Concept of Operations

PPM Version 2.0

<Project or Solution Name>

U.S. Department of Housing and Urban Development

<Month, Year>

Solution Information

	Information
Solution Name	*<Solution Name>*
Solution Acronym	*<Solution Acronym>*
Project Cost Accounting System (PCAS) Identifier	*<PCAS Identifier>*
Document Owner	*<Owner Name>*
Primary Segment Sponsor	*<Primary Segment Sponsor Name>*
Version/Release Number	*<Version/Release Number>*

Document History

<Provide information on how the development and distribution of the CONOPS is controlled and tracked. Use the table below to provide the release number, date, author, and a brief description of the reason for creating the revised version.>

Release No.	Date	Author	Revision Description

Contents

1. Overview

The Concept of Operations (CONOPS) document depicts the overall solution composition and provides a mechanism for users to describe their expectations of the solution. The CONOPS describes the solution and communicates the high-level characteristics, activities, and structures of a solution to its stakeholders. It is primarily a non-technical document presented from the viewpoints of various stakeholders (classes of users). The CONOPS often serves as the bridge between the concept that motivated the project to begin with and the initiation of technical requirements. The CONOPS is developed for numerous reasons:

- Get stakeholder agreement identifying how the system is to be operated, defining responsibilities, and determining lines of communication
- Define the high-level solution concept and justify that it is superior to the other alternatives
- Define the environment in which the solution will operate
- Derive high-level requirements (especially user requirements)
- Provide criteria to be used for solution validation

<Note: If the solution is a large solution/system with component parts that are set up as independent projects, the CONOPS should focus on describing the operation of the entire system and specify how the component parts operate as part of the larger solution. The information within this document serves as an input for the Requirements Definition and Solution Architecture documents. The in-depth detail of the CONOPS increases dependent on the expected impact on HUD operations. In some cases in PPM, this content can be combined with the Requirements Definition document, please refer to the Project Type Guides for instances when this can occur.>

2. Solution Concept of Operations

2.1 Proposed Solution Summary

<Describe the operational concept from a high-level, integrated perspective. Include the reasoning for choosing the approach in the description. The description is not a design, but a high-level, conceptual, operational description of the proposed solution. The use of graphics is encouraged.>

2.2 Major Processes and Functions

<Describe each major process and the functions or steps performed as part of the integrated solution. State the processes and functions in a manner that enables the reader to see broad concepts decomposed into layers of increasing detail. Then show, in a high-level diagram with brief narrative, the sequence of the process steps.>

The following table is a starting point to describe the high-level processes:

Attributes	Process Description
Process Name	Identify the high-level process.
Purpose	Describe the why and how of the process and its business value.
Description	Describe the process at a high-level. The more granular level details should appear within the operational scenarios.
Priority	Rank the priority (High, Medium, or Low).
Frequency	Identify metrics and/or expectations for the high-level process (example: duration).

2.3 Process Flow

<Create a process flow diagram for the major processes and functions described above. Project teams should be doing some degree of process review and analysis work as part of their efforts. The results will then help derive the content within the Requirements Definition artifact.>

2.4 External, Operational, and Support Environment

<Describe what is known about the solution will interface with and the structure for where the operations of the solution will be carried out and what the lines of communication will be. Also, provide any known information on the physical operational environment in terms of facilities, equipment, computing hardware and software, personnel, operational procedures, and support necessary to operate the deployed solution. Provide information on any expected support from outside agencies in regards to the physical support environment including facilities, utilities, equipment, computing hardware, software, services, personnel, operational procedures, and maintenance.>

3. User Classes and Operational Scenarios

3.1 Classes/Categories of Users

<Identify and describe the major classes/categories of users that will interact with the new solution or capability.>

3.2 User Classes Mapped to Functional Features

<Provide an explanation of how the solution will look to each class of users who will interact with the solution. Define high-level variations (if any) in the user work processes that correspond to the use of the solution by the different classes of users.>

3.3 Sample Operational Scenarios

<Provide scenarios that show how the solution will perform the objectives and meet the users' requirements. A scenario describes a sequence of events, activities carried out by the user and the solution. Develop sample usage scenarios (as realistic as possible) for each major user class that show what inputs will initiate or trigger the solution's functions, how the user will interact with the solution (who or what performs each step), and what outputs are expected to be generated by the solution. Consider covering not only normal conditions, but also stress conditions, failure events, maintenance, anomalies and exceptions.>

4. Assumptions and Constraints

4.1 Assumptions

<Describe any assumptions that might affect the success, functionality, or operability of the new system or capability.>

4.2 Constraints

<Describe any constraints that might affect the success, functionality, or operability of the new system or capability.>

Appendix A: Critical Information Checklist

This critical information checklist is a reference to use when completing the work involved with developing a Concept of Operations.

- Is the reason for developing the solution/system stated clearly?
- Are all the stakeholders identified and their anticipated roles described? This should include anyone who will operate, maintain, build, manage, use, or otherwise be affected by the solution.
- Are alternative operational approaches and the selected approach described?
- Is the external environment described? Does it include required interfaces to existing systems?
- Is the support environment described? Does it include maintenance?
- Is the operational environment described?
- Are there clear and complete descriptions of normal operational scenarios?
- Do the scenarios include the viewpoints of all involved stakeholders? Do they make it clear who is doing what?
- Are operational assumptions and constraints related to the implementation of the solution identified?