

**HOUSE . . . . . No. 2140**

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**The Commonwealth of Massachusetts**

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**In the Year Two Thousand Nine**  
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An Act relative to reporting on health effects of particulate matter..

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:*

1 SECTION 1: The following words and phrases as used in this section shall have the  
2 following meanings:-

3 “particulate matter” shall mean a broad class of chemically and physically diverse  
4 substances that exist as discrete particles in air

5 “fine particulate matter” shall mean particulate matter less than or equal to 2.5  
6 micrometers in diameter

7 “ultrafine particulate matter” shall mean particulate matter less than or equal to .1  
8 micrometers in diameter (.1 micrometers is equivalent to 100 nanometers)

9 SECTION 2: The center for environmental health of the department of public health shall  
10 conduct a comprehensive study of data on the health effects of particulate air pollution from  
11 surface transportation. The study shall focus on understanding the health impacts from fine and  
12 ultrafine particulate matter upon populations that are located within 500 feet of any roadway with  
13 50,000 or more motor vehicle trips per day, or any rail line regularly used by diesel locomotives;

14 provided further, that the study may include, but not be limited to, examining respiratory and  
15 cardiovascular disease and cancer incidence that may be affected by exposure to surface  
16 transportation-related particles. The following departments and agencies of the commonwealth  
17 shall provide information to the center for environmental health of the department of public  
18 health relevant to this study: the department of environmental protection, the executive office of  
19 transportation, and the central transportation planning staff of the Boston metropolitan planning  
20 organization. The department of public health shall report its findings, or a progress report,  
21 together with any recommended response actions by the commonwealth to the house and senate  
22 committees on ways and means, to the Secretary of the Executive Office of Energy and  
23 Environmental Affairs, and to the Secretary of the Executive Office of Transportation, not later  
24 than two years after the adoption of this act; provided further that no less than \$250,000 shall be  
25 appropriated for this purpose.

26 SECTION 3:

27 Chapter 21A of the General Laws is hereby amended by inserting after section 18A the  
28 following section:

29 Section 18B: The department of environmental protection in consultation with the  
30 department of public health shall promulgate regulations, based on the best available science,  
31 establishing health risk assessment guidelines and exposure standards within the commonwealth  
32 for ultrafine and fine particulate matter. To ensure the accuracy and completeness of the  
33 assessment, the department's guidelines shall set forth standard procedures for conducting air  
34 dispersion modeling; obtaining dose-response values; estimating the frequency, duration, and  
35 intensity of exposure; and estimating both acute and chronic health risks. Exposure standards

36 shall be based on the best available science. The Department of Environmental Protection will  
37 develop a plan for monitoring particulates so as to acquire data indicative of areas of greatest  
38 hazard to human health.