

.....
(Original Signature of Member)

117TH CONGRESS
1ST SESSION

H. R.

To establish a national network of electric vehicle charging stations, and
for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. LEVIN of Michigan introduced the following bill; which was referred to
the Committee on _____

A BILL

To establish a national network of electric vehicle charging
stations, 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 “Electric Vehicle Free-
5 dom Act” or the “EV Freedom Act”.

6 **SEC. 2. FINDINGS; PURPOSE.**

7 (a) FINDINGS.—Congress finds the following:

8 (1) Electric vehicles will play an important role
9 in transitioning to a cleaner transportation system

1 that protects Americans' health and our planet. Ac-
2 cording to the United States Department of Energy,
3 electric vehicles "produce fewer emissions that con-
4 tribute to climate change and smog than conven-
5 tional vehicles."

6 (2) Electric vehicles are becoming more popular
7 among American consumers. United States sales of
8 electric vehicles increased 27 percent between 2016
9 and 2017, and 81 percent between 2017 and 2018,
10 achieving a record sales volume of 361,307 units.

11 (3) Access to electric vehicle charging stations
12 is currently insufficient to meet consumer demand.
13 According to the National Renewable Energy Lab-
14 oratory, "two key areas of needed improvement in
15 actual vehicle charging are speed (reducing battery
16 charging times) and coverage (having adequate and
17 accessible charging stations)".

18 (4) Demand for publicly accessible electric vehi-
19 cle chargers is projected to grow. There are an esti-
20 mated 41,878 publicly available electric vehicle di-
21 rect current fast charging stations (DC Fast and
22 Level 2) with 101,296 charging outlets available in
23 the United States. A report released in April 2021
24 by Lawrence Berkeley Labs at the University of
25 California-Berkley, estimated that the number of EV

1 chargers required to support the accelerated transi-
2 tion necessary to meet GHG was 8.1 million public
3 EV charge points by 2050.

4 (5) In August 2020, cumulative U.S. plug-in
5 electric vehicle sales reached 1.6 million units. In
6 February 2021, 53,247 electric vehicles were sold in
7 the United States, a 64.8 percent increase from the
8 electric vehicle sales in February 2020.

9 (6) However, China and the European Union
10 are exceeding the United States in the EV manufac-
11 turing sector. China is the world leader in total EV
12 production and total EV sales; 45 percent of global
13 electric vehicles were built and sold in China. China
14 also already produces the global majority of pas-
15 senger EVs (60 percent) and is expected to produce
16 65 percent of global lithium-ion batteries by 2021.
17 Currently, China has 7 of the 10 largest lithium-ion
18 mega-factories by production capacity, while the
19 United States only has one. Europe accounted for
20 24 percent of the global EV fleet in 2018. In order
21 for the United States to remain a competitor in auto
22 manufacturing, the U.S. must greatly increase in-
23 vestment in the infrastructure necessary for wide
24 adoption of EVs.

1 (7) Americans demand the freedom to roam
2 with their electric vehicle and convenient charging
3 opportunities. However, failure to expand access to
4 publicly accessible electric vehicle chargers will pre-
5 vent the wider adoption of electric vehicles and,
6 therefore, hinder progress towards a more sustain-
7 able transportation system. According to a study
8 produced by the Michigan Energy Office and Michi-
9 gan State University, “limited charging infrastruc-
10 ture for electric vehicles has been one of the main
11 barriers in adopting these vehicles”.

12 (8) Expediting the wider adoption of electric ve-
13 hicles will require considerable changes to consumer
14 behavior, which will not be possible without the cre-
15 ation of necessary infrastructure. According to a
16 study produced by the Transportation Research
17 Board and National Research Council, “adoption
18 and diffusion of new innovations can be a long-term,
19 complicated process that is especially slow for prod-
20 ucts that cost tens of thousands of dollars and where
21 consumers have questions about infrastructure avail-
22 ability, resale value, and other variables”, and “a
23 perception of a lack of public charging infrastructure
24 might hinder [plug-in electric vehicle] deployment.”
25 Thus, greatly expanding access to publicly accessible

1 electric vehicle chargers will be essential to changing
2 consumer behavior radically and, accordingly, accel-
3 erating the wider adoption of electric vehicles.

4 (b) PURPOSE.—The purpose of this Act is to estab-
5 lish a network of electric vehicle charging stations along
6 eligible roads so that the United States may lead the world
7 in protecting the environment while improving consumer
8 experiences. The implementation of this Act will encourage
9 the widespread adoption of light-, medium-, and heavy-
10 duty electric vehicles by—

11 (1) establishing a convenient system of charging
12 networks;

13 (2) allowing drivers to charge vehicles more
14 quickly; and

15 (3) ensuring that vehicle charging is equitably
16 accessible and reasonably priced, enabling long-dis-
17 tance travel along eligible roads.

18 (c) DEFINITIONS.—In this Act:

19 (1) ELIGIBLE ROAD.—The term “eligible road”
20 means a road that—

21 (A) is part of the National Highway Sys-
22 tem (as such term is defined in section 101 of
23 title 23, United States Code); and

1 (B) is a public road (as such term is de-
2 fined in section 101 of title 23, United States
3 Code).

4 (2) PUBLICLY AVAILABLE EVSE.—

5 (A) IN GENERAL.—The term “publicly
6 available EVSE” means electric vehicle supply
7 equipment and any associated parking spaces
8 designated by the property owner or lessee to be
9 available to, and accessible by, the public for
10 any period of time, including electric vehicle
11 supply equipment and associated parking spaces
12 if any member of the public can obtain vehic-
13 ular access to the facility for free or through
14 payment of a fee.

15 (B) EXCLUSION.—The term “publicly
16 available EVSE” does not include—

17 (i) electric vehicle supply equipment
18 and any associated parking spaces in a
19 workplace if the electric vehicle supply
20 equipment and associated parking spaces
21 are clearly marked and operated as avail-
22 able exclusively to employees or contracted
23 drivers; and

24 (ii) electric vehicle supply equipment
25 and any associated parking spaces that are

1 locked behind gates, walls or obstructed in
2 any manner to prevent a driver from
3 charging their vehicle at a reasonable cost.

4 (3) RENEWABLE ENERGY SOURCE.—The term
5 “renewable energy source” means a renewable
6 source of generated energy, including the following:

7 (A) Solar, including electricity.

8 (B) Wind.

9 (C) Ocean, including tidal, wave, current,
10 and thermal.

11 (D) Geothermal, including electricity and
12 heat pumps.

13 (E) New hydroelectric generation capacity
14 achieved from increased efficiency or additions
15 of new capacity—

16 (i) at an existing hydroelectric project;

17 and

18 (ii) that was placed in service on or
19 after January 1, 1999.

20 (F) Hydrogen used in fuel cells or other
21 non-combustion technologies.

22 (G) Thermal energy generated by any of
23 the sources described in subparagraphs (A)
24 through (F).

1 (4) FRONTLINE AND VULNERABLE COMMU-
2 NITY.—The term “frontline and vulnerable commu-
3 nity” means a community—

4 (A) in an area described in section 301(a)
5 of the Public Works and Economic Develop-
6 ment Act of 1965 (42 U.S.C. 3161(a)); and

7 (B) in which climate change, pollution, or
8 environmental destruction have exacerbated sys-
9 temic racial, regional, social, environmental,
10 gender, and economic injustices by dispropor-
11 tionately affecting Black, Brown, and Indige-
12 nous peoples, other communities of color, mi-
13 grant communities, deindustrialized commu-
14 nities, depopulated rural communities, the poor,
15 low-income workers, women, the elderly, the
16 unhoused, people with disability, or youth.

17 **SEC. 3. NATIONAL NETWORK OF ELECTRIC VEHICLE**
18 **CHARGING STATIONS ALONG ELIGIBLE**
19 **ROADS.**

20 (a) PLAN.—The Secretary of Transportation, in co-
21 ordination with the Secretary of Energy, shall devise a
22 plan to create a network of publicly available EVSE along
23 eligible roads.

24 (b) SUBMISSION.—Not later than 1 year after the
25 date of enactment of this Act, the Secretary of Transpor-

1 tation, in coordination with the Secretary of Energy, shall
2 submit the plan to the Speaker of the House of Represent-
3 atives, the Minority Leader of the House of Representa-
4 tives, the Majority Leader of the Senate, the Minority
5 Leader of the Senate, and the Chairs and Ranking Mem-
6 bers of—

7 (1) the Committee on Transportation and In-
8 frastructure of the House of Representatives;

9 (2) the Committee on Environment and Public
10 Works of the Senate;

11 (3) the Subcommittee on Transportation, Hous-
12 ing and Urban Development, and Related Agencies
13 of the Committee on Appropriations of the House of
14 Representatives; and

15 (4) the Subcommittee on Transportation, Hous-
16 ing and Urban Development, and Related Agencies
17 of the Committee on Appropriations of the Senate.

18 (c) CONSIDERATIONS.—The Secretary of Transpor-
19 tation, in coordination with the Secretary of Energy, shall
20 consider the following in developing the plan:

21 (1) The distance between publicly available
22 EVSE locations.

23 (2) Connections to the electric grid, including
24 electric distribution upgrades that account for charg-
25 ing during peaking periods, alignment with electric

1 distribution interconnection processes, and plans for
2 the use of renewable energy sources to power charg-
3 ing and energy storage.

4 (3) The ability to incorporate technologies not
5 yet invented or technically feasible, or infrastructure
6 that can allow the addition of new capabilities and
7 functionalities as they become available.

8 (4) The number of publicly available EVSE lo-
9 cations needed in the network and the number of
10 charging stations at each publicly available EVSE
11 location, accounting for dense corridors where mul-
12 tiple stations or a greater number of charging ports
13 at the location are necessary and for rural corridors
14 where special considerations will need to be made for
15 less dense corridors that will still require publicly
16 available EVSE placement.

17 (5) The placement of publicly available EVSE
18 within parking facilities and other locations, includ-
19 ing recommendations for promoting efficient dwell
20 times based on best practices.

21 (6) The availability of onsite amenities for vehi-
22 cle operators, including restrooms or food facilities.

23 (7) The long-term operation and maintenance
24 of publicly available EVSE, including consideration
25 of the need for expanded capacity resulting from in-

1 creasing demand into the future, to avoid stranded
2 assets and protect the investment of public funds in
3 that infrastructure.

4 (8) A maximum distance for publicly available
5 EVSE placement off of eligible roads.

6 (9) Existing private as well as national, State,
7 local, Tribal, and territorial government electric
8 charging infrastructure incentives and programs, in-
9 cluding alternative fueling corridor networks.

10 (10) Existing labor or labor-management orga-
11 nizations that promote a skilled workforce to install
12 publicly available EVSE with high standards for
13 quality and safety.

14 (11) Pricing transparency and payment options
15 that encourages a consistent, reliable, secure, con-
16 venient and equal access consumer charging and
17 payment experience to all members of the public.

18 (12) Publicly available EVSE placement and
19 construction in or near frontline and vulnerable com-
20 munities, provided such placements benefit such
21 communities and does not harm or displace commu-
22 nity members.

23 (13) Adequate signage for users to identify
24 publicly available EVSE that ensures uniformity in

1 providing road users direction to publicly available
2 EVSE locations.

3 (14) Existing EVSE investments, proposal or
4 projects that are complementary towards the deploy-
5 ment of publicly available EVSE under this Act are
6 not precluded by plan development.

7 (d) CONSULTATIONS.—In developing the plan, the
8 Secretary of Transportation, in coordination with the Sec-
9 retary of Energy, shall consult with stakeholders, includ-
10 ing the following:

11 (1) Federal partners, including the Secretary of
12 the Interior and the Administrator of the Environ-
13 mental Protection Agency.

14 (2) State, local, Tribal, and territorial govern-
15 ments, including State air quality and utility regu-
16 lators.

17 (3) Metropolitan planning organizations.

18 (4) Unionized labor groups.

19 (5) Environmental and environmental justice
20 organizations.

21 (6) Automobile and truck manufacturers.

22 (7) Electric utilities.

23 (8) Infrastructure providers.

24 (9) Technology providers.

25 (10) Software and network services providers.

1 (11) Infrastructure construction and component
2 parts suppliers.

3 (12) Multi-State and regional entities.

4 (13) Fuel station owners and operators.

5 (14) Fleet owners.

6 (15) Fleet managers.

7 (16) Other relevant stakeholders as identified
8 by the Secretary of Transportation.

9 **SEC. 4. TRANSPORTATION RESEARCH BOARD REPORT ON**
10 **FINANCING THE PLACEMENT OF ELECTRIC**
11 **VEHICLE CHARGERS.**

12 (a) IN GENERAL.—The Secretary of Transportation
13 shall commission the Transportation Research Board of
14 the National Academy of Sciences to conduct a study on
15 options for financing the placement of publicly available
16 EVSE along eligible roads that includes consideration of
17 financial instruments, such as a revolving loan fund.

18 (b) DEADLINE.—The Secretary shall submit to Con-
19 gress the study commissioned under subsection (a) not
20 later than 2 years after the date of enactment of this Act.

21 **SEC. 5. ESTABLISHMENT OF NETWORK OF ELECTRIC VEHI-**
22 **CLE CHARGERS ALONG ELIGIBLE ROADS.**

23 (a) PLAN IMPLEMENTATION.—Not later than 5 years
24 after the date of enactment of this Act, using the plan
25 developed pursuant to section 3 and the recommendations

1 in the report described in section 4, the Secretary of
2 Transportation and the Secretary of Energy shall com-
3 plete the establishment of a national network of publicly
4 available EVSE.

5 (b) CONSULTATIONS.—In implementing the plan, the
6 Secretary of Transportation, in coordination with the Sec-
7 retary of Energy, shall consult with stakeholders, includ-
8 ing the following:

9 (1) Federal partners, including the Secretary of
10 the Interior and the Administrator of the Environ-
11 mental Protection Agency.

12 (2) State, local, Tribal, and territorial govern-
13 ments, including state air quality and utility regu-
14 lators.

15 (3) Metropolitan planning organizations.

16 (4) Unionized labor groups.

17 (5) Environmental and environmental justice
18 organizations.

19 (6) Automobile and truck manufacturers.

20 (7) Electric utilities.

21 (8) Infrastructure providers.

22 (9) Technology providers.

23 (10) Software and network services providers.

24 (11) Infrastructure construction and component
25 parts suppliers.

1 (12) Multi-State and regional entities.

2 (13) Fuel station owners and operators.

3 (14) Fleet owners.

4 (15) Fleet managers.

5 (16) Other relevant stakeholders as identified
6 by the Secretary of Energy and Secretary of Trans-
7 portation.

8 (c) GRANT PROGRAM.—

9 (1) ESTABLISHMENT.—Not later than 1 year
10 after the date of enactment of this Act, the Sec-
11 retary of Transportation shall establish a competi-
12 tive grant program to award grants to eligible enti-
13 ties to implement the plan developed in section 3 of
14 this Act.

15 (2) APPLICATIONS.—To be eligible to receive a
16 grant under this subsection, an eligible entity shall
17 submit to the Secretary of Transportation an appli-
18 cation at such time, in such manner, and containing
19 such information as the Secretary of Transportation
20 shall require.

21 (3) PRIORITY.—In selecting grant recipients,
22 the Secretary of Transportation shall give priority
23 to—

24 (A) applications consistent with the plan
25 developed pursuant to section 3 of this Act;

- 1 (B) applications located in or near—
2 (i) a frontline and vulnerable commu-
3 nity; or
4 (ii) an area identified as having dis-
5 proportionately high adverse human health
6 and environmental impacts on minority
7 populations and low-income populations;
8 and

9 (C) applications that specify priority em-
10 ployment of workforce trained and certified by
11 labor or joint labor-management organizations
12 that promote a skilled workforce to install pub-
13 licly available EVSE with high standards for
14 quality and safety.

15 (4) USE OF FUNDS.—An entity receiving a
16 grant under this subsection shall only use the funds
17 in accordance with this paragraph to contract with
18 a private entity for acquisition and installation of
19 publicly available EVSE that is directly related to
20 the charging of light-, medium-, and heavy-duty ve-
21 hicles.

22 (5) FRONTLINE, VULNERABLE, AND DISADVAN-
23 TAGED COMMUNITIES.—Of the total amounts made
24 available to carry out the program for each fiscal
25 year under this subsection, not less than 50 percent

1 shall be used for eligible projects located in frontline,
2 vulnerable, and disadvantaged communities.

3 (6) ELIGIBLE ENTITY DEFINED.—In this sub-
4 section, the term “eligible entity” means—

5 (A) a State;

6 (B) a unit of local government;

7 (C) a transit agency;

8 (D) a port authority;

9 (E) an Indian tribe (as such term is de-
10 fined in section 4 of the Indian Self-Determina-
11 tion and Education Assistance Act (25 U.S.C.
12 5304));

13 (F) a for-profit business enterprise or non-
14 profit organization; and

15 (G) a group of entities described in sub-
16 paragraphs (A) through (F).

17 (d) REQUIREMENTS.—The following requirements
18 apply with respect to the construction of new publicly
19 available EVSE along eligible roads:

20 (1) CHARGING INFRASTRUCTURE PLACE-
21 MENT.—The distance between publicly available
22 EVSE shall be such that—

23 (A) a light-, medium-, and heavy-duty elec-
24 tric vehicle driver starting at any point along an
25 eligible road in the continental United States

1 can drive to any other point along an eligible
2 road within the continental United States with-
3 out running out of charging power; and

4 (B) a light-, medium-, and heavy-duty elec-
5 tric vehicle driver starting at any point along an
6 eligible road within Hawaii, Alaska, or Puerto
7 Rico can drive to any other point along an eligi-
8 ble within that same State or territory without
9 running out of charging power.

10 (2) CHARGING SPEED.—

11 (A) IN GENERAL.—Charging speed min-
12 imum standards maybe set by the Secretary of
13 Transportation and evaluated every 2 years
14 until the feasible speed of charging standard
15 meets or exceeds the equivalency of average in-
16 ternal combustion vehicle refueling times.

17 (B) UPDATE.—The Secretary of Transpor-
18 tation may update the minimum standards set
19 under subparagraph (1) after an evaluation de-
20 scribed in such subparagraph. In evaluating
21 and developing updates to the minimum stand-
22 ards set under subparagraph (1), the Secretary
23 of Transportation and the Secretary of Energy
24 shall also consider how updated minimum
25 standards—

- 1 (i) impact the electric grid;
- 2 (ii) impact the cost to operate a
- 3 charging station; and
- 4 (iii) other criteria as determined by
- 5 the Secretary of Transportation and Sec-
- 6 retary of Energy.

7 (3) INTEROPERABILITY.—Federal funds pro-

8 vided by this Act may not be used to construct any

9 publicly available EVSE that has the ability to serve

10 vehicle produced by only one vehicle manufacturer.

11 (4) AGREEMENT TO MAINTAIN.—Each recipient

12 of support under this section shall enter into an

13 agreement with the Secretary to maintain the pub-

14 licly available EVSE for not less than 5 years after

15 the date on which the eligible entity receive support.

16 (5) PAYMENT METHODS.—Payment methods

17 are implemented that ensure secure, convenient, fair,

18 and equal access, such as with credit card readers

19 and the display of toll-free calling information for

20 credit card payment or support, as well as the pro-

21 tection of personal privacy and cybersecurity.

22 (6) PROVISION OF INFORMATION.—Information

23 on publicly available EVSE location, station operator

24 contact information, number of simultaneous refuel-

25 ing positions, pricing, and real-time availability shall

1 be made publicly available and easily accessible, in-
2 cluding through applicable mapping applications.

3 (7) ADA.—Publicly available EVSE shall be ac-
4 cessible in compliance with the Americans with Dis-
5 abilities Act of 1990 (42 U.S.C. 12101 et seq.).

6 (8) BUY AMERICA AND WAGE REQUIRE-
7 MENTS.—

8 (A) BUY AMERICA.—The construction of
9 publicly available EVSE shall prioritize the
10 need for high domestic content by observing the
11 following Buy America provisions:

12 (i) None of the funds appropriated or
13 otherwise made available by this Act may
14 be used for a project for the construction,
15 alteration, maintenance, or repair of pub-
16 licly available EVSE unless all of the iron,
17 steel, and manufactured goods used in the
18 project are produced in the United States.

19 (ii) Clause (i) shall not apply in any
20 case or category of cases in which the head
21 of the Federal department or agency in-
22 volved finds that—

23 (I) applying clause (i) would be
24 inconsistent with the public interest;

1 (II) iron, steel, and the relevant
2 manufactured goods are not produced
3 in the United States in sufficient and
4 reasonably available quantities and of
5 a satisfactory quality; or

6 (III) inclusion of iron, steel, and
7 manufactured goods produced in the
8 United States will increase the cost of
9 an overall project by more than 25
10 percent.

11 (iii) If the head of a Federal depart-
12 ment or agency determines that it is nec-
13 essary to waive the application of this sub-
14 paragraph based on a finding under sub-
15 paragraph (B), the head of the department
16 or agency shall publish in the Federal Reg-
17 ister a detailed written justification as to
18 why the provision is being waived.

19 (iv) This paragraph shall be applied in
20 a manner consistent with United States
21 obligations under international agreements.

22 (B) WAGE RATE REQUIREMENT.—The
23 Secretary of Transportation and the Secretary
24 of Energy shall require that each recipient of
25 support under this section provide reasonable

1 assurance that all laborers and mechanics em-
2 ployed in the performance of the project for
3 which the assistance is provided, including
4 those employed by contractors, subcontractors,
5 or manufacturers of publicly available EVSE,
6 will be paid wages at rates not less than those
7 prevailing on similar work in the locality as de-
8 termined by the Secretary of Labor in accord-
9 ance with subchapter IV of chapter 31 of part
10 A of subtitle II of title 40, United States Code
11 (commonly referred to as the “Davis-Bacon
12 Act”).

13 (C) NEUTRALITY TOWARD ORGANIZED
14 LABOR.—All contractors and subcontractors in
15 the performance of a project receiving support
16 under this Act shall have—

17 (i) an explicit policy of neutrality with
18 regard to—

19 (I) labor organizing for the em-
20 ployees of the entity, contractor or
21 subcontractor employed in the per-
22 formance of the eligible project; and

23 (II) such employees’ choice to
24 form and join labor organizations;

25 (ii) policies that require—

1 (I) the posting and maintenance
2 of notices in the workplace to such
3 employees of their rights under the
4 National Labor Relations Act (29
5 U.S.C. 151 et seq.); and

6 (II) that such employees are, at
7 the beginning of their employment in
8 the performance of the eligible
9 project, provided notice and informa-
10 tion regarding the employees' rights
11 under such Act.

12 (D) PREFERENCE FOR LOCAL HIRING.—
13 The contractor or subcontractor shall have ex-
14 plicit policies that provide a preference for local
15 hiring, consistent with applicable Federal law
16 and subject to rules issued by the Secretary of
17 Labor.

18 (E) EMPLOYEE CLASSIFICATION.—All con-
19 tractors and subcontractors in the performance
20 of a project receiving support under this Act,
21 shall consider an individual performing any
22 service in such performance as an employee
23 (and not an independent contractor) of the enti-
24 ty, contractor, or subcontractor, respectively,
25 unless—

1 (i) the individual is free from control
2 and direction in connection with the per-
3 formance of the service, both under the
4 contract for the performance of the service
5 and in fact;

6 (ii) the service is performed outside
7 the usual course of the business of the en-
8 tity, contractor, or subcontractor, respec-
9 tively; and

10 (iii) the individual is customarily en-
11 gaged in an independently established
12 trade, occupation, profession, or business
13 of the same nature as that involved in such
14 service.

15 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

16 There is authorized to be appropriated—

17 (1) for carrying out section 3, such sums as
18 may be necessary, to be available until expended;

19 (2) for carrying out section 4, such sums as
20 may be necessary, to be available until expended;
21 and

22 (3) for carrying out section 5, such sums as
23 may be necessary, to be available until expended.