

DHS Science and Technology Directorate

Surface Transportation Program

Seeking new ways to protect surface transportation systems from explosives attacks

With multiple access points, a lack of resources, extensive ridership, and hubs that often serve multiple carriers, surface transportation systems are extremely difficult to monitor and secure. Explosives attacks on a surface transportation system (e.g., ferries, buses, mass transit rail) would be devastating, resulting in massive casualties and extensive damage to infrastructure.

The Transportation Security Administration (TSA) and surface transportation authorities are searching for better ways to protect the traveling public. Traditional security screening systems, like those used in aviation security, are not a viable option. These systems, which are not designed for such heavy foot traffic, would create long lines and passenger delays in a matter of seconds. Transportation authorities need new technologies capable of scanning large crowds and carried items quickly and accurately.

S&T is developing surface transportation security solutions

To date, surface transportation security has largely been ignored due to the heavy focus on aviation security and the fact that the responsibility for securing surface transportation falls on the owners and operators of the systems, local law enforcement, and local governments.



The Department of Homeland Security Science and Technology Directorate (S&T) is stepping in to help resolve the problem. Working with TSA and surface transportation authorities, S&T is identifying, developing, testing, and transitioning solutions to protect the nation's surface transportation systems from terrorist threats. In order to develop these solutions, S&T:

- Surveyed mass transit rail and ferry properties to frame future technology development
- Identified technology requirements and systems frameworks specific to the surface transportation environment
- Works to develop explosives detection and mitigation technologies, including stand-off detection tools, for the surface transportation environment

Extensive testing and evaluation on technologies which meet end users' needs

Technologies which meet the needs of end users will undergo extensive testing and evaluation in operational environments. S&T will ensure solutions are flexible so they can easily be integrated into the existing infrastructure of transportation systems across the nation.

Once finalized, these technologies will be made available for procurement through the Transportation Security Grant Program.



Homeland Security

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To learn more about the Surface Transportation Program, email sandt.explosives@dhs.gov.