PER/ZIP4
Postal Coding
User's Guide

TABLE OF CONTENTS

CHAPTER 1 – INTRODUCTION

WHAT IS PER/ZIP4?

PER/ZIP4 is a software product for the IBM System i - iSeries - AS/400 computer which allows you to postal code name and address files. Postal coding consists of the following:

Correcting street and city names and state codes

Standardizing addresses according to U.S. Postal Service rules

Adding or correcting ZIP Codes

Adding ZIP+4 Codes

Adding carrier route codes

Adding delivery point codes

PER/ZIP4 will work with both uppercase and mixed case address files.

HOW TO USE THIS MANUAL

If you are responsible for installing PER/ZIP4, you should read the section "Installing PER/ZIP4 for the First Time" in chapter 2. This section provides step-by-step instructions for installing PER/ZIP4.

If you are new to PER/ZIP4, you should first read the section "How PER/ZIP4 works" in chapter 2. This section will show you how to access PER/ZIP4 and give you a brief orientation as to how the system is structured.

If you are an experienced user of PER/ZIP4 and you want more detailed information about a specific task, use the table of contents to find the particular section you need.

A NOTE TO NEW USERS

The following installation outline is provided so that your evaluation of the PER/ZIP4 - Postal Coding product can proceed as smoothly as possible. Please refer to the indicated chapters in this manual for detailed information concerning the following steps:

Install the product on your iSeries or AS/400 (chapter 2).

Enter the U.S.P.S. form 3553 information (chapter 4).

You are now ready to use PER/ZIP4. Use this manual and the HELP key to orient yourself to the product as you proceed with your evaluation. Please remember that unlimited telephone support is available to you by calling WorksRight Software, Inc. at 601-856-8337.

This page intentionally left blank.

CHAPTER 2 - GETTING STARTED

INSTALLING PER/ZIP4 FOR THE FIRST TIME

In the following instructions command keywords and values given in uppercase characters may be entered in lowercase characters but otherwise should be keyed exactly as shown. Where "device" is shown, enter the name of the device in which you have mounted the product CD or DVD (e.g., OPT01, *OPT).

QTEMP must be in your library list while installing PER/ZIP4. The system value QALWUSRDMN must either be set to *ALL or include MLLIBR.

    A. Sign off and sign on again before installing PER/ZIP4 to insure a "clean session". Make sure that you sign on as a user with both *ALLOBJ and *SECADM special authorities.

    B. Load the first product CD (Volume 1) or the product DVD into the optical drive.

    C. Enter the following command to install the system:

   LODRUN DEV(device)

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                              System:    S10FDE81



       Installing the system for the first time . . .

         The following libraries will be created: MLCTRL, MLLIBR,
         MLyymmv (yy = year, mm = month, v = version)

       Installing a release upgrade . . .

         The following library will be created: MLyymmv (yy = year,
         mm = month, v = version)

       Call WorksRight Software, Inc. at (601) 856-8337 if you have
       any non-PER libraries with these names.

       Press Enter to continue.
   _____
    F3=Exit
```

The initial product installation screen allows you to confirm that the installation should be performed.

Function keys

F3   Exit the job.
F12   Go to the previous display.

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                                  System:    S10FDE81




        Your system has more than one Auxiliary Storage Pool (ASP).
        You must select the ASP in which you want the product to be
        installed. Make your selection and press Enter.

        Install to ASP . . . _1

        Possible values  . . 1 2 3 16








  _____

   F3=Exit
```

If you are installing the application for the first time and your System i - iSeries - AS/400 is configured with multiple Auxiliary Storage Pools (ASP's), you will be prompted for the ASP in which the product is to be installed. If your System i - iSeries - AS/400 is configured with only the system ASP (ASP 1) or if any PER/MAIL products are already installed on your system, the ASP selection prompt will not be shown. In the case of PER/MAIL products already installed, the installation will proceed using the same ASP.

Function keys

F3   Exit the job.
F12   Go to the previous display.

The next screen displayed during the installation process allows you to indicate which product(s) and module(s) you wish to install and whether you wish to install the product(s) to *TEST* or *PRODUCTION*. The screen will look similar to the following:

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                          System:    S10FDE81
 Type options, press Enter.               Media level: 1304A
   1=Install   4=Delete                   Device: OPTVIR

                                   Size   Installed   Prod    Test
 Opt   Product     Type    Description   MB    Status      Level   Level
  1    PER/ZIP4    Base    Postal coding   2211  .........   .....   .....
  _    PER/ZIP4    Option  eLOT database    345  .........   .....   .....
  _    PER/ZIP4    Option  Occupancy database 100 .........  .....   .....
  _    PER/ZIP4    Option  RDI database      25  .........   .....   .....
  _    PER/SORT    Base    Postal presorting 43  .........   .....   .....




  P   P = load to production, T = load to test
_____
 F3=Exit
```

The PER/ZIP4 Base Postal Coding application should be selected for installation. The PER/ZIP4 database, PER/DPV, PER/LLK, and PER/SLK are all installed with the PER/ZIP4 Base Postal Coding selection. They are not listed separately because they are all required components. The three remaining optional components are listed separately.

eLOT Database

The optional PER/ZIP4 component eLOT database should be selected if you would like to use PER/ZIP4 to populate eLOT fields in your database. The eLOT number is a sequential number that indicates the order in which add-on codes are arranged within a given carrier route. eLOT information is used to qualify mailings for carrier route sortation discounts. **There is no additional cost for this PER/ZIP4 optional component.**

Occupancy Database

The optional PER/ZIP4 component Occupancy database should be selected if you would like to use PER/ZIP4 to populate occupancy fields in your database. The Occupancy database is provided by the USPS as part of the Delivery Point Validation (DPV) data set. This database allows PER/ZIP4 to return a one character field indicating the occupancy status of any address with a DPV confirmation indicator of "Y". **There is no additional cost for this PER/ZIP4 optional component.**

The occupancy status will be represented by one of the following values:
- Blank = If the address DPV confirms, it is presumed to be occupied
- N = Nostats (mail delivery to this address has not started)
- V = Vacant (this address is currently vacant)

RDI Database

The optional PER/ZIP4 component RDI database should be selected if you would like to use PER/ZIP4 to populate Residential Delivery Indicator and/or Business/Residential Indicator fields in your database. The RDI database is provided by the USPS. **There is an additional fee for this PER/ZIP4 optional component. For current pricing, visit our website at** www.WorksRight.com.

This database allows PER/ZIP4 to return a one character Residential Delivery Indicator indicating whether or not a valid address is a residence. The value returned will be one of the following:
- N = address is not a residence (business)
- Y = address is a residence

This database also allows PER/ZIP4 to return a one character Business/Residential Indicator indicating whether a valid address is a business or residence. The value derived for this field is more reliable than the Residential Delivery Indicator described above and is used as input for walk sequence carrier route presort mailings. The value returned will be one of the following:
- Blank = Business/Residential status could not be reliably determined
- B = Business
- R = Residence

Prior to March 2013, the RDI database was only available directly from the USPS.

PER/SORT - Postal Presorting

The base PER/SORT Postal presorting application is the same PER/SORT that was previously supplied on CD-ROM to PER/SORT licensees. If you are a licensee of PER/SORT or if you wish to evaluate or purchase PER/SORT, you should select this application for installation. If selected, PER/SORT will be installed at the same time as PER/ZIP4.

Use of PER/ZIP4 does not depend upon installation of PER/SORT. If you intend to use PER/ZIP4 for address standardization and validation only, do not select PER/SORT for installation.

Function keys

F3   Exit the job.

Once you identify the product(s) you wish to install and the environment to which they should be installed (*TEST* or *PRODUCTION*), press ENTER and the following screen will be displayed:

```
WRSLIC                    WorksRight Software, Inc.                  4/29/13
 WRSLICD                      License Agreement                      15:51:38

 Licensed program: PER/ZIP4 - CASS Certified Postal Coding Software
 System serial number: 10-6D74E

      This is a license for the use of the software product PER/ZIP4 and its
      components on the system identified above by serial number.  PER/ZIP4 is a
      CASS Certified® Postal Coding system developed by P.E.R Software, Inc.,
      hereafter referred to as PER.

      PER/ZIP4 required components include:
         o PER/DPV - Delivery Point Validation
         o PER/LLK - A LACS (Locatable Address Conversion System)-Link Interface
         o PER/SLK - A SUITE-Link Interface

      PER/ZIP4 optional components include:
         o PER/DDPV - A Direct DPV Interface
         o PER/OCC - Occupancy Code
         o PER/RDI - Residential Delivery Indicator
                                                                    More...
 F3=Exit and cancel installation    F6=Print Lic Agmt    F14=Accept Lic Agmt
 F17=Top    F18=Bottom
```

From the screen above you can use the scroll (page up / page down) keys to review the entire license agreement. You may also use the **F6** function key to print the license agreement.

After reviewing the license agreement, press the **F14** function key to accept the License Agreement. Installation cannot continue if the license agreement is not accepted.

Function keys

F3   Exit the job.
F6   Print the License Agreement.
F14   Accept the License Agreement.
F17   Go to the top of the License Agreement.
F18   Go to the bottom of the License Agreement.

Once you've accepted the program license agreement the following screen will be displayed:

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                            System:    S10FDE81




P.E.R.   ----------------------------------------------------------------------
       / SSSSSS  OOOOOO  FFFFFF  TTTTTTTTWWW  WW   AAAA   RRRRRR   EEEEEE /
      / SSSSSS  OOOOOO  FFFFFF  TTTTTTTTWWW   WW  AA AA   RR RR   EEEEEE /
     / SS     OO  OO   FF        TT    WW   WW  AA AA   RR RR   EE     /
    / SSSSSS  OO  OO   FFFF      TT    WW   WW  AAAAAA  RRRR    EEEE   /
   / SSSSSS  OO  OO   FFFF      TT   WW W WW   AAAAAA  RRRR    EEEE   /
  /    SS   OO  OO   FF        TT   WW W WW   AA AA   RR RR    EE     /
 / SSSSSS  OOOOOO   FF        TT   WW W WW   AA AA   RR  RR   EEEEEE /
/ SSSSSS  OOOOOO   FF        TT   WWW WWW   AA AA   RR  RR   EEEEEE /
 ----------------------------------------------------------------------   INC.




_____

 PER/ZIP4 is being installed.
```

The screen above will be displayed while PER/ZIP4 and the selected optional components are being installed. The message at the bottom of the screen will change as the installation process progresses.

Once PER/ZIP4 and the selected optional components have been installed, you will be prompted to enter a password to unlock the software on your system. Type the password that was provided with PER/ZIP4 and press Enter. The password entry screen will look similar to the screen shown below.

```
  6/02/10                    PER/MAIL - MAIL MANAGEMENT               LYNNB
 10:09:22
                              INSERT PASSWORD

 Serial number . . . 10FDE81
 Product(s)  . . . . PER/ZIP4


 P.E.R.  --------------------------------------------------------------------
      / SSSSSS   OOOOOO   FFFFFF  TTTTTTTTTWWW   WW    AAAA    RRRRRR   EEEEEE /
       / SSSSSS   OOOOOO   FFFFFF  TTTTTTTTTWWW   WW   AA AA   RR RR    EEEEEE /
      / SS        OO  OO   FF         TT   WW   WW   AA AA   RR RR    EE     /
      / SSSSSS   OO  OO   FFFF       TT   WW   WW   AAAAAA  RRRRR    EEEE   /
       / SSSSSS   OO  OO   FFFF       TT   WW W WW   AAAAAA  RRRR     EEEE   /
      /   SS    OO  OO   FF         TT   WW W WW   AA AA   RR RR    EE     /
     / SSSSSS   OOOOOO   FF         TT   WW W WW   AA AA   RR  RR   EEEEEE /
    / SSSSSS   OOOOOO   FF         TT   WWW WWW   AA AA   RR   RR  EEEEEE /
     --------------------------------------------------------------------        INC.



 Type password, press Enter.  ___ ___ ___
 _____
 F3=Exit    F12=Previous
```

Enter the password exactly as shown on the password sheet and press Enter. If the password sheet is missing or some other condition prevents the entry of the password, you can press F3 to exit the password screen.

You can enter the password after installation by entering the command PERINSPSW on any command line within PER/ZIP4. A password must be entered before you can use the system. If the application already has the password inserted (e.g., you are installing an upgrade), the password prompt will not be presented.

Function keys

F3   Exit the job.
F12   Go to the previous display.

When the installation process is complete the following screen will be displayed:

```
                     PER/MAIL - PRODUCT MANAGEMENT
                                             System:    S10FDE81



P.E.R.    ---------------------------------------------------------------
      / SSSSSS   OOOOOO    FFFFFF  TTTTTTTTWWW   WW    AAAA    RRRRRR   EEEEEE /
      / SSSSSS   OOOOOO    FFFFFF  TTTTTTTTWWW   WW   AA AA    RR RR    EEEEEE /
      / SS       OO  OO    FF          TT   WW   WW   AA AA    RR RR    EE     /
      / SSSSSS   OO  OO    FFFF        TT   WW   WW   AAAAAA   RRRRR    EEEE   /
      / SSSSSS   OO  OO    FFFF        TT   WW W WW   AAAAAA   RRRR     EEEE   /
      /     SS   OO  OO    FF          TT   WW W WW   AA AA    RR RR    EE     /
      / SSSSSS   OOOOOO    FF          TT   WW W WW   AA AA    RR  RR   EEEEEE /
      / SSSSSS   OOOOOO    FF          TT   WWW WWW   AA AA    RR  RR   EEEEEE /
      ---------------------------------------------------------------    INC.




 _____
 Software installation/deletion complete.  Press Enter to continue.
```

Press the ENTER key to return to the command line from which you executed the **LODRUN** command.

Refer to the section "How PER/ZIP4 works" to orient yourself to the logic and functions of the system.

INSTALLING A PER/ZIP4 MONTHLY UPDATE

PER/ZIP4 monthly updates can be installed while users are actively using PER/ZIP4. As users exit and re-enter the PER/ZIP4 application, they will automatically begin using the latest production version.

In the following instructions command keywords and values given in uppercase characters may be entered in lowercase characters but otherwise should be keyed exactly as shown. Where "device" is shown, enter the name of the device in which you have mounted the product CD or DVD (e.g., OPT01, *OPT).

QTEMP must be in your library list while installing PER/ZIP4. The system value QALWUSRDMN must either be set to *ALL or include MLLIBR.

    A. Sign off and sign on again before installing PER/ZIP4 to insure a "clean session". Make sure that you sign on as a user with both *ALLOBJ and *SECADM special authorities.

    B. Load the first product CD (Volume 1) or the product DVD into the optical drive.

    C. Enter the following command to install the system:

    LODRUN DEV(device)

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                            System:    S10FDE81



      Installing the system for the first time . . .

        The following libraries will be created: MLCTRL, MLLIBR,
        MLyymmv (yy = year, mm = month, v = version)

      Installing a release upgrade . . .

        The following library will be created: MLyymmv (yy = year,
        mm = month, v = version)

      Call WorksRight Software, Inc. at (601) 856-8337 if you have
      any non-PER libraries with these names.

      Press Enter to continue.

  _____
   F3=Exit
```

The initial product installation screen allows you to confirm that the installation should be performed.

Function keys

F3   Exit the job.
F12   Go to the previous display.

The next screen displayed during the installation process allows you to indicate which product(s) and module(s) you wish to install and whether you wish to install the product(s) to *TEST* or *PRODUCTION*. The screen will look similar to the following:

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                              System:     S10FDE81
   Type options, press Enter.                 Media level: 1304A
     1=Install    4=Delete                    Device: OPTVIR

                                        Size   Installed   Prod    Test
   Opt  Product    Type    Description   MB     Status      Level   Level
   1    PER/ZIP4   Base    Postal coding 2211   INSTALLED   0911A   .....
        PER/ZIP4   Option  eLOT database  345   .........   .....   .....
        PER/ZIP4   Option  Occupancy database 100 .........  .....  .....
        PER/ZIP4   Option  RDI database    25   .........   .....   .....
        PER/SORT   Base    Postal presorting 43 .........   .....   .....


                    ┌─────────────────────────────────────────────────┐
                    │ Currently installed products and components will be preselected. │
                    └─────────────────────────────────────────────────┘



   P    P = load to production, T = load to test
  _____
   F3=Exit
```

If a PER/ZIP4 update is installed as a *TEST* version and there is already a *TEST* version installed, the existing *TEST* version is removed from your system.

If a PER/ZIP4 update is installed as a *PRODUCTION* version, the existing *PREVIOUS* version (if any) is removed from your system, the existing *PRODUCTION* version becomes the *PREVIOUS* version, and the newly installed update becomes the *PRODUCTION* version.

The PER/ZIP4 Base Postal Coding application should be selected for installation. The PER/ZIP4 database, PER/DPV, PER/LLK, and PER/SLK are all installed with the PER/ZIP4 Base Postal Coding selection. They are not listed separately because they are all required components. The three remaining optional components are listed separately.

eLOT Database

The optional PER/ZIP4 component eLOT database should be selected if you would like to use PER/ZIP4 to populate eLOT fields in your database. The eLOT number is a sequential number that indicates the order in which add-on codes are arranged within a given carrier route. eLOT information is used to qualify mailings for carrier route sortation discounts. **There is no additional cost for this PER/ZIP4 optional component.**

Occupancy Database

The optional PER/ZIP4 component Occupancy database should be selected if you would like to use PER/ZIP4 to populate occupancy fields in your database. The Occupancy database is provided by the USPS as part of the Delivery Point Validation (DPV) data set. This database allows PER/ZIP4 to return a one character field indicating the occupancy status of any address with a DPV confirmation indicator of "Y". **There is no additional cost for this PER/ZIP4 optional component.**

The occupancy status will be represented by one of the following values:
- Blank = If the address DPV confirms, it is presumed to be occupied
- N = Nostats (mail delivery to this address has not started)
- V = Vacant (this address is currently vacant)

RDI Database

The optional PER/ZIP4 component RDI database should be selected if you would like to use PER/ZIP4 to populate Residential Delivery Indicator and/or Business/Residential Indicator fields in your database. The RDI database is provided by the USPS. **There is an additional fee for this PER/ZIP4 optional component. For current pricing, visit our website at** www.WorksRight.com**.**

This database allows PER/ZIP4 to return a one character Residential Delivery Indicator indicating whether or not a valid address is a residence. The value returned will be one of the following:
- N = address is not a residence (business)
- Y = address is a residence

This database also allows PER/ZIP4 to return a one character Business/Residential Indicator indicating whether a valid address is a business or residence. The value derived for this field is more reliable than the Residential Delivery Indicator described above and is used as input for walk sequence carrier route presort mailings. The value returned will be one of the following:
- Blank = Business/Residential status could not be reliably determined
- B = Business
- R = Residence

Prior to March 2013, the RDI database was only available directly from the USPS.

PER/SORT - Postal Presorting

The base PER/SORT Postal presorting application is the same PER/SORT that was previously supplied on CD-ROM to PER/SORT licensees. If you are not a licensee of PER/SORT, there is no need to install PER/SORT. If you are a PER/SORT licensee, select this component for installation and PER/SORT will be installed at the same time as PER/ZIP4.

Function keys

F3   Exit the job.

Once you identify the product(s) you wish to install and the environment to which they should be installed (*TEST* or *PRODUCTION*), press ENTER and the following screen will be displayed:

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                          System:    S10FDE81




P.E.R.    ------------------------------------------------------------------
       / SSSSSS   OOOOOO   FFFFFF  TTTTTTTTWWW   WW    AAAA    RRRRRR   EEEEEE /
      / SSSSSS   OOOOOO   FFFFFF  TTTTTTTTWWW   WW   AA AA   RR RR   EEEEEE /
     / SS       OO  OO   FF        TT   WW   WW   AA AA   RR RR   EE     /
    / SSSSSS   OO  OO   FFFF       TT   WW   WW   AAAAAA  RRRR    EEEE   /
   / SSSSSS   OO  OO   FFFF       TT   WW W WW   AAAAAA  RRRR    EEEE   /
  /    SS    OO  OO   FF         TT   WW W WW   AA AA   RR RR   EE     /
 / SSSSSS   OOOOOO   FF         TT   WW W WW   AA AA   RR RR   EEEEEE /
/ SSSSSS   OOOOOO   FF         TT   WWW WWW   AA AA   RR  RR  EEEEEE /
 --------------------------------------------------------------------     INC.




_____

  PER/ZIP4 is being installed.
```

The screen above will be displayed while PER/ZIP4 and the selected optional components are being installed. The message at the bottom of the screen will change as the installation process progresses.

When the installation process is complete the following screen will be displayed:

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                             System:    S10FDE81



P.E.R.  ----------------------------------------------------------------------
      / SSSSSS  OOOOOO   FFFFFF  TTTTTTTTWWW   WW    AAAA    RRRRRR   EEEEEE /
      / SSSSSS  OOOOOO   FFFFFF  TTTTTTTTWWW   WW   AA AA    RR RR    EEEEEE /
     /  SS      OO  OO   FF        TT    WW   WW   AA AA    RR RR    EE     /
    /  SSSSSS  OO  OO   FFFF       TT    WW   WW   AAAAAA   RRRR     EEEE   /
   /  SSSSSS  OO  OO   FFFF       TT   WW W WW   AAAAAA   RRRR     EEEE   /
  /    SS    OO  OO   FF         TT   WW W WW   AA AA   RR RR    EE     /
 /  SSSSSS  OOOOOO   FF         TT   WW W WW   AA AA   RR RR    EEEEEE /
/  SSSSSS  OOOOOO   FF         TT   WWW WWW   AA AA   RR  RR   EEEEEE /
 ----------------------------------------------------------------------   INC.




 _____
  Software installation/deletion complete.  Press Enter to continue.
```

Press the ENTER key to return to the command line from which you executed the **LODRUN** command.

REMOVING PER/ZIP4 FROM YOUR SYSTEM

Up to three versions of PER/ZIP4 can exist on your system at any time. These are *TEST, PRODUCTION,* and *PREVIOUS* versions of PER/ZIP4.

To remove a *TEST* version of PER/ZIP4 from your system:

1. Sign on to your System i - iSeries - AS/400 as a user with both *ALLOBJ and *SECADM special authorities.

2. Add libraries MLCTRL and MLLIBR to your library list using the ADDLIBLE command.

3. Delete the *TEST* version of PER/ZIP4 by entering the following command: PERDLTTST

To remove a *PRODUCTION* version of PER/ZIP4 from your system:

1. Sign on to your System i - iSeries - AS/400 as a user with both *ALLOBJ and *SECADM special authorities.

2. Add libraries MLCTRL and MLLIBR to your library list using the ADDLIBLE command.

3. Delete the *PRODUCTION* version of PER/ZIP4 by entering the following command: PERDLTPRO

To remove a *PREVIOUS* version of PER/ZIP4 from your system:

1. Sign on to your System i - iSeries - AS/400 as a user with both *ALLOBJ and *SECADM special authorities.

2. Add libraries MLCTRL and MLLIBR to your library list using the ADDLIBLE command.

3. Delete the *PREVIOUS* version of PER/ZIP4 by entering the following command: PERDLTPRV

To completely remove PER/ZIP4 from your system:

1. Remove the *TEST, PRODUCTION,* and *PREVIOUS* versions of PER/ZIP4 following the steps above.

2. Remove libraries MLCTRL and MLLIBR from your library list using the RMVLIBLE command.

3. Delete libraries MLCTRL and MLLIBR using the DLTLIB command.

4. Delete PER/ZIP4 objects from library QGPL using the following commands:

    a. DLTCMD CMD(QGPL/STRPERZIP4)
    b. DLTPGM PGM(QGPL/STRPERZIP4)

HOW PER/ZIP4 WORKS

PER/ZIP4 can be run in three different modes: in batch with user files, interactively with data keyed by the user, and by using callable programs (API's) in a user written program .

When run in batch, PER/ZIP4 will print a USPS form 3553 (**Coding Accuracy Support System (CASS) Summary Report**). The batch process is also capable of producing the following:

- A **Coding Report** showing all addresses that could not be matched to the USPS database and the reason. i.e. *address not on street, street not found, etc.*
- An **Address Standardization Exceptions Report** showing addresses that, once standardized, had to be abbreviated to fit within your file's address line length.
- A **Locatable Address Conversion System (LACS)-Link Conversions Report** showing addresses that were changed as a result of LACS[Link] processing.
- A **Suite-Link Address Updates Report** showing addresses that were updated with secondary address information as a result of SUITE[Link] processing.

```
MLZIP4                        PER/ZIP4 - Main Menu          Ver 8.02.00.N.13.04

 Select one of the following:

     1. Postal code user files

     3. Interactive postal coding

     4. Work with file definitions
     5. Product management
     6. Enter PS form 3553 information

     7. Utility functions
     8. Go to PER/SORT (if installed)
                                          CASS certified through 06/24/14
    90. Sign off                          Database valid through 07/31/13

                                          COPYRIGHT (C) 2013 PER SOFTWARE, INC.
 Selection or command
 ===> _____
 _____


 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
 F13=Information Assistant  F16=System main menu
```

Signing on and off the system

To display the main PER/ZIP4 menu enter:

    STRPERZIP4

To sign off PER/ZIP4, select option 90 on any of the menus.

USING THE ON-LINE HELP KEY

When using PER/ZIP4, you will probably want detailed information concerning the particular tasks you are performing. On-line help screens are available that describe menus and program screens. These help screens provide specific information on program operations, field values, and program function keys.

MENUS: To get general information about the various options available on a menu, just press the HELP key. For more detailed information about a particular menu option, enter the number of the option and then press the HELP key.

```
MLZIP4                          PER/ZIP4 - Main Menu

     The PER/ZIP4 Main Menu allows you to select the postal coding task you
     want to perform.

     To display the description of a particular option, enter the option
     number, then press the HELP key.










 F3=Exit    F12=Cancel

```

PROGRAMS: When you are viewing a program screen, you can get a description of a particular field by placing the cursor in that field and pressing the HELP key. If several pages of HELP text are available for a particular screen, you can use the roll keys to browse through them. Program function key descriptions can be viewed by placing the cursor at the bottom of the screen and pressing the HELP key. When you are finished viewing the HELP text, press F3 to return to the program screen.

```
HPZIP4   HELP _____ Pg:  27   Ln:  31__

  Option

  Enter an option code next to each definition you want to work with.

          2 = change the definition
          3 = copy the definition into a new definition
          4 = delete the definition
          6 = print the definition

  F3    Exit the job.
  F6    Add a new definition.
  F12   Go to the previous display.
  Roll  Roll the list up or down (if "+" in the lower right of screen).

   ADD FILE DEFINITION (SELECT ADDRESS FORMAT)

  When F6 is pressed on the select options screen, the select address format
  screen is displayed.  This screen is functionally identical to the first
 _____
   Section, page, or label name . . . . . . . . . .  _____
  F3=Exit                                     F24=More keys
```

PROMPT SCREENS

When you select batch processing menu options, you are prompted for information to control the processing of the program you chose.

Defaults are displayed for most parameters. If the default values do not suit your needs, you can enter the values you want before you submit the program for processing. If you want to permanently change the defaults to your own values, enter the values you want and then press F1 to save them (F13 resets the parameters to their shipped values). Each work station can have its own set of default values saved.

On some prompt screens you can retrieve the previous set of parameters that was run by pressing the F9 key. These sets are saved by user profile rather than by work station as default changes are. PER/ZIP4, as shipped, saves the last ten parameter sets. The number of parameter sets that can be retrieved can be changed with the Set System Values (Z4SYSVAL) command.

If you do not know what values are available, certain parameters allow you to display a list of possible values by entering a question mark (?).

```
  4/30/13                      PER/ZIP4 - POSTAL CODING              LYNNA
 10:08:19
                            POSTAL CODING FOR USER FILES




         File name (? for list)...........................  _____   *
           Library........................................ *LIBL        *
         Member........................................... *FIRST       *
         Definition number (1-9)................................... 1 *
         Records to print (A=all E=exception N=none 1=changed &
           exception 2=changed & exception (no update)).......... E *

         WARNING!!!  The file named above will be updated during the
                     run.  Be sure you have a back-up copy to insure
                     the integrity of your data.


 _____
 F1=Change defaults (*)    F3=Exit   F9=Retrieve   F10=PS 3553   F12=Previous
 F13=Reset defaults (*)    F23=Work with file definitions   F24=Printer options
```

If you decide that you do not want to run the program that you selected, press F3 to exit the job and return to the menu, or press F12 to go to the previous screen (this functions the same as F3 when you are on an initial prompt).

To run the program, press the ENTER key. Before the program is run, the values that you entered are edited. If an invalid value is detected, the prompt screen is redisplayed with the value in reverse image along with an error message. You must press the RESET key to clear the error message before you can enter a correct value.

PRINTER OPTIONS

On some prompt screens you can press F24 to display the printer options. The printer options display is a second level prompt screen. All of the features described on the prior page for prompt screens are also available for the printer options display. You can use this display to override the printer options shown. For detailed information concerning the various fields on this screen, refer to the Override with Printer File (OVRPRTF) command in the System i - iSeries - AS/400 CL Reference.

```
 4/30/13                   PER/ZIP4 - POSTAL CODING              LYNNA
10:13:31
Coding rpts    (pg 1/2)       PRINTER OPTIONS


Print device............. *SYSVAL    *  Lines per page...........  _____      *
Positions per line....... _____     *  Lines per inch........... _           *
Characters per inch...... _____     *  Overflow line number..... _____      *
Fold records............. *NO        *  Align page............... *YES        *
Form feed................ *DEVD      *  Print quality............ *DEVD       *
Source drawer............ _          *  Font indentifier......... *DEVD       *
Degree of page rotation.. *DEVD      *  Hardware justification... _____      *
Spool the data........... *YES       *  Form type................ *STD        *
Copies................... 1          *  File separators.......... _____      *
Spooled output schedule.. *FILEEND   *  Hold spooled file........ *YES        *
Save spooled file........ *NO        *  Output priority.......... *JOB        *
User data................ _____  *  Spool file name.......... _____   *




_____
 F1=Change defaults (*)   F3=Exit   F12=Previous   F13=Reset defaults (*)
                                                            (Page/roll)
```

This page intentionally left blank.

POSTAL CODE USER FILES

To postal code a user file, you must first define the file. This can be done through the Edit File Definition by selecting option 4 (Work with file definitions) on the PER/ZIP4 main menu. A file definition can also be edited by pressing F23 (Work with file definitions) on the prompt screen.   A file definition consists of the from/thru positions of the fields required by PER/ZIP4 to perform the postal coding function. Up to 9 different definitions can be maintained for each file (used when the records in the file contain more than one set of address data). For more information on file definitions, see "Work with file definitions" in chapter 4.

Both uppercase and lowercase (mixed case) address files can be processed.

```
  4/30/13                    PER/ZIP4 - POSTAL CODING                LYNNA
 10:08:19
                        POSTAL CODING FOR USER FILES




          File name (? for list).......................... _____   *
            Library...................................... *LIBL      *
          Member......................................... *FIRST     *
          Definition number (1-9)................................ 1 *
          Records to print (A=all E=exception N=none 1=changed &
            exception 2=changed & exception (no update)).......... E *

          WARNING!!!  The file named above will be updated during the
                      run.  Be sure you have a back-up copy to insure
                      the integrity of your data.


 _____
 F1=Change defaults (*)   F3=Exit   F9=Retrieve   F10=PS 3553   F12=Previous
 F13=Reset defaults (*)   F23=Work with file definitions   F24=Printer options
```

File name (? for list)

Enter the name of the file you want to postal code. A logical file can be used for record selection; however, the physical file will always be processed in arrival sequence.

Library

Enter a valid library name or *LIBL (if the library containing the file exists in your library list).

Member

Enter the name of the file member you want to postal code or *FIRST to process the first member of the file, *LAST to process the last member of the file, or *ALL to process all members in the file.

Definition number (1-9)

Enter the definition number you want to use. A file can have up to 9 different definitions to accommodate multiple addresses within a single record.

Records to print (A=all E=exception N=none 1=changed & exception 2=changed & exception (no update))

Indicate which records are to print on the report. U.S.P.S. form 3553 (Coding Accuracy Support System (CASS) Report) will print for all options except "2" (where the file is not updated).

F1   Change the default parameters (for items marked with an *) for the current prompt screen to those you have just entered. Only the defaults for this display station will be changed.
F3   Exit the job.
F9   Retrieve the previous set of parameters that were run
F10 Override the name and address of the mailer on the PS form 3553
F12 Go to the previous display.
F13 Reset the default parameters (for items marked with an *) for the current prompt screen to their shipped values. Only the defaults for this display station will be changed.
F23 Work with file definitions.
F24 Display printer options.

When postal coding a user file, if an address can be coded, the record is updated with the standardized address, ZIP, ZIP+4, carrier route, and delivery point codes (assuming the carrier route and delivery point fields were defined). The address will be printed on the coding report only if the "Records to print" prompt was set to A (all) or 1 / 2 (changed and exception) and the record was changed.

For addresses that cannot be coded, the record is updated with the error code if the error code output positions were specified on the file definition. The address will be printed on the coding report along with the error code if the "Records to print" prompt was set to A (all), E (exception), or 1 / 2 (changed and exception). In any case, the coding report's error statistics are updated.

PER/ZIP4 will update addresses that cannot be ZIP+4 Coded in the following cases:

1. If the address cannot be ZIP+4 Coded because it results in a multiple response (MLT) error, PER/ZIP4 will check to see if all possible responses have the same ZIP Code, and, if they do, the ZIP Code will be assigned. PER/ZIP4 also checks to see if all the possible carrier route codes match, and, if so, the carrier route code will be assigned.

    The address and last line, however, are not standardized or updated in either case. Therefore, the record is not updated if the file definition directs output to the address last line rather than the city, state, ZIP fields.

2. If the address cannot be ZIP+4 Coded because it results in a Delivery Point Validation (DPV) error. In this case, the ZIP and carrier route codes are assigned and the address is standardized.

3. If the address is a nondelivery address (NDA). In this case, the ZIP and carrier route codes are assigned and the address is standardized.

4. If the address is a post office box, rural route, or highway contract route, the delivery address is standardized.

5. The ZIP+4 Code will be blanked if the address cannot be coded.

When a standardized address is to be written to the file, PER/ZIP4 checks to see if it will fit into the address field, and, if so, the record is updated. If it is too long, PER/ZIP4 will try to abbreviate it to a length less than or equal to the defined address field length or wrap any apartment information to the secondary address line if one is defined. If this is successful, the record is updated, and the address is printed on the address standardization exception report. If the address is still too long, the standard address will not be written, but it is noted on the exception report.

OVERRIDE PS FORM 3553 INFORMATION

U.S. Postal Service form 3553 (Coding Accuracy Support System (CASS) Report) is generated by PER/ZIP4 as a part of the postal coding report. This form requires the name and address of the list processor and the name and address of the mailer. You can override the default name and address of the mailer which is stored in the system (through "Enter PS form 3553 information") by pressing F10 on the batch postal coding prompt.

```
  4/30/13                    PER/ZIP4 - POSTAL CODING               LYNNA
 16:02:17
                           POSTAL CODING FOR USER FILES




                    ----------- Name and address of mailer -----------
            Line 1... WORKSRIGHT SOFTWARE, INC._____
            Line 2... PO BOX 1156_____
            Line 3... MADISON MS  39130-1156_____
            Line 4... _____
            Line 5... _____
            Line 6... _____




 _____
  F3=Exit   F5=Refresh   F12=Previous
```

Name and address of mailer

Enter the override name and address of the mailer. Up to six lines are provided for this information which will be used on the 3553 printed for this run only.

Function keys

F3   Exit the job.
F5   Refresh.
F12 Go to the previous display.

INTERACTIVE POSTAL CODING

PER/ZIP4 can postal code addresses directly on a display station when you run the "Interactive postal coding" program. When an address is successfully coded, the standardized address is displayed along with the county name, the FIPS (federal information processing standard) state and county numbers, the carrier route code, the delivery point code, the delivery point correction digit, the congressional district number, LACS (locatable address conversion service) indicator. If an address cannot be coded, the reason is displayed at the bottom of the screen. You can also search the ZIP+4 database for a particular address during interactive postal coding by pressing F6 on the coding screen.

ADDRESS ENTRY

```
 4/30/13                    PER/ZIP4 - POSTAL CODING               LYNNA
16:07:55                                                        UPPER CASE
                           INTERACTIVE POSTAL CODING

Firm........ WORKSRIGHT SOFTWARE, INC._____
Urbanization. _____
Sec address.. _____
Del address.. PO BOX 1156_____
Last line.... MADISON MS 39130-1156_____

Delivery point / check digit..... 56 0 Carrier route id.................. B011
eLOT sequence no / A/D code.... 0001 A County.... MADISON                   MS
FIPS state / county no......... 28 089 Congressional district.......... MS 03
Early Warning System flag........... _ LACS indicator...................... _
DPV confirmation indicator......... Y DPV CMRA indicator................... N
DPV footnotes............... AA BB __ DPV false positive indicator......... _
Residential delivery indicator...... Y LACS-Link ind / return code....... _ __
Occupancy code.................... _ Suite-Link ind / return code...... _ __
Business/residential indicator...... R Record type / default flag......... P _
PMB designator / number.. _____ Street match lev / sec adr flag.... _ _
_____
 F3=Exit   F5=Refresh   F6=Address search   F7=Last line search   F12=Previous
F15=Toggle case   F18=Pass address to search                  (Page/roll)
```

Firm name

Enter the firm name if appropriate. This field is optional.

Urbanization

Enter the urbanization name for Puerto Rican addresses if available. This field is optional.

Secondary address

Enter the secondary address line if one exists. This field is optional.

Delivery address

Enter the delivery address line. This field is required.

Last line (City, State, and ZIP Code)

Enter the address last line (combined city, state, ZIP Code). This field is required and must minimally contain either a city and state or a ZIP Code.

ADDRESS INFORMATION DISPLAY

Delivery point / check digit

The delivery point code and check digit are derived from the street number (or box number) and apartment number if present. This information is required for automation rate mailings.

Carrier route id

This is the identification code assigned to the Postal carrier who serves this address.

eLOT sequence no / A/D code

The enhanced Line Of Travel sequence number and ascending / descending code are used for carrier route sort mailings.

County

The name of the county in which the address resides.

FIPS state / county number

The Federal Information Processing Standard state and county numbers for the address.

Congressional district

This gives the state code and congressional district number for the address.

Early Warning System flag

The EWS flag is set to "Y" if no exact match can be found in the ZIP+4 database but the address is on the U.S.P.S. EWS database. These addresses may be codable in the near future.

LACS indicator

The LACS indicator is set to "L" if the address has been converted under the Locatable Address Conversion Service system. Since LACS-Link is now a required feature of CASS certified software, these addresses are normally converted automatically through the LASC-Link interface.

DPV confimation indicator

The Delivery Point Validation indicator will return one of the following values:

- D = address was DPV confirmed for the primary number only, and secondary number information was missing
- N = both primary and, if present, secondary number information failed to DPV confirm
- S = address was DPV confirmed for the primary number only, and secondary number information was present but unconfirmed
- Y = address was DPV confirmed for both primary and, if present, secondary numbers

DPV CMRA indicator

The Commercial Mail Receiving Agent (a business that receives mail for their customers) indicator can contain the following values:

- N = address was not found in the CMRA table
- Y = address was found in the CMRA table

DPV footnotes

The following is a list of the possible footnotes and their meanings:

- AA = input address matched to the ZIP+4 file
- A1 = input address not matched to the ZIP+4 file
- BB = input address matched to DPV (all components)
- CC = input address primary number matched to DPV but secondary number not matched present but invalid)
- F1 = input address matched to a ZIP+4 military record
- G1 = input address matched to a ZIP+4 general delivery record
- N1 = input address primary number matched to DPV but highrise address missing secondary number
- M1 = input address primary number missing
- M3 = input address primary number invalid
- P1 = input address missing PO, RR, or HC box number
- P3 = input address PO, RR, or HC box number invalid
- RR = input address matched to CMRA and PMB designator present (PMB 123 or # 123)
- R1 = input address matched to CMRA but PMB designator not present (PMB 123 or # 123)
- U1 = input address matched to a ZIP+4 unique ZIP record

DPV false positive indicator

The false positive indicator will return one of the following values:

- N = address is not a false positive
- Y = address is a false positive

Residential delivery indicator

If PER/RDI is installed and the address is successfully coded one of the following values will be returned in this field:

N = address is not a residence (business)
Y = address is a residence

LACS-Link indicator and return code

The LACS-Link indicator and return code values are as follows:

Indicator:

- N = New address not returned
- Y = New address returned

Return code:

- A = LACS record match
- 00 = No match
- 09 = Cannot match LACS record: highrise default
- 14 = Found LACS record: new address would not convert at run time
- 92 = LACS record: secondary number dropped from input address

Occupancy code

A value will be returned in this field only if the address has been successfully coded and if the occupancy code feature of the PER/DPV product is loaded. The possible return values are:

- N = nostats (mail delivery to this address has not started)
- V = vacant (this address is currently vacant)

Suite-Link indicator and return code

The optional PER/SLK Suite-Link interface must be installed for information to be returned in these fields. The indicator and return code values are as follows:

Indicator:

- N = Address not updated by Suite-Link
- Y = Address updated by Suite-Link

Return code:

- A = Suite-Link record match
- 00 = No match

Business/residential indicator

The PER/RDI interface must be installed for this indicator to be active. The value derived for this field is more reliable than RDI alone and is used as input to HyPER/Sort for walk sequence carrier route presort mailings. The possible return values are:

- B = Business
- R = Residence

Record type / default flag

The record type and default flag indicate type of record that was matched to in the ZIP+4 database. The record type and default flag values are as follows:

Record type:

- S = Street
- P = PO Box
- R = Rural Route
- H = Highrise
- F = Firm
- G = General Delivery

Default flag:

- Blank = Not a default
- Y = Highrise or rural route default

PMB designator / number

If the address contains a private mail box the PMB information is reflected here.

Street match lev / sec adr flag

The street match level and secondary address flag indicate the depth of match for street type addresses. The street match level and secondary address flag values are as follows:

Street match level:

- S = street match
- H = highrise match
- A = apartment (suite, room, etc.) match
- F = firm match
- N = non-delivery address match
- D = firm required to make match

Secondary address flag:

- Blank = No apartment or firm records exist for the address
- Y = Apartment or firm records exist for the address

MULTIPLE ADDRESS DISPLAY

If the input address matches more than one address in the ZIP+4 database, PER/ZIP4 will display all the possible matches and allow you to select the one you want.

```
  5/01/13                    PER/ZIP4 - POSTAL CODING              LYNNA
 14:20:09                                                          UPPER CASE
                            INTERACTIVE POSTAL CODING

 Firm.........  _____
 Urbanization.  _____
 Sec address..  _____
 Del address..  1909 HARRISON AVE_____
 Last line....  HARLINGEN TX 78550_____

 Type options, press Enter.
   1=Select


 Opt --------------Address--------------- ------City------ St -ZIP- ZIP4 CRRT
   _   1909 E HARRISON AVE                    HARLINGEN      TX 78550 7311
   _   1909 W HARRISON AVE                    HARLINGEN      TX 78550 5929




 F3=Exit   F5=Refresh   F6=Address search   F7=Last line search   F12=Previous
 F15=Toggle case   F18=Pass address to search                     (Page/roll)
 Multiple addresses found
```

A multiple address match is most commonly caused by a missing directional or street suffix. For example, if the address given is 1909 Harrison Ave and there is both a 1909 E Harrison Ave and a 1909 W Harrison Ave, PER/ZIP4 would be unable to determine the correct address and return a multiple match. Likewise, if the given address is 12 North Main and there is a 12 North Main Street and a 12 North Main Avenue, PER/ZIP4 would return a multiple match.

Function keys

F3   Exit the job.
F5   Refresh (clear) the screen.
F6   ZIP+4 database search.
F7   City/state look up.
F12   Go to the previous display.
F18   Pass address to ZIP+4 database search.
Roll   Roll the list up or down (if "+" in the lower right of screen).

CITY/STATE LOOK UP

By pressing F7 on the interactive postal coding screen you can access the city/state look up function. This allows you to display detailed information about post offices by entering a ZIP Code or a city/state name.

This screen allows you to use the ZIP Code as the input field.

```
  5/01/13                  PER/ZIP4 - POSTAL CODING              LYNNA
 14:26:13
                           CITY/STATE LOOK UP

 Type ZIP code, press Enter.

 39110


 -----------Name------------ St ----Abrev---- -Classification- -Facility type-
 GLUCKSTADT                  MS               Non-unique ZIP   Non-postal name
 MADISON                     MS               Non-unique ZIP   Post office








 _____
 F1=Fold   F3=Exit   F6=Name search   F12=Previous            (Page/roll)
```

The F1 key will "unfold" the record to show additional information.

```
  5/01/13                  PER/ZIP4 - POSTAL CODING              LYNNA
 15:59:57
                           CITY/STATE LOOK UP

 Type ZIP code, press Enter.

 39110


 -----------Name------------ St ----Abrev---- -Classification- -Facility type-
 GLUCKSTADT                  MS               Non-unique ZIP   Non-postal name
 Preferred name.. MADISON                     Mail name... No_ City del... No_
 County name..... MADISON                     Auto zone... No_ Unq name... N/A
 Finance number.. 4810 FIPS county no..... 089 City key.. 00687 Pfd key.. 00688
 Seasonal ind.... NNNNNNNNNNNN
 MADISON                     MS               Non-unique ZIP   Post office
 Preferred name.. Same                        Mail name... Yes City del... No_
 County name..... MADISON                     Auto zone... No_ Unq name... N/A
 Finance number.. 4810 FIPS county no..... 089 City key.. 00688 Pfd key.. 00688
 Seasonal ind.... NNNNNNNNNNNN

 _____
 F1=Fold   F3=Exit   F6=Name search   F12=Previous            (Page/roll)
```

The F6 key allows you to switch to a city name search mode.

This screen allows you to use the city name and state code as the input field.

```
  5/01/13                    PER/ZIP4 - POSTAL CODING                LYNNA
 16:11:33
 Search type... EXACT         CITY/STATE LOOK UP

 Type city, state, press Enter.

 MADISON                      MS

 ------------Name------------ St -ZIP-        -Classification- -Facility type-
 MADISON                      MS 39110        Non-unique ZIP   Post office
 MADISON                      MS 39130        PO box ZIP       Post office




 _____
 F1=Fold    F2=Change search   F3=Exit   F6=ZIP search           (Page/roll)
 F12=Previous
```

The F1 key will "unfold" the record to show additional information.

```
  5/01/13                    PER/ZIP4 - POSTAL CODING                LYNNA
 16:11:33
 Search type... EXACT          CITY/STATE LOOK UP

 Type city, state, press Enter.

 MADISON                      MS

 ------------Name------------ St -ZIP-        -Classification- -Facility type-
 MADISON                      MS 39110        Non-unique ZIP   Post office
 Preferred name.. Same                        Mail name... Yes City del... No_
 County name..... MADISON                     Auto zone... No  Unq name... N/A
 Finance number.. 4810 FIPS county no..... 089 City key.. 00688 Pfd key.. 00688
 Seasonal ind.... NNNNNNNNNNNN
 MADISON                      MS 39130        PO box ZIP       Post office
 Preferred name.. Same                        Mail name... Yes City del... No_
 County name..... MADISON                     Auto zone... No  Unq name... N/A
 Finance number.. 4810 FIPS county no..... 089 City key.. 00688 Pfd key.. 00688
 Seasonal ind.... NNNNNNNNNNNN

 _____
 F1=Fold    F2=Change search   F3=Exit   F6=ZIP search           (Page/roll)
 F12=Previous
```

In either the ZIP Code or city name search mode the following information is displayed on the expanded information screen.

CITY NAME

This is a name associated with the Five-Digit ZIP Code. A ZIP Code may be known by more than one name.

STATE CODE

This is a two-character abbreviation for the name of a state, U.S. Territory, or Armed Forces ZIP Code designation.

ZIP CODE

This field contains the Five-Digit ZIP Code of the city. A city can have more than one ZIP code.

CITY NAME ABBREVIATION

This is a standard 13-character abbreviation for a city name. This field is only used for names that are greater than 13 characters and is always blank if the Facility Code is "Nonpostal name".

ZIP CLASSIFICATION

This is a field that describes the type of ZIP Code area that a Five-Digit ZIP Code serves, e.g., a single educational institution, with only Post Office Boxes, or a single address that has unusually high mail volume or many different addresses.

- Nonunique ZIP = a standard ZIP with many addresses assigned to it
- PO Box ZIP   = ZIP Code has Post Office Boxes only
- Military ZIP   = Military ZIP Code
- Unique ZIP   = Unique ZIP Code (ZIP assigned to a single organization)

FACILITY TYPE

This field indicates the type of locale identified in the City Name. The facility may be a postal facility, such as a Post Office, station, or branch, or it may be a non-postal place name.

- Airpt mail fac   = Airport mail facility
- Branch   =   Branch
- Comm post off   = Community post office
- Area dist ctr   = Area distribution center
- Sec ctr fac   = Sectional center facility
- Del dist ctr   = Delivery distribution center
- Gen mail fac   = General mail facility
- Bulk mail ctr   = Bulk mail center

- Money ord unit   = Money order unit
- Non-postal name = Nonpostal name, comm name, former postal facility, or place name
- Post office   = Post office
- Station   = Station
- Urbanization   = Urbanization

Folded screen...

PREFERRED CITY NAME

This field contains the U.S.P.S. default Preferred City Name for the given ZIP Code.

COUNTY NAME

This is the name of the county or parish in which the Five-Digit ZIP Code resides. For military ZIP Codes the County name will be blank.

FINANCE NUMBER

The Finance Number is a code assigned to Postal Service facilities for purposes of collecting cost and statistical data and for compiling revenue and expense data. Finance Numbers are six-digit numbers with the first two positions being the State Number. Since PER/ZIP4 does not use the State Number, only the last four positions of the Finance Number are returned. A city may have multiple ZIP Codes but will have only one finance number.

FIPS COUNTY NUMBER

This is the Federal Information Processing Standard (FIPS) Code assigned to a given county or parish within a state. In Alaska, it identifies a region within the state. For military ZIP Codes the County Number will be zero.

MAILING NAME INDICATOR

This field specifies whether or not the City Name can be used as a last line of address on a mail piece.

- No = City Name is not approved for mailing purposes
- Yes = City Name is a U.S.P.S. approved mailing name

CITY DELIVERY INDICATOR

This field specifies whether or not a Post Office has city-delivery carrier routes.

- No = Office does not have city delivery carrier routes
- Yes = Office has city delivery carrier routes

AUTOMATED ZONE INDICATOR

This indicator specifies whether the mail for the ZIP Code area (ZONE) is or is not sorted by Bar Code Sorting equipment. The automation Basic Carrier Route rate is available for letter-size mail only if the destination ZIP Code's automated zone indicator is Yes.

- No = Not automated
- Yes = Automated

UNIQUE ZIP NAME INDICATOR

This field specifies if the record contains the organization name for a Unique ZIP Code. If this field contains a "Yes," the organization name will appear in the City Name field. N/A indicates the indicator is not applicable for the record displayed.

CITY KEY

This field contains the internal key PER/ZIP4 uses to identify the city name.

PREFERRED CITY KEY

This field contains the internal key PER/ZIP4 uses to identify the preferred city name.

SEASONAL INDICATORS

This field contains twelve indicators for the months January to December (left to right) which indicate if mail is delivered to seasonal addresses within the ZIP code during the respective months. If all the indicators are set to "N" there are no seasonal addresses in the ZIP code.

Function keys

F1   Fold or unfold display.
F3   Exit the job.
F6   Name search.
F12   Go to the previous display.
Roll   Roll the list up or down (if "+" in the lower right of screen).

ZIP+4 Database Search

Selected elements window

This window in the upper right-hand corner of the ZIP+4 database search screen displays the address elements (state, city, and street name) which have already been selected.

```
 5/01/13                    PER/ZIP4 - POSTAL CODING              LYNNA
16:40:17
State selection            ZIP+4 DATABASE SEARCH

Place cursor on line to select,     _____
press Enter                         _____
                                    _____
  __    <==
Code Name_____
 AA   ARMED FORCES AMERICAS
 AE   ARMED FORCES EUROPE
 AK   ALASKA
 AL   ALABAMA
 AP   ARMED FORCES PACIFIC
 AR   ARKANSAS
 AS   AMERICAN SAMOA
 AZ   ARIZONA
 CA   CALIFORNIA
 CO   COLORADO
                                                                  MORE...
_____
 F3=Exit   F6=Postal coding   F12=Previous                   (Page/roll)
 F18=Pass address to postal coding
```

```
 5/01/13                    PER/ZIP4 - POSTAL CODING              LYNNA
16:44:10
City selection             ZIP+4 DATABASE SEARCH

Place cursor on line to select,     _____
press Enter                         _____
                                    WY_____
_____     <= (name, ZIP, *generic*)
Name                          Abbreviation   Preferred name
ACME                                         RANCHESTER
AFTON
ALADDIN
ALBIN
ALCOVA
ALLENDALE                                    CASPER
ALPINE
ALTA
ALVA
ARAPAHOE
                                                                  MORE...
_____
 F3=Exit    F6=Postal coding   F12=Previous                  (Page/roll)
 F18=Pass address to postal coding
```

Street selection   ZIP+4 DATABASE SEARCH

Place cursor on line to select,   _____
press Enter   _____
                                   ALPINE WY_____
_____   <== (name, *generic*)
Street name   **Sufx Pre Pst Preferred last line name / Alias for**
ADAMS   ST   AFTON
AIRPORT   LN   AFTON
ALLRED   RD   AFTON
ASPEN   CT   AFTON
ASPEN HILL   DR   ALPINE
ASTLE   RD   BEDFORD
BIG RIDGE   RD   AFTON
BIG RIDGE MEADOWS   DR   AFTON
BITTER CREEK   RD   AFTON
BOWLES   LN   AFTON
                                                                    MORE...
_____
F3=Exit   F6=Postal coding   F12=Previous   (Page/roll)
F18=Pass address to postal coding

Address display   ZIP+4 DATABASE SEARCH

Partial firm names are in reverse   _____
image. Place cursor on line and   BITTER CREEK RD_____
press Enter to see full name.   ALPINE WY_____
_____   <==   O   **Prfd** **Sec**   O
Pri low **Pri high** **E** **City** **Abrv Sec low Sec high E   ZIP CRRT Z4lo Z4hi**
      2000   2999 B AFTON   83110 R001 9775 9775
      3000   3999 B AFTON   83110 R001 9776 9776
      4000   4999 B AFTON   83110 R001 9777 9777
      5000   5399 B AFTON   83110 R001 9712 9712
      5400   5699 B AFTON   83110 R001 9778 9778
      5700   5799 B AFTON   83110 R001 9713 9713
      5800   5999 B AFTON   83110 R001 9714 9714
      6000   6999 B AFTON   83110 R001 9779 9779
      7000   7700 B AFTON   83110 R001 9723 9723
      7701   7799 B AFTON   83110 R001 9831 9831
                                                                    BOTTOM
_____
F3=Exit   F6=Postal coding   F11=City view   F12=Previous   (Page/roll)
F18=Pass address to postal coding

<== (position to) field

Enter a value in this field to position the list to that point. If the value entered has an exact match in the list, the cursor will be placed on that value after the list is redisplayed. For a generic search the following forms are allowed: ABC* (names beginning with ABC), *ABC (names ending with ABC), *ABC* (names containing ABC).

Selection list

Place the cursor anywhere on the line of the element you want to select. After you press Enter, the next selection screen or the detail address screen will be displayed.

The information displayed on the selection list for each of the search screens is as follows:

State selection . . .

Code   U.S.P.S. standard two-character abbreviation of the name of a state, U.S.
                        Territory, or Armed Forces ZIP Code.
Name   State, U.S. Territory, or Armed Forces ZIP Code complete name.

City selection . . .

Name   Name of the city.
Abbreviation   U.S.P.S. standard 13-character abbreviation (used only for names which are
                greater than 13 characters).
Preferred name The U.S.P.S. preferred city name if different than the city name listed.

Street selection . . .

Street name   Name of the street.
Sufx   Street suffix abbreviation (AVE, BLVD, ST, etc.).
Pre   Predirection abbreviation (N, S, E, W, NE, NW, SE, SW).
Pst   Postdirection abbreviation (N, S, E, W, NE, NW, SE, SW).
Preferred last line name   The U.S.P.S. preferred last line (city) name for the street.

Alias for   The U.S.P.S. base street name if the listed street is an alias name (a name by
                     which a street may be known locally which is different from the official name
                     used by the U.S. Postal Service). These entries are displayed in reverse
                     image along with the ZIP Code and the type of alias (A = street abbreviation
                     P = preferred street name, C = official street name change, O = other).

Address display . . .

Firm names which are too long to be fully displayed on this screen are shown in reverse image. To see the entire firm name, place the cursor on the line containing the name and press Enter. Pressing Enter again with the cursor still on the same line will redisplay the name in the short format.

Pri low   Primary address range low number.
Pri high   Primary address range high number.
OE   Primary address range odd/even indicator (O = odd, E = even, B = both).
Prfd city   Preferred city name for the address range (This information is shown only if more than one
                preferred city name is associated with the street or if the preferred city name is different from
                the city name selected.)
Sec abrv   Secondary address range abbreviation (APT, RM, etc.).
Sec low   Secondary address range low number.
Sec high   Secondary address range high number.
OE   Secondary address range odd/even indicator (O = odd, E = even, B = both).
ZIP   ZIP Code for the address range.
CRRT   Carrier route code for the address range.
Z4lo   The low ZIP+4 add on for the address range.
Z4hi   The high ZIP+4 add on for the address range.

            A ZIP+4 add on describes the last four positions of a ZIP+4 Code. The ZIP+4 low and high
            add-on numbers determine the limits of a range of codes. Most delivery addresses are
            assigned a single ZIP+4 Code. However, large companies may be given a range of ZIP+4
            codes that can be used to route mail to specific departments. A range of ZIP+4 Codes can
            also be assigned to a corresponding range of Post Office Boxes, where each box is mapped,
            one-to-one, with a ZIP+4 Code in the range. A single Post Office Box can also be assigned
            a range of ZIP+4 Codes. ZIP+4 Codes associated with nondelivery areas end with "ND".
            Nondelivery areas include vacant lots, land which borders railroad tracks, or other areas to
            which the U.S.P.S. does not deliver mail.

Function keys

F3   Exit the job.
F6   Postal coding.
F11   City view / combined view toggle (only on the address display when preferred city
                names are relevant.)
F12   Go to the previous display.
F13   Previous city (only on the address display city view.)
F14   Next city (only on the address display city view.)
F18   Pass address to postal coding.
Roll   Roll the list up or down (if "+" in the lower right of screen.)

CALLING PER/ZIP4 FROM A USER PROGRAM

PER/ZIP4 can be called from a user program thus making it possible to correct, standardize, and postal code addresses during data entry, insuring that only good addresses enter your database. There are several methods available to call PER/ZIP4. A description of each method and actual code is provided for you in source file QSMPLSRC in library MLLIBR.

QSMPLSRC also contains sample code for calling other PER/ZIP4 functions from within your application programs such as:

      calling the city/state lookup program
      calling the batch postal coding program
      calling the interactive postal coding / search program

Since new code is added to this file from time to time, you should check it periodically to see if any of the functions described therein can be of benefit to you. The #READ.ME member in QSMPLSRC will alert you to all new features and functions added to the PER/ZIP4 product.

ERROR CODE DESCRIPTIONS

ADR - insufficient address information

The delivery address does not contain enough information for a search to be performed.

ALT – address changed from alternate to base

The address was changed from an alternate address to the base or actual address. **This is an informational message and not an error message.**

ANS - address not on street

The street number does not fall within the primary address range(s) for the street on the ZIP+4 database. For example, if the address is 100 MAIN ST and the ZIP+4 database contains only a range of 1-99 MAIN ST, PER/ZIP4 will return this error code.

BNC - PO Box not found in city (finance number)

The PO Box in the delivery address cannot be found in the given city.

BNR - Box missing or not found in RR/HC (default taken)

The delivery address contains a rural route or highway contract route address with either no box number or one that cannot be found in the ZIP+4 database. The database does, however, contain a default ZIP+4 for the route which is returned by the program. **This is an informational message and not an error message.**

DBE - USPS database exception (firm required to make match)

This error is caused when the delivery address is not an official mailing address but a commonly used (alternate) address (usually a building name address, eg. 123 IBM BUILDING) which requires firm name information in order to make a match. Since PER/ZIP4 attempts to locate the actual street address associated with this type of address, this error should be extremely rare.

DBX – US Postal Service database has expired

The currently loaded database has passed its expiration date. Load a newer version of PER/ZIP4.

DPV – Delivery Point Validation failed

The address does not exist in the USPS Delivery Point Validation (DPV) data set. This means that the address is not a known delivery point for mail. Consequently, a +4 and delivery point code cannot be assigned to the address.

EWS - Early Warning System (EWS) match

The address matches a record in the Early Warning System file and should not be changed in any way. It cannot be coded at this time because it has not yet been entered into the U.S. Postal Service's national ZIP+4 database. It will be codable in a future release of the database.

LLK – address changed by LACS^{Link} processing

The address was converted to a new address as the result of LACS^{Link} processing. **This is an informational message and not an error message.**

LLN - insufficient last line (city, state, ZIP) information

The last line of the address does not contain a valid city and state or a valid ZIP Code.

MLT - multiple addresses found

The delivery address given can possibly be matched to more than one address range in the ZIP+4 database. A multiple address match is most commonly caused by a missing directional or street suffix. For example, if 102 University is entered and there is both a 102 E University and a 102 W University, PER/ZIP4 would be unable to determine which one is correct and return a multiple match. Likewise, if the given address is 12 N Main and there is a 12 N Main Street and a 12 N Main Avenue, PER/ZIP4 would also return a multiple match.

NDA - nondelivery address

PER/ZIP4 has uniquely matched the delivery address to an address range in the ZIP+4 database, but that range is designated as a nondelivery area. Nondelivery areas include vacant lots and roads that border railroad tracks, rivers, etc. The USPS does not deliver mail to these locations.

PGM - program error

The most probable cause of this error is the inability of the program to find certain ZIP+4 database objects because of an incorrectly set library list or an incorrectly installed or corrupted ZIP+4 database. If these causes have been eliminated, please report the error (with the address that caused it) to WorksRight Software.

PWX – Password has expired.

The current password for PER/ZIP4 has expired. Contact WorksRight Software, Inc. at 601-856-8337.

RNF - RR/HC number not found in city (finance number)

The delivery address contains a rural route or highway contract route that cannot be found in the given city.

SLK - address changed by Suite^Link processing

Secondary address information (i.e. Apartment, Floor, Suite, Unit, etc.) was added or changed as the result of Suite^Link processing. **This is an informational message and not an error message.**

SNF - street not found in city (finance number)

The street name in the delivery address cannot be found in the given city. This could be the result of a gross misspelling of the street name or an incorrect last line (city, state, ZIP).

STR - street name not found

The delivery address contains a street name which cannot be found in the entire state. A gross misspelling of the street name or extraneous information in the delivery address can cause this error.

XST - ZIP+4 database member missing for state

The ZIP+4 database for the state contained in the address has not been loaded. Load the required state and run the postal coding again. **Since all states are now installed with every PER/ZIP4 update, this error code is obsolete and no longer used.**

This page intentionally left blank.

PER/ZIP4 relies on various system files to perform its function. Occasionally it is necessary to maintain these files so the application can function properly in your environment. This chapter describes the system file maintenance tasks you will need to perform.

WORK WITH FILE DEFINITIONS

To postal code a user file, you must first define the file. This is done by selecting option 4 (Work with file definitions) on the PER/ZIP4 main menu. File definitions can also be entered by pressing F23 (Work with file definitions) on the "Postal code user files" prompt screen.

```
  5/16/13                    PER/ZIP4 - POSTAL CODING            LYNNA
 09:51:19
                          WORK WITH FILE DEFINITIONS

 Type options, press Enter.
   2=Change   3=Copy   4=Delete   6=Print

 ==>  _____
 Opt  File name   Def  Text
 _    DATAFILE     1   Sample data file for MULIB
 _    TNCUST       1   WRSI master file
 _    TNLAB        1   WRSI label file




 _____
  F3=Exit   F6=Add   F12=Previous                           (Page/roll)
```

SELECT OPTIONS

==> (Position list to)

If you have too many records to be displayed on one screen, you can enter a value to position the list to the point closest to the value entered.

Option

Enter an option code next to each definition you want to work with.

2 = change the definition	4 = delete the definition
3 = copy the definition into a new definition	6 = print the definition

Function keys

F3	Exit the job.
F6	Add a new definition.
F12	Go to the previous display.
Roll	Roll the list up or down (if "+" in the lower right of screen).

ADD FILE DEFINITION (SELECT ADDRESS FORMAT)

When F6 is pressed on the select options screen, the select address format screen is displayed. This screen is functionally identical to the first Edit File Definition screen which is displayed following the initial prompt for "Postal code user files" if the definition for the file you entered cannot be found.

```
 5/16/13                    PER/ZIP4 - POSTAL CODING              LYNNA
09:57:33
                        WORK WITH FILE DEFINITIONS



          Address format type (1=fixed 2=floating)................. 1











     _____
 F3=Exit    F12=Previous

```

Address format type

Enter the address format type of the file definition you are adding. If 1 is entered, the fixed format file definition screen is displayed. If 2 is entered, the floating format file definition screen is displayed.

Function keys

F3   Exit the job.
F12   Go to the previous display.

ADD/CHANGE FILE DEFINITION (FIXED FORMAT)

When 2 (change) is entered next to a fixed format file definition on the select options screen or F6 (add) is pressed and format 1 is selected, the fixed format file definition add/change screen is displayed. This screen is functionally identical to the Edit File Definition screen for fixed format records which is displayed following the initial prompt for "Postal code user files" if the definition for the file you entered cannot be found.

```
  5/16/13                      PER/ZIP4 - POSTAL CODING                    LYNNA
 10:00:31
                            WORK WITH FILE DEFINITIONS

         File name / definition number................ TNLAB      / 1
         Text..... WRSI label file_____
         Output single address to address line 1 or 2.............. 2
         Input / output positions.......... From Thru * / From Thru *
         Key number........................     9   16 _
         Firm name.........................    66  100       ____ ____
         Address line 1 (secondary)........   101  135       ____ ____
         Address line 2 (delivery).........   136  170       ____ ____
         City (or City/State)..............   171  205       ____ ____
         State.............................   206  207       ____ ____
         ZIP code..........................   208  212 _     ____ ____ _
         ZIP+4 code........................   213  216 _     ____ ____ _
         Address last line.................  ____ ____       ____ ____
         Carrier route code..............................   217  220
         Delivery point code.............................   221  222 _
         Delivery point check digit...................... ____ ____ _
        * blank=alpha/numeric B=binary P=packed S=signed_____
 F3=Exit   F5=Display physical file member   F7=Display file field description
 F12=Previous                                                          Roll up
```

Note: Use the output position fields only if you do not want the specified input fields updated by PER/ZIP4.

File name / definition number

Enter the name of the file you are defining and the number of the definition. These fields are only accessible when adding a new definition.

Text

Enter the text describing the definition. If this field is left blank and the system can find the file, the text describing the file will be inserted. This text description is for internal use only and does not appear on any reports generated by the system.

Output single address to address line 1 or 2

If you are defining two address lines and only one contains data, you must indicate which address line is to receive the output.

51

Key number

Enter the input positions of the record key number to be printed on the coding report. This field is optional but if specified must be from 1 to 15 alpha/numeric, 2(4) or 4(9) binary, 1(1) to 8(15) packed numeric, or 1 to 15 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B," "P," or "S" respectively in the "*" column. If no key number is specified, the relative record number is used as the key number on the coding report.

Firm name

Enter the input positions of the firm name. This field is optional, but if specified must be from 15 to 64 positions long.

Address line 1 (secondary address)

Enter the input and output positions of the first address line. This field is optional but if specified must be from 20 to 64 positions long. Leave the output positions blank if they are the same as the input positions.

Address line 2 (delivery address)

Enter the input and output positions of the second address line. This field is required and must be from 20 to 64 positions long. Leave the output positions blank if they are the same as the input positions.

City (or City/State)

Enter the input and output positions of the city or city and state. This field is required if the address last line is not used and must be from 13 to 64 positions long if the field contains only the city or 16 to 64 positions long if it contains the city and the state. Leave the output positions blank if they are the same as the input positions.

State

Enter the input and output positions of the state. This field is required if the address last line is not used and there is not a combined city/state field. It must be from 2 to 64 positions long. Leave the output positions blank if they are the same as the input positions.

ZIP Code

Enter the input and output positions of the ZIP Code. This field is required if the address last line is not used and must be 5 or 10 alpha/numeric, 4(9) binary, 3(5) or 5(9) packed numeric, or 5 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B," "P," or "S" respectively in the "*" column. If the field is 4(9) binary or 5(9) packed positions long, it must contain the ZIP+4 Code appended to the ZIP Code. If the field is 10 character positions long, PER/ZIP4 assumes the ZIP+4 Code is in the last four positions and will insert a hyphen in position 6 followed by the ZIP+4 Code when it codes the records. Leave the output positions blank if they are the same as the input positions.

ZIP+4 Code

Enter the input and output positions of the ZIP+4 Code. This field is required if the address last line is not used and must be 4 alpha/numeric, 2(4) binary, 3(5) packed numeric, or 4 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B," "P," or "S" respectively in the "*" column. Leave the output positions blank if they are the same as the input positions.

Address last line

Enter the input and output positions of the address last line (combined city, state, ZIP Code). This field is required if the city, state, and ZIP Code fields are not used and must be 27 to 64 positions long. If the city, state, and ZIP Code exist in a single field in your file, you should use this field to define its position. Leave the output positions blank if they are the same as the input positions.

Carrier route code

Enter the output positions of the carrier route code. This field is optional but if specified must be 4 positions long.

Delivery point code

Enter the output positions of the delivery point code. This field is optional but if specified must be 2 or 3 alpha/numeric, 2(4) binary, 2(3) packed numeric, or 2 or 3 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B," "P," or "S" respectively in the "*" column. A 2 position alpha/numeric or signed numeric field will contain only the delivery point code, while a 3 position alpha/numeric, 2(4) position binary, 2(3) position packed numeric, or 3 position signed numeric field will also contain the delivery point bar code check digit in the last position.

Delivery point check digit

Enter the output positions of the delivery point check digit. This field is optional but if specified must be 1 alpha/numeric, 1(1) packed numeric, or 1 signed numeric position long. If the field is packed numeric or signed numeric, enter a "P" or "S" respectively in the "*" column.

Function keys

F3   Exit the job.
F5   Display the first physical file member of the file being defined.
F7   Display the file field description of the file being defined.
F12   Go to the previous display.
Roll   Roll up to next display.

ADD/CHANGE FILE DEFINITION (FLOATING FORMAT)

When 2 (change) is entered next to a floating format file definition on the select options screen or F6 (add) is pressed and format 2 is selected, the floating format file definition add/change screen is displayed. This screen is functionally identical to the Edit File Definition screen for floating format records which is displayed following the initial prompt for "Postal code user files" if the definition for the file you entered cannot be found.

```
   5/16/13                    PER/ZIP4 - POSTAL CODING                  LYNNA
  10:41:18
                            WORK WITH FILE DEFINITIONS

         File name / definition number................ DATAFILE   / 1
         Text..... Sample data file for MULIB_____

         Input / output positions.......... From Thru * / From Thru *
         Key number........................    1    8 _
         Address line 1....................    9   43       ____ ____
         Address line 2....................   44   78       ____ ____
         Address line 3....................   79  113       ____ ____
         Address line 4....................  114  148       ____ ____
         Address line 5....................  149  183       ____ ____
         Address line 6....................  184  218       ____ ____
         ZIP code..........................  219  223 _     ____ ____ _
         ZIP+4 code........................  224  227 _     ____ ____ _
         Carrier route code............................... ____ ____
         Delivery point code..............................  228  230 _
         Delivery point check digit....................... ____ ____ _
        * blank=alpha/numeric B=binary P=packed S=signed_____
 F3=Exit   F5=Display physical file member   F7=Display file field description
  F12=Previous                                                      Roll up
```

Note: Use the output position fields only if you do not want the specified input fields updated by PER/ZIP4.

File name / definition number

Enter the name of the file you are defining and the number of the definition. These fields are only accessible when adding a new definition.

Text

Enter the text describing the definition. If this field is left blank and the system can find the file, the text describing the file will be inserted. This text description is for internal use only and does not appear on any reports generated by the system.

Key Number

Enter the input positions of the record key number to be printed on the coding report. This field is optional but if specified must be from 1 to 15 alpha/numeric, 2(4) or 4(9) binary, 1(1) to 8(15) packed numeric, or 1 to 15 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B", "P," or "S" respectively in the "*" column. If no key number is specified, the relative record number is used as the key number on the coding report.

Address lines

Enter the input and output positions of the address lines. These fields are optional, but if specified must be from 27 to 64 positions long and must all be the same length. At least three address lines should be defined; otherwise, the fixed format definition should be used. Leave the output positions blank if they are the same as the input positions. It is assumed that address information will be entered in a normal sequence in the defined address fields (name(s), address(es), city/state/ZIP). PER/ZIP4 will process the address lines from the bottom up, first trying to locate the city/state/ZIP line, then the delivery address, and last any secondary or firm information. If the record is successfully coded, the address lines will be compressed up in the stack so that any blank lines will be placed in the fields defined last.

ZIP Code

Enter the input and output positions of the ZIP Code. This field is required if the ZIP Code is not contained in the address lines and must be 5 or 10 alpha/numeric, 4(9) binary, 3(5) or 5(9) packed numeric, or 5 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B," "P," or "S" respectively in the "*" column. If the field is 4(9) binary or 5(9) packed positions long, it must contain the ZIP+4 Code appended to the ZIP Code. If the field is 10 unpacked positions long, PER/ZIP4 assumes the ZIP+4 Code is in the last four positions and will insert a hyphen in position 6 followed by the ZIP+4 Code when it codes the records. Leave the output positions blank if they are the same as the input positions. Optionally, only the output positions can be entered if the ZIP Code is contained in the address lines and you want it also placed in the defined positions.

ZIP+4 Code

Enter the input and output positions of the ZIP+4 Code. This field is required if the ZIP+4 Code is not contained in the address lines and must be 4 alpha/numeric, 2(4) binary, 3(5) packed numeric, or 4 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B," "P," or "S" respectively in the "*" column. Leave the output positions blank if they are the same as the input positions. Optionally, only the output positions can be entered if the ZIP+4 Code is contained in the address lines and you want it to also be placed in the defined positions.

Carrier route code

Enter the output positions of the carrier route code. This field is optional but if specified must be 4 positions long.

Delivery point code

Enter the output positions of the delivery point code. This field is optional but if specified must be 2 or 3 alpha/numeric, 2(4) binary, 2(3) packed numeric, or 2 or 3 signed numeric positions long. If the field is binary, packed numeric, or signed numeric, enter a "B," "P," or "S" respectively in the "*" column. A 2 position alpha/numeric or signed numeric field will contain only the delivery point code, while a 3 position alpha/numeric, 2(4) position binary, 2(3) position packed numeric, or 3 position signed numeric field will also contain the delivery point bar code check digit in the last position.

Delivery point check digit

Enter the output positions of the delivery point check digit. This field is optional but if specified must be 1 alpha/numeric, 1(1) packed numeric, or 1 signed numeric position long. If the field is packed numeric or signed numeric, enter a "P" or "S" respectively in the "*" column.

Function keys

F3   Exit the job.
F5   Display the first physical file member of the file being defined.
F7   Display the file field description of the file being defined.
F12   Go to the previous display.
Roll   Roll up to next display.

ADD/CHANGE FILE DEFINITION (FIXED OR FLOATING FORMAT) SCREEN 2

When the Roll up key is pressed on either the fixed or floating format file definition screen, the additional file definition add/change screens are displayed.

```
  5/16/13                     PER/ZIP4 - POSTAL CODING                  LYNNA
 11:32:50
                           WORK WITH FILE DEFINITIONS

        File name / definition number................ TNLAB      / 1
        Text..... WRSI label file_____

        Input / output positions.......... From Thru * / From Thru *
        Error code....................................... ____ ____
        County name...................................... ____ ____
        FIPS state/county number......................... ____ ____ _
        Congressional district number.................... ____ ____ _
        LACS indicator................................... ____ ____
        Street match level indicator..................... ____ ____
        Secondary address flag........................... ____ ____
        eLOT sequence number............................. ____ ____ _
        eLOT ascending/descending code................... ____ ____
        ZIP+4 coding date (YYMMDD)....................... ____ ____
        Urbanization (Puerto Rico)........ 101 130       ____ ____

         * blank=alpha/numeric B=binary P=packed S=signed_____
 F3=Exit   F5=Display physical file member   F7=Display file field description
 F12=Previous                                           Roll up/down
```

Error code

Enter the output positions of the error code. This field is optional but if specified must be 3 positions long. If specified, the same error code which prints on the postal coding report will be placed in this field.

County name

Enter the output positions of the county name. This field is optional, but if specified must be 25 to 64 positions long.

FIPS state/county number

Enter the output positions of the FIPS state/county number. This field is optional, but if specified must be 5 alpha/numeric, 4(9) binary, 3(5) packed numeric, or 5 signed numeric positions long.

Congressional district number

Enter the output positions of the congressional district number. This field is optional, but if specified must be 2 alpha/numeric, 2(4) binary, 2(3) packed numeric, or 2 signed numeric positions long.

LACS indicator

Enter the output positions of the LACS (locatable address conversion service) indicator. This field is optional, but if specified must be 1 position long. If an address has been LACS converted, this field will contain an "L" after processing.

Street match level indicator

Enter the output positions of the street match level indicator. This field is optional but if specified must be 1 position long. For street type addresses this field will contain the level of the match as follows:

   S = street match
   H = highrise match
   A = apartment (suite, room, etc.) match
   F = firm match
   N = nondelivery address match
   D = firm required to make match

When this field is used in conjunction with the secondary address flag, you can isolate addresses that are incomplete as given. If the street match level indicator is "H" and the secondary address flag is "Y," the firm name and/or apartment information may be missing or incorrect on the address.

Secondary address flag

Enter the output positions of the secondary address flag. This field is optional, but if specified must be 1 position long. For street type addresses this field will contain a "Y" if secondary address (apartment) records and/or firm records exist for the address. When this field is used in conjunction with the street match level indicator, you can isolate addresses that are incomplete as given. If the street match level indicator is "H" and the secondary address flag is "Y," the firm name and/or apartment information may be missing or incorrect on the address.

eLOT sequence number

Enter the output positions of the eLOT (enhanced line of travel) sequence number. This field is optional, but if specified must be 4 alpha/numeric, 2(4) binary, 3(5) packed numeric, or 4 signed numeric positions long. The LOT number is a sequential number that indicates the order in which add-on codes are arranged within a given carrier route. LOT information is used to qualify mailings for carrier route sortation discounts. This field will be output only if the optional eLOT database PER/ZIP4 component is installed.

eLOT ascending/descending code

Enter the output positions of the eLOT (enhanced line of travel) ascending/descending code. This field is optional but if specified must be 1 position long. The ascending/descending code indicates the order in which delivery points are delivered within an add-on code. LOT information is used to qualify mailings for carrier route sortation discounts. This field will be output only if the optional eLOT database PER/ZIP4 component is installed.

ZIP+4 coding date (YYMMDD)

Enter the output positions of the ZIP+4 coding date. This field is optional but if specified must be 6 positions long. If an address is successfully coded, this field will contain the coding date in year-month-day format. The field will be set to zero on records that cannot be ZIP+4 Coded.

Urbanization (Puerto Rico)

Enter the input and output positions of the urbanization field. Urbanizations are an important part of Puerto Rican addresses that denote an area, sector, or development within a geographic area. If a separate urbanization field does not exist in the address record, PER/ZIP4 checks the normal address lines for urbanization names when it encounters a Puerto Rican address. This field is optional but if specified must be from 20 to 64 positions long. Leave the output positions blank if they are the same as the input positions.

Function keys

F3   Exit the job.
F5   Display the first physical file member of the file being defined.
F7   Display the file field description of the file being defined.
F12   Go to the previous display.
Roll   Roll to next or previous display.

ADD/CHANGE FILE DEFINITION (FIXED OR FLOATING FORMAT) SCREEN 3

When the Roll up key is pressed from screen 2 of either the fixed or floating format file definition screen, the third file definition add/change screen is displayed.

```
 5/16/13                   PER/ZIP4 - POSTAL CODING                  LYNNA
11:56:42
                        WORK WITH FILE DEFINITIONS

        File name / definition number................ TNLAB      / 1
        Text..... WRSI label file_____

        Input / output positions......... From Thru * / From Thru *
        Early Warning System (EWS) flag................. ____ ____
        DPV confirmation indicator...................... ____ ____
        DPV CMRA indicator.............................. ____ ____
        DPV false positive indicator.................... ____ ____
        DPV footnote 1.................................. ____ ____
        DPV footnote 2.................................. ____ ____
        DPV footnote 3.................................. ____ ____
        Residential delivery indicator.................. ____ ____
        Occupancy code.................................. ____ ____



        * blank=alpha/numeric B=binary P=packed S=signed_____
 F3=Exit   F5=Display physical file member   F7=Display file field description
 F12=Previous                                              Roll up/down
```

Early Warning System (EWS) flag

Enter the output positions of the Early Warning System (EWS) flag. This field is optional but if specified must be 1 position long. If PER/ZIP4 cannot make an exact match to an address and the address is on the U.S.P.S. EWS file this flag will be set to "Y" and the record will be bypassed. Addresses with and EWS flag set to "Y" are currently not in the U.S.P.S. ZIP+4 database but will be in the near future.

DPV confirmation indicator

Enter the output positions of the DPV (Delivery Point Validation) confirmation indicator. This field is optional but if specified must be 1 position long. Output values for this field are:

- Y = address was DPV confirmed for both primary and, if present, secondary numbers
- D = address was DPV confirmed for the primary number only, and secondary number information was missing
- S = address was DPV confirmed for the primary number only, and secondary number information was present but unconfirmed
- N = both primary and, if present, secondary number information failed to DPV confirm

60

DPV CMRA indicator

Enter the output positions of the DPV CMRA (Commercial Mail Receiving Agent) indicator. This field is optional but if specified must be 1 position long. Output values for this field are:

- Y = address was found in the CMRA table
- N = address was not found in the CMRA table

DPV false positive indicator

Enter the output positions of the DPV false positive indicator. This field is optional but if specified must be 1 position long. Output values for this field are:

- Y = address is a false positive
- N = address is not a false positive

If a false positive is encountered DPV processing is immediately halted.

DPV footnotes 1-3

Enter the output positions of the DPV footnotes. These fields are optional but if specified must be 2 positions long. Output values for these fields are:

- AA = input address matched to the ZIP+4 file
- A1 = input address not matched to the ZIP+4 file
- BB = input address matched to DPV (all components)
- CC = input address primary number matched to DPV but secondary number not matched present but invalid)
- F1 = input address matched to a ZIP+4 military record
- G1 = input address matched to a ZIP+4 general delivery record
- N1 = input address primary number matched to DPV but highrise address missing secondary number
- M1 = input address primary number missing
- M3 = input address primary number invalid
- P1 = input address missing PO, RR, or HC box number
- P3 = input address PO, RR, or HC box number invalid
- RR = input address matched to CMRA and PMB designator present (PMB 123 or # 123)
- R1 = input address matched to CMRA but PMB designator not present (PMB 123 or # 123)
- U1 = input address matched to a ZIP+4 unique ZIP record

Residential delivery indicator

Enter the output positions of the residential delivery indicator (RDI). This field is optional but if specified must be 1 position long. If PER/RDI is not installed, any entries made in these fields are ignored. Output values for this field are:

- Y = address is a residence
- N = address is not a residence (business)

   NOTE: All Post Office Boxes will return a Y (residence) RDI code.

Occupancy code

Enter the output positions of the occupancy code. This field is optional but if specified must be 1 position long. If the occupancy code feature of PER/DPV is not installed, any entries made in these fields are ignored. Output values for this field are:

- N = nostats (mail delivery to this address has not started)
- V = vacant (this address is currently vacant)

Function keys

F3   Exit the job.
F5   Display the first physical file member of the file being defined.
F7   Display the file field description of the file being defined.
F12   Go to the previous display.
Roll   Roll to next or previous display.

ADD/CHANGE FILE DEFINITION (FIXED OR FLOATING FORMAT) SCREEN 4

When the Roll up key is pressed from screen 3 of either the fixed or floating format file definition screen, the fourth file definition add/change screen is displayed.

```
  5/16/13                     PER/ZIP4 - POSTAL CODING               LYNNA
 14:49:50
                          WORK WITH FILE DEFINITIONS

         File name / definition number................ TNLAB      / 1
         Text..... WRSI label file_____

         Input / output positions.......... From Thru * / From Thru *
         Record type code................................. ____ ____
         Default flag..................................... ____ ____
         Private Mail Box (PMB) designator................ ____ ____
         Private Mail Box (PMB) number.................... ____ ____
         Business/residential indicator................... ____ ____
         LACS-Link indicator.............................. ____ ____
         LACS-Link return code............................ ____ ____
         Suite-Link indicator............................. ____ ____
         Suite-Link return code........................... ____ ____



        * blank=alpha/numeric B=binary P=packed S=signed_____
 F3=Exit   F5=Display physical file member   F7=Display file field description
 F12=Previous                                            Roll up/down
```

Record type code

Enter the output positions of the record type code. This field is optional but if specified must be 1 alpha/numeric position long. Output values for this field are:

- S = Street
- P = PO Box
- R = Rural Route
- H = Highrise
- F = Firm
- G = General Delivery

Default flag

Enter the output positions of the default flag. This field is optional but if specified must be 1 alpha/numeric position long. This flag is set to "Y" if a match is made to a highrise or rural route default record.

Private Mail Box (PMB) designator

Enter the output positions of the PMB designator. This field is optional but if specified must be 4 alpha/numeric positions long.

Private Mail Box (PMB) number

Enter the output positions of the PMB number. This field is optional but if specified must be 8 alpha/numeric positions long.

Business/residential indicator

Enter the output positions of the Business/residential indicator. This field is optional but if specified must be 1 alpha/numeric position long. If PER/RDI is not installed, any entries made in these fields are ignored. Output values for this field are:

- B = business address
- R = residential address
- blank = address does not DPV Confirm therefore Business/Residential status could not be confirmed

LACS-Link indicator

Enter the output positions of the LACS-Link indicator. This field is optional but if specified must be 1 alpha/numeric position long. If PER/LLK is not installed, any entries made in these fields are ignored. Output values for this field are:

- Y = New address returned
- N = New address not returned

LACS-Link return code

Enter the output positions of the LACS-Link return code. This field is optional but if specified must be 2 alpha/numeric positions long. If PER/LLK is not installed, any entries made in these fields are ignored. Output values for this field are:

- A = LACS record match
- 00 = No match
- 09 = Cannot match LACS record: highrise default
- 14 = Found LACS record: new address would not convert at run time
- 92 = LACS record: secondary number dropped from input address

Suite-Link indicator

Enter the output positions of the Suite-Link indicator. This field is optional but if specified must be 1 alpha/numeric position long. If PER/SLK is not installed, any entries made in these fields are ignored. Output values for this field are:

- N = Address not updated by Suite-Link
- Y = Address updated by Suite-Link

Suite-Link return code

Enter the output positions of the Suite-Link return code. This field is optional but if specified must be 2 alpha/numeric positions long. If PER/SLK is not installed, any entries made in these fields are ignored. Output values for this field are:

- A = Suite-Link record match
- 00 = No match

Function keys

F3   Exit the job.
F5   Display the first physical file member of the file being defined.
F7   Display the file field description of the file being defined.
F12   Go to the previous display.
Roll   Roll to next or previous display.

ADD/CHANGE FILE DEFINITION (FIXED OR FLOATING FORMAT) SCREEN 5

When the Roll up key is pressed from screen 4 of either the fixed or floating format file definition screen, the fifth file definition add/change screen is displayed.

```
  5/16/13                    PER/ZIP4 - POSTAL CODING                 LYNNA
 15:04:27
                          WORK WITH FILE DEFINITIONS

         File name / definition number................ TNLAB      / 1
         Text..... WRSI label file_____

         Input / output positions.......... From Thru * / From Thru *
         Lat/Lon match quality indicator................. ____ ____
         Latitude........................................ ____ ____
         Longitude....................................... ____ ____
         2000 MSA code................................... ____ ____
         2000 MCD code................................... ____ ____
         2000 CDP code................................... ____ ____
         Census Tract.................................... ____ ____
         Census Block Group.............................. ____ ____
         Current MSA code................................ ____ ____
         Current Micropolitan SA code.................... ____ ____


        * blank=alpha/numeric B=binary P=packed S=signed_____
  F3=Exit   F5=Display physical file member   F7=Display file field description
  F12=Previous                                            Roll up/down
```

Lat/Lon match quality indicator

Enter the output positions of the latitude/longitude match quality indicator. This field is optional but if specified must be 1 alpha/numeric, 1(1) packed, or 1 signed numeric position long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored. Output values for this field are:

- 1 – Centroid located at the midpoint of the Zip+4 area
- 2 – Centroid located at the midpoint of the Zip+2 area
- 3 – Centroid located at the midpoint of the Carrier Route
- 4 – Centroid located at the midpoint of the 5-digit Zip Code area
- 5 – Centroid located at the midpoint of the associated incorporated city area
- 6 – Centroid located at the midpoint of the associated county area
- 7 – Centroid located at the midpoint of the 3-digit Zip Code area

Latitude

Enter the output positions of the latitude. This field is optional but if specified must be 9 alpha/numeric, 4(9) binary, 5(9) packed, or 9 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Longitude

Enter the output positions of the longitude. This field is optional but if specified must be 9 alpha/numeric, 4(9) binary, 5(9) packed, or 9 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

2000 MSA code

Enter the output positions of the 2000 Metropolitan Statistical Area (MSA) code. This field is optional but if specified must be 4 alpha/numeric, 2(4) binary, 3(5) packed, or 4 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

2000 MCD code

Enter the output positions of the 2000 Minor Civil Division (MCA) code. This field is optional but if specified must be 5 alpha/numeric, 4(9) binary, 3(5) packed, or 5 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

2000 CDP code

Enter the output positions of the 2000 Census Designated Place (CDP) code. This field is optional but if specified must be 5 alpha/numeric, 4(9) binary, 3(5) packed, or 5 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Census Tract

Enter the output positions of the Census Tract. This field is optional but if specified must be 6 alpha/numeric, 4(9) binary, 4(7) packed, or 6 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Census Block Group

Enter the output positions of the Census Block Group. This field is optional but if specified must be 1 alpha/numeric, 1(1) packed, or 1 signed numeric position long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Current MSA code

Enter the output positions of the current Metropolitan Statistical Area (MSA) code. This field is optional but if specified must be 5 alpha/numeric, 4(9) binary, 3(5) packed, or 5 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Current Micropolitan SA code

Enter the output positions of the current Micropolitan Statistical Area code. This field is optional but if specified must be 5 alpha/numeric, 4(9) binary, 3(5) packed, or 5 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Function keys

F3	Exit the job.
F5	Display the first physical file member of the file being defined.
F7	Display the file field description of the file being defined.
F12	Go to the previous display.
Roll	Roll to next or previous display.

ADD/CHANGE FILE DEFINITION (FIXED OR FLOATING FORMAT) SCREEN 6

When the Roll up key is pressed from screen 5 of either the fixed or floating format file definition screen, the sixth file definition add/change screen is displayed.

```
   5/16/13                    PER/ZIP4 - POSTAL CODING                    LYNNA
  15:54:40
                           WORK WITH FILE DEFINITIONS

          File name / definition number................ TNLAB      / 1
          Text..... WRSI label file_____

          Input / output positions.......... From Thru * / From Thru *
          Current Metropolitan Division Code.............. ____ ____ _
          Current Consolidated SA Code.................... ____ ____ _
          ZIP code class.................................. ____ ____
          Time zone....................................... ____ ____
          Telephone area code # 1......................... ____ ____ _
          Telephone area code # 2......................... ____ ____ _
          Telephone area code # 3......................... ____ ____ _




        * blank=alpha/numeric B=binary P=packed S=signed_____
  F3=Exit   F5=Display physical file member   F7=Display file field description
  F12=Previous                                                    Roll down
```

Current Metropolitan Division Code

Enter the output positions of the current Metropolitan Division Code. This field is optional but if specified must be 5 alpha/numeric, 4(9) binary, 3(5) packed, or 5 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Current Consolidated SA Code

Enter the output positions of the current Consolidated Statistical Area Code. This field is optional but if specified must be 3 alpha/numeric, 2(4) binary, 2(3) packed, or 3 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

ZIP code class

Enter the output positions of the ZIP code class. This field is optional but if specified must be 1 position long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored. Output values for this field are:

- M = military
- P = PO boxes only

- U = unique (single organization)
- blank = all others

Time zone

Enter the output positions of the time zone. This field is optional but if specified must be 1 position long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored. Output values for this field are:

- E = Eastern US
- C = Central US
- M = Mountain US
- P = Pacific US
- A = Alaska
- H = Hawaii

- V = Puerto Rico/Virgin Islands
- G = Guam
- S = American Samoa
- U = Palau
- N = Marshall Islands

Telephone area code # 1

Enter the output positions of the first telephone area code. This field is optional but if specified must be 3 alpha/numeric, 2(4) binary, 2(3) packed, or 3 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Telephone area code # 2

Enter the output positions of the second telephone area code. This field is optional but if specified must be 3 alpha/numeric, 2(4) binary, 2(3) packed, or 3 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Telephone area code # 3

Enter the output positions of the third telephone area code. This field is optional but if specified must be 3 alpha/numeric, 2(4) binary, 2(3) packed, or 3 signed numeric positions long. If Z4 LAT/LON is not installed, any entries made in these fields are ignored.

Function keys

F3   Exit the job.
F5   Display the first physical file member of the file being defined.
F7   Display the file field description of the file being defined.
F12   Go to the previous display.
Roll   Roll to next or previous display.

COPY FILE DEFINITIONS

When 3 (copy) is entered next to one or more file definitions on the select options screen, the file definition copy screen is displayed.

```
  5/17/13                    PER/ZIP4 - POSTAL CODING                    LYNNA
 09:37:44
                            WORK WITH FILE DEFINITIONS

 To rename copied record, type new name and definition number, press Enter.
 Press F12=Previous to return to change your choices.


 File name   Def  New name    Def
 TNMASTG      1    TNMASTG      _




 _____
  F12=Previous                                               (Page/roll)

```

New name

Enter the new file name. The combination of file name and definition number must not already exist in the file definition file.

Definition number

Enter the new definition number. The combination of file name and definition number must not already exist in the file definition file.

Function keys

F12   Go to the previous display.
Roll   Roll the list up or down (if "+" in the lower right of screen).

DELETE FILE DEFINITIONS

When 4 (delete) is entered next to one or more file definitions on the select options screen, the file definition delete screen is displayed.

```
  5/17/13                    PER/ZIP4 - POSTAL CODING               LYNNA
 09:41:35
                          WORK WITH FILE DEFINITIONS

 Press Enter to confirm your choices for Delete.
 Press F12=Previous to return to change your choices.


 File name   Def  Text
 TNMASTG      1   WRSI master file







 _____

  F12=Previous                                                (Page/roll)

```

Press enter to confirm the records to be deleted.

Function keys

F12   Go to the previous display.
Roll Roll the list up or down (if "+" in the lower right of screen).

PRODUCT MANAGEMENT

PER/ZIP4 modules can be installed and/or deleted using the Product Management screen. This screen is also valuable in determining which components are installed and whether they are installed to the production or test environment.

When installing components, the PER/MAIL media (DVD or CD-ROM) should first be loaded into the optical device shown in the upper right-hand corner of the screen. PER/ZIP4 should not be in use while installing or deleting components.

```
                      PER/MAIL - PRODUCT MANAGEMENT
                                               System:    S106D74E
 Type options, press Enter.                    Media level: 1305A
   1=Install   4=Delete                        Device: OPT01_____

                                     Size    Installed    Prod    Test
 Opt   Product     Type    Description  MB    Status       Level   Level
   _   PER/ZIP4    Base    Postal coding       3657  INSTALLED    1305A   .....
   _   PER/ZIP4    Option  eLOT database        357  INSTALLED    1305A   .....
   _   PER/ZIP4    Option  Occupancy database   100  INSTALLED    1305A   .....
   _   PER/ZIP4    Option  RDI database          25  .........    .....   .....
   _   PER/SORT    Base    Postal presorting     37  INSTALLED    1305A   .....




   P   P = load to production, T = load to test
_____
 F3=Exit
```

Postal Coding

This is the base PER/ZIP4 postal coding component and should already be installed. If you choose to delete this component, you must also delete all other components. An alternate method of deleting all components from the production environment is to use the **MLLIBR/PERDLTPRO** command. An alternate method of deleting all components from the test environment is to use the **MLLIBR/PERDLTTST** command.

eLOT Database

The optional PER/ZIP4 component eLOT database allows PER/ZIP4 to populate eLOT fields in your database. The eLOT number is a sequential number that indicates the order in which add-on codes are arranged within a given carrier route. eLOT information is used to qualify mailings for carrier route sortation discounts. **There is no additional cost for this PER/ZIP4 optional component.**

Occupancy Database

The optional PER/ZIP4 component Occupancy database allows PER/ZIP4 to populate occupancy fields in your database. The Occupancy database is provided by the USPS as part of the Delivery Point Validation (DPV) data set. This database allows PER/ZIP4 to return a one character field indicating the occupancy status of any address with a DPV confirmation indicator of "Y".   **There is no additional cost for this PER/ZIP4 optional component.**

The occupancy status will be represented by one of the following values:
- Blank = If the address DPV confirms, it is presumed to be occupied
- N = Nostats (mail delivery to this address has not started)
- V = Vacant (this address is currently vacant)

RDI Database

The optional PER/ZIP4 component RDI database allows PER/ZIP4 to populate Residential Delivery Indicator and/or Business/Residential Indicator fields in your database. The RDI database distributed with PER/ZIP4 is provided by the USPS. **There is an additional fee for this PER/ZIP4 optional component. For current pricing, visit our website at** www.WorksRight.com.

This database allows PER/ZIP4 to return a one character Residential Delivery Indicator indicating whether or not a valid address is a residence. The value returned will be one of the following:
- N = address is not a residence (business)
- Y = address is a residence

This database also allows PER/ZIP4 to return a one character Business/Residential Indicator indicating whether a valid address is a business or residence. The value derived for this field is more reliable than the Residential Delivery Indicator described above and is used as input for walk sequence carrier route presort mailings. The value returned will be one of the following:
- Blank = Business/Residential status could not be reliably determined
- B = Business
- R = Residence

Prior to March 2013, the RDI database was only available directly from the USPS.

PER/SORT - Postal Presorting

The base PER/SORT Postal presorting application is our legacy mail presort solution. If you are a licensee of PER/SORT or if you wish to evaluate or purchase PER/SORT, you can select this component for installation.

> **Note**: Use of PER/ZIP4 does not depend upon installation of PER/SORT. If you intend to use PER/ZIP4 for address standardization and validation only, do not select PER/SORT for installation.

Function keys

F3   Exit the Product Management screen.

ENTER PS FORM 3553 INFORMATION

U.S. Postal Service form 3553 (Coding Accuracy Support System (CASS) Report) is generated by PER/ZIP4 as a part of the postal coding report. This form requires the name and address of the list processor and the name and address of the mailer.

```
  5/22/13                   PER/ZIP4 - POSTAL CODING                 LYNNA
 16:42:37
                         ENTER PS FORM 3553 INFORMATION


                    ------- Name and address of list processor -------
            Line 1... WORKSRIGHT SOFTWARE, INC._____
            Line 2... PO BOX 1156_____
            Line 3... MADISON MS  39130-1156_____
            Line 4... _____
            Line 5... _____
            Line 6... _____


                    -- Name and address of mailer (if not as above) --
            Line 1... _____
            Line 2... _____
            Line 3... _____
            Line 4... _____
            Line 5... _____
            Line 6... _____
 _____
  F3=Exit   F12=Previous
```

Name and address of list processor

Enter the name and address of your company. Up to six lines are provided for this information.

Name and address of mailer (if not same as above)

Enter the name and address of the mailer. Up to six lines are provided for this information. If your company is the mailer, you can leave these fields blank, and the name and address given for the list processor will be used for that of the mailer on PS form 3553.

Function keys

F3   =   Exit the Form 3553 Information screen.
F12 =   Go to the previous display.

SET SYSTEM VALUES

The command Z4SYSVAL allows you to change the PER/ZIP4 system values.

```
  5/22/13                    PER/ZIP4 - POSTAL CODING                  LYNNA
 16:52:25
                              SET SYSTEM VALUES


         For coding reports...
           Characters per inch override....................... 10__
         For CASS (3553) report...
           Device type override........................... LASER___
           Overlay offset down (inches - laser only).......... 012_
           Overlay offset across (inches - laser only)........ 012_
           Print in uppercase (line printer only)? (Y=yes N=no)... N
         Maximum number of prompt screens to retrieve (for F9)... 10
         User profiles to receive system messages........ QSYSOPR___
                                                          QSECOFR___
         Printer to receive system messages............. *SYSVAL___




 _____

  F3=Exit    F12=Previous
```

Characters per inch override (coding reports)

Enter a characters per inch value (e.g., 10, 15) to use when printing the coding reports. When this system value is set to a number other than 10, any value entered for the "Characters per inch" prompt on the printer options screen is ignored.

Device type override (CASS report)

Enter one of the following values to force the CASS (3553) report to print in line printer format or in overlay format:

- blank = IPDS nonlaser printer (line printer)
- LASER = IPDS laser printer (overlay if AFP = *YES)
- SCS = SCS nonlaser printer (line printer)
- SCSLASER = SCS laser printer (line printer)
- 4234 = 4234 IPDS printer (line printer)
- 4235 = 4235 IPDS printer (line printer)

Overlay offset down (CASS report)

This value only affects the printing of the CASS (3553) report in overlay format. It should normally not be changed.

Overlay offset across (CASS report)

This value only affects the printing of the CASS (3553) report in overlay format. It should normally not be changed.

Print in uppercase (line printer only)? (Y=yes N=no) (CASS report)

Indicate if PER/ZIP4 is to print the CASS report in all uppercase characters. The application is shipped with this value set to N (the CASS report is printed in mixed case). This value is used only for the line printer format of the PS-3553.

Maximum number of prompt screens to retrieve (for F9)

On batch processing prompt screens, previous parameter setups are available by pressing the F9=Retrieve command key. PER/ZIP4 is shipped with this value set to 10 (the application saves the last ten sets of prompt screen parameters that were run). You can change the number to any value between 1 and 99 to meet your needs.

User profiles to receive system messages

Enter the user profiles that are to receive database expiration messages. These messages are issued when the database will expire in ten days or less.

Printer to receive system messages

Enter the name of the printer that is to receive database expiration messages. These messages are issued when the database will expire in ten days or less.

Function keys

F3   Exit the job.
F12   Go to the previous display.

This page intentionally left blank.

CHAPTER 5 - UTILITY FUNCTIONS

The utility functions menu contains options to save the PER/ZIP4 product library and perform electronic customer support tasks. Option two allows you clear the temporary works file used by PER/ZIP4 during the search function.

```
MLZ410                     PER/ZIP4 - Utility Functions

 Select one of the following:

     1. Display PER/MAIL installed libraries
     2. Clear PER/ZIP4 work files

    90. Sign off




                                         COPYRIGHT (C) 2013 PER SOFTWARE, INC.
 Selection or command
 ===> _____
 _____
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel
 F13=Information Assistant  F16=System main menu
```

DISPLAY PER/MAIL INSTALLED LIBRARIES

This option allows you to identify which PER/MAIL monthly update libraries currently reside on your system. Following our naming convention (ML*yymmv*) where *yy*=year, *mm*=month, and *v*=version, you can tell the year and month of each update. For example: ML1305A is the library for the May, 2013 PER/MAIL monthly update.

This option also indicates the environment (*TEST, PRODUCTION*, or *PREVIOUS*) in which each library is available.

```
                    PER/MAIL - PRODUCT MANAGEMENT
                                               System:    S106D74E


   PER/MAIL product libraries currently installed on your system:


         Test . . . . . . . . .   ML1306A

         Production . . . . . .   ML1305A

         Previous . . . . . . .   ML1304A




   _____

   F3=Exit

```

Test...

This is the name of the PER/MAIL monthly update library currently installed in the *TEST* environment. This library can be promoted to production by executing the following command from the PER/ZIP4 Main Menu: **PERSETVER PREVTEST(*TEST)**. This library can be deleted by executing the following command from the PER/ZIP4 Main Menu: **PERDLTTST**.

Production...

This is the name of the PER/MAIL monthly update library currently installed in the *PRODUCTION* environment. This library can be deleted by executing the following command from the PER/ZIP4 Main Menu: **PERDLTPRO**.

Previous...

This is the name of the PER/MAIL monthly update library currently installed in the *PREVIOUS* environment. This library can be moved back to production by executing the following command from the PER/ZIP4 Main Menu: **PERSETVER PREVTEST(*PREV)**. This library can be deleted by executing the following command from the PER/ZIP4 Main Menu: **PERDLTPRV**.

Function keys

F3   Exit the job.

This page intentionally left blank.

CHAPTER 6 – REPORTS

On the following pages you will find samples of the printed output produced by PER/ZIP4.

PER/ZIP4 generates the following documents:

1. **United States Postal Service Form 3553** - This is commonly called the "CASS Report." This is the document you provide to the USPS to prove that your mailing files have been properly postal coded.

2. **Postal Coding Report** – This is a detail report showing individual records that were coded. Records that were not coded have an error code listed.

3. **Address Standardization Exceptions Report** - This report identifies records containing addresses that, once standardized, will not fit in the available field size. PER/ZIP4 attempts to compress the address so that it will fit the available space. If the address cannot be compressed sufficiently, a line of asterisk will print on the report and the address line will not be updated in the file. However, the ZIP Code and ZIP+4 will be updated.

4. **LACS-Link Address Conversions Report** - This report identifies records containing addresses that were changed as a result of LACS-Link processing. LACS is an acronym for Locatable Address Conversion System. USPS LACS-Link data and technology enables PER/ZIP4 to automatically update rural-style addresses with new, locatable city-style addresses in areas that are conducting E-911 emergency response address conversions.

5. **Suite-Link Address Updates Report** - This report identifies records containing addresses that were changed as a result of Suite-Link processing. USPS Suite-Link data and technology enables PER/ZIP4 to correct invalid secondary address information and append missing secondary address information to business addresses located in high-rise buildings.

UNITED STATES POSTAL SERVICE FORM 3553

UNITED STATES POSTAL SERVICE

This form may be generated as the output of address matching processing using CASS Certified™ software in conjunction with current USPS® address database files. Any facsimile must contain the same information in the same format as the printed form.

See DMM® Section 708 for more information.

CASS™ Summary Report

A. Software

1. CASS Certified Company Name	2. CASS Certified Software Name & Version	3. Configuration
P.E.R. Software, Inc.	PER/ZIP4 8.02.00.N	STD

CASS A1

4. Z4Change Certified Company Name	5. Z4Change Certified Software Name & Version	6. Configuration

7. DirectDPV™ Certified Company Name	8. DirectDPV Certified Software Name & Version	9. Configuration

10. eLOT® Certified Company Name	11. eLOT Certified Software Name & Version	12. Configuration

MASS A2

1. MASS™ Certified Company Name	2. MASS Certified Software Name, Version & Model No.	3. Configuration
		4. MLOCR Serial No.

B. List

1. List Processor's Name	2. Date List Processed	3. Date of Database Product Used
WORKSRIGHT SOFTWARE, INC. PO BOX 1156 MADISON, MS 39130-1156	a. Master File 5/28/2013	a. ZIP + 4® File 5/15/2013
	b. Z4Change	b. Z4Change
	c. DirectDPV	c. DirectDPV
	d. eLOT	d. eLOT
	e. CRIS	e. CRIS

4. List Name or ID No. (If using ID No., number must start with ID #)	5. Number of Lists	6. Total Records Submitted for Processing
PZ4TESTLIB/TNMASTG/*FIRST/1	1	80,797

C. Output

Output Rating	1. Total Coded	2. Validation Period	Output Rating	1. Total Coded	2. Validation Period
a. ZIP + 4/DPV Confirmed	75,643	From 5/28/2013 To 11/24/2013	d. 5-Digit Coded	79,287	From 5/28/2013 To 5/28/2014
b. Z4Change Processed			e. CRRT Coded		From To
c. DirectDPV		From To	f. eLOT Assigned		From To

D. Mailer

I certify that the mailing submitted with this form has been coded (as indicated above) using CASS Certified software meeting all of the requirements listed in the DMM Section 708.

1. Mailer's Signature	2. Date Signed

3. Name and Address of Mailer
WORKSRIGHT SOFTWARE, INC.
PO BOX 1156
MADISON, MS 39130-1156

E. Qualitative Statistical Summary (QSS)

For informational Purposes Only: QSS is solely made available for the list processor's review and analysis. This information is not to be considered by U.S. Postal Service® personnel in determining rate eligibility under any circumstances. See reverse for a detailed explanation.

High Rise Default	High Rise Exact	RR Default	RR Exact	LACS™	EWS	Suite™
12779	4920	0	7	7	5	18

Privacy Notice: For information regarding our Privacy Policy, visit USPS.COM®.

PS Form **3553**, August 2011 (Page 1 of 2)   This form available on the web at http://about.usps.com/forms/all-forms.htm

Instructions

A. Software

A1.1, 1.4, 1.7, & A2.1 – **Company Name:** Enter the name for *each kind of software* as it appears on the CASS™/MASS™ certificate.

A1.2, 1.5, 1.8, & A2.2 – **Software Name and Version:** Enter name and version for *each kind of software* as it appears on the CASS/MASS certificate.

A1.3, 1.6, 1.9, & A2.3 – **Configuration:** Enter the specific software configuration parameter settings as it appears on the CASS/MASS certificate.

A2.4 – **MLOCR:** Enter the MLOCR Serial Number as it appears on the MASS Certificate.

NOTE: If information entered in this section represents the list processing of more than one certified company, attach a list of company names, software names and versions, as well as the configuration to code the address information used in the mailing.

B. List

1. **List Processor's Name:** Enter the company name that coded the address list(s) and/or performed ZIP + 4®/DPV® confirmation using CASS Certified™ software. Attach a list if additional space is required.
2. **Date List Processed:** Enter the processing date for each list. If multiple lists, enter the oldest date from the list.
3. **Date of Database Product Used:** Enter the version date of each database package used for processing. If multiple lists, enter the oldest version date from the lists.
4. **List Name or ID No.:** Print the name or identification number of the address list. If more than one list is used, leave blank. If the identification number is used, the number MUST be preceded by "ID#".
5. **Number of Lists:** Enter the number of lists used to produce the mailing.
6. **Total Records Submitted for Processing:** Enter the total number of address records *(from all lists in item B5)* submitted at the time the list(s) was coded.

C. Output

1. **Total Coded:** Enter the total number coded.
2. **Validation Period:** Enter the effective dates as shown below:

Product Name	From Date	To Date
ZIP + 4/DPV Confirmed	30 days before *(the 15th of each month or bi- monthly)* or no later than 105 days after the file date.	180 days after the ZIP + 4 valid "From" date.
DirectDPV™	30 days before *(the 15th of each month or bimonthly)* or no later than 105 days after the ZIP + 4 product file date.	180 days after the DirectDPV/ZIP + 4 valid "From" date.
Five-Digit Coded	30 days before *(the 15th of each month or bimonthly)* or no later than 105 days after the ZIP + 4, Five-digit ZIP, or the Carrier Route product date.	365 days after the Five-Digit Valid "From" date.
Total Carrier Route Coded	30 days before or up to 105 days after the ZIP + 4, Five-Digit ZIP™, or the Carrier Route product date *(the 15th of each month or bimonthly)* or up to 105 days after the file date.	90 days after the Carrier Route Valid "From" date.
eLOT® Sequence No. Assigned	30 days before or up to 105 days after the eLOT file product date *(the 15th of each month or bimonthly)*.	90 days after the eLOT valid "From" date.

D. Mailer

1. **Signature:** Signature of individual who processed the list, or the mailer's representative.
2. **Date Signed:** Enter the date this form is signed.
3. **Name & Address of Mailer:** Enter the name and address of the individual whose signature appears in item D1.

E. Qualitative Statistical Summary (QSS)

This information allows mailers and list processors to evaluate the quality of their address list processed through CASS software before its contents enter the mailstream. A significant number of Highrise default/rural route default matches, although these addresses remain eligible for postal automation rate discounts at this time, increase the costs and reduce the efficient delivery of this mail. Mailer's should research to obtain secondary unit designator address information or highrise addresses and specific box number information for rural route addresses which are coded to default records on the National ZIP + 4 File.

Highrise Default/RR Default

Entries in this box show the number of addresses that were default matched. Defaults are matches made to addresses that contain invalid/missing secondary address or box information. A highrise default contains the building street address in the primary range field and spaces in the secondary range field. A rural route default contains the route number in the primary name but also has spaces in the primary address range.

LACS^Link® System

Entries in this box show the number of addresses which have been converted through the LACS^Link process. LACS^Link is a data product provided by the Postal Service to allow addresses that have been converted due to USPS changes or for 911 emergency systems to be linked with their new address.

Early Warning System (EWS)

Entries in this box show the number of addresses on the processed address list that are new addresses not in the current U.S. Postal Service® ZIP + 4 File. These addresses are, however, valid addresses as formatted and should not be changed in any way since the U.S Postal Service will assign ZIP + 4's to these addresses on the next monthly ZIP + 4 File.

Suite^Link® System

Entries in this box show the number of ZIP+4/DPV confirmed addresses that matched to a highrise default, and the Suite^Link process returned the appropriate suite number. Only Suite^Link enabled software will return a value in this box *(Check with your software vendor for obtaining this option)*. These address records are valid delivery points by the U.S. Postal Service. Addresses that are not confirmed by DPV are either new addresses not available on the current Delivery Sequence File, or are not valid and the list holder should further investigate to determine the accuracy of these addresses. Mailers should make every effort to ensure the quality of their address list(s).

PER/ZIP4 POSTAL CODING REPORT

```
PZ4TESTLIB/TNMASTG/*FIRST/1          PER/ZIP4 - POSTAL CODING                          PAGE    6
PZ4TESTLIB/TNMASTG/*FIRST/1           CODING REPORT  5/28/13
---- KEY # ---- COD ------ FIRM NAME ------- -------- ADDRESS ------- -------- LAST LINE --------

    00021286 DPV TIMBERLAND COMPANY              PO BOX 700                STRATHAM NH 03885

    00021292     EMERY AND WEBB INC              989 MAIN ST               FISHKILL NY 12524-1784
                 EMERY AND WEBB INC              989 MAIN ST               FISHKILL NY 12524-1751

    00021298 ANS ENCORE MANUFACTURING CORP       4310 CARNEGIE AVE         CLEVELAND OH 44103

    00021362 BNC FIBRE BOND CORP                 PO BOX 5001               MINDEN LA 71058

    00021470 DPV FREMONT MUTUAL INS              933 W MAIN ST             FREMONT MI 49412

    00021602 ANS GREAT PLAINS VENTURES INC       3526 N OLIVER ST          WICHITA KS 67220

    00021652 DPV HAHN TRUCK LINE INC             1100 S MACARTHUR BLVD      OKLAHOMA CITY OK 73128

    00021662 ANS HANDY & HARMAN TUBE             701 W TOWNSHIP LINE RD     NORRISTOWN PA 19403

    00021670 ANS NATIONAL REFRACTORIES           2 GATEWAY CTR STE 380S     PITTSBURGH PA 15222

    00021678 DPV HARRISON-WRIGHT COMPANY         305 S CHURCH ST            CHARLOTTE NC 28202

    00021706 DPV HEALTHCARE AMERICA              PO BOX 4008                AUSTIN TX 78765

    00021746 BNC HILL'S PET PRODUCTS             PO BOX 30309               BOWLING GREEN KY 42102

    00021776 DPV TOM HOPKINS CONSTRUCTION        PO BOX 1888                SANTA CRUZ CA 95061

    00021800 DPV A H HUMMERT SEED COMPANY        2746 CHOUTEAU AVE          SAINT LOUIS MO 63103

    00021856 DPV IMPERIAL BOND WEAR              12901 STATE ROUTE 31       KENTON OH 43326

    00021908 DPV INTERCOASTAL SERVICE INC        PO BOX 1000                SHALLOTTE NC 28459

    00022020 BNC DAKIN INC                       PO BOX 7746                SAN FRANCISCO CA 94120

    00022054 DPV KAY BEER DIST INC               PO BOX 269                 DE PERE WI 54115

    00022270 DPV M CONLEY COMPANY                1300 4TH ST SE             CANTON OH 44707

    00022280 DPV EATON CORP                      PO BOX 1028                HUTCHINSON KS 67504

    00022286 DPV MALLINCKRODT INC                PO BOX 17627               RALEIGH NC 27619

    00022350 DPV MC COY MANAGEMENT SERVICE       PO BOX 668                 MADISONVILLE KY 42431

    00022394 DPV MEDICAL RADIOLOGISTS INC        1596 W DOROTHY LN          DAYTON OH 45409

    00022478 BNC ALLIS MINNERAL SYSTEMS DI       PO BOX 15312               YORK PA 17405

    00022482 DPV MINI COMPUTER SERVICES          15 1ST AVE SW STE 301      MINOT ND 58701

    00022490 DPV MINOT FOOD PACKERS INC          1 PENN ST                  BRIDGETON NJ 08302

    00022504 DPV MIX INTERNATIONAL LIGHTIN       1120 MEIGS AVE             JEFFERSONVILLE IN 47130
```

```
PZ4TESTLIB/TNMASTG/*FIRST/1                    PER/ZIP4 - POSTAL CODING
PZ4TESTLIB/TNMASTG/*FIRST/1                    CODING REPORT 5/28/13                                    PAGE 206
---- KEY # ----- COD ------- FIRM NAME ------ ------ ADDRESS ------ ------ LAST LINE ------
```

```
---------------- RETURN CODE STATISTICS ----------------

CODE TYPE DESCRIPTION                                                    COUNT   % TTL

ADR  ERR  INSUFFICIENT ADDRESS INFORMATION.................               1     .00
ALT  INFO ADDRESS CHANGED FROM ALTERNATE TO BASE...........               0     .00  *
ANS  ERR  ADDRESS NOT ON STREET..........................              658     .81
BNC  ERR  PO BOX NOT FOUND IN CITY (FINANCE NUMBER)........              401     .49
BNR  INFO BOX MISSING OR NOT FOUND IN RR/HC (DEFAULT TAKEN).               0     .00  *
DBE  ERR  USPS D/B EXCEPTION (FIRM NAME REQUIRED TO MAKE MATCH)            0     .00
DPV  ERR  ADDRESS COULD NOT BE DPV COMFIRMED...............             3578    4.42
EWS  ERR  EARLY WARNING SYSTEM MATCH (MAY CODE IN THE FUTURE)              5     .00
LLK  INFO ADDRESS LACS-LINK CONVERTED.....................                7     .00  *
LLN  ERR  INSUFFICIENT LAST LINE (CITY, STATE, ZIP) INFORMATION.         339     .41
MLT  ERR  MULTIPLE ADDRESSES FOUND........................               17     .02
NDA  ERR  NON-DELIVERY ADDRESS............................               66     .08
PGM  ERR  PROGRAM ERROR...................................                0     .00
RNF  ERR  RR/HC NUMBER NOT FOUND IN CITY (FINANCE NUMBER)...              21     .02
SLK  INFO SECONDARY ADDRESS INFORMATION UPDATED BY SUITE-LINK.            18     .02  *
SNF  ERR  STREET NOT FOUND IN CITY (FINANCE NUMBER)........               47     .05
STR  ERR  STREET NAME NOT FOUND...........................               21     .02
XST  ERR  ZIP+4 DATABASE MEMBER MISSING FOR STATE.........                0     .00

TOTAL RECORDS REJECTED....................................             5154    6.37

TOTAL RECORDS CODED.......................................            75643   93.62

TOTAL RECORDS PROCESSED...................................            80797  100.00

* NOT INCLUDED IN TOTAL RECORDS REJECTED
```

PER/ZIP4 - POSTAL CODING

PZ4TESTLIB/TNMASTG/*FIRST/1   ADDRESS STANDARDIZATION EXCEPTIONS   5/28/13   PAGE   1
PZ4TESTLIB/TNMASTG/*FIRST/1

KEY #	STANDARDIZED ADDRESS	OUTPUT ADDRESS	ADR LINE	FLD LENG	REQ LENG	MESSAGE
00002042	245 PEACHTREE CENTER AVE NE STE 2220	245 PEACHTREE CENTER AVE NE # 2220	D/1	35	36	ABV TO 34
00154310	1211 AVENUE OF THE AMERICAS STE 1900	1211 AVENUE OF THE AMERICAS # 1900	D/1	35	36	ABV TO 34
00197808	400 INTERSTATE NORTH PKWY SE STE 1600	400 INTERSTATE NORTH PKWY SE # 1600	D/1	35	37	ABV TO 35
00265832	1250 E HALLANDALE BEACH BLVD STE 901	1250 E HLND BCH BLVD STE 901	D/1	35	36	ABV TO 28
00272962	2901 W KINNICKINNIC RIVER PKWY STE 415	2901 W KK RIVER PKWY STE 415	D/1	35	38	ABV TO 28
00277972	1285 AVENUE OF THE AMERICAS FL SCONC1	1285 AVE OF TH AMER FL SCONC1	D/1	35	37	ABV TO 29
00290566	8505 W IRLO BRONSON MEMORIAL HWY OFC	8505 W IBM HWY OFC	D/1	35	36	ABV TO 18
00305682	180 INTERSTATE NORTH PKWY SE STE 500	180 INTERSTATE NORTH PKWY SE # 500	D/1	35	36	ABV TO 34
00571688	8505 W IRLO BRONSON MEMORIAL HWY OFC	8505 W IBM HWY OFC	D/1	35	36	ABV TO 18
00597336	6689 PEACHTREE INDUSTRIAL BLVD STE D	6689 PCHTR IND BLVD STE D	D/1	35	36	ABV TO 25
00772459	150 INTERSTATE NORTH PKWY SE STE 300	150 INTERSTATE NORTH PKWY SE # 300	D/1	35	36	ABV TO 34
00773315	5808 LAKE WASHINGTON BLVD NE STE 100	5808 LK WASH BLVD NE STE 100	D/1	35	36	ABV TO 28
00775993	1230 AVENUE OF THE AMERICAS FL CONC1	1230 AVE OF TH AMER FL CONC1	D/1	35	36	ABV TO 28
00992020	180 INTERSTATE NORTH PKWY SE STE 180	180 INTERSTATE NORTH PKWY SE # 180	D/1	35	36	ABV TO 34
04022323	2323 N DR MARTIN LUTHER KING DR. STOP 2	2323 N M L KING DR STOP 2	D/1	35	38	ABV TO 25
08222340	14601 BEN C PRATT/6 MILE CYPRESS PKWY	14601 BEN 6 MILE PKWY	D/1	35	37	ABV TO 21
08224382	716 RICHARD ARRINGTON JR BLVD N RM 22	716 ARRINGTON BLVD N RM 22	D/1	35	37	ABV TO 26
08243138	8250 WOODFIELD CROSSING BLVD STE 400	8250 WDFLD XING BLVD STE 400	D/1	35	36	ABV TO 28
08246150	1 NW MARTIN LUTHER KING JR BLVD RM 106	1 NW M L KING BLVD RM 106	D/1	35	38	ABV TO 25
80674324	1301 W PRESIDENT GEORGE BUSH HWY STE 330	1301 W GEORGE BUSH HWY STE 330	D/1	35	40	ABV TO 30

88

PER/ZIP4 LACS-LINK ADDRESS CONVERSIONS REPORT

```
8:50 AM
PZ4TESTLIB/TNMASTG/*FIRST/1                    PER/ZIP4 - POSTAL CODING
                                  LACS-LINK ADDRESS CONVERSIONS  5/28/13              PAGE   1
---- KEY # ----     ------- ADDRESS -------                ------- LAST LINE -------

00305726  OLD       8 SUBURBAN PARK DR # 2
          NEW       8 SUBURBAN PARK DR # 2                  BILLERICA MA 01821-3903

00774293  OLD       8 SUBURBAN PARK DR # 2
          NEW       8 SUBURBAN PARK DR # 2                  BILLERICA MA 01821-3903

08229226  OLD       480 LINDEN AVE
          NEW       480 DR MARTIN LUTHER KING JR DR         MEMPHIS TN 38126-1943

08229228  OLD       594 LINDEN AVE
          NEW       594 DR MARTIN LUTHER KING JR DR         MEMPHIS TN 38126-1941

08299326  OLD       RR 1 BOX 100
          NEW       1028 MONUMENT RD                        LOVING TX 76460-5416

80076624  OLD       8 SUBURBAN PARK DR # 2
          NEW       8 SUBURBAN PARK DR # 2                  BILLERICA MA 01821-3903

85032652  OLD       5000 CHESHIRE LN N STE 1
          NEW       5000 CHESHIRE PKWY N STE 1              MINNEAPOLIS MN 55446-4104

     7 ADDRESSES LACS-LINK CONVERTED
```

PER/ZIP4 SUITE-LINK ADDRESS UPDATES REPORT

P24TESTLIB/TNMASTG/*FIRST/1

PER/ZIP4 - POSTAL CODING
SUITE-LINK ADDRESS UPDATES   5/28/13   PAGE   1

KEY #		FIRM NAME	ADDRESS	LAST LINE
00003708	OLD	KELLY SCOTT AND MADISON INC	35 E WACKER DR STE 1150	
	NEW	KELLY SCOTT AND MADISON INC	35 E WACKER DR STE 1400	CHICAGO IL 60601-2110
00151282	OLD	MASSACHUSETTS FINANCIAL SERVIC	500 BOYLSTON ST FL 7	
	NEW	MASSACHUSETTS FINANCIAL SERVIC	500 BOYLSTON ST LBBY 3	BOSTON MA 02116-3787
00249204	OLD	CENTRAL ASSOC MIRACULOUS MEDAL	475 E CHELTEN AVE	
	NEW	CENTRAL ASSOC MIRACULOUS MEDAL	475 E CHELTEN AVE STE 1	PHILADELPHIA PA 19144-5790
00251526	OLD	COLLINS DEV ASSET MNGMNT GRO	11750 SORRENTO VALLEY RD	
	NEW	COLLINS DEV ASSET MNGMNT GRO	11750 SORRENTO VALLEY RD STE 200	SAN DIEGO CA 92121-1019
00263072	OLD	HARRIS INC REALTORS	2604 RIDGE RD	
	NEW	HARRIS INC REALTORS	2604 RIDGE RD STE 1	ROCKWALL TX 75087-5524
00593830	OLD	TRICOM MANAGEMENT INC	1300 N KELLOGG DR	
	NEW	TRICOM MANAGEMENT INC	1300 N KELLOGG DR STE B	ANAHEIM CA 92807-1967
00772609	OLD	FIDELITY INVESTMENTS	100 SUMMER ST FL 7	
	NEW	FIDELITY INVESTMENTS	100 SUMMER ST STE 2200	BOSTON MA 02110-2116
00991750	OLD	COUNTY OF CLEVELAND BD OF ED	130 S POST RD	
	NEW	COUNTY OF CLEVELAND BD OF ED	130 S POST RD STE 2	SHELBY NC 28152-6206
08170942	OLD	BARNES AND NOBLE	120 5TH AVE	
	NEW	BARNES AND NOBLE	120 5TH AVE FL 2	NEW YORK NY 10011-5666
08170944	OLD	BARNES AND NOBLE	120 5TH AVE	
	NEW	BARNES AND NOBLE	120 5TH AVE FL 2	NEW YORK NY 10011-5666
08194330	OLD	D O D	9800 SAVAGE RD	
	NEW	D O D	9800 SAVAGE RD STE 6856	FORT GEORGE G MEADE MD 20755-6856
08252514	OLD	COUNTY OF MUSKEGON	990 TERRACE ST	
	NEW	COUNTY OF MUSKEGON	990 TERRACE ST STE C	MUSKEGON MI 49442-3396
08274810	OLD	MARRIOTT INC	540 N MICHIGAN AVE	
	NEW	MARRIOTT INC	540 N MICHIGAN AVE STE 1	CHICAGO IL 60611-3869
08275116	OLD	IIT RESEARCH INST	10 W 35TH ST	
	NEW	IIT RESEARCH INST	10 W 35TH ST STE 1	CHICAGO IL 60616-3799
08300644	OLD	GALTNEY GROUP	820 GESSNER RD	
	NEW	GALTNEY GROUP	820 GESSNER RD STE 1850	HOUSTON TX 77024-4274
08319002	OLD	M S A LOS ANGELES	12121 WILSHIRE BLVD	
	NEW	M S A LOS ANGELES	12121 WILSHIRE BLVD STE 1120	LOS ANGELES CA 90025-1164
08320466	OLD	OMELVENY AND MYERS	400 S HOPE ST	
	NEW	OMELVENY AND MYERS	400 S HOPE ST FL 10	LOS ANGELES CA 90071-2899
86026645	OLD	UNITED HEALTH CARE	3141 N 3RD AVE	
	NEW	UNITED HEALTH CARE	3141 N 3RD AVE STE 100	PHOENIX AZ 85013-4351

18 ADDRESSES SUITE-LINK CONVERTED

APPENDIX A

The following components of PER/ZIP4 were once optional but are now required by the USPS Postal Service for CASS processing. Since these components are no longer optional, they are automatically installed with the PER/ZIP4 base Postal Coding module. They cannot be removed or disabled.

PER/DPV – DELIVERY POINT VALIDATION

In August of 2007 the United States Postal Service began requiring that all CASS Certified™ postal coding solutions perform DPV (Delivery Point Validation) as part of CASS processing.   This functionality is built into PER/ZIP4.

DPV allows PER/ZIP4 to indicate whether or not an exact address is a valid delivery point for the USPS. Prior to the introduction of DPV, PER/ZIP4 could only determine that an address matched to an <u>address range</u> present in the USPS National Zip+4 database. DPV allows PER/ZIP4 to provide the highest level of address validation available.

The US Postal Service has estimated that an additional 5 to 8% improvement in delivery quality is achieved by including DPV as a required component of CASS processing. In addition to the basic "yes" or "no" match indicator, DPV provides additional information about the quality of the match, such as whether an apartment or suite number is missing.

DPV allows PER/ZIP4 to provide the following information for addresses processed:

DPV confirmation indicator

- **Y** - Address was DPV confirmed for both primary and, if present, secondary numbers

- **D** - Address was DPV confirmed for the primary number only, and secondary number information was missing

- **S** - Address was DPV confirmed for the primary number only, and secondary number information was present but unconfirmed

- **N** - Both primary and, if present, secondary number information failed to DPV confirm

DPV CMRA indicator (CMRA = commercial mail receiving agent)

- **Y** - Address was found in the CMRA table

- **N** - Address was not found in CMRA table

DPV footnotes

- **AA** - Input address matched to the ZIP+4 file

- **A1** - Input address not matched to the ZIP+4 file

- **BB** - Input address matched to DPV (all components)

- **CC** - Input address primary number matched to DPV but secondary number not matched (present but invalid)

- **N1** - Input address primary number matched to DPV, but highrise address missing secondary number

- **M1** - Input address primary number missing

- **M3** - Input address primary number invalid

- **P1** - Input address missing PO, RR, or HC box number

- **P3** - Input address PO, RR, or HC box number invalid

- **RR** - Input address matched to CMRA and PMB designator present (PMB 123 or # 123)

- **R1** - Input address matched to CMRA but PMB designator not present (PMB 123 or # 123)

DPV information is returned by all three PER/ZIP4 interfaces; Interactive, Batch, and Callable Program (API).

Interactive Interface

While using the PER/ZIP4 interactive interface, if an address does not DPV confirm (DPV Confirmation Indicator = N), the message *Address could not be DPV confirmed* will appear at the bottom of the screen.

Callable Program (API) Interface

While using the PER/ZIP4 callable program interface, if an address does not DPV confirm (DPV Confirmation Indicator = N), the error code "DPV" will appear in the error code (ECOD##) field.

Batch Interface

While using the PER/ZIP4 batch interface, if an address does not DPV confirm (DPV Confirmation Indicator = N), the address will appear on the PER/ZIP4 Coding Report with a "DPV" error code. This error code will appear for each address that does not DPV confirm.

In all cases if an otherwise valid address (i.e. address is within a valid range, valid street name, and valid city/state/zip) is not in the DPV dataset as a known delivery point for mail, the standardized address will be returned by PER/ZIP4 along with a DPV error code/message. When a DPV error code is returned by PER/ZIP4, no +4 or delivery point code is assigned to the address.

PER/LLK – A LACS-LINK INTERFACE

In August of 2007 the United States Postal Service began requiring that all CASS Certified™ postal coding solutions perform LACS (Locatable Address Conversion System)Link processing as part of CASS processing.   PER/ZIP4 meets this requirement by utilizing the United States Postal Service's LACSLink data and technology.

Since the mid 1980s, the Enhanced 911 emergency response system has required the conversion of rural route-style addresses to city-style street names across the country. E-911 automatically associates a physical address with the telephone number from which an emergency call is made so that authorities can respond faster.

LACSLink data and technology enables PER/ZIP4 to automatically update mailer's rural-style addresses with new, locatable city-style addresses in areas that are conducting E-911 emergency response address conversions. The LACSLink data currently contains over five million converted addresses. The LACSLink technology maintains the privacy and security of the data while allowing the access needed to convert outdated addresses.

LACSLink processing is performed by all three PER/ZIP4 interfaces; Interactive, Callable Program (API), and Batch.

Interactive Interface

While using the PER/ZIP4 interactive interface, if LACSLink processing results in the conversion of an address, the message *Address LACS-Link converted* will appear at the bottom of the screen.

Callable Program (API) Interface

While using the PER/ZIP4 callable program interface, if LACSLink processing results in the conversion of an address, the converted (new) address will be returned and the informational code "LLK" will appear in the error code (ECOD##) field.

Batch Interface

While using the PER/ZIP4 batch interface, if LACSLink processing results in the conversion of an address, the address will appear on the PER/ZIP4 Coding Report with an "LLK" informational code. This informational code will appear for each address that is LACSLink converted.

Addresses converted as a result of LACS^Link processing will also appear on the PER/ZIP4 LACS^Link Address Conversions Report.

>Note: Just like "ALT", "BNR", and "SLK"; "LLK" is an informational code and not a true error.

PER/SLK – A SUITE-LINK INTERFACE

In August of 2011 the United States Postal Service began requiring that all CASS Certified™ postal coding solutions perform Suite^Link processing as part of CASS processing. PER/ZIP4 meets this requirement by utilizing the United States Postal Service's Suite^Link data and technology.

According to USPS estimates, nearly 1.8 billion mailpieces are sent to business addresses in large buildings without the correct suite number. Getting these mailpieces delivered depends entirely on the carrier's personal knowledge. But the carrier might not always know where the mail should be delivered and the mailpiece can end up as undeliverable-as-addressed (UAA).

Suite^Link is designed to help fix these incomplete or inaccurate business addresses by matching to the business name and providing the correct suite number. This allows the mailpiece to be correctly and completely addressed to a valid delivery point and avoid becoming possible UAA mail. With Suite^Link, mailers experience more efficient processing and delivery of their business-addressed mail.

Suite^Link processing is performed by all three PER/ZIP4 interfaces; Interactive, Callable Program (API), and Batch.

Interactive Interface

While using the PER/ZIP4 interactive interface, if Suite^Link processing results in the conversion of an address, the message *Secondary address information updated by SUITE-Link* will appear at the bottom of the screen.

Callable Program (API) Interface

While using the PER/ZIP4 callable program interface, if Suite^Link processing results in an address being updated, the updated address will be returned and the informational code "SLK" will appear in the error code (ECOD##) field.

Batch Interface

While using the PER/ZIP4 batch interface, if Suite^Link processing results in an address being updated, the address will appear on the PER/ZIP4 Coding Report with an "SLK" informational code. This informational code will appear for each address that is updated as a result of Suite^Link processing.

Addresses converted as a result of Suite^Link processing will also appear on the PER/ZIP4 Suite^Link Address Updates Report.

>Note: Just like "ALT", "BNR", and "LLK"; "SLK" is an informational code and not a true error.

USPS DATA LICENSE AND COPYRIGHT NOTICE

The following pages are the copyright notice for the United States Postal Service database information included in PER/ZIP4.

A license fee for the use and distribution of the postal database information has been paid to the US Postal Service.

This copyright notice does not obligate you to purchase PER/ZIP4. You are, however, obligated to abide by the notice during the time the postal database information is in your possession.

IMPORTANT - Read Carefully Before Opening

By opening this sealed software/database package, you
indicate your acceptance of the following:

UNITED STATES POSTAL SERVICE®

United States Postal Service®
Software/Database License Agreement

This legal document is an agreement between you, the end user, and The United States Postal Service® (USPS®). By OPENING THIS SOFTWARE/DATABASE PACKAGE YOU ARE AGREEING TO BECOME BOUND BY THE TERMS OF THIS AGREEMENT, WHICH INCLUDES THE DISCLAIMER OF WARRANTY (collectively the "Agreement").

THIS AGREEMENT, WHICH MAY BE AMENDED BY THE ENCLOSED INSERT FOR AUTHORIZATION TO MAKE ADDITIONAL COPIES, CONSTITUTES THE COMPLETE AGREEMENT BETWEEN YOU AND USPS. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY RETURN THIS UNOPENED PACKAGE AND THE OTHER ITEMS (INCLUDING WRITTEN MATTER, BINDERS OR OTHER CONTAINERS AND MATERIALS, IF ANY THAT ARE PART OF THIS PURCHASE) TO THE PLACE WHERE YOU OBTAINED THEM FOR A FULL REFUND.

USPS Software/Database License

1. **GRANT OF LICENSE.** In consideration of payment of a LICENSE fee, which is part of the price you paid for this product, USPS as LICENSOR, grants to you, the LICENSEE, a nonexclusive right to use and display this copy of a USPS software program and/or database (hereinafter the "PRODUCT") FOR YOUR INTERNAL CORPORATE OR PERSONAL USE on one computer at one location. If you use the PRODUCT, on a multi-user computer system, the license covers all users. USPS reserves all rights not expressly granted to LICENSEE.

2. **OWNERSHIP OF PRODUCT.** As the LICENSEE, you own the magnetic or other physical media on which the PRODUCT is originally or subsequently recorded or fixed, but USPS retains title and ownership of the PRODUCT recorded on the original media and all subsequent copies of the PRODUCT, regardless of the form or media in or on which the original and other copies may exist. This License is not a sale of the original PRODUCT or any copy.

3. **COPY OF RESTRICTIONS.** This PRODUCT and the accompanying written materials are copyrighted. Unauthorized copying of the PRODUCT, including PRODUCT that has been modi-

fied, merged or included with other software and/or data, or of the written material, is expressly forbidden. You may be held legally responsible for any copyright infringement that is caused or encouraged by your failure to abide by the terms of this License. Subject to these restrictions, and if the PRODUCT is not copy-protected, you may make one (1) copy of the PRODUCT solely for backup purposes. You must reproduce and include the copyright notice on the backup copy. To obtain immediate legal authorization to make ADDITIONAL COPIES of PRODUCT, in whole or in part, which may or may not contain value added information, complete and submit with check or money order the enclosed United States Postal Service LICENSE AMENDMENT. The ADDITIONAL COPIES may be used by LICENSEE for any bonafide purpose.

4. **USE RESTRICTIONS.** As the LICENSEE, you may physically transfer the PRODUCT from one computer to another provided that the PRODUCT is used on only one computer at a time. You may not electronically transfer the PRODUCT from one computer to another over a network nor may you distribute copies of the PRODUCT or accompanying written materials to others, nor may you modify, adapt, translate, or create derivative works based on the written materials without having executed the enclosed LICENSE AMENDMENT. PRODUCT versions that are more than 105 DAYS OLD are NOT authorized for use by any USER without written permission from the USPS.

5. **TRANSFER RESTRICTIONS.** This PRODUCT is licensed only to you, the LICENSEE, and may not be transferred to anyone without the prior written consent of USPS. Any authorized transfer of the PRODUCT shall be bound by the terms and conditions of this Agreement. In no event may you transfer, assign, rent, lease, sell or otherwise dispose of the PRODUCT on a temporary or permanent basis except as expressly provided herein.

6. **TERMINATION.** This license is effective for one year from date of purchase of PRODUCT. This License will terminate automatically without notice from USPS if you fail to comply with any provision of this License. Upon termination you shall destroy the written materials and all copies of the PRODUCT, including modified copies, if any.

Disclaimer of Warranty and Limited Warranty

THE PRODUCT AND ACCOMPANYING WRITTEN MATERIALS (INCLUDING INSTRUCTIONS FOR USE) ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. FURTHER, USPS DOES NOT WARRANT, GUARANTEE, OR MAKE ANY REPRESENTATIONS REGARDING THE USE, OR THE RESULTS OF THE USE OF THE PRODUCT OR WRITTEN MATERIALS IN TERMS OR COR-RECTNESS, ACCURACY, RELIABILITY, CURRENTNESS, OR OTHER QUALITIES. USPS warrants to the original LICENSEE that (a) the media on which the PRODUCT is recorded is free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from the date of delivery as evidenced by a copy of the receipt. Further, USPS hereby limits the duration of any implied warranty(ies) on the PRODUCT to the respective periods stated above. Some states do not allow limitations on duration of implied warranty, so the above limitation may not apply to you.

USPS' entire liability and your exclusive remedy shall be, at USPS option, either (a) return of the purchase price or (b) replacement of the PRODUCT that does meet USPS Limited Warranty and which is returned to USPS with a copy of the receipt. If failure of the PRODUCT has resulted from accident, abuse, or misapplication, USPS shall have no responsibility to replace the PRODUCT or refund the

purchase price. Any replacement will be warranted for the remainder of the original warranty period or thirty (30) days, which ever is greater.

Manufacturer

Manufacturer is United States Postal Service, 475 LENFANT PLZ SW, WASHINGTON, DC 20260-6803. Should you have any questions concerning this PRODUCT or Agreement, please call our Customer Support Department at 1-800-238-3150 or make contact in writing to:

CUSTOMER CARE DEPARTMENT
NATIONAL CUSTOMER SUPPORT CENTER
UNITED STATES POSTAL SERVICE
6060 PRIMACY PKWY STE 201
MEMPHIS TN 38188-0001

LGA 92-001

APPENDIX C

CASS CERTIFICATE

PER/ZIP4 is CASS Certified by the US Postal Service.

PER/ZIP4 is certified for the current CASS Cycle (Cycle N).

CASS Cycle N was originally scheduled to expire on July 31, 2013 but has been extended through July 31, 2015. CASS Cycle O is scheduled to begin on August 1, 2015.

The following page shows a copy of the official USPS CASS Certificate issued for PER/ZIP4.

CASS™ Quality Certification

for

Address Matching Software

This certified software performs the following functions:

ZIP + 4® Delivery Point Code   Five-Digit   Carrier Route
RDI™   Suite ᴸⁱⁿᵏᵀᴹ   eLOT™   DPV™   LACS ᴸⁱⁿᵏᵀᴹ

MANUFACTURER

P.E.R. SOFTWARE INC

PER/ZIP4 (8.02)

Configuration: STD

Platform: AS/400

This certificate is valid 07/2011 thru 07/31/2013 for the following areas:

NATIONAL PROCESSING

James D. Wilson

Manager
Address Management

UNITED STATES
POSTAL SERVICE®

CAS111 MAY 2007