



Office of Biometric Identity Management

Multi-Year Investment and Management Plan

June 11, 2015

Fiscal Year 2015 Report to Congress



Homeland
Security

National Protection and Programs Directorate

Message from the Acting Director

I am pleased to submit the following report, “Office of Biometric Identity Management Multi-Year Investment and Management Plan” for Fiscal Year (FY) 2015, prepared by the National Protection and Programs Directorate’s Office of Biometric Identity Management (OBIM).

OBIM compiled this report pursuant to legislative language set forth in Senate Report 113-198, which accompanies the *FY 2015 DHS Appropriations Act* (P.L. 114-4), as well as the *FY 2013 Department of Homeland Security (DHS) Appropriations Act* (P.L. 113-6).



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) 298-5200 or to the Department’s Chief Financial Officer, Chip Fulghum, at (202) 447-5751.

Yours very truly,

A handwritten signature in dark ink, appearing to read "Shonnie R. Lyon". The signature is stylized and includes a long horizontal flourish extending to the right.

Shonnie R. Lyon
Acting Director
Office of Biometric Identity Management

Executive Summary

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 a cross-cutting responsibility to serve DHS Components and other 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. OBIM analysts also provide human biometric verification and search capabilities, updates to the IDENT biometric watchlist, and responses to requests for IDENT biometric records to support analytical, investigative, and operational needs of customers and partners. 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 (DOJ), State (DOS), and Defense (DOD); state, local, and tribal law enforcement; the Intelligence Community; and foreign government partners. In FY 2014, OBIM biometric services provided DHS and other partners with significant contributions to homeland security, national security and law enforcement missions, including 27,591 known or suspected terrorist (KST) identifications in support of homeland security missions and 323,162 KST matches for DOD national security missions. Additionally, reviews by OBIM's fingerprint examiners in FY 2014 provided 239,154 urgent verifications; 2,318 latent fingerprint identifications in support of terrorism and criminal investigations; and identification of 218 unknown deceased individuals, including victims from the Malaysian Air Flight 17 crash in the Ukraine and a New York train derailment. OBIM's identity analysts also produced 29 reports focusing on significant operational activities, such as providing DHS stakeholders and partners with the ability to identify individuals who attempt to use multiple identities to illegally obtain immigration benefits in the United States or identifying KSTs from foreign government partners initiatives. OBIM analysts also provided 57,378 fingerprints and related encounter data on KSTs to the Intelligence Community and 552 watchlist notifications to customers.

In this Multi-Year Investment and Management Plan (MYIP), OBIM strategically frames customer- and mission-focused priorities within available resources to sustain and provide biometric identity services within current capabilities (interventions to correct emergent system performance issues). OBIM also strategically frames these priorities within programmed activities to develop necessary interim system improvements to meet growing stakeholder and customer demand for current services and agreements.

The FY 2015 OBIM MYIP reflects planned accomplishments for FY 2015–FY 2018 to execute OBIM’s mission, meet customer and stakeholder requirements, and continue progress from FY 2014 to achieve strategic goals and objectives. To meet the requirements of Senate Report 113-198, as well as the *FY 2013 DHS Appropriations Act* (P.L. 113-6), OBIM addresses planned accomplishments in terms of four major components of the OBIM budget:

- Salaries and Expenses
- System Operations and Maintenance for IDENT and for Corporate Systems
- Identity and Screening Services
- Planned development of a replacement biometric system based on re-architecting the current IDENT system to meet current and future requirements¹

OBIM leadership is committed to effective management to achieve strategic goals and to exercise effective stewardship of federal resources. Therefore, OBIM addresses budgeted activities within the categories above in terms of:

- FY 2015–FY 2018 planned and projected accomplishments that demonstrate alignment with OBIM strategic goals and describe achieved or intended outcomes
- OBIM’s efforts to mature and continue strengthening accountability and identify opportunities for efficiencies
- Appropriations for activities as shown in appendix A

¹ In FY 2016, OBIM is proposing a new activity account structure that more accurately portrays how funding streams support mission capabilities. The new structure consists of: Salaries and Benefits, Program Operations, Identity and Screening Services, IDENT System Operations, and Replacement Biometric Systems. However, OBIM organized this MYIP in the format of the FY 2015 budget structure for consistency and readability.



Office of Biometric Identity Management Multi-Year Investment and Management Plan Fiscal Year 2015

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I. Legislative Requirement

This Multi-Year Investment and Management Plan (MYIP) for the Office of Biometric Identity Management (OBIM) is submitted pursuant to Senate Report 113-198, which accompanies the *Fiscal Year (FY) 2015 Department of Homeland Security (DHS) Appropriations Act* (P.L. 114-4), as well as the *FY 2013 DHS Appropriations Act* (P.L. 113-6).

Senate Report 113-198 states, in relevant part:

Section 545. The bill includes language directing DHS CIO, CBP, ICE, United States Secret Service, and the Office of Biometric Identity Management to submit multiyear investment and management plans for all information technology programs and procurements at the time the President's budget proposal is submitted.

Senate Report 113-198 also states, in relevant part:

Language is included in the bill requiring a multi-year investment and management plan be submitted with the President's budget request that justifies current and future requirements for OBIM.

P.L. 113-6 states, in relevant part:

For necessary expenses for the Office of Biometric Identity Management ... shall submit to the Committees on Appropriations of the Senate and the House of Representatives at the time the President's budget is submitted each year under section 1105(a) of title 31, United States Code, a multi-year investment and management plan for the Office of Biometric Identity Management program, to include each fiscal year starting with the current fiscal year and the 3 subsequent fiscal years, that provides—

(1) the proposed appropriation for each activity tied to mission requirements and outcomes, program management capabilities, performance levels, and specific capabilities and services to be delivered, noting any deviations in cost or performance from the prior fiscal years expenditure or investment and management plan for United States Visitor and Immigrant Status Indicator Technology [now known as the Office of Biometric and Identity Management (OBIM)];

(2) the total estimated cost, projected funding by fiscal year, and projected timeline of completion for all enhancements,

modernizations, and new capabilities proposed in such budget and underway, including and clearly delineating associated efforts and funds requested by other agencies within the Department of Homeland Security and in the Federal Government and detailing any deviations in cost, performance, schedule, or estimated date of completion provided in the prior fiscal years expenditure or investment and management plan for United States Visitor and Immigrant Status Indicator Technology; and

(3) a detailed accounting of operations and maintenance contractor services, and program costs associated with the management of identity services.

II. Establishing OBIM Strategic Direction

The *OBIM Strategic Plan 2014–2018* defines and establishes the organization’s vision, mission, and four strategic goals to fulfill its mandated role as the lead entity within DHS responsible for managing biometric identity services. The goals outlined in OBIM’s strategic plan fully align with the National Protection and Programs Directorate (NPPD) and DHS strategic goals and priorities, as well as with updated priorities outlined in the DHS 2014 Quadrennial Homeland Security Review. These goals frame activities to provide mission-focused biometric identity services within current capabilities, develop necessary system improvements to meet growing stakeholder and customer demand, and plan for capabilities to meet future requirements.

OBIM’s 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. OBIM’s vision is a homeland that is safe, secure, and resilient through advanced identity services, information sharing, and analysis. OBIM’s four strategic goals collectively provide areas of focus for realization of its vision and accomplishment of its mission. The goals align with NPPD’s strategic 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 DHS Policy 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 enterprise-wide 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.

The *OBIM Strategic Plan 2014–2018* recognizes this by explicitly emphasizing the need to mature and strengthen its management and organizational infrastructure, focusing on two desired results:

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

Figure 1 provides a summary overview of OBIM goals and objectives. These objectives advance the strategic goals and provide a basis for establishing milestones. This MYIP will reference them throughout to indicate strategic alignments of activities. The structure of the MYIP conveys how OBIM's FY 2015 through FY 2018 plans are aligned with OBIM's strategic goals and objectives, with an emphasis on strengthening program management to execute specific activities that support strategic objectives designed to meet stakeholder and customer requirements.

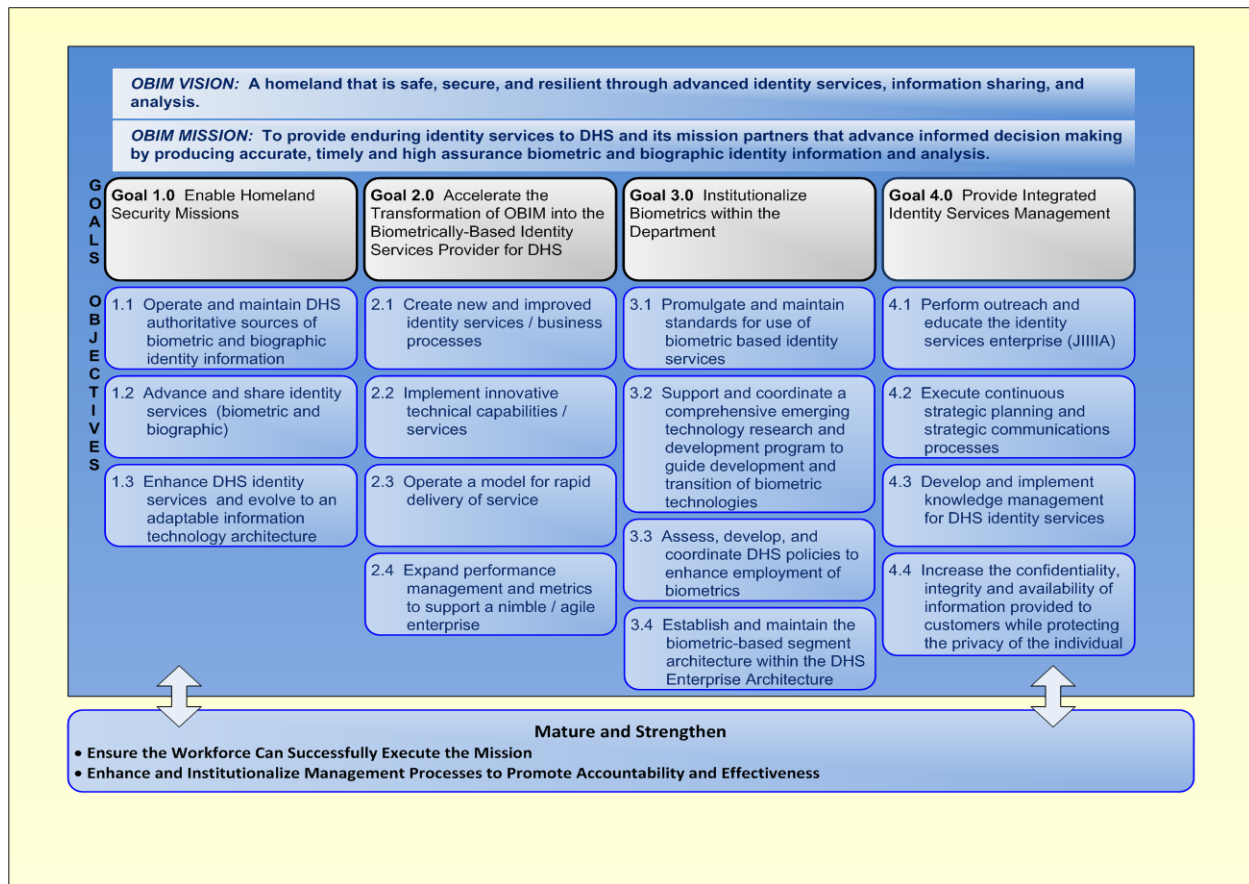


Figure 1. OBIM Goals and Objectives

Building upon the strategic foundation and direction that OBIM established in 2013, OBIM has aligned a complementary family of planning and guidance documents within the planning, programming, budgeting, and execution (PPBE) framework: the Implementation Plan (IPlan), the Integrated Planning and Execution Guidance (IPEG), the MYIP, and annual Strategic Plan Reviews. These documents guide activities to implement and further strategic goals and objectives, achieve unity of effort within OBIM, NPPD, and DHS, and meet the needs of customers and stakeholders.

These documents build upon OBIM’s strategic plan vision, mission, and goals to support and enable DHS mission areas, ensure that OBIM is able to meet customer needs, and provide the most current and state-of-the-art biometric identity management capabilities. Within the scope of the strategic plan, the following documents:

- Provide a frame of reference in which to align OBIM priorities and focus operations, activities, and resources
- Undergo annual reviews against performance measures and internal/external conditions to monitor progress, identify emphasis areas, and make necessary adjustments



The IPlan establishes planned activities aligned to goals and objectives. It describes how OBIM will execute and measure activities and provides an opportunity for unconstrained planning to identify and develop details of additional activities for future needs.

The IPEG focuses and prioritizes what OBIM will do each year.

The MYIP is an OBIM report to Congress that articulates how OBIM plans resources and accounts for priority activities.

Strategic Plan Reviews derive from quarterly review cycles and form the basis for updating IPlan activities.

OBIM also developed an integrated strategic management process to complete the implementation of OBIM’s strategy. This management process is a tool that enables leaders to better monitor and manage progress and resources by setting conditions to establish a learning organization that is adaptive to change. The process framework shown in figure 2 incorporates and accounts for progress toward strategic goals and objectives to continually align planning, budget, and acquisition by monitoring specific activity milestones and performance measures. This enables leadership to identify and synchronize critical paths and priorities within OBIM and for unity of effort within DHS. It provides a way to incorporate goals, objectives, milestones, and performance measures into procurements, investments, budget execution decisions, unfunded requirements, and quarterly performance reviews. The process also enables leaders to tie measured and planned activities to annual employee and leadership development, performance planning and appraisals, hiring priorities, and communications.

Figure 2 represents the strategic management process and its integration with related processes.

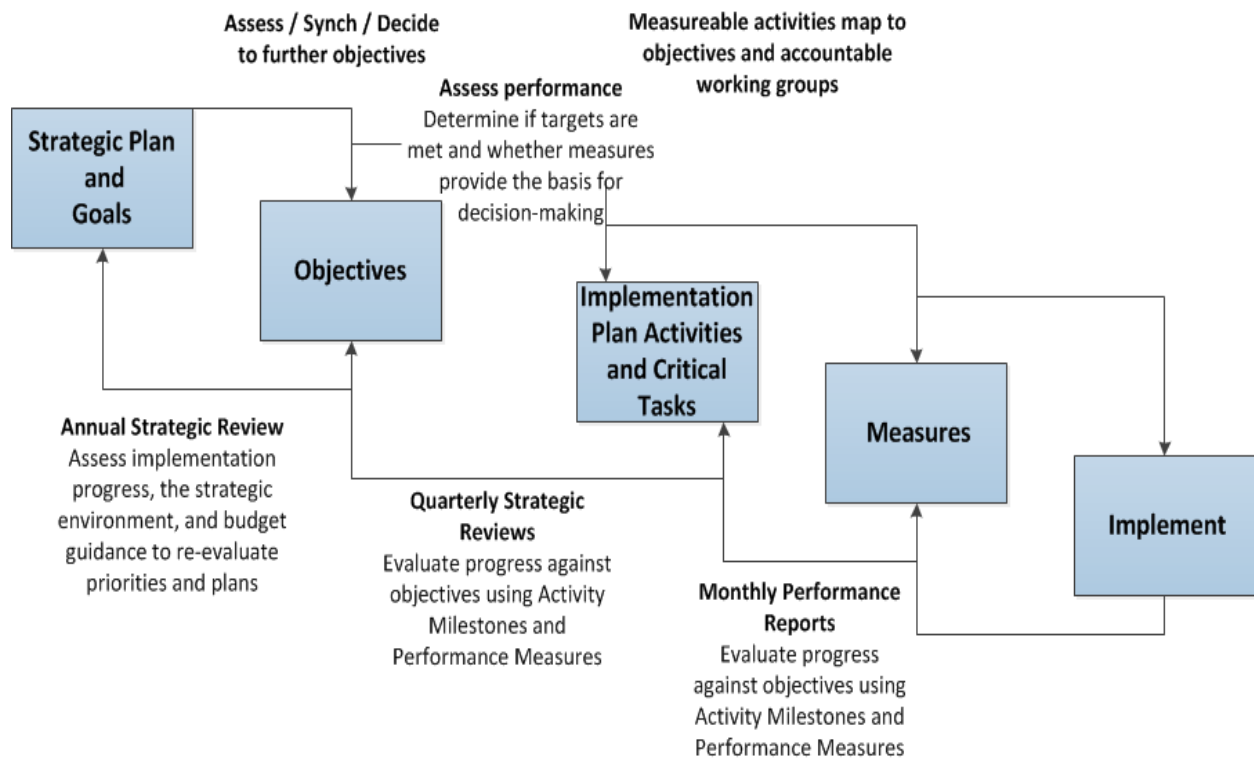


Figure 2. Integrated Strategic Management Process

This performance monitoring and analysis framework consists of a performance community of leadership, working units, and employees working together in a process to review and improve performance measures through verification and validation. The framework incorporates periodic reporting of performance results, which are reviewed regularly by leadership. It integrates with the PPBE processes to develop an integrated performance budget. By focusing on central execution, reporting, and decision flow within this integrated strategic management framework, OBIM can continually mature and refine its processes and outputs to efficiently support mission, outcomes-focused accountability and decision support.

III. Current Services

OBIM’s current services consist of biometric identity management and analysis capabilities that directly support agencies within DHS, as well as the Departments of Justice (DOJ), State (DOS), and Defense (DOD); state, local, and tribal law enforcement; the Intelligence Community; and international partners. To meet DHS missions and strategic goals, OBIM provides its customers with timely, accurate, and uninterrupted access to information on individuals to facilitate decisions on enforcing immigration laws, adjudicating immigration benefit requests, providing credentialing-related benefits or services, and granting or denying facility access rights.



Figure 3. OBIM Customers

This MYIP organizes current OBIM services described in the following sections by Salaries and Expenses; Systems Operations and Maintenance (O&M) for the Automated Biometric Identification System (IDENT) and for Corporate Systems; Identity and Screening Services; and the planned development of the Replacement Biometric System on the basis of re-architecting the current IDENT system to meet current and future requirements.

A. Salaries and Expenses

Salaries and Expenses provide funding for OBIM’s 208 federal staff (in FY 2015) 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 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, the Working Capital Fund (WCF) (including rent expenses), administration, and logistics.

The mission support activities conducted by OBIM employees are essential to the execution of OBIM’s core mission support functions of matching, storing, sharing, and analyzing biometric data. The MYIP also presents notable accomplishments and plans pertaining to mission support and Strategic Goals 3 and 4 under Salaries and Expenses in table 1.

Table 1. Planned Accomplishments in FY 2015: Salaries and Expenses

FY 2015 Planned Accomplishments
<p>Align Planning, Acquisition, and Budgeting within a Strategic Framework</p> <ul style="list-style-type: none"> • Fully execute complete, integrated PPBE on the basis of matured OBIM processes and governing documents in a fully integrated, well managed PPBE cycle <ul style="list-style-type: none"> ○ Implement 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. ○ Implement FY 2015–FY 2018 acquisition strategy developed in 2014 as an annex to the OBIM Strategic Plan, to mature program management; align planned acquisitions to OBIM strategic objectives; streamline acquisition processes targeted to mission-critical activities and strategically targeted progressions; identify efficiencies through elimination of non-essential acquisitions, inform executive acquisition, performance analysis, and accountability ○ Update IPlans to reflect project scope, costs, schedules, progress and impacts achieved, risks, and mitigations, and identify future needs rationalized to resource allocations • Publish OBIM FY 2016 IPEG <ul style="list-style-type: none"> ○ Guide planning, mission execution, performance reporting, and decision making within existing budget for FY 2016 ○ Guide strategic planning to inform the budget processes for out-years that support mission and customer requirements • Publish the OBIM PPBE Manual in alignment with NPPD/Budget and Financial Administration PPBE guidance, which codifies alignment of strategy, acquisition, and budgeting and provides enabling structure and processes to make informed decisions to manage toward strategic goals and ensure top-level goals and objectives are in fact reflected in budgets submitted to Congress <p>Strategic Alignment</p> <p>Objective 4.2—Execute continuous strategic planning and strategic communications processes</p> <p>Objective 2.2—Implement innovative technical capabilities/services</p> <p>Objective 2.3—Operate a model for rapid delivery of service</p> <p>Mature and Strengthen: Enhance and Institutionalize Management Processes to Promote Accountability and Effectiveness</p>

FY 2015 Planned Accomplishments

Improve Financial Controls

Continue to close expired contracts and recover funds to redirect toward program priorities (i.e., the Replacement Biometric System), meet a DHS mid-FY 2016 target, reduce migration costs to the DHS Financial Management System, and identify funds for redirection to meet OBIM mission requirements.

- OBIM verifies and validates Undelivered Order (UDO) balances, reporting back to NPPD within 10 business days of receipt of quarterly status reports
- Government Services Administration contractor support to OBIM is expected to process 13 purchase requests/month
- Close out all applicable OBIM UDOS by mid-FY 2016 (final target to be established by DHS)

Strategic Alignment

Mature and Strengthen: Enhance and Institutionalize Management Processes to Promote Accountability and Effectiveness

Identify and Achieve Efficiencies in Operations and Facilities

- Expand the OBIM Telework Program toward a goal of increasing telework to account for 50 percent of eligible work hours in FY 2015 to enable cost efficiencies in facilities and transit subsidy expenses, stimulate productivity improvements, and reduce environmental impacts
- Consolidate OBIM work spaces and reallocate 60 work spaces from OBIM to NPPD to reduce overall facilities rent

Strategic Alignment

Mature and Strengthen: Enhance and Institutionalize Management Processes to Promote Accountability and Effectiveness

Meet Privacy Requirements to Maintain IDENT Operations

- Analyze OBIM customer requirements and produce necessary privacy documentation to support identity services, including the IDENT System of Record Notice (SORN), IDENT Privacy Impact Assessment (PIA), and DHS/DOJ Interoperability PIA

Strategic Alignment

Objective 3.3—Assess, develop, and coordinate DHS policies to enhance employment of biometrics

Validate and Maintain Service Level Agreements

The validation of Service Level Agreements (SLAs) is critical to OBIM's responsibility to fulfill its customers' needs, provide input to the review of its current technical architecture costs and system modernization needs, and contribute to the development of system change requests.

Validated SLAs will:

- Enable and enhance customer relations through managing expectations within the scope of OBIM's capabilities/capacities to support demand
- Document and verify baseline commitments to customers
- Support the development of OBIM plans for future modifications and upgrades to meet customer needs

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 2.3—Operate a model for rapid delivery of service

FY 2015 Planned Accomplishments

Execute Plans for Onboarding of Customers

“Onboarding” is defined as a set of activities associated with bringing on new customers or expanding services. OBIM will continue to onboard new customers and expand current levels of OBIM services in response to customer requests within budget and resource limits. OBIM will provide biometric identity services to the Transportation Security Administration (TSA) and the Federal Emergency Management Agency (FEMA) as new IDENT customers. OBIM is developing an onboarding schedule with the DHS Office of the Chief Security Officer. OBIM will also ingest additional DOJ Federal Bureau of Investigation (FBI) Criminal Justice Information Services (CJIS) Division records in support of U.S. Immigration and Customs Enforcement (ICE) and additional DOD records. Adding these records will allow OBIM to process and store new identities, offering expanded search capability and enhanced ability to biometrically identify individuals.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 2.2—Implement innovative technical capabilities/services

Execute Plans for Engagement with DHS Science and Technology (S&T) Directorate that Guide OBIM’s Efforts to Leverage DHS S&T Research and Development Capabilities in Support of OBIM Capabilities Development

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 cost-effective processes.

- In FY 2015, collaborating with DHS S&T Directorate, OBIM will continue partnerships with National Science Foundation Industry/University Cooperative Research Centers investigating emerging biometric technologies. Research will focus on the following: fingerprint and iris liveness detection; deception and detection using soft biometrics; behavioral biometrics; facial imaging quality and analysis; aging and permanence in biometrics; and cloud-based biometric service.

Strategic Alignment

Objective 3.2—Support and coordinate a comprehensive emerging technology research and development program to guide development and transition of biometric technologies

FY 2015 Planned Accomplishments

Continue to Implement Partner Engagement for Expanding, Sharing, and Standardizing the Use of Biometrics to Enable Data Sharing with Visa Waiver Program Members for Law Enforcement Purposes and with Additional Countries under Preventing and Combating Serious Crime Agreements

OBIM is participating in the DHS collaborative development of an International Information Sharing Architecture, led by the Office of Policy and the Office of the Chief Information Officer. DHS intends this effort to increase the effectiveness and accountability of biometric technical expertise across domestic agencies. It will increase the percentage of Visa Waiver Program (VWP) and Preventing and Combating Serious Crime (PCSC) records shared and matched to biometric holdings. DHS intends to achieve this increased percentage by increasing agency cooperation among DHS Components, DOS, and DOJ, as well as among state and local law enforcement, and by building collaborative biometric information-sharing platforms in the Caribbean Basin, with VWP member states, and with other countries and organizations of strategic interest. This effort includes implementation of data sharing with additional countries under PCSC agreements.

OBIM continues to advise and consult with ICE with regard to the Law Enforcement Information Sharing Initiative (LEISI) to determine what information DHS will share.

- In FY 2015, OBIM will specify and develop plans to implement a collaborative biometric information-sharing platform to institute a technical and operational capability to share biometric information and associated biographic data. It will define use cases, elicit requirements, validate solutions, and establish metrics that will support biometric and biographic information and deliver mission value to DHS and its stakeholders.

Strategic Alignment

Objective 1.2—Advance and share identity services

Objective 3.1—Promulgate and maintain standards for use of biometric-based identity services

Extend Efforts to Align and Promulgate Standards within the National and International Biometric Communities

This objective responds to requirements in Executive Order 13356 (2004) to develop common standards for sharing terrorism information by agencies within the Intelligence Community to increase the effectiveness and accountability of biometric technical expertise across domestic agencies and international partners.

- Build upon 2014 planning and initial development of the Biometric Resource Center concept of operations; this will provide OBIM in FY 2015 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
- Continue to engage internationally by expanding, sharing, and standardizing the use of biometrics
- Continue managing and facilitating the National Information Exchange Model (NIEM) Biometric Domain to ensure the capture and standardization of new modalities and enhancements to existing biometric-related data standards, thus creating a structure for seamless information sharing
 - Through NIEM and NIEM data exchange standardization, work with all biometric information exchange partners to help promote reuse of existing data models and unify interoperability
 - As part of Domain and Steering Committee leadership, support the annual Global Identity Summit by showcasing the NIEM Biometric Domain
 - Continue interoperability technology transfer and standardization integration with existing communities of interest (DHS, DOS, and DOJ) and explore possibilities of expansion to other partners

Strategic Alignment

Objective 1.2—Advance and share identity services

Objective 3.1—Promulgate and maintain standards for use of biometric-based identity services

Objective 4.1—Perform outreach and educate the identity services enterprise – Joint Interagency, Intergovernmental, International, Industry, Academia (JIIIIA)

Table 2. Planned Accomplishments in FY 2016–FY 2018: Salaries and Expenses

FY 2016–FY 2018 Planned Accomplishments
<p>Align Planning, Acquisition, and Budgeting within a Strategic Framework</p> <ul style="list-style-type: none"> In FY 2016, OBIM will operationalize the Replacement Biometric System Program Management Cell (PMC). The PMC will consist of federal staff personnel who manage the re-architecture of IDENT for the acquisition, risk, development, deployment, and execution of the Replacement Biometric System. <p>Strategic Alignment</p> <p>Objective 4.2—Execute continuous strategic planning and strategic communications processes Objective 2.2—Implement innovative technical capabilities/services Objective 2.3—Operate a model for rapid delivery of service Mature and Strengthen: Enhance and Institutionalize Management Processes to Promote Accountability and Effectiveness</p>
<p>Continue to Identify and Achieve Efficiencies in Operations and Facilities</p> <p>OBIM will analyze space and produce a plan that reflects reaching the goal of 50-percent telework; this is expected to further reduce office space requirements.</p> <p>Strategic Alignment</p> <p>Mature and Strengthen: Enhance and Institutionalize Management Processes to Promote Accountability and Effectiveness</p>
<p>Continue to Meet Privacy Requirements to Maintain IDENT Operations</p> <ul style="list-style-type: none"> On the basis of OBIM customer requirements, produce necessary privacy documentation (such as PIAs, SORNs) to support delivery of identity services with development of a replacement biometric system as well as additions of facial and iris modalities <p>Strategic Alignment</p> <p>Objective 3.3—Assess, develop, and coordinate DHS policies to enhance employment of biometrics</p>
<p>Execute Plans for Engagement with DHS S&T Directorate that Guide OBIM’s Efforts to Leverage DHS S&T Research and Development Capabilities in Support of OBIM Capabilities Development</p> <ul style="list-style-type: none"> Engage in coordinated DHS biometric research and development efforts to achieve the most cost-effective research and results by building on planning efforts from 2015 Coordinate to showcase and prototype latest technologies throughout OBIM and to OBIM stakeholders Regularly provide biometric requirement information to DHS S&T Directorate to continuously inform research and development of the current state Develop short-term and long-term technology enhancement plans to ensure maturity of biometric functional areas <p>Strategic Alignment</p> <p>Objective 3.2—Support and coordinate a comprehensive emerging technology research and development program to guide development and transition of biometric technologies</p>

FY 2016–FY 2018 Planned Accomplishments

Continue to Implement Partner Engagement while Expanding, Sharing, and Standardizing the Use of Biometrics to Enable Data Sharing with Visa Waiver Program Members for Law Enforcement Purposes and with Additional Countries under Preventing and Combating Serious Crime Agreements

Senate Report 113-198 charges DHS and OBIM “... to work cooperatively with the Departments of Justice, Defense, and State to standardize and share biometric information ...” and “... encourages OBIM to continue its data sharing and connectivity improvement efforts with the Intelligence Community.” OBIM will continue to participate in the DHS collaborative development of an International Information Sharing Architecture. OBIM will also further biometric-sharing capabilities with DHS Components, DOS, DOJ, and State and local law enforcement partners and customers to increase the percentage of VWP and PCSC records shared and matched to biometric holdings. OBIM will also continue to advise and consult with ICE and LEISI to determine what information the Department will share. OBIM has sufficient resources to perform manual reviews for up to seven VWP and PCSC countries. On the basis of current phasing and limiting discussions, these resources will most likely be sufficient through FY 2018.

- FY 2016 – Complete design, development, and testing of the collaborative biometric information-sharing platform with VWP partners and with other nations
- FY 2017 – Achieve interim operational capability for operational use by DHS and VWP partners

Strategic Alignment

Objective 1.2—Advance and share identity services

Objective 3.1—Promulgate and maintain standards for use of biometric-based identity services

Extend Efforts to Align and Promulgate Standards within the National and International Biometric Communities

- Extend the scope of the Biometric Resource Center, consistent with Homeland Security Presidential Directive 24/National Security Presidential Directive 59, to NPPD in FY 2016; all of DHS in FY 2016–FY 2017; and DOD, DOJ, DOS, and other federal agencies, and state, local, tribal, international, and industry partners in FY 2018.
- Continue to implement international engagement while expanding, sharing, and standardizing the use of biometrics
- Continue managing and facilitating the NIEM Biometric Domain to ensure the capture and standardization of new modalities and enhancements to existing biometric-related data standards by creating a structure for seamless information sharing

Strategic Alignment

Objective 1.2—Advance and share identity services

Objective 3.1—Promulgate and maintain standards for use of biometric-based identity services

Objective 4.1—Perform outreach and educate the identity services enterprise – JIIIA

Recap of Key Points:

- OBIM’s 208 federal staff members provide essential mission support functions in sustaining IDENT operations and for Identity Management activities
- Mission support includes planning, human capital management, budget and financial management, IT security and support, acquisition, activities within the WCF, administration, and logistics

B. System Operations and Maintenance

1. Automated Biometric Identification System (IDENT)

IDENT is the DHS target information system that provides biometric identity management capabilities and analysis services in support of the Department's mission. Maintenance of the IDENT system is fundamental to achieving the priority strategic goal of supplying user agencies with the biometric identity management services they require to protect the homeland.

Customer organizations collect biometrics from individuals as part of their operational processes and send these data to OBIM. IDENT can then compare information on persons of interest and other identified individuals from multiple sources. The system can match, store, share, analyze, and compare data and information about an individual's identity, thereby representing the foundation of biometric identification services. This information is then provided to the customer for decision and action.

Services provided or enabled by OBIM through IDENT include:

- **Identity establishment:** Using submitted biometric information and associated biographic data to uniquely distinguish an individual and connect that individual to his or her other information, such as biographic data and encounter information
- **Enrollment:** Using captured biometric information and associated 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 information and associated biographic data
- **Identity management:** Manages 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 known or suspected terrorists (KSTs)
- **Data sharing:** Exchanging biometric encounter information and biographic data with authorized users

Table 3 lists the detailed user volume and IDENT biometric watchlist breakout for FY 2014 requests for biometric services in which the majority of the transactions were from U.S. Customs and Border Protection (CBP) Office of Field Operations, followed by DOJ, then DOS Consular Affairs. In contrast to transaction volume, the greatest numbers and proportions of watchlist matches tend to occur in support of law enforcement and DOD where specific data are taken from populations more likely to present terrorist, watchlist, or criminal subjects.

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

FY 2014 OBIM Transactions and Watchlist Hits by Customer*							
Customers	Organizations Supported	Subjects Processed	Percentage of Transactions Processed	KST Matches Identified* *	Percentage of KST Matches	Watchlist Matches Identified	Percentage of Watchlist Matches
	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%
	USCIS	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%
	OPM	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 includes systems O&M, supporting infrastructure and data center operations, and systems engineering expenses. OBIM data center operations and fees sustain IDENT's mission operating environment at the two DHS Enterprise Data Centers (DCs). These funds provide for hardware maintenance, system help desk, network services, system maintenance agreements, and a portion of the WCF allocation (such as data center management and administrative services, and enterprise license agreements). Systems engineering provides effective and efficient operations across a systems lifecycle that covers systems acquisition, development, and deployment. Systems engineering 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. This analysis is performed using a framework of solutions, tools, standards, and reusable assets that contribute to effective and efficient operations across systems. Systems engineering

offers technical recommendations to promote consistent and efficient IT planning, design, development, testing, and deployment efforts for OBIM mission systems.

Systems engineering modeling indicates that IDENT requires continued investment as transactions grow and fingerprint gallery demands on the availability of system processing and storage space increase. The projected growth is organic and results from increased enrollments that affect capacity requirements and real-time data access through increased transactions. In FY 2014, IDENT added approximately 15 million records and is expected to add nearly 21 million records in FY 2015. Table 4 illustrates IDENT’s projected growth in annual transaction volumes and gallery size 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 to FY 2015. The expected onboarding of Federal Protection Service, ICE, DOD, TSA (Surface, Maritime, and Aviation), and FEMA records will significantly increase the gallery size in FY 2015 and FY 2016.

Although IDENT has performed well, the system is aging. IDENT was originally developed in the 1990s by the Immigration and Naturalization Service as a pilot project and continues to use the underlying legacy code. IDENT has grown significantly in daily transaction volume and the number of stored biometrics, and has added and expanded capabilities that exceed the original design. Two independent studies¹ confirmed inherent challenges with the stability and scalability of the IDENT system that will limit its ability to support current customers, as well as biometrics beyond fingerprints, or to expand the customer base while acting as the DHS enterprise-level provider of biometric identity services, in accordance with guidance in P.L. 113-6.

Resources will be dedicated to IDENT system improvements that ensure continued operation of the legacy system. To meet congressional intent for the FY 2015 funds provided, and with additional resources requested in FY 2016, OBIM will continue to dedicate resources and efforts toward IDENT system improvements that ensure continued operation of the legacy system and also complement the process to re-architecture IDENT to support future capability development. These improvements address critical

¹ *US-VISIT IDENT Systems and Architecture Assessment*, Oracle Consulting, January 2011, and *US-VISIT IDENT Code Assessment*, U.S. Air Force, Software Technology Support Center, January 2012.

IDENT system challenges pertaining to database management, including storage, image separation, 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):** Technical study to determine if queue optimization will improve system performance and reduce 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

Recap of Key Points:

- IDENT is the DHS target biometric data information system
- Maintenance of the IDENT system is fundamental to mission accomplishment and customer support to protect the homeland
- Funding for IDENT includes systems O&M, infrastructure and data center operations support, and systems engineering expenses
- IDENT requires continued investment as transaction volumes increase and the fingerprint gallery grows
- Interim, resourced priorities to extend system life are continuing from FY 2014 into FY 2015 to ensure that biometric identity matching, storing, and sharing can be accomplished for DHS, DOS, DOJ, and DOD
- IDENT is aging, and IDENT priority solutions will concurrently meet significant challenges to sustain mid- to long-term robust, scalable capabilities and will also be leveraged to develop a future replacement system for continuing long-term services that support the needs of DHS

Table 5. Planned Accomplishments for FY 2015

FY 2015 Planned Accomplishments
<p>Maintain IDENT Service Levels</p> <p>OBIM plans to maintain IDENT service levels by focusing resources first on the most critical break/fix issues (system interventions to correct emergent system performance issues), system change requests, technical refreshes, and preventive maintenance to meet current requirements. IDENT's success is primarily measured 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 for maintaining system performance to sustain the following system standards:</p> <ul style="list-style-type: none"> • Number of seconds (average) for biometric watchlist searches (for queries from U.S. ports of entry (POEs); target 10 seconds or less • Number of minutes (average) for biometric watchlist searches (for queries from DOS); target 5 minutes or less • Percentage (average) of IDENT operational availability; target 99.7 percent or greater • Number of minutes (average) for biometric watchlist searches (for queries from law enforcement); target 2 minutes or less • Percentage (average) of daily travelers referred to additional screening because of false fingerprint matches; target 0.35 percent or less <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p>
<p>Replace Enterprise Storage Solutions within the DHS Data Centers for Improved Capacity Management</p> <p>The primary database is the central repository for biometric, biographic, and transactional information for the entire IDENT system. All customer (DHS Components, DOJ, DOD, DOS, etc.) 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. A lack of storage for biometric, biographic, and transactional data in the primary database would prevent future population enrollments into the IDENT system.</p> <ul style="list-style-type: none"> • Identify and deploy replacement enterprise storage solution within DCs • Implement the new storage solution to include virtualization solution for improved capacity management • Ensure that IDENT primary database storage capacity does not exceed 80 percent <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p>

FY 2015 Planned Accomplishments

Support Expansion of Non-Production Environments

The 1:1 staging effort will provide an operationally representative pre-production environment to test new capabilities before they are released into production. OBIM currently has a very limited ability to test new IDENT capabilities before deployment, which has resulted in occasional post-deployment issues and system patches. This 1:1 staging environment will help reduce operational costs and planned system outages by reducing the number and frequency of system change requests or outages in the production environment. OBIM will use a phased approach to migrate physical environments to virtualized environments that better represent the operational environment and contain the data and tools required to ensure that system changes will not result in degradation of services to customers and stakeholders.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture

Objective 3.4—Establish and maintain the biometric-based segment architecture within the DHS Enterprise Architecture (EA)

Refine System Monitoring and Forecasting Capabilities

The Management Control System (MCS) provides for server performance monitoring, validation, and prediction analysis for end-to-end visibility of storage utilization and forecasting current and future storage capacity requirements. OBIM will build on the success of the deployment of tools that enable performance/capacity monitoring and accelerate troubleshooting within operational environments to better forecast vital system statistics. OBIM will be able to manage existing and projected database storage requirements to maximize and target funding. OBIM is analyzing additional phases of the MCS to improve production performance in the future.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Completion of the Secure Real-Time Platform Effort Initiated in FY 2013

The Secure Real-Time Platform IDENT Integration Project is an automated biometric and biographic immigration data-sharing initiative between Australia, New Zealand, Canada, the United Kingdom, and the United States (known as the Five Country Conference, or FCC). Biometric and biographic exchanges with FCC member countries result in improved border management and security, increased support for detecting and preventing criminal activities and immigration and identity fraud, greater facilitation of legitimate travel, increased accuracy of data records, and improved integrity of identity management systems.

Although full operating capability (FOC) was deployed in November 2013, onboarding efforts will continue through 2015 and 2016 because of the complexity of international agreements and the development of foreign partner's systems and testing. This effort automates the data-sharing process for higher volumes of data sharing, improves efficiency, and ensures the integrity of OBIM's data-sharing efforts with multiple partners.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

FY 2015 Planned Accomplishments

Implement Image Separation to Remove IDENT Images from the Transaction Database

Image separation will remove images from the IDENT transaction database and host them on an alternative platform. This effort will dramatically reduce the size, complexity, and management burdens of the IDENT database and provide a more scalable approach to image storage. At more than 450 terabytes and growing, the sheer size of the IDENT database presents storage, complexity, and management challenges. This effort also reduces the system footprint and addresses issues with IDENT primary database storage. Image separation builds for the future by providing a more scalable approach to image storage with a more modular architecture for the fastest growing database component. (Modular architecture is a component-based design with shared individual modules and processes for interoperability using standardized exchange principles.)

Strategic Alignment:

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture

Objective 3.4—Establish and maintain the biometric-based segment architecture within the DHS EA

Design Messaging Infrastructure Consolidation

Messaging Infrastructure Consolidation will consolidate all messaging occurring at the Local Service Bus (LSB) into the Enterprise Service Bus (ESB), completely eliminating the LSB, a legacy, redundant component. This consolidation will reduce the system footprint as well as associated maintenance, monitoring, and licensing costs by removing a total of eight servers (four at each DC). This action is fully consistent with OBIM's approach of simplifying and streamlining the system architecture to reduce O&M costs and improve system ability to meet performance measures associated with response times, system availability, and reliability.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture

Objective 3.4—Establish and maintain the biometric-based segment architecture within the DHS EA

FY 2015 Planned Accomplishments

Perform Technical Study of Transaction Manager Queue Optimization

Transaction Manager Queue Optimization will increase system efficiency by eliminating unnecessary queue overhead. By enforcing workload priorities, Transaction Manager Queue Optimization will smooth out system utilization peaks and valleys through more effective work distribution. This process will reduce high-stress, excessive load conditions and reduce the risk of system failure. Optimization will reduce O&M costs by reducing the need for hardware upgrades by more efficiently utilizing available hardware and reducing manual intervention and manual optimization of queues. The effort will also increase the predictability of the system's behavior, improve the system's ability to handle critical load conditions, and provide a more uniform level of service for all IDENT stakeholders, improving mission outcome. OBIM will initially perform a technical study; if the recommendations are feasible and cost effective, it will implement the solution.

- Technical study to be delivered in second quarter FY 2015
- Determination from technical study recommendations will provide the basis on whether or not to exercise the option for implementation in third quarter FY 2015

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture

Objective 3.4—Establish and maintain the biometric-based segment architecture within the DHS EA

Matcher Procurement and Installation

Matcher capacity accommodates database growth and ensures that transactions are processed within SLA time frames required by IDENT users. When the system reaches matcher bank capacity, IDENT cannot enroll additional records and can no longer process transactions within required user SLAs, raising the potential for operational impacts on end users. 10-print matchers are required to accommodate growth and move IDENT toward the ability to enable a full search of the 10-print gallery. OBIM will purchase and install six matchers that are required in 2015 to complete this effort begun in FY 2014.

To ensure that IDENT 10-print matcher sub-system enrollment capacity does not exceed 93 percent:

- 18 matchers will be installed in first quarter FY 2015
- 6 matchers will be installed in second quarter FY 2015

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture

Objective 3.4—Establish and maintain the biometric-based segment architecture within the DHS EA

FY 2015 Planned Accomplishments

Platform Integration

Leverage the existing DHS platform to simplify and integrate the server, network, and storage requirements associated with database operations in a tightly coupled solution. OBIM has expanded the list of candidate solutions to include Exadata as well as other DHS technical implementations.

OBIM will expand capacity of its International Business Machines Corporation (IBM) P795 large-scale servers to run not only the IDENT database workloads, but also to encompass all current workloads to enable additional processing and memory for each Data Center (DC1 and DC2). The Platform Integration effort will have the following positive impacts:

- Reduce O&M costs by reducing the system footprint, reducing maintenance activities such as patching and upgrades, and eliminating some software license fees
- Shorten outage times due to the reduced number of physical servers that need to be shut down and restarted, thereby improving system availability for stakeholders
- Reduce the number of infrastructure components (such as server clusters dedicated to a specific workload), thereby simplifying the number of physical system interconnections, including local networking infrastructure
- Improve system reliability and resilience by configuring the IBM P795s for full local redundancy and failover
- Improve ability to respond to relative changes in load among system components by leveraging the IBM P795 ability to virtualize and allocate system resources (central processing unit and memory)
- Provide greater standardization by reducing the number/type of operating systems used within IDENT

OBIM will upgrade to Oracle WebLogic and migrate from other operating systems to IBM Advanced Interactive eXecutive (AIX). This will result in reduced system complexity and better system availability and reliability for customers.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity

Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture

Objective 3.4—Establish and maintain the biometric-based segment architecture within the DHS EA

Operational Data Store and Operational Data Reporting

OBIM analysts have a mission to analyze biometric information to ensure data integrity and matching accuracy. In addition, OBIM stakeholders have requirements for data and information. Neither group can fulfill its mission without a modern solution. In response, OBIM plans to develop a solution that enables real-time data exchange, from the production system to an external repository, to meet these requirements. The Operational Data Store (ODS) and Operational Data Reporting (ODR) initiative will implement a solution that provides real-time access to stakeholder-specific data. To deliver enhanced analytic insights and information for specific stakeholder mission areas, the IDENT data store has been targeted as the optimum solution. The ODS/ODR effort will examine needed functionalities to meet internal and stakeholder requirements. On the basis of those requirements, OBIM will conduct vendor research to determine the best solution for the organization. In FY 2015, OBIM will build the data store on a common platform for both mission-critical systems to provide a modern analytic and reporting capability. For future capability, OBIM will conduct market research and select a product in 2015 to ensure that ODR stakeholders and OBIM analysts will be able to generate their own reports and queries by FY 2017.

Strategic Alignment

Objective 1.1—Operate and maintain DHS authoritative sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity

Table 6. Planned Accomplishments for FY 2016–FY 2018: IDENT

FY 2016–FY 2018 Planned Accomplishments
<p>Continue to Maintain IDENT Service Levels by Focusing on the Most Critical Break/Fix Issues and Preventive Maintenance to Meet Current Requirements</p> <p>Critical to system performance and related mission accomplishment, OBIM will continue standard processes to maintain IDENT service levels by focusing resources first on the most critical break/fix issues (system interventions to correct emergent system performance issues), system change requests, technical refreshes, and preventive maintenance to meet requirements. This will ensure the system’s ability to meet performance metrics and SLAs with customers and stakeholders for accuracy, reliability, and system availability. Maintaining system performance ensures continued delivery of the biometric matching, storing, sharing, and analyzing capabilities necessary to achieve OBIM’s mission, while striving to identify current and future-year efficiencies for maintaining system performance to sustain the following system standards:</p> <ul style="list-style-type: none"> • Number of seconds (average) for biometric watchlist searches (for queries from U.S. POEs); target 10 seconds or less • Number of minutes (average) for biometric watchlist searches (for queries from DOS); target 5 minutes or less • Percentage (average) of IDENT operational availability; target 99.7 percent or greater • Number of minutes (average) for biometric watchlist searches (for queries from law enforcement); target 2 minutes or less • Percentage (average) of daily travelers referred to additional screening due to false fingerprint matches; target 0.35 percent or less <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p>
<p>Plan to Continue Operational Data Store and Operational Data Reporting</p> <p>As a continuation of this activity from 2015, OBIM will plan and prepare to develop ODR capabilities for stakeholders and customers that have requirements for data queries and reports. ODR customers will be able to generate their own reports and queries by FY 2017.</p> <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p>Objective 1.2—Advance and share identity</p>
<p>Implement Messaging Infrastructure Consolidation</p> <p>Messaging Infrastructure Consolidation will consolidate all messaging occurring at the LSB into the ESB, completely eliminating the LSB, a legacy, redundant component. Consolidation will reduce the system footprint, as well as associated maintenance, monitoring, and licensing cost by removing a total of eight servers (four at each DC). This action is fully consistent with OBIM’s approach of simplifying and streamlining the system architecture to reduce O&M costs and improve system ability to meet performance measures associated with response times, system availability, and reliability. This will be implemented in FY 2016.</p> <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p>Objective 1.2—Advance and share identity services</p> <p>Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture</p> <p>Objective 3.4—Establish and maintain the biometric-based segment architecture within the DHS EA</p>

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. Internal corporate systems also consist of information and backup storage.

Table 7. Planned Accomplishments for FY 2015: Corporate Systems

FY 2015 Planned Accomplishments
<p>Plan for Workplace as a Service</p> <p>Workplace as a Service is intended to provide users with secure, virtual access to desktop operating systems and applications anywhere in the world, including on mobile devices. This effort will provide real-time scalability as well as consistent and timely installation of patches and upgrades. This effort also allows OBIM contractors such as Science Applications International Corporation and Computer Science Corporation not to have DHS circuits in their facility. Contractors would be able to use non-Government-furnished equipment to access DHS applications remotely and securely.</p> <p>Strategic Alignment</p> <p>Mature and Strengthen: Ensure the Workforce Can Successfully Execute the Mission</p>
<p>Enhance Video Teleconference and Video Operations at OBIM, Providing Improved Video Capabilities in all Environments (Including Arlington, Virginia, Both DHS DCs, and San Diego, California, Operating Facilities)</p> <p>OBIM continues to embrace the <i>Telework Enhancement Act</i>. The majority of personnel have video teleconference or other video capability to enhance the telework experience. Users are able to work collaboratively with other users anywhere in the world.</p> <p>Strategic Alignment</p> <p>Mature and Strengthen: Enhance and Institutionalize Management Processes to Promote Accountability and Effectiveness; Ensure the Workforce Can Successfully Execute the Mission</p>

Table 8. Planned Accomplishments for FY 2016–FY 2018: Corporate Systems

FY 2016–FY 2018 Planned Accomplishments
<p>Migrate to DHS Headquarters Local Area Network A</p> <p>DHS Headquarters manages Local Area Network (LAN) A. NPPD is currently operating on this network. All OBIM corporate systems will be migrated from the currently utilized ICE network onto the LAN A. This includes help desk support, desktops, printers, servers, and BlackBerry/smartphone support. Primary benefits will be improved alignment with NPPD operational servers and improved technological sharing capability with NPPD.</p> <p>Strategic Alignment</p> <p>Mature and Strengthen: Enhance and Institutionalize Management Processes to Promote Accountability and Effectiveness; Ensure the Workforce Can Successfully Execute the Mission</p>

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 associated biographic information 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 partners that 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

1. Biometric Verification

DHS biometric verification services are provided by OBIM's Biometric Support Center (BSC). The BSC's primary mission is to provide expert fingerprint identification services to support DHS Components along with other federal departments; state, local, and tribal law enforcement agencies; the Intelligence Community; and international partners.

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

In addition to fingerprint verifications, OBIM is planning for examiners to provide multimodal verification capabilities in response to growing customer requirements.

a. 10-Print Verification Services

Although IDENT fingerprint matching technology is among the most efficient and accurate in the world, in some cases reviews by fingerprint examiners are required to ensure biometric records are properly linked in IDENT and those derogatory data are not erroneously associated with an individual. Therefore, this verification provides more accurate, reliable, and actionable information to OBIM customers. Daily, OBIM fingerprint examiners verify more than 1,700 sets of fingerprints to supplement IDENT’s automated biometric matching capabilities. Subsets of the daily volume include urgent verification requests that an examiner must review and complete within 10 minutes, and also corrections to existing biometric records (for example, wrong portion of the finger captured by an officer) to ensure 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.

Table 9. 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.

b. 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 latent prints at crime scenes and from 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 supporting terrorism and criminal investigations as more than 70 percent of the known fingerprints 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. This significant increase was due to the additional derogatory records added to IDENT from a newly enrolled partner agency. In 151 cases, identifications would not have been made without searching

IDENT because the individuals had no prior derogatory information associated with them and therefore would not have been matched in a search of other agencies' fingerprint repositories.

Table 10. 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.

c. Supplemental Biometric Services

The BSC provides other biometric services including IDENT biometric watchlist enrollments, IDENT biometric searches, and IDENT biometric record requests.

- *Biometric Watchlist Enrollments:* The BSC enrolls records in IDENT when stakeholders are not able to do so through automated processes. These efforts ensure OBIM customers have access to timely and accurate IDENT data.
- *Biometric Search Requests:* OBIM stakeholders can request searches of IDENT that OBIM cannot handle through normal IDENT submissions. In FY 2014, OBIM's BSC responded to 3,793 such requests. Biometric search requests may be related to unknown deceased individuals who are victims of criminal activities or mass casualty incidents such as natural disasters or transportation accidents. In FY 2014, the BSC identified 218 unknown deceased individuals, including victims from various transportation incidents (for example, the Malaysian Air Flight 17 crash in Ukraine and a train derailment in New York).
- *Biometric Records Requests:* OBIM provides biometric records from IDENT to stakeholders for specific cases (such as investigations or court proceedings), as requested and allowed under policy and privacy guidelines. In FY 2014, OBIM's BSC responded to 371 requests for IDENT fingerprint records.

Table 11. 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 2014, fingerprint examiners continued to support existing customers at the same service levels as prior years. 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.

In FY 2015, biometric verification efforts will adhere to the same service-level targets, while contending with an increased workload anticipated because of the expanded use of IDENT, by maintaining the established response time for urgent fingerprint verifications to ensure that DHS officers and other customers are quickly notified of IDENT biometric watchlist matches. This effort will ensure that legitimate travel is not adversely affected and will preserve the integrity of biometric identities. By maintaining established response times for non-urgent fingerprint verification requests, OBIM will ensure the integrity of biometric data by linking previous biometric encounters and providing IDENT stakeholders with an individual's complete biometric history. In addition, OBIM will continue to update biometric records that the system did not capture correctly when the customer encountered an individual. This will help ensure that IDENT has the best set of biometric data on file to facilitate future matching.

Table 12. Planned Accomplishments for FY 2015: Biometric Verification

FY 2015 Planned Accomplishments
<p>Biometric Verification</p> <p>Through biometric verification services, OBIM provides resources that help ensure the integrity of IDENT biometric data and provides supplemental biometric services to support the operational needs of DHS Components, federal, state, local, tribal, and international law enforcement agencies, and U.S. intelligence and military agencies. These resources of highly skilled 10-print and latent print examiners operate 24 hours per day/7 days per week. Specifically, OBIM's biometric verification capabilities include:</p> <ul style="list-style-type: none">• Providing 10-print verification services to supplement IDENT's automated matching capabilities• Vetting latent fingerprints from terrorism incidents and crime scenes from around the world against the more than 170 million known fingerprints in IDENT to identify possible suspects• Providing supplemental biometric services including biometric watchlist enrollments, biometric searches of IDENT for OBIM stakeholders, including identifying unknown deceased individuals, and responses to biometric record requests <p>OBIM will 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 FY 2014 and FY 2015 onboarding efforts. OBIM will initiate planning efforts to expand biometric verification capabilities to support additional biometric modalities. Service level targets include:</p> <ul style="list-style-type: none">• Biometric analysis<ul style="list-style-type: none">○ Average response time for urgent verification requests of 10 minutes or less and 91 percent of all urgent verification requests completed in less than 10 minutes.○ Average response time for non-urgent verification requests not to exceed 24 hours• Vet latent prints<ul style="list-style-type: none">○ 100-percent accuracy rate on positive latent identifications○ 99.5-percent accuracy rate on non-match latent identifications• Supplemental biometric services<ul style="list-style-type: none">○ 99.5-percent accuracy rate for biometric enrollments○ Respond to search requests within 6 hours 90 percent of the time○ Respond to biometric record requests within 1 business day after approvals are obtained <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p>Objective 1.2—Advance and share identity services</p> <p>Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture</p>

Table 13. Planned Accomplishments for FY 2016–FY 2018: Biometric Verification

FY 2016–FY 2018 Planned Accomplishments
<p>Continue Biometric Verification Services</p> <p>To continue to achieve or exceed service level targets for biometric services while meeting increasing workloads, the BSC will:</p> <ul style="list-style-type: none">• Shift resources to support full gallery search (instead of only a watchlist search) while travelers are still at Primary Inspection in support of Increment 1 deployment of the Replacement Biometric System. (Although this effort will not increase the overall amount of verifications, since full gallery transactions are occurring at the Primary Inspection point, it is expected to increase the number of urgent verification requests sent to OBIM BSCs when the system cannot resolve them.)• Prepare for future considerations in response to growing requirements by customers, including planning to provide multimodal capabilities by OBIM examiners. <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p>Objective 1.2—Advance and share identity services</p> <p>Objective 1.3—Enhance DHS identity services and evolve to an adaptable IT architecture</p>

2. Identity Analysis

Identity analysis provides resources for value-added identity management services with a focus on biometrics that respond to analytical, investigative, and operational requests from law enforcement, intelligence agencies, external agencies, and foreign partners. OBIM identity analysts:

- Coordinate with the Intelligence Community to promote KSTs to the IDENT biometric watchlist
- Interact with the FBI TSC regularly to verify the status of a KST on the IDENT biometric watchlist and receive associated biographic information based on biometrics recently added or removed from the Terrorist Screening Database
- Conduct identity fraud detection activities
- Provide notification to customers of recent watchlist promotions

This interactive service assists OBIM stakeholders in making adjudications based on biometric data and determining eligibility for immigration benefits. Identity analysts also provide NPPD and OBIM senior leadership with operational reports on trends and patterns to manage the identity function. In FY 2014, identity analysts produced 29 reports focusing on significant operational activities as well as Daily Operational Reports. Additionally, identity analysts vetted 30,876 biometric matches, researched 2,824 redress requests, and provided 57,378 fingerprints and encounter data to the Intelligence Community on KSTs, as well as provided 552 watchlist notifications to stakeholders.

OBIM identity analysts support multiple global projects with foreign partners to detect and deter inadmissible aliens from entering the United States or applying for immigration benefits. The United Kingdom 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 United Kingdom visas.

Under the FCC High Value Data Sharing Protocol (HVDSP), OBIM provides biometric identity verification services to Australia, New Zealand, Canada, and the United Kingdom. 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 biometric information and associated biographic data 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 14. Planned Accomplishments for FY 2015: Identity Analysis

FY 2015 Planned Accomplishments
<p>Identity Analysis</p> <p>Provide a strengthened international biometrics data-sharing planning and analysis capability and allow DHS to more fully integrate its diverse information on international persons with other intelligence agencies.</p> <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p>Objective 1.2—Advance and share identity services</p> <p>Objective 4.1—Perform outreach and educate the identity services enterprise – JIIIIA</p>
<p>Identity Analysis Training</p> <p>Institute a rigorous Identity Analysis training program to strengthen the ability of staff to analyze biographic information associated with biometric matches. Analysts will have the ability to research, process, coordinate, analyze, exploit, and report on biometric matches that have an immigration or national security impact.</p> <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p>Objective 1.2—Advance and share identity services</p> <p>Objective 4.1—Perform outreach and educate the identity services enterprise – JIIIIA</p>

Table 15. Planned Accomplishments for FY 2016–FY 2018: Identity Analysis

FY 2016–FY 2018 Planned Accomplishments
<p>Continue to Provide Identity Analysis</p> <ul style="list-style-type: none"> • Expand operational and reporting capabilities to increase identity services capabilities to customers and international partners, and produce intelligence information reports with law enforcement and intelligence communities • Improve identity services capabilities to provide vital identity information to DHS, law enforcement and intelligence communities, and national security operations for increased biometric capabilities • Develop and improve upon current operational reporting capabilities for OBIM to communicate and promote OBIM identity services to DHS and throughout the entire identity services enterprise • Develop technical and manual solutions to allow operational analysts to review an individual's biographic data associated with biometric identity data and perform research against OBIM systems and external systems to determine the possibility of fraud <p>Strategic Alignment</p> <p>Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p>Objective 1.2—Advance and share identity services</p> <p>Objective 4.1—Perform outreach and educate the identity services enterprise – JIIIIA</p>

IV. Replacement Biometric System

DHS operational elements and mission partners require accurate, timely, and high assurance biometric identity services every day to help enable them to make decisions and take actions that directly affect national security and public safety. As the designated enterprise provider of biometric identity services for the Department, OBIM delivers these capabilities through both the IDENT system and its identity services expertise. On the basis of the age and capability limitations of the IDENT system discussed earlier in this MYIP, there is a need to develop a replacement biometric system as requested in the FY 2016 President's Budget.

As discussed in section III, because IDENT continues to use legacy code from the 1990s, OBIM must re-architect the system and leverage current and future IDENT investments for development of a future replacement system with capabilities and capacity to meet current and future requirements. This situation presents a twofold issue to: 1) extend the life of the current system to ensure that OBIM can continue to provide biometric “match-store-share” capabilities to existing customers; and 2) plan for a replacement system that OBIM can put into operation before the current system can no longer provide needed capabilities. System engineering modeling, coupled with the findings from two independent studies noted in section III.B.1, shows potential for system failure in multiple system layers—points at which the system's capacity will reach its limitations—in the FY 2016–FY 2019 time frame, with some layers at risk of failure sooner than others.

OBIM dedicated resources to IDENT system improvements that it undertook in FY 2014 and continues in FY 2015. OBIM can leverage and re-use these improvements to the current IDENT system in a replacement biometric system. However, IDENT's inherent scalability and stability limitations cannot be addressed without fundamentally re-architecting (i.e., replacing) the system.

The Replacement Biometric System is required to provide DHS with biometric identity services capabilities that enable operational needs across DHS mission areas in support of national security and public safety. It will result in the following benefits:

- *Address Current System Challenges:* The replacement system will address the risk of mission failure due to identified legacy IDENT system issues. Without a functional system, DHS users will not receive the biometric identity information and analysis they require to make informed operational decisions.
- *Improved Detection:* The replacement system will enable increased numbers of individuals matched to the watchlist each year: for example, according to Analysis of Alternatives (AoA) estimates, more than 100,000 additional

individuals matched to the watchlist at CBP POEs; more than 60,000 additional individuals matched to the watchlist to inform ICE and CBP law enforcement actions.

- *Multimodal Capabilities*: The replacement system will have multimodal biometric services (such as iris and facial modalities as well as fingerprints), providing additional identity surety and overcoming operational challenges in the field when encountered individuals cannot provide sufficient fingerprints (for example, missing fingers, deliberately altered fingerprints, or degraded fingerprint quality due to manual labor or dehydration).
- *Increased Efficiency*: The replacement system will be almost two times as efficient in processing biometric transactions over current systems.
- *Ability to Scale*: The replacement system will be capable of handling both organic growth resulting from increased customer enrollments and accommodating additional DHS users that require identity services. The replacement system will have the ability to add capabilities 40 percent faster than the current system and will be capable of supporting customer-driven transaction volumes, storage size, and throughput speed.

The Replacement Biometric System investment supports the following DHS Missions/Goals and related imperatives:

DHS Missions and Goals	<p>Mission 1 – Prevent Terrorism and Enhance Security</p> <ul style="list-style-type: none"> • Goal 1.1 – Prevent Terrorist Attacks • Goal 1.3 – Reduce Risk to the Nation’s Most Critical Infrastructure, Key Leadership, and Events <p>Mission 2 – Secure and Manager Our Borders</p> <ul style="list-style-type: none"> • Goal 2.1 – Secure U.S. Air, Land, and Sea Borders and Approaches <p>Mission 3 – Enforce and Administer Our Immigration Laws</p> <ul style="list-style-type: none"> • Goal 3.1 – Strengthen and Effectively Administer the Immigration Services System • Goal 3.2 – Prevent Unlawful Immigration
NPPD Goals	NPPD Strategic Goal 4: Deliver Enterprise Identity Services that Enable Homeland Security Missions
Presidential Directives	Presidential Policy Directive 8, <i>National Preparedness</i> National Security Presidential Directive-59/Homeland Security Presidential Directive-24, <i>Biometrics for Identification and Screening to Enhance National Security</i> (biometric data sharing to identify and screen KSTs and other national security threats)
Public Law	The accompanying explanatory statement to Division D of P.L. 113-6, designated OBIM as the lead entity within DHS for biometric identity management services

Starting in FY 2016, OBIM will operationalize the Replacement Biometric System PMC. The PMC will consist of federal staff personnel who manage the acquisition, risk, development, deployment, and execution of the Replacement Biometric System.

OBIM designed a phased, four-increment approach to execute the transformation from the legacy IDENT system to a replacement biometric system that will serve DHS mid- and long-term needs for biometric services. These increments are explained in the planned accomplishment tables that follow. Initial operating capability (IOC) will be reached at completion of the first increment and FOC will be reached at completion of the fourth increment.

Table 16. Planned Accomplishments for FY 2016–FY 2018: Replacement Biometric System

FY 2016–FY 2018 Planned Accomplishments
<p data-bbox="181 294 909 325">Increment 1: Core Foundational Work: FY 2016–FY 2017</p> <p data-bbox="181 331 1404 514">Includes: Implementation of Online Transaction Processing database; replacement of the current Transaction Manager with business workflow and business rules management system software components; middleware for biometric matching services; initial performance test environment for Increment 1; designated Authentication and Authorization Service for IT security; high availability; initial tiered storage and server consolidation/virtualization; and data migration. IOC will be reached at the completion of Increment 1.</p> <p data-bbox="181 520 909 552">The capabilities deployed as part of Increment 1 will result in:</p> <ul data-bbox="227 558 1429 1522" style="list-style-type: none">• Improved system timeliness, increasing the number of automated biometric watchlist checks that inform CBP officer admissibility decisions and help ensure dangerous individuals do not enter the United States. Given the system analysis performed as part of the AoA, up to 100,000 additional automated biometric watchlist hits may be provided in a sufficiently timely manner to inform admissibility determinations.• A complete search of the full biometric gallery within 10 seconds during CBP Primary Inspection to detect individuals who have multiple identities and who seek to enter the United States under a false identity record. This will be a significant improvement over IDENT processing and will close a critical system gap for detection of inadmissible individuals at CBP Primary Inspection. (Currently, IDENT only provides a full search within 24 hours, which may mean individuals with multiple/false identities are not detected until after they depart Primary Inspection.)• Reduced system downtime, which increases the number of accurate identifications and watchlist checks for all system users and stakeholders, including DHS, DOS, DOJ, DOD; state and local law enforcement; the Intelligence Community; and international partners, ensuring that customers detect criminals in a timely manner. Reducing downtime, whether scheduled or unscheduled, also reduces processing times at the border and traveler inconvenience.• Improved system scalability to enable the system to meet future stakeholder demand. This will provide the ability to add new users and support new uses to meet evolving threats and mission needs.• The initial ability to process biometric transactions on a per transaction basis more efficiently than the current IDENT system. This improvement will ensure that DHS resources are used effectively and efficiently without resorting to degradation of services and capabilities to meet affordability constraints at the expense of the DHS mission. The Replacement Biometric System will reduce the cost per transaction and result in direct cost avoidance for long-term O&M.• Improved modularity and flexibility that will allow OBIM to more rapidly respond to changing customer requirements and to more efficiently take advantage of emerging technologies. Stakeholders will be able to meet mission needs and address evolving threats, with the ability to quickly add additional high-value data sets for biometric searches, perform additional automated biometric checks for new end user populations, and more rapidly meet privacy and policy changes due to legislative or executive decision making. This will also reduce development costs and time-to-market for implementing new requirements. <p data-bbox="181 1533 446 1564">Strategic Alignment</p> <p data-bbox="181 1570 1356 1633">Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data</p> <p data-bbox="181 1640 803 1671">Objective 1.2—Advance and share identity services</p> <p data-bbox="181 1677 1112 1709">Objective 2.1—Create new and improved identity services/business processes</p> <p data-bbox="181 1715 982 1747">Objective 2.2—Implement innovative technical capabilities/services</p> <p data-bbox="181 1753 901 1785">Objective 2.3—Operate a model for rapid delivery of service</p>

FY 2016–FY 2018 Planned Accomplishments

Increment 2: Multimodal (Fingerprints, Iris, and Facial) Full Performance Test Environment Schedule: FY 2017–FY 2018

Initiate multimodal, including fusion capabilities; implement the complete performance test environment, tiered storage, and server consolidation/virtualization; and fully implement the data warehouse and data mart (a data mart is an access layer to the data warehouse that makes it easier for users to access data and improves response time).

The capabilities deployed as part of Increment 2 will result in:

- Improved accuracy through multimodal biometric fusion using iris and facial matching in addition to fingerprints. The use of multiple modalities allows identification searches to occur across a breadth of modalities and improves matching accuracy. Traveler inconvenience rates at POEs will be lower and result in less automated referrals to CBP Secondary Inspection. This will make the entry process more efficient and has the potential to reduce CBP Secondary workloads. The use of multimodal biometrics and fusion will enable greater identification accuracy for the DOS visa issuance process and DHS law enforcement operations.
- Implementation of the full capability to process biometric transactions more efficiently and effectively, thereby reducing the cost per transaction and resulting in direct cost avoidance for long-term operations and maintenance.
- Implementation of a full performance test environment that will improve overall system availability and ensure that OBIM meets stakeholder requirements. The test environment will ensure that stakeholder requirements are fully tested and functional for the use of biometric identification. The performance test environment will closely mimic the production environment and be able to stress-test the system at production-level loads and beyond prior to deployment.
- A data warehouse capability that enables stakeholder analytics and reporting capabilities in Increment 4. This capability separates data from the operational system and enables the benefits of system scaling and improved biometric matching performance by reducing analysis and reporting workloads on the main biometric system. This will relieve the transactional system from having to process the reporting workload and will, therefore, improve performance and extend the system's useful life.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 2.1—Create new and improved identity services/business processes

Objective 2.2—Implement innovative technical capabilities/services

Objective 2.3—Operate a model for rapid delivery of service

FY 2016–FY 2018 Planned Accomplishments

Increment 3: Web Portal, Person-Centric Services Schedule: FY 2018–FY 2020

Implement: a Web portal for the following Web services: Identity, Pre-Verify, Verify, Retrieve Information, Update Information, Add Information, and Notify; an identity directory to map identities in multiple databases to achieve person-centric view; a person-centric information management service; information sharing; and palm, scars, marks, and tattoos, and DNA—storage and retrieval only.

The capabilities deployed as part of Increment 3 will result in:

- Timely access to all relevant information on an individual due to the structure and use of person-centric data. Stakeholders will have more information with which to make decisions regarding admissibility, visa issuance, and appropriate law enforcement actions.
- User-friendly system interface enabling stakeholders to use common Web service functions and IT tools to access OBIM system services and data at a lower cost. This will reduce the need to develop more expensive custom system-to-system interfaces.
- OBIM stakeholders fully realizing the benefit of improved accuracy made possible by using additional multimodal biometrics and fusion.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 2.1—Create new and improved identity services/business processes

Objective 2.2—Implement innovative technical capabilities/services

Objective 2.3—Operate a model for rapid delivery of service

Increment 4: Candidate Verification Tool, Analytics, and Reporting Schedule: FY 2019–FY 2021

Implementation of enhanced identity management applications that will enable more efficient adjudication of identities. Identity management applications will leverage the data warehouse to provide a more flexible and comprehensive set of services. FOC will be reached at the completion of Increment 4.

The capabilities deployed as part of Increment 4 will result in:

- Advanced capabilities to ensure analytics and reporting accuracy and eliminate duplicative, non-current, and inconsistent data.
- Improved reporting and data accuracy. Stakeholder reporting needs will be enhanced and made timely through automated access to reporting tools using common interfaces and commercial off-the-shelf tools. The reporting capability will allow for reduced O&M costs and a rapid request and delivery process to provide accurate reports to support stakeholder missions.
- Linking of biometric records between agency partners such as DOJ and DOD to improve information sharing and timely identification of criminals, immigration violators, and KSTs and ensure biometric records contain relevant and accurate information that will inform stakeholder decisions. Record linking will also reduce the number of unnecessary/repetitive biometric searches within the linked system, thereby improving performance and extending the system's useful life.
- Stakeholder tools to improve the accuracy of human biometric examiner decisions using multimodal biometrics. More accurate results will reduce traveler inconvenience and improve detection to enforce immigration laws or apprehend criminals.

Strategic Alignment

Objective 1.1—Operate and maintain DHS sources of biometric identity information and associated biographic data

Objective 1.2—Advance and share identity services

Objective 2.1—Create new and improved identity services/business processes

Objective 2.2—Implement innovative technical capabilities/services

Objective 2.3—Operate a model for rapid delivery of service

Recap of key points:

- The Replacement Biometric System will be developed to continue providing DHS operational elements and mission partners with accurate, timely, and high assurance biometric identity services.
- Re-architecture of the aging IDENT system will leverage necessary IDENT system improvements to maximize resources and enable implementation of a four-increment process to develop the new system.
- Achievement of IOC at completion of Increment 1 will ensure that a scalable system with biometric “match-store-share” capabilities can continue to provide timely services to existing customers.
- Increments 2 through 4, with FOC at completion of Increment 4, will ensure increased capabilities, greater system flexibility, and necessary services with updated biometric technologies that are responsive to new and emerging Homeland Security requirements.

Appendices

Appendix A. Abbreviations and Acronyms

AIX	Advanced Interactive eXecutive Operating System (IBM)
AoA	Analysis of Alternatives
BSC	Biometric Support Center
CBP	U.S. Customs and Border Protection
CJIS	Criminal Justice Information Services Division (FBI)
DC	Data Center
DHS	Department of Homeland Security
DOD	Department of Defense
DOJ	Department of Justice
DOS	Department of State
EA	Enterprise Architecture
ESB	Enterprise Service Bus
FBI	Federal Bureau of Investigation
FCC	Five Country Conference
FEMA	Federal Emergency Management Agency
FOC	Full Operating Capability
FY	Fiscal Year
HVDSP	High Value Data Sharing Protocol
IBM	International Business Machines Corporation
ICE	U.S. Immigration and Customs Enforcement
IDENT	Automated Biometric Identification System
IOC	Initial Operating Capability
IPEG	Integrated Planning and Execution Guidance
IPlan	Implementation Plan
IT	Information Technology
JIIIA	Joint Interagency, Intergovernmental, International, Industry, Academia

KST	Known or Suspected Terrorist
LAN	Local Area Network
LEISI	Law Enforcement Information Sharing Initiative (ICE)
LSB	Local Service Bus
MCS	Management Control System
MYIP	Multi-Year Investment and Management Plan
NIEM	National Information Exchange Model
NPPD	National Protection and Programs Directorate
O&M	Operations and Maintenance
OBIM	Office of Biometric Identity Management
ODR	Operational Data Reporting
ODS	Operational Data Store
PCSC	Preventing and Combating Serious Crime
PIA	Privacy Impact Assessment
PMC	Program Management Cell
POE	Port of Entry
PPBE	Planning, Programming, Budgeting, and Execution
S&T	Science and Technology (DHS Directorate)
SLA	Service Level Agreement
SORN	System of Record Notice
TSA	Transportation Security Administration
UDO	Undelivered Order
US-VISIT	United States Visitor and Immigrant Status Indicator Technology Program
VWP	Visa Waiver Program
WCF	Working Capital Fund

Appendix B. Current Year Funding and 3-Year Estimates

Office of Biometric Identity Management (OBIM) (dollars in thousands)	FY 2015 Enacted			FY 2016 President's Budget			FY 2017 Estimate			FY 2018 Estimate		
	FTP	FTE	\$000	FTP	FTE	\$000	FTP	FTE	\$000	FTP	FTE	\$000
OBIM TOTAL	208	208	\$ 252,056	177	168	\$ 283,533	177	168	\$ 303,830	177	168	\$ 303,310
Salaries and Expenses	208	208	\$ 41,536	177	168	\$ 34,721	177	168	\$ 34,953	177	168	\$ 35,650
Federal Salaries and Benefits	208	208	\$ 30,188	177	168	\$ 23,511	177	168	\$ 23,946	177	168	\$ 24,423
Program Expenses	-	-	\$ 11,348	-	-	\$ 11,210	-	-	\$ 11,007	-	-	\$ 11,227
System Operations & Maintenance	-	-	\$ 190,450	-	-	\$ 162,942	-	-	\$ 86,774	-	-	\$ 60,380
Automated Biometric Identification System (IDENT)	-	-	\$ 185,298	-	-	\$ 157,617	-	-	\$ 81,784	-	-	\$ 55,336
<i>IDENT Planning</i>	-	-	\$ -	-	-	\$ -	-	-	\$ -	-	-	\$ -
<i>IDENT Acquisition</i>	-	-	\$ -	-	-	\$ -	-	-	\$ -	-	-	\$ -
<i>IDENT Maintenance¹</i>	-	-	\$ 169,372	-	-	\$ 144,625	-	-	\$ 68,845	-	-	\$ 42,138
<i>IDENT Program Expenses</i>	-	-	\$ 15,926	-	-	\$ 12,992	-	-	\$ 12,940	-	-	\$ 13,198
Systems Engineering	-	-	\$ 15,058	-	-	\$ 12,121	-	-	\$ 12,051	-	-	\$ 12,292
IDENT Mission Expenses	-	-	\$ 868	-	-	\$ 871	-	-	\$ 888	-	-	\$ 906
Corporate Systems	-	-	\$ 5,152	-	-	\$ 5,325	-	-	\$ 4,990	-	-	\$ 5,044
Identity and Screening Services	-	-	\$ 20,070	-	-	\$ 20,070	-	-	\$ 20,471	-	-	\$ 20,881
Biometric Verification	-	-	\$ 19,100	-	-	\$ 19,014	-	-	\$ 19,394	-	-	\$ 19,782
Identity Analysis	-	-	\$ 970	-	-	\$ 1,056	-	-	\$ 1,077	-	-	\$ 1,099
Replacement Biometric System	-	-	\$ -	-	-	\$ 65,800	-	-	\$ 161,632	-	-	\$ 186,398
Planning	-	-	\$ -	-	-	\$ 5,319	-	-	\$ 5,707	-	-	\$ 5,150
Acquisition	-	-	\$ -	-	-	\$ 59,681	-	-	\$ 47,120	-	-	\$ 34,850
Maintenance	-	-	\$ -	-	-	\$ 800	-	-	\$ 108,805	-	-	\$ 146,398

¹IDENT maintenance in FY 2015 includes \$25,382 thousand for the implementation of IDENT system improvements and modernization efforts.