



September 2025

LAND PORT INSPECTIONS

CBP Should Improve Performance Data and Deployment Plans for Scanning Systems

CBP Should Improve Performance Data and Deployment Plans for Scanning Systems

GAO-25-107379

September 2025

A report to congressional requesters.

For more information, contact: Hilary Benedict at BenedictH@gao.gov or Rebecca Gambler at GamblerR@gao.gov.

What GAO Found

U.S. Customs and Border Protection (CBP) uses non-intrusive inspection (NII) systems, such as X-ray machines, to inspect vehicles and travelers at land ports of entry (POE). As part of this process, CBP officers use large-scale NII systems to scan entire vehicles and their contents. These scans produce images that CBP officers review to help detect illegal drugs or other contraband. In 2020, to increase vehicle scans, CBP began deploying these systems to preprimary inspection areas—before a traveler is interviewed by a CBP officer. Previously, NII systems were generally used only when an officer determined that further inspection was required after the interview.

Non-Intrusive Inspection Systems Deployed in the Preprimary Inspection Area at the Bridge of the Americas, El Paso, Texas



Source: U.S. Customs and Border Protection (photo). | GAO-25-107379

CBP uses performance data to help ensure large-scale NII systems are operational, but it has not defined all key performance parameters for NII systems. For one key parameter, CBP reports and uses data on the percent of time that large-scale NII systems are available for operational use. However, CBP has not clearly defined or reported results for its other two key parameters related to inspection rate and examination of containers and cargo. For example, CBP's inspection rate parameter requires 100 percent inspection of high-risk commercial vehicles and container cargo, but CBP has not clearly defined the term high risk. Clearly defining and reporting results for all of its key performance parameters would help CBP manage the NII program and inform future procurement decisions.

CBP has made progress deploying large-scale NII systems. As of February 2025, 52 of 153 planned systems are fully operational, nearly all at preprimary inspection areas. Deployments have cost more than CBP estimated due to, for example, unexpected construction challenges. Congress directed CBP to develop a plan to achieve 100 percent scanning of commercial and passenger vehicles and rail containers at land POEs using large-scale NII by 2027. However, some POEs lack installation space and CBP's plans for the southwest border omit nine passenger vehicle crossings that together account for nearly 40 percent of passenger vehicle traffic at that border. Without these crossings in its plan, CBP risks entry of many unscanned passenger vehicles, hampering its ability to prevent illegal drugs and other contraband from entering the U.S.

Why GAO Did This Study

Since 2019, CBP has received over \$2 billion that they have used to deploy additional NII systems to land POEs, which are a key drug smuggling route.

GAO was asked to review the implementation and effectiveness of CBP's NII program. This report examines (1) how CBP uses NII systems during inspections at land POEs, (2) CBP's assessment of large-scale NII performance, and (3) the status of large-scale NII system deployments.

GAO analyzed NII program documentation, including inspection procedures, performance data, and deployment plans, and interviewed program officials. GAO also interviewed and observed CBP officers conducting inspections at land POEs within all four field offices where large-scale NII systems had been deployed in preprimary inspection areas. These POEs included a variety of large-scale NII systems and types of crossings (passenger and commercial vehicles, and rail) along the southwest border. GAO also interviewed officials at a northern border field office that was in the process of deploying new large-scale NII systems.

What GAO Recommends

GAO is making two recommendations, including that CBP clearly define and report results for its key performance parameters, and determine how to include deployment of large-scale NII systems to all southwest land border ports of entry in updates to the deployment plans. DHS agreed with both recommendations.

Contents

Letter		1
	Background	4
	CBP Uses NII Systems to Enhance Inspections at Land Ports of Entry	10
	CBP Assesses Large-Scale NII Performance, but Has Not Clearly Defined All Key Performance Parameters	20
	CBP Has Made Progress Deploying Large-Scale NII Systems, but Its Plans Do Not Include All Locations	24
	Conclusions	40
	Recommendations for Executive Action	41
	Agency Comments	41
Appendix I	Objective, Scope, and Methodology	44
Appendix II	Inventory of U.S. Customs and Border Protection Non-Intrusive Inspection Systems at Land Ports of Entry	48
Appendix III	U.S. Customs and Border Protection Deployment of Large-Scale Non-Intrusive Inspection Systems	54
Appendix IV	Comments from the Department of Homeland Security	58
Appendix V	GAO Contacts and Staff Acknowledgments	62

Tables

Table 1: Steel Penetration Depths of Transmission Imaging Systems at Different Energy Levels	8
Table 2: Deployment Status of U.S. Customs and Border Protection Large-Scale Non-Intrusive Inspection Systems at Land Ports of Entry, as of February 2025	27
Table 3: U.S. Customs and Border Protection Reported Funding for Non-Intrusive Inspection Program Fiscal Years 2019 Through 2024 (dollars in millions)	30

Table 4: Numbers of Additional Large-Scale Non-Intrusive Inspection (NII) Systems Needed, Based on U.S. Customs and Border Protection Fiscal Year 2021 Scanning Plan	35
Table 5: Southwest Border Passenger Vehicle Crossings Not Included in Current U.S. Customs and Border Protection Deployment Plans	36
Table 6: U.S. Customs and Border Protection Non-Intrusive Inspection Systems at Land Ports of Entry	49
Table 7: Planned U.S. Customs and Border Protection (CBP) Deployment of Large-Scale Non-Intrusive Inspection Systems to the Southwest Border (SWB), as of February 2025	54

Figures

Figure 1: U.S. Customs and Border Protection's Three-Phase Inspection Process at Land Ports of Entry	5
Figure 2: Transmission Versus Backscatter X-rays Used in U.S. Customs and Border Protection's Non-Intrusive Inspection Systems at Land Ports of Entry	9
Figure 3: Low-Energy Non-Intrusive Inspection (NII) System in Passenger Secondary Inspection Area in San Ysidro, California (left), and High-Energy NII System in Cargo Secondary Inspection Area in Laredo, Texas (right)	11
Figure 4: Depiction of U.S. Customs and Border Protection Use of a Large- and Small-Scale Non-Intrusive Inspection (NII) System to Scan Vehicles at Land Ports of Entry	11
Figure 5: Videoscope (left) and U.S. Customs and Border Protection Officer Using a Handheld Density Meter to Inspect a Vehicle (right)	12
Figure 6: U.S. Customs and Border Protection Officer Using a Chemical Analyzer to Identify What an Unknown Substance Might Be	13
Figure 7: Non-Intrusive Inspection (NII) Rail System in Laredo, Texas (left), and a Train Proceeding Through a NII Rail System (right)	14
Figure 8: Image of a Commercial Vehicle from a Multi-Energy Portal Scan	15
Figure 9: Low-Energy Portal in Passenger Preprimary Inspection Area and Multi-Energy Portal in Commercial Preprimary	

Inspection Area at Land Ports of Entry in Mision, Texas (left), and Laredo, Texas (right)	18
Figure 10: Image From a Low-Energy Portal Showing Anomalies and Pictures of the Drugs Found in the Vehicle at a Land Port of Entry	19
Figure 11: Five Low-Energy Portals Deployed in the Preprimary Inspection Area at the Bridge of the Americas, El Paso, Texas	26
Figure 12: Map of Ports of Entry and Large-Scale Non-Intrusive Inspection (NII) Systems U.S. Customs and Border Protection Planned to Deploy at the Southwest Border, as of February 2025	34
Figure 13: Limited Space in Preprimary at the DeConcini Passenger Vehicle Crossing, Nogales, Arizona	37

Abbreviations

CBP	U.S. Customs and Border Protection
DHS	Department of Homeland Security
LEP	low-energy portal
MEP	multi-energy portal
NII	non-intrusive inspection
OFO	Office of Field Operations
POE	port of entry

<p>This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.</p>
--



September 15, 2025

Congressional Requesters

In fiscal year 2024, more than 98.4 million passenger vehicles, 181,000 buses, 13.0 million commercial vehicles, 3.6 million rail containers, and 40.3 million pedestrians entered the U.S. at 115 land ports of entry (POE), according to U.S. Customs and Border Protection (CBP).¹ Within the Department of Homeland Security (DHS), CBP is the lead federal agency charged with a dual mission of facilitating the flow of legitimate travel and trade at U.S. borders while also keeping terrorists and their weapons, criminals and their contraband, and inadmissible people out of the country.

Land POEs are a key drug smuggling route for transnational criminal organizations. According to CBP, most illicit drugs, including fentanyl, enter the U.S. through southwest border POEs hidden in passenger vehicles or belongings, concealed in commercial vehicles, and carried by pedestrians.² CBP uses large- and small-scale non-intrusive inspection (NII) systems, like X-ray machines, at land POEs to enable officers to inspect travelers and their belongings, and vehicles and their contents, without the need for unloading or disassembly to help detect illegal drugs and other contraband.³ Since 2019, CBP's NII program has received over \$2 billion for NII systems, which it has used to enhance inspections of commercial and passenger vehicles and trains, and increase the number

¹POEs are facilities that provide for the controlled entry into or departure from the U.S. Specifically, a POE is any officially designated location (seaport, airport, or land border location) where CBP officers or employees are assigned to clear passengers, merchandise, and other items, collect duties, and enforce customs laws; and where CBP officers inspect persons seeking to enter or depart, or apply for admission into the U.S., pursuant to U.S. immigration and travel controls. A single land POE may be composed of one or more crossings.

²James Mandryck, Deputy Assistant Commissioner, Office of Intelligence, U.S. Customs and Border Protection, U.S. Department of Homeland Security, *Protecting the U.S. Homeland: Fighting the Flow of Fentanyl from the Southwest Border*, testimony before the U.S. House of Representatives Committee on Homeland Security, Subcommittee on Border Security and Enforcement (Washington, D.C.: July 12, 2023).

³CBP officers use large-scale NII systems to scan entire vehicles. The process produces an image that CBP officers review to identify anomalies that may be an indication of contraband or hidden people. CBP officers use small-scale NII systems to localize those anomalies, among other things.

of vehicles that are scanned using large-scale NII systems as they enter the U.S.

You asked us to review CBP's NII program, including its technology implementation, infrastructure requirements, and system effectiveness. This report addresses (1) how CBP uses NII systems during inspections at land POEs, (2) the extent to which CBP has assessed the performance of its large-scale NII systems, and (3) the status of CBP's large-scale NII system deployment and the extent to which CBP has planned for future deployments.

To determine how CBP uses large- and small-scale NII systems during inspections at land POEs, we reviewed documentation on NII systems capabilities and inspection procedures and analyzed CBP data on its inventory of large- and small-scale NII systems at land POEs. To assess the reliability of the inventory data, we reviewed the data to identify any errors and asked CBP officials questions to clarify any issues we identified. We determined that the data were sufficiently reliable for the purpose of reporting information about the number and types of NII systems at land POEs.

Further, we interviewed and observed CBP officers conducting inspections of passengers and vehicles using NII systems at land POEs within the El Paso, Texas; Laredo, Texas; San Diego, California; and Tucson, Arizona, CBP field offices.⁴ We selected these locations to include all four field offices where large-scale NII systems had been deployed in preprimary inspection areas at the time of our site visits in 2024. We also interviewed CBP officials from the Buffalo, New York, field office, which we selected because it was in the process of deploying a new NII rail system. The information and observations we obtained from these interviews are not generalizable to all POEs, but they provide perspectives from CBP officers on how they are using the NII systems when they conduct inspections and their usefulness in detecting contraband. We also interviewed officials responsible for managing the

⁴Within the El Paso, Texas, field office, we visited the Bridge of the Americas and Paso Del Norte crossings at the El Paso, Texas, POE; the Ysleta, Texas, POE; and the Santa Teresa, New Mexico, POE. Within the Laredo, Texas, field office, we visited the Colombia Bridge and rail crossings at the Laredo, Texas POE; the Anzalduas crossing at the Hidalgo, Texas POE; and the Veterans International Bridge and Los Indios crossings at the Brownsville, Texas, POE. Within the San Diego, California, field office, we visited the Calexico East and San Ysidro, California, POEs. Within the Tucson, Arizona, field office, we visited the Mariposa and DeConcini crossings at the Nogales, Arizona, POE.

NII program and acquiring new technologies from CBP and from DHS's Science and Technology Directorate.⁵

To determine the extent to which CBP has assessed the performance of its large-scale NII systems at land POEs, we reviewed CBP documentation on performance of these systems in calendar years 2020 through 2023 and data from fiscal year 2024—the most recent data available at the time of our review. To assess the reliability of these data, we reviewed the data to identify errors and interviewed CBP officials. We determined that the data were sufficiently reliable for the purpose of describing the performance of large-scale NII systems. In addition, we interviewed CBP officials from headquarters and DHS officials to determine how they oversee the NII program. To obtain further perspectives on NII systems performance, we interviewed CBP officers at the five field offices we selected, and land POEs within these field offices. We evaluated CBP's efforts to assess NII systems performance against DHS and the Office of Management and Budget guidance for reporting performance information in operational analysis reports.⁶

To determine the status of CBP's deployment of large-scale NII systems to land POEs and the extent to which CBP has planned for future deployments, we reviewed CBP's NII systems deployment plans, schedule and cost estimates, data on funding used for the NII program in fiscal years 2019 through 2024, and DHS and CBP budget requests and congressional appropriations.⁷ To assess the reliability of these data, we reviewed the data to identify any errors and interviewed CBP officials responsible for the data. We determined that the data were sufficiently reliable for the purpose of providing information, as presented by CBP, about recent, ongoing, and planned deployments of large-scale NII systems to land POEs, and the appropriations applicable to the NII program. We evaluated CBP's efforts to deploy large-scale NII systems, specifically to the southwest border, against the deployment plan

⁵The Science and Technology Directorate delivers innovative technology solutions to support DHS missions and first responders and serves as the science advisor to the Secretary and the primary research and development arm of DHS.

⁶DHS Office of Program Accountability & Risk Management, *Systems Engineering Life Cycle Guidebook* (May 2021) and Office of Management and Budget, *Capital Programming Guide v 3.1 Supplement to Office of Management and Budget Circular A-11: Planning, Budgeting, and Acquisition of Capital Assets* (2024).

⁷For example, see U.S. Customs and Border Protection, *Large Scale Non-Intrusive Inspection Scanning Plan - Annual Update, Fiscal Year 2022 Report to Congress* (Washington, D.C: March 31, 2023).

developed to meet congressional requirements directing CBP to develop a plan to increase large-scale NII scan rates for passenger and commercial vehicles, and rail containers entering the U.S. at land POEs.⁸ We also interviewed CBP headquarters officials responsible for planning and overseeing large-scale NII deployments, managing its acquisition efforts, and improving scanning efficiency. Appendix I provides more details on our objectives, scope, and methodology.

We conducted this performance audit from February 2024 to September 2025 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Inspections at Land Ports of Entry

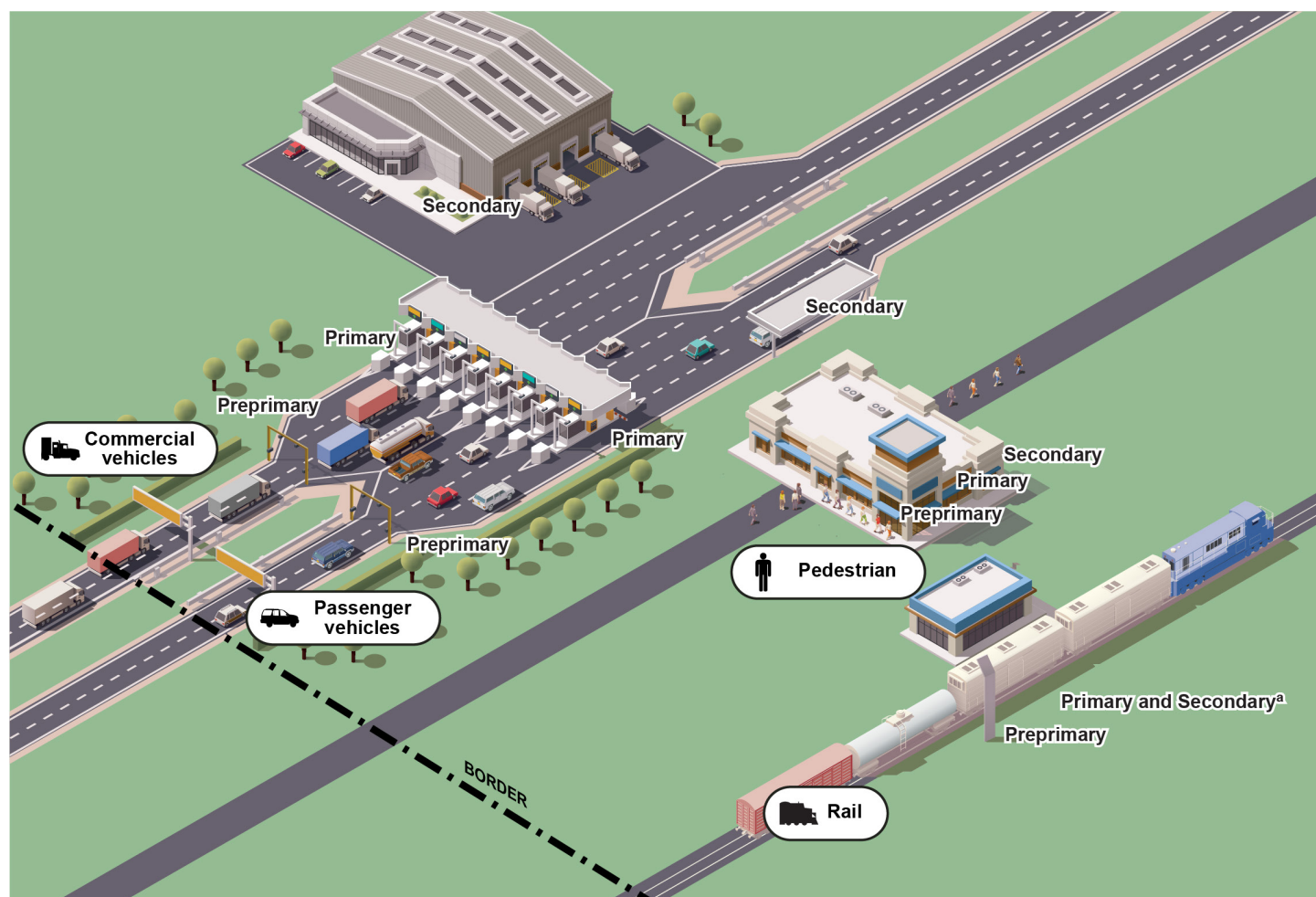
CBP's Office of Field Operations (OFO) is responsible for coordinating the inspection and processing of pedestrians, passengers, cargo, and other items at all POEs.⁹ OFO has 20 field offices nationwide that oversee 115 land POEs, and each land POE includes one or more crossings. At some of these POEs, CBP officers may process only one mode of transportation at a crossing (e.g., commercial or passenger vehicles), while at others, CBP may process multiple modes of transportation at the same crossing. For example, the Laredo, Texas, POE has five crossings, which collectively include crossings for pedestrians, passenger and commercial vehicles, and rail. At the 115 POEs, there is a total of 186 land crossings.

At land POEs, CBP officers generally conduct inspections using a three-phase process: preprimary, primary, and secondary inspection (see fig. 1).

⁸Securing America's Ports Act, Pub. L. No. 116-299, 134 Stat. 4906 (2021), codified at 6 U.S.C. § 211 note.

⁹See 6 U.S.C. § 211(g)(3) (listing duties of Office of Field Operations within CBP).

Figure 1: U.S. Customs and Border Protection's Three-Phase Inspection Process at Land Ports of Entry



Sources: GAO analysis of U.S. Customs and Border Protection (CBP) information; GAO (illustration and icons); Taras Livvy/stock.adobe.com (images). | GAO-25-107379

^aAccording to CBP officials, for rail inspections, if the officer in primary inspection determines a secondary inspection is required, the train may be stopped immediately or directed to the nearest railyard where the targeted rail container is separated for secondary inspection.

Preprimary inspection. CBP uses law enforcement and intelligence information, and other relevant information such as from manifests and past CBP inspections, to help identify and target high-risk travelers, vehicles, and cargo for additional scrutiny before their arrival at a land POE. CBP personnel at POEs use this information to identify high-risk inbound cargo to be targeted for additional research and analysis and a potential secondary inspection upon arrival at the POE. Similarly, CBP personnel at POEs or field offices may review seizure and arrest reports,

and other law enforcement information to identify individuals or vehicles that have associations with known criminals and place a “lookout” on them in TECS, CBP’s system for processing travelers. TECS will flag travelers with lookouts for additional inspection if they arrive at land POEs.

Primary inspection. CBP officers inspect travelers, vehicles, and rail containers to determine compliance with certain U.S. laws and admissibility to the country. A CBP officer interviews travelers and commercial vehicle operators to establish the purpose and intent of travel; asks about items acquired outside of or being imported into the U.S.; examines travel documents, such as a passport or visa; reviews information in TECS, including lookouts; and determines admissibility. If the officer deems the travelers and their belongings, and vehicles and their contents admissible, they are released to enter the U.S.

Secondary inspection. During primary inspection, CBP officers may refer vehicles and travelers for secondary inspection. Secondary inspection may include a CBP officer conducting further questioning of the traveler or additional examination of the traveler, the traveler’s documents, the vehicle and its contents, or baggage. CBP officers can manually inspect a vehicle, offload the contents of vehicles, and use canines to detect concealed persons or illicit drugs. In addition, CBP may use NII equipment as part of its further inspection of travelers’ belongings, and vehicles and their contents.

NII Program Overview

Through its NII program, CBP acquires and deploys large- and small-scale NII systems to help its officers more efficiently and effectively conduct inspections. NII systems have been deployed to most land POEs. Because these systems are non-intrusive, officers can conduct inspections quickly and safely and only refer vehicles for a more costly and time-consuming manual inspection when images from the NII system show anomalies that may indicate the presence of contraband. Manual inspection can involve removing contents from and disassembling or drilling into a vehicle.

Several organizations within CBP are involved in the NII program. Within OFO, three specific offices are responsible for managing the program:

- The NII Division is responsible for identifying and developing requirements, developing NII acquisition strategies and deployment plans, and training CBP officers.

-
- The NII Systems Program Management Office is responsible for acquiring, testing, and deploying the NII systems and providing input on all project decisions for the NII program.
 - The Acquisition Division is responsible for managing the cost and schedule and defining the scope of the NII program, including managing procurement efforts.

According to CBP officials, field offices and POEs work with these offices to identify their NII needs—considering factors such as cargo volume, types of crossings, physical space, and seizures—and during system deployment.

CBP's Office of Information and Technology is responsible for providing secure and reliable information technology services and capabilities for CBP and provides oversight to ensure that all deployed NII systems meet CBP requirements. Specifically, the Integrated Logistics Division provides NII system maintenance support, assists in developing operation and maintenance training requirements, and monitors the performance of contractors providing life cycle support to the NII program. CBP's Laboratories and Scientific Services assists CBP's NII Division with field testing of NII technologies.

DHS's Science and Technology Directorate has assisted CBP with its NII program by providing research, development, and technical testing of NII technologies, including conducting demonstration projects for large-scale NII systems at POEs.

NII Systems and Technologies

CBP has a variety of large- and small-scale NII systems. These systems use various technologies depending on their location and intended purpose. Large-scale systems can scan entire vehicles to produce images of their contents. These systems can be fixed, where they are installed and remain in a particular location, or mobile, where they are self-propelled and can be moved to different locations as needed. Depending on the large-scale NII system, images may be taken from one or more views, which can include from one or both sides, the top, and the bottom of the vehicle.

Some small-scale NII systems can scan and produce video or images, or measure the density of different areas of vehicles, cargo and packages, and individual travelers with their personal items to localize anomalies, such as those identified by large-scale systems. For example, CBP has small-scale NII systems that can provide live video or images of hard-to-reach areas of vehicles and small-scale NII systems that can scan

baggage. Other small-scale NII systems help identify unknown substances or use passive heat detection to provide a thermal heat video of travelers.

To generate images, CBP has large- and small-scale NII systems that use transmission X-rays with different energy levels or backscatter X-rays, or a combination of both, and large-scale systems that use transmission gamma-rays.¹⁰ The higher the energy level of the system, the deeper it can penetrate objects (see table 1).

Table 1: Steel Penetration Depths of Transmission Imaging Systems at Different Energy Levels

System type	Penetration depth
Low-energy X-ray	4 inches
Medium-energy X-ray	6 inches
High-energy X-ray	11-13 inches
Gamma-ray	4-6 inches

Source: Customs and Border Protection. | GAO-25-107379

Note: Steel penetration depths are used as a standard measure of how well imaging systems can penetrate opaque objects to produce images of the contents.

Each of these technologies has different imaging characteristics, as well as advantages and disadvantages in their use. For example, higher-energy transmission systems can penetrate and scan high-density and thick objects better than lower-energy systems. However, the resulting exposure to radiation may exceed established exposure limits.¹¹ Lower-energy systems scan low-density and thin objects better than higher-energy systems. Additionally, when low-energy X-rays are used, occupants of the vehicle can remain in the vehicle as it is scanned. With

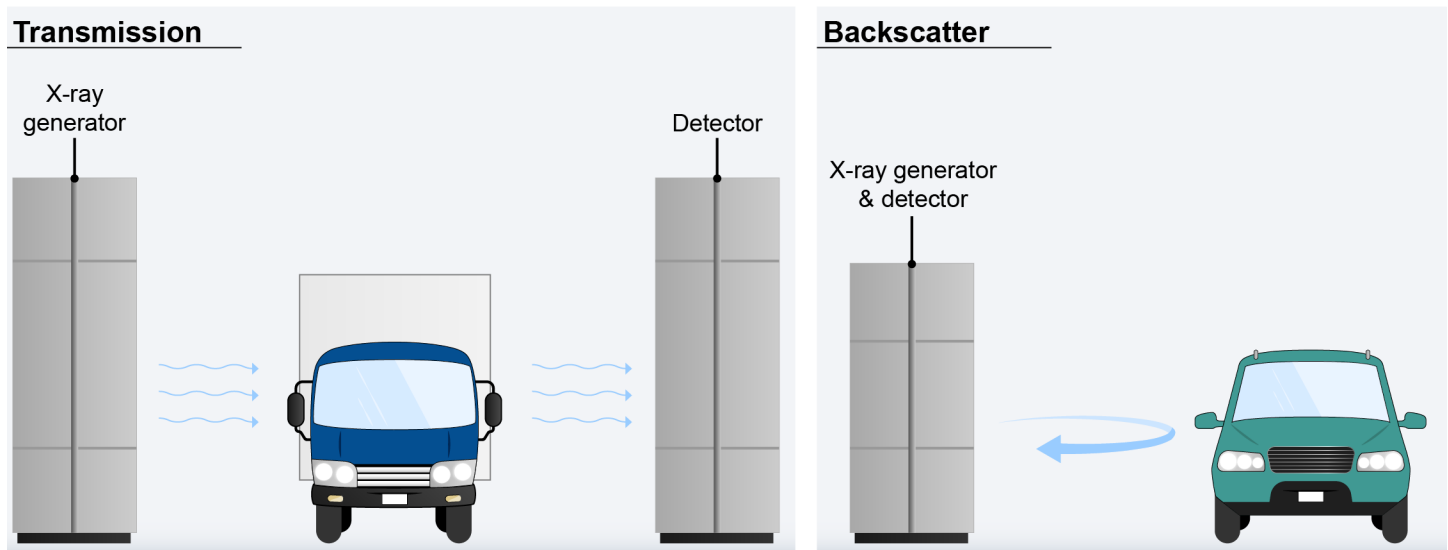
¹⁰Transmission X-rays pass through an object, while backscatter X-rays are reflected by the object.

¹¹CBP follows the principle of keeping radiation exposure as low as reasonably achievable. This is defined in 10 C.F.R. § 20.1003, as “making every reasonable effort to maintain exposures to radiation as far below the dose limits in this part as is practical consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed materials in the public interest.” To meet radiation dose limits for CBP personnel and one-time and frequent border crossers, CBP establishes controlled areas outside of which personnel and persons who have exited their vehicles are required to remain while a vehicle is scanned.

high-energy X-ray systems, generally the occupants must exit the vehicle and be brought to an area to wait while it is scanned.

In addition to using different energy levels, X-ray systems use transmission or backscatter X-rays. Transmission X-rays penetrate the object being scanned to reach a receiver on the other side of the object from the transmitter, while backscatter X-rays are reflected by the object being scanned to reach the receiver on the same side as the transmitter (see fig. 2). To penetrate an object, transmission X-ray systems generally use higher energy than backscatter X-ray systems. Transmission X-rays produce clear images of high-density objects, such as those made of steel, but may produce faint images of low-density objects, such as drugs and explosives. Conversely, backscatter X-rays can more clearly show low-density, organic materials such as explosives or drugs, but are unable to penetrate thick or high-density objects. Many NII systems produce both transmission and backscatter X-ray images to take advantage of their different strengths, which can be useful because vehicles and their contents are diverse.

Figure 2: Transmission Versus Backscatter X-rays Used in U.S. Customs and Border Protection's Non-Intrusive Inspection Systems at Land Ports of Entry



Source: U.S. Customs and Border Protection image as modified by GAO. | GAO-25-107379

These differences in imaging characteristics mean that different technologies may be more appropriate in particular situations. For

example, according to CBP, a transmission X-ray system might be the best option for vehicles with dense cargo.¹² If the cargo is primarily low-density, organic materials, then a backscatter X-ray system might be the best option. When the contents of a vehicle are complex, such as including both high- and low-density objects or objects of varying composition, then using a system that combines both transmission and backscatter X-ray imaging may be the best option.

CBP Uses NII Systems to Enhance Inspections at Land Ports of Entry

CBP Has Integrated NII Systems into Its Inspection Process for Vehicles at Land POEs

Since the NII program began using large-scale NII systems in 1996, they have generally been deployed in secondary inspection areas at land POEs for scanning passenger and commercial vehicles. CBP has also deployed these systems for conducting rail container inspections at POEs.

Passenger and commercial vehicle inspections. When a vehicle is referred for secondary inspection, CBP officers can begin by scanning the vehicle with a large-scale NII system to generate an image of the vehicle and its contents (see fig. 3). Alternatively, at crossings without large-scale NII systems in secondary inspection areas, officers may begin secondary inspection by using small-scale NII systems or conducting a manual inspection.

¹²Department of Homeland Security, U.S. Customs and Border Protection, *NII Technology and Capabilities Book* (Washington, D.C.: December 2023).

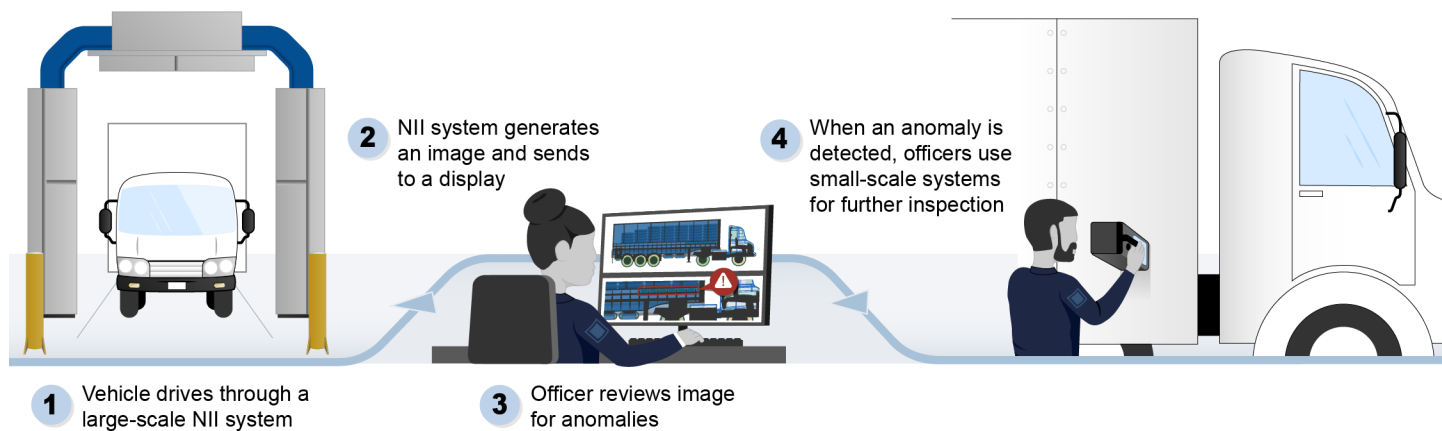
Figure 3: Low-Energy Non-Intrusive Inspection (NII) System in Passenger Secondary Inspection Area in San Ysidro, California (left), and High-Energy NII System in Cargo Secondary Inspection Area in Laredo, Texas (right)



Source: U.S. Customs and Border Protection (left photo); GAO (right photo). | GAO-25-107379

When a vehicle is scanned using a large-scale NII system, the image generated is displayed for an officer to review and identify any anomalies that may indicate contraband or hidden people (see fig. 4).

Figure 4: Depiction of U.S. Customs and Border Protection Use of a Large- and Small-Scale Non-Intrusive Inspection (NII) System to Scan Vehicles at Land Ports of Entry



Source: GAO analysis of U.S. Customs and Border Protection information. | GAO-25-107379

When anomalies are detected, officers may use small-scale NII systems and canines to localize the anomalies. For example, fiberscopes and videoscopes are used to view hard-to-reach areas such as inside fuel tanks and dashboards. Handheld X-ray systems display real-time video imaging through parts of vehicles. Density meters are used to identify density changes inside inaccessible areas, such as door panels and tires, that can be an indication of contraband (see fig. 5).

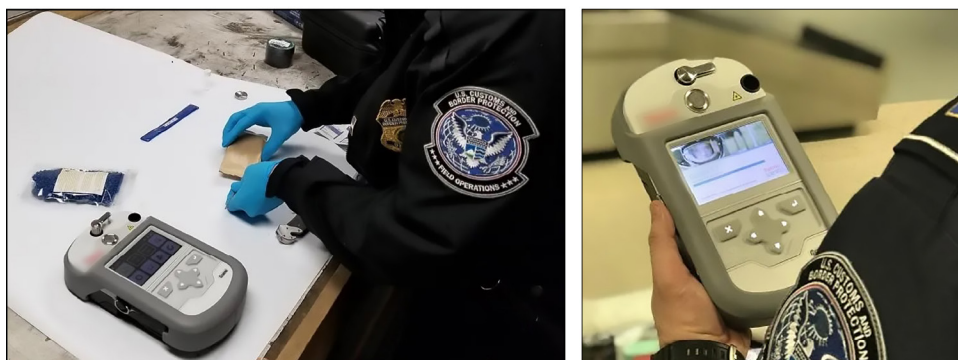
Figure 5: Videoscope (left) and U.S. Customs and Border Protection Officer Using a Handheld Density Meter to Inspect a Vehicle (right)



Source: U.S. Customs and Border Protection (photos). | GAO-25-107379

When an anomaly is localized, officers may proceed with a manual inspection of the vehicle to access and remove it, which can involve removing vehicle contents, offloading cargo, and disassembling and drilling into parts of the vehicle. If an unknown substance is found, officers can use handheld chemical analyzers to identify what it might be, such as drugs or explosives (see fig. 6).

Figure 6: U.S. Customs and Border Protection Officers Using a Chemical Analyzer to Identify What an Unknown Substance Might Be



Source: U.S. Customs and Border Protection (photos). | GAO-25-107379

As of January 2025, at land POEs on the northern and southwest borders, CBP had 43 fixed large-scale systems for passenger vehicle inspection, 5 fixed large-scale NII systems for bus inspection, and 19 fixed large-scale NII systems for commercial vehicle inspection.¹³ CBP has deployed most of these systems in secondary inspection areas. In addition, as of January 2025 CBP had 14 large-scale fixed, low-energy NII systems in commercial primary inspection areas, 73 large-scale NII mobile systems, and 159 small-scale fixed and mobile NII systems at these land POEs. As of October 2024, CBP had more than 2,000 handheld small-scale NII systems at land POEs on the northern and southwest borders. Mobile and small-scale NII systems can be moved among crossings or POEs as needed. According to our analysis of CBP data, in fiscal years 2020 through 2024, large-scale NII systems were involved in more than 8,400 incidents of finding hidden people and seizing contraband, including drugs, weapons and weapons parts, ammunition, and currency. For more information about CBP's inventory of large- and small-scale NII systems available to land POEs see appendix II.

Rail inspection. At land POEs where NII rail systems are deployed, all rail containers are scanned as they slowly proceed through the system, and the images are reviewed by an officer to identify anomalies (see fig. 7). If an anomaly is detected, the train is stopped, and officers conduct

¹³Generally, at land POEs, buses enter through dedicated lanes and are inspected following the same process as commercial and passenger vehicles.

further inspections. These inspections can include using small-scale NII systems and canines to localize any anomalies, using small-scale NII systems to help identify any potential contraband found, or a manual inspection. As of January 2025, CBP had 25 NII rail systems at land POEs.

Figure 7: Non-Intrusive Inspection (NII) Rail System in Laredo, Texas (left), and a Train Proceeding Through a NII Rail System (right)



Source: GAO (left photo); U.S. Customs and Border Protection (right photo). | GAO-25-107379

CBP Is Deploying Additional NII Systems to Increase Vehicle Scans

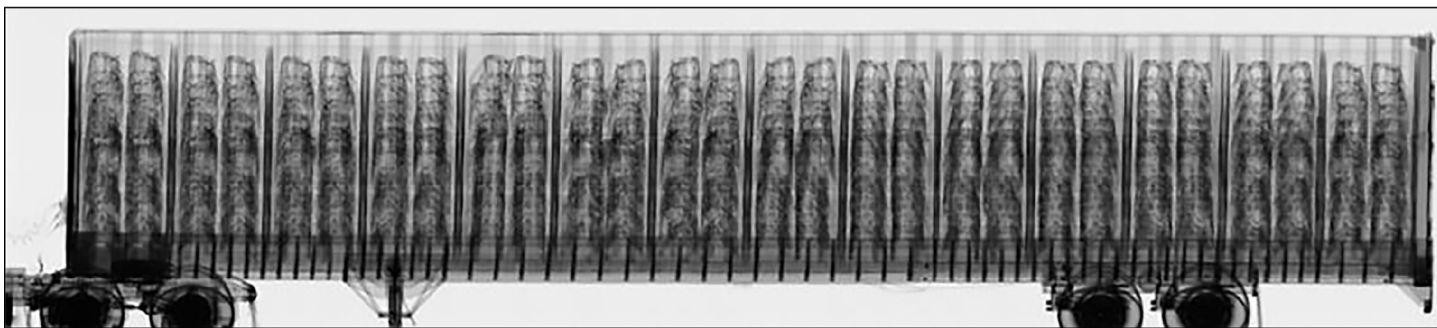
As part of its efforts to increase vehicle scanning at land POEs, CBP is deploying additional large-scale NII systems in preprimary inspection areas. In 2021, the Securing America's Ports Act required CBP to develop a plan to achieve 100 percent scanning of commercial and passenger vehicles and freight rail entering the U.S. at land POEs by 2027 using large-scale NII systems.¹⁴ In response, CBP submitted its plan to increase vehicle scanning with these systems at land POEs to Congress in January 2022 and submitted an update in March 2023,

¹⁴Securing America's Ports Act, Pub. L. 116-299, 134 Stat. 4906 (2021), codified at 6 U.S.C. § 211 note.

including the steps it has taken to increase scanning.¹⁵ According to this plan, a major cause of CBP's limited scanning capacity is that large-scale NII systems have been primarily deployed as part of secondary inspection to scan high-risk vehicles. Deploying additional NII systems in preprimary inspection areas is part of CBP's efforts outlined in this plan to increase scanning. According to CBP officials, as of February 2025, it is using NII systems to scan about nine percent of passenger vehicles and 32 percent of commercial vehicles entering the U.S. at the southwest border.

Specifically, CBP is deploying low-energy portals (LEP) in passenger vehicle preprimary inspection areas and multi-energy portals (MEP) in commercial vehicle preprimary inspection areas. These systems will allow CBP to scan vehicles prior to primary inspection to identify potential anomalies and assist in determining whether to refer vehicles for secondary inspection, rather than only scanning vehicles referred for secondary inspection (see fig. 8). Further, when scanning commercial vehicles during secondary inspection, generally the driver must exit the vehicle and be led to a waiting area before the vehicle is scanned. MEPs use low-energy X-rays to scan the vehicle cab with the driver and then varying energy X-rays to scan the trailer and its cargo, so the driver does not have to exit the vehicle.

Figure 8: Image of a Commercial Vehicle from a Multi-Energy Portal Scan



Source: U.S. Customs and Border Protection (photo). | GAO-25-107379

¹⁵Department of Homeland Security, U.S. Customs and Border Protection, *Large Scale Non-Intrusive Inspection Scanning Plan Fiscal Year 2021 Report to Congress* (Washington, D.C.: January 18, 2022) and Department of Homeland Security, U.S. Customs and Border Protection, *Large Scale Non-Intrusive Inspection Scanning Plan - Annual Update Fiscal Year 2022 Report to Congress* (Washington, D.C.: March 31, 2023). In April 2025, CBP officials told us that CBP's biennial update to the scanning plan had been drafted and was under review.

CBP began these deployments in 2020 as part of demonstration projects it conducted in collaboration with the DHS Science and Technology Directorate. In these projects, CBP deployed LEPs in passenger vehicle preprimary inspection areas and MEPs in commercial vehicle preprimary inspection areas. CBP conducted the demonstration projects at the Hidalgo, Progreso, Brownsville, and Laredo, Texas, POEs; Santa Teresa, New Mexico, POE; and Nogales, Arizona, POE. According to CBP officials, through these demonstration projects they identified issues related to the deployment of the NII systems, learned how the systems perform at land POEs, and identified their impacts on operations at these POEs. For example, CBP and DHS Science and Technology Directorate officials told us they learned that POEs need to adequately prepare for how the deployment of the systems will impact their operations and that the harsh weather and environmental conditions along the southwest border can impact construction and system performance. Additionally, CBP officials said they learned about how much time it takes officers to review system images and that additional officers are required to operate the equipment and review the images.

In addition to testing the deployment of LEPs and MEPs to preprimary inspection areas, as part of the demonstration project with the DHS Science and Technology Directorate, CBP installed backscatter X-ray undercarriage scanners. CBP installed these scanners alongside the LEPs and MEPs in the preprimary inspection areas at two crossings in Texas. Specifically, according to CBP officials, CBP installed undercarriage scanners with two MEPs at the Brownsville, Texas, POE, and one MEP at the Laredo, Texas, POE in commercial vehicle preprimary inspection areas. CBP also installed undercarriage systems to passenger preprimary inspection areas, along with three LEPs, at the Donna, Texas, crossing at the Progreso, Texas, POE. The undercarriage systems in Brownsville and Laredo were successfully demonstrated, and CBP continues to use these systems at those crossings, according to CBP officials. However, the demonstration project of the LEPs and undercarriage scanners in Donna was unsuccessful and CBP removed the systems from the crossing. CBP officials told us because the LEP and the undercarriage scanner were from different vendors, they found they could not operate together compatibly.

The LEPs and MEPs deployed in preprimary inspection areas at land POEs are integrated into the overall inspection process. Specifically, before approaching a primary inspection booth, vehicles drive through a portal where they are scanned, and the images are sent to a command center where CBP officers review them to determine if there are any

anomalies that require additional inspection. According to CBP officials, once they have completed the review, the officers send their determination to the officer in primary inspection and, if additional inspection is required, the officer in primary inspection refers the vehicle for secondary inspection. Whether or not an anomaly is found, the officer in primary inspection conducts the regular primary inspection procedures to determine whether the vehicle and its occupants are admissible or if the vehicle is to be sent for secondary inspection. According to CBP officials, travelers may opt out of undergoing a scan by an LEP or MEP in preprimary inspection by using an opt-out lane to drive to the primary inspection booth, and officials at the POEs have discretion as to how vehicle inspections are handled when drivers choose to opt out.

The LEPs and MEPs that CBP has deployed or is planning to deploy in preprimary inspection areas provide greater throughput than the large-scale systems currently deployed in secondary inspection areas and enable CBP to scan more vehicles (see fig. 9). Further, CBP can generally scan commercial vehicles with MEPs more quickly than they can with the fixed large-scale systems currently deployed in secondary inspection areas because the commercial vehicle operator does not need to exit the vehicle and wait in another location, and the systems take less time to scan the vehicles. As of February 2025, CBP had deployed 35 LEPs and 15 MEPs in preprimary inspection areas at 16 land POEs.

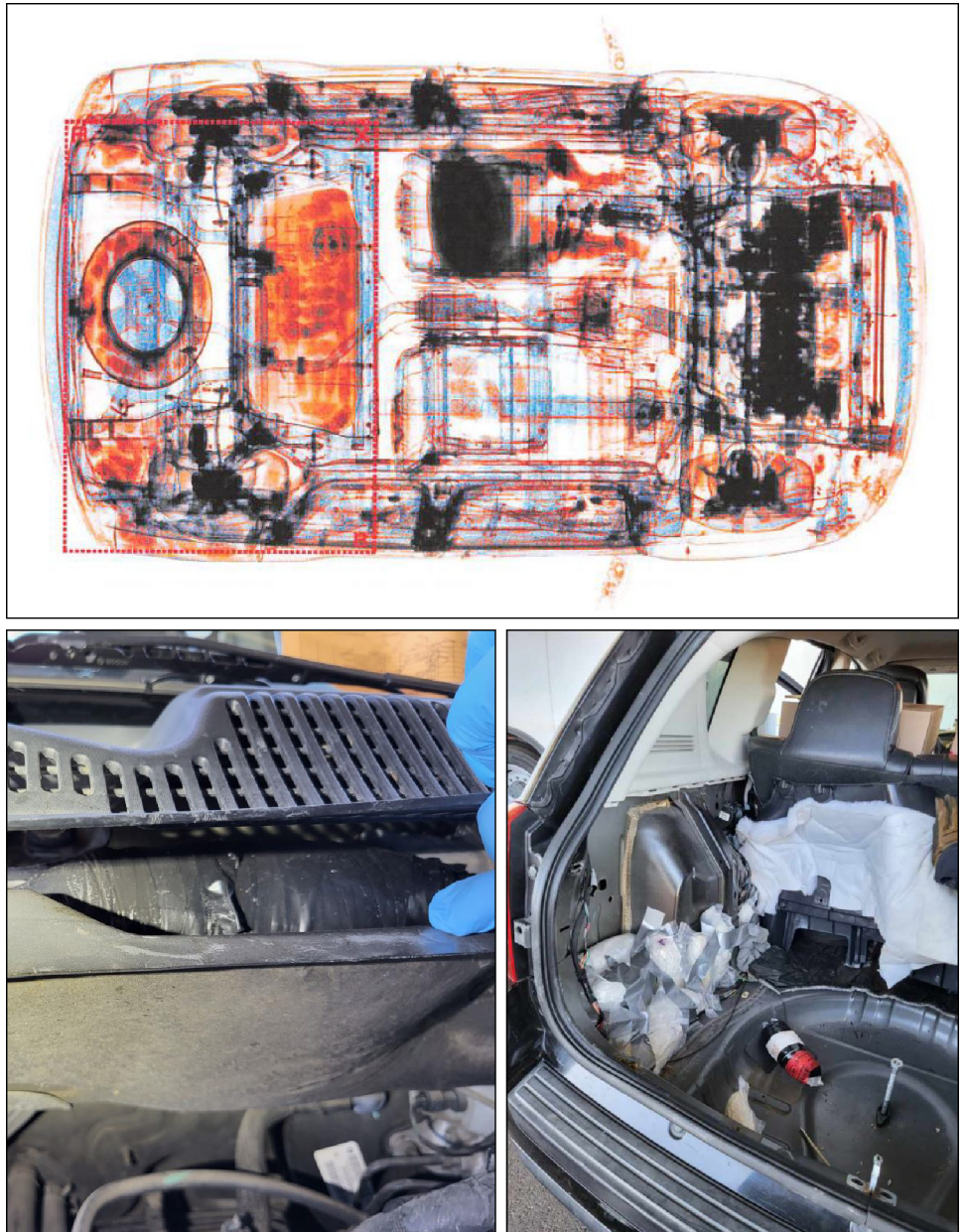
Figure 9: Low-Energy Portal in Passenger Preprimary Inspection Area and Multi-Energy Portal in Commercial Preprimary Inspection Area at Land Ports of Entry in Mission, Texas (left), and Laredo, Texas (right)



Source: GAO (photos). | GAO-25-107379

According to CBP, it has detected contraband at land POEs using LEPs and MEPs deployed in preprimary inspection areas at land POEs. For example, CBP officials from the San Diego, California, field office told us about a seizure of contraband that involved an LEP deployed in the preprimary passenger inspection areas at a POE. A CBP official stated that the officer reviewing an image of a vehicle scanned by an LEP in a preprimary trusted traveler lane at the Calexico, California, crossing identified anomalies and notified the officer in primary inspection who referred the vehicle for secondary inspection. During the secondary inspection, officers found about 200 pounds of methamphetamine (see fig. 10). According to CBP, between May 2024 and May 2025, LEPs were involved in 48 seizures including more than 1,100 kilograms of drugs and \$30,000 in currency, and MEPs were involved in 34 seizures including more than 9,400 kilograms of drugs.

Figure 10: Image From a Low-Energy Portal Showing Anomalies and Pictures of Drugs Found in a Vehicle at the Calexico, California, Land Port of Entry



Source: U.S. Customs and Border Protection (photos). | GAO-25-107379

In addition to deploying LEPs and MEPs in preprimary inspection areas for passenger and commercial vehicles, CBP is also deploying high-energy NII rail systems to replace existing gamma-ray systems that they are retiring and plans to use these new systems in the same way it uses the currently deployed systems. According to CBP officials, the new high-energy NII rail systems can penetrate steel more deeply than the gamma-ray systems and therefore provide better images of the high-density commodities that are shipped using rail. As of February 2025, CBP had installed and begun site testing one high-energy NII rail system at the Buffalo, New York, POE. CBP expects that such systems will be fully operational at an additional 11 crossings by 2029.¹⁶

CBP Assesses Large-Scale NII Performance, but Has Not Clearly Defined All Key Performance Parameters

CBP Uses Performance Data to Help Ensure Large-Scale NII Systems Are Operational

CBP uses performance data to help ensure that large-scale NII systems are operational and therefore available to use for preprimary and secondary inspections. Specifically, officials in CBP's Integrated Logistics Division said they review a daily list of system outages, which they use to inform their conversations with contractors who are responsible for resolving maintenance tickets. In addition, CBP officials review a dashboard that includes various measures of operational availability—the percent of time systems are available to use for operations, excluding preventative maintenance. This dashboard includes, for example, data on the operational availability for individual large-scale NII systems, as well as the average operational availability for all large-scale NII systems.

CBP has used these performance data to inform actions intended to improve operational availability. Specifically, CBP's fiscal year 2024 target was for each individual large-scale NII system, and for the average

¹⁶According to CBP officials, as of February 2025 a high-energy NII rail system is operational in Laredo, Texas, that was privately funded through CBP's Donations Acceptance Program, but this is not part of the NII program. The Donations Acceptance Program is a mechanism by which private sector and government entities can donate property and services that facilitate trade and travel.

across all large-scale NII systems, to have an operational availability of 95 percent or greater. However, in fiscal year 2024 just over half of individual large-scale NII systems (51 percent) met this target, while the overall average for large-scale systems was 90 percent.¹⁷ Officials in CBP headquarters said they are aware of this issue, and the agency has taken recent actions to improve operational availability. Specifically, when CBP awarded its new maintenance contracts in September 2024, it included penalty clauses that are intended to improve contractors' accountability for maintaining a targeted level of operational availability. CBP also increased the targeted level of performance for large-scale NII systems deployed in preprimary inspection areas. Specifically, the targets for maintenance contractors over a 30-day period are 96 percent operational availability for each large-scale NII system deployed in preprimary inspection areas at land POEs, and 95 percent for all other large-scale NII systems deployed in the U.S.

CBP Has Not Clearly Defined All of Its Key Performance Parameters for NII Systems

CBP has made efforts to ensure large-scale NII systems are operational but has not clearly defined all of its key performance parameters for NII systems. According to DHS guidance, key performance parameters reflect the most important and nonnegotiable requirements that a system must meet to fulfill its fundamental purpose.¹⁸ This guidance also states that once a program has been operational long enough to assess its utility to the user, it is required to report the results of its key performance parameters in annual operational analysis reports. According to the guidance, this process can help agencies identify system deficiencies or opportunities for cost savings and achieve their objectives more efficiently and effectively. Further, Office of Management and Budget guidance for conducting operational analysis states that current, complete, accurate, and relevant data can help an agency make informed decisions regarding the allocation of resources and compare actual against planned results.¹⁹

In 2015 CBP established three key performance parameters for NII systems:

¹⁷The operational availability data include all CBP large-scale NII systems, which are not limited to land POEs. For example, CBP also uses large-scale NII systems at seaports and Border Patrol immigration checkpoints.

¹⁸DHS, *Systems Engineering Life Cycle Guidebook*.

¹⁹Office of Management and Budget, *Capital Programming Guide v 3.1*.

-
1. **Operational availability.** Meet average percentage of NII imaging systems operational availability at 95 percent.
 2. **Inspection rate.** Inspect 100 percent of all designated high-risk commercial vehicles and containerized cargo.
 3. **Examination.** Maintain 100 percent inspection of targeted containers, cargo, and international mail.

For its first key performance parameter, CBP reports operational availability results in its annual operational analysis reports, including the average across large-scale NII systems.²⁰ In addition, CBP uses these data to help ensure that large-scale NII systems are available to use, as discussed earlier. However, CBP has not clearly defined its other two key performance parameters for NII systems or reported their results in operational analysis reports. CBP officials said they have not reported data on inspection rate and examination because they are unclear how CBP originally intended to define and measure these key performance parameters. Specifically, for the second key performance parameter on inspection rate, officials have not clearly defined the term high-risk, noting that its definition may change over time and across different modes of transportation, for example, at land and seaports. Regarding the third key performance parameter on examination, CBP officials told us they do not know what it means to maintain 100 percent of targeted inspections. They noted that it could refer to facilitating trade and travel while enhancing the inspection process, but they said that without a clearer definition of the parameter, they do not know how to measure it. CBP initially established these key performance parameters in 2015 before these officials joined the NII program.²¹

Clearly defining its key performance parameters and using them for reporting would give CBP assurance that large-scale NII systems are working as intended. Doing so would also help CBP identify any system deficiencies or possible cost savings, achieve its objectives more efficiently and effectively, and help inform future procurement decisions, consistent with DHS and Office of Management and Budget guidance.

²⁰This key performance parameter addresses operational availability for all large-scale NII systems, including those used to scan passenger and commercial vehicles and rail at land POEs.

²¹U.S. Customs and Border Protection, *Non-Intrusive Inspection Systems Program, Acquisition Program Baseline* (Washington, D.C.: July 2015).

Additional NII Systems Increased Vehicle Scans, but Various Factors Limit Use

Another way that CBP assesses the performance of NII systems is by examining its progress increasing vehicle scans by deploying large-scale NII systems in preprimary inspection areas at land POEs.²² Specifically, in fiscal year 2024, CBP scanned 8 percent of passenger vehicles and 27 percent of commercial vehicles at land POEs along the southwest border, according to headquarters officials. In fiscal year 2020, prior to the deployment of large-scale NII systems in preprimary inspection areas, CBP reported scanning 2 percent of passenger vehicles and 16 percent of commercial vehicles at land POEs along the southwest border.²³ According to CBP officials, vehicle scans from large-scale NII systems in preprimary inspection areas at land POEs led to almost 28,000 referrals for secondary inspection for passenger vehicles and over 15,000 for commercial vehicles in fiscal year 2024.

However, CBP has been unable to fully use its large-scale NII systems at land POEs because they do not always have staff available and have experienced system outages. Specifically, deploying new large-scale NII systems in preprimary inspection areas at land POEs requires additional staff to operate and review images from the NII scans. CBP officials we met with at all four field offices where large-scale NII systems had been deployed in preprimary inspection areas at land POEs said they did not always have sufficient staff to fully use the systems. For example, CBP officers at one of these POEs said that they did not receive additional officers needed to review images from the new systems deployed in preprimary inspection areas. As a result, some of the systems for scanning commercial vehicles in preprimary inspection areas were not being used during the time of our site visit. CBP headquarters officials said they have ongoing working group meetings, during which they discuss various ways to help mitigate these staffing challenges. For example, CBP is considering whether images can be reviewed at regional command centers rather than at individual land POEs, which could improve the efficiency of operations. Officials said these ongoing discussions are intended to better enable the agency to assess staffing needs for use of large-scale NII systems in preprimary inspection areas at land POEs.

²²CBP's initial deployments of NII systems in preprimary inspection areas at land POEs have been focused along the southwest border. We provide additional details on NII deployments later in this report.

²³Department of Homeland Security, *Non-Intrusive Inspection Scanning Fiscal Plan Year 2021 Report to Congress*.

Another reason that systems were not used was due to outages. For example, CBP officials we met with at four field offices where large-scale NII systems had been deployed in preprimary inspection areas at land POEs said that system outages had affected their operations, and in some cases the outages were frequent or lengthy. As discussed earlier, CBP has taken steps to improve operational availability by including penalty clauses in its maintenance contracts and increasing the targeted level of performance for large-scale NII systems deployed in preprimary inspection areas.

CBP Has Made Progress Deploying Large-Scale NII Systems, but Its Plans Do Not Include All Locations

CBP has made progress deploying large-scale NII systems to land POEs to implement its plan to achieve 100 percent scanning. However, the deployments have cost more and taken longer than CBP expected. Furthermore, CBP has not determined how to deploy large-scale NII systems at all land POEs that inspect passenger vehicles, including those with the highest traffic volumes. To improve the efficiency and effectiveness of its existing large-scale NII systems, and to make it easier for its officers to review images, CBP has also pursued new technologies, such as tools to identify anomalies that should receive further inspection. Even with these efforts, CBP will not be able to achieve 100 percent scanning without acquiring hundreds of additional large-scale NII systems, according to CBP documents.

CBP's Deployment of NII Systems in Preprimary Inspection Areas Has Cost More and Taken Longer than Expected

CBP has processes for acquiring large-scale NII systems and deploying them in preprimary and other inspection areas of land POEs. CBP has made progress in its deployment efforts, but these efforts have cost more and taken longer than originally expected.²⁴

CBP manages its large-scale NII acquisitions as part of a larger portfolio management process, which includes multiple steps to develop plans and other materials. They include (1) establishing future NII system requirements, (2) prioritizing NII system procurements and deployments, and (3) developing execution plans and acquisition strategies.

²⁴GAO has previously reported on CBP acquisition management and made recommendations to CBP to strengthen its management and knowledge sharing. See GAO, *Customs and Border Protection: Actions Needed to Enhance Acquisition Management and Knowledge Sharing*, [GAO-23-105472](#), (Washington, D.C.: April 25, 2023). At the time of our review, CBP had not implemented the recommendations from that report.

Once large-scale NII systems have been procured, CBP has used a four-phase process for deployment to preprimary and other inspection areas. These four phases are:

(1) **Pre-planning.** During this phase CBP consults with port owners and operators, which may include the General Services Administration.²⁵

(2) **Design.** During this phase, vendors conduct initial site and environmental assessments of the POE. Vendors also develop operational models for each site and develop and revise plans for civil works and installation. CBP approves the final design following stakeholder input.

(3) **Construction.** In this phase, vendors begin construction, including preparatory civil works, such as pouring concrete or installing conduit for electrical power, followed by NII system installation.

(4) **Site activation.** Final tasks include site acceptance testing and training for on-site CBP officers. Once these are completed, the system is considered fully operational.

According to CBP officials, making other site changes to accommodate large-scale NII system use, such as redesigning traffic flows and adding lanes to allow drivers to opt-out of scanning is also part of this process. Figure 11 shows an example of LEPs operating in preprimary inspection areas at a border crossing.

²⁵The General Services Administration owns and operates 122 of CBP's 186 land border crossings.

Figure 11: Five Low-Energy Portals Deployed in the Preprimary Inspection Area at the Bridge of the Americas, El Paso, Texas



Source: U.S. Customs and Border Protection (photo). | GAO-25-107379

In implementing this process, CBP has contracted with vendors to plan for, construct, and test large-scale NII systems in preprimary inspection areas. In fiscal years 2020 and 2021, CBP awarded nine contracts—three each for LEPs, MEPs, and high-energy NII rail—to procure and deploy 135 NII systems.²⁶ These 135 systems represent CBP's primary effort to increase scanning and were determined by the amount of funds available and CBP's estimates of NII system costs per unit from fiscal year 2021. As discussed earlier, CBP also worked with DHS's Science and Technology Directorate to deploy 11 large-scale NII systems in preprimary inspection areas at six land POEs, beginning in fiscal year

²⁶CBP initially awarded approximately \$51 million for 12 high-energy NII rail systems and over \$480 million for 88 LEPs and 35 MEPs.

2020.²⁷ Eight of those systems remained operational as of January 2025. Additionally, in fiscal years 2022 and 2023, CBP modified the contracts to order 10 additional systems for deployment on the northern border to Gordie Howe Bridge, Michigan, and Peace Bridge, New York.

CBP has made progress deploying large-scale NII systems to land POEs and using them in preprimary inspection areas. As of February 2025, 52 of the 153 systems CBP plans to deploy to these POEs are fully operational, nearly all located at preprimary inspection areas.²⁸ An additional 101 systems remain in pre-planning, design, or construction phases (see table 2). These systems include 12 high-energy NII rail systems that CBP plans to deploy to replace existing gamma-ray systems that they are retiring.

Table 2: Deployment Status of U.S. Customs and Border Protection Large-Scale Non-Intrusive Inspection (NII) Systems at Land Ports of Entry, as of February 2025

Type of system	Pre-planning	Design	Construction	Fully operational	Total ^a
Low-energy portal (LEP)	4	34	23	35	96
Multi-energy portal (MEP)	6	7	15	17	45
High-energy rail	0	11	1	0	12
Total	10	52	39	52	153

Source: GAO analysis of U.S. Customs and Border Protection information. | GAO-25-107379

^aTotal does not include three LEPs deployed to Donna, Texas, for the DHS Science and Technology demonstration that are no longer operational.

²⁷CBP entered into two agreements with DHS’s Science and Technology Directorate to support NII research and development and testing efforts, which included the MEP and LEP technology demonstrations. The first agreement provided the Science and Technology Directorate with approximately \$64 million for support in fiscal years 2018 through 2021. The second provided the Directorate with an estimated \$50 million for support in fiscal years 2023 through 2027.

²⁸These 153 large-scale NII systems include the 135 systems CBP awarded contracts for in fiscal years 2020 and 2021, the eight operational systems deployed with DHS’s Science and Technology Directorate, and the 10 systems CBP has identified for deployment to land POEs in Michigan and New York. CBP has continued to install new large-scale NII systems in secondary inspection areas. Systems located in secondary inspection areas can provide better or different detection capabilities. Besides the systems it has procured for installation in preprimary inspection areas, CBP has procured and installed three NII systems to secondary inspection areas at crossings in San Ysidro, California; Port Huron, Michigan; and Ambassador Bridge, Michigan.

Although CBP has made progress deploying large-scale NII systems, deployments have cost more than CBP originally estimated and taken longer than planned.

Costs for large-scale NII deployments. CBP has developed and updated cost estimates for deploying MEP, LEP, and high-energy NII rail systems, but costs have exceeded those estimates. More specifically, according to CBP documents, there have been substantial increases in costs above the original estimates for civil works and construction activities for these systems. For example, in fiscal year 2020, CBP estimated installation costs for each MEP to be \$1.3 million, but, according to CBP in fiscal year 2023, subsequent vendor-provided cost estimates averaged \$4.1 million per system. In October 2024 CBP estimated that costs to complete installation of each remaining planned MEP system would range from \$4.2 to \$9.7 million. CBP also anticipated that inflationary factors could increase these costs by an additional 10 percent in the future.

In addition to system installation costs, CBP documents show that some costs have increased more modestly or have been lower than initial estimates, such as costs for purchasing the systems. For example, according to CBP cost estimates, system purchase costs for MEPs increased from the initial estimate of \$4.0 million per system in fiscal year 2020 to an average cost of \$4.3 million in fiscal year 2023. Over the same period, the cost to purchase LEPs dropped from the initial estimate of \$2.2 million per system to an average cost of \$1.2 million per system.

CBP officials at headquarters and field offices attributed cost increases to several factors. For example:

- CBP officials told us the agency's initial plans did not account for all deployment costs. For example, in fiscal year 2021 CBP estimated it would cost about \$4 million to procure and deploy a high-energy NII rail system at the Bridge of the Americas crossing at the El Paso, Texas, POE. However, according to officials at the POE, the installation requires costly infrastructure changes and, in fiscal year 2025, CBP reported that it would cost an additional \$17.6 million to complete the deployment. At other sites, officials said initial plans did not include costs for infrastructure or equipment necessary to support operation of these NII systems.
- Each border crossing poses different construction challenges for contractors, some of which may be unexpected, resulting in additional costs, safety measures, and reviews. For example, CBP officials told

us that construction work at the Columbus POE in New Mexico to install large-scale NII systems broke a water line, which likely resulted in additional unanticipated costs.

- According to CBP officials and documents, the agency's original cost estimates for large-scale NII system deployments underestimated the inflation rates for labor and material. For example, CBP's fiscal year 2020 cost estimates for MEP and LEP deployments were higher than its initial projections based on the contracts for the DHS Science and Technology Directorate NII technology demonstrations. Subsequently, in fiscal year 2023, CBP reported that costs for construction activities over the prior two years had increased well above the original estimates. Officials told us that labor costs had increased by 30 percent to 40 percent, or more in some cases.

As a result, CBP has requested and received additional funding to deploy its large-scale NII systems and to meet its initial goals to increase vehicle scanning rates.²⁹ In fiscal year 2019, CBP received appropriations of \$570 million to procure and deploy additional large-scale NII systems. In its fiscal year 2021 scanning plan, CBP projected that \$520 million of the \$570 million it received in fiscal year 2019 to deploy these NII systems would be sufficient to increase scanning rates at the southwest border to 40 percent of passenger vehicles and 90 percent of commercial vehicles.³⁰ However, in its fiscal year 2022 scanning plan update, CBP reported that it needed an additional approximately \$221 million to complete 135 of the 153 planned large-scale NII installations. In the update, CBP also reduced the projected increase in the percentage of commercial vehicles scanned from 90 percent to 70 percent, while the projected increase in passenger vehicle scanning remained unchanged at 40 percent.³¹

CBP received additional appropriations beginning in fiscal year 2020 that have been used for the NII program. That year, according to CBP, they

²⁹CBP reported in 2020 that it needed additional funds to deploy NII systems at Gordie Howe Bridge, Michigan. Department of Homeland Security, *Draft Non-Intrusive Inspection Division MEP & POV Prioritization – Fiscal Year 2020*. CBP identified additional funding needs in its fiscal year 2022 scanning plan update. Department of Homeland Security, *Large Scale Non-Intrusive Inspection Scanning Plan – Annual Update Fiscal Year 2022 Report to Congress* (March 31, 2023).

³⁰CBP stated in a 2021 press release that its initiative to deploy new high-energy NII rail systems to replace existing NII systems at 12 locations would improve scanning for approximately 60 percent of the rail cargo entering the U.S.

³¹Department of Homeland Security, *Non-Intrusive Inspection Scanning Plan Fiscal Year 2022 Report to Congress*.

received approximately \$67 million to support large-scale NII system deployments to the southwest and northern borders. In 2023, Congress allocated \$69 million for the NII program. A portion of these funds were specified for the deployment of previously funded systems. In fiscal year 2024, CBP received an additional \$201 million used to fund costs associated with large-scale NII installation. In October 2024, CBP reported that it had sufficient funds to finish deploying 64 large-scale NII systems but needed an additional approximately \$173 million for the remaining 31 systems. As discussed earlier, as of February 2025, CBP had completed deployment of 52 large-scale NII systems at land POEs.

According to CBP officials, in fiscal years 2019 through 2024, CBP received nearly \$2.12 billion in total funds for the NII program, of which \$1.2 billion was meant for procurement, installation, and construction (see table 3). As discussed earlier, the majority of these funds were intended for the deployment of large-scale NII systems in preprimary inspection. CBP also used these funds to deploy large-scale NII systems to other locations in secondary inspection areas and to support NII-related initiatives. According to CBP officials, over the same period CBP received nearly \$920 million in total appropriations for NII operations and support to fund salaries, maintenance, and, from fiscal year 2020 onward, procurement of small-scale and handheld NII systems.

Table 3: U.S. Customs and Border Protection Reported Funding for Non-Intrusive Inspection Program Fiscal Years 2019 Through 2024 (dollars in millions)

Type of funding	2019	2020	2021	2022	2023	2024	Total
Procurement, construction, and improvements	\$570	\$66	\$0	\$87	\$95	\$381	\$1,199
Operations and support	\$116	\$127	\$152	\$167	\$177	\$177	\$917
Total	\$686	\$193	\$152	\$254	\$273	\$558	\$2,117

Source: GAO analysis of U.S. Customs and Border Protection data. | GAO-25-107379

Time frames for large-scale NII system deployments. Concurrently with increasing costs, CBP has taken longer than expected to deploy planned large-scale NII systems. In its fiscal year 2021 scanning plan, CBP proposed a 6-year procurement schedule ending in fiscal year 2027 to acquire all of the 434 large-scale NII systems that CBP identified it needed to achieve 100 percent scanning of passenger and commercial vehicles and rail at northern and southwest land POEs, given sufficient

funding.³² However, each location is unique, and installation timelines to complete system deployments have varied, as some sites have taken longer than the 12- to 24-month timeline CBP proposed in 2021.

Initial CBP projections also suggested that MEPs and LEPs could be deployed on a rolling basis over 4 years, finishing by fiscal year 2026. CBP expected to complete deployment of the 12 high-energy NII rail systems by the end of fiscal year 2024. However, as of February 2025, CBP's deployment schedule notes that the last high-energy NII rail system is not scheduled for completion until December 2029. Furthermore, while 31 of the systems have scheduled completion dates, according to CBP the timelines are contingent on additional funds for installation, as mentioned previously.

CBP officials identified various factors that have contributed to deployments taking longer than expected. For example:

- CBP officials told us that major site upgrades are needed to install large-scale NII systems in preprimary inspection areas at some land POEs. These upgrades include, for example, construction of buildings for image review (i.e., command centers) or installation of power and data connections to the new systems.
- Large-scale NII systems can interfere with radiation detection systems that are also located in preprimary inspection areas, and CBP may need additional planning and time to resolve any interference at land POEs, according to CBP officials.³³
- Vendors have been slow to resolve deployment issues, according to CBP officials. For example, officials told us a vendor needed over 3 months to fix issues found during system testing at one California POE. Officials noted that multiple challenges during a deployment add delays because vendors may be installing systems at several locations simultaneously, and they lack the labor resources to address additional, unplanned challenges.

³²To meet the requirement specified in the Securing America's Ports Act that CBP develop a plan to reach 100 percent scanning of passenger and commercial vehicles and rail containers at land POEs, CBP projected it would need 434 large-scale NII systems. We discuss CBP's deployment plans in more detail later in this report.

³³Officials told us that the interference caused by MEPs can be mitigated using a 'blanking' technology that briefly pauses the radiation detection system while the MEP is operating and vice versa. The only current means to reduce interference caused by LEPs are shielding and distance.

-
- Newly installed NII systems have failed site acceptance testing due to extreme environmental conditions at the crossings (e.g., heat, sand, and wind) which were not accounted for during factory testing.³⁴ Officials told us that the four main vendors installing systems have experienced these problems, and the additional work needed to comply with the statements of work have led to delays in the installation timelines.

Other challenges have also slowed deployments. In 2022, CBP noted that long lead times to acquire raw materials needed for construction work, such as steel or concrete, posed a risk to its deployment schedules.³⁵ And, in prior reports, we have found that CBP's NII programs have ongoing staffing challenges, which have impeded their ability to complete program requirements on schedule.³⁶

CBP officials are aware of these factors and told us about actions they are taking in response. For example, officials are reviewing projects along the northern border to identify where, if funding is provided, NII system installation needs could be considered when making infrastructure improvements to older land POEs that require redevelopment.

CBP Has Not Included All Locations in Its Large-Scale NII System Deployment Plans

As previously noted, CBP has developed and updated its fiscal year 2021 plan to scan all land border traffic using large-scale NII systems.³⁷ In the plan, CBP details how it intends to increase its large-scale NII scanning capacity, through future acquisitions as well as the systems it has already procured. While the plan describes how CBP intended to deploy large-scale NII systems to both northern and southwest borders, CBP has focused its initial efforts on the southwest border because most CBP

³⁴CBP officials said that vendors conduct factory testing to ensure that a system functions according to specification. Once systems are installed, vendors and CBP conduct site acceptance testing to ensure that the system operates in compliance with CBP statements of work.

³⁵Department of Homeland Security, U.S. Customs and Border Protection, Office of Field Operations Non-Intrusive Inspection Division, *Non-Intrusive Inspection MEP and LEP Implementation Plan* (Washington, D.C.: October 2022).

³⁶GAO, *Homeland Security Acquisitions: Outcomes have Improved but Actions Needed to Enhance Oversight of Schedule Goals*, [GAO-20-170SP](#), (Washington, D.C.: December 19, 2019). GAO, *DHS 2024 Annual Assessment: Improved Guidance on Revised Acquisition Goals Would Enhance Transparency*, [GAO-25-107317](#), (Washington, D.C.: February 25, 2025).

³⁷Department of Homeland Security, *Non-Intrusive Inspection Scanning Plan Fiscal Year 2021 Report to Congress*. In April 2025, CBP officials told us that CBP's biennial update to the scanning plan had been drafted and was under review.

contraband seizures have occurred there. However, despite this prioritization, CBP's plan does not account for the large-scale NII systems it needs to provide full scanning of passenger vehicle traffic at nine crossings along the southwest border—including three of its highest-traffic locations.³⁸

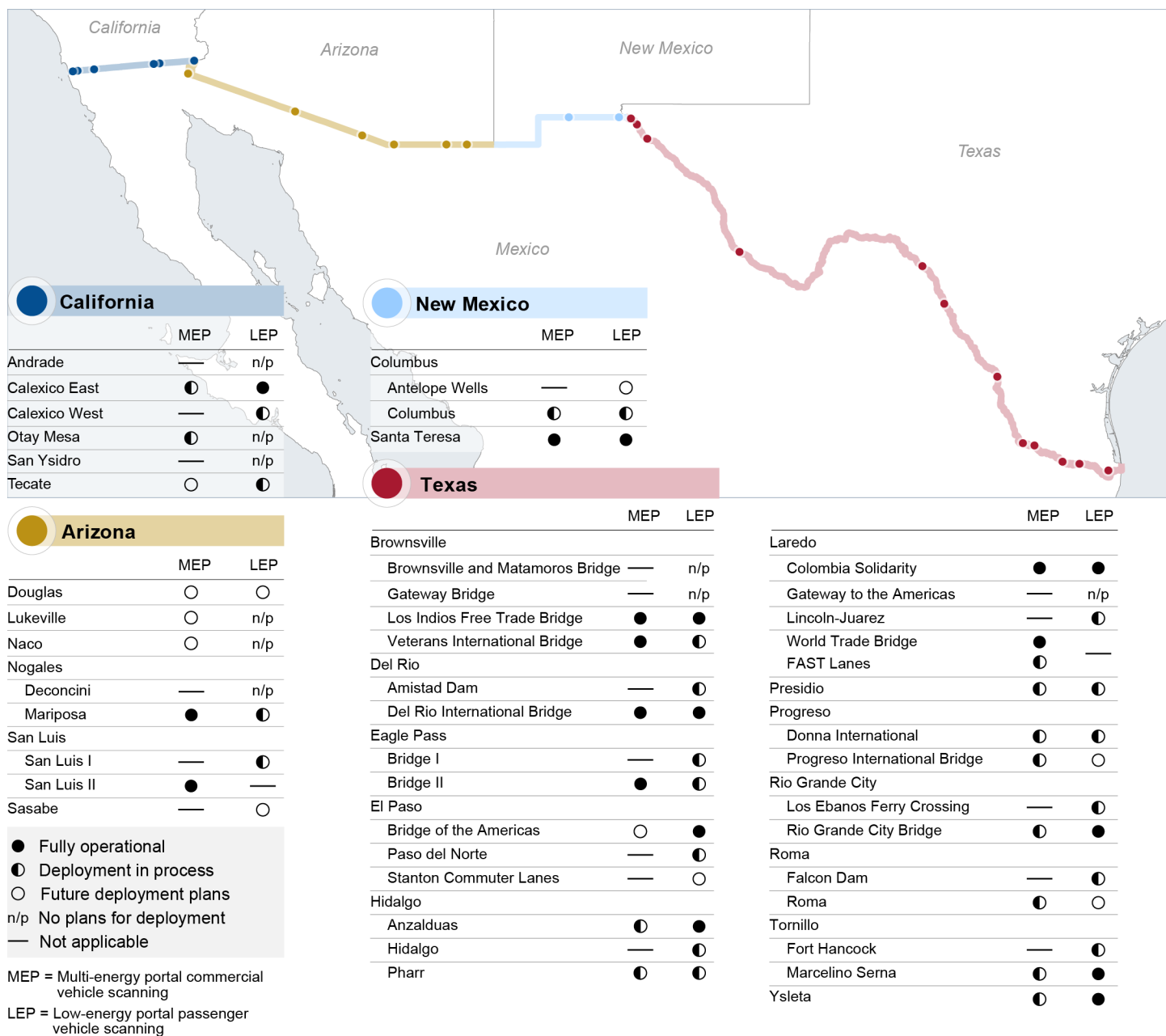
According to CBP's most recent update to the fiscal year 2021 scanning plan, the large-scale NII systems that CBP had procured (including eight systems remaining from the technology demonstration), would give CBP the physical capacity to scan up to 40 percent of passenger vehicles and 70 percent of commercial vehicles at southwest land border POEs.³⁹ The plan estimated that 197 new systems in total are required to scan all passenger and commercial vehicles at the southwest border.⁴⁰ After accounting for large-scale NII systems already procured, CBP's plan indicated that 62 additional systems would need to be procured to reach its 100 percent scanning goal for the southwest border. See figure 12 for a map of all planned NII system deployments to the southwest border. See appendix III for a list of planned large-scale NII system deployments.

³⁸We did not assess the completeness of CBP's plans for the northern border.

³⁹Department of Homeland Security, *Non-Intrusive Inspection Scanning Plan Fiscal Year 2022 Report to Congress*. As previously noted, CBP is deploying high-energy NII rail systems to replace existing gamma-ray systems that they are retiring. These systems scan 99 percent of inbound rail cargo.

⁴⁰Department of Homeland Security, *Non-Intrusive Inspection Scanning Plan Fiscal Year 2021 Report to Congress*. According to the plan, the southwest border requires 146 LEPs, 44 MEPs, and seven high-energy NII rail systems to scan all passenger, commercial, and rail vehicles.

Figure 12: Map of Ports of Entry and Large-Scale Non-Intrusive Inspection (NII) Systems U.S. Customs and Border Protection Planned to Deploy at the Southwest Border, as of February 2025



Source: GAO analysis of U.S. Customs and Border Protection information; Census Bureau and Bureau of Transportation Statistics (map). | GAO-25-107379

Overall, CBP estimated that it needs a total of 434 additional large-scale NII systems to scan all passenger and commercial vehicles and rail containers at northern and southwest border land POEs (see table 4).⁴¹

Table 4: Numbers of Additional Large-Scale Non-Intrusive Inspection (NII) Systems Needed, Based on U.S. Customs and Border Protection Fiscal Year 2021 Scanning Plan

	Low-energy portal (LEP)	Multi-energy portal (MEP)	High-energy NII rail	Total
Planned NII systems, total	337 ^a	65	32	434
Current procurements, total	96	45	12	153
Southwest border	90	39	6	135
Northern border	6	6	6	18
Future procurements, total	241	20	20	281
Southwest border	56	5	1	62
Northern border	185	15	19	219

Source: GAO analysis of U.S. Customs and Border Protection information. | GAO-25-107379

Note: The total number of systems acquired and needing future procurement reflects CBP's estimate of the number of multi-energy and low-energy portals, and high-energy NII rail systems it would need to scan 100 percent of passenger and commercial vehicles, and rail containers at northern and southwest border land ports of entry. CBP made these estimates in its Large Scale Non-Intrusive Inspection Scanning Plan Fiscal Year 2021 Report to Congress. Department of Homeland Security, U.S. Customs and Border Protection, *Large Scale Non-Intrusive Inspection Scanning Plan Fiscal Year 2021 Report to Congress*, (January 18, 2022).

^aLEP totals include additional systems CBP plans to deploy in secondary inspection areas.

To acquire these 434 large-scale NII systems, CBP estimated it would need nearly \$2 billion in funds. CBP has also prepared total life cycle cost estimates for its entire NII program.⁴² In its most recent life cycle cost estimate from fiscal year 2023, CBP estimated the total cost of the NII program as approximately \$5.6 billion.⁴³ At that time, CBP estimated life cycle costs for future NII systems, including the large-scale systems needed to achieve 100 percent scanning at all POEs to be about \$6.9

⁴¹Department of Homeland Security, *Non-Intrusive Inspection Scanning Plan Fiscal Year 2021 Report to Congress*.

⁴²CBP plans to release an updated life cycle cost estimate for its NII programs in 2025.

⁴³Department of Homeland Security, *Non-Intrusive Inspection (NII) Systems Program Life Cycle Cost Estimate Fiscal Year 2023 Annual Update*, (Washington, D.C: April 14, 2023). Estimates are then year at the 80 percent confidence level. The life cycle cost estimate included past and future costs for all NII systems and technology in fiscal years 1995 through 2035. It also assumed no new NII systems would be acquired by the program after fiscal year 2021.

billion—\$3.7 billion of which was attributed to costs for NII systems for land crossings.⁴⁴

However, the CBP scanning plan does not include NII system deployments needed to scan passenger vehicle traffic at nine southwest border crossings (see table 5). CBP included all nine of these border crossings in its 2020 NII deployment prioritization, which identified crossings needing additional large-scale NII systems and determined their priority for deployment using factors such as installation complexity, traffic volumes, and risk. However, the agency did not include these crossings in its subsequent plans for deployment of NII systems to preprimary inspection areas, nor did it include them in the fiscal year 2022 plan update.⁴⁵

Table 5: Southwest Border Passenger Vehicle Crossings Not Included in Current U.S. Customs and Border Protection Deployment Plans

Land border crossing	Fiscal year 2024 passenger vehicle arrivals			
	Volume rank	Vehicle count	Percent of total, southwest border	Percent of total, all land borders
San Ysidro, CA	1	15,112,930	19.8%	15.4%
Otay Mesa, CA	2	6,244,660	8.2%	6.3%
Nogales-DeConcini Crossing, AZ	11	2,200,556	2.9%	2.2%
Gateway to the Americas Bridge, TX	17	1,553,481	2.0%	1.6%
Brownsville and Matamoros International Bridge, TX	20	1,397,149	1.8%	1.4%
Gateway International Bridge, TX	21	1,135,410	1.5%	1.2%
Andrade, CA	29	605,876	0.8%	0.6%
Lukeville, AZ	36	389,566	0.5%	0.4%
Naco, AZ	37	336,582	0.4%	0.3%
Total		28,976,210	38.0%	29.4%

Source: GAO analysis of U.S. Customs and Border Protection information. | GAO-25-107379

⁴⁴Department of Homeland Security, *Non-Intrusive Inspection Integration (NII-I) Program Life Cycle Cost Estimate Fiscal Year 2023 Annual Update*, (Washington, D.C.: April 14, 2023). Estimates are then year at the 80 percent confidence level. The life cycle estimate provided costs for NII systems in land, rail, sea, and air environments in fiscal years 2022 through 2040.

⁴⁵Using the current contracts, CBP deployed one large-scale NII system to the secondary inspection area at the San Ysidro, California, POE in 2022.

Among these crossings, San Ysidro and Otay Mesa in California process the largest share of passenger vehicle crossings in the U.S., and the DeConcini crossing in Arizona has the 11th-highest volume. CBP officials told us that its plans have not included these three high-traffic crossings because it has not determined how it will overcome the lack of sufficient space to install large-scale NII systems in preprimary inspection areas (see fig. 13). One solution CBP is pursuing, with the assistance of DHS's Science and Technology Directorate, is the development of LEPs that could be installed where space constraints and interference with radiation detectors make deployment of large-scale NII systems difficult, but these efforts are still ongoing. Other options are to locate large-scale NII systems in post-primary, a solution used at the Mariposa commercial crossing at the Nogales, Arizona, POE, or to redevelop border crossings. CBP has also installed large-scale NII systems across the international border—for example in Canada, at the Peace Bridge crossing at the Buffalo, New York, POE—however, this may not be possible on the southern border.

Figure 13: Limited Space in Preprimary at the DeConcini Passenger Vehicle Crossing, Nogales, Arizona



Source: GAO (photo). | GAO-25-107379

Note: The U.S.-Mexico international border is indicated by a line of red and white bumps, centered between the yellow bumps.

As stated earlier, passenger traffic at the southwest border has been one of the primary modes of drug trafficking in the U.S.⁴⁶ Additionally, according to the fiscal year 2022 scanning plan update, over 90 percent of the total drug seizures in fiscal years 2017 through 2021 were accomplished through large-scale NII scanning of approximately 2 percent of the passenger vehicle traffic in secondary inspection. Further, according to CBP data, in fiscal year 2020, the agency's scanning of passenger vehicles in secondary inspection areas at the San Ysidro and Otay Mesa crossings, and the Nogales POE, which includes the DeConcini crossing, accounted for nearly 40 percent of total seizures at land POEs in that fiscal year despite scanning less than 1 percent of the total passenger vehicle traffic.

The Securing America's Ports Act directed CBP to develop a plan and to provide regular updates on its efforts to increase commercial vehicle, passenger vehicle, and freight rail scan rates to 100 percent at land POEs using large-scale NII systems. As part of its plan, CBP was to demonstrate how it would reach this 100 percent scanning rate over a period of years, the estimated costs of doing so, and a corresponding acquisition plan. To satisfy this requirement, CBP submitted its *Large Scale Non-Intrusive Inspection Scanning Plan, Fiscal Year 2021 Report to Congress* in 2022. In 2023, CBP released the most recent update to the scanning plan.

While CBP's scanning plan states its intent to accomplish 100 percent scanning using large-scale NII systems at land POEs, the plan does not include nine passenger vehicle land crossings along the southwest border, including three high-traffic crossings.⁴⁷ These nine passenger vehicle crossings comprise about 30 percent of total passenger vehicle traffic entering the U.S. as a whole, which is about 40 percent of passenger vehicle traffic entering the U.S. at southwest land border crossings. Excluding these crossings from its plan may not provide CBP the information it needs to ensure that it will have the necessary large-scale NII systems in place for scanning. CBP is working on solutions to enable large-scale NII systems to be installed at locations with limited space, such as the three high-traffic crossings noted above. However, without a plan for the southwest border that includes these nine

⁴⁶Department of Homeland Security, *Non-Intrusive Inspection Scanning Plan Fiscal Year 2022 Report to Congress*.

⁴⁷As noted previously, we did not evaluate CBP's plans for large-scale NII deployments to the northern border.

passenger vehicle crossings, CBP is not well positioned to achieve its goal for 100 percent scanning of passenger and commercial vehicles and rail containers using large-scale NII systems at land POEs. These scanning capabilities could assist in the interdiction of additional illicit goods, which contributes to the achievement of CBP's mission.

CBP is Acquiring New Technologies to Improve Scanning Efficiency

CBP is in the process of acquiring new technologies intended to increase scanning efficiency and throughput. This is to limit the substantial increase in the scanning-related resources CBP will need to expend as additional NII systems are deployed.

According to CBP's fiscal year 2021 scanning plan, these technologies are intended to allow it to achieve 100 percent scanning without needing a large number of additional officers. CBP also noted that improved inspection processes with NII systems would allow officers to carry out preprimary vehicle scans without increasing vehicle wait times in primary inspection.

The NII Integration (NII-I) program, which CBP established in 2019, is responsible for these efforts. The program aims to transition stand-alone, non-networked large-scale NII systems to a more integrated network of NII systems capable of high-volume scanning. For example, the program is intended to interconnect NII systems from all vendors and integrate image review with new automation and existing CBP law-enforcement tools such as cargo manifests containing trade and travel data. The NII-I program is in the early stages of evaluating two technologies and a new data management platform to improve scanning efficiency.

- **Common integration platform.** The integration platform is a combination of software and hardware systems intended to collect and transmit data from large-scale NII systems to centralized locations or command centers where it can be more easily reviewed and shared. In its 2024 functional requirements document, the NII-I program identified four capabilities it needed for the platform: (1) secure interfaces with other CBP law enforcement tools that allow automatic associations with cargo manifests or other information; (2) real-time transfer of scan images from any MEP or LEP system in a standardized format to the CBP cloud; (3) remote review of NII images by officers in a command center or other remote location; and

(4) remote monitoring of NII system performance and maintenance.⁴⁸ The common image viewer is intended to be the user interface to the common platform. CBP closed its first solicitation for a commercial, off-the-shelf common integration platform solution in January 2025.

- **Common image viewer.** The viewer is intended to allow officers to review images produced by any large-scale NII system from a single terminal. This addresses a key limitation of current stand-alone NII systems, which require vendor-specific interfaces for operation and image review and are not able to attach officer decisions (or other metadata) to vehicle scans. The common viewer also supports CBP plans to centralize the review of NII images into command centers. CBP closed its first solicitation for a commercial, off-the-shelf common viewer solution in January 2025.⁴⁹
- **Anomaly detection algorithms.** CBP has explored the potential for algorithms to improve efficiency, throughput, and detection effectiveness by helping officers identify anomalies in images of scanned passenger and commercial vehicles, and their contents, which may need secondary inspection. In 2023, CBP awarded three contracts to support algorithm development and one contract for independent review of systems and design.⁵⁰

Conclusions

Since 2019, CBP has received over \$2 billion used to acquire and deploy additional NII systems at land POEs, which are a key drug smuggling route for transnational criminal organizations. Since that time, CBP has made progress deploying these new systems and increasing the number of passenger and commercial vehicles that it scans in preprimary inspection areas. However, further actions to improve CBP's management of the NII program and its plans for deploying additional

⁴⁸Department of Homeland Security, U.S. Customs and Border Protection, *NII-I CIP Functional Requirements Document*, Request for Proposal 70B04C25R00000011 (December 13, 2024).

⁴⁹CBP has pursued this technology since at least 2017, when it worked with the DHS Science and Technology Directorate to develop a common user interface. That interface, like the common image viewer, was intended to allow CBP officers to view images and data from multiple NII systems on a single software platform. See Department of Homeland Security, U.S. Customs and Border Protection, *Budget Overview Fiscal Year 2018 Congressional Justification*. (October 2017)

⁵⁰The DHS Countering Weapons of Mass Destruction Office awarded two contracts in 2023 to develop nuclear and radiological threat detection algorithms for NII systems. According to DHS officials, these tools could work in tandem with the anomaly detection algorithms.

systems could strengthen its interdiction efforts and achievement of its mission.

Although CBP uses performance data to help ensure that large-scale NII systems are operational, it has not defined all of its key performance parameters. As a result, CBP does not have assurance that the NII program is working as intended. Clearly defining its key performance parameters and using them for reporting would help CBP manage the NII program (e.g., by comparing actual against planned performance results) and could help inform future procurement decisions.

Further, Congress directed CBP to develop a plan to achieve 100 percent scanning of commercial and passenger vehicles and freight rail entering the U.S. at land POEs by 2027 using large-scale NII systems. While CBP's plan states its intent to accomplish this goal, the plan does not include large-scale NII system deployments to some of CBP's highest-passenger traffic crossings at the southwest border. Excluding these crossings from its plan may not provide CBP the information it needs to ensure that it will have the necessary large-scale NII systems in place to achieve its scanning goals. As a result, CBP risks entry of many unscanned passenger vehicles, hampering its ability to prevent illegal drugs and other contraband from entering the U.S.

Recommendations for Executive Action

We are making the following two recommendations to CBP:

The Commissioner of CBP should clearly define all NII key performance parameters and report performance using them. (Recommendation 1)

The Commissioner of CBP should determine how to include deployment of large-scale NII systems to all southwest border land POEs in updates to its deployment plans. (Recommendation 2)

Agency Comments

We provided a draft of this report to DHS for review and comment. In its written comments, reproduced in appendix IV, DHS agreed with the recommendations and identified steps it plans to address them. DHS also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Homeland Security, and other interested parties. In addition, the report is available at no charge on the GAO website at <https://www.gao.gov>.

If you or your staff have any questions about this report, please contact Hilary M. Benedict at benedicth@gao.gov or Rebecca Gambler at gablerr@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

//SIGNED//

Hilary M. Benedict
Acting Director, Science, Technology Assessment, and Analytics

//SIGNED//

Rebecca Gambler
Director, Homeland Security and Justice

List of Requesters

The Honorable John Cornyn
Chairman
Subcommittee on Border Security and Immigration
Committee on the Judiciary
United States Senate

The Honorable Andrew Garbarino
Chairman
The Honorable Bennie G. Thompson
Ranking Member
Committee on Homeland Security
House of Representatives

The Honorable Lou Correa
Ranking Member
Subcommittee on Border Security and Enforcement
Committee on Homeland Security
House of Representatives

Appendix I: Objectives, Scope, and Methodology

This report examines:

1. how U.S. Customs and Border Protection (CBP) uses non-intrusive inspection (NII) systems during inspections at land ports of entry (POE);
2. the extent to which CBP has assessed the performance of its large-scale NII systems; and
3. the status of CBP's large-scale NII system deployment and the extent to which CBP has planned for future deployments.

To determine how CBP uses large- and small-scale NII systems during inspections at land POEs, we reviewed documentation on NII systems capabilities and inspection procedures, including CBP's directive on the primary processing of travelers and vehicles entering the U.S.¹ We also analyzed CBP data on its inventory of large- and small-scale NII systems at land POEs. The inventory data for all large-scale and some small-scale NII systems were current as of January 2025, and for some small-scale NII systems were current as of October 2024.² To assess the reliability of the inventory data, we reviewed the data to identify any errors and missing data, and we asked CBP officials questions to clarify any issues we identified. We determined that the data were sufficiently reliable for the purpose of reporting information about the number and types of NII systems at land POEs.

Further, we interviewed and observed CBP officers conducting inspections of passengers and vehicles using NII systems at land POEs within the El Paso, Texas; Laredo, Texas; San Diego, California; and Tucson, Arizona, field offices. We selected these locations to include all four field offices where large-scale NII systems had been deployed in preprimary inspection areas at the time of our site visits in 2024, all of which were along the southwest border. Within each field office, we visited POEs with low-energy portals for scanning passenger vehicles, multi-energy portals for scanning commercial vehicles, and NII rail

¹U.S. Customs and Border Protection, *CBP Directive No. 3340-040A: Primary Processing of Travelers and Vehicles Seeking Entry to the U.S. at Land Ports of Entry* (January 2011).

²CBP provided inventory information for all NII systems in October 2024. CBP provided updated inventory information for NII systems in January 2025. The updated data did not include small-scale handheld NII systems. According to CBP the inventory of small-scale handheld NII systems would not have changed significantly between October 2024 and January 2025.

systems.³ We also interviewed CBP officials from the Buffalo, New York, field office, which at the time of our review was in the process of deploying a new high-energy NII rail system, one type of NII system. The information and observations we obtained from these interviews are not generalizable to all POEs, but they provide perspectives from CBP officers on how they are using the NII systems when they conduct inspections and their usefulness in detecting contraband. We also interviewed officials from CBP and the Department of Homeland Security's (DHS) Science and Technology Directorate responsible for managing the NII program and acquiring new technologies.⁴

To determine the extent to which CBP has assessed the performance of its large-scale NII systems at land POEs, we reviewed CBP documentation related to the performance of these systems, including operational analysis reports in calendar years 2020 through 2023.⁵ We also reviewed CBP data related to the performance of large-scale NII systems from fiscal year 2024.⁶ These data include operational availability and scan rate.⁷ To assess the reliability of these data, we reviewed the data to identify any errors and missing data, and we interviewed CBP officials knowledgeable about the data. We determined that the data were sufficiently reliable for the purpose of describing the performance of NII systems. In addition, we interviewed CBP headquarters officials to

³Within the El Paso, Texas, field office, we visited the Bridge of the Americas and Paso Del Norte crossings at the El Paso, Texas, POE; the Ysleta, Texas, POE; and the Santa Teresa, New Mexico, POE. Within the Laredo, Texas, field office, we visited the Colombia Bridge and rail crossings at the Laredo, Texas, POE; the Anzalduas crossing at the Hidalgo, Texas, POE; and the Veterans International Bridge and Los Indios crossings at the Brownsville, Texas, POE. Within the San Diego, California, field office, we visited the Calexico East and San Ysidro, California, POEs. Within the Tucson, Arizona, field office, we visited the Mariposa and DeConcini crossings at the Nogales, Arizona, POE.

⁴The Science and Technology Directorate delivers innovative technology solutions to support DHS missions and first responders and serves as the science advisor to the Secretary and the primary research and development arm of DHS.

⁵We reviewed reports from this time period because they were the most recent available at the time of our review.

⁶We reviewed fiscal year 2024 because it was the most recent fiscal year for which data were available at the time of our review.

⁷According to CBP, operational availability is the percentage of time NII systems are available to use for operations, excluding preventative maintenance. The operational availability data include all CBP large-scale NII systems, which is not limited to land POEs. Scan rate is the percentage of vehicles scanned by large-scale NII systems. The scan rate data include passenger and commercial vehicles at land POEs along the southwest border.

determine how they assess the performance of NII systems, and officials from the DHS Office of Program Accountability and Risk Management to determine how they oversee the NII program.⁸ To obtain further perspectives on NII systems performance, we interviewed CBP officers at the five field offices we selected, and land POEs within these field offices. We evaluated CBP's efforts to assess NII systems performance against DHS and Office of Management and Budget guidance for reporting performance information in operational analysis reports.⁹

To determine the status of CBP's large-scale NII systems deployment to land POEs and the extent to which CBP has planned for future deployments, we reviewed CBP's NII systems deployment plans, schedule and cost estimates, data on funding used for the NII program in fiscal years 2019 through 2024, and DHS and CBP budget requests and congressional appropriations. More specifically, we reviewed CBP reports to Congress, deployment prioritization plans, life cycle cost estimates, and the Integrated Master Schedule of recent, ongoing, and planned deployments of new large-scale NII systems as of February 2025.¹⁰ To assess the reliability of the Integrated Master Schedule, we reviewed the schedule to identify any errors and missing data and we interviewed CBP officials responsible for maintaining it. We determined that the data in this schedule were sufficiently reliable to provide information about the number, type, location, and estimated dates of recent, ongoing, and planned deployments of large-scale NII systems, as presented by CBP.¹¹

To assess the reliability of funding data for the NII program in fiscal years 2019 through 2024 we reviewed the data to identify any errors and missing data and interviewed CBP officials responsible for managing the

⁸According to DHS, the Office of Program Accountability and Risk Management manages DHS-wide policy, governance, and oversight of the largest and most complex DHS acquisition programs and supports senior leadership decision-making to ensure effective and efficient program execution.

⁹DHS Office of Program Accountability & Risk Management, *Systems Engineering Life Cycle Guidebook* (May 2021) and Office of Management and Budget, *Capital Programming Guide v 3.1 Supplement to Office of Management and Budget Circular A-11: Planning, Budgeting, and Acquisition of Capital Assets* (2024).

¹⁰For example, see U.S. Customs and Border Protection, *Large Scale Non-Intrusive Inspection Scanning Plan - Annual Update, Fiscal Year 2022 Report to Congress* (March 31, 2023).

¹¹We did not conduct an independent reliability assessment of the large-scale NII system Integrated Master Schedule. CBP updates the schedule weekly and estimated dates of planned completions may change due to delays or other factors.

data. We also reviewed congressional appropriations and documents related to DHS and CBP funding and budget requests. We determined that the funding data were sufficiently reliable for the purposes of providing information about the funds available to be used for the NII program.

We evaluated CBP's efforts to deploy large-scale NII systems to land POEs, specifically to the southwest border, against the deployment plan it developed to meet congressional requirements directing CBP to develop a plan to increase large-scale NII scan rates for passenger and commercial vehicles, and rail containers entering the U.S at land POEs.¹² In particular, we evaluated the plan against the large-scale NII deployments listed in CBP's integrated master schedule, a list of southwest land border crossings and POEs, and traffic volume data for fiscal year 2024. We did not assess the completeness of CBP's plans for the northern border. We also interviewed CBP headquarters officials responsible for planning and overseeing large-scale NII deployments, managing its acquisition efforts, and improving scanning efficiency.

We conducted this performance audit from February 2024 to September 2025 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹²Securing America's Ports Act, Pub. L. No. 116-299, 134 Stat. 4906 (2021), codified at 6 U.S.C. § 211 note.

Appendix II: U.S. Customs and Border Protection Non-Intrusive Inspection Systems at Land Ports of Entry

Table 6 lists the types of large- and small-scale NII systems U.S. Customs and Border Protection (CBP) has deployed across northern and southwest land ports of entry (POE). For each equipment type, there is a description of how these systems are used at land POEs to inspect commercial and passenger vehicles and railcars and their contents, and travelers and their belongings, to help detect illegal drugs and other contraband. The table also provides the total number of large- and small-scale NII systems CBP has in inventory at these land POEs. Inventory information for the large- and small-scale NII systems, except for handheld, was current as of January 2025. Handheld NII system inventory information was current as of October 2024.¹

¹CBP provided inventory information for all NII systems in October 2024. CBP provided updated inventory information for NII systems in January 2025. The updated data did not include small-scale handheld NII systems. According to CBP the inventory of small-scale handheld NII systems would not have changed significantly between October 2024 and January 2025.

**Appendix II: U.S. Customs and Border
Protection Non-Intrusive Inspection Systems
at Land Ports of Entry**

Interactive: Click on a thumbnail image to enlarge. Click on the enlarged image to make it disappear.

Table 6: U.S. Customs and Border Protection (CBP) Non-Intrusive Inspection Systems at Land Ports of Entry

Large-scale systems	Description	Number of systems available
Gamma-source fixed portal	<p>Uses low-level gamma radiation to generate a side image of commercial vehicles and their contents. Before the vehicle is scanned, the occupants exit the vehicle and are brought to a waiting area. The system then moves the gamma source and detector along the length of the vehicle.</p> <p>These systems are used in commercial vehicle secondary inspection areas.</p> <p>To minimize exposure, a radiation exclusion zone is maintained for these systems. CBP is phasing out large-scale gamma-source systems.</p>	5
Gamma-source mobile	<p>Uses low-level gamma radiation to generate a side image of commercial vehicles and their contents. This system can be operated in stationary mode or drive-by mode. In stationary mode, the driver stops the vehicle past the gamma radiation source before the system begins the scan, and only the trailer is scanned as the vehicle passes through the portal. In drive-by mode, vehicle occupants exit the vehicle and are brought to a waiting area, and the system operator drives alongside the vehicle as the system images it.</p> <p>This system can be relocated and is used in stationary mode in secondary inspection areas and in drive-by mode in preprimary or primary inspection areas.</p> <p>To minimize exposure, a radiation exclusion zone is maintained for these systems. CBP is phasing out large-scale gamma-source systems.</p>	1
Fixed gamma-source rail	<p>Uses low-energy gamma radiation to generate a side image of each rail container and its contents as the train slowly passes through the system.</p> <p>To minimize exposure, a radiation exclusion zone is maintained for these systems. CBP is phasing out large-scale gamma-source systems.</p>	25
High-energy gantry	<p>Uses high-energy transmission X-rays to penetrate dense cargo in stationary commercial vehicles to generate a side image. This system is used in secondary inspection areas.</p> <p>Because this system uses high-energy X-rays, the driver must exit the vehicle and go to a waiting area, and the system is inside a radiation shielding structure to minimize exposure.</p>	13

**Appendix II: U.S. Customs and Border
Protection Non-Intrusive Inspection Systems
at Land Ports of Entry**

Large-scale systems	Description	Number of systems
High-energy rail	<p>Uses high-energy transmission X-rays to provide a side image of rail containers and their contents as the train passes by the system.</p> <p>Because these systems use high-energy X-rays, there is a radiation exclusion zone to minimize exposure, and some models require shielding walls to provide protection.</p>	1 ^a
Low-energy portal in primary and preprimary	<p>Provides low-energy transmission and backscatter X-ray images of passenger vehicles. These systems scan vehicles as they are driven through them and occupants can remain in the vehicle. These systems provide a top-down image of the vehicle and can be deployed with undercarriage scanners to provide a bottom-up image.</p> <p>These systems are generally deployed to preprimary inspection areas but can also be deployed to primary and secondary inspection areas.</p>	32
Multi-energy portal	<p>Scans commercial vehicles using low-energy X-rays for the cabin and driver so the driver can remain in the vehicle, and varying energies of X-rays for the trailer and its cargo.</p> <p>These systems provide a side image of commercial vehicles. These systems can be deployed with undercarriage scanners to provide a bottom-up image and can include multi-view backscatter imaging.</p> <p>These systems are generally deployed to preprimary and primary inspection areas but can also be deployed to secondary inspection areas.</p>	16

**Appendix II: U.S. Customs and Border
Protection Non-Intrusive Inspection Systems
at Land Ports of Entry**

Low-energy portal in passenger secondary, commercial primary, and bus lanes	<p>Provides low-energy transmission and backscatter X-ray images of passenger and commercial vehicles and buses. The systems for buses provide a higher clearance than those for passenger vehicles to accommodate their height.</p> <p>These systems scan passenger and commercial vehicles as they are driven through them and occupants can remain in the vehicle as it is scanned. According to CBP officials, for buses, the passengers are first off-loaded for pedestrian inspection before the bus is driven through the system to be scanned.</p> <p>These systems can provide three views—which include two side views and a top view—or four views, which adds a bottom view.</p> <p>These systems are used in secondary inspection areas for passenger vehicles and primary inspection areas for commercial vehicles. According to CBP officials, these systems are generally used in secondary inspection for buses.</p>	62
Low-energy mobile	<p>Provides a low energy X-ray image of entire passenger vehicles. One model uses low-energy transmission X-rays to scan vehicles from the top down in stationary mode as each vehicle is driven through the system. The other model scans unoccupied vehicles in drive-by mode using backscatter X-rays to generate a side image.</p> <p>These systems can be relocated and are used in secondary inspection areas.</p>	33
Medium-energy fixed portal and mobile	<p>Provides dual-energy transmission X-ray side images of commercial vehicles and their contents. Vehicles are driven through fixed systems as they are scanned. Mobile systems can be operated in either drive-by mode where the system operator drives alongside the vehicle as the system scans it, or in stationary mode where the vehicle is driven through the system as it is scanned.</p> <p>Fixed systems are used in secondary inspection areas. Mobile systems can be relocated and are used in drive-by mode in preprimary inspection areas and in stationary mode in secondary inspection areas.</p>	40
Small-scale systems		
Handheld density meter	Measures changes in density in inaccessible areas, such as car panels and tires. Changes in density can be an indication of concealed contraband.	1,358

**Appendix II: U.S. Customs and Border
Protection Non-Intrusive Inspection Systems
at Land Ports of Entry**

Small-scale systems	Description	Number of systems
Handheld fiberscope and videoscope	A fiberscope provides a view and a videoscope provides video inside confined spaces where contraband may be hidden, such as vehicle fuel tanks, dashboards, and doors.	686
Handheld X-ray imager	Displays real-time images of the area being inspected through up to 12-gauge steel—about 2mm thick—using backscatter X-ray. Newer models include a lead detection algorithm.	105
Handheld chemical identifiers	<p>Help identify substances such as drugs and explosives using Raman spectroscopy, a combination of Raman spectroscopy and Fourier transform infrared (FTIR) spectroscopy, or mass spectrometry.</p> <p>The Raman spectroscopy system can identify over 400 substances, including narcotics, stimulants, depressants, hallucinogens, and analgesics.</p> <p>The FTIR spectroscopy/Raman spectroscopy system can use FTIR spectroscopy to identify colored and fluorescent samples, and Raman spectroscopy to identify chemicals dissolved in water and semi-translucent containers.</p> <p>The mass spectrometry system can identify trace vapor and trace amounts of chemicals.</p>	148

**Appendix II: U.S. Customs and Border
Protection Non-Intrusive Inspection Systems
at Land Ports of Entry**

Small-scale systems	Description	Number of systems
Baggage and parcel scanners	Provides X-ray images of the contents of baggage and parcels using transmission X-rays. Baggage scanners can range from large capacity, fixed systems to portable, lightweight desktop or cart-mounted scanners. Some systems take multiple images of the item as it passes through the system and then use computed tomography (CT) to provide a 360-degree, three-dimensional view of the item.	57
Pallet scanner	Images the contents of consolidated cargo using either medium- or high-energy X-rays. Small systems can scan up to 2,500 pounds of material and large systems can scan up to 5,800 pounds.	3
Passive body scanner	Provides terahertz (thermal) and visible spectrum video of moving people. The terahertz video shows differences in temperature from objects blocking heat from the body, which may be contraband.	77
X-ray van	Combines transmission and backscatter X-ray imaging with image enhancement software to detect anomalies in parcels, boxes, and luggage.	21

Source: GAO analysis of CBP and vendor information; (photos from top to bottom) CBP, GAO, GAO, GAO, GAO, GAO, GAO, CBP, CBP, CBP, CBP, CBP, CBP, GAO, GAO, GAO. | GAO-25-107379

Note: Inventory information was as of January 2025 for all large-scale and small-scale NII systems except for handheld systems. Information for small-scale NII handheld systems was as of October 2024.

^aThe NII program has not completed the deployment of any high-energy NII rail systems. However, according to CBP officials there is a high-energy rail system in Laredo, Texas, that was privately funded through CBP's Donations Acceptance Program. The Donations Acceptance Program is a mechanism by which private sector and government entities can donate property and services that facilitate trade and travel.

Appendix III: U.S. Customs and Border Protection Deployment of Large-Scale Non-Intrusive Inspection Systems

Table 7 lists all U.S. Customs and Border Protection (CBP) crossings at the southwest border, by state, where commercial or passenger vehicles may enter the U.S. from Mexico. For each crossing, the table shows whether CBP has installed or plans to install large-scale non-intrusive inspection (NII) systems in preprimary inspection areas, the date when systems were or are projected to be operational, and the percentage of the total commercial or passenger vehicle traffic volume entering the U.S. at locations along the southwest border in fiscal year 2024. Dates for large-scale NII system deployments were current as of February 2025. For each state, the table lists the total number of large-scale NII systems deployed or planned for deployment and the percent of overall southwest border traffic that entered the U.S. at each port of entry and crossing. Fiscal year 2024 arrivals at these southwest border locations totaled 7,541,799 commercial and 76,204,468 passenger vehicles.

Table 7: Planned U.S. Customs and Border Protection (CBP) Deployment of Large-Scale Non-Intrusive Inspection Systems to the Southwest Border (SWB), as of February 2025

Port of entry or crossing	Commercial vehicle scanning				Passenger vehicle scanning			
	Status	Number of systems ^a	Date of operation ^b	Percent total SWB volume	Status	Number of systems ^a	Date of operation ^b	Percent total SWB volume
Arizona total		6		6.29%		10		12.16%
Douglas	○	1	—	0.37%	○	3	—	2.00%
Lukeville	○	1	—	0.01%	n/p	—	—	0.51%
Naco	○	1	—	0.04%	n/p	—	—	0.44%
Nogales				5.29%				4.86%
DeConcini		No commercial vehicles			n/p	—	—	2.89%
Mariposa	●	2 ^c	Sep 2023	5.29%	●	3	Jul 2026	1.97%
San Luis				0.59%				4.33%
San Luis I		No commercial vehicles			●	3	May 2026	4.33%
San Luis II	●	1	Feb 2024	0.59%		No passenger vehicles		
Sasabe		No commercial vehicles			○	1	—	0.02%
California total		5		20.90%		14		40.95%
Andrade		No commercial vehicles			n/p	—	—	0.80%
Calexico West		No commercial vehicles			●	9	Apr 2027	6.90%
Calexico East	●	2	Aug 2026	6.10%	●	4	Nov 2024	3.83%
Otay Mesa	●	2	Oct 2026	13.97%	n/p	—	—	8.19%
San Ysidro		No commercial vehicles			n/p	—	—	19.83%
Tecate	○	1	—	0.82%	●	1	Jan 2019	1.39%
New Mexico total		2		2.64%		5		1.59%
Columbus				0.25%				0.54%

**Appendix III: U.S. Customs and Border
Protection Deployment of Large-Scale Non-
Intrusive Inspection Systems**

Port of entry or crossing	Commercial vehicle scanning				Passenger vehicle scanning			
	Status	Number of systems ^a	Date of operation ^b	Percent total SWB volume	Status	Number of systems ^a	Date of operation ^b	Percent total SWB volume
Antelope Wells		No commercial vehicles			○	1	—	0.02%
Columbus	●	1	Sep 2025	0.25%	●	2	Jul 2026	0.52%
Santa Teresa	●	1	Jun 2023	2.39%	●	2	Jan 2025	1.05%
Texas total		32		70.18%		69		45.31%
Brownsville				4.10%				6.32%
Brownsville and Matamoros Bridge		No commercial vehicles			n/p	—	—	1.83%
Gateway Bridge		No commercial vehicles			n/p	—	—	1.49%
Los Indios Free Trade Bridge	●	2	Jun 2024	1.06%	●	2	May 2024	0.90%
Veterans International Bridge	●	2	Jun 2022	3.04%	●	4	Jan 2026	2.10%
Del Rio				1.02%				2.25%
Amistad Dam		No commercial vehicles			●	1	Apr 2025	0.07%
Del Rio International Bridge	●	1	Jan 2025	1.02%	●	4	Feb 2025	2.18%
Eagle Pass				3.03%				3.70%
Bridge I		No commercial vehicles			●	2	Nov 2025	1.45%
Bridge II	●	1	Feb 2024	3.03%	●	3	Nov 2025	2.25%
El Paso				1.65%				9.83%
Bridge of the Americas	○	2	—	1.65%	●	5	Nov 2023	4.40%
Paso del Norte		No commercial vehicles			●	7	Mar 2026	3.17%
Stanton Commuter Lanes		No commercial vehicles			○	1	—	2.26%
Hidalgo				9.40%				6.29%
Anzalduas ^d	●	2	Jun 2026		●	3	Jun 2022	2.25%
Hidalgo		No commercial vehicles			●	6	Dec 2025	3.42%
Pharr	●	3	Feb 2026	9.40%	●	3	Oct 2026	0.62%
Laredo				40.13%				6.65%

**Appendix III: U.S. Customs and Border
Protection Deployment of Large-Scale Non-
Intrusive Inspection Systems**

Port of entry or crossing	Commercial vehicle scanning				Passenger vehicle scanning			
	Status	Number of systems ^a	Date of operation ^b	Percent total SWB volume	Status	Number of systems ^a	Date of operation ^b	Percent total SWB volume
Colombia Solidarity	●	2	Feb 2024	10.01%	●	2	Mar 2024	0.51%
Gateway to the Americas		No commercial vehicles			n/p	—	—	2.04%
Lincoln-Juarez		No commercial vehicles			●	5	Jun 2025	4.10%
World Trade Bridge	●	5	Oct 2024	30.11%	No passenger vehicles			
FAST Lanes	●	2	Jul 2024					
Presidio	●	1	Mar 2022	0.15%	●	2	Jul 2025	0.96%
Progreso				0.80%				1.92%
Donna International ^d	●	2	Apr 2025		●	3	Nov 2026	1.18%
Progreso International Bridge	●	1	Jun 2026	0.80%	○	2	—	0.74%
Rio Grande City				0.52%				0.60%
Los Ebanos Ferry Crossing		No commercial vehicles			●	1	Dec 2026	0.04%
Rio Grande City Bridge	●	1	Dec 2025	0.52%	●	2	Nov 2024	0.57%
Roma				0.61%				1.10%
Falcon Dam		No commercial vehicles			●	1	Nov 2018	0.19%
Roma	●	1	Aug 2026	0.61%	○	1	—	0.91%
Tornillo				0.26%				0.91%
Fort Hancock		No commercial vehicles			●	1	Feb 2026	0.14%
Marcelino Serna	●	1	Jul 2025	0.26%	●	2	Oct 2024	0.77%
Ysleta	●	3	Mar 2026	8.49%	●	6	Dec 2023	4.77%

● = Fully operational; ● = Deployment in process; ○ = Future deployment plans; n/p = No plans for deployment; — = Not applicable.

Source: GAO analysis of U. S. Customs and Border Protection information. | GAO-25-107379

^aThe number of large-scale non-intrusive inspection systems may indicate the 1) number of fully operational systems; 2) number of systems scheduled for installation; or 3) number of systems planned for future deployment as reported in CBP's Large Scale Non-Intrusive Inspection Scanning Plan Fiscal Year 2021 Report to Congress.

^bFor sites with a fully operational status, date of operation reflects the month when the last deployment task was completed. For sites still in the process of deployment, date of operation indicates the date when CBP anticipates beginning the last deployment task.

**Appendix III: U.S. Customs and Border
Protection Deployment of Large-Scale Non-
Intrusive Inspection Systems**

^cAccording to CBP officials, large-scale NII systems were installed in the postprimary inspection area at this location due to space limitations.

^dCommercial vehicles did not enter the U.S. at the Anzalduas, Texas, and Donna, Texas, crossings in fiscal year 2024. CBP is building new cargo facilities at these crossings to allow commercial traffic in the future.

Appendix IV: Comments from the Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
Security**

BY ELECTRONIC SUBMISSION

August 19, 2025

Hilary M. Benedict
Acting Director, Science, Technology Assessment, and Analytics
U.S. Government Accountability Office
441 G Street, NW
Washington, DC, 20548-0001

Rebecca Gambler
Director, Homeland Security and Justice
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548-0001

Re: Management Response to GAO-25-107379, "LAND PORT INSPECTIONS: CBP Should Improve Performance Data and Deployment Plans for Scanning Systems"

Dear Ms. Benedict and Ms. Gambler:

Thank you for the opportunity to comment on this draft report. The U.S. Department of Homeland Security (DHS, or the Department) appreciates the U.S. Government Accountability Office's (hereafter referred to as "the auditors") work in planning and conducting its review and issuing this report.

DHS leadership is pleased to note the auditor's positive recognition that the U.S. Customs and Border Protection (CBP) made progress deploying large-scale non-intrusive inspection systems. Specifically, the auditors noted that—as of February 2025—52 of 153 planned systems are fully operational, nearly all at preprimary inspection areas. CBP remains committed to ensuring the flow of lawful trade and travel and securing U.S. borders through the acquisition and deployment of non-intrusive inspection capabilities.

The draft report contained two recommendations with which the Department concurs. Enclosed find our detailed responses to each recommendation. DHS previously submitted technical comments addressing several accuracy, contextual, and other issues under a separate cover for GAO's consideration, as appropriate.

**Appendix IV: Comments from the Department
of Homeland Security**

Again, thank you for the opportunity to review and comment on this draft report. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Sincerely,

JEFFREY M.
BOBICH

Digitally signed by
JEFFREY M BOBICH
Date: 2025.08.19
17:46:04 -04'00'

JEFFREY M. BOBICH
Director of Financial Management

Enclosure

**Enclosure: Management Response to Recommendations
Contained in GAO-25-107379**

GAO recommended that the Commissioner of CBP:

Recommendation 1: Clearly define all [non-intrusive inspection] key performance parameters and report performance using them.

Response: Concur. CBP's Non-Intrusive Inspection Program will capture and clearly define system-level key performance indicators and reporting requirements for non-intrusive inspection systems within new contract Statements of Work. This will also include maintenance and availability requirements and reporting. Once this process is implemented, system reporting for these key performance indicators will be available through CBP data reporting processes, such as periodic briefings to CBP leadership.

Estimated Completion Date: June 30, 2026.

Recommendation 2: Determine how to include deployment of large-scale [non-intrusive inspection] systems to all southwest border land [ports of entry] in updates to its deployment plans.

Response: Concur. Since February 2025, CBP is actively collaborating with the DHS Science and Technology Directorate (S&T) to address radiation interference between the scanning and radiation detection technology, to include S&T contracting a vendor to develop a technological solution allowing scanning of passenger vehicles without causing interference with the radiation detection technology within limited real estate constraints. DHS S&T anticipates conducting a factory test of the technical solution in the first quarter of fiscal year 2026, which will be followed by an operational test and other activities as follows:

**Appendix IV: Comments from the Department
of Homeland Security**

Action	Interim Estimated Completion Date
Complete DHS S&T factory test of technical solution to radiation interference.	June 30, 2026
Begin analysis of preliminary results of DHS S&T operational tests.	March 31, 2027
Select radiation interference solution.	December 31, 2027
Deploy radiation interference solution	June 30, 2028
Update CBP deployment plans, as appropriate, to address deployment of large-scale non-intrusive inspection systems to all impacted Southwest border land ports of entry.	September 29, 2028

Overall Estimated Completion Date: September 29, 2028.

Appendix V: GAO Contacts and Staff Acknowledgments

GAO Contact

Hilary M. Benedict at benedicth@gao.gov

Rebecca Gambler at gablerr@gao.gov.

Staff Acknowledgments

In addition to the contact above, Rich Hung (Assistant Director), Kirk Kiestner (Assistant Director), Maria Stattel (Analyst in Charge), Dave Bieler, Nathan Hamm, Megan Graves, Ashley Stewart, Michele Feijfar, Mark Kuykendall, Anika McMillon, John Mingus, Jenny Chanley, Shelby Clark, Tyann Lee, Claire Li, and Susan Murphy also made important contributions to this report.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its [website](#) newly released reports, testimony, and correspondence. You can also [subscribe](#) to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [X](#), [LinkedIn](#), [Instagram](#), and [YouTube](#).
Subscribe to our [Email Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at <https://www.gao.gov>.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/about/what-gao-does/fraudnet>

Automated answering system: (800) 424-5454

Media Relations

Sarah Kaczmarek, Managing Director, Media@gao.gov

Congressional Relations

A. Nicole Clowers, Managing Director, CongRel@gao.gov

General Inquiries

<https://www.gao.gov/about/contact-us>



Please Print on Recycled Paper.