Office of Biometric Identity Management Expenditure Plan

Message from the Office of the Chief Financial Officer

I am pleased to submit the following "Office of Biometric Identity Management Expenditure Plan," prepared by the National Protection and Programs Directorate (NPPD).

This report was compiled pursuant to legislative language set forth in H.R. 4903 and House Report 113-481 as referenced in the Joint Explanatory Statement accompanying *Fiscal Year* (FY) *2015 Department of Homeland Security Appropriations Act* (P.L. 114-4).

Pursuant to congressional requirements, this report is being provided to the following Members of Congress:

The Honorable John R. Carter
Chairman, House Appropriations Subcommittee on Homeland Security

The Honorable Lucille Roybal-Allard
Ranking Member, House Appropriations Subcommittee on Homeland Security

The Honorable John Hoeven
Chairman, Senate Appropriations Subcommittee on Homeland Security

The Honorable Jeanne Shaheen
Ranking Member, Senate Appropriations Subcommittee on Homeland Security

Inquiries relating to this report may be directed to me at (202) 447-5751.

Sincerely,

Chip Fulghum
Chief Financial Officer

Executive Summary

The Office of Biometric Identity Management (OBIM), a subcomponent of NPPD, is the lead entity within DHS responsible for biometric identity management services to ensure that the homeland is safe, secure, and resilient.

As an enterprise-level service provider, OBIM has crosscutting responsibility to serve DHS Components and mission partners. OBIM provides biometric identity services through the Automated Biometric Identification System (IDENT), which stores biometric identities and conducts recurrent matching against derogatory information, and OBIM analysts provide other biometric expertise and services. By matching, storing, sharing, and analyzing biometric data, OBIM provides decision makers on the front lines of homeland security with rapid, accurate, and secure identity services. OBIM's customer and stakeholder base includes not only agencies within DHS, but also the Departments of Justice, State, and Defense; state, local, and tribal law enforcement; the Intelligence Community; and international partners.

P.L. 114-4 provides OBIM with $252,056,000 in FY 2015 to continue as the lead entity in DHS responsible for biometric identity management services and as the steward of IDENT. This amount includes $25,382,000 for IDENT system improvements and modernization efforts to ensure the continued provision of biometric identity services to OBIM customers and stakeholders. IDENT system improvements also represent the foundational attributes of a future biometric replacement system.

NPPD organized this expenditure plan by current services, including funds for Salaries and Expenses, Operations and Maintenance of IDENT and Corporate Systems, and Identity and Screening Services.

Office of Biometric Identity Management Expenditure Plan

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I.   Legislative Language

This document has been compiled in response to language in H.R. 4903 and House Report 113-481 as referenced in the Joint Explanatory Statement accompanying *Fiscal Year* (FY) *2015 Department of Homeland Security* (DHS) *Appropriations Act* (P.L. 114-4).

H.R. 4903 states, in relevant part:

> SEC. 514. (b) Not later than 45 days after the date of enactment of the Act, the Chief Financial Officer of the Department of Homeland Security shall submit an obligation and expenditure plan by quarter for the following offices, agencies, accounts, programs, projects, or activities of the Department: …
> (9) National Protection and Programs Directorate, Infrastructure Protection and Information Security, Federal Network Security, Network Security Deployment, and Office of Biometric Identity Management;

House Report 113-481 states, in relevant part:

> Section 514. The Committee continues and modifies a provision requiring the Chief Financial Officer to submit monthly budget execution and staffing reports within 30 days after the close of each month. The Committee modifies the provision to include a requirement for source years for all unobligated balances in multi-year appropriations, with the exception of FEMA DRF. The Committee further modifies the provision to require a detailed obligation and expenditure plan for specified Departmental components, including quarterly updates for certain programs.

II.   OBIM Strategic Mission and Goals

The Office of Biometric Identity Management (OBIM) mission is to provide enduring identity services to DHS and its mission partners that advance informed decision making by producing accurate, timely, and high assurance biometric identity information and analysis with associated biographic data. To accomplish its mission, OBIM operates under four strategic goals that align with the National Protection and Programs Directorate (NPPD) goal to deliver enterprise identity services that enable homeland security missions with the objective of integrated identity services management.

Goal 1: Enable Homeland Security Missions. OBIM will ensure that user mission needs for accurate, timely, and reliable biometric information and analysis and for continuous operation of existing core biometric identity management services are met, while allowing for the expansion of additional biometrics-based identity management capabilities.

Goal 2: Accelerate the Transformation of OBIM into the Biometrically Based Identity Services Provider for DHS. OBIM will accelerate its transformation effort, transitioning from a project-oriented program into an innovative identity services provider. This transformation requires maturing the DHS enterprise architecture by integrating biometric technology and services across DHS, improving identity services business processes within OBIM and across DHS, and meeting demands for new and improved identity services capabilities.

Goal 3: Institutionalize Biometrics Within the Department. OBIM will engage with DHS partners to promulgate DHS biometric standards, mature the DHS biometric enterprise architecture—as well as work with the DHS Office of Policy and the DHS Privacy Office to continue development of Department biometric policies—and pursue a coordinated research and development strategy to guide development of, and transition to, advanced biometric technologies.

Goal 4: Provide Integrated Identity Services Management. OBIM will work with both its mission partners and other governmental and private-sector entities to improve enterprisewide biometric identity services management and to fulfill the DHS vision of a homeland that is safe, secure, and resilient against terrorism and other hazards.

To achieve these goals, OBIM must have a strong management and organizational infrastructure to support its mission of delivering biometrics-based identity and analysis services. OBIM recognizes this by focusing on two desired results:

- Ensure the workforce can successfully execute the mission.
- Enhance and institutionalize management processes to promote accountability and effectiveness.

III. Current Services

OBIM Current Services provide enterprise-level biometric identity management services to customers across DHS, other federal departments, state and local law enforcement, the Intelligence Community, and foreign partners by storing biometric identities, recurrent matching against derogatory information, and delivering other biometric expertise and services. OBIM services provide accurate and actionable information to its customers, including but not limited to those who conduct background checks, issue credentials, take law enforcement actions with potential homeland security implications, conduct border control operations, and verify the identity of persons associated with matters of national security. Moreover, these services broaden the scope of information available to OBIM customers and stakeholders and lead to identifying tens of thousands of known or suspected terrorist (KST) and watchlist matches every year in support of efforts to protect critical infrastructure and other DHS operations.

OBIM Current Services include funding for OBIM federal staff and associated expenses (salaries and expenses), operations and maintenance (O&M) of the Automated Biometric Identification System (IDENT) and Corporate Systems, and management of biometric identity services. Activities identified within OBIM Current Services represent resources that provide the foundation for successful mission accomplishment.

Table 1 provides a breakout of OBIM's FY 2015 appropriated and prior-year carryover funding.

Table 1. FY 2015 OBIM Funding Table

Fiscal Year Funding Profile (dollars in thousands)		FY 2015 Appropriated Funds				
		Q1 Actual	Q2 Actual	Q3 Planned	Q4 Planned	Total
Salaries and Expenses	Federal Salaries and Benefits	$ 6,109	$ 5,918	$ 9,050	$ 9,111	$ 30,188
	Working Capital Fund	$ 1,681	$ 1,516	$ 6,663	$ -	$ 9,860
	Rent (non-GSA)	$ 467	$ -	$ -	$ -	$ 467
	Hiring, Retention, & Development	$ 91	$ 137	$ 114	$ 115	$ 457
	Logistics Support	$ 2,047	$ 297	$ -	$ -	$ 2,344
	Office of General Counsel	$ 23	$ 24	$ 200	$ -	$ 247
	Travel	$ 32	$ 26	$ 43	$ 55	$ 156
	S&E Subtotal	**$ 10,450**	**$ 7,918**	**$ 16,070**	**$ 9,281**	**$ 43,719**
Operations and Maintenance	**Automated Biometric Identification System (IDENT)**	**$ 27,595**	**$ 34,943**	**$ 66,090**	**$ 56,946**	**$ 185,573**
	Operations and Maintenance	*$ 27,595*	*$ 34,943*	*$ 43,072*	*$ 40,839*	*$ 146,448*
	IDENT System Improvements	*$ -*	*$ -*	*$ 10,058*	*$ 15,324*	*$ 25,382*
	Systems Engineering	*$ -*	*$ -*	*$ 12,136*	*$ 739*	*$ 12,875*
	Biometric Standards	*$ -*	*$ -*	*$ -*	*$ 824*	*$ 44*	*$ 868*
	Corporate Systems	**$ 14**	**$ 915**	**$ 2,865**	**$ 1,358**	**$ 5,152**
	O&M Subtotal	**$ 27,609**	**$ 35,858**	**$ 68,955**	**$ 58,304**	**$ 190,725**
Identity and Screening Services	Biometric Verification	$ 2,459	$ 2,459	$ 3,688	$ 8,036	$ 16,642
	Identity Analysis	$ -	$ -	$ -	$ 970	$ 970
	ISS Subtotal	**$ 2,459**	**$ 2,459**	**$ 3,688**	**$ 9,006**	**$ 17,612**
FY 2015 Appropriated Funds Total		*$ 40,518*	*$ 46,235*	*$ 88,713*	*$ 76,591*	*$ 252,056*

Fiscal Year Funding Profile (dollars in thousands)		Prior Year Carryover Funds				
		Q1 Actual	Q2 Actual	Q3 Planned	Q4 Planned	Total
Operations and Maintenance	**Automated Biometric Identification System (IDENT)**	**$ 6,135**	**$ 90**	**$ 3,058**	**$ 16,004**	**$ 25,287**
	Operations and Maintenance	*$ 6,135*	*$ 90*	*$ -*	*$ -*	*$ 6,225*
	IDENT System Improvements	*$ -*	*$ -*	*$ 3,058*	*$ 16,004*	*$ 19,062*
	Systems Engineering	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
	Biometric Standards	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
	Corporate Systems	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
	O&M Subtotal	**$ 6,135**	**$ 90**	**$ 3,058**	**$ 16,004**	**$ 25,287**
Identity and Screening Services	Biometric Verification	$ 1,229	$ 1,229	$ -	$ -	$ 2,458
	Identity Analysis	$ -	$ -	$ -	$ -	$ -
	ISS Subtotal	**$ 1,229**	**$ 1,229**	**$ -**	**$ -**	**$ 2,458**
Prior Year Carryover Funds Total		*$ 7,364*	*$ 1,319*	*$ 3,058*	*$ 16,004*	*$ 27,745*
TOTAL		*$ 47,882*	*$ 47,554*	*$ 91,771*	*$ 92,595*	*$ 279,801*

A. Salaries and Expenses

Salaries and Expenses provide funding for OBIM's 208 federal staff to manage and execute the program mission and for necessary mission support activities. Personnel reported as supporting mission operations include staff directly involved in sustaining IDENT operations and the fingerprint examiners and analysts providing identity management services that supplement IDENT. Mission support personnel are engaged in activities such as strategic and operational planning, human capital management, budget and financial management, information technology (IT) security and support, acquisition policies and procedures, program management and control practices (i.e., risk, schedule, and records management), the Working Capital Fund (WCF) (including rent expenses), enterprisewide licenses, administration, and logistics.

As originally defined by the National Science and Technology Council Subcommittee on Biometrics and Identity Management, Identity Management is "… the combination of technical systems, rules, and procedures that define the ownership, utilization, and safeguarding of personal identity information. The primary goal of the [identity management] process is to assign attributes to a digital identity and to connect that identity to an individual." As such, the mission support activities conducted by OBIM

employees are essential to the execution of OBIM's core mission support functions to match, store, share, and analyze biometric data. Accomplishments pertaining to these mission support functions completed by OBIM federal staff are included under Salaries and Expenses in table 2.

Table 2 provides FY 2015 planned accomplishments for Salaries and Expenses.

Table 2. FY 2015 Planned Accomplishments – Salaries and Expenses

FY 2015 Planned Accomplishments

Description: Improve alignment of planning, acquisition, and budgeting within a strategic framework consistent with the DHS Planning, Programming, Budgeting, and Execution (PPBE) process. This includes:
• Implementing OBIM's integrated strategic management process to continually align planning, budget, and acquisition through monitoring specific activity milestones and performance measures and inform decision analysis
• Implementing the FY 2015–FY 2018 acquisition strategy as an annex to the OBIM Strategic Plan to mature program management, align planned acquisitions to OBIM strategic objectives, streamline acquisition processes, identify efficiencies through elimination of non-essential acquisitions, and inform executive acquisition, performance analysis, and accountability
• Updating implementation plans to reflect program impacts and risk mitigation strategies while identifying future needs rationalized to resource allocations
• Publishing the OBIM FY 2016 Integrated Planning and Execution Guidance to:
  o Guide planning, mission execution, performance reporting, and decision making within existing budget for FY 2016
  o Guide strategic planning to inform the budget processes for out-years that support mission and customer requirements
• Publishing the OBIM PPBE Manual in alignment with NPPD/Budget and Financial Administration PPBE guidance that aligns strategy, acquisition, and budgeting while enabling structure and processes to make informed decisions to manage toward strategic goals
Justification: These efforts will allow for a more streamlined and integrated decision-making process within OBIM regarding budget requests and expenditure of resources to support strategic objectives.

Description: Improve financial controls by continuing to close expired contracts and recover funds. **Justification:** This will allow OBIM to redirect unobligated funds from old contracts toward program priorities, primarily focused on addressing the most critical conditions threatening IDENT sustainment.
Description: Achieve efficiencies in Operations and Facilities by expanding the OBIM Telework Program and consolidating workspace. **Justification:** The OBIM Telework Program will enable facility and transit cost efficiencies, stimulate productivity improvements, and reduce environmental impacts. The OBIM goal is to increase the use of telework by OBIM staff in FY 2015 to 50 percent of total work hours. In addition, OBIM is planning to consolidate workspace and reallocate 60 spaces from OBIM to NPPD to reduce overall facilities rent.
Description: Meet privacy requirements to maintain IDENT operations by analyzing OBIM customer requirements and producing the necessary privacy documentation to support identity services. **Justification:** This will ensure continued provision of compliant identity services and timely operations through the drafting, updating, finalizing, and publishing of the IDENT System of Record Notice, IDENT Privacy Impact Assessment (PIA), and DHS/Department of Justice (DOJ) Interoperability PIA. The update to the Interoperability PIA between DHS and DOJ identity service systems will enable continued exchange of information to provide the most comprehensive responses to user queries.

FY 2015 Planned Accomplishments
Description: Validate Service Level Agreements (SLAs) with OBIM stakeholders to better plan future resource needs. **Justification:** SLA validation enables enhanced customer relations by managing expectations within the scope of OBIM's capabilities and capacity to support demand, while simultaneously verifying baseline commitments to customer SLAs and supporting the development of OBIM plans for future modifications and upgrades to meet customer needs.
Description: Onboarding of customers. "Onboarding" is defined as a set of activities associated with bringing on new customers or expanding services. OBIM will provide biometric identity services to the Transportation Security Administration (TSA) and the Federal Emergency Management Agency (FEMA) as new IDENT customers in FY 2015, and will develop an onboarding schedule with the DHS Office of the Chief Security Officer for implementation in the FY 2015–FY 2017 time frame. Additionally, OBIM will ingest Federal Bureau of Investigation (FBI) Criminal Justice Information Services (CJIS) Division records to support U.S. Immigration and Customs Enforcement (ICE) customer requirements, as well as additional Department of Defense (DOD) records. **Justification:** This allows OBIM to store and process new identities, offering expanded biometric identification capabilities to OBIM customers.
Description: Execute plans for engagement with the DHS Science and Technology Directorate (S&T). In FY 2015, in collaboration with DHS S&T, OBIM will continue partnerships with the National Science Foundation Industry/University Cooperative Research Center investigating emerging biometric technologies. Research will focus on fingerprint and iris detection, deception and detection using soft biometrics, behavioral biometrics, facial imaging quality and analysis, aging and permanence in biometrics, and cloud-based biometric services. **Justification:** The objective is to pursue coordinated DHS biometric research and development efforts to achieve the most cost-effective results through leveraging existing DHS resources for more effective processes. This will guide OBIM's efforts to leverage DHS S&T research and development capabilities in support of OBIM capabilities development.
Description: Continue to implement partner engagement for expanding, sharing, and standardizing the use of biometrics to enable data sharing with Visa Waiver Program (VWP) members for law enforcement purposes and with additional countries under Preventing and Combating Serious Crime (PCSC) agreements. To accomplish this, OBIM is participating in the DHS collaborative development of an international information-sharing architecture, led by the DHS Office of Policy and the Office of the Chief Information Officer. This will build collaborative biometric information-sharing platforms in the Caribbean Basin, with VWP member states, and with other countries and organizations of strategic interest. In addition, OBIM will continue to: advise and consult with ICE in regard to the Law Enforcement Information Sharing Initiative on what information DHS will share; specify and develop plans to implement a collaborative biometric information-sharing platform to institute a technical and operational capability to share data; and define use cases, elicit requirements, validate solutions, and establish metrics that will deliver mission value to DHS and its stakeholders. **Justification:** In FY 2015, this is intended to increase the effectiveness and accountability of biometric technical expertise across domestic agencies by increasing the percentage of VWP and PCSC records shared and matched to biometric holdings. This will increase agency cooperation among DHS Components, Department of State (DOS), and DOJ, as well as among state and local law enforcement.

FY 2015 Planned Accomplishments
Description: Extend efforts to align and promulgate standards within the national and international biometric communities by building upon FY 2014 planning of the Biometric Resource Center concept of operations and continuing support to the National Information Exchange Model to ensure the capture and standardization of new modalities and enhancements to the existing standard, thus structuring seamless information sharing. In FY 2015, this will provide OBIM with a Web-based, virtual environment that can later expand to external agencies to enable the capture, dissemination, and use/reuse of information related to biometric identity services.
Justification: This objective responds to requirements in Executive Order 13356 (2004) to develop common standards for sharing of terrorism information by agencies within the Intelligence Community to increase the effectiveness and accountability of biometric technical expertise across domestic agencies and international partners. The intent of the resource center is to support and build relationships and to engage in mutually supporting joint and interagency information-sharing activities. This includes engaging DHS stakeholders for input; identifying liaisons with interagency, private sector, and academic parties; and defining a path and timetable toward reaching full operational capability for the resource center.

B.   System Operations and Maintenance

The largest category of operational expenses for OBIM resides in O&M. O&M provides the IT support, including operational costs at the two DHS Enterprise Data Centers, that enables Identity and Screening Services through the daily operations of the IDENT system. These functions enable OBIM's match, store, share, and analyze capabilities, providing the foundation of biometric identity services.

1. Automated Biometric Identification System

IDENT is the DHS target information system to provide biometric identity management capabilities and analysis services in support of the Department's mission. Maintenance of the IDENT system enables OBIM to provide automated biometric matching and enrollment services to DHS and other federal, state, and local entities. Customer organizations collect biometrics from individuals as part of their operational processes and send these data to OBIM. IDENT then compares the data to stored information and provides a response to the customer for decision and action. Services provided or enabled by OBIM through IDENT include:

- **Identity establishment:** Using submitted biometric and biographic information to uniquely distinguish an individual and connect that individual to his or her other information
- **Enrollment:** Using captured biometric and biographic data to create a record for a person and link the record to that individual
- **Identity verification:** Confirming the identity of an individual through the comparison of biometric and biographic information
- **Identity management:** Managing the accuracy of identity records
- **Analysis:** Examining the biometric, biographic, and status data for a person or persons

- **IDENT biometric watchlist management:** Maintaining and updating a biometrically based list of subjects of interest for multiple screening programs within DHS, such as immigration violators, wanted persons, and KSTs
- **Data sharing:** Exchanging biometric and biographic identity and encounter information with authorized users

Table 3 lists the detailed user volume and IDENT biometric watchlist breakout for FY 2014 requests for biometric services. The majority of the transactions were from U.S. Customs and Border Protection (CBP) Office of Field Operations, followed by DOJ, state and local law enforcement, then DOS Consular Affairs. The relative proportions of watchlist matches with law enforcement and DOD biometrics are indicative of the derogatory nature of these specific data populations.

Table 3. OBIM Transactions and Watchlist Hits by Customer in FY 2014

	FY 2014 OBIM Transactions and Watchlist Hits by Customer*						
	Organizations Supported	**Subjects Processed**	**Percentage of Transactions Processed**	**KST Matches Identified****	**Percentage of KST Matches**	**Watchlist Matches Identified**	**Percentage of Watchlist Matches**
Customers	CBP Ports of Entry	56,559,931	63.7%	294	0.1%	452,014	16.7%
	DOJ	13,354,080	15.1%	26,284	7.5%	1,293,894	47.7%
	DOS	11,333,706	12.8%	525	0.1%	153,073	5.6%
	U.S. Citizenship and Immigration Services	3,401,412	3.8%	331	0.1%	248,750	9.2%
	DHS Enforcement	1,848,515	2.1%	157	0.0%	126,319	4.7%
	Office of Personnel Management	1,458,933	1.6%	-	0.0%	8,682	0.3%
	DOD	486,898	0.5%	323,162	92.1%	425,257	15.7%
	U.S. Coast Guard	892	0.0%	-	0.0%	34	0.0%
	TSA***	110,917	0.1%	1	0.0%	3,024	0.1%
	International	175,618	0.2%	-	0.0%	2,475	0.1%
	FEMA****	2	0.0%	-	0.0%	-	0.0%
	Ad Hoc	-	0.0%	-	0.0%	-	0.0%
	TOTAL	**88,730,904**	**100.0%**	**350,754**	**100.0%**	**2,713,522**	**100.0%**

* Data as of September 30, 2014.

** IDENT receives DOD's Biometrically Enabled Watchlist (BEWL), which results in nominations to the Terrorist Screening Center (TSC). These numbers do not necessarily indicate DOD's first match to a KST, but a rather a positive affirmation that a derogatory DOD encounter resulted in an enrollment to the TSC's Terrorist Screening Database. In FY 2014, OBIM collaborated closely with DOD to analyze and close gaps in BEWL records maintained in IDENT; this resulted in OBIM reloading BEWL records during the reconciliation process, causing a spike in KST matches. Additionally, there was a spike in FY 2014 KST matches for DOJ caused by DOJ's deployment of the Next Generation Identification System release 4 and associated CJIS data conversion actions.

*** Operational deployment of TSA Technology Infrastructure Modernization Program population started April 4, 2014.

**** Operational deployment of FEMA population started June 11, 2014.

Funding for IDENT O&M includes data center operations and systems engineering expenses. OBIM data center operations and fees sustain IDENT's mission operating environment at the two DHS data centers. These funds provide for hardware maintenance, system help desk support, network services, and system maintenance agreements. Systems engineering provides effective and efficient operations across a system's lifecycle and covers acquisition, development, and deployment. Funding also provides specialized IT engineering and process skills regarding capacity planning, system availability, service-level management, performance and service quality analysis, system and workload modeling and simulation, and statistical analysis through a framework of solutions, tools, standards, and reusable assets that contribute to effective and efficient operations across systems.

System modeling and simulation indicated that IDENT requires continued investment because increasing transaction volumes and a growing fingerprint gallery place increasing demands on throughput availability of system processing and storage space. Projected growth is organic and results from new enrollments, which affect capacity requirements and real-time data access resulting from increased transactions. As IDENT grows, additional resources are needed to meet existing performance standards with stakeholders and support capabilities, such as 10-fingerprint record storage and matching, enhanced IDENT biometric watchlist matching, and interoperability initiatives. New stakeholder requirements also continue to expand the system's matching services. In FY 2014, IDENT added approximately 15 million records to the fingerprint gallery and is expected to add an additional 21 million records in FY 2015.

Table 4 shows IDENT growth for FY 2014 and projected growth through FY 2020.

Table 4. Actual Growth for IDENT in FY 2014 and Projected Growth in FY 2015 – FY 2020

IDENT Transactions* (in millions)	FY 2014 (Actual)	FY 2015 (Est.)	FY 2016 (Est.)	FY 2017 (Est.)	FY 2018 (Est.)	FY 2019 (Est.)	FY 2020 (Est.)
Annual Transaction Volumes	88	102	120	129	137	144	152
Gallery Size (Records)	176	197	222	238	252	266	280

*OBIM has rescheduled planned customer onboardings that did not occur in FY 2014 through FY 2015. The expected onboarding of Federal Protective Service, ICE, DOD, TSA (Surface, Maritime, and Aviation), and FEMA records will significantly increase the gallery size in FY 2015 and FY 2016.

OBIM measures IDENT mission success in terms of its ability to meet performance parameters designed to measure the system's accuracy, reliability, and availability. Although IDENT has performed well, the system is aging and has grown significantly in daily transaction volume and number of stored biometrics. Inherent challenges to the stability and scalability exist and limit IDENT's ability to support current customer demands as well as the development of future capabilities.

To counteract these impacts, OBIM received $25,382,000 in FY 2015 to implement IDENT system improvements that address critical IDENT system challenges pertaining to database management, storage, and transaction volume. Continuing from FY 2014 and for FY 2015, the following solutions are being implemented to extend the life of the legacy IDENT system:

- **Image separation (FY 2014–FY 2015):** Separates IDENT images from the transaction database, dramatically reducing the size, complexity, and management burdens of the IDENT database
- **Matcher procurement and installation (FY 2014–FY 2015):** Adds required matchers to continue to enable a full search of the 10-print gallery and to accommodate organic growth, replication requirements, and the onboarding of potential new customers
- **Message infrastructure consolidation (FY 2014–FY 2016):** Consolidates all messaging into the Enterprise Service Bus to reduce the system's footprint
- **Transaction manager queue optimization (FY 2014–FY 2015):** Optimizes system performance and reduces the total queue count
- **Platform integration (FY 2015):** Leverages existing DHS platform to simplify and integrate the server, network, and storage requirements associated with the database
- **Operational data store/operational data reporting (FY 2015–FY 2016):** Automated access to mission-critical data extracted from external storage to meet OBIM stakeholder and customer requirements for data queries and reports

These system improvements will ensure the continued operation of the legacy system and will also complement the planned process to re-architect IDENT to support future capability development in a future biometric replacement system. The future biometric replacement system is a planned initiative to begin in FY 2016 that will provide scalable, cost-efficient, and modular system architecture. This will enable OBIM to continue to provide current identity management services as well as support future customer demands and expanded capability.

Table 5 outlines FY 2015 planned accomplishments for IDENT.

Table 5. FY 2015 Planned Accomplishments – IDENT

FY 2015 Planned Accomplishments
Description: Maintain IDENT service levels by focusing on the most critical break/fix issues and preventive maintenance. **Justification:** OBIM measures IDENT's success primarily by the system's ability to meet performance metrics and SLAs with customers and stakeholders for accuracy, reliability, and system availability. During times of funding constraints, OBIM is committed to maintaining system performance to ensure continued delivery of the biometric matching, storing, sharing, and analyzing capabilities necessary to achieve its mission, while striving to identify current and future-year efficiencies that IDENT can use to maintain system performance. Performance targets include: - Number of seconds (average) for biometric watchlist searches (for queries from U.S. ports of entry); target is 10 seconds or less   - Number of minutes (average) for biometric watchlist searches (for queries from DOS); target is 5 minutes or less   - Percentage (average) of IDENT operational availability; target is 99.7 percent or greater   - Number of minutes (average) for biometric watchlist searches (for queries from law enforcement); target is 2 minutes or less   - Percentage (average) of daily travelers referred to additional screening due to false fingerprint matches; target is 0.35 percent or less
Description: Replace enterprise storage solutions for deployment within the DHS data centers. This includes the implementation of virtualization in the new storage solution for improved capacity management and ensures IDENT primary database storage capacity does not exceed 80 percent. **Justification:** The primary database is the central repository for biometric and transactional information for the entire IDENT system. All customer enrollments are stored in the IDENT primary database. The ability to continue to store data in the primary database is vital to OBIM's ability to match, store, share, and analyze data for its customers, while a lack of storage would prevent future population enrollments into the IDENT system.
Description: Improve IDENT capability by expanding nonproduction testing environments via the 1:1 staging effort. The 1:1 staging effort will provide an operationally representative pre-production environment to test new capabilities before they are released into production. OBIM will use a phased approach to migrate physical environments to virtualized environments that better represent the operational environment. **Justification:** Currently, OBIM has a very limited ability to test new IDENT capabilities before deployment, which has historically resulted in post-deployment issues that necessitate costly and time-consuming system patches. The 1:1 staging nonproduction environment will enable operational efficiencies by limiting post-production issues and system change requests. This process also will ensure that system changes do not result in degradation of services to customers and stakeholders.
Description: Refine system monitoring and forecasting capabilities through deployment of tools to enable performance/capacity monitoring and accelerate troubleshooting within the operational environments. **Justification:** The Management Control System (MCS) provides for server performance monitoring, validation, and prediction analysis for end-to-end visibility of storage utilization, as well as forecasting for current and future storage capacity requirements. MCS information enables OBIM to model storage scenarios that more accurately predict requirements and manage existing and projected database storage requirements to target maximal funding efficiency.

FY 2015 Planned Accomplishments

Description: Complete the Secure Real-Time Platform IDENT Integration, a data-sharing system with Five Country Conference (FCC) members designed to deploy an automated solution for filtering data of special protected classes. OBIM deployed full operating capability of this effort in November 2013; however, because of the complexity of international agreements and the development of foreign partner systems, testing and onboarding efforts will continue through FY 2015 and FY 2016.

Justification: Biometric and biographic exchanges with FCC members result in improved border management and security, better support for the detection and prevention of criminal activities and immigration/identity fraud, more efficient passenger facilitation, more accurate data records, and improved integrity of identity management services.

Description: Implement image separation to remove IDENT images from the transaction database; OBIM will subsequently host the removed images on an alternative, yet accessible, platform. This effort, initiated in FY 2014, is planned for completion in FY 2015.

Justification: The IDENT database presents storage, complexity, and management challenges due to its sheer size and projected growth. The image separation effort will dramatically reduce the size, complexity, and management burdens of the IDENT database, as well as provide a more scalable approach to image storage.

Description: Design messaging infrastructure consolidation by consolidating all messaging into the Enterprise Service Bus to reduce the system's footprint. OBIM initiated this effort in FY 2014 and plans completion in FY 2015.

Justification: Currently, IDENT includes two messaging infrastructures that are duplicative, costly, and unnecessary. This effort will reduce system footprint and associated maintenance, monitoring, and licensing costs by removing a total of eight servers (four at each data center) and completely eliminating the Local Service Bus, a redundant legacy component of the system.

Description: Perform a technical study of Transaction Manager queueing optimization. OBIM initiated this effort in FY 2014, and plans delivery of the technical study in FY 2015. Upon delivery, OBIM will review the recommendations of the technical study to determine a future course of action for queue optimization.

Justification: The IDENT Transaction Manager processes and aligns all matching transaction requests received by the system. The queueing optimization effort will increase system efficiency and eliminate unnecessary queue overhead by enforcing workload priorities in the process, thereby smoothing system utilization and transaction distribution during usage peaks and valleys. This effort would result in optimized system performance, a reduced total queue count, and improved system workflows that enable more efficient operations.

Description: Purchase additional 10-print matchers. OBIM initiated this effort in FY 2014 with the purchase of 18 additional matchers. In FY 2015, OBIM will purchase and install a total of six matchers.

Justification: After the system reaches matcher bank capacity, OBIM cannot enroll additional records on the system. 10-print matchers are required to accommodate growth and move IDENT toward the ability to enable a full search of the 10-print gallery.

Description: Implement IDENT platform integration to simplify system servers, networks, and storage requirements associated with database operations by leveraging existing DHS IT platforms. This implementation will include expanding the capacity of currently deployed large-scale servers to manage all workloads and enable additional processing capacity at each DHS data center. OBIM will configure servers for full redundancy and leverage virtualization capabilities to allocate system resources.

Justification: This effort will result in O&M cost efficiencies by reducing the system footprint in the DHS data centers and reducing maintenance expenses associated with system patching and upgrades. Additionally, a reduction in the number of physical servers and other infrastructure components that OBIM needs to restart and regularly maintain will increase system availability. Finally, IDENT platform integration will reduce the number and different types of servers, enabling greater IT standardization across both data centers.

FY 2015 Planned Accomplishments
Description: Implement the Operational Data Store and Operational Data Reporting capabilities to provide automated access to mission-critical data. OBIM initiated this effort in FY 2014 and plans for completion in FY 2015.
Justification: OBIM provides data extracts of the information requested through data queries from OBIM. This initiative will implement an automated solution aimed to develop efficiencies in operations.

2. Corporate Systems

OBIM internal Corporate Systems consist of hardware, software (maintenance and licensing agreements), data circuit maintenance costs, Tier 1/2/3 help desk and application support, and network and telecommunication services for employee desktop support. Internal Corporate Systems also consist of information and backup storage. These services are necessary program expenses that enable effective OBIM program management.

Table 6 details FY 2015 planned accomplishments for Corporate Systems.

Table 6. FY 2015 Planned Accomplishments – Corporate Systems

FY 2015 Planned Accomplishments
Description: Plan for Workplace as a Service.
Justification: The intent of this service is to provide users with secure, virtual access to desktop operating systems and applications anywhere in the world, including on mobile devices. This access will provide real-time scalability as well as consistent and timely installation of patches and upgrades.
Description: Enhance video teleconference and video operations at OBIM by providing improved video capabilities in all operational facilities (including the DHS data centers).
Justification: The intent of this capability is to enhance the OBIM Telework Program experience by enabling video capability for all employees, thereby allowing for work collaboration with users anywhere in the world.

C. Identity and Screening Services

OBIM is the designated lead entity within DHS responsible for biometric identity management services. Identity and Screening Services provide real-time human biometric verification capabilities, updates to the IDENT biometric watchlist, and other biometric expertise and services.

OBIM meets these mission requirements in four areas:

- Establishing or verifying identity through IDENT, supplemented with fingerprint analysis conducted by OBIM fingerprint examiners
- Enhancing biometric identification and intelligence vetting of persons of interest through biographic and data integrity analysis

- Supporting law enforcement and intelligence operational activities to improve the accuracy and usefulness of identities maintained by the office
- Providing technical assistance to domestic and international government partners who are either engaged in developing large-scale biometric systems and services themselves, or are interested in using IDENT to meet their needs for identity management

Collectively, these services aim to identify individuals by providing actionable information across DHS and to other Federal Government agencies, state and local law enforcement, the Intelligence Community, and international partners. All biometric exchanges increase the sharing of information, promoting homeland security by pushing out our borders and assisting our partners with proven identity management practices.

1. Biometric Verification

OBIM's Biometric Support Center (BSC) provides DHS biometric verification services. Its primary mission is to provide expert fingerprint identification services to support DHS Components along with federal, state, and local law enforcement agencies; intelligence agencies; and foreign partners.

To support this diverse customer base, OBIM employs contractor resources of highly skilled 10-print and latent fingerprint examiners operating 24 hours per day/7 days per week to support critical immigration and border management missions, investigations, and identifications of potential persons of interest and unknown individuals.

Specifically, the BSC supports OBIM's biometric verification capabilities by providing:

- 10-print verification services to supplement IDENT's automated matching capabilities
- Latent print services involving the comparison and verification of known fingerprints with previously unidentified latent fingerprints
- Supplemental biometric services including IDENT biometric watchlist enrollments and biometric searches of IDENT for non-DHS stakeholders, including unknown deceased individuals, and biometric record maintenance

10-Fingerprint Verification Services

Although IDENT fingerprint matching technology is among the most efficient and accurate in the world, reviews by fingerprint examiners are required in some cases to ensure that biometric records are properly linked in IDENT and that derogatory data are not erroneously associated with an individual, thereby providing more accurate, reliable, and actionable information to OBIM customers. Daily, OBIM fingerprint examiners verify more than 1,700 sets of fingerprints to supplement the automated biometric

matching capabilities of IDENT. A subset of the daily volume includes urgent verification requests that an examiner must review and complete within 10 minutes and corrections to existing biometric records (for example, wrong portion of the finger captured by an officer) to ensure that DHS officers have timely and accurate biometric results to meet their mission needs. In FY 2014, OBIM completed 239,154 urgent verifications. Although total verification volumes decreased in FY 2014 in part because of the implementation of improved matching algorithms, urgent verification volumes increased because existing customers expanded their use of IDENT. In addition, OBIM made corrections to 19,045 biometric records during FY 2014. OBIM has begun tracking these corrections to identify increasing trends in biometric capture issues that can be used to improve the biometric capture applications submitting fingerprints to IDENT.

Using prior year data, Table 7 shows the history of biometric verifications from FY 2009 through FY 2014.

Table 7. History of Biometric Verifications

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Total 10-print Verifications Completed	643,091	637,366	599,837	625,636	693,308	631,348
Urgent Verifications Completed	180,123	185,866	183,007	191,852	181,175	239,154

Note: Figures are actual numbers for each fiscal year end.

Latent Fingerprint Services

The BSC latent fingerprint operation supports DHS efforts to prevent and deter threats to the United States by identifying criminals and high-risk individuals using latent fingerprints. Latent fingerprints are partial fingerprint impressions unintentionally left by an individual on an object or surface. Other agencies collect these latent prints at crime scenes and terrorist incidents or operational locations. OBIM searches these latent prints against IDENT. In addition, OBIM vets new 10-print records added to IDENT against the file of unidentified latent prints. BSC latent print examiners review the results of these searches, averaging 12,100 latent print comparisons daily, and verify any identification made. Searching IDENT is an important step in terrorist and criminal investigations as over 70 percent of the known prints in IDENT are not replicated in any other fingerprint repository. In FY 2014, these efforts resulted in 2,318 identifications— nearly double FY 2013 volumes. The significant increase was due to additional derogatory records from a partner agency that OBIM enrolled into IDENT. In 151 cases, identifications would not have been made without searching IDENT because the individuals had no prior derogatory information associated with them and would not have been matched in a search of other agencies' fingerprint repositories.

Using prior year data, Table 8 shows the history of latent comparisons and identifications from FY 2009 through FY 2014.

Table 8. History of Latent Fingerprint Comparisons and Identifications

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Latent Comparisons Completed	4,616,604	5,169,509	4,194,714	4,483,604	4,624,869	4,422,948
Latent Identifications	139	139	343	1,041	1,207	2,318

Note: Figures are actual numbers for each fiscal year end.

Supplemental Biometric Services

The BSC provides other biometric services including IDENT biometric watchlist enrollments and IDENT biometric searches, some of which are related to unknown deceased cases, including criminal cases and mass casualty incidents such as natural disasters or transportation accidents. These efforts ensure that OBIM stakeholders have access to timely and accurate IDENT data. In FY 2014, the BSC responded to 3,793 biometric search requests and identified 218 unknown deceased persons, including the victims from various transportation incidents (for example, the Malaysian Air Flight 17 crash in Ukraine and a train derailment in New York). In addition, the BSC provides biometric records from IDENT to stakeholders in some circumstances (such as investigations and court proceedings) as they are requested; this is allowed under policy and privacy guidelines. In FY 2014, the BSC responded to 371 requests for IDENT fingerprint records.

Using prior year data, Table 9 shows the history of biometric watchlist enrollments, biometric searches, and unknown decreased identifications from FY 2009 through FY 2014.

Table 9. History of Supplemental Biometric Services

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Watchlist Enrollments	22,281	6,327	8,163	3,576	2,586	1,995
Biometric Searches	7,507	6,107	5,241	4,186	4,326	3,793
Unknown Deceased Identifications	397	242	173	132	100	218
Biometric Record Requests	-	-	-	-	454	322

Note: Figures are actual numbers for each fiscal year end.

In FY 2015, OBIM fingerprint examiners will continue to support existing stakeholders at the same service levels as prior years while contending with an increased workload; OBIM anticipates the increase due to the planned expanded use of IDENT. To ensure that the increased workload does not impede legitimate travel or negatively affect officer safety, it is critical that OBIM fingerprint examiners continue to provide fingerprint verification decisions on urgent requests in 10 minutes or less and non-urgent requests within 24 hours.

Table 10 describes FY 2015 planned accomplishments for biometric verification.

Table 10. FY 2015 Planned Accomplishments – Biometric Verification

FY 2015 Planned Accomplishments
Description: Continue to provide biometric verification capabilities and adhere to service-level targets for urgent and non-urgent fingerprint verification requests while responding to increased demands for services through fiscal year onboarding efforts. OBIM will initiate planning efforts to expand biometric verification capabilities to support additional biometric modalities. Service-level targets include: - Rate of urgent verification transactions to be completed within 10 minutes or less; target is 91 percent or greater   - Average response time for non-urgent requests; target is 24 hours or less   - Accuracy rate for positive latent prints; target is 100 percent   - Accuracy rate for non-match latent identifications; target is 99.5 percent or greater   - Accuracy rate for biometric enrollments; target is 99.5 percent or greater   - Rate of biometric search requests completed within 6 hours; target is 90 percent or greater   - Average response time to biometric record requests after approvals are obtained; target is 1 business day or less
Justification: Through biometric verification services, OBIM provides resources that help ensure the integrity of IDENT biometric data and provide supplemental biometric services to support the operational needs of OBIM customers and stakeholders. These resources of highly skilled 10-print and latent print examiners operate 24 hours per day/7 days per week.

2. Identity Analysis

Identity Analysis provides resources for value-added identity management services with a focus on biometrics. These activities support analytical, investigative, and operational needs for law enforcement, intelligence agencies, external agencies, and international partners as needed. As a part of OBIM's current identity services structure, identity analysts coordinate with the Intelligence Community to promote KSTs to the IDENT biometric watchlist. Identity analysts also interact regularly with the FBI TSC to verify the status of a KST on the FBI biometric watchlist and receive biographic information based on biometrics recently added or removed from the Terrorist Screening Database, conduct identity fraud detection activities, and notify stakeholders of recent watchlist promotions. This interactive service assists OBIM stakeholders in making adjudications and providing benefits.

Identity analysts also provide NPPD and OBIM senior leadership with operational reports focusing on trends and patterns that result in increased awareness by senior management on current activities and significant operational cases. OBIM has begun providing these reports to DHS Operations and Coordination Planning, which then briefs the information in the DHS Daily Component Highlights Report for the Secretary. In FY 2014, identity analysts produced 29 significant operational activities reports in addition to Daily Operational Reports.

In FY 2014, identity analysts vetted more than 30,876 biometric matches, researched 2,824 redress requests, and provided 57,378 fingerprints and encounter data to the Intelligence Community on KSTs. Additionally, OBIM provided 552 watchlist notifications to stakeholders.

OBIM identity analysts support multiple projects with DHS operational Components and foreign partners to detect and deter inadmissible aliens from entering the United States or applying for immigration benefits. The United Kingdom (U.K.) is a significant partner. The DHS Tripwire program permits the exchange of biometric identification information for national security and law enforcement purposes between the United States and the London Metropolitan Police Service. In FY 2014, identity analysts received 189 fingerprints and made 110 matches under this data-sharing agreement. OBIM also exchanges records with the United Kingdom Home Office. In FY 2014, identity analysts provided information to the United Kingdom on 264 IDENT biometric watchlist matches regarding individuals who applied for U.K. visas.

Under the FCC High Value Data Sharing Protocol (HVDSP), OBIM provides biometric identity verification services to Australia, New Zealand, Canada, and the U.K. Information sharing under these agreements assists in establishing an individual's identity and verification during subsequent encounters and enables criminal and immigration violation biometric watchlist checks. The exchange of information is reciprocated by partner agencies to OBIM stakeholders through identity analysts to support the adjudication of immigration benefits, enforcement actions, credentialing, and access permissions, along with other uses. In FY 2014, identity analysts coordinated, processed, and researched 30,451 IDENT matches under HVDSP data-sharing agreements.

Identity analysts also provide operational support to PCSC agreements by coordinating biometrics and biographic information with foreign governments and researching incoming biometrics and releasable biographic data. During FY 2014, identity analysts received 10 batches of fingerprints, which resulted in two matches for action by identity analysts.

Table 11 provides FY 2015 planned accomplishments for Identity Analysis.

Table 11. FY 2015 Planned Accomplishments – Identity Analysis

FY 2015 Planned Accomplishments
Description: Continue to provide a strong international biometrics data-sharing planning and analysis capability. **Justification:** This capability allows DHS to more fully integrate its diverse information on international persons with other intelligence agencies and capabilities.
Description: Institute a rigorous Identity Analysis training program to strengthen the ability of staff to analyze biographic information from biometric matches. **Justification:** This will enable analysts to have the ability to research, process, coordinate, analyze, exploit, and report on biometric matches that have an immigration or national security impact.

Abbreviations and Acronyms

BEWL	Biometrically Enabled Watchlist (DOD)
BSC	Biometric Support Center
CBP	U.S. Customs and Border Protection
CJIS	Criminal Justice Information Services Division (FBI)
DHS	Department of Homeland Security
DOD	Department of Defense
DOJ	Department of Justice
DOS	Department of State
FBI	Federal Bureau of Investigation
FCC	Five Country Conference
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
HVDSP	High Value Data Sharing Protocol
ICE	U.S. Immigration and Customs Enforcement
IDENT	Automated Biometric Identification System
IT	Information Technology
KST	Known or Suspected Terrorist
MCS	Management Control System
NPPD	National Protection and Programs Directorate
O&M	Operations and Maintenance
OBIM	Office of Biometric Identity Management
PCSC	Preventing and Combating Serious Crime
PIA	Privacy Impact Assessment
PPBE	Planning, Programming, Budgeting, and Execution
S&T	Science and Technology (DHS Directorate)
SLA	Service Level Agreement

U.K.	United Kingdom
TSA	Transportation Security Administration
TSC	Terrorist Screening Center (FBI)
U.K.	United Kingdom
VWP	Visa Waiver Program
WCF	Working Capital Fund