Department of Homeland Security

Office of Inspector General

U.S. Customs and Border Protection's Workload Staffing Model

OIG-14-117

July 2014

OFFICE OF INSPECTOR GENERAL
Department of Homeland Security

Washington, DC 20528 / www.oig.dhs.gov

JUL 24 2014

MEMORANDUM FOR: John P. Wagner
Acting Assistant Commissioner
Office of Field Operations
U.S. Customs and Border Protection

FROM: Anne L. Richards
Assistant Inspector General for Audits

SUBJECT: *U.S. Customs and Border Protection's Workload Staffing Model*

Attached for your information is our final report, *U.S. Customs and Border Protection's Workload Staffing Model.* We incorporated formal comments from U.S. Customs and Border Protection in the final report.

The report contains three recommendations aimed at improving the Office of Field Operations' Workload Staffing Model. Your office concurred with all recommendations. As prescribed by the *Department of Homeland Security Directive 077-01, Follow-Up and Resolutions for Office of Inspector General Report Recommendations*, within 90 days of the date of this memorandum, please provide our office with a written response that includes your (1) agreement or disagreement, (2) corrective action plan, and (3) target completion date for each recommendation. Also, please include responsible parties and any other supporting documentation necessary to inform us about the current status of the recommendation.

Based on information provided in your response to the draft report, we consider recommendation #1 unresolved and open. We consider recommendations #2 and #3 resolved and open. Once your office has fully implemented the recommendations, please submit a formal closeout letter to us within 30 days so that we may close the recommendation(s). The memorandum should be accompanied by evidence of completion of agreed-upon corrective actions and of the disposition of any monetary amounts. Please email a signed PDF copy of all responses and closeout requests to OIGAuditsFollowup@oig.dhs.gov.

Consistent with our responsibility under the *Inspector General Act*, we will provide copies of our report to appropriate congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post the report on our website for public dissemination.

Please call me with any questions, or your staff may contact John E. McCoy II, Deputy Assistant Inspector General for Audits, at (202) 254-4100.

Attachment

Table of Contents

Executive Summary 1

Background 2

Results of Audit 5

Overview of CBP's Workload Staffing Model 5
Data Reliability in the Workload Staffing Model 7
Internal Controls over the Workload Staffing Model 9
Next Phase of the Workload Staffing Model 10
Recommendations 11
Management Comments and OIG Analysis 12

Appendixes

Appendix A: Objectives, Scope, and Methodology 14
Appendix B: Management Comments to the Draft Report 16
Appendix C: CBP OFO's Field Offices and Ports of Entry 18
Appendix D: Resource Optimization Strategy 20
Appendix E: WSM Timeline of Significant Events 21
Appendix F: WSM Methodology for Calculating CBPOs Needed at a POE 22
Appendix G: Major Contributors to This Report 23
Appendix H: Report Distribution 24

Abbreviations

CBP	U.S. Customs and Border Protection
CBPO	Customs and Border Protection Officer
DHS	Department of Homeland Security
FTE	full-time equivalent
FY	fiscal year
GAO	Government Accountability Office
IT	information technology
IV&V	independent verification and validation
OFO	Office of Field Operations
OIG	Office of Inspector General
POE	port of entry
TSA	Transportation Security Administration
WSM	Workload Staffing Model

Executive Summary

U.S. Customs and Border Protection (CBP) is responsible for security at and between ports of entry along the Nation's sea, air, and land borders. Congress has expressed interest in how CBP determines staffing at ports of entry. In a statement accompanying the *Department of Homeland Security Appropriations Act, 2012*, Congress directed CBP to report on its allocation for field operations and update the ports of entry staffing model. To improve operations, CBP developed a three-pronged Resource Optimization Strategy. The second prong of the strategy is the Workload Staffing Model, which CBP uses to identify staffing needs for its Office of Field Operations' CBP Officers at ports of entry. We conducted this audit to determine the reliability of the Workload Staffing Model in establishing the number of CBP Officers needed to fulfill mission requirements.

CBP's Workload Staffing Model includes a sound methodology to determine its staffing needs for CBP Officers and identify staffing shortages. However, the results of the model may not be accurate because CBP cannot ensure that the data entered into the model is reliable. CBP also does not have adequate internal controls over the model. Specifically, CBP's Office of Field Operations does not (1) catalog, track, and validate all data and systems used in workload calculations; (2) systematically approve changes and additions to the Workload Staffing Model; and (3) have written policies and procedures on developing and using the model. In its December 2013 *Strategy and Action Plan (2014–2017),* CBP acknowledges concerns about data from other systems used in the Workload Staffing Model. CBP has contracted to automate the model, which should address the issues we identified. To ensure that the automated model is accurate, complete, and meets its needs, CBP should conduct an independent verification and validation of the updated model, as well as the data entered into it.

Improving data reliability and strengthening internal controls over the Workload Staffing Model would help CBP ensure that its budget requests accurately reflect CBP Officer staffing needs. It would also help ensure that CBP is allocating staffing resources efficiently. With confidence in the model's reliability and accuracy, Congress will be able to make more informed decisions when considering appropriations for additional CBP officers.

CBP concurred with all three recommendations made, which when implemented, should strengthen internal controls over the Workload Staffing Model and improve its results.

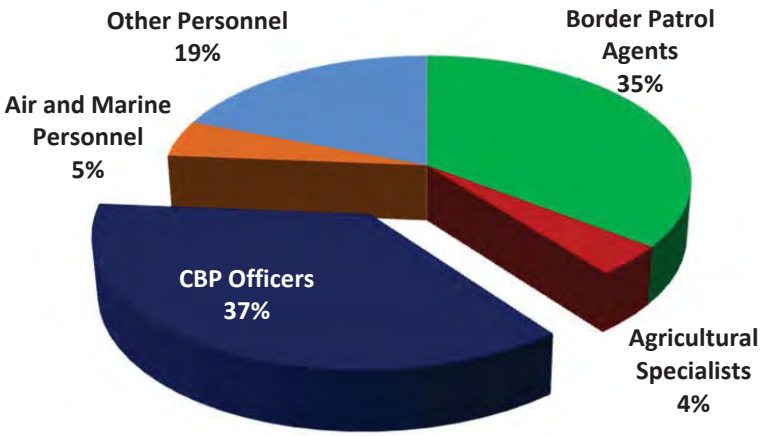
Background

CBP is responsible for security at and between ports of entry (POE) along the Nation's sea, air, and land borders. Its priority mission is to prevent the entry of terrorists and contraband, while facilitating lawful travel, trade, and immigration. CBP currently has about 60,000 employees nationwide and overseas, with more than $8.1 billion for salaries and expenses.

CBP's three uniformed law enforcement divisions are the Office of Field Operations (OFO), Office of Border Patrol, and Office of Air and Marine. Together, these divisions make up the largest law enforcement workforce in the Federal Government. Each division has its own mission and work environment. OFO's CBP Officers (CBPO) perform their duties at the POEs; Border Patrol Agents and Air and Marine Officers operate between the POEs.

OFO's 20 field offices secure the border at the 328 POEs nationwide. Appendix C contains a map showing field office locations and a list of all POEs. In 2014, OFO employed 21,925 CBPOs who made up 37 percent of CBP's entire workforce. Figure 1 shows CBP's workforce composition as of March 2014.

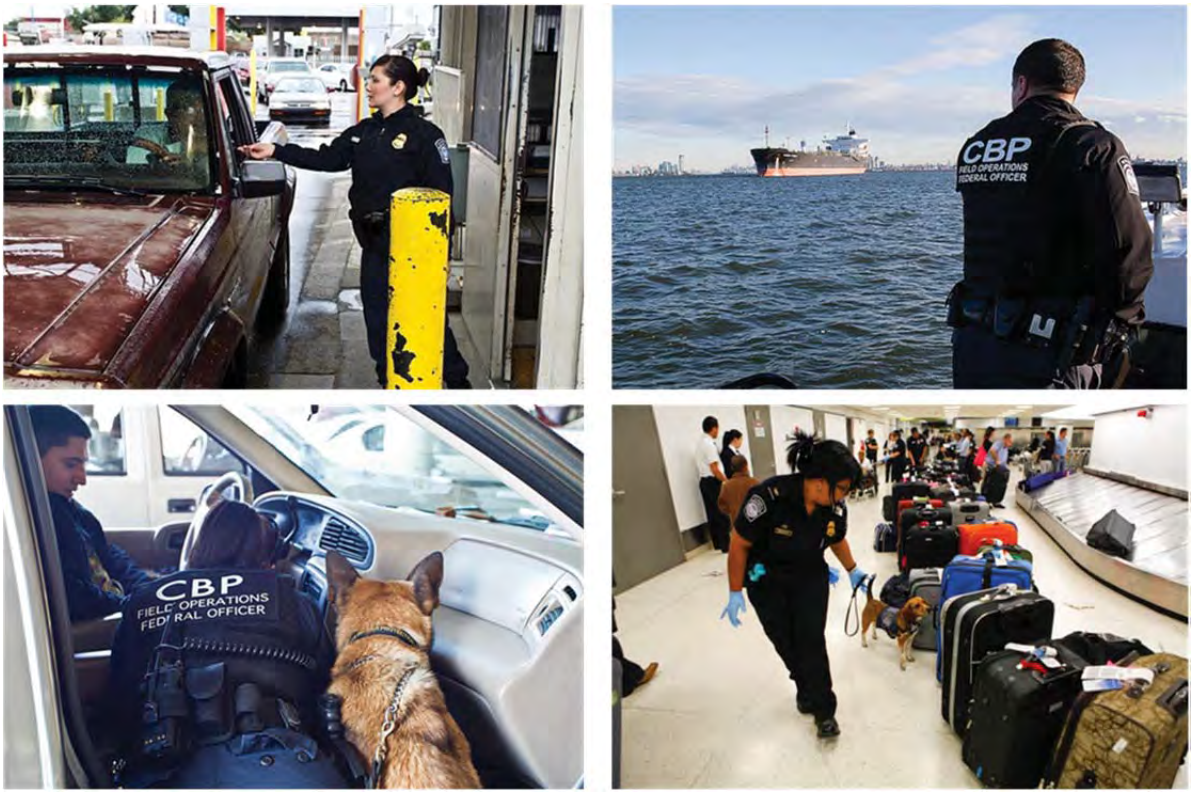
Figure 1: CBP Workforce Composition in March 2014



Source: Department of Homeland Security (DHS) Office of Inspector General (OIG)

CBPOs at POEs detect and prevent the import and export of illicit material and search items such as merchandise, agricultural products, and cargo containers. CBPOs also examine the documents of people entering or exiting the United States through POEs to determine citizenship; immigration status; and whether individuals may enter, reside in, or depart from the United States. The photos in figure 2 show examples of CBPO duties at POEs.

Figure 2: CBPO Officers Performing Duties at Land, Sea, and Air Ports



Source: Flickr: CBP Photography's Photostream

Congress has expressed interest in how CBP staffs POEs. Most recently, in a statement accompanying the *Department of Homeland Security Appropriations Act, 2012*, Congress directed CBP to report on its staffing allocation for its field operations and update the POE staffing model. In response, CBP developed a three-pronged Resource Optimization Strategy for improving POE operations. Appendix D contains more information on this strategy. Our audit focused on the second prong, the Workload Staffing Model (WSM), which CBP uses to identify CBPO staffing needs at POEs. The WSM is not used to determine staffing levels of Border Patrol Agents or Air and Marine Officers.

According to CBP, it began developing the WSM, an Excel spreadsheet-based model, in 2006. The component first used it internally for target-setting exercises and ad hoc staffing analyses. CBP now uses the WSM to identify CBPO staffing requirements, taking into account operational data from its information technology (IT) systems, as well as information that program offices provide. CBP also uses WSM results when seeking congressional approval, in its budget requests to increase user fees and hire additional CBPOs. According to CBP, with additional CBPOs, as well as technology improvements and partnerships, it is able to fully support the identified staffing requirements.

In fiscal year (FY) 2013, CBP used the WSM to develop its baseline staffing needs, taking into consideration use of overtime and streamlining of processes. In that fiscal year, CBP projected a shortage of 3,811 CBPOs through 2014; it sought to fill 1,600 of the positions through appropriations and the balance through increased user fees. CBP included this identified shortage in its FY 2014 budget request. The *Consolidated Appropriations Act, 2014* (Public Law 113−76) gives CBP about $165.7 million through September 30, 2015, to hire, train, and equip new CBPOs.

In its FY 2015 budget proposal, CBP included a request to increase certain user fees.[1] Specifically, CBP plans to use the estimated $332 million increase to hire up to 2,000 more CBPOs. CBP reports that these additional officers, along with the 2,000 new CBPOs funded in the *Consolidated Appropriations Act, 2014*, would bring the total to a historic high of 25,775 officers.

In September 2013, CBP issued a contract to RTR Technologies, LLC, to replace the existing Excel spreadsheet-based WSM with an automated system referred to as WSM 2.0. CBP expects that this automation will address WSM's internal control issues we identified. Appendix E provides a timeline of significant WSM events.

[1] CBP has proposed increasing the Immigration User Fee and eliminating an exception for certain sea passengers who pay a reduced fee under current law. CBP has also proposed increasing fees under the *Consolidated Omnibus Budget Reconciliation Act of 1985*, as well as Express Consignment Carrier Facilities user fees.

Results of Audit

CBP has developed a WSM that includes a sound methodology to determine its CBPO staffing needs. However, the results of the WSM may not be accurate because CBP cannot ensure that the data entered into the model is reliable. CBP also does not have adequate internal controls over the WSM. Specifically, CBP OFO does not (1) catalog, track, and validate all data and systems used in workload calculations; (2) systematically approve changes and additions to the WSM; and (3) have written policies and procedures on developing and using the model. In its December 2013 *Strategy and Action Plan (2014–2017),* CBP acknowledges concerns about data from other systems used in the WSM. CBP has contracted to automate the WSM, which should address the issues we identified. To ensure that the automated model is accurate, complete, and meets its needs, CBP should consider conducting an independent verification and validation (IV&V) of the updated model, as well as the data entered into it. Improving data reliability and strengthening internal controls over the WSM would help CBP ensure that its budget requests accurately reflect CBPO staffing needs and that it is allocating staffing resources efficiently. With confidence in the model's reliability and accuracy, Congress will be able to make more informed decisions when considering appropriations for additional CBPOs.

Overview of CBP's Workload Staffing Model

CBP has a model and methodology to help determine the optimal number of CBPOs needed to fulfill its mission at all 328 POEs. However, the data from more than 25 IT systems used in calculations may not be reliable, which calls into question predicted staffing needs and shortages.

To calculate the number of CBPOs needed at POEs, the WSM incorporates five components:

1. Volume – all key CBPO activities at each POE, such as inspections and seizures of goods, from the previous fiscal year.

2. Processing time – the average amount of time it takes a CBPO to complete each activity, such as an inspection.

3. Available hours – the amount of time CBP estimates that CBPOs are available each year to perform inspections and other POE-specific duties. CBP estimates that CBPOs are available for such duties 1,182 out of 2,080

hours, or 57 percent of the time; CBPO leave, training, and assorted administrative duties account for the remaining hours.

4. Percentage factor increases – time spent on activities that are not countable transactions, such as supervision and working in special dedicated teams.

5. Coverage factors – factors that are independent of volume, such as infrastructure and layout of the POE. For example, a POE exit point requires dedicated staffing regardless of usage rates.

Figure 3 shows how CBP uses these five elements in the WSM methodology to calculate the number of CBPOs needed at a POE. Appendix F contains additional details on the WSM calculation.

Figure 3: WSM Methodology for Calculating CBPOs at a POE

$$\text{CBPOs Needed} = \frac{\text{Volume} \times \text{Processing Time}}{\text{Available Hours}} + \text{Percentage Factors} + \text{Coverage Factors}$$

Source: DHS OIG analysis of CBP data

CBP calculates the optimum number of CBPOs needed to accomplish the work. This includes other factors, such as, use of overtime, streamlining processes, increased volume, and planned facility expansions and information from subject matter experts. The difference between the optimum number of CBPOs and current CBPOs determine CBPO staffing shortages. In April 2013, CBP reported to Congress that it would have a shortage of 3,811 CBPOs through FY 2014. Figure 4 shows how CBP arrived at this number.

Figure 4: CBP-provided WSM Results for FYs 2013–2014

Source: CBP

During our eight site visits, we observed CBPOs and supervisory CBPOs, who are law enforcement officers, performing work normally done by those who are not law enforcement officers. These tasks included timekeeping, scheduling, taking inventory, and maintaining fleets. According to CBP, CBPOs performing these types of administrative duties contributed to the shortage of CBPOs in FYs 2013 and 2014. According to an October 2013 CBP draft report, CBPOs dedicate a significant amount of time to supporting duties, such as administrative and operational tasks.[2] The report also included recommendations to reduce the CBPOs' administrative burden and alleviate staff shortages.

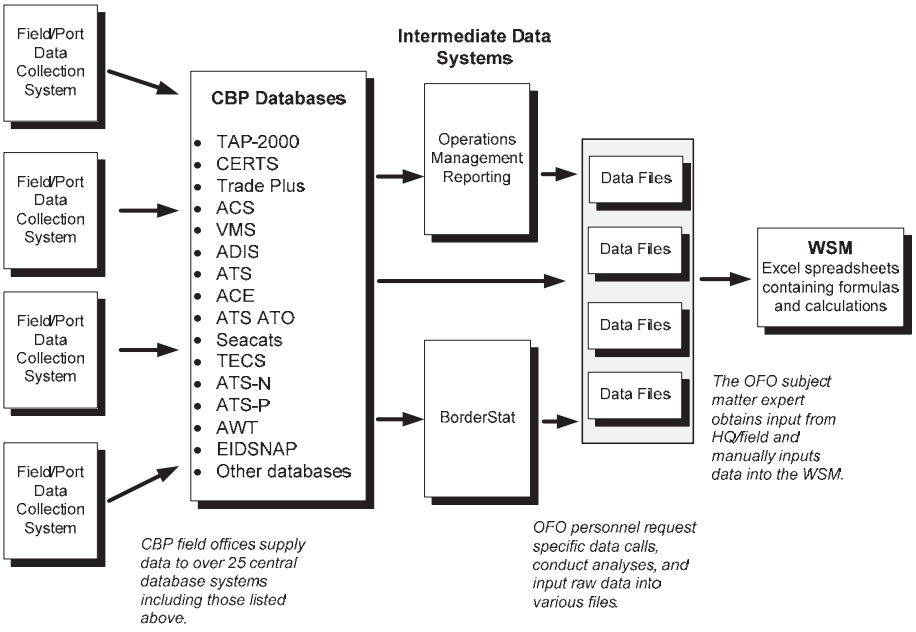
Data Reliability in the Workload Staffing Model

CBP cannot ensure that the data in the WSM is reliable and accurate. Over 180 data elements for the WSM originate from more than 25 CBP IT systems. OFO did not identify all the systems from which these data elements originate. Many of these systems channel data to intermediate systems, such as Operations Management Reporting and BorderStat. OFO staff members obtain most of the data used for the WSM from the two intermediate systems. The information is then pulled by OFO and manually entered into WSM Excel spreadsheets.

[2] Administrative tasks consist of activities such as budgeting, human resources, training coordination, and property management. Conversely, operational support tasks are defined as those activities that "directly" support the execution of inspectional or law enforcement functions.

Although OFO personnel take measures to maintain the integrity of the data received, they do not validate the information pulled into these systems for reliability and accuracy. According to OFO, it is not necessary to validate the data because it is obtained from official CBP IT systems. Figure 5 shows how data flows from CBP field offices and POEs to the WSM spreadsheets.

Figure 5: Data Flow for CBP's WSM (As of April 2014)



Source: OIG analyses of CBP provided data

In response to our inquiries about data reliability, the CBP Office of Information Technology gave us documentation indicating that the data systems met the security requirements of the *Federal Information Security Management Act of 2002*. However, reviews conducted under this act certify that systems are secure, not that the data is reliable.

In November 2010, LMI, a government contracting firm, evaluated the WSM, and in January 2012, the DHS Program Analysis and Evaluation Office evaluated WSM.[3] Neither evaluation assessed the reliability of the data in WSM.

[3] *Evaluation of U.S. Customs and Border Protection Workload Staffing Model*, November 2010 and *An Evaluation of Custom and Border Protection's Workload Staffing Model*, January 2012

In the current WSM, staff members manually enter data into Excel spreadsheets. Because data entries are linked to data in other cells on separate pages, unintentionally changing the information in one cell can result in errors throughout the WSM.

At the time of our audit, the contractor, RTR Technologies, LLC, was duplicating the WSM. The contractor was transferring data from spreadsheets and developing a database. Therefore, we determined that, based on available information at that time, testing data reliability of the intermediate systems without identification of the source data would produce inaccurate findings. CBP and the contractor indicated they were eliminating duplication and unused data fields from the spreadsheets. After 6 months, the contractor was still cataloging all WSM data sources. Completing this task should facilitate future reliability testing.

Internal Controls over the Workload Staffing Model

CBP has insufficient internal controls over the WSM. One OFO employee is responsible for maintaining and using the model, and CBP management has not developed formal WSM policies and procedures. Without sufficient controls and sound policies and procedures, CBP management may not be able to rely on the results of the WSM to make key management decisions and budget requests for CBPO staffing.

In September 2013, CBP issued a contract to RTR Technologies, LLC, to replace the existing Excel spreadsheet-based WSM with an automated system referred to as WSM 2.0. CBP expects that this automation will address WSM's internal control issues we identified.

Segregation of Duties and Oversight

Currently, two OFO employees, supported by one contractor, have WSM responsibilities. One of the employees gathers and manually enters data into the model, makes changes and updates, analyzes data, and drafts reports on results. According to the Government Accountability Office (GAO), segregation of duties—dividing duties and responsibilities among different people—is a key internal control for reducing the risk of error or fraud.[4] When an organization is unable to separate duties adequately, it should develop oversight and approval procedures to mitigate risk.

[4] *GAO Standards for Internal Controls in the Federal Government* (GAO/AIMD-00-21.3.1)

The WSM also resides on a restricted, but shared, drive that CBP has not fully protected against intentional or unintentional tampering by unauthorized users. The WSM Excel spreadsheets are not password protected and formula cells are not locked to prevent editing. CBP risks compromising the integrity of the WSM without safeguards to prevent tampering, misuse, or other incidents.

Policies and Procedures

CBP does not have approved written policies and procedures to further develop and use the WSM. Instead, the OFO employee with day-to-day responsibility for the model maintains informal notes on changes, updates, and improvements to the WSM. According to GAO standards, internal controls need to be clearly documented. Without formally approved and documented policies and procedures for the WSM, CBP cannot ensure adequate oversight or accurate results.

Next Phase of the Workload Staffing Model

In September 2013, CBP contracted with RTR Technologies, LLC, to develop an automated system called WSM 2.0. CBP seeks a more user-friendly system that can interface with existing CBP systems, allow automated data capture and verification, and improve analysis and modeling. Automating the WSM will also allow CBP to easily update or change the model's methodology.

Under the terms of the contract, RTR Technologies is to ensure that WSM 2.0:

- Documents current practices for analysis and reporting;
- Catalogues and validates data inputs;
- Captures data accurately; and
- Fully automates and integrates the model throughout OFO to ensure segregation of duties and transparency.

To ensure the new model is valid, accurate, complete, and meets its needs, CBP should conduct an IV&V of the WSM that includes source data. In an IV&V, an independent third party certifies that a software system satisfies requirements and can function as intended. Throughout government and industry, IV&Vs are recognized as a best practice. In addition, according to the *Department of Homeland Security Acquisition Manual*, officials should address the need for an IV&V contractor when planning to acquire an IT system.

Ensuring that WSM 2.0 functions as intended would make it more useful for CBP and congressional decisionmakers in allocating resources and ensuring that OFO has the staff necessary to fulfill its mission. In addition, if an independent third party performs an IV&V, other offices in CBP and other DHS components could potentially use CBP's WSM to develop staffing models.

Conclusion

CBP used the WSM to support its FY 2014 budget request to fund an additional 1,600 CBPOs. Without reliable data and strong internal controls, however, CBP and Congress may not have had accurate information from the WSM to make sound staffing and funding decisions. CBP risks overstaffing POEs, which could lead to inefficiency and waste or understaffing, which could lead to security breaches and economic losses.

Recommendations

We recommend that the Acting Assistant Commissioner of U.S. Customs and Border Protection's Office of Field Operations:

Recommendation #1:

Establish written procedures for developing and using the WSM. Include procedures to catalogue, track, and validate all data sources.

Recommendation #2:

Develop a systematic process to approve changes and additions to the WSM and periodically evaluate to ensure WSM inputs and assumptions are current and valid.

Recommendation #3:

Conduct an independent verification and validation of WSM 2.0, after its completion, to ensure that it satisfies CBP's requirements and functions as CBP intended.

Management Comments and OIG Analysis

CBP OFO provided comments to the draft report and concurred with all three of our recommendations. A summary of the responses and our analysis follows. We have included a copy of the management comments in their entirety in appendix B.

Response to Recommendation #1: CBP OFO concurred with the recommendation. OFO reported that it has contracted with RTR Technologies, LLC, to capture the process map of the WSM architecture, catalogue and track all data sources, and program an automatic validation process for WSM data. Where feasible, the contractor will also develop an automated data capture process. The estimated completion date is December 31, 2014.

OIG Analysis: OFO's response to this recommendation does not fully address the intent of the recommendation. Although the contractor's actions are necessary and will assist in developing WSM procedures, the response does not address OFO's efforts to develop and implement approved written procedures for the WSM. The recommendation is unresolved and will remain open until CBP provides approved written procedures.

Response to Recommendation #2: CBP OFO concurred with the recommendation. According to OFO, a change control board manages and makes decisions on proposed changes to the interim version of the WSM. OFO will have a change control board for the fully automated WSM 2.0. OFO will also implement procedures to approve all changes to assumptions and algorithms that significantly impact the automated model. The estimated completion date is December 31, 2014.

OIG Analysis: OFO's response meets the intent of this recommendation. The recommendation is resolved and open. We will close this recommendation when OFO completes the necessary actions and submits a detailed summary of actions taken to establish the review and approval process.

Response to Recommendation #3: CBP OFO concurred with the recommendation. According to OFO, RTR Technologies, LLC, has implemented a framework to support necessary documentation and a database structure to validate and verify WSM 2.0. The estimated completion date is June 30, 2016. In its response, OFO provided interim milestones to facilitate meeting the estimated completion date.

OIG Analysis: OFO's response meets the intent of this recommendation. The recommendation is resolved and open. We will close this recommendation when OFO completes the necessary actions and submits a detailed summary of actions taken.

Appendix A
Objectives, Scope, and Methodology

DHS OIG was established by the *Homeland Security Act of 2002* (Public Law 107−296) by amendment to the *Inspector General Act of 1978*. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibilities to promote economy, efficiency, and effectiveness within the Department.

We conducted an audit of CBP OFO's WSM to determine its reliability in establishing the number of CBPOs needed to fulfill mission requirements.

To achieve our audit objective, we obtained and reviewed documentation including the WSM, CBP's Resource Optimization Strategy, and CBP's contract with RTR Technologies, LLC, for WSM 2.0 We interviewed key CBP officials in OFO's Planning, Program and Evaluation Office who are directly involved in developing, maintaining, and using the WSM. We also interviewed the Acting Deputy Commissioner of CBP, the Deputy Assistant Commissioner of Field Operations, and CBP officials from the following offices at CBP Headquarters in Washington, DC: the OFO Human Capital Division, the Office of Information and Technology, the Office of Intelligence and Investigative Liaison, the OFO Budget Division, and the Office of Human Resources Management.

We visited the following CBP field offices and POEs:

Field Office	Port of Entry	Site(s) Visited
Baltimore, MD	Baltimore	Baltimore Seaport (cargo and passenger) Baltimore/Washington International Thurgood Marshall Airport
	Washington-Dulles	Dulles International Airport
Buffalo, NY	Buffalo	Lewiston, Peace, Rainbow, and Whirlpool Bridges (cargo and passenger) Buffalo Niagara International Airport
Los Angeles, CA	Los Angeles/ Long Beach	Port of Los Angeles (cargo and passenger) Port of Long Beach (cargo and passenger)
San Diego, CA	San Diego	Palomar (User Fee) Airport
	San Ysidro	San Ysidro border crossing (land passenger only)
	Otay Mesa	Otay Mesa border crossing (land cargo and outbound passenger)

We judgmentally selected these locations because they collectively represented most of OFO's operating environments (cargo and passenger operations; air, land, and sea environments; and large and small ports). At each location, we interviewed CBP officials and observed CBPOs performing their duties, including targeting; primary, secondary, and non-intrusive inspections; radiation portal monitoring; outbound operations; and administrative duties.

We also interviewed the following personnel: (1) the contractor tasked with automating CBP's WSM 2.0, (2) officials at the Transportation Security Administration (TSA) involved with developing that component's staffing model, and (3) the contractors that developed TSA's staffing model.

We interviewed officials at CBP responsible for developing, updating, and using the WSM. To determine the reliability of the model in establishing the number of CBPOs needed to fulfill mission requirements, we reviewed the WSM's methodology and how data inputs are turned into outputs. Additionally, we examined the underlying data and report. We did not perform detailed data reliability testing, which does not impact our finding and recommendations. We obtained and reviewed all pertinent Federal, DHS, and CBP regulations, policies, procedures and guidance pertaining to the development and use of a WSM.

We visited a sample of CBP field offices and POEs to obtain relevant documentation and interviewed officials about local participation in developing, updating, and analyzing the WSM and local input on decision making based on WSM outputs. We used pertinent information obtained during these site visits to supplement our review of the WSM's data reliability and predictive accuracy.

We conducted this performance audit between July 2013 and April 2014 pursuant to the *Inspector General Act of 1978*, as amended, and according to generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based upon our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based upon our audit objectives.

Appendix B
Management Comments to the Draft Report

U.S. Department of Homeland Security
Washington, DC 20229

U.S. Customs and Border Protection

June 13, 2014

MEMORANDUM FOR: Anne L. Richards
Assistant Inspector General for Audits
Office of Inspector
U.S. Department of Homeland Security

FROM: Anthony Triplett
Acting Assistant Commissioner
Office of Internal Affairs
U.S. Customs and Border Protection

SUBJECT: Response to the Office of Inspector General Draft Report Entitled: U.S. Customs and Border Protection's Workload Staffing Model

The U.S. Customs and Border Protection (CBP) appreciates the opportunity to review and comment on the U.S. Department of Homeland Security (DHS), Office of Inspector General (OIG) draft report entitled, "U.S. Customs and Border Protection's (CBP's) Workload Staffing Model (WSM)," dated May 21, 2014 (job code 13-156-AUD-CBP).

With the WSM, CBP believes that it has a model and reliable methodology to help determine the optimal number of CBPOs needed to fulfill its mission, as well as significant validation procedures for the data used by the WSM, including multi-year comparisons to ensure the data is within a reasonable range of accuracy. RTR Technologies, awarded a contract in September 2013, will develop an automated system to provide a more user-friendly system that can interface with existing CBP systems, allow automated data capture and verification, and improve analysis and data modeling. The OIG acknowledges in the results of the audit that this should address the issues identified.

The draft report contained three recommendations directed to CBP's Acting Assistant Commissioner, Office of Field Operations. CBP/OFO concurs with all three recommendations as follows:

Recommendation 1: Establish written procedures for developing and using the WSM. Include procedures to catalogue, track, and validate all data sources.

CBP/OFO Response: Concur. OFO has contracted with RTR Technologies to formally capture the process map of the architecture of the WSM, catalogue and track all data sources, and program an automatic validation process for the data once incorporated into the WSM. RTR also will automate the process for populating the WSM with source data, where feasible, to eliminate manual input of data.

Estimated Completion Date: December 31, 2014

Recommendation 2: Develop a systematic process to approve changes and additions to the WSM and periodically evaluate to ensure WSM inputs and assumptions are current and valid.

CBP/OFO Response: Concur. The interim version of the WSM currently is managed through a change control board, a committee that makes decisions regarding whether or not proposed changes should be implemented. A change control board will also be implemented for version 2.0 of the WSM, a fully automated system. In addition, procedures will be implemented to approve all changes to assumptions and algorithms that result in a significant impact, which will be defined as a change in model results of greater than 5 percent.

Estimated Completion Date: December 31, 2014

Recommendation 3: Conduct an independent verification and validation of WSM 2.0 after its completion to ensure that it satisfies CBP's requirements and functions as CBP intended.

CBP/OFO Response: Concur. RTR Technologies has implemented a framework to support the necessary documentation and database structure to conduct a validation and verification of WSM 2.0. An independent verification and validation (IV&V) of the fully automated WSM 2.0 will be conducted by June 30, 2016.

Estimated Completion Date: June 30, 2016

Interim Milestones:

1. Finalize the requirements for WSM 2.0	September 30, 2014
2. Identify cost requirements and funding source	December 31, 2014
3. Award contract for development/implementation	March 31, 2015
4. Finalize WSM 2.0	March 31, 2016
5. Conduct an IV&V of WSM 2.0	June 30, 2016

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were previously provided under separate cover. Please feel free to contact me if you have any questions. Alternatively, a member of your staff can contact Kathryn Dapkins, Audit Liaison, Office of Internal Affairs at (202) 325-7732. We look forward to working with you in the future.

Appendix C
CBP OFO's Field Offices and Ports of Entry

Map of CBP OFO's 20 Field Offices

Source: DHS OIG

CBP's 328 Ports of Entry							
Aberdeen, WA	Buffalo-Niagara Falls, NY	Eastport, ME	Honolulu Intl Airport, HI	Marinette, WI	Opheim, MT	Rogers City, MI	St. Petersburg, FL
Aguadilla, PR	Burlington, VT	El Paso, TX	Honolulu, HI	Marquette, MI	Orlando, FL	Roma, TX	St. Thomas, VI
Albany, NY	Butte, MT	Erie, PA	Houlton, ME	Massena, NY	Orlando Sanford	Roosville, MT	Sumas, WA
Albuquerque, NM	BWI Airport, MD	Eureka, CA	Houston	Mayaguez, PR	Airport, FL	Roseau, MN	Sweetgrass, MT
Alcan, AK	Calais, ME	Everett, WA	Intercontinental, TX	Memphis, TN	Oroville, WA	Rota, GU	Syracuse, NY
Alexandria (Andrews AFB), VA	Calexico East, CA	Fabens, TX	Houston, TX	Metaline Falls, WA	Oswego, NY	Sacramento Intl	Tacoma, WA
Alexandria Bay, NY	Calexico West, CA	Fairbanks, AK	Huntsville, AL	Miami Intl Airport, FL	Otay Mesa ,CA	Airport, CA	Tampa, FL
Allentown, PA	Carbury, ND	Fajardo, PR	Indianapolis, IN	Miami, FL	Panama City, FL	Saginaw/Bay City, MI	Tecate, CA
Amarillo, TX	Champlain-Rouses	Fargo, ND	International Falls,	Midway Intl Airport,	Pascagoula, MS	Saipan, GU	Texas City, TX
Ambrose, ND	Point, NY	Fernandina Beach, FL	MN	IL	Pembina, ND	Salem, MA	Toledo, OH
Anacortes, WA	Charleston, SC	Ferry, WA	Jackman, ME	Milwaukee, WI	Pensacola, FL	Salt Lake City, UT	Tri-City Blountville,
Anchorage, AK	Charleston, WV	Fort Fairfield, ME	Jacksonville, FL	Minneapolis-St Paul,	Peoria, IL	San Antonio, TX	TN
Andrade, CA	Charlotte, NC	Fort Kent, ME	John F Kennedy	MN	Perth Amboy, NJ	San Diego, CA	Trout River, NY
Annapolis, MD	Charlotte Amalie, VI	Fort Myers, FL	Airport, NY	Minot Airport, ND	Philadelphia, PA	San Francisco, CA	Tucson, AZ
Antler, ND	Chattanooga, TN	Fort Pierce, FL	Juneau, AK	Mobile, AL	Philadelphia Intl	San Francisco Intl	Tulsa, OK
Aplena, MI	Chester, PA	Fortuna, ND	Kahului, HI	Morgan City, LA	Airport, PA	Airport, CA	Turner, MT
Ashtabula/Conneaut, OH	Chicago, IL	Frederiksted, VI	Kalispell, MT	Morgan, MT	Phoenix, AZ	San Jose Intl Airport,	Valdez, AK
Astoria, OR	Christiansted, VI	Freeport, TX	Kansas City, MO	Naco, AZ	Piegan, MT	CA	Van Buren, ME
Atlanta, GA	Cincinnati, OH	Fresno, CA	Ketchikan, AK	Nashville, TN	Pinecreek, MN	San Juan, PR	Vanceboro, ME
Austin, TX	Cleveland, OH	Friday Harbor, WA	Key West, FL	Natrona County Intl	Pittsburgh, PA	San Juan Intl Airport,	Vicksburg (Inactive),
Austin-Bergstrom Intl	Columbia, SC	Frontier, WA	Knoxville, TN	Airport, WY	Point Roberts, WA	PR	MS
Airport, TX	Columbus, NM	Ft Lauderdale Intl	Kodiak, AK	Nawiliwili-Port Allen,	Ponce, PR	San Luis, AZ	Walhalla, WA
Baltimore, MD	Columbus, OH	Airport, FL	Kona, HI	HI	Port Angeles, WA	San Ysidro, CA	Warroad, MN
Bangor, ME	Coos Bay, OR	Galveston, TX	Lake Charles, LA	Neche, ND	Port Arthur, TX	Santa Teresa, NM	Washington (Dulles),
Bar Harbor, ME	Corpus Christi, TX	Georgetown, SC	Lancaster, MN	New Bedford, MA	Port Canaveral, FL	Sarles, ND	DC
Baton Rouge, LA	Cruz Bay, VI	Gloucester, MA	Laredo, TX	New Haven, CT	Port Everglades, FL	Sasabe, AZ	West Palm Beach, FL
Battle Creek, MI	Dallas/Ft. Worth, TX	Gramercy, LA	Las Vegas, NV	New London, CT	Port Hueneme, CA	Sault Sainte Marie,	Westhope, ND
Baudette, MN	Dalton Cache, AK	Grand Forks Airport,	Laurier, WA	New Orleans, LA	Port Huron, MI	MI	Whitlash, MT
Beaufort-Morehead	Danville, WA	ND	Lavaca-Point	New River Valley	Port Townsend, WA	Savannah, GA	Wichita, KS
City, NC	Davenport-Rock	Grand Portage, MN	Comfort, TX	Airport, Dublin, VA	Portal, ND	Scobey, MT	Wild Horse, MT
Beecher Falls, VT	Island "Moline", IA	Grand Rapids, MI	Lawrence, MA	New York, NY	Porthill, ID	Searsport, ME	Wilkes-
Belfast, ME	Dayton, OH	Great Falls, MT	Limestone, ME	New York/Newark	Portland, ME	Seattle, WA	Barre/Scranton, PA
Bellingham, WA	Del Bonita, MT	Green Bay, WI	Little Rock, AR	Area, NJ	Portland, OR	Seattle-Tacoma Intl ,	Williston Airport, ND
Birmingham, AL	Del Rio, TX	Greenville-	Logan Airport, MA	Newport News, VA	Portland Intl Airport,	irport	Willow Creek, MT
Blaine, WA	Denver, CO	Spartanbrg, SC	Longview, WA	Newport, OR	OR	Sherwood, ND	Wilmington, DE
Boeing Field/King	Derby Line, VT	Guam Preclearance,	Los Angeles (2704)/	Newport, RI	Portsmouth, NH	Shreveport- Bosier	Wilmington, NC
County Airport, WA	Des Moines, IA	GU	Long Beach (2709),	Nogales, AZ	Presidio, TX	City, LA	Winston Salem, NC
Boise, ID	Detour, MI	Gulfport, MS	CA	Noonan, ND	Progreso, TX	Sioux Falls, SD	Worcester, MA
Boston, MA	Detroit Metropltn	Hannah, ND	Los Angeles Intl	Norfolk, VA	Providence, RI	Sitka, AK	Wrangell, AK
Boundary, WA	Airprt, MI	Hansboro, ND	Airport, CA	Northgate, ND	Racine, WI	Skagway, AK	
Bridgeport, CT	Detroit, MI	Harrisburg, PA	Louisville, KY	Norton, VT	Raymond, MT	Spirit of St. Louis	
Bridgewater, ME	Douglas, AZ	Hartford, CT	Lubbock, TX	Oakland, CA	Reno, NV	Airport, MO	
Brownsville, TX	Duluth, MN	Hidalgo, TX	Lukeville, AZ	Ogdensburg, NY	Richford, VT	Spokane, WA	
Brunswick, GA	Dunseith, ND	Highgate	Lynden, WA	Oklahoma City, OK	Richmond-	Springfield, MA	
Buffalo Niagara Intl	Durham, NC	Springs/Alburg, VT	Madawaska, ME	Olympia, WA	Petersburg, VA	Springfield, MO	
Airport, NY	Eagle Pass, TX	Hilo, HI	Maida, ND	Omaha, NE	Rio Grande City, TX	St Louis, MO	
	Eastport ID, ID	Hobby Airport, TX	Manatee, FL	Ontario Intl Airport,	Rochester, NY	St. Croix, VI	
				CA	Rockford Airport, IL	St. John, ND	

Source: DHS OIG

Appendix D
Resource Optimization Strategy

CBP's *Resource Optimization at Ports of Entry* of April 10, 2013, outlines its integrated Resource Optimization Strategy, which is designed to (1) optimize current business processes (business transformation); (2) identify staffing requirements accurately (WSM); and (3) explore alternative funding strategies to increase revenue sources for staffing (alternative funding sources).

CBP Resource Optimization Strategy

Source: CBP

Business Transformation – CBP is engaged in a series of business transformation initiatives to reassess core processes, incorporate technology enhancements, assess use of law enforcement staff, and develop additional automation efforts.

Workload Staffing Model – the WSM is the primary tool for informing staffing decisions at POEs. It considers all business processes required of CBPOs, as well as the associated workload, and the level of effort required to effectively carry out the mission daily.

Alternative Funding Sources – CBP's goal is to move toward consistent appropriations and user fees to support CBPO staffing, based on an annual submission of the WSM to Congress. It is also exploring alternative financing sources for enhanced services in the short term and long term. For example, in the short term, CBP will continue to work with the United States Department of Agriculture to ensure full cost recovery for agricultural inspectional services. Its long-term strategy seeks to create a mechanism for public-private partnerships to fund enhanced CBP services.

Appendix E
WSM Timeline of Significant Events

Source: DHS OIG

Appendix F
WSM Methodology for Calculating CBPOs Needed at a POE

To determine the number of CBPOs required at a POE, the WSM:

1. Calculates the total workload by multiplying volume and processing time.

Total Workload = Volume x Processing Time

The WSM incorporates the volume of all CBPO activities, such as inspections and seizures of goods, at the POE from the previous fiscal year. Each CBPO activity has a processing time, or the average amount of time it takes a CBPO to complete the activity. The WSM multiplies the volume of each activity with that activity's processing time. It sums the time required for all activities at the POE to determine the POE's total workload.

2. Translates the total workload into a baseline number of CBPOs, or workload full-time equivalent (FTE), by dividing the total workload by the number of hours a CBPO is available to perform inspections during the year.

Workload FTE = Total Workload/Available Hours

3. Assigns a percentage increase factor to "non-countable" activities that are not transaction-based activities captured by the volume data. Non-countable activities include supervision and time spent on targeting and enforcement units. To account for time spent on these non-countable activities, the WSM multiplies a POE's workload FTE by each percentage increase factor affecting that POE. These results are added to the workload FTE.

4. Accounts for coverage factors related to the POE's infrastructure. Coverage factors are independent of volume. For example, a POE exit point requires dedicated staffing regardless of usage rates. Coverage factors are added to the workload FTE.

The final sum of the workload FTE, the percentage factor increase, and the coverage factors is the optimal number of CBPOs needed to carry out OFO's mission at that POE.

The WSM aggregates the CBPOs needed at each POE to determine CBPO need across all 328 POEs.

Appendix G
Major Contributors to This Report

Don Bumgardner, Director
Cecilia Carroll, Audit Manager
Karen Gardner, Auditor
Kevin King, Auditor
Victor Leung, Program Analyst
Shamika Morris, Auditor
Kelly Herberger, Communications Analyst
Carolyn Floyd, Independent Report Referencer

Appendix H
Report Distribution

Department of Homeland Security

Secretary
Deputy Secretary
Chief of Staff
Deputy Chief of Staff
General Counsel
Executive Secretary
Director, GAO/OIG Liaison Office
Assistant Secretary for Office of Policy
Assistant Secretary for Office of Public Affairs
Assistant Secretary for Office of Legislative Affairs
Chief Privacy Officer
Under Secretary for Management
Chief Procurement Officer, DHS
Chief Information Officer, DHS
Audit Liaison, CBP

Office of Management and Budget

Chief, Homeland Security Branch
DHS OIG Budget Examiner

Congress

U.S. Senate Committee on Appropriations
U.S. House of Representatives Committee on Appropriations
U.S. Senate Homeland Security and Governmental Affairs Committee
U.S. Senate Committee on Finance
U.S. Senate Committee on the Judiciary
U.S. House of Representatives Committee on Homeland Security
U.S. House of Representatives Committee on Government Reform
U.S. House of Representatives Committee on Transportation and Infrastructure

ADDITIONAL INFORMATION

To view this and any of our other reports, please visit our website at: www.oig.dhs.gov.

For further information or questions, please contact Office of Inspector General (OIG) Office of Public Affairs at: DHS-OIG.OfficePublicAffairs@oig.dhs.gov, or follow us on Twitter at: @dhsoig.

OIG HOTLINE

To expedite the reporting of alleged fraud, waste, abuse or mismanagement, or any other kinds of criminal or noncriminal misconduct relative to Department of Homeland Security (DHS) programs and operations, please visit our website at www.oig.dhs.gov and click on the red tab titled "Hotline" to report. You will be directed to complete and submit an automated DHS OIG Investigative Referral Submission Form. Submission through our website ensures that your complaint will be promptly received and reviewed by DHS OIG.

Should you be unable to access our website, you may submit your complaint in writing to:

Department of Homeland Security
Office of Inspector General, Mail Stop 0305
Attention: Office of Investigations Hotline
245 Murray Drive, SW
Washington, DC 20528-0305

You may also call 1(800) 323-8603 or fax the complaint directly to us at (202) 254-4297.

The OIG seeks to protect the identity of each writer and caller.