



USAID
FROM THE AMERICAN PEOPLE

U.S. Agency for International Development

Data Architecture

Volume II: Technical Discussion and Data Reference Model



June 20, 2006

Document Control

Change Record

Date	Author	Version	Change Reference
12/15/05	Margaret Ross, James Stevenson, Sherwin Meeker, Kirk Lutz, Evonne Williams, Ammar Benguedouar, Perry Pockros	0.8	Initial Working Version
03/31/06	Sherwin Meeker, Kirk Lutz, James Stevenson, Evonne Williams, Perry Pockros, Brooke Patterson, Margaret Ross	0.9	Second Working Draft
06/20/06	James Stevenson, Sherwin Meeker, Elise Storck, Alysia Johnson, Brooke Patterson	1.0	Version 1

Table of Contents

Section	Page
Executive Summary	1
1.0 USAID Data Architecture	2
1.1 Document Purpose and Scope	2
1.2 Definition of a Data Architecture	2
1.3 Data Architecture Addresses Broad Business Needs	2
1.4 Assumptions	3
1.5 Document Organization.....	4
2.0 USAID Data Architecture: the Logical Data Model and Data Dictionary	5
2.1 Logical Data Model and Data Dictionary Methodology	5
2.2 LDM Development.....	5
2.3 Data Dictionary Development	7
2.4 USAID Data Architecture: An initial step.....	7
3.0 USAID Data Architecture Alignment to the Data Reference Model	9
3.1 LDM Development Aligns with DRM Data Context.....	9
3.2 Data Dictionary Development Aligns with DRM Data Description.....	10
3.3 LDM Operational Process Change Identification Aligns with DRM Data Sharing.....	10
4.0 LDM Operational Process Change Identification	11
4.1 The Business Capability Model	11
4.2 Data Sharing and Process Change Identification Require Certain Assumptions.....	12
4.3 Operational Process Change Identification Methodology	12
4.4 Operational Process Change Analysis Findings	13
4.4.1 BCM to LDM Subject Areas Mapping Results.....	13
4.4.2 BCM to Operational Process Mapping Results	15
4.4.3 Changed Operational Processes to LDM Entities Mapping Results	17
5.0 DRM Alignment to the USAID Business Reference Model	19
6.0 Data Architecture Next Steps	20
6.1 Development of Agency Data Standards and Data Governance	20
6.2 Joint USAID and Department of State Activities.....	20
Appendix A: Data Architecture Subject Areas	A-1
Appendix B: Data Architecture Definitions	B-1
Appendix C: Architectural References	C-1
Appendix D: Information Sources	D-1
Appendix E: Data Modeling Concepts	E-1
Appendix F: Data Modeling Conventions	F-1
Appendix G: USAID Logical Data Model	G-1
Appendix H: USAID Data Dictionary	H-1

Appendix I: BCM to LDM Subject Area Mapping I-1

Appendix J: BCM to Operational Process Mapping J-1

Appendix K: LDM to Operational Process Mapping K-1

Appendix L: Agency DRM to BRM Alignment L-1

Appendix M: LDM Development Detail M-1

List of Figures

Figure 1: LDM Development Methodology 5

Figure 2: Executive Level Logical Data Model 6

Figure 3: LDM/Data Dictionary Development 7

Figure 4: Data Modeling Continuum 8

Figure 5: DRM Components 9

Figure 6: USAID Business Capability Model 11

Figure 7: Operational Process Change Identification Methodology 13

Figure 8: Average LDM Entities per BCM Capability 14

Figure 9: LDM to BCM Mapping Results 15

Figure 10: Process to BCM Mapping Result 15

Figure 11: Summary of Findings of Process Entity Map 16

Figure 12: LDM Impact on Organizational Processes 17

Figure 13: Changed Operational Process BCM "Heat Map" 18

Executive Summary

Data is the lifeblood of modern organizations. Standardized, organized data correctly codified within operational processes and business systems is critical to the United States Agency for International Development (USAID) success and credibility. Data standards enable improved management of the Agency's broad array of projects, partners and internal organizations. Just as a central nervous system allows coordination of individual body parts and awareness of the whole, data standards support the coordination of business activities and the communication and aggregation of Agency-wide information.

In 2004, the Agency's *International Business Model Review* observed, "The most striking thing we learned about the USAID business model is that we have many models, and this lack of standardization is in many ways our own worst enemy. This not only complicates the design and execution of new business systems but makes it difficult to manage across the Agency."

Part of the solution is the creation of consistent data, or a common language, shared across USAID. Data standards support consistency across the Agency's operations and ability to report to key stakeholders. Coherent data standards will also assist with aligning USAID operations with those of the Department of State (DoS).

The Agency's Data Architecture for Program Operations and Activity Execution contained in this document serves two purposes:

1. It is a blueprint for creating a consistent data structure across USAID, taking the Agency one step closer to more efficiently communicating its successes to key stakeholders.
2. It addresses Office of Management and Budget (OMB) requirements to develop an Agency Data Reference Model (DRM) conforming with OMB Enterprise Architecture (EA) guidance. The President's Management Agenda (PMA) priority on e-government requires all U.S. Government agencies to develop a DRM. Failure to do so may result in red progress and current status scores for USAID on e-government.

This document also takes a major step towards understanding Agency Data Architecture impact by identifying how incorporation of the Data Architecture into program management and results reporting systems will affect USAID business capabilities and core operational business processes. Understanding how these operational business processes will be changed by future program management and results reporting systems adhering to Data Architecture and associated data standards in turn will help support efficient investment decisions that enhance USAID's ability to tell its story.

This document is not intended to be a business discussion paper. It is a technical document based on the Program Operation and Activity Execution capabilities of the Agency Business Capability Model (BCM) developed in spring of 2005. The Data Architecture Management Summary and Key Findings address the business context of the Data Architecture.

This document both provides a baseline and a template for the integration of Data Architectures between USAID and DoS where appropriate. Current efforts are underway at DoS to develop a data architecture. The writers of this document will be working closely with DoS counterparts to harmonize Agency and DoS EA efforts and artifacts including the development of a DoS and future Joint DoS/USAID Data Architecture if this becomes a requirement.

1.0 USAID Data Architecture

1.1 Document Purpose and Scope

This document presents the USAID Data Architecture for Program Operations and Activity Execution (hereafter the Data Architecture), its relationship to other architecture work products, background, and the methodology used to develop the Data Architecture. It codifies the Data Architecture into a Logical Data Model (LDM), and aligns that LDM in terms of the Federal Enterprise Architecture (FEA) Data Reference Model (DRM). This document is Volume II of two USAID Data Architecture documents. Volume I, USAID Data Architecture Management Discussion and Key Findings, draws on this document and the process used to develop it to draw findings, conclusions, and recommendations on how USAID can apply the Data Architecture to standardize program management and results reporting information to more consistently manage its programs, and tell the USAID story to its key stakeholders. Volume II, USAID Data Architecture Technical Discussion and Data Reference Model, is intended to present the Data Architecture so that it can be used to define Agency level data standards, align the Data Architecture with that of the DoS, and fulfill the OMB's requirement for all Federal Agencies to develop a DRM. It also presents the underpinnings of the methodologies and conventions used in the Data Architecture, and analyses performed with it.

1.2 Definition of a Data Architecture

In a broad sense, architecture is defined as "the structure of the components, their relationships, and the principles and guidelines governing their design and evolution over time."¹ This data architecture:

- Establishes a framework to organize and define the interrelationships of data in support of an organization's mission, functions, and goals regarding Program Operations and Activity Execution.
- Encompasses the methodology, activities, and conventions that define, structure, and document USAID Program Operations and Activity Execution data assets.
- Provides a common context for USAID Program Operations and Activity Execution data to be understood and integrated.
- Defines and organizes data independent of function.
- Supplies the basis for the incremental, ordered design and development of subject-oriented databases.

1.3 Data Architecture Addresses Broad Business Needs

As USAID's organizational mission and programs have grown, and its technological and political environment has become more complex, the Agency has struggled to create systems that meet the needs of the stakeholders. Notwithstanding current Information Technologies (IT) available throughout USAID, much of today's business knowledge about the Agency's data and business rules is held informally by key knowledge workers. This lack of common, accessible business knowledge results in undocumented data and business rules, which in turn, increases the time and cost to identify, define, and organize USAID's data assets. The prevalence of undocumented or inaccessible data also limits the ability of USAID data stakeholders to share knowledge and work collaboratively.

The development of the Data Architecture meets OMB requirements and addresses internal Agency business needs. The USAID Data Architecture is a component of the USAID Enterprise Architecture and

¹ Institute of Electrical and Electronics Engineers, IEEE 610.2

supports data standardization, data requirements analysis and design in USAID programs and projects, and metadata management. Enterprise architecture supports the capital planning and investment control (CPIC) process for evaluating proposed information technology investments as presented by OMB.

Currently USAID is obligated to develop an overall enterprise IT architecture (consistent with the Clinger-Cohen Act² and OMB Circular A-130) and to align USAID's data assets to the Joint Information and Data Architecture (IDA) and DRM as described by OMB. These obligations demand the creation of a data architecture and data standards.

However, Data Architecture offers benefits far broader than meeting OMB and Congressional requirements. Data Architecture also responds to the increased need for data to be consistent, meaningful, shared, and aggregated among USAID organizations, applications, and functions.

Data Architecture is the basis for a common language across the Agency, facilitating a shared understanding of data definitions at all levels of the Agency from the program-level to Headquarters (USAID/W). The common language not only supports simplified data transfer among USAID's IT systems, but also enables ready communication and comparison between people and Missions. This eases data collection and dissemination, reduces redundant activities and the burden of duplicative data entry, and reduces costs associated with excess staff time devoted to collecting, translating, and transferring information. Further, the Data Architecture is a flexible foundation that improves USAID's ability to change and adapt while maintaining shared language and data standards.

Most importantly, the many benefits realized by implementing the Data Architecture enhance the Agency's ability to tell its story to the Administration and OMB, other United States Government (USG) agencies, Congress, and the public. In the increasingly competitive foreign assistance environment, it is essential that USAID be able to communicate its successes, link dollars to results, and be able to compare results among Missions and regions. The Data Architecture is the foundation that will allow USAID to meet these needs.

1.4 Assumptions

The following assumptions apply to the development of the USAID Data Architecture:

- This is the first in a series of iterative steps to develop a comprehensive and useful USAID Data Architecture.
- The USAID Data Architecture will evolve over time to incorporate more detail in the subject area data models and additional standard data elements.
- Collaboration with the DoS will be needed to evolve the Data Architecture into a Joint IDA model. This data model will provide the baseline for that discussion.
- Data models of the existing application systems were used in the development of the data architecture.
- The March 2004 version of the Automated Directives System (ADS) 200 series was used extensively in the development of the USAID Data Architecture. Changes in the ADS resulting from the Business Model Review and the Agency's evolving relationship with the DoS will affect the development of the Data Model.
- This Data Model will evolve as Agency operational processes change.

² Federal Acquisition Reform Act of 1996 (FARA) and the Information Technology Management Reform Act of 1996 (ITMRA)

1.5 Document Organization

This document is organized into two primary components. The first, the main body of text, presents the discussion of how the Data Architecture was developed, and analyses performed using it. The second, the appendices, presents the data supporting this discussion to include the data model itself, and the data dictionary which should serve as the foundation to develop USAID's program management and results reporting data standards. The document sections are as follows:

- **Section 2: USAID Data Architecture: the Logical Data Model and Data Dictionary** – This section provides an overview of the methodology and modeling concepts used to develop the USAID Data Architecture Logical Data Model (LDM) and its companion document the USAID Data Dictionary.
- **Section 3: USAID Data Architecture Alignment to the Data Reference Model** – This section describes how the Data Architecture aligns with OMB's Data Reference Model (DRM) guidance.
- **Section 4: LDM Operational Process Change Identification** – This section discusses the results of several intermediate analytical steps undertaken to align the Data Architecture and the DRM's Data Sharing developmental step.
- **Section 5: DRM Alignment the USAID Business Reference Model** – This section describes how the USAID Data Architecture and DRM align to the Business Reference Model (BRM).
- **Section 6: Data Architecture Next Steps** – This section describes some potential immediate next steps to using and further developing the USAID Data Architecture.

Following the discussion outlined above, are 14 appendices that provide the technical detail on the methodologies, references, conventions, specifics, and supporting analytical data. They are referenced throughout the discussion in the main portion of the document.

2.0 USAID Data Architecture: the Logical Data Model and Data Dictionary

This section provides an overview of the methodology and modeling concepts used to develop the USAID Data Architecture LDM and its companion document the USAID Data Dictionary located in Appendix G and Appendix H respectively.

2.1 Logical Data Model and Data Dictionary Methodology

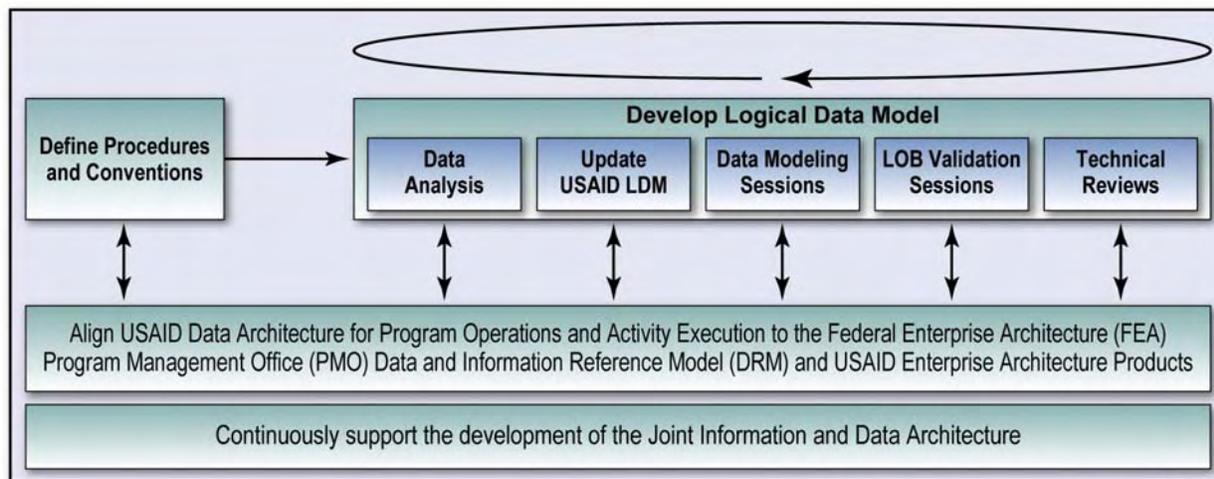
The LDM defines the metadata assets within USAID regarding Program Operations and Activity Execution, identifies relationships among this data, and presents the data needed to support the functional requirements across the Agency. The data is presented in a collection of eleven natural groupings called Subject Areas (Appendix A: Data Architecture Subject Areas). This grouping provides a mechanism for organizing and partitioning the complexities of data objects into cohesive collections. LDM subject area boundaries are derived by understanding data dependencies, so that logical groupings of data can be identified. Each subject area contains multiple entities representing business objects. Entities are either dependent or, in the case of the “kernel” entity, independent. Kernel entities inside respective subject areas represent business objects that stand alone and are not dependent on any other entity. Each LDM subject area has only one kernel entity that forms the core of the subject area collection of entities.

The Data Dictionary defines, in straightforward business language, the LDM kernel and dependent entities, to facilitate reading and understanding of LDM purpose and potential use. The complete Data Dictionary is located in Appendix H. The remainder of this section describes the LDM and Data Dictionary development methodology and outlines the approach used to gather, model, and organize USAID data and relationships during LDM maturation.

2.2 LDM Development

The development of the LDM is described in the steps outlined below. Figure 1 provides a graphical representation of LDM development.

Figure 1: LDM Development Methodology

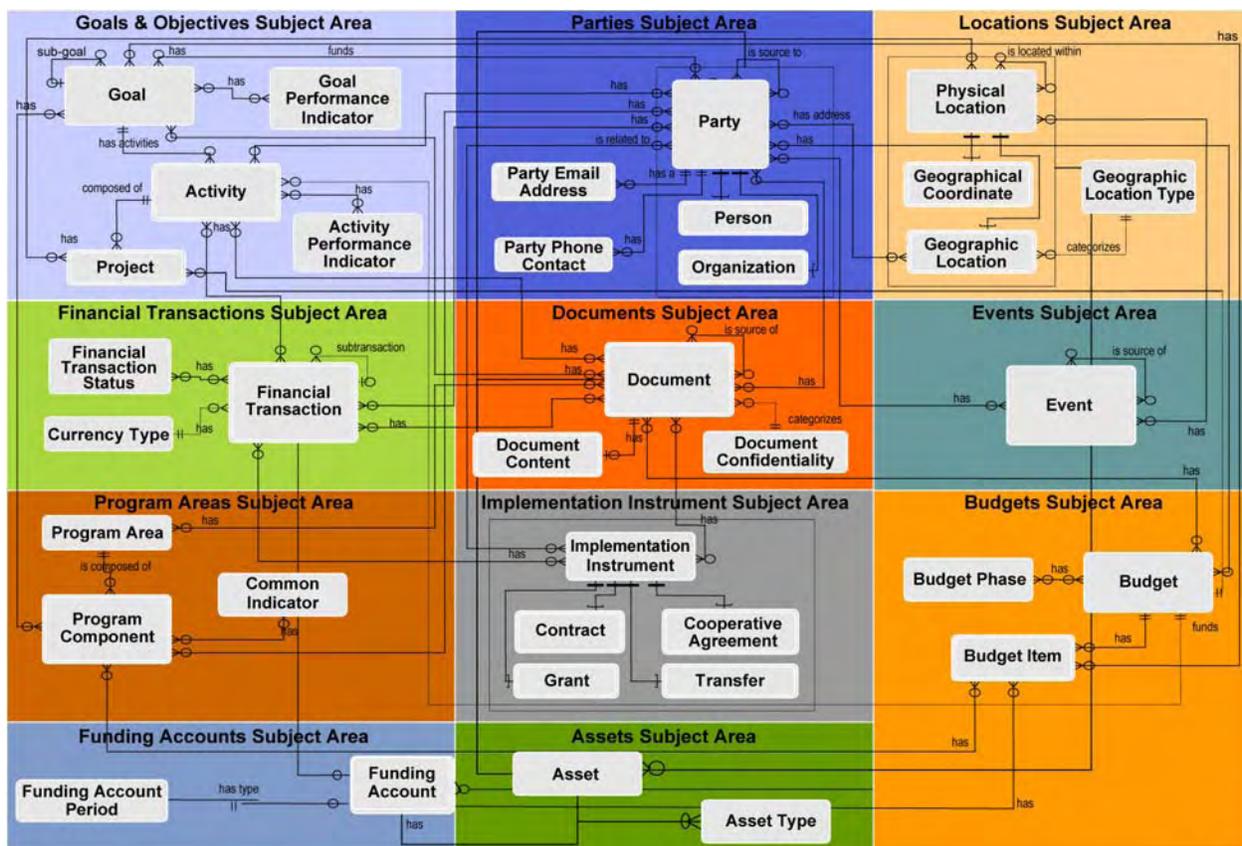


LDM formation is comprised of three major developmental steps. Appendix M provides more detail for each step outlined below:

- **Step 1: Define Procedures and Conventions** – Procedures and conventions were written to govern data modeling preparation, data modeling sessions and quality assurance checks.
- **Step 2: Develop LDM and Data Dictionary** – LDM development is an iterative process that gathered information regarding data requirements, definitions, and supporting detail and incorporated these into the LDM.
- **Step 3: Align USAID Data Architecture to the Federal Enterprise Architecture (FEA) Program Management Office (PMO) DRM** – The FEA DRM adheres to standard data architecture methodology used by architects for years. USAID’s Data Architecture adheres to these standards and is crosswalked to DRM requirements as specified by OMB.

Figure 2 is a simplified version of the overall Agency LDM. This model illustrates the eleven distinct Subject Areas, their respective kernel entities, and key dependent entities. Relationships between entities and Subject Areas are made explicit. Appendix F explains LDM and data modeling conventions for a more informed analysis of the LDM. Each Subject Area in Figure 2 breaks out into a more detailed picture of all respective entities. These pictures are located in Appendix G along with a larger version of Figure 2 below.

Figure 2: Executive Level Logical Data Model



0494-002

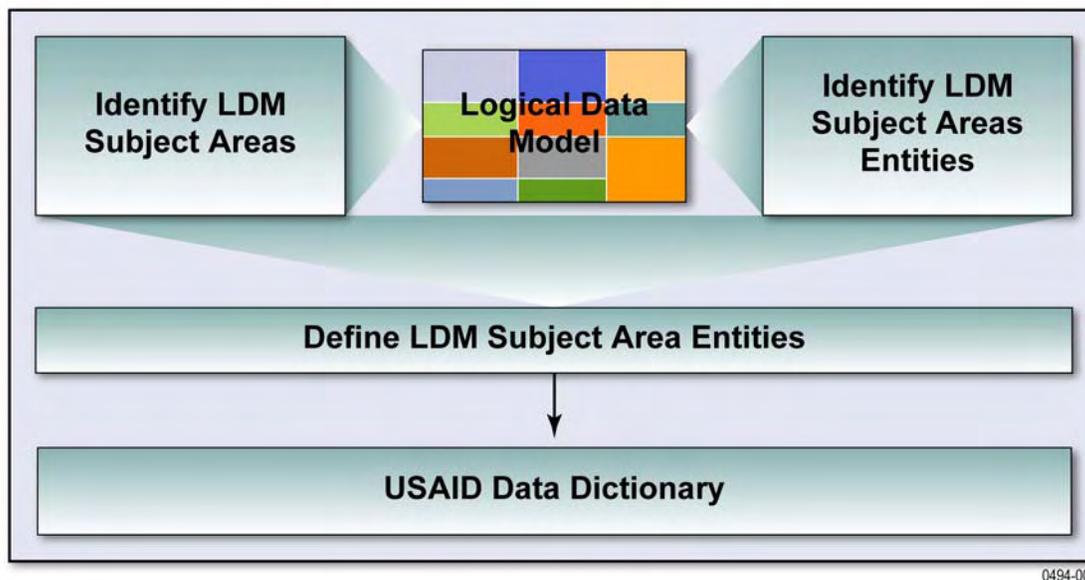
Appendix M: LDM Development Detail provides further information on LDM development, as well as key data architecture concepts: Abstraction, “As Is” and “To Be” Models, and Other Modeling Characteristics.

2.3 Data Dictionary Development

The Data Dictionary was developed in tandem with the LDM. The data dictionary defines the Subject Areas, Entities, and, wherever possible, attributes, known as “valid values.” Valid values enumerate tangible examples of the type of data an entity may contain, e.g., country, state, province, and oblast, found in the Geographic Location Type entity that is part of the Locations Subject Area.

Figure 3 depicts the iterative process by which the Data Dictionary was developed in tandem with the LDM.

Figure 3: LDM/Data Dictionary Development



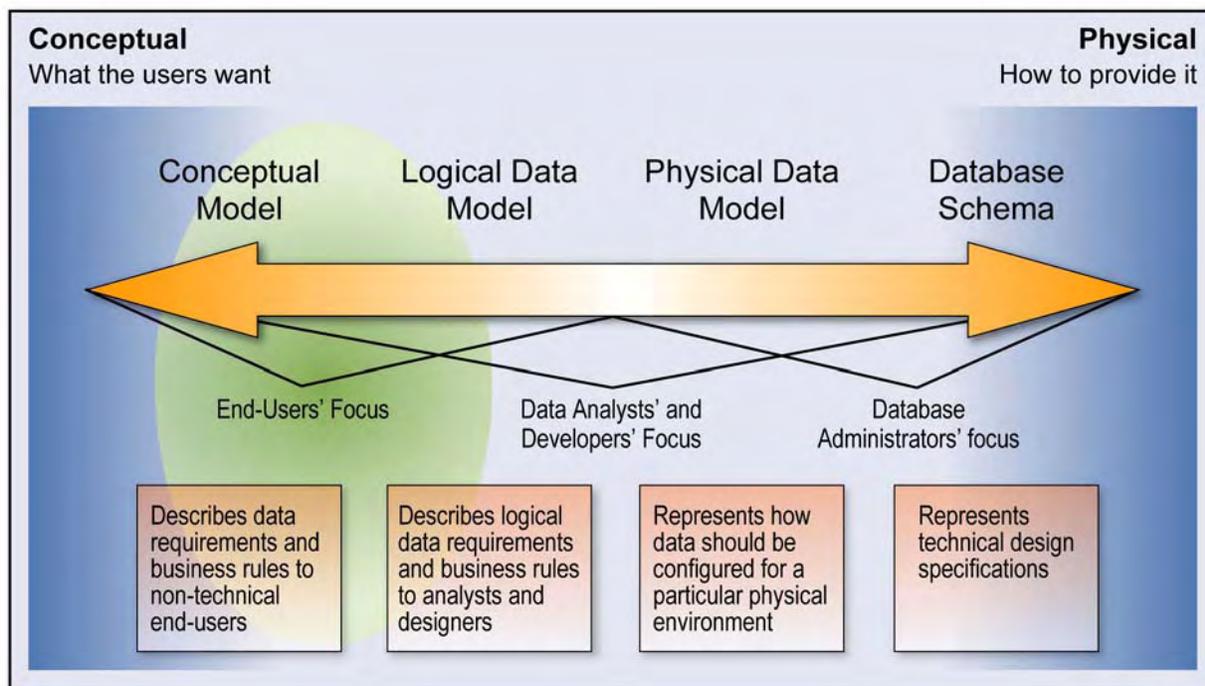
The Data Dictionary may be viewed in two ways: alphabetically or by LDM Subject Area. The alphabetized Data Dictionary can be used to quickly locate the definition of a specific item in the dictionary. The Subject Area Data Dictionary is organized by LDM Subject Area. As a documented view of a Subject Area in the model, the Subject Area Data Dictionary makes it possible to view a Subject Area of the LDM pictorially and in print. Appendix H contains both versions of the Data Dictionary.

2.4 USAID Data Architecture: An initial step

The LDM and Data Dictionary represent the majority of the work necessary to create the Agency’s Data Architecture. However, the LDM and Data Dictionary are living documents and will require periodic updating. Further, these documents are merely foundational artifacts necessary to solve the Agency’s program management and results reporting issues.

Figure 4 depicts the development of the LDM and Data Dictionary in the context of a larger cycle of data and physical architecture development efforts.

Figure 4: Data Modeling Continuum



0494-001

This effort concentrated on developing a Data Architecture in the shaded area. It should be used as a guide in follow on efforts to create progressively more detailed data models, which ultimately will result in a standardized Agency wide Data Architecture which will promote integrated information technology assets, consistent information exchange across the Agency's global operations, and consistent information alignment with partner organizations such as the DoS. It will also allow USAID to more easily adapt to the emerging Country Operational Framework, and evolving operational conditions by allowing discrete, measurable and predictable changes in how information is used, because the LDM focuses on creating a central, foundational structure for USAID's data.

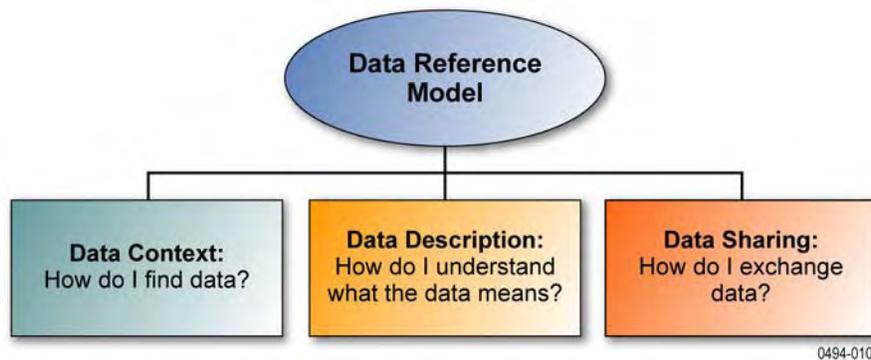
3.0 USAID Data Architecture Alignment to the Data Reference Model

The section describes how the Data Architecture aligns with OMB’s FEA DRM guidance.

The DRM, as a component reference model of the FEA, is intended to provide a common and consistent way to categorize, describe, and share data across the federal government through standardization of data in the following three areas:

- **Data Context** – A standard approach to representing taxonomies that an agency uses to categorize its data. Such categorization enables the business context of data to be well understood. It is a key capability for data discovery – enabling end users to search and find data relevant to their needs.
- **Data Description** – A standard approach to describing an agency’s structured, semi - structured, and unstructured data.³ This part of the DRM provides a format for selected metadata.
- **Data Sharing** – A standard approach to the sharing and exchange of data among agencies or communities of interest, including data sources. It defines a standard message structure known as an Exchange Package.

Figure 5: DRM Components



The following sections describe how the separate artifacts of the Agency Data Architecture align with these three key areas of the DRM – in particular the alignment of the Data Architecture with the principle of Data Sharing and the concept of Exchange Packages.

3.1 LDM Development Aligns with DRM Data Context

The DRM is intended to promote the common identification, use, and appropriate sharing of data/information across the Federal government through its standardization of data in the following three areas: data context, data sharing, and data description.⁴

Given that more DRM specifications are forthcoming, several ambiguities exist concerning the development of various areas of the DRM, and therefore the alignment of USAID’s Data Architecture to the DRM. However, based upon the areas enumerated above, an approach to aligning the USAID Data Architecture to the DRM is outlined as follows.

The data modeling methodology that was employed uses a hierarchy of subject areas and sub-subject areas as a mechanism for organizing and partitioning the complexities of the data objects of importance to

³ Drawn partly from FEA Consolidated Reference Model Document, May 2005, pg. 80

⁴ FY07 Budget Formulation FEA Consolidated Reference Model Document, pg 7

USAID into optimally cohesive groupings. This subject-oriented taxonomy assists in the discovery and identification of USAID data, and therefore provides for the context and categorization prescribed in the DRM. This is contained in Appendix A: Data Architecture Subject Areas.

An entity type has a collection of attributes that fully describe a person, place, thing, event or concept that is of interest to the organization and that is explicitly bounded and defined, as well as uniquely identified. As such, the Kernels, and their related characteristics and associative entity types, will describe the agency's data as conveyed within the DRM description area.

The LDM, found in Appendix G, works to fulfill the DRM requirement to build Data Context by developing a data schema that employs common data architecture constructs and techniques. The LDM is a living artifact that will evolve over time as OMB matures its DRM guidance and as DoS and USAID share closer ties. However, in its current form the LDM provides much value in its codification of the data required to conduct USAID operations (analogous to DRM Communities of Interest in this case). The LDM creates the basis for data governance through the planned development of Agency-wide data standards and requirements.

3.2 Data Dictionary Development Aligns with DRM Data Description

The development of the LDM Data Dictionary, found in Appendix H, fulfills the DRM requirement to create Data Description. The Data Dictionary follows industry convention in its definitions of Subject Areas, Entities, and inclusion of important valid values. The Data Dictionary also provides much operational value through its codification of working definitions of data: Due to USAID's decentralized structure, data frequently have multiple working definitions; the Data Dictionary supports Agency-wide comprehension as well as homogenous application of key data.

3.3 LDM Operational Process Change Identification Aligns with DRM Data Sharing

Areas of potential Data Sharing are identified by aligning the Agency's BCM to the LDM. Exchange Packages may occur at the intersections of LDM Subject Areas and BCM Capabilities. A key to understanding where Exchange Packages are employed is the identification of the operational processes that require data found within the LDM. This alignment creates the business context for data and identifies operational processes that will change once the LDM data is codified in a larger USAID results reporting solution. Thus, Exchange Packages may occur at the intersection between BCM capability operational processes and LDM entities.

This version of the Agency's DRM Data Sharing should be considered foundational to a long-term program management and results reporting development effort: USAID does not have mature systems for program operations and program management and results reporting, such as centralized transaction / analytical databases, authoring systems repositories, and document repositories.⁵ USAID intends to develop its Agency-wide results reporting capability over time. Essential at this point is identifying where data exchanges may occur. This step will clarify which operational processes will change once the availability or form of data is enhanced through a cohesive Agency-wide program management and results reporting solution.

⁵ The Data Reference Model V2, November 2005, pg. 47

4.0 LDM Operational Process Change Identification

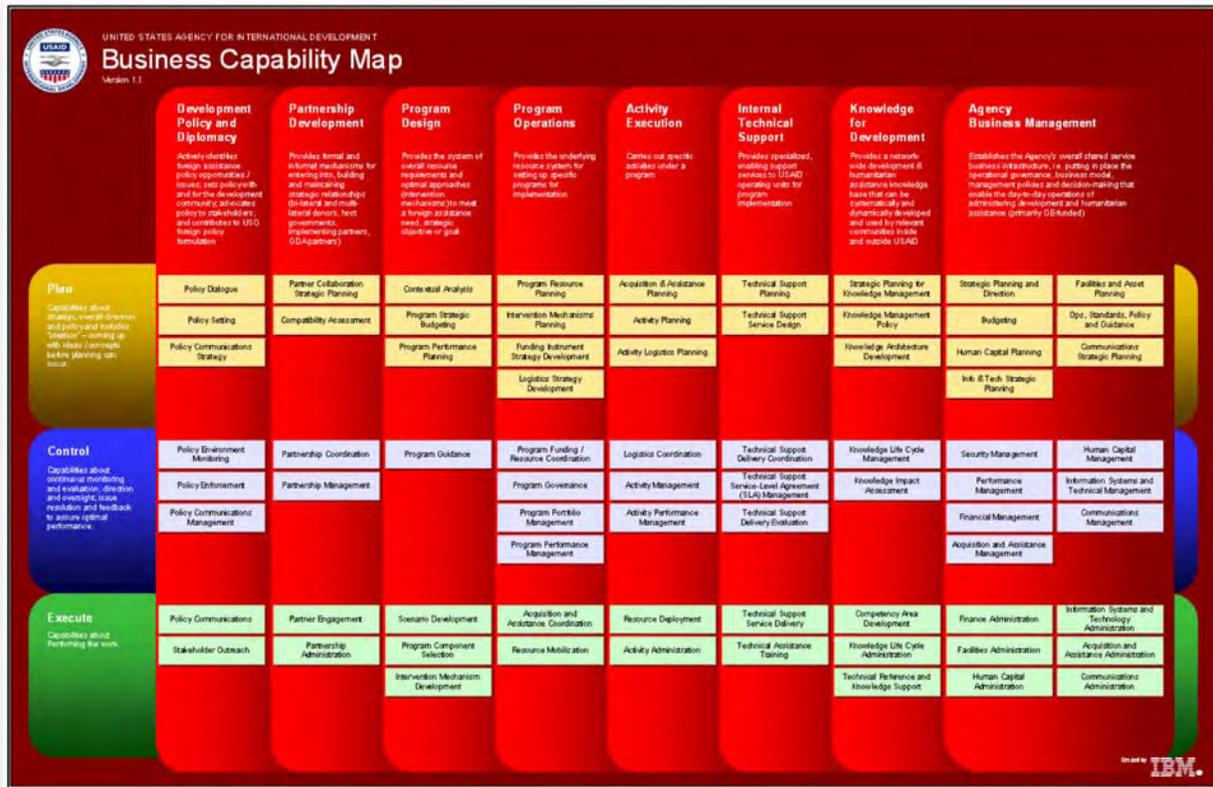
The analytical steps required in this section are significantly different from prior sections. This section discusses the results of several intermediate analytical steps undertaken to align the Data Architecture and the DRM’s Data Sharing developmental step. The intersection of the USAID BCM and LDM defines where data sharing and data exchange packages may occur. This section identifies where these intersections occur and also measures the relative impact that the codification of the LDM will have on USAID operational processes.

4.1 The Business Capability Model

The BCM was an essential tool in identifying areas of LDM impact and change. The BCM captures the functional nature of the Agency and displays it on a one page “map.” The BCM is not simply a functional organizational chart. Instead, the BCM depicts *what* USAID does, rather than *who* does what in the Agency. Removing organizational constructs and biases in describing and pictorializing what an organization does is very useful during analysis and mapping of such disparate issues as organizational and personnel alignment, IT investments, and data requirements.

The flexibility of the BCM and its inherent business focus make it a natural tool for evaluating the LDM impact on USAID’s business. Mapping the LDM to the BCM generates multiple analytical avenues to provide insight into LDM impact on operational processes. Identifying operational processes that are affected by LDM data is integral to understanding the data exchanges occurring between two or more entities.

Figure 6: USAID Business Capability Model



0494-011

4.2 Data Sharing and Process Change Identification Require Certain Assumptions

In and of itself, the Data Architecture cannot have an impact on operational processes, either at the program or management level. Rather, it is the future data collection or program management and results reporting systems, which are based on the Data Architecture and subsequent data standards, that will begin to change the way USAID operates at all levels.

As systems are updated using the Data Architecture, operational processes will inevitably change. The degree to which specific processes in Agency Program Operations and Activity Execution (two core BCM competencies) will be altered, and how organizational members' and partners' activities change, cannot be fully known at this point. It is clear that the application of the Data Architecture will affect how data are collected, which data are collected, how data are reported, and how often data are reported. Further, these changes will impact Program Operations and Activity Execution processes. The impact of the Data Architecture, as it is represented in future systems, will be felt at all levels of USAID's operations.

Although it may be challenging at this point to determine **how much** USAID's operational processes in Program Operations and Activity Execution may change due to DRM impact, it is possible and appropriate to identify **which** operational process will likely change due to Data Architecture adoption. However, this identification of operational process change *requires the assumption* of a future state in which USAID has made reasonable progress toward achieving the program management and results reporting system development underpinned by the Data Architecture.

4.3 Operational Process Change Identification Methodology

Identifying operational process changes and corresponding information exchange points is accomplished using several interlocking matrices. The analytical process was developed to measure LDM impact on Agency business processes and to identify those LDM entities that will drive operational process change. The analysis provided insight into organizational impact, making clear the broad reach of the LDM in support of BCM business capabilities beyond Program Operations and Activity Execution, both of which are considered core USAID competencies.

The analysis entailed four steps:

1. Map the intersections of the Business Capability Model and the Logical Data Model

This step identifies the breadth and depth of LDM's impact on USAID's business. The entities are each mapped to all of the business capabilities. This step provides insight into how many business functions will be "hit" by the LDM and identifies those functional areas that are most impacted.

2. Map the intersections of the Business Capability Model and the Operational Processes

This step highlights the process coverage of business capabilities. This mapping created a view of management burden and served as a linkage between the BCM to LDM mapping and the LDM to operational processes mapping.

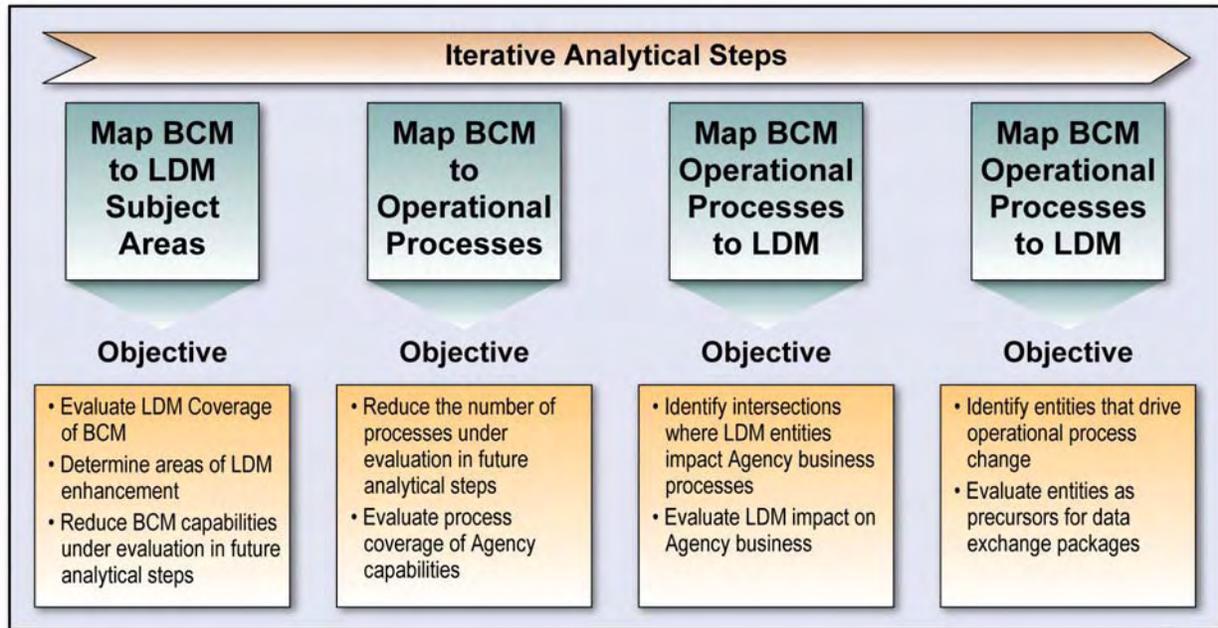
3. Map the intersection of operational processes to the Logical Data Model

The most critical step in the analysis, the alignment of the LDM to operational processes, identifies the processes that will be affected by the LDM.

4. Map changed operational processes to Logical Data Model entities

This final step provides insight into the *degree* of impact as measured by the number of entities aligned to a process. Additionally, it identified areas of potential data exchange.

Figure 7: Operational Process Change Identification Methodology



0494-012

4.4 Operational Process Change Analysis Findings

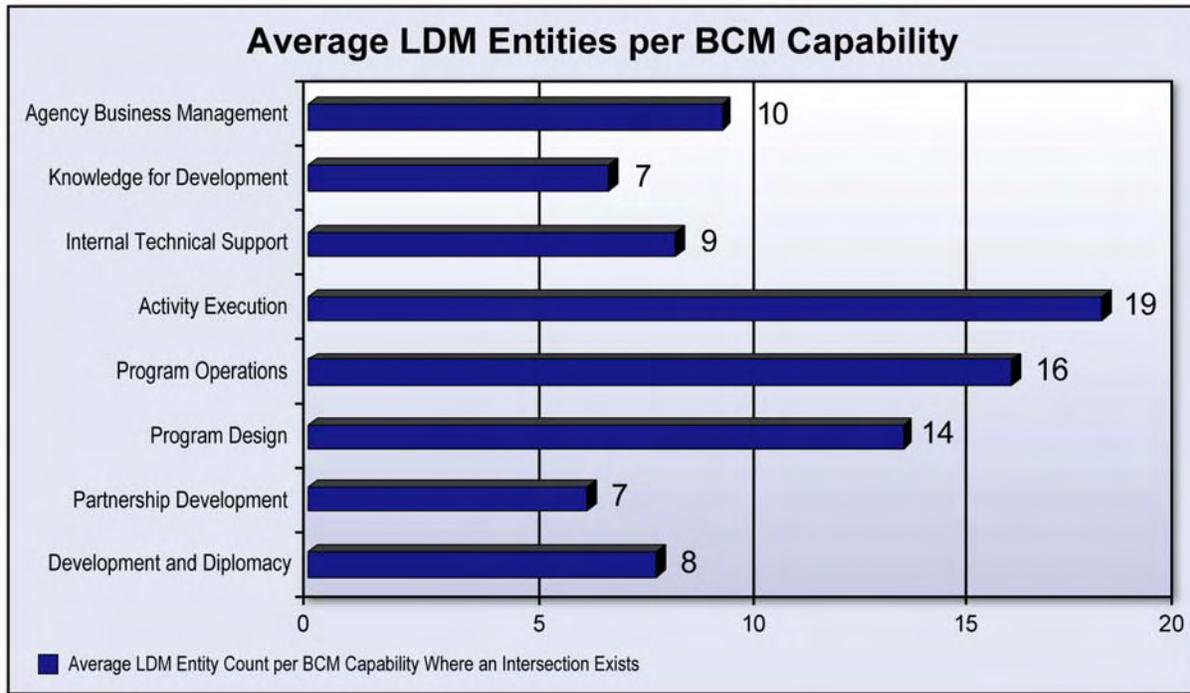
Each step in the mapping process identified and summed the points of intersection. This quantitative analysis helped support improved understanding of the LDM impact on USAID’s business and the relationships among data (as represented in the LDM), major business functional areas (the BCM), and operational processes.

4.4.1 BCM to LDM Subject Areas Mapping Results

As expected, the LDM supports the core business of USAID in the Program Operations and Activity Execution BCM competencies relatively more than other competencies. Beyond the expected level of core Agency business support, the LDM branches out to support other areas of USAID business. The sum of the entities intersecting with individual capabilities was used as a measure of LDM support of and impact on Agency business functions. It is noteworthy that Program Design competency capabilities received an average of 14 LDM entities in support of respective capability activity. This level of LDM support underscores how tightly the Program Design function is linked to Program Operations and Activity Execution, it illustrates the linkages between capabilities, and it supports the validity of the BCM as a representation of USAID.

Figure 8 illustrates the relative level of support all Agency BCM competencies receive from the LDM.

Figure 8: Average LDM Entities per BCM Capability



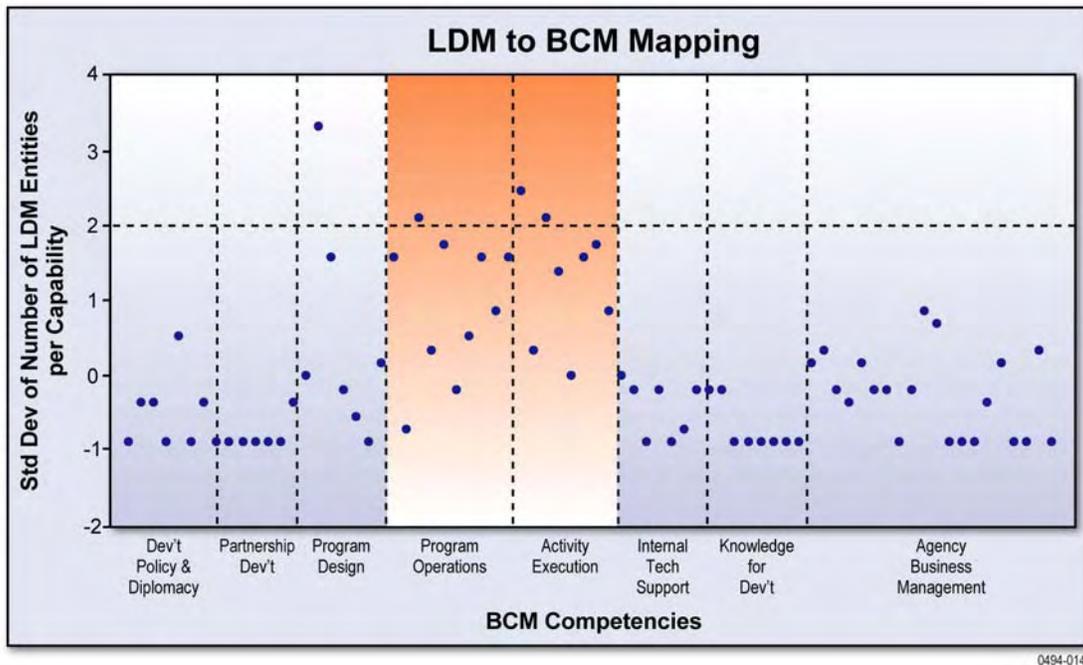
0494-013

Figure 9 below shows a different view of the same general relationship between the BCM and LDM. However, unlike Figure 8 which concentrates on broader competencies, Figure 9 is a normalized distribution of the number of LDM entities supporting particular competency capabilities. Two key findings from the mapping emerge: First, as validation of the relationship between the Logical Data Model and the Program Operations and Activity Execution competencies on which the LDM is based, it is again clear that the LDM provides the most support to the Program Operations and Activity Execution competencies, which are highlighted in the chart. The distribution of the capabilities within the two competencies is generally well above the mean, which demonstrates that these competencies receive more support from the LDM, on average, than other USAID competencies.

Second, the capabilities collected between 1.5 and 2.5 standard deviations above the mean (circled in Figure 9 below) primarily relate to either the “dollars, purpose, or results” of Agency programs. Loosely, the core of Agency operations can be broken down into 1) dollars: funding, implementing instruments, and budgets, 2) purpose: the plan and goals of agency activities, and 3) results: assessment and outcome management of programs. Those capabilities that are most supported by the LDM, and therefore most central to Agency programs and activities, primarily fall within these three categories.

A survey of the capabilities within the circle in Figure 9 identifies “Funding Instrument Strategy Development” and “Program Funding/Resource Coordination” (capabilities related to “dollars”), “Acquisition and Assistance Planning” and “Activity Logistics Planning” (purpose), and “Program Performance Management” and “Activity Performance Management” (results). While “dollars, purpose, and results” is an overly broad categorization of Agency activities to capture the entirety of USAID operations, it is a useful lens through which to view the organization and identify core activities. It is useful here in showing how the LDM aligns with those functions essential to USAID’s mission.

Figure 9: LDM to BCM Mapping Results

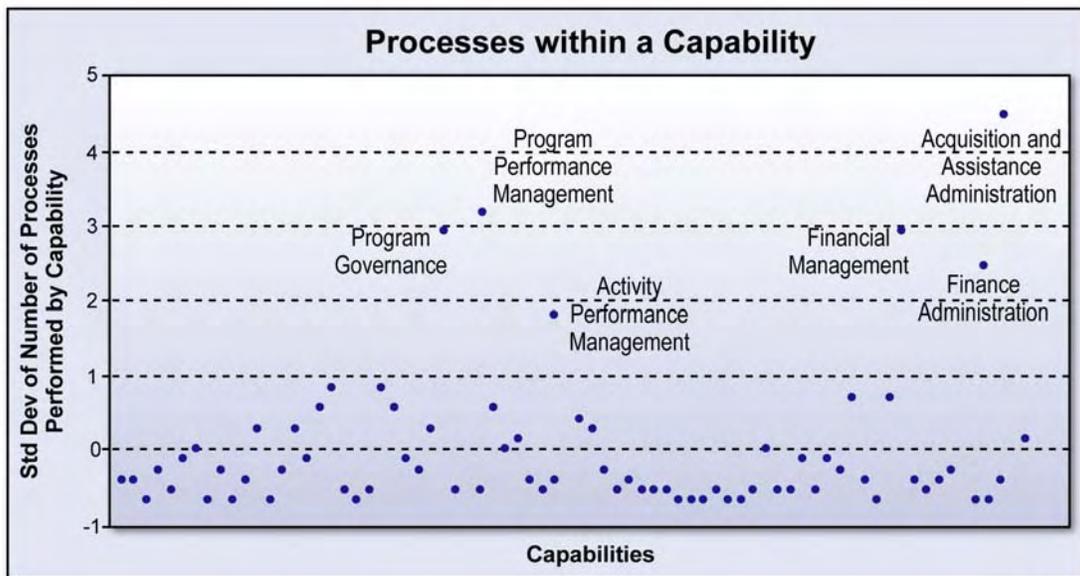


0494-014

4.4.2 BCM to Operational Process Mapping Results

The number of processes that take place, in part or in whole, within a BCM capability were summed to arrive at a rough assessment of capability burden. Capabilities that perform a financial function or acquisition administration were particularly busy. The capabilities Financial Management, Financial Administration, and Acquisition and Assistance administration were involved in some part of 25%, 21%, and 36% of the 110 listed processes, respectively.

Figure 10: Process to BCM Mapping Result



0494-015

Given the importance of planning, administering, tracking, and reporting financial processes in many aspects of USAID’s operations, it is not surprising to see these capabilities emerge as ones with a large share of the process responsibilities. The same is true of performance assessment. Objective measures of program performance are increasingly important as USAID strives to collect program results information that can be used to compare results from Mission-to-Mission and year-to-year.

4.4.2.1 LDM Subject Area to Operational Process Mapping Results

As with the BCM to Operational Process Mapping (Step 2), the LDM Subject Area to Operational Process Mapping (Step 3) is an interim step in a longer analytical process. However, here too there is insight to be gained from the mapping. 110 representative processes were mapped to the 111 entities within the LDM, a total of 12,210 intersections. Analysis of each process-entity intersection then focused on whether a future system built using the LDM would cause change to the organizational process. In all of the 12,210 possible instances of organizational change, there were found to be 1,301 intersections where change will occur. Even allowing for a margin of error in identifying future areas of change caused by the application of the LDM, this indicates the level of impact that can be expected from instituting an Agency-wide data model. Further, of the 110 processes evaluated, only 14 will not be impacted by the implementation of Data Architecture-based future systems.

Figure 11 below provides a more detailed summary of the mapping data. The data were summarized in two ways: 1) vertically by entity and, 2) horizontally by process. The top table highlights the vertical analysis. The number of processes affected by each entity were summed (see Appendix K: LDM to Operational Process) in order to provide a rough assessment of each entity’s impact. The assumption is that entities with the greatest organizational impact will affect a larger set of processes. The findings were summarized by collapsing the data into five-process ranges. As expected, the data show that a majority of entities affect only a small proportion of processes. Each entity will have an impact, although it may only be felt in a particular area of the organization or within a small set of processes.

A much smaller number of entities have impact across a broader set of processes. The three entities that affect the greatest number of processes – Document Role Type, Implementation Instrument Type, and Party Role Type – are those that are involved in many aspects of USAID operations from planning, to implementation, to oversight and assessment, to knowledge management. It is therefore not surprising to find that the codification of these entities in a future system would impact many processes at multiple levels within the Agency.

Figure 11: Summary of Findings of Process Entity Map

Number of Processes Affected by Entity	0	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50					
Number of Entities within Range	10	31	20	21	6	9	2	3	1	0	2					
Number of Entities Affecting a Process	0	1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	AVG	
Number of Processes within Range	14	33	24	12	8	14	1	0	0	1	0	0	2	1	11.7	

0494-016

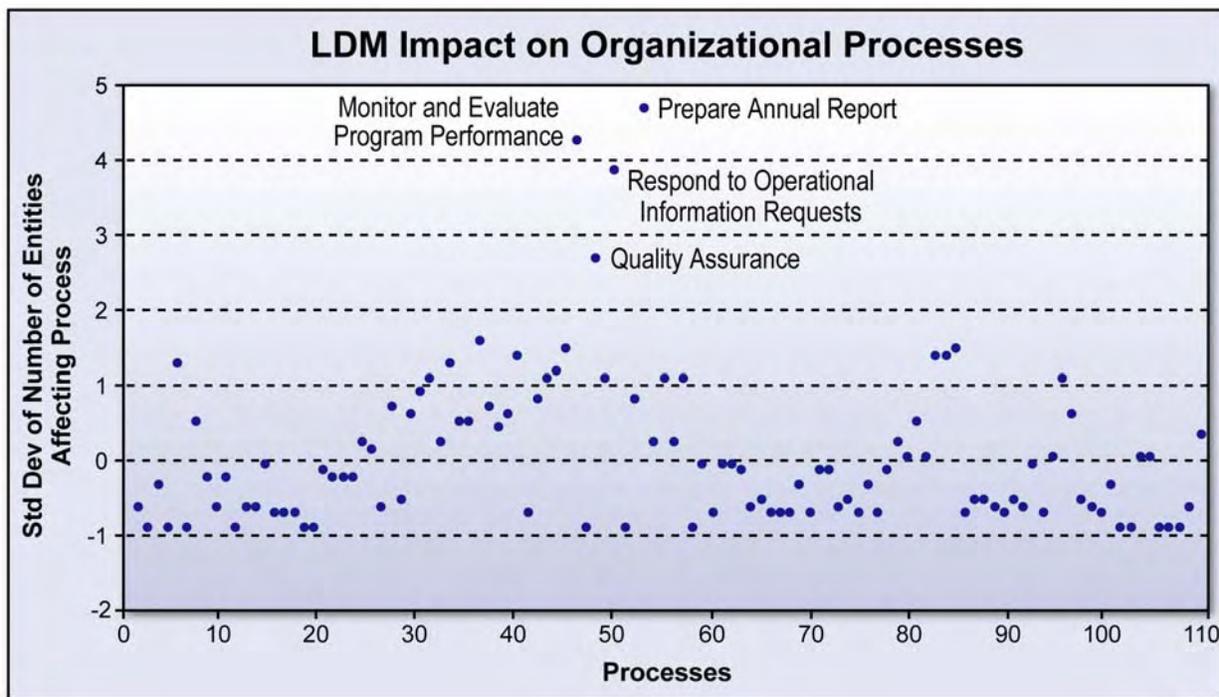
The second table in Figure 11 cuts the data horizontally by process. Each process is affected by between 0 and 65 entities. The information was consolidated into five-entity ranges. Thus, 33 processes were affected by between 1 and 5 entities while, at the other extreme, three processes will be affected by more than 55 of the 111 entities.

The number of entities touching a process can be used as a measure of the degree of impact on that process and on USAID operations. Most processes will experience only minor changes given that, on

average, only 12 entities have an impact on a process. However, a small proportion of processes, four in particular, will experience dramatic change and deserve deeper analysis. The processes “Monitor and Evaluate Program Performance,” “Respond to Operation Information Requests,” and “Prepare Annual Report” are outliers in the data set, each being touched by more than half of all the entities. “Quality Assurance” will also be significantly affected by the application of the DRM with 41 of the entities causing change to the process.

Figure 12 below shows the normalized distribution of the processes according to the number of entities by which they will be affected. The figure demonstrates the degree to which the four highlighted processes will be affected by the application of the DRM relative to other organizational processes. Almost all processes are within one standard deviation of the mean while “Monitor and Evaluate Program Performance,” “Respond to Operation Information Requests,” and “Prepare Annual Report” are between 2.5 and 4.5 standard deviations above the mean.

Figure 12: LDM Impact on Organizational Processes



0494-017

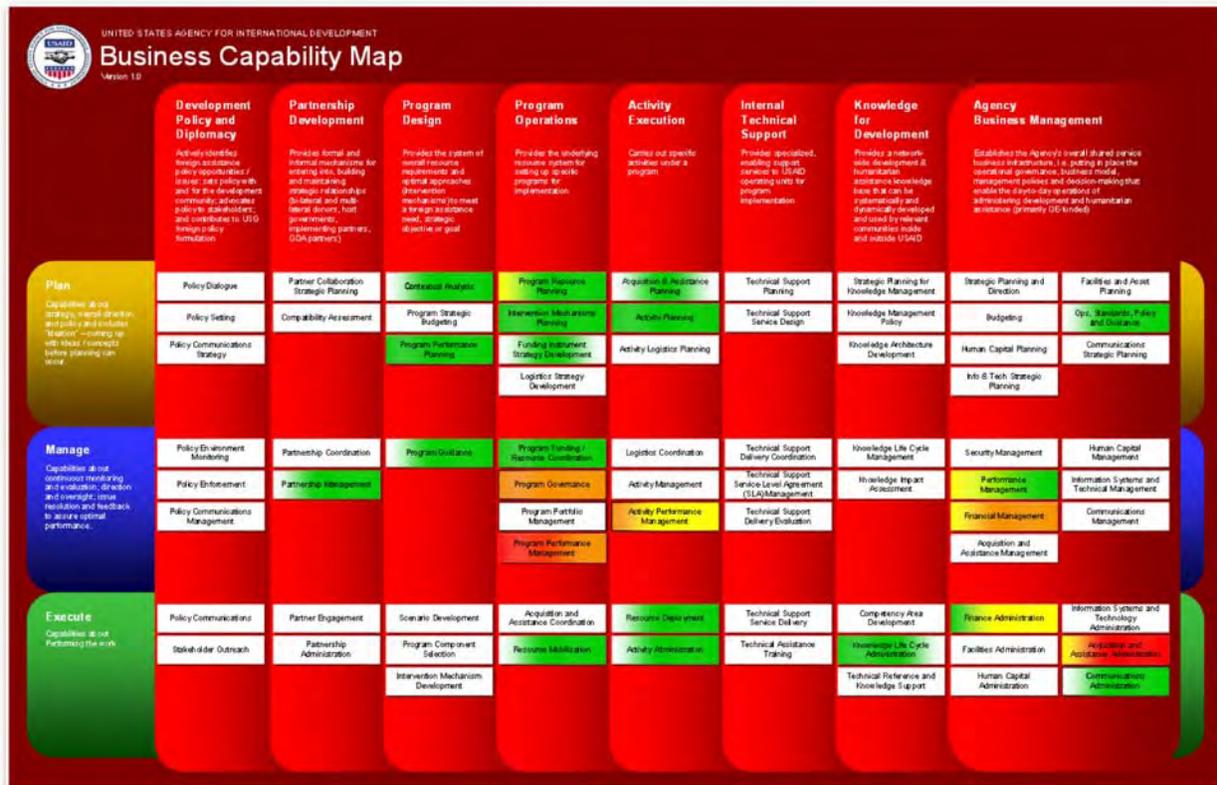
4.4.3 Changed Operational Processes to LDM Entities Mapping Results

The completion of the operational process change identification methodology not only meets OMB DRM guidance, but is indispensable to decision-makers intent on determining the business impact of the Data Architecture and ensuing program management and results reporting systems.

From a business function perspective, identifying changing operational processes will be critical to decision-makers as they determine where and how to apply the Agency’s Data Architecture.

Figure 13 illustrates the concentration of changed operational processes within the Agency’s BCM in terms of a capability “Heat Map,” and brings the discussion of the Data Architecture and LDM full circle in its depiction of Agency business function and capability impact.

Figure 13: Changed Operational Process BCM "Heat Map"



0494-018

Capabilities in with shadings of red and/or orange within Figure 13 align with the operational processes most impacted by the Logical Data Model. This is compelling evidence that the business function(s) served by a BCM red capability will be significantly affected by the Agency's Data Architecture.

5.0 DRM Alignment to the USAID Business Reference Model

The BRM provides an organized, hierarchical construct for describing the day-to-day business operations of the Federal government. While many models exist for describing organizations - org charts, location maps, etc. - this model presents the business using a functionally driven approach. The Lines of Business and Sub-functions that comprise the BRM represent a departure from previous models of the Federal government that use antiquated, stove-piped, agency-oriented frameworks. The BRM is the first layer of the FEA and is the main viewpoint for the analysis of data, service components, and technology.⁶

The Agency's DRM development followed the Agency BRM, which was developed and documented in the "USAID Enterprise Architecture: Agency Concept Level-Overview," March 2005.

Due to the ongoing development of DRM guidance by OMB, there are no formal linkages between the DRM and BRM. Clearly, though, connecting USAID's business sub-functions in the BRM and the data context of the DRM (LDM and data dictionary) is an important exercise. By connecting the BRM to the DRM, the Agency develops a clearer line of sight between its primary business BRM sub-functions and the data that support those sub-functions.

To forge linkages between the BRM and DRM the BCM is employed once again. Just as the LDM aligned to the BCM via functional business capabilities, so too the BRM aligned to USAID's BCM by mapping business capabilities to BRM sub-functions.⁷ Appendix M: DRM to BRM Alignment documents the alignment of DRM entities through the USAID Business Capability Map to the BRM. Appendix I: BCM to LDM Subject Area Mapping describes the DRM LDM subject areas aligned to BCM business capabilities. A review of these appendices reveals the co-alignment of BRM and DRM constructs through the BCM.

⁶ The Business Reference Model, E-Gov website (<http://www.whitehouse.gov/omb/egov/a-3-brm.html>) November 2005, pg. 47

⁷ USAID EA Overview Vol II Appendices, pg 43

6.0 Data Architecture Next Steps

6.1 Development of Agency Data Standards and Data Governance

Clearly, data standards are critical to realizing the benefits of a data architecture. These standards and subsequent data governance efforts will codify data architecture concepts into existing and future USAID systems over time. The Agency benefits that accrue from this will be substantial, and include enhancing USAID's ability to tell its story to key stakeholders.

Creating and enforcing data standards in USAID must include consideration of creating a new role for data administration – ideally by a Data Administrator (DA) who has purview over standards, metadata management, data modeling methods, data dictionary, data stewardship, and possibly even data deployment strategies. DAs take an enterprise-wide perspective by monitoring corporate data model evolution from a business perspective and monitoring application development to look for opportunities for data standardization and synchronization. The DA's responsibility for maintaining a corporate perspective enables the resolution of data ownership conflicts between users or application development groups, development of corporate data distribution strategies, and the design of database architectures.

6.2 Joint USAID and Department of State Activities

The Joint IT Strategic Plan calls for “a significant level of integration of the IT environments and operations of the two agencies. It will also promote the establishment of an integrated platform for supporting the activities and information requirements of all US Government agencies operating overseas.”

This document both provides a baseline and a template for the integration of Data Architectures between USAID and DoS where appropriate. Current efforts are underway at DoS to develop a data architecture. The writers of this document will be working closely with DoS counterparts to harmonize Agency and Department EA efforts and artifacts including the development of a DoS and future Joint USAID / DoS Data Architecture if this becomes a requirement.

Appendix A: Data Architecture Subject Areas

This is a consolidated view of the USAID Data Architecture Subject Areas. By arranging the detail found within the Data Architecture into defined subject areas it is easier to develop and communicate the overall model, by associating like data entities together.



0494-019

Appendix B: Data Architecture Definitions

This appendix presents the data architecture and data modeling terms used in the USAID Data Architecture. These are standard industry terms.

Attribute – The most basic component of information in a data model. Attributes maintain one “atomic” fact, characteristic, or property about a person, place, thing, event or concept that is of interest to the organization and about which data is kept.

Data – A noun that refers to things known or assumed; facts or figures from which information and conclusions can be inferred. Data is a representation of facts, concepts, or instructions in a formalized manner suitable for communication, interpretation, or processing by human or automated means.

Data Architecture – Data architecture depicts the objects that are relevant to an enterprise and their relationship to each other. It describes the structure of the data objects and elements, their relationships, and the principles and guidelines governing their design and evolution over time. It defines a process for rationalizing data needs across applications and determining its appropriate distribution and placement.

Data Domain – In this document, data domain is similar to a subject area; a field of logically grouped entities; (In a database design context, a data domain involves the data type assigned to a data element such as character, number, date, money, etc.)

Data Dictionary – A database for holding definitions of entities, elements/attributes, views, relationships, and other data that describes the structure of a database.

Data Management – The process of (program for) applying a standard methodology and readily accepted principles and practices to the creation, collection, storage, retrieval, and conversion to usable business information of organizational data.

Data Model – A data model is a representation of the things of significance to an enterprise and the relationships among those things. It portrays the underlying structure of the enterprise's data, so this can then be reflected in the structure of databases built to support it.

Data Repository – A repository is similar to a database and data dictionary, however, it usually encompasses a comprehensive information management system environment. It includes descriptions of data structures (i.e. entities and elements), and may also include metadata of interest to the enterprise, data screens, reports, programs, and systems. Typically it includes an internal set of software tools, a database management system, metadata, and loading and retrieval software for accessing repository data.

Data Steward – A data steward has the role of surrogate owner of a data element or entity for an enterprise. A data steward provides the definition and parameters of a data element or entity for the enterprise. A Data Steward manages the development, standardization, and certification of data within an assigned area of responsibility. A Data Steward is responsible for the accuracy, reliability, quality, and currency of descriptive information (metadata) about data in an assigned area of responsibility.

Data Warehouse – A database system that is optimized for the storage of aggregated and summarized data across the entire range of operational and tactical enterprise activities. The data warehouse brings together several heterogeneous databases from diverse sources in the same environment. This could include data from current systems, legacy sources, historical archives, and other external sources.

Database – A collection of data items that have constraints, relationships, and a schema. A collection of interrelated files stored together, where specific data items can be retrieved by various applications. A collection of data arranged in groups for access and storage.

Database Development – Process of creating a database by applying a standard methodology for defining user requirements for, modeling, designing, developing, testing, and implementing a database application to satisfy a business need.

Entity - A thing of significance about which the organization wishes to hold information.

Information Chain – The process whereby data is created, collected, stored, retrieved, and converted to provide the information needed to conduct the business of an organization.

Logical Data Model - A representation of the information requirements of an organization that is independent of individual applications, software, hardware constraints, or how the data is to be used.

Metadata - Metadata is data about data. It describes information about objects being manipulated. Examples of metadata include data element descriptions, data type descriptions, attribute/property descriptions, range/domain descriptions, and process/method descriptions. Ideally, the repository environment encompasses all corporate metadata resources: database catalogs, data dictionaries, and navigational services. Metadata includes things like the name, length, valid values, and description of a data element.

Modeling - Application of a standard, rigorous, structured methodology to create and validate a physical, mathematical, or otherwise logical representation of a system, entity, phenomenon, or process.

Platform – Refers to the computer hardware on which the database is stored or resides.

Physical Data Model - A representation of the technologically independent data structures for a data base, e.g., specification of database table structures.

Relationship – An association between two entity types, or between the same entity type in a recursive association, expressing a connection between them that is of importance to the business.

Standardization – Process of requiring application of a standard definition and representation to a data element.

Subject Area – A logical collection of entity types based on a major resource of an enterprise. A subject area consists of a cohesive set of entity types that are used by common business activities. This cohesive set of entity types contains one kernel entity type that forms the “back bone” of that subject area. The subject area boundaries are derived by understanding data dependencies, so that logical groupings of data entity types can be identified.

Appendix C: Architectural References

The following references were used as sources of material for the development of the requirements contained herein:

- Brackett, Michael. *Data Sharing: Using a Common Data Architecture*, John Wiley & Sons Inc., New York, 1994.
- Cook, Melissa A. *Building Enterprise Information Architectures: Reengineering Information Systems*. Upper Saddle River, New Jersey: Prentice-Hall, Inc., 1996.
- Hay, David C. *Data Model Patterns: Conventions of Thought*, Dost House Publishing, New York, 1996.
- *Federal Enterprise Architecture Framework*, Chief Information Officer (CIO) Council, Version 1.1, dated September 1999.
- *A Practical Guide to Federal Enterprise Architecture*, Federal Architecture Working Group (Federal Chief Information Officer Council), Version 0.9, 2/2/2001 (Draft)
- *Framework for the Specification and Standardization of Data Elements*, International Organization for Standardization and International Electrotechnical Commission (ISO/IEC), International Standard ISO/IEC 11179, 1998.
- *Metamodel for the Management of Shareable Data*, American National Standards Institute, ANSI X3.285, 1998.
- *ODMS Conceptual Data Model Draft*, July 1995.
- Purba, Sanjiv (editor). *Handbook of Data Management 1999*, CRC Press LLC, Boca Raton, 1999.
- Spewak, Steven H. *Enterprise Architecture Planning: Developing a Blueprint for Data, Applications and Technology*, John Wiley & Sons Inc., New York, 1992.
- Zachman, John. *A Framework for Information Systems Architecture*, IBM Systems Journal, Vol. 26, No. 3, 1987.
- Silverston, Len. *The Data Model Resource Book, Vol. 1: A Library of Universal Data Models for All Enterprises - Revised Edition*, John Wiley & Sons Inc., New York, 2001.

Appendix D: Information Sources

This appendix describes the information sources used to develop the specifics of the USAID Data Architecture. The USAID EA team developed the Data Architecture with a field based orientation. Interviews with personnel managing operations in the field, and in USAID/W were combined with studying existing best of breed systems used to support those operations, and guiding policy were used to formulate the core of the Data Architecture. Applicable industry best practices, OMB guidance, and Joint EA artifacts were used to refine, and provide added flexibility, robustness, and compliance. Finally the management context to solve specific business issues provided the overarching guidance for where to place particular emphasis in the Data Architecture.

Joint USAID/ DoS Sources

▪ **USAID Cuff Systems for Program Operations and Activity Execution**

- Peru Mission Monitoring and Evaluation System
- Bureau Data Resource Center (BDRC)
- Global Health Field Support System
- Global Health Expenditures Database (GHED)
- EGAT Information and Communication Technology Inventory
- Annual Report Database
- Iraq Financial Reporting Database
- Afghanistan Monetary and Evaluation System database
- Country Operational Planning & Reporting System (COPRS)
- Bosnia and Herzegovina Mission MIS MIS
- Development Assistance Database (DAD)
- West Bank and Gaza Mission System
- Ukraine Mission Database
- OFDA Abacus
- Serbia Mission Database

▪ **Documentation**

- ADS 200-203 Program Policy
- ADS 300, Acquisition & Assistance Policy
- ADS 600 Budget & Finance Policy
- ADS 634, Administrative Control of Funds
- Common Indicator guidance
- Strategic Management-Interim Guidance
- U.S. Foreign Aid: Meeting the Challenges of the Twenty-first Century
- Enterprise Executive Information Strategy v4 (EIS)
- State - USAID Joint Strategic Plan
- FY 06 Annual Report Guidance
- Planning, Achieving, and Learning course materials
- HIV/AIDS Segment Enterprise Architecture
- USAID Agency Conceptual Level Enterprise Architecture
- Draft Joint State/USAID IT Strategic Plan 2006 – 2010

- Joint DoS and USAID Information and Data Architecture
- Applied Joint Enterprise Architecture, 2005
- **Interviews with people from the following organizations**
 - Guatemala Mission
 - El Salvador Mission
 - Peru Mission
 - PAL Course Instructors
 - West Bank/Gaza Mission
 - Ukraine Mission
 - Bosnia Mission
 - Guatemala Embassy
 - El Salvador Embassy
 - Peru Embassy
 - DoS Washington
 - PPC
 - IRM
 - EGAT
 - E&E
 - GH
 - DoS
 - ANE
 - LAC
 - Synergy Information Systems
 - SRA
 - Chemonics

External Sources

Industry Enterprise Architecture Documentation

A number of initiatives in industry and government have advocated the articulation of explicit enterprise architecture as a means to better evolve an enterprise's information systems capabilities for meeting enterprise goals. These initiatives include a call for data architecture as one part of the enterprise architecture. Leading examples include the Zachman Framework for Enterprise Architecture and Dr. Steven Spewak's work on "Enterprise Architecture Planning." Within the federal government, there are several examples of enterprise architecture initiatives⁸. OMB requires federal agencies to have an enterprise architecture under OMB Circular A-130.

⁸ These include the more recent Reference Models making up the Federal Enterprise Architecture, the 1999 Federal Enterprise Architecture Framework (FEAF), Department of Defense (DoD) Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance (C4ISR) Architecture Framework, and Treasury Enterprise Architecture Framework (TEAF).

Industry Data Architecture Documentation

Initiatives in industry and government advocate having an explicit data architecture as part of managing a corporate data resource. Michael Brackett introduced corporate data resource management using a common data architecture in “Data Sharing: Using a Common Data Architecture” in 1994. He was President of the Data Administration Management Association (DAMA) International. Another leading advocate is Melissa Cook of Hewlett Packard, author of “Building Enterprise Information Architectures: Re-engineering Information Systems” in 1996.

Federal Enterprise Architecture Reference Models

OMB describes a number of reference models making up the structure of the Federal Enterprise Architecture (FEA). OMB Circular A-130 requires that each agency must create an IT Architecture (including an enterprise architecture, Technical Reference Model⁹, and Standards Profile¹⁰). A catalyst for the OMB requirement is the Clinger-Cohen Act. These documents provide guidance and direction for the USAID Enterprise Architecture including its Data Architecture.

Data Reference Model (DRM)

The Office of Management and Budget (OMB) has introduced a business-oriented framework for Government-wide improvement, the Federal Enterprise Architecture (FEA), as a component to transform the Government into one that is citizen-centered, results oriented, and market-based. The Data Reference Model (DRM), as a component reference model of the FEA, is a business-driven framework that classifies data with respect to how it supports the business of the government. For a detailed description of the DRM, and its relationship to the USAID Data Architecture, please reference Section 4.

Management Context

As with many large public and private organizations, the USAID’s information systems have evolved over the past 10 to 15 years to meet specific requirements. Past practice has led to a proliferation of unique and redundant data distributed among hundreds of computer applications and databases running on multiple platforms. As a result, data is difficult to share, costly to assemble, and hard to assess in terms of integrity and accuracy.

There is an increasing need to share information externally with implementing partners, host country Governments, the Congress, and the public. For example, in a series of memos this year, OMB is mandating enhanced joint operations between USAID and DoS. In a memo dating December 9, 2005, Undersecretary Fore and Deputy Administrator Shieck mandated increased emphasis on finding opportunities to eliminate duplicative support services. A key foundation to accomplishing this in a manner that supports national decisions based on a deep understanding of both organizations is through a well developed information model.

Finally, as a part of recent Federal critical infrastructure initiatives, USAID is placing increased emphasis on information security. A sound data management program can contribute to effective information security by helping to identify business rules, data ownership, and other protections that govern the world of international development assistance.

⁹ A Technical Reference Model is a taxonomy that provides a consistent set of service areas, interface categories, and relationships to address interoperability and open systems. It integrates the standards profile and technology forecasts. (From A Practical Guide to Federal Enterprise Architecture, CIO Council, 2/2001).

¹⁰ A Standards Profile documents technology standards, protocols, and definitions (From A Practical Guide to Federal Enterprise Architecture, CIO Council, 2/2001).

Appendix E: Data Modeling Concepts

The purpose of this appendix is to give the audience an understanding of the USAID Data Architecture by presenting fundamental data modeling concepts and listing some Telelogic System Architect modeling tool concepts. These will help guide the audience read and understand the actual data model diagrams found in Appendix G.

Data Modeling

Data modeling is a technique used to analyze a business or organization to define the data needed for its operation. A data model represents the shared data that is required by an organization, provides a structured means to communicate information requirements for a system to support the organization, and is the foundation of an enterprise-wide data standardization program. The data model components collectively describe the information required by the functional business processes.

The information must be uniformly and consistently collected, managed, controlled, and used by various business activities to accomplish their missions. The iterative process of developing normalized data models defines a non-redundant set of data structures that support and enforce the information needs of the enterprise. A data model identifies and defines the components of information - attributes, entity types, relationships between entity types, and subject areas. The data modeling components used in the LDM are detailed in the subsections listed below. The standards used to develop the LDM are listed in Appendix E: USAID Data Architecture Data Modeling Standards.

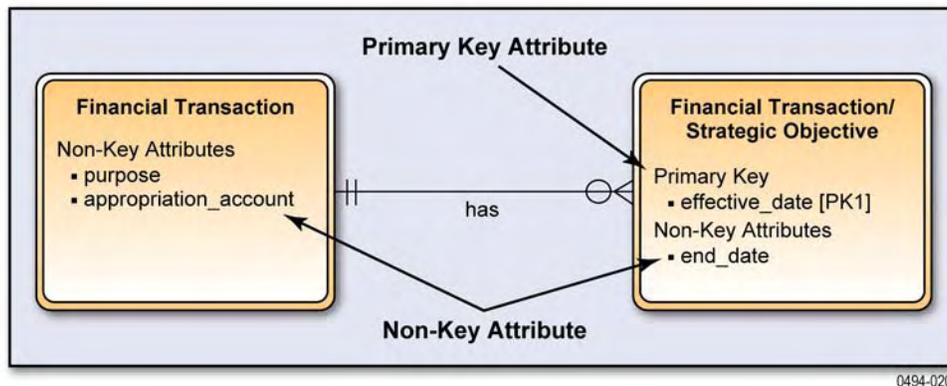
Attributes

Attributes are the most basic component of information in a data model. Attributes maintain one “atomic” fact, characteristic, or property about a person, place, thing, event or concept that is of interest to the organization and about which data is kept (e.g., a participant’s birth date, last name, or gender). Example attributes from the LDM include Person ID, First Name, and Last Name. Groups of related attributes combine to form and identify another data modeling component known as the **Entity Type**.

Entity Types

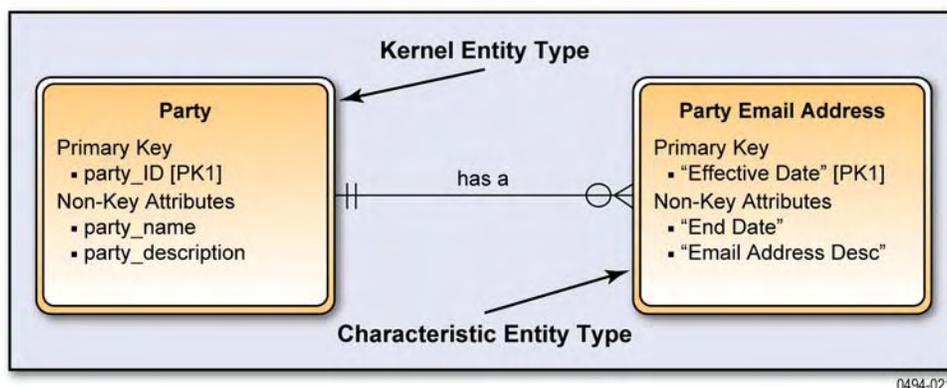
Entity types are collections of attributes that fully describe a person, place, thing, event or concept that is of interest to the organization and about which data is kept (e.g., Persons, Organizations). Entity types in a data model are uniquely identified by their **primary key**.

The **primary key** may be a single attribute or a concatenation of attributes, all of which are required to achieve unique identification of the entity type. All entity types must have a primary key to uniquely identify each occurrence of the entity type. For example, the attribute Person ID serves as the primary key for the Person entity type in the LDM, while the attribute Last Name would be a non-key attribute. A second form of data modeling key is the **foreign key**. If a specific connection or relationship exists between two entity types, the attributes forming the primary key of the parent entity type become foreign key attributes of the child entity. Following is a graphical representation of the primary key, foreign key, and non-key examples.

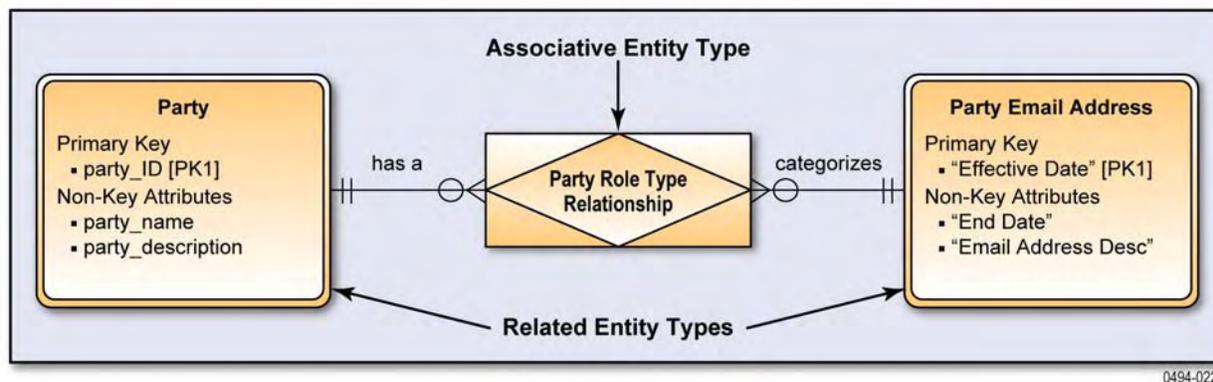


The common varieties of data modeling entity types include **kernel**, **characteristic**, and **associative** entity types. **Kernel** entity types represent a business object that can be identified independently of other entity types. An independent entity type is an entity type whose instances can be uniquely identified without determining its relationship to another entity type. Person, Organization, and Budget are examples of kernel entity types in the LDM.

Characteristic entity types describe, (i.e., are characteristics of) and are dependent on, kernel entity types. For example, one Person may be described as having many addresses over time (e.g., a change of address from one residence to another). A dependent entity type is an entity type whose instances **cannot** be uniquely identified without determining its relationship to one or more other entity types. Kernel entity types exist with characteristic entity types in parent-child relationships; kernel entity types being the parents and the characteristic entity types being the children. Following is a graphical representation of an example characteristic entity type.

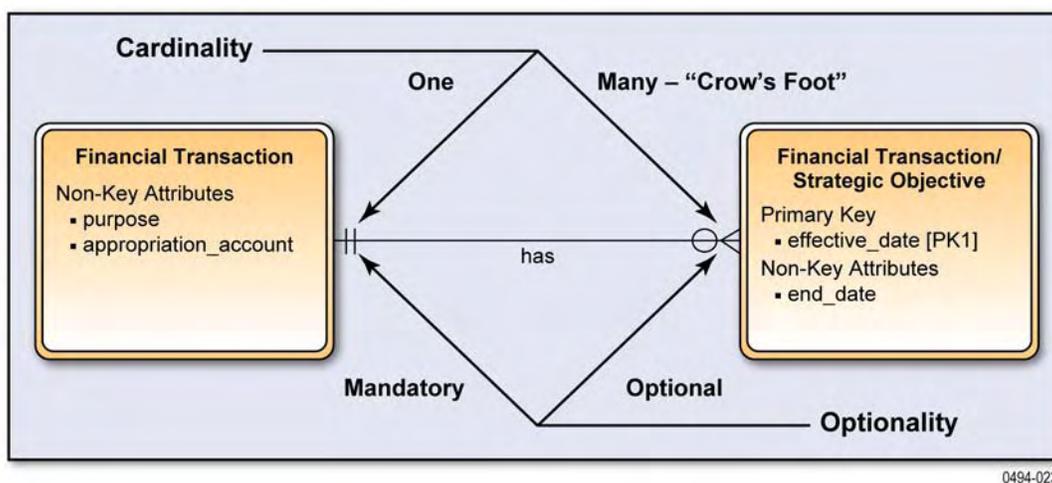


Associative entity types are formed by the association or intersection of two or more other entity types. An associative entity type is used to resolve a many-to-many relationship to be represented as one-to-many relationships (refer to Subsection 2.1.3 for an explanation of relationships.). Following is a graphical representation of an associative entity type.



Relationships

A **relationship** is an association between two entity types, or between the same entity type in a recursive association, expressing a connection between them that is of importance to the business. Relationships are represented in the data model using a line connecting the two related entity types. Following is a graphical representation of a relationship.



Two important characteristics of relationships are **optionality** and **cardinality**. The **optionality** identifies whether a relationship must exist (is mandatory) or may exist (is optional) at the instance when an occurrence of an entity is created. For example, if a Financial Transaction can be created without referencing an existing Effective Date, the relationship is optional and is marked with an "O". The optionality symbol is placed at the end of the relationship opposite from the entity being created. In the exhibit below, the "O" would be placed next to the Effective Date along the relationship line.

If the relationship is fully optional, two separate optionality symbols are required -- one at each end of the relationship line so that optionality is explained for both members of the relationship.

The **cardinality** marking on a relationship identifies whether one or many occurrences of an entity may exist for each occurrence of the related entity. A "crow's foot" at the end of the relationship means that many occurrences of that entity can relate to a single occurrence of the entity at the other end of the relationship. For example, if a Person can have many occurrences of a Person Address, the relationship is marked with a "crow's foot" next to the Person Address along the relationship line.

A straight line, “|” (without the crow's foot) means that a maximum of one entity occurrence may exist for a single occurrence of the related entity. If a Person Address can exist for only one occurrence of a Person, the relationship is marked with a “|” next to the Person along the relationship line.

Thus a relationship may have one of the following cardinalities:

- One-to-one;
- One-to-many; or
- Many-to-many.

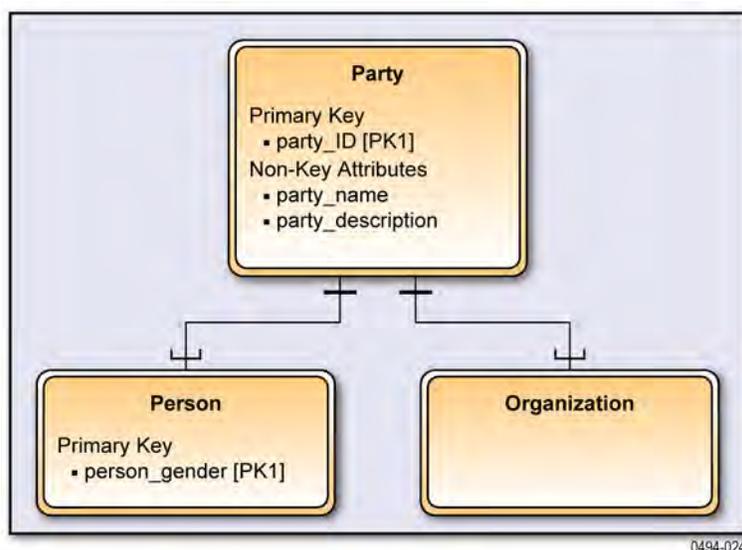
The most common type of relationship is one-to-many (e.g., a Person can have one or many Addresses). In the context of one-to-many relationships, the terms parent and child are often used to refer to the entity types at the one-end and at the many-end of the relationship, respectively. One-to-one relationships are relatively uncommon. An example of this type would be one DRIVER holds one DRIVER'S LICENSE. Many-to-many relationships are “unresolved” and require that one associative entity type and two one-to-many relationships be introduced to resolve the relationship.

A relationship may be **identifying** or **non-identifying**. An identifying relationship is used where an instance of the child entity type is uniquely identified through its association with the parent entity type. The primary key attribute(s) of the parent entity type becomes a component of the primary key of the child. A non-identifying relationship is where an instance of the child entity is not uniquely identified through its association with a parent entity. The primary key attribute(s) of the parent entity becomes a non-key attribute of the child.

Subtype Relationships

The models use Subtype relationships to depict a whole category of items that have the same type of attributes. The models depict these categories by creating both the entity that defines the category and each of the elements of the category and then connects them with a special type of relationship called **Subtype Relationship Connector**. The parent of the category is called the **supertype** and each of the children is called a **subtype**.

An example of this Subtype diagram is displayed below:



Both children have all the attributes of the parent and each child contains the two additional attributes displayed. The primary key for the children (Subtype Entity1 & 2) is the same as the parent (Supertype Entity). The relationship between the parent and children is the **Exclusive Subtype Relationship**.

There are two types of **Subtype Relationship Connectors**:



The **Exclusive Subtype Connector** is used when any instance of the Supertype Entity may not be a member of more than one of the Subtype Entities. The **Inclusive Subtype Connector** is used when any instance of the Supertype Entity may be member of two or more of the Subtype Entities concurrently.

Subject Areas

A subject area is a logical collection of entity types based on a major resource of an enterprise. A subject area consists of a cohesive set of entity types that are used by common business activities. This cohesive set of entity types contains one kernel entity type that forms the “back bone” of that subject area. The subject area boundaries are derived by understanding data dependencies, so that logical groupings of data entity types can be identified. Subject areas in a data model structure are established to focus attention at a higher level than entity types. They make the data model easier to understand, by allowing the reviewer to focus on specific sections of the data model without being overwhelmed by the details of the entire diagram. Examples of subject areas in the LDM include Persons, Organizations, and Work Activities.

Appendix F: Data Modeling Conventions

The purpose of this appendix is to present the USAID Data Architect Data Modeling Conventions for naming subject areas, entity types, and attributes for the Logical Data Model. This section provides guidelines and conventions to enable the USAID to integrate and share data across the enterprise. Guidelines and conventions are provided to assist with the creation and maintenance of the data model.

General Naming Conventions

- Names must be concise. Avoid prepositions, the possessive case, conjunctions, and articles except when absolutely essential for clarity.
- Names must reflect USAID business knowledge and terminology and avoid reference to technology, implementation, or processing rules.
- An acronym may be used only if its actual term is widely understood along all USAID Lines of Business, and then must be spelled out in the definition of the element.

Definition Conventions

- Abbreviations must not be used in definitions.
- Acronyms used are spelled out on first use within each definition.
- If the name of any object is referenced in a definition, the name must be capitalized.
- The definition must be in sentence form. One or more sentences may be used as required to complete the definition.
- For an entity type, the definition must describe a singular occurrence of the entity type rather than the plural. For example, a Person is
 - Proper: an individual...
 - Improper: individuals...
- The definition should be stable over time. For example, if the entity type definition contains the following words or phrases, this may be an indication of time dependency or process orientation:
 - Perhaps;
 - unless this happens;
 - in this situation;
 - however;
 - occasionally;
 - frequently;
 - depends; or
 - sometimes.

Subject Area Conventions

A subject area is a natural subdivision of an enterprise centered on a major resource or activity of the enterprise. It consists of a highly cohesive grouping of entities and their relationships that are used by common business activities.

Subject Area Properties

Subject Area Name

Exactly one kernel entity type and all of its dependent entity types are contained in the subject area. The name is formed by using the plural version of the kernel entity type name. Following are examples of subject area names:

- Persons;
- Organizations; and
- Work Activities.

Conventions addressed in Section 2 - General Naming Conventions apply to this section.

Subject Area Description

The description should describe the subject area. Conventions addressed in Section the Definition Conventions section above applies to this section.

Subject Area Guidelines

- Each subject area should contain one kernel entity type and its characteristics.
- Each entity type within a subject area should be related to other entity types in the same subject area.

Entity Type Conventions

An entity is a fundamental thing of relevance to the enterprise about which data should be kept. An entity type is the collection of entities that share a common definition, as well as common characteristics and relationships. An entity type may be a person (e.g., Contract Officer), place (e.g., Address), thing (e.g., Organization), concept (e.g., Strategic Goal/Objective), or event (e.g., Disaster).

Entity types are classified as independent or dependent. The independent entities can be identified independently of any other entity types. These are known as **kernels**. The dependent entity types must rely on one or more other entity types to exist. These dependent entity types are either characteristic or associative. The **characteristic** entity type further describes another entity type. For example Person Medical Condition is a characteristic entity type further describing the Person entity type. An **associative** entity type depends on, and resolves the many-to-many relationship between, two or more other entity types such as the “Organization Person Relationship” associative entity type. This associative entity type’s identifier is made up of the “Organization” identifier and the “Person” identifier, and provides for the definition of one or more associations between these two entity types.

Entity Type Properties

Entity Type Name

The name of the entity type classifies the entities it describes. The name must be a singular noun or a noun phrase and be unique within the business. These should be common nouns, not proper nouns. Entity type names must not include any special characters, and should not be abbreviated unless maximum name length is exceeded.

Examples:

Improper: Persons (plural)

Proper: Person (singular)

Improper: Ford, Honda, Volvo (proper nouns)

Proper: Motor Vehicle (common noun)

- Do not use articles (a, an, the) or possessives when naming entity types.
- Avoid using prepositions. When possible reword the name so the preposition is unnecessary.

Example:

Improper: Method Of Evaluation

Proper: Evaluation Method

- Similarly, entity type names should be worded so that conjunctions (and, or, but) are not necessary. The need for a conjunction in an entity type name may indicate faulty data modeling.

Examples:

Improper: Employee Location Or Assignment

Proper: Employee Location;
Employee Assignment

In the above example, perhaps two entities are needed - one for location and one for assignment.

- Reference entity types, also known as lookup entity types, document the domain of allowable values for coded attributes. As such, these entity types should end with the suffix of “Type”.

Examples:

Proper: Organization Role Type

Proper: Airman Type

- Since an associative entity type depends on, and resolves the many-to-many relationship between, two or more other entity types, an associative entity type name should be worded so that the name is the contraction of all related entity types. The name may also end with the suffix “Xref”, an abbreviation for “cross-reference”, to indicate that the associative entity type resolves the many-to-many relationship between the involved entity types.

Examples:

Proper: Person Employee Xref

Proper: Person Organization Xref

Unique Identifier

Identifiers distinguish one occurrence of an entity type from all other occurrences of that entity type. All identifiers must consist of one or more attributes which conform to the attribute naming conventions. In the case of a single attribute which uniquely identifies a kernel entity type, the attribute must use the *identifier* class word, abbreviated ID. It is common to encounter the identifier attribute of a kernel entity type where the name is the abbreviated entity type’s name plus the concatenated ‘ID’ class word suffix. When relationship memberships and attributes are used together as an identifier, the membership pairing and attribute value combine to provide uniqueness.

Entity Description: Definition

This is a narrative description of the entity type. Conventions indicated in the Definition Conventions section above apply to this section.

Entity Description: Notes

The Notes field may be used to add additional entity type information that is not appropriate for any other field. Conventions indicated in the Definition Conventions section above apply to this section.

Entity Type Guidelines

- Each entity described by an entity type must be uniquely identifiable.
- An entity type should participate in at least one relationship.
- An entity type is immediately associated with one, and only one, subject area.

Attribute Conventions

An attribute is a characteristic of an entity type.

Attribute Properties

Attribute Name

An attribute name is a noun or noun phrase describing the purpose or content of the attribute and reflects the terminology used in the business. An attribute name consists of zero or more modifier words; and must end in one and only one class word.

For instance, the following are valid names for attributes of Person:

- First Name
- Last Name
- Birth Date

First, *Last*, and *Birth* are used as modifier words. *Name* and *Date* are the class words.

An attribute must describe one concept and have singularity of purpose or use. Do not include the name of the entity type or subtype when naming the attribute. That creates redundant names, such as “Person Person ID”. An attribute name cannot contain special characters.

Class Words

A class word is a noun within an attribute name that defines the generic grouping of data to which an attribute belongs. Class words are the last component of an attribute name. Class words are reserved words and **must not** be used anywhere else in the attribute name. A class word is a modeling technique used to lend clarity to attribute names. A class word is a means of categorizing data, e.g. it is time, date, monetary amount, or coded information.

Class words must be distinguishable from one another. If class words are ambiguous, then they must be reconciled.

Class word lists should be kept small. A class word is not valid as a modifier. The class word is not the definition - it is a means of categorizing.

Example:

The entity type Person requires an attribute to record an employee's "social security number". If it is the primary key (of the kernel entity type), then it should be named Social Security Id. If social security number is not the primary key of the Person entity type, the attribute should be named, using approved abbreviations, “Social Security Nmbr”. If the primary key is a simple (not concatenated) assigned identifier, then it should be named Person ID.

For a list of class words, please reference the Class Word Table at the end of this appendix.

Domain

Domain refers to the allowable values for an attribute. This field is required for attributes that end with category or code class words. Domain values for attributes are captured within the Notes field of the associated reference entity type.

Attribute Guidelines

- An attribute describes exactly one entity type.
- An attribute must have, at most, one value for any entity of the entity type it describes.
- An attribute must not have attributes of its own.
- An optional attribute may not participate in an identifier.
- The initial value of an attribute that participates in an identifier may not be changed.
- A derived attribute may not participate in an identifier.

While these conventions are focused on logical data modeling, they have similarities with the NAS Data Standardization Procedures appendices entitled “APPENDIX 2. NAMING CONVENTIONS AND GUIDANCE” and “APPENDIX 3. WRITING GOOD DEFINITIONS.”

Relationship Conventions

A relationship is a reason of relevance to the business for associating entities.

Relationship Guidelines

- Each relationship associates one or two entity types.
- An optional relationship membership may not participate in an identifier.
- A relationship membership with a cardinality of “many” may not participate in an identifier.
- A relationship membership that is involved in a mutually exclusive set may not participate in an identifier.

Diagram Conventions

Model diagrams are presented by subject area. Each diagram describes one main subject area and its neighborhood, and contains entity types that are either shaded or unshaded. Shaded entity types belong within, and are the focus of, the subject area diagram, while unshaded entity types belong within, and are the focus of, another subject area. A neighborhood includes unshaded entity types from other subject areas which have direct relationships with shaded entity types in the diagrammed subject area.

As unshaded entity types are the focus of, and are described in full within another subject area, the non-key attributes of unshaded entity types are generally removed. This removal of duplicate non-key attributes minimizes the need to update unshaded entity types within numerous subject areas whenever an attribute change, due to further analysis and understanding, is made to the primary subject area entity type, and therefore minimizes these attribute changes being out of sync. This will also minimize diagram complexity and size.

Key attributes are generally not removed from unshaded entity types, as they often represent a relationship to the shaded entity type, e.g. a foreign key, and primary keys uniquely identify the entity type, thereby assisting the reader with understanding the entity type.

Entity types from other subject areas that do not have a direct relationship to a shaded entity type are also not displayed in order to minimize duplication, related out of sync errors, diagram complexity, and size.

Finally, to assist with model readability, all attempts were made to minimize the overlap of relationships. Therefore, entity types have been positioned within each subject area to reduce, or eliminate altogether, the cross-over of relationship lines.

Class Word Table

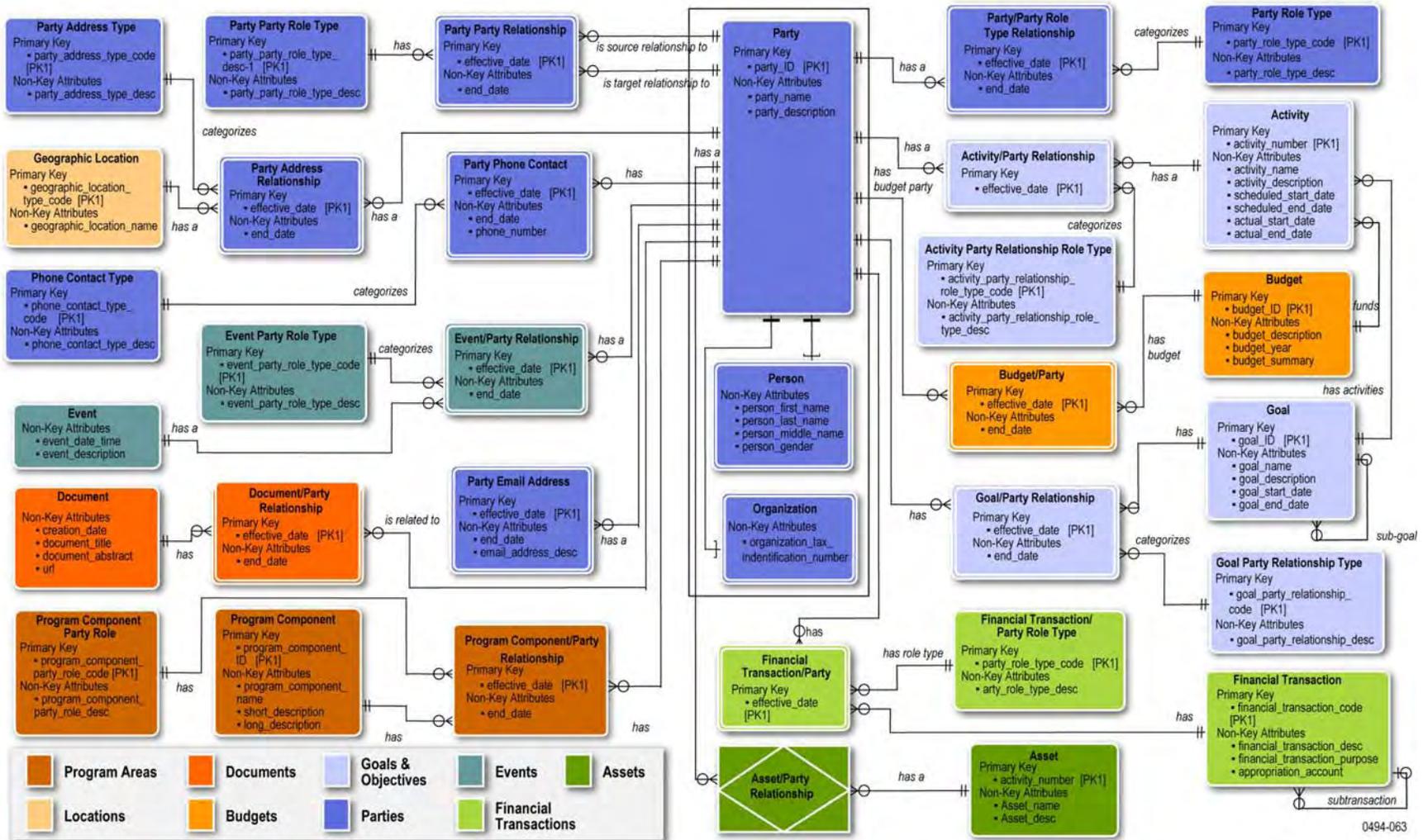
The following table contains class words applicable to attribute naming.

Table F1: Class Word Table

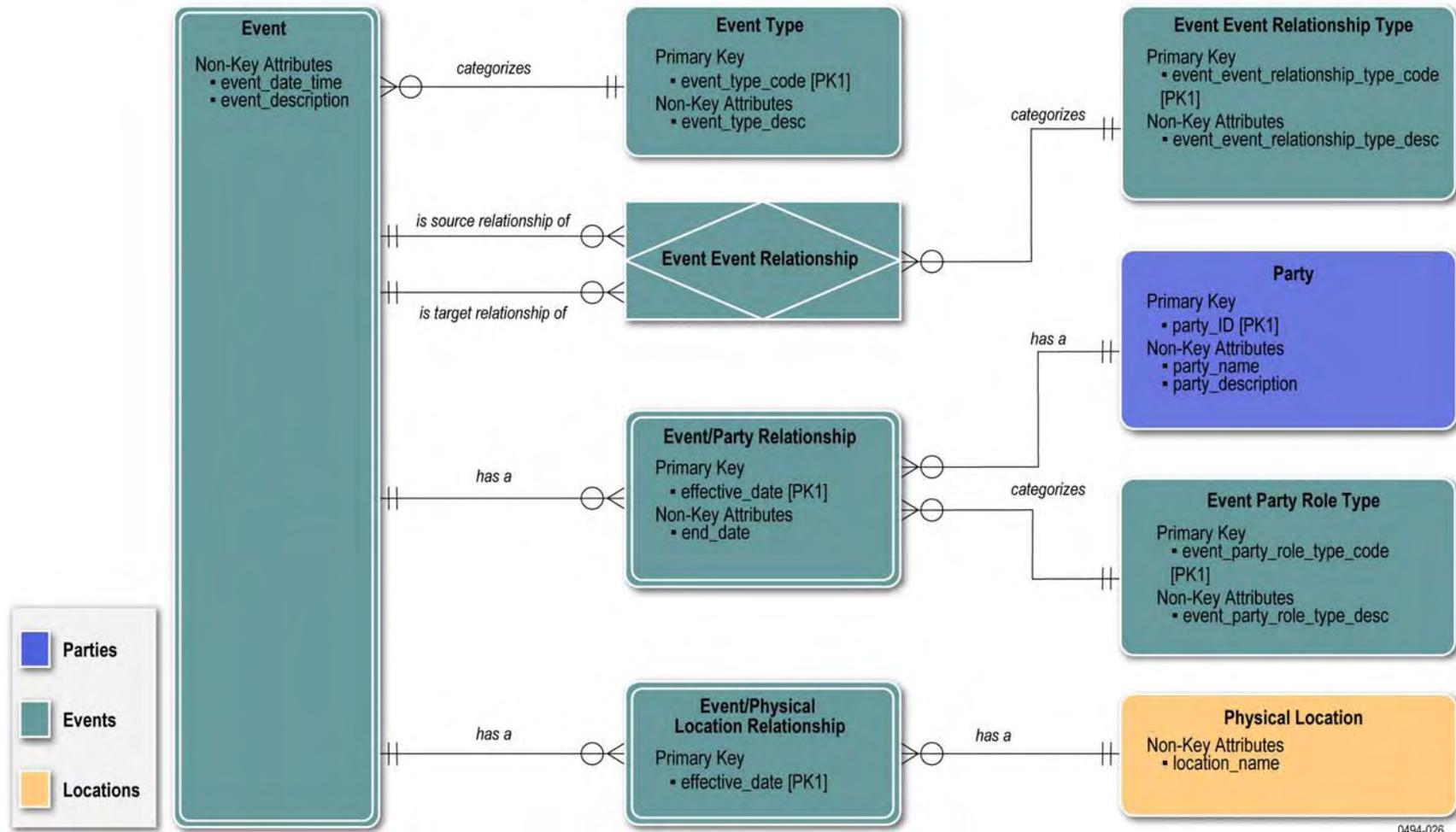
CLASS WORD	ABBREVIATION	DESCRIPTION
AMOUNT	AMT	A monetary quantity. Always expressed in whole and fractional portions.
CATEGORY	CAT	A classification of data which is not codified and does not require a reference or translation table to become meaningful information.
CODE	CODE	A differential of a classification of data which requires a reference or translation table to become meaningful information.
COUNT	CNT	An integer number indicating a measure in the indicated unit of measure and available for arithmetic use.
DATE	DATE	A measurement of time from which year, month, and day may be determined.
DESCRIPTION	DESC	Any of the forms, versions, or editions in which a written work exists. Data having undefined, free-form, unstructured or unformatted content, including text, alphanumeric and other printable characters.
IDENTIFIER	ID	One non-intelligence bearing attribute whose purpose is to uniquely identify a kernel entity type.
IMAGE	IMG	A picture or graphic.
INDICATOR	IND	A simple Boolean flag set to "Y" for yes (or true) and "N" for no (or false).
NAME	NAME	A word or phrase that constitutes a distinctive designation for a person, place, thing, concept, or event.
NUMBER	NMBR	A numeric integer used for identification or sequencing and not intended for arithmetic use.
PERCENT	PCT	A unit-less measurement expressing a part to the whole.
QUANTITY	QTY	A real number indicating a measure implied to be in units and available for arithmetic use.
RATE	RATE	A measurement of change over time expressed in designated units of measure.
TIME	TIME	An indication of time of day which is capable of indicating hours, minutes and/or seconds, including fractions

Appendix G: USAID Logical Data Model

Subject Area: Parties

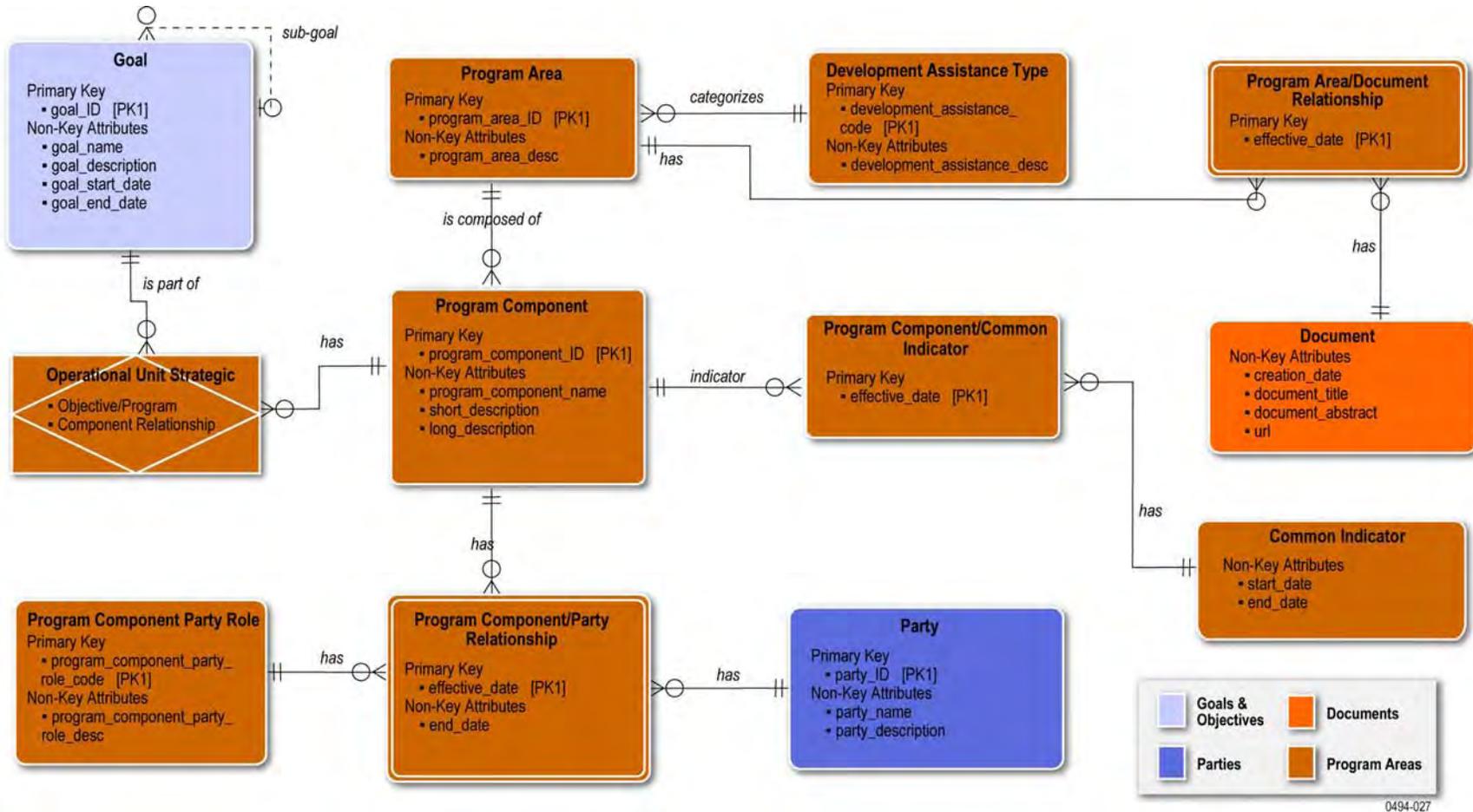


Subject Area: Events

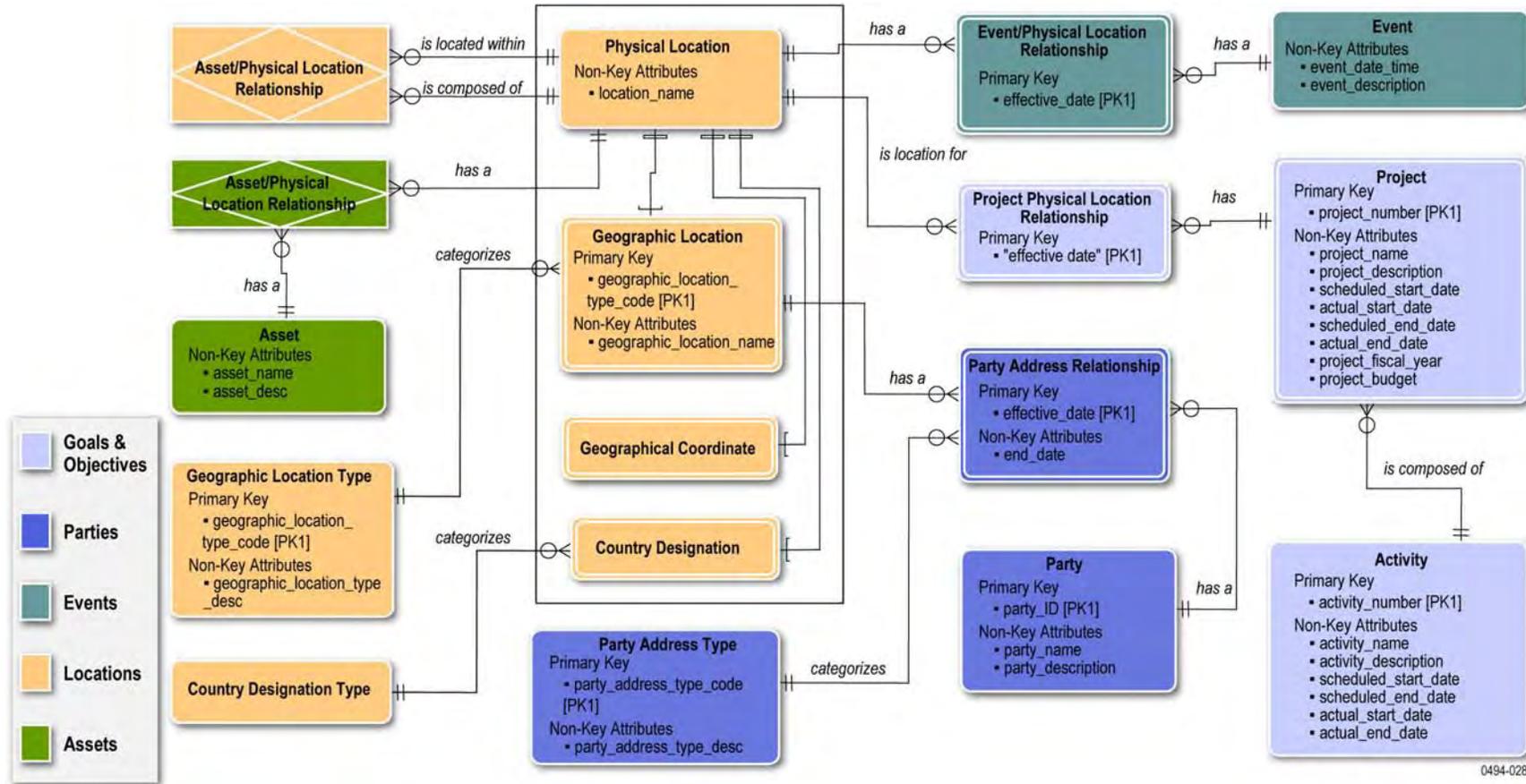


0494-026

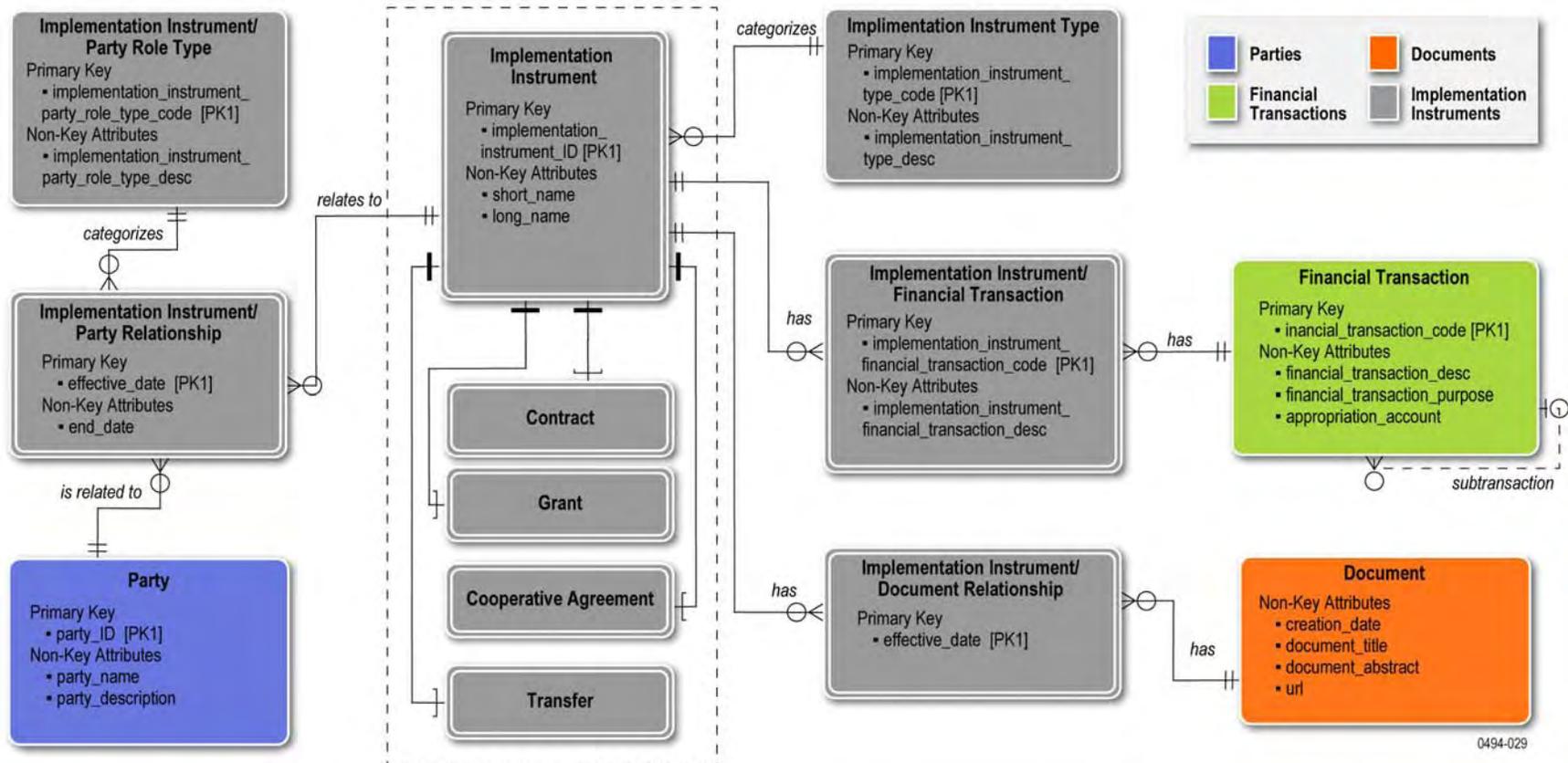
Subject Area: Program Areas



Subject Area: Locations

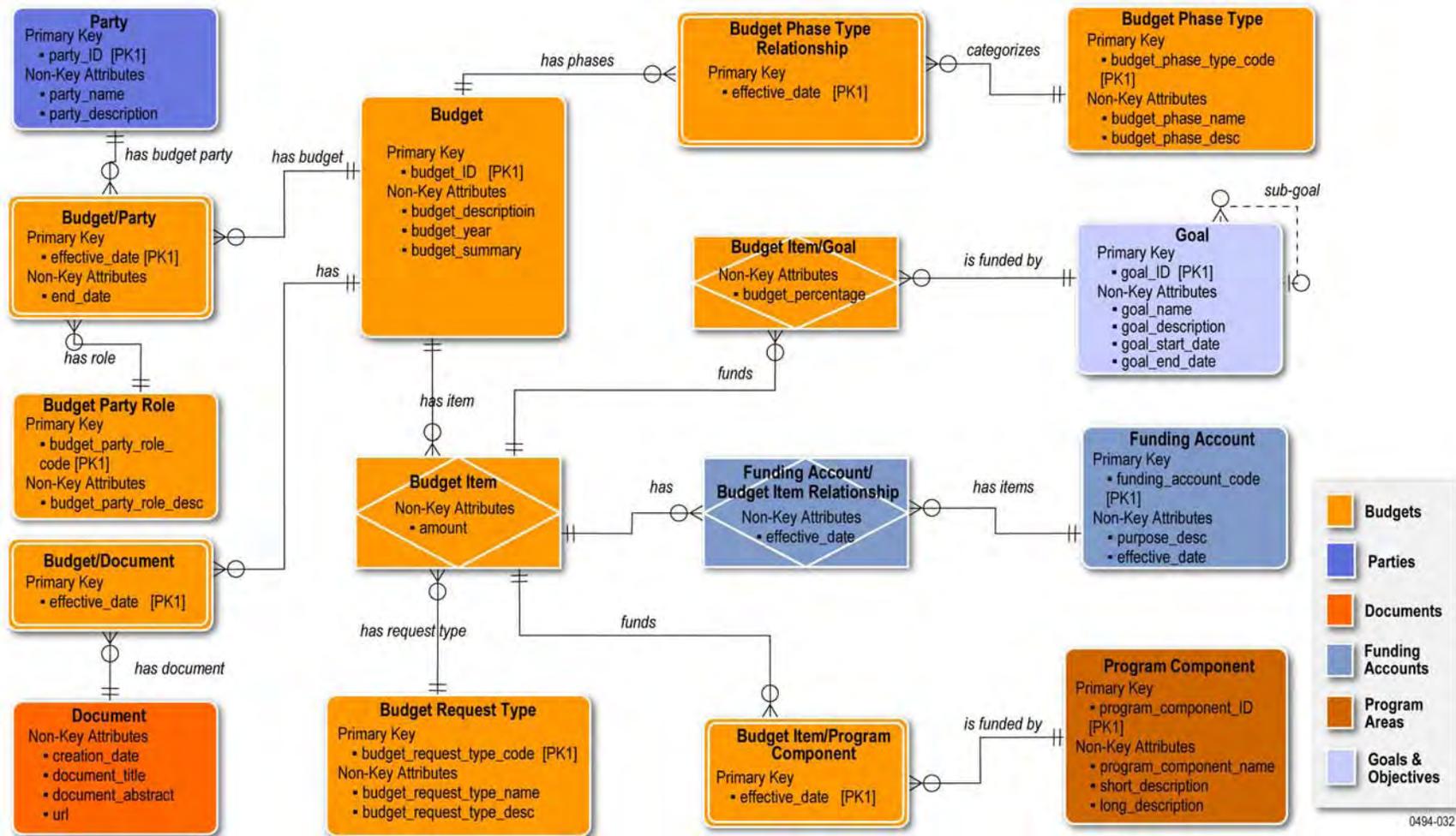


Subject Area: Implementation Instruments

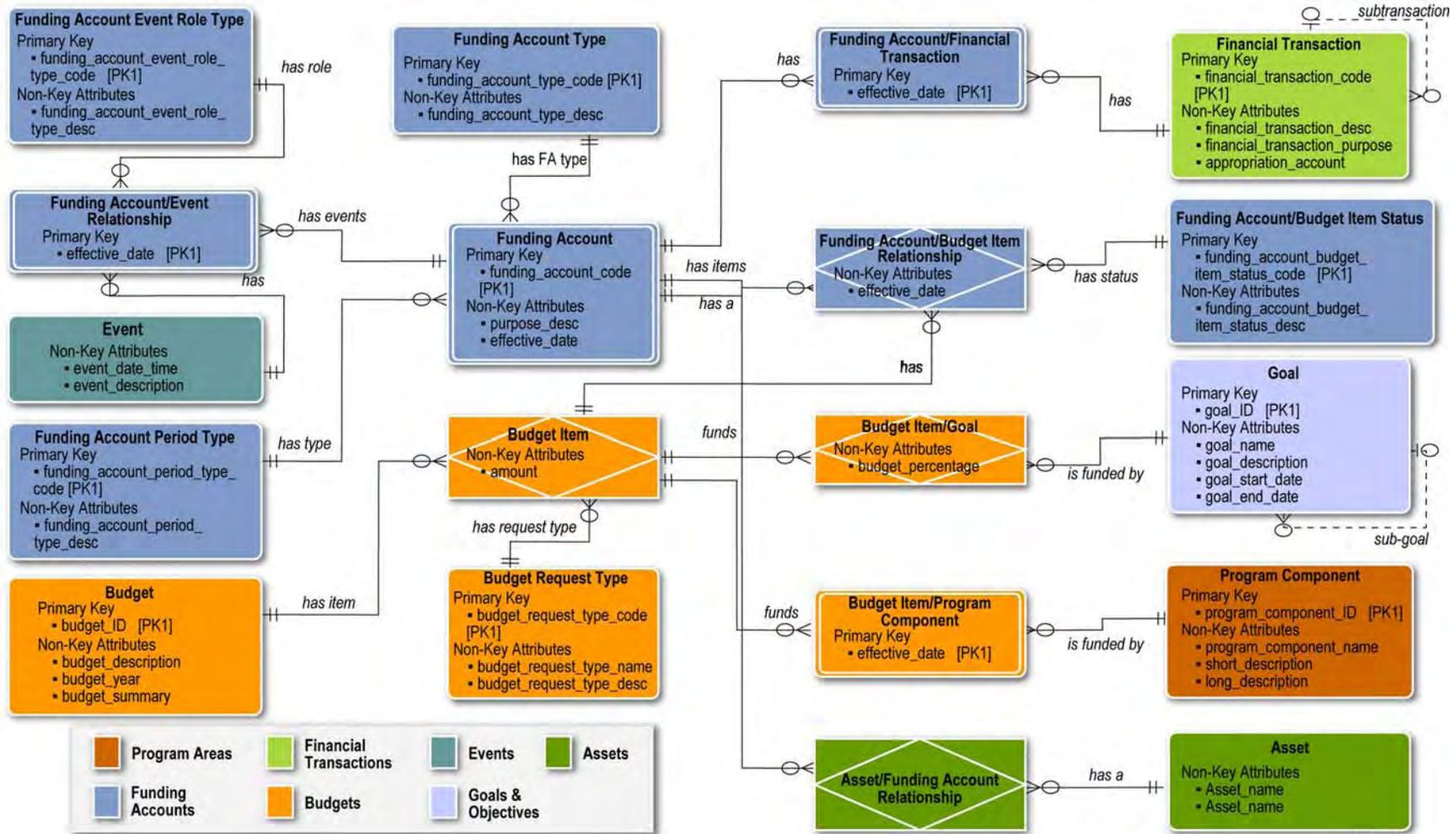


0494-029

Subject Area: Budgets

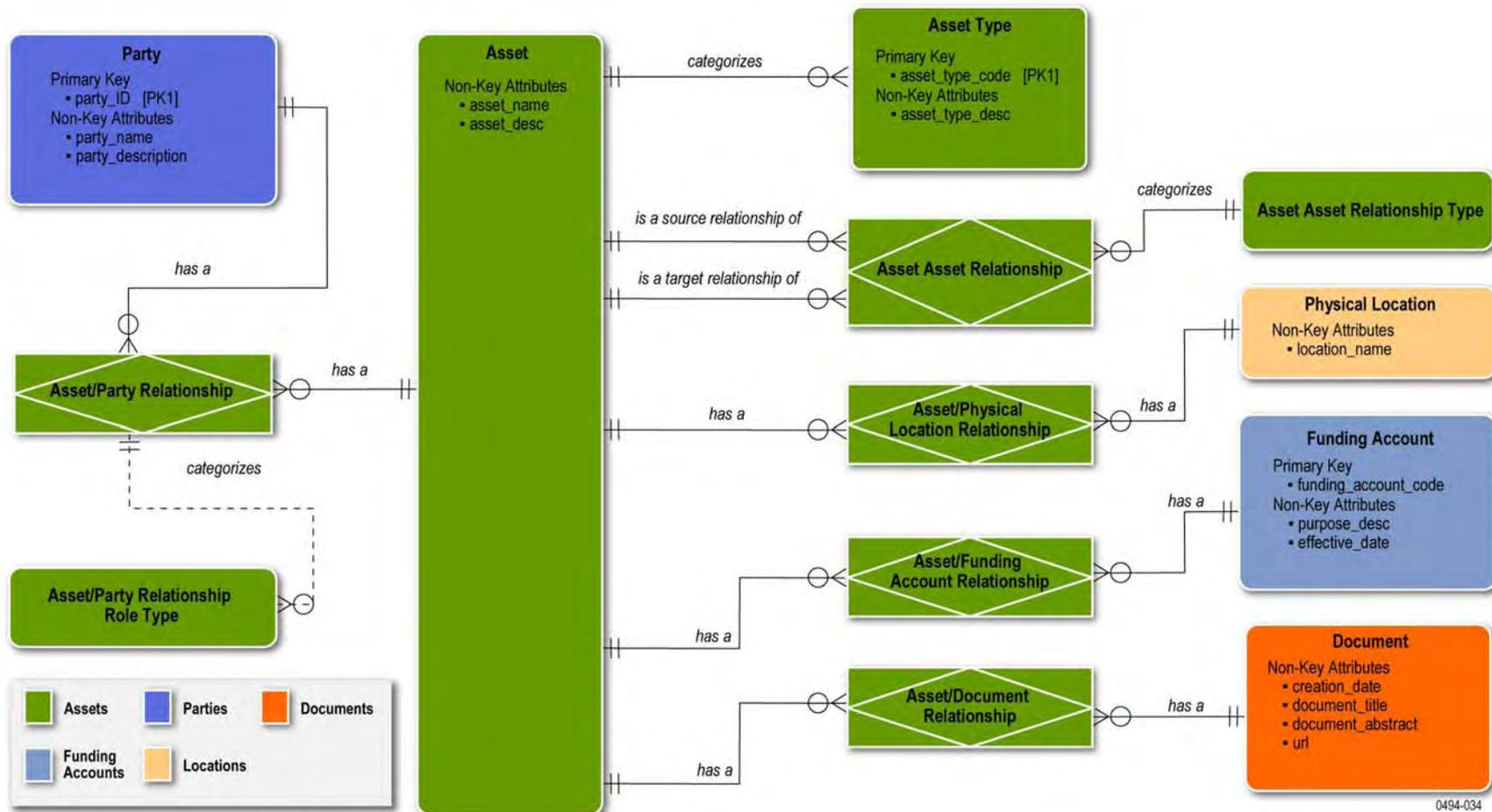


Subject Area: Funding Accounts

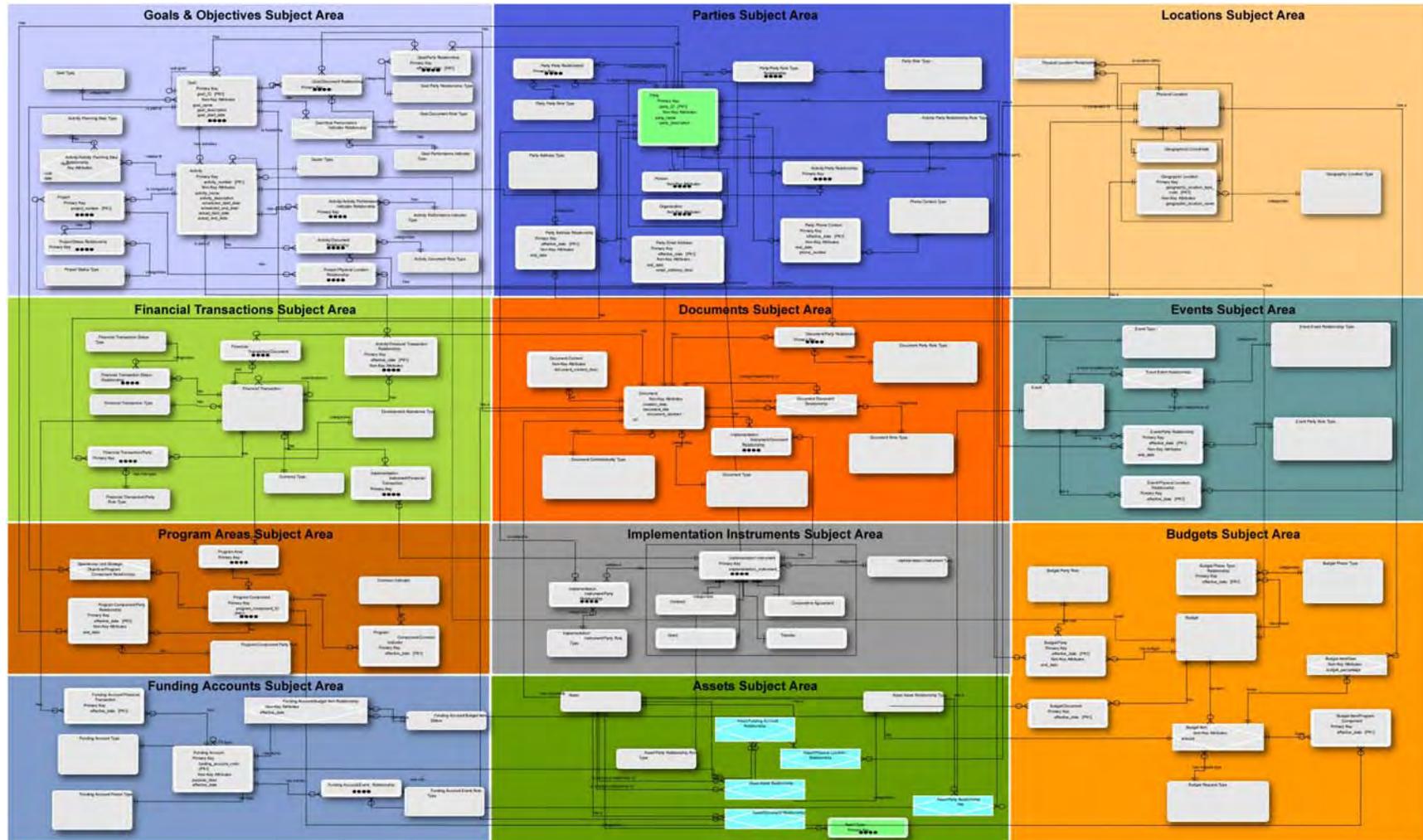


0494-033

Subject Area: Assets



USAID Data Model



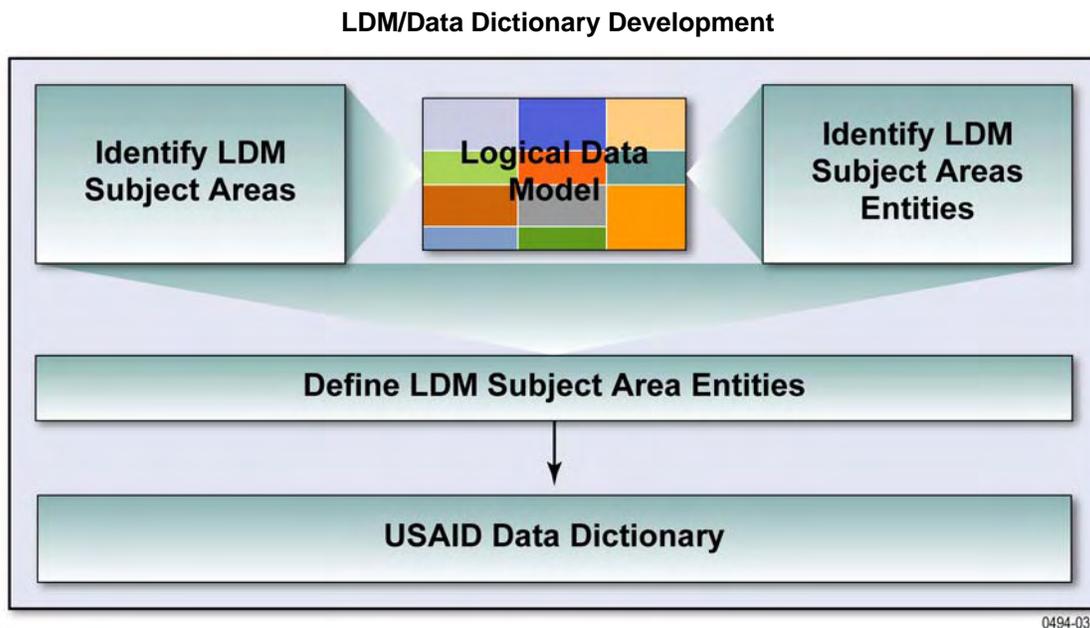
0494-035

Appendix H: USAID Data Dictionary

This Data Dictionary defines, in straightforward business language, the data objects found in the Logical Data Model (LDM), promoting rapid reading and understanding of LDM purpose and potential use.

The Data Dictionary was developed in tandem with the LDM. The data dictionary defines the Subject Areas, Entities, Attributes and, wherever possible, valid values. Valid values enumerate tangible examples of the type of data an entity may contain. An example of this are the valid values country, state, province, oblast, found in the Geographic Location Type entity that is part of the Locations Subject Area.

Figure H1 depicts the iterative process by which the Data Dictionary was developed in tandem with the LDM.



The Data Dictionary may be viewed in two ways, alphabetically or by LDM Subject Area. The alphabetized Data Dictionary is used to quickly and easily find the definition of a specific item in the dictionary. The Subject Area Data Dictionary is listed by LDM Subject Area. It is used to look at only the definitions within a specific Subject Area. It is also a documented view of a Subject Area in the model making it useful to view a Subject Area of the LDM pictorially and in print.

Data Dictionary in Alphabetical Order

- Activity – A set of actions through which inputs are mobilized to produce specific outputs.
- Activity Document Role Type – A categorization of roles a Document may have in relation to an Activity.
 - a. Valid Values
 - i. Approval
 - ii. Obligation
 - iii. Design
- Activity Party Relationship Role Type – A categorization of the association of a Party to an Activity by role.
 - a. Valid Value
 - i. USAID
 - ii. USAID/W
 - iii. USAID/OU
 - iv. U.S. Department of State
 - 1. Headquarters
 - 2. Embassy
 - v. U. S. Government Other
 - 1. Recipient – An organization receiving financial assistance to carry out an activity or program.
 - 2. Host Country – The country in which a USAID funded activity takes place.
 - 3. Local – Any unit of local government within a state, including county, borough, municipality, city, town, township, parish, local public authority, special district, intrastate district, council of governments or other instrumentality of local government.
 - 4. Regional
 - 5. National
 - vi. Host Country Ministry
 - vii. Beneficiary – A person or entity that receives a benefit from financial assistance provided by USAID through an activity or program.
 - viii. Recipient – An organization that receives financial assistance to carry out a USAID activity or program.
 - ix. Partner – An organization or individual with which/whom USAID collaborates to achieve mutually agreed upon objectives and to secure participation of ultimate customers.
 - 1. Private Voluntary Organization
 - 2. Non-Governmental Organization
 - 3. Indigenous
 - 4. U.S. Based
 - 5. Public International Organization
 - 6. Community Group
 - 7. Civil Society Organizations
 - x. University
 - xi. Businesses
 - 1. For Profit
 - 2. Not for Profit
 - xii. Media
 - xiii. Political Party

- Activity Performance Indicator Type – A categorization of an Activity Performance Indicator by status.
 - a. Valid Values
 - i. Baseline
 - ii. Planned
 - iii. Result
- Activity Planning Step Type – A categorization of Activity Planning by the actions that take place in the process.
 - a. Valid Values
 - i. Develop an Operationally Useful Results Framework
 - ii. Conduct Analyses as Needed
 - iii. Clarify the Role of Partners
 - iv. Assess Capacity of Potential Implementing Partners
 - v. Formulate Initial Cost Estimate and Develop Financial Plan
 - vi. Develop Acquisition and Assistance (Procurement) Plan
 - vii. Selecting Implementing Instrument
 - viii. Determine Appropriate Team Management Structure
 - ix. Identify Additional Planning Considerations
 - x. Determine and Meet Remaining Pre-Obligation Requirements
 - xi. Prepare Activity Approval Document
 - xii. Obtain Formal Approval/Approve Activity
- Activity Performance Result – A particular characteristic or dimension used to measure intended changes.
- Activity/Activity Planning Step Relationship – The association between an Activity and an Activity Planning Step.
- Activity/Document Relationship – The association between an Activity and a Document.
- Activity/Financial Transaction Relationship – The association between an Activity and a Financial Transaction.
- Activity/Party Relationship – The association between an Activity and a Party.
- Budget – A statement of USAID’s financial position of an administration for a definite period of time based on estimates of expenditures during a period and proposals for financing them.
- Budget Item – Budget line item that conforms to requirements of OMB Circular A-11.
- Budget Party Role – Roles of persons and organization in the annual budget cycle.
 - a. Valid Values
 - i. Guidance Provider
 - ii. Formulator
 - iii. Budget Recipient
 - iv. Reviewer
 - v. Approver
- Budget Phase Type – A categorization of USAID’s annual budget by budget cycle.
 - a. Valid Values
 - i. Formulation
 - ii. Justification
 - iii. Implementation
 - iv. Reporting

- Budget Request Type – A categorization of Budget Request by programming type.
 - a. Valid Values
 - i. Initial Programming
 - ii. Reprogramming
 - iii. Supplemental
 - iv. Fast Track
- Budget/Document Relationship – The association between a Budget and a Document.
- Budget Item/Goal Relationship – The association between a Budget Item and a Goal.
- Budget Item/Program Component Relationship – The association between a Budget Item and a Program Component.
- Budget/Budget Phase Type Relationship – The association between a Budget and a Budget Phase Type.
- Budget/Document Relationship – The association between a Budget and a Document.
- Budget/Party Relationship – The association between a Budget and a Party.
- Common Indicator – A high-level performance indicator that is associated with USAID mission programs over a multi-year period. Common indicators aggregate outcomes of programs at an Agency-wide level to inform stakeholders such as the Congress and the general public.
- Contract – A mutually binding legal instrument in which the principal purpose is the acquisition of property or services for the direct benefit or use of the Federal government or the host government agency that is a principal signatory party to the instrument.
 - a. Valid Values
 - i. Host Country Bilateral – An agreement by USAID with a foreign government or a subdivision of it to finance activities in furtherance of a strategic objective or for other purposes.
 - ii. Personal Service
 - iii. Institutional
- Cooperative Agreement – A legal instrument used where the principle purposes is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is anticipated.
- Country Designation – A method used to group countries as part of a country-focused strategic framework.
- Country Designation Type – A categorization that groups countries on the basis of similar characteristics and the goals the DoS/USAID seek to achieve.
 - a. Valid Values
 - i. Rebuilding Countries
 - ii. Developing Countries
 - iii. Transforming Countries
 - iv. Sustaining Partner Countries
 - v. Reforming Countries
- Currency Type – A categorization of Currency by currency.
 - a. Valid Values
 - i. Dollars
 - ii. Pesos
 - iii. Euro

- Development Assistance Type – A categorization of assistance by the type of USAID involvement.
 - a. Valid Values
 - i. Presence – A country where USAID has a U.S. Direct Hire.
 - ii. Non-Presence – A country where USAID does not have a mission or representative office.
 - iii. Project Based –
 - iv. Program Assistance (Non-project assistance) is a generalized resource transfer by USAID in the form of foreign exchange commodities to the recipient government.
- Document – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
- Document Confidentiality Type – A categorization of a Document by the level of sensitivity of the information contained in the document to determine approval or permission for access or use.
 - a. Valid Values
 - i. Top Secret – A national security classification applied to information, the unauthorized disclosure of which could reasonably result in exceptionally grave damage to the national security.
 - ii. Secret – A national security classification applied to information, the unauthorized disclosure of which could reasonably result in serious damage to the national security.
 - iii. Confidential – A national security classification applied to information, the unauthorized disclosure of which could reasonably be expected to cause damage to national security.
 - iv. Unclassified – Information that has not been determined pursuant to EO 12958 or any predecessor order to require protection against unauthorized disclosure and that is not designated as classified.
 - 1. Sensitive but Unclassified – Must be afforded additional protections commensurate with the sensitivity level of the data involved.
 - 2. Non-sensitive information – Information, which must be safeguarded against tampering, destruction, or loss.
- Document Content – Information contained in a document.
- Document Document Relationship – The association between any two documents.
- Document Party Role Type – A categorization of roles a Party may have related to a Document.
 - a. Valid Values
 - i. Author – The person or organization that wrote the document.
 - ii. Reviewer – The person or organization that reviews the document.
 - iii. Approver – The person or organization that approves the document.
- Document Role Type – A categorization of roles a Document has in relation to another Document.
 - a. Valid Values
 - i. Replaces – To take the place of a Document.
 - ii. Composed of – The parts of a document.
 - iii. Precedes – An earlier version of a Document.
 - iv. Supersedes – To replace a Document.

- Document Type – A categorization of a document by document purpose.
 - a. Valid Values
 - i. National Security Strategy – An overarching U.S. Government policy document which covers national security principles underlying U.S. foreign policy.
 - ii. Joint Strategic Plan – Identifies strategic development goals and outlines their linkages with U.S. national security interests.
 - iii. Joint Performance Plan
 - iv. Mission Annual Report
 - v. Operating Unit Strategic Statement
 - vi. Operating Unit Activity Approval Document
 - vii. Bureau Framework
 - viii. Bureau Program Budget Submission
 - ix. Annual Budget Submission
 - x. Congressional Budget Justification – Reflects the Administration's program and budget request for bilateral foreign economic assistance appropriations.
 - xi. Performance and Accountability Report –
 - xii. Performance and Accountability Plan – This document describes the Agency's performance goals and indicators and synthesizes the progress seen in the specific programs in countries and regions benefiting from USAID assistance.
 - xiii. Procurement Document
 - xiv. Directive/Mandate
 - xv. Annual Performance Plan
- Document/Party Relationship – The association between a Document and a Party.
- Event – An occurrence of significance to the Agency, that may be investigated, analyzed, measured, rated, managed, predicted/forecasted, hypothesized, mitigated, prevented, avoided, and/or resolved, in order to achieve agency missions and objectives.
- Event Event Relationship – The association between Events.
- Event Event Relationship Type – A categorization of the association between Events.
 - a. Valid Values
 - i. Causal – The cause of an Event.
 - ii. Precedence – The order of priority of an Event.
 - iii. Contingent – Dependency of one event on another.
- Event Party Role Type – The categorization of the association between an Event and a Party by role.
 - a. Valid Values
 - i. Assessor
- Event Type – The categorization of an Event by the type of occurrence.
 - a. Valid Values
 - i. Political – An Event that is related to or involved with politics.
 - ii. Natural Disaster – A sudden, calamitous Event that is the result of nature, which causes great damage, loss, or destruction.
 - iii. Conflict – Characterized by political, ethnic, or sectarian violence.
 - iv. Epidemic – An Event that affects large number of people within a population, community, or region at the same time.
 - v. Famine – An Event that is the result of an extreme scarcity of food.
- Event/Party Relationship – The association between an Event and a Party.
- Event/Physical Location Relationship – The association between an Event and a Physical Location.

- Financial Transaction – An exchange or transfer of funds.
- Financial Transaction Status Relationship – The association between a Financial Transaction and the state of a general ledger accounting practice at a specified period of time.
- Financial Transaction Status Type – A categorization of general ledger accounting practices.
- Financial Transaction Type – A categorization of a Financial Transaction by general ledger accounting practices.
 - a. Valid Values
 - i. Mortgage – A claim on future resources, which has been authorized in the Operating Unit’s Management Agreement, the difference between the total authorized level of funding and the cumulative total amount of funds obligated to a particular Strategic Objective, Intermediate Result, or Activity.
 - ii. Obligation – A term of appropriations law that means some action that creates a definite commitment, which creates a legal liability of the government for the payment of funds for specific goods or services ordered or received.
 - iii. Accrual – The estimated cost of goods and/or services or other performance received but not paid for by the Agency. Accruals are calculated for specific agreements and help provide current information on the financial status of an activity (or group of activities).
 - iv. Expenditure – The sum total of disbursements and accruals in a given time period. They are estimates of the total cost incurred by the agency for a given agreement, activity, or program.
 - v. Disbursement – Payments made by using cash, check, or electronic transfers. They include advances to others as well as payments for goods and services received and other types of payments made.
- Financial Transaction/Document Relationship – The association between a Financial Transaction and a Document.
- Financial Transaction/Party Relationship – The association between a Financial Transaction and a Party.
- Financial Transaction/Party Role Type – A categorization of roles a Party may have related to a Financial Transaction.
 - a. Valid Values
 - i. Manager
 - ii. Authority Delegate
 - iii. AA Obligation Recorder
 - iv. Financial Management Staff
 - v. Controller
 - vi. Operating Unit Management
- Funding Account – A sum of money or other resources whose principal or interest is set apart for a specific objective.
- Funding Account Event Role Type – The categorization of the association between a Funding Account and an Event by role.
 - a. Valid Values
 - i. Initiate
 - ii. Terminate
 - iii. Alter Scope of

- Funding Account Period Type – A categorization of a Funding Account Period by a period of time.
 - a. Valid Values
 - i. One-year Appropriation – An appropriation that is available for obligation during a specific fiscal year. Funds not obligated during the fiscal year expire at the end of the year.
 - ii. No-Year Appropriation – An appropriation that is available for obligation for an indefinite period of time. It is usually identified in appropriations language as “to remain available until expended” or “without fiscal year limitation”.
 - iii. Multi-Year Appropriations – An appropriation that is available for obligation for a definite period of time in excess of one fiscal year.
- Funding Account Type – A categorization of funding accounts by usage.
 - a. Valid Values
 - i. Program
 - ii. Operating Expense
 - iii. Capital Investment
 - iv. Trust
 - v. Credit Support
 - vi. Joint DoS/USAID Accounts
- Funding Account/Budget Item Relationship – The association of a Funding Account and a Budget Item.
- Funding Account/Budget Item Status – The association between a Funding Account and the status of a Budget Item.
- Funding Account/Event Relationship – The association between external events and statutorily authorized appropriations account against which funds are obligated.
- Funding Account/Financial Transaction Relationship – The association between a Funding Account and a Financial Transaction.
- Geographical Coordinate – The intersection of lines of reference, expressed in degrees/minutes/seconds of latitude and longitude, used to determine position or location.
- Geographic Location – A physical location on Earth.
- Geographic Location Type – A categorization of Geographic Location by area.
 - a. Valid Values
 - i. Geopolitical Land Parcel
 - 1. Country
 - 2. State
 - 3. Province
 - 4. Territory
 - 5. County
 - 6. Oblast
 - 7. District
 - 8. City
 - 9. Postal Area
 - 10. Congressional District
 - 11. Region
 - 12. Tribal Land Parcel
- Goals and Objectives – An overarching category that contains all subcategories of goals and objectives.

- Goal – A significant, intended, and measurable change in the condition of a customer or change in the host country, institutions, or other entities that will affect the customer directly or indirectly.
- Goal Document Role Type – A categorization of the association between a Goal and a Document by role.
 - a. Valid Values
 - i. Strategic
 - ii. Tactical
- Goal/Goal Performance Indicator Relationship – The association between a Goal and a Goal Performance Indicator.
- Goal/Party Relationship – The association between a person/organization and a Goal.
- Goal Party Relationship Type – The categorization of the relationship between an Organization or Person and a Goal.
 - a. Valid Values
 - i. SO Team Member
 - ii. SO Team Leader
 - iii. SO Team Core Member
- Goal Performance Indicator Type – A categorization of Goal Performance by the type of performance measure.
 - a. Valid Values
 - i. Quantitative
 - ii. Qualitative
 - iii. Context Level
 - iv. Agency Level
 - v. Common
- Goal Type – A categorization of Goal by granularity of results.
 - a. Valid Values
 - i. Foreign Assistance Objective
 - ii. Foreign Assistance Program Area
 - iii. Foreign Assistance Element
 - iv. Foreign Assistance Program Sub-Element
 - v. Joint State – USAID Strategic Plan Goal
 - vi. Joint State – USAID Strategic Plan Performance Goal
 - vii. Operating Unit Strategy Goal
 - viii. Operating Unit Strategy Statement Goal
 - ix. Operating Unit Strategic Objective – The most ambitious result a USAID Operating Unit, along with partners, can materially affect, and for which it is willing to be held accountable.
 - x. Operating Unit Intermediate Results
 - xi. Operating Unit Sub-Intermediate Results
- Goal/Document Relationship – The association between a Goal and a Document.
- Goal/Goal Performance Indicator Relationship – The association between a Goal and a Performance Indicator.
- Goal/Party Relationship – The association between a Goal and a Party.
- Grant – A legal instrument used where the principal purpose is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is not anticipated.

- Implementation Instrument – A binding relationship established between USAID and an outside party or parties to carry out USAID programs, by authorizing the use of USAID funds and/or non-financial resources for 1) the acquisition of services or commodities or 2) assistance that provides support or stimulation to accomplish a public purpose.
- Implementation Instrument Type – A categorization of an Implementation Instrument by the relationship established between USAID and an outside party.
 - a. Valid Values
 - i. Contract – A mutually binding legal instrument in which the principal purpose is the acquisition of property or services for the direct benefit or use of the Federal government or the host government agency that is a principal signatory party to the instrument.
 - ii. Cooperative Agreement – A legal instrument used where the principle purposes is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is anticipated.
 - iii. Grant – A legal instrument used where the principal purpose is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is not anticipated.
 - iv. Transfer – Interagency transfer of funds pursuant to a Section 632(a) and (b) agreements.
- Implementation Instrument/Document Relationship – The association between an Implementation Instrument and a Document.
- Implementation Instrument/Financial Transaction Relationship – The association between an Implementation Instrument and a Financial Transaction.
- Implementation Instrument/Party Relationship – The association between an organization or person and a corresponding implementation mechanism.
- Implementation Instrument/Party Role Type – The categorization of a Party in relationship to an Implementation Instrument by role.
 - a. Valid Values
 - i. Activity Designer
 - ii. Negotiator/Obligator
 - iii. Overseer
 - iv. Applicant
 - v. Offerer
 - vi. Contractor
 - vii. Awardee
 - viii. Recipient
- Location – The description of a place by either physical location, geographical location or geographical coordinates.
- Operating Unit Strategic Objective/Program Component Relationship – The association of an Operating Unit Strategic Objective to a Program Component.
- Organization – An entity conducting functions relating to or impacting foreign assistance.
- Party – An organization or individual conducting functions relating to or impacting foreign assistance.
- Party Address Relationship – The association between a Party and an Address and the role of the association.

- Party Address Type – A categorization of the association between a Party and an Address.
 - a. Valid Values
 - i. Home Address
 - ii. Mailing Address
 - iii. Business Address
 - iv. Email Address
- Party Email Address – Email contact information relevant to an organization or person.
- Party Phone Contact – Phone contact information relevant to an organization or person.
- Party Party Relationship – The association between Parties.
- Party Party Role Type – The categorization of a Party in relationship to another Party by role.
 - a. Valid Values
 - i. Supervisor
 - ii. Employee
 - iii. Employer
- Party Role Type – A categorization of Party by role.
 - a. Valid Values
 - i. Administrator
 - ii. Bureau
 - iii. Regional Bureau
 - iv. Pillar Bureau
 - v. Functional Bureau
 - vi. Operating Unit
 - vii. Mission
 - viii. USAID/Washington Office
 - ix. Sub-operating Unit
 - x. US Direct Hire Staff
 - xi. Foreign Service
 - xii. Civil Service
 - xiii. Non US Direct Hire
 - xiv. Foreign Service National
 - xv. Personal Services Contractor
 - xvi. Procurement Offerer
 - xvii. Assistance Applicant
 - xviii. Implementer
 - xix. Contractor
 - xx. Grantee
 - xxi. Global Development Alliance (GDA) Partner
 - xxii. Vendor
 - xxiii. Host Country Government
 - xxiv. SO Team
 - xxv. Partner
 - xxvi. Stakeholder
 - xxvii. Customer
 - xxviii. Beneficiary – A person or entity that receives a benefit from financial assistance provided by USAID through an activity or program.
 - xxix. Recipient

- Party/Party Role Type Relationship – The association between a Party and a Party Role Type.
- Person – Individual conducting functions relating to or impacting foreign assistance.
- Phone Contact Type – A categorization of phone contact information by purpose or function.
 - a. Valid Values
 - i. Business
 - ii. Home
 - iii. Emergency Contact
 - iv. Pager
 - v. Mobile
 - vi. Fax
- Physical Location – A unique postal delivery area.
- Physical Location Relationship – The association between Locations.
- Program Area – High-level Strategic Goal which is divided into categories of focus.
- Program Area Type – The categorization of Program Area by area of focus.
 - a. Valid Values
 - i. Economic Prosperity and Security
 - ii. Environment
 - iii. Education
 - iv. Family and Workforce Health
 - v. Democracy, Governance, and Human Rights
 - vi. International Trafficking in Drugs and Persons
 - vii. Conflict Mitigation
 - viii. Humanitarian Response
 - ix. Operations and Management
- Program Area/Document Relationship – The association between a Program Area and a Document.
- Program Component – A set of activities expected to lead to a related set of results. Program Components are defined operationally by the development rationale and USAID’s strategic framework.
 - a. Valid Values
 - i. Increase Participation in Global Trade and Investment
 - ii. Improve Economic Policies and Governance
 - iii. Increase Private Sector Growth
 - iv. Strengthen Financial Sector’s Contribution to Economic Growth
 - v. Expand and Improve Access to Economic and Social
 - vi. Increase Agricultural Productivity
 - vii. Protect and Increase the Assets and Livelihoods of the Poor
 - viii. Promote Sustainable Management of Natural Resources and Biodiversity
 - ix. Reduce, Prevent, and Mitigate Pollution
 - x. Improve Access to Clean Water and Sanitation.
 - xi. Improve the Quality of Basic Education
 - xii. Improve Institutions of Higher Education
 - xiii. Improve Quality of Workforce
 - xiv. Trafficking in Persons and Drugs

- Program Component Party Role – The association between a Party and a Program Component by role.
 - a. Valid Values
 - i. Program Manager
 - ii. Program Implementer
 - iii. Program Evaluator
- Program Component Type – A categorization of Program Component by development rationale.
 - a. Valid Values
 - i. Increase Participation in Global Trade and Investment
 - ii. Improve Economic Policies and Governance
 - iii. Increase Private Sector Growth
 - iv. Strengthen Financial Sector’s Contribution to Economic Growth
 - v. Expand and Improve Access to Economic and Social
 - vi. Increase Agricultural Productivity
 - vii. Protect and Increase the Assets and Livelihoods of the Poor
 - viii. Promote Sustainable Management of Natural Resources and Biodiversity
 - ix. Reduce, Prevent, and Mitigate Pollution
 - x. Improve Access to Clean Water and Sanitation
 - xi. Improve the Quality of Basic Education
 - xii. Improve Institutions of Higher Education
 - xiii. Improve Quality of Workforce
 - xiv. Trafficking in Persons and Drugs
- Program Component/Common Indicator Relationship – The association between a Program Component and a Common Indicator.
- Program Component/Party Relationship – The association between a Program Component and a Party.
- Project – A structured undertaking of limited duration that is developed through various administrative, analytical, and approval process in order to achieve a tangible objective.
- Project Physical Location Relationship – The association between a Project and a Physical Location.
- Project Status Type – A categorization of a Project by the stage which the Project is in at a given period of time.
 - a. Valid Values
 - i. Concept
 - ii. Under Design
 - iii. Procurement
 - iv. Mobilization
 - v. Ongoing
 - vi. Demobilization
- Project/Status Relationship – The association between a project and project’s status.

- Sector Type – A categorization of Sector by technical focus.
 - a. Valid Values
 - i. Democracy and Governance – Sector of USAID has takes a leading role in promoting and consolidating democracy worldwide.
 - ii. Economic Growth and Trade – Sector within USAID that partners with low to lower middle income countries to support their efforts to improve the levels of income.
 - iii. Education and Training – Sector of USAID that provides short-term training opportunities to hundreds of thousands of individuals in developing and transition countries.
 - iv. Environment – Sector of USAID that provides Natural Resources Management.
 - v. Humanitarian Assistance – Sector of USAID that is responsible for directing the contributions from the United States to thousands of non-profit partners and international organizations.
 - vi. Information Technology
 - vii. Global Health – (USAID) programs to prevent suffering, save lives, and create a brighter future for families in the developing world.
 - viii. Cross-Sectoral
- Transfer – Interagency transfer of funds pursuant to a Section 632(a) and (b) agreements.

Data Dictionary by Subject Area

1. Documents

- a. Activity – A set of actions through which inputs are mobilized to produce specific outputs.
- b. Activity Document Role Type – A categorization of roles a Document may have in relation to an Activity.
 - i. Valid Values
 1. Approval
 2. Obligation
 3. Design
- c. Activity/Document Relationship – The association between an Activity and a Document.
- d. Budget – A statement of USAID’s financial position of an administration for a definite period of time based on estimates of expenditures during a period and proposals for financing them.
- e. Budget/Document Relationship – The association between a Budget and a Document.
- f. **Document** – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
- g. **Document Confidentiality Type** – A categorization of a Document by the level of sensitivity of the information contained in the document to determine approval or permission for access or use.
 - i. Valid Values
 1. Top Secret – A national security classification applied to information, the unauthorized disclosure of which could reasonably result in exceptionally grave damage to the national security.
 2. Secret – A national security classification applied to information, the unauthorized disclosure of which could reasonably result in serious damage to the national security.
 3. Confidential – A national security classification applied to information, the unauthorized disclosure of which could reasonably be expected to cause damage to national security.
 4. Unclassified – Information that has not been determined pursuant to EO 12958 or any predecessor order to require protection against unauthorized disclosure and that is not designated as classified.
 - a. Sensitive but Unclassified – Must be afforded additional protections commensurate with the sensitivity level of the data involved.
 - b. Non-sensitive information – Information, which must be safeguarded against tampering, destruction, or loss.
- h. **Document Content** – Information contained in the document.
- i. **Document Document Relationship** – A relationship between any two or more documents.
- j. **Document Party Role Type** – A categorization of roles a Party may have related to a Document.
 - i. Valid Values
 1. Author – The person or organization that wrote the document.
 2. Reviewer – The person or organization that reviews the document.
 3. Approver – The person or organization that approves the document.
- k. **Document Role Type** – A categorization of roles a Document has in relation to another Document.
 - i. Valid Values
 1. Replaces – To take the place of a Document.
 2. Contains – The parts of a document.
 3. Precedes – An earlier version of a Document.
 4. Supersedes – To replace a Document.

1. **Document Type** – A categorization of a document by document purpose.
 - i. Valid Values
 1. National Security Strategy – An overarching U.S. Government policy document which covers national security principles underlying U.S. foreign policy.
 2. Joint Strategic Plan
 3. Joint Performance Plan
 4. Mission Annual Report
 5. Operating Unit Strategic Statement
 6. Operating Unit Activity Approval Document
 7. Bureau Framework
 8. Bureau Program Budget Submission
 9. Annual Budget Submission
 10. Congressional Budget Justification
 11. Performance and Accountability Report
 12. Procurement Document
 13. Directive/Mandate
 14. Annual Performance Plan
 - m. **Document/Party Relationship** – The association between a Document and a Party.
 - n. Financial Transaction – An exchange or transfer of funds.
 - o. Financial Transaction/Document Relationship – The association between a Financial Transaction and a Document.
 - p. Goal – A significant, intended, and measurable change in the condition of a customer or change in the host country, institutions, or other entities that will affect the customer directly or indirectly.
 - q. Goal Document Role Type – A categorization of the association between a Goal and Document by role.
 - r. Goal/Document Relationship – The association between a Goal and a Document.
 - s. Implementation Instrument – A binding relationship established between USAID and an outside party to carry out USAID programs, by authorizing the use of USAID funds and/or non-financial resources for 1) the acquisition of services or commodities or 2) assistance that provides support or stimulation to accomplish a public purpose.
 - t. Implementation Instrument/Document Relationship – The association between an Implementation Instrument and a Document
 - u. Party – An organization or individual with which whom the Agency collaborates to achieve mutually agreed upon objectives and to secure participation of ultimate customers.
 - v. Program Area – High-level Strategic Goal which is divided into categories of focus.
 - w. Program Area/Document Relationship – The association between a Program Area and a Document.

2. Events

- a. **Event** – An occurrence of significance to the Agency, that may be investigated, analyzed, measured, rated, managed, predicted/forecasted, hypothesized, mitigated, prevented, avoided, and/or resolved, in order to achieve agency missions and objectives.
- b. **Event Event Relationship** – The association between Events.
- c. **Event Event Relationship Type** – A categorization of the association between Events.
 - i. Valid Values
 1. Causal – The cause of an Event.
 2. Precedence – The order of priority of an Event.
 3. Contingent – Dependency of one event on another.

- d. **Event Party Role Type** – The categorization of the association between an Event and a Party by role.
 - i. Valid Values
 - 1. Assessor
- e. **Event Type** – The categorization of an Event by the type of occurrence.
 - i. Valid Values
 - 1. Political – An Event that is related to or involved with politics.
 - 2. Natural Disaster – A sudden, calamitous Event that is the result of nature, which causes great damage, loss, or destruction.
 - 3. Conflict – Characterized by political, ethnic, or sectarian violence.
 - 4. Epidemic – An Event that affects large number of people within a population, community, or region at the same time.
 - 5. Famine – An Event that is the result of an extreme scarcity of food.
- f. **Event/Party Relationship** – The association between an Event and a Party.
- g. **Event/Physical Location Relationship** – The association between an Event and a Physical Location.
- h. **Party** – An organization or individual conducting functions relating to or impacting foreign assistance.
- i. **Physical Location** – A unique postal delivery area.

3. Parties

- a. **Activity** – A set of actions through which inputs are mobilized to produce specific outputs.
- b. **Activity Party Relationship Role Type** – A categorization of the association between a Party to an Activity by role.
 - i. Valid Value
 - 1. USAID
 - 2. USAID/W
 - 3. USAID/OU
 - 4. U.S. Department of State
 - a. Headquarters
 - b. Embassy
 - 5. U. S. Government Other
 - a. Recipient – An organization receiving financial assistance to carry out an activity or program.
 - b. Host Country – The country in which a USAID funded activity takes place.
 - c. Local – Any unit of local government within a state, including country, borough, municipality, city, town, township, parish, local public authority, special district, intrastate district, council of governments or other instrumentality of local government.
 - d. Regional
 - e. National
 - 6. Host Country Ministry
 - 7. Beneficiary – A person or entity that receives a benefit from financial assistance provided by USAID through an activity or program.
 - 8. Recipient – An organization that receives financial assistance to carry out a USAID activity or program.
 - 9. Partner – An organization or individual with which/whom USAID collaborates to achieve mutually agreed upon objectives and to secure participation of ultimate customers.
 - a. Private Voluntary Organization
 - b. Non-Governmental Organization
 - c. Indigenous

- d. U.S. Based
- e. Public International Organization
- f. Community Group
- g. Civil Society Organizations
- 10. University
- 11. Businesses
 - a. For Profit
 - b. Not for Profit
- 12. Media
- 13. Political Party
- c. Activity/Party Relationship – The association between an Activity and a Party.
- d. Budget – A statement of USAID’s financial position of an administration for a definite period of time based on estimates of expenditures during a period and proposals for financing them.
- e. Budget/Party Relationship – The association between a Budget and a Party.
- f. Document – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
- g. Document/Party Relationship – The association between a Document and a Party.
- h. Event – An occurrence of significance to the Agency, that may be investigated, analyzed, measured, rated, managed, predicted/forecasted, hypothesized, mitigated, prevented, avoided, and/or resolved, in order to achieve agency missions and objectives.
- i. Event Party Role Type – The categorization of the role between an Event and a Party.
- j. Event/Party Relationship – The association between an Event and a Party.
- k. Financial Transaction – An exchange or transfer of funds.
- l. Financial Transaction/Party Relationship – The association between a Financial Transaction and a Party.
- m. Financial Transaction/Party Role Type – The categorization of roles a party may have related to a Financial Transaction.
 - i. Valid Values
 - 1. Manager
 - 2. Authority Delegate
 - 3. AA Obligation Recorder
 - 4. Financial Management Staff
 - 5. Controller
 - 6. Operating Unit Management
- n. Geographic Location – A physical location on the Earth.
- o. Goal – A significant, intended, and measurable change in the condition of a customer or change in the host country, institutions, or other entities that will affect the customer directly or indirectly.
- p. Goal Party Relationship Type – The categorization of the relationship between organization or person and achieving the operating unit goal statements.
 - i. Valid Values
 - 1. SO Team Member
 - 2. SO Team Leader
 - 3. SO Team Core Member
- q. Goal/Party Relationship – The association between a person/organization and a Goal.
- r. **Organization** – An entity conducting functions relating to or impacting foreign assistance.
- s. **Party** – An organization or individual conducting functions relating to or impacting foreign assistance.
- t. **Party Address Relationship** – The association between a Party and an Address and the role of the association.
- u. **Party Address Type** – A categorization of the association between a Party and an Address.
- v. **Party Email Address** – Email contact information relevant to an organization or person.

- w. **Party Phone Contact** – Phone contact information relevant to an organization or person.
- x. **Party Party Relationship** – The association between Parties.
- y. **Party Party Role Type** – The categorization of a Party in relationship to another Party by role.
 - i. Valid Values
 - 1. Supervisor
 - 2. Employee
 - 3. Employer
- z. **Party Role Type** – A categorization of Party by role.
 - i. Valid Values
 - 1. Administrator
 - 2. Bureau
 - 3. Regional Bureau
 - 4. Pillar Bureau
 - 5. Functional Bureau
 - 6. Operating Unit
 - 7. Mission
 - 8. USAID/Washington Office
 - 9. Sub-operating Unit
 - 10. US Direct Hire Staff
 - 11. Foreign Service
 - 12. Civil Service
 - 13. Non US Direct Hire
 - 14. Foreign Service National
 - 15. Personal Services Contractor
 - 16. Procurement Offerer
 - 17. Assistance Applicant
 - 18. Implementer
 - 19. Contractor
 - 20. Grantee
 - 21. Global Development Alliance (GDA) Partner
 - 22. Vendor
 - 23. Host Country Government
 - 24. SO Team
 - 25. Partner
 - 26. Stakeholder
 - 27. Customer
 - 28. Beneficiary
 - 29. Recipient
- aa. **Party/Party Role Type Relationship** – The association between a Party and a Party Role Type.
- ab. **Person** – Individual conducting functions relating to or impacting foreign assistance.
- ac. **Phone Contact Type** – A categorization of phone contact information by purpose or function.
 - i. Valid Values
 - 1. Business
 - 2. Home
 - 3. Emergency Contact
 - 4. Pager
 - 5. Mobile
 - 6. Fax
- ad. **Program Component** – A set of activities expected to lead to a related set of results. Program Components are defined operationally by the development rationale and USAID’s strategic framework.

- ae. Program Component Party Role – The association between a Party and a Program Component by role.
 - i. Valid Values
 - 1. Program Manager
 - 2. Program Implementer
 - 3. Program Evaluator
- af. Program Component/Party Relationship – The association between a Program Component and a Party.

4. Program Areas

- a. **Common Indicator** – A high-level performance indicator that is associated with USAID mission programs over a multi-year period. Common indicators aggregate outcomes of programs at an Agency-wide level to inform stakeholders such as, the Congress and the general public.
- b. **Development Assistance Type** – A categorization of assistance by the type of USAID involvement.
 - i. Valid Values
 - 1. Presence – A country where USAID has a U.S. Direct Hire.
 - 2. Non-Presence – A country where USAID does not have a mission or representative office.
 - 3. Project Based
 - 4. Program Assistance (Non-project assistance) is a generalized resource transfer by USAID in the form of foreign exchange commodities to the recipient government.
- c. Document – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
- d. Goal – A significant, intended, and measurable change in the condition of a customer or change in the host country, institutions, or other entities that will affect the customer directly or indirectly.
- e. **Operating Unit Strategic Objective/Program Component Relationship** – The association of an Operating Unit Strategic Objective to a Program Component.
- f. Party – An organization or individual conducting functions relating to or impacting foreign assistance.
- g. **Program Area** – High-level Strategic Goal which is divided into categories of focus.
- h. **Program Area Type** – The categorization of a Program Area by area of focus.
 - i. Valid Values
 - 1. Economic Prosperity and Security
 - 2. Environment
 - 3. Education
 - 4. Family and Workforce Health
 - 5. Democracy, Governance, and Human Rights
 - 6. International Trafficking in Drugs and Persons
 - 7. Conflict Mitigation
 - 8. Humanitarian Response
 - 9. Operations and Management
- i. **Program Area/Document Relationship** – The association of a Program Area and a Document.
- j. **Program Component** – A set of activities expected to lead to a related set of results. Program Components are defined operationally by the development rationale and USAID’s strategic framework.
 - i. Valid Values
 - 1. Increase Participation in Global Trade and Investment
 - 2. Improve Economic Policies and Governance
 - 3. Increase Private Sector Growth

4. Strengthen Financial Sector’s Contribution to Economic Growth
 5. Expand and Improve Access to Economic and Social
 6. Increase Agricultural Productivity
 7. Protect and Increase the Assets and Livelihoods of the Poor
 8. Promote Sustainable Management of Natural Resources and Biodiversity
 9. Reduce, Prevent, and Mitigate Pollution
 10. Improve Access to Clean Water and Sanitation
 11. Improve the Quality of Basic Education
 12. Improve Institutions of Higher Education
 13. Improve Quality of Workforce
 14. Trafficking in Persons and Drugs
- k. **Program Component Party Role** – The association between a Party and a Program Component by role.
- i. Valid Values
 1. Program Manager
 2. Program Implementer
 3. Program Evaluator
- l. **Program Component Type** – Program Component Type – A categorization of Program Component by development rationale.
- i. Valid Values
 1. Increase Participation in Global Trade and Investment
 2. Improve Economic Policies and Governance
 3. Increase Private Sector Growth
 4. Strengthen Financial Sector’s Contribution to Economic Growth
 5. Expand and Improve Access to Economic and Social
 6. Increase Agricultural Productivity
 7. Protect and Increase the Assets and Livelihoods of the Poor
 8. Promote Sustainable Management of Natural Resources and Biodiversity
 9. Reduce, Prevent, and Mitigate Pollution
 10. Improve Access to Clean Water and Sanitation
 11. Improve the Quality of Basic Education
 12. Improve Institutions of Higher Education
 13. Improve Quality of Workforce
 14. Trafficking in Persons and Drugs
- m. **Program Component/Common Indicator Relationship** – The association between a Program Component and a Common Indicator.
- n. **Program Component/Party Relationship** – The association between a Program Component and a Party.

5. Location

- a. Activity – A set of actions through which inputs are mobilized to produce specific outputs.
- b. **Country Designation** – A method used to group countries as part of a country-focused strategic framework.
- c. **Country Designation Type** – A categorization that groups countries on the basis of similar characteristics and the goals the DoS/USAID seek to achieve.
 - i. Valid Values
 1. Rebuilding Countries
 2. Developing Countries
 3. Transforming Countries

4. Sustaining Partner Countries
5. Reforming Countries
- d. Event – An occurrence of significance to the agency, that may be investigated, analyzed, measured, rated, managed, predicted/forecasted, hypothesized, mitigated, prevented, avoided, and/or resolved, in order to achieve agency missions and objectives.
- e. Event Physical Location Relationship – The association between an Event and a Physical Location.
- f. **Geographical Coordinate** – The intersection of lines of reference, expressed in degrees/minutes/seconds of latitude and longitude, used to determine position or location.
- g. **Geographic Location** – A physical location on Earth.
- h. **Geographic Location Type** – A categorization of Geographic Location by area.
 - i. Valid Values
 1. Geopolitical Land Parcel
 - a. Country
 - b. State
 - c. Province
 - d. Territory
 - e. County
 - f. Oblast
 - g. District
 - h. City
 - i. Postal Area
 - j. Congressional District
 - k. Region
 - l. Tribal Land Parcel
 - i. Party – An organization or individual conducting functions relating to or impacting foreign assistance.
 - j. Party Address Relationship – The association between a Party and an Address and the role of the association.
 - k. Party Address Type – A categorization of the association between a Party and an Address.
 - i. Valid Values
 1. Home Address
 2. Mailing Address
 3. Business Address
 4. Email Address
 - l. **Physical Location** – A unique postal delivery area.
 - m. **Physical Location Relationship** – The association between Physical Locations.
 - n. Project – A structured undertaking of limited duration that is developed through various administrative, analytical, and approval process in order to achieve a tangible objective.
 - o. Project Physical Location Relationship – The association between a Project and a Physical Location.

6. Implementation Instruments

- a. **Contract** – A mutually binding legal instrument in which the principal purpose is the acquisition of property or services for the direct benefit or use of the Federal government or the host government agency that is a principal signatory party to the instrument.
 - i. Valid Values
 1. Host Country Bilateral – An agreement by USAID with a foreign government or a subdivision of it to finance activities in furtherance of a strategic objective or for other purposes.
 2. Personal Service
 3. Institutional

- b. **Cooperative Agreement** – A legal instrument used where the principle purposes is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is anticipated.
- c. **Document** – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
- d. **Financial Transaction** – An exchange or transfer of funds.
- e. **Grant** – A legal instrument used where the principal purpose is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is not anticipated.
- f. **Implementation Instrument** – A binding relationship established between USAID and an outside party or parties to carry out USAID programs, by authorizing the use of USAID funds and/or non-financial resources for 1) the acquisition of services or commodities or 2) assistance that provides support or stimulation to accomplish a public purpose.
- g. **Implementation Instrument Type** – A categorization of an Implementation Instrument by the relationship established between USAID and an outside party.
 - i. **Valid Values**
 - 1. **Contract** – A mutually binding legal instrument in which the principal purpose is the acquisition of property or services for the direct benefit or use of the Federal government or the host government agency that is a principal signatory party to the instrument.
 - 2. **Cooperative Agreement** – A legal instrument used where the principle purposes is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is anticipated.
 - 3. **Grant** – A legal instrument used where the principal purpose is the transfer of money, property, services, or anything of value to the recipient in order to accomplish a public purpose of support or stimulation authorized by Federal statute and where substantial involvement by USAID is not anticipated.
 - 4. **Transfer** – Interagency transfer of funds pursuant to a Section 632(a) and (b) agreements.
- h. **Implementation Instrument/Document Relationship** – The association between an Implementation Instrument and a Document.
- i. **Implementation Instrument/Financial Transaction Relationship** – The association between an Implementation Instrument and a Financial Transaction.
- j. **Implementation Instrument/Party Relationship** – The association between an organization or person and a corresponding implementation mechanism.
- k. **Implementation Instrument/Party Role Type** – The categorization of a Party in relationship to an Implementation Instrument by role.
 - i. **Valid Value**
 - 1. Activity Designer
 - 2. Negotiator/Obligator
 - 3. Overseer
 - 4. Applicant
 - 5. Offerer
 - 6. Contractor
 - 7. Awardee
 - 8. Recipient
 - l. **Party** – An organization or individual conducting functions relating to or impacting foreign assistance.
- m. **Transfer** – Interagency transfer of funds pursuant to a Section 632(a) and (b) agreements.

7. Financial Transactions

- a. Activity – A set of actions through which inputs are mobilized to produce specific outputs.
- b. Activity/Financial Transaction Relationship – The association between an Activity and a Financial Transaction.
- c. **Currency Type** – A categorization of Currency by currency.
 - i. Valid Values
 1. Dollars
 2. Pesos
 3. Euro
- d. Document – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
- e. **Financial Transaction** – An exchange or transfer of funds.
- f. **Financial Transaction Status Relationship** – The association between a Financial Transaction and the state of a general ledger accounting practice at a specified period of time.
- g. **Financial Transaction Status Type** – A categorization of general ledger accounting practices.
- h. **Financial Transaction Type** – A categorization of general ledger accounting practices.
 - i. Valid Values
 1. Mortgage – A claim on future resources, which has been authorized in the Operating Unit’s Management Agreement, the difference between the total authorized level of funding and the cumulative total amount of funds obligated to a particular Strategic Objective, Intermediate Result, or Activity.
 2. Obligation A term of appropriations law that means some action that creates a definite commitment, which creates a legal liability of the government for the payment of funds for specific goods or services ordered or received.
 3. Accrual – The estimated cost of goods and/or services or other performance received but not paid for by the Agency. Accruals are calculated for specific agreements and help provide current information on the financial status of an activity (or group of activities).
 4. Expenditure – The sum total of disbursements and accruals in a given time period. They are estimates of the total cost incurred by the agency for a given agreement, activity, or program.
 5. Disbursement – Payments made by using cash, check, or electronic transfers. They include advances to others as well as payments for goods and services received and other types of payments made.
- i. **Financial Transaction/Document Relationship** – The association between a Financial Transaction and a Document.
- j. **Financial Transaction/Party Relationship** – The association between a Financial Transaction and a Party.
- k. **Financial Transaction/Party Role Type** – The association between a Financial Transaction and a Party.
 - i. Valid Values
 1. Manager
 2. Authority Delegate
 3. AA Obligation Recorder
 4. Financial Management Staff
 5. Controller
 6. Operating Unit Management
- l. Implementation Instrument – A binding relationship established between USAID and an outside party or parties to carry out USAID programs, by authorizing the use of USAID funds and/or non-financial resources for 1) the acquisition of services or commodities or 2) assistance that provides support or stimulation to accomplish a public purpose.

- m. **Implementation Instrument/Financial Transaction Relationship** – The association between an Implementation Instrument and a Financial Transaction.
- n. **Party** – An organization or individual with which whom the Agency collaborates to achieve mutually agreed upon objectives and to secure participation of ultimate customers.

8. Goals and Objectives

- a. **Activity** – A set of actions through which inputs are mobilized to produce specific outputs.
- b. **Activity Document Role Type** – A categorization of roles a Document may have in relation to an Activity.
 - i. Valid Values
 - 1. Approval
 - 2. Obligation
 - 3. Design
- c. **Activity Party Relationship Role Type** – A categorization of the relationship of a Party to an Activity by role.
 - i. Valid Value
 - 1. USAID
 - 2. USAID/W
 - 3. USAID/OU
 - 4. U.S. Department of State
 - a. Headquarters
 - b. Embassy
 - 5. U. S. Government Other
 - a. Recipient – An organization receiving financial assistance to carry out an activity or program.
 - b. Host Country – The country in which a USAID funded activity takes place.
 - c. Local – Any unit of local government within a state, including country, borough, municipality, city, town, township, parish, local public authority, special district, intrastate district, council of governments or other instrumentality of local government.
 - d. Regional
 - e. National
 - 6. Host Country Ministry
 - 7. Beneficiary – A person that receives a benefit from financial assistance provided by USAID through an activity or program.
 - 8. Recipient – An organization that receives financial assistance to carry out a USAID activity or program.
 - 9. Partner – An organization or individual with which/whom USAID collaborates to achieve mutually agreed upon objectives and to secure participation of ultimate customers.
 - a. Private Voluntary Organization
 - b. Non-Governmental Organization
 - c. Indigenous
 - d. U.S. Based
 - e. Public International Organization
 - f. Community Group
 - g. Civil Society Organizations
 - 10. University
 - 11. Businesses
 - a. For Profit
 - b. Not for Profit

- 12. Media
- 13. Political Party
- d. **Activity Performance Indicator Type** – A categorization of an Activity Performance Indicator by status.
 - i. Valid Values
 - 1. Baseline
 - 2. Planned
 - 3. Result
- e. **Activity Planning Step Type** – A categorization of Activity Planning by the actions that to take place in the process.
 - i. Valid Values
 - 1. Develop an Operationally Useful Results Framework
 - 2. Conduct Analyses as Needed
 - 3. Clarify the Role of Partners
 - 4. Assess Capacity of Potential Implementing Partners
 - 5. Formulate Initial Cost Estimate and Develop Financial Plan
 - 6. Develop Acquisition and Assistance (Procurement) Plan
 - 7. Selecting Implementing Instrument
 - 8. Determine Appropriate Team Management Structure
 - 9. Identify Additional Planning Considerations
 - 10. Determine and Meet Remaining Pre-Obligation Requirements
 - 11. Prepare Activity Approval Document
 - 12. Obtain Formal Approval/Approve Activity
- f. **Activity/Activity Performance Indicator Relationship** – A particular characteristic or dimension used to measure intended changes.
- g. **Activity/Document Relationship** – The association between an Activity and a Document.
- h. **Activity/Financial Transaction Relationship** – The association between an Activity and a Financial Transaction.
- i. **Activity/Party Relationship** – An association between an Activity and a Party.
- j. **Budget** – A statement of USAID’s financial position of an administration for a definite period of time based on estimates of expenditures during a period and proposals for financing them.
- k. **Document** – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
- l. **Financial Transaction** – An exchange or transfer of funds.
- m. **Goal**– A significant, intended, and measurable change in the condition of a customer or change in the host country, institutions, or other entities that will affect the customer directly or indirectly.
- n. **Goal Document Role Type** – Hierarchical categorization of foreign assistance documents.
- o. **Goal Party Relationship Type** – Relationship between organization or person and achieving the operating unit goal statements.
 - i. Valid Values
 - 1. SO Team Member
 - 2. SO Team Leader
 - 3. SO Team Core Member
- p. **Goal Performance Indicator Type** – A categorization of Goal Performance by the type of performance measure.
 - i. Valid Values
 - 1. Quantitative
 - 2. Qualitative
 - 3. Context Level
 - 4. Agency Level
 - 5. Common

- q. **Goal Type** – A categorization of Goals.
 - i. Valid Values
 - 1. Foreign Assistance Objective
 - 2. Foreign Assistance Program Area
 - 3. Foreign Assistance Element
 - 4. Foreign Assistance Program Sub-Element
 - 5. Joint State – USAID Strategic Plan Goal
 - 6. Joint State – USAID Strategic Plan Performance Goal
 - 7. USAID Sector Strategy Goal
 - 8. Operating Unit Strategic Statement Goal
 - 9. Operating Unit Strategic Objective – The most ambitious result that a USAID Operating Unit, along with partners, can materially affect, and for which it is willing to be held accountable.
 - 10. Operating Unit Intermediate Results
 - 11. Operating Unit Sub-Intermediate Results
 - r. **Goal/Document Relationship** – The association between a Goal and a Document.
 - s. **Goal/Goal Performance Indicator Relationship** – The association between a Goal and a Goal Performance Indicator
 - t. **Goal/Party Relationship** – The association between a Goal and a Party.
 - u. **Operating Unit Strategic Objective/Program Component Relationship** – The association of an Operating Unit Strategic Objective to a Program Component.
 - v. Party – An organization or individual with which whom the Agency collaborates to achieve mutually agreed upon objectives and to secure participation of ultimate customers.
 - w. Physical Location – A unique postal delivery area.
 - x. Program Component – A set of activities expected to lead to a related cluster of results. Boundaries and themes of PCs are defined operationally by the development rationale and USAID’s strategic framework.
 - i. Valid Values
 - 1. Increase Participation in Global Trade and Investment
 - 2. Improve Economic Policies and Governance
 - 3. Increase Private Sector Growth
 - 4. Strengthen Financial Sector’s Contribution to Economic Growth
 - 5. Expand and Improve Access to Economic and Social
 - 6. Increase Agricultural Productivity
 - 7. Protect and Increase the Assets and Livelihoods of the Poor
 - 8. Promote Sustainable Management of Natural Resources and Biodiversity
 - 9. Reduce, Prevent, and Mitigate Pollution
 - 10. Improve Access to Clean Water and Sanitation
 - 11. Improve the Quality of Basic Education
 - 12. Improve Institutions of Higher Education
 - 13. Improve Quality of Workforce
 - 14. Trafficking in Persons and Drugs
 - y. **Project** – A structured undertaking of limited duration that is developed through various administrative, analytical, and approval process in order to achieve a tangible objective.
 - z. **Project Physical Location Relationship** – Physical location of a project.
 - aa. **Project Status Type** – A categorization of a Project by the stage which the Project is in at a given period of time.
 - i. Valid Values
 - 1. Concept
 - 2. Under Design
 - 3. Procurement

4. Mobilization
 5. On-going
 6. Demobilization
- ab. **Project/Status Relationship** – The beginning and end dates of a project.
- ac. **Sector** – The technical focus of an activity or program.

9. Budgets

- a. **Budget** – A statement of USAID’s financial position of an administration for a definite period of time based on estimates of expenditures during a period and proposals for financing them.
- b. **Budget Item** – Budget line item that conforms to requirements of OMB Circular A-11.
- c. **Budget Item/Goal Relationship** – The association between a Budget Item and a Goal.
- d. **Budget Item/Program Component Relationship** – The association between a Budget Item and a Program Component.
- e. **Budget Party Role** – Roles of persons and organization in the annual budget cycle.
 - i. Valid Values
 1. Guidance Provider
 2. Formulator
 3. Budget Recipient
 4. Reviewer
 5. Approver
- f. **Budget Phase Type** – A categorization of USAID’s annual budget by budget cycle.
 - i. Valid Values
 1. Formulation
 2. Justification
 3. Implementation
 4. Reporting
- g. **Budget/Budget Phase Type Relationship** – The association between a Budget and a Budget Phase Type.
- h. **Budget Request Type** – A categorization of Budget Request by programming type.
 - i. Valid Values
 1. Initial Programming
 2. Reprogramming
 3. Supplemental
 4. Fast Track
- i. **Budget/Document Relationship** – The association between a Budget and a Document.
- j. **Budget/Party Relationship** – The association between a Budget and a Party.
- k. **Document** – A physical or electronic media that USAID employs to capture unstructured data and to communicate to stakeholders.
 - l. **Funding Account** – A sum of money or other resources whose principal or interest is set apart for a specific objective.
 - i. Valid Values
 1. Initiate
 2. Terminate
 3. Alter Scope of
- m. **Funding Account/Budget Item Relationship** – The association of a Funding Account and a Budget Item.
- n. **Goal** – A significant, intended, and measurable change in the condition of a customer or change in the host country, institutions, or other entities that will affect the customer directly or indirectly.

- o. Party – An organization or individual conducting functions relating to or impacting foreign assistance.
- p. Program Component – A set of activities expected to lead to a related set of results. Program Components are defined operationally by the development rationale and USAID’s strategic framework.
 - i. Valid Values
 - 1. Increase Participation in Global Trade and Investment
 - 2. Improve Economic Policies and Governance
 - 3. Increase Private Sector Growth
 - 4. Strengthen Financial Sector’s Contribution to Economic Growth
 - 5. Expand and Improve Access to Economic and Social
 - 6. Increase Agricultural Productivity
 - 7. Protect and Increase the Assets and Livelihoods of the Poor
 - 8. Promote Sustainable Management of Natural Resources and Biodiversity
 - 9. Reduce, Prevent, and Mitigate Pollution
 - 10. Improve Access to Clean Water and Sanitation
 - 11. Improve the Quality of Basic Education
 - 12. Improve Institutions of Higher Education
 - 13. Improve Quality of Workforce
 - 14. Trafficking in Persons and Drugs

10. Funding Accounts

- a. Budget – A statement of USAID’s financial position of an administration for a definite period of time based on estimates of expenditures during a period and proposals for financing them.
- b. Budget Item – Budget line item that conforms to requirements of OMB Circular A-11.
- c. Budget Request Type – Either programs or operating expenses. Demarcation between USAID’s program budget and operating expense budget.
 - i. Valid Values
 - 1. Initial Programming
 - 2. Reprogramming
 - 3. Supplemental
 - 4. Fast Track
- d. Budget Item/Goal Relationship – The association between a Budget Item and a Goal.
- e. Budget Item/Program Component Relationship – The association between a Budget Item and a Program Component.
- f. Event – An occurrence of significance to the agency, that may be investigated, analyzed, measured, rated, managed, predicted/forecasted, hypothesized, mitigated, prevented, avoided, and/or resolved, in order to achieve agency missions and objectives.
- g. Financial Transaction – An exchange or transfer of funds.
- h. **Funding Account** – A sum of money or other resources whose principal or interest is set apart for a specific objective.
- i. **Funding Account Event Role Type** – The categorization of the association between a Funding Account and an Event by role.
 - i. Valid Values
 - 1. Initiate
 - 2. Terminate
 - 3. Alter Scope of

- j. **Funding Account Period Type** – A categorization of a Funding Account Period by a period of time
 - i. Valid Values
 - 1. One-year Appropriation – An appropriation that is available for obligation during a specific fiscal year. Funds not obligated during the fiscal year expire at the end of the year.
 - 2. No-Year Appropriation – An appropriation that is available for obligation for an indefinite period of time. It is usually identified in appropriations language as “to remain available until expended” or “without fiscal year limitation”.
 - 3. Multi-Year Appropriations – An appropriation that is available for obligation for a definite period of time in excess of one fiscal year.
- k. **Funding Account Type** – A categorization of funding accounts by usage.
 - i. Valid Values
 - 1. Program
 - 2. Operating Expense
 - 3. Capital Investment
 - 4. Trust Fund
 - 5. Credit Support
 - 6. Joint DoS/USAID Accounts
 - l. **Funding Account/Budget Item Relationship** – The association of a Funding Account and a Budget Item.
 - m. **Funding Account/Budget Item Status** – The association between a Funding Account and the status of a Budget Item.
 - n. **Funding Account/Event Relationship** – The association between external events and statutorily authorized appropriations account against which funds are obligated.
 - o. **Funding Account/Financial Transaction Relationship** – The association between a Funding Account and a Financial Transaction.
 - p. Goal – A significant, intended, and measurable change in the condition of a customer or change in the host country, institutions, or other entities that will affect the customer directly or indirectly.
 - q. Program Component – A set of activities expected to lead to a related cluster of results. Boundaries and themes of PCs are defined operationally by the development rationale and USAID’s strategic framework.
 - i. Valid Values
 - 1. Increase Participation in Global Trade and Investment
 - 2. Improve Economic Policies and Governance
 - 3. Increase Private Sector Growth
 - 4. Strengthen Financial Sector’s Contribution to Economic Growth
 - 5. Expand and Improve Access to Economic and Social
 - 6. Increase Agricultural Productivity
 - 7. Protect and Increase the Assets and Livelihoods of the Poor
 - 8. Promote Sustainable Management of Natural Resources and Biodiversity
 - 9. Reduce, Prevent, and Mitigate Pollution
 - 10. Improve Access to Clean Water and Sanitation
 - 11. Improve the Quality of Basic Education
 - 12. Improve Institutions of Higher Education
 - 13. Improve Quality of Workforce
 - 14. Trafficking in Persons and Drugs

Appendix I: BCM to LDM Subject Area Mapping

The purpose of this matrix as outlined in Section 4.5.1 is to evaluate LDM coverage of the BCM, determine areas of LDM enhancement, and reduce BCM capabilities under evaluation in future analytical steps.

BCM Capabilities		LDM Subject Areas										
		Documents	Events	Swiss	Program Areas	Locations	Implementation Instruments	Financial Instruments	Goals and Objectives	Budgets	Funding Accounts	Assets
1. Development Policy and Diplomacy	P	01. Policy Dialogue		6								
		02. Policy Setting	3	6								
		03. Policy Communications Strategy	3	6								
		04. Policy Enforcement		6								
	C	05. Policy Environment Monitoring		6	6	2						
		06. Policy Communications Management		6								
	E	07. Policy Communications	3	6								
		08. Stakeholder Outreach		6								
2. Partnership Development	P	01. Partner Collaboration Strategic Planning		6								
		02. Compatibility Assessment		6								
	C	03. Partnership Coordination		6								
		04. Partnership Management		6								
	E	05. Partner Engagement		6								
		06. Partnership Administration	3	6								
3. Program Design	P	01. Contextual Analysis		6	4	2				3		
		02. Program Strategic Budgeting	2	6	4			8	5	5		
		03. Program Performance Planning	4	6	2			8				
	C	04. Program Guidance	4	6								
		05. Scenario Development	2	6								
	E	06. Program Component Selection		6								
		07. Intervention Mechanism Development		6	1							
4. Program Operations	P	01. Program Resource Planning		6	1	1		7	1	5		
		02. Intervention Mechanisms Planning	3	6	1		3					
		03. Funding instrument strategy development		6		8	3	4	2	4		
		04. Logistics Strategy Development		6	3		6			4		
	C	05. Program Funding / Resource Coordination		6	3		7		1	4		
		06. Program Governance	4	6								
		07. Program Portfolio Management		6			1	7				
		08. Program Performance Management	4	6	3			7				
	E	09. Acquisition And Assistance Coordination		6	1	5		5			1	5
		10. Resource Mobilization		6	3	5						
5. Activity Execution	P	01. Acquisition And Assistance Planning	4	6	1	7		7				
		02. Activity Planning	3	1	6	1		2				
		03. Activity Logistics Planning	3	2	6			1	4	1	6	
	C	04. Logistics Coordination		6	3			4		1	5	
		05. Activity Management		6				1	4			
		06. Activity Performance Management	4	6	3			7				
	E	07. Resource Deployment		6	3			7		1	4	
		08. Activity Administration		6			2	5	3			
6. Internal Technical Support	P	01. Technical Support Planning		6				5				
		02. Technical Support Service Design	4	6								
		03. Technical Support Delivery Coordination		6								
	C	04. Technical Support Service Level Agreement Management	4	6								
		05. Technical Support Delivery Evaluation		6								
	E	06. Technical Support Service Delivery		6				1				
		07. Technical Assistance Training	4	6								
7. Knowledge for Development	P	01. Strategic Planning For Knowledge Management	4	6				1				
		02. Knowledge Management Policy	4	6								
		03. Knowledge Architecture Development		6								
	C	04. Knowledge Life Cycle Management		6								
		05. Knowledge Impact Assessment		6								
		06. Competency Area Development		6								
	E	07. Knowledge Life Cycle Administration		6								
		08. Technical Reference And Knowledge Support		6								
8. Agency Business Management	P	01. Strategic Planning And Direction	4	6				2				
		02. Budgeting		6					5	2		
		03. Human Capital Planning		6	1	3						
		04. Information & Technology Strategic Planning	3	6								
		05. Facilities And Asset Planning		6		2					4	
		06. Operations Standards, Policy And Guidance	4	6								
		07. Communications Strategic Planning	4	6								
		08. Security Management		6								
		09. Performance Management	4	6								
		10. Financial Management	4	6				5		1		
	C	11. Acquisition And Assistance Management		6		7	2					
		12. Human Capital Management		6								
		13. Information Systems And Technical Management		6								
		14. Communications Management		6								
		15. Finance Administration		6			3					
		16. Facilities Administration		6		2					4	
	E	17. Human Capital Administration		6								
		18. Information Systems And Technology Administration		6								

0494-037

BCM to LDM Subject Area Mapping Entity Identification

This portion of Appendix H identifies each that corresponds to the entity counts included in the above BCM to LDM Subject Area matrix.

1. Development Policy and Diplomacy

- a. Policy Dialogue – The ability to engage with development actors within and outside USAID to ensure policy coherence and efficacy:
 - i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- b. Policy Setting – The ability to develop and articulate USAID’s policy position to formulate both mandatory guidance (policy directives and internal mandatory references) as well as broader official statements of Agency goals, guiding principles, and views on development changes.
 - i. Kernel
 1. Documents
 - a. Document
 - b. Document/Party Relationship
 - c. Document/Document Relationship
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- c. Policy Communications Strategy – The ability to identify and develop policy messages and optimal delivery methods for communicating those messages to target groups.
 - i. Kernel
 1. Documents
 - a. Document
 - b. Document Content
 - c. Document/Party Relationship
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

- d. Policy Enforcement – The ability to apply remedies or penalties for incidents of policy non-compliance.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- e. Policy Environment Monitoring – The ability to survey the political landscape for emerging and existing issues that impinge on USAID policies and to assess the impact of these issues on USAID development challenges.
 - i. Kernel
 - 1. Events
 - a. Event Event Relationship
 - b. Event Event Relationship Type
 - c. Event Party Role Type
 - d. Event Type
 - e. Event/Party Relationship
 - f. Event/Physical Location Relationship
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - 3. Physical Locations
 - a. Geographic Location
 - b. Physical Location
- f. Policy Communications Management – The ability to determine, coordinate and deliver communications on policy priorities.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- g. Policy Communications – The ability to disseminate and exchange policy information to the development community.
 - i. Kernel
 - 1. Documents
 - a. Document Content
 - b. Document Type
 - c. Document/Party Relationship

2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- h. Stakeholder Outreach – The ability to engage effectively with internal and external audiences to communicate specific messages (Includes the US Public, the foreign public, Congress, OMB, etc).
- i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

2. Partnership Development

- a. Partner Collaboration Strategic Planning – The ability to develop approaches for strategic 3rd party partnerships, including determination of appropriate partners and the approach to forming strategic partnerships and alliance networks.
 - i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - b. Compatibility Assessment – The ability to continuously evaluate the appropriateness and “attractiveness” of 3rd parties as current or potential strategic partners.
 - i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

- c. Partnership Coordination – The ability to coordinate activities that build strategic relationships with 3rd parties, including determination of appropriate partners and the approach to forming partnerships and alliance networks (e.g. other donors and GDA alliance members, respectively).
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- d. Partnership Management – The ability to continuously monitor and evaluate partnerships including resolving issues and providing feedback via conducting stakeholder consultations; due diligence; and setting shared principles and “rules of engagement.”
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- e. Partner Engagement – The ability to turn a relationship with a 3rd party into a formal strategic partnership – including identification, campaign for, qualification, negotiation, selection, and service delivery integration.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- f. Partnership Administration – The ability to administer the terms of partnering agreements made with strategic 3rd parties.
 - i. Kernel
 - 1. Documents
 - a. Document
 - b. Document Content
 - c. Document/Party Relationship
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

3. Program Design

a. Contextual Analysis – The ability to assess and understand the “development context” through situation analysis, prioritization, and decision-making at multiple levels (e.g. through a country classification, country strategy, etc.).

i. Kernel

1. Goals & Objectives

- a. Goal Party Relationship Role Type
- b. Goal Type
- c. Goal/Party Relationship

2. Parties

- a. Organization
- b. Party Party Relationship
- c. Party Party Role Type
- d. Party Role Type
- e. Party/Party Role Type Relationship
- f. Person

3. Locations

- a. Geographic Location
- b. Physical Location

b. Program Strategic Budgeting – The ability to integrate strategic planning, performance management, and budgeting to link decision-making about resource allocations with performance planning and results.

i. Kernel

1. Assets

- a. Asset Type
- b. Asset Asset Relationship
- c. Asset/Funding Account Relationship
- d. Asset/Party Relationship
- e. Asset/Physical Location Relationship

2. Budgets

- a. Budget
- b. Budget Item
- c. Budget/Document Relationship
- d. Budget Item/Program Components
- e. Budget/Party Relationship

3. Documents

- a. Document
- b. Document Content

4. Goals & Objectives

- a. Activity Performance Indicator Type
- b. Activity/Activity Performance Indicator Relationship
- c. Activity/Party Relationship
- d. Goal Performance Indicator Type
- e. Goal Type
- f. Goal/Document Relationship
- g. Goal/Goal Performance Indicator Relationship
- h. Goal/Party Relationship

5. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
6. Program Area
 - a. Common Indicator
 - b. Program Component
 - c. Program Component/Common Indicator Relationship
 - d. Program Component/Party Relationship
- c. Program Performance Planning – The ability to develop the performance parameters and measures against which program performance will be assessed and reported.
 - i. Kernel
 1. Documents
 - a. Document
 - b. Document Content
 - c. Document/Document Relationship
 - d. Document/Party Relationship
 2. Goals & Objectives
 - a. Activity Performance Indicator Type
 - b. Activity/Activity Performance Indicator Relationship
 - c. Activity/Party Relationship
 - d. Goal Performance Indicator Type
 - e. Goal Type
 - f. Goal/Document Relationship
 - g. Goal/Goal Performance Indicator Relationship
 - h. Goal/Party Relationship
 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 4. Program Areas
 - a. Common Indicator
 - b. Program Area/Document Relationship
 - d. Program Guidance – The ability to develop the parameters and “rules of engagement” for carrying out programs; includes policy directives, rules, regulations, advice, and other information relevant to program implementation (mandatory and non-mandatory).
 - i. Kernel
 1. Documents
 - a. Document Content
 - b. Document Document Relationship
 - c. Document Type
 - d. Document/Party Relationship

2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- e. Scenario Development – The ability to develop hypothetical situations that exercise and test a program’s design and components.
 - i. Kernel
 1. Documents
 - a. Document Content
 - b. Document Type
 - f. Program Component Selection – The ability to align and select the appropriate components of a program’s design.
 - i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - g. Intervention Mechanism Development – The ability to design intervention mechanisms – how and in what way USAID will execute programs – based on rigorous design criteria.
 - i. Kernel
 1. Goals & Objectives
 - a. Activity
 - b. Goal Party Relationship Type
 - c. Goal Type
 - d. Goal/Party Relationship
 - e. Project
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 3. Program Areas
 - a. Program Area Type

4. Program Operations

- a. Program Resource Planning – The ability to align the right assets (people, funding, things, relationships, etc.) to initiatives or programs.
 - i. Kernel
 - 1. Assets
 - a. Asset Type
 - b. Asset Asset Relationship
 - c. Asset/Funding Account Relationship
 - d. Asset/Party Relationship
 - e. Asset/Physical Location Relationship
 - 2. Funding Accounts
 - a. Funding Account Type
 - 3. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship Role Type
 - c. Activity/Party Relationship
 - d. Goal Party Relationship
 - e. Goal Party Relationship Type
 - f. Goal/Party Relationship
 - g. Goal Type
 - 4. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - 5. Program Areas
 - a. Program Area Type
- b. Intervention Mechanism Planning – The ability to align relevant and available intervention mechanisms to a program.
 - i. Kernel
 - 1. Events
 - a. Event Event Relationship
 - b. Event Event Relationship Type
 - c. Event Type
 - 2. Goals & Objectives
 - a. Activity
 - b. Goal Type
 - c. Project
 - 3. Program Areas
 - a. Program Area Type

c. Funding Instrument Strategy Development – The ability to determine the optimal mix of implementing instruments (grants, cooperative agreements, contracts, payments, loans, transfers, etc) appropriate for implementing a program.

i. Kernel

1. Implementation Instruments

- a. Contract
- b. Cooperative Agreement
- c. Grant
- d. Implementation Instrument
- e. Implementing Instrument/Document Relationship
- f. Implementing Instrument/Financial Transaction Relationship
- g. Implementing Instrument/Party Relationship
- h. Transfer

2. Financial Transactions

- a. Financial Transaction Type
 - b. Financial Transaction/Party Relationship
 - c. Financial Transaction/Party Role Type
3. Goals & Objectives
- a. Activity
 - b. Activity/Financial Transaction Relationship
 - c. Goal Type
 - d. Goal/Party Relationship

4. Funding Accounts

- a. Funding Account Type
- b. Funding Account/Financial Transaction Relationship

5. Parties

- a. Organization
- b. Party Party Relationship
- c. Party Party Role Type
- d. Party Role Type
- e. Party/Party Role Type Relationship
- f. Person

d. Logistics Strategy Development – The ability to determine the optimal mix of logistics assets (channels, relationships, etc.) to activity needs.

i. Kernel

1. Assets

- a. Asset Type
- b. Asset Asset Relationship
- c. Asset/Party Relationship
- d. Asset/Physical Location Relationship

2. Goals & Objectives

- a. Activity
- b. Activity Party Relationship
- c. Activity Party Relationship Role Type
- d. Goal Type
- e. Project
- f. Project Physical Location Relationship

3. Locations

- a. Geographic Location
- b. Physical Location
- c. Physical Location Relationship

- e. Program Funding/Resource Coordination – The ability to develop the funding portfolio for a program and align resources to program needs.
 - i. Kernel
 - 1. Assets
 - a. Asset Type
 - b. Asset/Funding Account Relationship
 - c. Asset/Party Relationship
 - d. Asset/Physical Location Relationship
 - 2. Funding Accounts
 - a. Funding Account Type
 - 3. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship Role Type
 - c. Activity/Party Relationship
 - d. Goal Party Relationship Type
 - e. Goal Type
 - f. Goal/Party Relationship
 - g. Project
 - 4. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - 5. Locations
 - a. Geographic Location
 - b. Physical Location
 - c. Physical Location Relationship
 - f. Program Governance – The ability to provide assurance of program efficacy through the system standards, policies, and guidance; risk management; decision making,
 - i. Kernel
 - 1. Documents
 - a. Document
 - b. Document Content
 - c. Document Document Relationship
 - d. Document/Party Relationship
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - g. Program Portfolio Management – The ability to coordinate, monitor, assess, and control the suite of programs that make up a portfolio.
 - i. Kernel
 - 1. Financial Transactions
 - a. Financial Transaction Type

2. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship Role Type
 - c. Activity/Party Relationship
 - d. Activity Performance Indicator Type
 - e. Activity Performance Result
 - f. Goal Type
 - g. Project
 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- h. Program Performance Management – The ability to assess program performance against plan (includes program reporting).
- i. Kernel
 1. Documents
 - a. Document
 - b. Document Content
 - c. Document Document Relationship
 - d. Document/Party Relationship
 2. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship
 - c. Activity/Party Relationship Role Type
 - d. Activity Performance Indicator Type
 - e. Activity Performance Result
 - f. Goal Type
 - g. Project
 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 4. Program Areas
 - a. Common Indicator
 - b. Program Component
 - c. Program Component/Party Relationship
- i. Acquisition and Assistance Coordination – The ability to organize Acquisition and Assistance vehicles that may be utilized for a specific program.
- i. Kernel
 1. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship
 - c. Activity/Party Relationship Role Type
 - d. Goal Type
 - e. Project

2. Implementation Instruments
 - a. Contract
 - b. Cooperative Agreement
 - c. Grant
 - d. Transfer
 - e. Implementation Instrument/Party Relationship
3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
4. Program Areas
 - a. Program Area Type
- j. Resource Mobilization – The ability to marshal and ready resources – people, things, money, Acquisition and Assistance awards – to be deployed to a targeted destination.
 - i. Kernel
 1. Assets
 - a. Asset
 - b. Asset Asset Relationship
 - c. Asset/Funding Account Relationship
 - d. Asset/Party Relationship
 - e. Asset/Physical Location Relationship
 2. Funding Accounts
 - a. Funding Account Type
 3. Implementation Instruments
 - a. Contract
 - b. Cooperative Agreement
 - c. Grant
 - d. Transfer
 - e. Implementation Instrument/Party Relationship
 4. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 5. Locations
 - a. Geographic Location
 - b. Physical Location
 - c. Physical Location Relationship

5. Activity Execution

a. Acquisition and Assistance Planning – The ability to determine the appropriate mix of implementing instruments, (including grants, coops, contracts, loans, transfers and payments) for a specific program.

i. Kernel

1. Documents

- a. Document Type
- b. Document Content
- c. Document Document Relationship
- d. Document/Party Relationship

2. Goals & Objectives

- a. Activity
- b. Activity/Party Relationship
- c. Activity/Party Relationship Type
- d. Goal Party Relationship
- e. Goal Type
- f. Goal/Party Relationship
- g. Project

3. Implementation Instruments

- a. Contract
- b. Cooperative Agreement
- c. Grant
- d. Transfer
- e. Implementing Instrument/Document Relationship
- f. Implementing Instrument/Financial Transaction Relationship
- g. Implementing Instrument/Party Relationship

4. Parties

- a. Organization
- b. Party Party Relationship
- c. Party Party Role Type
- d. Party Role Type
- e. Party/Party Role Type Relationship
- f. Person

5. Program Areas

- a. Program Area Type

b. Activity Planning – The ability to plan and design an activity that will contribute to a program’s objective.

i. Kernel

1. Documents

- a. Document
- b. Document Content
- c. Document/Party Relationship

2. Events

- a. Event Type

3. Goals & Objectives

- a. Activity
- b. Activity Planning Step Type

4. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
5. Program Areas
 - a. Program Area Type
- c. Activity Logistics Planning – The ability to determine the logistics requirements for executing a specific activity.
 - i. Kernel
 1. Assets
 - a. Assets
 - b. Asset Asset Relationship
 - c. Asset/Document Relationship
 - d. Asset/Funding Account Relationship
 - e. Asset/Party Relationship
 - f. Asset/Physical Location Relationship
 2. Documents
 - a. Document
 - b. Document Content
 - c. Document/Party Relationship
 3. Events
 - a. Event/Party Role Type
 - b. Event/Physical Location Relationship
 4. Funding Accounts
 - a. Funding Account Type
 5. Goals & Objectives
 - a. Activity
 - b. Activity/Party Relationship
 - c. Activity/Party Relationship Type
 - d. Project
 6. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- d. Logistics Coordination – The ability to facilitate and align logistics assets (channels, relationships, etc.) to activity needs.
 - i. Kernel
 1. Assets
 - a. Asset
 - b. Asset Asset Relationship
 - c. Asset/Funding Account Relationship
 - d. Asset/Party Relationship
 - e. Asset/Physical Location Relationship
 2. Funding Accounts
 - a. Funding Account Type

3. Goals & Objectives
 - a. Activity
 - b. Activity/Party Relationship
 - c. Activity/Party Relationship Type
 - d. Project
4. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
5. Locations
 - a. Geographic Location
 - b. Physical Location
 - c. Physical Location Relationship
- e. Activity Management – The ability to perform the activities that coordinate, monitor, assess, and control a specific activity.
 - i. Kernel
 1. Financial Transactions
 - a. Financial Transaction Type
 2. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship Role Type
 - c. Activity/Party Relationship
 - d. Project
 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - f. Activity Performance Management – The ability to develop and oversee the performance management system for a specific activity, including the assessment criteria and related measurements and reporting mechanisms.
 - i. Kernel
 1. Documents
 - a. Document
 - b. Document Content
 - c. Document Document Relationship
 - d. Document/Party Relationship
 2. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship
 - c. Activity/Party Relationship Role Type
 - d. Activity Performance Indicator Type
 - e. Activity Performance Result
 - f. Goal Type
 - g. Project

3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
4. Program Areas
 - a. Common Indicator
 - b. Program Component
 - c. Program Component/Party Relationship
- g. Resource Deployment – The ability to deliver the right resources to a targeted destination.
 - i. Kernel
 1. Assets
 - a. Asset
 - b. Asset Asset Relationship
 - c. Asset/Party Relationship
 - d. Asset/Physical Location Relationship
 2. Funding Accounts
 - a. Funding Account Type
 3. Parties
 - a. Organization
 - b. Party Address Relationship
 - c. Party Address Type
 - d. Party Party Relationship
 - e. Party Phone Contact
 - f. Person
 4. Locations
 - a. Geographic Location
 - b. Physical Location
 - c. Physical Location Relationship
- h. Activity Administration – The ability to perform the day-to-day operations of executing activity delivery, including activity management, paying of invoices, etc.
 - i. Kernel
 1. Funding Accounts
 - a. Funding Account Type
 - b. Funding Account/Financial Transaction Relationship
 2. Financial Transactions
 - a. Financial Transaction
 - b. Financial Transaction/Party Relationship
 3. Goals & Objectives
 - a. Activity
 - b. Activity Party Relationship
 - c. Activity/Party Relationship Role Type
 - d. Goal Type
 - e. Project

4. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

6. Internal Technical Support

- a. Technical Support Planning – The ability to analyze operating units and develop technical support service requirements for programs.
 - i. Kernel
 1. Goals & Objectives
 - a. Activity
 - b. Goal Party Relationship
 - c. Goal Type
 - d. Goal/Party Relationship Type
 - e. Project
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- b. Technical Support Service Design – The ability to specify technical support requirements that ultimately forms the basis for a service-level agreement (SLA); includes internal technical assistance and training for USAID staff.
 - i. Kernel
 1. Documents
 - a. Document Content
 - b. Document Document Relationship
 - c. Document Type
 - d. Document/Party Relationship
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

- c. Technical Support Delivery Coordination – The ability to organize the components needed to successfully carry out a specific technical support service.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- d. Technical Support Service Level Agreement Management – The ability to review, monitor, and assess SLAs to assure the efficacy of the technical assistance as defined in the SLA.
 - i. Kernel
 - 1. Documents
 - a. Document
 - b. Document Content
 - c. Document Document Relationship
 - d. Document/Party Relationship
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- e. Technical Support Delivery Evaluation – The ability to assess actual technical support performance against requirements.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- f. Technical Support Service Delivery – The ability to provide operating units with specific technical support services related to the direct implementation of an activity.
 - i. Kernel
 - 1. Goals & Objectives
 - a. Activity
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

g. Technical Assistance Training – The ability to design, develop, and deliver technical training to staff and partners.

- i. Kernel
 - 1. Documents
 - a. Document
 - b. Document Content
 - c. Document Document Relationship
 - d. Document/Party Relationship
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

7. Knowledge for Development

a. Strategic Planning for Knowledge Management – The ability to determine, design, and develop long-term strategic objectives for the Agency, including Bureaus and Operating Units.

- i. Kernel
 - 1. Documents
 - a. Document
 - b. Document Content
 - c. Document Document Relationship
 - d. Document/Party Relationship
 - 2. Goals & Objectives
 - a. Goal Type
 - 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person Program Areas

b. Knowledge Management Policy- The ability to establish and execute the governance model for knowledge management, including standards, policies, procedures; review, monitoring, and adjustment of official procedures and guidelines; and decision-making.

- i. Kernel
 - 1. Documents
 - a. Document Content
 - b. Document Document Relationship
 - c. Document Type
 - d. Document/Party Relationship
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

- c. Knowledge Architecture Development – The ability to establish the structures for development knowledge and related reference models to facilitate knowledge management programs.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- d. Knowledge Life Cycle Management – The ability to manage and oversee the enabling distribution channels and communication media for the optimal execution of Knowledge for Development objectives.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- e. Knowledge Impact Assessment – The ability to determine the impact of knowledge for Development programs; who is using intellectual capital; and how the intellectual capital is being used.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- f. Competency Area Development – The ability to build expertise around a body of development knowledge of importance.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- g. Knowledge Life Cycle Administration - The ability to create, capture, access, disseminate knowledge.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

h. Technical Reference and Knowledge Support – The ability to provide operating units with the support/assistance services that enable the efficient and effective use of knowledge for Development services.

- i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

8. Agency Business Management

a. Strategic Planning and Direction – The ability to determine, design, and develop long-term strategic objectives for the Agency, including bureaus and operating units.

- i. Kernel
 - 1. Documents
 - a. Document Document Relationship
 - b. Document Content
 - c. Document Type
 - d. Document/Party Relationship
 - 2. Goals & Objectives
 - a. Goal Type
 - b. Goal/Document Relationship
 - 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

b. Budgeting – The ability to forecast, plan, align, request, and assign budgetary and financial resources for Agency programs, related operations, and long-term capital investments (includes capital planning).

- i. Kernel
 - 1. Budgets
 - a. Budget
 - b. Budget Item
 - c. Budget Item/Goal Relationship
 - d. Budget/Document Relationship
 - e. Budget/Party Relationship
 - 2. Funding Accounts
 - a. Funding Account Type
 - b. Funding Account/Budget Item Relationship
 - 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

- c. Human Capital Planning – The ability to predict, assign, or transfer FTEs to programs, departments or initiatives. The ability to estimate training needs.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Address Relationship
 - c. Party Address Type
 - d. Party Party Relationship
 - e. Party Party Role Type
 - f. Party Role Type
 - g. Party Phone Contact
 - h. Party/Party Role Type Relationship
 - i. Person
 - 2. Locations
 - a. Geographic Location
 - b. Physical Location
 - c. Physical Location Relationship
 - 3. Program Areas
 - a. Program Area Type
 - d. Information and Technology & Technology Strategic Planning – The ability to conceptualize, plan, and develop/craft a long-term vision for securing, planning, and disseminating, and utilizing USAID information and technology assets.
 - i. Kernel
 - 1. Assets
 - a. Asset Asset Relationship
 - b. Asset Type
 - c. Asset/Document Relationship
 - d. Asset/Party Relationship
 - 2. Documents
 - a. Document Content
 - b. Document Type
 - c. Document/Party Relationship
 - 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - e. Facilities and Asset Planning – The ability to manage the physical assets (e.g. Buildings) and locations holdings of USAID.
 - i. Kernel
 - 1. Assets
 - a. Asset Asset Relationship
 - b. Asset Type
 - c. Asset/Party Relationship
 - d. Asset/Physical Location Relationship

2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 3. Locations
 - a. Geographic Location
 - b. Physical Location
- f. Operations Standards, Policy, and Guidance – The ability to develop core guidelines and norms that direct day-to-day operations; e.g. Ethics Administration.
- i. Kernel
 1. Documents
 - a. Document Content
 - b. Document Document Relationship
 - c. Document Type
 - d. Document/Party Relationship
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - g. Communications Strategic Planning – The ability to develop corporate-level communications, including the determination and design of appropriate messages and delivery mechanisms to achieve Agency communications objectives, including brand identity strategy.
 - i. Kernel
 1. Documents
 - a. Document Content
 - b. Document Document Relationship
 - c. Document Type
 - d. Document/Party Relationship
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - h. Security Management – The ability to scan USAID’s operational environment for potential security risks and opportunities to improve the risk management environment.
 - i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

i. Performance Management – The ability to continuously assess Agency progress against its performance plan and actively manage optimal results.

i. Kernel

1. Documents

- a. Document Content
- b. Document Document Relationship
- c. Document Type
- d. Document/Party Relationship

2. Parties

- a. Organization
- b. Party Party Relationship
- c. Party Party Role Type
- d. Party Role Type
- e. Party/Party Role Type Relationship
- f. Person

j. Financial Management – The ability to assess, schedule, control, distribute, and perform accounting and reporting on the finances and financial position of USAID.

i. Kernel

1. Documents

- a. Document Content
- b. Document Document Relationship
- c. Document Type
- d. Document/Party Relationship

2. Financial Transactions

- a. Financial Transaction Status Relationship
- b. Financial Transaction Type
- c. Financial Transaction/Document Relationship
- d. Financial Transaction/Party Relationship
- e. Financial Transaction/Party Role Type

3. Funding Accounts

- a. Funding Account Type

4. Parties

- a. Organization
- b. Party Party Relationship
- c. Party Party Role Type
- d. Party Role Type
- e. Party/Party Role Type Relationship
- f. Person

k. Acquisition and Assistance Management – The ability to coordinate, monitor performance, oversee and control the full range of implementing instruments including grants, cooperative agreements, contracts, loans, transfers, and payments.

i. Kernel

1. Financial Transactions

- a. Financial Transaction
- b. Financial Transaction/Party Relationship

2. Implementation Instruments

- a. Contract
- b. Cooperative Agreement
- c. Grant
- d. Transfer
- e. Implementing Instrument/Financial Transaction Relationship

- f. Implementing Instrument/Party Relationship
- g. Implementation Instrument/Party Role Type
- 3. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- l. Human Capital Management – The ability to track, monitor, and evaluate the workforce portfolio; forecast and perform decision support, continuous improvement, issue management, and needs assessment – all which support workforce planning and HR administration.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - m. Information Systems and Technical Management – The ability to establish and oversee the required technical environment to support the Agency’s business activities.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - n. Communications Management – The ability to coordinate communications activities across and beyond the Agency (includes Agency Brand/Identity Management, Communication Channel Management, and Relationship Management).
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 - o. Finance Administration – The ability to execute valid financial transactions resulting in a payment or receivable that satisfies financial reporting requirements.
 - i. Kernel
 - 1. Financial Transactions
 - a. Financial Transaction Type
 - b. Financial Transaction/Party Relationship
 - c. Financial Transaction/Party Role Type

2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- p. Facilities Administration – The ability to carry out the requirements for physical assets (e.g. buildings and locations ranging from construction to on-going maintenance).
 - i. Kernel
 1. Assets
 - a. Asset Type
 - b. Asset Asset Relationship
 - c. Asset/Party Relationship
 - d. Asset/Physical Location Relationship
 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
 3. Locations
 - a. Geographic Location
 - b. Physical Location
- q. Human Capital Administration – The ability to perform operational HR functions including recruitment, training, development, and career counseling.
 - i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- r. Information Systems and Technology Administration – The ability to perform day-to-day operations to provide and support the technical and data environment in support of USAID objectives.
 - i. Kernel
 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

- s. Acquisition and Assistance Administration – The ability to service the full range of implementing instruments including grants, cooperative agreements, contracts, loans, transfers, and payment.
 - i. Kernel
 - 1. Implementation Instruments
 - a. Contract
 - b. Cooperative Agreement
 - c. Grant
 - d. Transfer
 - e. Implementing Instrument/Document Relationship
 - f. Implementing Instrument/Financial Transaction Relationship
 - g. Implementing Instrument/Party Relationship
 - 2. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person
- t. Communications Administration – The ability to execute communication activities in alignment with communication strategies and related feedback procedures.
 - i. Kernel
 - 1. Parties
 - a. Organization
 - b. Party Party Relationship
 - c. Party Party Role Type
 - d. Party Role Type
 - e. Party/Party Role Type Relationship
 - f. Person

Appendix J: BCM to Operational Process Mapping

The purpose of this matrix is reduce the number of processes under evaluation in future analytical steps and evaluate process coverage of Agency capabilities per Section 4.5 of this document.

	Development Policy and Diplomacy							Partnership Development							Program Design						
	Policy Dialogue	Policy Setting	Policy Communications Strategy	Policy Environment Monitoring	Policy Enforcement	Policy Communications Management	Policy Communications	Stakeholder Outreach	Partner Collaboration Strategic Planning	Compatibility Assessment	Partnership Coordination	Partnership Management	Partner Engagement	Partnership Administration	Contextual Analysis	Program Strategic Budgeting	Program Performance Planning	Program Guidance	Scenario Development	Program Component Selection	Intervention Mechanism Development
USAID HIV/AIDS Strategic Overview (from Appendix B)																					
Program Oversight																					
Executive Guidance																					
31	Assess Needed Changes to Policies and Procedures	•	•												•						
32	Develop and Maintain Program Policies and Procedures	•	•												•						
33	Develop and Maintain Long Range Program Plan							•		•	•				•	•	•	•			
34	Evaluate Program Policies and Procedures																				
35	Understand Internal and External Forces Affecting Programs				•										•						
Governance																					
36	Assess Needed Changes to Governance Model			•											•			•			
37	Develop and Maintain Governance Model															•					
38	Evaluate Program Governance Model																				
Program Standards																					
39	Assess Needed Changes to Program Standards			•											•			•			
40	Develop and Maintain Program Performance Management Criteria															•					
41	Develop and Maintain Technical Performance Indicators																•				
42	Evaluate Program Standards																	•			
Program Communications																					
43	Develop Program Communications														•						
44	Develop and Maintain Program Business and Technical Architecture																				
45	Disseminate Program Guidance					•	•											•			
46	Disseminate Program Management Information					•	•											•			
47	Disseminate Program Related Knowledge					•	•											•			
48	Evaluate Communication Plan																				
49	Identify and Recommend Changes to Agency Communications Infrastructure																	•			
Operational Guidance																					
50	Assess Needed Changes to Operational Guidance																	•			
51	Develop and Maintain Operational Guidance																	•			
52	Review & Approve Operating Unit Program Strategies																	•			
53	Evaluate Program Guidance and Effectiveness																	•			
54	Analyze Program Results																	•			
Operational Coordination																					
55	Coordinate and Endorse Program Budget Submissions														•						
56	Submit Program Budget for Approval														•						
57	Monitor and Evaluate Resource Usage and Services																				
58	Enforce Program Guidance				•																
59	Review and Analyze Program Management Data																	•			
Program Information																					
60	Identify Knowledge Requirements																				•
61	Collect and Aggregate Program Results																				
62	QA/Information Assurance																				
63	Respond to Program Information Requests																				
64	Collect and Consolidate "Lessons Learned"																				
65	Collect and Consolidate Programmatic Knowledge																				
Resources and Services																					
66	Analyze and Plan Support Needs																	•			
67	Advise and Consult																				
68	Develop Program Support Lessons Learned																				

0494-038

	Program Operations										Activity Execution					Internal Technical Support										
	Program Resource Planning	Intervention Mechanisms Planning	Guiding Instrument Strategy Development	Logistical Strategy Development	Program Funding/Resource Coordination	Program Governance	Program Portfolio Management	Program Performance Management	Acquisition and Assistance Coordination	Resource Allocation	Acquisition and Assistance Planning	Activity Planning	Activity Logistics Planning	Logistics Coordination	Activity Management	Activity Performance Management	Resource Deployment	Activity Administration	Technical Support Planning	Technical Support Service Design	Technical Support Delivery Coordination	Technical Support Service Level Management	Technical Support Delivery Evaluation	Technical Support Delivery	Technical Assistance Training	
USMIG HIV/AIDS Segment Overview (from Appendix G)																										
Program Oversight																										
Executive Guidance																										
31																										
32																										
33																										
34																										
35																										
Governance																										
36																										
37																										
38																										
Program Standards																										
39																										
40																										
41																										
42																										
Program Communications																										
43																										
44																										
45																										
46																										
47																										
48																										
49																										
Operational Guidance																										
50																										
51																										
52																										
53																										
54																										
Operational Coordination																										
55																										
56																										
57																										
58																										
59																										
Program Information																										
60																										
61																										
62																										
63																										
64																										
65																										
Resources and Services																										
66																										
67																										
68																										

0494-039

	Knowledge for Development										Agency Business Management																	
	Strategic Planning for Knowledge Management	Knowledge Management Policy	Knowledge Management Development	Knowledge Life Cycle Management	Knowledge Impact Assessment	Competency Area Development	Knowledge Life Cycle Administration	Technical Assistance Knowledge Support	Strategic Planning and Direction	Buying	Human Capital Planning	Info & Tech Strategic Planning	Relative and Assets Planning	CIA, Standards, Policy, and Guidance	Communication Strategic Planning	Security Management	Performance Management	Financial Management	Acquisition and Asset Management	Human Capital Management	Information System and Technical Management	Commodities Management	Finance Administration	Facilities Administration	Human Capital Participation	Information Systems and Technology Administration	Acquisition and Assistance Administration	Communications Administration
USAID HIV/AIDS Segment Overview (from Appendix B)																												
Program Oversight																												
Executive Guidance																												
31																												
32																												
33																												
34																												
35																												
Governance																												
36																												
37																												
38																												
Program Standards																												
39																												
40																												
41																												
42																												
Program Communications																												
43																												
44																												
45																												
46																												
47																												
48																												
49																												
Operational Guidance																												
50																												
51																												
52																												
53																												
54																												
Operational Coordination																												
55																												
56																												
57																												
58																												
59																												
Program Information																												
60																												
61																												
62																												
63																												
64																												
65																												
Resources and Services																												
66																												
67																												
68																												

0494-040

	Development Policy and Diplomacy							Partnership Development					Program Design								
	Policy Dialogue	Policy Setting	Policy Communications Strategy	Policy Environment Monitoring	Policy Enforcement	Policy Communications Management	Policy Communications	Stakeholder Outreach	Partner Collaboration Strategic Planning	Compatibility Assessment	Partnership Coordination	Partnership Management	Partner Engagement	Partnership Administration	Contextual Analysis	Program Strategic Budgeting	Program Performance Planning	Program Guidance	Scenario Development	Program Component Selection	Intervention Mechanism Development
USAID HIV/AIDS Segment Overview (from Appendix B)																					
Program Operations																					
Operational Guidance																					
69																					
70																					
71																					
Operational Coordination																					
72																					
73																					
74																					
75																					
76																					
Program Information																					
77																					
78																					
79																					
80																					
81																					
82																					
83																					
Resources and Services																					
84																					
85																					
86																					
87																					
88																					
USAID HIV/AIDS Segment Financial Management (from p 6)																					
USAID Budget Process																					
Manage General Ledger																					
89																					
90																					
91																					
92																					
Manage Accounts Payable																					
93																					
94																					
95																					
96																					
97																					
Manage Accounts Receivable																					
98																					
99																					
100																					
101																					
Mission Accounts Payable																					
102																					
103																					
104																					
105																					
Mission Accounts Receivable																					
106																					
107																					
108																					
Manage Grants																					
109																					
110																					
Manage Funds																					
111																					
Manage Cost Accounting																					
112																					

	Program Operations										Activity Execution						Internal Technical Support									
	Program Resource Planning	Intervention Mechanisms Planning	Funding Instrument Development	Logistics Strategy Development	Program Funding/Resource Coordination	Program Governance	Program Portfolio Management	Program Performance Management	Acquisition and Assistance Coordination	Resource Mobilization	Acquisition and Assistance Planning	Activity Planning	Activity Logistics Planning	Logistics Coordination	Activity Management	Activity Performance Management	Resource Management	Activity Administration	Technical Support Planning	Technical Support Service Design	Technical Support Delivery Completion	Technical Support Services Level Assessment Standards	Technical Support Delivery Evaluation	Technical Support Delivery	Technical Assistance Training	
USAID HIV/AIDS Segment Overview (from Appendix B)																										
Program Operations																										
Operational Guidance																										
69																										
70	•	•	•		•	•		•			•															
71																										
Operational Coordination																										
72	•	•																								
73																										
74	•											•	•			•										
75	•																									
76						•		•								•										
Program Information																										
77																										
78						•		•				•				•										
79						•		•								•										
80						•		•								•										
81						•		•								•										
82						•		•								•										
83						•		•								•										
Resources and Services																										
84	•				•			•																		
85	•				•			•																		
86	•			•	•			•		•			•													
87	•				•			•		•																
88					•			•																		
USAID HIV/AIDS Segment Financial Management (from p. 3)																										
USAID Budget Process																										
Manage General Ledger																										
89																										
90																										
91																										
92																										
Manage Accounts Payable																										
93																										
94																										
95																										
96																										
97																										
Manage Accounts Receivable																										
98																										
99																										
100																										
101																										
Mission Accounts Payable																										
102																										
103																										
104																										
105																										
Mission Accounts Receivable																										
106																										
107																										
108																										
Manage Grants																										
109																										
110																										
Manage Funds																										
111																										
Manage Cost Accounting																										
112																										

	Knowledge for Development										Agency Business Management																	
	Strategic Planning for Knowledge Management	Knowledge Management Policy	Knowledge Development	Knowledge Life Cycle Management	Knowledge Impact Assessment	Competency Area Development	Knowledge Life Cycle Administration	Technical Reference Knowledge Support	Strategic Planning and Direction	Budgeting	Human Capital Planning	Info & Tech Strategic Planning	Resilience and Assets Planning	Ops, Standards, Policy, and Guidance	Communication Strategic Planning	Security Management	Performance Management	Financial Management	Acquisition and Assistance Management	Human Capital Management	Information System and Technical Management	Commodities Management	Finance Administration	Facilities Administration	Human Capital Administration	Information Systems and Technology Administration	Acquisition and Assistance Administration	Commodity Administration
USAID HIV/AIDS Segment Overview (from Appendix B)																												
Program Operations																												
Operational Guidance																												
69																												
70																												
71																												
Operational Coordination																												
72																												
73																												
74																												
75																												
76																												
Program Information																												
77																												
78																												
79																												
80																												
81																												
82																												
83																												
Resources and Services																												
84																												
85																												
86																												
87																												
88																												
USAID HIV/AIDS Segment Financial Management (from p 8)																												
USAID Budget Process																												
Manage General Ledger																												
89																												
90																												
91																												
92																												
Manage Accounts Payable																												
93																												
94																												
95																												
96																												
97																												
Manage Accounts Receivable																												
98																												
99																												
100																												
101																												
Mission Accounts Payable																												
102																												
103																												
104																												
105																												
Mission Accounts Receivable																												
106																												
107																												
108																												
Manage Grants																												
109																												
110																												
Manage Funds																												
111																												
Manage Cost Accounting																												
112																												

	Development Policy and Diplomacy						Partnership Development						Program Design									
	Policy Dialogue	Policy Setting	Policy Communications Strategy	Policy Environment Monitoring	Policy Enforcement	Policy Communications Management	Policy Communications	Stakeholder Outreach	Partner Collaboration Strategic Planning	Compatibility Assessment	Partnership Coordination	Partnership Management	Partner Engagement	Partnership Administration	Contextual Analysis	Program Strategic Budgeting	Program Performance Planning	Program Guidance	Scenario Development	Program Component Selection	Intervention Workstream Development	
USAID HIV/AIDS Segment Acquisition and Assistance (from p.6)																						
Acquisition and Assistance																						
Acquisition and Assistance Planning																						
113 Operating Unit Planning and Formation																						
114 Apply Other Considerations Affecting OU Planning and Formation																						
115 Generate Requests																						
Award Formulation																						
116 Route Action to Appropriate Process																						
117 OSDDBU Clearance																						
118 Advertise Action																						
119 Prepare Solicitation or Grant Scope																						
120 Solicit Response																						
121 Evaluate Response																						
122 Conduct Negotiation																						
123 Execute Award																						
124 Manage Protest																						
Award Administration																						
125 Administer Award												•		•								
126 Monitor Performance											•											
127 Modify Award											•											
128 Prepare Novation/Change-of-Name Agreement											•											
129 Termination											•											
130 Claim/Dispute Resolution											•											
131 Close-out Award											•											
Acquisition and Assistance Support																						
132 Audit Support of Responsibility Determination																						
133 Audit Support of Cost/Price Analysis																						
134 Monitor Annual Audit Requirements																						
135 Manage Annual Audits																						
136 Audit Support for Other Issues																						
137 Finalize NICRA																						
138 Administer Policy by OPI/P																						
139 Issue Warrants by OPI/E																						
140 Perform Systems Reviews by OPI/E																						

0494-044a

	Program Operations							Activity Execution							Internal Technical Support												
	Program Resource Planning	Intervention Mechanisms Planning	Funding Instrument Strategy Development	Logistics Strategy Development	Program Funding Resource Coordination	Program Governance	Program Portfolio Management	Program Performance Management	Acquisition and Assistance Coordination	Resource Mobilization	Acquisition and Assistance Planning	Activity Planning	Activity Logistics Planning	Logistics Coordination	Activity Management	Activity Performance Management	Resource Deployment	Activity Administration	Technical Support Planning	Technical Support Service Design	Technical Support Delivery Coordination	Technical Support Service Level Management	Technical Support Delivery Evaluation	Technical Support Delivery	Technical Assistance Training		
USAID HIV/AIDS Segment Acquisition and Assistance (from p.6)																											
Acquisition and Assistance																											
Acquisition and Assistance Planning																											
113			●								●	●															
114			●								●	●															
115																											
Award Formulation																											
116																											
117																											
118																											
119																											
120																											
121																											
122																											
123																											
124																											
Award Administration																											
125																											
126						●		●								●											
127																											
128																											
129																											
130																											
131																											
Acquisition and Assistance Support																											
132																											
133																											
134																											
135																											
136																											
137																											
138																											
139																											
140																											

0494-045a

US/AFI HIV/AIDS Segment/Acquisition and Assistance (from p. 8)	Knowledge for Development										Agency Business Management																	
	Strategic Planning for Knowledge Management	Knowledge Management Policy	Knowledge Development	Knowledge Life Cycle Management	Knowledge Impact Assessment	Competency Area Development	Knowledge Life Cycle Administration	Technical Reference Knowledge Support	Strategic Planning and Direction	Budgeting	Human Capital Planning	Info & Tech Strategic Planning	Facilities and Assets Planning	Ops, Standards, Policy, and Guidance	Communication Strategic Planning	Security Management	Performance Management	Financial Management	Acquisition and Assistance Management	Human Capital Management	Information System and Technical Management	Commissions Management	Finance Administration	Facilities Administration	Human Capital Administration	Information Systems and Technology Administration	Acquisition and Assistance Administration	Commodity/In-kind Administration
Acquisition and Assistance																												
Acquisition and Assistance Planning																												
113 Operating Unit Planning and Formation																												
114 Apply Other Considerations Affecting OU Planning and Formation																												
115 Generate Requests																												
Award Formulation																												
116 Route Action to Appropriate Process																												
117 OSD/DBU Clearance																												
118 Advertise Action																												
119 Prepare Solicitation or Grant Scope																												
120 Solicit Response																												
121 Evaluate Response																												
122 Conduct Negotiation																												
123 Execute Award																												
124 Manage Protest																												
Award Administration																												
125 Administer Award																												
126 Monitor Performance																												
127 Modify Award																												
128 Prepare Novation/Change-of-Name Agreement																												
129 Termination																												
130 Claim/Dispute Resolution																												
131 Close-out Award																												
Acquisition and Assistance Support																												
132 Audit Support of Responsibility Determination																												
133 Audit Support of Cost/Price Analysis																												
134 Monitor Annual Audit Requirements																												
135 Manage Annual Audits																												
136 Audit Support for Other Issues																												
137 Finalize NICRA																												
138 Administer Policy by OPI/P																												
139 Issue Warrants by OPI/E																												
140 Perform Systems Reviews by OPI/E																												

0494-046a

Appendix K: LDM to Operational Process Mapping

The purpose of this appendix's operational process mapping is to reduce the number of processes under evaluation in future analytical steps and evaluate process coverage by agency capabilities.

	Document							Events				Parties									
	Document	Document Confidentiality Type	Document Content	Document Document Relationship	Document Party Role Type	Document Role Type	Document Type	Document/Party Relationship	Event	Event Event Relationship	Event Event Relationship Type	Event Party Role Type	Event Type	Event/Party Relationship	Organization	Party	Party Party Relationship	Party Party Role Type	Party Role Type	Party/Party Role Type Relationship	Person
USAID HIV/AIDS Segment Overview (from Appendix B)	f	g	h	i	j	k	l	m	a	b	c	d	e	f	r	s	x	y	z	aa	bb
Program Oversight																					
Executive Guidance																					
1 Assess Needed Changes to Policies and Procedures									•				•								
2 Develop and Maintain Program Policies and Procedures									•				•								
3 Develop and Maintain Long Range Program Plan									•				•								
4 Evaluate Program Policies and Procedures									•				•								
5 Understand Internal and External Forces Affecting Programs									•				•		•	•	•		•		•
Governance																					
6 Assess Needed Changes to Governance Model																					
7 Develop and Maintain Governance Model					•			•				•		•							
8 Evaluate Program Governance Model																					
Program Standards																					
9 Assess Needed Changes to Program Standards																					
10 Develop and Maintain Program Performance Management Criteria																					
11 Develop and Maintain Technical Performance Indicators																					
12 Evaluate Program Standards																					
Program Communications																					
13 Develop Program Communications					•	•	•														
14 Develop and Maintain Program Business and Technical Architecture																	•			•	•
15 Disseminate Program Guidance																					•
16 Disseminate Program Management Information																					•
17 Disseminate Program Related Knowledge																					•
18 Evaluate Communication Plan																					
19 Identify and Recommend Changes to Agency Communications Infrastructure																					
Operational Guidance																					
20 Assess Needed Changes to Operational Guidance								•								•				•	
21 Develop and Maintain Operational Guidance								•								•				•	
22 Review & Approve Operating Unit Program Strategies								•								•				•	
23 Evaluate Program Guidance and Effectiveness								•								•				•	
24 Analyze Program Results								•								•				•	
Operational Coordination																					
25 Coordinate and Endorse Program Budget Submissions								•													•
26 Submit Program Budget for Approval								•													•
27 Monitor and Evaluate Resource Usage and Services								•													•
28 Enforce Program Guidance								•													•
29 Review and Analyze Program Management Data								•													•
Program Information																					
30 Identify Knowledge Requirements			•					•								•				•	
31 Collect and Aggregate Program Results			•			•	•	•													•
32 QA/Information Assurance		•	•			•	•	•													•
33 Respond to Program Information Requests			•			•	•	•													•
34 Collect and Consolidate "Lessons Learned"			•			•	•	•													•
35 Collect and Consolidate Programmatic Knowledge			•			•	•	•													•
Resources and Services																					
36 Analyze and Plan Support Needs									•				•								•
37 Advise and Consult									•												•
38 Develop Program Support Lessons Learned			•				•														•

0494-047

	Program Areas													Locations					Implementation Instruments										
	Common Indicator	Development Assistance Type	Operating Unit Strategic Objective/Program	Program Area	Program Area Type	Program Area Document Relationship	Program Component	Program Component Party Role	Program Component Type	Program Component/Indicator Relationship	Program Component/Party Relationship	Geographical Coordinates	Geographic Location	Geographic Location Type	Physical Location	Physical Location Relationship	Contract	Cooperative Agreement	Grant	Implementation Instrument	Implementation Instrument Type	Implementation Instrument/Document Relationship	Implementation Instrument/Financial Relationship	Implementation Instrument/Personnel Relationship	Implementation Instrument/Party Relationship	Implementation Instrument/Party Role Type	Transfer		
USAID HIV/AIDS Segment Overview (from Appendix B)	a	b	e	g	h	i	j	k	l	m	n	d	e	f	j	k	a	b	e	f	g	h	i	j	k	m			
Program Oversight																													
Executive Guidance																													
1 Assess Needed Changes to Policies and Procedures																													
2 Develop and Maintain Program Policies and Procedures																													
3 Develop and Maintain Long Range Program Plan																													
4 Evaluate Program Policies and Procedures																													
5 Understand Internal and External Forces Affecting Programs	•		•	•	•			•		•																			
Governance																													
6 Assess Needed Changes to Governance Model																													
7 Develop and Maintain Governance Model			•					•												•									
8 Evaluate Program Governance Model	•		•					•																		•			
Program Standards																													
9 Assess Needed Changes to Program Standards	•		•					•																					
10 Develop and Maintain Program Performance Management Criteria	•		•					•																					
11 Develop and Maintain Technical Performance Indicators																													
12 Evaluate Program Standards																													
Program Communications																													
13 Develop Program Communications																													
14 Develop and Maintain Program Business and Technical Architecture	•				•			•		•																			
15 Disseminate Program Guidance																													
16 Disseminate Program Management Information																													
17 Disseminate Program Related Knowledge																													
18 Evaluate Communication Plan																													
19 Identify and Recommend Changes to Agency Communications Infrastructure																													
Operational Guidance																													
20 Assess Needed Changes to Operational Guidance	•		•																		•								
21 Develop and Maintain Operational Guidance	•		•																		•								
22 Review & Approve Operating Unit Program Strategies	•		•																		•								
23 Evaluate Program Guidance and Effectiveness	•		•																		•								
24 Analyze Program Results	•		•							•											•								
Operational Coordination																													
25 Coordinate and Endorse Program Budget Submissions																						•		•					
26 Submit Program Budget for Approval																													
27 Monitor and Evaluate Resource Usage and Services	•		•							•																			
28 Enforce Program Guidance																													
29 Review and Analyze Program Management Data																						•		•					
Program Information																													
30 Identify Knowledge Requirements	•							•		•																			
31 Collect and Aggregate Program Results	•		•							•											•								
32 QA/Information Assurance																						•		•					
33 Respond to Program Information Requests	•									•																			
34 Collect and Consolidate "Lessons Learned"	•							•		•																			
35 Collect and Consolidate Programmatic Knowledge	•							•		•																			
Resources and Services																													
36 Analyze and Plan Support Needs	•		•																										
37 Advise and Consult			•							•											•						•		
38 Develop Program Support Lessons Learned	•		•					•		•												•							

0494-048

	Financial Transactions											Goals and Objectives																							
	Currency Type	Financial Transaction	Financial Transaction Status Relationship	Financial Transaction Status Type	Financial Transaction Type	Financial Transaction Document Relationship	Financial Transaction Document Type	Financial Transaction Party Relationship	Financial Transaction Party Type	Activity	Activity Document Role Type	Activity Party Relationship Role Type	Activity Performance Indicator Role Type	Activity Planning Role Type	Activity Type	Activity Performance Indicator Role Type	Activity Document Relationship	Activity Financial Transaction Relationship	Activity Party Relationship	Activity Performance Indicator Relationship	Goal	Goal Document Role Type	Goal Party Relationship Type	Goal Performance Indicator Type	Goal Type	Goal Document Relationship	Goal Performance Indicator Relationship	Operating Unit Relationship	Project	Project Physical Location Relationship	Project Status Type	Project Status Relationship	Sector		
USAID HIV/AIDS Segment Overview (from Appendix B)	c	e	f	g	h	i	j	k	a	b	c	d	e	f	g	h	i	m	n	o	p	q	r	s	t	u	y	z	aa	bb	cc				
Program Oversight																																			
Executive Guidance																																			
1 Assess Needed Changes to Policies and Procedures																																			
2 Develop and Maintain Program Policies and Procedures																																			
3 Develop and Maintain Long Range Program Plan																																			
4 Evaluate Program Policies and Procedures																																			
5 Understand Internal and External Forces Affecting Programs																																			
Governance																																			
6 Assess Needed Changes to Governance Model																																			
7 Develop and Maintain Governance Model																																			
8 Evaluate Program Governance Model																																			
Program Standards																																			
9 Assess Needed Changes to Program Standards																																			
10 Develop and Maintain Program Performance Management Criteria																																			
11 Develop and Maintain Technical Performance Indicators																																			
12 Evaluate Program Standards																																			
Program Communications																																			
13 Develop Program Communications																																			
14 Develop and Maintain Program Business and Technical Architecture																																			
15 Disseminate Program Guidance																																			
16 Disseminate Program Management Information																																			
17 Disseminate Program Related Knowledge																																			
18 Evaluate Communication Plan																																			
19 Identify and Recommend Changes to Agency Communications Infrastructure																																			
Operational Guidance																																			
20 Assess Needed Changes to Operational Guidance																																			
21 Develop and Maintain Operational Guidance																																			
22 Review & Approve Operating Unit Program Strategies																																			
23 Evaluate Program Guidance and Effectiveness																																			
24 Analyze Program Results																																			
Operational Coordination																																			
25 Coordinate and Endorse Program Budget Submissions																																			
26 Submit Program Budget for Approval																																			
27 Monitor and Evaluate Resource Usage and Services																																			
28 Enforce Program Guidance																																			
29 Review and Analyze Program Management Data																																			
Program Information																																			
30 Identify Knowledge Requirements																																			
31 Collect and Aggregate Program Results																																			
32 QA/Information Assurance																																			
33 Respond to Program Information Requests																																			
34 Collect and Consolidate "Lessons Learned"																																			
35 Collect and Consolidate Programmatic Knowledge																																			
Resources and Services																																			
36 Analyze and Plan Support Needs																																			
37 Advise and Consult																																			
38 Develop Program Support Lessons Learned																																			

0494-049

	Budgets										Funding Accounts								Assets									
	Budget	Budget Item	Budget Item Goal Relationship	Budget Item/Program Relationship	Budget Item/Account Relationship	Budget Party Role	Budget Phase Type	Budget/Phase Type Relationship	Budget Request Type	Budget Document Relationship	Budget Party Relationship	Funding Account	Funding Account Event Role Type	Funding Account Period Type	Funding Account Type	Funding Account/Budget Item Relationship	Funding Account/Budget Item Status	Funding Account/Event Relationship	Funding Account/Financial Transaction	Asset	Asset Asset Relationship	Asset Asset Relationship Type	Asset Type	Asset Document Relationship	Asset/Funding Account Relationship	Asset Party Relationship	Asset Party Relationship Role Type	Asset Physical Location Relationship
USAID HIV/AIDS Segment Overview (from Appendix B)	a	b	c	d	e	f	g	h	i	j	h	i	k	l	m	n	o	p	a	b	c	d	e	f	g	h	i	
Program Oversight																												
Executive Guidance																												
1 Assess Needed Changes to Policies and Procedures	•																											
2 Develop and Maintain Program Policies and Procedures																												
3 Develop and Maintain Long Range Program Plan																												
4 Evaluate Program Policies and Procedures																												
5 Understand Internal and External Forces Affecting Programs			•	•																								
Governance																												
6 Assess Needed Changes to Governance Model																												
7 Develop and Maintain Governance Model																												
8 Evaluate Program Governance Model																												
Program Standards																												
9 Assess Needed Changes to Program Standards																												
10 Develop and Maintain Program Performance Management Criteria																												
11 Develop and Maintain Technical Performance Indicators																												
12 Evaluate Program Standards																												
Program Communications																												
13 Develop Program Communications																												
14 Develop and Maintain Program Business and Technical Architecture																												
15 Disseminate Program Guidance																												
16 Disseminate Program Management Information																												
17 Disseminate Program Related Knowledge																												
18 Evaluate Communication Plan																												
19 Identify and Recommend Changes to Agency Communications Infrastructure																												
Operational Guidance																												
20 Assess Needed Changes to Operational Guidance																												
21 Develop and Maintain Operational Guidance																												
22 Review & Approve Operating Unit Program Strategies																												
23 Evaluate Program Guidance and Effectiveness																												
24 Analyze Program Results																												
Operational Coordination																												
25 Coordinate and Endorse Program Budget Submissions		•	•	•	•	•		•								•	•											
26 Submit Program Budget for Approval																												
27 Monitor and Evaluate Resource Usage and Services																												
28 Enforce Program Guidance																												
29 Review and Analyze Program Management Data																												
Program Information																												
30 Identify Knowledge Requirements																												
31 Collect and Aggregate Program Results			•	•																								
32 QA/Information Assurance																												
33 Respond to Program Information Requests																												
34 Collect and Consolidate "Lessons Learned"																												
35 Collect and Consolidate Programmatic Knowledge																												
Resources and Services																												
36 Analyze and Plan Support Needs			•	•																								
37 Advise and Consult			•	•																								
38 Develop Program Support Lessons Learned			•																									

0494-050

	Document							Events							Parties						
	Document	Document Confidentiality Type	Document Content	Document/Document Relationship	Document/Party Role Type	Document Role Type	Document Type	Document/Party Relationship	Event	Event/Event Relationship	Event/Event Relationship Type	Event/Party Role Type	Event Type	Event/Party Relationship	Organization	Party	Party/Party Relationship	Party/Party Role Type	Party Role Type	Party/Party Role Type Relationship	Person
	f	g	h	i	j	k	l	m	a	b	c	d	e	f	r	s	x	y	z	aa	bb
USAID HIV/AIDS Segment Overview																					
Program Operations																					
Operational Guidance																					
39									•				•		•	•			•		
40									•				•		•	•			•		
41			•												•	•			•		
Operational Coordination																					
42									•			•			•	•	•	•	•		
43									•						•	•	•	•	•		
44	•		•		•	•	•								•	•	•	•	•		
45											•				•	•	•	•	•		
46					•	•	•	•		•	•	•	•		•	•	•	•	•		
Program Information																					
47																					
48						•	•	•								•	•	•	•		
49																					
50	•		•		•	•	•	•				•				•			•		
51	•																				
52																					
53	•		•		•	•	•	•		•	•	•	•			•			•		
Resources and Services																					
54															•	•		•	•		
55									•				•								
56															•	•		•	•		
57		•	•												•	•		•	•		
58							•														
USAID HIV/AIDS Segment Financial Management																					
USAID Budget Process																					
Manage General Ledger																					
59								•													
60																					
61																					
62																					
Manage Accounts Payable																					
63																					
64																					
65																					
66																					
67																					
Manage Accounts Receivable																					
68																					
69																					
70																					
71																					
Mission Accounts Payable																					
72																					•
73																					
74																					
75																					
Mission Accounts Receivable																					
76																					
77																					
78																					•
Manage Grants																					
79																					•
80																					
Manage Funds																					
81																					•
Manage Cost Accounting																					
82																					

0494-051

	Program Areas											Physical Locations				Implementation Instruments										
	Common Indicator	Development Assistance Type	Operating Unit Strategic Objective/Program	Program Area	Program Area Type	Program Approval/Document Relationship	Program Component	Program Component Party Role	Program Component Type	Program Component/Indicator Relationship	Program Component/Party Relationship	Geographical Coordinate	Geographic Location	Geographic Location Type	Physical Location	Physical Location Relationship	Contract	Cooperative Agreement	Grant	Implementation Instrument	Implementation Instrument Type	Implementation Instrument/Document Relationship	Implementation Instrument/Financial Transaction	Implementation Instrument/Party Relationship	Implementation Instrument/Party Role	Transfer
USAID HIV/AIDS Segment Overview (a	b	e	g	h		j	k	l	m	n	d	e	f	j	k	a	b	e	f	g	h	i	j	k	m
Program Operations																										
Operational Guidance																										
39 Determine and Articulate Desired Results	•		•																		•	•				
40 Formulate Operating Plan	•		•																							
41 Obtain Approval																										
Operational Coordination																										
42 Develop Resource and Service Plans with Partners	•																•	•	•	•						
43 Negotiate Operating Plan Agreement		•		•	•		•	•																		
44 Complete Activity Planning Requirements	•	•	•	•	•		•	•	•																	
45 Coordinate Program Activities							•	•	•	•											•	•			•	
46 Monitor and Evaluate Program Performance	•		•		•	•	•	•	•	•	•										•	•		•	•	•
Program Information																										
47 Identify Operational Information Needs																										
48 Quality Assurance	•		•				•	•	•		•										•	•			•	
49 Collect and Aggregate Activity Information	•		•								•										•	•				
50 Respond to Operational Information Requests	•						•	•	•	•	•										•	•		•	•	
51 Review Portfolio																										
52 Evaluate Results	•	•	•	•	•	•	•	•	•	•	•										•	•		•	•	
53 Prepare Annual Report	•	•	•		•		•	•	•	•	•										•	•		•	•	
Resources and Services																										
54 Inventory Resources																					•	•				
55 Analyze Service and Resource Needs	•		•					•													•	•				
56 Plan Services and Resources																					•	•				
57 Draft and Execute Procurement Documents																					•	•		•	•	•
58 Develop Lessons Learned																					•	•				
USAID HIV/AIDS Segment Financial Management																										
USAID Budget Process																										
Manage General Ledger																										
59 Maintain Accounting System Information																						•		•		
60 Process Transactions																						•		•		
61 Analyze and Reconcile System Information																						•		•		
62 Generate Financial Reports																						•		•		
Manage Accounts Payable																										
63 Manage Accounts Payable Information																						•		•		
64 Record Accounts Payable																						•		•		
65 Execute Payments																						•		•		
66 Confirm Payments																										
67 Manage Accruals																										
Manage Accounts Receivable																										
68 Establish Accounts Receivable																						•		•		
69 Service Accounts Receivable																						•		•		
70 Collect Payments																						•		•		
71 Monitor Accounts Receivable																						•		•		
Mission Accounts Payable																										
72 Mission- Maintain Payee Information											•											•		•		
73 Mission- Record Transactions																						•		•		
74 Mission- Execute Payment																						•		•		
75 Mission- Confirm Payments																						•		•		
Mission Accounts Receivable																										
76 Mission- Service Accounts Receivable																						•		•		
77 Mission- Receive Collections																						•		•		
78 Mission- Monitor Aged Receivables																						•		•		
Manage Grants																										
79 Distribute Budgetary Resources																					•		•		•	
80 Control Funds																						•		•		
Manage Funds																										
81 Allocate Costs																						•		•		
Manage Cost Accounting																										
82 Manage LOC Grants																						•		•		

0494-052

	Budgets										Funding Accounts								Assets									
	Budget	Budget Item	Budget Item/Goal Relationship	Budget Item/Program Component Relationship	Budget Party Role	Budget Phase Type	Budget/Phase Type Relationship	Budget Request Type	Budget/Document Relationship	Budget/Party Relationship	Funding Account	Funding Account Event Role Type	Funding Account Period Type	Funding Account Type	Funding Account/Budget Item Relationship	Funding Account/Budget Item Status	Funding Account/Event Relationship	Funding Account/Financial Transaction	Asset	Asset/Asset Relationship	Asset/Asset Relationship Type	Asset Type	Asset/Document Relationship	Asset/Funding Account Relationship	Asset/Party Relationship	Asset/Party Relationship Role Type	Asset/Physical Location Relationship	
	a	b	c	d	e	f	g	h	i	j	h	i	k	l	m	n	o	p	a	b	c	d	e	f	g	h	i	
USAID HIV/AIDS Segment Overview																												
Program Operations																												
Operational Guidance																												
39			•																									
40		•	•	•																								
41																												
Operational Coordination																												
42																												
43		•	•								•		•	•														
44																												
45			•	•																								
46		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					•				•		
Program Information																												
47																												
48		•	•	•	•	•																						
49			•	•	•													•										
50		•	•	•	•	•				•	•	•	•	•	•	•	•							•		•		
51																												
52																												
53		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•											
Resources and Services																												
54	•	•									•								•			•				•		•
55	•	•	•								•												•			•		•
56	•	•									•								•							•		•
57		•						•																				
58											•																	
USAID HIV/AIDS Segment Financial Management																												
USAID Budget Process																												
Manage General Ledger																												
59																												
60																												
61																												
62																												
Manage Accounts Payable																												
63																												
64																												
65																												
66																												
67																												
Manage Accounts Receivable																												
68																												
69																												
70																												
71																												
Mission Accounts Payable																												
72																												
73																												
74																												
75																												
Mission Accounts Receivable																												
76																												
77																												
78																												
Manage Grants																												
79			•	•		•																						
80			•	•		•																						
Manage Funds																												
81			•	•						•																		
Manage Cost Accounting																												
82				•																								

	Document							Events					Parties								
	Document	Document Confidentiality Type	Document Content	Document Document Relationship	Document Party Role Type	Document Role Type	Document Type	Document/Party Relationship	Event	Event Event Relationship	Event Event Relationship Type	Event Party Role Type	Event Type	Event/Party Relationship	Organization	Party	Party Party Relationship	Party Party Role Type	Party Role Type	Party/Party Role Type Relationship	Person
	f	g	h	i	j	k	l	m	a	b	c	d	e	f	r	s	x	y	z	aa	bb
USAID HIV/AIDS Segment Acquisition and Assistance																					
Acquisition and Assistance																					
Acquisition and Assistance Planning																					
83 Operating Unit Planning and Formation									•				•		•	•			•		
84 Apply Other Considerations Affecting OU Planning and Formation									•				•		•	•			•		
85 Generate Requests									•				•		•	•			•		
Award Formulation																					
86 Route Action to Appropriate Process																					
87 OSDBU Clearance																			•		
88 Advertise Action																			•		
89 Prepare Solicitation or Grant Scope								•											•		
90 Solicit Response								•											•		
91 Evaluate Response								•											•		
92 Conduct Negotiation								•											•		
93 Execute Award								•											•		
94 Manage Protest																			•		
Award Administration																					
95 Administer Award		•	•					•													
96 Monitor Performance		•	•					•													
97 Modify Award		•	•					•													
98 Prepare Novation/Change-of-Name Agreement																			•		
99 Termination																					
100 Claim/Dispute Resolution																					
101 Close-out Award																					
Acquisition and Assistance Support																					
102 Audit Support of Responsibility Determination																					
103 Audit Support of Cost/Price Analysis																					
104 Monitor Annual Audit Requirements																					
105 Manage Annual Audits																					
106 Audit Support for Other Issues																					
107 Finalize NICRA																					
108 Administer Policy by OP/P			•	•				•													
109 Issue Warrants by OP/E																					
110 Perform Systems Reviews by OP/E								•											•		

0494-055

	Program Areas										Physical Locations					Implementation Instruments										
	Common Indicator	Development Assistance Type	Operating Unit Strategic Objective/Program	Program Area	Program Area Type	Program Area Document Relationship	Program Component	Program Component Party Role	Program Component Type	Program Component/Indicator Relationship	Program Component/Party Relationship	Geographical Coordinate	Geographic Location	Geographic Location Type	Physical Location	Physical Location Relationship	Contract	Cooperative Agreement	Grant	Implementation Instrument	Implementation Instrument Type	Implementation Instrument/Document Relationship	Implementation Instrument/Financial Transaction	Implementation Instrument/Party Relationship	Implementation Instrument/Party Role	Transfer
USAID HIV/AIDS Segment Acquisition and Assistance	a	b	e	g	h	i	j	k	l	m	n	d	e	f	j	k	a	b	e	f	g	h	i	j	k	m
Acquisition and Assistance																										
Acquisition and Assistance Planning																										
83 Operating Unit Planning and Formation	●		●																	●	●					
84 Apply Other Considerations Affecting OU Planning and Formation	●		●																	●	●					
85 Generate Requests	●		●																	●	●			●		
Award Formulation																										
86 Route Action to Appropriate Process																				●	●					
87 OSDDBU Clearance											●										●					
88 Advertise Action											●										●					
89 Prepare Solicitation or Grant Scope																										
90 Solicit Response																										
91 Evaluate Response																		●								
92 Conduct Negotiation																				●	●					
93 Execute Award																				●	●					
94 Manage Protest																					●				●	
Award Administration																										
95 Administer Award																				●	●					●
96 Monitor Performance	●	●	●	●	●			●	●	●											●	●				
97 Modify Award																	●	●	●		●	●	●		●	
98 Prepare Novation/Change-of-Name Agreement																	●	●	●		●	●	●		●	
99 Termination																				●	●	●	●		●	
100 Claim/Dispute Resolution																				●	●					
101 Close-out Award																				●	●					
Acquisition and Assistance Support																										
102 Audit Support of Responsibility Determination																										
103 Audit Support of Cost/Price Analysis																										
104 Monitor Annual Audit Requirements																										
105 Manage Annual Audits																										
106 Audit Support for Other Issues																										
107 Finalize NICRA																										
108 Administer Policy by OP/P																										
109 Issue Warrants by OP/E																										
110 Perform Systems Reviews by OP/E																				●	●					

0494-056

	Budgets										Funding Accounts						Assets										
	Budget	Budget Item	Budget Item/Goal Relationship	Budget Item/Program Component Relationship	Budget Party Role	Budget Phase Type	Budget/Budget Phase Type Relationship	Budget Request Type	Budget/Document Relationship	Budget/Party Relationship	Funding Account	Funding Account/Event Relationship	Funding Account Period Type	Funding Account Type	Funding Account/Budget Item Relationship	Funding Account/Budget Item Status	Funding Account/Event Relationship	Funding Account/Financial Transaction	Asset	Asset/Asset Relationship	Asset/Asset Relationship Type	Asset Type	Asset/Document Relationship	Asset/Funding Account Relationship	Asset/Party Relationship	Asset/Party Relationship/Role Type	Asset/Physical Location Relationship
USAID HIV/AIDS Segment Acquisition and Assistance	a	b	c	d	e	f	g	h	i	j	h	i	k	l	m	n	o	p	a	b	c	d	e	f	g	h	i
Acquisition and Assistance																											
Acquisition and Assistance Planning																											
83 Operating Unit Planning and Formation		•	•	•							•				•		•										
84 Apply Other Considerations Affecting OU Planning and Formation		•	•	•							•				•		•										
85 Generate Requests		•	•	•							•				•		•										
Award Formulation																											
86 Route Action to Appropriate Process																											
87 OSDBU Clearance																											
88 Advertise Action																											
89 Prepare Solicitation or Grant Scope				•																							
90 Solicit Response																											
91 Evaluate Response			•																								
92 Conduct Negotiation																											
93 Execute Award											•							•									
94 Manage Protest																											
Award Administration																											
95 Administer Award											•																
96 Monitor Performance											•																
97 Modify Award											•		•	•													
98 Prepare Novation/Change-of-Name Agreement																											
99 Termination												•															
100 Claim/Dispute Resolution																											
101 Close-out Award											•							•						•			
Acquisition and Assistance Support																											
102 Audit Support of Responsibility Determination																											
103 Audit Support of Cost/Price Analysis											•	•	•	•	•	•		•									
104 Monitor Annual Audit Requirements											•	•	•	•	•	•		•									
105 Manage Annual Audits											•	•	•	•	•	•		•									
105 Audit Support for Other Issues											•	•	•	•	•	•		•									
107 Finalize NICRA																											
108 Administer Policy by OP/P																											
109 Issue Warrants by OP/E																											
110 Perform Systems Reviews by OP/E				•																							

0494-058

Appendix L: Agency DRM to BRM Alignment

This appendix aligns the Agency’s Data Reference Model to the Agency’s Business Reference Model. Currently there is no way to directly align the two reference models. The two can be aligned through using the USAID Business Capability Map (BCM).

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment		
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities	
Services of Citizens	Community & Social Services	Homeownership Promotion					
		Community & Regional Development					
		Social Services					
		Postal Services					
	Correctional Activities	Criminal Incarceration					
		Criminal Rehabilitation					
	Defense & National Security	TBD					
	Disaster Management	Disaster Monitoring & Protection			Scenario Development	Documents	* Document Content * Document Type
						Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Disaster Preparedness & Planning			Intervention Mechanism Development	Program Areas	* Program Area Type
						Goals & Objectives	* Activity * Goal Party Relationship Type * Goal Type * Goal/Party Relationship * Project
						Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Disaster Repair & Restore			Activity Management	Financial Transactions	* Financial Transaction Type
						Goals & Objectives	* Activity * Activity Party Relationship Role Type * Activity/Party Relationship * Project

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
		Emergency Response		Resource Mobilization	Assets	<ul style="list-style-type: none"> * Asset * Asset Asset Relationship * Asset/Funding Account Relationship * Asset/Party Relationship * Asset/Physical Location Relationship
					Funding Accounts	<ul style="list-style-type: none"> * Funding Account Type
					Implementation Instruments	<ul style="list-style-type: none"> * Contract * Cooperative Agreement * Grant * Transfer * Implementation Instrument/Party Relationship
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Locations	<ul style="list-style-type: none"> * Geographic Location * Physical Location * Physical Location Relationship
	Economic Development	Business & Industry Development				
		Intellectual Property Protection				
		Financial Sector Oversight				
		Industry Sector Income Stabilization				
	Education	Elementary, Secondary & Vocational Education				
		Higher Education				
		Cultural & Historic Preservation				
		Cultural & Historic Exhibition				
	Energy	Energy Supply				
		Energy Conservation & Preparedness				
		Energy Resource Management				

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
		Energy Production				
	Environmental Management	Environmental Monitoring & Forecasting		Scenario Development	Documents	* Document Content * Document Type
				Intervention Mechanism Development	Goals & Objectives	* Activity * Goal Party Relationship Type * Goal Type * Goal/Party Relationship * Project
				Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
				Program Areas	* Program Area Type	
	Environmental Management	Environmental Remediation		Activity Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Goals & Objectives	* Activity * Activity Party Relationship * Activity/Party Relationship Role Type * Goal Type * Project
					Funding Accounts	* Funding Account Type * Funding Account/Financial Transaction Relationship
					Financial Transactions	* Financial Transaction * Financial Transaction/Party Relationship
		Pollution Prevention & Control				
	General Science & Innovation	Scientific & Technological Research & Innovation		Competency Area Development	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Space Exploration & Innovation				
	Health	Illness Prevention		Resource Deployment	Assets	* Asset * Asset Asset Relationship * Asset/Party Relationship * Asset/Physical Location Relationship

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Funding Accounts	* Funding Account Type
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Locations	* Geographic Location * Physical Location * Physical Location Relationship
				Resource Mobilization	Assets	* Asset * Asset Asset Relationship * Asset/Funding Account Relationship * Asset/Party Relationship * Asset/Physical Location Relationship
					Funding Accounts	* Funding Account Type
					Implementation Instruments	* Contract * Cooperative Agreement * Grant * Transfer * Implementation Instrument/Party Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Locations	* Geographic Location * Physical Location * Physical Location Relationship
		Immunization Management		Activity Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Goals & Objectives		* Activity * Activity Party Relationship * Activity/Party Relationship Role Type * Goal Type * Project	

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment		
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities	
		Public Health Monitoring		Activity Administration	Funding Accounts	* Funding Account Type * Funding Account/Financial Transaction Relationship	
					Financial Transactions	* Financial Transaction * Financial Transaction/Party Relationship	
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
					Goals & Objectives	* Activity * Activity Party Relationship * Activity/Party Relationship Role Type * Goal Type * Project	
					Funding Accounts	* Funding Account Type * Funding Account/Financial Transaction Relationship	
					Financial Transactions	* Financial Transaction * Financial Transaction/Party Relationship	
			Health Care Services				
			Consumer Health & Safety				
		Homeland Security	Border & Transportation Security				
			Key Asset & Critical Infrastructure Protection				
Catastrophic Defense							
Income Security	General Retirement & Disability						
	Unemployment Compensation						
	Housing Assistance						
	Food & Nutrition Assistance						
	Survivor Compensation						
Intelligence Operations	TBD						

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment		
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities	
	International Affairs & Commerce	Foreign Affairs					
		Int'l Development & Humanitarian Aid	Development Policy and Diplomacy	Policy Dialogue	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
				Policy Environment Monitoring	Events	* Event Event Relationship * Event Event Relationship Type * Event Party Role Type * Event Type * Event/Party Relationship * Event/Physical Location Relationship	
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
					Locations	* Geographic Location * Physical Location	
				Policy Communication s Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
				Policy Communication s Strategy	Documents	* Document * Document Content * Document/Party Relationship	
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
				Partnership Development	Partner Collaboration Strategic Planning	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
				Partner Engagement	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Partnership Administration	Documents	* Document * Document Content * Document/Party Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Partnership Coordination	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Partnership Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Compatibility Assessment	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Program Design	Contextual Analysis	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Goals & Objectives	* Goal Party Relationship * Goal Type * Goal/Party Relationship
					Locations	* Geographic Location * Physical Location

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
				Program Performance Planning	Documents	<ul style="list-style-type: none"> * Document * Document Content * Document/Document Relationship * Document/Party Relationship
					Goals & Objectives	<ul style="list-style-type: none"> * Activity Performance Indicator Type * Activity/Activity Performance Indicator Relationship * Activity/Party Relationship * Goal Performance Indicator Type * Goal Type * Goal/Document Relationship * Goal/Goal Performance Indicator Relationship * Goal/Party Relationship
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Program Areas	<ul style="list-style-type: none"> * Common Indicator * Program Area/Document Relationship
				Program Guidance	Documents	<ul style="list-style-type: none"> * Document Content * Document/Document Relationship * Document Type * Document/Party Relationship
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Program Component Selection	Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
				Program Resource Planning	Assets	<ul style="list-style-type: none"> * Asset Type * Asset Asset Relationship * Asset/Funding Account Relationship * Asset/Party Relationship * Asset/Physical Location Relationship
					Funding Accounts	<ul style="list-style-type: none"> * Funding Account Type
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Activity Party Relationship Role Type * Activity/Party Relationship * Goal Party Relationship * Goal Party Relationship Type * Goal/Party Relationship * Goal Type
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Program Areas	<ul style="list-style-type: none"> * Program Area Type
				Intervention Mechanism Planning	Events	<ul style="list-style-type: none"> * Event Event Relationship * Event Event Relationship Type * Event Type
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Goal Type * Project
					Program Areas	<ul style="list-style-type: none"> * Program Area Type
				Funding Instrument Strategy Development	Implementation Instruments	<ul style="list-style-type: none"> * Contract * Cooperative Agreement * Grant * Implementation Instrument * Implementation Instrument/Document Relationship * Implementation Instrument/Financial Transaction Relationship * Implementation Instrument/Party Relationship * Transfer
					Financial Transactions	<ul style="list-style-type: none"> * Financial Transaction Type * Financial Transaction/Party Relationship * Financial Transaction/Party Role Type

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Activity/Financial Transaction Roadmap * Goal Type * Goal/Party Relationship
					Funding Accounts	<ul style="list-style-type: none"> * Funding Account Type * Funding Account/Financial Transaction Relationship
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Logistics Strategy Development	Assets	<ul style="list-style-type: none"> * Asset Type * Asset Asset Relationship * Asset/Party Relationship * Asset/Physical Location Relationship
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Activity Party Relationship Role Type * Activity/Party Relationship * Goal Type * Project * Project Physical Location Relationship
					Locations	<ul style="list-style-type: none"> * Geographic Location * Physical Location * Physical Location Relationship
				Program Portfolio Management	Financial Transactions	<ul style="list-style-type: none"> * Financial Transaction Type
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Activity Party Relationship Role Type * Activity/Party Relationship * Activity Performance Indicator Type * Activity Performance Result * Goal Type * Project
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
				Program Governance	Documents	* Document * Document Content * Document/Document Relationship * Document/Party Relationship
				Program Governance	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Acquisition and Assistance Coordination	Goals & Objectives	* Activity * Activity Party Relationship Role Type * Activity/Party Relationship * Goal Type * Project
					Implementation Instruments	* Contract * Cooperative Agreement * Grant * Transfer * Implementation Instrument/Party Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Program Areas	* Program Area Type
			Activity Execution	Activity Planning	Documents	* Document * Document Content * Document/Party Relationship
					Events	* Event Type
					Goals & Objectives	* Activity * Activity Planning Step Type
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Program Areas	* Program Area Type

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
				Activity Logistics Planning	Assets	<ul style="list-style-type: none"> * Assets * Asset Asset Relationship * Asset/Document Relationship * Asset/Funding Account Relationship * Asset/Party Relationship * Asset/Physical Location Relationship
					Documents	<ul style="list-style-type: none"> * Document * Document Content * Document/Party Relationship
					Events	<ul style="list-style-type: none"> * Event/Party Role Type * Event/Physical Location Relationship
					Funding Accounts	<ul style="list-style-type: none"> * Funding Account Type
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Activity Party Relationship Type * Activity/Party Relationship * Project
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Activity Performance Management	Documents	<ul style="list-style-type: none"> * Document * Document Content * Document Document Relationship * Document/Party Relationship
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Activity Party Relationship Role Type * Activity/Party Relationship * Activity Performance Indicator Type * Activity Performance Result * Goal Type * Project
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Program Areas	* Common Indicator * Program Component * Program Component/Party Relationship
					Documents	* Document * Document Content * Document Document Relationship * Document/Party Relationship
					Goals & Objectives	* Activity * Activity Party Relationship Type * Activity/Party Relationship * Goal Party Relationship * Goal/Party Relationship * Goal Type * Project
				Acquisition and Assistance Planning	Implementation Instruments	* Contract * Cooperative Agreement * Grant * Transfer * Implementation Instrument/Document Relationship * Implementation Instrument/Financial Transaction Relationship * Implementation Instrument/Party Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Program Areas	* Program Area Type
			Internal Technical Support	Technical Support Delivery Coordination	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Technical Support Delivery Evaluation	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment		
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities	
				Technical Support Planning	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
					Goals & Objectives	* Activity * Goal Party Relationship * Goal/Party Relationship Type * Goal Type * Project	
					Technical Support Service Delivery	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
						Goals & Objectives	* Activity
					Technical Support Service Design	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
						Documents	* Document Type * Document Content * Document Document Relationship * Document/Party Relationship
					Technical Assistance Training	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
						Documents	* Document * Document Content * Document Document Relationship * Document/Party Relationship
					Knowledge Impact Assessment	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
				Knowledge Life Cycle Management	Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Knowledge Management Policy	Document	<ul style="list-style-type: none"> * Document Type * Document Content * Document Document Relationship * Document/Party Relationship
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Strategic Planning for Knowledge Management	Documents	<ul style="list-style-type: none"> * Document * Document Content * Document Document Relationship * Document/Party Relationship
					Goals & Objectives	<ul style="list-style-type: none"> * Goal Type
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Agency Business Management	Acquisition and Assistance Management	Financial Transactions	<ul style="list-style-type: none"> Financial Transaction Financial Transaction/Party Relationship
					Implementation Instruments	<ul style="list-style-type: none"> * Contract * Cooperative Agreement * Grant * Transfer * Implementation Instrument/Financial Transaction Relationship * Implementation Instrument/Party Relationship * Implementation Instrument/Party Role Type

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Assets	* Asset Asset Relationship * Asset Type * Asset/Party Relationship * Asset/Physical Location Relationship
				Facilities and Asset Planning	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Locations	* Geographic Location * Physical Location
				Communication s Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Communication s Strategic Planning	Documents	* Document Type * Document Content * Document Document Relationship * Document/Party Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Operations Standards, Policy and Guidance	Documents	* Document Type * Document Content * Document Document Relationship * Document/Party Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Global Trade				

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
	Law Enforcement	Criminal Apprehension				
		Criminal Investigation & Surveillance				
		Citizen Protection				
		Leadership Protection				
		Property Protection				
		Substance Control				
		Crime Prevention				
	Litigation & Judicial Activities	Judicial Hearings				
		Legal Defense				
		Legal Investigation				
		Legal Prosecution & Litigation				
		Resolution Facilitation				
	Natural Resources	Water Resource Management				
		Conservation, Marine & Land Management				
		Recreational Resource Management & Tourism				
		Agricultural Innovation & Services				
	Transportation	Ground Transportation				
		Water Transportation				
		Air Transportation				
		Space Operations				
	Workforce Management	Training & Employment				
Labor Rights Management						
Worker Safety						

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
Mode of Delivery	Financial Vehicles	Federal Financial Assistance	Federal Grants (Non-State)	Program Funding / Resource Coordination	Assets	* Asset/Funding Account Relationship * Asset Type * Asset/Party Relationship * Asset/Physical Location Relationship
					Funding Accounts	* Funding Account Type
					Goals & Objectives	* Activity * Activity/Party Relationship * Activity Party Relationship Role Type * Goal Party Relationship * Goal/Party Relationship Type * Goal Type * Project
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Locations		* Geographic Location * Physical Location * Physical Location Relationship	
			Direct Transfers to Individuals			
			Subsidies			
			Tax Credits			
			Credit & Insurance		Direct Loans	
					Loan Guarantees	
		General Insurance				
		Transfers to State & Local Governments	Formula Grants			
			Project/Competitive Grants			
			Earmarked Grants			
	State Loans					
	Governmental Service Delivery	Knowledge Creation & Management	Research & Development	Knowledge Architecture Development	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
			General Purpose Data & Statistics	Competency Area Development	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Advising & Consulting	Technical Reference and Knowledge Support	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Knowledge Dissemination	Knowledge Life Cycle Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Regulatory Compliance & Enforcement	Inspections & Auditing			
			Standard Setting/Reporting Guideline Development			
			Permits & Licensing			
		Public Goods Creation & Management	Manufacturing			
			Construction			
			Public Resources, Facility & Infrastructure Mgmt.			
			Information Infrastructure Management	Information Systems and Technical Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Direct Services for Citizens	Military Operations			
			Civilian Operations			

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment		
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities	
Support Delivery of Services	Controls & Oversight	Corrective Action		Policy Enforcement	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		Program Evaluation		Program Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		Program Monitoring				Program Performance Management	Documents
	Goals & Objectives						* Activity * Activity/Party Relationship * Activity Party Relationship Role Type * Activity Performance Indicator Type * Activity Performance Result * Goal Type * Project
	Parties						* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
	Program Areas						* Common Indicator * Program Component * Program Component/Party Relationship
	Financial Transactions						* Financial Transaction Type
		Program Portfolio Management	Goals & Objectives	* Activity * Activity/Party Relationship * Activity Party Relationship Role Type * Activity Performance Indicator Type * Activity Performance Result * Goal Type * Project			

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
	General Government	Central Fiscal Operations				
		Legislative Functions				
		Executive Functions				
		Central Property Management				
		Central Personnel Management				
		Taxation Management				
		Central Records & Statistics Management				
	Internal Risk Management & Mitigation	Contingency Planning				
		Continuity of Operations		Information Systems and Technical Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Service Recovery		Information Systems and Technical Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
	Legislative Relations	Legislation Tracking				
					Documents	* Document Content * Document Type * Document/Party Relationship
		Legislation Testimony			Policy Communications	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Proposal Development				

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
		Congressional Liaison Operations				
	Planning & Resource Allocation	Budget Formulation		Program Strategic Budgeting	Assets	<ul style="list-style-type: none"> * Asset/Funding Account Relationship * Asset Type * Asset Asset Relationship * Asset/Party Relationship * Asset/Physical Location Relationship
Budgets					<ul style="list-style-type: none"> * Budget * Budget Item * Budget/Document Relationship * Budget Item/Program Components * Budget/Party Relationship 	
Documents					<ul style="list-style-type: none"> * Document Content * Document 	
Goals & Objectives					<ul style="list-style-type: none"> * Activity/Party Relationship * Activity Performance Indicator Type * Activity/Activity Performance Indicator Relationship * Goal Performance Indicator Type * Goal Type * Goal/Document Relationship * Goal/Goal Performance Indicator Relationship * Goal/Party Relationship 	
Parties					<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person 	
Program Areas		<ul style="list-style-type: none"> * Common Indicator * Program Component * Program Component/Common Indicator Relationship * Program Component/Party Relationship 				
		Capital Planning				
		Enterprise Architecture		Information and Technology Strategic Planning	Assets	<ul style="list-style-type: none"> * Asset Type * Asset Asset Relationship * Asset/Party Relationship * Asset/Document Relationship

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Documents	* Document Content * Document Type * Document/Party Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Strategic Planning		Strategic Planning and Direction	Document	* Document Document Relationship * Document Content * Document Type * Document/Party Relationship
					Goals & Objectives	* Goal Type * Goal/Document Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Budget Execution		Budgeting	Budgets	* Budget * Budget Item * Budget Item/Goal Relationship * Budget/Document Relationship * Budget/Party Relationship
					Funding Accounts	* Funding Account Type * Funding Account/Budget Item Relationship
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Workforce Planning		Human Capital Planning	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person * Party Address Relationship * Party Address Type * Party Phone Contact

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment			
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities		
					Locations	* Geographic Location * Physical Location * Physical Location Relationship		
					Program Areas	* Program Area Type		
		Management Improvement			Performance Management	Documents	* Document Document Relationship * Document Content * Document Type * Document/Party Relationship	
						Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		Public Affairs	Customer Services			Communications Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Official Information Dissemination			Communications Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
	Product Outreach				Stakeholder Outreach	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
	Public Relations				Communications Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
	Regulatory Development	Policy & Guidance Development			Policy Setting	Documents	* Document * Document/Document Relationship * Document/Party Relationship	

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Public Comment Tracking		Communications Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Regulatory Creation		Policy Setting	Documents	* Document * Document/Document Relationship * Document/Party Relationship
		Regulatory Creation		Policy Setting	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Rule Publication				
	Revenue Collection	Debt Collection				
	Revenue Collection	User Free Collection				
	Revenue Collection	Federal Asset Sales				

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment		
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities	
Management of Government Resources	Administrative Management	Facilities, Fleet & Equipment Management		Facilities Administration	Assets	* Asset Type * Asset Asset Relationship * Asset/Party Relationship * Asset/Physical Location Relationship	
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
					Locations	* Geographic Location * Physical Location	
		Help Desk Services		Information Systems and Technology Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		Security Management		Security Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		Travel		Human Capital Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
	Financial Management	Accounting			Budgeting	Budgets	* Budget * Budget Item * Budget Item/Goal Relationship * Budget/Document Relationship * Budget/Party Relationship
						Funding Accounts	* Funding Account Type * Funding Account/Budget Item Relationship

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Budget & Finance		Budgeting	Budgets	<ul style="list-style-type: none"> * Budget * Budget Item * Budget Item/Goal Relationship * Budget/Document Relationship * Budget/Party Relationship
					Funding Accounts	<ul style="list-style-type: none"> * Funding Account Type * Funding Account/Budget Item Relationship
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Payments		Finance Administration	Financial Transactions	<ul style="list-style-type: none"> * Financial Transaction Type * Financial Transaction/Party Relationship * Financial Transaction/Party Role Type
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Collections & Receivables		Finance Administration	Financial Transactions	<ul style="list-style-type: none"> * Financial Transaction Type * Financial Transaction/Party Relationship * Financial Transaction/Party Role Type
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Asset & Liability Management		Financial Management	Documents	<ul style="list-style-type: none"> * Document Content * Document Type * Document Document Relationship * Document/Party Relationship

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Financial Transactions	* Financial Transaction Status Relationship * Financial Transaction Type * Financial Transaction/Document Relationship * Financial Transaction/Party Relationship * Financial Transaction/Party Role Type
					Funding Accounts	* Funding Account Type
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Reporting & Information		Financial Management	Documents	* Document Content * Document Type * Document Document Relationship * Document/Party Relationship
					Financial Transactions	* Financial Transaction Status Relationship * Financial Transaction Type * Financial Transaction/Document Relationship * Financial Transaction/Party Relationship * Financial Transaction/Party Role Type
					Funding Accounts	* Funding Account Type
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
Human Resource Management	Benefits Management				Administration of Medical Benefits	Human Capital Administration

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
			Administration of Insurance Benefits	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Administration of Disability Benefits	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Administration of Retirement Benefits	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Personnel Management	Personnel Action Processing	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Employee Tracking	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Position Classification & Management	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Discipline/Grievance	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
			Advancement (Merit Promotion?)	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Awards	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Labor/Employee Relations	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			EEO	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Diversity Planning	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Pre-Employment Drug Testing	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Random Drug Testing	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
			Worker's Compensation	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Administration of Employee Evaluations	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Payroll Management & Expense Reimbursement	Administration & Determination of Employee Compensation	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Resource Training & Development	Employee Training	Human Capital Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Clearance Investigations	Human Capital Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Security Clearance Management	Eligibility Determinations	Human Capital Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
			Clearance Tracking	Human Capital Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
		Staff Recruitment & Employment	Recruit	Human Capital Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
				Human Capital Planning	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person * Party Address Relationship * Party Address Type * Party Phone Contact
					Locations	* Geographic Location * Physical Location * Physical Location Relationship
					Program Areas	* Program Area Type
	Information & Technology Management	System Development		Information Systems and Technology Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Lifecycle/Change Management		Information Systems and Technical Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		System Maintenance		Information Systems and Technical Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		IT Infrastructure Maintenance		Information and Technology Strategic Planning	Assets	* Asset Type * Asset Asset Relationship * Asset/Party Relationship * Asset/Document Relationship
					Documents	* Document Content * Document Type * Document/Party Relationship

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment		
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities	
					Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		IT Security		Information Systems and Technical Management	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		Record Retention		Information Systems and Technology Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
		Information Management		Information Systems and Technology Administration	Parties	* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	
	Supply Chain Management	Goods Acquisition			Acquisition and Assistance Administration	Implementation Instruments	* Contract * Cooperative Agreement * Grant * Transfer * Implementation Instrument/Document Relationship * Implementation Instrument/Financial Transaction Relationship * Implementation Instrument/Party Relationship
	Parties					* Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person	

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
		Inventory Control		Acquisition and Assistance Administration	Implementation Instruments	<ul style="list-style-type: none"> * Contract * Cooperative Agreement * Grant * Transfer * Implementation Instrument/Document Relationship * Implementation Instrument/Financial Transaction Relationship * Implementation Instrument/Party Relationship
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
		Logistics Management		Logistics Coordination	Assets	<ul style="list-style-type: none"> * Asset * Asset Asset Relationship * Asset/Party Relationship * Asset/Physical Location Relationship * Asset/Funding Account Relationship
					Funding Accounts	<ul style="list-style-type: none"> * Funding Account Type
					Goals & Objectives	<ul style="list-style-type: none"> * Activity * Activity/Party Relationship * Activity/Party Relationship Type * Project
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person
					Locations	<ul style="list-style-type: none"> * Geographic Location * Physical Location * Physical Location Relationship
		Services Acquisition		Technical Support Service-Level Agreement (SLA) Management	Documents	<ul style="list-style-type: none"> * Document * Document Content * Document Document Relationship * Document/Party Relationship

FEA BRM			USAID BCM Alignment		USAID FEA DRM Alignment	
Business Areas	Lines of Business	Sub-Functions	Sub-Categories	USAID Capability	Subject Areas	Entities
					Parties	<ul style="list-style-type: none"> * Organization * Party Party Relationship * Party Party Role Type * Party Role Type * Party/Party Role Type Relationship * Person

Appendix M: LDM Development Detail

Step 1 – Define Procedures and Conventions

To ensure LDM and Data Dictionary consistency and track all changes to the LDM and Data Dictionary, procedures and conventions that guided the data modeling effort were defined. Procedures were written to govern data modeling preparation, data modeling sessions, and quality assurance checks. These procedures were developed based on the IBM Global Services (GS) Ascendant methodology and are listed next in Step 2 – Develop Logical Data Model. The USAID Data Architecture Data Modeling Conventions were defined to provide guidelines for LDM creation and maintenance. In addition, specific naming conventions were identified for the LDM and codified in the Data Dictionary.

Step 2 – Develop Logical Data Model and Data Dictionary

While developing the LDM and Data Dictionary, an iterative process was followed to gather information regarding new data requirements, definitions, and supporting detail.

Step 2.1 – Data Analysis

The DRM development approach for data context and data description will follow the tenets espoused in USAID’s EA Method Whitepaper (March 2005 Update). Top-down exercises consist of modeling the data required by BRM processes that support program operations and activity execution capabilities. These data entity types and key attributes are then modeled into Enterprise Data Model (EDM) subject areas and sub-subject areas. Concurrently, bottom up modeling is conducted by identifying, collecting, analyzing, consolidating existing Bureau and OU logical data models (and physical models if necessary) into the EDM subject and sub-subject areas.

Step 2.2 – Update USAID Data Architecture LDM

The data requirements and the source of each requirement were reviewed and documented in the LDM. During this step, the following procedures within the Ascendant methodology were implemented to capture the metadata requirements. Appendix D: Data Modeling Concepts, provides methodology term definitions.

- Identify the major entity types of importance to the agency. These entity types represent business objects that stand alone and are not dependent on any other entity, and are known as “kernel” entity types.
- Assign each identified kernel entity type to its own subject area. The Ascendant methodology uses a hierarchy of subject areas as a mechanism for organizing and partitioning the complexities of the data objects into optimally cohesive groupings. The kernel entity type provides the backbone, and should be the focus, of the lowest level subject area within the hierarchy of subject areas. Therefore, the new subject area is usually named as the plural of the kernel entity.
- For each kernel entity type, identify related “characteristic” entity types that would further define and describe the kernel entity type. As these related entity types are discovered, their relationships to the kernel and other entity types should be made explicit as well. As entities are identified, draft definitions are developed for inclusion in the Data Dictionary.
- As necessary, develop “associative” entity types to explicitly describe and resolve many to many relationships between entity types. When an associative entity type relates two kernel entity types, a decision must be made as to which subject area the associative entity type will reside, as any entity type must reside in only one lowest level subject area. The chosen subject areas can be somewhat subjective in this case.

- To further define and understand the documented entity types, as well as to enable the discovery of additional related entity types, identify major attributes of the entity types. Use this discovery process to enhance Data Dictionary entity definitions.
- Iterate these steps to determine if the entity types, relationships, and subject area organization are still appropriately defined. Adjust accordingly and proceed through this process iteratively as additional data, functionality, and requirements are identified.

It should be noted that the iterative process mentioned in the last procedure is important to the accurate understanding of the agency's data, data definitions, and related business rules. Without this iteration, the result would be strictly a top down analysis process. A drawback to the top down approach is that the analysis focal point is on the lines of business within an organization. These organizations develop and manage their data based on the inner workings of their business units. As such, data and systems are tightly bound to the “problem at hand”, lacking a more holistic perspective. The iterative process provides a mechanism to “look back” at the previously established data object and organization and refine along a more integrated and agency wide perspective with the following advantages:

- Redundancy and organizational stovepipes of agency data assets are minimized.
- USAID data assets are objectively bound and defined.
- The organization of data assets is defined, consistent, and data centric and not based upon functional organization, data access path, reporting patterns, etc.
- As operational perspectives on data change more rapidly than the data used by the operations, the data centric approach provides for a more stable data foundation.

It should also be noted that during these iterations, not all procedures need be done in strict sequential order. For example, as a first cut at a data architectural model, the subject areas and kernels would at first be identified, which could then lead back to more subject areas being identified with further kernel entity types. As necessary, the more detailed steps can be carried out to further identify and define the agency's data. These detailed steps may also reveal business rules that require a refinement of the kernels entity types or subject area organization.

Step 2.3 – Conduct Data Architecture Modeling Sessions

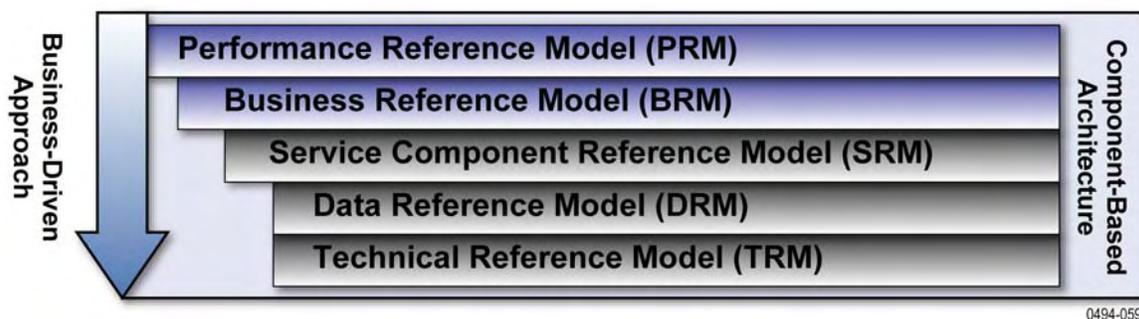
Using information gathered through the data analysis phase, the Data Architecture team conducted data modeling sessions to incrementally develop the USAID Data Architecture LDM and Data Dictionary. Through these sessions, the team reviewed information identified in the LDM to ensure that metadata was complete, consistent, and compatible with USAID Data Architecture LDM objectives, which included the minimization of data redundancy and elimination of update anomalies by normalizing the data in the model. During the data modeling sessions, the team also:

- Identified any deviations from the modeling conventions;
- Checked each component definition for accuracy and plain language;
- Checked each component of the LDM for consistency, compliance, and fit; and
- Identified new data requirements stemming from the new analysis.

Step 3 – Align USAID Data Architecture to the Federal Enterprise Architecture (FEA) Program Management Office (PMO) Data Reference Model

Concurrent with development of the USAID Data Architecture is the alignment of the USAID Data Architecture LDM components to the Federal Enterprise Architecture (FEA) Program Management Office (PMO) Data Reference Model (DRM). The Office of Management and Budget (OMB) is developing a business-oriented framework for Government-wide improvement, the Federal Enterprise Architecture (FEA), as a component to transform the Government into one that is citizen-centered, results oriented, and market-based.

As the figure below illustrates, the FEA is constructed through a collection of interrelated “reference models” designed to facilitate cross-agency analysis and the identification of duplicative investments, gaps, and opportunities for collaboration within and across Federal Agencies.¹



The DRM, as a component reference model of the FEA, is intended to provide a common and consistent way to categorize, describe, and share data across the federal government through its standardization of data in the following three areas:

- Data Context – A standard approach to representing taxonomies that an agency uses to categorize its data. Such categorization enables the business context of data to be well understood. It is a key capability for data discovery – enabling end users to search and find data relevant to their needs.
- Data Sharing – A standard approach to the sharing and exchange of data amongst agencies or communities of interest, including data sources. It defines a standard message structure known as an Exchange Package.
- Data Description – A standard approach to describing an agency’s structured, semi structured, and unstructured data.² This part of the DRM provides a format for selected metadata.

Step 3.1 – Abstraction within the Data Architecture

It is advantageous to leave a level of abstraction in the Data Architecture. Some of these are:

- The models that are produced are more flexible and adaptable to change, as an abstract kernel entity type introduces relationships that also can be abstracted. These specific relationships are then documented as enumerated roles via valid values, resulting in models that are more data driven than structure driven. Data driven models are more flexible and adaptable to change since a relationship in a model is easier to add, modify, or delete if it is documented as a role value instead of an explicit relationship structure. For example, if a relationship role is documented incorrectly within a valid

¹ <http://www.whitehouse.gov/omb/egov/a-2-EAModelsNEW2.html>

² Drawn partly from FEA Consolidated Reference Model Document, May 2005, pg. 80

value enumeration, it can easily be changed. Similarly, if a relationship is determined to be omitted, or a requirement for a new relationship is observed, it can be readily added to the enumeration. All this can be done without changing any structures of the model itself.

- The models are made less complex and visually cluttered because shared attributes and relationships that exist between more detailed subtype entity types can be documented in one place within the supertype subject area. For example, the Organization and Person entity types both have associated addresses, and therefore identical relationships to the Address entity type. By introducing the abstract Party Kernel entity type, both these relationships can be resolved once within the Party subject area.
- Similarly, the model can be made less complex and easier to understand since the types of Address associations, i.e. Shipping Address, Billing Address, Home Address, etc. can be documented by enumerating these valid values in only one place.
- Relationship roles enumerated in one place can be used as a tool to elicit user input of any missing or invalid relationships that may exist between entity types. And as previously noted, if corrections are needed to the enumeration, these valid values can be readily added to, modified, or deleted due to the data driven nature of this enumeration.
- The use of abstract kernel entity types also introduces corresponding subject areas. These more generalized subject areas contribute to the overall categorization of the Data Architecture. Therefore, the organization of subject areas from generalized to more detailed provides for a data centric taxonomy that aligns with the DRM.
- The addition of abstract structures provides for a further level of granularity as deemed appropriate – a 10,000 foot level or 10 foot level.
- Finally, abstract super-types represent a level of generalization applicable across LOBs, modes, and possibly even agencies. As such, it is possible that using these abstract kernel entity types will facilitate data integration across other agencies. For example, an Asset kernel entity type is sufficiently generalized to be applicable to both the USAID and the DOS. The more detailed subtypes of Asset that are within the scope of the USAID are currently represented in the USAID Asset model.

Step 3.2 – As-Is and To-Be Models

An input to the Data Architecture has been the analysis of as-is physical and logical data models, as well as other as-is data artifacts that document the existing data, relationships, and corresponding business rules of the agency. As these as-is data artifacts are analyzed and synthesized, the resulting data structures are normalized and abstracted, redundancies are identified and eliminated, and the resulting models are developed so as to be independent of specific system or DBMS implementation.

This process can result in structures that are more flexible, and/or be less complex, and renamed to conform to the Data Architecture’s naming conventions, in accordance with the objectives of the logical models. The structures therefore may look quite different than the physical data artifacts that were used as inputs to the process. Consequently, this process can inherently result in data structures with a to-be orientation.

It should be noted that the resulting data model is in this case considered to be a conceptually to-be model, but logical as-is and to-be analysis must be completed in order to make the model practicable. The Data Architecture inventories, defines and standardizes agency-wide data assets and related business rules to determine data that is common, redundant, and shared across Bureaus, Missions, and State Department. Although these models can provide insight and be used as input into how data could be logically structured, organized, and shared in potential systems development, the focus was not to resolve or document data requirements that are not presently being met by existing systems, as this requires additional SME input.

Step 3.3 – Other Modeling Characteristic

Finally, other aspects of the modeling approach included:

- The data models make use of, or were reconciled with, generic data models available in industry – including the models available from David Hay and Len Silverston³.
- Key entity types can be illustrated in two or more subject area diagrams in order to represent key relationships that span subject areas. An entity type repeated outside its primary subject area is depicted as un-shaded. For instance, the Party entity type appears un-shaded on several subject area data models.
- Sometimes, relationships are not displayed even when intuition would suggest a relationship. This may be for any one of a number of reasons, e.g., the relationship may be derived through several entities, or the relationship is not tracked now nor is there any pressing need to track it.
- An entity subtype is created when there are known or anticipated unique data attributes of the subtype. However, in some situations an entity subtype may be created to explicitly show a data requirement or to clarify the model. It is not known whether all these subtypes will indeed have unique attributes, but are shown to further describe and enumerate the types of entities that can exist. In this case, they are documented in the System Architect tool as logical-only constructs.
- Information engineering diagramming techniques are used in the entity-relationship diagrams comprising the subject area data models.

³ Recognized industry authorities on data modeling who have published generic data models for re-use. See references in Appendix C.