

ALLIANCE FOR THE COMMONS, INC.

3086

SSA

HB

17

8672

DECREASE ALCOHOL BEVERAGE CONSUMPTION		SB 61	CSFB 17(Jud)am	SB 226	Current Law	Recommendation/ Explanation
7. mandatory food service between certain hours	no provision	no provision	no provision	no provision	no provision	this would decrease the rate at which one became intoxicated
ENGINEERING EFFORTS/ DRIVING SAFETY		SB 61	CSFB 17(Jud) am	SB 226	Current Law	Recommendations
1. mandatory seat-belt use	no provision	no provision	no provision	no provision	no provision	According to Larry Ross this would drastically reduce the number of auto fatalities
2. child safety restraints	no provision	no provision	no provision	no provision	no provision	this measure drastically reduces the number of infant fatalities.
3. lower the speed limit to 50mph	no provision	no provision	no provision	no provision	no provision	lowering the speed limit was one of the two most successful highway safety measures in the '70's.
4. mandatory auto insurance	no provision	no provision	no provision	no provision	no provision	would make driver's more respons. for their actions. increased ins. rates would be a natural deterrent.
5. require digital add on equip. for car ignitions	no provision	no provision	no provision	no provision	no provision	would make it virtually impossible to start autos when intoxicated
6. curfew licenses for drivers under 18	no provision	no provision	no provision	driving prohibited for 16-17 year olds between 12am and 5am(see Attach 7)	no provision	could decrease fatalities for those covered under bill by as much as 63%

REHABILITATION TREATMENT/ EDUCATION	SB 61	CSHB 17(Jud)am	SB 226	Current law	RECOMMENDATION
1. provide reha- bilitation in incarceration facilities	no provision	no provision	no provision ✓	no provision	recommended by Judge Andrews as necessary for habitual offenders
2. court mediator or, hotline for problem drinkers	no provision	no provision	no provision ✓	no provision	some felt that this was necessary. for those who have no where to turn
3. teenage treatment program. or facilities	no provision	no provision	no provision	no provision	treatment for teens should be tailored differently than that for adults. ✓
4. rehabilitation, treatment	offender shall undertake rehabilitation or education specified by the court	no provision	no provision	treatment administered with judicial discretion ✓	
5. education	offender shall undertake rehabilitation or education specified by the court	no provision	will provide education ✓ in high schools (see attach 7).	provided as treatment at discretion of courts	

ATTACHMENT 1

April 16, 1983

Selective enforcement roadblocks

Selective enforcement roadblocks have been implemented in a number of countries, and in the United States.

A pilot project was implemented in the state of Maryland to aid in the detection and apprehension of intoxicated drivers. The program is anticipated to be a deterrent for potential drunk drivers.

The safety of citizens as well as Public Safety personnel will be considered in the selection of the sites. The sites will also be selected based on time of day, day of week location, and the number of accidents located in that area. The sites must also have a safe area in which cars can stop.

The Maryland project does not use barricades to block oncoming traffic. All traffic approaching the checkpoint will be pass through the checkpoint where the car will be approached by a police officer who will hand the driver a brochure prepared to explain the selective roadblock. If the officer detects alcohol while the car is stopped, the driver will be detained and required to present their driver's license and vehicle registration. They may also be required to give a preliminary breath test. If sufficient evidence of intoxication is developed, the driver will be arrested.

No action will be taken against a driver for merely turning off the roadway before the checkpoint.

ATTACHMENT 2

April 16, 1983

Mandatory Breathalyzer tests

A number of states give preliminary breath alcohol tests for all persons who are stopped for moving violations or who are involved in car accidents. The probable cause to give the test is simply that alcohol impairment may have caused the accident of the illegal driving pattern.

This was recommended by Dr. Dennis Kelso during the April 9, 1983 hearing as one of the best ways to increase enforcement efforts.

The lack of adequate enforcement was established as one of the largest loopholes in the drunk driving situation.

ATTACHMENT 3

April 16, 1983

Backup crews to assist police officers

Currently, the Alaska state trooper must spend at least one hour with the car of the apprehended person until the car can be impounded.

Using backup crews to come and wait with the car was recommended during the April 9 hearing as one way to decrease their down time which would ultimately increase enforcement.

ATTACHMENT 4

April 16, 1983

Mandatory minimum fines

Many opposing views were expressed on this option during the hearings. For instance, Anchorage Municipal Prosecutor Ailen Bailly suggested that fines would be an appropriate deterrent for drunk driving. District Court Judge, Elaine Andrews, expressed her concern about the difficulties in trying to collect the fine when the person is unable to pay.

ATTACHMENT 5

April 16, 1983

Mandatory Minimum incarceration

Included with this attachment are copies of the request we made from the Division of Corrections regarding the costs of installing and operating new or used modular minimum security facilities. Also included is a letter recommending the Harborview Disability Center as a minimum security facility.

Clearly, these suggestions have been made because of the strain already existing on the correctional facilities in the state.

Many persons during the hearings testified in favor of mandatory incarceration, and they generally stated it was a successful and warranted deterrent. Dr. Ross, on the other hand, stated that in England during the Road Safety act, there was no mandatory incarceration. The sanction for DWI was suspension of the driver's license. He suggested that the primary deterrent decreasing the fatality rate was the public's perception that they would be caught-- alcohol related accident fatalities rose within months of the implementation of the act with the change in the public perception.

STATE OF ALASKA
DEPT. OF HEALTH AND SOCIAL SERVICES
OFFICE OF THE COMMISSIONER

BILL SHEFFIELD, GOVERNOR

POUCH H 01
JUNEAU, ALASKA 99811

PHONE:

DOCUMENT NO. 83-154

April 15, 1983

The Honorable Vic Fischer
Senate State Affairs Committee
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

Dear Senator Fischer:

On Thursday April 7, 1983, your Committee requested that Corrections provide information regarding capital and operating costs for an institution which would house offenders convicted for drunk driving offenses (OMVI or DWI). In a short time we have reviewed available data and have formulated what we believe to be reasonable assumptions. This response is offered to your Committee with an understanding that the Sheffield Administration has not addressed the question as to whether this concept would be appropriate to pursue, and that funds are not available within current operating or capital requests to create an institution for this purpose. Further, this response is based on current statutes and law enforcement practices. Proposed changes under consideration could increase the numbers of offenders.

Sufficient numbers of offenders for a specialized facility to confine drunk drivers are only found in the southcentral region of the State. From data presently available we believe that a fifty five bed capacity would be necessary. It is likely that a site in the Matanuska Valley will be acquired for correctional purposes. Assuming the purchase of a 55 bed pipeline camp for transfer and setup it is estimated that capital costs for acquisition and site development would total \$3,350,000.

Twelve month operating costs for a 55 bed facility are estimated to be \$1,213,700. This figure includes a staff of nineteen, purchase and operation of two vans for transporting offenders to and from population centers, and routine operating costs.

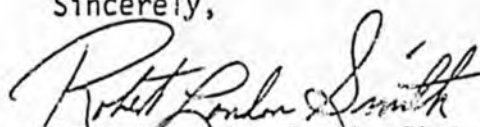
Programmatic issues for a specialized facility of this type have not been fully addressed. Many believe that those serving short sentences of three or ten days for drunk driving are not necessarily candidates for alcohol treatment programs. Some argue that the punitive impact of incarceration is most appropriate, while others believe that needs assessment and referral are the proper goals for this setting and population. Still others support a full educational and treatment effort. Two Social Worker III positions have been included in the proposed staff to provide on site alcoholism counseling. With staggered shifts and days of work, the counseling can be provided seven days a week.

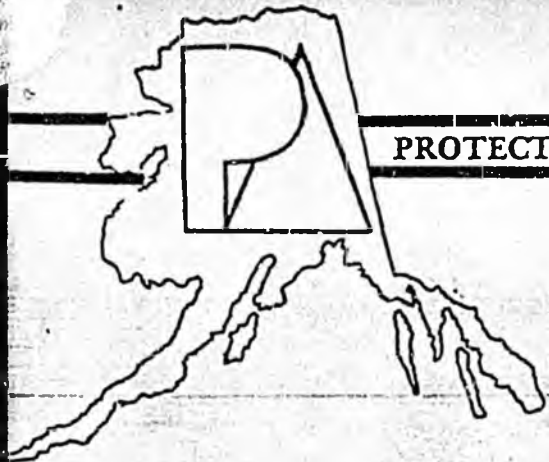
The Honorable Vic Fischer
Page 2

While funding for a 110 bed minimum custody facility has not been identified in budget requests, future planning calls for a facility of this size and custody classification. Due to initial site development and core facility costs for the first 55 bed facility, the remaining 55 bed capacity could be added for a comparatively small sum. Estimates to erect housing and core facility pipeline structures for the second 55 inmates at the same site are \$400,000, for a total capital investment of \$3,750,000. Twelve month costs for a 110 bed facility with a staff of 36 and related operational/inmate costs would total \$2,332,500. The additional 55 beds could be used for housing misdemeanor and minimum custody felony inmates.

It is my hope that this information is responsive to your inquiry. I wish to reiterate that the Administration has not developed a position regarding the appropriateness of a specialized facility for drunk drivers, nor would operating or capital funds be available for such a project within the Governor's FY'84 requests.

Sincerely,


Robert London Smith, Ph.D.
Commissioner



PROTECTION AND ADVOCACY FOR THE DEVELOPMENTALLY DISABLED

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763 7th Ave.
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April 13, 1983

Senator Vic Fischer
Pouch V
Mail Stop 3100
Juneau, Alaska 99811

Dear Senator Fischer:

This letter concerns the need for the State of Alaska to obtain a minimum security facility for the treatment of drunk drivers.

I noticed in the papers that it has been suggested that surplus pipeline camps be purchased and renovated for this purpose. It is my suggestion that the state first look to existing facilities that are not being appropriately utilized. The most notable example of this type of facility is Harborview Developmental Center for the developmentally disabled in Valdez.

Harborview currently provides residential care for up to 96 developmentally disabled Alaskans. Unfortunately, Harborview was constructed before it was realized that the developmentally disabled could be better served in community settings. This has resulted in the unnecessarily institutionalization of many Alaskans. There is a tremendous loss of human dignity and potential which occurs because of this state policy of institutionalization. In addition, the \$85,000 per person per year spent on this primarily custodial care is staggering at a time when community services have been set back for three years in a row. There is a strong consensus growing that the people in Harborview must be returned to their families and communities as soon as possible. As a result, the state will need to find alternative uses for this building.

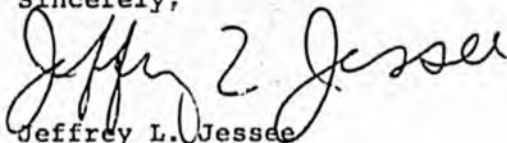
Harborview would be well-suited for use as a minimum security facility. Constructed after the earthquake of poured reinforced concrete, it contains a large cafeteria and laundry. In addition, each exterior door has an alarm system in place and the activities on each hall can be monitored from central nursing stations. The

local hospital is also located in the other end of the building. Renovations currently underway will result in a more efficient heating system and a new roof.

Alaskan's now believe that it is the drunken drivers that should be removed from the community, not the handicapped. I can think of no better expressions of this long overdue realization than by changing the use of Harborview.

Thank you for your consideration of this idea and please call me if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Jeffrey L. Jessee". The signature is written in dark ink and is positioned above the typed name.

Jeffrey L. Jessee
Staff Attorney

JLJ:bk

ATTACHMENT 6

April 16, 1983

Administrative license revocation

SB 61 states that if a person under arrest refuses to take the breathalyzer test, or if their BAC is above the legal limit, the enforcement officer shall seize that person's driver's license. The officer shall read and deliver to the person arrested a notice advising him or her that: 1) the state intends to revoke their driver's license; 2) the person has a right to obtain a court review of the revocation; 3) the notice is a temporary driver's license expiring seven days from date of notification; 4) the revocation of the person's driver's license shall take effect upon the expiration of the temporary driver's license unless that person within seven days initiates court proceedings to rescind the revocation.

ATTACHMENT 7

April 16, 1983

Curfew license provisions in SB 226

This bill creates three different stages of driver's licenses, and decreases the hours in which a person having a permit only can drive according to the outline below.

SB 226:

1) prohibits those automobile drivers with learning permits (as opposed to licenses) from driving between the hours of 9pm and midnight on Friday and Saturday, and prohibit them from driving between midnight and 5am every morning.

2) provides in the state driver's manual a more substantial section on the dangers of combining driving and alcohol-- including a portion on how to recognize an intoxicated driver, and create a corresponding section in the written examination.

3)creates a Stage 1 license--

-- this license would apply to 16 year old persons, and to those who are 17 years old who have not had driver's education.

-- persons with this license would be prohibited from driving between the hours of midnight and 5am unless accompanied by a parent or a spouse 18 years of age or older, or unless traveling to or from work or in the course of employment with a signed affidavit in hand from the employer.

-- two moving violations, 1 DWI, or driving in violation of the curfew would result in the revocation of this license, but would allow them to apply for a learner's permit.

4)creates a Stage 2 license--

--this license would apply to 17 year olds who have passed driver's education.

--to qualify for this license a 17 year old must have 6 consecutive months prior to application with no moving violations, and no DWIs or curfew violations.

--a moving violation, a DWI, or a curfew violation results in the revocation of the Stage 2 license. The person would, however, be able to apply for a stage 1 license.

--this Stage 2 license would not have any driving curfew.

5) creates a Stage 3 license equal to the current Alaska State driver's license in every way except that you must be 18 to be eligible for that license--

--any Alaska State resident currently eligible for a driver's license, and who is 18 years of age would be eligible for a Stage 3 license

--traffic violations obtained with a permit, stage 1 license, or a stage 2 license shall be applied to the stage 3 license in compliance with current Alaska law when that license is obtained on or after their 18th birthday.

6) provides an effective date of January 1, 1984

--those who receive their driver's licenses before January 1, 1984 would have a three month period in which to obtain the appropriate license after the effective date of the bill before their license automatically expires.

7) in accordance with this bill, driver's education courses must be available to all persons under 18 through the high school curriculum.

ALASKA STATE LEGISLATURE

SENATE STATE AFFAIRS COMMITTEE

SENATOR VIC FISCHER, CHAIRMAN

POUCH V, JUNEAU 99811

(907) 465-4954



MEMORANDUM

TO: Senate State Affairs Committee Members

FROM: Senator Vic Fischer, Chair
Senate State Affairs

RE: Enclosed Backup materials

DATE: 4/5/83

I am sure you are well aware that the problem of drunk driving will not be controlled by one or even a handful of measures quickly contemplated.

For this reason, the Senate State Affairs Committee will be holding a number of hearings in an effort to understand all the options open to us for getting a handle on the problem of drunk driving. My intent is that these hearings will act as a catalyst for a more systematic and conclusive approach to this problem.

Enclosed you will find an agenda for the hearings.

As backup for these hearings you will find sections on:

1. Alaska statistics
2. current laws pertaining to drunk driving (Title 28)
3. SB 61, including fiscal notes, a sectional analysis, and position papers
4. SB 226, including fiscal notes, a sectional analysis, and position papers
5. CSHB 17(Jud) am, including fiscal notes, a sectional analysis, and position papers
6. license curfews
7. raising the drinking age
8. educational programs
9. licensing procedures
10. community service
11. roadblocks
12. habitual offenders
13. impoundment and forfeiture of automobiles

Other measures relating to drunk driving will be addressed during the hearings.

SENATE STATE AFFAIRS COMMITTEE
MEETING SCHEDULE
(3/31/83)

April 5, Tuesday 3:00pm (Butrovich Room, Capitol Bldg.)

- SB 27 Toll-free telephone calls
- SB 115 Individual rights of peace officers
- SB 153 Citizens who assist peace officers
- SB 218 Disclosure of information
- SJR 13 Urging repeal of the Jones Act

April 7, Thursday 3:00pm (Butrovich Room, Capitol Bldg.)

Drunk driving and related issues (SB 61, HB 17, and SB 226)
Invited testimony only. See attached agenda for details.

TELECONFERENCE (Listening only):
South Central, Southeast, and Fairbanks.

April 9, Saturday 9:00am - 4:00pm (AST) (Anchorage Municipal Assembly
Chambers, 3500 E. Tudor)

Drunk driving and related issues (SB 61, HB17, and SB 226)
See attached agenda for details.

April 11, Monday 7:30pm (PST) (Butrovich Room, Capitol Bldg.)

Drunk driving and related issues (SB 61, HB 17, and SB 226). +
See attached agenda for details.

TELECONFERENCE:
South Central (except Anchorage), Southeast and Interior.

April 12, Tuesday 1:30pm (PST) (Senate Finance Room, Capitol Bldg.)

Drunk driving and related issues (SB 61, HB 17, and SB 226).
Invited testimony only. See attached agenda for details.

TELECONFERENCE (Listening only):
South Central, Southeast, and Fairbanks.

SENATE STATE AFFAIRS COMMITTEE

AGENDA FOR DRUNK DRIVING HEARINGS

REVISED April 4, 1983

APRIL 7, 1983 3:00pm Butrovich room

INVITED TESTIMONY

- I. DRIVING UNDER THE INFLUENCE: AN OVERVIEW OF THE PROBLEM IN ALASKA
 - A. a statistical look at the situation
 - B. Legal examination of Title 28, Motor Vehicles

- II. THE SYSTEM FROM APPREHENSION TO THE SANCTIONING OF DRUNK DRIVERS IN ALASKA
 - A. current enforcement practices
 - B. court proceedings; conviction rates, and penalties issued in court
 - C. actual penalties served, incarceration and treatment

- III. INTRODUCTION OF LEGISLATION BEFORE THE COMMITTEE
 - A. SB 61, An act related to driving a motor vehicle
 - B. CSHB 17 (Jud) am, Raising the Drinking Age
 - C. SB 226, Training and licensing of drivers

APRIL 9, 1983 in ANCHORAGE AT THE MUNICIPAL ASSEMBLY
CHAMBERS from 9:00am--12:00, 1:00pm--4:00pm
INVITED AND PUBLIC TESTIMONY

I. INTRODUCTION

II. PREVENTION OF DWI AND AUTO RELATED ACCIDENTS
testimony will include:

- A. the importance of public awareness as a deterrent
- B. curfew licenses for drivers under 18 years of age
- C. raising the drinking age
- D. the use of roadblocks as a deterrent
- E. educational programs
- F. licensing procedures as sanctions and deterrents
 - 1. suspensions
 - 2. revocations
 - 3. limited licenses

III. TREATMENT

testimony will include:

- A. different kinds of alcohol treatment
- B. success of mandatory treatment as a sanction
- C. the Alaska Alcohol Safety Action Program (AASAP)
screening program

IV. COURT/DMV RECORD SYSTEMS

testimony will include:

- A. problems with state record systems related to DWI
- B. National Driver's Register as a record system

April 11, MONDAY at 7:30pm (PST) Bulovich room

TELECONFERENCE for Southeast, Southcentral (except Anchorage), and Interior portions of the state on drunk driving, related issues, SB 61, CSHB 17(Jud) am, and SB 226.

April 12, Tuesday 1:30pm Senate Finance room
INVITED TESTIMONY

I. INTRODUCTION

II. PENALTIES

testimony will include:

- A. the use of fines as a sanction
- B. automobile impoundments and forfeitures
- C. the effectiveness of incarceration
- D. community service
- E. other

III. ALTERNATIVE APPROACHES FOR DETERRING THE DRINKING/DRIVING BEHAVIOR

testimony will include:

- A. limiting the circulation of alcohol
- B. transportation alternatives to and from drinking establishments

IV. ENFORCEMENT

testimony will include:

- A. public perception of size of police force as a deterrent
- B. mandatory breathalyzer test for all persons pulled over for a moving violation

V. SPECIFIC PROBLEM AREAS CONCERNING DRUNK DRIVING
testimony will include:

- A. the habitual offender
- B. the effect of mandatory penalties when they are too severe

VI. ROAD SAFETY MEASURES TO DECREASE ACCIDENT
FATALITY RISK
testimony will include:

- A. increased amount of street lights to decrease accidents
- B. child restraints
- C. use of road signs designed to mitigate the injuries received from accidents
- D. mandatory seat belt use

VII. CONCLUSIONS

For additional information contact Suzanne Tryck 465-4954

AN OVERVIEW OF THE DRUNK DRIVING SITUATION

APRIL 5, 1983

This section contains information on:

1. Facts on Alcohol and Highway Safety
2. OMVI arrests in Alaska
3. Fatal accidents in Alaska
4. accident/alcohol statistics
5. overall statewide problem analysis

The Problem

Overview:

Drunk driving continues to be one of our nation's most serious public health and safety problems. Some 50 percent of all drivers killed each year have blood alcohol concentrations in excess of the legal limit, 0.10 percent. In single vehicle fatal crashes, where it is more certain who is at fault, upwards of 65 percent of those drivers who die were legally drunk. Over the past 10 years, the proportion of highway deaths involving alcohol has averaged a tragic 25,000 per year. Thus, a staggering one quarter of a million Americans have lost their lives in alcohol-related crashes in the last decade.

The cost of drunk driving has a high economic cost to this country as well. A conservative estimate of the total economic cost of drunk driving is put at 24 billion.

Alcohol and Crashes:

Alcohol is a major contributing factor to fatal (and serious injury) automobile crashes. According to a 1978 review of the literature, approximately 60 percent of fatal crashes involved a driver who had been drinking. Between 40 and 55 percent of such crashes involved a driver who had a blood alcohol concentration (BAC) greater than .10 percent (w/v).

With regard to alcohol and responsibility for fatal crashes, the drinking driver problem is even more significant. In one study drivers judged to be at fault in fatal crashes were six times more likely to have had BAC's greater than .10 percent (w/v) alcohol in their blood than drivers judged not at fault for their crashes (60 percent vs. 10 percent).

This strong relationship between crash responsibility and high alcohol levels is shown further in single vehicle crashes, where responsibility is apparent, and where between 60 and 75 percent (60-75%) of dead drivers have BACs greater than .10 percent (w/v).

The Driver Population:

What the high BAC figures in crashes suggest is that the majority of alcohol related fatal crashes are caused by heavy (problem) drinkers. Some portion of the approximately 15 percent of fatal crashes which involve drivers who have been drinking, but who do not have BACs greater than .10 percent, may be caused by less heavy, less chronic, "social" drinkers.

The majority of drivers are either abstainers or light to moderate (social) drinkers. Even quite liberal estimates suggest that only about 10 to 15 percent of the nation's drivers would be classified as being heavy (problem) drinkers.

Arrested Drunk Drivers:

The average proportion of licenses drivers arrested for drunk driving over a one-year period is estimated to be one percent (1%). This translates to approximately 1.3 million of approximately 130 million licensed drivers.

On a nightly basis, between one in five hundred (1/500) and one in two thousand (1/2000) drivers on the road with a BAC greater than .10 percent (w/v) are arrested for drunk driving. These estimates come from a number of roadside surveys conducted in conjunction with the Alcohol Safety Action Projects (ASAPs) funded by the NHTSA in the 1970's and from the Grand Rapids data reported by Borkenstein and others.

The average BAC of these drinking drivers is approximately .20 percent, double the level for presumed intoxication. Estimating an average period of alcohol consumption at 4-5 hours, this means that the average fatally injured drinking driver had about 15 drinks prior to becoming involved in the crash.

Blood Alcohol and Body Weight

**CHART FOR RESPONSIBLE PEOPLE WHO MAY
SOMETIMES DRIVE AFTER DRINKING!**

(APPROXIMATE BLOOD ALCOHOL PERCENTAGE)

Drinks	Body Weight in Pounds								
	100	120	140	160	180	200	220	240	
1	.04	.03	.03	.02	.02	.02	.02	.02	Influenced Rarely
2	.08	.06	.06	.04	.04	.04	.03	.03	
3	.11	.09	.09	.06	.06	.06	.05	.05	
4	.15	.12	.11	.08	.08	.08	.07	.07	
5	.19	.16	.15	.12	.11	.11	.10	.10	
6	.23	.19	.18	.14	.13	.11	.10	.10	
7	.26	.22	.19	.16	.15	.13	.12	.11	
8	.30	.25	.21	.19	.17	.15	.14	.13	Definitely
9	.34	.28	.24	.21	.19	.17	.15	.14	
10	.38	.31	.27	.23	.21	.19	.17	.16	

But not at .01% for each 40 ounces of drinking
One drink is 1 oz. of 100 proof liquor, 12 oz. of beer, or 4 oz. of table wine.

SUREST POLICY IS ... DON'T DRIVE AFTER DRINKING!

Past Approaches and Current Activities

Federal Action:

Over the last 12 years, the National Highway Traffic Safety Administration (NHTSA), an Agency within the U.S. Department of Transportation, has worked with the States to reduce alcohol related deaths on the highway. NHTSA initiated 35 Alcohol Safety Action Projects (ASAPs) throughout the country from 1971-1976 which resulted in the development of a coordinated systematic approach to deal with drunk driving.

In 12 of the 35 ASAPs, a statistically significant reduction in fatal crashes at night was achieved. Individual projects were able to double, and even triple driving while intoxicated arrests, using such new technology as roadside breath testing. Court procedures were streamlined to handle large caseloads. Roughly a quarter-of-a-million drinking drivers were referred for treatment.

Before the passage of the Highway Safety Act of 1966, few States specified a presumptive level of driving while intoxicated. The Federal standard for alcohol safety prescribed the 0.10 percent blood level that legally defines the legal intoxication limit. Now all the States have laws defining driving under the influence at the 0.10 percent level. The majority of the States now have made some improvements in their law enforcement, court, rehabilitation, and educational efforts.

State Action

Under the Section 402 grant program established by the Highway Safety Act the States are increasing the proportion of funds allocated to alcohol programs. In FY 1982 approximately 35 percent of 402 funds (\$27.8 of 78.6 million) were allocated to drunk driving programs (with an added 30 percent spent on alcohol enforcement activities under Police Traffic Services).

Responding to citizen interest, 21 States and a number of local jurisdictions have established special drunk driving task forces to revitalize State/local programs.

Fifteen States have raised the minimum legal drinking age to reduce alcohol related crashes among youth. Other States such as Maryland have introduced legislation to raise the drinking age during 1982.

Sixteen States have adopted statutes allowing preliminary roadside breath testing to assist officers in establishing probable cause for drunk driving arrests.

Twenty-one States have established illegal per se statutes designed to simplify and streamline the prosecution of drunk drivers by making it illegal simply to operate a motor vehicle with an illegal blood alcohol concentration (above 0.10%).

DRUNK DRIVING FACTS

- o A blood alcohol concentration (BAC) of .10 percent or greater is the level at which a driver is considered legally intoxicated in most states.
- o Approximately 55 percent of fatal crashes involve a driver who has been drinking.
- o In single vehicle crashes, where responsibility is apparent, between 60 and 75 percent of dead drivers have BACs greater than .10 percent.
- o The average BAC of drivers arrested for drunk driving is approximately .20 percent, double the level for presumed intoxication.
- o Over the past 10 years, the proportion of highway deaths involving alcohol has averaged 25,000 per year; one quarter of a million Americans have lost their lives in alcohol-related crashes in the last decade.
- o A conservative estimate of the total economic cost of drunk driving is put at between five and six billion dollars a year.

REALISTIC EXPECTATIONS

Problem Drinkers:

Regardless of what we do with problem drinkers, approximately 1 of 5 will be re-arrested for a drinking-driving offense within one year, 2 of 5 in three years.

Social Drinkers:

Without rehabilitation, 3 of 10 social drinkers will be re-arrested within three years. However, only 2 of 10 entering rehabilitation of some type will be re-arrested.

Source: University of South Dakota,
Program Level Evaluation of ASAP
Diagnosis Referral and Rehabilitation
Efforts. Sept. 1975.

PROBLEM DRINKING DRIVERS

1. The Problem Drinking Driver is someone who *regularly* drives while seriously impaired.
2. In the typical jurisdiction, about two-thirds of persons arrested for DWI are identifiable as Problem Drinkers, either clearly or marginally.
3. Problem Drinking Drivers usually have a high BAC (0.15 percent or above) when arrested. Of course, the BAC on any occasion may be lower.
4. Drivers with a high BAC (0.10 percent or above) are likely to be involved in at least

- Twice as many crashes
- Twice as many property damage crashes
- Five times as many personal injury crashes
- Twelve times as many fatal crashes
- Twice as many traffic violations
- Three times as many license suspensions

as the average driver.

5. Social Drinkers rarely achieve the high BAC (0.10 percent or above) which problem drinkers achieve very often.
6. A person can learn to "drive while drunk" i.e., to compensate partially for the impairment caused by alcohol up to a point. The learning takes a lot of practice.

Social Drinkers don't get that much practice. They are likely to judge themselves "too drunk to drive," or to drive very badly at lower BACs.

Therefore, a person who drives reasonably well at a high BAC, or who can drive at all at a very high BAC (0.20 percent or above), is likely to be a Problem Drinker.

7. Problem Drinking Drivers tend to lead troubled lives, as is shown in:
 - The probability of their having previous and subsequent DWI arrests.
 - The frequency of their contacts with social agencies.
 - Their emotional profiles.
 - The frequency of their family and economic problems.

This makes it possible to identify them by record checks and personality tests.

ACCIDENTS IN ALASKA

In 1975, alcohol-related highway accidents cost \$19.5 million.

In 1977, 62 Alaskans died in alcohol-related highway accidents. About 80% of highway fatalities in Anchorage are alcohol-related.

OMVI ARRESTS IN ALASKA

The drivers being arrested are very heavy drinkers - had to have had ten drinks in an hour to reach the blood alcohol levels recorded. Most have so much alcohol in their system that they are still drunk when they go to work the next day.

Most people never drink enough to reach the illegal BAC level. Most people arrested for OMVI regularly drink large amounts.

At most one out of four arrested for OMVI are "normal" drinkers who have had too much just this night. The rest are used to drinking and driving - in fact one out of three people arrested for OMVI has previously been convicted.

Few of the arrests for OMVI are borderline cases - the average blood alcohol concentration is twice the level proscribed by law.

FATAL ACCIDENTS

1976 - 1981

1976	111 fatal accidents 67 alcohol involved	127 fatalities
1977	130 fatal accidents 64 alcohol involved	138 fatalities
1978	112 fatal accidents 54 alcohol involved	127 fatalities
1979	80 fatal accidents 48 alcohol involved	90 fatalities
1980	79 fatal accidents 50 alcohol involved	88 fatalities
1981	90 fatal accidents 55 alcohol involved	100 fatalities
Totals	602 fatal accidents 338 alcohol involved	670 fatalities

Information provided by:

Highway Safety Planning Agency
Pouch N
Juneau, AK 99811

I N J U R Y A C C I D E N T S

ALCOHOL INVOLVED

1978 - 1980

1978 3,381 injury accidents 4,836 people injured

1979 3,285 injury accidents 4,634 people injured

1980 3,457 injury accidents 5,030 people injured

Totals 10,073 injury accidents 13,347 people injured

Information provided by:

Highway Safety Planning Agency
Pouch N
Juneau, AK 99811

ALASKA HIGHWAY SAFETY PLANNING AGENCY TRAFFIC ACCIDENT PROJECTION

	YEAR 1	TOTAL ACCIDENTS 2	INJURY ACCIDENTS 3	FATALITIES 4	RATE	PROPERTY DAMAGE 5	
1	1977	15,086	5,085	136	4.5	20,348,441	1
2	1978	12,962	4,827	127	4.5	18,775,536	2
3	1979	13,521	4,560	91	3.5	19,365,424	3
4	1980	13,165	4,993	98	3.8	20,793,629	4
5	1981	13,500	5,500	100	4.0	22,250,000	5
6	1982	14,000	6,000	107	4.5	23,750,000	6
7							7
8							8
9							9
10							10
11							11
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31							31

4.
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3.
4.
4.

FROM: DEPT. OF PUBLIC SAFETY PLANNING AGENCY

OVERALL STATEWIDE PROBLEM ANALYSIS

TRAFFIC RECORDS

Because of the problems described in the following paragraphs and the fact that current data is unavailable, there were no attempts made to perform a statistical analysis of the old data. This analysis has been performed on available data in past years and would only be redundant. Therefore, with the exception of the narrative in the traffic records section, the Overall Statewide Problem Analysis remains unchanged from the FY1982 highway safety plan. No further attempt to perform problem identification through statistical analysis will be done until current and accurate data becomes available.

The Alaska traffic records system continues to be plagued with many of the same problems that have prevented timely and accurate retrieval of accident data for the past few years. Excessive delays are still experienced in all aspects of the collection, entry, editing and retrieval of the accident and driver license data. Even though the driver license system is an automated on-line system, accurate statistical data for calendar year 1981 are not available at this time. Errors in data collection, as well as in the data entry, continue to contribute to the excessive delays in obtaining accident data.

Because of the changing philosophical views within the department, all attempts to utilize the "DART" traffic records software package have been abandoned. There is presently no individual within the department available that can utilize this system and at this time no efforts to revitalize the system are planned.

Even though a project was implemented in the department to alleviate many of the problems of the traffic records system, no progress of any consequence can be expected. The fact that the system spans two departments, neither of which has total responsibility, only complicates all efforts to upgrade the system. As the accident system remains a low priority within the department, we do not anticipate any improvement to the system during FY1983.

Because of these problems and the lack of reliable traffic data, emphasis will be placed on working with the Department of Public Safety to develop a more responsive outlook towards the traffic records system. This will include suggestions to move the responsibility of data entry from DOT/PF to the Department of Public Safety and to assign the system responsibilities to an individual in the department capable of overseeing and maintaining the system needs. With a commitment from the Department, traffic data and problem identification could be eliminated as a major obstacle in the preparation of the annual highway safety plan.

From Highway Safety Planning, 1983

STATE ACCIDENT ANALYSIS

<u>YEAR</u>	<u>INJURY ACCIDENTS</u>	<u>FATALITIES</u>	<u>TOTAL ACCIDENTS</u>	<u>M.D.R. (1)</u>	<u>PROPERTY DAMAGE (\$)</u>
1976	5,765	124	18,154	4.1	20,220,195
1977	5,085	136	15,086	4.5	20,348,441
1978	4,822	127	12,962	4.5	18,775,536
1979	4,560	90	13,521	3.2	19,365,424
1980	4,993	88	13,165	3.3	20,793,029

(1) Mileage Death Rate

1981 DATA NOT AVAILABLE AT THIS TIME

As shown by the preceding table, the total accident picture for Alaska in 1980 was one of increased risk to the motorist when compared to 1979. Accidents increased from 45 per 1,000 licensed drivers in 1979 to 48 per 1,000 licensed drivers in 1980. The mileage death rate increased from 3.2 per hundred million miles traveled in 1979 to 3.3 in 1980. The death rate per 1,000 motor vehicle accidents increased from 6.66 in 1979 to 6.68 in 1980.

Overall, there were more accidents per driver and per miles traveled than in 1979, with greater accident severity causing a higher injury and fatality rate. As a public health concern, the motor vehicle death rate per 100,000 population increased from 21.78 in 1979 to 21.97 in 1980 while the motor vehicle injury rate increased from 1,103.6 per 100,000 population in 1979 to 1,246.8 per 100,000 population in 1980.

STATE TRAFFIC ANALYSIS

<u>YEAR</u>	<u>POPULATION</u>	<u>LICENSED DRIVERS</u>	<u>VEHICLES (1) REGISTERED</u>	<u>MILES (2) TRAVELED</u>
1976	413,289	216,079	259,615	30.67
1977	411,211	294,926	283,973	30.34
1978	416,500	283,733	276,918	28.22
1979	413,200	299,818	262,549	27.90
1980	400,481	272,472	257,491	26.58

(1) Excludes trailers, commercial trailers and snowmachines.

(2) Represented as 100 million vehicle miles traveled.

As shown by the above table, Alaska's population remained stable through 1976-1979, with the exception of 1978 when it reached its highest level. The state experienced a 4% decline in population between 1978 and 1980.

The number of licensed drivers increased significantly in 1977, 36%, followed by another increase in 1979, but declined in 1980.

The number of vehicles registered shows a steady decrease since 1977, with a similar trend occurring in miles traveled since 1976.

LICENSED DRIVERS BY AGE AND SEX (1980)

The following table displays licensed drivers by age and sex. As is obvious, the majority of drivers licensed in Alaska (56.3%) are under 35 years of age. Thirty-one percent of all licensed drivers are young (under 35) males: the group most at risk in highway traffic accidents.

<u>AGE</u>	<u>NUMBER OF ALCOHOL ACCIDENTS</u>	<u>PERCENT INVOLVEMENT</u>	<u>PERCENTAGE OF LICENSED DRIVERS</u>
15-18	220	11.3	3.4
19-29	922	47.2	36.5
30-39	407	20.9	27.8
40-49	238	12.2	15.2
50-59	134	6.9	10.3
60 +	31	1.6	2.5

During 1979, alcohol was indicated in 1,952 traffic accidents. Drivers aged 19-29 were the most frequent offenders: 47.2% of the alcohol-related accidents involved drivers in this age group who had been drinking or who were suspected of drinking.

Drivers between the ages of 15 to 18, inclusive, who make up only 3.4% of the licensed driver population, accounted for 11.3% of the alcohol-related accidents, or more than 3 times their distribution in the general driver population.

Alcohol was a factor in 70% of the fatal accidents that occurred during 1979. Further analysis is not possible because of contradictory bivariate data, although there is some indication that young drivers are, again, over-represented. Inexperienced both in driving and in drinking, the young driver also has a predilection for high speeds, and the combination is lethal.

Alcohol enforcement and diversion to treatment and/or education of the drinking driver will remain the highest priority for Alaska's highway safety program.

SPEED RELATED

The number of speed-related fatalities declined from 80 in 1978 to 61 in 1979. Although the number of fatalities that were speed-related declined, the rate of speed involvement has remained constant at 27%. Speed as a contributing factor in injury accidents declined from 21% in 1978 to 16% in 1979.

CURRENT ALASKA LAWS PERTAINING TO DRUNK DRIVING
(TITLE 28)

April 5, 1983

This section contains a short outline of Alaska laws pertaining to drunk drivers.

TITLE 28, LAWS PERTAINING TO DRIVING WHILE INTOXICATED

Backup information for "Drunk Driving" hearings
April 7 to April 12, 1983
Senate State Affairs Committee

DWI is a class a misdemeanor, 28.35.030(b), for which the punishment is:

1st conviction of DWI or refusal to submit to a breath alcohol test:

1. Mandatory license revocation for 30 days, but a limited license may be granted at the discretion of the court for 60 days, 28.15.18(c), 28.32.035(c).
2. Mandatory incarceration for not less than 72 hours, 28.35.030(e), 28.35.032(g).
3. Mandatory treatment, 28.35.030(c), 28.35.032(g).

2nd conviction or refusal within 1 year:

1. Mandatory 1 year license revocation with no limited license option, 28.15.181(c).
2. Mandatory 20 day incarceration period, 28.35.030(c).
3. Mandatory treatment, 28.35.030(c), 28.030.032(g).

2nd conviction or refusal within 5 years:

1. 1 year license revocation, 28.15.181(c).
2. 10 day mandatory incarceration period, 28.35.030(c).
3. Mandatory treatment, 28.35.030(c).

Implied consent provision, 28.35.031

Persons who operate motor vehicles, water crafts, or aircrafts within the boundaries of this state are considered to have given their consent to a chemical test of their breath.

Illegal Per Se law, 28.35.033

.10 grams of alcohol per 210 liters of a person's breath shall be

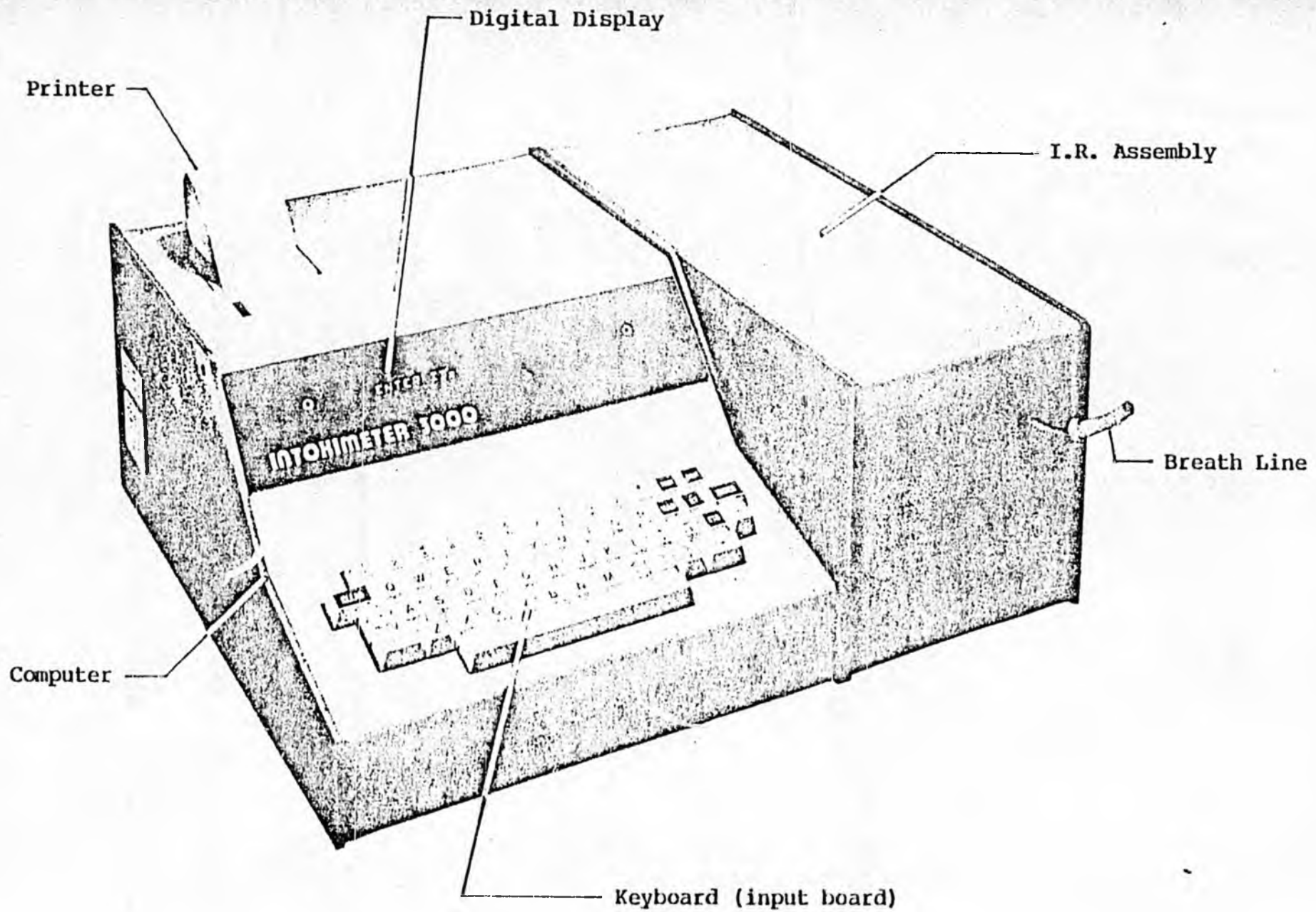
*Prepared by
Susan Fryck
April 1983*

presumptive evidence that the person is intoxicated. The chemical analysis must conform to methods approved by DHSS.

When the breath alcohol content (BAC) is between .05 and .10 grams/210 liter, no presumptions shall be made as to the intoxication of the person. When the BAC is below .05, it will be presumed that the person in question is not intoxicated.

The person tested may have someone of their choice administer a chemical test in addition to the one administered at the direction of the police officer.

If a person is under arrest for DWI, and the arrest was the result of an accident, a chemical test may be administered without the consent of the arrested individual. Persons who are unconscious or otherwise unable to refuse to take the test are considered not to have withdrawn their consent-- a chemical test may be administered.



INTRODUCTION

THE INTOXIMETER MODEL 3000 H/S COMBINED THE SIMPLICITY AND SPEED OF INFRARED ABSORPTION AND MODERN COMPUTER TECHNOLOGY TO PRODUCE THE MOST ACCURATE, VERSATILE, AND COMPLETE BREATH ALCOHOL TESTING INSTRUMENT AVAILABLE TODAY.

THE PROGRAM IS UNDER FULL COMPUTER CONTROL. THE STANDARD OPTIONS THAT YOUR SUPERVISOR CAN SELECT TO INDIVIDUALIZE YOUR PARTICULAR REQUIREMENTS ARE LISTED BELOW. ONCE THESE SELECTIONS ARE MADE, THEY BECOME A PERMANENT PART OF YOUR PROGRAM.

THE PRINTER MAY BE PROGRAMMED TO DELIVER FROM 1-9 COPIES OF THE TEST RESULT WHEN THE PRINT KEY IS PRESSED.

THE PRINTER AND DIGITAL DISPLAY MAY BE PROGRAMMED TO DISPLAY THE RESULTS IN EITHER TWO OR THREE DIGIT ACCURACY.

THE TEST SEQUENCE IS PROGRAMMED TO RUN A NALCO ALCOHOL STANDARD BEFORE EACH SERIES OF SUBJECT TESTS. THE EXTERNAL STANDARD MAY BE PROGRAMMED FOR THE EXACT VALUE OF THE NALCO STANDARD.

THE PROGRAM MAY BE REQUESTED TO ASK THE OPERATOR UP TO 10 ADDITIONAL QUESTIONS WHICH THE AGENCY CAN DESIGNATE. BOTH THE QUESTIONS AND RESPONSES CAN EACH BE 20 CHARACTERS IN LENGTH.

THE PRINT-OUT CAN BE PRE-PROGRAMMED TO AUTOMATICALLY TYPE IN THE AGENCY OR DEPARTMENT NAME.

A RETAINED SAMPLE OPTION MAY BE SELECTED WHICH WILL AUTOMATICALLY ASK THE OPERATOR IF THE SUBJECT'S BREATH SAMPLE IS TO BE PRESERVED. IF SO, THE INSTRUMENT WILL INSTRUCT THE OPERATOR AS TO HOW TO CONNECT AND DISCONNECT THE RETAINED SAMPLE.

A BATTERY BACK-UP PREVENTS THE LOSS OF A PROGRAM AND ANY TEST STORED IN MEMORY FOR UP TO TWO HOURS IN THE EVENT OF A POWER FAILURE.

A TYPICAL PRINT-OUT IS SHOWN ON THE FOLLOWING PAGES, INCLUDING A DESCRIPTION OF THE TEST. IN ADDITION TO RUNNING THE STD (STANDARD), BLK (BLANK TEST), SUBJ (SUBJECT TEST), AND SECOND STANDARD, THE IR 3000 AUTOMATICALLY PURGES AND RUNS A BLANK BEFORE AND AFTER EACH ONE OF THE TESTS SHOWN ON THE PRINT-OUT.

PRINTOUT RECORD - EXPLANATION OF TERMS

TEST RECORD

INTOX S/N 1000
NONE P.D.
SUN JAN 01, 1982

OPER NAME
JOE SMITH

I.D. NO. = AK3123

SUEJ NAME =
GERALD MICHAELS

O.L. NO. =
CA 1234567

DEPT./AGENCY =
STATE TROOPERS

EXT STD S/N = 1234

EXT STD TARGET VALUE
.12

TEST VALUE TIME

EXTSTD .12 01:45
BLK .00 01:45

SUEJ .15 01:46

BLK .00 01:47
EXTSTD .12 01:47

INSTRUMENT SERIAL NUMBER
HEADING
DATE

OPERATOR'S NAME

OPERATOR'S I.D. NUMBER

SUBJECTS'S NAME

OPERATOR'S LICENSE NUMBER

DEPARTMENT OR AGENCY

EXTERNAL NALCO TANK SERIAL NUMBER

VALUE OF NALCO STANDARD

CALIBRATION CHECK
ASSURES INSTRUMENT IS CLEAN

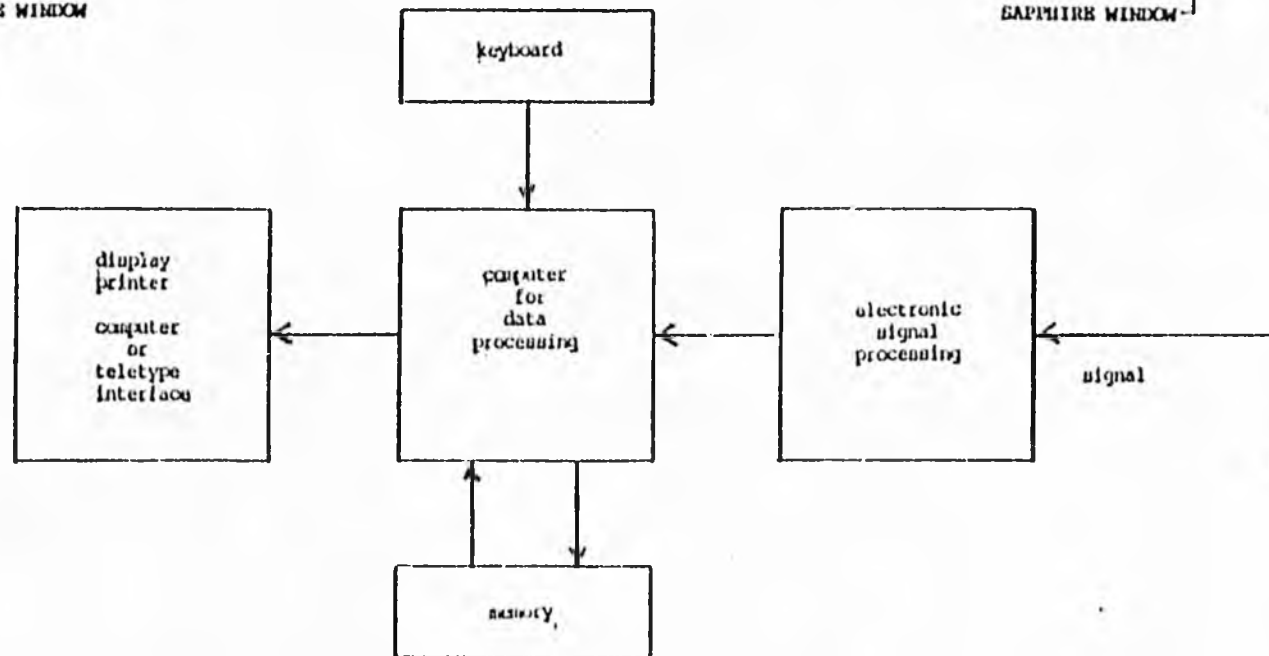
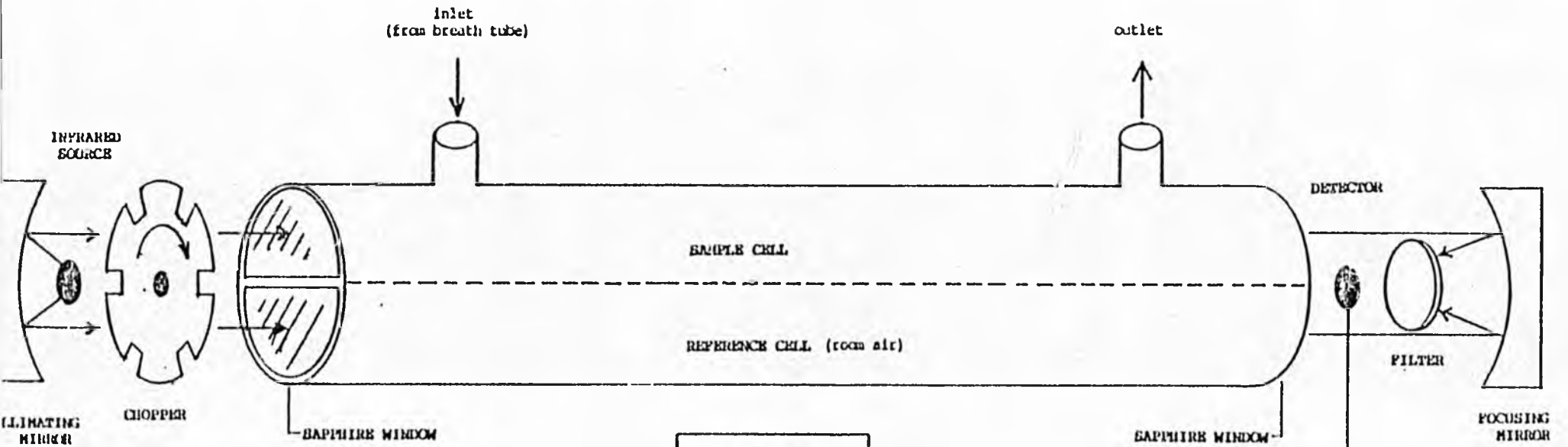
SUBJECT TEST RESULTS

FINAL BLANK AND STANDARD

RUNNING A SUBJECT:

1. TURN ON THE MAIN VALVE ON THE NALCO ALCOHOL STANDARD TANK.
CHECK THAT:
 - A. THE HIGH PRESSURE GUAGE READS GREATER THAN 300 PSI.
 - B. THE LOW PRESSURE GUAGE READS BETWEEN 10 AND 20 PSI.
2. CONNECT A CLEAN MOUTH PIECE TO THE BREATH LINE.
3. PRESS THE START KEY.
4. DISPLAY WILL REQUEST OPER NAME =.
THE OPERATOR SHOULD ENTER HIS NAME IN THE ORDER OF LAST, FIRST,
USING A MAXIMUM OF 20 CHARACTERS.
5. DISPLAY WILL REQUEST I.D. NO. =.
ENTER THE OPERATOR'S I.D. NO.
6. DISPLAY WILL REQUEST SUBJ NAME =.
ENTER THE SUBJECT'S NAME IN THE ORDER OF LAST NAME, FIRST NAME,
MIDDLE NAME OR INITIAL, USING A MAXIMUM OF 20 CHARACTERS.
7. DISPLAY WILL REQUEST O.L. NO. =.
ENTER THE OPERATOR'S LICENSE NUMBER.
8. DISPLAY WILL REQUEST DEPT./AGENCY =.
ENTER THE DEPARTMENT OR AGENCY CONDUCTING THE TEST.
9. DISPLAY WILL REQUEST EXT STD S/N =.
ENTER THE NALCO SERIAL NUMBER MARKED ON THE NALCO TANK.
10. DISPLAY WILL REQUEST EXT STD TARGET VALUE =.
ENTER THE ALCOHOL VALUE LISTED ON THE NALCO TANK.
11. THE INSTRUMENT WILL NOW AUTOMATICALLY RUN A PURGE AND BLANK SEQUENCE.
"XST" WILL FLASH WHILE THE INTOXIMETER 3000 IS RUNNING THE NALCO
STANDARD. AFTER THE STANDARD HAS BEEN RUN, THE DISPLAY WILL FLASH
"BLK", INDICATING THAT A BLANK TEST IS BEING CONDUCTED. WHEN THE
BLANK TEST IS COMPLETE, THE DISPLAY WILL BE READ BLOW UNTIL STAR
WITH "SUB" FLASHING. THE SUBJECT SHOULD BLOW INTO THE BREATH LINE.
IF THE SUBJECT IS BLOWING HARD ENOUGH A DASH (-) WILL APPEAR ON THE
LEFT SIDE OF THE DISPLAY AND THE HARDER THE SUBJECT BLOWS THE MORE
DASHES (- - - -) WILL APPEAR.
12. THE SUBJECT SHOULD CONTINUE TO BLOW INTO THE INSTRUMENT UNTIL THE
OPERATOR OBSERVES A FLASHING STAR "*" IN THE RIGHT-HAND CORNER OF
THE DISPLAY. THE STAR "*" INDICATES THAT A PROPER SAMPLE HAS BEEN
TAKEN. THE TEST RESULTS WILL BE DISPLAYED IN A FEW SECONDS.* THE
INTOXIMETER 3000 WILL AUTOMATICALLY PURGE, RUN A BLANK, AND THEN RUN
A SECOND NALCO STANDARD. THE RESULTS WILL THEN BE PRINTED OUT.

* If the subject's breath sample to be preserved - follow the procedure
on the opposite page.



OPERATING PRINCIPLES:

The Intoximeter Model 3000 breath analyzer employs the well-established principles of nondispersive infrared (NDIR) molecular absorption. Each compound in the breath absorbs infrared energy in a combination of absorption bands at frequencies unique to the compound. The position of these absorption bands do not change. However, the strength of a given absorption band will vary in direct relation to the change in the number of molecules within a fixed path.

The analyzer use a narrow band pass interference filter to isolate an absorption band at 3.39 microns; which is one of the strong absorption bands for alcohol. A heated element sends infrared energy through a two-chambered gas sample cell of fixed path length. With no absorbing gas in the sample half of the cell, the energy of the sample beam is ratioed against the energy passing through the reference half of the cell. The ratio is used to set and establishes the zero set point. The presence of alcohol in the sample cell will absorb some of the sample beam energy. The amount of energy attenuated is proportional to the number of alcohol molecules in the sample cell.

THE INFRARED SOURCE:

The source is a nichrome helix around a ceramic core. This assembly is then resistance-heated to 800 degrees C. A single source is used to simplify the optics and electronics and to insure stability. It is used so that any change in source character will have no net effect on the system. Extensive source check-out and burn-in yields high reliability in operation.

THE CHOPPER:

The source energy is modulated at 180 Hz and 300 Hz in the sample and reference beams by a slotted chopper wheel.

THE SAMPLE CELL:

The Sample Cell is a unique two-chamber design. The upper portion is a sample chamber and is ported close to each end to allow rapid sample transfer. The lower portion is the reference chamber.

The energy transmitted through the sample chamber is compared to the energy transmitted through the reference chamber. This establishes the zero and

automatically corrects for any changes in the cell sensitivity. No reflective optics or surfaces are used inside the sample cell. Consequently, particulates or other coatings will not affect the cell sensitivity.

Polished sapphire flats are used as cell-end windows. Diamond is the only other IR window material which is harder or more chemically inert than sapphire.

The unique two-chamber design minimizes optics and does not require critical alignment, which permits rapid cell interchange.

The sample cell is heated to prevent water condensation. The temperature is typically set to 45 degrees C.

THE INTERFERENCE FILTER:

A specially selected narrow band pass interference filter transmits infrared energy where the sample gas absorbs, while blocking all energy where interfering gases absorb. The filter is mounted on the detector for maximum stability.

The transmission characteristics of the filter do not change with time, ensuring long-term stability. Careful filter selection provides a readout free from interferences.

THE DETECTOR:

A solid-state photoconductive detector was chosen for its sensitivity and fast response. The detector is extremely rugged, and is insensitive to mechanical shock and vibration.

WHAT IF:

1. THE DISPLAY IS BLANK: PRESS THE CLEAR KEY AND HOLD DOWN FOR AT LEAST 2 SECONDS AND RELEASE. IF THE CIRCULATING MESSAGE DOES NOT APPEAR, NOTIFY THE ALCOHOL SUPERVISOR.
2. THE SUBJECT NAME IS MISPELLED: IF THE DATA IS STILL IN THE DISPLAY, THE DEL KEY MAY BE PRESSED THE CORRECT NUMBER OF TIMES TO ELIMINATE THE ERROR AND THEN RE-TYPED. IF THE ENTER KEY HAS BEEN PRESSED BEFORE THE MISTAKE IS NOTICED, THE CLEAR KEY MUST BE PRESSED AND THE TEST SEQUENCE RESTARTED.
3. MORE THAN 20 CHARACTERS ARE ENTERED FOR THE SUBJECT'S OR OPERATOR'S NAME: THE 20th CHARACTER WILL BE THE LAST CHARACTER RECORDED. FOR THIS REASON, IT IS RECOMMENDED TO ENTER THE LAST NAME FIRST AND TO NOT INCLUDE PERIODS(.) AFTER INITIALS.
4. AN ALCOHOL SIMULATOR IS LEFT CONNECTED TO THE BREATH INLET LINE: THE IR WILL CONTINUE TO ALTERNATE BETWEEN THE PURGE "PRG" AND THE BLANK "BLK" CYCLES.
5. DISPLAY SHOWS "STD .089 LO ABORT": STANDARD RESULTS ARE OUTSIDE THE NORMAL $\pm .009$ gm% LIMITS. CHECK THAT THE NALCO TANK IS TURNED ON, RUN A STD ONLY - CHECK THAT THE RESULTS ARE WITHIN .009 OF THE VALUE MARKED ON THE TANK. IF A HIGH OR LOW ABORT IS STILL PRESENT, THE STANDARD VALUE HAS BEEN ENTERED INCORRECTLY.
6. DISPLAY SHOWS "STD .111 HI ABORT": STANDARD RESULTS ARE HIGH.
7. PRINTED RESULTS SHOW: SUBJ NAME =, SUBJ NAME =: THE ENTER KEY WAS PRESSED WHEN THE "SUBJ NAME =" REQUEST WAS IN THE DISPLAY. REMEMBER, WHEN THE ENTER KEY IS PRESSED, THE CONTENTS IN THE DISPLAY WILL BE ENTERED AS DATA.
8. DISPLAY AND PRINT-OUT SHOW AN ACETONE PRINT-OUT: VERIFY THAT THE SUBJECT DID NOT SMOKE 15 MINUTES PRIOR TO TESTING.
9. DISPLAY SHOWS ENTER I.D. =: A SUPERVISOR MUST BE CALLED TO PROGRAM THE INSTRUMENT.
10. DISPLAY SHOWS "LOW TEMP": THE INSTRUMENT IS NOT WARMED UP. WAIT UNTIL THE "LOW TEMP" MESSAGE GOES OFF. PRESS CLEAR KEY.
11. TIME AND DATE MESSAGE IN DISPLAY DOES NOT MOVE: PRESS THE CLEAR KEY FOR 2 SECONDS. IF THIS DOES NOT CORRECT THE DISPLAY, NOTIFY YOUR SUPERVISOR.

ACETONE

The IR3000 has a second alcohol-acetone sensor of the semi-conductor type. The semi-conductor (SC) detector is about 3 to 5 times as sensitive for acetone as the IR detector. The computer uses this characteristic to compute the amount of acetone present and correct the IR reading. The sensitivity of the semi-conductor detector is automatically adjusted by comparing the IR and SC detector outputs. This calibration factor is averaged over the last 4 analysis and stored in memory.

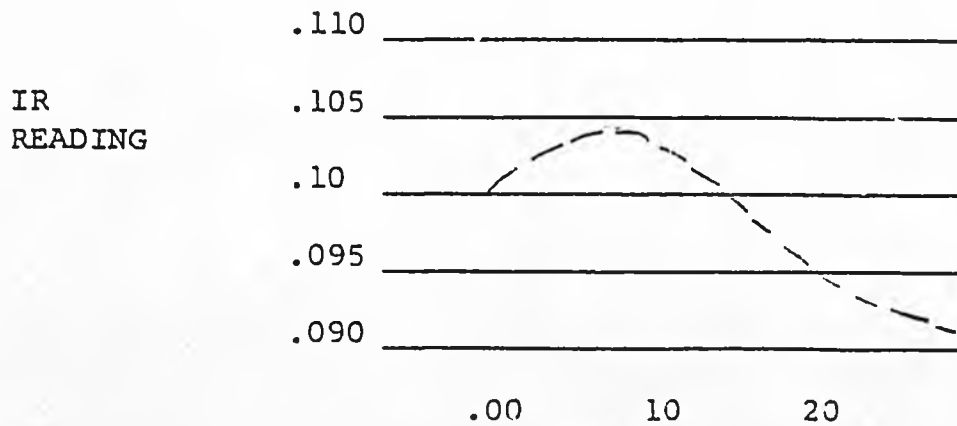
When the IR3000 is first programmed or after being in the factory mode, about 6 alcohol samples in the range of .08 to .25 gm% must be analyzed to calibrate the SC detector for acetone. Also 6 alcohol samples must be analyzed after each test where acetone is present.

Acetone standards can be prepared using the same formula as used for alcohol standards, ie 7.7 ML made up to 100 ML with distilled water. One ML of this stock solution made up to 500 CC will make a 10 MG% BAL acetone standard.

If checking the IR3000, a .10 gm% BAL alcohol standard with up to 2 ML (20 mg%) acetone stock can be used. At acetone levels of 30 mg% and higher, there is almost no chances of having alcohol present.

A more realistic test for these levels would be to prepare straight acetone standards. Acetone levels up to 60 mg% have been reported in the literature for diabetics.

The figure below shows a typical correction curve for acetone. Notice that the alcohol reading will increase slightly at low levels of acetone and then drop slightly at the higher levels of acetone.



mg% acetone in .10 gm% alcohol

SB 226, An act relating to training and licensing of drivers...

April 5, 1983

This section contains the backup information for SB 226 which includes:

1. a copy of the bill
2. a memo explaining the bill
3. a fiscal note from

STATE OF ALASKA
FISCAL NOTE

Revision Date _____, 1983

REQUEST

Bill/Resolution No.: SB - 226
 Title: ...Training...of drivers
 Sponsor: Sen. Fischer
 Requestor: Senate State Affairs

II. FISCAL DETAIL

Agency Affected: Education
 Program Category Affected: Elem. & Secondary
 B/J, Program of Subprogram(s) Affected: State Contract Programs

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC		1,250.9	1,325.9	1,405.5	1,489.8	1,579.2
TOTAL OPERATING		1,250.9	1,325.9	1,405.5	1,489.8	1,579.2
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		1,250.9	1,325.9	1,405.5	1,489.8	1,579.2
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME		0				
PART-TIME		0				
TEMPORARY		0				

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not provided by sponsor.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared By: Steve Hole
 Division: Management, Law, & Finance
 Approved by Commissioner: Marshall L. Lind
 Department: Education

Phone: 465-2865
 Date: _____
 Date: 4-8-83

Distribution:

Original to Legislative Finance
 Copy to Office of Management and Budget (for Legislature introduced bills)
 Copy to Department (for Governor introduced bills)
 Copy to Sponsor
 Copy to Requestor (if different from Sponsor)

3/8/83

I. REQUEST

Bill/Resolution No.: SB 226
 Title: Training & licensing of drivers
 Sponsor: Senator V. Fischer
 Requestor: Senate State Affairs

II. FISCAL DETAIL

Agency Affected: Public Safety
 Program Category Affected: Life & Prop.
 BRU, Program of Subprogram(s) Affected: Driver/Vehicle Services

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES	0	71.3	103.1	109.3	115.9	122.9
200 TRAVEL	0	1.0	2.0	2.1	2.2	2.3
300 CONTRACTUAL	0	39.4	22.4	25.3	28.1	29.8
400 COMMODITIES	0	.3	.3	.3	.4	.4
500 EQUIPMENT	0	5.1	0	0	0	0
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC						
TOTAL OPERATING	0	117.1	127.8	137.0	146.6	155.4
CAPITAL						
REVENUE	0	59.8	49.5	49.5	49.5	49.5

FUNDING: (Thousands of Dollars)

GENERAL FUND		117.1	127.8	137.0	146.6	155.4
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME	0	3	3	3	3	3
PART-TIME						
TEMPORARY		3				

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified by sponsor.

IV. ANALYSIS: Attach a separate page for any Analysis (2 pages attached)

Prepared By: Bill Brown Phone: 465-4335
 Division: Motor Vehicles Date: 4-6-83
 Approved by Commissioner: [Signature] Date: 4-6-83
 Department: Public Safety

Distribution:

- Original to Legislative Finance
- Copy to Office of Management and Budget (for Legislature introduced bills)
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- Copy to Sponsor
- Copy to Requestor (if different from Sponsor)

Fiscal note based on following:

1982 statistics: 2,622 16 year old licensed drivers
4,461 17 year old licensed drivers
5,932 18 year old licensed drivers

1980 statistics: 1,115 16 year old drivers received 1,596 citations
2,894 17 year old drivers had total of 4,333 citations

Therefore, approximately 7,000 16 and 17 year olds must obtain new provisional license by April 1, 1984.

500 16 year olds will have provisional license revoked and apply for Instruction Permit.

500 Reissuance of provisional license after three months.

1,000 17 year olds will have provisional license revoked and apply for Stage One license.

800 17 year olds will have Stage Two license reissued.

4,500 17 year olds with provisional license will obtain regular license at age 18 years, annually.

2,600 16 year olds will change from Stage One to Stage Two provisional license each year.

Detail: FY 84

100 Personal Services

1 - Document Processing Clerk II, 1/2 year	13.3	
1 - Motor Vehicle Rep. II, 1/2 year	14.1	
1 - Driver Improvement Specialist, 1/2 year	21.3	
3 - Motor Vehicle Rep II (Nonpermanent - 4 months)	22.6	
	TOTAL	71.3

200 Travel

Hearing Officers travel to various cities to conduct revocation hearings.	1.0	1.0
---------------------------------------------------------------------------	-----	-----

300 Contractual

310 - postage (All revocation notices and insurance cancellation notices must be sent via certified, return receipt mail at \$1.55 each)	2.4	
320 - advertising/publicity	10.0	
360 - equipment rental (2 AJIS terminals)	16.0	
380 - professional services (contract at \$.75 per drivers license issued)	9.0	

382a - DP Chargeback (programming and maintenance) 2.0

Total 39.4

400 Commodities

480 - Normal office supplies .3 .3

500 Equipment

3 typewriters 3.7

2 file cabinets .5

1 desk .4

3 chairs .5

Total 5.1

TOTAL 117.1

REVENUE

Revenue figure is based on assumption each different stage or class of license will require a \$5.00 fee per schedule outlined in AS 28.15.271. 11,950 licenses in FY84 = \$59.8. 9,900 licenses in FY85 = \$49.5.

GENERAL COMMENTS:

- A. AS 28.15.055(b) mentions Stage Two Provisional License if person has driver ed, and no citations within six months. If person has citation within six months is he then disqualified for license? Individual would not be eligible under proposed AS 28.15.055(a), as only 17 year olds without driver ed are mentioned. As written a 17 year old who has never been licensed before, and who has one moving violation, is not eligible for a provisional license if he has had driver ed, however, is eligible if he has not had driver ed.
- B. Question arises on AS 28.15.055(c) where it states "if the person is qualified". If an individual had a stage one provisional license revoked, and did not obtain an instruction permit as required by AS 28.15.213(c), would that person be qualified? Same with stage two and AS 28.15.213(d) - would that person be required to obtain a stage one first? Or once a person becomes 18 years of age, are all revocations of provisional licenses under AS 28.15.213 invalid?
- C. Question also arises on AS 28.15.055(a) where it indicates a holder of a provisional license has all the rights and privileges of a person with an "unrestricted" license, except hours. Does this possibly void any restriction we may impose for medical or other reasons? If AS 28.15.055(d) is the escape clause, it seems contradictory.

1.	POSITION TITLE Motor Vehicle Rep. II				RANGE/STEP 9B	BARG. UNIT GC	FORM 12 PAGE/LINE	GOV.	APPROV.	DISAPP.
2.	TYPE OF POSITION PFT	STAFF MONTHS 12	RP NUMBER	PCN NUMBER	BRU PRIORITY	LOCATION Anchorage	ELECTION DISTRICT 7-15	LEG.		
3.	CONTINUATION LEVEL				JUSTIFICATION					
4.	TYPE OF EXPENDITURE			AMOUNT						
	1		2		3					
	PERSONAL SERVICES									
5.	Salary		20,400							
6.	Benefits		3,582							
7.	Supplemental Benefits		1,251							
8.	Fixed Benefits		2,880							
9.	TOTAL PERSONAL SERVICES		01		28,113					
10.	Travel		02							
11.	Contractual		03							
12.	Commodities		04		100					
13.	Equipment		05		1,408					
14.	Other									
15.	TOTAL COST				29,621					
	RECEIPT CODE	FUNDING SOURCE								
16.		Federal Receipts 1002								
17.		G.F. Match 1003								
18.		General Funds 1004		29,621						
19.		I-A Receipts 1005								
20.		Program Receipts 1028								
21.		Other								
FOR B&M USE ONLY										
4A KEY NUMBER _____										

This position will work in the field office and be responsible to issue driver's licenses. It is estimated this bill will generate issuance of 9,900 additional licenses each year, plus an additional 7,000 required by Section 9 of the bill, for a total of 16,900 the first year. Approximately 50% of these will be in Anchorage.

Requested equipment breakdown is as follows:

Typewriter - \$1,245
 Chair - 163
 Total \$1,408

Prepared showing full year costs. Only 1/2 year reflected on fiscal note for FY84.

13 REQUEST FOR
NEW POSITION

AGENCY Department of Public Safety
 PROGRAM Life and Property Protection
 BRU Driver/Vehicle Services
 COMPONENT Field Services

FY 84

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 Revised Date _____

1.	POSITION TITLE Document Processing Clerk II				RANGE/STEP 8B	BARG. UNIT GG	FORM 12 PAGE/LINE	GOV.	APPROV.	DISAPP.
2.	TYPE OF POSITION PFT	STAFF MONTHS 12	RP NUMBER	PCN NUMBER	BRU PRIORITY	LOCATION Juneau	ELECTION DISTRICT 4	LEC.		
3.	CONTINUATION LEVEL				JUSTIFICATION					
4.	TYPE OF EXPENDITURE				AMOUNT					
	1		2		3					
	PERSONAL SERVICES									
5.	Salary		19,176							
6.	Benefits		3,367							
7.	Supplemental Benefits		1,175							
8.	Fixed Benefits		2,880							
9.	TOTAL PERSONAL SERVICES		01		26,598					
10.	Travel		02		-					
11.	Contractual		03		-					
12.	Commodities		04		100					
13.	Equipment		05		1,724					
14.	Other									
15.	TOTAL COST				28,422					
	RECEIPT CODE		FUNDING SOURCE							
16.			Federal Receipts 1002							
17.			G.F. Match 1003							
18.			General Funds 1004		28,422					
19.			I-A Receipts 1005							
20.			Program Receipts 1028							
21.			Other							

Will handle processing of paperwork related to revocations required by proposed AS 28.15.213. Will prepare and send out notices; handle certified copies for court and prosecutors; and maintain necessary files. Will also proof of insurance filings required by AS 28.20.240 after each revocation for a period of three years. It is estimated this bill will generate an additional 1,500 administrative revocations annually, which after three years will require proof of insurance be maintained on 4,500 individuals. Each time insurance is cancelled the individual must be sent a letter, or if not renewed, their license withdrawn.

Equipment breakdown is as follows:
 Typewriter - \$1,245
 File Cabinet - 291
 Chair - 188
 Total \$1,724

Prepared showing full year costs, Only 1/2 year reflected on fiscal note for FY84.

FOR B&M USE ONLY
4A KEY NUMBER

13 REQUEST FOR
NEW POSITION

AGENCY Department of Public Safety
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 BRU Driver/Vehicle Services
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1.	POSITION TITLE Driver Improvement Specialist				RANGE/STEP 16B	BARG. UNIT GG	FORM 12 PAGE/LINE	GOV.	APPROV.	DISAPP.
2.	TYPE OF POSITION PFT	STAFF MONTHS 12	RP NUMBER	PCN NUMBER	BRU PRIORITY	LOCATION Anchorage	ELECTION DISTRICT 7-15	LEG.		
3.	CONTINUATION LEVEL	ADDITION			JUSTIFICATION					
4.	TYPE OF EXPENDITURE			AMOUNT	<p>This position will be responsible to hold hearings under driver license administrative suspension programs. Each time a provisional license is revoked under proposed AS 28.15.213, the department must offer a hearing per AS 28.05.131. It is estimated this bill will generate an additional 1,500 administrative license actions annually. In addition to holding hearings would be responsible to maintain current records concerning the hearings.</p> <p>Travel is based on two trips to Fairbanks annually, two trips to Southeastern annually, and two trips to the Kenai Peninsula annually.</p> <p>Requested equipment breakdown is as follows: Typewriter - \$1,245 Desk - 426 File Cabinet - 235 Chair - 163 Total \$2,069</p> <p>Prepared showing full year costs. Only 1/2 year reflected on fiscal note for FY84.</p>					
	1	2	3							
	PERSONAL SERVICES									
5.	Salary	32,040								
6.	Benefits	5,626								
7.	Supplemental Benefits	1,964								
8.	Fixed Benefits	2,880								
9.	TOTAL PERSONAL SERVICES	01	42,510							
10.	Travel	02	1,900							
11.	Contractual	03								
12.	Commodities	04	100							
13.	Equipment	05	2,069							
14.	Other									
15.	TOTAL COST		46,579							
	RECEIPT CODE	FUNDING SOURCE								
16.		Federal Receipts 1002								
17.		G.F. Match 1003								
18.		General Funds 1004	46,579							
19.		I-A Receipts 1005								
20.		Program Receipts 1028								
21.		Other								
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4A KEY NUMBER										

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AGENCY Department of Public Safety
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1.	POSITION TITLE Motor Vehicle Rep. II				RANGE/STEP 9A	BAR. UNIT GG	FORM 12 PAGE/LINE	GOV.	APPROV.	DISAPP.
2.	TYPE OF POSITION NON PERM	STAFF MONTHS 4	RP NUMBER	PCN NUMBER	BRU PRIORITY	LOCATION Fairbanks	ELECTION DISTRICT 18-21	LEG.		
3.	CONTINUATION LEVEL				JUSTIFICATION					
4.	TYPE OF EXPENDITURE			AMOUNT	<p>This position will work in the field office and be responsible to issue driver's licenses during the start up period when all 16 and 17 year olds must obtain a different license.</p>					
	1	2	3							
	PERSONAL SERVICES									
5.	Salary	7,448								
6.	Benefits	725								
7.	Supplemental Benefits									
8.	Fixed Benefits									
9.	TOTAL PERSONAL SERVICES	01	8,173							
10.	Travel	02								
11.	Contractual	03								
12.	Commodities	04								
13.	Equipment	05								
14.	Other									
15.	TOTAL COST									
	RECEIPT CODE	FUNDING SOURCE								
16.		Federal Receipts	1002							
17.		G.F. Match	1003							
18.		General Funds	1004	8,173						
19.		I-A Receipts	1005							
20.		Program Receipts	1028							
21.		Other								
FOR B&M USE ONLY										
4A KEY NUMBER _____										

13 REQUEST FOR
NEW POSITION

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1.	POSITION TITLE Motor Vehicle Rep. II			RANGE/STEP 9A	BARC. UNIT GG	FORM PAGE/LINE	GOV.	APPROV.	DISAPP.
2.	TYPE OF POSITION NON PERM	STAFF MONTHS 4	RP NUMBER	PCN NUMBER	BRU PRIORITY	LOCATION Anchorage	ELECTION DISTRICT 7-15	LEG.	
3.	CONTINUATION LEVEL			ADDITION	JUSTIFICATION				
4.	TYPE OF EXPENDITURE			AMOUNT					
	1	2	3						
	PERSONAL SERVICES								
5.	Salary	6,596							
6.	Benefits	642							
7.	Supplemental Benefits								
8.	Fixed Benefits								
9.	TOTAL PERSONAL SERVICES	01	7,238						
10.	Travel	02							
11.	Contractual	03							
12.	Commodities	04							
13.	Equipment	05							
14.	Other								
15.	TOTAL COST								
	RECEIPT CODE	FUNDING SOURCE							
16.		Federal Receipts	1002						
17.		G.F. Match	1003						
18.		General Funds	1004	7,238					
19.		I-A Receipts	1005						
20.		Program Receipts	1028						
21.		Other							
FOR B&M USE ONLY 4A KEY NUMBER _____									

This position will work in the field office and be responsible to issue driver's licenses during the start up period when all 16 and 17 year olds must obtain a different license.

13 REQUEST FOR
NEW POSITION

AGENCY Department of Public Safety
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1.	POSITION TITLE Motor Vehicle Rep. II				RANGE/STEP 9A	BARG. UNIT GG	FORM 12 PAGE/LINE	GOV.	APPROV.	DISAPP.		
2.	TYPE OF POSITION NON PERM	STAFF MONTHS 4	RP NUMBER	PCN NUMBER	BRU PRIORITY	LOCATION Anchorage	ELECTION DISTRICT 7-15	LEG.				
3.	CONTINUATION LEVEL				JUSTIFICATION							
4.	TYPE OF EXPENDITURE				<p>This position will work in the field office and be responsible to issue driver's licenses during the start up period when all 16 and 17 year olds must obtain a different license.</p>							
	1		2								3	
	PERSONAL SERVICES											
5.	Salary		6,596									
6.	Benefits		642									
7.	Supplemental Benefits											
8.	Fixed Benefits											
9.	TOTAL PERSONAL SERVICES		01								7,238	
10.	Travel		02									
11.	Contractual		03									
12.	Commodities		04									
13.	Equipment		05									
14.	Other											
15.	TOTAL COST											
	RECEIPT CODE		FUNDING SOURCE									
16.			Federal Receipts 1002									
17.			G.F. Match 1003									
18.			General Funds 1004		7,238							
19.			I-A Receipts 1005									
20.			Program Receipts 1028									
21.			Other									
FOR B&M USE ONLY 4A KEY NUMBER _____												

13 REQUEST FOR
NEW POSITION

AGENCY Department of Public Safety
PROGRAM Life and Property Protection
BRU Driver/Vehicle Services
COMPONENT Field Services

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Revised Date _____

FY 84

REQUEST

Bill/Resolution No.: SB - 226
 Title: ...Training...of drivers
 Sponsor: Sen. Fischer
 Requestor: Senate State Affairs

II. FISCAL DETAIL

Agency Affected: Education
 Program Category Affected: Elem. & Secondary
 BRU, Program of Subprogram(s) Affected: State Contract Programs

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC		1,250.9	1,325.9	1,405.5	1,489.8	1,579.2
TOTAL OPERATING		1,250.9	1,325.9	1,405.5	1,489.8	1,579.2

CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND		1,250.9	1,325.9	1,405.5	1,489.8	1,579.2
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME		0				
PART-TIME		0				
TEMPORARY		0				

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not provided by sponsor.

IV. ANALYSIS: Attach - separate page for any Analysis

Prepared By: Steve Hole
 Division: Management, Law, & Finance
 Approved by Commissioner: Marshall L. Lind
 Department: Education

Phone: 465-2865
 Date: _____
 Date: 4-9-83

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- Copy to Sponsor
- Copy to Requestor (if different from Sponsor)

PROJECTED COST OF A HIGH SCHOOL DRIVER EDUCATION PROGRAM 1983-84

For 1982-83 school year, there are 19,311 students enrolled in grades 10-12.

A realistic percentage would be 25-28% enrollment in driver education for any given school year. The 1982-83 percentage of enrollment in schools offering the program is 23.7 %.

28% of 19,311 students would be 5407 students per year.

The average salary for a secondary school teacher for 1982-83 school year is \$35,103. Based on 180 days worked, this is \$195.02 per day. The average hourly rate, based on a 6-hour day, would be \$32.50.

The average gasoline consumption per student is 6 gallons. Based on an estimated cost of \$1.80 per gallon, this would amount to \$10.80 per student.

Vehicle cost: Based on an initial cost of \$9000 with a 5-year life-expectancy, the yearly cost would be \$1800. With a usage of 90 students per year, the cost per student would be \$20.00.

COST ANALYSIS:

Teachers' salaries for 5407 students for 6 hours Behind-the-wheel training @ \$32.50 per hour:	\$1,654,365
Gasoline costs for 5407 students: 6 gallons per student @ \$1.80	58,396
Vehicle costs for 5407 students @ \$20.00 per student:	108,140
In-Service Training Workshops for new Driver Education Teachers:	<u>30,000</u>
	\$1,250,901

Post FY 84 inflated 6% per annum.

Assumptions and Considerations:

1. The present Department of Education requirements for an approved program must be met in order for a school to participate in the program. See Exhibit A. The minimum legal licensing age is 16 years. Driver education should be offered at the earliest age possible so the student can learn the correct habits and skills at the onset. If students are legally driving and then take driver education, some bad habits have to be changed.
2. A flat reimbursement rate for each student completing a DOE approved program will be used.
3. Many of the schools that do not plan to offer a driver education program for the 1983-84 school year could not do so even if funding beyond the foundation program were available. They do not have teachers trained in driver education, nor vehicles, and could not get them in time. Many curricula for the 1983-84 school year will be established by the end of May, 1983.
4. The classroom portion of the program (minimum of 30 hours) will be funded through the present foundation program.
5. No consideration is given to increased teachers salaries, cost of living, etc. for succeeding years. Student enrollment will remain constant or decline slightly.
6. Many schools will be able to secure dealer loan cars at no or low cost for the program. Most of the schools with programs already own their vehicles. Some of the schools that would be adding driver education own vehicles that could be used in the program.
7. No consideration is given to fringe benefits for teachers or indirect costs.
8. Few foundation increases will be realized by the school because if the students were not in driver education (behind-the-wheel training), they would have to be somewhere with a teacher funded through regular sources.
9. Teaching time is based on a 6 period per day schedule.
10. No repair, maintenance or insurance costs are considered as these amounts would probably be covered by the proposed gasoline and vehicle costs as shown in the analysis section.
11. No salvage value is considered for vehicles after 5th year, although there would be a fair value.
12. Some of the smaller high schools will continue to offer driver education every other year or only one semester per year as an economy measure.

13. Due to the lack of trained teachers and lead time in scheduling, it is estimated that a maximum of 4,000 students would complete a driver education course for the 1983-84 school year. This is based on school size and past program experience. There would be a maximum of 26 new programs offered. If the same percentage of present driver education enrollment were to hold true statewide for total enrollment in grades 10-12, there would be 4584 students enrolled.
14. Driver education programs would not likely be conducted in communities where there are no roads nor in the very small high schools, especially one teacher schools and those with fewer than 15-20 students because it is not economically feasible.

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF PUBLIC SAFETY
OFFICE OF THE COMMISSIONER

POUCH N
JUNEAU, ALASKA 99811
PHONE: 465-4322

April 7, 1983

The Honorable Vic Fischer
Chairman, Senate State Affairs
Alaska State Senate
Pouch V
Juneau, Alaska 99811

Dear Senator Fischer:

This is in reply to your request for a departmental position paper on SB-226 entitled "An Act relating to the training and licensing of drivers; and providing for an effective date".

Percentage wise, the youthful driver is involved in more motor vehicle traffic accidents than older/experienced drivers. I do not have any figures which would reflect whether or not midnight to 5 a.m. is a high accident period for 16 and 17 year old drivers, however, I doubt that it is. Therefore, at this time I am maintaining a neutral position on SB 226. It would be quite burdensome to the young driver and to administer, while the curfew would probably have little effect on the overall accident rate.

Under SB-226 licenses in possession of 16 and 17 year olds will become invalid April 1, 1984. This will require reissuance of approximately 7,000 licenses in a short time frame. We estimate an increase of an additional 9,900 licenses to be issued per year due to age change, and/or receipt of citations for moving violations. We also anticipate a large increase in license revocations and hearings, plus factors which are a result thereof, such as requirement to show proof of insurance for three years after a license revocation as required by AS 28.20.240.

Sincerely,


Robert J. Sundberg
Commissioner

ALASKA STATE LEGISLATURE

SENATE STATE AFFAIRS COMMITTEE

SENATOR VIC FISCHER, CHAIRMAN

POUCH V, JUNEAU 99811

(907) 465-4954



April 5, 1983
Senate State Affairs Committee
Prepared by Suzanne Tryck

SECTIONAL ANALYSIS SB 226

- Section 1; provides for a driver's education program in each high school.
- Section 2; provides for a section in the DMV driver's manual on alcohol and driving.
- Section 3; is a technical section adding to the list of other classified licenses the youth provisional licenses.
- Section 4; provides a curfew preventing persons with only driving permits from driving between the hours of 12 midnight and 5:00am daily, and between 9:00pm and midnight on Friday and Saturday evenings.
- Section 5; (a) provides a stage one provisional license for licensed drivers age 16, and for 17 year old drivers who have not had driver's education. Those holding this stage one provisional license will not be able to drive between the hours of 12 midnight and 5:00 am unless:
1. accompanied by a parent, guardian or spouse 18 years or older who has held a valid driver's license for a year.
 2. traveling to or from work, or in the course of employment, and in the possession of a signed affidavit from their employer.
- (b) provides a stage 2 provisional license for those age 17 who have successfully completed the high school driver's education course, and who have had no moving violations, DWIs, or breath test refusals for 6 months prior to applying for the Stage 2 provisional license.
- (c) states persons age 18 or older are eligible for an unrestricted and unlimited license if qualified under current statute.

MEMORANDUM

TO: State Affairs Committee Members

FROM: Suzanne Tryck, Staffperson to
Senator Vic Fischer

RE: SB 226, An act relating to the training and licensing of
drivers

DATE: 03/31/83

This bill:

1) prohibits those automobile drivers with learning permits (as opposed to licenses) from driving between the hours of 9pm and midnight on Friday and Saturday, and prohibit them from driving between midnight and 5am every morning.

2) provides in the state driver's manual a more substantial section on the dangers of combining driving and alcohol-- including a portion on how to recognize an intoxicated driver, and create a corresponding section in the written examination.

3) creates a Stage 1 provisional driver's license--

- this license applies to 16 year old persons, and to those who are 17 years old who have not had driver's education.
- persons with this license would be prohibited from driving between the hours of midnight and 5am unless accompanied by a parent or a spouse 18 years of age or older, or unless traveling to or from work or in the course of employment with a signed affidavit in hand from the employer.
- two moving violations, 1 DWI, or driving in violation of the curfew would result in the revocation of this license, but would allow them to apply for a learner's permit.

4) creates a Stage 2 Provisional driver's license --

- this license would apply to 17 year olds who have passed driver's education.

--to qualify for this license a 17 year old must have 6 consecutive months prior to application with no moving violations, and no DWIs or curfew violations.

--a moving violation, a DWI, or a curfew violation results in the revocation of the Stage 2 provisional license. The person would, however, be able to apply for a stage 1 provisional license.

--this Stage 2 provisional license would not have any driving curfew.

- 5) When an Alaskan resident reaches the age of 18--regardless of which type of provisional license or permit they have-- they become eligible for an unrestricted and unlimited driver's license unless ineligible by some other statute.

--traffic violations obtained with a permit, stage 1 provisional license, or a stage 2 provisional license shall be applied to the unrestricted and unlimited in compliance with current Alaska law when that license is obtained on or after their 18th birthday.

- 6) provides an effective date of January 1, 1984

--those who receive their driver's licenses before January 1, 1984 would have a three month period in which to obtain the appropriate license after the effective date of the bill before their license automatically expires.

- 7) in accordance with this bill, driver's education courses on the combination of alcohol and driving an automobile must be available to all persons under 18 through the high school curriculum.

CURFEW LICENSES FOR YOUNG DRIVERS

April 5, 1983

This section contains:

1. a newspaper article on curfews for teen drivers
2. a report called, "Restrictions on Teenage Drivers."
3. a report called, "The Effect of Curfew Laws on Motor Vehicle Crashes."

Mindy Thursday, January 20, 1983

THE CHRISTIAN SCIENCE

INDIANA

USA Today

1/26/83

More states consider curfews for teen drivers

One study shows that such measures 'substantially' reduce number of crashes

By George B. Merry

Staff writer of The Christian Science Monitor
Boston

Putting the brakes on nighttime driving by teen-agers is a road-safety idea whose time may have finally come — or at least is on the way.

Proposals to restrict the use of motor vehicles by youths to daytime and early evening hours are expected to surface in several states in the next few years, if not months, according to those close to the scene. Such laws are in force in 12 states.

Lawmaker interest in some type of curfew legislation appears to have been spurred by the somewhat startling results of a study, involving crashes by 16-year-old motorists, released last fall by the Insurance Institute for Highway Safety (IIHS).

The analysis comparing the nighttime road-accident records in four of the states with some kind of partial driving ban on youths, concludes that such measures "substantially reduce" the number of crashes.

In Pennsylvania, for example, the researchers project that the more than decade-old curfew law there contributed to 69 percent fewer vehicle accidents during curfew hours than otherwise might be the case, based on crashes by 16-year-old drivers in neighboring Ohio, where there is no such restriction.

The study similarly estimates that such measures in New York has helped hold down night crashes by 62 percent. For Maryland and Louisiana, the other two curfew states studied, there were 40 and 25 percent fewer road accidents respectively during the driving restriction hours.

In Maryland, where the comparison in-

volved the average crash rate involving 16-year-olds between 1974 and 1978 (when the law was enacted) and 1979 and 1980, the annual number of crashes dropped by 338.

While declining to speculate how passage of such laws in other states might boost highway safety, William Haddon Jr. MD, president of the IIHS, views these curfews as a significant "way to put a dent in drunk driving and crashes by teen-agers."

He and other boosters of strong laws warn that having one on the books is only a partial step: To be effective it must be followed by rigid enforcement.

Many of the present measures, most of which are more than a decade old, "are very weak" Dr. Haddon asserts. Even the toughest measures include exceptions. For example, young drivers are often permitted to drive during the curfew hours if on the way to or from work or school.

Curfew hours vary widely from state to state. It is 9 p.m. to 5 a.m. in New York, 11 p.m. to 5 a.m. in Louisiana, midnight to 5 a.m. in Pennsylvania; and 1 a.m. to 6 a.m. in Maryland.

Some foes say curfews would not be necessary if the minimum drinking age is raised and enforced, since the lion's share of youth-involved traffic accidents are liquor related. Others suggest that restricting the hours a teen-ager can drive is unfair to young people who are responsible when they get behind the wheel.

Backers of curfew legislation, however, cite National Safety Council statistics which show that teen-agers, who comprise 8 percent of the licensed drivers, account for 21 percent of the traffic accidents.

Besides Louisiana, Maryland, New York, and Pennsylvania, states with some sort of driving hour restrictions for youths include Illinois, Indiana, Massachusetts, Michigan, South Carolina, South Dakota, Wisconsin, and Wyoming.

Indianapolis — A driving curfew for teen-agers was approved by a state Senate panel. The bill would prohibit 16- and 17-year-olds from driving midnight-5 a.m. unless driving to or from work or in an emergency. ... Hundreds of officers attend.

RAISING THE DRINKING AGE

April 7, 1983

This section contains:

1. a memo from the Arizona Legislative Council
2. a memo to Rep. Barnes on dispensing alcohol to minors
3. a fact sheet on the drinking age
4. an article titled, "Impact of Legislation Raising the Drinking Age..."
5. a number of newspaper articles on raising the drinking age



ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

South Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

April 2, 1982

MEMORANDUM

TO: Representative Ramona Barnes

FROM: Felicity Watt, Research Staff *FW*

RE: Dispensing Alcohol to Minors
Research Request No. 82-80

Dave Stancliff of your office recently asked us to survey other states' laws as they pertain to dispensing alcohol to minors. He noted that you are particularly interested in those states that have harsher penalties than Alaska's. To obtain information on this subject we contacted six national alcoholic beverage organizations, three university research groups, and five alcoholism and drug abuse agencies in Alaska and the Alcohol Beverage Control Board. Jody Buckley of the Distilled Spirits Council of the United States provided us with much of the information that specifically addresses this request. For your information, the attached appendix includes a list of the addresses and telephone numbers of the organizations we contacted.

Alaska Law

Furnishing alcohol to minors. The legal minimum drinking age in Alaska is 19. Furnishing alcohol to minors is addressed in AS 04.16.052 which states that licensees (bar or package store owners) are prohibited from allowing another person to sell, barter, or give an alcoholic beverage to a person under 19. Licensees are also prohibited on their licensed premises from allowing any person under 19 to enter and remain on the premises, or to consume an alcoholic beverage, or to sell or serve alcoholic beverages.

The offense of ordering an alcoholic beverage for the purpose of furnishing it to a minor is addressed in AS 04.16.060, which also prohibits a person from misrepresenting that another person is over 19 years of age for the purposes of obtaining entrance to a licensed premise, or to pretend to have obtained parental consent to escort a person under 19 years of age.

A person who furnishes an alcoholic beverage to a minor is considered guilty of the offense of contributing to the delinquency of that minor. AS 11.51.130, which addresses contributing to the delinquency of a minor who is under 18 years of age, includes a prohibition against aiding, inducing or encouraging a minor to violate a State law.

The penalties for dispensing alcohol to minors in these eight states are listed below.

CONNECTICUT (CT Law, Sec. 30-86 & 30-113)

fine of not more than \$1,000 or imprisonment for not more than one year or both

MARYLAND (MD Law, Sec. 118 & 200)

fine of not more than \$1,000 or imprisonment for not more than 2 years in the House of Correction, or jail, or both fine and imprisonment

MISSOURI (MO Law, Sec. 311.310 & 311.760)

fine of not less than \$100, nor more than \$1,000, or imprisonment in the county jail for not less than 30 days or more than 1 year; or by both fine and imprisonment

MONTANA (Mo Code Annotated 16.06.305)

fine not to exceed \$1,500 and imprisonment for up to one year

NORTH DAKOTA (ND Law, Title 5, Chap 5-01, Sec.5-01-09)

fine of up to \$1,000 or imprisonment for not more than one year or both.

TEXAS (TX Law, Chap 106, Sec. 106.03)

fine of not less than \$500 or confinement in jail for not more than one year, or both.

VERMONT (VT Law, Chap 21, Sec. 658)

fine of not more than \$200 or imprisonment for not more than one year.

VIRGINIA (VA Law, Title 3.1, Chap 20, Sec. 4-62 & 4.92)

fine not exceeding \$500 or confinement in jail not exceeding 12 months, or both in the discretion of the jury or trial justice or the court trying the case without a jury.

In our conversations with state legal counsel in both North Dakota and

debate, usually centering on the public health consequences of different minimum drinking ages. We spoke with Alexander Wagenaar of the Highway Safety Research Institute at the University of Michigan, who had compiled the most recent information we have found on the legal minimum drinking ages of the states. Table 1, showing each state's minimum legal drinking age, is attached in the appendix.

Thirty states, including Alaska, lowered their legal minimum drinking age as part of a nationwide trend in the 1970's to lower the age of majority. However, between 1976 and 1981, fifteen of those thirty states reversed their previous actions and raised their minimum drinking ages (although not necessarily to the same ages as before). These fifteen states are shown in Table 2 of the appendix.

=====

Mr. Garrity, of the legal division of the Montana Department of Revenue, suggested that we make a written request to his office for more information regarding his state's laws. We would be happy to make such a request of Montana and other states if you wish. If you have any questions or we can be of further assistance, please do not hesitate to contact us.

FW/bf
Attachments: Appendix A

TABLE 1
Current Drinking Ages in All States

STATE	Beer		Wine		Distilled Spirits
	3.2% or Less Alcohol	Over 3.2% Alcohol	Light	Fortified	
Alabama	19	19	19	19	19
Alaska	19	19	19	19	19
Arizona	19	19	19	19	19
Arkansas	21	21	21	21	21
California	21	21	21	21	21
Colorado	18	21	21	21	21
Connecticut	18	18	18	18	18
Delaware	20	20	20	20	20
District of Columbia	18	18	18	21	21
Florida	19	19	19	19	19
Georgia	19	19	19	19	19
Hawaii	18	18	18	18	18
Idaho	19	19	19	19	19
Illinois	21	21	21	21	21
Indiana	21	21	21	21	21
Iowa	19	19	19	19	19
Kansas	18	21	21	21	21
Kentucky	21	21	21	21	21
Louisiana	18	18	18	18	18
Maine	20	20	20	20	20
Maryland	18 ^e	18	18	21	21
Massachusetts	20	20	20	20	20
Michigan	21	21	21	21	21
Minnesota	19	19	19	19	19
Mississippi	18 ^a	21	18 ^a	21	21
Missouri	21	21	21	21	21
Montana	19	19	19	19	19
Nebraska	20	20	20	20	20
Nevada	21	21	21	21	21
New Hampshire	20	20	20	20	20
New Jersey	19	19	19	19	19
New Mexico	21	21	21	21	21
New York	18	18	18	18	18
North Carolina	18	18	18	21	21
North Dakota	21	21	21	21	21
Ohio	18	21	21	21	21
Oklahoma	18 ^b	21	21	21	21
Oregon	21	21	21	21	21
Pennsylvania	21	21	21	21	21
Rhode Island	20	20	20	20	20
South Carolina	18	18	18	18	21
South Dakota	18	21	21	21	21
Tennessee	19	19	19	19	19
Texas	19	18	18	18	18
Utah	21	21	21	21	21
Vermont	18	18	18	18	18
Virginia	18 ^c	18 ^c	21	21	21
Washington	21	21	21	21	21
West Virginia	18	18 ^d	18	18	18
Wisconsin	18	18	18	18	18
Wyoming	19	19	19	19	19

Source: Alexander Wanegaar, Highway Research Institute (April 1982).

TABLE 2
States That Have Raised Their Drinking Age
Since 1976

Florida.....	18 to 19 - all beverages	10/80
Georgia.....	18 to 19 - all beverages	9/80
Illinois.....	19 to 21 - beer and wine only	1/80
Iowa.....	18 to 19 - all beverages	7/78
Maine.....	18 to 20 - all beverages	10/77
Massachusetts.....	18 to 20 - all beverages	4/79
Michigan.....	18 to 21 - all beverages	12/78
Minnesota.....	18 to 19 - all beverages	9/76
Montana.....	18 to 19 - all beverages	1/79
Nebraska.....	19 to 20 - all beverages	5/80
New Hampshire.....	18 to 20 - all beverages	5/79
New Jersey.....	18 to 19 - all beverages	1/80
Rhode Island.....	18 to 19 - all beverages	7/80
Rhode Island.....	19 to 20 - all beverages	7/81
Tennessee.....	18 to 19 - all beverages	6/79
Texas.....	18 to 19 - all beverages	9/81
Virginia.....	18 to 19 - off-premises beer only	7/81



Impact of Legislation Raising the Legal Drinking Age in Massachusetts from 18 to 20

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ALLAN MEYERS, PhD, LEONARD GLANTZ, JD, TIMOTHY HEEREN, MS, NAN LIN, PhD,
MARC MUCATEL, MA, AND GLENN PIERCE, MS

Abstract: On April 16, 1979, Massachusetts raised its legal drinking age from 18 to 20 years. Massachusetts was compared with New York State, exclusive of New York City and Nassau County. New York State retained an 18-year-old drinking age. Random telephone surveys with approximately 1,000 16-19 year olds in each state were undertaken prior to the law's enactment and twice at yearly intervals after the law to assess the law's impact on teenage drinking, driving after drinking, and non-fatal accident involvement. Fatal crash data reported to the US Department of Transportation by each state from April 16, 1976-April 15, 1981 were also analyzed. After the law, although the modes of procuring alcohol changed. No significant changes were observed in Massachusetts relative

to New York in the proportion of surveyed teenagers who reported that they drank or in the volume of their consumption. The proportion of teenagers who drove after drinking heavily (six or more drinks at one time) did not decline in Massachusetts relative to New York. However, the frequency that teenagers reported driving after any drinking declined significantly in Massachusetts. Frequency of teenage driving after marijuana use and non-fatal teenage accidents declined at comparable rates in both states. The numbers of teenage nighttime single vehicle fatal accidents declined more in Massachusetts than New York, in the 18-19 year age group. Overall fatal accident trends among 16-19 year olds in the two states were similar. (*Am J Public Health* 1983; 73:163-170.)

Introduction

From 1970 to 1975 at least one-half of the states, including Massachusetts, passed laws which lowered their legal drinking age.¹ When Massachusetts also lowered its drinking age from 21 to 18 years of age in 1973, lively public debate arose about whether this change increased the likelihood of teenagers being involved in fatal accidents.

Studies in other states²⁻⁵ lowering their drinking ages have suggested that reductions in the legal drinking age produced increases in the 18-20 year old fatal traffic accident rates. However, research results on the impact of lowering the drinking age in Massachusetts have been contradictory.⁶⁻⁹ None of these studies compared Massachusetts with control states that did not lower their drinking ages.

Between 1976 and 1981, 16 states reversed the prior

trend by raising their legal drinking ages. Massachusetts did so effective April 16, 1979.

An analysis comparing nine states which raised their legal drinking ages to states whose statutes were not changed has concluded that states which raise their drinking age can expect a 28 per cent reduction in nighttime fatal accidents among drivers targeted by such changes.¹⁰ In Massachusetts state officials reported 39 per cent fewer teenage alcohol-related fatal accidents in 1980 compared to 1978.¹¹ However, no comparison was made to a state where the drinking age was not changed. Consequently, other factors which may be responsible for declines were not considered, e.g., reduced driving because of gasoline price increases and shortages, changes in the types of vehicles driven, or enforcement of other traffic safety laws.

This paper examines the impact of raising the drinking age in Massachusetts during the initial two years after enactment.

Methods and Materials

Data from Massachusetts are compared with those from New York State, exclusive of New York City and Nassau County. In New York State, the legal drinking age remained at 18. New York City and Nassau County were excluded

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TABLE 1—Response Rates in Random Digit Dialing Telephone Surveys of Teenagers in Legal Drinking Age Study

	Massachusetts			New York		
	Before	After		Before	After	
	(1979)	(1980)	(1981)	(1979)	(1980)	(1981)
Completed Interviews (N)	1023	1006	976	984	1007	999
Response Rate (%)	80	87	84	83	82	85
Non-Interview						
Refusals (%)	9	6	7	3	3	3
Never Contacted Households (%)	8	5	3	11	12	9
Other Reasons (%)	3	2	6	3	3	3

NOTE: "Before" and "After" refer to Massachusetts raising its legal drinking age from 18 to 20 years

because of differences in urban density and age of driving licensure. At the time Massachusetts raised its legal drinking age from 18 to 20, the two states had similar laws regarding age of driving licensure and penalties for driving while intoxicated (see Appendix). Being contiguous, the two states also have roughly similar weather patterns.

An anonymous random digit dialing telephone survey of approximately 1,000 16-19 years olds was conducted in Massachusetts prior to enactment of the law on April 16, 1979. Teenagers were asked about their personal characteristics, drinking practices, procurement of alcohol, use of psychoactive drugs, driving after drinking, and non-fatal accident involvement. A similar survey was conducted in Upstate New York during April and May of 1979. Twice at

yearly intervals following the law, these surveys were repeated in each state using the same sampling approach. Interviews were attempted with all eligible teenagers in each household contacted. Table 1 indicates response rates in the six surveys. The demographic characteristics and driving practices of respondents in each state were remarkably similar before and after passage of the law (Table 2).

The survey samples were large enough that there would be only a 1 in 100 chance of failing to detect a 10 per cent post law reduction in the numbers of Massachusetts teenagers who drove after drinking and only a 1 in 5 chance of failing to detect a statewide reduction of 4 non-fatal accidents per 100 drivers in Massachusetts relative to New York.

Log-linear analysis was used on the survey data to test

TABLE 2—Comparison of Respondent Demographic Characteristics in Massachusetts and New York Surveys 1979-1981

Demographics	Massachusetts			New York		
	Before	After		Before	After	
	(1979) (N = 1023)	(1980) (N = 1006)	(1981) (N = 976)	(1979) (N = 984)	(1980) (N = 1007)	(1981) (N = 999)
	%	%	%	%	%	%
Age 16	25	27	28	31	32	30
17	30	29	31	29	26	26
18	23	25	22	23	22	23
19	21	19	19	17	20	21
Sex—Male	52	51	49	48	51	51
Student	81	79	82	81	76	83
Licensed	81	78	79	81	78	79
Married	3	3	1	2	2	2
Drove Last Year						
Car	87	85	86	87	84	85
Truck	19	23	20	30	30	30
Motorcycle	18	19	17	21	20	19
Miles Driven						
None	17	20	18	17	20	20
100	36	30	31	34	31	34
100-500	29	33	33	32	33	29
500+	19	17	14	17	16	16
Condition of Car						
Poor-Fair	18	20	18	18	19	19

Handwritten signature or initials

TABLE 3—Teenage Reported Drinking and Alcohol Procurement, Legal Drinking Age Study

	Massachusetts			New York		
	Before	After		Before	After	
	(1979) (N = 1023)	(1980) (N = 1006)	(1981) (N = 976)	(1979) (N = 984)	(1980) (N = 1007)	(1981) (N = 999)
Average Drinks Daily	%	%	%	%	%	%
None	7	10	7	9	9	9
.01-.99	59	61	64	61	63	62
1-1.99	10	10	8	11	10	9
2-2.99	13	10	11	10	10	10
3-3.99	4	4	4	4	3	4
4-4.99	2	2	2	2	2	2
5+	5	4	5	4	4	4
Where Most Often Obtains Alcohol						
Liquor Store/Grocery*	44	31	27	31	29	30
Bars-Clubs-Restaurants*	19	7	6	23	22	22
Home‡	7	12	11	12	11	11
Others Buy*	21	39	43	19	23	20
Parties-Friends' Homes	9	10	12	15	15	18
Drank Last Month 5+ Times						
Parties‡	15	13	18	11	12	11
Car	18	17	18	14	16	14
Bar	21	9	7	20	18	20
For those who drank in past year						
Bought liquor last month*	50	30	24	43	40	43
Has Fake ID	7	8	7	8	7	8
Never Asked Age at Liquor Store/Attempted to Purchase Liquor	27	35	35	33	32	28

*p < .01

‡p < .05

(Testing the hypothesis that reductions were greater in Massachusetts than New York after the law.)

whether the law had any impact on the dependent variables in Tables 3, 4, and 5. The analysis compares Massachusetts to New York with respect to changes in the dependent variable, say driving after drinking, from the pre-law survey

to the post-law surveys, adjusting for possible initial differences between the states on the dependent variable. Relations are cited as significant if p < .05.

In addition, data from the US Department of Transport-

TABLE 4—Respondents Who Drive After Drinking or Drug Use in the Last Month, Legal Drinking Age Study

	Massachusetts			New York		
	Before	After		Before	After	
	(1979) (N = 843)	(1980) (N = 809)	(1981) (N = 795)	(1979) (N = 817)	(1980) (N = 799)	(1981) (N = 791)
Any Drinking*	51	42	40	39	39	41
Drinking 6+ drinks at one time**	11	12	11	8	8	10
Smoking Marijuana	29	25	21	20	18	18
Drinking and Smoking Marijuana	18	15	12	13	11	10
Using Other Psychoactive Drugs	6	6	4	3	4	4
Drinking and Using Other Psychoactive Drugs	4	4	3	2	3	3

*p < .01

**refers to the most recent occasion teenagers drove after drinking.

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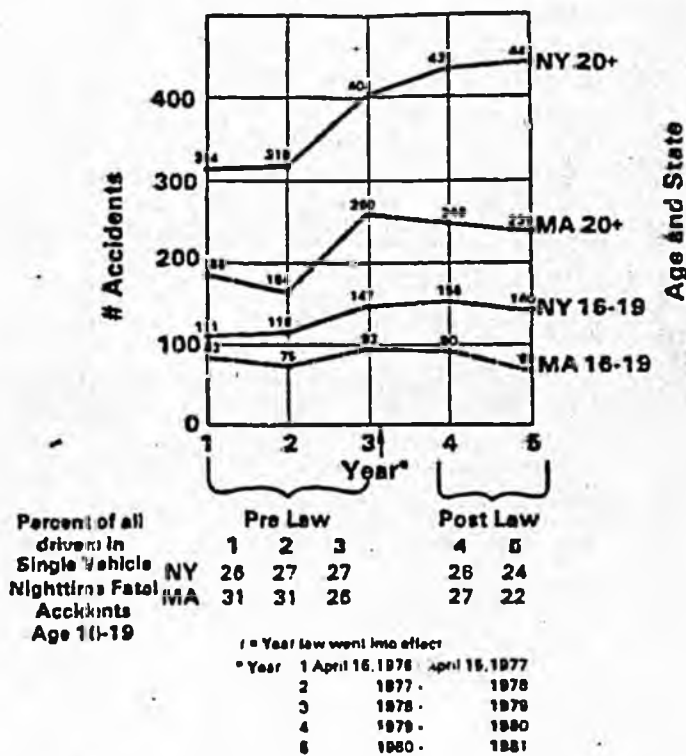


FIGURE 1—Single Vehicle Nighttime Fatal Accidents According to Age of Driver, State, and Year

Massachusetts teenagers said someone had purchased liquor for them in the previous month; two-thirds of these purchasers were over age 20 (not shown in Table).

The average daily consumption of alcohol in the 16-19 year old age group during the two years after the law did not decline in Massachusetts compared to New York. Nor did teenagers report shifts to the use of other psychoactive drugs. Consistent with trends nationwide, both states experienced significant reductions in the use of marijuana (not shown in Table).

Table 4 indicates the proportion of respondents who drove after drinking, psychoactive drug use, or drinking and drug use in combination during the month preceding the interview. After the law, the proportion of teenagers who reported driving after drinking heavily (six or more drinks) did not decline in either state. However, the frequency that teenagers reported they drove after any drinking declined significantly more in Massachusetts. Both states experienced comparable declines in the percentages of teenagers who drove after marijuana use.

In both states, the incidence of non-fatal accidents reported by 16-19 year old drivers dropped after the law (Table 5).^{*} The decrease was not significantly greater in Massachusetts compared to Upstate New York.

Prior to the enactment of the law, some legislators indicated doubts about whether the law would reduce drink-

^{*}Rates of accidents reported by respondents who drove motor vehicles during the year preceding the surveys exceeded the rates calculated from Registry of Motor Vehicle data per licensed teenage driver in each state. Neither Massachusetts nor New York require all non-fatal accidents to be reported to the police or registry.

ing and accidents among 18 and 19 years olds who had previously been entitled to drink. However, they anticipated that 16 and 17 years olds would find alcohol even more difficult to obtain because they would become even further removed from the legal drinking age. Analyses of survey data on drinking, driving after drinking, and non-fatal accidents did not identify a significantly greater impact of the law on 16 and 17 year olds compared to 18 and 19 year olds. (Data available on request from the authors)

Fatal Accidents

Analyses which focused on teenage single vehicle nighttime fatal accidents (Figure 1) revealed a 5 per cent drop in such accidents in Massachusetts during the two years after the law compared to the preceding three years. In New York, such accidents rose 19 per cent after the law. It should be noted that single vehicle nighttime fatal accidents among drivers above age 20 also rose at a 7 per cent higher rate in New York than in Massachusetts after the law even though it is unlikely that non-teenage drivers in single vehicle accidents would be affected by the drinking age change.

Three separate statistical procedures tested whether these teenage accident trends in Massachusetts were significantly different from the trends in New York. The accident totals for each age group and each year were fitted to a log-linear model using the methods of Bishop, Fienberg and Holland.¹² The data were also fitted to a regular analysis of variance model with log number of accidents as the dependent variable and age group, year, and state as factors. Finally, the data were fitted to an analysis of covariance model with log number of accidents in Massachusetts as the dependent variable and log number of accidents in New York as an independent variable. The teenage single vehicle nighttime fatal accident changes in Massachusetts relative to New York did not achieve statistical significance when tested using log linear analysis ($p > .1$) but were significant when tested by analysis of variance and covariance ($p < .05$).

Analyses were repeated separately for 18 to 19 year olds and for 16 to 17 year olds. Among 18 to 19 year olds in Massachusetts, single vehicle nighttime crashes dropped 15 per cent after the law, whereas in New York they rose 16 per cent ($p < .05$ based on analysis of variance and covariance). However, after the law such accidents among 16 to 17 year olds in both states actually rose by 20 per cent-30 per cent. (Data are available upon request from the authors.)

Figure 2 shows the total numbers of fatal accidents in Massachusetts and New York according to the age of the youngest driver. In both states, teenage accident totals were the highest during the last year before the law. When the average of teenage fatal accidents during the three years preceding the law was compared to the average of the two years following the law, Massachusetts dropped 1 per cent while New York rose 5 per cent. The three methods of statistical analysis indicated no significant difference between the two states in the overall teenage fatal accident trends. The results were the same when 16-17 year olds and 18-19 year olds were analyzed separately.

To control for possible confounding effects which might

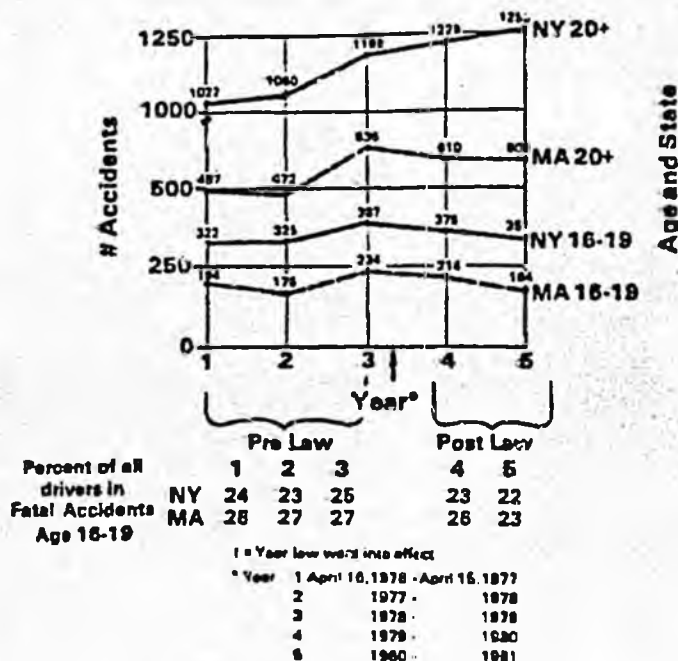


FIGURE 2—Fatal Accidents According to the Age of the Youngest Driver, State, and Year

be produced by Massachusetts teenagers crossing the border into New York in search of alcohol and then having accidents in New York, the analyses were repeated for 16-19 year olds excluding all New York and Massachusetts counties along their common border. Since less than 2 per cent teenage fatal accidents in those border counties involved drivers from the neighboring state, there was still no significant difference between overall teenage fatal accident trends in Massachusetts and New York.

Police and Enforcement of the Law

Arrest data and interviews with law enforcement officers in Massachusetts suggest possible explanations for these modest effects. Although most officers supported the new law, inspection of uniform crime reports (UCR) revealed that the frequency with which teenagers were arrested for driving under the influence did not significantly change in Massachusetts during the first year after the law compared to the previous two years. In New York, driving under the influence arrests for teenagers showed a steady increase over time throughout the study.

Predictably during the first year after the law when it became illegal for not just 16 and 17 year olds, but also 18 and 19 year olds to purchase alcohol in Massachusetts, arrests in that state among 16-19 year olds for all other alcohol-related offenses such as illegal purchase, possession, or public intoxication rose over 150 per cent. However, the intensity of enforcement varied widely from community to community. In 1980, the Massachusetts communities with over 100,000 inhabitants, recorded fewer than 10 arrests per every 1,000 teenage residents whereas more than 20 arrests

per 1,000 teenagers were recorded in the rest of the state.

The police interviews revealed that in some jurisdictions the police actively patrolled areas near liquor outlets and arrested observed violators of the law. In many other communities, however, officers used the law primarily in response to neighborhood complaints about public drinking by teenagers. Charges were not uniformly levied against teenage offenders. Often the teenagers' alcohol was either confiscated by the police for later disposal or disposed of while the violators watched. Frequently, violators were sent or taken home by the police with a warning only, or brought to police stations to be met by parents but not arrested. Arrests were generally reserved for known repeat violators, those who engaged in other law violations while drinking, teenagers who were abusive or uncooperative, or persons the police wished to arrest on other charges but lacked sufficient evidence for arrest.

The reasons most often cited for the variability in enforcement of the law among communities across the state was the lack of personnel and competing priorities, particularly in some high crime inner-city jurisdictions. Moreover, many officers did not perceive teenage purchasing of alcohol or drinking per se as a sufficiently serious crime to stigmatize juveniles by putting an arrest on their records. Parenthetically, several officers said they had behaved the same way when they were teenagers.

Finally, there were sometimes political deterrents to uniform enforcement. In at least one community, systematic enforcement of the law was abandoned and a special enforcement group was dissolved in response to complaints from other police officers, and town officials, whose children were arrested.

Enforcement of the law focusing on the sellers was minimal and sporadic. The year the law went into effect, the ABCC had only 24 inspectors to patrol the more than 12,000 liquor outlets statewide. Only three inspectors operated at night. Random checks of liquor outlets at night were discontinued during 1979 and inspections were made only in response to complaints (usually filed by competing liquor outlets or neighbors). The frequency of license revocations by the state did not increase after the law. Licenses were suspended only after a pattern of violations had been identified. Even then, a standard ABCC compromise procedure enabled the violating liquor outlets to remain open if 15 per cent of their daily profits were paid to the state during what would have been the suspension period.

Discussion

Several features of our study should be considered in interpreting these results. First, the study examined the first two years following enactment of the law. During this time period, the 18 and 19 year old age groups who had previously been allowed to drink had that privilege revoked. One could hypothesize that the previous drinking habits of this group would be resistant to change. Data from subsequent years may indicate whether people who were never allowed to drink will be more strongly affected by the law as they enter into the 18-20 year old age groups.

6 of 20

Second, one must be cautious about reports of drinking and psychoactive substance use based on survey self-reports. However, consistencies between the survey data and the accident data favor the validity of the survey results. To illustrate, according to the surveys, both Massachusetts and New York teenagers drove less frequently after drinking and after marijuana use during the two years after compared to the year before the law. Predictably, both states experienced declines in teenage single vehicle nighttime fatal accidents and overall fatal accidents during that period. Also, when Massachusetts and New York were compared, both the survey data and the accident data identified greater declines in Massachusetts on only some of these outcomes.

Third, whenever the null hypothesis is confirmed the likelihood of a type II error must be considered. Power calculations indicate that there is only a 13 per cent chance of failing to identify a 15 per cent reduction in the likelihood of overall teenage fatal accidents in Massachusetts relative to New York using a .05 level test. These calculations are based on the availability of two complete years of post-law fatal teenage accident data. Moreover, our current survey samples are sufficiently large that we have even greater confidence that there was no reduction in overall teenage drinking and non-fatal accidents in Massachusetts compared to New York after the law.

The results suggest that raising the drinking age reduced single vehicle nighttime but not overall fatal accidents in Massachusetts relative to New York among 18 and 19 year olds. We did not detect an impact on 16 and 17 year olds.

The state's law provides a symbolic statement to teenagers that its citizens disapprove of their drinking, and fears the accidents they may cause when they drive after drinking. The study results prompt us to ask whether the law could have had a greater impact among all Massachusetts teenagers if enforcement efforts were more consistent in all communities and if greater attention were paid to preventing the common practices of non-teenagers purchasing alcohol for teenagers or liquor outlets not requiring age identification? Without sufficient resources and coordination of enforcement efforts, those police who actively strive to enforce the law in one community may find their efforts negated by minimal enforcement in the next. Under these circumstances, will 16-19 year olds be offered an opportunity at a young age to learn that at least some laws can be violated or circumvented with little risk of apprehension, conviction, or punishment?

It is ironic that comparably high rates of fatal accidents have been consistently reported among persons in their early twenties, a group whose drinking privileges were not revoked. Moreover, because 18 and 19 year olds are involved in only a small fraction of alcohol-related accidents, even if the change in the legal drinking age had a greater impact on this age group, the tragedy of automobile injuries and fatalities caused by adults as well as 16 and 17 year olds who drink and drive would remain substantially unaltered.

Lack of community resources and variable willingness to enforce laws focused on teenagers raise questions about whether alternative strategies such as increased enforcement of the drunk driving and traffic safety laws aimed at all

drivers, or requirements for safer cars and improved road design would yield greater reductions in nonfatal and fatal accidents both among teenagers and non-teenagers.

The results of this study and others^{10,17,18} suggest that raising the legal drinking age may hold some promise of accident reductions. However, the impact of those legal changes may be diluted without intensive, publicly supported, coordinated enforcement efforts in all communities.

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APPENDIX

Comparison of Relevant Statutory Provisions in Massachusetts and New York* as of April 16, 1979

	Massachusetts	New York
Legal Drinking Age	20	18
Legal Driving Age	16	18
Penalty-selling or giving alcohol to minors	\$200 fine and/or 6 mos in prison	Up to \$500 fine and/or 3 months in prison
Penalty-minor buying alcohol (includes fraudulent ID)	\$300 fine	Mandatory probation no more than 1 year, fine up to \$10
Blood alcohol content proving intoxication	.10	.10
Driving deemed consent to blood alcohol test	Yes	Yes
Refusal to consent to blood alcohol test	Loss of license for 90 days. Refusal not admissible in court proceedings	6 mos revocation; if under 21 revocation for 6 mos or until 21, whichever is longer. Evidence of refusal is admissible in court proceedings
Penalty-driving while intoxicated	Fine of \$35-\$100 and/or 2 wks-2 yrs in prison	Fine up to \$500 and/or up to 1 year in prison
License revocation for driving while intoxicated	First offense—mandatory revocation at least 1 yr. Second offense—in 6 yrs, 5 yrs revocation. If a death results, at least 10 yrs revocation	First offense—mandatory revocation at least 6 mos, second offense or when personal injury results mandatory permanent revocation
Possibility of legally driving while in alcoholic rehabilitation	Yes, judge may continue case, dismiss charges after successful completion	May be given "conditional" license for limited purposes and may apply for a "restricted use" license if necessary for employment
Liquor dealer's license may be suspended or revoked for sale to minors	Yes	Yes

*Excluding Nassau County and New York City.

National Symposium on Genetic Disorders and Birth Defects

A National Symposium entitled "Genetic Disorders and Birth Defects in Families and Society: Toward Interdisciplinary Understanding" will be held April 25-26, 1983 at the Baltimore Hyatt-Regency. The symposium is sponsored by the Division of Medical Genetics and the Department of Social Work, Johns Hopkins Medical Institutions and supported by the March of Dimes Birth Defects Foundation, the Genetic Diseases Services Branch, Office of Maternal and Child Health, and the Mead-Johnson Company.

The purpose of this symposium is to heighten sensitivity to psychological and social implications of genetic disorders and birth defects as they affect individuals, families, and society.

For additional information, contact Program Coordinator, Office of Continuing Education, 720 Rutland Avenue, Turner 22, Baltimore, MD 21205. Telephone 301/955-6046.

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FINAL REPORT
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by

Cheryl Lynn
Research Scientist

Prepared by the Virginia Highway and Transportation Research
Council Under the Sponsorship of the
Department of Transportation Safety

(The opinions, findings, and conclusions expressed in this
report are those of the author and not necessarily those of
the sponsoring agencies.)

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