



Resource Optimization at Ports of Entry

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Executive Summary

The Office of Field Operations (OFO) is the law enforcement component within CBP responsible for carrying out CBP's complex and demanding border security mission at all ports of entry (POE). OFO manages the lawful access to our Nation and economy by securing and expediting international trade and travel. Staffing challenges at the POEs continue to increase as CBP takes on additional mission requirements, POE infrastructures expand, and trade and traveler volumes continue to grow. This report outlines CBP's transformational Resource Optimization Strategy for operations at all land, air, and sea POEs and provides details on the Workload Staffing Model (WSM), CBP's analytical framework for informing staffing decisions at our POEs. This report will focus on the WSM's methodology, independent validation, and the current WSM results. The Resource Optimization Strategy will cover CBP's efforts to transform business practices at the POEs to achieve greater security and efficiency, as well as to explore alternative funding streams and public-private partnerships.

CBP's integrated Resource Optimization Strategy has three main components: (1) optimize current business processes; (2) identify staffing requirements accurately; and (3) explore alternative funding strategies to increase revenue sources supporting staffing. The WSM itself is the tool at the core of the second prong, informing staffing decisions. It is composed of multiple elements—some fixed, others variable—that may be adjusted according to changing priorities, risks, and threats.

The FY 2013 WSM results incorporate the success CBP has achieved, to date, in implementing business transformation initiatives (BTIs), such as the Western Hemisphere Travel Initiative (WHTI), Non-Intrusive Inspection (NII) technology deployment, Trusted Traveler, and other programs. CBP continues to evaluate and optimize its primary business processes and will further develop transformation initiatives to accomplish its mission more effectively and efficiently, through practices such as employing technology to streamline processes, expanding Trusted Traveler/Trader Program (TTP) enrollment, increasing risk segmentation through enhanced targeting/pre-departure initiatives, and leveraging operational best practices.

The WSM results show a need for additional officers, assuming current processes, procedures, technology, and facilities to fully meet the standards set by statute, regulation, and CBP policies. To meet these needs, the FY 2014 President's Budget request includes an additional 1,600 new officers through appropriated funding and supports legislative changes to user fee collections that would fund 1,877 additional officers. Through the end of FY 2014, CBP will address the findings of the WSM by maximizing the productivity of our current workforce through the implementation of the near-term BTIs as well as overtime resources. CBP estimates these transformation efforts will have a workforce multiplier effect, translating to adding the equivalent of nearly 565 new CBP officers (CBPOs). Finally, CBP will work with U.S. Department of Agriculture (USDA) to ensure full cost recovery for agricultural quarantine inspectional services provided by CBP agriculture specialists.



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I. Background

CBP was established under DHS as the single law enforcement organization charged with securing our Nation's borders and facilitating legitimate trade and travel. As a component of CBP, OFO supports the border security mission by enforcing the laws and directing operational activities at the Nation's POEs.

Since the creation of CBP in 2003, CBP's mission requirements have expanded to meet changing security objectives and accommodate fluctuations in global trade and international travel. The mission at the POEs is demanding, complex, and constantly evolving, and requires adequate front-line staffing for effective and efficient performance.

Although limited increases in CBPOs have had a positive impact, CBP faces several challenges in providing adequate staffing to meet mission requirements. First, CBP relies on fluctuating user fee collections that are dependent on passenger volume for approximately 35 percent of the OFO annual financial plan. These user fees were authorized in 1985 (*Consolidated Omnibus Budget Reconciliation Act of 1985* [COBRA]) and 1987 (Immigration User Fee [IUF]) and are not associated with a consumer price index that would allow the index to automatically adjust for inflation. This means that each year their "buying power" diminishes. The user fees are set in statute and are subject to volume changes causing variances in collections and making long-term staffing decisions challenging as the user fees fluctuate during the year.

Additionally, CBP staffing at the POEs is directly affected by the growth of existing facilities and the construction of new facilities, including additional lanes that require CBP to move CBPOs from other ports to staff if additional personnel are not funded. More than 50 new and expanded facilities are in the process of coming online, or are scheduled to become operational within the next few years. Further, expansion of the CBP mission to areas such as pre-departure targeting of international air passengers and cargo shipments, enhanced outbound inspections on the Southwest border, global partnerships, trade initiatives, and other efforts require dedicated and experienced CBPO staffing in addition to ongoing operations at POEs.

Finally, increasing demands from growing passenger and cargo volume, as well as new requests for service from private and public stakeholders, also present increased requirements for front-line staff. The recovery from the global economic downturn has manifested itself in significant increases in inbound travel and trade volumes. Air passenger volume increased by over 12 percent between FY 2010 and FY 2012 and is currently at a record level, heading toward more than 100 million annual passenger arrivals in FY 2013. Furthermore, volume has increased by 3 percent at our land and seaports in FY 2012. Inbound trade volume has also recovered with import values growing by 5 percent and reaching \$2.3 trillion in FY 2012 and is expected to exceed previous records in the air, land, and sea environments this year.

Recognizing these challenges, the current budget environment, and the requirement to refine existing strategies, CBP has developed a robust, integrated long-term strategy for improving POE operations. The strategy is three-pronged: optimize current business processes; utilize the WSM to identify staffing requirements; and implement alternative funding strategies to increase

revenue sources as well as review the adequacy of user fees to more effectively support operations. This approach will help inform allocation of resources and identify where additional investments will have the greatest impact.

To ensure business process efficiency and more effectively achieve mission objectives, CBP is engaged in a series of BTIs. These initiatives involve reassessing core processes, incorporating technology enhancements, assessing utilization of law enforcement staffing, and developing additional automation efforts. Efficiencies that have already been implemented, such as WHTI, Radio Frequency Identification (RFID)-enabled documents and License Plate Readers (LPRs), TTPs, and NII equipment, have created a workforce multiplier equivalent to 7,995 CBPOs, roughly \$923 million in FY 2012 costs. CBP continues to pursue a series of these initiatives and expects to implement additional improvements in several areas, including employing mobile technology to streamline processes and relieve certain infrastructure constraints, increasing risk segmentation through enhanced targeting/pre-departure initiatives, and expanding operational best practices through the President's FY 2014 Budget.

Serving as a key component of CBP's three-pronged Resource Optimization Strategy to improve performance at POEs, the WSM is the primary tool for informing staffing decisions at the air, land, and sea ports. The WSM employs a rigorous, data-driven methodology to identify staffing requirements. It is composed of multiple elements—some fixed, others variable—that may be adjusted according to changing priorities, risks, and threats. The WSM considers all business processes required of CBPOs, the workload associated with those business processes, and the level of effort required to effectively carry out the mission daily. The WSM also captures future staffing requirements for new or enhanced facilities and technology deployments.

The WSM has been validated by both internal and external sources and continues to be refined. In November 2010, LMI, a nonprofit public-sector consulting firm, evaluated the overall methodology and approach, giving it a score of 88 on a scale of 90.¹ In January 2012, the model was evaluated by a DHS Program Analysis and Evaluation review team, which confirmed that the WSM is a sound tool for establishing a baseline estimate of the number of CBPOs required at each POE.

Although CBP's goal is to move toward a consistent appropriations and user fee basis supporting CBPO staffing based on an annual submission of the staffing model to Congress, we also continue to explore several alternative financing sources to provide enhanced services in both the short and long term. The short-term alternative sources of funding strategies include seeking congressional support for legislative proposals in the FY 2014 Budget to increase current immigration and customs user fees to recover more of the costs associated with providing services. In addition, CBP will continue to work with USDA to ensure full cost recovery for agricultural quarantine inspectional services (i.e., U.S. Department of Agriculture's Animal and Plant Health Inspection Service [APHIS]). The long-term strategy also seeks to create a mechanism for public-private partnerships to fund enhanced CBP services and will assess the feasibility and cost of establishing a land border crossing fee.

¹ Dwyer, Michael E., Chambers, Siobhan D., Colaianni, A. Jeffrey, Wax, Lisa S. (2010, November). *Evaluation of U.S. Customs and Border Protection Workload Staffing Model*. Report DHS0CT1. LMI study commissioned by CBP.

II. Business Transformation Initiatives (BTIs)

As the first, fundamental aspect of its Resource Optimization Strategy, CBP is engaged in a comprehensive and iterative business process review, seeking opportunities to achieve cost-saving operational efficiencies that can reduce staffing requirements. CBP has developed several measures that are designed to enhance efforts to expedite international travel and commerce and secure our Nation's border. As a component of the three-pronged Resource Optimization Strategy, the BTIs were developed to continuously evaluate and optimize our standard business practices. This is being accomplished by several means: incorporating advanced technologies, thereby reducing manpower requirements; streamlining core processes; refining risk segmentation efforts; expanding operational best practices; and improving the travel experience. Several key BTIs that CBP has implemented to optimize the current primary processes and leverage past investments are highlighted on the following pages. The initiatives emphasize that the right mix of technology, process re-engineering, and successful implementation can result in an important workforce multiplier.

A. Effective Use of Existing Resources

CBP works to meet daily mission requirements through effective scheduling of available personnel, efficient use of the overtime funds, and rotational practices at the POEs that prioritize primary processing functions. Although overtime remains the principal method for addressing a significant portion of port-level staffing needs, long-term reliance on overtime for core daily processing is not an optimal approach.

Moreover, budgetary pressures are lessening the availability of overtime as a tool for leveraging existing resources. The OFO inspectional overtime budget has decreased by over 8.2 percent from FY 2008 through FY 2013. The FY 2010 upgrade of journeyman officers to the GS-12 level further reduces the actual number of available CBPO hours that can be purchased with overtime by more than 20 percent. The decreased overtime funds and the increased overtime rate, due to salary growth, combine for a 30-percent net reduction of available overtime hours.

To address reductions in overtime and available CBPO hours, managers are implementing new scheduling and rotational practices to ensure mandatory mission requirements are fulfilled. Daily or monthly, POEs rotate CBPOs not regularly assigned to passenger and vehicle primary into these front-line positions to handle daily passenger and vehicle workload fluctuations. POEs also limit leave when CBPOs can schedule vacation time, and move CBPOs from administrative, mission support, and training functions to passenger processing during peak traffic periods. Table 1 illustrates how key airports successfully increased the number of primary booths staffed per flight during the peak travel season in FY 2012, compared to FY 2011.

Airport	July 2011	July 2012	% Change
Dallas Fort Worth International Airport	18.1	21.4	18.0%
Newark Liberty International Airport	22.9	24.7	8.0%
John F. Kennedy International Airport	27.0	28.3	4.9%
Miami International Airport	37.0	40.6	10.3%

B. Resource Optimization Efforts through FY 2012

Table 2 quantifies the benefits of BTIs implemented through FY 2012 that provide recurring time savings. These measures have helped reduce the total number of CBPOs needed today and will continue to support operations in the future. Many of these initiatives are expected to grow over time or be enhanced further by technology. CBPO savings are provided as full-time equivalents (FTEs).

Business Transformation Initiative	Inspectional hours saved	CBPOs saved (annualized FTEs)	Cost of CBPOs
WHTI, RFID, and LPR	157,056	133	\$15.4 M
TTP	220,860	187	\$21.6 M
NII	8,419,674	7,124	\$822.4 M
I-94 W Automation	55,215	47	\$5.4 M
Risk Segmentation	596,322	504	\$58.2 M
TOTALS	9,449,127	7,995	\$923 M

*Savings calculated using CBPO cost at \$115,443 to include salary and benefits and 1,182 available officer hours per FTE.

1. WHTI and RFID Technology

Before 2006, CBP performed passenger-name law enforcement queries on approximately 5 percent of travelers arriving to the United States by vehicle. The promotion of WHTI technologies, as well as the increased use of RFID travel documents, has enabled CBP to increase this national query rate to over 97 percent, greatly enhancing border security. Processing RFID travel documents is 60 percent faster than processing a manual entry with a paper document, which allows more passengers to be processed more quickly without requiring additional staffing. These reductions in processing time equate to approximately 133 CBPOs.

CBP is leveraging its TTPs and the growing prevalence of RFID travel documents to initiate the “active lane management” (ALM) concept at our land border POEs. ALM involves monitoring and making adjustments to a POE’s lane designations as traffic conditions and infrastructure limitations warrant. Ready Lanes, Dedicated Commuter Lanes, and Light Emitting Diode

signage are established best practices being deployed so port directors can re-designate lanes and communicate to the public to expedite both trusted and “ready” traffic. ALM is analogous to the segmentation of traffic at toll plazas on a highway. Trusted Traveler (see following paragraph) lanes are similar to EZ-Pass lanes with the shortest lines. Ready Lanes are similar to exact change lanes, which are also expedited, and general lanes would be similar to full-service lanes where longer waits can occur. CBP will continue to promote its TTPs and increased use of RFID-enabled documents to continue to promote ALM principles, expedite traffic, and enhance security.

2. Trusted Traveler/Trade Programs

CBP has placed great emphasis on developing and expanding TTP for travelers in both the air and land border environment. TTP helps to identify low-risk, vetted travelers by the voluntary submission of an application and subsequent vetting using automated name and fingerprint-based checks of law enforcement databases, fingerprint/name checks, and an interview with a uniformed officer. The TTP programs continue to expand and include a total of 1,547,899 members in FY 2012. This initiative comprises the following programs: NEXUS Highway and Air, Secure Electronic Network for Traveler’s Rapid Inspection (SENTRI), Free and Secure Trade (FAST), Global Entry (GE), and Global Enrollment System.

NEXUS Highway and Air

NEXUS, a joint U.S./Canada enrollment program at the Northern border land POE and at all Canadian preclearance ports, identifies low-risk travelers through a complete biographic check, an interview with a CBPO and a Canada Border Security Agency officer, and a fingerprint check. Enrollees are provided RFID-enabled cards that allow the traveler to use specified primary lanes at land border POEs. At the Canadian preclearance airports, passengers use kiosks instead of dedicated lanes, and iris scans, rather than RFID-enabled cards, are utilized to identify low-risk travelers.

In FY 2012, the average NEXUS program lane processing time, 20 seconds, was two and a half times faster than vehicles processed at general lanes crossing the Northern border (general lane times along the Northern border average 50 seconds per vehicle). For FY 2012, the NEXUS program lanes produced an inspection time savings equivalent to 25 CBPOs (a cost avoidance value of approximately \$2.9 million in salaries and benefits).

Secure Electronic Network for Traveler’s Rapid Inspection

On the Southwest border, SENTRI provides expedited CBP processing for pre-approved, low-risk travelers. Applicants must voluntarily undergo: a thorough biographical background check, personal interview with a CBPO, and a fingerprint check. SENTRI users have access to specific, dedicated primary lanes into the United States. The SENTRI program has grown to include a total of 17 lanes at the 10 largest southern border POEs along the U.S.-Mexico border. SENTRI members currently account for 19 percent of all Southwest border traffic.

In FY 2012, the average SENTRI lane processing time, 21 seconds, was almost three times faster than vehicles processed at general lanes crossing the southern border (general lane times along the southern border averaged 60 seconds per vehicle). In FY 2012, SENTRI lanes produced an inspection time savings equivalent to 106 CBPOs (a cost avoidance value of approximately \$12.2 million in salaries and benefits).

Free and Secure Trade

FAST is the cargo equivalent of the SENTRI and NEXUS facilitative programs in the passenger environment. Through FAST, importers, commercial carriers, truck drivers, and manufacturers who enroll in the program and meet agreed-upon security criteria, including participation in the Customs-Trade Partnership Against Terrorism (C-TPAT) program, are granted expedited clearance at a POE. Using electronic data transmission and transponder technology, CBP expedites clearance of approved trade participants.

Global Entry

CBP designed GE to allow for expedited clearance of pre-approved, low-risk air travelers into the United States. Through the use of automated kiosks placed in the Federal Inspection Services area of each identified airport, enrolled travelers are often able to bypass queues and process through Passport Control without having to interact with a CBPO. A random screening element is always maintained to ensure program integrity. This program facilitates entry into the United States and is especially beneficial to frequent international flyers. Currently, GE is available at 31 domestic and 10 pre-clearance airports. CBP also has limited pilots with the following countries: The Netherlands, United Kingdom, Qatar, Germany, and the Republic of Korea.

In FY 2012, GE kiosks were used approximately 2.5 million times (including NEXUS AIR use), producing an inspection time savings equivalent to 56 CBPOs (a cost avoidance value of approximately \$6.5 million in salaries and benefits). GE usage in FY 2012 also increased throughput by 2.1 percent for all passengers, including the majority of passengers not in GE since every kiosk use saves 1 – 3 minutes of CBPO time on the primary booth. GE passengers currently represent only 2 percent of total arriving passengers, but kiosk usage is increasing sharply due to the increase in kiosks, reciprocal agreements with additional countries and the fact membership extends benefits to TSA's Pre Check Program. Continued growth in GE will result in further efficiency.

The C-TPAT is CBP's premier cargo and conveyance TTP. More than 11 million cargo containers arrive on ships and are offloaded at U.S. seaports each year. CBP uses risk-based analysis and intelligence to pre-screen, assess, and examine 100 percent of suspicious containers. The remaining cargo is cleared for entry to the United States using advanced inspection technology. Containers inspected from trusted partners who participate in this trade-focused initiative are seven times less likely to undergo resource-intensive secondary examinations and benefit from reduced transaction costs.

3. NII

NII Technology exams require a fraction of the time required by a manual CBPO exam, which creates a workforce multiplier effect. A typical manual cargo inspection requires three people an average of 2 hours to complete. A typical large-scale NII examination requires three people an average of 8 minutes to complete, saving approximately 112 minutes per inspection, on average.

In FY 2012, CBP conducted approximately 5.9 million NII exams in the land, air, and sea environment. If NII technology had not been used to conduct these exams, the same workload would have required 7,124 CBPOs. In an effort to find additional efficiencies, CBP is piloting the remote viewing of scans from multiple types of NII equipment, an approach that will further decrease the number of officers needed for NII image analysis.

4. Form I-94W

In 2010, CBP eliminated manual processing of paper Form I-94Ws from Visa Waiver country passport holders in the air environment through the institution of the Electronic System for Travel Authorization (ESTA). This automation reduced the time of the overall primary inspectional processes for Visa Waiver Program travelers by 58 percent. In FY 2012, approximately 16 million Form I-94Ws were processed in the air environment. This reflects a time savings equivalent to 47 CBPOs, and these benefits are recurring. In addition, this initiative will result in a savings of approximately \$8 million per year because data entry costs will no longer be incurred.

By summer 2013, CBP will implement a pilot to automate filings of Form I-94. Form I-94s and data have been used for longer than 20 years as a key source of information regarding immigration status. Automation of the Form I-94 will improve the accuracy and timeliness of the data because the I-94 will be created in real time using the same information the officer uses for the primary inspection. In addition, CBP anticipates significant savings in data entry costs as a result of the Form I-94 automation program. This initiative is addressed in more detail in Section C.

5. Refined Risk Segmentation

The National Targeting Center (NTC), in coordination with the Immigration Advisory Program (IAP) and the Regional Carrier Liaison Groups (RCLGs), enhances pre-departure targeting efforts and conducts visa vetting efforts, which allows CBP, in coordination with other agencies and with the affected airlines, to assist in preventing inadmissible travelers from traveling to the United States. Pre-departure targeting continues to pay security and efficiency dividends. In FY 2012, the NTC was responsible for the offloading of 9,288 passengers. Of the 9,288 passengers offloaded, 3,883 were from RCLGs, 4,199 were based on NTC pre-departure targeting, and 1,206 were from IAP efforts. This targeting work alleviates field operational requirements equivalent to the work of 289 CBPOs, avoiding \$33.4 million in staffing requirements for CBP.

CBP will continue to enhance ESTA, a program that requires all nationals or citizens of Visa Waiver Program countries who plan to travel to the United States for temporary business or pleasure to have an approved ESTA application before boarding a carrier to travel by air or sea to the United States. This enhancement includes establishing the ESTA requirement to land border POEs and real-time interactivity with cruise lines to ease processing. In FY 2012, 25,036 ESTA applications were denied; as a result, CBP did not have to process refusals of admission for these individuals, leading to more than \$3 million in cost avoidance for OFO and 103 FTE and \$11.9 million in CBPO frontline savings.

Another aspect of CBP's efforts to refine risk segmentation is the Primary Lookout Over-Ride (PLOR) function. PLOR enhances the ability of CBPOs to focus inspections on high-risk and improperly documented travelers, by reducing the number of travelers unnecessarily referred for secondary inspections on the basis of false matches to records. Once a traveler is inspected and the determination is made that the traveler is bona fide, a message is appended to the individual's record to state that, upon subsequent encounters at primary inspection, on the basis of the name, date of birth, and travel document number (passport, Lawful Permanent Resident card, Border Crossing Card, etc.), the records that have been over-ridden will not trigger additional unnecessary secondary referrals. Referrals may be made based on other factors uncovered during the primary inspection, such as an assessment of the passenger's travel documents and the passenger responses to the examination by the CBPO. In FY 2012, CBP avoided nearly 370,000 secondary referrals using the PLOR, which has provided a cost avoidance of \$12.9 million, equating to 112 CBPOs.

These combined efforts provided a workforce multiplier equal to 7,995 CBPOs. These initiatives demonstrate CBP's commitment to rigorous self-examination and the implementation of a continuous cycle of business process review, technology and program development and implementation, and dedicated efforts to measure return on investment. Going forward, CBP will actively monitor and expand these initiatives to ensure continued return on investment in terms of process improvements and reduced reliance on personnel. To further these efforts, CBP will continue to collaborate with all public and private-industry stakeholders.

C. Resource Optimization Efforts through FY 2014

As we have demonstrated through our BTI efforts in FY 2012, CBP will continue to innovate and reengineer its business processes to address the staffing needs identified by the WSM. CBP is undertaking a comprehensive business process review and seeking opportunities to achieve cost-saving operational efficiencies that can reduce staffing requirements in the near term. These BTIs involve reassessing core processes, incorporating technology enhancements, and developing additional automation efforts.

Table 3 summarizes: (1) the estimated inspectional hours that can be saved through FY 2014, (2) the number of CBPOs that can be re-allocated as a result of the time savings, and (3) the cost in terms of salaries and benefits that can be saved through aggressive implementation of additional business process transformation efforts. The CBPO savings were annualized on the basis of this near-term implementation. This annualized data are more conservative than if calculated using its end period performance level, because it is offset by the lower cost-saving

rates during the implementation phases of each initiative. These are incremental savings, above and beyond the benefits realized, to date, from the BTIs. The savings of 565 FTEs from these initiatives address some of the estimated staffing needs identified by the WSM.

Table 3			
BTI Summary*			
BTI	Inspectional hours saved	CBPOs saved (annualized FTEs)	Cost of CBPOs
TTPs	132,384	112	\$13.5 M
CBP Mobile	95,742	81	\$9.7 M
Form I-94 Automation	75,648	64	\$7.7 M
Automated Passport Control	41,370	35	\$4.2M
Refined Risk Segmentation			
• NTC/IAP/RCLG	39,006	33	\$4.0 M
• ESTA	21,276	18	\$2.2 M
• FY 2013 technology enhancements	59,100	50	\$6.0 M
Expansion of Operational Best Practices			
• Ready Lanes	68,556	58	\$7.0 M
• Pedestrian Ready Lanes	72,102	61	\$7.3 M
Implementation of Automated Scheduling	28,368	24	\$2.9 M
Transformation of New Immigrant Processing	34,278	29	\$3.5 M
TOTALS	667,830	565	\$68 M

*Estimated savings (CBPO cost estimated at \$120,090 to include salary and benefits, which is the average of FY 2013 (\$118,825) and FY 2014 (\$121,354.17) salary and benefits and 1,182 available CBPO hours per FTE.

CBP is also assessing opportunities to adjust its staffing in a manner that would utilize less costly technicians and mission support staff to free up additional CBPOs to focus on law enforcement functions, including primary and secondary processing. Areas under review include reducing the amount of administrative time that CBPOs are required to perform in areas like self-inspection, property audits, and accounting. Additionally, CBP is looking at using these less costly, non-law enforcement staff as part of integrated teams supporting processes such as NII secondary examinations, driving mobile equipment, and related tasks, so that CBP can focus CBPOs on critical law enforcement functions. Both of these concepts will be further explored and piloted in FY 2013, with initial implementation targeted for FY 2014, but they have not been included in the table because the resource benefits are not expected to be achieved within this time frame.

1. Trusted Traveler/Trade Programs

Increased participation in GE, NEXUS, FAST, and C-TPAT, and CBP's TTPs will increase the number of pre-vetted travelers and traders, thereby allowing CBP to focus finite resources on those individuals and shipments that may present a higher risk. Although CBP has already realized time efficiencies from these programs (as demonstrated in previous sections), the additional enrollments in FY 2013 and FY 2014 are expected to result in cost avoidances of \$13.5 million (projected savings through FY 2014 of 132,384 inspection hours, which equate to approximately 112 CBPO FTEs). CBP has also been working closely with the Transportation Security Administration on the expansion of Pre-Check and with the U.S. Department of State on initiatives to cross-promote the passport renewal and GE application processes. The expansion of Pre-Check has already doubled the applications to GE (which acts as the gateway program for many Pre-Check applicants), and it is anticipated that the cross-promotion of the passport renewal and GE application processes will result in significant increases in GE membership.

2. CBP Mobile

The deployment of additional CBP Mobile technology to allow enforcement personnel to operate with full system capability without being tethered to a static workstation will also help mitigate staffing shortfalls. Mobile technology has also proven to be a valuable enforcement tool. The deployment of the Enforcement Link Mobile Operations (ELMO) has contributed to more than 1,000 successful CBP enforcement actions by both OFO and the Office of Border Patrol, including identification of subjects of National Crime Information Center warrants and the interdiction of undocumented aliens, narcotics, unreported currency, and weapons.

In FY 2012, CBP successfully piloted ELMO Cargo at two seaport POEs. The use of hand-held mobile devices has transformed the business practice (eliminating the hold sheet and travel time and providing real-time release of cargo at the inspection site), resulting in a 4,700-hour reduction in man-hours, at two ports, in a single year. The President's FY 2014 Budget includes \$10.8 million in funding for 1,500 mobile devices, of which 1,275 are ELMO devices, to expand deployment to additional locations. Therefore, assuming CBP receives approximately \$10.8 million in requested funding, the FY 2013/FY 2014 benefits of increased deployments could support an annual cost avoidance of up to \$9.7 million and 95,742 inspectional hours equaling 81 CBPO FTEs).

3. Form I-94 Automation

As discussed, the automation and elimination of the paper Form I-94 is expected to save an estimated \$12–15 million per year in data entry costs and reduce processing time by approximately 20–30 seconds per person for tens of millions of travelers. CBP processes more than 16 million I-94s annually in the air environment. Through FY 2014, CBPOs would have spent approximately 75,648 hours processing these forms. Therefore, automation will relieve up to 64 CBPOs who can be returned to the front-line to process passengers and reduce wait times. The total annual cost avoidance is \$7.7 million in CBPO salaries and benefits.

4. Automated Passport Control

In addition to automating the Form I-94, CBP is implementing the use of kiosks in the primary queuing area to facilitate travelers and reduce wait times. The goal of the self-service kiosk in a CBP environment is to allow a traveler or traveling group to complete the administrative portion of an inspection before speaking with a CBPO. The CBPO is then free to focus on identity verification and interviews. This process will ultimately reduce the traveler's time spent with the CBPO and reduce processing times. The kiosks, which are at no cost to CBP, are being implemented in Vancouver International Airport, Chicago O'Hare International Airport, and Orlando International Airport as pilot sites. In addition, several other airports in the United States have requested to partner with CBP to provide them. The accelerated use of kiosks through FY 2014 is expected to yield a savings of 41,370 inspectional hours equal to 35 CBPOs with a cost avoidance of \$4.2 million.

5. Improved Risk Segmentation with FY 2013/FY 2014 Targeting Investments

Investments in targeting systems will improve risk segmentation efforts currently under way. Congressional support for targeting in the FY 2012 appropriations and the President's FY 2014 request are critical to these enhancements. In FY 2012 alone, IAP, RCLG/pre-departure, and visa re-vetting programs prevented the entry of more than 4,000 inadmissible passengers. It is estimated that the average processing and detention cost per inadmissible alien is currently \$2,500. Pre-departure targeting is projected to provide an incremental cost avoidance of almost \$4 million through FY 2014 (39,006 inspectional hours equaling 33 CBPO FTEs). Additionally, it is projected that OFO will benefit from an additional \$2.1 million in cost avoidance through FY 2014 as a result of the ESTA program (21,276 inspection hours equaling 18 CBPO FTEs above FY 2012 savings).

In addition to the mentioned pre-departure targeting programs, the President's FY 2014 Budget includes \$8 million in funding for technology enhancements to support improvements to targeting systems. The funding will allow CBP to continue to support significant workload increases and program expansion to develop and implement an enhanced targeting strategy that more effectively and efficiently divides cargo and travelers according to the potential threat they pose. CBP estimates that these enhancements will result in more accurate lists and more efficient resolution time. The projected cost avoidance through FY 2014 is estimated at 59,100 inspection hours equal to 50 CBPOs, totaling approximately \$6 million.

6. Expansion of Operational Best Practices

Expansion of operational best practices such as ALM, to speed trusted travelers and those with RFID-enabled documents through dedicated lanes, allows both greater security and reduced wait times at the POEs. Ready Lanes are currently deployed at 21 locations; however, by the end of FY 2014, all major land border POEs will have Ready Lanes. Ready Lanes are 15 seconds faster than general lanes so cost avoidance can be calculated on the basis of reduced processing times. Through FY 2014, it is estimated that 30 percent of southern land border arrivals and 5 percent of northern land border arrivals will use Ready Lanes. This level of usage represents a time savings of approximately 68,556 inspection hours, which allows the re-allocation of 58 CBPOs

to primary vehicle lanes to help expedite processing at a cost avoidance of approximately \$7 million.

This practice has been expanded to the pedestrian environment where two pilots are currently under way at the Otay Mesa and Paso Del Norte border crossings. Surveys at Otay Mesa indicate the reduction is a minimum of 10 seconds and reduces average processing time from 40 seconds to 30 seconds, that is, a single officer can process an average of 90 pedestrians per hour without a kiosk and 120 per hour with a kiosk. Otay Mesa processes 2.4 million pedestrians per year. The current infrastructure requires approximately 27,000 officer hours or 23 CBPOs per year to process pedestrians (per the mentioned throughput metric), but only 20,000 or 17 CBPOs with the help of the kiosks. Further, Otay Mesa average wait time without kiosks is approximately 25 minutes, but just 15 minutes with kiosks.

The implementation of the kiosk technology at the eight high-volume pedestrian crossings will have a significant impact on CBP labor and will benefit pedestrians, who will enjoy a faster border crossing experience. CBP estimates that this optimal solution will enable CBP to process the 29.2 million pedestrians at these 8 high-volume pedestrian sites, in a manner that saves approximately \$7.3 million in officer labor (72,102 inspection hours, equivalent to 61 CBPOs). The President's FY 2014 Budget includes \$8 million in funding for 68 additional kiosks to support the expansion of Ready Lane technology for both pedestrians and vehicles.

7. Implementation of Automated Scheduling Tools

Additionally, CBP is implementing automated scheduling tools, such as the Airport Wait Time Console Real-Time Flightboard system, to ensure that CBPOs are deployed as efficiently as possible. This system utilizes live data feeds from multiple sources to create a view of passenger arrival data allowing port personnel to make optimal staff scheduling decisions in real time. By taking into account factors such as aircraft arrival time, facility constraints, and passenger volume and admission class, port managers are able to foresee how changes in any element will require corresponding adjustments to staffing to meet CBP passenger wait time goals. The Real-Time Flightboard is currently being implemented at the top 15 highest volume airports and is expected to be deployed to the top 30 airports by the end of FY 2014. In addition to the facilitation benefits anticipated from enhancing scheduling practices, the automated tool will also reduce the requirement for CBPOs to perform manual scheduling analysis and maintenance, freeing up an additional 24 CBPOs at major international gateway airports.

8. Transformation of New Immigrant Processing

Transforming the current approach to processing new immigrants arriving at POEs nationally can save significant inspection time and related costs for CBP. The current process is manual and paper-intensive, and requires paper copies of fingerprints, as well as extensive packaging, storing, and shipping costs for CBP. OFO will work with U.S. Citizenship and Immigration Services to modernize this approach to improve services for arriving immigrants and save time and resources. This initiative is estimated to save 34,278 inspection hours equal to 29 CBPOs at a cost avoidance of \$3.5 million.

III. WSM Methodology and Results

The WSM is the primary tool for informing staffing decisions at air, land, and sea ports. As such, it is the foundation for the second component of CBP’s integrated Resource Optimization Strategy. The WSM employs a rigorous, data-driven methodology to identify staffing requirements. It is composed of multiple elements—some fixed, others variable—that may be adjusted according to changing priorities, risks, and threats. The WSM considers all business processes required of CBPOs, the workload associated with those business processes, and the true level of effort required to effectively carry out the mission daily. The WSM not only identifies the required personnel necessary to accomplish the critical daily mission, it also captures future staffing requirements for new or enhanced facilities and technology deployments.

Staffing models are a corporate and government standard for determining resource needs. Accordingly, CBP has developed the WSM, a critical tool for planning, programming, budget, and accountability. It is a data-driven model that uses the official operational data of CBP as well as the actual overtime expenditures of the last full fiscal year. The WSM is not tied to a specific budget formulation cycle and does not necessarily reflect CBP or DHS funding priorities. Rather, the WSM is a tool that provides information on optimal staffing levels—based on specific input criteria—to carry out operations and adequately staff priority areas.

A. Inputs

Table 4 explains the elements that form the basis for the WSM’s calculations that determine staffing requirements.

Table 4	
WSM Elements	
Element	Description
Volume	The annualized counts of the mutually exclusive and collectively exhaustive CBPO activities at each location where these activities are performed. The WSM is currently populated with a full set of FY 2012 data for well more than 100 CBPO activities. These activities together represent the processes CBPOs carry out in all CBP OFO operational environments—including air, land, and sea modes; immigration and customs missions; and primary, secondary, and enforcement actions.
Processing Times	Each activity has an associated processing time, representing the level of effort (in minutes or hours) a CBPO expends each time he or she carries out the activity.
Available Hours	The number of annual work hours for an FTE CBPO, net of time away for holidays, vacation, sick leave, training, administrative and mission support responsibilities, and temporary duty assignments.

Table 4	
WSM Elements	
Element	Description
Percentage Increases	Factors that account for supervisors and special dedicated teams, such as Passenger Analytical Units and Advanced Targeting Units. These are responsibilities that tend to be driven by overall volume, for which there are no countable transactions that drive the workload.
Facility and Technology Coverage	Some CBPO responsibilities exist independent of traffic volume levels. Low-volume ports require minimum staffing levels to keep the ports operational. Some equipment or locations within a POE (for instance, exit points) require dedicated staffing regardless of usage rates. Finally, the complexity of a POE, as characterized by multiple crossings or multiple terminals, adds to the staffing burden.
Future Requirements	Program offices provide estimates of future staffing requirements for new or expanded facilities and technology deployments.

B. Calculations

The WSM uses the input elements in table 4 to calculate the staffing requirements at each individual POE location. The main calculation steps are described in table 5.

Table 5	
WSM Calculation Steps	
Calculation Step	Description
Workload FTEs	The volume, processing times, and available hours elements are used to calculate the workload FTEs. For each activity at each location, the volume multiplied by the processing time equals the annualized work hours. These work hours divided by the available hours equals the Workload FTEs. The Workload FTEs for all activities at each location are tallied to arrive at a total Workload FTE requirement for each location.
Percentage Increases Application	Each location's Workload FTEs multiplied by the percentage increase factor for each special activity equals the required staffing for those activities (supervisors, special teams, etc.).
Facility and Technology Coverage	The minimum staffing factors multiplied by each location's unique set of facility and technology characteristics equals the additional staffing required for facility and technology coverage.
Future Requirements	The future requirements for each location are added to the previously calculated staffing requirements as part of an integrated staffing requirement matrix.

The first three steps combine to determine the current staffing requirements, considering the new and renovated POEs that have been brought online as well as the increase in cross-border commercial and passenger traffic as the economy improved, as of the end of FY 2012. The fourth step identifies the additional CBPOs required for facility enhancements and technology deployments planned through FY 2014.

CBP recognizes that travel and trade volume has increased steadily since the global economic downturn in FY 2009. Furthermore, CBP expects volume to continue to grow; therefore, the future requirements component now includes estimated staffing requirements due strictly to anticipated volume growth during FY 2014 and FY 2015. Following President Obama's January 2012 Executive Order to increase travel to the United States, the Department of Commerce produced online resources for projecting future travel increases. On April 29, 2012, the Commerce Department announced that the United States can expect a 4–5 percent average annual growth in tourism over the next 5 years.

Reviewing sources external to the government, the International Air Transport Association publically posted on its Web site in February 2011, in a regional outlook over a 2009–2014 forecast period, that North America will grow 4.9 percent for international passenger demand and 7.6 percent for international freight. The United States will continue to be the largest international and domestic passenger market in the world, and is expected to remain the largest international freight market by some margin. Since CBP expects to continue mitigating volume growth through ongoing BTI implementation, we assume a more conservative 3-percent annual growth rate to project staffing requirements to accommodate this volume growth. The Results subsection of this report addresses these future requirements.

CBP continuously refines the precision of the model on the basis of ongoing reviews and validations. In 2010 and 2012, respectively, the nonprofit public-sector consulting firm LMI and the DHS Program Analysis and Evaluation office conducted model validation studies. The WSM team also regularly validates its data and assumptions with subject matter experts and operators from the POEs and field offices. The model remains dynamic to account for the flexibility and responsiveness of the field environment. It is refreshed annually with a full year of fiscal year data that incorporate savings from BTIs.

The WSM is not a performance-driven model in that it does not automatically calculate different results on the basis of achieving performance-related goals, such as meeting wait-time service levels and goals. Rather, the model calculates the staffing required to complete all aspects of the core mission work, regardless of fluctuations in workload volume, over the course of a year or within any given day. It can be used to perform sensitivity analyses that help project performance results. The WSM assumes that, during peak periods, the POEs employ all CBPOs at nearly 100-percent mission-oriented work, making up for leave, training, and administrative hours during slower periods. To the extent that it is possible, the POEs schedule CBPOs who typically serve in administrative and mission support functions, such as training officers, to primary or secondary inspection activities in busy times of the day and year. Additionally, CBP includes overtime spent on core processes in its presentation of the WSM results as described in the following subsection.

C. Application of Overtime

A critical component of CBP's efforts to effectively staff the POEs is the use of overtime funding. CBP derives overtime funding from user fees collected primarily from air carriers. At the POEs, CBP uses overtime to address core operational staffing requirements as well as surge requirements. Core overtime is used in two primary ways: (1) to address daily peak traffic

periods and close potential gaps between shifts; and (2) to complete enforcement actions initiated during daily shifts. Surge overtime, in contrast, is used to provide surge capacity to address heightened enforcement operations, such as the Arizona Alliance for Combating Transnational Threats or the South Texas Campaign; to address unanticipated traffic peaks; and to support threat or incident response operations, including mobile response team deployments, National Security Special Events, and the emergency support functions of Federal Emergency Management Agency-led disaster responses.

These two types of overtime are applied differently by CBP at POEs and are accounted for separately in the WSM. The standard use of core overtime provides the ability to staff in precise increments, rather than in 8–10 hour blocks, and promotes efficiency in the application of CBP’s staffing resources at POEs. It is an important technique in optimizing the utilization of resources. Because of ongoing annual user fee collections, the routine nature of the use of overtime for day-to-day functions, and the continuing operational value and efficiency of incorporating an overtime component into the overall staffing requirement, CBP includes core overtime in the WSM by adding it to the current CBPO staffing level. This approach provides a more complete and accurate representation of the CBPO resources available to apply to mission requirements.

The ability to flexibly and rapidly respond to support heightened enforcement and facilitation operations, as well as other incident or threat-based requirements, is a critical component of OFO’s operational posture. Accordingly, surge overtime is accounted for outside of the WSM as it is intended to apply to unique and cyclical contingencies that present staffing requirements outside of standard operations.

Based on historical trends and actual overtime plans for FY 2013, core overtime represents 80–85 percent of total overtime expenditures, while surge overtime comprises the remaining 15–20 percent. In FY 2013, OFO plans to spend \$245.7 million² on overtime overall, and approximately \$206.8 million in core overtime. This \$206.8 million represents the FTE staffing level of 2,396 CBPOs. This number is reflected as an adjustment to the staffing need identified in the WSM results.

D. Results

The WSM calculates the number of CBPOs estimated to carry out the CBP mission at each air, land, and sea POE in the United States and at each pre-clearance location. The difference between the model results and the current staffing levels represents an indication of the extent to which individual POEs are facing staffing challenges.

CBP’s internal and external validation efforts point to plans for future model enhancement and development. In addition to the plans to make the WSM more driven by performance targets, as discussed in this report, CBP plans to ensure that the model more explicitly considers the physical infrastructure constraints at the POEs. CBP recognizes that at some point, the mostly linear-based calculations in the model may suggest staffing levels beyond the physical capacity

² Assumes overtime funding in FY 2013 at FY 2012 level.

of a POE. Because CBP uses the WSM as a decision-support tool, we still rely on the expertise of our field operators and mission-support facility analysts to ensure we would not allocate CBPOs to locations where they would not be able to add value because of facility constraints.

CBP also plans to increase the modeling rigor pertaining to how future requirements are identified. Currently the model incorporates separate and off-line analysis performed by the WSM modeling team, relevant program offices, and mission-support analysts. CBP plans to build a common analytical approach and a more explicit forecasting capability into the model.

Deployment decisions are made by CBP management, using the WSM results, service levels, and operations subject matter expertise. They are continuously being reformulated on the basis of changing conditions. A critical piece for deployment is the schedule for facility expansions, because these affect staffing needs and when those staffing needs are anticipated. Phasing ensures that all priority POEs receive at least some of their requirements rather than fully front loading deployments to a small handful of the highest priority POEs. Important, too, is the consideration of service levels. Port service levels are analyzed to ensure that priority POEs challenged by service measures (such as excessive wait times) are given relief ahead of POEs that are operating at a better level of service but still may have substantial resource requirements.

The figures in the following table represent the current national staffing requirement based on the WSM calculations and the application of core overtime resources. In the field, management works within the constraints of current personnel levels to align staffing to the daily workload, which can be exacerbated during peak travel times where additional staff is simply not available. Leave usage, administrative functions, and training of CBPOs is appropriately limited during the peak processing times, ensuring that CBPOs are available to staff primary and secondary inspection. To address those situations where critical operational needs exceed staffing availability, CBP allocates all available resources including, in some cases, surge overtime funding to supplement permanent staff. The precise application of core overtime is the day-to-day mechanism that CBP uses to address a significant portion of the staffing deficit reflected in the WSM results shown in the following table.

Table 6 illustrates the current funded staffing level, core overtime resources, and the WSM baseline results.

Table 6	
WSM Results	
FY 2013 Baseline WSM Result	25,513
Total WSM Current CBPO Staffing Resources	23,970
<ul style="list-style-type: none"> • OFO FY 2013 Funded CBPO Staffing (21,574) • OFO Planned Core Overtime Expenditures in FY 2013 (2,396)* 	
Total Current CBPO Staffing Need	1,543

* CBPO FTE equivalent based on \$206.8 million planned core overtime expenditures. If sequestration extended into the next few years, every \$10 million cut from overtime increases the WSM gap by 1.5 percent or 59 CBPOs.

As mentioned, OFO’s staffing requirement approach identifies not just the WSM baseline results, but also requirements for facility enhancements and technology deployments through FY 2014 and requirements for conservatively projected growth through FY 2014. CBP subtracts

the expected BTI savings from these requirements to arrive at a total net requirement. Table 7 captures these total net requirements.

Table 7		
OFO CBPO Staffing Requirements		
Requirement Component	Description	CBPOs Required
FY 2013 WSM Baseline	The additional CBPOs required to process FY 2012 levels of volume according to current standards of operation	1,543
FY 2013 Facilities and Technology	The additional CBPOs required for facility enhancements and large-scale NII deployments planned for FY 2013	920*
FY 2014 Facilities and Technology	The additional CBPOs required for facility enhancements and large-scale NII deployments planned for FY 2014	409*
BTI Savings through FY 2014	Expected FTE CBPO savings from the BTIs through FY 2014	(565)
FY 2013 Growth	The additional CBPOs required for a modest 3-percent projected growth rate for FY 2013	741
FY 2014 Growth	The additional CBPOs required for an additional modest 3-percent projected growth rate for FY 2014	763
Total Net Requirements	Total net new CBPOs required	3,811

*These figures include a small requirement that will occur, but has not yet been designated to a specific location.

While these results quantify CBP’s need, based on existing workload, volume, technology and facility expansions through FY14, they do not incorporate the increases in workload that would result from legislative changes, such as comprehensive immigration reform. Implementation of immigration reform will provide a means for unauthorized residents in the United States to apply for legal status, which would include authorization to work and travel, resulting in a notable increase in crossings across our borders. In addition to primary inspection workload increases, CBP would also see an increase in secondary examinations, enforcement actions, outbound operations, and training requirements.

E. Benefits

Increasing CBPO staffing at the POEs in keeping with the WSM results and other considerations, such as infrastructure capacity, mission priorities, and threat level, would result in expedited processing of lawful trade and travel. As recent staffing deployments continue to indicate, additional CBPO staffing reduces wait times and transaction costs for cross-border travel and trade, and improves cargo release time frames. Additional staff would also enable CBP to expand CBP inspection services at new locations and during additional time periods requested by public and private stakeholders. All these benefits, particularly the reduction in wait times, have a positive impact on the Nation’s economy.

Using two different approaches, OFO has demonstrated the correlation between CBPO staffing levels and wait times. One approach involves tracking historical staffing levels and wait times at various POEs. These observations have shown that as staffing increases, wait times decrease.

Land

- CBP hired 59 new CBPOs at the El Paso POE from the FY 2010 Southwest Border Supplemental Budget appropriation. Since then, although overall traffic has remained steady, wait times have decreased. In FY 2012, average (passenger) wait time was 4.2 minutes or 16.3 percent lower than it was in FY 2011, which can be attributed to an increase in primary booth staffing over the past year.
- A closer look at El Paso during the recent 2012 Cinco de Mayo holiday period reveals the benefits of the additional CBPOs. CBP compared key statistics during this period to the same period in 2011. During this period, the additional CBPOs enabled booth lane hours to increase 13.7 percent, resulting in a reduction in average passenger wait time of 20.3 percent. This wait time reduction occurred despite a 3.7-percent increase in passenger vehicle volume for this year's holiday week.
- Similar results have been observed at the San Ysidro POE when we have been able to increase average booth staffing. CBP hired 30 new CBPOs for San Ysidro from the FY 2010 Southwest Border Supplemental Budget appropriation. When compared to FY 2011, average booth staffing increased by 19.7 percent in FY 2012, while average passenger wait time decreased by 4.1 percent.

Air

- Toward the end of FY 2011, CBP deployed an additional 20 CBPOs to Los Angeles International Airport, which resulted in a greater than 20-percent reduction in average wait time (when comparing the fourth quarter of FY 2011 to the first quarter in FY 2012). The downward trend in wait times continued throughout FY 2012, during which the average wait time for the fourth quarter of FY2012 was more than 7 minutes (26 percent) shorter than it was for the fourth quarter of FY 2011.
- At the beginning of FY 2012, CBP deployed five additional CBPOs to Dulles International Airport. The average wait time decreased from 14.2 minutes to 12.6 minutes, a decrease of 11.3 percent. This occurred despite a 2.3-percent increase in passenger volume at Dulles International Airport. Though the number of additional officers was small, CBP had the capacity to optimize the staffing of primary booths during peak arrival times, thus lowering wait times.

A second approach to evaluate CBPO staffing levels and wait times involves modeling and simulation. OFO has undertaken many modeling and simulation studies as part of various operational analyses in the land and air POE environments. The land analyses included both inbound and outbound operations. All of these analyses show a clear correlation between staffing levels and wait times. Although each POE situation is different based on volume, arrival patterns, and infrastructure, some general relationships emerge.

- Overall, these analyses have shown that an increase of one to three lanes or booths being staffed during peak arrival times can decrease maximum wait times by as much as 25 minutes at some POEs.

- In December 2011, as part of a study focused on required staffing levels necessary to meet a range of service levels, CBP dispatched a team to Los Angeles International Airport. Although this team focused on all five terminals and various peak times, one summary finding was that, with 10 additional booths open for 3 hours during the peak arrival time, the longest wait time was reduced from 97 minutes to 66 minutes. This suggests that under some situations, CBP could expect a 30-minute reduction or a 30-percent reduction in peak wait times if additional CBPOs were available. Simulation results vary on the basis of a number of factors, including volume and total capacity of the facility.

1. Economic Impact

Many of the cited benefits also have a positive impact on the Nation's economy. Trade enforcement both protects the Nation's intellectual property and collects additional revenue. The clearest and most-studied economic impact, however, is from the reduction in wait times. Wait times at the POEs can cause delays and travel time uncertainty for cars, trucks, pedestrians, and air passengers. The delays can add to supply chain and transportation costs for commercial companies. They can also serve as a deterrent to trade and cross-border travel. Therefore, wait time reduction can be a significant economic stimulus.

The extent to which wait times affect the local and national economy was most recently studied by the National Center for Risk and Economic Analysis of Terrorism Events (CREATE), a DHS Center of Excellence. CREATE provided a preliminary draft report titled "The Impact on the U.S. Economy of Changes in Wait Times at Ports of Entry" in February 2013. Their analysis found that an increase or decrease in staffing at the POEs has an impact on wait times and, therefore, on the U.S. economy. The impacts begin with changes in tourist and business travel expenditures and with changes in freight costs. These changes, in turn, translate into ripple, or multiplier, effects in port regions and the overall U.S. economy. In summary, CREATE found that the impacts on the U.S. economy of adding 33 CBPOs (their baseline) are a \$65.8 million increase in Gross Domestic Product (GDP), \$21.2 million in opportunity cost savings, and 1,094 annual jobs added. While the U.S. Travel Association found that every 33 overseas travelers creates one new American job (Travel Means Jobs, 2012), CREATE's findings equate to 33 new American jobs per CBPO added.

Numerous other studies have been conducted on the economic impact of wait times at the POEs. These studies attempt to identify the direct, indirect, and induced economic effects of wait times within a specific market area. A study commissioned by the San Diego Association of Governments in 2006 estimated that the 45-minute wait times at the San Diego land POEs were causing \$1.28 billion in lost business income in the San Diego market area. Other studies suggest an even larger economic impact of wait times (and therefore a corresponding economic stimulus from reducing wait times). For instance, a study commissioned by the U.S. Department of Commerce's International Trade Administration found that border wait times at the five busiest southern border POEs result in an average economic output loss of \$116 million per minute of delay. This study said that in 2008, the delays cost the U.S. economy 26,000 jobs and \$6 billion in output.

2. National Quantification

Providing precise quantification of these benefits is highly complex. The exact benefits depend on many interrelated factors, including deployment locations, officer assignments, local facility characteristics, local economies, and volume statistics. Advanced analytics, surveying, statistical analysis, and simulation should be used to estimate these benefits as precisely as possible. As part of its efforts to enhance its resource optimization strategy and improve the WSM, CBP will be engaging CREATE, a DHS Center of Excellence, to fully quantify the national direct, indirect, and induced economic impacts of projected wait time reductions due to adding CBPOs. In the meantime, using ratios based on the work accomplished by OFO's current workforce and leveraging results from publicly available economic studies (the cited San Diego Association of Governments study), CBP has made estimates of the benefits of adding CBPOs. CBP has reported that for every 1,000 CBPOs hired, the following estimated outcomes could be expected:

- \$2 billion increase in GDP
- \$642 million in opportunity costs saved (the quantification of time that a traveler could be using for other purposes than waiting in line, such as working or enjoying leisure activities)
- 33,148 annual jobs added

The President's Budget request funds for 3,477 CBPOs, and using this same study, the impact could be as high as:

- \$7 billion increase in GDP
- \$2 billion in opportunity costs saved
- 115,000 annual jobs added

CBP has demonstrated that additional CBPOs help to lower wait times. Numerous studies have quantified how long wait times affect the U.S. economy and how shortening those wait times would provide for a substantial economic benefit. The magnitude of the additional CBPOs provided for in the President's FY 2014 Budget would be expected to contribute billions of dollars to the U.S. GDP, save over a billion dollars in opportunity costs and add tens of thousands of U.S. jobs. The following table represents an excerpt of the report titled "The State of Trade, Competitiveness and Economic Well-being in the U.S.-Mexico Border Region" by Erik Lee and Christopher E. Wilson, which summarizes several studies that have attempted to quantify the costs of wait times to the economy. The authors state that "the specific results of the studies are quite varied, and too much value should not be placed on any single number. Nonetheless, one message comes through quite clearly—long and unpredictable wait times at the POEs are costing the United States and Mexican economies many billions of dollars each year."

Table 8

Studies of the Costs of Border Wait Times and Congestion to U.S. and Mexican Economies						
Region of Crossings	Region of Economic Impact	Wait Time (min.)	Year of Potential Impact	Cost to Regional Economy (billions of USD)	Costs in Jobs	Source
San Diego - Tijuana	U.S. and Mexico	...	2007	\$7.2	62,000	SANDAG, 2007 Update
Imperial Valley - Mexicali	U.S. and Mexico	...	2007	\$1.4	11,600	HDR HLB IVAG 2007
Tijuana	Mexico	180	2007-2008	\$1.9	57,000	Del Castillo Vera, COLEF, 2009
Ciudad Juarez	Mexico	132	2007-2008	\$1.5	87,600	Del Castillo Vera, COLEF, 2009
Nuevo Laredo	Mexico	174	2007-2008	\$3.7	133,800	Del Castillo Vera, COLEF, 2009
Nogales	Mexico	66	2007-2008	\$0.2	18,000	Del Castillo Vera, COLEF, 2009
US-Mexico Border	U.S.	63	2008	\$5.8	26,000	Accenture Draft, March 2008
US-Mexico Border	U.S.	99	2017	\$12.0	54,000	Accenture Draft, March 2008
El Paso/Cd. Juarez	El Paso/Cd. Juarez	2008 peak times: ~45 - 220	2035	\$54.0	850,000	Cambridge Systematics Inc., June 2011

Note: Year of Potential Impact refers to the year in which the listed monetary and employment effects take place. For dates before 2009, this refers to the estimated costs for the year of the study. For future years, this refers to the estimated cost that will take place if the border is not made more efficient.

Sources: Cambridge Systematics, *El Paso regional Ports of Entry Operations Plan*, Texas Department of Transportation and Cambridge Systematics, June 2011; Gustavo Del Castillo Vera, "Tiempos de espera en los cruces fronterizos del norte de México: una barrera no arancelaria," *Comercio Exterior*, Vol. 59, No. 7, July 2009, 555; SANDAG, *Economic Impacts of Wait Times in the San Diego-Baja California Border Region Fact Sheet: 2007 Update*; Accenture, *Draft: Improving Economic outcomes by Reducing Border Delays*, Accenture and Department of Commerce, March 2008; HDR|HLB, *Imperial Valley - Mexicali Economic Delay Study*, HDR, Imperial Valley Association of Governments and California Department of Transportation, District 11, November 19, 2007.

IV. Comprehensive Funding Strategy – Alternative Sources of Funding

A comprehensive funding plan that complements appropriations by exploring increased public-private partnerships and seeking alternative sources of financing for personnel resources represents the third prong of CBP's Resource Optimization Strategy. Additional demands have also been placed on CBP, which contribute to an increased staffing need, namely: the growth of existing facilities and the construction of new facilities require additional personnel resources; mission expansion to enhance outbound inspections, pre-departure targeting, global partnerships, and trade initiatives require dedicated staff; and requests for service from private and public stakeholders are increasing.

To meet this challenge, CBP has developed a comprehensive funding strategy, as proposed in the President's FY 2014 Budget, which recognizes fiscal realities and incorporates public-private partnerships and alternative sources of financing. The near-term alternative sources of funding strategies include seeking congressional support for legislative proposals in the FY 2014 Budget to increase current immigration and customs user fees to recover more of the costs associated with providing services. These legislative proposals would have a direct and immediate impact on CBP staffing resources and could be implemented immediately by Congress. The long-term strategy seeks to create a mechanism for public-private partnerships to fund enhanced CBP services and to assess the feasibility and cost of establishing a land border crossing fee.

A. Near-Term Funding Strategy

1. Appropriations

Based on a clear demonstration of staffing needs by CBP—with support from local governments, business groups, and the trade and travel industry—the President's FY 2014 Budget requests appropriated funding for 1,600 additional CBPOs. This funding is intended to offset CBPOs' current and immediate need as identified by the WSM (the 1,543 portion of the staffing requirement).

2. Increase User Fees (COBRA and IUF)

CBP collects two primary types of user fees that fund CBPOs. COBRA established the customs user fee at \$5, with some exemptions. The 1987 Appropriations Act authorized the Immigration and Naturalization Service to collect an IUF of \$5 for each passenger arriving in the United States by commercial air or sea conveyance.

As of April 2007, the COBRA fee is set at \$5.50—50 cents more than its original amount. The fee for the previously exempted passengers is \$1.93 per passenger. The IUF has been set at \$7 since 2002. Both fees are within \$1 of what they were in the 1990s. CBP analysis indicates that an increase in each fee of \$2 would pay for 1,877 CBPOs per year at current volumes.

As these fees are set by statute, they do not fully recover the costs associated with customs and immigration inspections and each year their “buying power” diminishes. Therefore, full recovery of costs through fees is likely not attainable as the costs to maintain staff grow each year. In FY 2011, CBP recovered 47 percent of its applicable customs inspection costs through this fee. This amounts to \$451 million in costs that were above the collections. CBP proposes raising this fee to generate funds to decrease the shortfall between CBP’s reimbursable customs inspection activity and actual reimbursements from the COBRA user fee. This will allow CBP to hire additional CBPOs, which will result in improved customs inspection services provided to those who pay this fee when traveling to the United States. CBP proposes a \$2 increase in the COBRA user fee, which is projected to provide \$194 million in additional funding, equating to 903 additional CBPOs and resources for overtime, infrastructure needs, and other business transformation opportunities. The funding for 903 CBPOs requires the legislation be enacted by October 1, 2013 (or for the entirety of FY 2014). Given a later date of enactment, fewer CBPOs would be funded.

CBP recovered 75 percent of its eligible expenses from the IUF in FY 2011. This amounts to \$180 million in costs that were above the collections. CBP proposes raising this fee to generate funds to decrease the gap between CBP’s reimbursable immigration inspectional activity and the actual reimbursements from IUF. This will allow CBP to hire additional CBPOs, which will result in improved immigration inspection services provided to those who pay this fee when traveling to the United States. CBP proposes a \$2.00 increase in the IUF, which is projected to provide \$166 million in funding, equating to 974 additional CBPOs. The funding for 974 CBPOs requires the legislation be enacted by October 1, 2013 (or for the entirety of FY 2014). Given a later date of enactment, fewer CBPOs would be funded.

3. Full Cost Recovery for APHIS

CBP is seeking to achieve full cost recovery of its AQI User Fee mission through receipt of additional AQI User Fees. Since FY 2007, CBP has experienced shortfalls in the AQI user fee due, in part, to the expansion of tours of duty and an increase in the number of CBP agriculture specialists at our POEs to support our critical agriculture protection mission. As a result, appropriated funds have been relied upon to cover these increased personnel and efforts.

B. Long-Term Funding Strategy

1. Reimbursement Authority for Enhanced CBP Services

As part of the FY 2014 President’s Budget, CBP has submitted a legislative proposal intended to remove restrictions to CBP’s ability to receive outside funding, except in narrowly defined instances, pursuant to Chapter 19 of the U.S. Code, Section 58b. CBP’s legislative proposal vests authority with the Commissioner to approve or disapprove requests from interested parties. Moreover, it authorizes CBP to: receive reimbursement from public-private sector organizations for border services in the air, land, and sea environments at both domestic and foreign locations; receive reimbursement at international and landing rights airports that already receive inspection

services; and define reimbursable expenses including salaries, benefits, temporary duty costs, relocation, and, as applicable, housing, infrastructure, equipment, and training.

The proposed legislation stipulates that reimbursement will be for only costs incurred above and beyond any user fees collected in association with the service provided to avoid double payment. CBP is requesting congressional support for this proposal, which may initially allow CBP to grant five significant pending requests, allowing for enhanced economic activity in key areas.

2. Conduct Land Border Crossing Fee Study

The President's FY 2014 Budget also includes legislative language that proposes CBP conduct a study to assess the feasibility and cost relating to establishing and collecting a land border crossing fee for both land border pedestrians and passenger vehicles along the Northern and Southwest borders of the United States. This study will be completed within 9 months of enactment and will include in its assessment: the feasibility of collecting from existing operators on the land border such as bridge commissions, toll operators, commercial passenger bus, and commercial passenger rail; requirements to collect at land ports of entry where existing capability is not present; and any legal and regulatory impediments to establishing and collecting a land border crossing fee.

V. Conclusion

CBP is committed to ensuring the security of our Nation's borders, while continuing to facilitate legitimate travel and trade. Given the recent growth in travel and trade and expansion of new and existing facilities, CBP is aggressively pursuing BTIs to operate as effectively and efficiently as possible at the POEs. CBP's FY 2013 WSM indicates a need for additional workforce capability at our POEs, assuming current processes, procedures, technology, facilities, and use of overtime. CBP's requirements process also projects needs for additional staff through FY 2014 due to expanding facilities, technology deployments, and expected growth in travel and trade.

To address these needs, the President's FY 2014 Budget submission includes a request for appropriated funding for 1,600 additional CBPOs. It further seeks congressional approval for legislative proposals to increase current immigration and customs user fees to recover more of the costs associated with providing services. Finally, CBP is also working with USDA to achieve full cost recovery for agricultural quarantine inspectional services provided by CBP agriculture specialists.

In developing its FY 2014 staffing requirements and funding strategy, CBP is implementing its multi-pronged approach to address front-line personnel needs by: (1) maximizing the use of current resources through overtime and optimal scheduling practices; (2) pursuing alternative sources of financing through legislative proposals supporting reimbursement authority and, as appropriate, adjusting user fees; and (3) continuing to implement BTIs to reduce costs and mitigate staffing requirements.

Taken together, this multi-pronged strategy will allow CBP to increase workforce capability while enhancing its operations. Innovative transformation efforts and public-private partnerships also will help inform the long-term front-line personnel requirements because the WSM is adjusted and improved annually. CBP looks forward to working with Congress on the identified initiatives as well as long-term efforts to address the findings of the model. CBP welcomes input from legislators, state and local partners, and private-sector stakeholders as it works to refine its operations and plans strategically for future personnel requirements.

VI. Appendix A. List of Abbreviations/Acronyms

Acronym	Definition
ALM	Active Lane Management
APHIS	U.S. Department of Agriculture's Animal and Plant Health Inspection Service
AQI	Agriculture Quarantine Inspection
BTI	Business Transformation Initiatives
C-TPAT	Customs-Trade Partnership Against Terrorism
CBP	U.S. Customs and Border Protection
CBPO	U.S. Customs and Border Protection Officer (GS-1895)
COBRA	<i>Consolidated Omnibus Budget Reconciliation Act of 1985</i>
CREATE	National Center for Risk and Economic Analysis of Terrorism Events
DHS	U.S. Department of Homeland Security
ELMO	Enforcement Link Mobile Operations
ESTA	Electronic System for Travel Authorization
FAST	Free and Secure Trade
FTE	Full-Time Equivalent Employee
FY	Fiscal Year
GDP	Gross Domestic Product
GE	Global Entry
IAP	Immigration Advisory Program
IPR	Intellectual Property Rights
IUF	Immigration User Fee
LPR	License Plate Reader
NEXUS	A joint program with the Canada Border Services Agency that allows pre-screened, approved travelers faster processing.
NII	Non-Intrusive Inspection
NTC	National Targeting Center
OFO	Office of Field Operations
PLOR	Primary Lookout Over-Ride
POE	Port of Entry
RCLG	Regional Carrier Liaison Group
RFID	Radio Frequency Identification
SENTRI	Secure Electronic Network for Traveler's Rapid Inspection
TTP	Trusted Traveler/Trade Program
USDA	U.S. Department of Agriculture
WHTI	Western Hemisphere Travel Initiative
WSM	Workload Staffing Model