A BILL FOR AN ACT

RELATING TO MOTOR VEHICLE ACCIDENT INVESTIGATION.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that traffic accident 2 management is of utmost public importance, especially when a 3 fatality occurs. Although the evidence collected at traffic 4 accident scenes may be crucial to determining their cause, these 5 accident investigations proceed at a slower rate in Hawaii than 6 in comparable metropolitan areas in the United States. 7 average length of time for lane closures in Hawaii ranges from two to four hours for major traffic accidents and to upward of 8 eight hours when a fatality occurs. In contrast, the California 9 10 highway patrol average for lane closures ranges from thirty 11 minutes for major collisions to sixty minutes for fatal 12 accidents. 13 The legislature also finds that these prolonged closures of traffic lanes adversely affect the public and our economy 14 because students can not reach school, school activities, or get 15 16 home afterwards, employees can not reach their place of work or 17 attend meetings at remote locations, and businesses cannot

receive or deliver products necessary to do business.

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- 1 traffic jams also bode ill for the economy because tourists can
- 2 not reach their destinations to spend money and may leave Hawaii
- 3 without feeling they have been on vacation at all. Moreover,
- 4 these prolonged investigative delays may result in secondary
- 5 accidents that cause further delays.
- 6 The legislature also finds that the Honolulu police
- 7 department currently conducts on-site measurements of accidents
- 8 using surveying equipment to collect data, which is then used to
- 9 complete accident investigations. In contrast, the California
- 10 highway patrol, the Oregon state police, the Washington state
- 11 patrol, the Utah highway patrol, and the Arizona department of
- 12 public safety use what is known as a multidisciplinary accident
- 13 investigation team system that employs digital photography and
- 14 other equipment that has reduced the duration of lane and road
- 15 closures.
- 16 The legislature also finds that the Washington state patrol
- 17 multidisciplinary accident investigation team is comprised of
- 18 two detective investigators who are certified collision
- 19 reconstructionists specializing in digital and print-based
- 20 photography, as well as occupant kinematics, vehicle dynamics,
- 21 and interviewing and interrogation. The multidisciplinary
- 22 accident investigation team also consists of other investigators



with specialized training in traffic and automotive engineering 1 2 and other disciplines that improve focus and data collection 3 times at accident scenes. 4 The legislature also finds that multidisciplinary accident 5 investigation teams use total station survey systems that employ laser technology to record specific reference points that are 6 recorded in an on-board data collector. Total station survey 7 systems significantly accelerate data collection, thereby 8 9 minimizing the time the roadway is closed and reducing the 10 exposure of officers and civilian personnel to the inherent 11 hazards of traffic congestion caused by roadway closures. 12 data can then be downloaded into a computer-aided drawing 13 program and printed in a large format. 14 The legislature further finds that the use of total station 15 survey systems have proven to be more efficient than other 16 generally accepted methods, but requires the use of two team **17** members to operate the equipment and document measurements. 18 member locates points of evidence with a reflector while the 19 second member aims and "shoots" the laser beam and records the information. Data collection can be accelerated even further by 20 use of a robotic total station survey system that can be managed 21 22 effectively with one member. The robotic total station survey

- 1 system is faster, more efficient, and more accurate, because the
- 2 system uses state-of-the-art technology to "follow" the
- 3 movements of the investigator as the investigator moves about
- 4 the scene of the incident locating evidence and recording the
- 5 information. This approach frees the second investigator to
- 6 assist in expediting the investigation in other ways.
- 7 The purpose of this Act is to require the police department
- 8 of any county with a population in excess of five hundred
- 9 thousand persons to establish a multidisciplinary accident
- 10 investigation team for Hawaii that will be composed of skilled,
- 11 trained investigators equipped to conduct expeditious
- 12 investigations of serious accidents on major state roadways and
- 13 thereby alleviate the harm caused by extended road closures
- 14 currently caused by major accident investigations.
- 15 SECTION 2. The police department of any county with a
- 16 population in excess of five hundred thousand persons shall
- 17 establish a multidisciplinary accident investigation team for
- 18 the purpose of investigating major accidents on roadways in the
- 19 county in a manner that limits the length of time road closures
- 20 are necessary for the data collection phase of the
- 21 investigation. The multidisciplinary accident investigation
- 22 team shall consist of personnel with specialized training in



- 1 traffic collision reconstruction, traffic engineering,
- 2 automotive engineering, vehicle dynamics, occupant kinematics,
- 3 interviewing and interrogation, and other appropriate
- 4 investigation techniques. Multidisciplinary accident
- 5 investigation team personnel may be drawn from the ranks of
- 6 state and county employees as well as from the private sector.
- 7 The police department shall also develop a program of training
- 8 to enhance and maintain the skills of multidisciplinary accident
- 9 investigation team members. The police department shall also
- 10 acquire the equipment necessary to accomplish the purposes of
- 11 this Act, including robotic total station survey systems,
- 12 digital cameras and related equipment, computer-aided drawing
- 13 software, and printers and equipment necessary to transport the
- 14 multidisciplinary accident investigation team equipment to
- 15 accident scenes.
- 16 SECTION 3. (a) For purposes of establishing the
- 17 multidisciplinary accident investigation team program under this
- 18 Act, the police department of any county with a population in
- 19 excess of five hundred thousand persons shall:
- 20 (1) Identify the personnel necessary to establish the
- 21 multidisciplinary accident investigation team and,
- where those personnel are not found within the ranks

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1		team investigation, considering factors such as
2		whether a fatality is involved, hazardous waste has
3		been spilled, or the roadway has been substantially
4		blocked by the accident itself;
5	(6)	Enter into such memoranda of understanding or
6		agreement or establish such protocol as are necessary
7		to coordinate major accident investigations with law
8		enforcement and other authorities having jurisdiction
9		over the location of a major accident, including:
10		(A) Minimizing the duration of lane closures in the
11		case of a fatality by immediately notifying the
12		medical examiner so that the medical examiner can
13		conduct the medical examiner's investigation
14		simultaneously with the police, to the extent
15		practical;
16		(B) Preservation of evidence;
17		(C) Documentation of the investigation; and
18		(D) Testimony in any subsequent court proceedings;
19		and
20	(7)	Develop a mechanism for collecting, measuring, and
21		reporting data to determine the effectiveness of the
22		multidisciplinary accident investigation team program,

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1	including reduction in the duration and extent of road
2	closures during major accident investigations,
3	findings relating to highway or vehicle design, and
4	the outcome of any criminal prosecutions arising from
5	multidisciplinary accident investigation team
6	investigations.

- 7 (b) This Act shall not be construed to restrict the
 8 appropriate police department's authority to enforce any of the
 9 powers otherwise granted to it by law.
- (c) The appropriate police department shall adopt rules inaccordance with chapter 91 to implement this Act.
- (d) Not later than twenty days prior to the convening of
 each regular session, each police department to which this Act
 applies shall submit a report to the legislature setting forth
 the number or major accidents to which it responded, the length
 it took each responding to arrive at the scene, and the length
 of any lane closures.
- SECTION 4. The appropriate police department shall report to the legislature not later than twenty days prior to the convening of the regular sessions of 2008, 2009, and 2010 on the progress of the program.

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- 1 SECTION 5. There is appropriated out of the general
- 2 revenues of the State of Hawaii the sum of \$400,000, or so much
- 3 thereof as may be necessary for fiscal year 2007-2008 as a
- 4 grant-in-aid to any county with a population in excess of five
- 5 hundred thousand persons for the multidisciplinary accident
- 6 investigation team program.
- 7 The sum appropriated shall be expended by the department of
- 8 transportation as a grant-in-aid to the county or counties
- 9 meeting the population requirement established in section 2 of
- 10 this Act for the purposes of this Act.
- 11 SECTION 6. This Act shall take effect on July 1, 2007.

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Report Title:

Highway Safety; Accident Investigation

Description:

Establishes a multidisciplinary accident investigation team in the police department of any county with a population in excess of 500,000 persons for the purpose of investigating major accidents on state roadways in a manner designed to minimize lane and roadway closures during the investigation. Appropriates funds.