
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 the cause of the
5 accident, these accident investigations proceed at a slower rate
6 in Hawaii than in comparable metropolitan areas in the United
7 States. The average length of time for lane closures in Hawaii
8 ranges from two to four hours for major traffic accidents to
9 over eight hours when a fatality occurs. In contrast, the
10 California highway patrol average for lane closures ranges from
11 thirty minutes for major collisions to sixty minutes for fatal
12 accidents.

13 The legislature also finds that these prolonged closures of
14 traffic lanes adversely affect the public and our economy
15 because students cannot reach school and school activities or
16 return home afterwards; employees cannot reach their place of
17 work or attend meetings at remote locations; and businesses
18 cannot receive or deliver products necessary to do business.



1 These traffic jams also bode ill for the economy because
2 tourists cannot reach their destinations and spend money and may
3 leave Hawaii without feeling that they have been on vacation at
4 all. Moreover, these prolonged investigative delays may result
5 in secondary accidents that cause further delays.

6 The legislature also finds that the county police
7 departments currently conduct 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 comprises two
18 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



1 with specialized training in traffic and automotive engineering
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
6 laser technology to record specific reference points that are
7 recorded in an on-board data collector. Total station survey
8 systems significantly accelerate data collection, thereby
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. The
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 has 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 to document measurements.
18 One member locates points of evidence with a reflector while the
19 second member aims and "shoots" the laser beam and records the
20 information. Data collection can be accelerated even further by
21 use of a robotic total station survey system that can be managed
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 each county to establish a multidisciplinary accident
9 investigation team that will be composed of skilled, trained
10 investigators equipped to conduct expeditious investigations of
11 serious accidents on major roadways and thereby alleviate the
12 harm caused by extended road closures currently caused by
13 investigations of major accidents.

14 SECTION 2. The police department of each county shall
15 establish a multidisciplinary accident investigation team for
16 the purpose of investigating major accidents on roadways in the
17 county in a manner that limits the length of time road closures
18 are necessary for the data collection phase of the
19 investigation. The multidisciplinary accident investigation
20 team shall consist of personnel with specialized training in
21 traffic collision reconstruction, traffic engineering,
22 automotive engineering, vehicle dynamics, occupant kinematics,



1 interviewing and interrogation, and other appropriate
2 investigation techniques. Multidisciplinary accident
3 investigation team personnel may be drawn from the ranks of
4 state and county employees as well as from the private sector.
5 The police department shall also develop a program of training
6 to enhance and maintain the skills of multidisciplinary accident
7 investigation team members. The police department shall also
8 acquire the equipment necessary to accomplish the purposes of
9 this Act, including robotic total station survey systems,
10 digital cameras and related equipment, computer-aided drawing
11 software, and printers and equipment necessary to transport the
12 multidisciplinary accident investigation team equipment to
13 accident scenes.

14 SECTION 3. (a) For the purpose of establishing the
15 multidisciplinary accident investigation team program under this
16 Act, the police department of each county shall:

17 (1) Identify the personnel necessary to establish the
18 multidisciplinary accident investigation team and,
19 where those personnel are not found within the ranks
20 of the police department, enter into contracts with
21 other state or county departments or the private



- 1 sector as necessary to obtain the services of
2 personnel required by this Act;
- 3 (2) Identify and acquire, by purchase, lease, or usage
4 agreement, the equipment necessary to accomplish the
5 purposes of this Act;
- 6 (3) Identify and arrange for the training of
7 multidisciplinary accident investigation team
8 personnel necessary to acquire and maintain the
9 expertise required for the purposes of this Act
10 whereby those trained may be retained in such
11 positions by direction of the chief of police;
- 12 (4) Identify the roadways, or class of roadways, that are
13 most critical to the free movement of persons and
14 commerce and that will be the focus of
15 multidisciplinary accident investigation team
16 investigations when a major accident occurs on those
17 roadways;
- 18 (5) Identify what constitutes a "major accident" for
19 purposes of a multidisciplinary accident investigation
20 team investigation, considering factors such as
21 whether a fatality is involved, hazardous waste has



1 been spilled, or the roadway has been substantially
2 blocked by the accident itself;

3 (6) Establish such protocol as necessary to coordinate
4 major accident investigations with law enforcement and
5 other authorities having jurisdiction over the
6 location of a major accident, including:

7 (A) Minimizing the duration of lane closures in the
8 case of a fatality by immediately notifying the
9 medical examiner so that the medical examiner can
10 conduct the medical examiner's investigation
11 simultaneously with the police, to the extent
12 practical;

13 (B) Preservation of evidence;

14 (C) Documentation of the investigation; and

15 (D) Testimony in any subsequent court proceedings;
16 and

17 (7) Develop a mechanism for collecting, measuring, and
18 reporting data to determine the effectiveness of the
19 multidisciplinary accident investigation team program,
20 including reduction in the duration and extent of road
21 closures during major accident investigations,
22 findings relating to highway or vehicle design, and



1 the outcome of any criminal prosecutions arising from
2 multidisciplinary accident investigation team
3 investigations.

4 (b) This Act shall not be construed to restrict the police
5 department's authority to enforce any of the powers otherwise
6 granted to it by law.

7 (c) Not later than twenty days prior to the convening of
8 each regular session, each police department shall submit a
9 report to the legislature setting forth the number of major
10 accidents to which it responded, the length of time it took each
11 responder to arrive at the scene, and the length of any lane
12 closures.

13 SECTION 4. The police department shall report to the
14 legislature not later than twenty days prior to the convening of
15 the regular sessions of 2008, 2009, and 2010 on the progress of
16 the program.

17 SECTION 5. There is appropriated out of the general
18 revenues of the State of Hawaii the sum of \$1 or so much thereof
19 as may be necessary for fiscal year 2007-2008 as a grant-in-aid
20 to each county for the multidisciplinary accident investigation
21 team program.



1 The sum appropriated shall be expended by the department of
2 transportation as a grant-in-aid to the counties for the
3 purposes of this Act.

4 SECTION 6. This Act shall take effect on July 1, 2050.



Report Title:

Highway Safety; Accident Investigation

Description:

Establishes a multidisciplinary accident investigation team in the police department of each county for the purpose of investigating major accidents on major roadways in a manner designed to minimize lane and roadway closures during the investigation. Appropriates \$1. (SD1)

