

Surface Safety Portfolio



Surface Awareness Initiative (SAI)

Background A safe and efficient National Airspace System (NAS) begins and ends on the airport surface. Giving ATC the tools necessary to improve their situational awareness on runways, taxiways, and other airport surface movement areas is key for the future of surface safety. The Surface Awareness Initiative (SAI) will deliver innovative, cost-effective technological solutions to airports without existing surface surveillance capabilities to expand ATC's surface situational awareness.

SAI solutions will leverage Automatic Dependent Surveillance – Broadcast (ADS-B) as a primary source of aircraft position both on the surface and in airport arrival and departure corridors. These 'targets' will be displayed overtop an airport surface map that will, at a minimum, depict runways, taxiways, hold ramps, and other movement areas. In addition to aircraft targets, any vehicles that are equipped with ADS-B Out capabilities will also be displayed on the map.

Current State of SAI The FAA is pursuing implementation of SAI with the greatest sense of urgency. From all lines of business within the agency and at all levels within the organization, getting SAI solutions deployed is of highest priority. Following up from the Surface Safety Symposium and Surface Safety Industry Day earlier in 2023, the FAA expedited acquisition planning activities to enable the release of a solicitation to industry for an SAI solution on December 27, 2023. Select solutions were placed on a Qualified Product List, and four initial sites are successfully operational with SAI since June 30, 2024.

What's Next A second block of 14 sites were awarded on August 16, 2024, and are expected to be operational by December 30, 2024.

Summation The FAA is dedicated to continually evaluating and improving upon safety. With SAI, ATC will have another tool in their toolbox to enhance their surface situational awareness. SAI is not the final and only endeavor the FAA is pursuing to address such a critical operational need. SAI, along with the Approach Runway Verification Tool, and the Runway Incursion Device, are a few examples of the FAA's commitment to always advancing the safety of the NAS.

