U.S. Customs and Border Protection

CBP Pre-Primary X-ray Scan of Occupied Vehicles at Veterans International Bridge

U.S. Customs and Border Protection (CBP) will use new drive-through X-ray systems approved to scan occupied commercial vehicles at the Veterans International Bridge Port of Entry (POE), as part of a new Non-Intrusive Inspection Concept of Operation. Trucks entering the port will encounter these systems in pre-primary, prior to arriving at the CBP primary officer entry booth. This method of inspection will expedite CBP's search of each vehicle, minimize delays, and requires the cooperation and assistance of the trade community. Although all X-ray scans conducted by CBP are safe and do not pose any threat to the public's health, CBP gives the driver and any other occupants of the vehicle the option to bypass pre-primary X-ray, though they are still subject to other forms of inspection. We encourage the trade community to study this information sheet and other related reference material to become familiar with the new procedures. Figure 1 provides an image of the X-ray systems at Veterans POE.

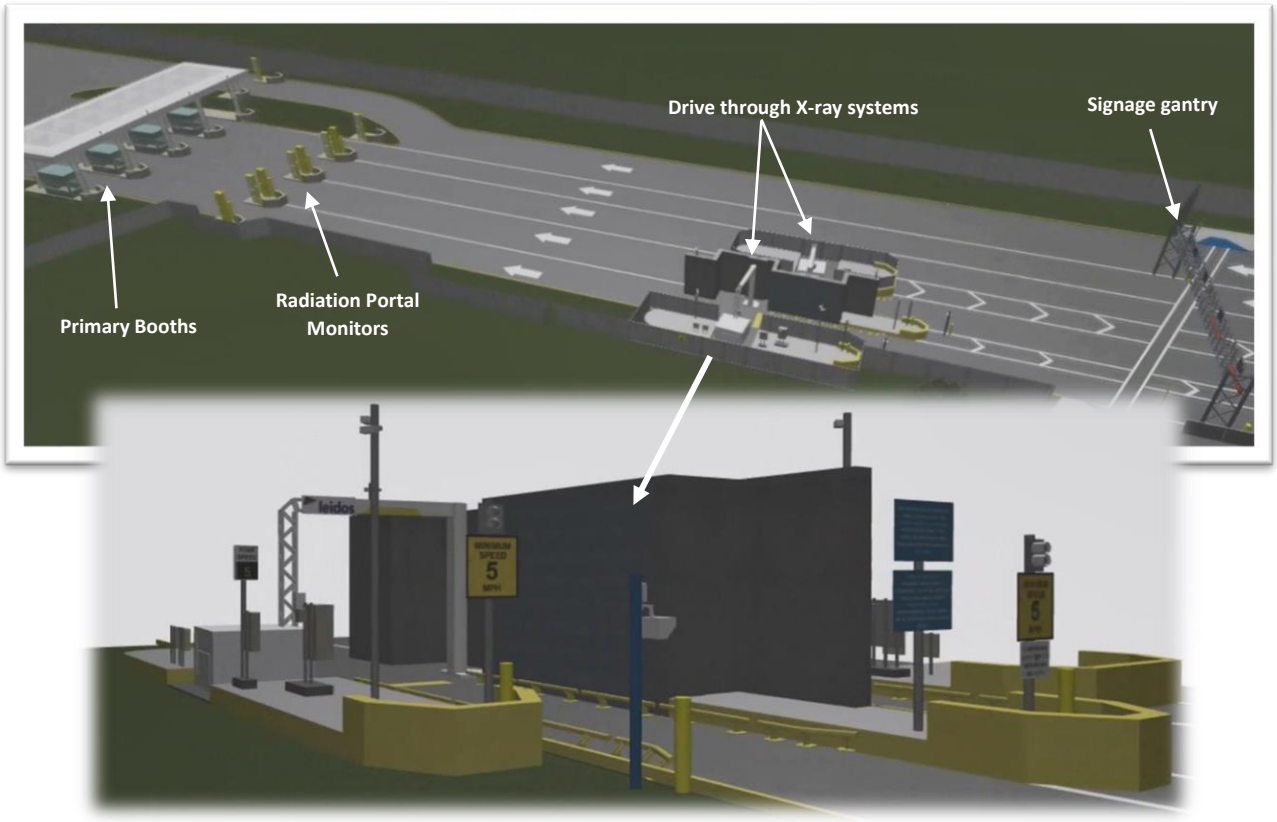

Figure 1. Cargo X-ray Portal at Veterans International Bridge Port of Entry

Concept of Operations – Port Entry and X-ray Scanning

Upon approach to Veterans Bridge POE, posted signage will direct the vehicle driver to the appropriate entry lane. Loaded trucks that will be scanned by one of the two installed X-ray system will proceed via the two left lanes #1 and #2 entering the POE and drivers who opt-out of X-ray scan, as well as oversize vehicles and CTPAT / FAST vehicles, will use the right-hand lanes #3 and #4. See Figure 2.

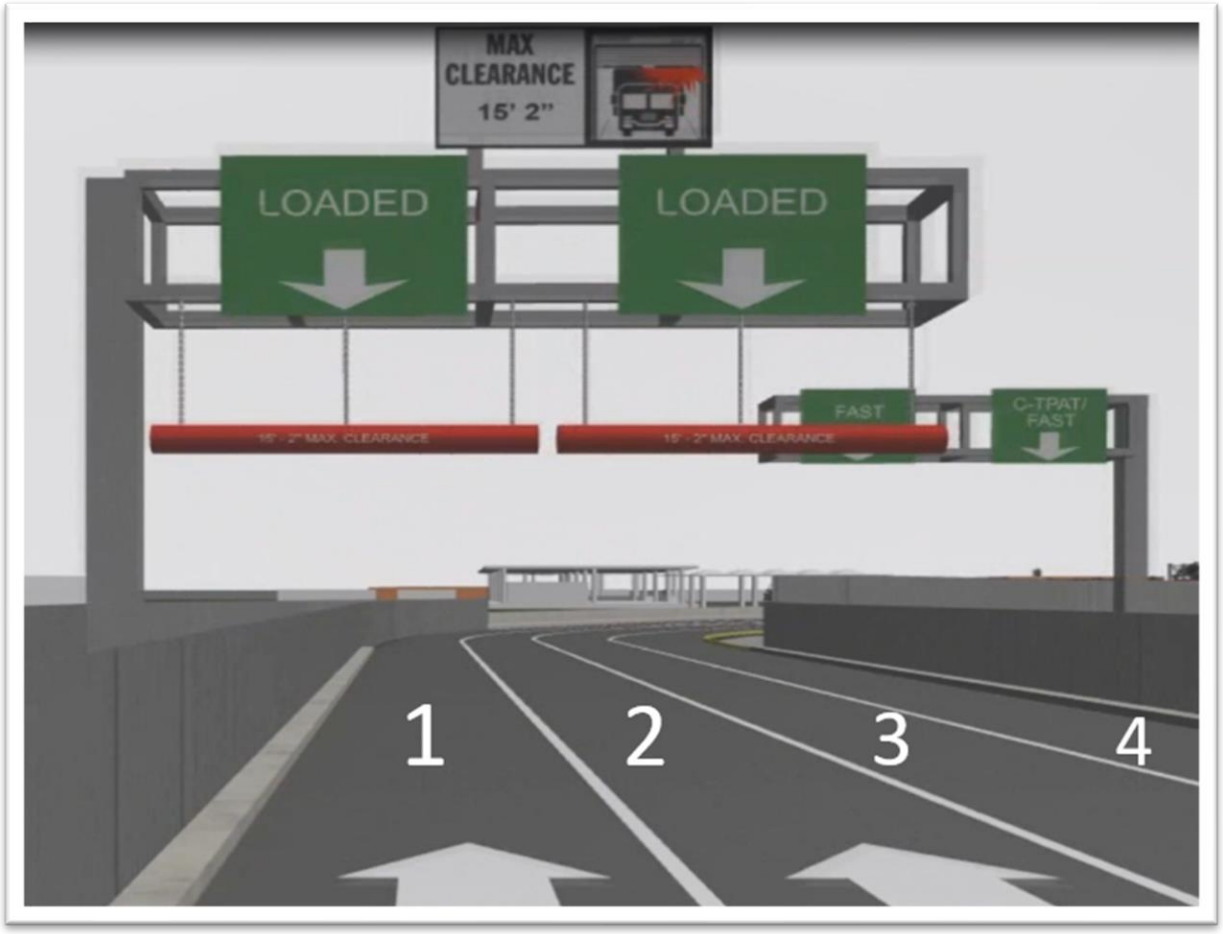

Figure 2. Entry Lane Signage

Trucks with drivers that opt-out of X-ray scan may be sent to POE secondary for additional inspection, at the discretion of the examining primary booth officer. CTPAT / FAST vehicles may be directed through the pre-primary X-ray systems at random, along with the general traffic, at the discretion of CBP operations. Empty trucks will bypass the primary booths via the far-right POE entry lanes and proceed directly to the secondary X-ray portal scanning system as they presently do today. See Figure 3.

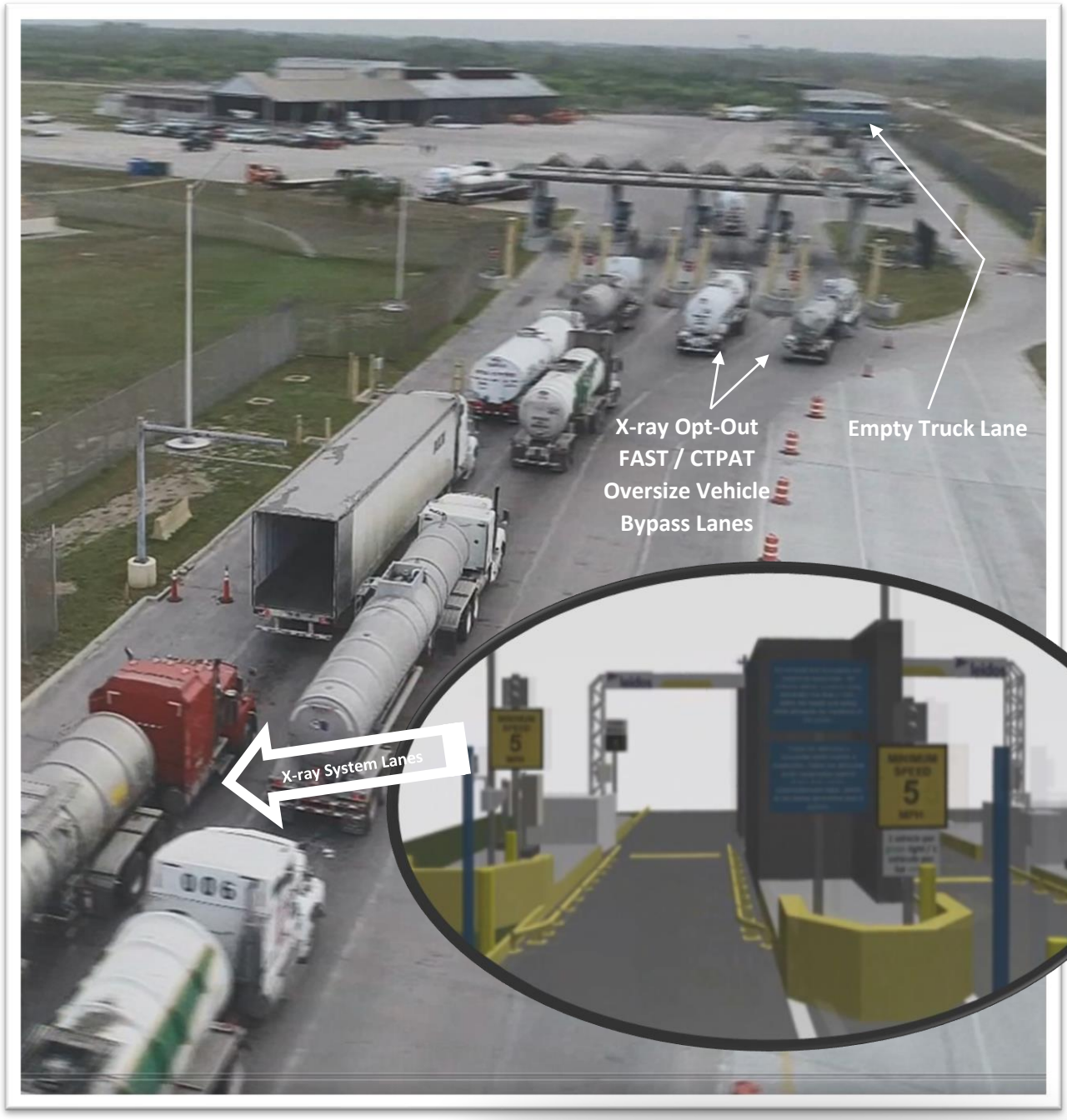

Figure 3. Entry Lane Assignment and Traffic Flow

Prior to X-ray, vehicles will pass under a laser over-height gauge and then through a gantry with mechanical oversize gauges suspended from it, as well as overhead signage indicating which primary lanes and which X-ray systems are open and operational. The laser and mechanical measurement gauges help to determine whether a vehicle can safely pass through the X-ray system. Over-width and over-height vehicles will be directed to the right-hand lane to go around the X-ray systems and be processed separately. See Figure 4.

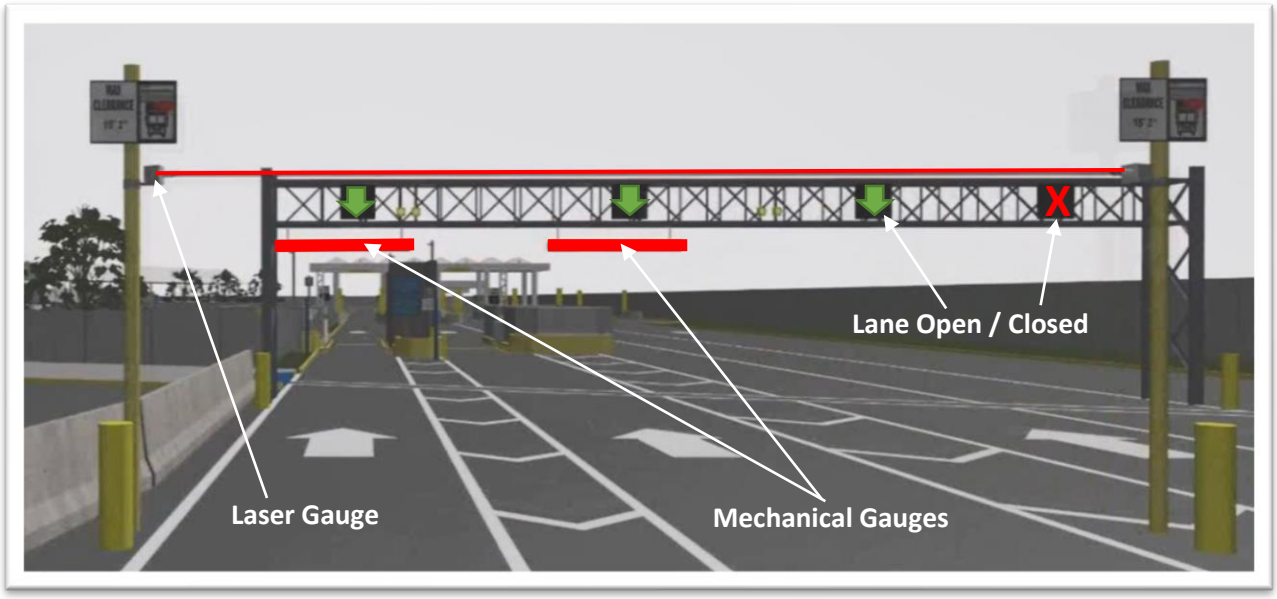

Figure 4. Electronic and Mechanical Over-height & Oversize Gauges

The pre-primary X-ray systems include pole-mounted cameras and other sensors that are used to collect identifying information about each vehicle and associate it with the entry trip and manifest data that shipping companies or a Customs broker pre-filed with CBP's Automated Commercial Environment (ACE) system prior to the truck's departure from Mexico. The CBP system will automatically read the truck and trailer license plates and the windshield-mounted CBP Decal and Transponder Online Procurement (DTOPS) RFID transponder tag, which is obtained following online payment of user crossing fees. All trucks entering the U.S. should have an installed DTOPS transponder tag. Just before transiting the X-ray system, trucks will come to a full stop and the driver can present an identifying QR code to a pole-mounted camera on the left side of the lane, as depicted below in Figure 5.

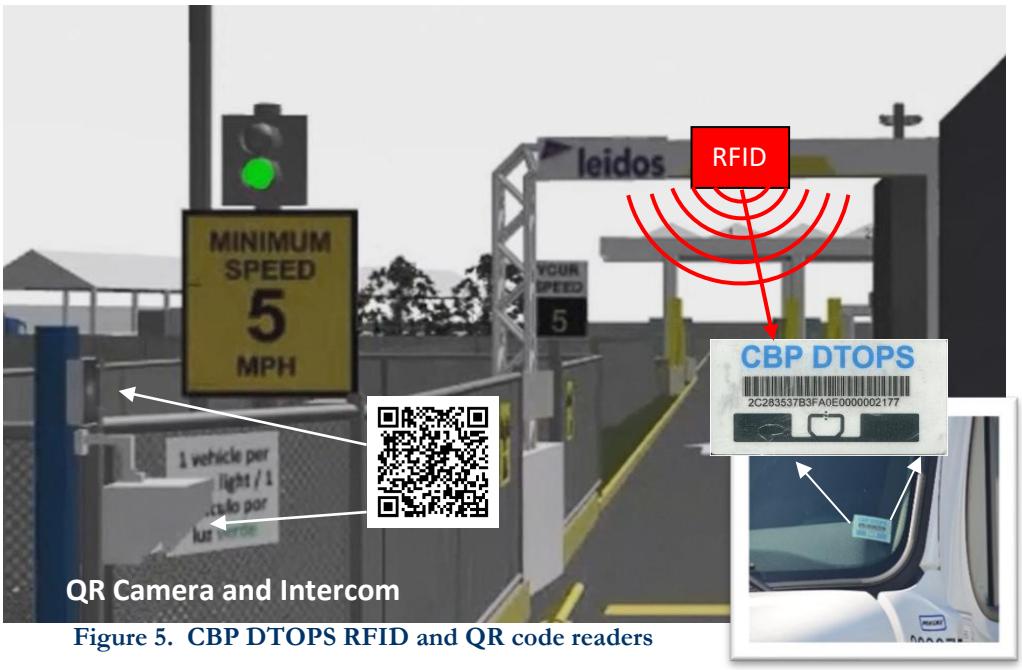

Figure 5. CBP DTOPS RFID and QR code readers

Drivers may proceed through the X-ray portal after a successful QR code read - see Figure 6. A two-way intercom system is also available to allow direct verbal communications with a CBP officer. Once the traffic light turns green, trucks must pass continuously through the portal at approximately 5 mph without stopping and then proceed to a primary booth.

Figure 6. QR code successful read

Encoding DTOPS RFID and QR Code Creation

In order for CBP to quickly identify each truck and associated ACE trip information for a given border crossing, the QR and/or the CBP DTOPS RFID tag will need to be coded with ACE trip number, date of arrival, tractor license plate and trailer license plate for each individual time a truck crosses the border. The QR code is printed on the ACE cover sheet provided via the ACE Trade portal, and it can also be created using a CBP-provided smart phone application as described below. CBP DTOPS tags have programmable memory that is used to store the same trip information for reading by CBP. CBP expects that drivers will either display a coded QR to the camera system as shown above, or that the CBP DTOPS RFID tag on the truck windshield will be coded with the necessary information for CBP systems to then read automatically. The trade community has the option to use either QR or RFID as they choose, properly coded, when crossing the border at the POE. Detailed instructions regarding the process for creating QR and coding RFID can be found at https://www.cbp.gov/document/guides or https://www.cbp.gov/trade/ace/training-and-reference-guides

CBP has developed an application, "CBP Truck QR," now available for both Android and Apple smartphones via their respective app stores, which the trade community can download to their personal smartphones and use, to create the QR or perform the RFID coding of the CBP DTOPS tag. In order to code the DTOPS RFID tag, the trade community will also need to acquire a handheld RFID read/write programming device, that can be paired with their personal smartphone hosting the RFID/QR application. The RFID programming device is available through various vendors via Amazon or other online outlet but does not include the smartphone. An example of the device is shown in Figure 7. Other RFID encoding devices with enterprise software systems that can encode the DTOPS windshield tag may become available from other industry sources.

Figure 7. TSL 1128 Bluetooth UHF RFID Reader