Director of Insurance and Business Manager

Director of Security and Director of Maintenance

Director of Personnel and Risk Manager

Three Persons or Departments

Director of Transportation/Director of Insurance/Departmental Representative

Director of Safety/Director of Purchasing/ Director of Physical Plant

Committees

Accident Review Committee

QUESTION #36: Does your institution participate in any type of automotive fleet safety evaluation program? If YES, please complete the following:

#36a: How often does this evaluation program occur?

RESPONSES: (those that answered YES)

Once a year

Twice a year

Monthly

Quarterly

Every two years

Periodically

Daily

QUESTION #36b: Who is responsible for gathering all of the data for evaluation?

RESPONSES: (those that answered YES)

Insurance Office

State Police

State Accident Control Office

State Fleet Operations

Motor Pool Manager/Transportation Manager

Safety/Security

Environmental Health and Occupational Safety Officer

Supervisor of Operations

Director of Physical Plant

State Department of General Services

Selected Accident Prevention/Review Committee

Insurance Carrier

QUESTION #36c: If applicable, what national organization or association is involved?

RESPONSES: (those that answered YES)

Insurance Company

National Safety Council

State Police

QUESTION #36d: Please specify any other pertinent information relative to this automotive fleet safety evaluation program:

RESPONSES: (those that answered YES)

Overall automotive fleet safety program is evaluated by their Highway Safety Center.

Fleet Programs are evaluated, compared and recognized by their respective state agencies.

QUESTION #37: Does your institution participate in any type of driver recognition program in relation to the safe and efficient operation

QUESTION #37: (continued) of the fleet vehicles? If YES, please answer the following:

#37a: What criteria do you use in evaluating your safe and efficient drivers?

RESPONSES: (those that answered YES)

Accident Record

Violation free and accident record

Cumulative miles of accident free driving

Performance evaluation

State certification (no further explanation)

Process is being developed

Established program (no explanation)

QUESTION #37b: How do you recognize or reward those drivers?

RESPONSES: (those that answered YES)

Plaques awarded annually

Plaque awarded monthly and article in college newspaper

Pins, cards and other items; also publicity

Process is being developed

QUESTION #37c: If in conjunction with an association or organization, please describe:

RESPONSES: None

QUESTION #37d: Please specify any other pertinent information relative to your recognition program:

RESPONSES: (those that answered YES)

Bus drivers only ones presently honored, but plan to expand program.

Monthly selection is single top driver, and yearly award is for the top three drivers.

Public notification via media.

QUESTION #38a: Indicate the origin of the crash prevention program:

__Insurance Company's Program (Specify company & Title of its program)

RESPONSES:

Hartford Insurance Company

PMA Driving Program

Home Insurance Company

QUESTION #38a: (continued) __Institution's Own Prepared Program (Please Specify)

RESPONSES:

Drivers are given Defensive Driving Test annually and abstracts on each driver's record are obtained annually from DMV

Safety seminars for school's professional drivers

Program developed by school's Highway Traffic Safety Center

Cooperative program with Motor Transportation Division

State recertification (no explanation)

State's Department of Transportation

State's Insurance Office multi-media program

State of California's Defensive Driving Program

State Insurance Unit

Special vehicle training

*Several schools indicated that their crash prevention programs were tied in with recognized state programs

QUESTION #38b: Is this crash prevention program required of <u>all</u> drivers operating fleet vehicles? If <u>NO</u>, who are the recipients of this accidence avoidance program?

RESPONSES: (those that answered NO)

Departments that have a large number of vehicles assigned to them

Those whose primary job is driving a fleet vehicle

Those that have been involved in accidents

Voluntary or upon request

QUESTION #39a: Who or what department determines if a driver should participate in a driver improvement program?

RESPONSES:

State Department of Motor Vehicles (based on state point system)

Physical Plant Office

Individual departments that are assigned vehicles

University or State Accident Review Board

Accident Review Board

Admissions Office

State (no explanation)

Program available to all and not mandatory

QUESTION #39b: Who or what department is responsible for conducting this driver improvement program?

RESPONSES:

State Department of Motor Vehicles

State Insurance Unit/State Risk Management

Governor's Safety Commission

State (no explanation)

Education Department

Physical Plant Director

Admissions

Highway Traffic Safety Center

QUESTION #39c: What factors determine if a driver must participate in a driver improvement program?

RESPONSES:

State point system

Accident record

Mileage driven and number of accidents

Driving habits

Severity and frequency of accidents

If driver of fleet vehicle involved in an accident was at fault

Committee made up of department head, dean of school, and business manager

QUESTION #39d: What is the origin and title (if applicable) of this driver improvement program?

RESPONSES:

Southwest Center for Safety

National Safety Council's Defensive Driving Course

QUESTION #39e: What is the disposition of the driver who refuses to participate in this driver improvement program?

RESPONSES:

License suspension

Not permitted to operate state vehicles

Denial of driving privileges

Program not mandatory

QUESTION #41: Is there any type of specialized training for operators of vehicles in the fleet that have limited visibility and/or handling characteristics different from your standard cars and trucks? If YES, please indicate the type of training received and who is responsible for the instruction?

RESPONSES: (those that answered YES)

Type of Vehicle Operator	Instructor
Bus drivers	Veteran Driver Transportation Supervisor Highway Traffic Safety Center Personnel
Construction Equipment	Veteran Operator Transportation Supervisor Certified Instructor Department of Public Safety National Safety Council Classes
Grounds Equipment (tractor and garbage trucks)	Grounds Superintendent Experienced Operator Transportation Supervisor
Large Truck	Transportation Supervisor Grounds Superintendent Highway Traffic Safety Center Personnel Certified Instructor Veteran Driver
Large Van	Transportation Supervisor Experienced Operator Highway Traffic Safety Center Personnel
Ambulance	Safety Director and Senior Rescue Squad Members
Motor Scooter	Veteran Operator

QUESTION #42: Where are the records maintained for reported accidents involving fleet vehicles?

RESPONSES:

Insurance Office/Risk Management Office

RESPONSES: (continued)

Business Office

Campus Safety and Security

Transportation Services/Motor Pool/
Fleet Dispatcher

Physical Plant/Facilities/Operations/
Maintenance

Treasurer/Financial Affairs/Comptroller

General Services/Campus Services/Administrative
Services

Environmental Health and Occupational Safety/
Safety and Health

State Police

Police Department within the town

QUESTION #43: Where are the records maintained that indicate the number of fleet accidents involving personal injury or fatality?

RESPONSES:

Insurance Office/Risk Management Office

Campus Safety and Security

Physical Plant/Facilities/Operations/Maintenance

Business Office

Transportation Services/Motor Pool/Fleet
Dispatcher

General Services/Campus Services/Administra-
tive Services

Treasurer/Financial Affairs/Comptroller

Environmental Health and Occupational Safety/
Safety and Health

State Police

Police Department within the town

QUESTION #44: Where are the records maintained that indicate the number of work days lost because of fleet accidents?

RESPONSES:

Insurance Office/Risk Management Office

Physical Plant/Facilities/Operations/Maintenance

Personnel Office

Business Office

Campus Safety/Security

Transportation Services/Motor Pool/Fleet Dispatcher

Environmental Health and Occupational Safety/ Safety and Health

QUESTION #45: Where are the records maintained that indicate the total costs to your institution for fleet accidents and what categories are used to determine these costs?

RESPONSES: (where records are maintained)

Insurance Office/Risk Management Office

Physical Plant/Facilities/Operations/Maintenance

Business Office

Transportation Services/Motor Pool/Fleet Dispatcher

Treasurer/Financial Affairs/Comptroller

Campus Safety/Security

General Services/Campus Services/Administrative Services

Individual Departments

Environmental Health and Occupational Safety

Campus Attorney's Office

Personnel

QUESTION #45: (continued)

RESPONSES: (categories used to determine costs)

Repairs to fleet vehicle

Liability for both property damage and personal injury to second party and property damage & medical costs to operator of fleet vehicle

Liability and property damage

Total loss less insurance

Liability claims only

Vehicle repair, medical, workman's compensation

Materials, labor, medical costs, workman's compensation

Property damage and lost time

Labor, parts, down time, and employee hours lost

QUESTION #46: Where are the records maintained that indicate the number of miles for the automotive fleet?

RESPONSES:

Physical Plant/Operations/Maintenance/Facilities

Transportation/Motor Pool/Fleet Dispatcher

Business Office

Treasurer/Financial Affairs/Comptroller

Individual Departments

Insurance Office/Risk Management Office

Campus Safety/Security

General Services/Environmental Services/ Administrative Services

Environmental Health and Occupational Safety

Dean of Students

QUESTION #50: Do you feel that your present fleet safety effort is adequate in relation to your total automotive fleet operation? Comments/Remarks

RESPONSES: (those that answered YES)

Experience is important for level of operation

As costs accelerate, we might consider a concentrated program

Records indicate fleet safety program is not necessary at the present time

Accidents are not a problem, it appears that fleet safety program has paid off

RESPONSES: (those that answered NO)

Effort is very informal

Need operator safety and maintenance training program

Too small of an institution to develop sophisticated program

Fleet safety program is in need of development

Questionnaire made me aware of how little is currently done in this area

Need to do more in the area of education

Total program needs to be more centralized

Present program is only for transportation driving staff, it should be expanded campus-wide

Current program in jeopardy because of budget cuts and other restrictions

Program needs better coordination to identify poor drivers & to implement safety activities

Formal procedures need to be published

Safety programs are definitely needed

Total program needs more organization than currently in use

QUESTION #50: (continued)

RESPONSES: (those that answered NO continued)

Individuals with safety duties are already overburdened with other responsibilities

More time and resources need to be spent on fleet safety

Need additional personnel to support more formal effort

QUESTION #51: Do you feel that your automotive fleet operation is experiencing an accident problem? Comments/Remarks

RESPONSES: (those that answered YES)

Numerous small accidents are not reported

Campus police are involved in a high number of accidents

No major accidents, but a lot of property damage incidence

Lack of reporting on part of inexperienced operators

Specific departments need ongoing programs

RESPONSES: (those that answered NO)

Very few accidents over a five-year period

Lucky so far (by luck to a great extent!)

Mileage and major accidents are minimal

QUESTION #52: Do you feel that a comprehensive fleet safety program would reduce the overall operating costs of your automotive fleet? Comments/Remarks:

RESPONSES: (those that answered YES)

Need resources to incorporate program

Definitely would help and is needed

QUESTION #52: (continued)

RESPONSES: (those that answered YES continued)

Needed to get drivers to think safety

Have experienced reduction in cost with present program

Savings must off-set program costs

Would have impact

Would have effect on driving efficiency

School is safety conscious, but needs improvement

Would reduce overall operating costs

Needed for faculty and staff to maintain attention on safe driving

To be effective, it must be enforced

Send me your ideas

RESPONSES: (those that answered NO)

Cost of program would reduce savings

Expenses kep low being part of maintenance

Not enough accidents to warrant such a program

Size of institution is too small

RESPONSES: (those that answered NOT APPLICABLE)

Already have a comprehensive fleet safety program

May help some

Depends on cost of current program compared to dost of implementing new program

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