
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 the 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. The
7 average length of time for lane closures in Hawaii ranges from
8 two to four hours for major traffic accidents and to upward of
9 eight hours when a fatality occurs. In contrast, the California
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
14 traffic lanes adversely affect the public and our economy
15 because students can not reach school, school activities, or get
16 home afterwards, employees can not reach their place of work or
17 attend meetings at remote locations, and businesses can not
18 receive or deliver products necessary to do business. These



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



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 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. One
18 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 department of
8 transportation to establish a multidisciplinary accident
9 investigation team for Hawaii that will be composed of skilled,
10 trained investigators equipped to conduct expeditious
11 investigations of serious accidents on major state roadways and
12 thereby to alleviate the harm caused by extended road closures
13 currently caused by major accident investigations.

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



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

13 SECTION 3. (a) For purposes of establishing the
14 multidisciplinary accident investigation team program under this
15 Act, the department of transportation shall:

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



- 1 are necessary to obtain the services of personnel
2 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 (4) Identify the roadways, or class of roadways, that are
11 most critical to the free movement of persons and
12 commerce within the State and that will be the focus
13 of multidisciplinary accident investigation team
14 investigations when a major accident occurs on those
15 roadways;
- 16 (5) Identify what constitutes a "major accident" for
17 purposes of a multidisciplinary accident investigation
18 team investigation, considering factors such as
19 whether a fatality is involved, hazardous waste has
20 been spilled, or the roadway has been substantially
21 blocked by the accident itself;



- 1 (6) Enter into such memoranda of understanding or
2 agreement or establish such protocol as are necessary
3 to coordinate major accident investigations with law
4 enforcement and other authorities having jurisdiction
5 over the location of a major accident, including
6 preservation of evidence, documentation of the
7 investigation, and testimony in any subsequent court
8 proceedings; and
- 9 (7) Develop a mechanism for collecting, measuring, and
10 reporting data to determine the effectiveness of the
11 multidisciplinary accident investigation team program,
12 including reduction in the duration and extent of road
13 closures during major accident investigations,
14 findings relating to highway or vehicle design, and
15 the outcome of any criminal prosecutions arising from
16 multidisciplinary accident investigation team
17 investigations.
- 18 (b) This Act shall not be construed to restrict the
19 department of transportation's authority to enforce any of the
20 powers otherwise granted to it by law.
- 21 (c) The department of transportation shall adopt rules in
22 accordance with chapter 91 to implement this Act.



1 SECTION 4. The department of transportation shall report
 2 to the legislature not later than twenty days prior to the
 3 convening of the regular sessions of 2007, 2008, and 2009 on the
 4 progress of the program.

5 SECTION 5. There is appropriated out of the general
 6 revenues of the State of Hawaii the sum of \$, or so
 7 much thereof as may be necessary for fiscal year 2006-2007, for
 8 the multidisciplinary accident investigation team program.

9 SECTION 6. The sum appropriated shall be expended by the
 10 department of transportation for the purposes of this Act.

11 SECTION 7. This Act shall take effect upon its approval;
 12 provided that section 5 shall take effect on July 1, 2006.

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Report Title:

Highway Safety; Accident Investigation

Description:

Establishes a multidisciplinary accident investigation team in the department of transportation 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.

