

DEPARTMENT OF TRANSPORTATION'S

REPORT TO LEGISLATURE

OF

THE STATE OF HAWAII

ON

ACT 72

SESSION LAWS OF HAWAII 2005

SECTION 12

**ANNUAL REPORT: "PLAN OR THE EVALUATION
OF HAWAII'S GRADUATED LICENSING
PROGRAM**

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
JANUARY 2008**

DEPARTMENT OF TRANSPORTATION'S
REPORT TO THE LEGISLATURE

ON

ACT 72
SESSION LAWS OF HAWAII 2005
SECTION 12

**Annual report to the Hawaii Legislature on the evaluation of Act 72:
Hawaii's Graduated Licensing Program**

Summary:

The enactment of Act 72, Hawaii's graduated licensing program, was associated with significant decreases in the numbers of 16 and 17 year-olds with driver's licenses in 2006. The translation of fewer licensed drivers to lowered teen involvement in crashes was less clear, however, mostly due to incomplete crash data for 2006. Despite this limitation, there was a significant decrease in the proportion of drivers involved in crashes who were 16 years-old, from 1.49% during pre-GDL periods to 1.22% in 2006. This small change represents an estimated reduction of 41 fewer 16 year-old drivers involved in crashes each year. The decrease was evident only among drivers in Hawaii and Kauai counties. Reductions in teen-aged drivers involved in night time crashes and crashes involving the transport of multiple minor-aged passengers were also described. Future analyses with complete 2006 data will provide a more thorough and statistically reliable examination of trends in the number and rate of crashes involving young drivers.

Introduction:

Hawaii's graduated licensing (GDL) program, as stipulated by Act 72, took effect on January 9, 2006. GDL changed both the license application process for 16 and 17 year-olds, and restricted the times and conditions under which they can drive. This evaluation will examine trends in the number and proportion of crashes involving teen-aged drivers, using data from pre- and post-GDL time periods.

Methodology:

Prior to GDL, an applicant could obtain a full driver's license at 15 (before 2001) or 16 years of age (2001 and later). GDL instituted a phased process to obtaining a license, so that a resident younger than 18 years of age must obtain in sequence: an instructional permit, a provisional license, and finally a full license. Applicants must be at least 15 years and 6 months of age to receive a permit, at least 16 years old for the provisional license, and at least 17 years old to receive a full driver's license. GDL further prohibits those with a provisional license from transporting more than one other person below age 18 at any time, and from driving between 11:00pm and 5:00am unless accompanied by the driver's parent or guardian. (There are some exemptions to the latter restriction, based on documented need to drive to work or school-authorized activities.)

This report will look at annual trends in the number and proportion of crashes involving teen-aged drivers over the 5-year period of 2002 to 2006. The number of all crashes is derived from the Motor Vehicle Accident Report (MVAR) form which is completed at crash scenes by

police officers in all counties and submitted to the Hawaii State Department of Transportation (DOT). Data from the Fatal Analysis Reporting System (FARS) of the National Highway Traffic Safety Administration is also used to describe traffic crashes involving a fatality.

At the time this report was prepared, MVAR data from 2006 was incomplete, so the results presented here should be considered preliminary. Table 1 show that data was missing from Honolulu and especially Hawaii counties. Data from Hawaii County was reduced by over 30% in 2006 compared to previous years, while there was a decrease of over 6% in records for Honolulu County. The observed decreases in records from Kauai and Maui counties in 2006 were within levels of fluctuation in previous years, so it is possible 2006 data is complete in those counties. However, given the incomplete 2006 data from Hawaii and Honolulu counties (and therefore the state), this report will consider changes in the proportion of crashes involving teen-aged drivers. Changes in proportion will be unaffected by changes in number of drivers (from incomplete data), with the reasonable assumption that the missing MVAR reports are not biased in terms of age of drivers. (Since complete data is not available for 2006, this report will not examine trends in the rates of crashes involving teen-aged drivers. Crash rates are computed using the counts from the above data sources, adjusted for the annual numbers of licensed drivers; data which was provided by the Hawaii Motor Vehicle & Licensing Division. These analyses will be conducted when complete 2006 data is available.)

Table 1. Annual number of traffic crashes documented by MVAR, by county, 2002-2006.

County	2002	2003	2004	2005	2006
Hawaii	2197	2310	2432	2117	1452
Honolulu	6364	6650	6518	6396	5981
Kauai	608	759	675	605	531
Maui	965	1079	790	905	866
state	10134	10798	10415	10023	8830

Apart from the missing 2006 data, MVAR has other limitations which effect this evaluation. Firstly, there is no place to note a driver's possession of an instructional permit, so this evaluation will only examine the crash rates of drivers aged 16 years and older. Secondly, MVAR is unable to distinguish possession of a provisional license from a full license, so this evaluation cannot assess compliance of those terms of GDL. Thirdly, while MVAR collects age and demographic information on most of the occupants involved in a crash, there is no information on their relationship to the driver. MVAR data therefore cannot establish whether a passenger was a parent or guardian of a teen-aged driver (as stipulated by GDL under certain conditions) or some unrelated person. This evaluation therefore considers only the presence of any passenger aged 32 or older in a car operated by a 16 or 17 year-old; there is no way to determine compliance with the GDL stipulations of a parent or guardian present in the transport of more than one passenger under 18 years of age, or a provisional licensee operating between 11:00 pm and 5:00 am. Finally, data relevant to this evaluation is sometimes missing from MVAR. Table 2 shows the magnitude of missing data for some MVAR elements needed for this evaluation. The time of the crash was missing for about 2% of the crashes that involved at least one automobile. Age was missing for about 7% of the drivers of automobiles, and driver gender was missing for 3.6%. Missing data will be excluded from analyses in this report, since there was no trend over time in the proportion of records with missing information. The only

exception was automobile passenger age in 2005 (missing for 11%), due to missing information for nearly one-third (30%) of passengers involved in crashes on Hawaii County that year.

Table 2. Summary of missing data from key elements of MVAR, by year.

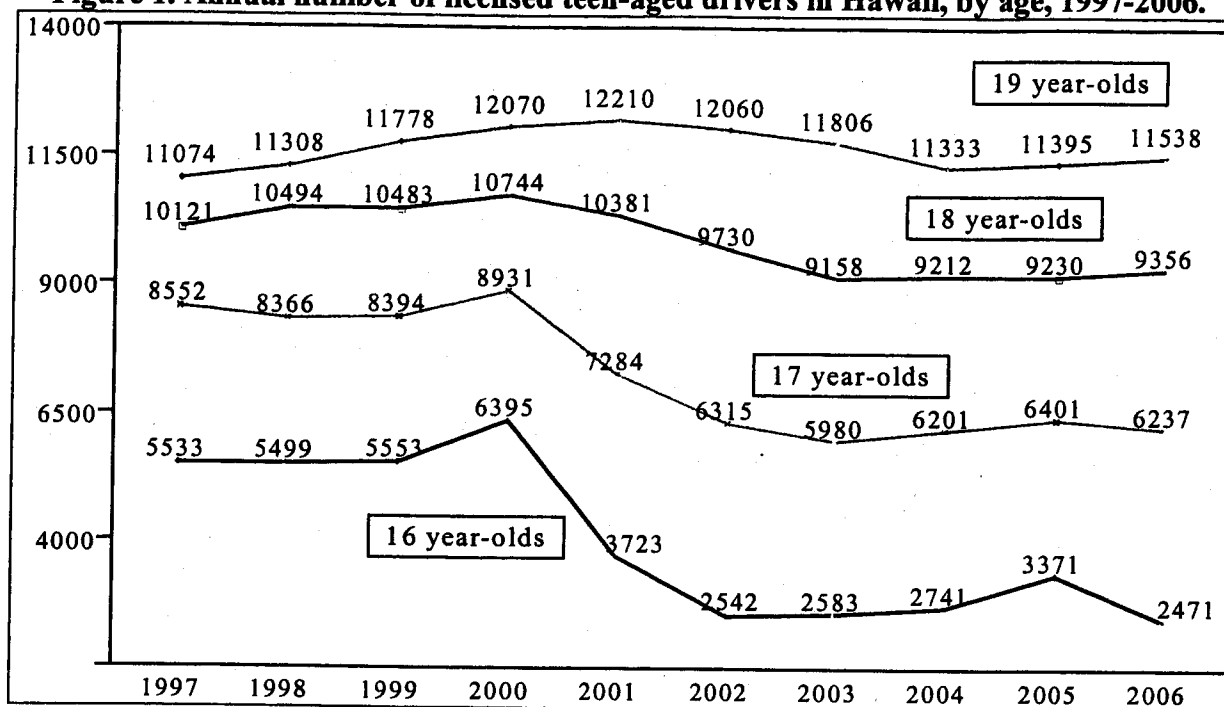
	2002	2003	2004	2005	2006	5-yr. ave
Crashes involving at least one automobile*						
number of crashes	10134	10798	10415	10023	8830	10040
missing vehicle type	1.8% (181)	1.4% (152)	2.2% (229)	1.7% (172)	1.9% (168)	1.8% (180)
missing time of crash	1.9% (193)	2.1% (229)	2.5% (262)	1.5% (149)	2.0% (179)	2.0% (202)
Drivers of automobiles* involved in crashes						
number of drivers	16651	17417	16790	16259	14360	16295
missing driver age	6.4% (1069)	7.3% (1271)	6.4% (1073)	6.5% (1059)	6.6% (949)	6.7% (1084)
missing driver gender	3.2% (531)	4.0% (698)	3.1% (527)	3.8% (618)	3.9% (554)	3.6% (586)
Passengers of automobiles* involved in crashes						
number of passengers	8363	8615	8288	7529	6787	7916
missing passenger age	4.4% (371)	4.2% (366)	4.2% (346)	10.7% (802)	6.2% (419)	5.8% (461)

*Automobile includes passenger cars, pick-up trucks, vans, and sport utility vehicles. Excludes motorcycles, mopeds, buses, and other specialized vehicles.

Results:

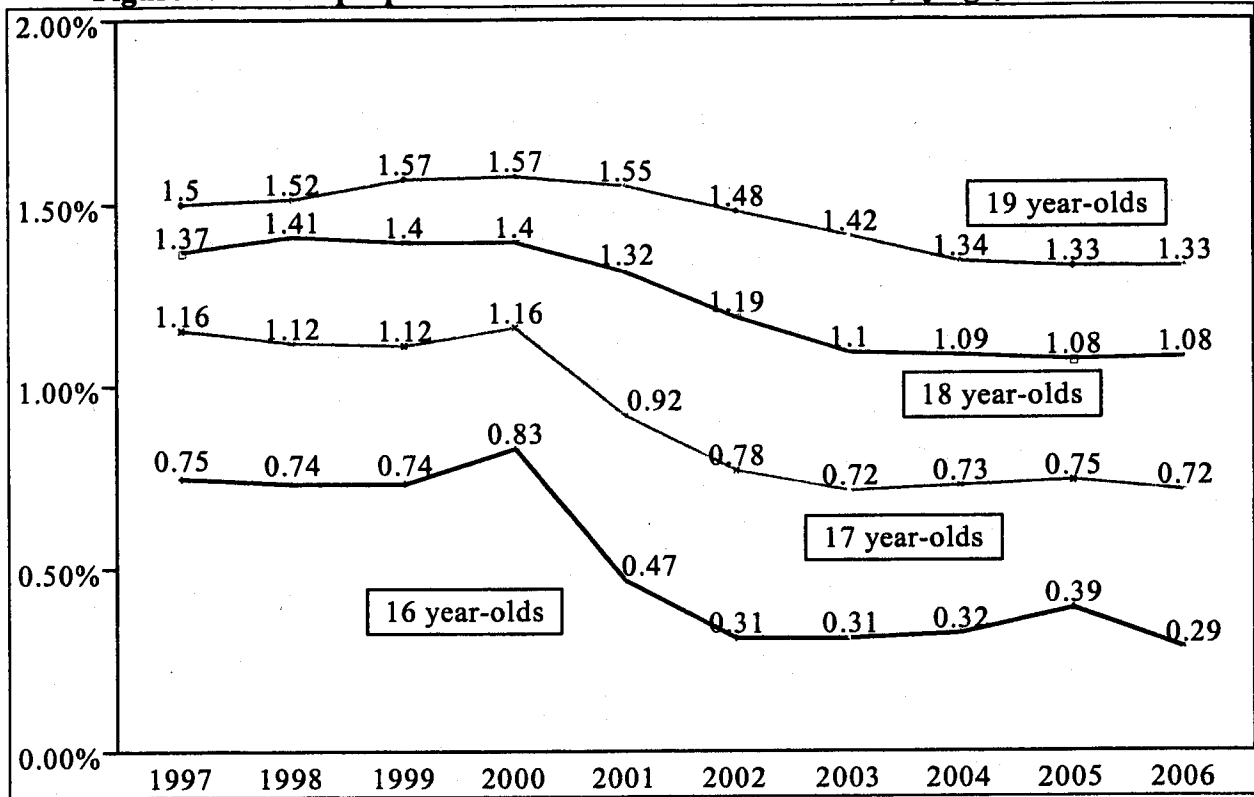
Figure 1 shows the number of 16 year-old licensees has decreased twice in recent years: first in 2001, after implementation of Act 175 which required driver license applicants under age 18 to complete a certified driver education program and a behind-the-wheel driver training course, and secondly in 2006 after the implementation of GDL. (Note the increases in licenses in 2000 and 2005, possibly in anticipation of these two programs.) There were also corresponding decreases in the number of 17 year-old licensees, although the decrease in 2006 was much less than for 16 year-olds. The number of 18 and 19 year-old licensees had stabilized a few years after Act 175.

Figure 1. Annual number of licensed teen-aged drivers in Hawaii, by age, 1997-2006.



Similar trends were seen in the proportion of licensed drivers who were 16 or 17 years of age (Figure 2): a sharp decrease in 2001 after Act 175, followed by stable levels from 2002 to 2004, and a decrease in 2006, particularly among 16 year-olds. These patterns were consistent across each of the four counties. The proportion of licenses to 16 year-olds in 2006 decreased significantly in all counties when comparing 2006 to either 2005 or the proportion averaged over the 4-year period of 2002 to 2005. The only exception was for Maui County, where the proportion of drivers who were 16 years old in 2006 (0.33%) was statistically comparable to the proportion over the 2002 to 2005 period (0.34%). For the state overall, the proportion of licensees who were 16 years old decreased 26% from 2005 (0.39%) to 2006 (0.29%). Figure 1 shows this translated into 900 fewer 16 year-olds with licenses in 2006, compared to 2005. The decrease in the proportion of 17 year-old licensees in the state from 2005 (0.75%) to 2006 (0.72%) was of "borderline" statistical significance ($p=0.052$). There were, however, significant decreases in this proportion Hawaii and Kauai counties. There were no significant changes from 2005 to 2006 in the proportion of licensees who were 18 or 19 years of age for any county, suggesting the observed decreases among 16 and 17 year-olds was due to the implementation of GDL.

Figure 2. Annual proportion of licensed drivers in Hawaii, by age, 1997-2006.



There was a statistically significant decrease in the proportion of 2006 automobile crashes that involved a 16 year-old driver, when compared to either the proportion in 2005 or the average proportion over the 2002 to 2005 period (Table 3 and Figure 3). In 2006, only 1.22% of drivers involved in crashes were 16 year-olds, an 18% decrease from 1.49% in 2005 or the 2002 to 2005 period. Using the 2002 to 2005 annual average of 232 drivers of this age, this decrease would translate into 41 fewer 16 year-old drivers who were involved in crashes in the state. There were no other significant differences for other teen-aged drivers, or drivers of older ages. (The only exceptions involved an increase in the proportion of 30 to 44 year-old drivers and a decrease among 45 to 64 year-old drivers, when compared to the 2002 to 2005 period.)

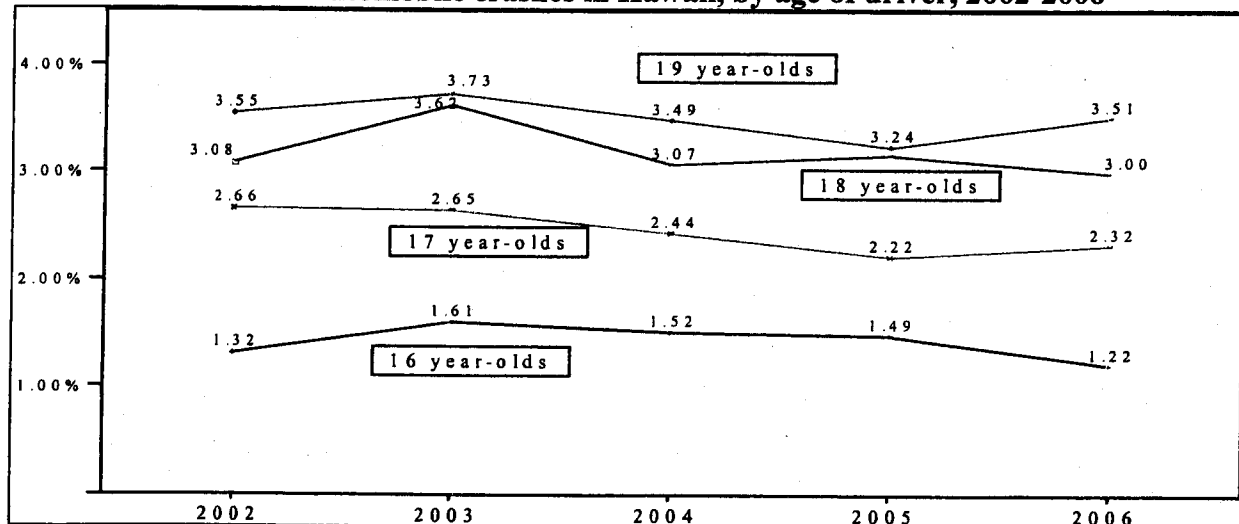
Table 3. Annual number and percent of drivers involved in automobile crashes in Hawaii, by age of driver, 2002-2006.

Age	Quantity	2002	2003	2004	2005	4-yr. ave	2006
16y	number of drivers	205	259	238	226	232	163
	percent of all drivers	1.32	1.61	1.52	1.49	1.49	1.22 ^{a,b}
17y	number of drivers	414	426	382	337	390	311
	percent of all drivers	2.66	2.65	2.44	2.22	2.50	2.32
18y	number of drivers	479	583	482	480	506	402
	percent of all drivers	3.08	3.62	3.07	3.17	3.24	3.00
19y	number of drivers	552	601	547	492	548	470
	percent of all drivers	3.55	3.73	3.49	3.24	3.51	3.51
20-29y	number of drivers	4024	4298	4112	4107	4135	3600
	percent of all drivers	25.90	26.69	26.22	27.09	26.47	26.91
30-44y	number of drivers	4627	4580	4458	4233	4475	3685
	percent of all drivers	29.78	28.44	28.43	27.92	28.64	27.55 ^b
45-64y	number of drivers	3956	4089	4163	4106	4079	3656
	percent of all drivers	25.46	25.39	26.55	27.08	26.11	27.33 ^b
65-74y	number of drivers	738	739	744	678	725	630
	percent of all drivers	4.75	4.59	4.74	4.47	4.64	4.71
75+y	number of drivers	541	527	556	504	532	461
		3.48	3.27	3.55	3.32	3.41	3.45

^a Statistically significant difference between proportion of drivers in 2006 compared to 2005.

^b Statistically significant difference between proportion of drivers in 2006 compared to the 2002-2005 average.

Figure 3. Annual proportion of teen-aged drivers involved in automobile crashes in Hawaii, by age of driver, 2002-2006



County-specific analyses showed the significant decrease in the proportion of 16 year-old drivers was evident only in Hawaii and Kauai counties (Tables 4 and 6, respectively). There was little change in this proportion among drivers in Maui (Table 7) and especially Honolulu counties (Table 5). These relationships are summarized graphically in Figure 4. Apart from 16 year-olds, county-specific analyses were consistent with those for the state as a whole, in that there were few significant changes in the distribution of driver age in 2006, either compared to 2005 or the 2002 to 2005 period.

Table 4. Annual number and percent of drivers involved in automobile crashes in Hawaii County, by age of driver, 2002-2006.

Age	Quantity	2002	2003	2004	2005	4-yr. ave	2006
16y	number of drivers	59	90	82	66	74	31
	percent of all drivers	1.71	2.55	2.19	2.05	2.13	1.30 ^{a,b}
17y	number of drivers	111	119	117	95	111	73
	percent of all drivers	3.21	3.37	3.12	2.95	3.17	3.07
18y	number of drivers	132	147	132	143	139	91
	percent of all drivers	3.82	4.17	3.52	4.45	3.97	3.83
19y	number of drivers	108	137	159	129	133	96
	percent of all drivers	3.12	3.88	4.24	4.01	3.82	4.04
20-29y	number of drivers	817	861	934	806	855	550
	percent of all drivers	23.63	24.40	24.93	25.07	24.51	23.15
30-44y	number of drivers	936	940	956	802	909	580
	percent of all drivers	27.08	26.64	25.51	24.95	26.05	24.41
45-64y	number of drivers	968	924	1041	926	965	750
	percent of all drivers	28.00	26.18	27.78	28.80	27.67	31.57 ^{a,b}
65-74y	number of drivers	171	169	184	146	168	119
	percent of all drivers	4.95	4.79	4.91	4.54	4.80	5.01
75+y	number of drivers	155	142	142	102	135	86
		4.48	4.02	3.79	3.17	3.88	3.62

^a Statistically significant difference between proportion of drivers in 2006 compared to 2005.

^b Statistically significant difference between proportion of drivers in 2006 compared to the 2002-2005 average.

Table 5. Annual number and percent of drivers involved in automobile crashes in Honolulu County, by age of driver, 2002-2006.

Age	Quantity	2002	2003	2004	2005	4-yr. ave	2006
16y	number of drivers	106	107	99	98	103	90
	percent of all drivers	1.11	1.09	1.02	1.02	1.06	1.02
17y	number of drivers	233	224	201	177	209	169
	percent of all drivers	2.44	2.29	2.07	1.84	2.16	1.92
18y	number of drivers	272	324	280	272	287	232
	percent of all drivers	2.85	3.31	2.89	2.82	2.97	2.63
19y	number of drivers	365	355	320	304	336	304
	percent of all drivers	3.82	3.63	3.30	3.16	3.48	3.45
20-29y	number of drivers	2634	2841	2677	2746	2725	2533
	percent of all drivers	27.60	29.07	27.63	28.51	28.21	28.77
30-44y	number of drivers	2893	2794	2851	2741	2820	2495
	percent of all drivers	30.31	28.59	29.43	28.46	29.19	28.34
45-64y	number of drivers	2281	2385	2480	2529	2419	2251
	percent of all drivers	23.90	24.40	25.60	26.26	25.04	25.57
65-74y	number of drivers	450	442	451	431	444	422
	percent of all drivers	4.71	4.52	4.66	4.48	4.59	4.79
75+y	number of drivers	311	302	329	333	319	309
		3.26	3.09	3.40	3.46	3.30	3.51

Table 6. Annual number and percent of drivers involved in automobile crashes in Kauai County, by age of driver, 2002-2006.

Age	Quantity	2002	2003	2004	2005	4-yr. ave	2006
16y	number of drivers	20	41	32	32	31	14
	percent of all drivers	2.15	3.78	3.42	3.70	3.28	1.79 ^{a,b}
17y	number of drivers	23	35	41	25	31	29
	percent of all drivers	2.48	3.23	4.38	2.89	3.25	3.70
18y	number of drivers	36	57	40	22	39	37
	percent of all drivers	3.88	5.25	4.27	2.55	4.06	4.72 ^a
19y	number of drivers	42	44	31	22	35	25
	percent of all drivers	4.52	4.06	3.31	2.55	3.64	3.19
20-29y	number of drivers	211	226	198	208	211	180
	percent of all drivers	22.71	20.83	21.13	24.07	22.10	22.96
30-44y	number of drivers	276	306	237	240	265	208
	percent of all drivers	29.71	28.20	25.29	27.78	27.76	26.53
45-64y	number of drivers	246	291	270	240	262	234
	percent of all drivers	26.48	26.82	28.82	27.78	27.44	29.85
65-74y	number of drivers	45	53	47	41	47	29
	percent of all drivers	4.84	4.88	5.02	4.75	4.88	3.70
75+y	number of drivers	30	32	41	34	34	28
		3.23	2.95	4.38	3.94	3.59	3.57

^a Statistically significant difference between proportion of drivers in 2006 compared to 2005.

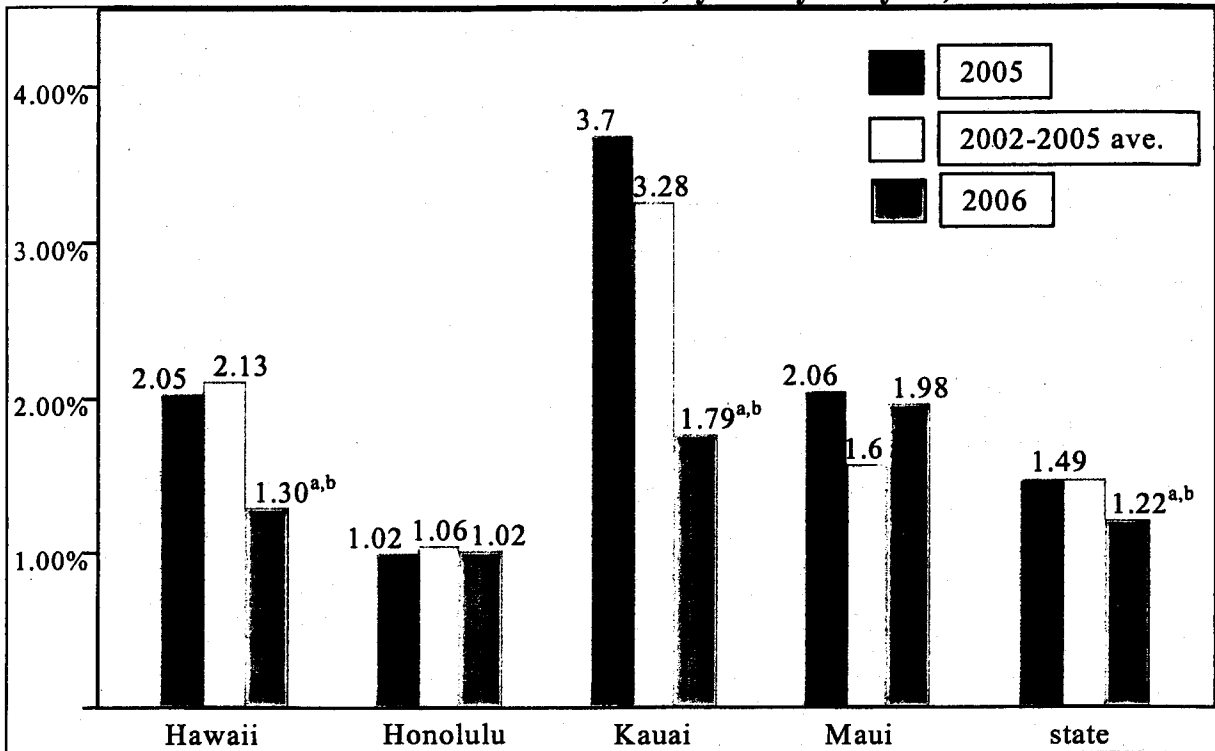
^b Statistically significant difference between proportion of drivers in 2006 compared to the 2002-2005 average.

Table 7. Annual number and percent of drivers involved in automobile crashes in Maui County, by age of driver, 2002-2006.

Age	Quantity	2002	2003	2004	2005	4-yr. ave	2006
16y	number of drivers	20	21	25	30	24	28
	percent of all drivers	1.25	1.23	1.91	2.06	1.58	1.98
17y	number of drivers	47	48	23	40	40	40
	percent of all drivers	2.93	2.80	1.76	2.75	2.60	2.83
18y	number of drivers	39	55	30	43	42	42
	percent of all drivers	2.43	3.21	2.29	2.96	2.75	2.97
19y	number of drivers	37	65	37	37	44	45
	percent of all drivers	2.31	3.79	2.82	2.55	2.89	3.18
20-29y	number of drivers	362	370	303	347	346	337
	percent of all drivers	22.55	21.59	23.13	23.88	22.72	23.85
30-44y	number of drivers	522	540	414	450	482	402
	percent of all drivers	32.52	31.51	31.60	30.97	31.67	28.45 ^b
45-64y	number of drivers	461	489	372	411	433	421
	percent of all drivers	28.72	28.53	28.40	28.29	28.49	29.79
65-74y	number of drivers	72	75	62	60	67	60
	percent of all drivers	4.49	4.38	4.73	4.13	4.42	4.25
75+y	number of drivers	45	51	44	35	44	38
		2.80	2.98	3.36	2.41	2.88	2.69

^b Statistically significant difference between proportion of drivers in 2006 compared to the 2002-2005 average.

Figure 4. Proportion of 16 year-old drivers involved in automobile crashes in Hawaii, by county and year, 2002-2006.



^a Statistically significant difference between proportion of drivers in 2006 compared to 2005.

^b Statistically significant difference between proportion of drivers in 2006 compared to the 2002-2005 average.

A total of nineteen 16 year-old drivers and forty-six 17 year-old drivers were involved in crashes between 11:00pm and 5:00am in 2006 without an adult passenger (ages 32 years and older) in the car; a time period in which provisional licensees are prohibited from driving (Table 8). The nineteen 16 year-olds comprised about 12% of all 16 year-old drivers who were in crashes, which was somewhat lower than in 2005 (15.9%) or over the 2002 to 2005 period (14.8%). However that proportion was only 3% (a single driver) for the drivers of this age in Hawaii County, a significantly lower proportion than in either 2005 (22.7% of drivers) or over the 2002 to 2005 period (15.8%). There were no other statistically significant changes in the proportion of either 16 or 17 year-old drivers who were involved in night time crashes in any other county.

Table 8. Annual number and percent of teen-aged drivers involved in night time crashes in Hawaii, by age of driver and county, 2002-2006.
(Night time is defined as between 11:00pm and 5:00am.)

<i>County</i>	2002	2003	2004	2005	4-yr. ave	2006
<i>16 year-old drivers</i>						
Hawaii	9 (15.25%)	17 (18.89%)	6 (7.32%)	15 (22.73%)	12 (15.82%)	1 (3.23%) ^{a,b}
Honolulu	12 (11.32%)	22 (20.56%)	13 (13.13%)	11 (11.22%)	15 (14.15%)	12 (13.33%)
Kauai	3 (15.00%)	5 (12.20%)	8 (25.00%)	6 (18.75%)	6 (17.60%)	2 (14.29%)
Maui	0 (0.00%)	1 (4.76%)	5 (20.00%)	4 (13.33%)	3 (10.42%)	4 (14.29%)
state	24 (11.71%)	45 (17.37%)	32 (13.45%)	36 (15.93%)	34 (14.76%)	19 (11.66%)
<i>17 year-old drivers</i>						
Hawaii	18 (16.22%)	22 (18.49%)	13 (11.11%)	9 (9.47%)	16 (14.03%)	8 (10.96%)
Honolulu	34 (14.59%)	35 (15.63%)	33 (16.42%)	32 (18.08%)	34 (16.29%)	27 (15.98%)
Kauai	4 (17.39%)	4 (11.43%)	13 (31.71%)	5 (20.00%)	7 (20.97%)	6 (20.69%)
Maui	8 (17.02%)	4 (8.33%)	4 (17.39%)	4 (10.00%)	5 (12.66%)	5 (12.50%)
state	64 (15.46%)	65 (15.26%)	63 (16.49%)	50 (14.84%)	59 (15.14%)	46 (14.79%)

^a Statistically significant difference between proportion of drivers in 2006 compared to 2005.

^b Statistically significant difference between proportion of drivers in 2006 compared to the 2002-2005 average.

There was little change in the proportion of 16 year-old drivers (14.7%) or 17 year-old drivers (12.9%) who were involved in a crash while transporting more than 1 other minor-aged (under 18 years) passenger without an adult also in the car (Table 9). This proportion was lowest among 16 year-old drivers in Hawaii County (6.5%), although not statistically different from the proportions in 2005 (13.6%) or over the 2002 to 2005 period (12.8%), perhaps due to the small sample size. The only significant change in this proportion in 2006 was among 17 year-old drivers in Maui County, although it is possible that single driver had a full license and was not prohibited from transporting multiple minor-aged passengers.

Table 9. Annual number and percent of teen-aged drivers involved in crashes in Hawaii, with multiple minor-aged passengers, 2002-2006.

<i>County</i>	2002	2003	2004	2005	4-yr. ave	2006
<i>16 year-old drivers</i>						
Hawaii	6 (10.17%)	11 (12.22%)	12 (14.63%)	9 (13.64%)	10 (12.79%)	2 (6.45%)
Honolulu	16 (15.09%)	24 (22.43%)	14 (14.14%)	17 (17.35%)	18 (17.32%)	13 (14.44%)
Kauai	2 (10.00%)	7 (17.07%)	5 (15.63%)	2 (6.25%)	4 (12.80%)	3 (21.43%)
Maui	4 (20.00%)	4 (19.05%)	7 (28.00%)	5 (16.67%)	5 (20.83%)	6 (21.43%)
state	28 (13.66%)	46 (17.76%)	38 (15.97%)	33 (14.60%)	36 (15.63%)	24 (14.72%)
<i>17 year-old drivers</i>						
Hawaii	18 (16.22%)	20 (16.81%)	15 (12.82%)	9 (9.47%)	16 (14.03%)	13 (17.81%)
Honolulu	22 (9.44%)	30 (13.39%)	22 (10.95%)	21 (11.86%)	24 (11.38%)	22 (13.02%)
Kauai	2 (8.70%)	2 (5.71%)	6 (14.63%)	4 (16.00%)	4 (11.29%)	4 (13.79%)
Maui	10 (21.28%)	8 (16.67%)	3 (13.04%)	4 (10.00%)	6 (15.82%)	1 (2.50%) ^b
state	52 (12.56%)	60 (14.08%)	46 (12.04%)	38 (11.28%)	49 (12.57%)	40 (12.86%)

^b Statistically significant difference between proportion of drivers in 2006 compared to the 2002-2005 average.

According to FARS data, only one 16 year-old driver was involved in a fatal crash in Hawaii (in Honolulu County) in 2006 (Table 10). (Unlike MVAR data, FARS data is believed to be complete through 2006 for all fatal traffic crashes in the state.) This total was the same as recorded in most previous years, however. There were two 17 year-old drivers involved in fatal crashes in 2006, a total which was also within the levels recorded in previous years.

Table 10. Annual number of teen-aged drivers involved in fatal traffic crashes in Hawaii, by age and county, 2002-2006.

County	2002	2003	2004	2005	2006
<i>16 year-old drivers</i>					
Hawaii	0	0	0	1	0
Honolulu	1	0	0	0	1
Kauai	0	0	2	0	0
Maui	0	1	1	0	0
state	1	1	3	1	1
<i>17 year-old drivers</i>					
Hawaii	0	0	2	0	1
Honolulu	1	2	3	1	0
Kauai	0	1	1	0	1
Maui	2	0	0	0	0
state	3	3	6	1	2
<i>18 year-old drivers</i>					
Hawaii	0	1	3	0	0
Honolulu	1	3	2	1	3
Kauai	0	0	1	0	0
Maui	0	2	0	1	1
state	1	6	6	2	4
<i>19 year-old drivers</i>					
Hawaii	0	1	3	2	1
Honolulu	2	4	4	4	4
Kauai	0	2	1	1	0
Maui	0	1	2	1	1
state	2	8	10	8	6

Conclusions:

The results in this report should be considered preliminary, since there was a significant portion of 2006 MVAR data missing from Hawaii and Honolulu counties. This limited the interpretation of decreases in the absolute number of crashes involving teen drivers from the post-GDL period (2006) compared to the pre-GDL periods. Missing MVAR data also excluded the examination of changes in the rates of crashes involving teen drivers. It was only possible to describe age-specific trends in the proportion of drivers involved in crashes.

These analyses showed a statistically significant decrease in the proportion of 16 year-old drivers involved in crashes. Few other significant changes were evident in other age groups, indicating a specific response to GDL among 16 year-old licensees. On the other hand, the practical significance of this decrease (from 1.49% in the pre-GDL period to 1.22% in 2006) is uncertain. Further, this proportional decrease was evident only among 16 year-old drivers in Hawaii and Kauai counties. Hawaii County was also the only county where there was a significant decrease in the proportion of 16 year-old drivers who were involved in a crash between 11:00pm and 5:00am without the presence of an adult-aged passenger. There were decreases in most counties for this outcome and in crashes in which 16 year-olds were transporting more than one minor-aged passenger, but not to a statistically significant degree.

However, it is possible that future analyses with complete MVAR data for 2006 will add to the statistical power to detect significant differences. The availability of complete data will also allow a more straightforward examination of decreases in the number and rate of crashes involving teen drivers. This will also be presented with 2006 injury outcome data from hospitals and emergency departments around the state in future reports.