



## Best Operational Success – Winner



### National Vetting Center

The National Vetting Center (NVC) is the U.S. Government's solution to streamline visa vetting operations. Historically, vetting of individuals seeking entry to the U.S. was highly manual, lacked agility, and was applied inconsistently across agencies. To remediate this, the NVC developed the High Side Vetting Unified Environment (HiVUE), which consolidates all application and vetting information in a timely manner, to inform immigration recommendations. For the first time, adjudicators have a single view, connecting all the "dots" of sensitive information before making an adjudication decision. This innovation has automated vetting, finally providing law enforcement and the intelligence community with a unified approach.

Since 2020, the NVC has invested in process improvements, architecture improvements, and new mission features, revolutionizing how the government conducts vetting. The NVC team has adopted a cloud-native architecture, allowing HiVUE to support four vetting populations, while also enabling future scaling for new populations. System software patching processes have been automated, allowing for regular bug fixes and security improvements without service interruptions. In December 2020, the NVC deployed a DevSecOps CI/CD pipeline on the classified network that allows for automated code deployments, meaning zero-downtime for application releases and ensuring consistency in software testing and security scanning. In January 2021, the team implemented full text searching in HiVUE for analysts to search across any field in ESTA applications, and more readily search for applicant information. The NVC has also customized data delivery for new customers, by enriching records and filter fields, and throttling message delivery rates to prevent large backlogs of data.



In improving the NVC's architecture, the team has leveraged common data formats to standardize how agencies receive information, and enabling improved onboarding of new datasets from new populations with the same codebase. The team has significantly decreased the average vetting response time for ESTA applications, from a requirement of two hours, to an average of seven minutes. Improving HiVUE's IT architecture has also led to a significant cost savings, as it enables administering two vetting programs for less than what it previously cost to run the system for a single program. The new architecture focuses on the containerization of NVC's application services, securing the application footprint by limiting its access to host operating systems, and enabling controlled application scaling through container orchestration. Additionally, the team has invested heavily in cross domain infrastructure, ensuring data sets from across the government have redundant delivery paths. This has created highly available and resilient cross-domain data flows for populations, reducing the impact of an outage or degraded performance of cross-domain infrastructure.

Our success has centered on scaling the NVC's technological advancements for increasing our mission scope, specifically for new populations. The NVC is integrating two new populations, beyond ESTA applicants, in the coming year, and will customize HiVUE features for each agency. A fourth vetting agency was integrated into NVC's systems on October 1. As the NVC expands into these new categories, the NVC's recent innovations will position it for a more seamless integration of programs, ultimately improving vetting across the government.