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MOTOR VEHICLE CRASH FATALITY REDUCTION GROUP

DATA SUMMARY

2003

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and Makani Stevens
with data from Department of Health, Department of
Transportation and Dr. Andrew Ten Have

Hawaii County Motor Vehicle Crash Fatality Reduction Data

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Hawaii County - Motor Vehicle Crash Fatality Reduction Group Data Summary of November 2003

I. Why are we addressing this issue?

Figure 1 - shows the disturbing data that Hawaii County (red), and North Hawaii (green) have significantly higher motor vehicle crash fatality rates when compared to the rest of the State (blue).

Figure 1

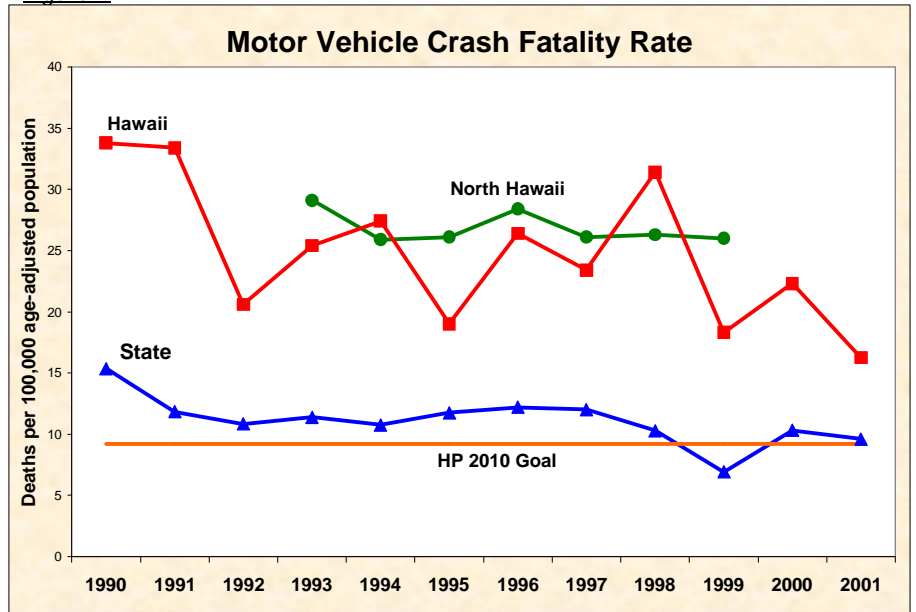
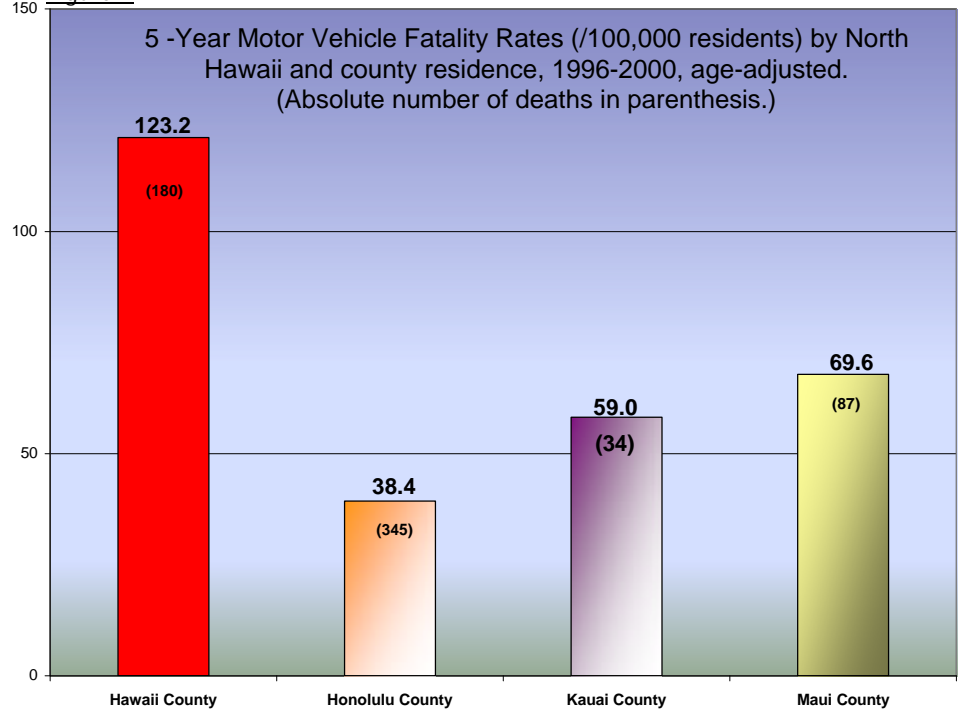


Figure 2 – shows the 5-year Hawaii County Motor Vehicle fatality rate (red) is significantly higher than the other counties in Hawaii State.

Figure 2



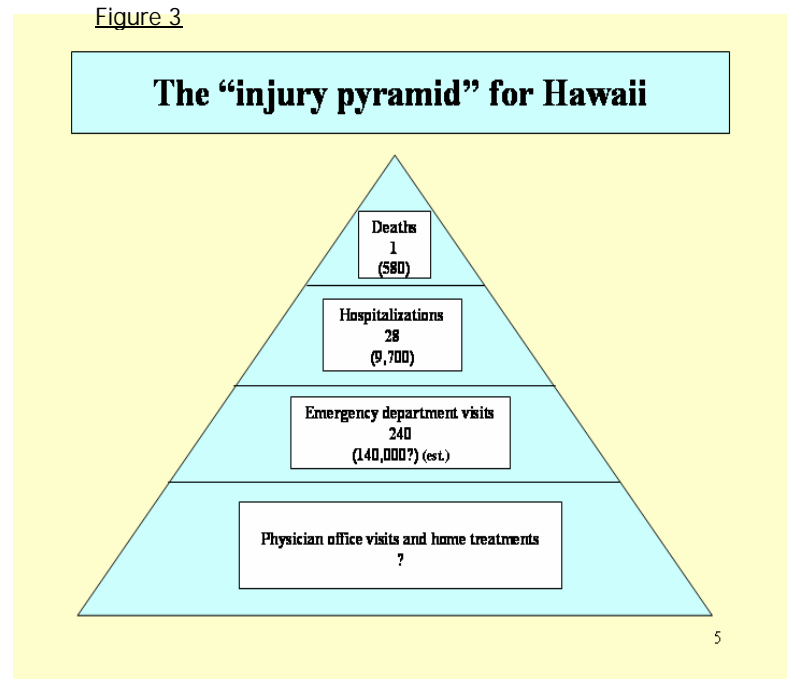
Source: North Hawaii Motor Vehicle Fatality Research Project, 2002, by Andrew G. Ten Have, M.D., M.P.H.

There are numerous factors which may contribute to the higher motor vehicle fatality rate in Hawaii County (original data available upon request). This report reviews data from Department of Health, Department of Transportation, and Dr. Ten Have, which may help stakeholders understand why Hawaii County rates are higher and which interventions are most likely to have the biggest impact. In addition it should be noted that rural areas commonly have higher motor vehicle crash death rates than more urban areas.

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Figure 3 from Dan Galanis, Ph.D., DOH, was presented at our April 2003 meeting. Dr. Galanis reminded us that fatalities are only the tip of the pyramid. He noted, "So far, we've been talking about fatal injuries, but in injury we have the concept of the Injury Pyramid. This shows that fatal injuries represent only a small proportion of all injuries that occur. For every death due to injury, there are far more non-fatal injuries that require, for example, hospitalization and even more that require visits to hospital emergency departments, or at least some sort of medical attention.

In Hawaii, for every one person that dies from an injury, there are an estimated 28 who are hospitalized and perhaps as many as 240 who are seen in emergency departments. So although fatal injuries are obviously the most severe, the vast majority of injuries are non-fatal and in some respects have much greater public health implications."



Source: Dan Galanis, Department of Health

As we review the data on fatalities and injury causing crashes in search of effective interventions, it is useful to review the Haddon Matrix Figure 4 as a guide to design Hawaii County specific interventions. Its three phases are pre-crash, crash and post-crash as well as looking at factors such as human, vehicle and road and environment. Source: Dr. Ten Have, report North Hawaii Motor Vehicle Fatality Research Project, October 2002.

Figure 4

| Haddon Matrix: Basic road safety elements | | FACTORS | | |
|--|---|---|--------------------------------------|-----------------------------------|
| | | Human Factors | Vehicle | Road & Environment |
| PHASES | Pre-crash (crash prevention) | Alcohol and drug intoxication; (Driver skill) Public transport. | Roadworthiness (brakes, lights, etc) | Road design (divided highways) |
| | Crash (injury prevention) | Seatbelt and helmet use. | Crashworthiness (airbags, frame) | Protection (barriers, crosswalks) |
| | Post-crash (saving lives) | Vulnerability to hemorrhage; first-aid skill | Ease of emergency access; fire risk. | Emergency response system |

See also Dr. Ten Have's review of 'What's worked elsewhere?'

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II. Where are the Hawaii County motor vehicle crash fatalities and injuries occurring?

As we reviewed the data from Dr. Dan Galanis, DOH, on where fatalities were occurring in Hawaii County, three "hot spots" were noted in the North Hawaii area, which prompted a site visit for closer analysis. (see Appendix A "hot spots" summary and analysis)

Additional site visits to other "hot spots" in Hawaii County have not been done by this group. Question: Have these "hot spots" been analyzed recently by DOT, County, State or Federal transportation groups?

A. Fatalities for Hawaii County and North Hawaii – 1996-2000

Figure 5

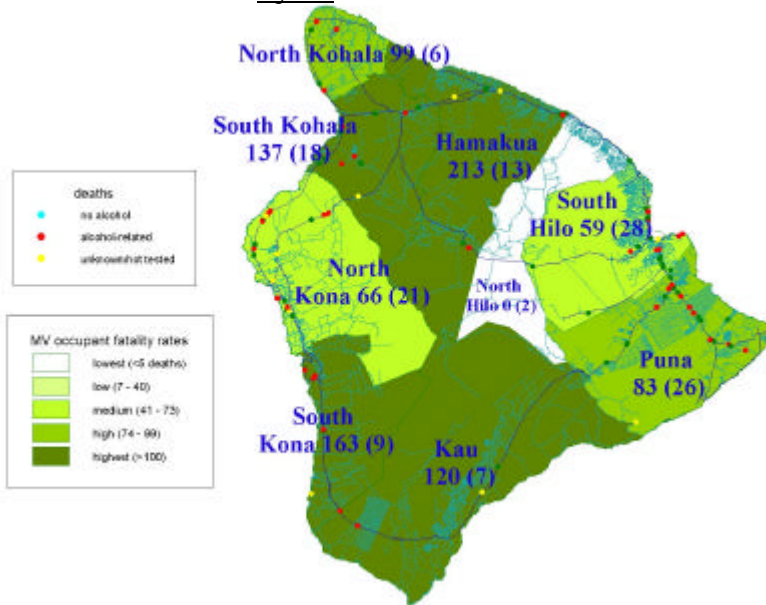
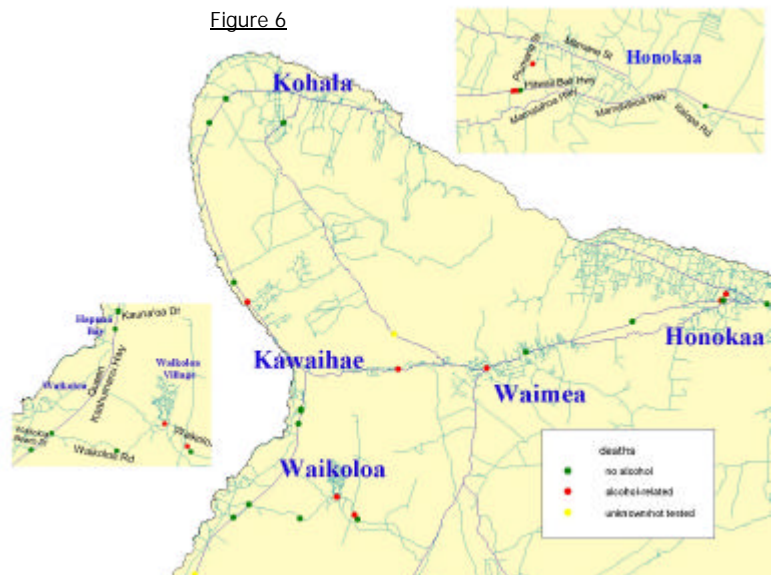


Figure 6



B. Injury location data requested from Department of Health and Department of Transportation in 2003 by Dr. Ten Have is not yet available for this analysis.

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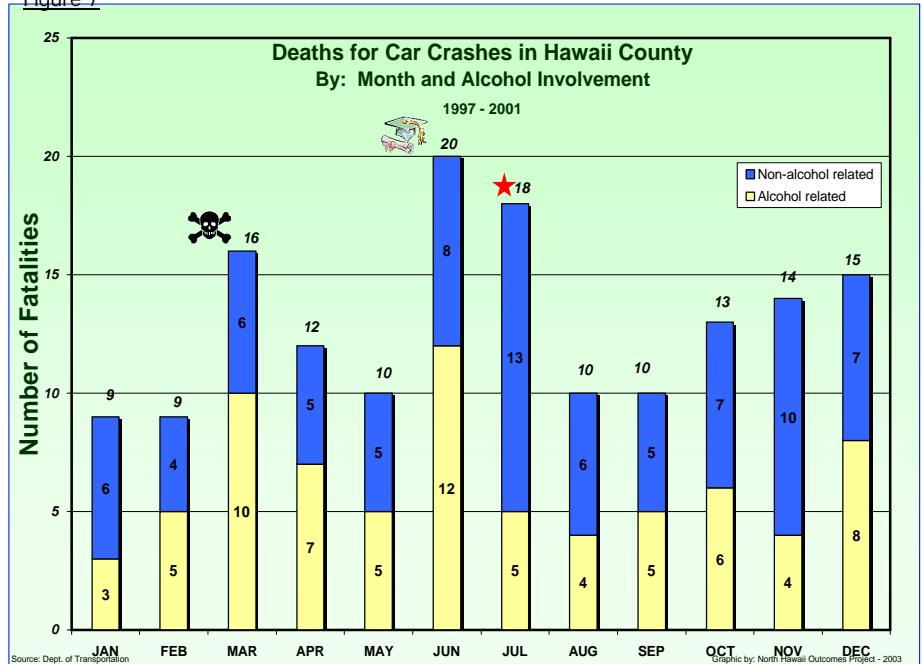
III. When and how are Hawaii County alcohol and non-alcohol fatalities and injuries occurring?

Peak months for motor vehicle crash fatalities are June and July and suggest a relationship to school graduation and summer vacation. Other peak times are also during school vacations in March and December.

A. Fatalities

Figure 7 shows that alcohol was involved in approximately 50% of fatal crashes as shown by the yellow lower half of the bar.

Figure 7

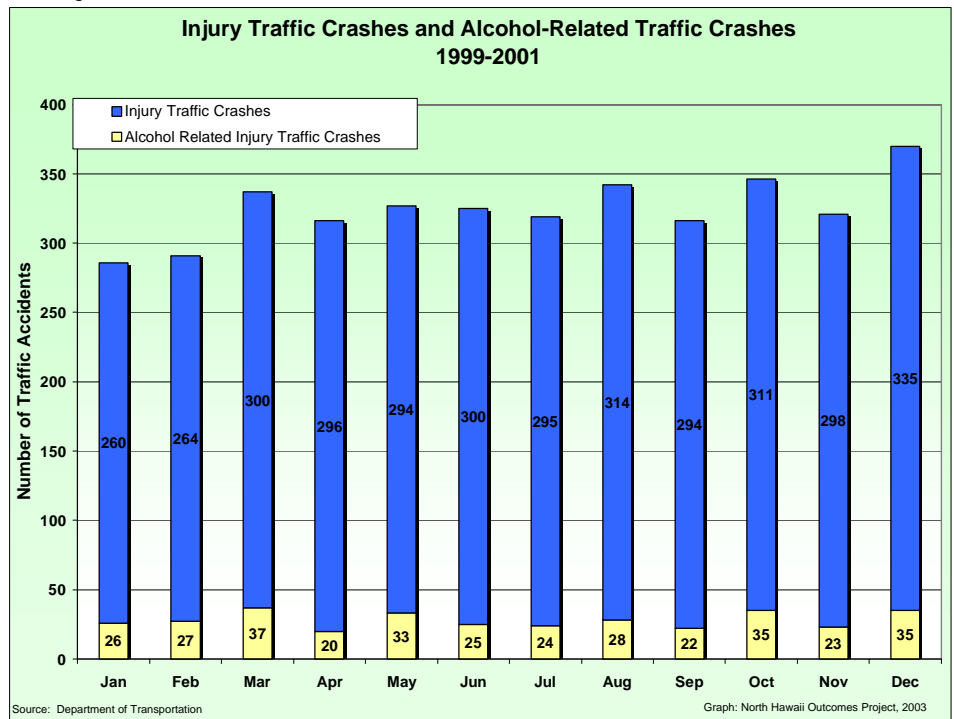


B. Injuries

It is surprising that the rate of alcohol involvement in injury associated motor vehicle crashes is dramatically lower in injuries, Figure 8 compared to fatalities, Figure 7 as seen by the smaller lower bar in Figure 8.

It has been suggested that this lower rate of apparent alcohol involvement is in part because there may be under-recording of alcohol use in these crashes. (see Appendix G - Act 101)

Figure 8



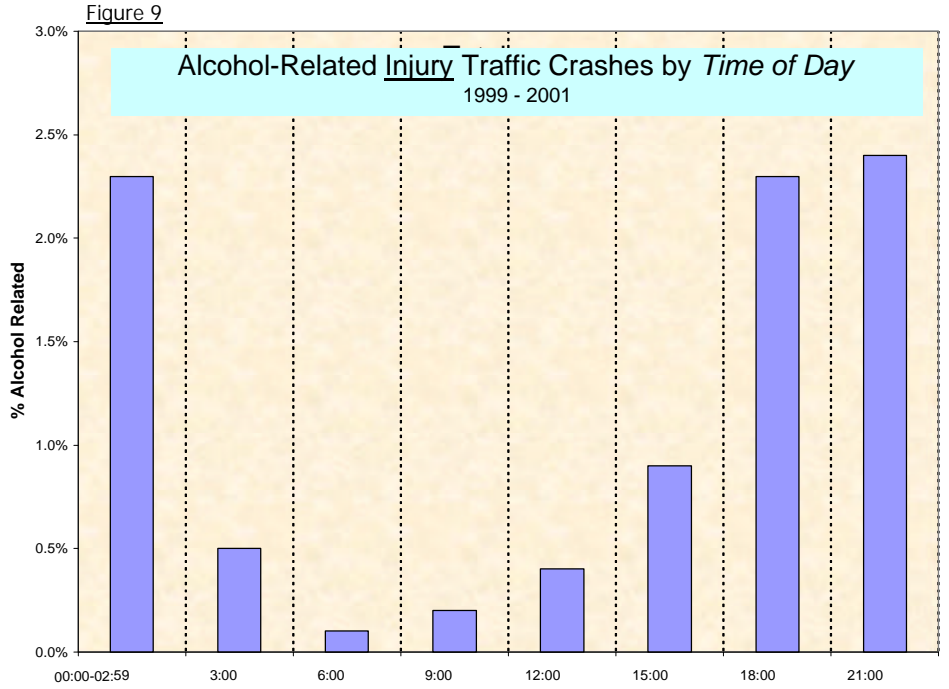
Hawaii County - Motor Vehicle Crash Fatality Reduction Group Data Summary of November 2003

IV. When are Hawaii County crash fatalities and injuries occurring?

Time of day

A. Fatality -1997-2001 data shows the peak time for fatal motor vehicle crashes is between 5:00 p.m. – 1:00 a.m. (DOT data)

B. Injury – 1999-2001 data shows the peak time for alcohol related traffic injury crashes is between 6:00 p.m. – 3:00 a.m. (see [Figure 9](#))



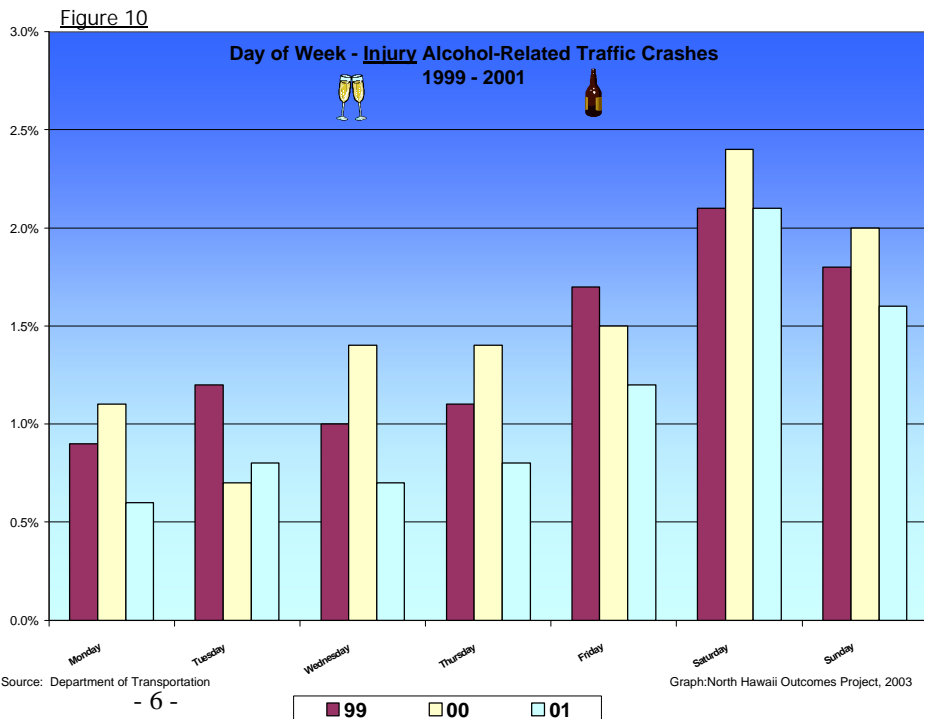
Source: Department of Transportation

Graph: North Hawaii Outcomes Project, 2003

Day of Week

A. Fatality – 1997-2001 data shows peak days are Wednesday, Thursday & Saturday (DOT data)

B. Injury - 1999-2001 data shows peak days are Saturday, Sunday & Friday (see [Figure 10](#))



Source: Department of Transportation

Graph: North Hawaii Outcomes Project, 2003

Hawaii County - Motor Vehicle Crash Fatality Reduction Group Data Summary of November 2003

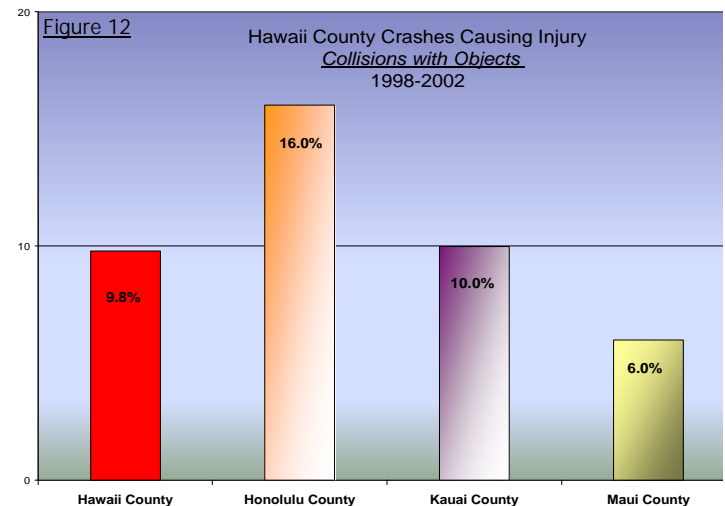
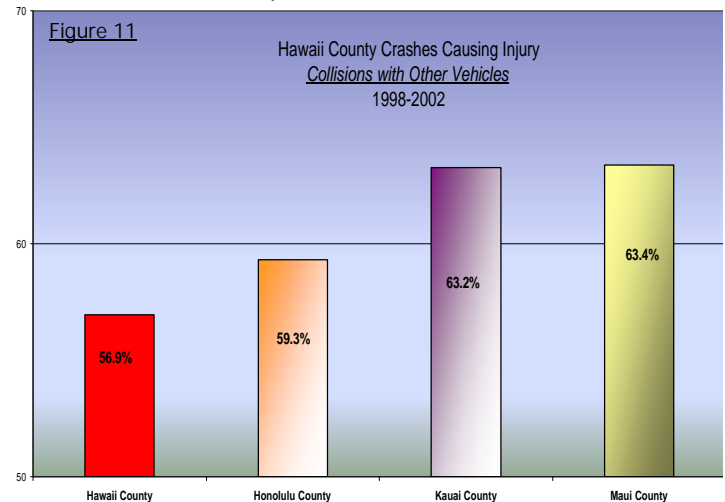
V. How are Hawaii County crash fatalities and injuries occurring?

A. Fatalities (DOT data)

- 1997-2001 data, 42.3% of fatal accidents involved collision with another motor vehicle in transport.
- 1997-2001 data, 33.4% of fatal accidents involved collision with fixed & other objects.
- 1997-2001 data, 12.2% of fatal accidents involved collision with a pedestrian.

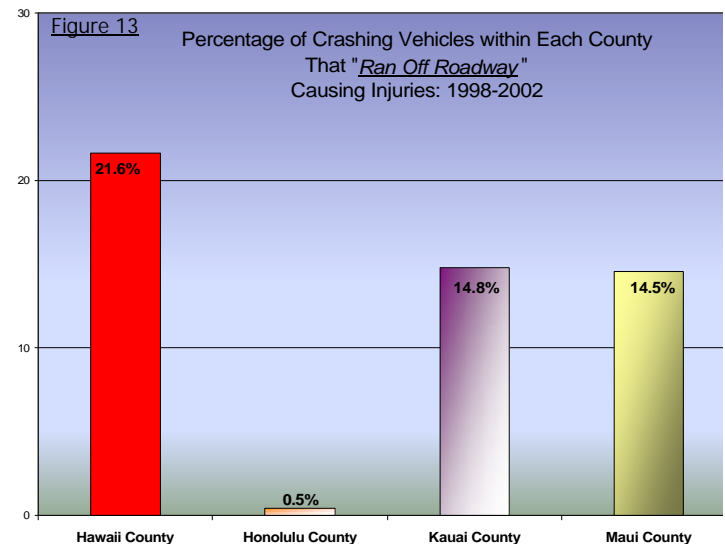
B. Injuries – comparison by Hawaii counties of different mechanisms or crashes causing injuries

- Other vehicles (see *Figure 11*), 1998-2002 data, shows that 56.9% of crashes causing injury involved collision with another vehicle
- Objects (see *Figure 12*)
- Ran off roadway (see *Figure 13*)
- Seatbelt use (need to review)



The mechanism of crashes in Hawaii County as seen in *Figure 13* shows that Hawaii County has relatively more injury causing crashes involving "ran off roadway."

Collision with another vehicle in transport is the most common mechanism of fatal crashes and of injury causing crashes.



Source: Department of Transportation

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VI. Who are the Hawaii County victims?

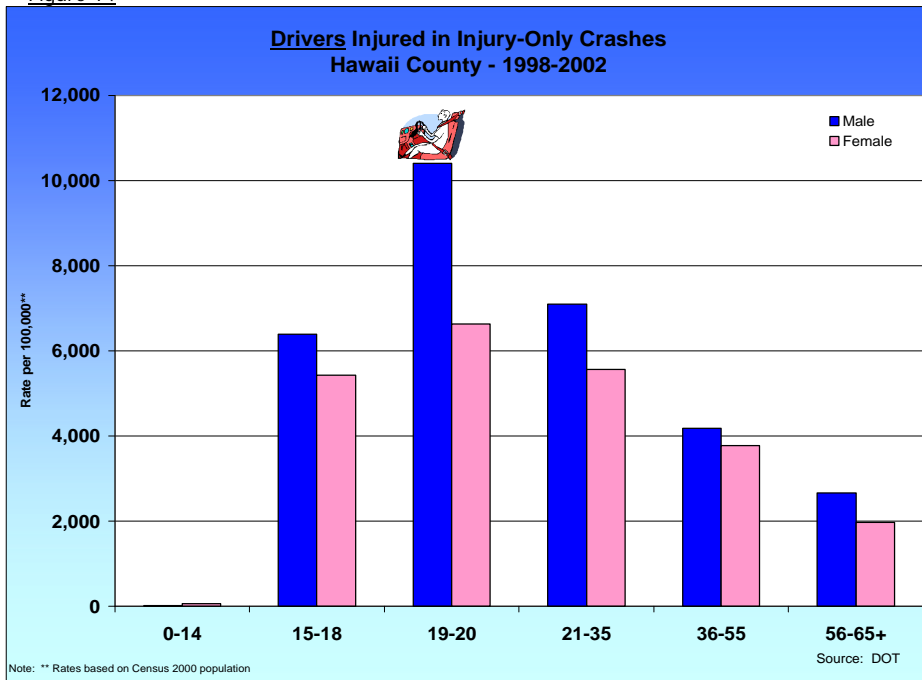
A. Fatalities

- Ethnicity - DOH analysis shows there maybe a slightly higher rate of Hawaiians involved in fatal crashes compared to Japanese. But caution is advised with this small numbers (see Appendix B)
- 1997-2001 data, male drivers 15 - 49 years old are the highest risk group (DOT data)
- 1997-2001 data, male passengers 15 -24 years old are the highest risk group (DOT data)
- 1997-2001 data, shows that 72.3 % of fatalities are male (DOT data)

B. Injuries

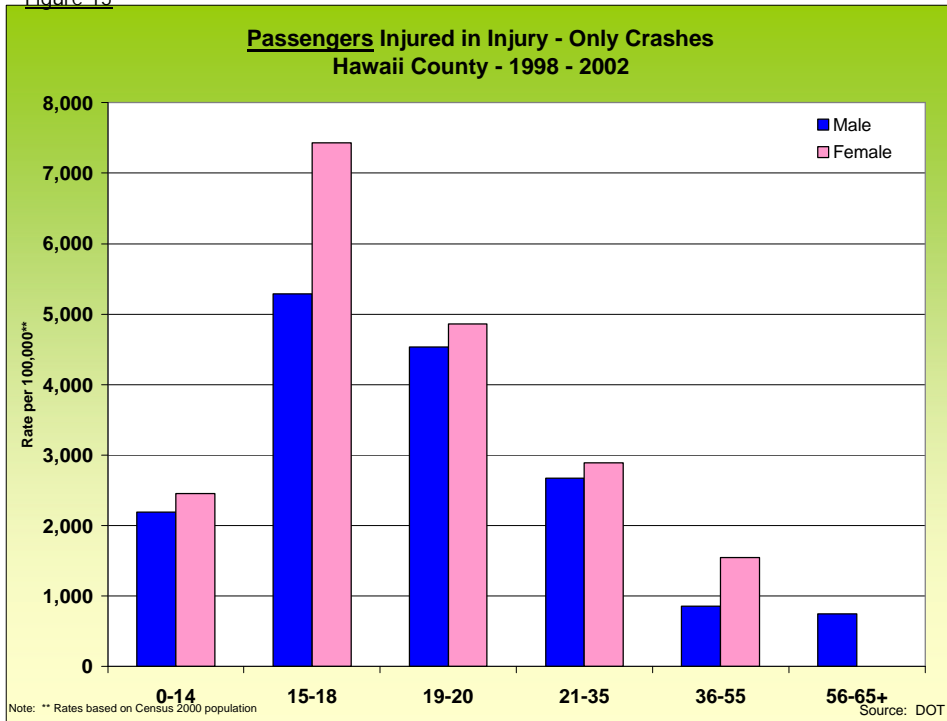
Drivers - the highest risk group among drivers in injury only crashes is males (blue) 19-20 years old (*Figure 14*).

Figure 14



Passengers - the highest risk group among passengers in injury only crashes is females (pink) 15-18 years old (*Figure 15*).

Figure 15



Hawaii County - Motor Vehicle Crash Fatality Reduction Group
Data Summary of November 2003

VII. Center for Disease Control - Economic Evaluation Findings for interventions- see Appendix C

VIII. What's currently being done to reduce motor vehicle crash occupant injury and death in Hawaii County? see Appendix F

IX. Conclusion – To our knowledge the data and graphs reflected in this report are accurate. However, if there are errors, of course we want to correct them and would appreciate your quick feedback and suggestions to Sharon Vitousek, M.D. at 808-887-1665.

Mahalo to Department of Health's, Dr. Dan Galanis and Mr. Eric Tash, Department of Transportation, Mr. Gordon Hong for supplying data and Dr. Andy Ten Have for data analysis. Mahalo to Sergeant Randy Apele, Mr. Stanley Tamura and Mr. Bruce McClure for helping with the site visits and for their active participation.

Mahalo to Sergeant James Sanborn for data review and facilitating a committee problem solving discussion.

Mahalo to Hawaii County Department of Health, Ms. Jan Yokoyama, Mr. John Kaizuka and Ms. Carrie Kuwada for their active participation.

This report surfaces several key questions: What DUI interventions are planned for 2004 and by whom? How will we assess the effectiveness of these interventions? What is the correlation between the location of fatal crashes and injury causing crashes? Have site visits to "hot spots" for both fatalities and injury causing crashes been conducted?

In summary, there is increasing awareness of the high motor vehicle fatality rate in Hawaii County and active collaboration to address this issue. However, significant reduction of the high Hawaii County motor vehicle crash fatality rate will require even more collaboration to use and improve existing data and to increase partnerships. It is our hope and vision that we are moving in the right direction towards working together to make our island a much safer place to drive and to live, work, play and raise a family.

APPENDIX A

Motor Vehicle Crash Fatality Reduction “Hot Spot” Site Visits July 9, 2003

Site visit team: Sgt Randy Apele, Stanley Tamura, Bruce McClure, Andy Ten Have M.D., Sharon Vitousek, M.D.

Preliminary Conclusions:

Though alcohol and driver error seem to be large factors in the crashes assessed, further analysis would be helpful, especially of the 5-6 mile area near Hilo. Further analysis of weather through review of the police files would be helpful. Further review of nonfatal crashes in these sites would be helpful.

Possibility of site visits in Puna discussed.

Hilo between mile 5-6

- ✓ The nearby county park(Kolekole) known to be a drinking party site.
- ✓ Speed limit is 45, road is straight, with good site and it is a passing zone.
- ✓ One area does have narrow shoulders and high lava embankment
- ✓ In general there are less reported speeding infractions in this region compared to Queen Kaahumahu Highway
- ✓ 3 crashes involved alcohol
- ✓ One motorcycle ran off road

Honokaa near mile 44—Nienie Bridge

- ✓ Two crashes were near the bridge, both involving alcohol
- ✓ Since then guard rails have been installed
- ✓ One crash involved a left turn onto Kapuna St. which is likely to have been driver error

Honokaa near mile 46

- ✓ Three crashes
- ✓ One crash involved a motorcycle and unclear whether helmet was worn
- ✓ Two car crashes were very near the 46 mile marker one traveling east and one west, in one alcohol was “believed” to be involved and the driver crossed the center line and collided head on. The second crash the driver ran off the road to the right around 7:00 a.m. while traveling west

See attached table

Big Island Motor Vehicle Crash Statistics

| HONOKAA | Date | Victims | Crash Type | Alcohol | Where | Direction | How | When | Driver Age | Seat Belt | Weather | Hospital | Subsequent Change |
|---------|---------|---------|-------------------|---------------------------|-------------------------------|-----------|------------------------------------|---------------|------------|-----------|---------|------------|-------------------|
| | 12/1996 | 1 | 1-motorcycle | | near 46 mile marker | East | ran off road; struck embankment | 5:20 AM | 41 | | ? | air QMC | |
| | 08/2000 | 1 | 2-car | no | 4 mile intersect Kapuna & H19 | West | left turn; hit by oncoming vehicle | 12:50 pm call | 58 17 | | ? | NHCH, Hilo | |
| | 09/2001 | 1 | 1-car 1-pickup | believed alcohol involved | near 46 mile marker | East | crossed center; collided head-on | 5:31 AM call | 44 50 | | ? | Hilo | |
| | 04/1996 | 1 | single car | ? | near 46 mile marker | West | ran off road to right; overturn | 6:59 AM call | 15 | | ? | Hilo | |

| HONOKAA | Date | Victims | Crash Type | Alcohol | Where | Direction | How | When | Driver Age | Seat Belt | Weather | Hospital | Subsequent Change |
|---------|---------|---------|------------|---------|-----------------------------|-----------|--|--------------|------------|-----------|---------|-----------|--------------------------|
| | 01/1997 | 4 | single car | yes | ~ 44 mile marker | East | ran off road; crossed center; struck bridge | ? | 22 | | ? | DOA | guard rail Nienie bridge |
| | 08/1999 | 1 | single car | yes | ~ 44 mile marker | East | crossed center line of bridge; struck abutment | 6:45 pm call | 48 | | ? | DOA | |
| | 08/1998 | 1 | single car | yes | Plumeria | North | veered off right shoulder | 1:39 am call | 20 | | ? | air QMC | |
| | 01/2001 | 1 | single car | | Plumeria intersection Lehua | North | lost control; struck embankment | 3:25 pm call | 79 | no | ? | NHCH, QMC | |

| HILO | Date | Victims | Crash Type | Alcohol | Where | Direction | How | When | Driver Age | Seat Belt | Weather | Hospital | Subsequent Change |
|------|------------|---------|---------------------------|-------------|--------------------|-----------|--|--------------|--------------|-----------|---------|----------|-------------------|
| | 02/1996 | 4 | 2-car | yes, all 4 | | North | Forced off R-shoulder to avoid head-on | 12:11 AM | 45 22 | | | DOA | |
| | 08/1996 | 3 | 2-pick up trucks 1-car | yes & drugs | near 5 mile marker | South | crossed center; head-on | 7:38 PM | 36, 29 44 | | | Hilo | |
| | 10/1999 | 2 | 2-car | yes | | | | | | | | | |
| | 10/31/2000 | 1 | 1-motorcycle 1-car | ? | ~ 6 mile marker | | motorcycle traveling wrong lane | | 48 | no helmet | | Hilo | |
| | 07/2000 | 1 | single car | ? | Papaikou overpass | South | lost control; struck overpass | 1:32 pm call | 69 | | ? | Hilo | |

APPENDIX B

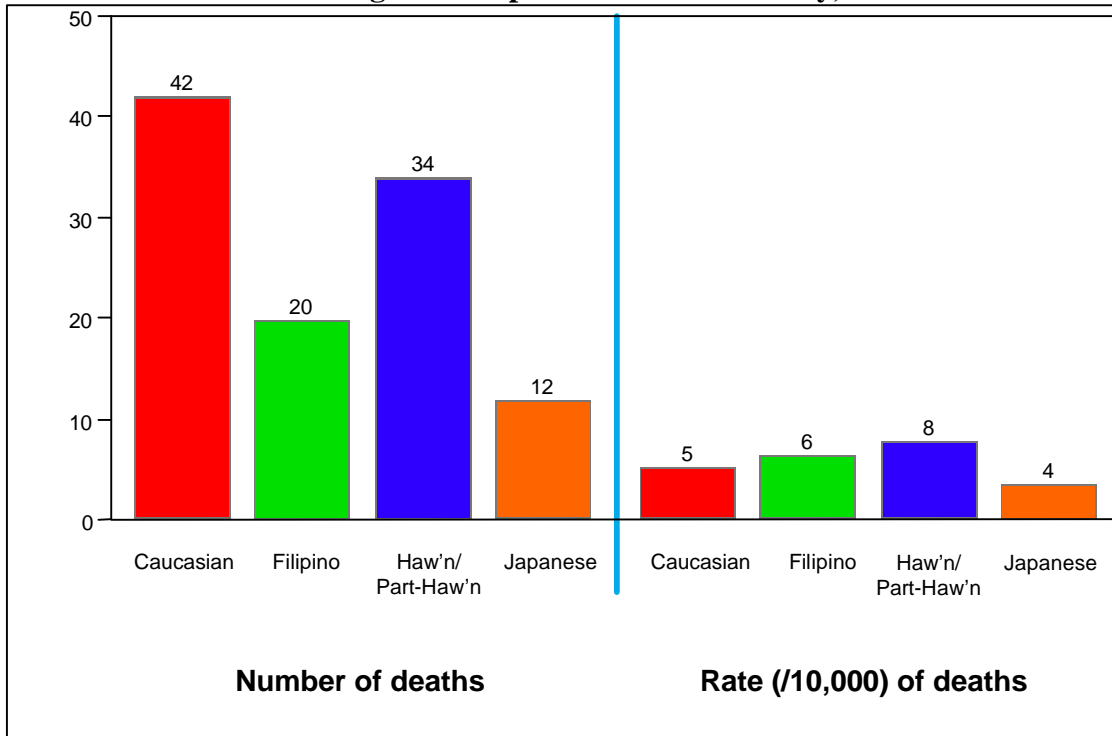
Deaths Among Car Occupants in Hawaii County, 1996-2000.

There were a total of 130 Hawaii County residents who were killed in car crashes over this 5-year period. (This includes only passenger vehicles, not motorcycles or motor scooters.) Ethnicity of the victims was categorized by the first-listed ethnicity on the death certificate. Eleven separate ethnic categories resulted, but this analysis was restricted to only those four ethnicities with 10 or more fatalities: Caucasian (42 deaths), Filipino (20), Hawaiian/Hawaiian (34), and Japanese (12). Together, these four ethnicities accounted for 108 (83%) of the 130 deaths.

Overall, a single ethnicity was listed for 62 (57%) of the victims. That proportion was highest among Caucasians (81%) and Japanese (75%), intermediate among Filipinos (60%), and markedly lower among Hawaiians (21%). (For that reason, the latter are referred to as “Hawaiian/part-Hawaiian.”) Rates were computed using 2000 US Census estimates. Since there were many victims with more than one ethnicity listed on the death certificate, the “in combination” Census estimates were used for denominators. This estimates, for example, both Caucasians and part-Caucasians living in Hawaii County in 2000.

The chart below shows that while there were large differences in the ethnic-specific number of deaths (left side of chart), the rates were comparable, after adjusting for population differences (right side of chart). The only statistically significant rate difference was found between Hawaiians/part-Hawaiians and Japanese, as the rate among Hawaiians/part-Hawaiians was twice as high.

Ethnic-specific number (left side) and rate (10,000 residents) of fatalities among car occupants in Hawaii County, 1996-2000.



APPENDIX C



Motor Vehicle Occupancy Injuries

Economic Evaluation Findings

Economic Evaluations: Net Benefit or Benefit-Cost Ratio

Systematic reviews of economic evaluations were completed for only those interventions that were either Strongly Recommended or Recommended. The information provided here is **only a summary**.

| Intervention | Summary Measure ^a | Comparison Group |
|---|--|---|
| Increasing Child Safety Seat Use | | |
| Child safety seat laws | No economic evaluations were identified that met Guide inclusion criteria. | |
| Community-wide information and enhanced enforcement campaigns | No economic evaluations were identified that met Guide inclusion criteria. | |
| Distribution and education programs | No economic evaluations were identified that met Guide inclusion criteria. | |
| Incentive and education programs | No economic evaluations were identified that met Guide inclusion criteria. | |
| Increasing Safety Belt Use | | |
| Safety belt laws | No economic evaluations were identified that met Guide inclusion criteria. | |
| Primary enforcement laws | No economic evaluations were identified that met Guide inclusion criteria. | |
| Enhanced enforcement programs | No economic evaluations were identified that met Guide inclusion criteria. | |
| Reducing Alcohol-Impaired Driving | | |
| .08% blood alcohol concentration (BAC) laws | No economic studies were identified that met the Guide inclusion criteria | |
| Lower BAC laws for young or inexperienced drivers | Benefit-cost ratio: ^b \$11 for 6-month suspension $n=1$ ^c | 12 states that did not lower BAC levels for young drivers |
| Minimum legal drinking age (MLDA) laws | No economic evaluations were identified that met Guide inclusion criteria. | |
| Sobriety checkpoints: Selective Breath Testing (SBT) | Net benefit: \$7.6 million Benefit-cost ratio: ^d \$6 Net benefit: ^e \$3.7 million Benefit-cost ratio: \$23 $n=1$ | No comparison group No intervention site |
| Random Breath Testing (RBT) | Net benefit: \$224 million Net benefit: \$15.8 million Benefit-cost ratio: \$2 $n=1$ | Other mainland Australian sites Previous policy |
| Intervention training programs for servers of alcohol beverages | No economic evaluations were identified that met Guide inclusion criteria. | |

^a All summary measures are in 1997 U.S. dollars

^b Benefit-cost ratios are provided as a stand-alone piece of information and should not be used to rank interventions unless a) there is a known budget constraint; b) the interventions are mutually independent; and c) interventions exhibit constant returns to scale

^c n represents the number of studies

^d All benefit-cost ratios for sobriety checkpoints calculated as return to investment

^e Calculated for the 9-month study period whereas other net benefit calculations are annual net benefit.

Publication:

- American Journal of Preventive Medicine May 2002 supplement (Am J Prev Med. 2001; 20 (2S)). - Evidence, findings, and expert commentaries. See www.thecommunityguide.org/pa/ for individual articles.

The Guide to Community Preventive Services (Community Guide) provides recommendations on population-based interventions to promote health and to prevent disease, injury, disability, and premature death, appropriate for use by communities and healthcare systems. For more information about the Community Guide (including links to publications and a variety of resources) see www.thecommunityguide.org for **Physical Activity** see www.thecommunityguide.org/pa/.

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Created – November 26, 2002

APPENDIX D

**Table 4.9-- MOTOR VEHICLE TRAFFIC ACCIDENTS, BY DISTRICTS,
HAWAII COUNTY: 1991 TO 2002**

| Subject and year | Hawaii County | South Hilo | North Hilo | Hama- kua | North Kohala | South Kohala | Kona | Kau | Puna |
|-----------------------------------|--------------------------|-----------------------|-----------------------|----------------------|-------------------------|-------------------------|-------------|------------|-------------|
| 2002 | | | | | | | | | |
| Fatal & injury accidents | 27 | 5 | 3 | 1 | 0 | 3 | 10 | 1 | 4 |
| Persons killed | 28 | 5 | 4 | 1 | 0 | 3 | 10 | 1 | 4 |
| Persons injured | 1,173 | 404 | 27 | 35 | 17 | 123 | 356 | 34 | 177 |
| Property damage only accidents | 4,554 | 1,753 | 50 | 99 | 77 | 451 | 1,564 | 51 | 509 |
| 1991 | 6,455 | 2,815 | 105 | 168 | 85 | 501 | 1,881 | 90 | 810 |
| 1992 | 5,683 | 2,587 | 92 | 125 | 64 | 219 | 2,016 | 123 | 457 |
| 1993 | 5,316 | 2,075 | 141 | 211 | 82 | 448 | 1,660 | 153 | 546 |
| 1994 | 5,370 | 2,075 | 187 | 211 | 187 | 448 | 1,660 | 153 | 495 |
| 1995 | 5,016 | 2,100 | 63 | 140 | 81 | 412 | 1,437 | 107 | 676 |
| 1996 | 4,961 | 1,964 | 87 | 148 | 92 | 448 | 1,540 | 89 | 593 |
| 1997 | 4,975 | 1,921 | 65 | 126 | 106 | 474 | 1,608 | 85 | 590 |
| 1998 | 4,942 | 1,945 | 69 | 125 | 97 | 469 | 1,550 | 97 | 590 |
| 1999 | 5,224 | 1,944 | 62 | 131 | 84 | 492 | 1,796 | 104 | 611 |
| 2000 | 5,513 | 2,013 | 83 | 142 | 93 | 535 | 1,948 | 109 | 590 |
| 2001 | 5,888 | 2,217 | 90 | 126 | 95 | 584 | 2,004 | 109 | 673 |
| 2002 | 6,090 | 2,269 | 95 | 138 | 101 | 610 | 2,031 | 96 | 750 |

Source: Hawaii County Police Department, records.

APPENDIX - E

Table 4.10-- ANALYSIS OF TRAFFIC ACCIDENTS BY POPULATION, LICENSED DRIVERS, MOTOR VEHICLES, AND GASOLINE CONSUMPTION, HAWAII COUNTY: 1999 TO 2002

| Subject | 1999 | 2000 | 2001 | 2002 |
|---|-------------|-------------|-------------|-------------|
| Accidents | 5,224 | 5,513 | 5,888 | 6,090 |
| Injuries | 1,827 | 1,689 | 1,558 | 1,173 |
| Killed | 31 | 38 | 31 | 28 |
| Population | 142,400 | 148,700 | 152,100 | 154,800 |
| Number of licensed drivers | 100,331 | 104,058 | 106,557 | 110,561 |
| Registered motor vehicles | 126,039 | 132,305 | 134,012 | 139,371 |
| Fuel consumption (gallons) | 68,373,778 | 73,234,014 | 72,537,305 | 77,708,688 |
| Gasoline | 60,252,148 | 65,309,769 | 64,633,897 | 68,711,234 |
| Diesel oil & liquid petroleum gas (highway use) | 8,121,630 | 7,924,245 | 7,903,408 | 8,997,455 |
| Rate per 10,000 population | | | | |
| Accidents | 366.9 | 370.7 | 387.1 | 393.4 |
| Injuries | 128.3 | 113.6 | 102.4 | 75.8 |
| Deaths | 2.2 | 2.6 | 2.0 | 1.8 |
| Rate per 1,000 licensed drivers | | | | |
| Accidents | 52.1 | 53.0 | 55.3 | 55.1 |
| Injuries | 18.2 | 16.2 | 14.6 | 10.6 |
| Deaths | 0.31 | 0.37 | 0.30 | 0.25 |
| Rate per 1,000 motor vehicles | | | | |
| Accidents | 41.4 | 41.7 | 43.9 | 43.7 |
| Injuries | 14.5 | 12.8 | 11.6 | 8.4 |
| Deaths | 0.25 | 0.29 | 0.23 | 0.20 |
| Rate per 1,000,000 gallons fuel consumed | | | | |
| Accidents | 76.4 | 75.3 | 81.2 | 78.4 |
| Injuries | 26.7 | 23.1 | 21.5 | 15.1 |
| Deaths | 0.45 | 0.52 | 0.43 | 0.36 |

Source: Hawaii County Police Department, records.

APPENDIX F

| INTERVENTION | WHAT IS BEING DONE ON HAWAII ISLAND | WHO IS DOING IT? |
|--|---|---|
| <p>EDUCATION</p> <ul style="list-style-type: none"> ▪ Increasing Child Safety Seat Use ▪ Increasing Safety Seat Use ▪ Profiling "aggressive drivers" ▪ Training of sellers and servers of alcoholic beverages | <p>Certification and training - Hilo, Kona, NHCH</p> <p>Click-it or Ticket</p> <p>Social Marketing - focus groups</p> <p>Secret Shoppers Training</p> | <p>Dpt. of Health - John Kaizuka, Carrie Kuwada</p> <p>County Police</p> <p>Department of Transportation - G. Hong</p> <p>Liquor Board Department of Transportation</p> |
| <p>EMERGENCY MEDICAL SYSTEMS</p> <ul style="list-style-type: none"> ▪ Improving Emergency Medical Trauma Transport | <p>Participation on statewide committees</p> | <p>Peggy Sale - Trauma System Les Inouye - EMS, Trauma System</p> |
| <p>ENFORCEMENT</p> <ul style="list-style-type: none"> ▪ Reducing Alcohol-Impaired Driving ▪ Speeding Reduction | <p>Police targeted DUI road blocks</p> <p>PACE program</p> | <p>Hawaii County Police M.A.D.D.</p> <p>Solutions 2000 Enforcement and data on the number speeding</p> |
| <p>ENGINEERING</p> <ul style="list-style-type: none"> ▪ Road Design Improvement | | <p>State Department of Transportation and County</p> |
| <p>EVERYONE ELSE / COMMUNITY</p> <ul style="list-style-type: none"> ▪ Universal Seat Belt Law ▪ Graduated Licensing Advocacy | <p>Proposed Hawaii State laws</p> | <p>Department of Transportation M.A.D.D.</p> |

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SECTION 5. This Act shall take effect upon its approval.
(Approved May 2, 1997.)

ACT 99 H.B. NO. 1840

A Bill for an Act Relating to an Emergency Appropriation for the Hawaii Health Systems Corporation.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. This Act is recommended by the governor for immediate passage in accordance with section 9 of article VII of the Constitution of the State of Hawaii.

SECTION 2. The legislature did not appropriate any general funds for the operation of community hospitals for the fiscal period beginning July 1, 1995, and ending June 30, 1997.

A critical funding emergency exists. The program will expend all special funds before the end of the fiscal year and will be unable to meet its fiscal obligation to provide services to members of the general public who need hospital-based services provided by the community hospital system. The primary reason for this fiscal situation is the legislative mandate that services not be reduced at any of the facilities combined with the fact that no general funds were available and no cost saving changes were made by Act 262, Session Laws of Hawaii 1996, to the personnel system, which constitutes a large proportion of the expenditures of the community hospitals.

The purpose of this Act is to appropriate moneys to prevent the reduction or discontinuance of services provided by the community hospitals.

SECTION 3. There is appropriated out of the general revenues of the State of Hawaii the sum of \$12,000,000 or so much thereof as may be necessary for fiscal year 1996-1997 to carry out the purposes set forth in Act 262, Session Laws of Hawaii 1996. The sum appropriated shall be expended by the Hawaii health systems corporation.

SECTION 4. This Act shall take effect upon its approval.
(Approved May 2, 1997.)

ACT 100 H.B. NO. 1581

A Bill for an Act Making an Emergency Appropriation for Agricultural Resource Management.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. This Act is recommended by the governor for immediate passage in accordance with section 9 of article VII of the Constitution of the State of Hawaii.

ACT 101

SECTION 2. Act 218, Session Laws of Hawaii 1995, as amended by Act 287, Session Laws of Hawaii 1996, appropriated certain designated sums from the agricultural park special fund and the irrigation system revolving fund for agricultural resource management (AGR 141) for the fiscal year 1996-1997.

A critical funding emergency exists. During the heavy rains and flooding of November 1996, the Waianae Agricultural Park sustained damage to its roadways and drainage systems, and the Waimanalo Irrigation System sustained damage to sections of its Maunawili Ditch requiring cleanup and repairs. Further, additional expenses will be incurred to operate and maintain the newly opened Kekaha Agricultural Park Irrigation System. The expenditures for the cleanup and repairs due to the flooding and the operation and maintenance of the irrigation system at the Kekaha Agricultural Park will exceed the sums appropriated under Act 218, Session Laws of Hawaii 1995, as amended by Act 287, Session Laws of Hawaii 1996, for agricultural resource management (AGR 141).

The purpose of this Act is to appropriate additional special and revolving funds in order to select and engage consultants to develop appropriate plans and specifications to facilitate the necessary cleanup and repair work at the Waianae Agricultural Park and the Waimanalo Irrigation System and to cover additional operation and maintenance expenses at the Kekaha Agricultural Park Irrigation System.

SECTION 3. There is appropriated out of the agricultural park special fund the sum of \$20,000, or so much thereof as may be necessary, for fiscal year 1996-1997, to select and engage consultants to develop plans and specifications for the cleaning and repairing of the Waianae Agricultural Park damaged by the November 1996 heavy rains and flooding.

SECTION 4. There is appropriated out of the irrigation system revolving fund the sum of \$41,000, or so much thereof as may be necessary, for fiscal year 1996-97, to select and engage consultants to develop plans and specifications for the cleaning and repairing of the Waimanalo Irrigation System damaged by the November 1996 heavy rains and flooding and to cover operation and maintenance expenses for the Kekaha Agricultural Park Irrigation System.

SECTION 5. The sums appropriated shall be expended by the department of agriculture for the purposes of this Act.

SECTION 6. This Act shall take effect upon its approval.
(Approved May 7, 1997.)

ACT 101 S.B. NO. 377

A Bill for an Act Relating to Impaired Drivers.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. Section 286-163, Hawaii Revised Statutes, is amended to read as follows:

"§286-163 Applicable scope of part; mandatory testing in the event of a collision resulting in injury or death. (a) Nothing in this part shall be construed to prevent the police from obtaining a sample of breath or blood as evidence of

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intoxication from the driver of any vehicle involved in a collision resulting in injury to or the death of any person.

(b) If a health care provider who is providing medical care in a health care facility to any person involved in a motor vehicle accident, becomes aware, as a result of any blood test performed in the course of medical treatment, that the alcohol content in the person's blood meets or exceeds the amount specified in section 291-4, and has a reasonable belief that the person was the driver of a motor vehicle involved in the accident, the health care provider shall notify, as soon as reasonably possible, any law enforcement officer present at the health care facility to investigate the accident or, if no such officer is present, the county police department in the county where the accident occurred. Where the health care provider is aware of any blood test result as provided in the preceding sentence, but lacks information to form a reasonable belief as to the identity of the driver involved in a motor vehicle accident, then the health care provider shall give notice as provided in the preceding sentence for all persons involved in a motor vehicle accident whose alcohol content in the person's blood meets or exceeds the amount specified in section 291-4. The notice by the health care provider shall consist of the name of the person being treated, the blood alcohol level disclosed by the test, and the date and time of the administration of the test. Such notice shall be deemed to satisfy the intoxication element necessary to establish the probable cause requirement set forth in subsection (c).

(c) In the event of a collision resulting in injury or death, and the police have probable cause to believe that a person involved in the incident has committed a violation of section 707-702.5, 707-703, 707-704, 707-705, 707-706, 291-4, or 291-7, the police shall request that a sample of blood be recovered from the driver or any other person suspected of committing a violation of section 707-702.5, 707-703, 707-704, 707-705, 707-706, 291-4, or 291-7. The police shall make this request to the hospital or medical facility treating the person from whom the police request that the blood be recovered. Upon the request of the police that blood be recovered pursuant to this section, and except where the responsible attending personnel at the hospital or medical facility determines in good faith that recovering or attempting to recover blood from the person represents an imminent threat to the health of the medical personnel or others, the hospital or medical facility shall provide the police with the blood sample requested, recover the sample in compliance with section 321-161, and assign a person authorized under section 286-152 to withdraw the blood sample.

(d) Any person complying with [a request to withdraw blood under the direction of a police officer pursuant to] this section shall be exempt from liability pursuant to section 663-1.9 as a result thereof.

(e) As used in this section, unless the context otherwise requires:
 "Health care facility" includes any program, institution, place, building, or agency, or portion thereof, private or public, whether organized for profit or not, used, operated, or designed to provide medical diagnosis, treatment, rehabilitative, or preventive care to any person. The term includes but is not limited to health care facilities that are commonly referred to as hospitals, outpatient clinics, organized ambulatory health care facilities, emergency care facilities and centers, health maintenance organizations, and others providing similarly organized services regardless of nomenclature.

"Health care provider" means a person who is licensed, certified, or otherwise authorized or permitted by law to administer health care in the ordinary course of business or practice of a profession."

SECTION 2. Section 663-1.9, Hawaii Revised Statutes, is amended to read as follows:

"[[§663-1.9]] Exception to liability for health care provider, authorized person withdrawing blood at the direction of a police officer. (a) Any health care provider who, in good faith in compliance with section 286-163, provides notice concerning the alcohol content of a person's blood shall be immune from any civil liability in any action based upon the compliance. The health care provider shall also be immune from any civil liability for participating in any subsequent judicial proceeding relating to the person's compliance.

(b) Any authorized person who properly withdraws blood from another person at the written request of a police officer for testing of the blood's alcoholic content, and any hospital, laboratory, or clinic, employing or utilizing the services of such person, and owning or leasing the premises on which such tests are performed, shall not be liable for civil damages resulting from the authorized person's acts or omissions in withdrawing the blood, except for such damages as may result from the authorized person's gross negligence or wanton acts or omissions.

(c) For the purpose of this section[, "authorized person"]:
 "Authorized person" means a person authorized under section 286-152 to withdraw blood at the direction of a police officer.

"Health care provider" has the same meaning as in section 286-163."

SECTION 3. Statutory material to be repealed is bracketed. New statutory material is underscored.

SECTION 4. This Act shall take effect upon its approval.

(Approved June 2, 1997.)

ACT 102

H.B. NO. 116

A Bill for an Act Relating to Driving Under the Influence of Intoxicating Liquor.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. Chapter 286, Hawaii Revised Statutes, is amended by adding a new section to be appropriately designated and to read as follows:

"§286- Refusal to submit to testing for measurable amount of alcohol; district court hearing; sanctions; appeals; admissibility. (a) If a person under arrest for driving after consuming a measurable amount of alcohol, pursuant to section 291- , refuses to submit to a breath or blood test, none shall be given, except as provided in section 286-163, but the arresting officer, as soon as practicable, shall submit an affidavit to a district judge of the circuit in which the arrest was made, stating:

- (1) That at the time of the arrest, the arresting officer had probable cause to believe the arrested person was under the age of twenty-one and had been operating a motor vehicle or moped upon the public highways with a measurable amount of alcohol concentration;
- (2) That the arrested person had been informed of the sanctions of this section; and
- (3) That the person had refused to submit to a breath or blood test.

(b) Upon receipt of the affidavit, the district judge shall hold a hearing within twenty days. The district judge shall hear and determine:

- (1) Whether the arresting officer had probable cause to believe that the person was under the age of twenty-one and had been operating a motor

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