ZIP/CITY
SYSTEM

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We welcome your comments and suggestions. Please fax any comments or suggestions to 601-856-9432.

SECURITY

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INTRODUCTION

ZIP/CITY System is designed to provide an easy-to-use method for viewing ZIP Codes and their corresponding state/city combinations. ZIP/CITY System consists of data files containing all the United States ZIP Codes, and easy-to-use programs for viewing and using the information. The ZIP/CITY file can be viewed in either ZIP Code sequence or in state/city sequence.

In addition to the normal post-office-preferred ZIP/city combinations, the ZIP/CITY file contains records for the facility Codes and types of ZIP Codes used by the post office. Each individual ZIP Code may have several place names associated with it. The file contains over 70,000 records. The county name and county FIPS (Federal Information Processing Standards) code for each ZIP Code are also provided.

A distance calculation program is also provided. The air-line distance between two ZIP Codes can be calculated based on the latitude and longitude of each ZIP Code. The calculations are based on the average lat/lon for the ZIP Codes involved.

The telephone area code and time zone associated with a ZIP Code have been added to the ZIP/CITY system. The area code and time zone information is not provided for military APO and FPO ZIP Codes.

Options for maintaining area codes in user data files are also provided. These options allow you to define your files and enter and update area code information. These options will allow you to keep your customer files up-to-date for the many area code changes taking place.

These area code options were formerly marketed as a separate system named AREA CODE MANAGER. They have been added to the ZIP/CITY system since the two are so closely related.

The Nearest Dealer Locator function is a subsystem designed to aid customer service operations. It uses the customer's ZIP Code to identify the nearest customer service location based on the distance to the dealer's ZIP Code. The three nearest dealers will be identified.

Callable programs are provided for almost all of the features of the ZIP/CITY system, allowing you to add these features to your own application software.

We strongly encourage you to use the callable programs to access ZIP/CITY data rather than write your software to go directly to the data files. As new features are added to the ZIP/CITY system, it is likely that there will be changes to file and record structures. We will keep the callable programs up-to-date. If you have written code to access the files directly, you may be faced with changing your programs.

Descriptions for the callable programs are provided in this book. Sample source code is also provided to aid you in using the callable programs.

GETTING STARTED

ZIP/CITY System is extremely easy to install and use. No programming experience is needed; although a basic understanding of how to use your workstation is necessary.

First, install ZIP/CITY System using the instructions in this book. The installation should take only a few minutes. If you select an interactive installation , when the installation ends you will be viewing the ZIP/CITY menu.

ZIP/CITY System comes to you with the ZIP/CITY data file, plus the city abbreviation, county, and the latitude/longitude files. Information about past area code and ZIP Code changes is also included.

Next, use menu option one to view the ZIP/CITY file. The file is always displayed first in ZIP Code sequence. A function key can be used to change the sequence to state/city.

Please review this entire book. While you may not want to read every single word, it is important that you browse every page so that you will have a good understanding of the features provided by the ZIP/CITY System.

No programming skills are required to use the menu options. However, to use the callable programs and take advantage of all features, a programmer will need to modify your existing software systems.

Installation

The same installation is used for new installations and for bimonthly updates, unless special instructions are provided with a bimonthly update.

To install ZIP/CITY System, do the following:

1. Sign on to your system as SECURITY OFFICER

2. Load the ZIP/CITY System CD-ROM

3. Key LODRUN DEV(device name)

4. If installing for the first time, you will be prompted to accept the license. If you accept the license, installation will continue. If you decline to accept the license, the installation will end.

5. Select the BATCH or INTERACTIVE load

If you select the BATCH option you will be prompted as to whether the job should run immediately or be scheduled for later.

6. Press ENTER

If you select the interactive option, when the installation ends you will be viewing the ZIP/CITY System menu.

If you select the batch option, when the installation is completed you will receive a message telling you the installation has ended.

IMPORTANT CONCEPT - Keying **STRZIPCITY** on any command line will take you directly to the ZIP/CITY System menu.

Deinstallation

To permanently remove ZIP/CITY System, do the following:

1. On any command line key STRZIPCITY

2. Press ENTER

3. Key CALL ZCLIB/ZCDEINSTAL

4. Press ENTER

5. Sign on to any library other than ZCLIB

6. Key DLTLIB ZCLIB

7. Press ENTER

ZIP/CITY Main Menu

```
COMMAND                          MENU: ZCMENU                             W1

    Select one of the following:

     1. Work with the ZIP/CITY file
                                           2. Work with country file
     3. Work with selection options
                                           4. Work with ZIP/CITY system values
     5. Compute distances based on ZIP Codes
                                           6. Work with MSA codes
     7. Work with area code information

     9. Nearest Dealer Locator

    11. Browse the county file

    90. Sign off your workstation


 Selection or command
 ===> _____
 _____
  F3=Exit    F4=Prompt    F9=Retrieve    F12=Cancel
  F13=User support        F16=System main menu
```

The ZIP/CITY System is a system designed to provide three basic types of information based on ZIP Code. First is ZIP Code and matching city name. Abbreviations are also provided for those city names that exceed 13 characters.

The ZIP/CITY file is a data file containing all the valid ZIP Codes in the United States. As new ZIP Codes are introduced by the United States Postal Service, they will be added to the file.

Option one on the ZIP/CITY menu allows you to browse ZIP Code information in ZIP Code order or in city name order. This is strictly a browse function. If the preferred city name exceeds 13 characters, the USPS city name abbreviation is also displayed.

The second type of information is COUNTY name based on ZIP Code. The county name is displayed as part of the browse option. The county name is also provided through a callable program. See the section on callable programs for more information.

The third type of information is commonly referred to as geocoding. The information provided is based on the latitude and longitude of a ZIP Code. This enables the calculation of air-line distance between two ZIP Codes. The computation is approximate because the latitude and longitude of a given ZIP Code is not precise. Most ZIP Codes cover a fairly wide area.

Option two on this menu allows you to browse a file of country names. The telephone country code, ISO code, and capital city are shown.

Option three on this menu takes you to the selection options. Options are provided to allow you to select ZIP Codes based on state, county, city, or distance. Selected ZIP Codes will be placed into a "finder" file. The selected ZIP Codes can then be used in any user written applications.

Option four on this menu allows you to work with ZIP/CITY system values.

Option five on this menu allows you to compute the air-line distance between two ZIP Codes. When you enter two valid ZIP Codes, the program will do the calculation based on the latitude and longitude of the two ZIP Codes.

The resulting distance is the approximate air-line distance between the two ZIP Codes. A ZIP Code usually covers a fairly wide geographic area; thus, the latitude and longitude, and therefore the distance, will not be exact.

Keep in mind that the air-line distance will be different from the distance in highway miles. The distance is displayed in miles and in kilometers.

If either of the ZIP Codes is not valid, no distance will be computed. If the ZIP Code is not found in the latitude and longitude file, no distance will be computed.

Option six on this menu allows you to work with MSA codes.

Option seven on this menu takes you to a group of options which allow you to work with area code information and keep your customer telephone numbers up-to-date. The system comes to you with information already entered for many of the recent area code changes.

Option nine on this menu takes you to the Nearest Dealer Locator. The Nearest Dealer Locator function is a subsystem designed to aid customer service operations. It uses the customer's ZIP Code to identify the nearest customer service location based on the distance to the dealer's ZIP Codes. The three nearest dealers will be identified.

Option eleven on this menu allows you to browse the county file. The browse is in state/county order.

Browse ZIP/CITY File

```
  BROWSE ZIP/CITY FILE    Mode=ZIP Code                        ZC0100

Position to ZIP Code _____
St  City                      ZIP     City Abrev    County
NY  HOLTSVILLE                00501 U               SUFFOLK
NY *I R S SERVICE CENTER      00501 U               SUFFOLK
NY  HOLTSVILLE                00544 U               SUFFOLK
NY *IRS SERVICE CENTER        00544 U               SUFFOLK
PR  ADJUNTAS                  00601                 ADJUNTAS
PR *JARD DE ADJUNTAS          00601                 ADJUNTAS
PR *URB SAN JOAQUIN           00601                 ADJUNTAS
PR *EXT LOS ROBLES            00602                 AGUADA
PR  AGUADA                    00602                 AGUADA
PR *ALTS DE AGUADA            00602                 AGUADA
PR *URB ISABEL LA CATOLICA    00602                 AGUADA
PR *URB MONTEMAR              00602                 AGUADA
PR *URB BRISAS DEL MAR        00602                 AGUADA
PR *URB SAN CRISTOBAL         00602                 AGUADA
PR *PARC PALMAR NOVOA         00602                 AGUADA
PR *COMUNIDAD LAS FLORES      00602                 AGUADA
PR *PASEO UNIVERSITARIO       00603                 AGUADILLA
PR  AGUADILLA                 00603                 AGUADILLA


 Place the cursor on a line and press ENTER for details.    U=Unique ZIP Code
 F3=Exit    F10=Change modes    F24=Added/Deleted ZIP Codes *=Nonmailing name
```

This program allows you to browse the data in the ZIP/CITY file. The short city name is provided only if the preferred city name is longer than thirteen characters. The thirteen-character rule does not apply to organization names or to place names.

You have the option to display the data in ZIP CODE sequence or in state/city alphabetic sequence. The data is displayed in the same format in either mode; only the sequence changes. The name of the county (or county equivalent) is also displayed.

You can view additional information for the displayed ZIP Codes by placing the cursor on the line of the ZIP Code you wish to view and pressing the ENTER key. All the information contained in the ZIP/CITY System for that ZIP Code will be displayed.

The ROLL keys may be used to go forward or backward in the file. Pressing the ENTER key has the same effect as using the roll forward key.

F3 = Exit the program
F10 = Changes modes - toggles between ZIP Code sequence and state/city sequence.
F24 = Displays a list of ZIP Codes which have recently been added or deleted.

If you use function key 10 to switch modes, you will see the following display. The state/city information will be displayed in alphabetic order beginning with the city displayed at the top of the last ZIP order display.

```
                         BROWSE ZIP/CITY FILE                Mode=State/city

   Position to state __ city _____
   St  City                       ZIP     City Abrev     County
   NY  HOLTSVILLE                  00501 U                SUFFOLK
   NY  HOLTSVILLE                  00544 U                SUFFOLK
   NY  HOLTSVILLE                  11742                  SUFFOLK
   NY  HOMER                       13077                  CORTLAND
   NY *HOMES                       12531                  DUTCHESS
   NY  HONEOYE                     14471                  ONTARIO
   NY  HONEOYE FALLS               14472                  MONROE
   NY *HONEYWELL CORNERS           12025                  FULTON
   NY *HONNEDAGA LAKE              13338                  ONEIDA
   NY *HOOPERS VALLEY              13812                  TIOGA
   NY  HOOSICK                     12089                  RENSSELAER
   NY  HOOSICK FALLS               12090                  RENSSELAER
   NY *HOOSICK JUNCTION            12133                  RENSSELAER
   NY *HOPE FALLS                  12134                  FULTON
   NY  HOPEWELL                    12533   HOPEWELL JCT   DUTCHESS
   NY  HOPEWELL JCT                12533   HOPEWELL JCT   DUTCHESS
   NY  HOPEWELL JUNCTION           12533   HOPEWELL JCT   DUTCHESS
   NY  HOPKINTON                   12965                  SAINT LAWRENCE


 Place the cursor on a line and press ENTER for details.   U=Unique ZIP Code
 F3=Exit   F10=Change modes   F24=Added/Deleted ZIP Codes  *=Nonmailing name
```

You can position the program to view anywhere in the file by entering the ZIP Code or state Code and city name in the field at the top of the screen.

You can view additional information for the displayed ZIP Codes by placing the cursor on the line of the ZIP Code you wish to view and pressing the ENTER key. All the information contained in the ZIP/CITY System for that ZIP Code will be displayed.

The ROLL keys can be used to move back and forth through the file. Pressing ENTER has the same effect as using the roll forward key.

ZIP Code Information

```
                     BROWSE ZIP/CITY FILE
 ZC0100


 Detailed information for ZIP Code 10572

 Selected city name .............. PLEASANTVILLE
 Preferred city name .............
 State name ...................... NY
 County name ..................... WESTCHESTER
 County FIPS code ................ 36119
 City abbreviation ...............
 Telephone area code(s) .......... 914
 Time zone ....................... E
 Latitude ........................ 411262
 Longitude ....................... 0737891
 Postal facility code ............ P
 Postal mailing indicator ........ Y
 Postal city delivery ............ N
 Postal carrier route rate sort .. A
 Postal finance number ........... 356625
 ZIP Code class .................. U
 Single ZIP Code city ............
 CSA/MSA/MSA Division/MICRO Codes. 408   / 35620 / 35644 / *****


 F3=Exit   F12=Prior
```

This is the display for an individual ZIP Code record. This display is produced by placing the cursor on a ZIP code record and pressing ENTER.

Browse Added/Deleted ZIP Codes

```
                        ZIP Codes Added or Removed                    ZC0105
 Position to Zip Code _____

 ZIP Code  City                        State  Added/Removed  Date Added/Removed
  23295    CAPITAL ONE                  VA       ADDED           11/15/00
  23295    RICHMOND                     VA       ADDED           11/15/00
  29124    PERRY                        SC       REMOVED         11/15/00
  43196    GAP INC DIRECT               OH       ADDED           11/15/00
  43196    GROVEPORT                    OH       ADDED           11/15/00
  53009    BYRON                        WI       REMOVED         11/15/00
  57074    WARD                         SD       REMOVED         11/15/00
  72260    LITTLE ROCK                  AR       ADDED           11/15/00
  75294    DALLAS                       TX       REMOVED         11/15/00
  89494    RMX                          NV       ADDED           12/15/00
  89494    SPARKS                       NV       ADDED           12/15/00
  93759    EQUIT LIFE ASSC SOC          CA       REMOVED         12/15/00
  93759    FRESNO                       CA       REMOVED         12/15/00
  97468    REMOTE                       OR       REMOVED         11/15/00


  F3=Exit    F5=Display Added Only        F10=Date Sequence    More...
```

This is the display of added and removed ZIP Codes. The feature includes ZIP Code activity since November, 2000.

These ZIP Codes can be display in ZIP Code order or in date order by using function key F10 to toggle between modes.

Also you can display only the added ZIP Codes, only the removed ZIP Codes, or both added/removed ZIP Codes by using function key F5 to toggle between modes.

This list is displayed by the F24 key on the main browse screen.

Selection Menu

```
 COMMAND                                 MENU: ZSMENU

  Select one of the following:

   1. Select ZIP Codes by distance

   3. Select ZIP Codes by state

   5. Select ZIP Codes by county
   6. Select ZIP Codes by area code
   7. Select ZIP Codes by city

   9. Select ZIP Codes by CSA/MSA/MICRO/MSA Division Codes

  90. Sign off your workstation


  Ready for option number or command
  ===>
  _____

  _____
  F3=Exit    F4=Prompt    F9=Retrieve    F12=Cancel
  F13=User support        F16=System main menu
```

This menu allows you to select ZIP Codes based on several options. ZIP Codes can be selected by distance, state, county, area code, city or CMSA/MSA/MICRO or MSA DIVISION code.

The ZIP Codes selected will be placed into a file where they can then be used as "finder" records in another application.

The selection file has a record length of 5, and will contain only the ZIP Codes. For all the options the default selection file name is ZCSELECT in library ZCLIB. You can change the file/library names if you wish.

The selected ZIP Codes can be added to a prior selection file or placed in an empty selection file. This allows you to do things such as selecting all the ZIP Codes in a particular county, then selecting all the ZIP Codes in a city not in that county, placing all the selected ZIP Codes into a single file.

The intent is that in user written application programs, you will be able to use the selection file to identify desired addresses for further processing.

Option one on this menu allows you to select ZIP Codes based on the distance from a central ZIP Code. Any ZIP Code within the specified distance of the ZIP Code will be selected and placed in the selection file.

Option three on this menu allows you to select ZIP Codes based on the state in which the ZIP Codes are located. You can select any combination of states.

Option five on this menu allows you to select ZIP Codes based on the county in which the ZIP Codes are located. Selection is based on the county FIPS code. Up to ten counties can be selected.

Option six on this menu allows you to select ZIP Codes based on the telephone area code in which the ZIP Codes are located. Up to ten area codes can be used for selection.

Option seven on this menu allows you to select ZIP Codes based on the city in which the ZIP Codes are located. Up to ten cities can be selected.

Option nine on this menu allows you to select ZIP Codes based on the CMSA/MSA/ MICRO or MSA DIVISION code in which the ZIP Codes are located. Up to ten CMSA/MSA/MICRO or MSA DIVISION codes can be selected.

Selection by Distance

```
 HELP                          ZIP/CITY SYSTEM

   This program selects all ZIP Codes within a given number of miles.


   Enter the ZIP Code for selection..  39110

   Select all ZIP Codes within ......  0010   miles

   Name for selection file ..........  ZCSELECT__

   Library for selection file .......  ZCLIB_____

   Add to prior selection file ......  Y (Y or N)

   List selected ZIP Codes .........   Y (Y or N)



 F13=Submit to batch
 F1=Run interactively   F3=Exit
```

This option allows you to select all ZIP Codes within X miles of another ZIP Code. The selected ZIP Codes will be placed into a selection file which can be used in your own application programs.

The default selection file name is ZCSELECT in library ZCLIB. You can change the file/library names if you wish.

The selected ZIP Codes can be added to a prior selection file or placed in an empty file.

You have the option to print a list of the selected ZIP Codes. Enter Y or N.

    F1=Run the job interactively
    F3=Exit and cancel the job
    F13=Submit the job to batch processing

Selection by State

```
                      Select ZIP Codes by State

 1=Select    File name ZCSELECT__    Library name ZCLIB____    Add N (Y or N)

 _ AA A F AMERICAS    _ AE A F EUROPE     _ AP A F PACIFIC    _ AL ALABAMA
 _ AK ALASKA          _ AS AMER SAMOA     _ AZ ARIZONA        _ AR ARKANSAS
 _ CA CALIFORNIA      _ CO COLORADO       _ CT CONNECTICUT    _ DE DELAWARE
 _ DC DIST COLUMBIA   _ FM FED STATES     _ FL FLORIDA        _ GA GEORGIA
 _ GU GUAM            _ HI HAWAII         _ ID IDAHO          _ IL ILLINOIS
 _ IN INDIANA         _ IA IOWA           _ KS KANSAS         _ KY KENTUCKY
 _ LA LOUISIANA       _ ME MAINE          _ MH MARSHALL ISL   _ MD MARYLAND
 _ MA MASSACHUSETTS   _ MI MICHIGAN       _ MN MINNESOTA      _ MS MISSISSIPPI
 _ MO MISSOURI        _ MT MONTANA        _ NE NEBRASKA       _ NV NEVADA
 _ NH NEW HAMPSHIRE   _ NJ NEW JERSEY     _ NM NEW MEXICO     _ NY NEW YORK
 _ NC NORTH CAROLIN   _ ND NORTH DAKOTA   _ MP N MARIANA IS   _ OH OHIO
 _ OK OKLAHOMA        _ OR OREGON         _ PW PALAU          _ PA PENNSYLVANIA
 _ PR PUERTO RICO     _ RI RHODE ISLAND   _ SC SOUTH CAROLIN  _ SD SOUTH DAKOTA
 _ TN TENNESSEE       _ TX TEXAS          _ UT UTAH           _ VT VERMONT
 _ VA VIRGINIA        _ VI VIRGIN ISLAND  _ WA WASHINGTON     _ WV WEST VIRGINIA
 _ WI WISCONSIN       _ WY WYOMING

 F1=Run interactively   F3=Exit     List selected ZIP Codes Y
 F13=Submit to batch
```

This program allows you to select all ZIP Codes within a given state or states. The selected ZIP Codes will be placed in a selection file. The default file name is ZCSELECT in library ZCLIB.

The selection file can be used as a "finder" file for further selection within your application programs.

The selection file has a record length of 5. The only information is a five digit ZIP Code.

The selected ZIP Codes can be added to a prior selection file or placed in an empty file.

You have the option to print a list of the selected ZIP Codes. Enter Y or N.

    F1=Run the job interactively
    F3=Exit and cancel the job
    F13=Submit the job to batch processing

Selection by County

```
                Select ZIP Codes by County FIPS Code

 Enter up to ten county FIPS codes  _____   _____
                                            _____   _____
                                            _____   _____
                                            _____   _____
                                            _____   _____

 File to contain selected ZIP Codes ....  ZCSELECT__

 Library for selection file ...........  ZCLIB_____

 Add to prior selection file ..........  Y (Y or N)

 List Selected ZIP Codes ..............  Y (Y or N)




 F13=Submit to batch
 F1=Run interactively    F3=Exit
```

This program allows you to select all ZIP Codes within a given county or using the county FIPS (Federal Information Processing Standards) code. Up to ten counties can be used for selection. The default file name is ZCSELECT in library ZCLIB.

The selection file can be used as a "finder" file for further selection within your application programs.

The selection file has a record length of 5. The only information is a five digit ZIP Code.

The selected ZIP Codes can be added to a prior selection file or placed in an empty file.

You have the option to print a list of the selected ZIP Codes. Enter Y or N.

   F1=Run the job interactively
   F3=Exit and cancel the job
   F13=Submit the job to batch processing

Selection by Telephone Area Code

```
                    Select ZIP Codes by Area Code

  Enter up to ten area codes ......   ___     ___
                                      ___     ___
                                      ___     ___
                                      ___     ___
                                      ___     ___

  Selection file to be used...  ZCSELECT__

  Library for selection file..  ZCLIB_____

  Add to prior selection file.  Y (Y or N)

  List selected ZIP Codes ....  Y (Y or N)



  F13=Submit to batch
  F1=Run interactively    F3=Exit
```

This program allows you to select all ZIP Codes within a given area code. Up to ten area codes may be used for selection. The selected ZIP Codes will be placed in a selection file. The default file name is ZCSELECT in library ZCLIB.

The selection file can be used as a "finder" file for further selection within your application programs.

The selection file has a record length of 5. The only information is a five digit ZIP Code.

The selected ZIP Codes can be added to a prior selection file or placed in an empty file.

You have the option to print a list of the selected ZIP Codes. Enter Y or N.

    F1=Run the job interactively
    F3=Exit and cancel the job
    F13=Submit the job to batch processing

Selection by City Name

```
                    Select ZIP Codes by City name

 Enter up to ten city/state names
 City                                State
 _____      __
 _____      __
 _____      __
 _____      __
 _____      __
 _____      __
 _____      __
 _____      __
 _____      __
 _____      __


 Selection file to be used...   ZCSELECT__
 Library for selection file..   ZCLIB_____
 Add to prior selection file.   Y (Y or N)
 List selected ZIP Codes ....   Y (Y or N)

 F1=Run interactively    F3=Exit
 F13=Submit to batch
```

This program allows you to select all ZIP Codes within a given city or cities. The selected ZIP Codes will be placed in a selection file. The default file name is ZCSELECT in library ZCLIB.

The selection file can be used as a "finder" file for further selection within your application programs.

The selection file has a record length of 5. The only information is a five digit ZIP Code.

The selected ZIP Codes can be added to a prior selection file or placed in an empty file.

You have the option to print a list of the selected ZIP Codes. Enter Y or N.

    F1=Run the job interactively
    F3=Exit and cancel the job
    F13=Submit the job to batch processing

Selection by CMSA/MSA/MICRO or MSA DIVISION Codes

ZIP/CITY allows you to select ZIP Codes by Consolidated Metropolitan Statistical Area, Metropolitan Statistical Area, and by MICRO Statistical area. The following example is for MSA codes. CMSA, MICRO, and MSA DIVISION codes selections are very similar.

```
                    Select ZIP Codes by MSA Code

 Enter up to ten MSA codes .......  _____  _____
                                    _____  _____
                                    _____  _____
                                    _____  _____
                                    _____  _____

 File to contain selected ZIP Codes .... ZCSELECT__

 Library for selection file ............ ZCLIB_____

 Add to prior selection file ........... Y (Y or N)

 List Selected ZIP Codes ............... Y (Y or N)




 F13=Submit to batch
 F1=Run interactively   F3=Exit
```

This program allows you to select all ZIP Codes within a given MSA (Metropolitan Statistical Area) code or codes up to ten MSA codes may be used for selection. The selected ZIP Codes will be placed in a selection file. The default output file name is ZCSELECT in library ZCLIB.

The selection file can be used as a "finder" file for further selection within your application programs.

The selection file has a record length of 5. The only information is a five digit ZIP Code.

The selected ZIP Codes can be added to a prior selection file or placed in an empty file.

You have the option to print a list of the selected ZIP Codes. Enter Y or N.

   F1=Run the job interactively
   F3=Exit and cancel the job
   F13=Submit the job to batch processing

Work With System Values

```
 11/14/02                      ZIP/CITY SYSTEM                    ZCMENU04FM
   16:13:30
                             CHANGE SYSTEM VALUES


 Users that will receive ZIP/CITY System messages ..........  QSECOFR____
                                                              QSYSOPR____

 Print device for ZIP/CITY expiration warnings .............  PRT07_____

 Automatic advance with ZIP Code entry on browse screen ....  *YES

 User program to be run when updates are installed ........  *NONE_____

 Library where user program is stored .....................  *LIBL_____




   F3=Exit
```

The message queues for the user ID's entered here will be used to send warning messages about the database expiration. The messages will be sent once per day to the specified users beginning ten days before the expiration date of the database.

The messages will be sent the first time ZIP/CITY is accessed each day during those last ten days and will continue until the software is updated. If ZIP/CITY is not accessed, no messages will be sent.

During the last ten days of the life of the database, a warning will be printed. Specify the print device to be used.

On the browse ZIP Codes screen the program can automatically advance to the next screen when a ZIP Code is entered or you can require that the ENTER key be used.

You can specify a program that will be run each time a ZIP/CITY update is installed. Enter the name of the program to be called and the library where it is stored.

Distance Calculations

```
                    COMPUTE DISTANCE BETWEEN TWO ZIP CODES



   Enter the first ZIP Code......  39110

   Enter the second ZIP Code.....  39201

   The approximate distance is..  __12.17 Miles    __19.62 Kilometers







    F3=Exit    F4=Prompt 1st ZIP Code    F5=Prompt 2nd ZIP Code    HELP
```

This program computes the air-line distance between two ZIP Codes. Enter two valid ZIP Codes and press ENTER. The approximate air-line distance between them will be displayed. The distance is displayed in miles and in kilometers.

The computation is based on the latitude and longitude of the ZIP CODES involved. This is not a precise calculation since most ZIP Codes cover a wide area. Keep in mind that the air-line distance will almost always be less than the distance in highway miles.

If either ZIP Code is not valid, or if no entry is found in the latitude longitude file, no distance will be computed. The ZIP/CITY latitude/longitude file contains about 98 percent of all ZIP Codes.

You may use function key 4 to prompt for the first ZIP Code and function key 5 to prompt for the second ZIP Code.

ZIP Code Selection for Distance Calculations

If you use F4 or F5 while viewing the distance calculation screen, the following display will be shown.

```
                        SELECT A ZIP CODE

 1 = Select      Position to state __   city _____

 _   36274  AL   ABANDA
 _   36310  AL   ABBEVILLE
 _   36258  AL   ABEL
 _   35440  AL   ABERNANT
 _   35004  AL   ACMAR
 _   35005  AL   ADAMSVILLE
 _   35540  AL   ADDISON
 _   35006  AL   ADGER
 _   35441  AL   AKRON
 _   35295  AL   ALA GAS CORP
 _   36130  AL   ALA GOVT MAIL
 _   36133  AL   ALA POWER CO
 _   35762  AL   ALABAMA A AND M
 _   35904  AL   ALABAMA CITY
 _   36523  AL   ALABAMA PORT
 _   35291  AL   ALABAMA POWER CO
 _   35292  AL   ALABAMA POWER CO


 F3=Exit    HELP    ROLL
```

This program allows you to select the ZIP Codes to be used for distance calculations. Use the "position to" fields to enter the state and city you wish to select. You need enter only a partial city name. The display will be positioned to the place in the file you have indicated.

Select the desired ZIP Code by placing a "1" in the "Select" field. Then press ENTER. You will be returned to the previous screen.

You may use the ROLL keys to browse the file prior to making your selection. Pressing ENTER without making a selection has the same effect as using the roll forward key.

Work With Area Codes

```
ACMENU                          ACMENU Menu

 Select one of the following:

      1. Work with user data file definitions


      3. Work with area code and exchange information


      5. Change area codes in user files

      7. Browse area code file




     90. Sign off your workstation



 Selection or command
 ===> _____
 _____
 F3=Exit    F4=Prompt    F9=Retrieve    F12=Cancel
 F13=User support        F16=System main menu
```

These options are designed to provide an easy-to-use method for updating telephone numbers when new area codes are created and telephone exchanges are moved from one area code to another. Only the area code is changed. The exchange and actual phone number are not changed.

These options can be used with almost any user file. The file definition feature allows you to tell the program where the telephone number information is located within each record. The telephone number information can be in a variety of formats. The area code, exchange, and number can be in a single field or in separate fields. The data can be in packed or unpacked numeric format, or in the case of separate fields, mixed packed and unpacked.

Updating the area code information in your files is a two-step process. First, define the telephone number information as it is found in your file(s).
These options can be used on many files, each with telephone number information formatted in different ways and in different locations in the records.

Next enter the area code to be changed and related exchange information. Then run the menu option for updating files. The file will be updated "in place."

Option one on this menu allows you to define the data files in which you wish to update area codes. You must provide the file name, library name, and locations of the telephone number information in the data file. You may also optionally enter a description for the file being defined.

The telephone number may be defined in several different ways. The telephone number may be defined as three separate fields, two separate fields, or a single field. Each field may be packed or unpacked data.

You are asked to provide the actual physical location of the telephone number in the data file. If two phone numbers exist in the record, create two definitions for the file, one for each phone number. This is a common circumstance with both voice and fax numbers being found in a single record. Run the update option twice, once for the voice number and again for the fax number.

Option three on the area code menu allows you to define the area codes and exchanges which are to be moved. You are asked to provide the old area code, new area code, and the exchange numbers which are to be moved to the new area code.

You are allowed to enter multiple area code changes. This allows you to maintain changes for future use on many files.

Option five on the area code menu allows you to update your data files with new area code information. Before running this option you use menu option one to define the data file to be updated. You must also update the area code and exchange information using menu option three.

Always make a back-up copy of the file you want to update.

You will be prompted to select and specify the file definition and area code information to be changed. You may override to a different file and/or library than that named in the file definition. This will allow you to update several similar files using the same definition.

The file update can be run interactively or in batch mode. Use function key 1 to run the update interactively or use function key 13 to run in batch mode.

Option seven allows you to browse the area code file. You will be able to see the states and time zones associated with each area code.

Work With User Data File Definitions

```
                        Work with file Definitions

   Type option, press Enter.


   2=Edit    3=Copy    4=Delete


   Opt    File name        Library name      Description
    _     AC10             QS36F             10 UNPACKED
    _     AC2P             QS36F             AC PACKED EX & NMB PACKED
    _     AC3N2P3P         QS36F             AC UNPACKED EX PACKED NB PCKED
    _     AC3P             QS36F             THREE PACKED FIELDS
    _     AC4P             QS36F             AC UNPACKED EX & NB PACKED
    _     AC6P             QS36F             ONE PACKED FIELD
    _     TNMAST           QS36F             CUSTOMER MASTER FILE
    _     TNTEST           QS36F             SALES MASTER FILE






   F3=Exit    F6=Create new definition
```

This program allows you to maintain file definitions for your data files in which you want to maintain area code information. You are allowed to add, update, and delete file definitions. These definitions are not linked to any other file definitions in your system. They are strictly used by AREA CODE MANAGER to make area code changes.

When you create a new file definition, use the actual file name and library name to identify the file. You are allowed to override these names when the update program is run. This allows you to update several files using the same definition.

If a file contains two or more phone numbers, create multiple definitions using slightly different file names. The file names can be overridden back to the actual file at the time the file is updated.

Work With User Data File Definitions

```
              Enter Data File Specifications for AREA CODE MANAGER


   File name ...........  AC3P_____

    Library name ........ QS36F_____


                                 Beg   End   Packed (P)
   Area code location ........ _246 _247    P

   Exchange location ......... _248 _249    P

   Number location ........... _250 _252    P

   Record key (optional) ..... ____ ____    _

   File description .......... THREE_PACKED_FIELDS_____




   F3=Exit    F12=No update
```

This program allows you to describe your data files. You need to specify the actual physical location of the telephone number information in the file to be described.

The area code, exchange, and number may be described as three separate fields, two fields with the area code separate, or a single field. The fields may be packed or not packed.

The record key is optional. If specified, the record key will be used during the update process, if a list of changes is requested. You may specify the actual record key or some other field, such as the person's name.

Use the actual file name and library name to identify the file. You are allowed to override these names when the update program is run. This allows you to update several files using the same definition. If a file contains two or more phone numbers, create multiple definitions using slightly different file names.

Enter the beginning and ending position of the physical location of the data within the records. If the data is packed, enter "P" in the designated field.

EXAMPLES

If the telephone number is in three separate unpacked fields, define it as three fields.

6018568337 in positions 246-248, 251-253, and 261-264 equals:

```
                                  Beg  End  Packed(P)
Area code location ........  _246 _248   _
Exchange location .........  _251 _253   _
Number location ...........  _261 _264   _
```

If the telephone number is a single field, ten positions, unpacked, define it as three separate fields.

6018568337 in positions 246-255 equals:

```
                                  Beg  End  Packed(P)
Area code location ........  _246 _248   _
Exchange location .........  _249 _251   _
Number location ...........  _252 _255   _
```

If the telephone number is twelve positions alphabetic with dashes, define it as three separate fields.

601-856-8337 in positions 246-257 equals:

```
                                  Beg  End  Packed(P)
Area code location ........  _246 _248   _
Exchange location .........  _250 _252   _
Number location ...........  _254 _257   _
```

If the telephone number is a single ten-position packed field, define it as a single field in the area code location, and indicate packed data. Since a six position packed field actually holds 11 positions of data, it is assumed that the field is right justified with a leading zero.

06018568337 in positions 246-251 equals:

```
                                  Beg  End  Packed(P)
Area code location ........  _246 _251   P
Exchange location .........  ____ ____   _
Number location ...........  ____ ____   _
```

If the telephone number is in three separate packed fields, define it as three fields and indicate packed data.

6018568337 in positions 246-247, 248-249, and 250-252 equals:

```
                              Beg  End  Packed(P)
Area code location ........ _246 _247   P
Exchange location ......... _248 _249   P
Number location ........... _250 _252   P
```

If the telephone number is in two separate packed fields (area code in one field, exchange and number in the other), define it as two fields and indicate packed data.

6018568337 in positions 246-247, and 248-251 equals:

```
                              Beg  End  Packed(P)
Area code location ........ _246 _247   P
Exchange location ......... _248 _251   P
Number location ........... ____ ____   _
```

Work With User Data File Definitions

```
 Copy User Data File Definition



   To be copied

          File .................. AC10_____
             Library ............ QS36F_____


   Copy to
          File ................. AC10_____
              Library ............ QS36F_____
                Description ...... 10_UNPACKED




  F3=Exit    F12=Cancel copy
```

Use this option to copy file definitions. Specify a new file name and/or library name. The description may optionally be changed.

Work With Area Code Definitions

```
                    Work with Area Code Definitions

   Type option, press Enter.

   2=Edit    4=Delete    5=Work with exchange information    6=List

        Area Codes                                  Permissive Dialing
   Opt  Old   New   Description                      Beginning    Ending
    _    203   860   Connecticut                      08 28 1995   10 04 1995
    _    205   334   South Alabama                    02 12 1995   05 13 1995
    _    206   360   Washington                       01 15 1995   08 20 1995
    _    214   972   Texas                            09 14 1996   03 15 1997
    _    215   610   Pennsylvania                     01 08 1994   01 08 1995
    _    216   330   Ohio                             03 09 1996   06 29 1996
    _    303   970   Colorado                         04 02 1995   10 01 1995
    _    305   954   Florida                          03 07 1996   05 30 1996
    _    312   773   Illinois                         10 12 1996   01 11 1997
    _    314   573   Missouri                         01 08 1996   07 08 1996
    _    404   770   Metro Atlanta                    08 01 1995   11 30 1995
    _    407   561   Florida                          05 01 1996   08 01 1996
    _    503   541   Oregon                           11 05 1995   06 30 1996
    _    513   937   Ohio                             09 28 1996   06 14 1997

   F3=Exit    F6=Create    F9=Print area code list   F10=Chg display sequence
```

This program allows you to work with the area code definition file. You are allowed to add new area code definitions, delete existing definitions, work with related exchange information, or print a list.

The definitions in this file are used to determine how area codes will be changed in your data files. You must specify the old area code to be changed, the new area code to be assigned, and the exchanges which are to be moved to the new area code.

After you have created the area code definition, you should enter the exchange information for the exchanges involved in the area code split.

Function key 10 allows you to change the display sequence. The default sequence is by old area code. F10 allows you to change the display sequence to beginning permissive date.

Work With Area Code File

```
                       Work with Area Code File


Old Area Code ......... 205

New Area Code ......... 334

Description .......... SOUTH_ALABAMA___03/01/95___












    F3=Exit    F12=No update

```

This screen is used to add new area code records or change the description for existing records.

New records must contain the old area code which is being changed, the new area code to be assigned, and the exchanges which are to be moved to the new area code.

Work With Exchange Information

```
                    Work with Exchange Information



  Old area code...........   205

  New area code...........   334

  Exchange to be moved ...   ___






  F3=Exit   F4=Delete   F8=Display   F12=No update

```

Enter the exchanges which are to be moved from the old area code to the new area code. Enter the exchange number; then press ENTER.

To delete an exchange added in error, type the exchange number, do not press ENTER, and then use function key 4 to delete the record.

After entering new area code and exchange information, you should print a list and check it carefully to insure that all the information has been entered correctly.

Use F8 to display all the exchanges that have been entered for the currently displayed area code change. A screen similar to the one on the next page will be displayed.

Display Exchanges Previously Entered

```
  Exchanges moved from 205 to 334

 201 202 206 207 213 214 215 216 222 223 224 225 227 240 241 242 243 244 246 248
 255 257 258 260 261 262 263 264 265 266 267 269 270 271 272 275 276 277 278 279
 281 282 283 284 285 286 288 289 291 293 294 295 296 297 298 299 300 301 303 304
 308 312 316 317 318 330 335 337 341 342 343 344 346 347 361 365 366 368 374 376
 380 382 385 388 393 397 399 401 402 405 406 408 409 412 414 415 416 417 418 419
 421 427 431 432 433 434 438 439 441 443 445 450 452 454 456 457 460 469 470 471
 473 474 476 478 479 480 484 485 493 496 499 500 502 503 513 514 516 519 522 527
 529 537 540 541 542 548 562 563 564 565 566 567 569 572 573 575 576 577 578 580
 584 585 588 598 602 604 605 606 607 610 613 615 616 617 618 621 624 626 627 628
 633 636 639 642 644 645 649 653 660 661 666 667 670 671 675 677 679 682 683 684
 687 690 691 692 693 694 696 701 702 703 704 705 712 713 714 719 724 727 735 736
 738 742 743 745 746 749 754 756 762 765 768 770 771 774 775 777 789 790 792 793
 794 795 797 807 809 813 814 821 824 826 827 829 832 834 843 844 846 847 855 857
 858 860 861 862 863 864 865 866 867 872 873 874 875 885 886 887 889 894 897 898
 899 900 928 931 937 943 944 946 947 948 949 952 953 957 962 963 964 965 966 968
 973 981 982 983 986 989 990 992 994 996

F12=Return
```

When function key F8 is used on the screen displayed on the prior page, a complete list of all previously entered exchanges will be displayed on the screen shown above.

Updating User Files for Area Code Changes

```
                    Select User File to be Updated

  Type option, press Enter.
  1=Select  (only one may be selected)

  Opt    File name        Library name      Description
   _     AC10             QS36F             10 UNPACKED
   _     AC2P             QS36F             AC PACKED EX & NMB PACKED
   _     AC3N2P3P         QS36F             AC UNPACKED, EX & NMBR PACKED
   _     AC3P             QS36F             THREE PACKED FIELDS
   _     AC4P             QS36F             AC UNPACKED EX & NB PACKED
   _     AC6P             QS36F             ONE PACKED FIELD
   _     AC7P             QS36F             ONE PACKED FIELD PLUS EXT
   _     AC8P             QS36F             ONE PACKED FIELD PLUS EXT
   _     CUSTMAST         QS36F             CUSTOMER FILE/VOICE NUMBER
   _     CUSTMASTF        QS36F             CUSTOMER FILE/FAX NUMBER



  F3=Exit
```

When you select option five on the AREA CODE MANAGER menu the screen shown above will be displayed. This screen allows you to select the user data file to be changed. Select the file to be changed by placing a "1" in the selection field and then pressing ENTER. Only one file can be selected.

The file you update must have a file definition previously entered. However, you will have the option to override the file definition to another file and library.

IMPORTANT NOTE - Every record in the file will be checked to see if the area code change applies. If you have any records in the file, such as deleted records, you will need to in some way exclude the records which should not be changed. One way is to build a logical file over the physical file. Another way is to split the file into good and bad records, update the good records, and then merge the good and bad records back together. When you press ENTER, the screen shown on the next page will be displayed.

Updating User Files for Area Code Changes

```
                  Select Area Code Change to be Made

 Type option, press Enter.

 1=Select (only one may be selected)

       Area Codes                              Permissive Dialing
 Opt   Old   New   Description                 Beginning   Ending
  _     203   860   Connecticut                 08 28 1995  10 04 1995
  _     205   334   South Alabama               02 12 1995  05 13 1995
  _     206   360   Washington                  01 15 1995  08 20 1995
  _     214   972   Texas                       09 14 1996  03 15 1997
  _     215   610   Pennsylvania                01 08 1994  01 08 1995
  _     216   330   Ohio                        03 09 1996  06 29 1996
  _     303   970   Colorado                    04 02 1995  10 01 1995
  _     305   954   Florida                     03 07 1996  05 30 1996
  _     312   773   Illinois                    10 12 1996  01 11 1997
  _     314   573   Missouri                    01 08 1996  07 08 1996
  _     404   770   Metro Atlanta               08 01 1995  11 30 1995
  _     407   561   Florida                     05 01 1996  08 01 1996
  _     503   541   Oregon                      11 05 1995  06 30 1996
  _     513   937   Ohio                        09 28 1996  06 14 1997



 F3=Exit    F12=Prior
```

After you have selected the file to be updated, the screen shown above will be displayed. This screen allows you to select the area code change to be made. The area codes and exchanges to be moved must have been previously defined. Only one area code change can be on each execution of this program.

Select the area code change to be made from the list by placing a "1" in the selection field. Then press ENTER. Only one change can be selected.

When you have selected the area code change to be made, the screen shown on the next page will be displayed.

Updating User Files for Area Code Changes

```
                    Change Area Codes in a User File


      File name ................ AC10_____

       Library name ............ QS36F_____

        Area code to be changed ....... 205
        New area code ................. 334


      Override To

      File name ................ *SAME_____

       Library name ............ *SAME_____

        Member ................. *FIRST_____

      Print changed records .... *NO_


      F1=Run interactively   F3=Exit   F12=Prior
      F13=Submit to batch
```

After you have selected the file to be updated and the area code change to be implemented, the screen shown above will be displayed.

This screen allows you to further specify and override the file in which area codes are to be updated. If the file and library you have selected previously are correct, no change is needed. If you wish to override the file name and/or library name, you may do so. The member name defaults to *FIRST. This may be changed if needed.

You have the option to print a record of the changes made. If you specify *YES, a list will be printed showing the record changed and the before and after phone number. If you provided a key location as part of the file definition, the record key will be listed. If no key location was given, the relative record number will be shown.

The file to be updated will be updated in place. Be sure that you have a back-up copy of the file.

The file update can be run interactively or in batch mode. Use function key 1 to run the update interactively, or use function key 13 to run in batch mode.

After the update is complete, you must review the results and determine if they are satisfactory for use in your operations.

Source file QCLSRC contains a member, #CLSAMPLE, which contains an example of CL code which can be used for area code updates. This sample code can be used to construct programs to update multiple files or do multiple area code updates without operator intervention.

If you choose to use this sample CL code, you must use extreme care and monitor the results very carefully. We believe the area code and telephone number information in your customer files deserves the utmost diligence in any update situation.

Browse Area Code File

```
                    Area Code Display

 Position to ___
  Area              Time        Area              Time        Area              Time
  Code___State___Zone          Code___State___Zone          Code___State___Zone
  201      NJ     E            217     IL      C            312     IL      C
  202      DC     E            218     MN      C            313     MI      E
  203      CT     E            219     IN      E            314     MO      C
  205      AL     C            248     MI      E            315     NY      E
  206      WA     P            253     WA      P            316     KS      C
  207      ME     E            281     TX      C            316     KS      M
  208      ID     M            301     MD      E            317     IN      E
  208      WY     M            302     DE      E            318     LA      C
  208      ID     P            303     CO      M            319     IA      C
  209      CA     P            304     WV      E            320     MN      C
  210      TX     C            305     FL      E            330     OH      E
  212      NY     E            307     WY      M            334     AL      C
  213      CA     P            308     NE      C            340     VI
  214      TX     C            308     NE      M            352     FL      E
  215      PA     E            309     IL      C            360     WA      P
  216      OH     E            310     CA      P            401     RI      E


  F3=Exit
```

This option allows you to browse the information in the area code file. You may position the display to a specific area code, or use the ENTER key to roll forward in the file.

The only information displayed is the area code, state, and time zone. Please note that some area codes span times zones.

Nearest Dealer Locator

```
 NDLMNU                           NDLMNU Menu

  Select one of the following:

       1. Define dealer file

       3. Create or remove dealer location file

       5. Locate the nearest dealer


       9. Return to ZIP/CITY menu

      90. Sign off your workstation

                                          Nearest Dealer Locator
                                          (c) 1995 WorksRight Software Inc.
  Selection or command
  ===>
 _____

 _____
  F3=Exit                 F10=Work with commands        F12=Cancel
  F13=Command area        F20=Reverse                   F24=More keys
```

You must define your dealer file for the system so that a location file can be created. The location file will identify dealers by a ZIP Code index.

Option one on this menu allows you to describe the dealer file from which dealer locations will be selected. You must provide a record key for dealer identification and the location of the ZIP Code within the dealer record. The record key will usually be a dealer number assigned within your application program. However, it can be any portion of the dealer record. Up to thirty positions can be used to identify the dealer. The thirty positions must be contiguous in the dealer record. The dealer record must contain a valid ZIP Code.

This information will be used to create source code for a location file which will be keyed by ZIP Code. This file will then be used as part of the search routine to locate the nearest dealer.

Your original dealer file will not be changed in any way. However, you must keep in mind that the dealer location file must be updated any time there are changes to your regular dealer file.

The dealer location file can be created and removed at any time. It must exist at the time the system searches for the nearest dealer.

Option three on this menu allows you to create or remove the dealer locator file. The dealer locator file is a physical file based on the description you have entered using menu option 01.

The dealer locator file can be created anytime after you have entered the physical file description. It can be removed at any time.

Option five on this menu runs the nearest dealer locator program. Prior to using this option you must define your dealer file and create the dealer location file.

Although this program can be used to run the nearest dealer locator program, it is anticipated that most users will use the callable programs to add this function to their own application programs.

Nearest Dealer Locator

```
                        NEAREST DEALER LOCATOR

       Dealer file name .......... CUSTMAST__

        Member name .............. *FIRST____

         Library where stored ...... *LIBL_____

                              Begins  Length  Packed
       Dealer key location ..  0001     08      _

       Zip Code location ....  0208     05      P










       F1=Update    F3=Exit
```

Use this screen to define your dealer file. Your dealer file will not be changed. This description will be used to create a new dealer locator file.

DEALER FILE NAME - The name of the physical file containing your dealer information.

MEMBER NAME - The name of the physical file member containing your dealer information. This is usually *FIRST.

LIBRARY WHERE STORED - The name of the library where your dealer physical file is stored.

KEY LOCATION - The location within the dealer file where the dealer number or key is located. The beginning position and length are needed. If the field is packed, enter "P". Provide the field length in record positions. For example, a seven-position dealer number would use seven positions if unpacked, or four positions if packed. The maximum key length is 30 positions.

The dealer key is normally a dealer number assigned by your application software. However, it can be any portion of the dealer record up to thirty positions.

ZIP CODE LOCATION - The location within the dealer file where the dealer's ZIP Code is located. The beginning position and length are needed. If the field is packed, enter "P". Provide the field length in record positions. For example, a five-position ZIP Code would use five positions if

unpacked, or three positions if packed. A nine-position ZIP Code would use nine positions if unpacked, or five positions if packed. 03, 05, and 09 are the only valid values.

Nearest Dealer Locator

```
   HELP                         NEAREST DEALER LOCATOR


    This program creates or removes the dealer locator file.

    Do you wish to create or remove?   CREATE    (CREATE,REMOVE)

    File to create or remove .......   DLRLOC____

    Library where file is stored ...   ZCLIB_____






    F3=Exit
```

This program allows you to create or remove the dealer locator file. Your original dealer file is not changed. A new file will be created in the ZIP/CITY library. This file will be used only by the nearest dealer locator program.

Default names are provided for the Nearest Dealer Locator file and library. Use the default file and library names unless you have studied the callable programs and have a specific reason to use different names. Menu option five requires that the default names be used.

You must recreate the dealer locator file each time you change your dealer file. When you recreate the file, the old file will be automatically replaced.

If you need to recreate the dealer locator file on a regular basis, using the default file and library names, you can use the callable program NDLBLD.

Enter: CALL ZCLIB/NDLBLD no parameters are required.

This call can be added to your CL programs if desired.

If you need to recreate the dealer locator file on a regular basis, using different file and library names, you can use the callable program NDMENU03RN.

Enter: CALL ZCLIB/NDLMNU03RN PARM(?????? filename library name)

?????? equals CREATE or REMOVE.

This call can be added to your CL programs if desired.

The REMOVE option is needed only if you wish to remove the file to save storage on your system.

Nearest Dealer Locator

```
    HELP                        NEAREST DEALER LOCATOR



    Enter the ZIP Code to be located .... 39110



    The nearest dealers are ..... 5963_____
                                  0019.23 Miles

                                  4136_____
                                  0023.14 Miles

                                  9824_____
                                  0038.55 Miles





    F3=Exit
```

This program allows you to locate the nearest dealer to a customer based on the customer's ZIP Code and the dealer's ZIP Code.

The nearest three dealers will be located, based on the air-line miles between ZIP Codes. The computation is based on the latitude and longitude of the ZIP Codes.

If the customer and the dealer are both located within the same ZIP Code, the distance will be displayed as "zero" miles.

The program run by this menu option is a complete working program. However, it is anticipated that most users will use the callable program provided with the ZIP/CITY system in order to add this function to their own application programs. Please see the section on callable programs for more information.

CALLABLE PROGRAMS

We have included callable programs in the ZIP/CITY System that can be added to your user-written programs. These callable programs can be used in native AS/400 programs or in System/36 environment programs. Sample RPG source Code is provided in member #RPGSAMPLE in source file QRPGSRC in library ZCLIB. This source code is for programs that are expected to be called from user written application programs. ZIP/CITY also included callable CL (Command Language) programs that may interest advanced users.

We strongly encourage you to use our callable programs to access ZIP/CITY data rather access the data directly. As new features are added to the ZIP/CITY system, it is likely that there will be changes to file and record structures. We will keep the callable programs up-to-date. If you have written code to access the files directly, you may be faced with changing your programs.

On the following pages you will find samples of some of the callable programs included with ZIP/CITY. From time to time we may add additional callable programs. Browse #RPGSAMPLE for more information.

If you have trouble identifying the callable program you need for a particular purpose, call WorksRight Software, Inc. and we will help you find it.

We also provide sample source code in file QCLSRC in member #CLSAMPLE, which can be used to do multiple updates of area code changes. The sample programs provided in #CLSAMPLE can be used to construct your own programs to update area codes in user files, rather than use the menu options we provide.

You could create a program to update multiple files for a single area code change, update a single file for multiple area code changes, or some combination of the two.

ZC0010

Callable program ZC0010 displays a screen which allows you to select a ZIP Code for further processing. The ZIP Code parameter is the only one used. A blank ZIP Code is passed to the program. If a selection is made, it is returned as the ZIP Code parameter. ZC0010 returns only the selected ZIP Code. Program ZC0011 is identical except that it also returns the name of the selected city and state.

```
C*******************************************************************
C*
C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0010 WHICH
C*    DISPLAYS A SCREEN FOR ZIP CODE SELECTION.
C*
C*    A BLANK ZIP CODE IS PASSED TO ZC0010.  IF A ZIP CODE IS
C*    SELECTED, IT WILL BE RETURNED.
C*
C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*    THE PROGRAM CALLING ZC0010 IS STARTED.
C*
C                     CALL 'ZC0010'
C                     PARM *BLANKS   ZIPSEL  5        ZIPCODE     DE
C*
C*    TEST THE ZIP CODE FIELD TO DETERMINE IF A ZIP CODE WAS
C*    SELECTED.
C*                                              HILOEQ
C         ZIPSEL    COMP *BLANKS                    XX
C*
C*******************************************************************
```

Suggested use - During data entry, allow the user to prompt for a ZIP Code. This is most useful or smaller cities. Large cities such as Chicago or Los Angeles have too many ZIP Codes to make this a good solution.

ZC0020

Callable program ZC0020 computes the distance between two ZIP Codes. The computation is based on the latitude and longitude of each ZIP Code. The distance is provided in both miles and kilometers.

CAUTION! The distance computation is based on an average or approximate location. Some ZIP Codes cover wide geographic areas.

```
C*******************************************************************
C*
C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0020 WHICH
C*    CALCULATES THE DISTANCE BETWEEN TWO ZIP CODES.
C*
C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*    THE PROGRAM CALLING ZC0020 IS STARTED.
C*
C*
C                     CALL 'ZC0020'
C                     PARM            ZIP1    5       FIRST ZIP CODE
C                     PARM            ZIP2    5       SECOND ZIP CODE
C                     PARM *ZEROS     MILES   62      MILES
C                     PARM *ZEROS     KILOM   62      KILOMETERS
C                     PARM *BLANK     ECOD    1       ERROR CODE
C*
C*    TEST ERROR CODE
C*
C          ECOD      COMP '1'                        41ZIP1 ERROR
C          ECOD      COMP '2'                        42ZIP2 ERROR
C          ECOD      COMP '3'                        43LAT/LON ERROR
C*
C*******************************************************************
```

Suggested use - Nearest dealer locator. Use this program to determine which dealer services the customer's location.

ZC0021

Callable program ZC0021 allows you to select all ZIP Codes within X miles of another ZIP Code. The program creates a file containing the selected ZIP Codes.

Although ZC0021 can be called directly, it is better to call CL program ZC0021RN which will manage the files involved. Sample code for ZC0021 and CL program ZC0021RN are shown here.

```
C***********************************************************************
C*
C*   THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0021 WHICH
C*   SELECTS ALL ZIP CODES WITH X MILES OF ANOTHER ZIP CODE.
C*
C*   USING THIS PROGRAM CREATES A SELECTION FILE WHICH WILL
C*   CONTAIN THE SELECTED ZIP CODES.
C*
C*   RATHER THAN CALL THIS PROGRAM DIRECTLY, IT IS BETTER TO
C*   CALL CL PROGRAM ZC0021RN WHICH WILL MANAGE THE FILES.
C*   SAMPLE CODE FOR ZC0021RN IS SHOWN BELOW.
C*
C*   LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*   CALLING ZC0021 OR ZC0021RN.
C*
C                     CALL 'ZC0021'
C                     PARM           ZIP    5
C                     PARM           RANGE  40     DISTANCE TO SEARCH
C*
C***********************************************************************


          /*   ZC0021RN  SELECT ZIP CODES WITHIN X MILES        */

          PGM       PARM(&PRM01 &PRM02 &PRM03 &PRM04)

          DCL       VAR(&PRM01) TYPE(*CHAR) LEN(5) /* ZIP CODE */
          DCL       VAR(&PRM02) TYPE(*CHAR) LEN(4) /* RANGE */
          DCL       VAR(&PRM03) TYPE(*CHAR) LEN(10) /* FILE NAME */
          DCL       VAR(&PRM04) TYPE(*CHAR) LEN(10) /* LIBRARY
                      NAME */

          ADDLIBLE  LIB(ZCLIB)
          MONMSG    MSGID(CPF0000)

          CHKOBJ    OBJ(&PRM04/&PRM03) OBJTYPE(*FILE)

          MONMSG    MSGID(CPF0000) EXEC(DO)

          /* CREATE ZCSELECT FILE                        */

          CRTPF     FILE(&PRM04/&PRM03) SRCFILE(ZCLIB/QDDSSRC)
                      SRCMBR(ZCSELECT) OPTION(*NOSOURCE) /*
                      this is the file to hold selected zip
                      codes */

          ENDDO

          CLRPFM    FILE(&PRM04/&PRM03) /* Clear the selection
                      file */

          OVRDBF    FILE(ZCSELECT) TOFILE(&PRM04/&PRM03) SHARE(*NO)
```

```
          OVRDBF      FILE(ZCLAT) TOFILE(ZCLIB/ZCLAT)
                        SHARE(*YES)

          CALL        PGM(ZCLIB/ZC0021) PARM(&PRM01 &PRM02)

          RGZPFM      FILE(&PRM04/&PRM03) KEYFILE(*FILE) /* put
                        the file in key sequence */

          /*   DELETE ALL OVERRIDES                              */

          DLTOVR      FILE(*ALL)

          RMVLIBLE    LIB(ZCLIB)
          MONMSG      MSGID(CPF0000)

CANCELTAG:

          ENDPGM
```

ZC0200

Callable program ZC0200 returns the state and U.S. Postal Service preferred city and state names when you provide the ZIP Code. If no match is found for the ZIP Code, the city and state fields will be blank. Program ZC0200 returns all uppercase city names. Program ZC0400 is identical except that it returns mixed-case city names.

```
C******************************************************************
C*
C*   THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0200 WHICH RETURNS
C*   THE PREFERRED CITY AND STATE WHEN GIVEN A VALID ZIP CODE.
C*
C*   LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*   THE PROGRAM CALLING ZC0200 IS STARTED.
C*
C                     CALL 'ZC0200'
C                     PARM            ZIP     5
C                     PARM *BLANKS    STATE   2
C                     PARM *BLANKS    CITY    28
C*
C*   TEST THE CITY FIELD FOR BLANKS.  IF THE FIELD IS BLANK, NO
C*   MATCH WAS FOUND.
C*                                              HILOEQ
C          CITY      COMP *BLANKS                 XX
C*
C******************************************************************
```

Suggested use - Prompt the user for a ZIP Code and use the ZIP Code to retrieve the state and preferred city name. This can be used to reduce data entry keystrokes and insure accuracy of the spelling of city names.

ZC0201

Callable program ZC0201 returns all city and place names associated with a single zip code. In addition, fields are also returned to indicate if the name is a valid mailing name, and to indicate the preferred mailing name. The names and mailing indicator fields are returned as elements in 50-element arrays. Program ZC0201 returns city names in uppercase. Program ZC0401 is identical to ZC0201 except that it returns mixed-case city names.

```
E*******************************************************************
E*  ARRAYS TO CONTAIN MULTIPLE CITY NAMES
E                   C#          50 28              CITY NAME ARRAY
E                   S#          50  2              STATE NAME ARRAY
E                   M#          50  1              MAILING NAME Y/N
E                   P#          50  1              PREFERRED NAME P
E*******************************************************************


C*******************************************************************
C*
C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0201 WHICH RETURNS
C*    ALL CITY AND PLACE NAMES ASSOCIATED WITH A VALID ZIP CODE.
C*
C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*    THE PROGRAM CALLING ZC0201 IS STARTED.
C*
C                   CALL 'ZC0201'
C                   PARM          ZIPC##
C                   PARM          C#
C                   PARM          S#
C                   PARM          M#
C                   PARM          P#
C*
C*    TEST THE M# ARRAY FOR THE LETTER N, WHICH INDICATES A
C*    NON-MAILING NAME.  TEST THE P# ARRAY FOR THE LETTER P,
C*    WHICH INDICATES THE PREFERRED NAME.
C*
C*******************************************************************
```

Suggested use - During data entry, compare the entered city name with the list of city names returned by the program to see if the name is a valid one. Many ZIP Codes have multiple city names, some of which are valid mailing names and others which are not valid mailing names.

ZC0205

Callable program ZC0205 returns the USPS abbreviation for city names when the preferred city name exceeds thirteen characters. This situation applies to only about five percent of all city names. Program ZC0205 returns the abbreviation in all uppercase. Program ZC0405 is identical to ZC0205 except that it returns mixed-case city names.

```
C*******************************************************************
C*
C*   THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0205 WHICH RETURNS
C*   THE OFFICIAL POSTAL CITY ABBREVIATION FOR CITY NAMES LONGER
C*   THAN 13 CHARACTERS.
C*
C*   LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*   THE PROGRAM CALLING ZC0205 IS STARTED.
C*
C                     CALL 'ZC0205'
C                     PARM          ZIP     5
C                     PARM *BLANKS   CITYA  13
C*
C*   TEST THE ABBREVIATION FIELD FOR BLANKS.  IF THE FIELD IS BLANK, NO
C*   MATCH WAS FOUND.
C*                                          HILOEQ
C         CITYA     COMP *BLANKS                XX
C*
C*******************************************************************
```

Suggested use - Determine if there is an official abbreviation for the city name to allow the city name, state, ZIP Code, and ZIP4 to all fit on a normal mailing label. Some city names, such as Oak Grove Village, will cause the last line of the address to be too long to fit in a regular address space.

ZC0210

Callable program ZC0210 returns the county name, state abbreviation, and FIPS (Federal Information Processing Standard) code for a given ZIP Code. Program ZC0210 returns all uppercase county names. Program ZC0410 is identical to ZC0210 except that it returns mixed-case county names.

```
C*******************************************************************
C*
C*   THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0210 WHICH RETURNS
C*   THE COUNTY NAME, STATE, AND FIPS CODE BASED ON ZIP CODE.
C*
C*   LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*   THE PROGRAM CALLING ZC0210 IS STARTED.
C*
C                     CALL 'ZC0210'
C                     PARM           ZIP
C                     PARM *BLANKS    STATE    2
C                     PARM *BLANKS    COUNTY 25
C                     PARM *BLANKS    FIPS     5
C*
C*   TEST THE COUNTY FIELD FOR BLANKS.  IF THE FIELD IS BLANK, NO
C*   MATCH WAS FOUND.
C*                                             HILOEQ
C           COUNTY    COMP *BLANKS                XX
C*
C*******************************************************************
```

Suggested use - Determine in which county a ZIP Code is located. Could be used to determine a service area for customer service or for taxation purposes.

ZC021502

Callable program ZC021502 returns the time zone and area codes for a given ZIP Code.

```
C*******************************************************************
C*
C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC021502 WHICH
C*    RETURNS THE AREA CODE, OVERLAY AREA CODE, AND TIME ZONE
C*    BASED ON A ZIP CODE.  IF A SECOND OVERLAY AREA CODE EXISTS
C*    IT WILL ALSO BE RETURNED.
C*
C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*    THE PROGRAM CALLING ZC021502 IS STARTED.
C*
C                     CALL 'ZC021502'
C                     PARM          ZCODE   5       INPUT ZIP CODE
C                     PARM *BLANKS   ZAREAC  3       BASE AREA CODE
C                     PARM *BLANKS   ZTIMEZ  1       TIME ZONE
C                     PARM *BLANKS   OLNWAC  3       1ST OVERLAY A C
C                     PARM *BLANKS   OLEFDT  8       1ST OVERLAY A C DATE
C                     PARM *BLANKS   OL2NAC  3       2ND OVERLAY A C
C                     PARM *BLANKS   OL2EDT  8       2ND OVERLAY A C DATE
C*
C*    TEST THE FIELDS FOR BLANKS.  IF THE FIELDS ARE BLANK, THE
C*    INFORMATION IS NOT AVAILABLE.
C*                                              HILOEQ
C           ZAREAC    COMP *BLANKS                 AA
C           ZTIMEZ    COMP *BLANKS                 BB
C           OLNWAC    COMP *BLANKS                 CC
C           OLEFDT    COMP *BLANKS                 DD
C           OL2NAC    COMP *BLANKS                 EE
C           OL2EDT    COMP *BLANKS                 FF
C*
C*******************************************************************
```

Suggested use - Could be used in telemarketing to know the best time to call or could be used to audit a file for correctness of area codes.

ZC0220

Callable program ZC0220 returns all the ZIP Codes for a county. The input is a state name and county name. The output is an array containing all the valid ZIP Codes for that county.

```
E**********************************************************************
E*    THIS ARRAY IS USED TO RETURN THE MATCHING ZIP CODES
E                     Z1         600 5              MLT ZIP CODES
E**********************************************************************
C**********************************************************************
C*
C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0220 WHICH RETURNS
C*    ALL MATCHING ZIP CODES WHEN GIVEN A VALID STATE AND COUNTY.
C*
C*    THE MATCHING ZIP CODES WILL BE RETURNED AS ELEMENTS IN A
C*    600 POSITION ARRAY.
C*
C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*    THE PROGRAM CALLING ZC0220 IS STARTED.
C*
C*    THIS PROGRAM USES FILE ZCCNTYA, A LOGICAL FILE CREATED
C*    FROM PHYSICAL FILE ZCCNTY, AND FILE ZCCITYC, A LOGICAL FILE
C*    CREATED FROM PHYSICAL FILE ZCCITY.
C*
C**********************************************************************
C*
C                     CALL 'ZC0220'
C                     PARM           STATE   2
C                     PARM           CNTY   25
C                     PARM *BLANKS   Z1
C*
C**********************************************************************
```

Suggested use - Could be used in direct mail to select which ZIP Codes should be included in a mailing.

ZC0300

Callable program ZC0300 returns the matching ZIP Code when you provide the state and city name. If no match is found, the ZIP Code field will be blank. Keep in mind that most cities have multiple ZIP Codes. Only the lowest valid ZIP Code for the city will be returned. Caution! Use of this program may not produce the desired results.

```
C*******************************************************************
C*
C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0300 WHICH RETURNS
C*    THE MATCHING ZIP CODE WHEN GIVEN A VALID CITY AND STATE.
C*
C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*    THE PROGRAM CALLING ZC0300 IS STARTED.
C*
C*    CAUTION!  IN THE CASE OF CITIES WITH MULTIPLE ZIP CODES,
C*    THE LOWEST VALID ZIP CODE FOR THE CITY WILL BE RETURNED.
C*
C                     CALL 'ZC0300'
C                     PARM *BLANKS   ZIP     5
C                     PARM           STATE   2
C                     PARM           CITY   28
C*
C*    TEST THE ZIP FIELD FOR BLANKS.  IF THE FIELD IS BLANK, NO
C*    MATCH WAS FOUND.
C*                                            HILOEQ
C          ZIP        COMP *BLANKS                XX
C*
C*******************************************************************
```

Suggested use - Could be used to gain an approximate ZIP Code starting range for a large city.

ZC0310

Callable program ZC0310 returns all matching ZIP Codes when you provide the state and city name. The ZIP Codes are returned in an array. The array can hold up to 300 ZIP Codes. If no match is found, the ZIP Code array will be blank.

```
E*********************************************************************
E                     Z1        300  5           MLT ZIP CODES
E*********************************************************************
      C*********************************************************************
      C*
      C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM ZC0310 WHICH RETURNS
      C*    ALL MATCHING ZIP CODES WHEN GIVEN A VALID CITY AND STATE.
      C*
      C*    THE MATCHING ZIP CODES WILL BE RETURNED IN A 300 ELEMENT
      C*    ARRAY.
      C*
      C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
      C*    THE PROGRAM CALLING ZC0310 IS STARTED.
      C*
      C*
      C*********************************************************************
      C*
      C                     CALL 'ZC0310'
      C                     PARM           STATE   2
      C                     PARM           CITY   28
      C                     PARM *BLANKS    Z1
      C*
      C*********************************************************************
```

Suggested use - Could be used in data entry to insure that the ZIP Code entered is in the range of valid ZIP Codes for a large city.

AC0600

Callable program AC0600 allows you to determine if a particular exchange within an area code has been moved to another area code. The input parameters are the current area code and exchange. The return parameter will either be blank or will contain the new area code.

```
      C*********************************************************************
      C*
      C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM AC0600 WHICH RETURNS
      C*    A NEW AREA CODE WHEN IT IS DETERMINED THAT THE EXISTING AREA
      C*    CODE AND EXCHANGE COMBINATION HAS BEEN ASSIGNED A NEW AREA
      C*    CODE.
      C*
      C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
      C*    THE PROGRAM CALLING AC0600 IS STARTED.
      C*
      C*    THE INPUT TO THE PROGRAM IS THE AREA CODE AND EXCHANGE.
      C*    IF A CHANGE IS INDICATED, THE NEW AREA CODE FIELD IS
      C*    RETURNED WITH THE NEW AREA CODE, OTHERWISE IT WILL BE BLANK.
      C*
      C*********************************************************************
      C*
      C                     CALL 'AC0600  '
      C                     PARM           AC$$    3         ORIGINAL AC
      C                     PARM           EX$$    3         ORIGINAL EX
```

```
C                           PARM            AC##    3         NEW AC
C*
C********************************************************************
```

NDL006

Callable program NDL006 returns the three nearest dealers and the distance to each. If you need more than three dealers, use program NDL007.

NDL007 is identical to NDL006 except that it returns the ten nearest dealers, rather than three. See #RPGSAMPLE in source file QRPGSRC in library ZCLIB for a sample of the source code for calling NDL007.

NDL006 uses file NDLLOC which is created using option three on the NEAREST DEALER LOCATOR menu. If you have not used the default names for the Nearest Dealer Locator file and library, you will need to used an override statement for file NDLLOC prior to calling NDL006.

```
C********************************************************************
C*
C*    THIS IS SAMPLE RPG CODE TO CALL PROGRAM NDL006 WHICH RETURNS
C*    THE THREE NEAREST DEALER NUMBERS AND THE MILES TO EACH.
C*
C*    LIBRARY ZCLIB MUST BE ADDED TO YOUR LIBRARY LIST BEFORE
C*    THE PROGRAM CALLING NDL006 IS STARTED.
C*
C*    YOU MUST ALSO CREATE THE DEALER LOCATOR FILE USING THE
C*    MENU OPTIONS BEFORE CALLING THIS PROGRAM.
C*
C*    THE INPUT TO THE PROGRAM IS THE CUSTOMER'S ZIP CODE.
C*    THE RETURNED PARAMETERS WILL BE THE THREE NEAREST DEALERS
C*    AND THE MILES TO EACH.
C*
C*
C********************************************************************
C********************************************************************
C*  CALL THE DISTANCE PROGRAM
C*
C                     CALL 'NDL006'
C                     PARM            ZIPCOD          CUSTOMER ZIP
C                     PARM *BLANKS    DEALN1 30       NEAREST DLR
C                     PARM *BLANKS    DEALN2 30       2ND NEAREST DLR
C                     PARM *BLANKS    DEALN3 30       3RD NEAREST DLR
C                     PARM *ZEROS     DEALM1  62      1ST DLR MILES
C                     PARM *ZEROS     DEALM2  62      2ND DLR MILES
C                     PARM *ZEROS     DEALM3  62      3RD DLR MILES
C*
C********************************************************************
```

Suggested use - Use as part of a customer service application to determine to which dealer a customer should be referred.

System Information

ZIP/CITY System uses a single library named ZCLIB. The programs are written in RPG. All RPG, DDS, CL, and menu source code is provided.

ALL OF THE SOFTWARE CODE IN THE ZIP/CITY SYSTEM IS COPYRIGHTED PROPERTY OF WORKSRIGHT SOFTWARE, INC.

All the program calls in ZIP/CITY System are qualified by the ZCLIB library name. The menu options manage the library list. You do not need to add ZCLIB to your library list when using the ZIP/CITY menu options. You will need to add ZCLIB to your library list if you use any of the callable programs provided with the ZIP/CITY library in your own application programs.

Several physical and logical files are used. The specifications for the files used by the ZIP/CITY system are stored in QDDSSRC source file in library ZCLIB.

Definitions for postal terms:

FIPS code	Federal Information Processing Standards
Facility code	A=Airport mail facility
	B=Branch
	C=Community post office
	D=Area distribution center
	E=Sectional center facility
	F=Delivery distribution center
	G=General mail facility
	K=Bulk mail center
	M=Money order unit
	N=Non-Postal name
	P=Post office
	S=Station
	U=Urbanization
Mailing indicator	Y=Mailing name
	N=Non-Mailing name
City delivery	Y=City delivery
	N=No city delivery
Carrier route	A=Carrier route sortation, merging permitted
	B=Carrier route rates apply, no merging permitted
	C=No Carrier route, merging applies
	D=No Carrier route, no merging permitted

Finance number	Each city has a single finance number for identification with the	
postal system		

ZIP Code class   M=Military
                  P=Post office boxes only
                  U=Unique (Single organization)
                  Blank=All others

Single ZIP   Y=Only one ZIP Code exists for the city
Code city   Blank=More than one ZIP Code exists for the city
 (Not an official postal designation)

Time Zones

In addition to the time zones found in the continental United States, we provide time zones for several obscure locations such as the Marshal Islands. The following codes are used.

Eastern US	E
Central US	C
Mountain US	M
Pacific US	P
Alaska AK	A
Hawaii HI	H
Puerto Rico PR	V
Virgin Islands VI	V
Guam GU	G
American Samoa AS	S
Palau PU	U
Marshal Islands MH	N

ZIP/CITY System was written by Leon F. Stewart.