Future: The Technology

TSA continues to evolve as an agile national security agency with investments in new technologies, an emphasis on quickly deploying new capabilities to the frontlines, and a focus on improving security of our transportation systems. To stay ahead of the evolving threats, TSA identifies emerging technologies and works to aggressively implement new policies and procedures. TSA uses state-of-the art technologies to effectively screen passengers, checked baggage, and air cargo. TSA moves into the future with a renewed commitment to its people and the public they serve. The ork continues, securing the American people with integrity, respect and a commitment to the mission to protect the nation's transportation systems.


Early 2000s

Congress Mandates the Federalization of Airport Security Checkpoints

Congress federalized the airport security checkpoint through the Aviation and Transportation Security Act (ATSA) as a result of the September 11, 2001 attacks. ATSA mandated the Under Secretary of Transportation for Security to provide airline passenger and baggage screening to include protecting the aviation system against terrorist threats, sabotage, and other acts of violence through the deployment of passenger and baggage screeners; detection systems for explosives, weapons, and other contraband; and employing other security technologies. The policy mandated that for flights and flight segments originating in the U.S., the screening shall take place prior to boarding and by a federal government employee. On April 30, 2002, Baltimore Washington International Airport became the first federalized airport to operate with a Federal security screener workforce comprised of TSA employees.
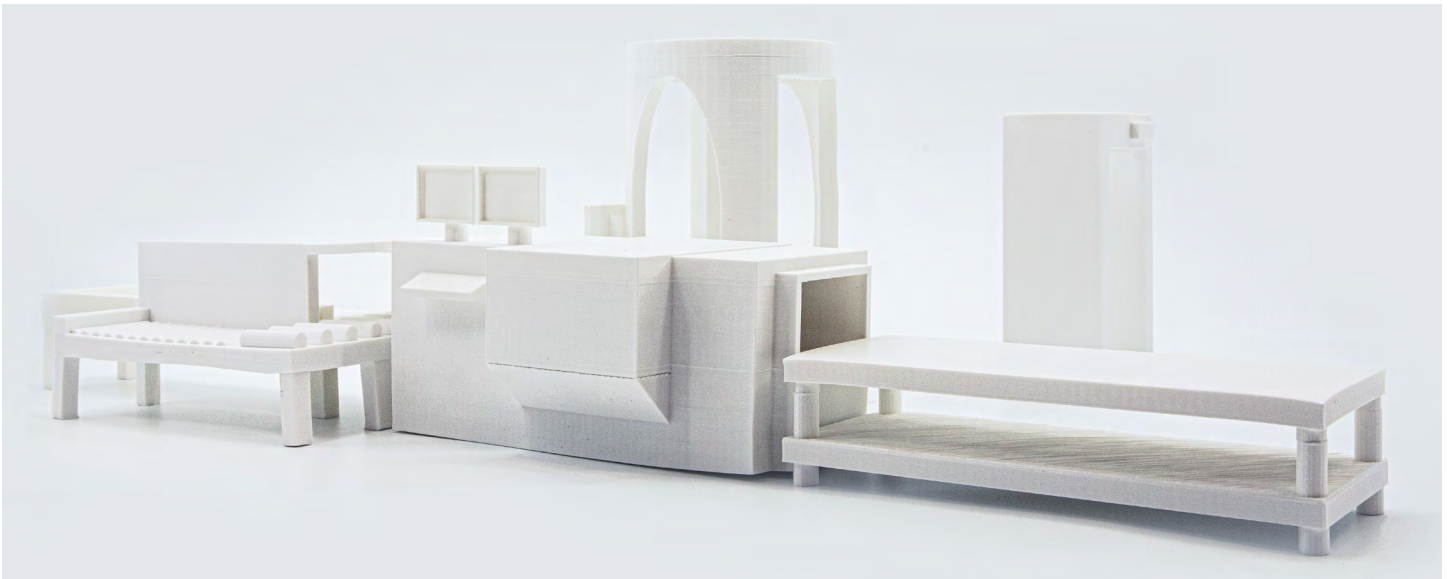
Checkpoint of the early 2010s

TSA Responds to Threats by Implementing Advances in Processes and Technology

In response to the continued evolution of threats in the checkpoint environment, TSA implemented new processes and technology. Checkpoint enhancements in the early 2010s included Advanced Technology (AT) Dual-View X-rays, Advanced Imaging Technology (AIT) body scanners, Alternative Viewing Stations (AVS), Boarding Pass Scanners at the TSA Travel Document Checker (TDC), Bottle Liquid Scanners (BLS), and Manual Diverter Rollers.

Checkpoint of the late 2010s

TSA Advances and Fosters Innovation to Accelerate the Identification of New Capabilities That Mitigate Ever-Evolving Threats

TSA continued to advance in the late 2010s and checkpoint enhancements included Credential Authentication Technology (CAT) at the TDC, Computed Tomography X-ray Scanning Systems, Enhanced AITs, and Automated Screening Lanes. Mandated by the Transportation Security Acquisition Reform Act (TSARA), and confirmed in legislation by both the TSA Modernization Act and the FAA Reauthorization Act, TSA created the Innovation Task Force (ITF) in 2016 to better understand the operational environment earlier in the development cycle and inform TSA to better define requirements to close capability gaps in partnership with stakeholders. TSA and ITF continues to conduct technology demonstrations in live airport environments of new and emerging technologies. Demonstrations include a CAT/BAT with e-Gates, CTs with ASLs, and Passenger Communication Totems.
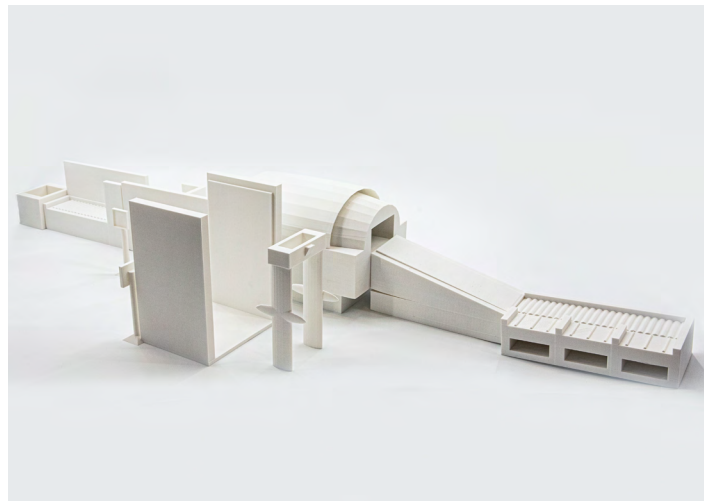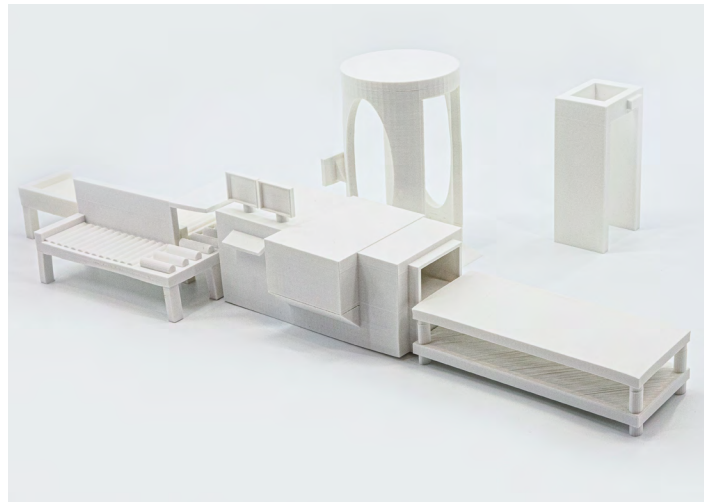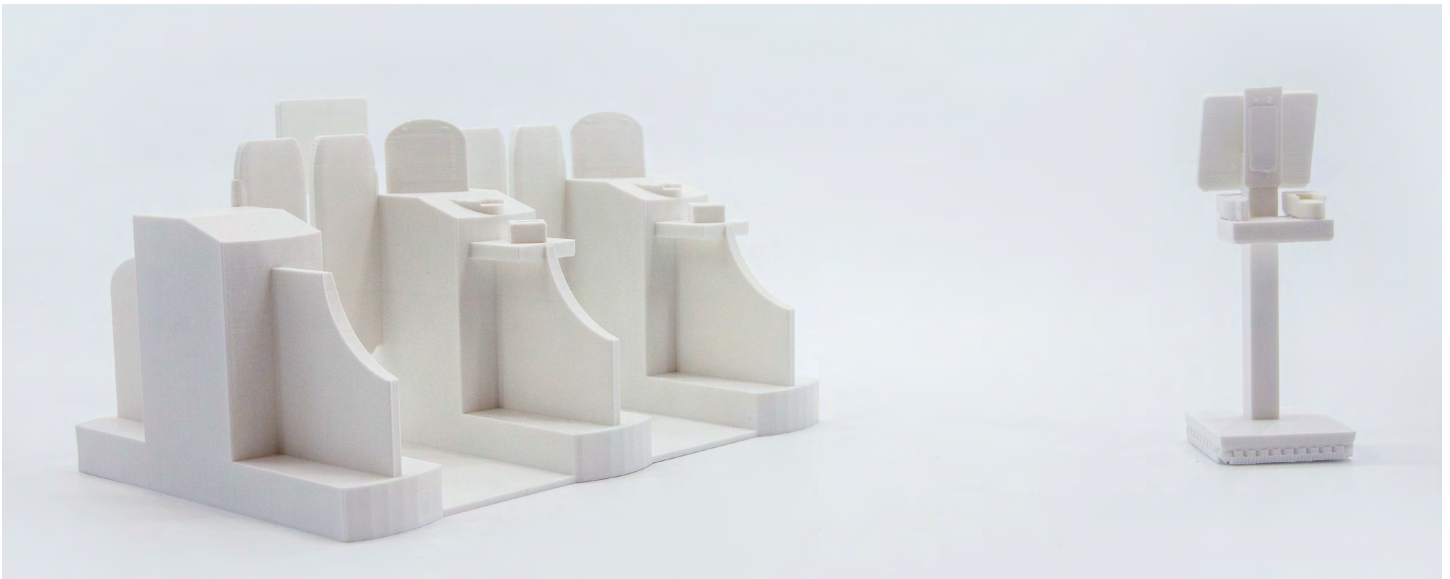
Checkpoint of the Future
TSA Continues to Foster an Environment of Innovation by Piloting New Ideas and Technologies

TSA is exploring a future where passengers and TSOs alike will experience a more seamless airport journey. Technology and information will combine to make improvements that increase the passenger experience without decreasing security. TSA is committed to accelerating smart solutions for secure and seamless travel, working with innovation sites and partners worldwide to challenge the status quo – piloting new ideas and new technologies, to get us to the future of airport security – No slowing down, no dropping your bag, and an automation of security procedures.