

H B

1/2

COMMITTEE REPORT

SENATE

5/18/82

FURTHER: None

Date: May 18, 1982

Mr. President:

The Committee on JUDICIARY has had CSHB 112 (Jud) an
age limits under Title 4, Alcoholic Beverages

under consideration and (a majority of the committee) (the committee)
reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s)
- replace with CS for CSHB 112 same title
 new title
- and recommends _____
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

see page 20112
Nobert Anderson, Ws Rec
Charles ...

CHAIRMAN

1 person of an offense under (a)(1) - (7) of this section shall revoke
2 that person's driver's license for a period of not less than 30 days for
3 the first conviction, unless the court determines that the person's
4 ability to earn a livelihood would be severely impaired and a limitation
5 under sec. 201 of this chapter can be placed on the license which will
6 enable the person to earn a livelihood without excessive risk or danger
7 to the public. If a court limits a person's license under this subsec-
8 tion, it shall do so for a period of not less than 30 days. Upon a
9 subsequent conviction of a person for any offense under (a) of this
10 section, the court shall revoke the person's license and may not grant
11 him any limited license privileges for the following periods:

12 (1) not less than one year for the second conviction; and

13 (2) not less than three years for a third or subsequent
14 conviction.

15 * Sec. 4. AS 28.15.181 is amended by adding a new subsection to read:

16 (c) A court convicting a person under 19 years of age of driving
17 while intoxicated under AS 28.35.030 shall revoke the person's driver's
18 license for a period extending until the person reaches the age of 19 or
19 for a longer period, unless the court limits the person's license in
20 accordance with AS 28.15.201. If a court limits a person's license
21 under this subsection, it shall do so for a period extending until the
22 person reaches the age of 19 or for a longer period.
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Official Business

Alaska State Legislature

Senate

Committee on Judiciary

Pouch V
State Capitol
Juneau, Alaska 9981

MINUTES OF THE SENATE JUDICIARY COMMITTEE

OF

MAY 18, 1892

Butrovich Committee Room, State Capitol Juneau, Alaska

Legislation Before Committee:

HB 633 - "An Act authorizing an advisory vote on raising the age of majority to 21 for the purpose of regulation of alcoholic beverages and authorizing an advisory vote on legalizing possession of marijuana by adults for their own use; and providing for an effective date."

CSHB 112 - "An Act relating to revocation or limitation of the driver's license of a person under 19 years of age who is convicted of driving while intoxicated, and authorizing persons 16 years of age or older to be present in certain premises that serve alcoholic beverages."

The meeting of the Senate Judiciary Committee was called to order by Chairman Rodey at 3:20 P.M. Committee members present were: Senators Parr, Ray, Rodey, and Anderson. Senator Bennett was absent.

005 - Call to order.

015 - Chairman Rodey brought HB 633 before the committee.

060 - Representative Anderson testified against placing the HESS Committee substitute language on HB 633, stating it was dirty politics.

122 - After brief discussion, Senator Ray suggested an amendment adding a ballot question on whether the voting age be raised from 18 to 21.

205 - After discussion, Senator Ray's amendment was adopted with no objection.

249 - Senator Anderson moved that the Senate CSHB 633 along with Senator Ray's amendment be added to CSHB 155 St. Aff. amended. There was no objection.

264 - Chairman Rodey brought HB 112 before the committee.

289 - Senator Ray objecting to section one, stated that if you allow kids 16 years of age to enter premises where liquor is served, you are just going to put the burden on the licensees. The licensees are not going to let them in anyway, so they will be the one's who will have to turn them away, instead of the law.

580 - Senator Rodey states that the language evoking the license of a person under the age of 19 who is picked up for driving while intoxicated is a good idea and important to public safety.

605 - Senator Ray moves to delete Sec. 1 & 2 of the bill.

606 - Senator Parr objects. Chairman Rodey takes a vote on the motion. Senator Parr votes no. Senators Ray, Rodey, and Anderson vote yes. The motion is adopted.

614 - Senator Anderson moved to adopt the CS and move the bill from committee. There was no objection.

639 Chairman Rodey adjourned the meeting at 4:00 P.M.



Official Business

Alaska State Legislature

Senate

Committee on

Health, Education & Social Services

Charlie Parr, Chairman
Terry Stimson, Vice-Chairman
Vic Fischer
Tim Kelly
Mike Colletta

Pouch V
State Capitol
Juneau, Alaska 99811

465-4907
465-4908

May 17, 1982

LETTER OF INTENT

ON

SENATE (HESS) COMMITTEE SUBSTITUTE for CSHB 112 (Jud) am

The legislature finds that there is a serious highway safety problem caused by persons driving under the influence of alcohol, and that a disproportionate number of alcohol related traffic fatalities involve persons under the age of 19.

The legislature further finds that in many cases existing law may contribute to this problem. AS 04, which prohibits young people from frequenting establishments which serve alcohol, leads them to drive to out-of-way places to socialize. Behavior in such places tends to be less controlled and may result in driving under the influence of alcohol.

The legislature recognizes that for most young people a driver's license is a "key to the world" and is highly prized. It is the intent of SCS HB 112 that revocation of the drivers license be a significant deterrent. Loss of a drivers license for a substantial period may for young people be a more significant deterrent than a short period of imprisonment. It is further the intent that young people be encouraged not to drink and drive by increasing the number of places they may legally frequent, to eat, listen to music, and dance. Nothing in SCS HB 112 is to be interpreted as changing existing law as to the age at which they may legally drink alcohol.

A handwritten signature in cursive script, appearing to read "Charles H. Parr".

Senator Charles H. Parr
Chairman

FROM: Mail Station 1205 Department **AHSPA**
 By **T. Michael Lewis** Date **4/27/82**

Alaska Hwy Safety
Charlie Smith

02-002 (Rev. 2/80)

AGE	MALE	% (1)	FEMALE	% (1)	TOTAL	% (2)
14-18	8,367	60.6	5,431	39.4	13,798	5.1
19-24	23,822	55.0	21,111	45.0	46,933	17.2
25-29	25,395	53.3	22,282	46.7	47,677	17.5
30-34	24,950	55.4	20,121	44.6	45,071	16.5
35-39	18,681	55.9	14,753	44.1	33,434	12.3
40-44	13,721	57.4	10,164	42.6	23,885	8.8
45-49	10,588	58.2	7,610	41.8	18,198	6.7
50-54	9,114	59.3	6,252	40.7	15,366	5.6
55-59	7,211	59.3	4,943	40.7	12,154	4.5
60-64	4,922	60.2	3,254	39.8	8,176	3.0
65-69	2,772	61.5	1,738	38.5	4,510	1.7
70 +	2,093	65.1	1,120	34.9	3,213	1.2
Unknown	34	59.6	23	40.4	57	
TOTAL	153,670	56.4	118,802	43.6	272,472	100.0

- (1) Percentage of that age group.
- (2) Percentage of total licensed drivers.

MOTOR VEHICLE TRAFFIC FATALITY ACCIDENTS

During the years 1976-1978 the rate of alcohol-related fatal accidents occurring in the state appears to have remained fairly constant: approximately one-half of all fatal accidents were alcohol-related. A departure from this trend was reported in 1979 when the rate of alcohol involvement increased to 70% in fatal accidents.

There is some indication that improved reporting of alcohol involvement contributed to this apparent increase. However, alcohol involvement in highway crashes is the state's most serious and enduring problem and has been assigned the highest priority for treatment in the 1982 highway safety program.

ALCOHOL

The following table reflects the distribution of alcohol/driver by age group. Accidents in which alcohol involvement was not stated or was unknown have been removed from the calculations.

AGE	NUMBER OF ALCOHOL ACCIDENTS	A PERCENT INVOLVEMENT	B PERCENTAGE OF LICENSED DRIVERS	A B
15-18	220	11.3	3.4	3.3
19-29	922	47.2	36.5	1.3
30-39	407	20.9	27.8	75
40-49	238	12.2	15.2	80
50-59	134	6.9	10.3	67
60 +	31	1.6	2.5	64

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.

YOUNG DRIVERS

As might be expected, young drivers, ages 15-24, are significantly over-represented in fatal and injury accidents. During 1979, young people in this age group were involved in 38.8% of fatal accidents and 34.8% of injury accidents, while representing only 22.6% of the licensed drivers. Drivers in all other age groups were generally underrepresented relative to their occurrence in the licensed driver population.

MOTORCYCLE ACCIDENTS

The frequency of motorcycle accidents showed a marked decline during the years 1976-1978 and has leveled off to a seemingly stable figure of approximately 300 motorcycle accidents per year during 1978 and 1979. There has been a steady decrease in the number of injuries reported from 1976 to 1979. The number of fatalities has fluctuated in a random manner between 10-15 per year. In 1979, 294 accidents were reported, with 214 injuries and 11 fatalities. The ratio of injuries and fatalities to reported accidents indicates high risk to motorcyclists involved in accidents.

1. Report No. UM-HSRI-81-58		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Raising the Legal Drinking age in Michigan and Maine				5. Report Date December 1981	
				6. Performing Organization Code	
7. Author(s) A. C. Wagenaar, R. L. Douglass, C. P. Compton, with L. C. Pettis				8. Performing Organization Report No. UM-HSRI 81-58	
9. Performing Organization Name and Address Highway Safety Research Institute The University of Michigan Ann Arbor, Michigan 48109				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. H 84 AA 04794-01	
12. Sponsoring Agency Name and Address National Institute on Alcohol Abuse and Alcoholism Department of Health and Human Services Rockville, Maryland 20857				13. Type of Report and Period Covered Final 9/80 - 4/82	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract <p>Previous research has shown that increased alcohol availability associated with reductions in legal minimum age for purchase of alcoholic beverages resulted in increased alcohol-related traffic crash involvement among young drivers. In the late 1970s, Michigan raised the drinking age from 18 to 21, and Maine from 18 to 20, providing natural experiments reducing alcohol availability. Effects of the raised drinking age on motor vehicle crash involvement were evaluated using a tri-level hierarchical multiple time-series design.</p> <p>Results revealed a significant 20% reduction in alcohol-related injury-producing crash involvement among 18-20-year-old Michigan drivers directly attributable to the higher drinking age; alcohol-related property damage crashes decreased 17% for this age group. Maine drivers age 18-19 experienced a 20% reduction in alcohol-related property damage crash involvement attributable to the raised drinking age.</p> <p>It is concluded that the legal minimum drinking age has a significant effect on alcohol-related motor vehicle crash involvement among young drivers. Implications of the findings for beverage alcohol availability theory and public policy concerning the prevention of alcohol-related problems are included.</p>					
17. Key Words Legal drinking age, traffic accidents, alcohol availability, Box-Jenkins Time Series Analysis			18. Distribution Statement Unlimited		
19. Security Classification (of this report) Unclassified		20. Security Classification (of this paper) Unclassified		21. No. of Pages 367	22. Price

6.0 SUMMARY, DISCUSSION, AND RECOMMENDATIONS

6.1 Summary

The core issue of this investigation was whether raising the legal minimum age for purchase of alcoholic beverages has a significant effect in reducing alcohol-related motor vehicle crash involvement among young drivers, the leading cause of death for this age group. The findings are unambiguous; analyses of extended crash time series, comparing (1) alcohol-related with non-alcohol-related crashes, (2) young drivers with older drivers, and (3) states that raised the legal age with those that have not, demonstrate that significant reductions in alcohol-related crash involvement among young drivers result from increases in the minimum drinking age. Taking into account the results from analyses of multiple states, age groups, and indicators of alcohol involvement, the best estimates of the effects of the raised drinking age in Michigan and Maine are as follows. First, Michigan drivers age 18-20 experienced a net reduction of approximately 20% in the frequency of involvement in alcohol-related injury-producing crashes due to the higher drinking age. The 20% reduction means that about 1100 fewer young Michigan drivers were injured in the first 12 months with the higher drinking age than would have been expected had the legal age not been raised. Second, young Michigan drivers were involved in 17% fewer alcohol-related property damage crashes after the drinking age change, representing a reduction of about 1500 crash-involved drivers per year. Third, 18-19-year-old Maine drivers were involved in approximately 20% fewer alcohol-related property damage crashes after the drinking age was raised; that is, 75 fewer young drivers were involved in property damage crashes than one would have expected had the law not been changed. These crash

reductions are causally attributable to the higher drinking ages because substantial decreases in crash involvement were limited to alcohol-related crashes among young drivers in states that raised the drinking age, with no comparable reductions in non-alcohol-related crashes among youth, crash involvement of older drivers within the same state, or crash involvement of young drivers in comparison states with unchanged drinking ages.

Although the public health benefits and reduced social costs resulting from injury and property damage reductions identified in this research are large, note that the benefits of higher drinking ages are understated, because reductions in injuries to passengers of young crash involved drivers have not been taken into account.

The conclusion that the legal minimum drinking age affects youth crash involvement is further strengthened by comparing results of this research on the raised drinking age with results of earlier research on effects of lowered drinking age. Douglass and Freedman (1977) analyzed a subset of Michigan jurisdictions with complete accident reporting over the 1968 through 1975 period, using a time-series design. Results revealed a 17% ($p < .06$) increase in total (i.e., property damage and injury producing) single-vehicle nighttime male crash involvement among drivers age 18-20 associated with the lowered drinking age in 1972. Police-reported drinking driver crash involvement increased 35% ($p < .01$) after the drinking age was reduced. Similar analyses for the State of Maine revealed a 29% ($p < .02$) decrease in reported alcohol-related crashes, and a 16% ($p < .10$) decrease in single-vehicle nighttime male crash involvement associated with Maine's reduction in drinking age from 20 to 18 in 1972 (Douglass et al., 1974). Comparisons between these

earlier findings and results of the present investigation reveal that raising the drinking age reverses the effect of prior reductions in drinking age. Estimates of the increase in alcohol-related crash involvement among young drivers associated with Michigan and Maine's lowered drinking ages ranged from 16 to 35%, remarkably similar to the 11 to 34% range of estimates obtained in the present study of decreased alcohol-related crash involvement associated with raising the drinking age in these two states.

6.2 Discussion

Although the effect of the raised drinking age in reducing youthful auto crashes is now clearly documented, some caution is warranted before a blanket statement is made that any state raising the drinking age can count on a 20% decrease in youth crash involvement. The effect of higher drinking ages is not necessarily uniform across states. In this research, the effect in Michigan was larger and more obvious than the effect in Maine, particularly for the more serious, injury-producing crashes. As noted in section 3.2.2, two studies of fatal crash involvement in Massachusetts found no significant reductions due to an increase in drinking age from 18 to 20 (Kingson et al., 1981; Williams et al., 1981).

One possible reason for the lack of an effect in Massachusetts is that four of the five states bordering Massachusetts had minimum drinking ages of 18 for all alcoholic beverages after Massachusetts' higher drinking age was implemented.²⁵ The availability of beverage alcohol to

²⁵Vermont, New York, Connecticut, and Rhode Island permitted 18-year-olds to purchase all types of alcoholic beverages during the period for which the Massachusetts law was evaluated. New Hampshire increased

LICENSED DRIVERS - 1961

AGE	REGULAR LICENSE			REGULAR + M/C			REGULAR + M/S		
	M	F	TOTAL	M	F	TOTAL	M	F	TOTAL
Unknown	30	23	53	3	-	3	1	-	1
14	8	3	11	-	-	-	1	-	1
15	20	6	26	-	-	-	1	1	2
16	1,471	1,002	2,473	108	5	113	115	10	125
17	2,415	1,778	4,193	199	18	217	157	23	180
18	2,845	2,352	5,197	265	21	286	330	164	494
19	2,981	2,631	5,612	291	27	318	172	80	252
20	3,377	3,003	6,380	350	35	385	165	83	248
21	3,681	3,298	6,979	327	45	372	208	135	343
22	3,863	3,539	7,402	420	41	461	123	114	237
23	4,149	3,820	7,969	447	50	497	132	108	240
24	4,358	3,872	8,230	464	54	518	215	164	379
25-29	22,262	21,208	43,470	2,270	273	2,543	827	714	1,541
30-34	22,405	19,342	41,747	1,762	171	1,933	754	605	1,359
35-39	17,096	14,109	31,205	1,027	112	1,139	543	438	981
40-44	12,829	9,824	22,653	560	58	618	321	280	601
45-49	9,995	7,410	17,405	325	22	347	264	177	441
50-54	8,708	6,099	14,807	202	15	217	200	138	338
55-59	6,931	4,839	11,770	112	8	120	167	96	263
60-64	4,774	3,187	7,961	43	5	48	105	62	167
65-69	2,715	1,721	4,436	16	-	16	40	17	57
70+	2,055	1,101	3,156	3	-	3	34	19	53
TOTAL	138,968	114,337	253,305	8,184	860	9,044	4,875	3,428	8,303

ALASKA STATEWIDE STUDENT ASSOCIATION
Position Paper: HB 112

ASSA is opposed to raising the drinking age. We feel this is not the best way to solve our many alcohol-related problems, as its only major effect would be to put many young adults out of work.

Furthermore, we feel it is manifestly unfair to punish an entire cross-section of the electorate for the transgressions of a few of their peers. This is inconsistent with the Anglo-American tradition of punishing only the guilty.

We urge you not to pass this bill or, if you feel you must, to amend it to an advisory vote.

No. of Arrests for Driving Under the Influence
By Age of Offender
1977-1981

	15 & Under	16	17	18	19	20	21	22	23	24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+	TOTAL ALL AGES
1977	5	19	50	141	130	146	148	135	145	155	569	455	397	343	274	181	135	76	3,504
1978	7	20	35	102	103	135	135	129	129	140	592	455	368	280	233	208	111	75	3,265
1979	7	29	48	105	118	138	137	133	117	121	553	411	341	249	204	150	83	62	3,006
1980	5	15	71	74	102	130	106	115	113	92	451	245	291	201	193	122	76	73	2,475
1981	7	21	69	112	179	132	134	153	170	142	661	567	366	268	189	147	96	68	3,481
FIVE YEAR TOTAL	31	112	273	534	632	681	660	666	674	650	2,826	2,133	1,763	1,341	1,093	808	501	354	15,731

Source: House Research Agency, May 1982, from data provided by the Criminal Justice Planning Agency, Crime in Alaska, 1977-1981.



ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

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

May 6, 1982

TO: Bill Zybach
FROM: Christine Johnson, Research Staff
RE: Age Breakdown of OMVI Offenders

Attached please find a table showing the ages of individuals arrested for driving under the influence in the past five years. If you have any questions regarding this data, please give me a call.

CJ

From Charlie Smith

1979

<u>FATAL ACCIDENTS</u>	<u>ALCOHOL RELATED</u>	<u>ALCOHOL RELATED AGE 0-18</u>	<u>ALCOHOL RELATED AGE 19-20</u>	<u>TOTAL AGE 0-20</u>
80	48 = 60.0%	15 = 31.3%	9 = 18.8%	24 = 50.0%

1980

<u>FATAL ACCIDENTS</u>	<u>ALCOHOL RELATED</u>	<u>ALCOHOL RELATED AGE 0-18</u>	<u>ALCOHOL RELATED AGE 19-20</u>	<u>TOTAL AGE 0-20</u>
79	50 = 63.3%	23 = 46.0%	13 = 26.0%	36 = 72.0%

LICENSED
DRIVERS

272,472		13,798 = 5.1%	13,226 = 4.9%	27,024 = 9.9%
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Passage in 1971 of the 26th Amendment to the United States Constitution went far beyond giving voting privileges to those in the 18-to-20 age bracket. It also stimulated a prevailing trend toward a lower age-of-majority with respect to the purchase and consumption of alcoholic beverages. The period from 1970 to 1975 saw a spate of legislation to lower the minimum drinking age (MDA), in most cases to the age of 18. By May 1976 (when the first In Brief on the subject appeared), 27 states had lowered the MDA for all alcoholic beverages and another 11 had lowered it for wine and/or beer. This concession of drinking privileges reflected the view of many legislators that there was no longer a constitutional basis for their denial. To many people the right to drink was nothing more than the legitimization of already existing behavior.

The initial thrust of the movement to lower the MDA, however, has not been sustained: on the contrary, a reversal of the trend has developed and appears to be gaining momentum. While the Oregon and Pennsylvania legislatures have recently taken preliminary steps to lower the MDA, not one state has actually done so since 1976. Following Minnesota's lead (1976), three other states have succeeded in raising the MDA, four are at present considering such legislation, and another six have so far failed in the attempt. Michigan voters have raised the minimum age in that state to 21, and voters in Montana have raised theirs to 19--both through the referendum process.

The generally good reception accorded efforts to raise the MDA may not herald a cessation of MDA-lowering efforts; however, it does suggest substantial disaffection with the idea of drinking as early as 18, which can be traced to the appearance of research evidence of increased problem drinking among those affected by the lowering of the MDA. The literature, although rather limited in this regard, points to a higher incidence of alcohol-related traffic accidents and traffic fatalities among the younger drinkers. Survey data also imply an increase in alcohol use among youth below 18 owing to the so-called "trickle-down effect" (access to alcohol through older classmates in the "legal" age group).

Perhaps the most significant impact analysis to date is a series of studies conducted by R. L. Douglass et al. at the Highway Safety Research Institute (HSRI) of the University of Michigan. The first study (1973-1974), prepared under

contract to the National Highway Traffic Safety Administration, focused on the effect of legislation lowering the drinking age on the affected driver populations in Maine, Michigan, and Vermont. The results disclosed significant increases in the alcohol-related crash experience of 18- to 20-year-old drivers in both Maine and Michigan. No concomitant changes were observed in Vermont or in any of four control states. (Not insignificantly, the three states targeted in this study were among the first seeking to rescind their MDA-lowering laws.) The second HSRI study (1976-1977), conducted for the Office of Substance Abuse Services (OSAS) of the Michigan Department of Public Health, concentrated on effects over a 4-year period (1972-1975) of the 1972 law permitting drinking at 18. The results, as elaborated in an April 1977 report to Governor Milliken and in the final report of August 1977, showed a significantly greater increase in alcohol-related accidents among 18- to 20-year-old drivers than among any other age group during the period under review. The increase was attributable in part to the change in drinking age and in part to other long-term behavioral trends. The initial increase in alcohol-related crashes persisted but did not worsen over the years following the change. There was no conclusive evidence that the change in law caused an increase in alcohol-related automobile accidents among 16- and 17-year-old drivers; an increase for this group was better explained by long-term trends existing before 1972 and continuing to the present.

The HSRI findings are to a great extent supported by those of other investigators. A 1977 review of empirical research (including the initial HSRI study) on the consequences of changes in alcohol-purchasing age in different areas of the United States and Canada found consistent and possibly reliable evidence of the following: (1) substantial increases in drinking, particularly in on-premises drinking, among those affected by the lowered MDA; (2) a greater increase in alcohol-related motor vehicle accidents in areas of lowered purchasing age than in comparison areas; and (3) a probable influence of alcohol on the crash experience of 15- to 17-year-olds. The studies under review have yielded little information to implicate alcohol in greater educational, family, or public order problems, or in the observed increase in the admission of young people to alcoholism treatment facilities.

The agreement among HSRI and other findings notwithstanding, the notion that the dramatic

* This updates the May 1976 In Brief Number 4, published under the same title.

increase in youth crash involvement is necessarily connected with MDA lowering is challenged by some specialists. Conspicuous among these is Richard Zylman of Rutgers University's Center of Alcohol Studies. Zylman's view, expounded in several papers, is that the allegedly disproportionate number of such crashes can be otherwise interpreted. He argues that the drinking habits of youth were changing before the laws were enacted and that a dramatic upsurge in accidents among youth was therefore inevitable.

Accordingly, the increased drinking and driving reported in Michigan and elsewhere would have occurred with or without the sanction of law. He also insists that one consequence of MDA legislation was stricter police reporting of alcohol involvement in accidents and that this distorted the picture of actual changes that were taking place. The result was the creation of a "phantom" problem, which to Zylman is nowhere better exemplified than in an HSRI report on alcohol involvement in fatal crashes among 18- to 20-year-old drivers in Michigan between 1971 and 1973. His conclusion is that changing social norms, not MDA lowering, are the real cause of the increase seen in alcohol-related collisions, and that withholding the right to drink at 18 or, even worse, rescinding it once it has been granted, runs the risk of criminalizing a normal youthful activity and thereby alienating a rather large segment of the nation's youth.

Indirect support for Zylman's position has come in the form of widespread recognition of: (1) the lack of uniform statistics in accident reporting; (2) the revision of law enforcement procedures following legislation lowering the drinking age; and (3) the overriding significance of long-range behavioral trends. As yet, however, this concert of opinion has not been matched by a major protest response from young people in those states which rescinded earlier MDA-lowering laws. The few efforts that have been initiated have fared poorly both in state legislatures and in the courts. One youth group in Maine organized

a petition drive aimed at suspending the age increase until the electorate could vote on the measure by referendum. The drive fell significantly short of the number of signatures required by the closing date. A second Maine drive would have placed on the ballot a bill to limit the 20-year minimum to carry-out purchases, while retaining 18 as the age for on-premises drinking. This move suffered the same fate as the first, even with the benefit of a much longer time period for the gathering of signatures. In a landmark case, the issue of drinking rights was resolved in favor of the state. The Supreme Court of the State of Washington ruled that the constitutional rights of 18-year-olds were not violated by a distinction between legal drinking age and the age of other adult rights and privileges. The court cited as justification the evidence of a more severe impact of alcohol on 18-year-olds than on persons 21 years of age or older.

Any attempt to predict the future course of MDA policy would be guesswork. There is, however, a certain pattern to the accomplished and projected MDA changes in various states. A compromise has evolved, such that 19 is the favored age among those states inclined to change. With the exception of Maine (age 20) and Michigan (age 21), all states that have already rescinded their lowered MDA have adopted an MDA of 19, and most of the states still seeking to raise the MDA show the same tendency. The two states committed to the opposite course, Oregon and Pennsylvania, have also settled on age 19. A review of the pertinent literature brings to light three specific goals of such a compromise: (1) the legalization of drinking at an age approximating that of the recognition of adulthood in other senses; (2) the separation of legal drinking age from legal driving age, so as to eliminate the difficulties associated with learning both at the same time; and (3) the removal, at least from the high school environment, of a major potential source of alcohol for the younger teenager.

The Legal Drinking Age and Traffic Casualties: A Special Case of Changing Alcohol Availability In a Public Health Context

Richard L. Douglass, Ph.D.

In 1971 the legislature of Michigan voted to lower the legal drinking age from 21 to 18. The legal drinking age was one of three components in an age of majority proposal modeled after the July 1971 U.S. Constitutional amendment which permitted 18-year-olds to vote in Federal elections. The Michigan law included the right to vote in local and State elections, to enter into binding contracts, and to purchase, possess, and consume distilled spirits, beer, and wine according to the provisions of alcoholic beverage control policies in the State of Michigan.

Similar alterations in the legal drinking ages took place throughout the United States and Canada at the same time. Maine and Vermont lowered drinking ages to 18 in 1972, as did Ontario. Texas lowered the drinking age to 18 in August of 1973. Wisconsin made all alcoholic beverages available to 18-year-olds in 1972 (beer had been legal for the young purchasers since 1969). Many other States and provinces joined the bandwagon and, in a relatively short period of time, over half the States had reduced the legal age of purchase from 21 to a lower age, either for all beverages or for beer, wine, or a lower alcohol content beverage.

Considerable national, State, and local controversy erupted during the months prior to the effective dates of the new laws. The beverage alcohol industry, in concert with most of the intellectual community, supported lowering the legal drinking age on several grounds. On the

basis of surveys of high school students, proponents claimed that lowering the legal drinking age would have little effect on drinking patterns or alcohol consumption levels among heretofore underage drinkers. It was claimed that young people already drank, that they could acquire alcoholic beverages at will, and the legal change would simply legitimize existing behaviors.

In addition, the intellectual community, civil liberties advocates, and others argued that thousands of young people had served in the armed forces in Vietnam and elsewhere, yet were unable to legally purchase or consume alcoholic beverages at home. This apparent inequity of rights and responsibilities helped create a groundswell of emotion that characterized the debate.

The opposition to lowering the legal drinking age was also vocal, but not nearly as broadly based as the proponents. Religious organizations, residuals of the temperance movement, and similar groups argued that if 18- to 20-year-olds were given the right to purchase and consume alcoholic beverages, then alcohol-related traffic accidents, public drunkenness, and early alcoholism would increase. Associated with these immediate social costs, some opponents argued, would be an increase in the general moral decay of Michigan's youth. These groups also argued that the younger peers and siblings of 18- to 20-year-old new drinkers would become involved, and Michigan would experience increas-

ing alcohol-related problems among early adolescents and the very young.

Another major coalition opposing the 18-year-old minimum drinking age was composed of the departments of State, county, and local police. These organizations argued that the lower legal drinking age would cause an increase in traffic casualties associated with drinking and driving, as well as an increase in driving-while-intoxicated incidents.

A pervasive element in this debate was a lack of adequate research to predict the impact of the proposed lower legal drinking age. No one really knew what would happen and it is probably true that it was not possible to predict the consequences of the legal drinking age change without actually trying it with a natural population.

In Michigan the law became effective on January 1, 1972. When most elections and referendums are approved, debates typically dissipate and attendant energies are directed toward new

Not so with the legal drinking age. Within 6 months of the effective date of the 18-year-old drinking age, the Michigan Department of State Police reported an increase of more than 100 percent in alcohol-related accidents in which the 18- to 20-year-old drivers had been drinking, compared with the same time period in 1971. This report touched off a new, more emotional, debate.

Armed with statistics, the opposition to the lower legal drinking age launched a campaign to move the minimum age back to 21. Charges of unreliable reporting, bias, and statistical misrepresentation were made by the proponents of the 18-year-old drinking age and the situation was again deadlocked.

The issues raised in 1972 and 1973 were based on the need to explain events rather than postu-

late them. Specifically, it had been alleged that traffic casualties had increased in Michigan and that drinking had become a problem in the public schools; the debate involved the fundamental question of to what extent the lower legal drinking age was responsible for traffic casualties and public school problems.

In 1973, the U.S. Department of Transportation, National Highway Traffic Safety Administration, contracted with the Highway Safety Research Institute (HSRI) of The University of Michigan to conduct a scientific analysis of the effects of the lower legal drinking age on youth crash involvement in three States—Michigan, Maine, and Vermont. The Department of Transportation's initiative was in response to the public's reactions to the initial effects of the lower drinking age.

Impact of Lower Drinking Age

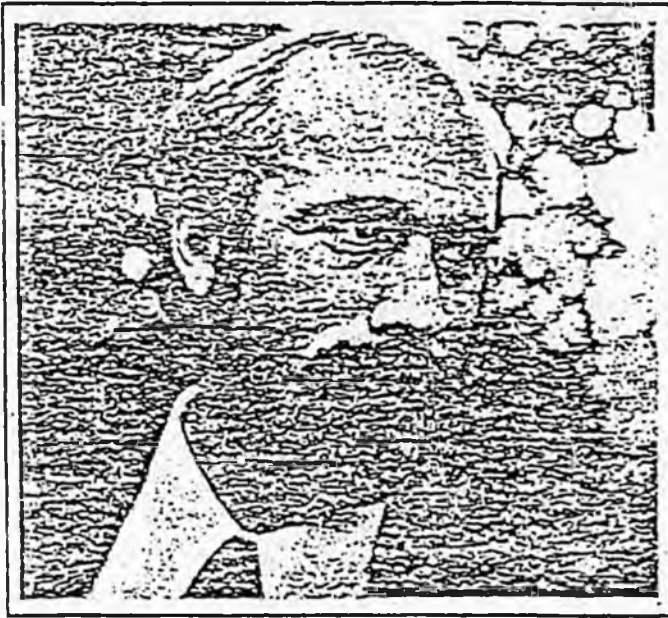
The initial study, reported in 1974, revealed that Michigan and Maine experienced a frequency increase in alcohol-related traffic crashes among 18- to 20-year-old drivers, conservatively estimated to be between 9.99 percent and 25.66 percent for the first 12 to 18 months subsequent to the effective dates in 1972. The increases in alcohol-related traffic accidents were statistically and socially significant. No comparable change was found in Vermont.

The 1972-1974 HSRI study demonstrated an immediate impact of the lower legal drinking age on youth crash involvement in two States. However, two research questions were generated by the investigation. First, was the initial increase in alcohol-related crashes temporary or permanent? Secondly, what intervening factors might help explain the relationship between the change in legal drinking age and a consequent increase in alcohol-related casualties? These unresolved issues constituted the focus of a second investigation.

The second study, conducted between 1976 and 1977, was sponsored by the Office of Substance Abuse Services of the Michigan Department of Public Health. Unlike the first investigation, the focus of this inquiry was only on Michigan.

In the second study, the time period for analysis after the Michigan 18-year-old drinking age change was extended from 12 to 48 months and the age comparisons for analysis included 16- and 17-year-old drivers involved in traffic crashes as well as the 18 to 20 and older age groups. Also, a detailed analysis of licensing activities of

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Richard L. Douglass, Ph.D.

the Michigan Liquor Control Commission and statistics of alcohol beverage distribution in the State was conducted to test possible alternative explanations for the increase in alcohol-related crashes attributed to the 18-year-old drinking age in the first study.

The main objectives of the second study were to determine if the initially measured increase in 18- to 20-year-old alcohol-related crashes was temporary or permanent, if 16- and 17-year-olds were also affected, and if there was any evidence that other kinds of alcohol control measures also changed the availability of beverage alcohol which might help the increase in traffic casualties.

Subsequent to the release of findings from the second HSRI study, in addition to political pressure from the organized public school interests in Michigan, the Michigan legislature introduced legislation which essentially raised the legal drinking age to 19, effective in December 1978. Not satisfied with the 19-year-old drinking age, an organized petition drive put the issue on the November 1978 popular election ballot as a proposed constitutional amendment. The proposition to return Michigan's drinking age to 21, as a constitutional amendment, passed without difficulty in over 90 percent of Michigan jurisdictions and the new law became effective just prior to Christmas in 1978.¹ The constitutionality of the new 21-year-old drinking age was challenged in Federal court and upheld in December 1978.² Subsequent appeals to the 1978 court opinion were denied.³

To date, the effectiveness of the 21-year-old drinking age regarding improved circumstance on the highways, in public schools, and regarding other drinking problems among 18- to 20-year-olds has not been measured. It is, in my opinion, still too early to know to what extent the return to age 21 has changed either the drinking, drinking and driving, or other behaviors of 18- to 20-year-olds in Michigan.

Following is a summary of the two studies I was responsible for conducting.

Study I 1973-1974

The first study for which I had responsibility was conducted in 1973-1974.⁴ The research was an analytic evaluation of the impact of the lower drinking age in Michigan, Maine, and Vermont on alcohol-related highway crash experiences of affected young driving populations. The objectives of the study were:

1. To determine if the alcohol-related highway crashes increased among legally affected populations of drivers in three study States
2. To determine, if changes were found in the frequencies and rates of alcohol-related crashes, whether a causal relationship exists between the crash experience increases and the legal changes

Data were collected from appropriate police or traffic safety agencies in seven States. Data for the 1968-1973 time period were sought; few States, however, were able to produce full sets of data in uniform and compatible computerized form. Therefore, incomplete data were obtained for certain States, resulting in an unbalanced quasi-experimental time series design.

The seven States included represent two long-

¹Michigan's proposition to raise the drinking age to 21 passed by over 400,000 votes and became effective on December 23, 1978.

²Hon. Ralph Guy, Jr., U.S. District Judge. *Opinion*, Civil No. 8-73015 and Civil No. 8-73159. U.S. District Court, Eastern District of Michigan, Southern Division, December 22, 1978.

³Personal correspondence, Michigan Attorney General Frank J. Kelley to Michigan Governor William G. Milliken, dated June 21, 1979. Re: Felix V. Milliken et al. Sixth Circuit Court, Michigan, 79-1049.

⁴Richard L. Douglass, "The Effect of the Lower Legal Drinking Age on Youth Crash Involvement." Ph.D. dissertation, Public Health Administration, The University of Michigan, 1974.

Richard L. Douglass et al. *The Effect of the Lower Legal Drinking Age on Youth Crash Involvement. Final Report for the National Highway Traffic Safety Administration*. U.S. Department of Transportation. Report No. UM-HSRI-AL-74-1-1. Ann Arbor: The University of Michigan, 1974.

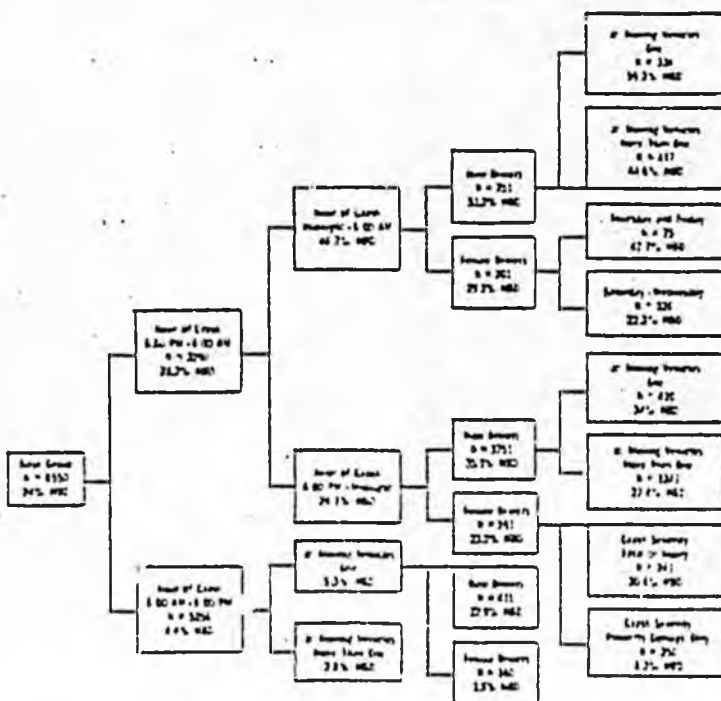


Figure 1. AID Analysis of Oakland County, Michigan, 18-20-Year-Old Drivers, "Had Been Drinking" (HBD) as Dependent Variable; 1972 Data.

term 18-year-old States—New York and Louisiana; two long-term 21-year-old States—Pennsylvania and Texas; and three transitional States forming an "experimental group."⁵ All three experimental States—Michigan, Vermont, and Maine—changed their legal drinking age within the same 6-month period in 1972. State selection was based on the legal structure of the age of majority regarding the purchase of alcoholic beverages, and geographic-demographic matching characteristics of the several candidate States. The total data files utilized in the research represented approximately five million driver-crash involvements between 1968 and the first half of 1973.

Although agencies in all States in this research do report alcohol involvement as a matter of course in highway crash investigations, the variety of ways in which alcohol involvement is measured is a direct function of the number of

jurisdictions in question.⁶ None of the seven States in this research design measured, defined, or counted "alcohol involvement" in the same way—and some States changed their own procedures between 1968 and 1973. Because reported statistics were unacceptable for comparative analysis, the measurement problem became defined as the need to derive an empirical surrogate variable to substitute for reported alcohol involvements.⁷

An analytic program named *Automatic Interaction Detection (AID)*⁸ was used to select the "best" subset of objectively measured variables in 1970 Texas and 1972 Oakland County, Michigan, data. "Best" was operationally defined as the subset of all driver involvements which, interactively, was most often known to be alcohol-related. The 1972 Oakland County, Michigan, and 1970 Texas data were selected because of known relative stability of these data regarding the operational measurements of alcohol involvement.⁹

Figure 1 presents the results of one of many AID analyses of these data. It can be seen, by

⁵Texas lowered the legal drinking age to 18 in August 1973, after the data-limit of the present study.

⁶Richard L. Douglass, "The Operational Meaning of Reported Alcohol Involvement in Official State Accident Data: A Comparative Analysis," *HIT LAB Reports*, Highway Safety Research Institute, Ann Arbor, Michigan, Vol. 4, 9, May 1974, pp. 1-6.

⁷Richard L. Douglass and L.D. Filkins, "Empirical Development of a Surrogate Measure of Alcohol Involvement in Official Accident Data," *HIT LAB Reports*, Highway Safety Research Institute, Ann Arbor, Michigan, Vol. 4, 9, May 1974, pp. 7-11.

⁸J.A. Senquist and J.N. Morgan, *The Detection of Interaction Effects: A Report on a Computer Program for the Selection of Optimal Combinations of Explanatory Variables*. Monograph No. 33. Ann Arbor: Survey Research Center, Institute for Social Research, 1964.

⁹Douglass and Filkins, *op. cit.*

following the uppermost or "worst" path, that the final analytic group was derived with the entry of only three variables:

Factor 1. Time of Night

Factor 2. Sex of Driver

Factor 3. Number of Vehicles

Inclusion of additional independent variables did not make statistically significant contributions to this "worst case." It can be seen that the three key descriptive variables—9:00 p.m. to 6:00 a.m., single vehicle, and male drivers—interactively predict the driver-crash involvements most likely to be alcohol-related. This *three-factor-surrogate* subset, in terms of expected alcohol involvement, is remarkably consistent and between 53 percent and 63 percent alcohol-related. This subset of all crash involvements was measured, by month, for all data in each jurisdiction in the study. Measurement of the three-factor-surrogate subset was substituted for analyses of cases with reported alcohol involvement for reasons of comparative measurement consistency.

The Magnitude of Change

On the basis of the three-factor-surrogate subset, the Michigan experience was a clear demonstration that the 18- to 20-year-old driver involvements increased dramatically. In Maine, the 18- to 20-year-old frequency increased to a level approaching statistical significance. No changes were found in Vermont. It would appear that these conservative analyses demonstrate an impact of the lower legal drinking age in Michigan, evidence of a lesser change in Maine, and no evidence at all in Vermont. In that no 21- to 45-year-old observations changed significantly, any changes among the 18- to 20-year-olds can be related to the change in the drinking age.

Among the control States which did not lower the legal drinking age, no evidence was found that would support an hypothesis of change specific to the young drivers. The absence of concomitant changes in the control States strengthens the causal interpretation linking the increases in Michigan and Maine to the legal changes in those States.

Study II 1976-1977

The second study of the legal drinking age focused exclusively on Michigan's experience in the 48 months subsequent to the new law's effective date, January 1, 1972.

The second study, first reported in September 1977, was intended to determine if the initial impacts reported in 1974 were permanent or

transitory. Also, it was decided to determine if the full urban-rural mix of Michigan populations were equally affected and if a "spill-over" effect was measurable among 16- and 17-year-old drivers.

To investigate the consistency of 18- to 20-year-old response to the lower legal drinking age, we reasoned that the urban-rural mix of the Michigan population should be separately analyzed. Therefore, a systematic sample of 27 rural counties with 1970 populations under 100,000 residents was taken and aggregated to form a "rural" analytic study site. Ingham County was selected as a mid-Michigan analytic study site with a substantial metropolitan and rural population mixture.

Other jurisdictions included were Washtenaw County, Oakland County, and statewide localities (with those areas consistently reporting all accidents since 1968 and fatal driver-crash involvements). These study sites formed the basic set of Michigan jurisdictions in the 1973-1974 HSRI study and were included to permit consistency and comparability with the results of the two investigations.¹⁰

These jurisdictions represent urban, suburban, and rural areas of Michigan. Places of rapid population growth (Oakland County), high youth population density (Washtenaw County), mixed population (Ingham County), and stable, low-youth-population density (rural counties) are all represented.

Rather than only comparing 18- to 20- against 21- to 45-year-old drivers involved in crashes, in the second study four analytic groups were created. These included 16- to 17-, 18- to 20-, 21- to 24-, and 25- to 45-year-old drivers. These four groups give considerable control to the quasi-experimental design in which only the 18- to 20-year-olds were affected by the 18-year-old drinking age. Also, it is possible to be more precise in the analytic comparisons with both younger and immediately older proximal persons of the 18- to 20-year-old target group.

The 48-month experience in Michigan after the 18-year-old drinking age became effective was consistent throughout the State. In most jurisdictions increases of residual three-factor-surrogate crashes among 18- to 20-year-old drivers were concurrent with decreases among

¹⁰Richard L. Douglass and Jay Alan Freedman, *Alcohol-Related Casualties and Alcohol Beverage Market Response to Beverage Alcohol Availability Policies in Michigan*, Vol. 1, UM-HSRI-77-37. Ann Arbor: The University of Michigan, 1977.

16- to 17-year-old and/or 21- to 24-year-old drivers. While all under-25-year-old groups experienced percentage residual increases of alcohol-related crashes, the 18- to 20-year-old group usually had much larger increases than any other age group. The impact of the legal drinking age change is generally found only among the 18- to 20-year-old drivers, except in Oakland County, where the 16- to 17-year-old drivers were also involved.

Our findings clearly isolate the young drivers, particularly 18- to 20-year-olds, as being uniquely affected by the lower legal drinking age. These findings are more dramatic when it is observed that total residual crash involvement throughout the State stabilized or declined considerably in this same time period. Among drivers 21 and older, the 48-month residuals reveal consistently fewer crash involvements than predicted; except for Oakland County, this holds as well for 16- to 17-year-old drivers.

The effect of the legal drinking age measured after the initial 1972 experience appears to have persisted through 1975. On a statewide basis (1972-1975) a conservative estimate is that at least 4,625 three-factor-surrogate alcohol-related crashes—of which at least 89 were fatal—occurred due primarily to the 18-year-old drinking age.

Alcohol Consumption and Retail Licensing

In addition to analyses of traffic accidents my colleagues and I have collected data from the Michigan Liquor Control Commission and the Michigan Beer and Wine Wholesaler's Association to assess changes in alcohol consumption or licensing activities which might elaborate or challenge the causal relationship between the 18-year-old drinking age and increased numbers of 18- to 20-year-old traffic crashes.

Michigan liquor control laws were reviewed, and when appropriate data were examined, it became apparent that the retail marketplace, far from being in a steady state between 1968 and 1976, was in a state of considerable change. Several specific changes were noted.

Class C licenses are awarded to retail establishments to permit consumption of all types of alcohol on premise. In Michigan the current formula for such licenses is 1 per 1,500 people in the population of the jurisdiction. Because the formulas change with the availability of new population size estimates it was expected that there would be an increase in Class C award

transactions after the 1970 U.S. census. Studies showed that the monthly frequency of Class C transactions increased in mid-1971.

On occasion, rules and regulations governing retail licensing change, and the marketplace responds. In early 1970 legislation was passed permitting owners of tavern licenses, who could sell only beer or wine by the drink, to transfer their license to Class C, thus enabling them to expand their trade. There was a dramatic response to this legislation, which had the effect of increasing the on-premise distilled spirits availability throughout the State.

Court decisions were found to be major determinants of increased frequencies of certain Liquor Control Commission activities. The most significant was the case of Sunday sales permits and a series of legal opinions and judicial decisions that eventually deregulated a major factor of alcohol availability. A large number of Sunday sales permits were awarded during 1972.

Few changes in the laws, policies, or interpretations of the laws have the effect of expanding the most basic foundations of market availability. It is clear that the alterations in 1972 enabled such a basic change, and one that could, hypothetically, have had a disproportionate impact on young drinkers in on-premise consumption establishments during weekends, the recreational time when most youthful drinking takes place.

Although the marketplace, as measured by licensing activities, was anything but stable during the years proximal to the 1972 change in the legal drinking age, only the increases in Sunday sales permits might have had a direct interaction with that legal change. No changes in liquor control during the 1968-1976 period were age-specific, except the drinking age change in 1972.

Analyses of Beverage Alcohol Consumption

Table Top (on-premise) and SDD (Specially Designated Distributor, Package Sales) distilled spirits sales in Michigan increased between 1968 and 1976. This suggests an increase in consumption during the 1972-73 period which is slightly greater than the stable and strong growth trend in these data. Time-series analyses using the same techniques as were used with traffic accident data, however, found no statistically significant increase in 1972.

The statewide frequencies for wholesale gallons of wine and barrels of beer showed an upward linear trend, as well as the regular cyclical pattern in which wholesale packaged beer

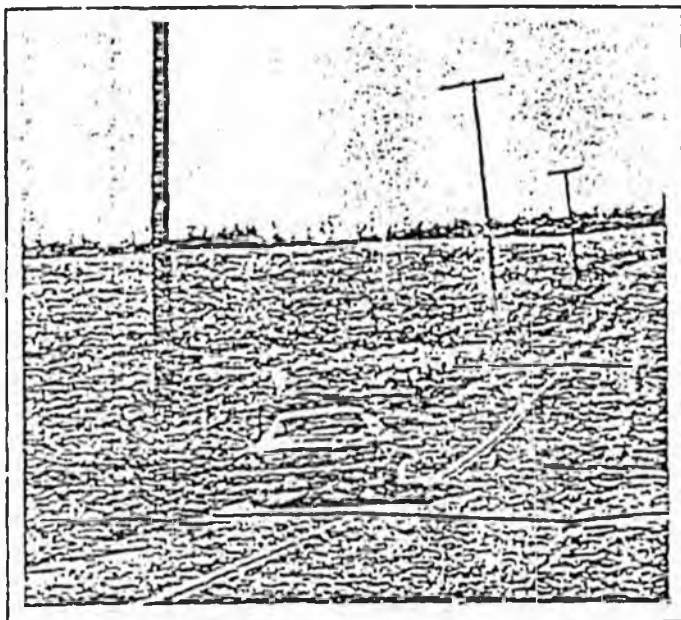
sales consistently peak during the months of July and August, while wholesale draught beer sales peak during the months of May through August.

Of particular interest in this set of data is a statistically significant increase in wholesale draught beer sales during 1972.²¹ Beer is the preferred alcoholic beverage among young people, and because on-premise consumption represents a sphere of the alcoholic beverage market not open to 18- to 20-year-olds prior to the legal change (as opposed to off-premise consumption which, although illegal prior to 1972, was impossible to restrict totally), this increase would appear to represent a temporary surge in on-premise consumption of beer by 18- to 20-year-olds. The findings regarding draught beer are consistent with Smart's 1977 findings that in 25 States in which the drinking age was lowered, only beer demonstrated an increase in consumption.²² The present findings further isolate draught rather than packaged beer.

Discussion and Conclusions

The basic findings of the studies summarized here demonstrate that in the time period surrounding Michigan's reduction of the legal drinking age to 18 in 1972, alcohol-related casualties increased for 18- to 20-year-olds and many concurrent dynamics occurred in the control and consumption of beer, wine, and distilled spirits.

In the methodological development of the many analyses reported here, great care has been exercised to maximize our control over spurious or plausible alternative explanations of increases



in traffic casualties and alcohol consumption. There is a point, however, beyond which the limits of data quality and data availability prohibit further systematic control over spuriousness; the process of integrating the findings of these years of study approaches that point.

It has been established that many historical, legal, and social changes took place at or about the same time that 18- to 20-year-olds in Michigan became enfranchised to purchase and consume beverage alcohol. We know, too, that traffic casualties among 18- to 20-year old drivers related to alcohol increased during and subsequent to 1972, and that draught beer sales increased during 1972 since 1972. Distilled spirits, packaged beer and wine sales have increased markedly since 1969. All of these events, combined, represent a compelling argument that the changes in alcohol availability, consumption, and related traffic casualties are not independent but linked together. Particularly, the changes in availability brought about by the 18-year-old drinking age in Michigan were usually associated with a large increase in traffic accidents among the age group directly affected.

Little Attention Paid to Availability

During the countless discussions and arguments about the probable impact of the lower legal drinking age during 1971, little, if any, serious attention was paid to the entire notion of the availability (supply) of beverage alcohol in Michigan—most people involved in the debates presumed the availability to be primarily stable. During this period of debate, the influx of new young drinkers and drinking drivers was conceived as a change in demand for alcoholic beverages. A potential change in alcohol-related casualties was thought to be the result of an increase in the population of young drinkers.

To many, the lower legal drinking age was little more than the legitimization of presumed existing drinking, and drinking-driving behaviors, among the enfranchised 18- to 20-year-old populations. Little or no change in either demand or availability (supply) of alcoholic beverages was predicted. Proponents of the lower drinking age supported the position that potential increases in alcohol-related traffic crashes due to the lower legal drinking age, as well as other alcohol-related problems, would be minimal be-

²¹Ibid., p. 86.

²²Reginald G. Smart, Changes in alcoholic beverage sales after reduction in the legal drinking age, *Am J Drug Alcohol Abuse* 4(1):101-108, 1977.

cause "nothing real" would be changed (except a poorly enforced minimum drinking age).

Our position, on the basis of the analyses reported here, is that in 1971 most individuals and organizations engaged in the debate over the legal drinking age were not provided with adequate information about the factors influencing the likely impacts of that legislation. Assumptions of stability of beverage alcohol consumption and supply and demand of beverage alcohol were fallacious. We have identified that the distribution of beer, wine, and spirits is highly variable over time, although predictable. Draught beer consumption, especially, appears to have been directly affected by the lower legal drinking age.

We are struck by the apparent disassociation of beverage alcohol from potential problems related to alcohol during the continuing debate about the effects of the lower legal drinking age. Specifically, the technical and popular literature directed to the issue have consistently failed to consider the supply and distribution of beverage alcohol as a potential factor in any expected social impact.

It is useful, at this point, to wonder why the distribution and volume of beverage alcohol was not investigated during the debate concerning the impact of the lower legal drinking age in Michigan or elsewhere. Although the precise contribution of changes in beverage alcohol control policies and practices to increases in traffic crashes related to drinking cannot be measured, I believe that increases in the number of outlets, increases in Sunday sales permits, increases in the volume of beer, wine, and spirits distributed, transfers of Tavern to Class C licenses, and the influence of the 1970 census, plus other factors, certainly contributed to the magnitude of the effect of the lower legal drinking age on youth crash involvement. It is clear that Michigan has had a persistent increase of 18- to 20-year-old, alcohol-related crash involvements since 1972. It is my conclusion that the relatively simultaneous alterations of the influences of alcohol availability and the lowered legal drinking age have interacted to create a traffic casualty problem that might have been reduced if one or the other were held constant.

In 1977 my colleague, Jay Freedman, and I recommended that Michigan's legal drinking age be raised because of the magnitude of the traffic casualty impact of the 18-year-old law. We

stated, however, that it would be totally naive to expect that legal action, alone, would have any measurable influence. Enlightened social policies regarding alcohol education, nonalcohol-requiring recreational alternatives, and the enforced control of distribution of beverage alcohol all must be engaged simultaneously if the real problem is to be reduced.

It was an encouraging experience in research utilization when the constitutional challenge to the 21-year-old law, which took place in Michigan in December 1978, cited our studies and made mention of the methodological design of the research. It was also encouraging from a public health perspective to note that the Federal judge who wrote the opinion gave credence to the public's right to emphasize the primacy of life and limb over certain social liberties and privileges.²³

The new 21-year-old drinking age in Michigan will provide the opportunity for another phase of study. The newest chapter in the drama is confounded by an energy crisis which will probably reduce some proportion of total traffic crashes. (We did find, however, that the 1974 fuel shortage had little effect on alcohol-related crashes; thus the newest energy crisis may not threaten our evaluation significantly.)

Also challenging our planned evaluation of the newest legal change is a law which became effective in January 1979 banning nonreturnable glass or metal beer containers (in addition to soft drink containers). The returnable bottle and can law introduced a deposit charge for all off-premise beer containers at the point of retail sale. This has had the effect of raising the retail price of bottled or canned beer, which will probably reduce consumption by the economically disadvantaged, a status that usually includes youth. Thus with on-premise consumption again unavailable and the supply of illicit packaged beer made more expensive, a reduction in beer consumption by 18- to 20-year-olds might not be due entirely to the higher drinking age. Fortunately, the returnable bottle law is not age-specific to youth. The analyses, however, will require new design features to control for the concurrent changes in legal and price availability.

This situation is to be expected with applied research. Good research should produce new and more challenging research questions. The dynamics of alcohol problems and alcohol availability will certainly provide research problems for many years to come.

²³Gov. op. cit., p. 51.

CHAR

Alaska Cabaret, Hotel & Restaurant Association

P.O. BOX 4-1260 • ANCHORAGE, ALASKA 99509
PHONE: 272-4032

April 22, 1982

Sen. Charles Parr
State Capitol
Pouch V
Juneau, Alaska 99811

Good Morning, Charlie:

The Alaska Cabaret, Hotel and Restaurant Association and its membership is very much concerned about new pressures to change the 19 year old drinking age. The age of young adults in Alaska permits:

- 1) Legal voting at 18
- 2) Legal subpoena for jury duty at 18
- 3) Legal to make binding contracts at 18
- 4) Legal driving license at 18
- 5) Legal driving license at 16 with parents consent
- 6) Legaly classed as adult at 16 under new criminal code
- 7) In March of this year, the Anchorage Crime Commission went on record recommending lowering the age of majority to 16.

All these ages indicate the majority of people believe in the worth and decision making ability of our young adults.

The restaurant industry is the "first-job" for many of our young adults.....dishwashers, waiter, waitress'. In my own Hotel/Restaurant approximately 30 young adults are employed as their first-job each year. Any change in the drinking age would prohibit most of these young adults being employed for the two-year period. On a state-wide basis, this would adversely affect a large number of young adults.

The young adults in our cities and communities are good and productive citizens. As parents, employers and legislators, the young adults deserve our support and encouragement. However, there may be the 5% that create a bad name for the 95% of young adults that are good and law abiding. We believe that strict enforcement of existing laws, cooperation with law enforcement agencies and the judicial system will pave the way toward solving problems created by the 5 per cent.

You will be pleased to learn that since the March 25th Legislative Dinner where CHAR formally announced the beverage industry leadership committment, CHAR leadership has had meetings with the State Coordinator of Alcohol Programs, the ABC Director and the Alaska State Troopers, as a first step to more actively enforce existing State laws, including not serving minors. Further, a work session for police management personnel and CHAR leaders has been scheduled June 11th at the Alaska Police Chiefs Convention to coordinate enforcement of State liquor laws, particularly by the industry.

CHAR

Alaska Cabaret, Hotel & Restaurant Association

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We believe positively in the young adults of our State. We believe that the beverage industry's committment to education and enforcement will positively influence and reduce the 5 per cent.

We request your support in maintaining the legal drinking age at 19.

Sincerely

Alaska Cabaret, Hotel and Restaurant Association

Bob Cramer

Robert W. Cramer, Pres.

RWC/fc