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TRB: Transportation Research Board, National Academy of Sciences, 2101 Constitution Ave., N.W., Washington, D.C. 20418.

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SPECIAL ADJUDICATION FOR ENFORCEMENT (SAFE)

First Annual Report
Technical Summary
February 1976

by

Donald G. Morehead and Michael Wood

ABSTRACT

This technical summary is intended to provide an overview of the project operations and impact. It includes a step-by-step history of how the program operations were implemented. Persons in the field of traffic safety who are considering the implementation of similar operations within their own communities will find this summary a helpful reference document. However, the reader is cautioned that the project results reflect only a year of operations and that more time is required before a fully adequate evaluation of project impact may be conducted.

TECHNICAL SUMMARY

A. Project Objectives

The Seattle SAFE project has been organized to demonstrate and evaluate the value of a noncriminal driver adjudication and improvement process. Being tested are techniques and sanctions designed to improve deterrence and reduce traffic violator recidivism. The project is structured to operate as a subsystem to the Seattle Municipal Court and is integrated directly with the driver licensing and control programs of the Washington State Department of Motor Vehicles.

The specific objectives of the project are as follows:

1. To unburden the regular court by transferring less serious traffic infractions to a new driver adjudication/improvement system.
2. To identify and treat problem drivers at an earlier time in their driving experience.
3. To demonstrate a reduction in traffic violator recidivism, as a result of swift adjudication and subsequent prompt referral to driver improvement programs.
4. To evaluate the cost effectiveness of the driver adjudication/improvement system to identify those elements best suited for inclusion in an expanded comprehensive statewide plan.
5. To determine those types of essential driver improvement activities which are most enhanced by the application of special adjudication/improvement processes, techniques, and sanctions.
6. To generate and evaluate local public awareness of the SAFE program and the importance of responsible driving practices, and to enhance and assess public support for overall project goals through structured public education effort.
7. To promote national interest in developing improved driver adjudication/improvement methods by demonstrating program effectiveness.
8. To ultimately reduce the number of fatal accidents caused by drivers in metropolitan Seattle.

B. Background Information

Each year, prior to the worldwide energy shortage, the number of persons operating motor vehicles on our public streets and highways, the total number of vehicles being operated, the average speed of the vehicles being operated, the average annual mileage per driver, and the number of available miles of public roadways continued to increase.

Concurrent with this was a continual rise in the number of people killed and injured in motor vehicle crashes. Although the state of Washington consist-

ently has been below the national average in death rate per 100 million miles and the death rate has been slowly continuing a slight downward trend, there is no denying that a state motor vehicle transportation system which killed 852 persons in 1972, which injured over 55,000 others, which permitted 100,000 traffic accidents to occur and forced the local economy to assume a loss well in excess of $200 million could stand considerable improvement.

Coupled with the above statistics has been the growing concern among members of the judiciary, particularly the Seattle Municipal Court, of the increasing length of time that was required to obtain a court date for both traffic and criminal cases. Courts within the state of Washington operate under the "60-day rule," which means that an accused must be heard within 60 days of the defendant's appearance date. Cases which cannot be brought to trial within that time limit must of necessity be dismissed. As the court's workload continued to increase at an alarming rate, more and more cases were being dismissed because of this limitation. Imminently aware of the impending and growing problem, the presiding judge of the Municipal Court sought relief from this untenable position and proposed that a demonstration project, funded by the U.S. Department of Transportation, could provide new answers and approaches to this dilemma. At about this same time, persons within the National Highway Traffic Safety Administration were looking for suitable agencies to submit proposals for administrative or parajudicial adjudication/driver improvement systems. Partly because of the interest expressed by the court and the cooperation exhibited between the court and the Department of Motor Vehicles in the just-completed Alcohol Safety Action Project, the NHTSA accepted a proposal from the two agencies for funding consideration. Following a series of meetings and negotiations, a contract was awarded to the Department of Motor Vehicles on July 1, 1973, to commence the writing of a detailed plan.

C. Summary of Work Accomplished

Of paramount importance in the establishment of an informal adjudication system is the removal of the criminal sanction from the so-called "minor" traffic offenses. This was ultimately accomplished in the city of Seattle, after lengthy legislative processes within the city council for the creation of an ordinance authorizing informal adjudication of minor traffic cases. Almost simultaneously, the Municipal Court adopted new court rules, which decriminalized traffic offenses by removing the jail sanction except for the following:

1. Driving while under the influence of alcohol or drugs;
2. Reckless driving;
3. Driving while license suspended or revoked;
4. Hit and run driving, involving an attended vehicle or a pedestrian injury.

Because of the specifics of the intended research design of the project, certain other infractions were deemed to require a hearing before a magistrate for adjudication. At the outset, this included:

1. Charges arising from an accident;
2. Driving without a valid operator's license on person;
3. Speeding in excess of 15 miles an hour over the limit; or
4. A charge that is the fourth infraction in two years or the third charge in one year.

Driving without a valid operator's license on person was later dropped as a mandatory-appearance category primarily because magistrates and analysts could not justify to themselves or the defendants the need to attend a rehabilitation program based on only this one citation on their record. Substituted were:

1. Failure to yield right-of-way;
2. Following too close; and
3. Negligent driving.

Early consideration of the budget soon revealed that insufficient funds would be available to the project unless other resources were made available. For this reason, the Department of Motor Vehicles and the Municipal Court prepared an application to the Washington Traffic Safety Commission for 402 funding.* A commitment was obtained stating that such funds would be available, not to exceed $50,000 per annum, for the salaries and related costs of at least two magistrates and a supporting clerk. Concurrently, a proposed ordinance was prepared and submitted to the city council, which permitted the Municipal Court to accept federal funds and thus participate in the SAFE project. Individual meetings with council members by the presiding judge and project staff, in addition to testifying before the council members, resulted in affirmative action by the council with no opposition.

* Under the Highway Safety Act of 1966.

Integration of the proposed system into an already existing and dynamic process required a close look at the impact on the operating divisions of the court structure. Particularly impacted was the Traffic Violations Bureau, whose primary responsibility is the processing of bail notices, citations and cash flow from in-person appearances, as well as mail forfeitures. Determinations were made concerning the increased volume that the project would create for the system, and estimates were thus proposed to meet the increased data processing programming requirements. Additionally, provisions were made for increasing the memory storage capability of the data processing units, utilized by the SEA-KING data system. (SEA-KING is a shared city-county data processing system.) Currently in use by the Traffic Violations Bureau are three cash register computers, which produce a hard copy cash receipt and Magisterial Hearing Card and update the central file automatically. When the questions of volume had been resolved, it became necessary to redesign existing bail notices. It should be pointed out that the bail *amounts* were never altered for the project. Numerous new forms were also designed to accommodate and to assist in the collection of statistical data for management and evaluation purposes.

Early consideration was given to the requirements of the project for suitable quarters for analysts, magistrates, and support staff. In this particular situation, space was already at a premium; and considerable negotiating and shuffling had to be completed in order to provide a bare minimum of work area within close proximity to the other court functions. Manpower requirements were estimated as well as possible at the time and the order to commence remodeling was given early in 1974. Arrangements were made early in the planning phase to make use of office equipment which had been left over from the Alcohol Safety Action Project. Accessibility of this equipment substantially reduced the overall costs to the project by several thousands of dollars, since all the equipment was virtually new and in good condition. Transfer of the furniture from storage in Olympia to the Public Safety Building in Seattle was coordinated to coincide with the completion date of the remodeling.

The Department of Motor Vehicles Information Systems Division spent numerous hours with project personnel, assessing the needs for management information and reports for the evaluation specialists. A major component of the project was to make available the driving history of all drivers who appeared for a hearing before a magistrate. In order to accomplish this, the record had to be translated into readable English rather than the customary coded format used for so many years by this department. Thus, a forms revision was required so that use of the high-speed video terminal and printer could be maximized. At the outset, one video terminal was thought to be adequate to recall all driver records and update the files following adjudication. It soon became apparent, however, because of the length of the format and the time involved to make the necessary entries, that an additional video needed to be installed. An operator is now kept busy full time keeping records current, while the other operator prepares the driver histories and assembles other pertinent paperwork for not only the mandatory cases, but for those who appear voluntarily for adjudication. Daily volume usually runs in the neighborhood of 100 cases.

As mentioned earlier, considerable time and detail were devoted to the process of ferreting out the procedures and policies of the Traffic Violations Bureau in order to visualize how the new project activity could be integrated with an ongoing system. Still further coordination was necessary between the project and the Evergreen Safety Council, an affiliate of the National Safety Council, so that a complete history of drivers attending Defensive Driving classes and those who were rescheduled or failed to complete was available to the evaluator. Each new procedural detail required in-depth study to determine the impact on each and every segment of the entire court system. Needless to say, it is extremely important that each step be documented so that new personnel can be apprised of their job functions and the streamlining of procedures enhanced.

As much information as could possibly be obtained concerning the project proposal, related projects in other jurisdictions, potential budget, and evaluation requirements was assembled and distributed to potential bidders for the evaluation and public information subcontracts. As a result, during the planning phase, potential bidders were invited to a formal briefing session, at which time they learned about the project and its requirements. Five potential evaluators and three public information specialists submitted proposals for consideration in late 1973. Within two weeks, the proposals had been analyzed and evaluated by the prime contractor and the NHTSA. Notification of the successful bidders was then forwarded to all persons who had submitted bids for consideration. With the

award of the subcontract for public information/education to Ballard Cannon, Inc., work immediately commenced on the preparation of informational brochures, a slide presentation, and guest appearances of project personnel on radio and television talk shows, all designed to inform the Seattle public about the goals and objectives of the project. Detailed work was initiated for the evaluation phase of the project with the Human Affairs Research Center of Battelle Memorial Institute.

Subcontract negotiations were also ongoing with the Evergreen Safety Council, which proposed to conduct not only the standard Defensive Driving Course, but a supplement, known as Programmed Learning, which is a tape-recorded version of the Defensive Driving Course and can be completed at a student's own pace. Formalized work statements for the Municipal Court, Battelle, Ballard Cannon, and the Safety Council were for the most part completed in December 1973.

The desirability of establishing an Advisory Committee soon became apparent. In an effort to solicit membership from a broad influential population, letters of invitation to serve on the committee were prepared and mailed for the signature of the Governor. Persons invited to serve included such figures as the Seattle police chief; the King County sheriff; the mayor of Seattle; the presiding judge of the Municipal Court; the director of the Department of Motor Vehicles; the president of the Women's Highway Safety Leaders; the president of the League of Women Voters; the chairman of the Citizens' Advisory Committee on Traffic Safety; the presidents of the major television stations in Seattle; editors and publishers of the daily newspapers; the director of the high school driver education system for King County; the presidents of the King County and Washington State Bar Associations; and the director of the Washington Traffic Safety Commission, who acted as chairman of the group. As with other advisory committees, the intent in this instance was to keep these top community leaders informed of the project's existence and its ongoing activities. Because of the crowded schedules of so many of the persons selected, it was decided to conduct the meetings only once per quarter. Each member was subsequently asked to designate a member of his or her staff to act as a liaison person with the project on a monthly basis, meeting together in a Coordinating Council. This latter group is known as the "working committee" and consists of those persons more intimately involved in the project's functions. They were asked to report back to their respective superiors to keep them appraised of progress, or lack of it, on a more current basis. The value of such a committee in coordinating future plans should not be overlooked.

The project staff worked closely with the personnel office of the Department of Motor Vehicles for the establishment of the new positions necessary to conduct the project. Justifications for the existence of and duties related to the positions of clerk typist, project manager, and driver improvement analysts were prepared and submitted for approval to the Department's personnel office and, eventually, the State personnel office before hiring could commence. Since the project manager position was needed early in the program to assist with the writing of the detailed plan and other administrative chores, primary emphasis was directed toward the successful conclusion of that request. The analysts and clerk typist were not needed until a short time just before project implementation. As is common with the civil service system, several weeks elapsed between the time the positions were formally requested, approved, announcements made statewide for the availability of positions, testing, and final selection. Comparatively speaking, the selection of the magistrates to work with the project was relatively simple. Hiring of the magistrates was left to the discretion of the Municipal Court, which required a consensus of the four judges for confirmation. Magistrates must be admitted to the practice of law in the state of Washington and be current members of the State Bar Association. Prior to a change in the law, brought about during the 1975 legislative session, magistrates were also required to be residents of the city of Seattle before they could be appointed as judges pro tempore of the Municipal Court. Since one magistrate had already been employed by the city for approximately twelve months prior to implementation of the SAFE project, it was necessary only to hire two additional persons to commence operations.

Special training arrangements were made for driver improvement analysts within the Department of Motor Vehicles. Approximately two weeks were devoted to intensive "in-house" sessions, to familiarize them with all programs and options available to the Department for errant drivers of all categories. This was coupled with observation of group sessions and eventual leading of group sessions, as proficiency became apparent. At the conclusion of their training, the analysts were qualified to handle nearly any situation that would arise in the Driver Improvement Division.

Magistrates received specialized training by observance of court procedures for arraignments, trials, sentencing, etc. In addition, each magistrate spent several hours observing and riding with traffic officers to provide a perspective of the enforcement viewpoint. Technical and scientific information relating to motor vehicle crashes and their causes was distributed to all for an enlargement of the overall traffic safety problem. Insofar as possible, continuing training in court processes was arranged for by having magistrates act as judges pro tempore of the Municipal Court when short-term absences occurred.

The project staff determined that it would be highly advantageous to all concerned if a specially designed training program could be conducted for all personnel selected for the project. Thus, a training package was prepared that would expose magistrates, analysts, support clerical staff, and management staff to the interrelationships of job functions and interdependencies of each person on others within the program. The four-day training session included a lecture and demonstration series from the University of Washington's Psychology Department, input of project goals and objectives by the Department of Motor Vehicles and court staff, as well as relevant information from regional and headquarters personnel of the NHTSA. Detailed procedures were discussed, along with philosophical questions concerning the efficacy of driver improvement programs and rehabilitation efforts across the State and Nation. Small group exercises allowed each person to participate and become a member of the total group. A concerted effort was directed toward the establishment and maintenance of a special camaraderie and esprit de corps among all participants. Every effort was made to ensure that everyone recognized the importance of each other's duties and that no one person was considered to be more important or influential than another. The idea of the "team concept" was repeated many times throughout the sessions. With the conclusion of what was believed to be a very successful training program, the project staff was prepared to "go operational." Computerized mandatory-appearance bail notices were thus mailed for the first time on June 24, 1974. As can be expected, the first few weeks detected several bugs in the system; and it was not until mid-September 1974 that the project felt comfortable that the data being collected were suitable for evaluation purposes. The first-year results, then, and description of project activities are primarily limited to that time period between mid-September 1974 and June 30, 1975.

Just described have been the major considerations for establishment and implementation of the SAFE system. Following, then, is a brief description of what actually occurs when a defendant enters this system as a result of receiving a citation for a traffic offense that is "SAFE-relevant."

1. The driver is cited by the Seattle Police for one of the previously described SAFE-relevant offenses.
2. The driver is ordered to appear for adjudication. If the driver fails to appear, a Traffic Violations Bureau warrant is issued reordering him to appear. Failure to appear to this warning generates a court bench warrant for the driver's arrest. The TVB is the body which does the preappearance paperwork to bring the defendant into the system.
3. When the defendant appears, he is assigned on a "first-come-first-served" basis to one of three magistrates. The magistrate reviews the facts of the case with the defendant and renders a disposition. This process takes place in an office-like environment. Neither police officers nor prosecutors are present. The defendant may be accompanied by his lawyer or witnesses. The magistrate reaches one of three decisions:
   (a) Refer to court on the basis of insufficient fact to render undisputed judgment of guilt or innocence.
   (b) Not find the defendant guilty (verdicts of not guilty, stricken, or dismissed).
   (c) Find the defendant guilty upon admission of guilt. Guilty verdicts are followed by fines, levied in part or in toto or suspended. Jail cannot be imposed as a sanction because of the decriminalization of the traffic offenses.
4. At this point, the process of random referral by predesignation comes into play. The magistrate is instructed, by a predesignation code written on a case control sheet and magistrate card, that a guilty offender shall be referred specifically to one of the following post-adjudication actions:
   (a) Direct sentence, without driver analyst involvement, to a driver improvement program or no-action control group.
   (b) Counseling with a driver analyst, to be followed automatically with no analyst decision-

making, by referral to the same options as above.

(c) Diagnostic interview with a driver improvement analyst.

5. There are three driver improvement analysts conducting case analyses. The analyst, following his diagnostic interview, makes one of three general decisions concerning the course of action that is best suited to the offender.

   (a) The offender's operating license should be suspended.

   (b) The offender is qualified for a specialized Department of Motor Vehicles rehabilitation program or sanction.

   (c) The offender is not qualified for Department of Motor Vehicles programs.

When decision (b) or (c) is made, the specific referral made by the analyst is then guided by the predesignated assignment procedure. If the person is qualified for a DMV program, he is either sent to that program, e.g., First Group Interview, or is held out as a control comparison case without receiving the rehabilitation. Two-thirds of the cases are referred to the program, while one-third serve as controls. In this manner, control groups are comprised for each DMV rehabilitation option, excepting the set of three "other sanctions." If the person is *not* qualified for a DMV program, the analyst randomly assigns the offender to the Driver Improvement Program, Programmed Learning, or the DIP/PL control, with one-third of the eligible cases entering each group.

Predesignation means that the final adjudicative referral is predetermined (if the defendant is guilty) before the case is adjudicated. This also permits predetermination of sufficient proportions of the guilty case volume for the various experimental conditions. Predesignation is applied randomly across the guilty-case population; neither verdicts nor rehabilitation referrals are biased by this process. Its course is essentially to guarantee equivalent population from which (some) rehabilitation samples are formed, without any intervening magistrate or analyst judgments about criteria for assigning offenders to programs. The only random assignments are to DIP or PL, to DIP/PL or a no-action control, and to DMV programs versus their no-action counterparts. There are no a priori reasons to expect that participation in general driver training will harm the offender. However, if a case occurs where the adjudicator feels the predesignated referral might jeopardize the individual, he may take exception to the referral.

The remaining two-thirds of the offender population continues through the system by a process similar to that just described, but without predesignated assignments and control groups. The flow into this part of the system begins as before with a citation and appearance before a SAFE magistrate. The basic difference is that after a determination of guilt, the follow-up actions are based upon the magistrate's best judgment, rather than by random assignment. This portion of the system represents SAFE activities that would be followed after the experimental evaluation project has terminated (unless modified by results of the evaluation). The population of cases entering the next segment of the design represents two kinds of offenders: (a) those whose appearance under a SAFE-relevant citation was mandatory or (b) defendants who appear voluntarily to have their cases, which are based on moving but non-SAFE mandatory citations, heard by a magistrate. This class of defendants is called "walk-in." Since they are motivated to appear voluntarily, and since their alleged offenses differ from the set of seven SAFE offenses, walk-ins are not included for impact evaluation with mandatory cases subject to predesignated adjudication follow-up. All walk-ins are referred to rehabilitation, analyst diagnosis, or no action at the magistrate's discretion. The magistrate makes one of three decisions, based on his/her assessment of the circumstances of the case:

1. Refer directly to (usually DIP) rehabilitation;
2. Refer to a driver improvement analyst for analysis, diagnosis, and referral;
3. Take no follow-up action—send the case to a routine DMV record review, which may, at a later time, apply further sanctions or rehabilitation programs to the offender.

Following diagnosis of the cases he analyzes, the analyst makes one of three best-judgment decisions:

1. Recommend license suspension,
2. Refer to an appropriate rehabilitation program, or
3. Take no further action.

Referrals to DMV rehabilitation programs are made for offenders with specific driving problems, and no cases are held out for control comparisons.

The project's experimental control design involves alternative modes of adjudication, with which the outcomes of informal magistrate adjudication may be

compared. Five percent of the SAFE-relevant offenses represent the traditional case-processing method of permitting the defendant to assume guilt and pay his ticket. This "forfeit" option requires only that the defendant forfeit his bond (amount of fine) and have the case closed, primarily via the mails. If, however, the defendant rejects the option and wishes to contest the citation, he may request a court date or appear at his convenience for a magistrate hearing.

The third major comparison group consists of a randomly determined 10 percent of the SAFE-offense cases, which are required to be heard in formal municipal court proceedings. These cases are adjudicated per the normal process of the courts for adjudication, disposition, and follow-up referral. Offenders may be referred to driver improvement rehabilitation through this route, as well as via magistrate hearings. Adjudication outcomes may thus be compared for SAFE versus court versus forfeit processes, with equivalent (same types of traffic offenses) populations of defendants.

The foregoing represents the basic design for assessing the effectiveness of SAFE adjudication and rehabilitation. Outcomes of the various treatments and information to which they may be related are measured in several ways. The principal data collection measures are a case data control sheet and DMV and TVB records. The control sheet provides information pertinent to case background, defendant characteristics, adjudication, DIA actions, rehabilitation referrals and case updates (rehabilitation completion, fine payment). Recidivism data are collected through the state driver records. (Details of the evaluation information management system are available in the SAFE Work Plan, August 1974.) Additional data were secured to relate to project objectives of "reducing accidents and violations," "unburdening the courts," and "implementing acceptable programs." The basic experimental/control design was supplemented with more general "before-after" comparisons of accidents and violations. To this end, monthly traffic statistics were provided by the Seattle Traffic Engineering Department. Records of caseflow and dispositions in the regular municipal court were obtained through monthly court activity summaries.

D. Summary of Significant Results

How SAFE is Being Evaluated

SAFE was designed and implemented to permit rigorous evaluation of program effectiveness. The evaluation approach involves:

1. Comparison of alternative ways to handle traffic cases;
2. Random assignment to experimental treatment and control conditions where appropriate and consistent with equal justice; and
3. Measurement of impacts in multiple domains related to project goals.

The effects of the overall program and its adjudication, sanctions, and rehabilitation components are evaluated with respect to administrative efficiency and the future behavior of drivers and the attitudes of drivers and other people involved in the program.

The major criteria of program effectiveness are:

1. Efficient administration, based on processing volume and time; case dispositions and referrals and operating costs;
2. Fairness to the defendant;
3. Recidivism among defendants, including violations and accidents incurred after a SAFE appearance;
4. The attitudes of defendants toward the program; and
5. The attitudes of the general public and law enforcement and adjudication personnel.

Three case-processing alternatives are being compared:

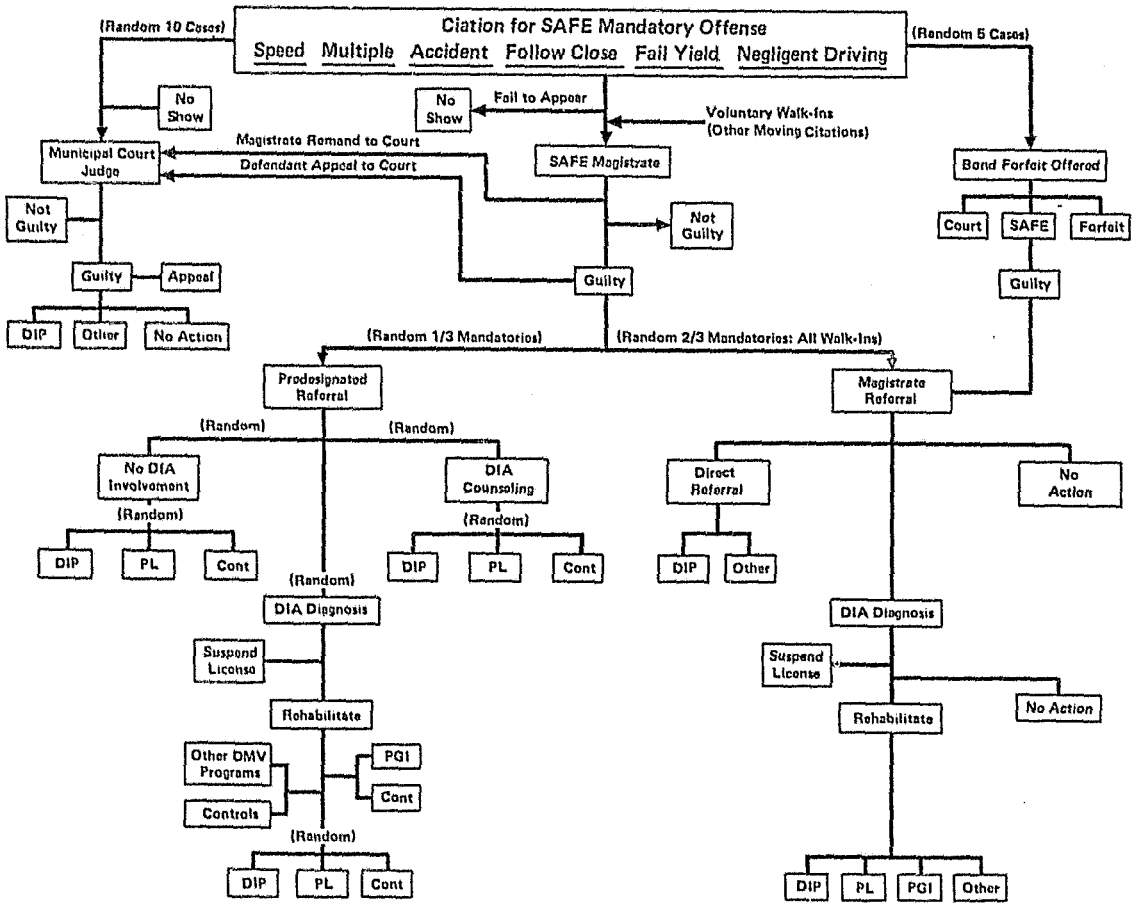
1. SAFE,
2. Municipal court trials, and
3. Bond forfeiture (paying the ticket by mail).

These comparisons are shown in Figure 1, which is described in detail in the complete annual report. Several features of that comparison design should be noted:

1. Within the SAFE process there are two major referral methods for offenders: (a) actions based on magistrate decisions and (b) actions based on predesignated referrals. The former involves magistrates' referrals to rehabilitation, diagnosis, or no action at their discretion. The latter involves predetermined assignments to DIA action (counseling, diagnosis, or none) and rehabilitation (or none) to which magistrates may take exception only with good cause. This procedure equalizes the populations of offenders receiving different treatments so that their effects may be examined without contaminating influences of personal characteristics, driving histories, or adjudicators' decision biases.

2. Defendants appearing mandatorily and voluntarily are differentiated. Only one-third of those cited for offenses requiring a mandatory appearance are included in the experimental versus control evaluation within SAFE.
3. Offenders may be referred to either a rehabilitation program or a no-action control group. Thus, rehabilitation effectiveness may be evaluated by comparing programs against each other and by comparing those offenders who received a particular kind of rehabilitation with those who did not. The major rehabilitation programs shown in the figure are: (a) DIP—Driver Improvement Program—a lecture class based on the National Safety Council's Defensive Driving Course; (b) PL—Programmed Learning—a self-instruction form of the Defensive Driving Course using tape cassettes; and (c) FGI—First Group Interview—a Department of Motor Vehicles program for drivers diagnosed as over-aggressive. Offenders are randomly referred to DIP, PL, or a DIP/PL control group (see part II of the figure). One-third of those who are diagnosed to qualify for FGI are assigned to the FGI control group.

Figure 1. SAFE Evaluation Design



Case Processing: Volume and Speed

During the first nine and one-half months of operation, SAFE processed 17,721 minor traffic cases, of which 69 percent involved mandatory appearances; 35 percent were speeding cases and 30 percent were multiple offenders, having three citations in one year or four in two years. The caseload averaged 96 per day or 480 per week. Most of the defendants were men (73 percent), white (82 percent), relatively young (79 percent between the ages of 18 and 34) with low-to-moderate incomes (90 percent earned less than $15,000). Voluntary defendants included more women and people with better driving records.

It took an average of forty-six minutes to process a SAFE case, excluding any time spent in rehabilitation programs. The defendant spent about six minutes with the magistrate and eleven minutes with the DIA. The times the DIA spent, generally counseling offenders and diagnosing their driving problems, did not differ substantially. Half of the defendants had to wait less than half an hour for their hearings.

Case Dispositions

Eighty-seven percent of the cases were judged guilty. Offenders were fined an average of $20, of which $10 was suspended. For offenders assigned to rehabilitation and also fined, the amounts suspended were higher. DIA's recommended driver license suspensions for less than one percent of the defendants. Over twenty percent of the defendants were referred to some form of rehabilitation; 2,721 people were assigned to the two Defensive Driving Courses, 694 were sent to First Group Interview, and 401 were referred to other DMV programs.

Case Processing Costs

Based on current volume, it has cost $13.10 to process a SAFE case. This conservative estimate includes only cost associated with direct defendant processing, excluding enforcement costs and some ancillary office management costs. The diagnostic-rehabilitation component of SAFE accounts for 59 percent of the administrative cost. Adding costs incurred by the defendant (fine and time) and subtracting savings due to recidivism prevention produced a net societal economic cost of $22.67 per case.

Changes in the Court's Efficiency

During SAFE's operation, improvements have been noted in administration of the Municipal Court. While the trends are preliminary, and factors other than SAFE may account for some change, SAFE has demonstrated the capability to help the courts by reducing their traffic caseload. While SAFE added 2,278 cases to the court's load, through assignment for evaluation purposes and magistrate referrals to trial, it also absorbed 5,548 walk-in cases. If half of those walk-ins would have been motivated to take their cases to court in the absence of SAFE, the walk-in assistance of SAFE would more than balance its mandatory-case imposition on the courts.

The most important improvement in court efficiency has been reduction of the docket backlog. As shown in Figure 2, there was a temporary increase in the backlog early in the SAFE operational period. Since the winter peak, there has been a fairly steady decrease in the backlog. The improvement has come in the number of cases pending trial for more than a month, which has dropped to 135 (three-month aver-

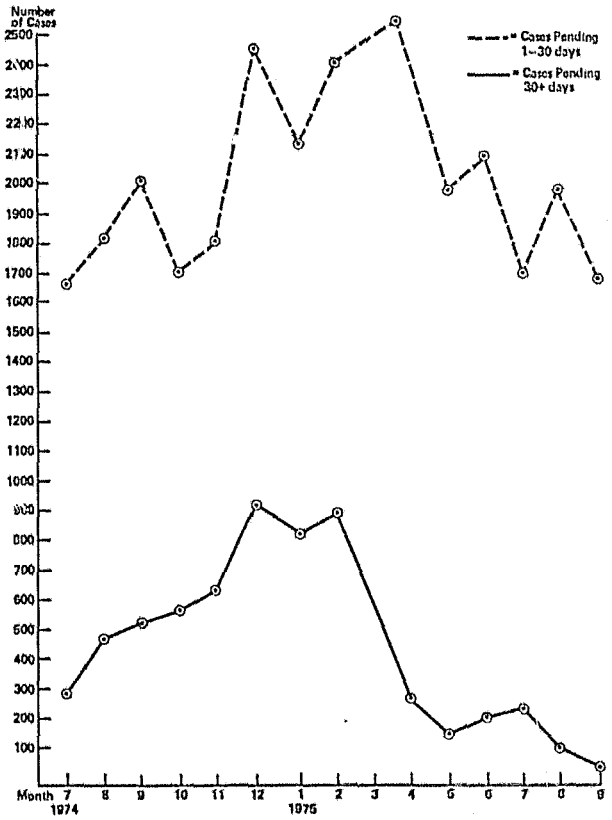


Figure 2. The Court Backlog: Number of Cases Pending by Month

age) from the peak of 850 and the pre-SAFE level of 425 cases per month. The court has also experienced increases in the proportion of its cases that involve nontraffic ordinance violations and in fines accrued from both traffic and ordinance violators.

Different People Receive Equal Judicial Treatment

Defendants with different personal characteristics, with few exceptions, fared equally in their SAFE hearings. Only driving exposure was related to verdicts, with guilty outcomes being more common for people who reported that they typically drive fewer miles per week. Fines levied on offenders appeared superficially to vary with their sex, age, education, and income. However, the effects of such personal characteristics were minimal or nil when the influence of other factors (i.e., offense committed and driving record) were partialled out (controlled). Thus, for example, while men were fined more than women, men also tended to have had poorer driving records and to have committed more serious offenses, which carry higher fines. The only characteristic related to fines that could not be explained by other logical correlates was the defendant's education. High school graduates were fined more than people with either less or more education.

Different Magistrates Give Equal Judicial Treatment

SAFE employs three magistrates. What happens to the defendant generally does not depend on which magistrate hears his case. As shown in Table 1, different magistrates spend different amounts of time with defendants and differ in their referral patterns; i.e., referrals to court and to rehabilitation. However, they have been consistent in verdict and fine dispositions. While magistrates differed significantly in their fines, the magnitude of that difference was on the order of only $1. Furthermore, recidivism rates were equivalent for offenders who saw different magistrates.

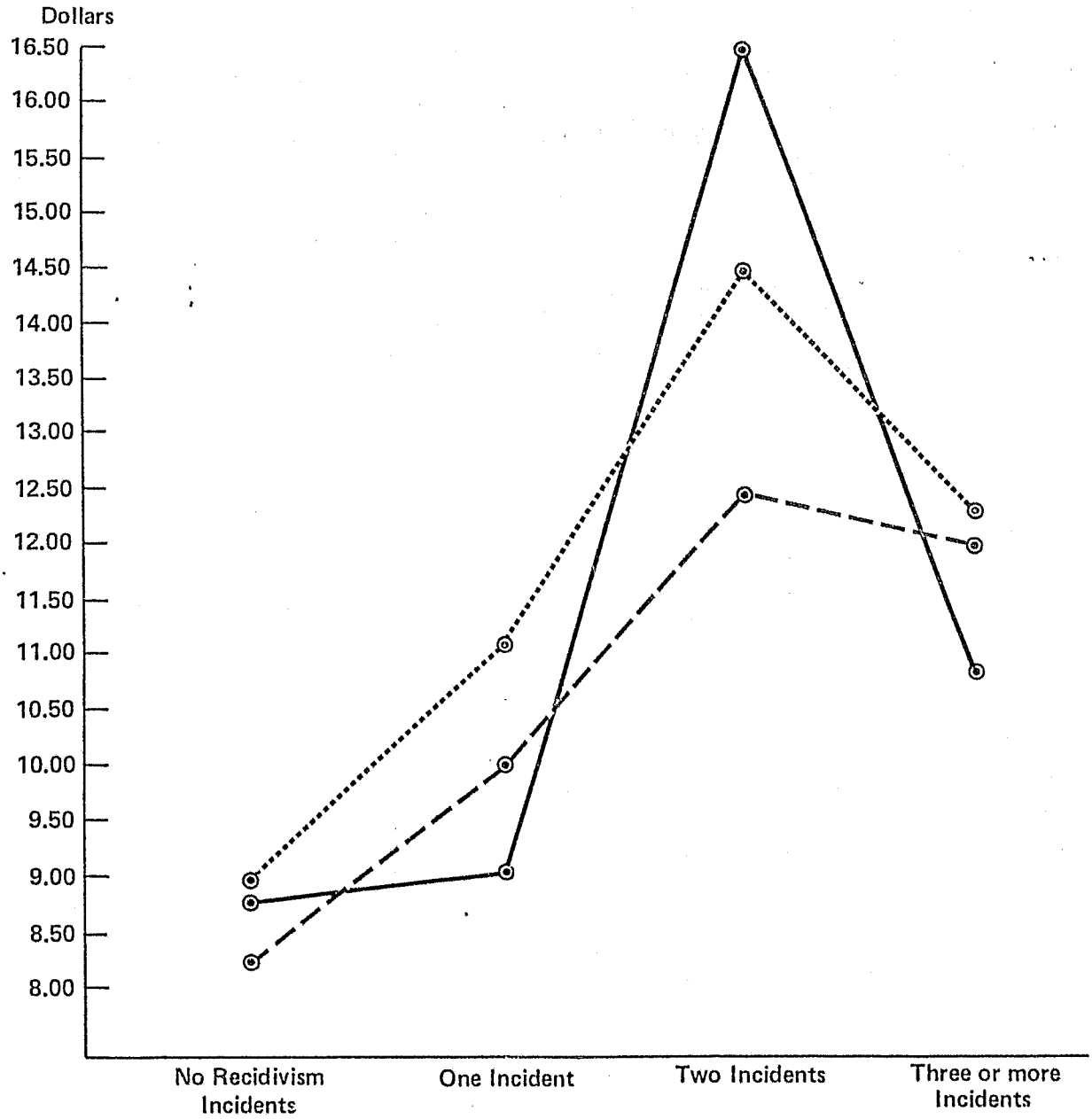
Impact of the SAFE System on Driver Behavior

The magistrate-hearing portion of the SAFE system seems to have been largely responsible for the system's beneficial impacts on driving behavior. When defendants who received no sanction beyond a fine, no contact with an analyst, and no rehabilitation follow-up were examined, their times to their next citation were 77 days for SAFE, 68 for forfeit and 56 for court. Informal magistrate hearings produced significantly better driving behavior (slower recidivism) than court trials or forfeiture without an appearance.

Results available at this time do not allow complete evaluation of the DIA's role in SAFE. However, they suggest that offenders' contact with DIA's has not had notable impacts on those offenders' later driving behavior. There have been no recidivism differences for offenders referred to rehabilitation (defensive driving) with, versus without, a DIA interview preceding the referral. The time to citation recidivism has tended to be longer for offenders referred directly to the driver improvement program by the magistrates' judgment than for those referred to that program through direct predesignated referral. Driver license suspension recommendations have been too few to test their impacts.

Accident and citation impacts of the SAFE, court and forfeit alternatives are shown in Table 2. Accident rates have not differed, although people who went to court tended to have an accident more quickly. SAFE, however, has been the (significantly) best approach for minimizing the occurrence of and extending the time to commission of traffic violations. Fewer SAFE (and court) defendants committed violations than did people who forfeited bond. SAFE produced the longest time to recidivism, and court yielded the shortest time. This difference in time-to-failure indicates that the mere fact of appearing for adjudication is no better than forfeiting bond. What matters is the way a mandatory-appearance case is handled: SAFE procedures were superior to court trials.

Fine sanctions have been shown to be related to recidivism. However, their effect was such that those who had been fined more severely were involved in more recidivism incidents, at least when comparing offenders with zero, one, and two incidents (see Figure 3). Analyses of fine variances showed that differences with respect to both citations and accidents were significant. Fines have clearly not had a deterrent effect on driving problems. Rather, offenders may be reciprocating for lower fines with safer driving.



Note:

——— = Accidents
------- = SAFE Citations
— — - = Non-SAFE Citations

Figure 3. Amount of Fine Levied on Later Recidivists and Nonrecidivists

TABLE 1

Summary of SAFE Hearing Activities and Outcomes for the Three Magistrates

Activity or Outcome	*Magistrate* #1	#2	#3	*Do The Magistrates Differ Significantly?*
Average Cases Heard Per Working Day	42	30	24	yes
Percent of Cases Referred to Court	2.1	10.7	10.8	yes
Percent of Cases Found Guilty	87.4	86.3	88.1	no
Average Dollar Fine Per Case	19.08	20.40	21.05	yes
Average Fine After Part-Suspension	9.28	9.92	10.28	yes
Minutes Spent by Defendant in SAFE	43.07	47.87	50.07	yes
Number of Magistrate-Determined Direct Referrals to DIP	18	258	84	yes
Percent of Defendants Recidivating (SAFE Citation)	8.0	9.4	8.2	no
Percent of Defendants Recidivating (Other Citation)	15.6	16.7	16.3	no

TABLE 2

Accident and Citation Recidivism for Offenders in SAFE, Court, and Forfeit Systems

Impact Measure	*Case Processing System* SAFE	Court	Forfeit
Percent Having Accident	6.6	7.1	6.7
Percent Cited for Violation	22.0	21.0	28.0
Mean Days to Accident	101.02	80.80	97.20
Mean Days to Citation	79.24	56.53	68.55

The rehabilitation component of SAFE has affected both future accidents and citations. Recidivism has been significantly less prevalent among offenders referred to defensive driving programs than for those not receiving the rehabilitation (see Figure 4). The lecture and programmed learning versions of defensive driving have been equally effective.

The time to one's next citation or accident, however, was shorter for those recidivists with the rehabilitation than for those without it (Figure 5). While based on small samples, this trend was significant for accident recidivism. The apparent contradiction between recidivism incidence rates and the time taken to become involved in a future incident cannot yet be explained by the data. However, it may be that rehabilitation may be more helpful (i.e., delay recidivism) to people initially less likely to recidivate; e.g., those with better past driving records. Current results show only that: (a) citation recidivism time is longer for offenders with only one past citation if they go to PL instead of DIP; (b) the reverse holds for offenders with two past citations; (c) there is no difference in impacts of the two DDC forms for offenders with three or more citations and (d) rehabilitation effectiveness is *not* linearly related to the number of past traffic violations.

Rehabilitation effects depend upon the offenders' sex and the type of offense that brought the person to SAFE. Women have responded better (in terms of longer recidivism time) to DIP (lecture defensive driving) and to the FGI (First Group Interview); effects of programmed learning have been more favorable for men.

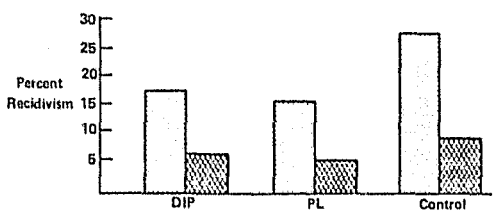


Figure 4. Proportion of Offenders with Post-SAFE Recidivism Incidents After DDC Rehabilitation Referral

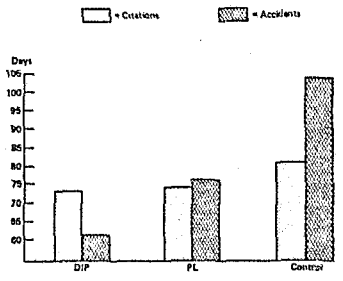


Figure 5. Days to Recidivism Incident for Rehabilitation Referrals

Defendants' Attitudes Toward the Program

Defendants' attitudes are being measured three to five months after their SAFE, court, or forfeit experience. The attitude questionnaires measure reactions to the case-processing experience and to its elements. Results at present are very preliminary in that only one set of early defendants has been surveyed, and the sample size does not permit comparisons of the three case-processing methods.

Defendants' general reactions to processing of their traffic cases appeared favorable:

1. 57 percent were satisfied with their case handling, while only 22 percent were dissatisfied;
2. 58 percent indicated preferences for adjudication through magistrate hearings; and
3. 19 percent felt their experience in SAFE was worse than they expected.

Attitudes toward SAFE were measured among three groups of people directly concerned with, or working within, the program: police officers, attorneys, and court personnel. Attitude surveys were also administered to a random sample of licensed drivers in Seattle. These groups answered some common sets of questions and some questions of particular interest to their group. For an analysis of responses from these groups, the reader may consult the complete SAFE Annual Report dated July 1974–June 1975.*

* *Special Adjudication for Enforcement (SAFE) First Annual Report, July 1974–June 1975.* Washington, D.C., National Highway Traffic Safety Administration, Office of Driver and Pedestrian Programs, February 1976.

Catalytic/Ancillary Effects

An unforeseen but valuable side effect of the project has been the on-site availability of driver improvement analysts from the Department of Motor Vehicles to formal court. As time permits, analysts counsel referrals from the court in license reinstatement procedures, implications and requirements of the financial responsibility law, and other driver examining and improvement questions. This service has become so valuable to the court that, on occasion, analysts have been asked to testify in court concerning the Department of Motor Vehicles records and/or procedures. As a further indication of the esteem in which the analysts are held is the fact that the court has actively pursued sources of funding for continuation of their positions after federal funding expires. Working closely together, the Seattle Municipal Court and the Department of Motor Vehicles have tentatively identified funding sources which are expected to assure continuation for an indefinite period of time.

E. Potential Applications

The project is demonstrating that the courts and regulatory agencies do not have to be at odds with each other over the control of high-risk drivers. From all indications, it appears that an unprecedented spirit of cooperation and mutual respect has commenced, which will act as a catalyst for future associations with other court jurisdictions across the state. The potential use of driver improvement analysts within the court system poses an interesting and challenging concept that will be explored to its fullest extent. Utilization of magistrates or hearing officers for the disposition of minor traffic infractions in other areas of this state will be pursued through such organizations as the Citizens' Advisory Committee to the Legislative Transportation Committee, the Traffic Safety Commission, and other interested groups.

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