CHAPTER 2. SYSTEM SUMMARY

2-1. INPUT OR SOURCE DOCUMENT. The automated data base is formed by
     information recorded on the HUD 930.1A through 930.4 and HUD 948.
     These forms contain all data recorded on the processing of
     complaints and compliance reviews under the various Civil Rights
     authorities.

     a.   The HUD 930.1A through 930.4 contain information on complaints
          and compliance reviews as follows:

          HUD 930.1A - Regional Monthly Status Summary of
                         Complaints Received, Title VIII of the
                         Civil Rights Act of 1968 and Executive
                         Order 11063 (Complaints only)

          HUD 930.1B - Regional Monthly Status Summary of
                         Compliance Reviews, Title VIII of the
                         Civil Rights Act of 1968 and Affirmative
                         Fair Housing Marketing (Compliance reviews
                         only)

          HUD 930.2   - Regional Monthly Status Summary of
                         Complaints Received and Compliance Reviews
                         Conducted, Title VI of the Civil Rights Act
                         of 1964 and Section 109 of the Housing and
                         Community Development Act of 1974 (Complaints
                         and Compliance Reviews)

          HUD 903.3   - Regional Monthly Status Summary - Equal
                         Employment Opportunity Contract Clause

          HUD 930.4   - Regional Monthly Status Summary of
                         Complaints Received and Compliance Reviews
                         Conducted, Section 3 of the Housing and
                         Urban Development Act of 1968 (Complaints
                         and Compliance Reviews)

     (1) A file number which is used as the controlling
          identification number in the automated system is recorded
          on each form. In addition, information which describes the
          allegation, location data, critical milestone action
          dates associated with proper case handling, and information
          on the outcome or result are recorded for each complaint
          or compliance review.

b. The HUD 948 (State/Local Referral Agency Reports) provides
    information on the processing of Title VIII complaints which
    have been referred to state and local agencies for handling
    under the Department's Substantial Equivalency Regulation.
    This unique form is the only source document which is submitted
    to the data base after the complaint has been completely
    processed. Its primary value is that it contains information on
    state or local agency complaint processing which can be used
    to aid in an evaluation of the agency's substantial equivalency
    posture. In practice, a HUD 948 is completed and entered into
    the automated data base for each Title VIII complaint recorded
    on the HUD 930.1A as closed by a state or local agency.

    (For instructions on the completion of these forms, see
    . For samples of these forms see Appendix 4.)

2-2. EDIT/UPDATE - OVERVIEW. The second phase of the Automated
      Complaint and Compliance Review System relates to the creation
      and maintenance of the automated data base from the input or
      source documents. The data base is composed of six separate
      files -- one for each form (HUD 930.1A, 930.1B, 930.2, 930.3,
      930.4, and 948). Information on each of these documents is
      keyed into the system (or converted to machine readable form),
      if valid, the information is made a part of the automated data
      base, and edited. Errors detected by the machine edits are
      relayed to the user in the Edit Error Listings, which are
      the output reports produced from the edit/update phase.

2-3. TYPES OF TRANSACTIONS. The permissible activities against the
      data base are additions, changes, and deletions. For instructions
      on the preparation of addition, change, and deletion transactions
      see Handbook 8000.1, FHEO Complaint and Compliance Review
      Reporting and Control Procedures.

    a. By definition, an addition is the entry of a complaint or
        compliance review for the first time into the data base.
        The minimum data which should be present to make an addition
        to the data base are the file number and a complaint receipt
        or compliance review opened date, whichever is applicable.
        If this minimum data is not present and valid, the case
        will be flagged as an acceptable fatal error, maintained
        on the file but not included in system status and workload
        summary reports.

    b. A change is, by definition, any action to modify a data
        item on a case which has previously been added to the system.
        The change data will replace whatever previously existed in the
        given field for that case. Thus, a change transaction is used
        to correct a data item previously entered incorrectly, or to
        insert a data item which was previously missing from the case.

(1) A change transaction may be used to delete a single
data item, i.e., change a previously entered field to
spaces. This is accomplished by a change transaction
containing all 9's in the data item field or fields to be
blanked out. The number of nines (9's) must be equal
to the maximum number of characters that may exist in the
field. This single field deletion procedure may be used
for all data items except the file number on all files
and the Compensation Awarded field on the 930.1A file. A
file number may never be changed because it is the single
item which uniquely identifies the case in the data base.
If it becomes necessary to correct a file number, a
deletion transaction must be entered for the case with
the incorrect file number and an addition transaction
entered with the correct file number.

c. A deletion is the transaction which will cause a case to be
dropped from the data base. A deletion is possible only on
a case which has been previously added to the system.

2-4. DATA ENTRY. The transactions are entered into the system through
the use of HUD's Linolex terminals located in each Regional Office.
Complete instructions for use of the Linolex terminals are
contained in Handbook 2361.7 FHEO Complaint and Compliance
Review System, Terminal Operating Procedures.

a. The data capture tape is the mechanism used to key the data
into the system. The capture tape contains a frame
corresponding to each of the system input documents, i.e., HUD
Forms 930.1A, 930.1B, 930.2, 930.3, 930.4 and 948. Limited
editing is built into each frame of the capture tape to
prevent such occurrences as entering alphabetics in an all
numeric field or entering an invalid file number.

(1) In addition to the ability to visually verify each
transaction prior to writing it onto the tape file
to be transmitted, the capability is provided to
list or print the data tapes which contain the keyed
transactions. Printing of the data tapes may be
accomplished both prior to and after transmission of
the data to the central computer site. The printout of
the data tapes may be useful for verification and audit
trail requirements. See HUD Handbook 2361.7, Chapter 1-2,
Paragraph (10) for precise instructions for printing the
cassette data tapes.

(2) If it becomes necessary to delete a transaction after it
has been written onto the cassette data tape, but prior
to the tape being transmitted to the central computer site,
it can be recalled and marked so that the system's edit/
update programs will process it but make no alterations
to the data base. For instructions to implement this
procedure see the HUD Handbook 2361.7, Chapter 1-2,
Paragraph 8, Subparagraph (i).

2-5. EDITING AND UPDATING OF THE DATA BASE. The transaction data entered
via the Linolex terminals is transmitted to the central computer
site in Headquarters where it is batched and processed weekly.

a. Prior to the update transactions being entered into any of the
system's edit/update programs, they are sorted for the entire
country by their file number in ascending order. If there are
two or more transactions with the same file number, then all the
deletion transactions ("D") will be processed before the
addition ones ("A") which in turn will be processed before the
change transactions ("C"). Therefore, the user can replace an
existing record on the master file with a new one by submitting
both a deletion and an addition transaction having the same
file number during the same processing run.

(1) However, because of the way transactions are collated,
the user cannot delete an old record, replace it with a
new record having the same file number and then delete the
new record during the same update processing run. The old
record would be deleted by the first deletion transaction
as desired. The second deletion transaction would be
processed next and would result in the transaction being
rejected with the fatal error message, "NO MASTER
RECORD TO DELETE, TRANSACTION REJECTED," as the previous
deletion transaction removed it. Therefore, after the
update process is completed, the new record would exist
on the master file even though this was not desired.

(2) While the collating sequence processes "D", "A" and "C"
transactions having the same file number in this order,
the EDIT/UPDATE Program does not permit a change
transaction to update any fields on a record that was
just added to the Master File during the same processing
run. Instead, the change transaction would be rejected
with the fatal error message, "NO MASTER RECORD TO CHANGE,
TRANSACTION REJECTED." This will occur inspite of the
fact that after the update processing run a record will
exist on the updated master file, because the immediately
preceding addition transaction with the same file number
was processed.

2-6. EDIT ERROR LISTINGS

    a.   Structure of Listings. There are six (6) types of Edit Error
          Listings. Each listing informs the user of the results of an
          update or the current status of the existing data base. The
          types are identified by descriptive headings. At the top of
          each page on the left there is a Product Information Code
          (PIC), as an example EO2ACC-E. This code contains the CCRS
          System Code (EO2) followed by a sequence code of A. The next
          code is an A, B, C, D or E. This code corresponds to the HUD
          form number (930.1A, 930.1B, etc.) to which the listing applies.
          The HUD form number is found in the center of the page, second
          line. The next character of the PIC is always a C. This
          character is not intended to provide the CCRS user any meaningful
          information. The last character of the PIC, that to the
          right of the hyphen, informs the user which of the reports are
          being referenced. The last character of PIC code is an A thru
          F corresponding to the following types of listings.

LISTING TITLE	LAST CHARACTER OF PIC
Accepted Error Free Updates	A
Non-Fatal and Accepted Fatal	B
Rejected Fatal	C
Summary	D
Master File Status	E
Legend	F

          The above titles are printed in the center of the page, most
          often on the third line. On the right side of the page is
          printed the date (MM/DD/YY), month, day, year, and the time
          (HH:MM:SS:), hour, minute and second, that the listing was
          started. Below the time, the title OPTION: is followed by
          either 'ERROR', 'UPDATE', or 'ALL.' These options are
          explained in Paragraph 2-6b of this Chapter.

        (1)   The Accepted Error Free Updates Listing is generated
               only when the 'UPDATE' option is requested. This
               listing informs the user of those updates made to the
               data base which were error free. Each case listed has
               printed to the left of the 'FILE-NUMBER' the type of
               update that was performed on that case (Add, Delete, or
               Change). When a data base record is changed two lines
               are printed for the case. The top line is the data base
               record as it exists after being updated. Any data element
               that is changed is preceded by an asterisk. Each data
               element of all added and deleted cases are printed.

(2) The Non-Fatal and Accepted Fatal Updates Listing contains information regarding added or changed cases which are in error. The type of update is printed to the left of each FILE-NUMBER. The next line identifies the type of error that was produced from this update. Errors found on this listing are only non-fatal or accepted fatal. A non-fatal error is defined as data which is not valid for a particular field of information but the existence of which does not cause the case to be excluded from the system output summary workload and status reports. An accepted fatal error is defined as data which is not valid for a particular critical field of information and the existence of which causes the case to be excluded from the system output summary workload and status reports. Errors in the following data items cause "Accepted" fatal errors:

      1) Complaint Received or Compliance Review Opened Date

      2) Closed Date

      3) Closing Code or Type of Closure

The concept of the 'ACCEPTED' fatal error prevents the loss of a data base record when a change transaction introduces an error in one of the above listed critical fields. Immediately below each type of error identification line is printed one or more error codes. The interpretation of each error code, non-fatal or accepted fatal, is found on the legend listing.

(3) The Rejected Fatal Updates Listing informs the user of update errors which have not affected the data base. The first type of rejectable fatal errors relate to file-number and are noted by error codes 01 through 05. Each of these codes relate to errors found in file-number and are as follow: 01 Region Code not within Prescribed Range of 01-10; 02 Fiscal Year not within Prescribed Range of 69-85 or TQ; 03 Month not within Prescribed Range of 01-12; 04 Serial not numeric or serial is zero; and 05 Authority Code Invalid. Any error in file number will cause the rejection of an add transaction. File Number error are rejected fatal errors because subsequent change transactions cannot alter file-number. The second type of rejectable fatal errors results when a transaction is submitted and the existing status of the data base disallows a particular type of updating. The codes and a description of each:

```
86   No Master Record to Delete
87   No Master Record to Change
88   Invalid Type of Update Code
98   Duplicate of a Previous Add Update
99   Duplicate of an Existing Master Record
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(a)   Errors as described above which occur during the
      posting of a transaction to the Master File are
      referred to as "rejectable" fatal errors because
      they cause a transaction to be excluded from the
      Master File.

(4)   The Summary Listing contains detail counts of activity
      which occurs during an update. The first line printed
      'Master Input Records' is the total number of records which
      exist on the data base prior to updating. The last line,
      'Master Output Records' is the resultant total after
      updating. The activity of changes to the data base is
      listed by transaction type. 'Rejected' transactions do not
      effect the master counts. The right column of 'Changes
      Accepted' is always zero, because change transactions have
      no effect on the master output record total. 'Deletes
      Accepted' are printed in parenthesis, to emphasize that
      the count has a negative effect on the total master
      records. The third from the last line, 'Invalid Type'
      is a count of transactions which are not identified by
      the system as adds, changes, or deletes.

(5)   The Master File Status Listing summarizes two types of
      information. The top portion of the listing reports
      the status of all records on the Regional data base.
      The count displayed for 'Total Non-Reportable Records'
      is the total of all acceptable fatal records. Records
      in this category are not reported in any of the system
      output summary workload and status reports. The
      second portion of the listing informs the user of the
      options used in creating this particular Edit Error
      Listing. An asterisk under a particular Region number
      indicates that the option printed to the left has been
      selected for that Region. These options may be requested
      by Regional Offices through FHEO Headquarters staff.
      Paragraph 2-6b of this Chapter explains the available
      options.

(6)   The Legend Listing primarily contains a description of
      error codes and the meaning of each. The error codes
      are listed in the left column followed by the type of
      error, non-fatal, rejectable fatal, or acceptable. The
      next column is a total of all records on the data base
      having this particular error. The data listed under
      description explains the meaning of each error code.

8000.2

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b.   Edit Error Options. The Edit Error Listing for each Master File
     may be produced through the use of three options. The options
     are 'UPDATE', 'ERROR', and 'ALL'.

     (1) The 'UPDATE' option is run on a weekly cycle to update the
          data base with transactions created via DEGEN and
          transmitted from Regional Offices to HUD's Headquarters
          computer. When an update option is used all Regions will
          receive at least a Master File Status Listing, even though
          a particular Region may not have submitted update
          transactions. Each Region submitting transactions will
          receive a Master File Status Listing plus these listings;
          Accepted Error Free, Non-Fatal and Accepted Fatal, or
          legend, dependent upon the events of updating.

     (2) The 'ERROR' option edits all records on the data base and
          reports only those records in error. This option may be
          run selectively by Region. Each Region, selected for an
          'ERROR' option, will receive a Non-Fatal and Accepted Fatal
          Listing, if any errors exist within its data base, a Master
          File Status Listing and a Legend Report are also created.
          Types of errors (Non-Fatal and Acceptable Fatal) are
          identified to the left of the record in error. Error codes
          are printed on the next line and explained in the Legend
          Report. The 'ERROR' option listing will be produced
          periodically, and upon Regional request giving Regional
          staff an opportunity to make corrections to data which
          is in error.

     (3) The 'ALL' option is identical to the 'ERROR' option
          except that it also prints data base records which are
          error free. This listing will be generated periodically
          providing Regional Offices with a complete listing of data
          base contents.

2-7. ERROR CORRECTION. When a rejectable fatal error occurs on an
     addition transaction, correct the identified items and re-enter
     the case as an addition. When a rejectable fatal error occurs on
     a change or deletion transaction because there exists no matching
     file number already in the data base, correct the file number and
     re-enter the change or deletion transaction. When an acceptable
     fatal error occurs on a change transaction, correct the data
     items in error and re-enter the change transaction. When a
     non-fatal error and/or an acceptable fatal error occurs on an
     addition transaction, correct the data items and submit a change
     transaction. When a non-fatal error occurs on a change
     transaction, correct the data items and re-enter the change
     transaction.

2-8.   DATA ENTRY AND EDIT SCHEDULE. It is recommended that each
       Region key in transactions on a weekly basis. After the end
       of each week, all of the data transmitted by the Regions is
       collected at the central computer site and processed against
       the master file. From this processing a set of Edit Error
       Listings is prepared for each Region. These listings reflect
       all errors detected in the entire data base. Within one
       to two days the listings are returned over terminal lines to
       the Regions. Corrections are made by each Region to its data
       base in time for the next weeks processing.

2-9.   OUTPUT REPORTS - OVERVIEW. In addition to the Edit/Error Listings,
       a series of management reports have been designed for system
       output. In general, these reports may be separated into six
       categories:

           a.   Summary Workload Reports
           b.   Status Reports on open and closed cases
           c.   Aging Reports
           d.   Lapse Time Analysis of Closed Cases
           e.   Query Report
           f.   Special Report

       (Appendix 2 contains samples of each of these reports. A list
       of each report is provided at the end of this chapter, with the
       identification of the input documents from which the data for
       each report is taken).

2-10. WORKLOAD SUMMARY REPORTS. Workload Summary Report provides such
       information as complaint receipts by authority and by state,
       compliance reviews by authority and program, and complaint
       receipts by basis, program, and issue. It is anticipated that
       FHEO Headquarters will produce these reports routinely on a
       monthly basis to coordinate with the OPLAN System and as
       special needs rise. Each Region may request preparation of any
       of these reports on a schedule suited to its own needs.

       a.   The timeframes for each of these reports are selected
            by the user and input to the system through Data
            Parameter Cards. Detail instructions for completing these
            Data Parameter Cards are found in Handbook 2361.7, FHEO
            Complaint and Compliance Review System, Terminal Operating
            Procedures.

            (1)   Examples of uses of the Workload Summary Reports include:
                  budget analysis; special reports such as the HUD
                  Statistical Yearbook; and analysis of the specific
                  HUD programs in which compliance reviews are conducted.

8000.2

2-11.   STATUS REPORTS.   The Status Reports on open and closed cases are
        the reports which are best used by both Regional and Headquarters
        for management control and program evaluation under each of the
        authorities.   Separate reports are prepared for complaints and
        compliance reviews for each of the major groupings of the Civil
        Rights Enforcement Program -- Title VIII and EO 11063, Title VI,
        Section 109, EEO Contract Clause, and Section 3.   Each of the
        Status Reports contains information on complaint receipts or
        compliance review starts, cases on hand the beginning of the
        period, cases awaiting investigation for a given number of days,
        cases under investigation, cases awaiting negotiation or
        conciliation for a given number of days, cases investigated,
        investigation or negotiation results, cases closed and the
        results of closures, and cases open at the end of the period.
        This kind of information is useful to the manager in identifying
        potential problem areas or bottlenecks in the processing of
        complaints or compliance reviews and in beginning to evaluate
        the results of case handling.   Because of the complexity of
        the definitions of some of the items used in these reports, a
        data dictionary which defines the items for each status report
        is included in Appendix 3.

        a.   Each of these reports provides separate information by
             Region and provides for user selection of two time periods
             for reporting.   The system provides for the user selection
             of time periods for reporting through the use of Data
             Parameter Cards which are prepared by the user and which
             specify each of the two time periods in terms of a from to
             range.   As an example, the status report on open Title VIII
             cases may be prepared for the periods February 1, 1977
             through February 28, 1979 and October 1, 1978 through
             December 31, 1978.

        b.   Under routine circumstances, Headquarters will produce Status
             Reports for each calendar month and fiscal year cumulative
             period.   However, there is no limitation on the selection of
             time periods chosen.   Detail instructions on the preparation
             and submission of these Data Parameter Cards is found in
             Handbook 2361.7, FHEO Complaint and Compliance Review System,
             Terminal Operating Procedures.

2-12.   AGING REPORTS.   The Aging Reports are a series of separate reports,
        one for each activity and each Civil Rights authority, which lists
        by Region all open cases as of a given time period.   They are
        summary-type reports which provide the total number of open cases
        in each Region in 30-day categories.   Currently, these reports
        provide the data necessary in the Executive Management Report on
        aged cases.

2-13. LAPSE TIME ANALYSIS OF CLOSED CASES. The Lapse Time Reports are a
      series of separate reports, one for each activity and each Civil
      Rights authority, which list the total number of days required to
      process the cases which were closed during a specified time period.
      The computation of the number of days is based on a comparison of
      the date the complaint was received or the date the compliance
      review was opened with the date the case was closed. These too
      are summary-type reports which provide by Region the total number
      of closed cases by 30-day categories.

2-14. QUERY REPORT. The system provides a query capability for each of
      the six files which comprise the data base. These six files
      correspond to the six input source documents: HUD 930.1A; HUD
      930.1B; HUD 930.2; HUD 930.3; HUD 930.4; and HUD 948. Any data
      item on each of these files may be queried at any time. The
      query capability is provided primarily because all but one of
      the output reports is designed for summary reporting only, i.e.,
      they do not list individual cases. An example of the use of the
      query capability to support the summary reporting might be detection
      of a bottleneck in Title VIII Complaints under investigation more
      than 30 days through use of the Status Report on Title VIII,
      followed by a query of the system to list all cases under
      investigation more than 30 days. This would provide the manager
      with the essential information he/she would require for corrective
      action. Another example of the use of the query capability is to
      determine whether or not compliance reviews have been conducted
      on a particular respondent in a Title VI complaint. The query
      capability is provided through use of a pre-programmed software
      package called SCORE (Select Copy Report). Detail information on
      the use of the SCORE package is contained in the Terminal Operating
      Procedures Handbook. In general, the SCORE program allows the
      user to choose the criteria to be used to select and print the
      individual cases, specify title and other header information to
      be printed at the top of each page of the report, sort data in a
      specified sequence, and select the data items to be printed for
      each case.

2-15. SPECIAL REPORT. At this time there is one Special Report -- a
      report on Repeated Title VIII Offenders. It was designed in
      response to inquiries received by FHEO Headquarters from other
      Federal agencies, such as the Civil Rights Commission. Essentially,
      the report provides information on the respondents of Title VIII
      complaints who have been respondents in more than one complaint.
      The respondent's name is used to identify multiple offenders. The
      ability to adequately use this report is dependent upon the
      extent to which each Region uniformly identifies a respondent
      each time he/she becomes party to a Title VIII complaint.

8000.2

2-16. TECHNICAL ASSISTANCE. To request query reports or to obtain
      assistance in the resolution of ADP-related problems, FHEO
      Regional personnel should contact the Regional Management
      Information Division Director or Computer Specialist. To obtain
      special runs of pre-programmed system output reports on a
      limited basis, Regional FHEO personnel should make a written
      request to FHEO Headquarters, attention Management Systems and
      Services Division. To resolve questions of a procedural nature,
      FHEO Regional staff should contact FHEO Headquarters, Management
      Systems and Services Division.

2-17. RESERVED