

109<sup>TH</sup> CONGRESS  
1<sup>ST</sup> SESSION

# H. R. 909

To provide for the establishment of a hazardous materials cooperative research program.

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## IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 17, 2005

Mr. CUMMINGS introduced the following bill; which was referred to the Committee on Science, and in addition to the Committee on Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To provide for the establishment of a hazardous materials cooperative research program.

1        *Be it enacted by the Senate and House of Representa-*  
2        *tives of the United States of America in Congress assembled,*

3        **SECTION 1. SHORT TITLE.**

4        This Act may be cited as the “Hazardous Materials  
5        Cooperative Research Act of 2005”.

6        **SEC. 2. FINDINGS AND PURPOSES.**

7        Congress finds the following:

8                (1) There are more than 1,000,000 shipments  
9        per day in the United States of materials identified

1 as hazardous by the United States Department of  
2 Transportation. These shipments are estimated to  
3 total 2,100,000,000 tons of hazardous cargo per  
4 year and to comprise more than 18 percent of the  
5 total freight tonnage moved in the United States an-  
6 nually.

7 (2) Hazardous materials are shipped by all  
8 transportation modes and it is estimated that there  
9 are currently 400,000 large trucks, 115,000 railroad  
10 tank cars, and 3,000 tank barges dedicated to the  
11 shipment of hazardous materials.

12 (3) More than a dozen Federal agencies have  
13 regulatory, enforcement, and operational responsibil-  
14 ities for ensuring the safety and security of haz-  
15 ardous materials shipments. In addition, a variety of  
16 State and local agencies have responsibility for de-  
17 veloping and enforcing State-level regulations and  
18 for responding to incidents involving hazardous ma-  
19 terials.

20 (4) Decisions regarding the packaging and  
21 routing of hazardous materials shipments, the devel-  
22 opment and implementation of procedures to ensure  
23 both the safety and security of such shipments, and  
24 the regulation of hazardous materials shipments are  
25 made by industry groups and government entities at

1 a variety of levels and in all modal administrations  
2 of the Department of Transportation on a daily  
3 basis.

4 (5) The Federal agencies involved in the regula-  
5 tion and oversight of hazardous materials shipments  
6 as well as State and local governments, carriers,  
7 shippers, and other groups conduct on-going re-  
8 search on the transportation of hazardous materials.  
9 However, much of this research is program or mode-  
10 specific and as such is focused on addressing only  
11 the regulatory, inspection, enforcement, or oper-  
12 ational needs of the group undertaking the research.

13 (6) There is a documented need for the estab-  
14 lishment of a cooperative research program that will  
15 engage all modes and actors, both public and pri-  
16 vate, involved in the transportation of hazardous  
17 materials in conducting cross-cutting assessments of  
18 hazardous materials transportation issues that are  
19 national and multi-modal in scope and application.

20 **SEC. 3. HAZARDOUS MATERIALS COOPERATIVE RESEARCH**  
21 **PROGRAM.**

22 (a) IN GENERAL.—From the amounts made available  
23 under section 5127 of title 49, United States Code, the  
24 Secretary of Transportation may obligate not to exceed

1 \$2,000,000 per fiscal year to develop and administer a  
2 hazardous materials cooperative research program.

3 (b) GOVERNANCE.—The Secretary of Transportation  
4 shall establish an independent governing board to select  
5 projects and studies to be carried out under the hazardous  
6 materials cooperative research program. The Board shall  
7 be comprised of one voting representative from the fol-  
8 lowing:

- 9 (1) The Federal Aviation Administration.
- 10 (2) The Federal Motor Carrier Administration.
- 11 (3) The Federal Transit Administration.
- 12 (4) The Federal Railroad Administration.
- 13 (5) The Maritime Administration.
- 14 (6) The Research and Innovative Technology  
15 Administration.
- 16 (7) The Pipeline and Hazardous Materials  
17 Safety Administration.
- 18 (8) The Department of Homeland Security.
- 19 (9) The Department of Energy.
- 20 (10) The Environmental Protection Agency.
- 21 (11) A State department of transportation.
- 22 (12) A State emergency management agency.
- 23 (13) A nonprofit organization representing  
24 emergency responders.
- 25 (14) A hazmat employer.

1           (15) A nonprofit organization representing  
2           hazmat employees.

3           (16) A hazardous materials shipper.

4           (17) A hazardous materials manufacturer.

5           (18) An organization representing the haz-  
6           ardous materials manufacturing industry.

7           (19) A research university or research institu-  
8           tion.

9           (20) Additional representatives as the Secretary  
10          considers appropriate.

11          (c) RESEARCH STUDIES.—Under the cooperative re-  
12          search program, the governing board shall select coopera-  
13          tive research studies of hazardous materials transpor-  
14          tation that are cross-cutting in nature and that consider  
15          issues not adequately addressed by existing Federal or pri-  
16          vate sector research programs. Priority shall be given to  
17          research studies that will yield results immediately appli-  
18          cable to risk analysis and mitigation or that will strength-  
19          en the ability of first responders to respond to incidents  
20          and accidents involving transportation of hazardous mate-  
21          rials.

22          (d) SPECIAL RULES REGARDING STUDIES.—

23                 (1) SAFETY AND SECURITY.—The purpose of at  
24          least one of the studies to be conducted under the  
25          cooperative research program shall be—

1 (A) to provide an assessment of opportuni-  
2 ties for integrating and supplementing safety  
3 and security measures for hazardous materials  
4 transportation;

5 (B) to identify areas where safety and se-  
6 curity measures currently utilized in the trans-  
7 portation of hazardous materials conflict or  
8 complement one another;

9 (C) to outline a comprehensive approach to  
10 hazardous materials transportation that effec-  
11 tively incorporates safety and security proce-  
12 dures; and

13 (D) to produce a model of reasonable State  
14 and local risk response and management plans  
15 that effectively address safety and security of  
16 hazardous materials transportation.

17 (2) PERFORMANCE DATA FOR BULK CON-  
18 TAINERS.—The purpose of at least one of the stud-  
19 ies to be conducted under the research program shall  
20 be to provide—

21 (A) an analysis of, and recommendations  
22 for, the design and funding of a nationwide sys-  
23 tem capable of collecting and analyzing per-  
24 formance data from bulk containers involved in  
25 transportation accidents; and

1           (B) recommendations that can be used to  
2           develop conditional release probabilities for var-  
3           ious container design specifications (by trans-  
4           port mode).

5           (3) PACKAGING REQUIREMENTS.— The purpose  
6           of at least one of the studies to be conducted under  
7           the research program shall be to provide an analysis  
8           of recommendations on appropriate packaging re-  
9           quirements for those hazardous materials that are  
10          most frequently involved in release incidents.

11          (4) ROUTING.—The purpose of at least one of  
12          the studies to be conducted under the research pro-  
13          gram shall be to identify the components that could  
14          comprise a model of risk and consequence analysis  
15          in rail and highway transportation and that can be  
16          used to facilitate decisionmaking regarding the rout-  
17          ing of hazardous materials shipments and the devel-  
18          opment of regulations regarding mandatory routing  
19          decisions.

20          (5) RESPONSE COVERAGE.—The purpose of at  
21          least one of the studies to be conducted under the  
22          research program shall be to provide an assessment  
23          of the quality of response coverage for hazardous  
24          materials incidents, including cost-effective strate-  
25          gies for improving response capabilities and making

1 recommendations on systematic approaches that  
2 could be used to allocate government funding to en-  
3 hance response capability.

4 (6) RESPONSE GUIDELINES.—The purpose of  
5 at least one of the studies to be conducted under the  
6 research program shall be—

7 (A) to develop a guideline document for  
8 use by emergency responders and handlers to  
9 guide their response to incidents involving haz-  
10 ardous materials and to define the roles and re-  
11 sponsibilities of carriers and shippers in event  
12 response; and

13 (B) to detail event response procedures  
14 that can be consistently applied across all  
15 modes.

16 (e) IMPLEMENTATION.—The Secretary of Transpor-  
17 tation shall make grants to, and enter a cooperative agree-  
18 ment with, the National Academy of Sciences to carry out  
19 activities under this Act.

20 (f) REPORT.—Not later than 1 year after the date  
21 of enactment of this Act, the Secretary shall transmit a  
22 report to the Committee on Transportation and Infra-  
23 structure of the House of Representatives and the Com-  
24 mittee on Commerce, Science, and Transportation of the  
25 Senate on the effectiveness of the program in meeting the



1 needs of government and the private sector for cooperative  
2 research on hazardous materials transportation.

3 (g) DEFINITIONS.—In this Act, the terms “hazmat  
4 employer” and “hazmat employee” have the meaning  
5 given those terms in section 5102 of title 49, United  
6 States Code.

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