

118TH CONGRESS
2D SESSION

S. 4062

To establish a pilot program to assess the use of technology to speed up and enhance the cargo inspection process at land ports of entry along the border.

IN THE SENATE OF THE UNITED STATES

MARCH 22, 2024

Mr. CORNYN (for himself and Ms. HASSAN) introduced the following bill; which was read twice and referred to the Committee on Homeland Security and Governmental Affairs

A BILL

To establish a pilot program to assess the use of technology to speed up and enhance the cargo inspection process at land ports of entry along the border.

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 TITLES.**

4 This Act may be cited as the “Contraband Awareness
5 Technology Catches Harmful Fentanyl Act” or the
6 “CATCH Fentanyl Act”.

7 **SEC. 2. DEFINITIONS.**

8 In this Act:

1 (1) APPROPRIATE CONGRESSIONAL COMMIT-
2 TEES.—The term “appropriate congressional com-
3 mittees” means—

4 (A) the Committee on Homeland Security
5 and Governmental Affairs of the Senate; and

6 (B) the Committee on Homeland Security
7 of the House of Representatives.

8 (2) ARTIFICIAL INTELLIGENCE; AI.—The terms
9 “artificial intelligence” and “AI” have the meaning
10 given the term “artificial intelligence” in section
11 238(g) of the John S. McCain National Defense Au-
12 thorization Act for Fiscal Year 2019 (Public Law
13 115–232; 10 U.S.C. 4061 note).

14 (3) CBP INNOVATION TEAM.—The term “CBP
15 Innovation Team” means the U.S. Customs and
16 Border Protection Innovation Team within the Of-
17 fice of the Commissioner.

18 (4) NONINTRUSIVE INSPECTION TECHNOLOGY;
19 NII TECHNOLOGY.—The terms “nonintrusive inspec-
20 tion technology” and “NII technology” means tech-
21 nical equipment and machines, such as X-ray or
22 gamma-ray imaging equipment, that allow cargo in-
23 spections without the need to open the means of
24 transport and unload the cargo.

1 (5) PILOT PROJECTS.—The term “pilot
2 projects” means the projects required under section
3 3(a) for testing and assessing the use of technologies
4 to improve the inspection process at land ports of
5 entry.

6 **SEC. 3. PILOT PROJECTS ALLOWING ADDITIONAL TECH-**
7 **NOLOGY PROVIDERS TO PARTICIPATE IN IN-**
8 **SPECTING CARS, TRUCKS, AND CARGO CON-**
9 **TAINERS AT CERTAIN PORTS OF ENTRY.**

10 (a) ESTABLISHMENT.—

11 (1) IN GENERAL.—Not later than 1 year after
12 the date of the enactment of this Act, the Secretary
13 of Homeland Security, acting through CBP Innova-
14 tion Team, and in coordination with the Office of
15 Field Operations, shall begin the implementation of
16 pilot projects for testing and assessing the use of
17 technologies or technology enhancements to improve
18 the process for inspecting, including by increasing
19 efficiencies of such inspections, any conveyance or
20 mode of transportation at land ports of entry along
21 the borders of the United States. The technologies
22 or technology enhancements tested and assessed
23 under the pilot projects shall be for the purpose of
24 assisting U.S. Customs and Border Protection per-
25 sonnel to detect contraband, illegal drugs, illegal

1 weapons, and threats on inbound and outbound traf-
2 fic, in conjunction with the use of imaging equip-
3 ment, radiation portal monitors, and chemical detec-
4 tors.

5 (2) REQUIREMENTS.—

6 (A) IN GENERAL.—In implementing the
7 pilot projects at ports of entry, the CBP Inno-
8 vation Team shall test and collect data regard-
9 ing not fewer than 5 types of nonintrusive in-
10 spection technology enhancements that can be
11 deployed at land ports of entry. The CBP Inno-
12 vation Team shall test technology enhancements
13 from not fewer than 1 of the following cat-
14 egories:

15 (i) Artificial intelligence.

16 (ii) Machine learning.

17 (iii) High-performance computing.

18 (iv) Quantum information sciences, in-
19 cluding quantum sensing.

20 (v) Other emerging technology.

21 (B) IDENTIFICATION OF EFFECTIVE EN-
22 HANCEMENTS.—The pilot projects shall identify
23 the most effective types of technology enhance-
24 ments to improve the capabilities of nonintru-

1 sive inspection systems and other inspection
2 systems used at land ports of entry based on—

3 (i) the technology enhancement’s abil-
4 ity to assist U.S. Customs and Border
5 Protection accurately detect contraband, il-
6 legal drugs, illegal weapons, or threats in
7 inbound and outbound traffic;

8 (ii) the technology enhancement’s abil-
9 ity to increase efficiencies of inspections to
10 assist U.S. Customs and Border Protection
11 address long wait times;

12 (iii) the technology enhancement’s
13 ability to improve capabilities of aging de-
14 tection equipment and infrastructure at
15 land ports of entry;

16 (iv) the technology enhancement’s
17 safety relative to As Low As Reasonably
18 Achievable (ALARA) standard practices;

19 (v) the expected cost of implementing
20 the new technology;

21 (vi) the ability to integrate the new
22 technology into the existing workflow and
23 infrastructure;

24 (vii) the technology enhancement’s
25 ability to incorporate automatic threat rec-

1 ognition technology using standard formats
2 and open architecture;

3 (viii) the mobility of technology en-
4 hancements; and

5 (ix) other performance measures iden-
6 tified by the CBP Innovation Team.

7 (C) PRIVATE SECTOR INVOLVEMENT.—The
8 CBP Innovation Team may solicit input from
9 representatives of the private sector regarding
10 commercially viable technologies.

11 (3) NONINTRUSIVE INSPECTION SYSTEMS PRO-
12 GRAM.—The CBP Innovation Team shall work with
13 existing nonintrusive inspection systems programs
14 within U.S. Customs and Border Protection when
15 planning and developing the pilot projects required
16 under paragraph (1).

17 (b) TERMINATION.—The pilot projects shall termi-
18 nate on the date that is 5 years after the date of the enact-
19 ment of this Act.

20 (c) REPORTS REQUIRED.—Not later than 3 years
21 after the date of the enactment of this Act, and 180 days
22 after the termination of the pilot projects pursuant to sub-
23 section (b), the Secretary of Homeland Security shall sub-
24 mit a report to the appropriate congressional committees
25 that contains—

1 (1) an analysis of the effectiveness of tech-
2 nology enhancements tested based on the require-
3 ments described in subsection (a)(2);

4 (2) any recommendations from the testing and
5 analysis concerning the ability to utilize such tech-
6 nologies at all land ports of entry;

7 (3) a plan to utilize new technologies that meet
8 the performance goals of the pilot projects across all
9 U.S. Customs and Border Protection land ports of
10 entry at the border, including total costs and a
11 breakdown of the costs of such plan, including any
12 infrastructure improvements that may be required to
13 accommodate recommended technology enhance-
14 ments; and

15 (4) the analysis described in subsection (d).

16 (d) AREAS OF ANALYSIS.—The report required under
17 subsection (c) shall include an analysis containing—

18 (1) quantitative measurements of performance
19 based on the requirements described in subsection
20 (a)(2) of each technology tested compared with the
21 status quo to reveal a broad picture of the perform-
22 ance of technologies and technology enhancements,
23 such as—

24 (A) the probability of detection, false alarm
25 rate, and throughput; and

1 (B) an analysis determining whether such
2 observed performance represents a significant
3 increase, decrease, or no change compared with
4 current systems;

5 (2) an assessment of the relative merits of each
6 such technology;

7 (3) any descriptive trends and patterns ob-
8 served; and

9 (4) performance measures for—

10 (A) the technology enhancement's ability to
11 assist with the detection of contraband on in-
12 bound and outbound traffic through automated
13 (primary) inspection by measuring and report-
14 ing the probability of detection and false alarm
15 rate for each NII system under operational con-
16 ditions;

17 (B) the throughput of cargo through each
18 NII system with a technology enhancement, in-
19 cluding a breakdown of the time needed for
20 U.S. Customs and Border Protection—

21 (i) to complete the image review proc-
22 ess and clear low-risk shipments; and

23 (ii) to complete additional inspections
24 of high-risk items;

1 (C) changes in U.S. Customs and Border
2 Protection officer time commitments and per-
3 sonnel needs to sustain high volume NII scan-
4 ning operations when technology enhancements
5 are utilized; and

6 (D) operational costs, including—
7 (i) estimated implementation costs for
8 each NII system with technology enhance-
9 ments; and

10 (ii) estimated cost savings due to im-
11 proved efficiency due to technology en-
12 hancements, if applicable.

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