

119TH CONGRESS
1ST SESSION

S. _____

To require the Secretary of Transportation to develop a centralized, web-based platform for managing, submitting, and tracking documents and processes relating to compliance with the National Environmental Policy Act of 1969, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Ms. LUMMIS introduced the following bill; which was read twice and referred to the Committee on _____

A BILL

To require the Secretary of Transportation to develop a centralized, web-based platform for managing, submitting, and tracking documents and processes relating to compliance with the National Environmental Policy Act of 1969, 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 “Streamlining Modeling
5 for Advanced, Rapid Transportation Infrastructure Act of
6 2025” or the “SMART Infrastructure Act of 2025”.

1 **SEC. 2. FINDINGS.**

2 Congress finds that—

3 (1) Federal permitting processes for infrastruc-
4 ture projects are often delayed due to inefficient co-
5 ordination, imperfect communication of complex in-
6 formation, manual data handling, and lack of trans-
7 parency;

8 (2) 2-dimensional paper- and PDF-based
9 project designs impede the effective communication
10 of complex, integrated engineering-based project in-
11 formation to government agencies, project stake-
12 holders, laypersons, and local communities, causing
13 delays in permitting and project delivery;

14 (3) digital twin technology enables real-time,
15 high quality, high resolution, data-driven modeling
16 of infrastructure projects that improves planning,
17 environmental review, and stakeholder collaboration;

18 (4) digital twin technology is widely available on
19 the commercial market from a variety of vendors;

20 (5) digital twins of infrastructure projects in-
21 clude and preserve detailed information about the
22 project, acting as a single source of truth for all par-
23 ticipants in the development of the project, which
24 improves quality, reduces project risk, and acceler-
25 ates delivery;

1 (6) technological progress in the planning, per-
2 mitting, design, construction, delivery, operation,
3 and management of infrastructure is best achieved
4 when design models are developed and transmitted
5 in interoperable, digital, high-fidelity, 3-dimensional
6 formats;

7 (7) an electronic NEPA portal can centralize
8 permitting data, streamline reviews, reduce environ-
9 mental review timelines, and enhance public access
10 to environmental documents; and

11 (8) modernizing permitting processes will accel-
12 erate critical infrastructure development, support
13 economic growth, and ensure environmental protec-
14 tions.

15 **SEC. 3. DEFINITIONS.**

16 In this Act:

17 (1) APPROPRIATE COMMITTEES OF CON-
18 GRESS.—The term “appropriate committees of Con-
19 gress” means—

20 (A) the Committee on Commerce, Science,
21 and Transportation of the Senate; and

22 (B) the Committee on Transportation and
23 Infrastructure of the House of Representatives.

24 (2) COVERED INFRASTRUCTURE PROJECT.—
25 The term “covered infrastructure project” means

1 any infrastructure project for which the Department
2 of Transportation is the lead agency.

3 (3) DIGITAL TWIN.—The term “digital twin”,
4 with respect to an infrastructure project or infra-
5 structure asset, means a high-fidelity, digital model
6 of the infrastructure project or infrastructure asset
7 that—

8 (A) integrates real-time data from design,
9 construction, operation, maintenance, and envi-
10 ronmental factors to simulate the performance
11 and impacts of the infrastructure project or in-
12 frastructure asset; and

13 (B) is used to ensure greater accuracy, ef-
14 ficiency, and seamless integration of elements
15 throughout the infrastructure project or infra-
16 structure asset lifecycle.

17 (4) ELIGIBLE PROJECT.—The term “eligible
18 project” means a covered infrastructure project for
19 which each of the following are used:

20 (A) 1 or more digital twins.

21 (B) The e-NEPA portal developed under
22 section 5(a).

23 (5) E-NEPA DOCUMENT.—The term “e-NEPA
24 document” means an electronic environmental docu-
25 ment or other NEPA-related document, including a

1 permitting document, that is developed, submitted,
2 reviewed, or tracked through the use of an e-NEPA
3 portal.

4 (6) E-NEPA PORTAL.—The term “e-NEPA
5 portal” means a centralized, web-based platform—

6 (A) for managing, submitting, and track-
7 ing documents and processes relating to NEPA
8 compliance; and

9 (B) through which e-NEPA documents are
10 developed with interactive, digital technologies
11 and systems to streamline—

12 (i) document development; and

13 (ii) communications between project
14 sponsors, government agencies, and com-
15 munity stakeholders with respect to the
16 documents and processes required under
17 NEPA.

18 (7) ENVIRONMENTAL DOCUMENT.—The term
19 “environmental document” has the meaning given
20 the term in section 111 of NEPA (42 U.S.C.
21 4336e).

22 (8) INFRASTRUCTURE.—The term “infrastruc-
23 ture” means physical infrastructure.

1 (9) LEAD AGENCY.—The term “lead agency”
2 has the meaning given the term in section 111 of
3 NEPA (42 U.S.C. 4336e).

4 (10) NEPA.—The term “NEPA” means the
5 National Environmental Policy Act of 1969 (42
6 U.S.C. 4321 et seq.).

7 (11) OPEN APPLICATION PROGRAMMING INTER-
8 FACE.—The term “open application programming
9 interface” mean an open source, machine-readable
10 specification format that facilitates the integration
11 of different systems from a variety of vendors, allow-
12 ing the free exchange of data between engineering
13 software tools, and enabling clear documentation
14 and communication, without users needing access to
15 the source code.

16 (12) SECRETARY.—The term “Secretary”
17 means the Secretary of Transportation.

18 **SEC. 4. DIGITAL TWIN IMPLEMENTATION IN PERMITTING.**

19 (a) GUIDELINES FOR ADOPTION OF DIGITAL TWIN
20 TECHNOLOGY.—

21 (1) IN GENERAL.—Not later than 18 months
22 after the date of enactment of this Act, the Sec-
23 retary, in coordination with the Council on Environ-
24 mental Quality and relevant Federal agencies, shall
25 establish guidelines for integrating digital twin tech-

1 nology into the permitting process for covered infra-
2 structure projects.

3 (2) REQUIREMENTS.—

4 (A) IN GENERAL.—The guidelines estab-
5 lished under paragraph (1) shall include—

6 (i) standards for creating and main-
7 taining digital twins to model project im-
8 pacts, including environmental, economic,
9 and operational factors;

10 (ii) requirements for interoperability
11 with existing Federal permitting systems;
12 and

13 (iii) protocols for real-time data inte-
14 gration from environmental sensors, geo-
15 graphic information systems, and stake-
16 holder inputs.

17 (B) OPEN APPLICATION PROGRAMMING
18 INTERFACES.—The standards described in sub-
19 paragraph (A)(i) shall include recommendations
20 that digital twins be developed with open appli-
21 cation programming interfaces.

22 (b) PILOT PROGRAM.—

23 (1) IN GENERAL.—Not later than 120 days
24 after the date of enactment of this Act, the Sec-
25 retary shall establish a pilot program to test digital

1 twin applications in not less than 10 covered infra-
2 structure projects across diverse sectors.

3 (2) REQUIREMENTS.—The pilot program estab-
4 lished under paragraph (1) shall evaluate—

5 (A) the extent of any—

6 (i) reductions in permitting timelines;

7 (ii) improvements in environmental
8 impact assessments;

9 (iii) cost savings; and

10 (iv) stakeholder collaboration out-
11 comes; and

12 (B) the importance of early public stake-
13 holder engagement.

14 (3) REPORT.—Not later than 2 years after the
15 date of enactment of this Act, the Secretary shall
16 submit to the appropriate committees of Congress a
17 report on the findings of the pilot program.

18 **SEC. 5. ESTABLISHMENT OF E-NEPA PORTAL.**

19 (a) DEVELOPMENT.—

20 (1) IN GENERAL.—Not later than 2 years after
21 the date of enactment of this Act, the Secretary, in
22 coordination with the Council on Environmental
23 Quality, the Administrator of the Environmental
24 Protection Agency, and the Secretary of Commerce,

1 shall develop an e-NEPA portal for covered infra-
2 structure projects.

3 (2) REQUIREMENTS.—The e-NEPA portal de-
4 veloped under paragraph (1) shall—

5 (A) serve as a centralized platform for sub-
6 mitting, reviewing, and tracking e-NEPA docu-
7 ments;

8 (B) integrate with digital twin models to
9 provide real-time visualization of the impacts of
10 covered infrastructure projects;

11 (C) provide public access to—

12 (i) nonsensitive e-NEPA documents;

13 and

14 (ii) comment periods; and

15 (D) include secure data storage compliant
16 with Federal cybersecurity standards.

17 (b) AGENCY COORDINATION.—

18 (1) REQUIREMENT.—Beginning not later than
19 January 1, 2028, all Federal agencies involved in an
20 environmental review under NEPA for a covered in-
21 frastructure project shall use the e-NEPA portal de-
22 veloped under subsection (a) for all permitting relat-
23 ing to that covered infrastructure project.

24 (2) ROLE OF THE SECRETARY.—For each cov-
25 ered infrastructure project for which the e-NEPA

1 portal developed under subsection (a) is used, the
2 Secretary shall—

3 (A) oversee portal-based coordination; and

4 (B) ensure compliance with statutory dead-
5 lines.

6 (c) PUBLIC INTERFACE.—The e-NEPA portal devel-
7 oped under subsection (a) shall include a public interface
8 allowing stakeholders and members of the public, includ-
9 ing communities—

10 (1) to access, for covered infrastructure
11 projects—

12 (A) project timelines;

13 (B) nonsensitive e-NEPA documents; and

14 (C) information relating to the status of
15 permitting for the covered infrastructure
16 project; and

17 (2) to submit comments on a digital platform or
18 website during NEPA public comment periods.

19 **SEC. 6. ACCELERATED PERMITTING TIMELINES.**

20 (a) STREAMLINED REVIEWS.—

21 (1) IN GENERAL.—The Secretary shall use all
22 available existing authorities to reduce NEPA envi-
23 ronmental review timelines for eligible projects by
24 not less than 25 percent compared to existing aver-
25 ages.

1 (2) IMPLEMENTATION.—Not later than 1 year
2 after the date of enactment of this Act, the Sec-
3 retary shall promulgate guidance or regulations, as
4 necessary, to implement the requirements of para-
5 graph (1).

6 (b) INTERAGENCY COORDINATION.—

7 (1) IN GENERAL.—The Secretary shall use the
8 e-NEPA portal developed under section 5(a) to co-
9 ordinate with other Federal, State, and local agen-
10 cies to accelerate reviews for covered infrastructure
11 projects.

12 (2) SINGLE ENVIRONMENTAL DOCUMENT.—A
13 single environmental document shall be used across
14 agencies for each covered infrastructure project.

15 **SEC. 7. ANNUAL REPORT.**

16 The Secretary shall submit to the appropriate com-
17 mittees of Congress an annual report that describes—

18 (1) any progress made with respect to—

19 (A) the integration of digital twin tech-
20 nology into the permitting process for covered
21 infrastructure projects; and

22 (B) the development and use of an e-
23 NEPA portal for covered infrastructure
24 projects;

- 1 (2) any reductions in permitting timelines and
- 2 costs for covered infrastructure projects; and
- 3 (3) any environmental, public stakeholder, or
- 4 community outcomes from the use of digital twins or
- 5 the e-NEPA portal developed under section 5(a).