

118TH CONGRESS
2D SESSION

H. R. 9219

To establish the Federal Commission on Weather Risk Data and Modeling,
and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 30, 2024

Mr. MILLER of Ohio (for himself and Mr. LUCAS) introduced the following
bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To establish the Federal Commission on Weather Risk Data
and Modeling, and for other purposes.

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 “Weather Data Tax-
5 payer Protection Act”.

6 **SEC. 2. FEDERAL COMMISSION ON WEATHER RISK DATA**
7 **AND MODELING.**

8 (a) ESTABLISHMENT.—Not later than 180 days after
9 the date of the enactment of this Act, the Secretary of
10 Commerce shall establish in the Department of Commerce

1 a commission to be known as the “Federal Commission
2 on Weather Risk Data and Modeling” (in this section re-
3 ferred to as the “Commission”).

4 (b) DUTIES.—The duties of the Commission are the
5 following:

6 (1) To establish data, metadata, and service
7 standards and specifications required for the valida-
8 tion of weather risk data and models under sub-
9 section (c).

10 (2) To identify the quality, reliability, usability,
11 timeliness, and accuracy of key data inputs and pa-
12 rameters provided by the private sector and used in
13 weather risk data and models, including the fol-
14 lowing:

15 (A) Data related to frequency and severity
16 of natural hazards.

17 (B) Data related to natural hazards expo-
18 sures, vulnerability, adaptation, and mitigation
19 in built environments, including infrastructure,
20 economic activity, and human population.

21 (C) Data related to the relationship and
22 scientific connections between subparagraphs
23 (A) and (B), including types of natural hazards
24 and the specific damages such natural hazards
25 cause.

1 (3) To develop standardized methodologies and
2 protocols for the collection, validation, and analysis
3 of such key private sector data inputs and param-
4 eters utilized or purchased by Federal departments
5 and agencies.

6 (4) To facilitate the sharing and dissemination
7 of weather risk data and models among the fol-
8 lowing:

9 (A) State, local, and Tribal governments.

10 (B) Federal departments and agencies.

11 (C) Appropriate representatives of the in-
12 surance industry.

13 (D) Appropriate representatives of the
14 banking industry.

15 (E) Appropriate representatives of the
16 weather industry.

17 (F) Any other relevant stakeholders as de-
18 termined by the Commission.

19 (5) To coordinate data collection, analysis, and
20 modeling activities for weather risk data and models
21 with the following:

22 (A) The National Oceanic and Atmos-
23 pheric Administration.

24 (B) The National Institute of Standards
25 and Technology.

1 (C) The National Aeronautics and Space
2 Administration.

3 (D) The Department of Energy.

4 (E) The Environmental Protection Agency.

5 (F) The Office of Science and Technology
6 Policy.

7 (G) Any other relevant Federal depart-
8 ments and agencies as determined by the Com-
9 mission.

10 (6) To make recommendations to Federal de-
11 partments and agencies on improving the quality,
12 accuracy, consistency, and transparency of weather
13 risk data models.

14 (c) WEATHER RISK DATA AND MODEL VALIDA-
15 TION.—

16 (1) IN GENERAL.—The Commission shall imple-
17 ment validation standards and specifications that en-
18 sure the accuracy and reliability of weather risk data
19 and models utilized or purchased from the private
20 sector by Federal departments and agencies.

21 (2) CRITERIA.—In carrying out this subsection,
22 the Commission shall engage with Federal depart-
23 ments and agencies, and external partners and pro-
24 viders, to develop and test validation standards and
25 specifications in order to evaluate all sources and

1 types of weather risk data and models for use by the
2 Federal Government. Not later than one year after
3 such development of such standards and specifica-
4 tions, such standards and specifications shall be
5 used to evaluate current federally used weather risk
6 data and models.

7 (3) PILOT CONTRACTS.—The Commission shall
8 seek, through an open competition, to enter into con-
9 tracts with private sector entities capable of pro-
10 viding weather risk data and models that can be
11 evaluated to satisfy the standards and specifications
12 implemented pursuant to paragraph (1). Not later
13 than six months after entering into any such con-
14 tract, the Commission, to the maximum extent prac-
15 ticable, shall seek to recommend submission of an
16 application under paragraph (4) after determining if
17 such data and models satisfy such standards and
18 specifications.

19 (4) APPLICATIONS.—Not later than one year
20 after the date of the enactment of this Act and on
21 a continuous basis thereafter, the Commission shall
22 consider applications for review of weather risk data
23 and models for the purpose of validating such model
24 for use by Federal departments and agencies. In
25 order to have weather risk data or models reviewed

1 by the Commission, the owner of such data or model
2 shall submit to the Commission an application at
3 such time, in such manner, and containing such in-
4 formation as the Commission may require.

5 (c) MEMBERSHIP.—

6 (1) NUMBER AND APPOINTMENT.—The Com-
7 mission shall be co-chaired by the Administrator of
8 the National Oceanic and Atmospheric Administra-
9 tion and the Director of the National Institute of
10 Standards and Technology, and be composed of
11 members who are qualified to provide advice regard-
12 ing weather risk data and models, including, to the
13 maximum extent practicable, from the following enti-
14 ties:

15 (A) One representative of a State or local
16 government that has experience with responding
17 to natural hazards.

18 (B) One representative of a State regu-
19 latory entity that utilizes or purchases weather
20 risk data or models.

21 (C) One representative of the Federal
22 Emergency Management Agency.

23 (D) One representative of the United
24 States Forest Service who has experience with
25 wildfire modeling.

1 (E) One representative of a Federal de-
2 partment or agency that utilizes or purchases
3 weather risk data or models.

4 (F) One representative of an organization
5 representing rural communities that has experi-
6 ence with community planning.

7 (G) One representative of an organization
8 representing urban communities that has expe-
9 rience with community planning.

10 (H) One representative of the insurance in-
11 dustry who has experience with weather risk
12 data or modeling.

13 (I) One representative of the banking in-
14 dustry who has experience with weather risk
15 data or modeling.

16 (J) One representative of a non-govern-
17 mental organization that has experience with
18 weather risk data or modeling.

19 (K) One representative of the engineering
20 industry who has experience with structural en-
21 gineering related to natural hazards.

22 (L) One representative of an institution of
23 higher education that has experience with con-
24 ducting research on weather risk data or mod-
25 els.

1 (M) One representative of an institution of
2 higher education that has experience with using
3 artificial intelligence to improve weather risk
4 data or modeling.

5 (2) TERM.—Each member of the Commission
6 shall be appointed for a term of four years, not to
7 exceed a total of eight non-consecutive years, except
8 that the term of six of the members who are initially
9 appointed to membership on the Commission shall
10 be two years. To the maximum extent practicable,
11 the co-chairs of the Commission shall ensure stag-
12 gered terms of members to avoid complete turnovers
13 of the Commission membership.

14 (3) VACANCIES.—A vacancy in the Commission
15 shall be filled in the same manner in which the origi-
16 nal appointment was made.

17 (4) BASIC PAY.—

18 (A) IN GENERAL.—Except as provided in
19 subparagraph (B), members of the Commission
20 shall be paid at a rate equal to the daily equiva-
21 lent of the annual rate of basic pay prescribed
22 for level IV of the Executive Schedule under
23 section 5315 of title 5, United States Code, for
24 each day (including travel time) during which

1 such member is engaged in the actual perform-
2 ance of duties vested in the Commission.

3 (B) PROHIBITION OF COMPENSATION OF
4 FEDERAL EMPLOYEES.—Members of the Com-
5 mission who are full-time officers or employees
6 of the United States may not receive additional
7 pay, allowances, or benefits by reason of their
8 service on the Commission.

9 (d) STAFF OF COMMISSION.—

10 (1) PERSONNEL.—Upon request of the Com-
11 mission, the Administrator of the National Oceanic
12 and Atmospheric Administration and the Director of
13 the National Institute of Standards and Technology
14 may assign any of the personnel of their respective
15 agencies to the Commission to assist the Commis-
16 sion in carrying out the duties described in sub-
17 section (b).

18 (2) OTHER FEDERAL DEPARTMENTS AND
19 AGENCIES.—Upon request of the Commission the
20 head of any Federal department or agency may de-
21 tail, on a reimbursable basis, any of the personnel
22 of such department or agency to the Commission to
23 assist the Commission in carrying out the duties de-
24 scribed in subsection (b).

1 (3) EXPERTS AND CONSULTANTS.—The Com-
2 mission may procure temporary and intermittent
3 services under section 3109(b) of title 5, United
4 States Code, at rates for individuals that do not ex-
5 ceed the daily equivalent of the annual rate of basic
6 pay prescribed for level IV of the Executive Schedule
7 under section 5315 of that title.

8 (e) REPORT.—Not later than one year after the date
9 of the establishment of the Commission, the Commission
10 shall submit to the President and Congress a report that
11 includes the following:

12 (1) An analysis of the quality, reliability,
13 usability, timeliness, and accuracy of weather risk
14 models and data.

15 (2) An assessment of the extent to which Fed-
16 eral departments and agencies utilize or purchase
17 weather risk data or models produced by the private
18 sector.

19 (3) A list of the key weather risk data and
20 model inputs and parameters that are needed to in-
21 tegrate long-term climate models and short-term ca-
22 tastrophe models into weather risk data and models.

23 (f) PROHIBITION OF NON-APPROVED WEATHER
24 RISK DATA AND MODELS.—Not later than two years after
25 the date of the enactment of this Act, notwithstanding any

1 other provision of law, the head of each Federal depart-
2 ment or agency shall ensure such department or agency,
3 as the case may be, does not utilize or purchase any
4 weather risk data or model that does not meet the valida-
5 tion standards and specifications implemented by the
6 Commission pursuant to subsection (c)(1).

7 (g) DEFINITIONS.—In this section:

8 (1) ARTIFICIAL INTELLIGENCE.—The term “ar-
9 tificial intelligence” has the meaning given such
10 term in section 5002(3) of the National Artificial In-
11 telligence Initiative Act of 2020 (15 U.S.C. 9401(3));
12 enacted as division E of the William M. (Mac)
13 Thornberry National Defense Authorization Act for
14 Fiscal Year 2021; Public Law 116–283).

15 (2) INSTITUTION OF HIGHER EDUCATION.—The
16 term “institution of higher education” has the
17 meaning given such term in section 101 of the High-
18 er Education Act (20 U.S.C. 1001).

19 (3) NATURAL HAZARDS.—The term “natural
20 hazards” means extreme weather or water events
21 and other natural phenomena, including wildfire,
22 drought, flooding, damaging winds, tornadoes, and
23 precipitation, that have a high risk of loss of life or
24 property.

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