

DHS Science and Technology Directorate

Research & Development Analysis and Assessment: Rio Grande Valley Systems Analysis

Threats are emerging along the south Texas border

U.S. Customs and Border Protection (CBP) agents protect our borders in several states but what works to ensure our safety in one state may not work in another. Those who patrol the Rio Grande Valley sector (RGV) are faced with the unique challenges posed by geography and the high numbers of people attempting to cross the border every day. Border Patrol agents rely heavily on their training and experience to respond to incidents but have asked for improved tools and techniques to increase their probability of success to address constantly evolving and emergent threats. CBP requested the Department of Homeland Security Science and Technology Directorate (S&T) help identify systems solutions to meet these operational challenges.

S&T uses risk-based systems analysis

The S&T Acquisition Support and Operations Analysis team collaborated with agents at the RGV McAllen Station (MCS) detention center, in McAllen, Texas, to gain a first-hand understanding of agent operations in surveillance, detection, apprehension and processing of illegal immigrants.

By employing a systematic, operationally focused approach, the S&T team identified 22 gaps and limitations in technology, training and organizational processes in less than six months.

From this initial study, S&T performed a Lean Six Sigma analysis and was able to recommend improvements specific to the ways MCS agents process apprehended illegal immigrants. Currently, the apprehension process requires MCS detention center agents to complete time-intensive administrative tasks such as collecting fingerprints, reviewing criminal and immigration histories and preparing files to support a prosecution decision. Because of the high volume of work—the MCS detention center typically encounters more than 650 illegal immigrants per week—S&T recognized that increasing administrative efficiencies could significantly improve processing times and enable more agents to remain active in the field.

S&T recommendations result in improved CBP operations

Between August 2012 and January 2013, the MCS detention center implemented S&T's recommended improvements, resulting in significant time and cost savings. Recent validation and analysis demonstrated that the implemented improvements saved over 2,000 agent hours at MCS in January 2013 alone.

S&T continues to collaborate with CBP to implement additional process improvements and technology solutions. The ultimate goal is to expand the implementation of these process improvements across CBP to yield organization-wide cost savings and agent redeployment opportunities.

Project partners

- CBP Office of Border Patrol
- CBP Office of Technology Innovation and Acquisition
- U.S. Border Patrol
- Rio Grande Valley Sector
- McAllen Station
- Booz Allen Hamilton
- MIT Lincoln Laboratory
- Homeland Security Studies and Analysis Institute



Agents from RGV Sector Stations participate in a table-top exercise with the S&T project team to validate the list of 22 identified gaps and limitations.

"Implementing the [process improvement recommendations] at the earliest convenience will prove to be highly cost effective for the station, sector and agency."

— Matthew J. DePaola, Supervisory Border Patrol Agent
McAllen Station, Rio Grande Valley Sector, CBP



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To learn more about the RGV Systems Analysis Project, contact John Dargan, Director, Research and Development Analysis and Assessment, at John.Dargan@hq.dhs.gov.