

Memorial Benefits Management System

First Notice of Death Enhancements



**System Design Document Version 1.0
Created May 2014 (Updated November 2014)**

**Department of Veterans Affairs
Office of Information and Technology
Product Development**

Revision History

Date	Version	Description	Author
09/03/2014	1.0	Removed UI screen shots per PjM guidance. Implemented additional changes at request of NCA. This version is re-baselined and the PDF signed for up to and including section 3.	OI&T PD MBMS

Artifact Rationale

The System Design Document (SDD) is a dual-use document that provides the conceptual design as well as the as-built design. This document will be updated as the product is built, to reflect the as-built product. Per the Project Management Accountability System (PMAS) Guide, the SDD as a conceptual design is required prior to the Milestone 1 Review. (Sections 1, 2, 3, 4, 5, 7, 9 need to be populated, as applicable.) The as-built design for each delivery must be incorporated prior to the Milestone 2 Review. (The entire document needs to be populated or updated, as applicable.)

Instructions

The System Design Document (SDD) is a general purpose document that is use to specify the design of new systems including Custom Development, Software as a Service, Hosted Services; modifications or updates to an existing system. Therefore, all sections may not apply to system being designed. Any sections not applicable to the current effort must be marked N/A.

Table of Contents

1. INTRODUCTION.....	8
1.1. Purpose of the SDD	8
1.2. Identification.....	8
1.3. Scope	8
1.4. Constraining Policies, Directives and Procedures	8
1.5. User Characteristics.....	9
1.5.1. User Problem Statement	9
1.5.2. User Objectives	9
1.6. Relationship to Other Documents and Plans	9
1.7. Definitions, Acronyms, and Abbreviations	9
1.8. References	11
2. BACKGROUND.....	12
2.1. Overview of the System	12
2.2. Overview of the Business Process	12
2.3. Business Benefits	15
2.4. Assumptions and Constraints.....	15
2.4.1. Design Assumptions.....	15
2.4.2. Design Constraints	15
2.4.3. Design Trade-offs.....	16
2.5. Overview of the Significant Requirements	16
2.5.1. Overview of Significant Functional Requirements.....	16
2.5.2. Overview of Functional Workload / Performance Requirements	21
2.5.3. Overview of Operational Requirements	21
2.5.4. Overview of the Technical Requirements.....	22
2.5.5. Overview of the Security or Privacy Requirements	22
2.5.6. Overview of System Criticality and High Availability Requirements.....	22
2.5.7. Single Sign-on Requirement.....	22
2.5.8. Requirement for Use of Enterprise Portals.....	22
2.5.9. Special Device Requirements.....	22
2.6. Legacy System Retirement	23
3. CONCEPTUAL DESIGN	24
3.1. Conceptual Application Design.....	24

3.1.1.	Application Context	24
3.1.2.	High-Level Application Design	25
3.1.3.	Application Locations.....	37
3.2.	Conceptual Data Design	38
3.2.1.	Project Conceptual Data Model.....	38
3.2.2.	Database Information	52
3.2.3.	User Interface Data Mapping.....	52
3.3.	Conceptual Infrastructure Design	69
3.3.1.	System Criticality and High Availability.....	70
3.3.2.	Special Technology	70
3.3.3.	Technology Locations	70
3.3.4.	Conceptual Infrastructure Diagram	71
4.	SYSTEM ARCHITECTURE.....	ERROR! BOOKMARK NOT DEFINED.
4.1.	Hardware Architecture.....	Error! Bookmark not defined.
4.2.	Software Architecture	Error! Bookmark not defined.
4.3.	Network Architecture.....	Error! Bookmark not defined.
4.4.	Service Oriented Architecture / ESS	Error! Bookmark not defined.
4.5.	Enterprise Architecture	Error! Bookmark not defined.
5.	DATA DESIGN	74
5.1.	DBMS Files	74
5.2.	Non-DBMS Files.....	74
5.3.	Data View.....	75
6.	DETAILED DESIGN.....	ERROR! BOOKMARK NOT DEFINED.
6.1.	Hardware Detailed Design.....	Error! Bookmark not defined.
6.2.	Software Detailed Design	Error! Bookmark not defined.
6.2.1.	Conceptual Design	Error! Bookmark not defined.
6.2.2.	Specific Requirements	Error! Bookmark not defined.
6.3.	Network Detailed Design	Error! Bookmark not defined.
6.4.	Service Oriented Architecture / ESS Detailed Design	Error! Bookmark not defined.
6.4.1.	Service Description for <Consumed Service Name>	Error! Bookmark not defined.
6.4.2.	Service Design for <Provided Service Name>	Error! Bookmark not defined.
7.	EXTERNAL SYSTEM INTERFACE DESIGN	76

7.1.	Interface Architecture	91
7.2.	Interface Detailed Design	91
8.	HUMAN-MACHINE INTERFACE.....	94
8.1.	Interface Design Rules.....	94
8.2.	Inputs.....	94
8.3.	Outputs	94
8.4.	Navigation Hierarchy.....	94
8.4.1.	Screen [x.1]	94
8.4.2.	Screen [x.2]	95
8.4.3.	Screen [x.3]	95
9.	SECURITY AND PRIVACY	96
9.1.	Security	96
9.2.	Privacy	96
A.	ATTACHMENT A – APPROVAL SIGNATURES	97
B.	ADDITIONAL INFORMATION	98
B.1.	RTM	98
B.2.	Packaging and Installation.....	98
B.3.	Design Metrics	98
B.4.	Acronym List and Glossary	98
B.5.	Required Technical Documents	98

List of Tables

TABLE 1: GLOSSARY	9
TABLE 2: ACRONYMS	10
TABLE 3: FNOD SDD REFERENCES.....	11
TABLE 4: FNOD FUNCTIONAL REQUIREMENTS.....	16
TABLE 5: FNOD WORKLOAD AND PERFORMANCE REQUIREMENTS	21
TABLE 6: FNOD OPERATIONAL REQUIREMENTS.....	21
TABLE 7: FNOD SECURITY REQUIREMENTS	22
TABLE 8: OBJECT	24
TABLE 9: FNOD SCREEN FLOW AND ACTIVITY DIAGRAMS	37
TABLE 10: APPLICATION LOCATIONS.....	38
TABLE 11: APPLICATION USERS	38
TABLE 12: ACTIVITY_TYPE TABLE	39
TABLE 13: APP_ROLE TABLE	40
TABLE 14: APP_USER TABLE	40
TABLE 15: APP_USER_ROLE TABLE	41
TABLE 16: ATTACHMENT_TYPE TABLE	41
TABLE 17: AUDIT_ACTIVITY TABLE.....	41
TABLE 18: AUDIT_CHANGE TABLE	42
TABLE 19: CASE_ADDRESS TABLE	42
TABLE 20: CASE_ATTACHMENT TABLE	42
TABLE 21: CASE_DATA TABLE	43
TABLE 22: CASE_FLAG_APP TABLE	45
TABLE 23: CASE_INSURANCE TABLE	45
TABLE 24: CASE_LINK TABLE.....	46
TABLE 25: CASE_TYPE TABLE	47
TABLE 26: FNOD_RECORD TABLE	47
TABLE 27: RANDOM_SAMPLE TABLE.....	49
TABLE 28: REGION TABLE	49
TABLE 29: REGIONAL_OFFICE TABLE	50
TABLE 30: REPORT TABLE	50
TABLE 31: SAMPLES TABLE	50
TABLE 32: SOURCE_CASE_TYPE_MAP TABLE	50
TABLE 33: SOURCE_SYSTEM TABLE	51
TABLE 34: SYSTEM_PARAMETERS TABLE	51
TABLE 35: FNOD TEMPORARY GLOBAL TABLES.....	51
TABLE 36: FNOD LOGIN SCREEN CONTROLS.....	53
TABLE 37: CONTROLS FOR THE SELECT SOURCE CASE TYPE SCREEN	53
TABLE 38: CONTROLS OF THE FILTER FLAG APPLICATIONS SCREEN.....	54
TABLE 39: CONTROLS FOR THE FILTER PENDING CASES SCREEN	54
TABLE 40: CONTROLS FOR THE FNOD RECORD SCREEN.....	55
TABLE 41: CONTROLS FOR THE PARKING LOT RESULTS SCREEN.....	57
TABLE 42: CONTROLS FOR THE USER PROFILE PASSWORD CHANGE SCREEN	57
TABLE 43: CONTROLS FOR THE SYSTEM ADMINISTRATOR USER PROFILE SCREEN.....	58
TABLE 44: CONTROLS FOR THE SEARCH FNOD RECORD SCREEN FOR PSA USER	58
TABLE 45: CONTROLS FOR THE SEARCH FNOD RECORD SCREEN FOR SUPERVISOR	59
TABLE 46: CONTROLS FOR THE FNOD RECORD SEARCH RESULTS SCREEN	60
TABLE 47: CONTROLS FOR THE AGGREGATE COUNTS SCREEN	61
TABLE 48: CONTROLS FOR THE AWARD AUDIT SCREEN.....	61
TABLE 49: CONTROLS FOR THE PENDING CASES DISPLAY	64
TABLE 50: CONTROLS FOR THE SAMPLE COMPLETED CASES SEARCH RESULTS SCREEN.....	65
TABLE 51: CONTROLS FOR THE FNOD REPORT FOR PRINTING AND DOWNLOAD SCREEN.....	67

TABLE 52: GLOBAL TEMPORARY TABLES FOR TRANSIENT DATA FROM GENERATED REPORT	68
TABLE 53: SYSTEM_PARAMETERS TABLE	68
TABLE 54: SAMPLES TABLE	69
TABLE 55: SOURCE_CASE_TYPE_MAP TABLE	69
TABLE 56: SOURCE_SYSTEM TABLE	69
TABLE 57: FNOD TECHNOLOGY LOCATION DETAILS (PRODUCTION 1)	70

List of Figures

FIGURE 1: NODS FROM EXTERNAL SYSTEMS.....	12
FIGURE 2: PSA CASE VERIFICATION	13
FIGURE 3: FNOD APPLICATION WORKFLOW	14
FIGURE 4: FNOD END-OF-DAY REPORT.....	15
FIGURE 5: FNOD APPLICATION CONTEXT	24
FIGURE 6: FNOD LOG IN DIAGRAM.....	26
FIGURE 7: FNOD PROCESS CASE DIAGRAM	27
FIGURE 8: FNOD PARKED LIST DIAGRAM.....	28
FIGURE 9: FNOD UPDATE FLOW DIAGRAM	28
FIGURE 10: PRINT DIAGRAM	29
FIGURE 11: FNOD REPORTS DIAGRAM	30
FIGURE 12: PENDING CASE COUNTS DIAGRAM	31
FIGURE 13: SAMPLE CASES DIAGRAM	32
FIGURE 14: SAMPLE FNOD DIAGRAM.....	33
FIGURE 15: FNOD REVIEW CAPTURE DIAGRAM	34
FIGURE 16: FNOD CREATE NEW USER ACCOUNT DIAGRAM	35
FIGURE 17: UPDATE USER ACCOUNT DIAGRAM	36
FIGURE 18: FNOD CONCEPTUAL DATA MODEL	39
FIGURE 19: FNOD DEPLOYMENT ENVIRONMENT	70
FIGURE 20: FNOD ENVIRONMENTS AND EXTERNAL INTERFACES	71

1. INTRODUCTION

FNOD processing establishes or updates the Veteran's Beneficiary Identification and Records Locator Subsystem record when the Veteran dies and automatically cancels any benefits being paid to reduce or eliminate overpayments.

FNOD enhancements are needed to reduce or eliminate data entry errors, help users meet performance standards, provide accurate reports, and allow management to review work performance, delegate assignments, and manage overtime. The FNOD Enhancement will enable users to create records and to store, query, retrieve, print, and update record information. Users will also be able to associate and save one or more document(s) to the record. This will provide time saving workflow and will improve quality of data, a new form of reporting capabilities and user creation of ad-hoc queries.

1.1. Purpose of the SDD

This document records the design of the FNOD enhancement project. This document provides an overview of the design involved in the implementation of First Notice of Death (FNOD) application enhancements.

1.2. Identification

This application will automate the processing of Notice of Death (NOD) Cases to create FNOD Records and provide reporting and auditing to assist management. The application will replace the existing paper-based process.

1.3. Scope

The scope of the FNOD project will provide an automated system that creates a unique electronic document of each Flag Application case, Automated Monument Application System (AMAS) case, AMAS Spouse case, Burial Operation Support System (BOSS) case, BOSS Spouse case, Arlington case, Arlington Spouse case, Insurance case, and Prudential case. In addition, this project will enable each case to be viewed individually and easily on the user's monitor screen and to be used to update Share. The scope of this project should eliminate manual processing associated with approximately 385,000 Flag Applications and approximately 280,000 AMAS, BOSS, Arlington, Insurance, Prudential, system records annually.

The scope of the FNOD enhancement will achieve the following.

- Users will be able to create a record; store, query, retrieve, print, and update record information; and save one or more documents to record as desired.
- Metrics of employee's/reviewers performances will be recorded automatically when FNOD records are created and parked by each user.

1.4. Constraining Policies, Directives and Procedures

The technology stack to develop FNOD application and meet the project requirements will be selected from the permissible range of technologies listed in One-VA TRM. All VA privacy, security, and 508 requirements will be adhered to.

1.5. User Characteristics

Authorized FNOD Office Supervisors and FNOD PSAs will have access to the new FNOD Application.

- **Office Supervisor User:** A person that supervises the FNOD PSA but also may create or modify an FNOD record
- **PSA User:** Employee at the FNOD office that creates and modifies FNOD records

1.5.1. User Problem Statement

Notice of deaths are received by the FNOD office in the form of hard copy Burial Operations Support System (BOSS), Automated Monument Application System (AMAS), BOSS Spouse, AMAS Spouse, Arlington, Arlington Spouse, Prudential and Insurance reports, and hard-copy Flag Applications. Tasks for the FNOD office include retrieving, printing, separating and distributing the printed reports and Flag Applications prior to processing by the FNOD office staff.

All work is self-reported to the supervisor who tabulates the results and prepares an electronic spreadsheet to use in workload measurement, staffing assignments, planning, and management reporting. There is not an automated way to accurately track the pending and processed FNOD records resulting in valuable resources being used for the processing, printing, and storage of hard-copy documents.

1.5.2. User Objectives

The FNOD Users want an automated system that will allow a user to create and update FNOD records, query for FNOD records, capture and verify awards, and generate reports. The system will also create an audit trail of all activity with the FNOD records. The new system will provide supervisors with the ability to track work of the PSA User, manage the workload assignments, and generate management reports.

1.6. Relationship to Other Documents and Plans

This document relies on information gathered from the following documents.

- [First Notice of Death Business \(FNOD\) Requirement Document \(BRD\)](#)
- [FNOD Requirements Specification Document \(RSD\)](#)

Note: TSPR links to these documents will be provided once they become available.

1.7. Definitions, Acronyms, and Abbreviations

Table 1: Glossary

Term	Definition
Applicant	The individual applying for the United States Burial Flag
Case information	Information that contains all the necessary attributes related to notice of death.
Electronic document	For Flag App Case: Created during the scanning process and contains all images associated with each Flag App Case received
First Notice of Death	Processing a FNOD transaction within Share, documents the Veteran's death and causes the system to stop any benefit being paid

Term	Definition
Flag Application (App)	VA Form 21-2008 Application For United States Flag For Burial Purposes
Share	A Microsoft Windows-based application to access BIRLS, Compensation and Pension (C&P) Master Records, and other VA Applications (Share is not an acronym and is used to update BIRLS)

Table 2: Acronyms

Term	Meaning
ADD	Activity Diagram Document
AMAS	Automated Monument Application System
ANT	ANother build Tool
API	Application Programming Interface
APP	Application
BIRLS	Beneficiary Identification and Records Locator Subsystem
BIRT	Business Intelligence and Reporting Tools
BOSS	Burial Operations Support System
C&P	Compensation and Pension
CR	Change Request
CRL	Certificate Revocation Lists
CSV	Comma Separated Value
DOI	Date of Interment
ENTR	Enterprise
FNOD	First Notice of Death
FRD	Functional Requirements Document
ID	Identification
JPA	Java Persistence API
JSF	Java Server Faces
MALE	Memorial Affairs Legacy Enhancements
MVC	Model-View-Controller
NCA	National Cemetery Administration
NOD	Notice of Death
PDF	Portable Document Format
PII	Personally Identifiable Information
PSA	Program Support Assistant

Term	Meaning
RSD	Requirements Specification Document
QITC	Quantico Information Data Center
SHA	Secure Hash Algorithm
SOA	Service Oriented Architecture
SSL	Secure Socket Layer
TTL	Time to Live
TRM	Technical Reference Model
VA	Department of Veterans Affairs
VHA	Veterans Health Administration
VLER	Virtual Lifetime Electronic Record

1.8. References

The following documents were referenced for the creation of this SSD.

Note: TSPR links to documents in the table below will be provided once they become available.

Table 3: FNOD SDD References

Document	Published by	Date
FNOD Business Requirements Document	National Cemetery Administration (NCA)	May 2014
FNOD Requirements Specifications Document	OI&T PD	August 2014
FNOD Acceptance Criteria Plan	OI&T PD	August 2014
FNOD Requirements Traceability Matrix	OI&T PD	August 2014
Memorial Benefits Management System (MBMS) Program Charter	NCA/OI&T	June 2014

2. BACKGROUND

2.1. Overview of the System

FNOD processing establishes or updates the Veteran's Beneficiary Identification and Records Locator Subsystem record when the Veteran dies, to cancel any benefits being paid to reduce or eliminate overpayments. The number of NOD Cases processed is estimated to be over 660,000 annually.

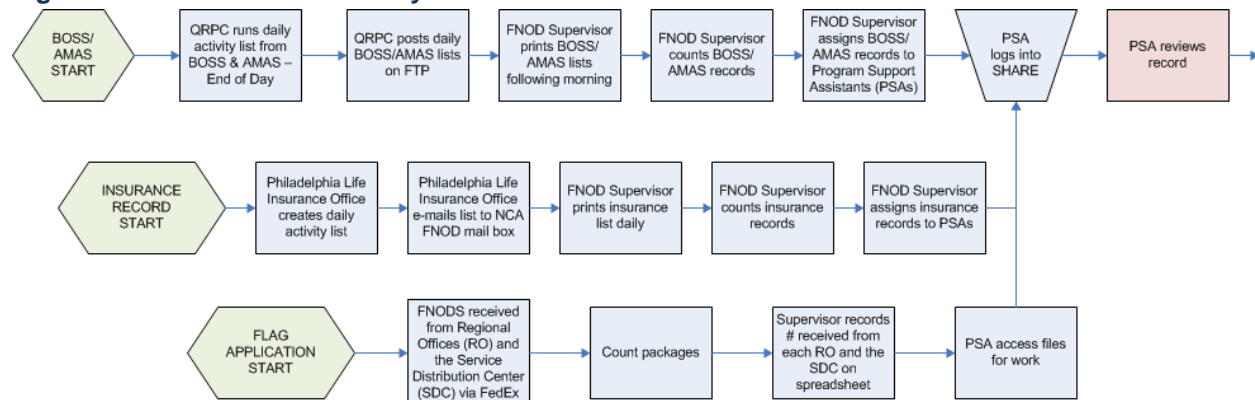
FNOD enhancements will automate the creation and update of FNOD records and reporting capability. The application will also allow the user to filter existing FNOD records, or on pending cases that have not been processed. The FNOD Office Supervisor will have additional capabilities. Those capabilities will include management of pending cases and the ability to view the audit trail of a FNOD record. FNOD user's work performance is measured when the system automatically captures FNOD records created and parked by each user.

The FNOD system processes FNOD case records when sufficient information has been furnished concerning the veteran to permit definite identification of the veteran or veteran's existing record within the system. When a notification of death is received from a BOSS, AMAS, Arlington, Prudential, or Insurance report or a flag application, the FNOD case is established. After enough information has been collected to verify the veteran's identity, this information is updated in Share, after which the FNOD becomes considered a processed record.

2.2. Overview of the Business Process

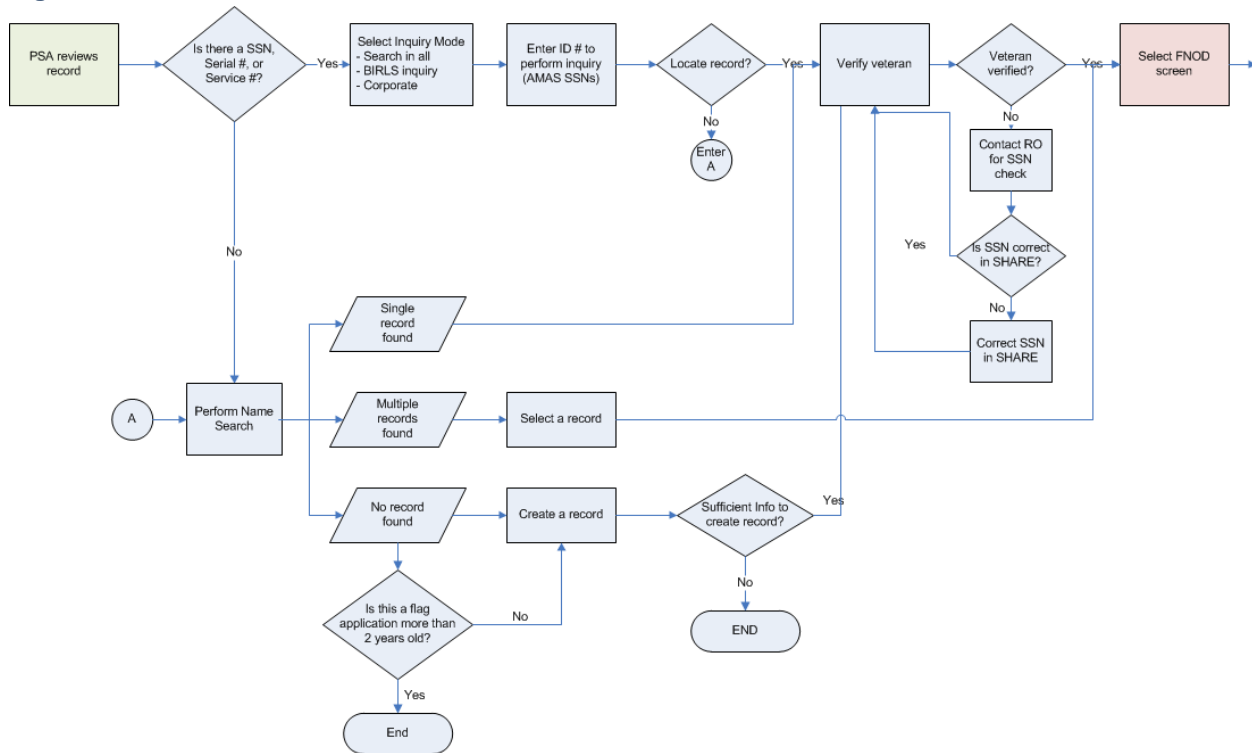
FNOD processing provides for the creation of an FNOD record from NODs received from multiple sources.

Figure 1: NODs from External Systems



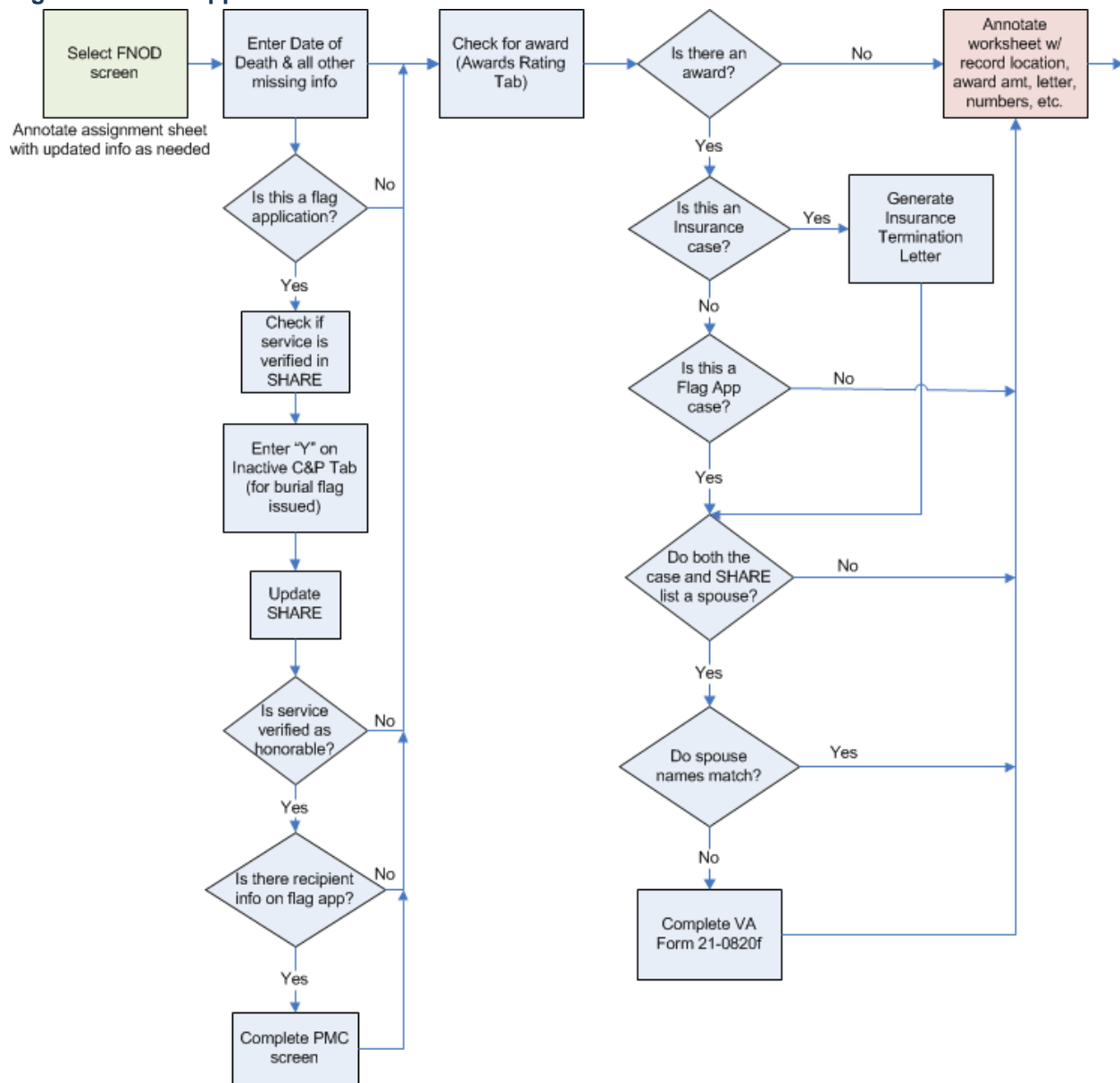
The user evaluates the NOD received as well as information within Share to determine if there is sufficient information to process the NOD. If there is sufficient information, the user establishes or updates the Veteran's information and creates a new FNOD record. If there is not sufficient information to process the NOD, it is set aside for later processing.

Figure 2: PSA Case Verification



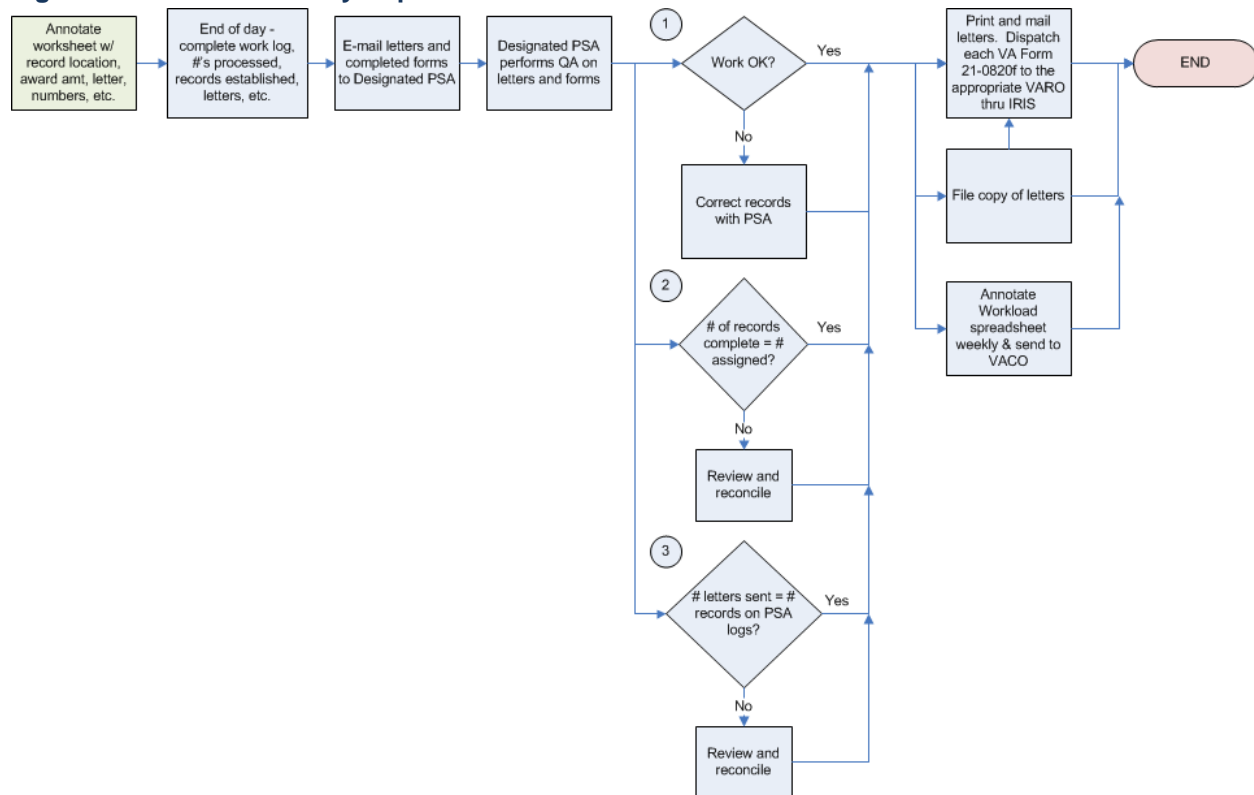
FNOD records that are created where there is a monthly benefit cancelled are reviewed by the supervisor on the same day the benefit is cancelled. The supervisor also reviews pending cases for quality assurance of incoming images and data.

Figure 3: FNOD Application Workflow



All work is self-reported by the employees to the supervisor who tabulates the results and prepares an electronic spreadsheet to use in workload measurement, staffing assignments, planning, and management reporting.

Figure 4: FNOD End-of-Day Report



The current system does not have the ability to accurately track the pending and processed FNOD records. These workflow diagrams will be verified, validated and updated as part of the as-is activity workflow business model analysis.

2.3. Business Benefits

Implementation of FNOD enhancements will improve production by eliminating the handling and storage of paper documents. The application will provide automatic tracking of pending and processed cases and provide an audit trail for all changes. The supervisor will have an automated means by which to track the status of pending and processed records, and be able to view the progress of employees, manage workload, and generate management reports. Elimination of the paper-based system will eliminate the printing, handling, processing, and storage of hard-copy documents that consume valuable time and resources.

2.4. Assumptions and Constraints

This section describes the assumptions, and constraints that impacted the design of the system.

2.4.1. Design Assumptions

There are no design assumptions made in this release.

2.4.2. Design Constraints

There are no design constraints identified for FNOD in this release.

2.4.3. Design Trade-offs

No design trade-offs have been identified for FNOD in this release.

2.5. Overview of the Significant Requirements

The material in this section is not to replace either the existing functional or technical requirements documents, nor serve as the basis for the Requirements Traceability Matrix (RTM), but only to inform non-project personnel reading this document of the basis for the design.

2.5.1. Overview of Significant Functional Requirements

In this section, we provide an overview of the pivotal (i.e. that force design decisions) functional requirements for the system with the goal of identifying major functions to be performed and the few major requirements that drive FNOD design for this release. As well, we do not intend to include the full set of requirements in this document or to replace the functional requirements located in the FNOD RSD. For this document, the emphasis will be on identifying the impact that these requirements have on the design.

Table 4: FNOD Functional Requirements

ID	Requirement
US0001	Increase the field length for Insurance File Number and Address Line 1 for Case Insurance Table
US0002	Allow uploading the file via FNOD ANC and the User to click on Display Printable PDF Link.
US0003	The FNOD system will properly load/ingest BOSS Veteran, BOSS Spouse, AMAS Veteran and AMAS Spouse files.
US0004	Allow a Non-Supervisor User to query the entire FNOD database but restrict the query to exclude query by a specific User ID
US0005	System will reflect system generated time zone to FNOD Record fields and Reports.
US0006	Provide detailed on-line help.
US0007	Make enter key actionable for FNOD Login Screen
US0008	Automatically include slashes in DOD and DOB fields of the system.
US0009	Display an Attachments indicator on the case when Attachments exist.
US0010	Change “User Profile Link” to read as “Change Password” and located under Main Menu and Logout.
US0011	Add back link on each of the Search FNOD Record Screen, Parking Lot Screen and Process Case Screen.
US0012	Add main menu hyperlink at the upper right-hand corner of all FNOD Screens and positioned to the immediate left of “Logout”.
US0013	Increase spacing between Main Menu Functions.
US0014	Implement business rule that helps to select either NIS or Sensitive fields.

ID	Requirement
US0015	<p>The system will provide that the DOD Already Present field and Benefits Cancelled fields cannot both be selected. The system will provide that when IRIS is selected, Benefits Cancelled cannot be null.</p> <ul style="list-style-type: none"> ▪ The system will allow selection of only one of the following fields: <ul style="list-style-type: none"> ➤ DOD Already Present ➤ Benefit Cancelled ▪ When DoD Already Present is selected, the Benefit Cancelled field will be Null. ▪ When Benefit Cancelled is selected, DOD Already Present will be Null. ▪ Current rules for Benefits Cancelled and Monthly Amount fields remain unchanged. ▪ Upon record completion, if DOD Already Present and Benefit Cancelled are both selected, an error message shall display stating that when DOD Already Present is selected, Benefits Cancelled must be Null, and when Benefit Cancelled is selected, DOD Already Present must be Null. ▪ For the following case types, when IRIS is selected, Benefit Cancelled must be selected: <ul style="list-style-type: none"> ➤ AMAS FNOD Spouse ➤ ANC FNOD Spouse ➤ BOSS FNOD Spouse ▪ Upon record completion for the case types of AMAS FNOD Spouse, ANC FNOD Spouse or BOSS Spouse case type, if IRIS is selected and Benefits Cancelled is Null, an error message shall display stating that Benefits Cancelled cannot be Null when IRIS is selected.
US0016	Update the message indicating the name of the Regional Office and navigate the User to the Process Case: Flag Application Screen
US0017	Update the name of the regional office names replacing the state abbreviation.
US0018	Modify the monthly and cumulative totals for the same data elements and same time period resulting on multiple reports.
US0019	Update spelling error for the application error message displayed for Invalid Military Service Number.

ID	Requirement
US0020	<p>System to apply processing rules and display correct messages to the User</p> <ul style="list-style-type: none"> ▪ FNOD Supervisors must select at least one of the following fields for case types that include AMAS FNOD, AMAS FNOD Spouse, ANC FNOD, ANC FNOD Spouse, BOSS FNOD, BOSS FNOD Spouse, Insurance Report, and Prudential: Benefits Cancelled, NMI, FNOD, BIRLS Add, BIRLS Update, DOD Already Present, IRIS, NIS, Sensitive ▪ For a Flag Application Case Type, an FNOD Supervisor must select at least one of the following fields: Benefits Cancelled, NMI, FNOD, BIRLS Add, BIRLS Update, DOD Already Present, IRIS, NIS, Sensitive, Flag Issued, PMC, Too Old to Create, Folder Only Benefit ▪ An FNOD PSA User must select at least one of the following fields for case types that include AMAS FNOD, AMAS FNOD Spouse, ANC FNOD, ANC FNOD Spouse, BOSS FNOD, BOSS FNOD Spouse, Insurance Report, and Prudential: Benefits Cancelled, FNOD, BIRLS Add, BIRLS Update, DOD Already Present, IRIS, NIS ▪ For a Flag Application Case Type, an FNOD PSA User must select at least one of the following fields: Benefits Cancelled, FNOD, BIRLS Add, BIRLS Update, DOD Already Present, IRIS, NIS, Flag Issued, PMC, Too Old to Create, Folder Only Benefit ▪ PSA User cannot complete an FNOD record when NMI is selected. When NMI is selected, upon record completion an error message is displayed stating “When NMI is selected; the case must be Parked for later update or Supervisor completion of the FNOD record”. When NMI is selected, the FNOD record must be Parked. ▪ PSA User cannot complete an FNOD record when Sensitive is selected. When Sensitive is selected, upon record completion an error message is displayed stating “When Sensitive is selected, the case must be Parked for later update or Supervisor completion of the FNOD record”. When Sensitive is selected, the FNOD record must be Parked. ▪ Current business rules for the following fields will remain unchanged: Benefit Cancelled, NMI, FNOD, BIRLS Add, BIRLS Update, DOD Already Present, IRIS, NIS, Sensitive, Flag Issued, PMC, Too Old to Create, Folder Only Benefit
US0021	<p>Update Display Printable PDF on FNOD screen to include Veteran Suffix Field and check box field for all the case types.</p> <ul style="list-style-type: none"> ▪ For all case types, the Display Printable PDF link on the FNOD Record Screen will include the Veteran Suffix field. ▪ For all case types, the Display Printable PDF link listed on the FNOD Record Screen will include the following check box fields directly under the Monthly Amount field, in the following sequence: <ul style="list-style-type: none"> ➤ IRIS ➤ NIS ➤ Sensitive ➤ Folder Only Benefit ➤ For all case types, the values from the FNOD record for all 5 fields should display to the User.
US0022	<p>Notify the User each time an FNOD Record is successfully saved.</p>

ID	Requirement
US0023	<p>Display Aggregate Counts Screen statistics for cases pending Award Audit.</p> <ul style="list-style-type: none"> ▪ The View Aggregate Counts screen will display statistics for cases pending Award Audit. ▪ The View Aggregate Counts screen will include a listing of Award Audits Pending. ▪ The Award Audits Pending information will be a separate table from the existing Pending and Parked case totals. ▪ The Award Audits Pending table will display before the current Pending and Parked case totals and after the View Aggregate Counts Screen heading. ▪ The Award Audit Pending table will display the total number of FNOD records pending Award Audit for each case type. ▪ The Award Audit Pending table will display a cumulative total of all FNOD records pending Award Audit. ▪ For each Case Type, the Award Audit Pending table will display the total number of Award Audits pending by date. ▪ This functionality will work in the same manner as the Upload Date for the existing Pending and Parked cases table. ▪ When the User clicks on the case type, a separate screen will display with the total number of Award Audits Pending by date. ▪ Information should only displays if there are pending Award Audits for a specific date.

ID	Requirement
US0024	<p>Update FNOD Parking Lot Screen to remove the Source System Code and Case Type Code column and add Case Type, NMI and Sensitive.</p> <ul style="list-style-type: none"> ▪ The Source System Code and Case Type Code will no longer be displayed on the Parking Lot Screen. ▪ The Case Type column will display the Source Case Type Description of the records in the Parking Lot. <ul style="list-style-type: none"> ➤ AMAS FNOD ➤ AMAS FNOD Spouse ➤ ANC FNOD ➤ ANC FNOD Spouse ➤ BOSS FNOD ➤ BOSS FNOD Spouse ➤ Flag Application ➤ Insurance Report ➤ Prudential ▪ The system will allow the User to change the “sort” of the Parking Lot by clicking on the Case Type column heading. ▪ The NMI column will display the value of the NMI field of the records in the Parking Lot. ▪ The Sensitive column will display the value of the Sensitive field of the records in the Parking Lot. ▪ The system will allow sorting of the Parking Lot by clicking on the value of NMI column. ▪ The system will allow sorting of the Parking Lot by clicking on the value of the Sensitive column. ▪ The FNOD Application will display the column information and associated data for the Parking Lot in the following order left to right: <ul style="list-style-type: none"> ➤ Select ➤ Case Id ➤ User ➤ Case Type ➤ NMI ➤ Sensitive ➤ Veteran Name ➤ Case Locked Date
US0025	Increase the size of the display View Case Data window as full screen for FNOD Application
US0026	Ensure password of ROOT and FNODCRON does not expire.

ID	Requirement
US0027	<p>Ensure received data files are properly ingested within FNOD.</p> <ul style="list-style-type: none"> System will properly, successfully, and thoroughly ingest data files from Arlington, Prudential, and Insurance without error. Data files received for Arlington Veteran, Arlington Spouse, Prudential, and Insurance will be properly ingested within the application for Unit and Alpha testing.
US0028	<p>Ensure data files received are properly ingested to the application using sFTP</p> <ul style="list-style-type: none"> The FNOD system will properly and successfully ingest all FNOD Source Data from Arlington Veteran Data, Arlington Spouse Data, Insurance Data, and Prudential Data using sFTP in Beta. The FNOD system will properly and successfully ingest all FNOD Source Data including Arlington Veteran Data, Arlington Spouse Data, Insurance Data, and Prudential Data using sFTP in Prod.

2.5.2. Overview of Functional Workload / Performance Requirements

There are approximately 25 users of the FNOD system. Twenty (20) users are involved in processing FNOD cases; five (5) users are involved in generating reports and running adhoc queries. This project is not expected to add any new users to the system because the business process is already in place and this is an automated effort.

There is no anticipation of growth for the number of FNOD records created and number of Notices of Death received. This process has been in place for many years and the average is based on that historical information. The application will retain all FNOD records and associated case records indefinitely.

FNOD application is developed with a goal of no more than 3 seconds response time for any action performed. This will be a goal of the design and implementation, but not a requirement.

Table 5: FNOD Workload and Performance Requirements

ID	Requirement
	Update the Service Level Agreement (SLA) regarding availability of the system.

2.5.3. Overview of Operational Requirements

FNOD application is developed with a goal of no more than 3 seconds response time for any action performed. This will be a goal of the design and implementation, but not a requirement.

The FNOD system must be available 99.9% of the time. The system needs to be available 24-hours a day, seven (7) days a week. While the administrative staff will be working during business hours, non-VA providers may want to return results to the VA at alternative times of the day. The system needs to be available to accept results at any time.

Table 6: FNOD Operational Requirements

ID	Requirement
	The FNOD system must be available 99.9% of the time.
	The system needs to be available 24-hours a day, seven (7) days a week.

2.5.4. Overview of the Technical Requirements

The FNOD sub-system may be developed using the following set of Tools and technologies:

- Oracle WebLogic Server 10.3.6
- Oracle Database 11G
- Apache Formatting Objects Processor 1.1
- iText Core 5.4
- Java 7.0

Tools used for FNOD developments are compliant with the Product Development (PD) software engineering TRM.

2.5.5. Overview of the Security or Privacy Requirements

The web component of FNOD (First Notice of Death) was implemented using Secure Socket Layer (SSL) for the encryption of web content. Users will be authenticated using Oracle Database accounts, and authorization will be controlled using role based access. The VA 6500 requirements for “moderate” categorized systems and the following business-specific security requirements for User Access control:

Table 7: FNOD Security Requirements

ID	Requirement
	Ensure the proposed solution meets all VA Security and Privacy requirements including VA Handbook 6500

2.5.6. Overview of System Criticality and High Availability Requirements

The FNOD system must be available 99.9% of the time. The system needs to be available 24-hours a day, seven (7) days a week. While the administrative staff will be working during business hours, non-VA providers may want to return results to the VA at alternative times of the day. The system needs to be available to accept information at any time.

2.5.7. Single Sign-on Requirement

This release is planned to reduce or eliminate data entry errors, help users meet performance standards, provide accurate reports, and allow management to review work performance, delegate assignments, manage overtime and enhance the capabilities of the currently functioning FNOD application. As this is an enhancement to the existing legacy system, Single sign-on is not considered as a requirement.

2.5.8. Requirement for Use of Enterprise Portals

This release is planned to reduce or eliminate data entry errors, help users meet performance standards, provide accurate reports, and allow management to review work performance, delegate assignments, manage overtime and enhance the capabilities of the currently functioning FNOD application. As this is an enhancement to the existing legacy system, enterprise portal usage is not considered as a requirement.

2.5.9. Special Device Requirements

There are no Special Device Requirements required to be part of the currently planned FNOD enhancements release.

2.6. Legacy System Retirement

Currently planned enhancements of the FNOD application will reduce or eliminate data entry errors, help users meet performance standards, provide accurate reports, and allow management to review work performance, delegate assignments, and manage overtime. There are no plans to retire legacy systems during this release cycle.

3. CONCEPTUAL DESIGN

This section of the FNOD SDD provides details about Conceptual Application Design, Conceptual Data Design, and Conceptual Infrastructure Design. The following sections provide a conceptual overview and illustration of the FNOD system and the systems and users with which it interacts.

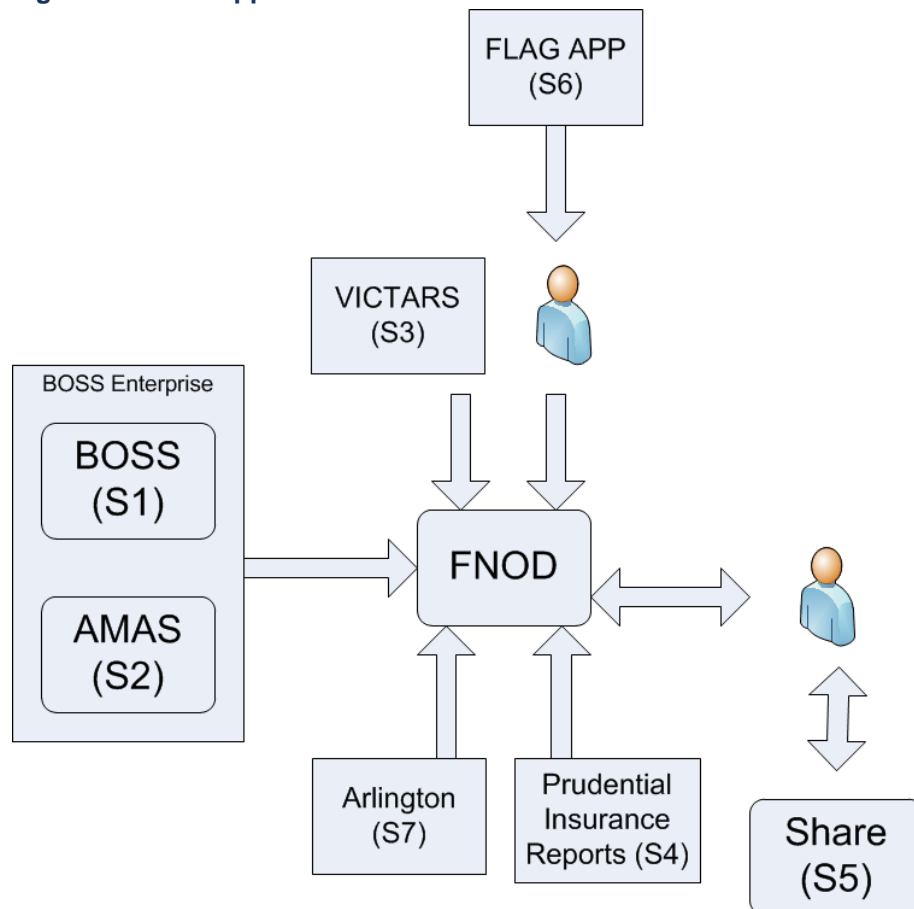
3.1. Conceptual Application Design

The purpose of the conceptual application design is to illustrate all systems that interact with the FNOD system and the interfaces by which these systems will interact with one another. Some indication of the origination of events has also been illustrated.

3.1.1. Application Context

The figure below depicts the context in which the FNOD application will exist.

Figure 5: FNOD Application Context



The tables below provide information in the FNOD application diagram in four sections: Object, Interfaces External to OI&T, Interfaces Internal to OI&T, and Externally Shared Data Stores.

Table 8: Object

ID	Name	Description	Interface Name	Interface System
----	------	-------------	----------------	------------------

ID	Name	Description	Interface Name	Interface System
S1	BOSS	Interface that provides Veteran and Spouse Decedent records.	BOSS Report	FNOD
S2	AMAS	Interface to provide veteran or dependent Decedent records	AMAS Report t	FNOD
S3	VICTARS	The VICTARS was developed to automate the input and processing activities for claims, transactions, and responses to policyholders. Interface to provide Veteran Decedent records.	Insurance Report	FNOD
S4	Prudential	Interface to provide Veteran Decedent records	Prudential Report	FNOD
S5	SHARE	A Microsoft Windows-based application to access BIRLS, Compensation and Pension (C&P) Master Records, and other VA Applications.	SHARE BIRLS ADD_or_Update	FNOD
S6	FLAG APP	Interface to collect and store scanned documents sent by the FLAG application	Feith Scan FLAG Application Document	FNOD
S7	Arlington	Interface to provide veteran or dependent Decedent records	Arlington Report	FNOD

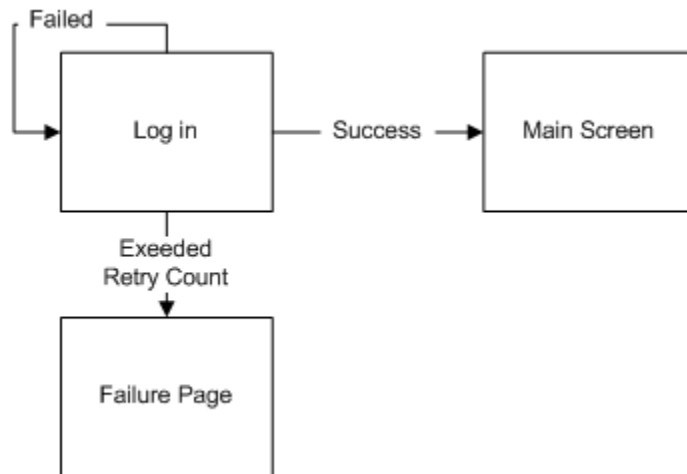
3.1.2. High-Level Application Design

The following diagrams represent screen flows based on the activity diagrams. These diagrams depict the screen flows, as they will be presented to the user when performing the appropriate functions that have been described in the activity diagrams. These screen flows represent the high-level application design.

These Activity Diagrams will be verified, validated and updated as part of the as-is activity workflow model analysis. The activity diagrams will be analyzed based on the additional enhancement requirements of FNOD and changes to the activity diagram will be updated as part of the future enhancement in this document.

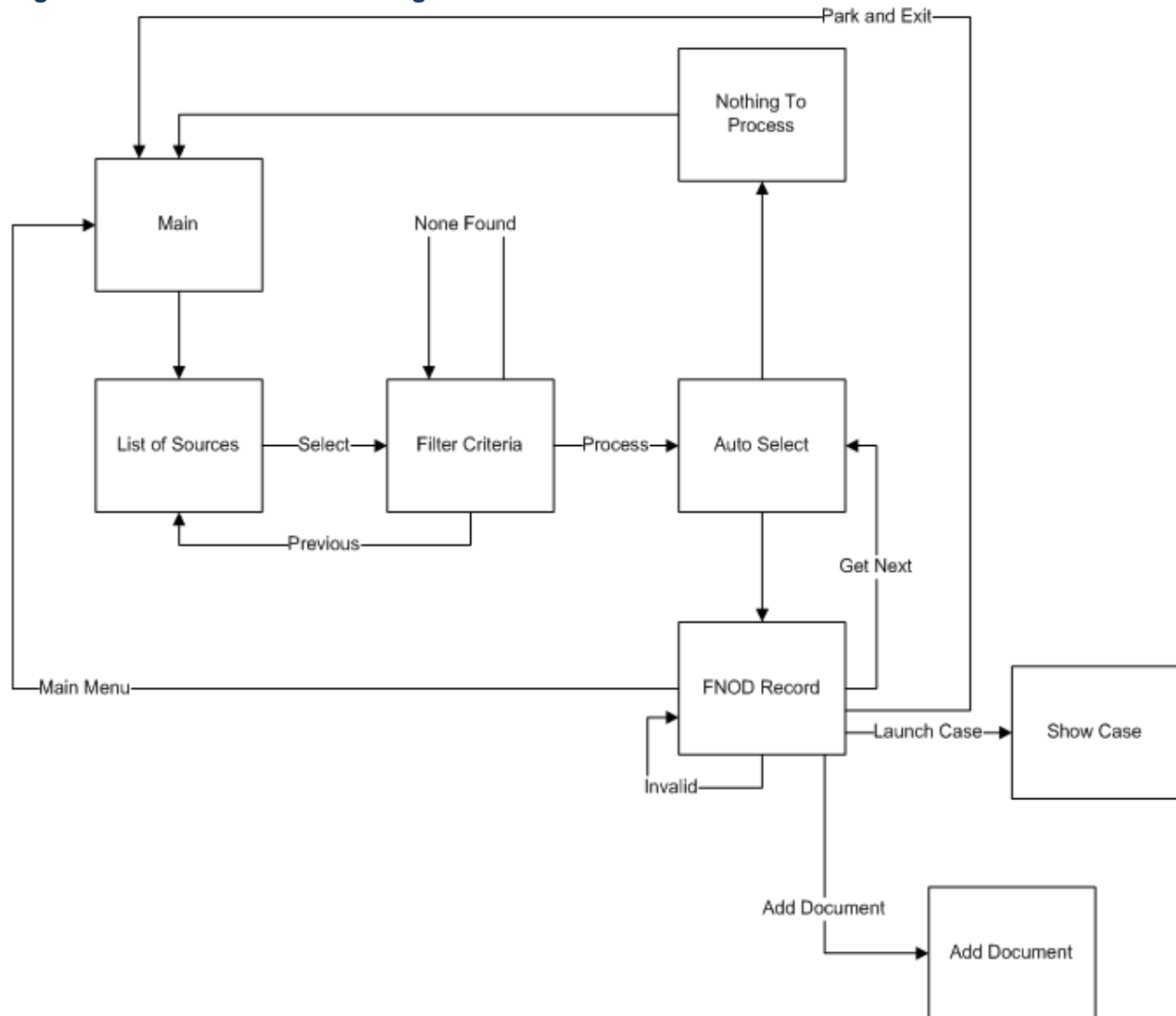
This flow depicts the screens that will be presented to the user during the log in process. This is the first step in the FNOD Application.

Figure 6: FNOD Log in Diagram



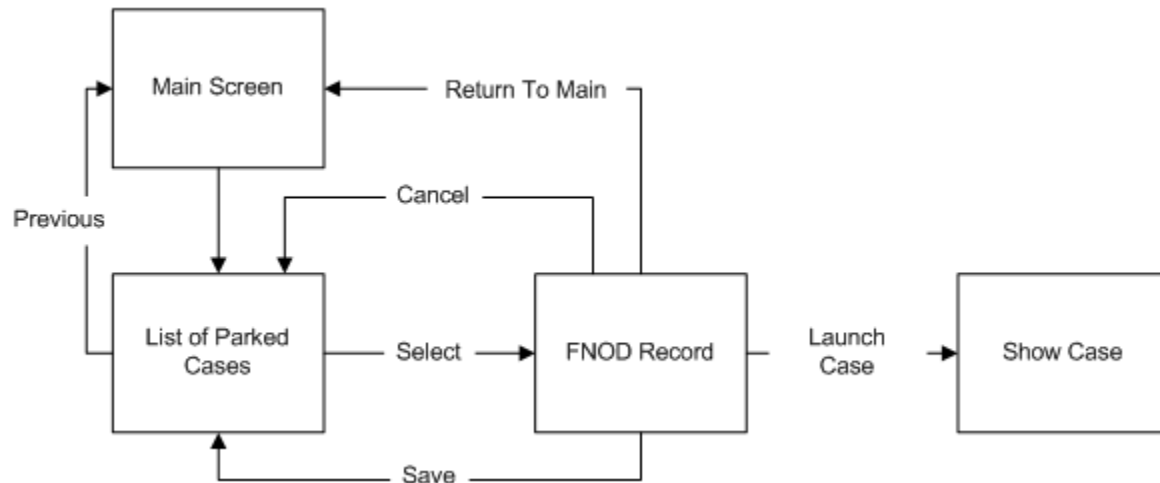
This figure depicts the screens that will be presented to the user to process a case (Flag App, Insurance, BOSS, BOSS Spouse, AMAS, AMAS Spouse, ANC, ANC Spouse, or Prudential).

Figure 7: FNOD Process Case Diagram



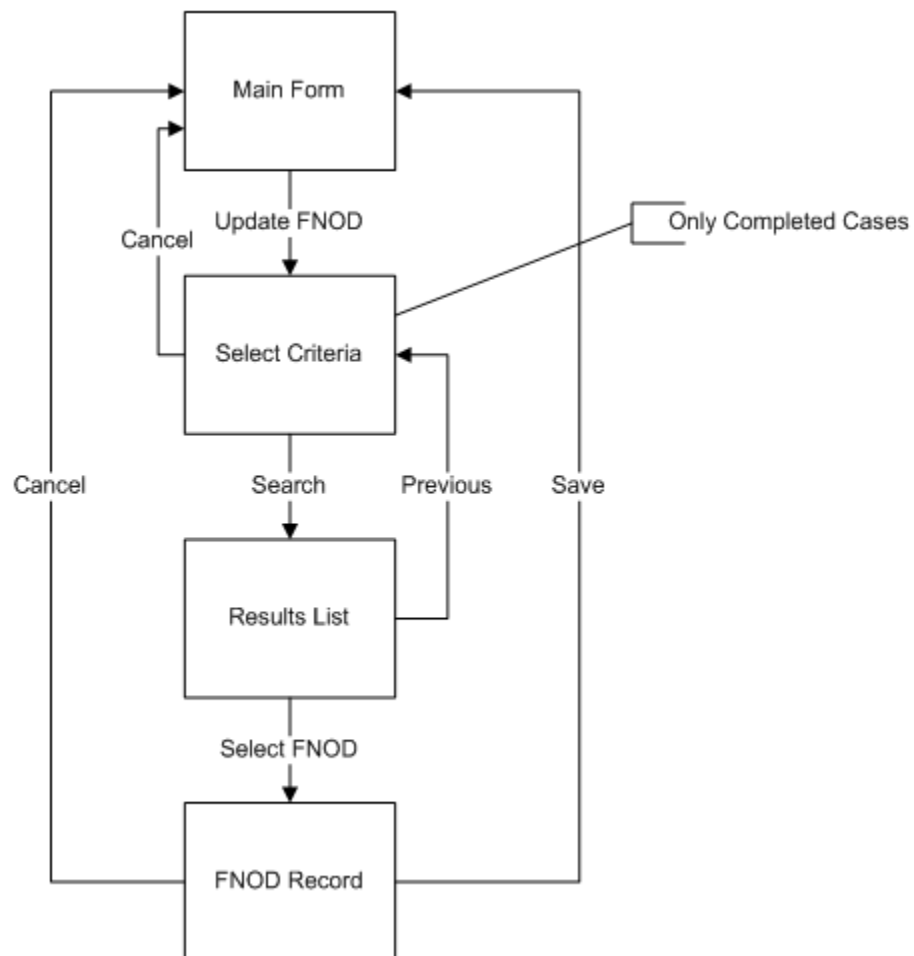
This figure depicts the screens that will be presented when the user has elected to “postpone” the processing of a case. The case will be “parked” (i.e. it enters the Parked state) and the user can return to processing the case at a later time.

Figure 8: FNOD Parked List Diagram



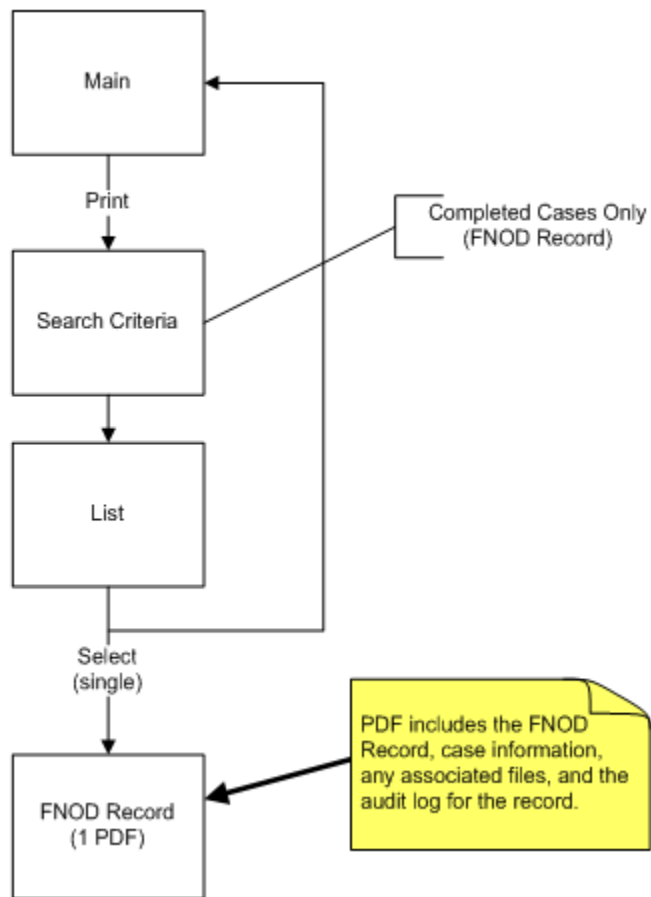
This figure depicts the screens that will be presented when the user chooses to update (that is, change) an FNOD record.

Figure 9: FNOD Update Flow Diagram



This figure depicts the screens that will be presented when the user chooses to print an FNOD record.

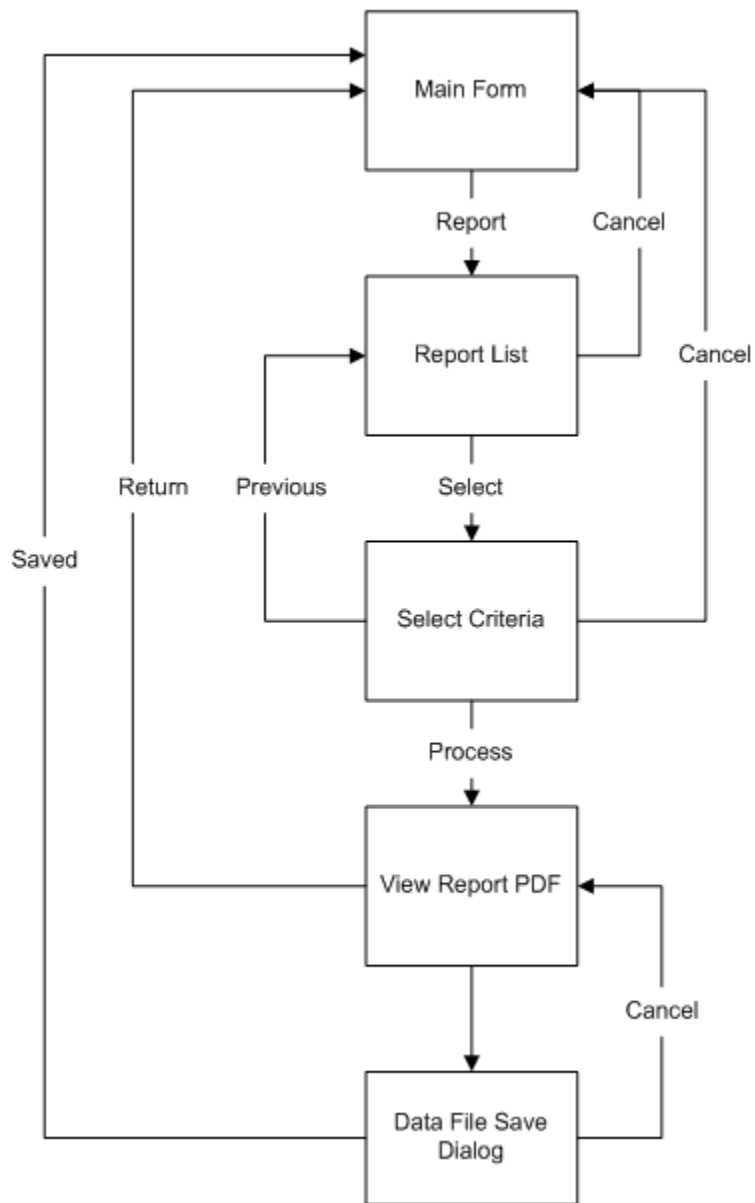
Figure 10: Print Diagram



This figure depicts the screens that will be presented when the user chooses to display a report of the FNOD User processing.

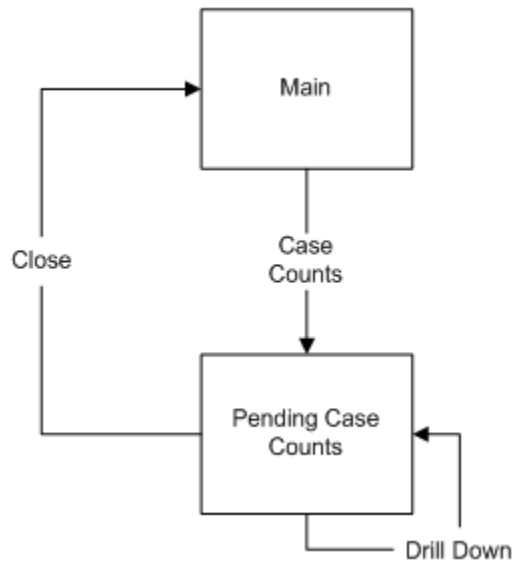
These Activity Diagrams will be verified, validated and updated as part of the as-is activity workflow model analysis. The activity diagrams will be analyzed based on the additional enhancement requirements of FNOD and changes to the activity diagram will be updated as part of the future enhancement in this document.

Figure 11: FNOD Reports Diagram



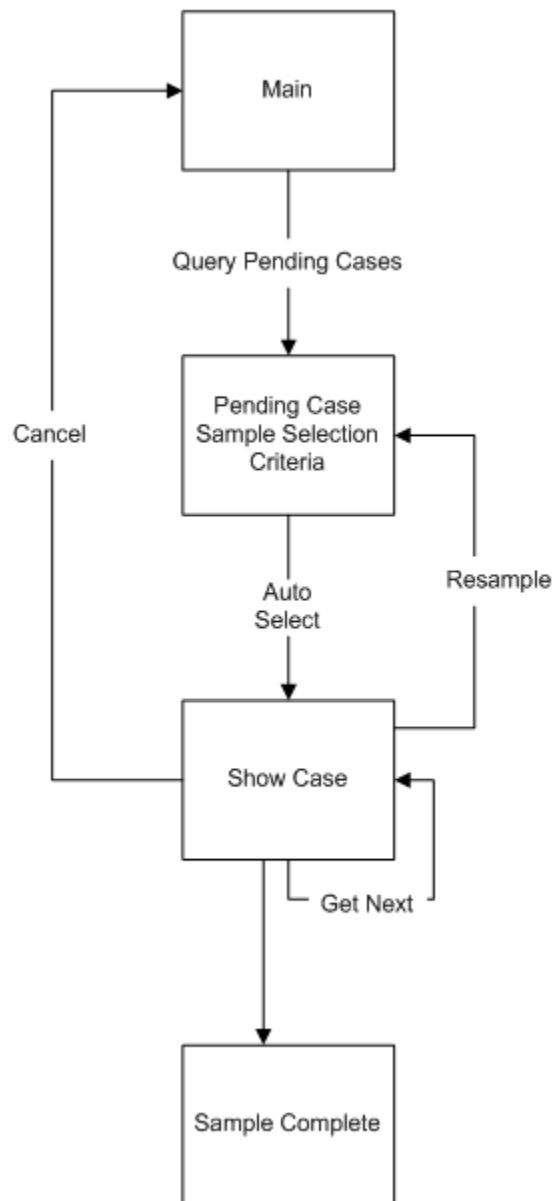
This figure depicts the screens that will be presented when the user chooses to display the “counts” of the pending cases. It will allow the user to drill down to a more detailed “count” of the pending cases.

Figure 12: Pending Case Counts Diagram



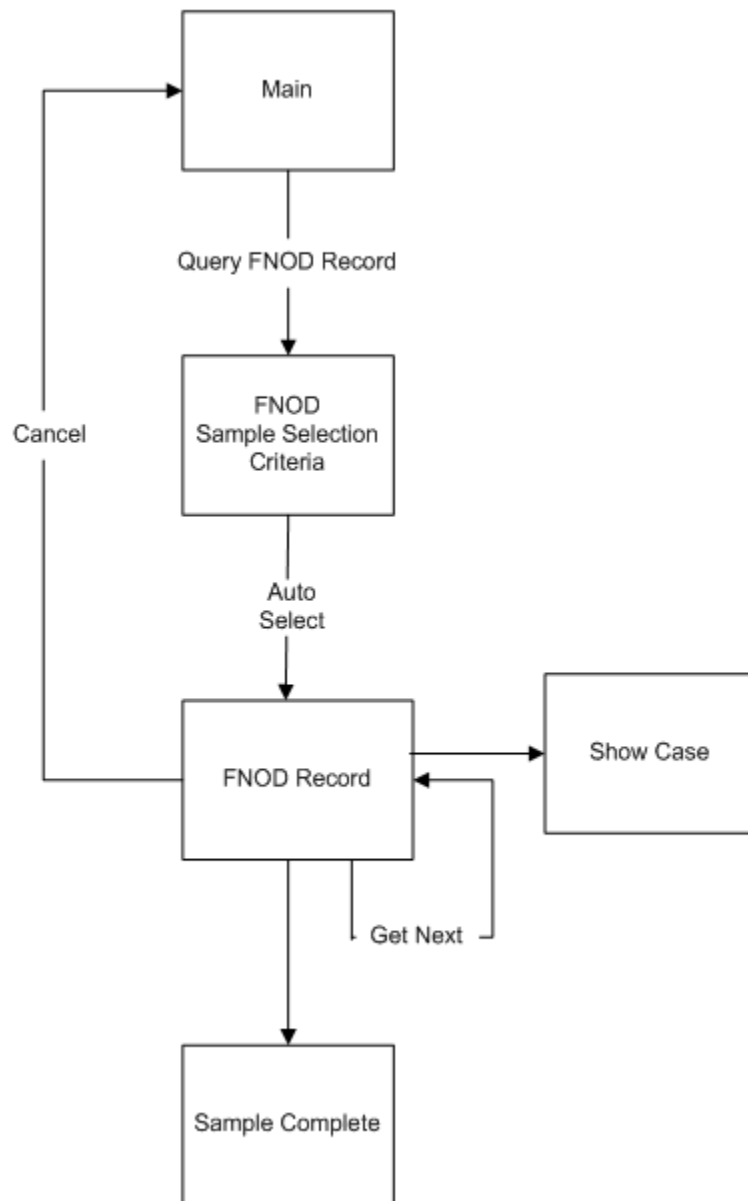
This figure depicts the screens that will be presented when the user chooses to display a “sample” of the pending cases of a certain type. The user may re-sample as many times as they like, changing the criteria each time.

Figure 13: Sample Cases Diagram



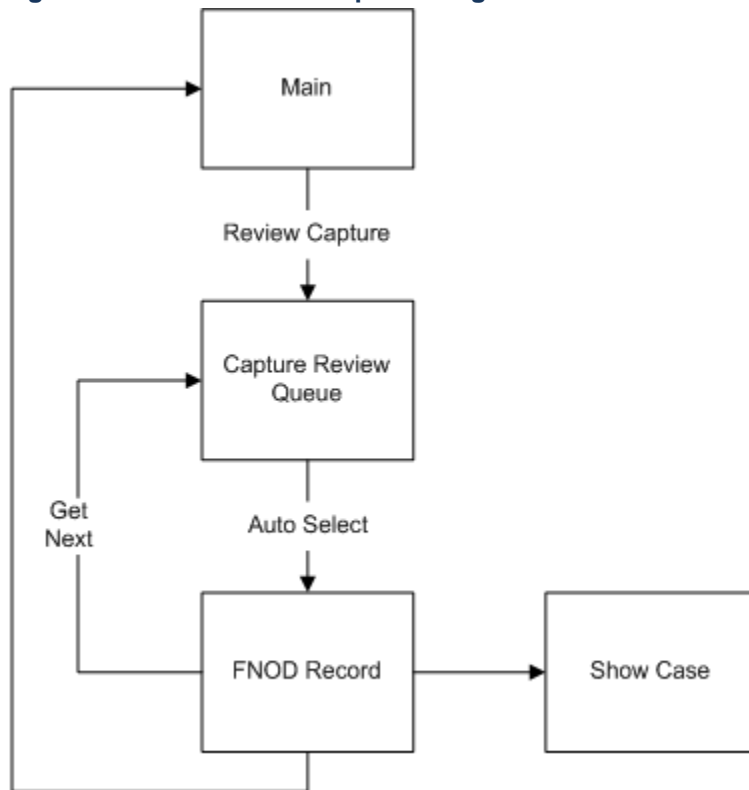
This figure depicts the screens that will be presented when the user chooses to display FNOD records based on the sample selection criteria. The user can then choose to display the records one at a time to review the information in the records.

Figure 14: Sample FNOD Diagram



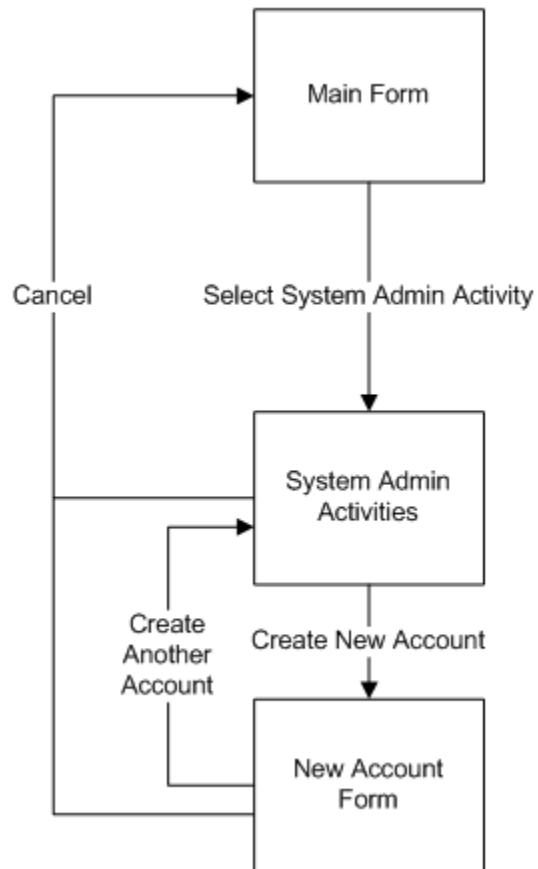
This figure depicts the screens that will be presented when the user chooses to display FNOD records based on the “capture (awards)” criteria. The records will be displayed to the user one at a time to review the information in the record.

Figure 15: FNOD Review Capture Diagram



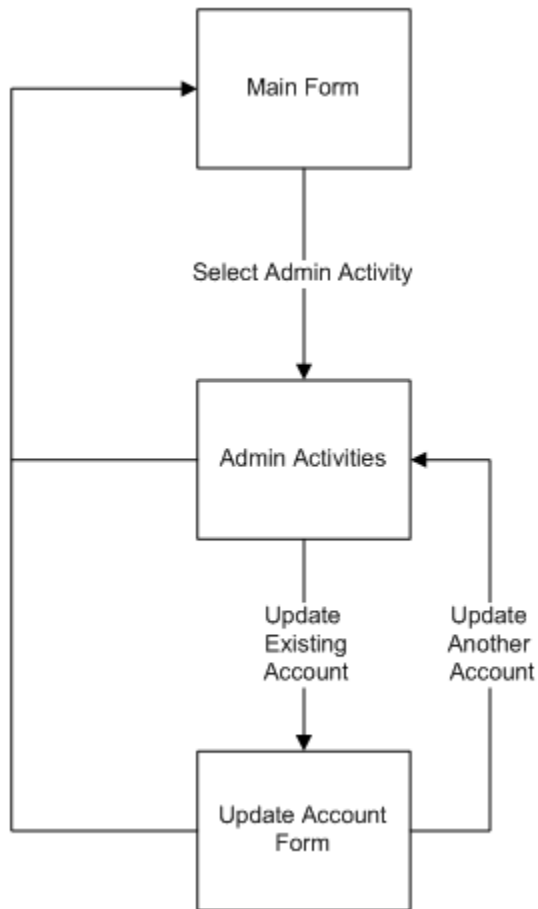
This figure depicts the screens that will be presented when the System Administrator User chooses to create a new user account.

Figure 16: FNOD Create New User Account Diagram



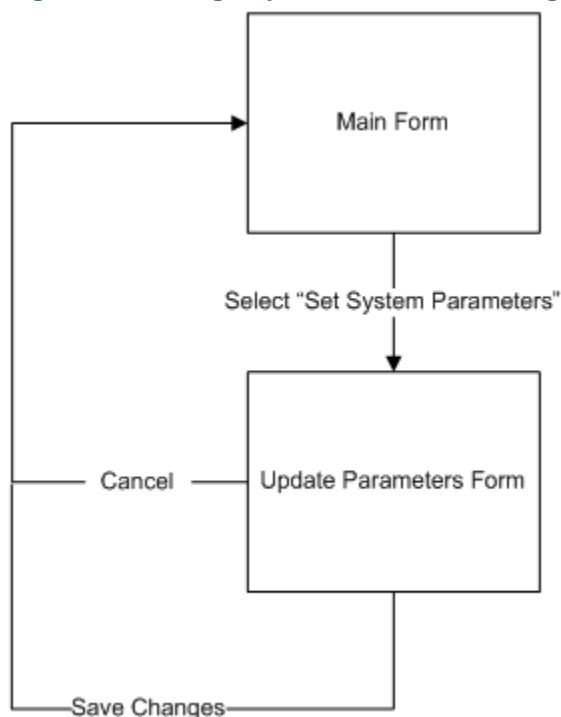
This figure depicts the screens that will be presented when the System Administrator User chooses to update an existing user account.

Figure 17: Update User Account Diagram



This figure depicts the screens that will be presented when the System Administrator User chooses to make changes to the system parameters.

Figure 13: Manage System Parameters Diagram



The following table shows the screen flow and its corresponding activity diagram from the ADD.

Table 9: FNOD Screen Flow and Activity Diagrams

Screen Flow diagram	Activity Diagram
Figure 1 - Log in	FNOD.13 Log in
Figure 2 - Process Case	FNOD.2 Process Case
Figure 3 - Parked List	FNOD.9 Manage Parked Cases
Figure 4 - Update Flow	FNOD.3 Update FNOD Record
Figure 5 - Print	FNOD.4 Print FNOD Record
Figure 6 - Reports	FNOD.6 Generate Reports
Figure 7 - Pending Case Counts	FNOD.8 View Aggregate Counts
Figure 8 - Sample Cases	FNOD.10 Sample Pending Cases
Figure 9 - Sample FNOD	FNOD.12 Review Completed Cases
Figure 10 - Review Capture	FNOD.11 FNOD Award Activity
Figure 11 - Create New User Account	FNOD.14 Create New User Account
Figure 12 - Update User Account	FNOD.15 Update User Account
Figure 13 - Manage System Parameters	FNOD.16 Manage System Parameters

3.1.3. Application Locations

The table below identifies the locations at which FNOD application components will be hosted.

Table 10: Application Locations

Application Component	Description	Host Location	Type
FNOD Enterprise Application	Enterprise application that bundles the different application components.	QITC	Enterprise Application
FNOD Services	The service layer that supports orchestration of the business processes performed by the application.	QITC	Enterprise Java Beans / Web Services
FNOD Web Application	The web application used by staff to support the FNOD business processes.	QITC	Web Application
FNOD database	The database that stores and provides the FNOD data.	QITC	Database

Table 11: Application Users

Application Component	Location	User
Log in	FNOD Office	PSA User, Supervisor
Process Case	FNOD Office	PSA User, Supervisor
Manage Parked Cases	FNOD Office	PSA User, Supervisor
Update FNOD Record	FNOD Office	PSA User, Supervisor
Print FNOD Record	FNOD Office	PSA User, Supervisor
Generate Reports	FNOD Office	PSA User, Supervisor
View Aggregate Counts	FNOD Office	Supervisor
Sample Pending Cases	FNOD Office	Supervisor
Review Completed Cases	FNOD Office	Supervisor
FNOD Award Activity	FNOD Office	Supervisor
Create New User Account	QITC	System Administrator
Update User Account	QITC	System Administrator, Administrator

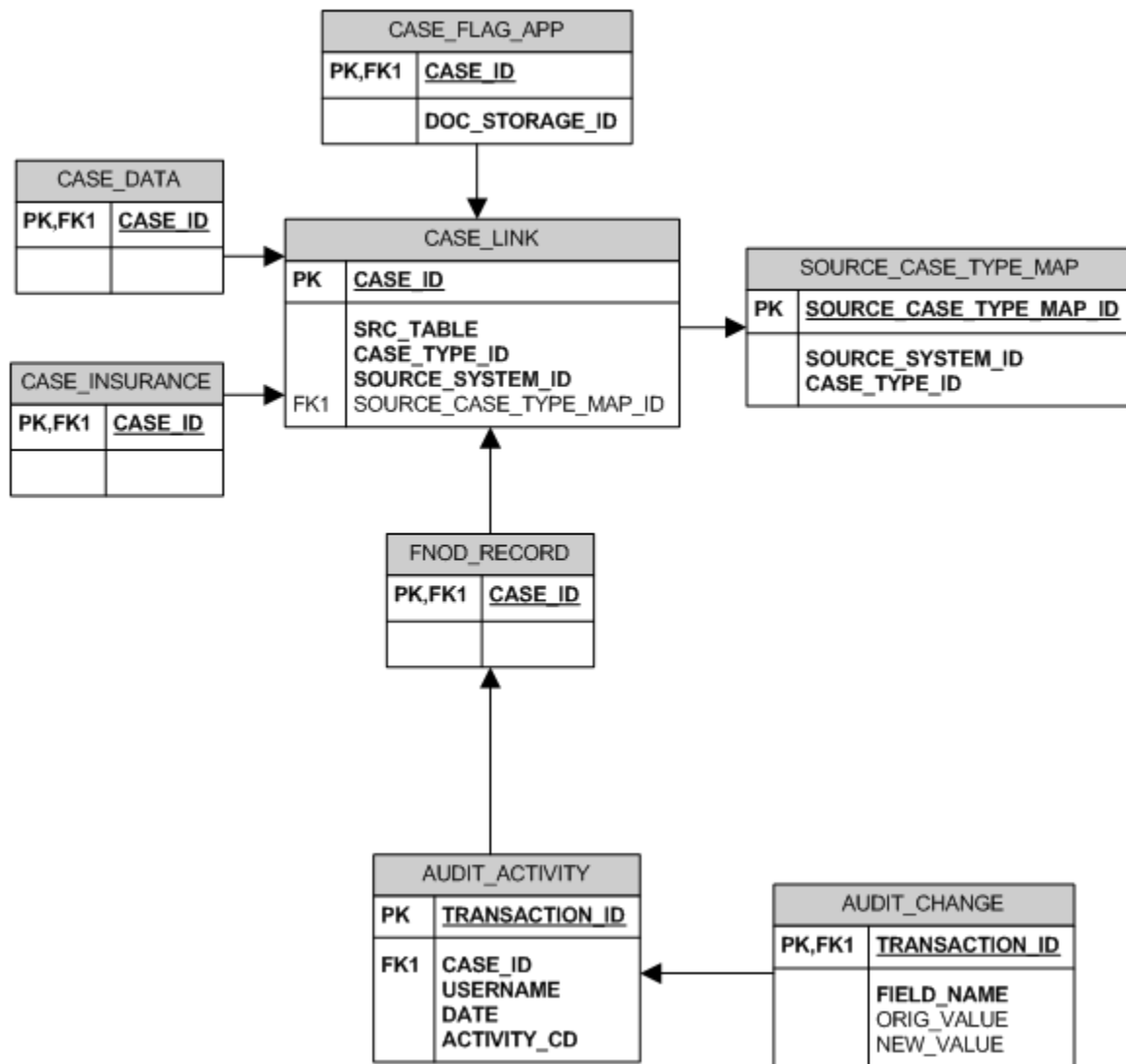
3.2. Conceptual Data Design

3.2.1. Project Conceptual Data Model

A project conceptual data model (CDM) is a high-level representation of the data entities and their relationships. It does not normally include the data elements that comprise each entity. It is a first step toward developing the more detailed logical data model (LDM) that will be provided during the Logical Data Design.

The figure that follows illustrates the FNOD CDM.

Figure 18: FNOD Conceptual Data Model



Note: These tables and diagrams will be verified, validated and updated in the document as part of the as-is data model documentation and additional attributes based on the FNOD enhancement requirements and will be added, normalized and updated as part of the future enhancement in this document.

3.2.1.1. Table and Attribute Information

These tables will be verified, validated and updated in this document as part of the as-is data model analysis, to capture additional tables used to support Arlington, Arlington Spouse, and Prudential information and additional attributes such as NIS, IRIS, Sensitive, and Folder Only Benefit. FNOD Data model will be analyzed based on the additional enhancement requirements and additional attributes will be added, normalized and updated as part of the future enhancement in this document.

The ACTIVITY_TYPE table contains the Activity Type ID, Activity Code, and the Description field that are associated with the different types of activities performed on pending cases and FNOD records. This table has no foreign keys.

Table 12: ACTIVITY_TYPE Table

Column	Description	Type
--------	-------------	------

Column	Description	Type
ACTIVITY_TYPE_ID	PRIMARY KEY FOR ACTIVITY_TYPE	NUMBER(9,0)
ACTIVITY_CD	CODE FOR TYPE OF ACTIVITY	VARCHAR2(3 BYTE)
DESCRIPTION	DESCRIBES THE TYPE OF ACTIVITY PERFORMED	VARCHAR2(40 BYTE)

The APP_ROLE table contains the available User Roles, Role ID, and Description. It has no foreign keys.

Table 13: APP_ROLE Table

Column	Description	Type
ROLE_ID	PRIMARY KEY FOR APP_ROLE	NUMBER(9,0)
ROLE_CD	USER ROLE CODE	VARCHAR2(32 BYTE)
DESCRIPTION	USER ROLE CODE DESCRIPTION	VARCHAR2(50 BYTE)
ROLE_USER	IDENTIFIES A USER ROLE	CHAR(1 BYTE)

The APP_USER table contains information for each user, by User ID. This table contains the User ID, Username, Display Name, Password, Password History, E-mail Address, Telephone Number, User Created Date, User Update Date, Status, Locked Time, Expiration Date, Log-in Attempts, and Password Changed Date of each User. This table has no foreign keys.

Note: There must be an entry in the APP_USER_ROLE table for each User in this table.

Table 14: APP_USER Table

Column	Description	Type
USER_ID	PRIMARY KEY FOR APP_USER	NUMBER(9,0)
USERNAME	USER NAME - UNIQUELY IDENTIFIES A USER	VARCHAR2(32 BYTE)
DISPLAY_NAME	IDENTIFIES THE USER DISPLAY NAME	VARCHAR2(50 BYTE)
PASSWORD	USER PASSWORD	VARCHAR2(72 BYTE)
PASSWORD_HISTORY	USER PASSWORD HISTORY	VARCHAR2(1024 BYTE)
EMAIL_ADDRESS	USER E-MAIL ADDRESS	VARCHAR2(50 BYTE)
PHONE_NUM	USER PHONE NUMBER	VARCHAR2(20 BYTE)
USER_CREATED_DT	USER CREATED DATE	DATE
USER_UPDATE_DT	USER UPDATED DATE	DATE
STATUS	IDENTIFIES THE USER STATUS	VARCHAR2(20 BYTE)
LOCKED_TIME	USER LOCKED TIME	TIMESTAMP(0) WITH TIME ZONE
EXPIRY_DATE	EXPIRY DATE	DATE
LOGIN_ATTEMPTS	NUMBER OF LOG IN ATTEMPTS	NUMBER(9,0)

Column	Description	Type
PASSWORD_CHANGE D_DATE	PASSWORD CHANGED DATE	DATE

The APP_USER_ROLE table contains the User ID and the Role(s) associated to the User ID (i.e., PSA User, Office Supervisor, Administrator, System Administrator, Service User). It also has the following foreign keys: User ID, Role ID.

Table 15: APP_USER_ROLE Table

Column	Description	Type
APP_USER_ROLE_ID	PRIMARY KEY FOR APP_USER_ROLE	NUMBER(9
USER_ID	IDENTIFIES THE USER	NUMBER(9
ROLE_ID	IDENTIFIES THE USER ROLE	NUMBER(9

The ATTACHMENT_TYPE table contains the Attachment Type ID and Description which specify what type of attachment to the FNOD record or case. It has no foreign keys.

Table 16: ATTACHMENT_TYPE Table

Column	Description	Type
ATTACHMENT_TYPE_ID	PRIMARY KEY FOR ATTACHMENT_TYPE	NUMBER(9,0)
DESCRIPTION	DESCRIBES THE TYPE OF ATTACHMENT	VARCHAR2(30 BYTE)

The AUDIT_ACTIVITY table contains the Transaction ID, Case ID, Username, Activity Date, and Activity Type ID associated with changes to a FNOD record. It contains the following foreign keys: Case ID, ACTIVITY_TYPE_ID.

Table 17: AUDIT_ACTIVITY Table

Column	Description	Type
TRANSACTION_ID	PRIMARY KEY FOR AUDIT_ACTIVITY	NUMBER(9,0)
CASE_ID	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	NUMBER(9,0)
USERNAME	UNIQUELY IDENTIFIES A USER	VARCHAR2(32 BYTE)
ACTIVITY_DT	AUDIT ACTIVITY DATE	TIMESTAMP(0) WITH TIME ZONE
ACTIVITY_TYPE_ID	PRIMARY KEY FOR AUDIT_ACTIVITY	NUMBER

The AUDIT_CHANGE table contains the Transaction ID, Case ID, Username, Activity Date, and Activity Type ID associated to an audit change to an FNOD record. It contains the foreign keys: TRANSACTION_ID.

Table 18: AUDIT_CHANGE Table

Column	Description	Type
AUDIT_CHANGE_ID	PRIMARY KEY FOR AUDIT_CHANGE	NUMBER(9,0)
TRANSACTION_ID	IDENTIFIES A UNIQUE TRANSACTION	NUMBER(9,0)
FIELD_NAME	FIELD NAME	VARCHAR2(30 BYTE)
ORIG_VALUE	ORIGINAL FIELD VALUE	VARCHAR2(100 BYTE)
NEW_VALUE	NEW FIELD VALUE	VARCHAR2(100 BYTE)

The CASE_ADDRESS table contains the address associated to a Case ID. The case will have a type of either Veteran or Spouse. It contains the foreign key: CASE_ID.

Table 19: CASE_ADDRESS Table

Column	Description	Type
CASE_ID	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	NUMBER(9,0)
CASE_ADDRESS_ID	PRIMARY KEY FOR CASE_ADDRESS	NUMBER(9,0)
ADDRESS_TYPE	IDENTIFIES THE ADDRESS TYPE	CHAR(1 BYTE)
LINE_ONE_ADDR	LINE ONE ADDRESS	VARCHAR2(35 BYTE)
LINE_TWO_ADDR	LINE TWO ADDRESS	VARCHAR2(35 BYTE)
LINE_THREE_ADDR	LINE THREE ADDRESS	VARCHAR2(35 BYTE)
LINE_FOUR_ADDR	LINE FOUR ADDRESS	VARCHAR2(35 BYTE)
LINE_FIVE_ADDR	LINE FIVE ADDRESS	VARCHAR2(35 BYTE)
CITY	ADDRESS - CITY	VARCHAR2(30 BYTE)
STATE_PROV_CD	STATE PROVINCE CODE	VARCHAR2(2 BYTE)
ZIP_CODE	ZIP CODE	VARCHAR2(10 BYTE)
FOREIGN_MAIL_CODE	FOREIGN MAIL CODE	VARCHAR2(10 BYTE)

The CASE_ATTACHMENT table contains the fields related to documents attached to an FNOD record and username and date of the user that attached the document. It also contains the following foreign keys: CASE_ID, ATTACHMENT_TYPE_ID, DOCUMENT_STORAGE_ID.

Table 20: CASE_ATTACHMENT Table

Column	Description	Type
--------	-------------	------

Column	Description	Type
CASE_ATTACHMENT_ID	PRIMARY KEY FOR CASE_ATTACHMENT	NUMBER(9,0)
CASE_ID	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	NUMBER(9,0)
ATTACHMENT_TYPE_ID	THE ID FOR THE TYPE OF ATTACHMENT	NUMBER(9,0)
FILE_NAME	THE NAME OF THE FILE THAT WAS ATTACHED	VARCHAR2(50 BYTE)
COMMENTS	COMMENTS MADE BY USER WHO ATTACHED THE FILE	VARCHAR2(100 BYTE)
ATTACHED_DATE	DATE THE FILE WAS ATTACHED TO THE RECORD	DATE
ATTACHED_BY	USERNAME OF THE PERSON THAT ATTACHED THE FILE	VARCHAR2(32 BYTE)
DOCUMENT_STORAGE_ID	THE ID FOR THE IMAGE OF THE FLAG APP STORED IN THE DOC STORAGE FILES	NUMBER(9,0)

The CASE_DATA table contains the fields associated with the information received on BOSS, BOSS Spouse, AMAS, AMAS Spouse FNOD reports from external sources. It also contains the foreign key: CASE_ID.

Table 21: CASE_DATA Table

Column	Description	Type
CASE_ID	NUMBER(9,0)	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED
ENTRY_DT	TIMESTAMP(0) WITH TIME ZONE	ENTRY DATE
VETERAN_LAST_NAME	VARCHAR2(25 BYTE)	VETERAN LAST NAME
VETERAN_FIRST_NAME	VARCHAR2(15 BYTE)	VETERAN FIRST NAME
VETERAN_MIDDLE_NAME	VARCHAR2(15 BYTE)	VETERAN MIDDLE NAME
VETERAN_SUFFIX_NAME	VARCHAR2(3 BYTE)	VETERAN SUFFIX NAME
VETERAN_ALIAS_LAST_NAME	VARCHAR2(25 BYTE)	VETERAN ALIAS LAST NAME
VETERAN_BIRTH_DT	DATE	VETERAN DATE OF BIRTH (DOB)

Column	Description	Type
VETERAN_DEATH_DT	DATE	VETERAN DATE OF DEATH (DOD)
VETERAN_RECORD_OF_INTERMENT_DT	DATE	VETERAN DATE OF INTERMENT (DOI)
VETERAN_HOME_OF_RECORD_CITY	VARCHAR2(30 BYTE)	VETERAN CITY HOME OF RECORD
VETERAN_HOME_OF_RECORD_STATE	VARCHAR2(20 BYTE)	VETERAN STATE HOME OF RECORD
VETERAN_DECEDENT_ID	VARCHAR2(9 BYTE)	VETERAN DECEDENT ID
VETERAN_ID	VARCHAR2(9 BYTE)	VETERAN ID
VETERAN_CLAIM_NUM	VARCHAR2(10 BYTE)	VETERAN CLAIM NUMBER
VETERAN_SOCIAL_SECURITY_NUMBER	VARCHAR2(9 BYTE)	VETERAN SOCIAL SECURITY NUMBER
MILITARY_SERVICE_NUM	VARCHAR2(9 BYTE)	VETERAN MILITARY SERVICE NUMBER
RANK_CD	VARCHAR2(20 BYTE)	RANK CODE
BRANCH_OF_SERVICE_CD	VARCHAR2(2 BYTE)	BRANCH OF SERVICE
WAR_PERIOD_CD	VARCHAR2(4 BYTE)	WAR PERIOD
ENTERED_ON_ACTIVE_DUTY_DT	DATE	ENTERED ACTIVE DUTY
RELEASED_FROM_ACTIVE_DUTY_DT	DATE	RELEASED ACTIVE DUTY
CEMETERY_NAME	VARCHAR2(50 BYTE)	CEMETERY NAME
CEMETERY_NUM	VARCHAR2(3 BYTE)	CEMETERY NUMBER
CEMETERY_TYPE	VARCHAR2(1 BYTE)	CEMETERY TYPE
SOURCE_USER_ID	VARCHAR2(8 BYTE)	SOURCE USER ID
SPOUSE_LAST_NAME	VARCHAR2(25 BYTE)	SPOUSE LAST NAME
SPOUSE_FIRST_NAME	VARCHAR2(15 BYTE)	SPOUSE FIRST NAME
SPOUSE_MIDDLE_NAME	VARCHAR2(15 BYTE)	SPOUSE MIDDLE NAME
SPOUSE_DECEDENT_ID	VARCHAR2(9 BYTE)	SPOUSE DECEDENT ID
SPOUSE_BIRTH_DT	DATE	SPOUSE DATE OF BIRTH
SPOUSE_DEATH_DT	DATE	SPOUSE DATE OF DEATH

Column	Description	Type
SPOUSE_RECORD_OF_INTERMENT_DT	DATE	SPOUSE DATE OF INTERMENT
SPOUSE_SOCIAL_SECURITY_NUMBER	VARCHAR2(9 BYTE)	SPOUSE SOCIAL SECURITY NUMBER
COMMENTS	NUMBER(9,0)	COMMENTS
SPOUSE_SUFFIX_NAME	TIMESTAMP(0) WITH TIME ZONE	SPOUSE SUFFIX NAME

The CASE_FLAG_APP table contains the CASE_ID, ENTRY_DT, REGIONAL_ID, REGIONAL_OFFICE_ID, and DOC_STORAGE_ID for a Flag Application document that has been scanned and the image received for processing. It also contains the foreign keys: CASE_ID, REGION_ID, REGIONAL_OFFICE_ID, DOC_STORAGE_ID.

Table 22: CASE_FLAG_APP Table

Column	Description	Type
CASE_ID		NUMBER(9,0)
ENTRY_DT	DATE FLAG APP WAS SCANNED	TIMESTAMP(0) WITH TIME ZONE
REGION_ID	REGION THAT WAS SOURCE FOR APP	NUMBER(9,0)
REGIONAL_OFFICE_ID	REGIONAL OFFICE ID FOR SOURCE OF APP	NUMBER(9,0)
DOC_STORAGE_ID	THE ID FOR THE IMAGE OF THE FLAG APP STORED IN THE DOC STORAGE FILES	NUMBER(9,0)

The CASE_INSURANCE table contains the CASE_ID and Veteran information including spouse information from an Insurance record that is loaded to the database. It also contains the foreign key: CASE_ID.

Table 23: CASE_INSURANCE Table

Column	Description	Type
CASE_ID	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	NUMBER(9,0)
ENTRY_DT	ENTRY DATE	TIMESTAMP(0) WITH TIME ZONE
VETERAN_NAME	VETERAN NAME	VARCHAR2(25 BYTE)
VETERAN_BIRTH_DT	VETERAN DATE OF BIRTH (DOB)	VARCHAR2(30 BYTE)
VETERAN_DEATH_DT	VETERAN DATE OF DEATH (DOD)	VARCHAR2(30 BYTE)

Column	Description	Type
VETERAN_CLAIM_NUM	VETERAN CLAIM NUMBER	VARCHAR2(10 BYTE)
VETERAN_SOCIAL_SECURITY_NUM	VETERAN SOCIAL SECURITY NUMBER	VARCHAR2(37 BYTE)
MILITARY_SERVICE_NUM	VETERAN MILITARY SERVICE NUMBER	VARCHAR2(10 BYTE)
INSURANCE_FILE_NUMBER	INSURANCE FILE NUMBER	VARCHAR2(9 BYTE)
SPOUSE_NAME	SPOUSE_NAME	VARCHAR2(25 BYTE)
COMMENTS	COMMENTS	CLOB
NAME_ADDRESS_LINE_1	NAME OR ADDRESS LINE 1	VARCHAR2(22 BYTE)
NAME_ADDRESS_LINE_2	NAME OR ADDRESS LINE 2	VARCHAR2(23 BYTE)
NAME_ADDRESS_LINE_3	NAME OR ADDRESS LINE 3	VARCHAR2(23 BYTE)
NAME_ADDRESS_LINE_4	NAME OR ADDRESS LINE 4	VARCHAR2(18 BYTE)
NAME_ADDRESS_LINE_5	NAME OR ADDRESS LINE 5	VARCHAR2(18 BYTE)
CITY_AND_STATE	CITY AND STATE	VARCHAR2(23 BYTE)
ZIP_OR_FOREIGN_CODE	ZIP OR FOREIGN CODE	VARCHAR2(5 BYTE)
SPOUSE_ADDRESS_LINE_1	SPOUSE ADDRESS LINE 1	VARCHAR2(25 BYTE)
SPOUSE_ADDRESS_LINE_2	SPOUSE ADDRESS LINE 2	VARCHAR2(25 BYTE)
SPOUSE_ADDRESS_LINE_3	SPOUSE ADDRESS LINE 3	VARCHAR2(25 BYTE)
SPOUSE_CITY_AND_STATE	SPOUSE CITY AND STATE	VARCHAR2(28 BYTE)
SPOUSE_ZIP	SPOUSE ZIP	VARCHAR2(5 BYTE)

The CASE_LINK table contains the Case ID, Source Table, Case Type ID, Source System ID, and Locked Status for each Case that has been created. There must be an associated Case Data record, Case Flag App record, or Case Flag App record which has been loaded from an external source. It also contains the foreign keys: CASE_ID, CASE_TYPE_ID, SOURCE_SYSTEM_ID.

Table 24: CASE_LINK Table

Column	Description	Type
CASE_ID	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	NUMBER(9,0)
SRC_TABLE	IDENTIFIES THE SOURCE TABLE BASED ON THE CASE TYPE	CHAR(1 BYTE)

Column	Description	Type
CASE_TYPE_ID	UNIQUE IDENTIFIER FOR CASE TYPE	NUMBER(9,0)
SOURCE_SYSTEM_ID	UNIQUE IDENTIFIER FOR SOURCE SYSTEM	NUMBER(9,0)
LOCKED_STATUS	STATE OF THE ELECTRONIC DOCUMENT, EITHER LOCKED OR UNLOCKED. WHEN AN ELECTRONIC DOCUMENT IS FIRST CREATED AND SAVED, UNLOCKED IS THE DEFAULT VALUE	VARCHAR2(2 BYTE)
LOAD_DT	DATE THE RECORD WAS LOADED FROM AN EXTERNAL SOURCE	DATE

The CASE_TYPE table contains the CASE_TYPE_ID, CASE_TYPE_CD, and Description of case types that include FNOD, FNOD Spouse, Flag Application, or Insurance Report. It has no foreign keys.

Table 25: CASE_TYPE Table

Column	Description	Type
CASE_TYPE_ID	PRIMARY KEY FOR CASE_TYPE	NUMBER(9,0)
CASE_TYPE_CD	CASE TYPE CODE	VARCHAR2(3 BYTE)
DESCRIPTION	CASE TYPE DESCRIPTION	VARCHAR2(30 BYTE)

The FNOD_RECORD table contains Username of user that processed the record. It also contains the foreign keys: CASE_ID, REGIONAL_OFFICE_ID.

Table 26: FNOD_RECORD Table

Column	Description	Type
CASE_ID	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	NUMBER(9,0)
USERNAME	USER THAT CREATED AND SAVED THE FNOD RECORD	VARCHAR2(32 BYTE)
CASE_STATE	STATE OF THE ELECTRONIC DOCUMENT	VARCHAR2(2 BYTE)
REGIONAL_OFFICE_ID	DENOTES THE REGION WHERE THE FLAG APP ORIGINATED	NUMBER(9,0)
FNOD_CREATED_DT	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	TIMESTAMP(0) WITH TIME ZONE
CASE_LOCKED_DT	THE DATE/TIME THE CASE RECORD WAS LOCKED DURING FNOD RECORD ESTABLISHMENT	TIMESTAMP(0) WITH TIME ZONE
VETERAN_LAST_NAME	VETERAN LAST NAME	VARCHAR2(25 BYTE)

Column	Description	Type
VETERAN_FIRST_NAME	VETERAN FIRST NAME	VARCHAR2(15 BYTE)
VETERAN_MIDDLE_NAME	VETERAN MIDDLE NAME	VARCHAR2(15 BYTE)
VETERAN_BIRTH_DT	VETERAN DATE OF BIRTH (DOB)	DATE
VETERAN_DEATH_DT	VETERAN DATE OF DEATH (DOD)	DATE
NMI	NEED MORE INFORMATION. COMMONLY USED WITHIN THE FNOD OFFICE WHEN THERE IS NOT ENOUGH INFORMATION PROVIDED WITHIN THE CASE INFORMATION TO PERFORM ANY SHARE UPDATE ACTION	CHAR(1 BYTE)
TOO_OLD_TO_CREATE	TOO OLD TO CREATE	CHAR(1 BYTE)
ELIGIBILITY_VERIFICATION	INDICATOR AS TO WHETHER VETERAN ELIGIBILITY HAS BEEN PROVIDED WITHIN THE CASE INFORMATION	CHAR(1 BYTE)
DOD_ALREADY_PRESENT	INDICATOR AS TO WHETHER THE DATE OF DEATH IS ALREADY LISTED IN SHARE OR NOT	CHAR(1 BYTE)
FLAG_ISSUED	INDICATOR AS TO FLAG ISSUANCE WITHIN SHARE	CHAR(1 BYTE)
FNOD	INDICATOR AS TO FNOD PROCESSING WITHIN SHARE	CHAR(1 BYTE)
BENEFIT_CANCELLED	INDICATOR AS WHETHER A BENEFIT WAS CANCELLED WITHIN SHARE OR BENEFIT CANCELLATION WAS REQUESTED	CHAR(1 BYTE)
MONTHLY_AMOUNT	REPRESENTS THE DOLLAR AMOUNT OF THE MONTHLY BENEFIT PAID WHEN BENEFITS WERE CANCELLED THROUGH FNOD SHARE PROCESSING OR CANCELLATION OF THE BENEFIT WAS REQUESTED	NUMBER(10,2)
BIRLS_ADD	INDICATOR AS TO A BIRLS RECORD BEING CREATED WITHIN SHARE	CHAR(1 BYTE)
BIRLS_UPDATE	INDICATOR AS TO A BIRLS RECORD BEING UPDATED WITHIN SHARE	CHAR(1 BYTE)

Column	Description	Type
PMC	THE FIELD DOCUMENTS THE OUTCOME OF SHARE PMC PROCESSING. IF SHARE SHOWS THAT THE VETERAN WAS HONORABLY DISCHARGED, THE PMC IS ORDERED WITHIN SHARE. IF SHARE DOES NOT SHOW THE VETERAN WAS HONORABLY DISCHARGED, NO PMC IS ORDERED	CHAR(1 BYTE)
COMMENTS	COMMENTS	CLOB
VETERAN_SUFFIX_NAME	VETERAN SUFFIX	VARCHAR2(3 BYTE)
VETERAN_SOCIAL_SECURITY_NUM	VETERAN SOCIAL SEC NUM	VARCHAR2(9 BYTE)
VETERAN_DECEDENT_ID	VETERAN DECEDENT ID	VARCHAR2(9 BYTE)
VETERAN_RECORD_OF_INTERMENT_DT	VETERAN ROI DATE	DATE
VETERAN CLAIM NUMBER	VETERAN CLAIM NUMBER	VARCHAR2(9 BYTE)
MILITARY SERVICE NUMBER	VETERAN MILITARY SVC NUMBER	VARCHAR2(9 BYTE)

The RANDOM_SAMPLE table is a temporary table used in generating samples. It contains no foreign keys.

Table 27: RANDOM_SAMPLE Table

Column	Description	Type
CASE_ID	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	NUMBER

The REGION table contains the Region ID, Region CD, and Description for the Region of origin of the document. It contains no foreign keys.

Table 28: REGION Table

Column	Description	Type
REGION_ID	PRIMARY KEY FOR REGION	NUMBER(9,0)
REGION_CD	DENOTES THE REGION LABEL WHERE THE FLAG APP ORIGINATED	CHAR(1 BYTE)
DESCRIPTION	DENOTES THE REGION DESCRIPTION WHERE THE FLAG APP ORIGINATED	VARCHAR2(8 BYTE)

The REGIONAL_OFFICE table contains the Regional Office ID, Regional Office Number, Regional Office Name, and the Region ID that identify the VA Regional Office of origin for the document. It also contains the foreign key: REGION_ID.

Table 29: REGIONAL_OFFICE Table

Column	Description	Type
REGIONAL_OFFICE_ID	PRIMARY KEY FOR REGIONAL_OFFICE	NUMBER(9,0)
REGIONAL_OFFICE_NUM	DENOTES THE VARO STATION NUMBER WHERE THE FLAG APP ORIGINATED	NUMBER(3,0)
REGIONAL_OFFICE_NAME	DENOTES THE VARO STATION NAME WHERE THE FLAG APP ORIGINATED	VARCHAR2(50 BYTE)
REGION_ID	UNIQUE IDENTIFIER REPRESENTING THE REGION	NUMBER(9,0)

The REPORT table contains the fields related to the title and parameters for the reports generated from the FNOD Application. It has no foreign keys.

Table 30: REPORT Table

Column	Description	Type
REPORT_ID	Tag for uniquely identifying report - this value is used throughout report process	VARCHAR2(30 BYTE)
TITLE	Name of report displayed to user on the screen	VARCHAR2(100 BYTE)
PARAMETER_CODE	Value used to control which parameters are displayed to the user	NUMBER

The SAMPLES table stores records selected by the sample processes. It contains the foreign key: CASE_ID.

Table 31: SAMPLES Table

Column	Description	Type
OWNER	The username that generated the sample	VARCHAR2(32 BYTE)
CASE_ID	The case selected	NUMBER
ASSIGNED_TO	User currently reviewing sampled record	VARCHAR2(32 BYTE)

The SOURCE_CASE_TYPE_MAP table contains the SOURCE_CASE_TYPE_MAP_ID, SOURCE_SYSTEM_ID, and the CASE TYPE ID that specifies the source and case type for case loaded from an external source. It also contains the foreign keys: SOURCE_SYSTEM_ID, CASE_TYPE_ID.

Table 32: SOURCE_CASE_TYPE_MAP Table

Column	Description	Type
SOURCE_CASE_TYPE_MAP_ID	PRIMARY KEY FOR SOURCE_REPORT_TYPE_MAP	NUMBER(9)

Column	Description	Type
SOURCE_SYSTEM_ID	SOURCE SYSTEM	NUMBER(9
CASE_TYPE_ID	REPORT TYPE	NUMBER(9

The SOURCE_SYSTEM table contains the SOURCE_SYSTEM_ID, SOURCE_SYSTEM_CD, and DESCRIPTION related to data loaded from an external source. It also contains the foreign key: SOURCE_SYSTEM_ID.

Table 33: SOURCE_SYSTEM Table

Column	Description	Type
SOURCE_SYSTEM_ID	PRIMARY KEY FOR SOURCE_SYSTEM	NUMBER(9,0)
SOURCE_SYSTEM_CD	SOURCE SYSTEM CODE	VARCHAR2(2 BYTE)
DESCRIPTION	SOURCE SYSTEM DESCRIPTION	VARCHAR2(30 BYTE)

The SYSTEM_PARAMETERS table contains the SYS_PARAM_ID, PARAM_NAME, and PARAM_VALUE. These values are set/editable by the System Administrator for the password expiration date, password and username lengths and Log in retries. It contains no foreign keys.

Table 34: SYSTEM_PARAMETERS Table

Column	Description	Type
SYSTEM_PARAM_ID	PRIMARY KEY FOR SYSTEM_PARAMETERS	NUMBER(9,0)
PARAM_NAME	PARAMETER NAME	VARCHAR2(50 BYTE)
PARAM_VALUE	PARAMETER VALUE	VARCHAR2(50 BYTE)

The following are global temporary tables that are used to store transient data from a generated report. This data is used to provide two separate views of the report: Comma Separated Value (CSV) and PDF.

Table 35: FNOD Temporary Global Tables

Temporary Table	Report Supported
RPT_DAILY_FNOD	Daily FNOD Records Created Report
RPT_DAILY_USER_ACTIVITY	Daily FNOD Activity by User Report
RPT_FLAG_APPS_BY_REGIONS	Flag Applications Received by Regions Report
RPT_FLAG_APPS_BY_RO	Flag Applications Received by RO Report
RPT_FNODS_PROC	FNODs Processed Report
RPT_FNODS_PROC_BY_WORKGROUP	FNODs Processed by Workgroup Report
RPT_NODS	Notice of Deaths (NOD) Received Report
RPT_NODS_BY_WORKGROUP	Notice of Deaths (NOD) Received by Workgroup Report
RPT_NODS_PROC	NODs Processed Report

Temporary Table	Report Supported
RPT_NODS_PROC_BY_WORKGROUP	NODs Processed by Workgroup Report
RPT_PMCS_PROC	PMC Processed Report
RPT_SPO_BEN_CAN	Spouse Benefits Cancelled Report
RPT_SPO_BEN_CAN_BY_WORKGROUP	Spouse Benefits Cancelled by Workgroup Report
RPT_SPO_RUN_CAN	Spouse Running Award Cases Cancelled Report
RPT_VET_BEN_CAN	Veteran Benefits Cancelled Report
RPT_VET_BEN_CAN_BY_WORKGROUP	Veteran Benefits Cancelled by Workgroup Report
RPT_VET_RUN_CAN	Veteran Running Award Cases Cancelled Report
RPT_VET_RUN_CAN_BY_WORKGROUP	Veteran Running Award Cases Cancelled by Workgroup Report

3.2.2. Database Information

This section identifies all databases that will be created, replaced, interfaced with, or whose structure will be modified (i.e., add or delete tables or add or delete columns to a table) as part of the FNOD development effort.

Table 9: Database Inventory

Database Name	Description	Type	Steward
BOSS	Development database instance hosted at the QITC contains FNOD information used by the FNOD application.	Oracle 11g	MBMS
BOSS	Test database instance hosted at the QITC contains FNOD information used by the FNOD application.	Oracle 11g	MBMS
BOSS	Pre-production database instance hosted at the QITC contains FNOD information used by the FNOD application.	Oracle 11g	MBMS
BOSS	Production database instance hosted at the QITC contains FNOD information used by the FNOD application.	Oracle 11g	MBMS
BOSSCOOP	Production COOP database instance.	Oracle 11g	MBMS

3.2.3. User Interface Data Mapping

The User Interface screens and the tables will be verified, validated and updated in this document as part of the as-is system analysis, to capture any unidentified changes. FNOD system will be analyzed based on the additional enhancement requirements and the UI modifications will be updated along with any database modifications, as part of the future enhancement in this document.

This section describes and defines the format and information that will be available for users of the FNOD product to be able to enter data into the database or to retrieve information from the database.

3.2.3.1. Application Screen Interface

The following section provides the application screen interfaces designed and the mapping of the data to the FNOD database schema.

3.2.3.1.1. FNOD Login Screen

Users log into the system using the FNOD Login Screen.

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 36: FNOD Login Screen Controls

Control	Action Description	Database TableName.ColumnName
Username	Logon username	APP_USER.UserName
Password	User Password	APP_USER.Password
Login	Click to login and continue	

3.2.3.1.2. Main Menu for PSA User Screen

Once the user has logged in successfully, the system displays the Main Menu Screen. From here, the user selects Process Case from the Main Menu.

Note: User interface screen shots will be provided as part of the future development effort of this document.

3.2.3.1.3. Main Menu for Supervisor Screen

Supervisors have access to certain screens that make managing user workloads and identifying system issues easier. The following sections detail the additional screens that provide this functionality.

Note: User interface screen shots will be provided as part of the future development effort of this document.

3.2.3.1.4. Selecting a Pending Case to Process Screen

Once Process Case has been selected from the Main Menu, the user is presented with the Select Source Case Type Screen. The user selects the type of case to process from the list of case types by selecting the case type and clicking the Next button.

The user has the option to cancel the Process Case action by clicking the Cancel button. This will return the user to the Main Menu Screen.

Note: User interface screen shots will be provided as part of the future development effort of this document.

After the user chooses the case type to process, they can filter cases to narrow their work focus.

Table 37: Controls for the Select Source Case Type Screen

Control	Action Description	Database TableName.ColumnName
Source Case Type	Source Case type which categorizes the case based on the source such as BOSS, AMAS, FLAG and Insurance app	CASE_LINK .SRC_TABLE

3.2.3.1.5. *Filtering Flag Applications Screen*

Users can filter Flag Applications by the following criteria.

- Date (Created) From
- Date (Created) To
- Region
- Regional Office

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 38: Controls of the Filter Flag Applications Screen

Control	Action Description	Database TableName.ColumnName
Date From	Criteria for selecting cases entered after the specified date	CASE_FLAG_APP.ENTRY_DT
Date To	Criteria for selecting cases entered before the specified date	CASE_FLAG_APP.ENTRY_DT
Region	DENOTES THE REGION DESCRIPTION WHERE THE FLAG APP ORIGINATED	REGION.DESCRPTION
Regional Office	DENOTES THE VARO STATION NAME WHERE THE FLAG APP ORIGINATED	REGIONAL_OFFICE .REGIONAL_OFFICE_NAME

3.2.3.1.6. *Filtering Other Cases*

Users can filter pending cases by the following criteria.

- Date (Created) From
- Date (Created) To

Note: User interface screen shots will be provided as part of the future development effort of this document.

Displays the Filter Pending Cases Screen where the user selects the date range of the cases to process.

Table 39: Controls for the Filter Pending Cases Screen

Control	Action Description	Database TableName.ColumnName
Date From	Criteria for selecting cases entered after the specified date	CASE_DATA.ENTRY_DT CASE_INSURANCE. ENTRY_DT
Date To	Criteria for selecting cases entered before the specified date	CASE_DATA.ENTRY_DT CASE_INSURANCE. ENTRY_DT

3.2.3.1.7. *FNOD Record Screen for Processing a Pending Case*

Note: User interface screen shots will be provided as part of the future development effort of this document.

Displays the FNOD Record Screen where the user processes the case. If the user does not have sufficient information, the case can be parked until a later date. If the user can finishes the FNOD processing and selects to “Complete” the FNOD record is created.

Table 40: Controls for the FNOD Record Screen

Control	Action Description	Database TableName.ColumnName
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD.USERNAME
Case id	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	FNOD_RECORD.CASE_ID
FNOD Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Case Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Case Locked Date	THE DATE/TIME THE CASE RECORD WAS LOCKED DURING FNOD RECORD ESTABLISHMENT	FNOD_RECORD.CASE_LOCKED_DT
Case Status	STATE OF THE ELECTRONIC FNOD DOCUMENT	FNOD_RECORD.CASE_STATE
Veteran First Name	VETERAN FIRST NAME	FNOD_RECORD.VETERAN_FIRST_NAME
Veteran Middle Name	VETERAN MIDDLE NAME	FNOD_RECORD.VETERAN_MIDDLE_NAME
Veteran Last Name	VETERAN LAST NAME	FNOD_RECORD.VETERAN_LAST_NAME
Veteran Suffix Name	VETERAN SUFFIX	FNOD_RECORD.VETERAN_SUFFIX_NAME
Veteran Date of Birth	VETERAN DATE OF BIRTH (DOB)	FNOD_RECORD.VETERAN_BIRTH_DT
Veteran Date of Death	VETERAN DATE OF DEATH (DOD)	FNOD_RECORD.VETERAN_DEATH_DT
Veteran Claim Number	VETERAN CLAIM NUMBER	FNOD_RECORD.VETERAN_CLAIM_NUMBER
Veteran Social Security Number	VETERAN SOCIAL SEC NUMBER	FNOD_RECORD.VETERAN_SOCIAL_SECURITY_NUM
Military Service Number	VETERAN MILITARY SVC NUMBER	FNOD_RECORD.MILITARY_SERVICE_NUMBER
Regional Office	DENOTES THE VARO STATION NAME WHERE THE FLAG APP ORIGINATED	FNOD_RECORD.REGIONAL_OFFICE_NAME

Control	Action Description	Database TableName.ColumnName
FNOD	INDICATOR AS TO FNOD PROCESSING WITHIN SHARE	FNOD_RECORD. FNOD
Benefit Cancelled	INDICATOR AS WHETHER A BENEFIT WAS CANCELLED WITHIN SHARE OR BENEFIT CANCELLATION WAS REQUESTED	FNOD_RECORD. BENEFIT_CANCELLED
Monthly Amount	REPRESENTS THE DOLLAR AMOUNT OF THE MONTHLY BENEFIT PAID WHEN BENEFITS WERE CANCELLED THROUGH FNOD SHARE PROCESSING OR CANCELLATION OF THE BENEFIT WAS REQUESTED	FNOD_RECORD. MONTHLY_AMOUNT
Flag Issued	INDICATOR AS TO FLAG ISSUANCE WITHIN SHARE	FNOD_RECORD. FLAG_ISSUED
PMC	THE FIELD DOCUMENTS THE OUTCOME OF SHARE PMC PROCESSING. IF SHARE SHOWS THAT THE VETERAN WAS HONORABLY DISCHARGED, THE PMC IS ORDERED WITHIN SHARE. IF SHARE DOES NOT SHOW THE VETERAN WAS HONORABLY DISCHARGED, NO PMC IS ORDERED	FNOD_RECORD. PMC
Too Old To Create	Too Old To Create FNOD record	FNOD_RECORD. TOO_OLD_TO_CREATE
NMI	NEED MORE INFORMATION. COMMONLY USED WITHIN THE FNOD OFFICE WHEN THERE IS NOT ENOUGH INFORMATION PROVIDED WITHIN THE CASE INFORMATION TO PERFORM ANY SHARE UPDATE ACTION	FNOD_RECORD.NMI
BIRLS Add	INDICATOR AS TO A BIRLS RECORD BEING CREATED WITHIN SHARE	FNOD_RECORD. BIRLS_ADD
BIRLS Update	INDICATOR AS TO A BIRLS RECORD BEING UPDATED WITHIN SHARE	FNOD_RECORD. BIRLS_UPDATE
Eligibility Verification	INDICATOR AS TO WHETHER VETERAN ELIGIBILITY HAS BEEN PROVIDED WITHIN THE CASE INFORMATION	FNOD_RECORD. ELIGIBILITY_VERIFICATION

Control	Action Description	Database TableName.ColumnName
DoD Already Present	INDICATOR AS TO WHETHER THE DATE OF DEATH IS ALREADY LISTED IN SHARE OR NOT	FNOD_RECORD. DOD_ALREADY_PRESENT
Comments	comments	FNOD_RECORD.COMMENTS

3.2.3.1.8. *Selecting a Parked Case Screen*

Once Parking Lot is selected from the Main Menu, the user is presented with the Parking Lot Results Screen, which provides a list of all of the cases that have been parked.

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 41: Controls for the Parking Lot Results Screen

Control	Action Description	Database TableName.ColumnName
Case id	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	FNOD_RECORD .CASE_ID
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD. USERNAME
Case Type Code	CASE TYPE CODE	CASE_TYPE. CASE_TYPE_CD
Source System Code	VETERAN_LAST_NAME	SOURCE_SYSTEM. SOURCE_SYSTEM_CD
Veteran Name	VETERAN FIRST NAME , VETERAN MIDDLE NAME ,VETERAN LAST NAME	FNOD_RECORD. VETERAN_FIRST_NAME FNOD_RECORD. VETERAN_MIDDLE_NAME FNOD_RECORD. VETERAN_LAST_NAME
Case Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD. FNOD_CREATED_DT

3.2.3.1.9. *User Profile Password Change Screen*

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 42: Controls for the User Profile Password Change Screen

Control	Action Description	Database TableName.ColumnName
UserName	USER NAME - UNIQUELY IDENTIFIES A USER	APP_USER. USERNAME
Password	USER PASSWORD	APP_USER. PASSWORD

3.2.3.1.10. System Administrator Manage User Profile Screen

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 43: Controls for the System Administrator User Profile Screen

Control	Action Description	Database TableName.ColumnName
Display Name	IDENTIFIES THE USER DISPLAY NAME	APP_USER. DISPLAY_NAME
UserName	USER NAME - UNIQUELY IDENTIFIES A USER	APP_USER. USERNAME
Password	USER PASSWORD	APP_USER. PASSWORD
Status	IDENTIFIES THE USER STATUS	APP_USER. STATUS
Lock	USER LOCKED	APP_USER.LOCK
Assign Roles	IDENTIFIES THE USER ROLE	APP_USER_ROLE. ROLE_ID

3.2.3.1.11. Search FNOD Record Screen for PSA User Screen

Note: User interface screen shots will be provided as part of the future development effort of this document.

The PSA user can select to edit a parked case, or close and return to the Main Menu.

The Supervisor user can select to view all the parked cases by any selected PSA or Supervisor user, or all parked cases for all PSA and Supervisor users. The Supervisor user can edit a parked case, reassign a parked case, or close and return to the Main Menu.

Table 44: Controls for the Search FNOD Record Screen for PSA User

Control	Action Description	Database TableName.ColumnName
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD.USERNAME
Case id	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	FNOD_RECORD.CASE_ID
FNOD Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Veteran First Name	VETERAN FIRST NAME	FNOD_RECORD.VETERAN_FIRST_NAME
Veteran Middle Name	VETERAN MIDDLE NAME	FNOD_RECORD.VETERAN_MIDDLE_NAME
Veteran Last Name	VETERAN LAST NAME	FNOD_RECORD.VETERAN_LAST_NAME
Veteran Suffix Name	VETERAN SUFFIX	FNOD_RECORD.VETERAN_SUFFIX_NAME

Control	Action Description	Database TableName.ColumnName
Veteran Date of Birth	VETERAN DATE OF BIRTH (DOB)	FNOD_RECORD. VETERAN_BIRTH_DT
Veteran Date of Death	VETERAN DATE OF DEATH (DOD)	FNOD_RECORD. VETERAN_DEATH_DT
Veteran Claim Number	VETERAN CLAIM NUMBER	FNOD_RECORD. VETERAN_CLAIM_NUMBER
Veteran Social Security Number	VETERAN SOCIAL SEC NUMBER	FNOD_RECORD. VETERAN_SOCIAL_SECURITY_NUM
Military Service Number	VETERAN MILITARY SVC NUMBER	FNOD_RECORD. MILITARY_SERVICE_NUMBER

3.2.3.1.12. Search FNOD Record Screen for Supervisor Screen

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 45: Controls for the Search FNOD Record Screen for Supervisor

Control	Action Description	Database TableName.ColumnName
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD.USERNAME
Case id	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	FNOD_RECORD.CASE_ID
FNOD Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Veteran First Name	VETERAN FIRST NAME	FNOD_RECORD. VETERAN_FIRST_NAME
Veteran Middle Name	VETERAN MIDDLE NAME	FNOD_RECORD. VETERAN_MIDDLE_NAME
Veteran Last Name	VETERAN LAST NAME	FNOD_RECORD. VETERAN_LAST_NAME
Veteran Suffix Name	VETERAN SUFFIX	FNOD_RECORD. VETERAN_SUFFIX_NAME
Veteran Date of Birth	VETERAN DATE OF BIRTH (DOB)	FNOD_RECORD. VETERAN_BIRTH_DT
Veteran Date of Death	VETERAN DATE OF DEATH (DOD)	FNOD_RECORD. VETERAN_DEATH_DT
Veteran Claim Number	VETERAN CLAIM NUMBER	FNOD_RECORD. VETERAN_CLAIM_NUMBER

Control	Action Description	Database TableName.ColumnName
Veteran Social Security Number	VETERAN SOCIAL SEC NUMBER	FNOD_RECORD. VETERAN_SOCIAL_SECURITY_NUM
Military Service Number	VETERAN MILITARY SVC NUMBER	FNOD_RECORD. MILITARY_SERVICE_NUMBER

3.2.3.1.13. FNOD Record Search Results Screen

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 46: Controls for the FNOD Record Search Results Screen

Control	Action Description	Database TableName.ColumnName
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD.USERNAME
Case id	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	FNOD_RECORD.CASE_ID
FNOD Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Veteran First Name	VETERAN FIRST NAME	FNOD_RECORD. VETERAN_FIRST_NAME
Veteran Middle Name	VETERAN MIDDLE NAME	FNOD_RECORD. VETERAN_MIDDLE_NAME
Veteran Last Name	VETERAN LAST NAME	FNOD_RECORD. VETERAN_LAST_NAME
Veteran Suffix Name	VETERAN SUFFIX	FNOD_RECORD. VETERAN_SUFFIX_NAME
Veteran Date of Birth	VETERAN DATE OF BIRTH (DOB)	FNOD_RECORD. VETERAN_BIRTH_DT
Veteran Date of Death	VETERAN DATE OF DEATH (DOD)	FNOD_RECORD. VETERAN_DEATH_DT
Veteran Claim Number	VETERAN CLAIM NUMBER	FNOD_RECORD. VETERAN_CLAIM_NUMBER
Veteran Social Security Number	VETERAN SOCIAL SEC NUMBER	FNOD_RECORD. VETERAN_SOCIAL_SECURITY_NUM
Military Service Number	VETERAN MILITARY SVC NUMBER	FNOD_RECORD. MILITARY_SERVICE_NUMBER

3.2.3.1.14. View Aggregate Counts Screen –Supervisor Role

Note: User interface screen shots will be provided as part of the future development effort of this document.

This screen will be enhanced to display statistics for pending Award Audit and include a listing of Award Audits pending. The screen will be modified to include a separate table for the Award Audits Pending from the existing pending and parked case totals and display the total number of FNOD records pending Award Audit for each case type.

Table 47: Controls for the Aggregate Counts Screen

Control	Action Description	Database TableName.ColumnName
Case Type	UNIQUE IDENTIFIER FOR CASE TYPE	CASE_LINK. CASE_TYPE_ID
Pending, Parked	STATE OF THE ELECTRONIC DOCUMENT	FNOD_RECORD.CASE_STATE

3.2.3.1.15. Award Audit Screen –Supervisor Role

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 48: Controls for the Award Audit Screen

Control	Action Description	Database TableName.ColumnName
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD.USERNAME
Case id	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	FNOD_RECORD.CASE_ID
FNOD Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Case Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Case Locked Date	THE DATE/TIME THE CASE RECORD WAS LOCKED DURING FNOD RECORD ESTABLISHMENT	FNOD_RECORD.CASE_LOCKED_DT
Case Status	STATE OF THE ELECTRONIC FNOD DOCUMENT	FNOD_RECORD.CASE_STATE
Veteran First Name	VETERAN FIRST NAME	FNOD_RECORD.VETERAN_FIRST_NAME
Veteran Middle Name	VETERAN MIDDLE NAME	FNOD_RECORD.VETERAN_MIDDLE_NAME

Control	Action Description	Database TableName.ColumnName
Veteran Last Name	VETERAN LAST NAME	FNOD_RECORD. VETERAN_LAST_NAME
Veteran Suffix Name	VETERAN SUFFIX	FNOD_RECORD. VETERAN_SUFFIX_NAME
Veteran Date of Birth	VETERAN DATE OF BIRTH (DOB)	FNOD_RECORD. VETERAN_BIRTH_DT
Veteran Date of Death	VETERAN DATE OF DEATH (DOD)	FNOD_RECORD. VETERAN_DEATH_DT
Veteran Claim Number	VETERAN CLAIM NUMBER	FNOD_RECORD. VETERAN_CLAIM_NUMBER
Veteran Social Security Number	VETERAN SOCIAL SEC NUMBER	FNOD_RECORD. VETERAN_SOCIAL_SECURITY_NUM
Military Service Number	VETERAN MILITARY SVC NUMBER	FNOD_RECORD. MILITARY_SERVICE_NUMBER
Regional Office	DENOTES THE VARO STATION NAME WHERE THE FLAG APP ORIGINATED	FNOD_RECORD. REGIONAL_OFFICE_NAME
FNOD	INDICATOR AS TO FNOD PROCESSING WITHIN SHARE	FNOD_RECORD. FNOD
Benefit Cancelled	INDICATOR AS WHETHER A BENEFIT WAS CANCELLED WITHIN SHARE OR BENEFIT CANCELLATION WAS REQUESTED	FNOD_RECORD. BENEFIT_CANCELLED
Monthly Amount	REPRESENTS THE DOLLAR AMOUNT OF THE MONTHLY BENEFIT PAID WHEN BENEFITS WERE CANCELLED THROUGH FNOD SHARE PROCESSING OR CANCELLATION OF THE BENEFIT WAS REQUESTED	FNOD_RECORD. MONTHLY_AMOUNT
Flag Issued	INDICATOR AS TO FLAG ISSUANCE WITHIN SHARE	FNOD_RECORD. FLAG_ISSUED

Control	Action Description	Database TableName.ColumnName
PMC	THE FIELD DOCUMENTS THE OUTCOME OF SHARE PMC PROCESSING. IF SHARE SHOWS THAT THE VETERAN WAS HONORABLY DISCHARGED, THE PMC IS ORDERED WITHIN SHARE. IF SHARE DOES NOT SHOW THE VETERAN WAS HONORABLY DISCHARGED, NO PMC IS ORDERED	FNOD_RECORD. PMC
Too Old To Create	Too Old To Create FNOD record	FNOD_RECORD. TOO_OLD_TO_CREATE
NMI	NEED MORE INFORMATION. COMMONLY USED WITHIN THE FNOD OFFICE WHEN THERE IS NOT ENOUGH INFORMATION PROVIDED WITHIN THE CASE INFORMATION TO PERFORM ANY SHARE UPDATE ACTION	FNOD_RECORD.NMI
BIRLS Add	INDICATOR AS TO A BIRLS RECORD BEING CREATED WITHIN SHARE	FNOD_RECORD. BIRLS_ADD
BIRLS Update	INDICATOR AS TO A BIRLS RECORD BEING UPDATED WITHIN SHARE	FNOD_RECORD. BIRLS_UPDATE
Eligibility Verification	INDICATOR AS TO WHETHER VETERAN ELIGIBILITY HAS BEEN PROVIDED WITHIN THE CASE INFORMATION	FNOD_RECORD. ELIGIBILITY_VERIFICATION
DoD Already Present	INDICATOR AS TO WHETHER THE DATE OF DEATH IS ALREADY LISTED IN SHARE OR NOT	FNOD_RECORD. DOD_ALREADY_PRESENT
Comments	comments	FNOD_RECORD.COMMENTS

3.2.3.1.16. Sample Pending Cases –Supervisor Role

The Sample Pending Cases Module scans the pending cases using criteria specified by the Supervisor User. A sample of the pending cases that meet the criteria are presented to the Supervisor User for review. The Supervisor User can elect to delete pending Flag App cases. Only pending Flag App cases can be deleted.

Note: User interface screen shots will be provided as part of the future development effort of this document.

3.2.3.1.17. Sample Pending Cases Display

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 49: Controls for the Pending Cases Display

Control	Action Description	Database TableName.ColumnName
First Name	VETERAN FIRST NAME	CASE_ID. VETERAN_FIRST_NAME
Middle Name	VETERAN MIDDLE NAME	CASE_ID. VETERAN_MIDDLE_NAME
Last Name	VETERAN LAST NAME	CASE_ID. VETERAN_LAST_NAME
Suffix	VETERAN SUFFIX NAME	CASE_ID. VETERAN_SUFFIX_NAME
Alias Name	VETERAN ALIAS LAST NAME	CASE_ID. VETERAN_ALIAS_LAST_NAME
DOB	VETERAN DATE OF BIRTH (DOB)	CASE_ID. VETERAN_BIRTH_DT
DOD	VETERAN DATE OF DEATH (DOD)	CASE_ID. VETERAN_DEATH_DT
DOI	VETERAN DATE OF INTERMENT (DOI)	CASE_ID. VETERAN_RECORD_OF_INTERMENT_DT
RANK	RANK CODE	CASE_ID. RANK_CD
BOS	BRANCH OF SERVICE	CASE_ID. BRANCH_OF_SERVICE_CD
WAR PERIOD	WAR PERIOD	CASE_ID. WAR_PERIOD_CD
EOD	ENTERED ACTIVE DUTY	CASE_ID. ENTERED_ON_ACTIVE_DUTY_DT
RAD	RELEASED ACTIVE DUTY	CASE_ID. RELEASED_FROM_ACTIVE_DUTY_DT
City Home of RCD	VETERAN CITY HOME OF RECORD	CASE_ID. VETERAN_HOME_OF_RECORD_CITY
State Home of RCD	VETERAN STATE HOME OF RECORD	CASE_ID. VETERAN_HOME_OF_RECORD_STATE
Cemetery_ Name	CEMETERY NAME	CASE_ID. CEMETERY_NAME
Cem_NBR	CEMETERY NUMBER	CASE_ID. CEMETERY_NUM
Cem_Type	CEMETERY TYPE	CASE_ID. CEMETERY_TYPE

3.2.3.1.18. Sample Completed Cases

The Sample Completed FNOD Records Module allows the Supervisor User to review a sampling of completed FNOD records for the purpose of Quality Control. The Supervisor User can edit a selected FNOD edit and save the updated FNOD Record. An audit record is created if the FNOD Record is updated and saved.

Note: User interface screen shots will be provided as part of the future development effort of this document.

3.2.3.1.19. Sample Completed Cases Search Results

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 50: Controls for the Sample Completed Cases Search Results Screen

Control	Action Description	Database TableName.ColumnName
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD.USERNAME
Case id	UNIQUE NUMBER ASSIGNED TO EACH ELECTRONIC DOCUMENT CREATED	FNOD_RECORD.CASE_ID
FNOD Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Case Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Case Locked Date	THE DATE/TIME THE CASE RECORD WAS LOCKED DURING FNOD RECORD ESTABLISHMENT	FNOD_RECORD.CASE_LOCKED_DT
Case Status	STATE OF THE ELECTRONIC FNOD DOCUMENT	FNOD_RECORD.CASE_STATE
Veteran First Name	VETERAN FIRST NAME	FNOD_RECORD.VETERAN_FIRST_NAME
Veteran Middle Name	VETERAN MIDDLE NAME	FNOD_RECORD.VETERAN_MIDDLE_NAME
Veteran Last Name	VETERAN LAST NAME	FNOD_RECORD.VETERAN_LAST_NAME
Veteran Suffix Name	VETERAN SUFFIX	FNOD_RECORD.VETERAN_SUFFIX_NAME
Veteran Date of Birth	VETERAN DATE OF BIRTH (DOB)	FNOD_RECORD.VETERAN_BIRTH_DT
Veteran Date of Death	VETERAN DATE OF DEATH (DOD)	FNOD_RECORD.VETERAN_DEATH_DT
Veteran Claim Number	VETERAN CLAIM NUMBER	FNOD_RECORD.VETERAN_CLAIM_NUMBER
Veteran Social Security Number	VETERAN SOCIAL SEC NUMBER	FNOD_RECORD.VETERAN_SOCIAL_SECURITY_NUM
Military Service Number	VETERAN MILITARY SVC NUMBER	FNOD_RECORD.MILITARY_SERVICE_NUMBER
Regional Office	DENOTES THE VARO STATION NAME WHERE THE FLAG APP ORIGINATED	FNOD_RECORD.REGIONAL_OFFICE_NAME

Control	Action Description	Database TableName.ColumnName
FNOD	INDICATOR AS TO FNOD PROCESSING WITHIN SHARE	FNOD_RECORD. FNOD
Benefit Cancelled	INDICATOR AS WHETHER A BENEFIT WAS CANCELLED WITHIN SHARE OR BENEFIT CANCELLATION WAS REQUESTED	FNOD_RECORD. BENEFIT_CANCELLED
Monthly Amount	REPRESENTS THE DOLLAR AMOUNT OF THE MONTHLY BENEFIT PAID WHEN BENEFITS WERE CANCELLED THROUGH FNOD SHARE PROCESSING OR CANCELLATION OF THE BENEFIT WAS REQUESTED	FNOD_RECORD. MONTHLY_AMOUNT
Flag Issued	INDICATOR AS TO FLAG ISSUANCE WITHIN SHARE	FNOD_RECORD. FLAG_ISSUED
PMC	THE FIELD DOCUMENTS THE OUTCOME OF SHARE PMC PROCESSING. IF SHARE SHOWS THAT THE VETERAN WAS HONORABLY DISCHARGED, THE PMC IS ORDERED WITHIN SHARE. IF SHARE DOES NOT SHOW THE VETERAN WAS HONORABLY DISCHARGED, NO PMC IS ORDERED	FNOD_RECORD. PMC
Too Old To Create	Too Old To Create FNOD record	FNOD_RECORD. TOO_OLD_TO_CREATE
NMI	NEED MORE INFORMATION. COMMONLY USED WITHIN THE FNOD OFFICE WHEN THERE IS NOT ENOUGH INFORMATION PROVIDED WITHIN THE CASE INFORMATION TO PERFORM ANY SHARE UPDATE ACTION	FNOD_RECORD.NMI
BIRLS Add	INDICATOR AS TO A BIRLS RECORD BEING CREATED WITHIN SHARE	FNOD_RECORD. BIRLS_ADD
BIRLS Update	INDICATOR AS TO A BIRLS RECORD BEING UPDATED WITHIN SHARE	FNOD_RECORD. BIRLS_UPDATE
Eligibility Verification	INDICATOR AS TO WHETHER VETERAN ELIGIBILITY HAS BEEN PROVIDED WITHIN THE CASE INFORMATION	FNOD_RECORD. ELIGIBILITY_VERIFICATION

Control	Action Description	Database TableName.ColumnName
DoD Already Present	INDICATOR AS TO WHETHER THE DATE OF DEATH IS ALREADY LISTED IN SHARE OR NOT	FNOD_RECORD. DOD_ALREADY_PRESENT
Comments	comments	FNOD_RECORD.COMMENTS

3.2.3.2. Application Report Interface

The Reports Module allows the generation of reports, most of which are reserved for the Supervisor User. All reports are displayed in PDF format and all reports can be downloaded by the user in CSV format for import into another application, such as MS Excel.

The PSA User can generate a Daily Activity Report that only shows work that they have performed. The PSA User can specify a date as criteria for generating this report. The Supervisor User can generate the Daily Activity Report and specify a date and a username as criteria for generating the report.

3.2.3.2.1. Reports Screen for PSA User

Note: User interface screen shots will be provided as part of the future development effort of this document.

3.2.3.2.2. Reports Screen for Supervisor

Note: User interface screen shots will be provided as part of the future development effort of this document.

3.2.3.3. Example of FNOD Report Printing and Download

Note: User interface screen shots will be provided as part of the future development effort of this document.

Table 51: Controls for the FNOD Report for Printing and Download Screen

Control	Action Description	Database TableName.ColumnName
User	USER THAT CREATED AND SAVED THE FNOD RECORD	FNOD_RECORD.USERNAME
Case Locked Date	THE DATE/TIME THE CASE RECORD WAS LOCKED DURING FNOD RECORD ESTABLISHMENT	FNOD_RECORD.CASE_LOCKED_DT
FNOD Created Date	THE DATE/TIME THE FNOD RECORD WAS CREATED AND SAVED AT FNOD RECORD ESTABLISHMENT	FNOD_RECORD.FNOD_CREATED_DT
Activity Type	DESCRIBES THE TYPE OF ACTIVITY PERFORMED	ACTIVITY_TYPE.DESCRPTION
Regional Office Name	DENOTES THE VARO STATION NAME WHERE THE FLAG APP ORIGINATED	REGIONAL_OFFICE.REGIONAL_OFFICE_NAME

The following are global temporary tables that are used to store transient data from a generated report. This data is used to provide two separate views of the report: Comma Separated Value (CSV) and PDF.

Table 52: Global Temporary Tables for Transient Data from Generated Report

Temporary Table	Report Supported
RPT_DAILY_FNOD	Daily FNOD Records Created Report
RPT_DAILY_USER_ACTIVITY	Daily FNOD Activity by User Report
RPT_FLAG_APPS_BY_REGIONS	Flag Applications Received by Regions Report
RPT_FLAG_APPS_BY_RO	Flag Applications Received by RO Report
RPT_FNODS_PROC	FNODs Processed Report
RPT_FNODS_PROC_BY_WORKGROUP	FNODs Processed by Workgroup Report
RPT_NODS	Notice of Deaths (NOD) Received Report
RPT_NODS_BY_WORKGROUP	Notice of Deaths (NOD) Received by Workgroup Report
RPT_NODS_PROC	NODs Processed Report
RPT_NODS_PROC_BY_WORKGROUP	NODs Processed by Workgroup Report
RPT_PMCS_PROC	PMC Processed Report
RPT_SPO_BEN_CAN	Spouse Benefits Cancelled Report
RPT_SPO_BEN_CAN_BY_WORKGROUP	Spouse Benefits Cancelled by Workgroup Report
RPT_SPO_RUN_CAN	Spouse Running Award Cases Cancelled Report
RPT_VET_BEN_CAN	Veteran Benefits Cancelled Report
RPT_VET_BEN_CAN_BY_WORKGROUP	Veteran Benefits Cancelled by Workgroup Report
RPT_VET_RUN_CAN	Veteran Running Award Cases Cancelled Report
RPT_VET_RUN_CAN_BY_WORKGROUP	Veteran Running Award Cases Cancelled by Workgroup Report

3.2.3.4. Unmapped Data Element

The SYSTEM_PARAMETERS Table contains the SYS_PARAM_ID, PARAM_NAME, and PARAM_VALUE. These values are set/editable by the System Administrator for the password expiration date, password and username lengths and Log in retries. It has not foreign keys.

Table 53: SYSTEM_PARAMETERS Table

Column	Description	Type
SYSTEM_PARAM_ID	PRIMARY KEY FOR SYSTEM_PARAMETERS	NUMBER(9,0)
PARAM_NAME	PARAMETER NAME	VARCHAR2(50 BYTE)
PARAM_VALUE	PARAMETER VALUE	VARCHAR2(50 BYTE)

The SAMPLES Table stores records selected by the sample processes. It also contains one foreign key: CASE_ID.

Table 54: SAMPLES Table

Column	Description	Type
OWNER	The username that generated the sample	VARCHAR2(32 BYTE)
CASE_ID	The case selected	NUMBER
ASSIGNED_TO	User currently reviewing sampled record	VARCHAR2(32 BYTE)

The SOURCE_CASE_TYPE_MAP table contains the SOURCE_CASE_TYPE_MAP_ID, SOURCE_SYSTEM_ID, and the CASE TYPE ID that specifies the source and case type for case loaded from an external source. It also contains the foreign keys: SOURCE_SYSTEM_ID, CASE_TYPE_ID.

Table 55: SOURCE_CASE_TYPE_MAP Table

Column	Description	Type
SOURCE_CASE_TYPE_MAP_ID	PRIMARY KEY FOR SOURCE_REPORT_TYPE_MAP	NUMBER(9)
SOURCE_SYSTEM_ID	SOURCE SYSTEM	NUMBER(9)
CASE_TYPE_ID	REPORT TYPE	NUMBER(9)

The SOURCE_SYSTEM table contains the SOURCE_SYSTEM_ID, SOURCE_SYSTEM_CD, and DESCRIPTION related to data loaded from an external source. It also contains the foreign key: SOURCE_SYSTEM_ID.

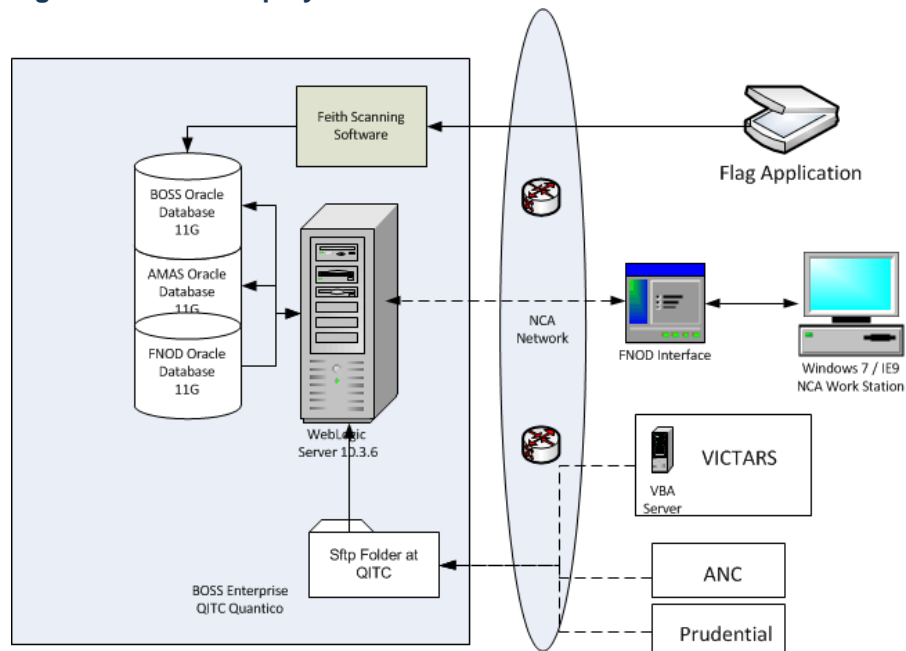
Table 56: SOURCE_SYSTEM Table

Column	Description	Type
SOURCE_SYSTEM_ID	PRIMARY KEY FOR SOURCE_SYSTEM	NUMBER(9,0)
SOURCE_SYSTEM_CD	SOURCE SYSTEM CODE	VARCHAR2(2 BYTE)
DESCRIPTION	SOURCE SYSTEM DESCRIPTION	VARCHAR2(30 BYTE)

3.3. Conceptual Infrastructure Design

The FNOD subsystem, from a data standpoint, exists as part of the BOSS / AMAS enterprise Oracle database at the Quantico ITC. FNOD presentation logic and business logic will be packaged and deployed in WebLogic Servers.

Figure 19: FNOD Deployment Environment



3.3.1. System Criticality and High Availability

The FNOD system will reside at QITC and will rely on the Disaster Recovery and Concept of Operations (CONOPS) plans in place to support systems that require continuous availability. For details of the FNOD Disaster Recovery Plan and ConOps, see the FNOD Project Management Plan.

Note: We will provide TSPR links for references once they become available.

3.3.2. Special Technology

There are no Special Device Requirements required to be part of the currently planned FNOD enhancements release.

3.3.3. Technology Locations

All systems participating in FNOD will be located at QITC. Development and test systems will be located in an environment at the QITC.

Table 57: FNOD Technology Location Details (Production 1)

Tech Component Prod 1	Location	Usage
Workstations	FNOD Office	PSA and Supervisor Users
Special Hardware		
Interface Processors		
Legacy Mainframe		
Legacy Application Server	QITC Quantico, VA	Production: FNOD Application and other NCA Applications
Legacy Databases	QITC Quantico, VA	Production: FNOD Database and other NCA Database

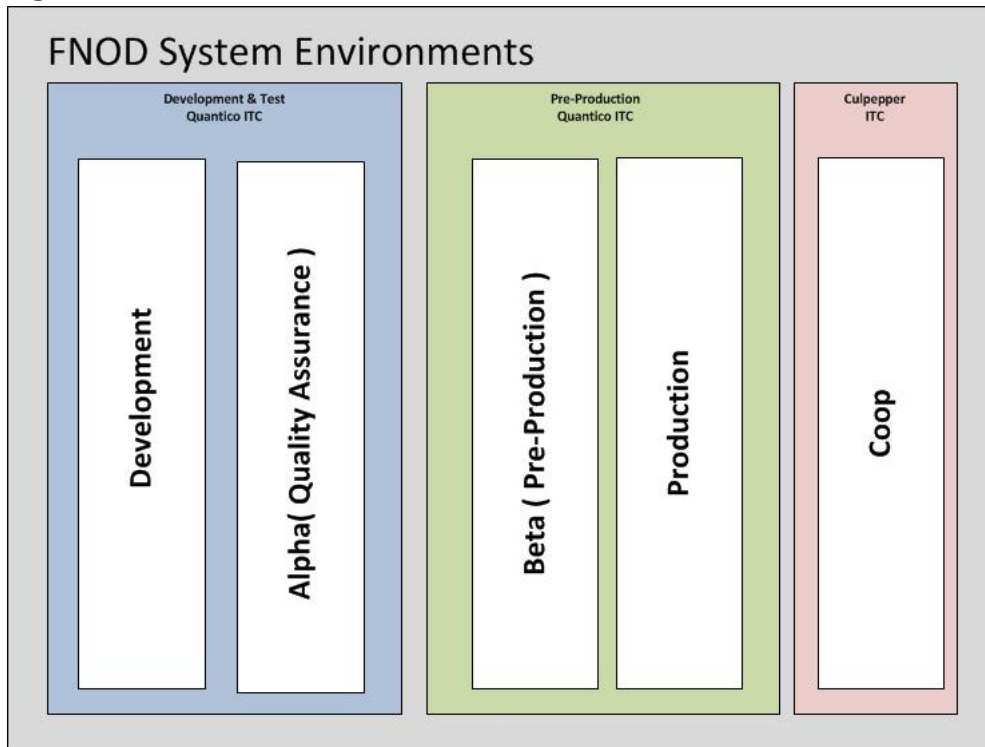
Tech Component Prod 1	Location	Usage
Other		

3.3.4. Conceptual Infrastructure Diagram

3.3.4.1. Location of Environments and External Interfaces

The following diagram depicts the FNOD environments that will be supported.

Figure 20: FNOD Environments and External Interfaces



- **Development Environment:** Environment used internally by developers to perform integration testing of the system.
- **QA Test Environment:** Environment used to do independent verification and validation of the system's functionality.
- **Pre-Production Environment:** Environment used to do initial field testing of the system under development. Generally one or more test sites or partners are selected to test the capabilities of the system.
- **Production Environment:** Environment that hosts the full production system.
- **COOP Environment:** Environment that acts as a Failover or disaster recovery in case there is a failure in production systems.

3.3.4.2. Conceptual Production String Diagram

Figure 42 in section 3.3 explains conceptual production string system architecture diagram of the FNOD application.

4. SYSTEM ARCHITECTURE

The FNOD System is a sub-component of Burial Operations Support System (BOSS)/Automated Monument Application System (AMAS) Enterprise. The application is built using a Model View Controller (MVC) framework that will control service request and data calls made between client and backend databases. The services call's response for GET and PUT requests will use RESTful web services and will provide SOAP messages in XML and JSON format for all data exchanges. The application is designed to use Java and Oracle products. The application's compiled code is not limited to an Oracle platform and will function on any web application server that could host a Java application.

4.1. Hardware Architecture

The hardware is composed of several Oracle WebLogic web servers, one load balancer and a cluster database servers to support rapid and reliable data access. The application is supported by several IBM AIX 7 servers for the entire suite of MBMS applications with secure connections to database resources. Please see figure 33 for connection information between hardware devices and the use of the network resources. The FNOD user capacity is approximately 10 users and throughput of transactions are minimal and will not be strained with growth.

4.2. Software Architecture

The application is designed using an MVC framework model. The Model contains the action calling element of the application. The controller manages the use and access to the model and the View provides the rendering of that data as a response to be consumed. FNOD's model calls will perform the interaction between the database server and the user interface.

The FNOD application is supported by software packages Hibernate, Java, Oracle database and WebLogic Server. Hibernate is a mapping tool for Java classes to database tables and provides data query and retrieval of data. It generates SQL calls and relieves the developer from manual result set handling and object conversion. The application is coded in Java and is deployed to the WebLogic server. The WebLogic is a web application hosting platform that serves up the application and facilitates access through a browser.

Software Diagram

4.3. Network Architecture

The FNOD application uses TCP/IP for its primary communication on the network and with other applications. The database server will use UDP and TCP/IP to foster data communication between application and database. Applications or other resources that will leverage the services designed to support this application and access information will be communicated via TCP/IP and use URL's for services and either JSON or XML responses in SOAP messages. As outlined in figure 31, traffic between the application and the database over the network. The network is configured with routers, switches and load balancers to manage and control the flow of traffic between data points.

4.4. Service Oriented Architecture / ESS

The current design does not use SOA or consume any shared services. The to be design of FNOD will use common services that the MBMS suite would use such as search, authentication, and CRUD (Create, Read, Update, Delete) functionality is provided as a shared service. These services will be secured at the application level to prevent unauthorized access of the information. The services can be configured and used by other applications that would access and use data collected in the BOSS and AMAS databases. These services are designed as RESTful services using SOAP to provide JSON and XML responses to the client interfaces. The current system is in-transition to the MVC framework architecture and will implement the use of common shared services.

4.5. Enterprise Architecture

The FNOD application uses Oracle WebLogic 11g and Oracle Database 10 Server to support application functionality and user access to the MBMS data. These products are approved on the VA's TRM list. The FNOD application applies the rules and guidelines that are outlined in the VA's 6500 series handbook. This application is a subset application of the MBMS Suite.

5. DATA DESIGN

This section outlines the design of the database management system (DBMS) and non-DBMS files associated with the system. For networks, detail the distribution of data and identify any changes to the logical data model that may occur due to software or hardware requirements.

Note: Provide a data dictionary appendix showing data element name, type, length, source, validation rules, maintenance, data stores, outputs, aliases, and description.

5.1. DBMS Files

If a database will be used list and describe the logical requirements that exist for data formats, storage capabilities, data retention, data integrity, etc.

Describe how the database will be designed, including the following information, as appropriate:

- Logical model; provide normalized table layouts, entity relationship diagrams, and other logical design information*
- DBMS schemas, subschemas, records, sets, tables, storage page sizes*
- Access methods (such as indexed, via set, sequential, random access, sorted pointer array)*
- Estimate the database file size or volume of data within the file, data pages, including overhead resulting from access methods and free space*
- Definition of the update frequency of the database tables, views, files, areas, records, and sets*
- Estimates on the number of transactions that the database may have to process.*

5.2. Non-DBMS Files

- Describe all non-DBMS files including narratives on the usage of each file.*
- Identify if the file is used for input, output, or both; identify temporary files, which modules read and write the file, and similar.*
- Identify record structures, record keys, indices, and reference data elements within the records.*
- Define record length and blocking factors.*
- Define the file access method such as: index sequential, virtual sequential, random access.*
- Estimate the file size or volume of data within the file.*
- Define the update frequency of the file if appropriate. Provide the estimated number of transactions per unit time and the statistical mean, mode, and distribution of those transactions.*

5.3. Data View

A "Data View" should be included in the Architectural Representation whenever persistent data objects are included in the system (they are typically present in most software systems). The data view describes the logical data model of the system and includes an Entity Relationship Diagram (ERD). For a description of Entity Relationship diagramming please refer to the whitepaper <http://www-106.ibm.com/developerworks/rational/library/content/03July/2500/2785/2785_uml.pdf>

6. DETAILED DESIGN

This section describes the proposed design in detail. Provide the necessary information for the development team to integrate the hardware components and write the software code, so that the hardware and software components will provide a functional product. This is the detailed design, based upon the conceptual design (high level) that was described in the document up to this point. Most sections prior to this are needed for Milestone 1, on a best effort basis as the design is visualized and refined. This section is needed for Milestone 2, this is where the design in described in the conceptual sections is refined and an in depth detailed design is documented.

Note: Every design item should map back to the Requirements Specification Document. These should be captured in the Requirement Traceability Matrix (RTM).

6.1. Hardware Detailed Design

The information requested in this section maybe provided by Engineering and/or the Developers. The information provided here is mainly for use by Engineering and Operations.

In this section, provide enough information for the developers to build and/or procure the system's hardware. The level of detail requested should be treated as a general guideline and can be omitted if it needs to be filled in by Engineering and Operations.

Note: If this section becomes too lengthy, consider incorporating it as an appendix or reference it in a separate document. Add additional diagrams, if necessary, to describe each component and its functions.

Include the following information (as applicable):

- *How much compute capacity? (MFLOPS, TPMs etc)*
- *System Memory*
- *Local and Shared storage*
- *Network requirements (Bandwidth, Latency etc.)*
- *Public or Private cloud*

6.2. Software Detailed Design

This section provides conceptual and final detailed information associated with the design of the software being delivered. This should be an extension of the corresponding section from Section 3.1, but should contain additional detail as the project progresses.

6.2.1. Conceptual Design

This section introduces the conceptual information that establishes the basis for how the software will be built.

6.2.1.1. Product Perspective

This subsection of the SDD should put the product into perspective with other related products. If the product is independent and completely self-contained, it should be stated here. If the SDD defines a product that is a component of a larger system, then this subsection should relate the requirements of that larger system to functionality of the software and should identify interfaces between that system and the software.

A block diagram showing the major components of the larger system, interconnections, and external interfaces can be helpful.

Sections of the Requirements Specification Document (RSD) can be referenced in the subsections, if applicable.

6.2.1.1.1. User Interfaces

This subsection should specify the logical characteristics of each interface between the software product and its users. This includes those configuration characteristics necessary to accomplish the software requirements (e.g., screens, roll and scroll, GUI interface).

Recommendation: Create a block diagram showing the user interfaces.

6.2.1.1.2. Hardware Interfaces

This subsection should specify the logical characteristics of each interface between the software product and the hardware components of the system. This includes configuration characteristics (for example, hardware platform or mainframe versus personal computer). It also covers matters such as what devices the system will support, how they will be supported, and protocols.

Examples include scanners, pen driven devices, and radio frequency devices.

Recommendation: Create a block diagram showing the hardware interfaces.

6.2.1.1.3. Software Interfaces

This subsection should specify the use of other required software products (e.g., VA Kernel, VA FileMan, Windows NT); and interfaces with other applications or other systems such as commercial off-the-shelf (COTS) or national databases. Specify the application interfaces (e.g., the linkage between an accounts receivable system and a general ledger system and a COTS software package that will be interfaced using an existing interface). This section should provide the following information for each required software product:

- Name*
- Version number*
- Discussion of the purpose of the interfacing software as related to this software product*
- Definition of the interface in terms of message content and format (e.g., Health Level Seven [HL7], electronic data interchange).*

6.2.1.1.4. Communications Interfaces

This subsection should specify the various interfaces to communications such as local network protocols, e-mail, Transmission Control Protocol (TCP), modems.

Recommendation: Create a block diagram showing the communications interfaces.

6.2.1.2. Product Features

This subsection should provide a summary of the major features of the software.

For example, an SDD for an accounting program might use this section to address customer account maintenance, customer statement, and invoice preparation without mentioning the vast amount of detail that each of those features requires.

Note: For clarity, remember these items when creating this section of the SDD:

- The features should be organized in a way that makes the list of features understandable to the customer or to anyone else reading the document for the first time.*
- Textual or graphical methods can be used to show the different features and their relationships.*
- Such a diagram is not intended to show a design of a product, but simply shows the logical relationships among variables.*

6.2.2. Specific Requirements

6.2.2.1. Database Repository

The Database Repository section in the RSD can be referenced in this section.

If a logical database design is a part of the system, it should be listed here. Logical database design should specify the logical requirements for any information that is to be placed into a database. This may include:

- Types of information used by various functions*
- Frequency of use*
- Accessing capabilities*
- Data entities and their relationships*
- Integrity constraints*
- Data retention requirements.*

Recommendation: Create a block diagram showing the databases and where the data resides.

6.2.2.2. System Features

Describe the system features, functional requirements, sub-requirements, etc. which can be organized in an outline format that matches the RSD. Specific formatting and organization of the paragraphs (i.e., section numbering) is left to the discretion of the author and is dependent on the level of detail essential to fully describe the design. Some designs may only require two levels; others may require multiple levels. The information necessary to define the items or to specify modifications to the items affected by the functionality being designed should be provided in the appropriate design element tables. Where feasible, instead of duplicating the RSD, it can be referenced via a link, to avoid unnecessary duplication. The key goal is to provide traceability to requirements.

6.2.2.3. Design Element Tables

The design element tables are provided for your convenience. Copy each table as many times as necessary to address multiple items within each section. Add rows and headings to the tables to provide any additional required information to define the item or to specify the modifications to the item. Numbering of the design element tables to align them underneath the applicable requirement or sub-requirement is recommended, but is left to the author's discretion. For that reason they are not numbered in this template.

6.2.2.3.1. Routines (Entry Points)

Not applicable

6.2.2.3.2. Templates

Not applicable

6.2.2.3.3. Bulletins

Not applicable

6.2.2.3.4. Data Entries Affected by the Design

Not applicable

6.2.2.3.5. Unique Record(s)

Not applicable

6.2.2.3.6. File or Global Size Changes

Not applicable

6.2.2.3.7. Mail Groups

Not applicable

6.2.2.3.8. Security Keys

Not applicable

6.2.2.3.9. Options

Not applicable

6.2.2.3.10. Protocols

Not applicable

6.2.2.3.11. Remote Procedure Call (RPC)

Not applicable

6.2.2.3.12. Constants Defined in Interface

Provide the name and description.

Table 33: Constants Defined in Interface

Name	Description

6.2.2.3.13. Variables Defined in Interface

Provide the name, type, and description.

Table 34: Variables Defined in Interface

Name	Type	Description

6.2.2.3.14. Types Defined in Interface

Provide the name, type, and description.

Table 35: Types Defined in Interface

Name	Type	Description

6.2.2.3.15. GUI

The “to be” design of the PMC application’s GUI will be modified to accommodate changes outlined in the RTM.

Table 36: GUI

Unit Name	Description
PMC	The PMC interface.

6.2.2.3.16. GUI Classes**Table 37: GUI Classes (Instructions)**

GUI Classes	Instructions
Class Name	<i>List the name of the class affected. The headers in the following tables have names for the information outlined. Note that only the new properties and methods for a class are listed below. All ancestor properties and methods are still available and unchanged.</i>
Derived From Class	<i>List the class that this is derived from, its parent and any interfaces listed as part of this class.</i>
Purpose	<i>Describe the functionality that users can access from this class and related form, if any.</i>

Table 38: GUI Classes

GUI Classes	Instructions
Class Name	
Derived From Class	
Purpose	

6.2.2.3.17. Current Form

Provide a screen capture or graphical representation of the current layout.

6.2.2.3.18. Modified Form

Provide a screen capture or graphical representation of the layout that the design will implement.

6.2.2.3.19. Components on Form**Table 39: Components on Form**

Name	Type	Description
------	------	-------------

Name	Type	Description

6.2.2.3.20. Events

Table 40: Events

Name	Type	Description

6.2.2.3.21. Methods

Table 41: Methods

Method Name	Procedure/Function	Description

6.2.2.3.22. Special References

Include references that are not listed elsewhere.

Special Reference Name	Type	Description

6.2.2.3.23. Class Events

Table 42: Class Events

Name	Type	Description

6.2.2.3.24. Class Methods

Table 43: Class Methods

Name	Procedure/Function	Description

6.2.2.3.25. Class Properties

Table 44: Class Properties

Class Properties Name	Type	Visibility	Description

6.2.2.3.26. Uses Clause

Not applicable

6.2.2.3.27. Forms

This section lists the forms that will be affected or created by the functionality being designed. A short description of the change that will be made to the forms should be included.

Table 45: Forms (Instructions)

Forms	Instructions
Form Name	<i>List the name of the form affected by the functionality being designed.</i>

Forms	Instructions
Enhancement Category	<i>Check the appropriate box: New, Modify, Delete, or No Change.</i>
Form Functionality	<i>Describe the form's functionality and refer to the usage of the form. An example of such a description is "This form is used to enter patient demographic data."</i>
Current Form Layout	<i>Define the current form layout that the design will modify. If this is a new form, enter "N/A".</i>
Modified Form Layout (Changes are in bold)	<i>Define the form layout that the design will implement.</i>

Table 46: Forms

Forms	Description
Form Name	
Enhancement Category	<input type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
Form Functionality	

Current Form Layout

Modified Form Layout (Changes are in bold)

6.2.2.3.28. Functions

The functions affected by the capabilities being designed should be listed in this section. A short description of what change will be made to the functions and/or new functions should be included.

Table 47: Forms (Instructions)

Functions	Instructions
Function Name	<i>List the specific function affected by the capability being designed.</i>
Short Description	<i>List a short description of the change that will be made to the functions and/or new functions.</i>
Enhancement Category	<i>Check the appropriate box: New, Modify, Delete, or No Change.</i>
Related Options	<i>List the options that directly call or are called by the function.</i>
Related Routines	<i>List the routines that directly call or are called by the function.</i>
Data Dictionary (DD) References	<i>List the files that reference the function through input transforms, cross reference logic, etc.</i>
Related Protocols	<i>List the protocols that reference or are referenced by the function.</i>
Related Integration Control Registrations (ICRs)	<i>List proposed new ICRs and subscribed ICRs. Also, list any obscure Supported ICRs.</i>

Functions	Instructions
Data Passing	<i>Check the appropriate box. An event that would trigger the new/changed function should be included in this section. An example of such a description would be a note that the new/changed function will be invoked as part of a function call or it would be invoked through system protocols, HL7 Logical Links, etc. This section refers specifically to the change implemented with the design.</i>
Input Attribute Name and Definition	<i>List the input attributes passed into the new or changed function logic. Each attribute should be defined.</i>
Output Attribute Name and Definition	<i>List the output attributes returned from the new or changed function logic. Each attribute should be defined.</i>
Current Logic	<i>Define the current logic in the function that the design will modify. If this is new code, enter "N/A".</i>
Modified Logic (Changes are in bold)	<i>Define the logic in the function that the design will implement.</i>

Table 48: Forms

Function Name	Activities
Short Description	
Enhancement Category	<input type="checkbox"/> New <input type="checkbox"/> Modify <input type="checkbox"/> Delete <input type="checkbox"/> No Change
Related Options	

Related Routines	Routines "Called By"	Routines "Called"

Function Name	Activities
Data Dictionary (DD) References	
Related Protocols	
Related Integration Control Registrations (ICRs)	
Data Passing	<input type="checkbox"/> Input <input type="checkbox"/> Output <input type="checkbox"/> Both <input type="checkbox"/> Global Reference <input type="checkbox"/> Local Reference
Input Attribute Name and Definition	Name: Definition:
Output Attribute	Name:

Function Name	Activities
Name and Definition	Definition:

Current Logic

Modified Logic (Changes are in bold)

6.2.2.3.29. Dialog

Not applicable

6.2.2.3.30. Help Frame

Not applicable

6.2.2.3.31. HL7 Application Parameter

Not applicable

6.2.2.3.32. HL7 Logical Link

Not applicable

6.2.2.3.33. COTS Interface

Not applicable

6.3. Network Detailed Design

Provide enough detailed information about the communication requirements to build and/or procure the communication components for the system. This section should provide sufficient detail to support the procurement of hardware for the system installation. Include the following information in the form of detailed designs (as appropriate):

- *Details of servers and clients to be included on each area network*
- *Specifications for bus timing requirements and bus control*
- *Format(s) for data being exchanged between components*
- *Diagrams showing connectivity between components, data flow (if applicable), and distances between components*
- *LAN topology.*

6.4. Service Oriented Architecture / ESS Detailed Design

This section provides details of provided and consumed services as follows:

- *Consumed Services: Provide link to Service Description Document for each consumed service.*

- *Provided Services: Give service design for each provided service.*

The information you provide here will be used to upload to the ESS Registry and Repository. At some point in the near future, we do not expect these SOA artifacts such as SLA, Service Description, etc. to be static documents. They will be dynamically generated from the ESS Registry and Repository tool in the form of reports. Any application and service integration design is also documented here.

A list of currently available Enterprise Shared Services is available here: <insert link to ESS list>

6.4.1. Service Description for <Consumed Service Name>

Provide link to Service Description document for the consumed service. This section will repeat for each consumed service.

6.4.2. Service Design for <Provided Service Name>

This section should describe the detailed service design for each ESS and SOA service needed to obtain an intended result.

This section will repeat for each provided service.

6.4.2.1. Introduction

6.4.2.1.1. Purpose and Scope of Service

This service was described at a high level in the charter document. Please refer to it here via a link.

6.4.2.1.2. Links to Other Documents

Provide links to other documents created for this service so far in the SOA lifecycle. At a minimum, provide links to:

- *Service Charter*
- *Service Roadmap*
- *Service Description*

6.4.2.2. Service Details

6.4.2.2.1. Service Identification

This section will be written as a table to provide a quick reference to the service's what, where, why and how - cheat sheet.

Service Attribute	Value
<i>Name and Alias (if any)</i>	<i>Name of the service and other names for the service, which might be used by someone searching for this service. Please follow ESS naming standards.</i>
<i>Overview</i>	<i>Brief textual overview of the service.</i>
<i>Version</i>	<i>Version number of the service being described here</i>

Service Attribute	Value
Latest Status	<i>This field shows the latest status for the above referenced version of this service! The status of a service shows the progress of the service from initiation through development, deployment, and eventual retirement. The status also has a status date associated with the status - and we will be using the latest one here in this document. Valid values include: Inception, Design, Provisioning, Certification / Testing, Operation, Deprecated, Retired, Rejected - Owner has decided not to develop the service.</i>
Service Type	<i>Used to define applicable architecture patterns. Examples (from Open Group):</i> <ul style="list-style-type: none"> • <i>Interaction</i> • <i>Process</i> • <i>Information</i> • <i>Partner</i> • <i>Business Application</i> • <i>Access</i> • <i>Service Connectivity</i>
Architecture Layer	<i>Referred to as class in VA Service template. Used to define applicable architecture patterns and relationships to governing bodies. Examples:</i> <ul style="list-style-type: none"> • <i>Solution</i> • <i>Process</i> • <i>Information</i> • <i>Utility</i> • <i>Underlying</i>
Business Domain	<i>Business Vertical or Business Division where this service belongs.</i>
Service Domain	<i>The service or technical domain that the service belongs to. Can be used to establish the namespace.</i>
Business Organization and Owner	<i>Person who approves this service & any changes. Include email.</i>
Technical Organization and Owner	<i>Person responsible for provisioning (specifying, acquiring certifying) this service. Include email.</i>
Development Organization and Owner	<i>Person who is responsible for the development processes and activities for this service. Include email.</i>
Support Organization and Owner	<i>Person who is responsible for the support of this service while in production. Include email.</i>
Target Consumer Organization(s) and Owner(s)	<i>Organizations and/or developers roles that service is intended for.</i>

6.4.2.2.2. Service Versions

Version Numbers	Current Status of Version	A Brief Description of the change implemented in that version
<i>This version</i>	<i>Being Designed</i>	
<i>Example: version 2</i>	<i>Example: In production. Will be retired with this release.</i>	<i>Example: This release added the ability to look up a person by address. Provide a link to each version of the service.</i>

<i>Example: version 1</i>	<i>Example: Retired.</i>	<i>Example: This release provided the base minimum functionality to look up a person by name. Provide a link to each version of the service.</i>
---------------------------	--------------------------	--

6.4.2.2.3. Summary of Design and Platform Details

6.4.2.2.3.1. SOA Pattern(s) Implemented

Name of the SOA pattern implemented – for instance, this may be a Pub/Sub model. Just a name and reference to the document or book with the pattern is sufficient for popular patterns or VA's own patterns. If you are using some esoteric pattern, more details will help.

6.4.2.2.3.2. COTS Platform vendor names and versions for hosting platform

Example, TIBCO.

6.4.2.3. Dependencies

The Dependency Model identifies other services, systems, databases, etc. that [Service Name] is dependent upon or interacts with to perform its function.

This section should clearly identify all sources and external systems that are accessed by this service to fulfill the service consumers' request. This section should include diagrams to show as much detail as necessary to inform the developer. Provide a context diagram for the service.

Note: Here our primary audience includes the providers of the service. So this document in general will emphasize system components and sub-systems as much as external interactions.

6.4.2.4. Service Design Details

The next sub-section on Interface Technical Specs could be just a copy from the corresponding sub-section in Interface section in the Service Description Document. Here, you could provide more detail necessary for building this service but the interface spec needs to be consistent between this document and the Service Description Document. This section contains all information necessary to fully describe an interface published by this service..

6.4.2.4.1. Interface Technical Specs

The technical specification allows developers of service consumers to locate and discover the service for run time consumption.

6.4.2.4.1.1. Service Invocation Type

Such as: SOAP over HTTP, REST.

6.4.2.4.1.2. Service Interface Type

Such as: WSDL via Web Service 2.0

6.4.2.4.1.3. Service Name

Technical Service Name. Comply with ESS naming standards.

6.4.2.4.1.4. Interface

Link to WSDL or other interface document.

6.4.2.4.1.5. End Points

Provide if known! Calls that can be made into the service. Can be referenced to the WSDL or can be in a separate table.

6.4.2.4.1.6. Operations or Methods

In the table below, the technical names of the operations, inputs and outputs are used. Inputs and outputs, if parameters, must have a data type.

Non-primitive data types must be defined in the Service Information Model section.

This table could be generated automatically from the WSDL content or its equivalent.

Style can take any of these values: Parameters or Document; and One-way or Request-response or Solicit-response or Notification.

Use a separate column for the operation purpose if you wish.

You might use abbreviations in the Faults column and explain the abbreviations used below the table. For example, NF = Not Found, MI = Missing Input.

Operation Name	Inputs	Outputs	Transactional Qualities if relevant (Updating?, Atomic?, Can participate in transaction?)	Pre and Post Conditions	Exception (s)

Provide a link to the Service Information model so that the consumer of your system knows the schema for the input and output parameters.

6.4.2.4.1.7. Message Schemas

Provide definitions or links to definitions of the message(s) related to the service operations. These may be dependent on the implementation style and protocol binding of the interface.

6.4.2.4.2. Information Model

Even though this section looks similar to the corresponding section 3.2 in Service Description, remember that the primary objective here is to facilitate construction and to gain approvals from governing bodies. So you will provide more of a “white box” view of the design here to help your developers code the service.

6.4.2.4.2.1. Class Diagram and Description of Entities Involved

Map out all entities involved in the service: input, output, exceptions, entities manipulated in persistent media/DBs, intermediate entities created in memory etc.

6.4.2.4.2.2. Mappings from ELDM to Standards Based Schemas

Provide mappings from your native schema to any standards based schemas your service will use to communicate outside. For instance, if you are using HL7 based messages then you will show how data is converted from your native schema to HL7.

6.4.2.4.3. Behavior Model (AKA Use Case Realization)

The Behavior Model defines the actions and processes supported by the service. Actions and methods represented in the use cases and sequence diagrams shown below are further defined by the operation contracts and the message payloads.

6.4.2.4.3.1. Use Cases (Use Case Model)

*How does this service fit into the larger use case model of the consumer? You may need multiple models for multiple consumers. Focus is **not** on the internal workings of the new service instead of the calls made from external consumers. Just a summary or the Use Case Diagram may be sufficient. List the alternative and exception flows. Reference the detailed design documents via a URL.*

6.4.2.4.3.2. Interaction Diagrams

Cut and paste screen shot from RSA or similar tool or provide link to the model. Provide description to help developers build your service. The interaction diagrams should depict external interactions and internal sequences of calls between internal components. The sequence diagram should cut through all layers to show the main, alternate and exception flows.

6.4.2.5. Gap Analysis

Provide a Gap Analysis (Reference) to demonstrate compliance of this service with various standards, policies, guidelines and laws. The Gap Analysis may take the form of a matrix as shown in the sample below. This will help the governance boards expedite your request.

Design Elements→ Policies / SLD elements etc↓	Design Element A	Design Element B	Design Element C	Comment for non-conformance
Policy X	Match			
Policy Y		Partial		
Policy Z				Commercial encryption server in prod will have to address this policy.
Policy A				Compliance with this policy not required until next year.
New / Additional Features			New element minimizes manual intervention	

6.4.2.5.1. Variances from Enterprise Target Architecture

This list of “variances” will become a submission to the ESS dispensation process.

6.4.2.5.2. Variances from SLDs

This list of “variances” will become a submission to the ESS dispensation process.

6.4.2.5.3. Variances from Standards and Policies

This list of “variances” will become a submission to the ESS dispensation process.

6.4.2.5.4. Justification for Exceptions and Mitigation

This section will list out any non-functional and functional requirements that are not being met. The non-conformance may be in violation of elements of SLDs, enterprise architecture (TRM Technology Reference Model), privacy policies or guidelines. For each exception provide:

- 1. Reasons for non-conformance (cost, time, technology, etc)*

2. *Mitigating actions taken to reduce the impact of non-conformance*
3. *Plan (roadmap) to come back into conformance*

This list can grow depending on what the Review bodies may ask for.

7. EXTERNAL SYSTEM INTERFACE DESIGN

This section details interfaces external to system, that are NOT services (ESS/SOA). Typically, these may include, RPCs, Flat Data Files etc.

External systems are systems that are not within the scope of the system under development, regardless of whether the other systems are managed by the vendor or its client.

In this section, describe the interface(s) between the system under development (i.e., the system that is the subject of this SDD) and external systems and/or subsystem(s).

It is best to illustrate these sections with annotated diagrams to clearly identify the various elements of the interfaces.

7.1. Interface Architecture

Describe the interface(s) between the system being designed and other systems. Include the interface architecture(s) being implemented, such as wide area networks, gateways, etc. Provide diagrams showing the communications path(s) between this system and other systems.

7.2. Interface Detailed Design

Provide sufficient detail about the interface requirements for the development team to format, transmit, and/or receive data across the interface.

Include the following information (as appropriate):

- *Data format requirements; if data must be reformatted before it is transmitted or after incoming data is received. Describe the tools and/or methods for the reformat process.*
- *Specifications for hand-shaking protocols between systems; content and format of hand-shake messages, timing for exchanging these messages, and errors handling.*
- *Format(s) for reports exchanged between the systems.*
- *Graphical representation of the connectivity between systems, showing the direction of data flow.*
- *Query and response descriptions.*
- *Describe the individual data elements that the interfacing entity(s) will provide, store, send, access, and receive, such as:*
- *Names/identifiers*
 - *Data Element Name*
 - *Data Format/Length*
 - *Data Type*
 - *Definition*
 - *Non-Technical Name*
 - *Non-Technical Synonyms*

- *Specifications*
- *Synonyms*
- *Range or enumeration of possible values (e.g., 0-99)*
- *Accuracy and precision (number of significant digits)*
- *Priority, timing, frequency, sequencing, and other constraints*
- *Security and privacy constraints*
- *Sources (setting/sending entities) and recipients (using/receiving entities).*

Describe the data element assemblies (records, messages, files etc.) that the interfacing entity(s) will provide, store, and send, such as:

- *Names/identifiers*
 - *Technical Name, e.g., data structure name*
 - *Non-technical Names, e.g. synonyms*
- *Data elements*
- *Medium/structure of data elements/assemblies*
- *Visual characteristics (e.g. layouts, fonts, icons etc.)*
- *Relationships among assemblies*
- *Security and privacy constraints*
- *Sources and recipients.*

Describe the communication methods that the interfacing entity(s) will use for the interface, such as:

- *Communication links, bands, frequencies, and media*
- *Message formatting*
- *Flow control (e.g. sequence numbering)*
- *Data transfer rate*
- *Routing*
- *Transmission services*
- *Safety*
- *Security and privacy considerations.*

Describe characteristics of the protocols that the interfacing entity(s) will use for the interface, such as:

- *Priority/layer of the protocol*
- *Packaging*
- *Legality checks, error control*
- *Recovery procedures*
- *Synchronization*
- *Status, identification, and other reporting features.*

Where appropriate describe other characteristics, such as physical compatibility of the interfacing entity(s) (dimensions, tolerances, loads, voltages, plug compatibility, etc.)

8. HUMAN-MACHINE INTERFACE

Describe the human-machine interface (i.e., GUI) relative to the user. Additional information may be added if the suggested headings are inadequate.

8.1. Interface Design Rules

Identify conventions and standards for designing the GUI.

8.2. Inputs

Identify the input media used by the user (i.e., operator) for providing information to the system, such as data entry screens, optical character readers, bar scanners, etc.

Identify the messages associated with operator inputs, including the following:

- *Form(s) if the input data is keyed or scanned for data entry*
- *Access restrictions*
- *Security considerations.*

8.3. Outputs

Describe the system output design relative to the user. System outputs include reports, data display screens, query results, etc.

Identify the following, if appropriate:

- *Access restrictions or security considerations*
- *Description of the purpose of the output*
- *Report requirements, including frequency of periodic reports*
- *Screen contents. (Provide a graphic representation of each layout. Define all data elements associated with the layout).*

8.4. Navigation Hierarchy

Provide a diagram of the navigation hierarchy that shows how a user moves through the GUI.

8.4.1. Screen [x.1]

Provide the layout of all input data screens or GUIs. Provide a graphic representation of each GUI, for example, a low-resolution screenshot. Define all data elements associated with each screen or GUI, or reference the data dictionary. Label each data input screen and/or GUI.

8.4.2. Screen [x.2]

Provide a graphic representation of each GUI, for example, a low-resolution screenshot. Define all data elements associated with each screen or GUI, or reference the data dictionary.

8.4.3. Screen [x.3]

Provide a graphic representation of each GUI, for example, a low-resolution screenshot. Define all data elements associated with each screen or GUI, or reference the data dictionary.

9. SECURITY AND PRIVACY

9.1. Security

Describe specific security mechanisms at the application level, as guided by NIST 800-53 revision 3 (or most current version). Also, summarize the security mechanisms to be provided by the VA GSSs. Reference the Security Risk Assessment.

The following information will be provided to address security controls:

A high-level description of the security controls, grouped according to the 18 control families identified in NIST 800-53 revision 3 (or most current version). A description of all 18 control families must be addressed; if a control family is not applicable, then state that control family does not apply and explain why it does not apply.

A description of the specific security controls that will be provided by existing VA infrastructure or VA GSSs.

Describe the planned use by the application of the infrastructure's centralized security mechanisms and VA GSSs (in particular, the identification and authentication, access control, and audit mechanisms), and infrastructure mechanisms, (e.g., Directory Services) to store user account information. Sufficient detail should be provided to show the feasibility of the integration and/or inter operation of application security mechanisms with infrastructure security mechanisms.

9.2. Privacy

Identify privacy design considerations. Describe specific privacy mechanisms at the application. Describe how the application's privacy requirements will be met. Reference the System Security Plan (SSP) and Privacy Impact Assessment (PIA).

A. ATTACHMENT A – APPROVAL SIGNATURES

This section documents the approval of the FNOD SDD during Formal Review. Ideally, the review should be conducted face-to-face where signatures can be obtained ‘live’ during the review, however the following forms of approval are acceptable.

- Physical signatures obtained face to face or via fax
- Physical signature obtained in person or via fax
- Digital signature tied cryptographically to the signer

/es/ in the signature block, provided that a separate digitally signed e-mail indicating the signer’s approval is provided and kept with the document.

REVIEW DATE: August 13-15, 2014

DOCUMENT VERSION: 1.0

SCRIBE: Laura Manning, Memorial Products Delivery PMO

The Chair of the governing Integrated Project Team (IPT), Business Sponsor, IT Program Manager, Project Manager, and the Co-chairs of the Architecture and Engineering Review Board (AERB) are required to sign.

Signed: Dr. Timothy Godlove, NCA Business Sponsor and Integrated Project Team (IPT) Co-Chair

Signed: Dan Pate, IT Program Manager and IPT Co-Chair

Signed: Angel Stanislaus, EOA Project Manager

Signed: Vijay R. Bekkem, Architecture, Strategy, and Design (ASD) IPT Representative

B. ADDITIONAL INFORMATION

Attach any addition information that supplements the design specification.

B.1. RTM

Include an RTM that traces modules and data structures to the software requirements. A reference to the location of the RTM is also acceptable.

B.2. Packaging and Installation

Outline any special considerations for software packaging and installation.

B.3. Design Metrics

Describe all metrics to be used during the design activity.

B.4. Acronym List and Glossary

Identify and define all acronyms and terms that establish meaning within the context of the plan.

Table 59: Glossary

Term	Meaning

B.5. Required Technical Documents

The following documents must be submitted for review to support proper approval:

- *Conformance Validation Statement (CVS) - Section 508*
- *For additional information regarding how to obtain proper approval for this project, refer to the following documents:*
- *IT Infrastructure Standards*
- *Systems Engineering and Design Review (SEDR) process*
- *Enterprise Architecture Web page*
- *One-VA TRM*