
CHAPTER 1. INTRODUCTION

1-1. OBJECTIVE.

- a. The objective of this Handbook is to outline and describe the procedures for using the Computerized Underwriting Processing System (CUPS) in processing multifamily rental project proposals.
- b. This Handbook addresses the technical underwriting aspects of CUPS and relates the automated process to manual instructions. It should be used in conjunction with the CUPS ADP Terminal Operation Handbook 2361.13, which outlines the procedures for the terminal operator to execute CUPS programs. Although this Handbook is directed to the Field Office housing technicians, it may be used by the terminal operators for a more indepth understanding of the underwriting process as it relates to CUPS input.
- c. The distribution of this Handbook will include the CUPS Data Base Manager; Architecture, Cost, Valuation and Mortgage Credit Branches; and the Administrative area of the Field Office. A copy of the Handbook should be retained in all of the above areas for access by the housing technicians, Data Base Manager, and terminal operator.

1-2. CUPS BACKGROUND AND DESCRIPTION.

- a. The initial module of the Computerized Underwriting Processing System (CUPS) was designed and developed in 1971 and 1972. The first segment of the system was known as the Automated Cost Evaluation System (ACES). This system provided the Field construction cost technicians with an automated capability for estimating the cost of the total for all improvements on proposed multifamily projects. ACES was designed around the manual cost processing system in operation in 1971.
- b. The second development phase of CUPS incorporated valuation (appraisal) and mortgage credit processes. This segment of CUPS was installed in the Field Offices in 1975.
- c. Presently the system provides an automated production processing capability in the Field for proposed multifamily cases for Site Appraisal and Market Analysis (SAMA), Conditional and Firm processing development stages. It also provides certain automated functions for the Field cost analysts during the construction and certification stages.

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- d. Currently, Valuation and Mortgage Credit can process Sections of the Act 221(d)(4), 207, 223(f), and 231 profit motivated. However, Construction Cost programs will allow processing for all Sections of the Act.
- 1-3. CUPS PURPOSE. The purpose of CUPS is to provide the Field Offices with a production system that will allow the Housing technicians of Area and Service Offices (with multifamily) to utilize automated techniques for arriving at the maximum insurable mortgage amounts for multifamily proposals relative to specific sections of the National Housing Act. The goals of the system are as follows:
- a. Free the Cost Analysts, Appraisers and Loan Specialists from involvement with voluminous mathematical details and time consuming tasks so that they may concentrate on their professional responsibilities.
 - b. Reduce processing time.
 - c. Provide management information at all levels.
 - d. Improve documentation.
 - e. Provide consistency and uniformity of processing results.
 - f. Provide for immediate quality processing review by Headquarters.
 - g. Provide a case history of major processing actions and conclusions by time and date.
 - h. Insure mathematical accuracy.
 - i. Provide the foundation on which continual modifications to processing regulations and instructions can be accomplished expeditiously.
- 1-4. CUPS OPERATIONAL ENVIRONMENT.
- a. Modes of Operation. CUPS programs execute on an assigned basis in three basic modes of operation as described below. See Appendix 27 for a description of the function of each program.
 - (1) Interactive Processing Mode. These programs are executed in an online, conversational mode. The terminal operator signs on to the computer and runs the required CUPS program. All processing such as data input, computation and report

generation is completed during the session that the operator is accessing the specific program. Final processing results are achieved at the time the terminal operator is executing the program. The following is a list of CUPS programs that execute in this mode. Edit criteria for these programs are contained in Handbook 2361.13, Chapter 2, Section 1.

- (a) ABATE
- (b) CATALOG
- (c) CERT
- (d) CHKPAR
- (e) CK2410
- (f) COLDER
- (g) C2013M
- (h) C2264M
- (i) C2326
- (j) LAND
- (k) LIMIT
- (l) L2326
- (m) NEWS
- (n) PLACE
- (o) P2013M
- (p) P2264M
- (q) P2325T
- (r) P2437M
- (s) X2328

- (2) Report Generator Programs With Redirected Print Mode. These programs are executed with minimal data input and generate reports with little or no intervention by the terminal

operator. The operator may be prompted for report parameters if required by the program. The requested report is available for printing via the @PRTLST routine. Instructions for this routine are contained in the HUD ADP Terminal Operation Handbook 2361.2, Chapter 2, Paragraph 2-2.a.(6). These reports can be printed immediately or at a later time on either low or high speed printers. However, it may be more practical and convenient to use the high speed printers, particularly if the report is lengthy. This will free the low speed terminals for interactive processing use. The following is a list of CUPS report generator programs. Edit criteria for these programs are contained in Handbook 2361.13, Chapter 2, Section 2.

- (a) CHECK
- (b) CHKDAT
- (c) CHKEXP
- (d) CHKLAN
- (e) CHK184
- (f) EXDATA
- (g) GPINDEX
- (h) HISTORY
- (i) MARKET
- (j) READDT
- (k) READFM
- (l) READIF
- (m) READUM
- (n) READZM
- (o) SEARCH
- (p) SFILES
- (q) TALLY

(r) UPDATE

(s) XINQ01

- (3) Offline Data Generation With Overnight Batch Processing Mode. These programs require a substantial volume of input data and do not normally need immediate update execution. Data for these programs are generally accumulated in batches; e.g., Market Absorption Record, Form HUD-9184. When the data are received, they are keyed offline onto data cassette tapes and transmitted to the computer during the day. The data transactions are then batch processed at night. Reports or error listings are available via the @PRTLST routine on the following morning. This type of program increases the availability of the computer during the daytime prime shift for more critical processing needs. The following is a list of the CUPS programs that utilize offline data generation with overnight batch processing. Edit criteria for these programs are contained in Handbook 2361.13, Chapter 2, Section 3.

(a) P184

(b) P2275

(c) P2410

- 1-5. SECURITY REQUIREMENTS. Automatic security checks have been built into CUPS. Each of these checks has a different function as described below.

- a. Validation Process. This is a process by which CUPS performs an integrity check on its program file to insure that the file is online and all program version dates are current as of the last modification. The process is activated when the first field office user signs on to CUPS for the first time each day. When the process is activated, the terminal operator is notified by the message: "PERFORMING VALIDATE PROCEDURE... WAIT FOR SECOND READY." If the program file is online and current, only the two ready messages are printed. However, if there appears to be a problem with the program file, the terminal operator will be notified to contact the Teleprocessing Assistance Center (TAC) at Headquarters. CUPS processing is not allowed until the problem has been resolved.

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- b. Data Base Access. Each Field Office has a unique, separate set of files which comprises its data base. The following three items must be properly identified before the system will allow access to a specific field office data base.
 - (1) USERID. This is a fixed item identified by the third field on the @run statement during sign-on procedures.
 - (2) UBW Number. This is a fixed three digit code assigned to each Field Office and is required by the CUPS LOGON prompt during sign-on procedures.
 - (3) PASSWORD. This is a key access word required by the CUPS LOGON prompt during sign-on procedures.
 - c. Password Integrity. Since the userid and the UBW number are fixed for each Field Office, the CUPS password is the only identifier that can be changed. If your password needs to be changed for security reasons, please notify TAC.
 - d. Data File Integrity. CUPS Programs perform integrity checks on data files that they read or write (excluding project-numbered files). If the status of a data file appears questionable, the system will instruct the terminal operator to inform TAC of the problem. If no file problem exists, program processing will continue normally.
 - e. NEWS Program. The NEWS program provides Field Office CUPS users with pertinent information concerning CUPS processing such as problems, system changes, special instructions, etc. The system alerts the terminal operator if a NEWS listing is available by printing the effective date and time of the NEWS during the CUPS LOGON procedure. Areas of distribution are indicated on each version of NEWS.