

Licensee Performance Requirements
DPV™ Product
Licensed Service

1.0 GENERAL

- 1.1 There are over 165 million address records in the United States Postal Service® address database. DPV is a product that identifies whether a ZIP + 4® coded address is currently represented in the USPS® delivery point file as a valid address record. A CASS Certified™ ZIP + 4 address-matching product matches and standardizes addresses within a range of addresses. Incorporating DPV with your ZIP + 4 system takes it one step further and validates the address as a USPS address record. Utilization of DPV allows users to validate address records as well as identify potential addressing issues that may cause problems with delivery. Correcting potential addressing issues can reduce the amount of undeliverable-as-addressed (UAA) pieces, which in turn will result in more efficient mail processing and delivery.
- 1.2 All requirements and specifications contained within the License Agreement, the most current version of this document, and the most current version of the Interface Developer's Guide shall apply to the use of the DPV process unless explicitly allowed, prohibited, or modified by USPS in writing.
- 1.3 DPV does not return information regarding the specific business, owners, occupants, or residents of a specific address, and does not confirm if they reside at that specific address.

2.0 PURPOSE

- 2.1 The purpose of these performance requirements is to enhance the processing and delivery of mail, and provide mutual cost reduction opportunities through improved efficiency by ensuring USPS customers have access to the following address list services:
 - Acceptable standardization and address matching services
 - Detection of undeliverable addresses (excluding change of address)
 - Delivery point validation information for existing addresses in the mailer's file
- 2.2 Another purpose of the performance requirements is to establish standard performance and service criteria for DPV Licensed Service providers.

3.0 PRODUCT DESCRIPTION AND DEFINITION

- 3.1 DPV utilizes secure datasets (hash tables) that include representations of known addresses and address attributes. The input to the DPV process is in the form of a 9-digit ZIP + 4 code and a parsed address. DPV secure datasets will only provide Y, D, S, N, or blank answers, (e.g., Does 123 Main St validate to a USPS address record?).

- Y = Address was DPV confirmed for both primary and secondary (if present) numbers.
- D = Address was DPV confirmed for the primary number only. Secondary information was missing.
- S = Address was DPV confirmed for the primary number only. Secondary number information was present but unconfirmed.
- N = Both primary and secondary (if present) number information failed to DPV confirm.
- Blank = Address was not presented to DPV.

Licensee Performance Requirements
DPV™ Product
Licensed Service

4.0 GENERAL REQUIREMENTS

- 4.1 Licensees seeking DPV certification must comply with all requirements, specifications, and report formats contained within the DPV License Agreement, the DPV License Performance Requirements, and the most current version of the DPV Interface Developers Guide. Specifications and requirements within these documents shall be considered valid unless exceptions are explicitly allowed by USPS in writing.
- 4.2 A Licensee or software developer writing an interface to DPV tables must first ensure the address list is processed through USPS® CASS Certified™ software to obtain a 9-digit ZIP Code and a parsed address immediately prior to the validation process. The DPV process only validates address records; it cannot assign a ZIP + 4 code, nor will it respond to a non-ZIP + 4 coded address. The Licensee is expected to maintain the current performance standard required for CASS™ certification as defined within the most current CASS cycle. The interface must be reviewed, tested, and approved by USPS prior to any actual DPV processing occurring in a production environment to ensure all license requirements are met. After review, USPS will provide the Licensee with written approval or rejection of the proposed interface system.
- 4.3 The DPV Licensee's matching software must adhere to specific USPS directions regarding the services as well as to the matching rules and specifications herein. Licensees must obtain CASS certification for ZIP + 4 coding prior to the DPV licensing. In addition, Licensees will be tested periodically using a test address file similar to CASS.
- 4.4 The Licensee is responsible for providing all necessary interface software.
- 4.5 Product fulfillment will be made directly to the Licensee on electronic media (CD, DVD, or other similar electronic file formats). The Licensee shall be capable of processing electronic media to obtain the various data sets and product files. Licensees must organize redistribution to synchronize DPV with their ZIP + 4 product.
- 4.6 The Licensee shall not export the DPV product outside the boundaries of the United States of America or its territories without prior written approval of USPS.
- 4.7 In conjunction with services to be performed as a Licensee of USPS, the Licensee agrees that any and all data, source code, or information received from USPS or otherwise obtained or developed in the course of, or as the result of the performance of such services shall:
 - 4.7.1 be kept in strict confidence and shall not be disclosed in any manner to any organization (including professional societies) other than USPS until released of such obligation by the contracting officer in writing, and
 - 4.7.2 when in the Licensee's possession, be provided with adequate physical, technical, and administrative safeguards to prevent unauthorized access, disclosure, misuse, or attention.
- 4.8 Customer education shall be the Licensee's responsibility. The Licensee will ensure its customers understand the DPV process and interface. The Licensee must provide a DPV product brochure to each customer who wishes to subscribe. The brochure must explain the product in detail and be approved by USPS. Licensee's customers requiring technical information must contact a customer service group managed by the Licensee.
- 4.9 If operating on a network, the interface system must be in an environment both physically and electronically secure to avoid unauthorized use.
- 4.10 DPV updates will be provided via electronic media to the Licensee. The Licensee shall incorporate updated DPV tables immediately within three (3) business days of receipt. The Licensee shall utilize a monthly release of the ZIP + 4 product, incorporating use within three (3) business days of receipt.

Licensee Performance Requirements
DPV™ Product
Licensed Service

The Licensee shall coordinate the update of DPV tables with the equivalent monthly release of the ZIP + 4® File. The Licensee will synchronize the ZIP + 4 product with the DPV updates to provide the best up-to-date addresses and attribute data.

- 4.11 USPS-supplied DPV updates more than 60 days old shall be destroyed using common practice for disposal of sensitive materials. Examples of acceptable methods of destruction include shredding, punching, incinerating, breaking the physical electronic media, or permanent file deletion.
- 4.12 Copies of this document and updates to the License Agreement or Certification Procedures will be posted on the RIBBS website at <http://www.ribbs.usps.gov/files/dpv/>.

5.0 SPECIFIC REQUIREMENTS

- 5.1 Licensees will design a process that will cause the DPV product interface to stop working when the DPV data has aged more than 105 days from the product date.
- 5.2 Licensees shall encapsulate the DPV product as received from USPS into a secure form subject to approval by USPS. Licensees must ensure the DPV-integrated product is released in the secure form that will only allow interaction with authorized CASS™ software.
 - 5.2.1 The Licensee's DPV-integrated product in its secure form shall render the DPV data unusable to unauthorized access by customers, other software developers, or independent use.
 - 5.2.2 Any sublicense of the Licensee's DPV-integrated product in its secure form must retain all elements of the secure form as provided by the Licensee in any subsequent distribution or product provided by or under the sublicense agreement.
- 5.3 Internet or Online Lookup System Restrictions
 - 5.3.1 Where DPV-licensed materials are used in an online format, the information returned to the inquiring system shall be limited to confirmation of whether the input is a valid address record.
 - 5.3.2 Where DPV-licensed materials are used in an online interface environment, the host DPV Licensee shall design the interface to prevent unauthorized access from anonymous sources. Licensees providing online inquiry capability shall know their end users and shall not respond to inquiries from unknown users.
 - 5.3.3 In the implementation of DPV licensed materials in an online environment, the Licensee shall take all steps necessary to prevent the potential misuse of the DPV-licensed materials from users attempting to automate the submission of addresses to the online inquiry system in a simulated manual-entry mode. Licensees shall have a management process to monitor the volume of inquiries made through their online system interface and validate that no obvious simulation of manual entry is occurring.

Licensee Performance Requirements
DPV™ Product
Licensed Service

6.0 FALSE POSITIVE REPORTING AND STOP PROCESSING

- 6.1 Per the License Agreement, the DPV product shall not be used to facilitate creation of address lists artificially.
- 6.2 To detect conditions where address records appear to be the result of artificial manufacture, and not legitimately obtained, a table of artificially-manufactured addresses is provided as part of the product. These addresses reside in the False Positive table (dph.hsf). For each negative response that occurs in a query of the A hash table (dph.hsa), a query must be made to the False Positive table.
- 6.3 The Licensee shall design or purchase a design for a false positive reporting and stop processing function.
- 6.4 Licensed NCOA^{Link}™ Full Service Providers
- 6.4.1 Any time an address encounters a match to the False Positive table, the Licensee may continue processing, but must notify USPS immediately of the customer's name and address using the file description identified in DPV False Positive File Layout (Appendix A).
- 6.4.2 The Licensee must transfer a file containing the affected addresses from each address list to Dsf2stop@usps.gov with the subject line *DPV False Positive*.
- 6.5 MASS™ Processing on MLOCR Equipment
- 6.5.1 Any time an address encounters a match to the False Positive table, the MLOCR equipment may continue processing, but the service providers must notify USPS immediately of the customer's name and address using the file description identified in the *DPV False Positive File Layout* (Appendix A).
- 6.5.2 The service provider must transfer a file containing the affected addresses from each address list to Dsf2stop@usps.gov or via fax to 650-577-2500 with the subject line *DPV False Positive*.
- 6.6 Third-party Service Providers
- 6.6.1 Third-party Service Providers are classified as commercial users doing the production and creation of mail on behalf of a third party with the direct intent of producing mail that will appear in the mail stream.
- 6.6.2 While there are no restrictions on the elapsed time between the creation of the list and the actual mail processing, the data must remain unchanged from one step to the next as processed by the CASS Certified™ software components as well as meeting the same monthly product cycle for the certified product.
- 6.6.3 USPS will consider entering into an additional agreement that may assist in more efficient processing. Under this agreement, these providers would not be allowed to process their own mail lists at any time. Providers that process their own mail lists must default to the Stop Processing for End Users identified in this section.
- 6.7 End Users
- 6.7.1 End Users are classified as customers receiving CASS Certified DPV from a Licensed Service Provider.
- 6.7.2 Any time an address encounters a match to the False Positive table, the interface must cease the delivery point validating of addresses for the specific address list. The function shall be halted immediately for that specific address list. Processing of other address lists may continue.

Licensee Performance Requirements
DPV™ Product
Licensed Service

The Licensee may continue to standardize the remaining addresses on this list if desired. The Licensee shall immediately notify the customer that the processing was halted due to an unauthorized exposure to an apparent artificially created address.

- 6.7.3 The Licensee's software interface shall be designed to include a unique one-time-only restart code to restore the processing capability (i.e., cannot be used after the first occurrence to bypass any further stop processing error codes).
- 6.7.4 The Licensee shall notify USPS immediately of the customer's name and address using the file description as identified in the *DPV False Positive File Layout* (Appendix A). The Licensee must transfer a file containing the affected addresses from each address list to Dsf2stop@usps.gov with the subject line *DPV False Positive*.
- 6.7.5 USPS reserves the right to require a Licensee to suspend a customer's ability to perform processing when multiple incidents of artificial address detection occur.
- 6.7.6 The following error code explanation regarding the stop processing function shall be placed in all documentation provided to the customer regarding a false positive match:

"Processing was terminated due to the detection of what is determined to be an artificially created address. No address beyond this point has been processed using this product. In accordance with the License Agreement between USPS and <<Licensee>>, this USPS product shall be used to convert legitimately obtained addresses only, and shall not be used for the purpose of artificially creating address lists. Continuing use of this product requires compliance with all terms of the License Agreement. If the customer believes this address was identified in error, contact the Licensee."
- 6.7.7 USPS will consider entering into an additional agreement that may assist in more efficient processing for mailing activities that demonstrate a low-risk of abuse. In these cases, the users will be required to demonstrate to the satisfaction of USPS that their ability to prepare and enter mail would suffer a severe negative impact by the termination of the CASS™/DPV™ software.
- 6.8 Call Center Operations
Where CASS Certified™ software is used within a call center environment, USPS will consider permitting a false positive reporting option in lieu of the stop processing requirement.
- 6.9 All developers must be able to provide false positive reporting and stop processing functions as defined in the License Performance Requirements.
- 6.10 Whenever DPV and ZIP + 4® match rate percentages in a mail list differ by more than 49 percent, the occurrence must be reported to Dsf2stop@usps.gov (see *Calculating Percentages for the DPV False Positive Header Record* -- Appendix B in this document). No stop processing is required.

Licensee Performance Requirements
DPV™ Product
Licensed Service

7.0 QUALITY STANDARDS AND TESTING CRITERIA

- 7.1 DPV is subject to periodic audit and evaluation by USPS to verify the Licensee's process and adherence to the conditions of the DPV License Agreement. All audit files must be processed through the same DPV system used for customer processing.
- 7.2 USPS will test the Licensee's processing system with a series of known and unknown delivery points to validate the Licensee's ability to query DPV.
- 7.3 The audit test will also verify the false positive reporting and stop processing functionality of the interface.
- 7.4 In conjunction with CASS™ certification, this testing will be performed annually or whenever significant changes occur in any software component used within the ZIP + 4® or DPV process. In addition to CASS certification, USPS shall have the right to test the accuracy of the DPV process at any time without advance notice.
- 7.5 The Licensee will receive official notification of the audit results. Upon USPS approval, the Licensee may receive confirmation to commence or continue provision of DPV Licensed Service processing.
- 7.6 Applicants will be evaluated for accuracy of CASS assignments. For each test address correctly ZIP + 4 coded by their CASS process, the applicants must correctly answer and provide all DPV elements with 100 percent accuracy of all presented records.

8.0 EXPECTED DPV PRODUCT OUTPUT

- 8.1 Standardized footnotes have been established to provide consistency of products and facilitate USPS evaluation of customer data.
- 8.2 For each address submitted by a customer, the Licensee must be able to return the following output on the medium specified by the customer:
 - 8.2.1 Each original mailing address as it was presented
 - 8.2.2 The standardized address appended with the correct ZIP + 4/DPC, other postal values as may be requested by the customer, and any other intelligence flags or footnotes that result from the CASS processing segment
- 8.3 For each mailing address for which there is a match to DPV as defined in this document, the Licensee shall be capable of providing each of the standard footnote codes as listed in Appendix B. The Licensee shall assign all applicable standard footnote codes for the address.
- 8.4 For each mailing address for which there is not a match to DPV, the Licensee shall return a standardized address, as appropriate, with a correlating 5-digit ZIP Code. If a standardized address is not attainable, the Licensee must comply with 8.2.1.
- 8.5 In the event that a problem related to the DPV process is identified, USPS will, at its sole discretion, direct correction of the problem and/or exercise the suspension or termination provisions of the license, as it deems appropriate.

Licensee Performance Requirements
DPV™ Product
Licensed Service

9.0 DirectDPV

- 9.1 DirectDPV identifies changes at the delivery point level. Address records that have been previously processed through CASS™ Cycle L (or later) can retain the ZIP + 4® information to be used as input to DirectDPV, enabling the Licensee to determine if address records are still valid. If records are not in the DirectDPV™ table, no CASS reprocessing is required at this time. If records are found in the DirectDPV table, they require processing. Other mechanisms such as a reverse 9-digit lookup utility (RV9) can be used to reconstruct addresses. Use of the DirectDPV table is optional.
- 9.2 DirectDPV is an accumulative archival database. It contains the most current address and carrier route information when a new address is provided.
- 9.3 DirectDPV is currently available as part of the DPV product fulfillment to DPV-licensed, CASS Certified™ address matching software authors. DirectDPV is provided to Full Service Bureau users for their use in combination with their DSF²™ or DPV product.
- 9.4 To use DirectDPV, the mailer must store, at a minimum, the complete ZIP + 4 code for each address record. It is recommended that in addition to the ZIP + 4 code that the delivery point value also be stored. If the delivery point value is not stored, the address may also be looked up in the DirectDPV process using only the ZIP + 4. This is done by creating the *SHA* value based on the ZIP + 4 alone. If the ZIP + 4 code is not present in the address record, DirectDPV cannot be used; the address record must be submitted for processing through a CASS Certified address matching process.
- 9.5 Any process involving DirectDPV requires certification prior to authorized use. A utility test will be provided that exercises the DirectDPV functions, verifies that they have been correctly implemented, and tabulates statistics on PS Form 3553 correctly.
- 9.6 All addresses within the mailer's file shall be resubmitted to a CASS Certified address matching batch process annually to coincide with the annual CASS requirements.
- 9.7 DirectDPV is an authorized validation process. Use of DirectDPV does not alter the mailer requirement to validate addresses every 185 days using CASS Certified software to qualify for automation rates.
- 9.8 DirectDPV Responses
 - 9.8.1 NOT FOUND – The ZIP + 4 or 11-digit is still valid.
 - 9.8.2 FOUND WITH ALL ZEROS – DirectDPV found the corresponding address record, but cannot provide a converted 11-digit. The record must be reprocessed through CASS Certified software.
 - 9.8.3 FOUND WITH CONVERTED 11-DIGIT – The 11-digit is no longer valid and the converted 11-digit for this address is provided with the address indicia and carrier route.

Licensee Performance Requirements
DPV™ Product
Licensed Service

9.9 Acceptable Methods of Using DirectDPV™ Data

9.9.1 Probe the table for found condition only.

- Probe the table using the ZIP + 4 or 11-digit.
- If the record is found, process it through CASS Certified™ software.

9.9.2 DirectDPV lookup with the developer's reverse address construction.

- Probe table for found condition.
- Retrieve converted ZIP + 4[®] and delivery point code from DirectDPV.
- If ZIP + 4 and delivery point code is returned, use developer's method to reconstruct address from 11-digit ZIP retrieved in DirectDPV.
- If all zeros are returned as 11-digit ZIP, reprocess record through CASS Certified software.

9.9.3 Full DirectDPV lookup.

- Probe the table for found condition.
- Retrieve converted ZIP + 4 and delivery point code from DirectDPV.
- If ZIP + 4 and delivery point code is present, retrieve new address indicia from DirectDPV.
- If all zeros are returned as 11-digit ZIP, reprocess the record through CASS Certified software.

9.10 PS Form 3553

9.10.1 Where the ZIP + 4 and delivery point value from the mailer's address record does not appear in the DirectDPV data, the address retains its eligibility to be counted as a ZIP + 4 coded address on the PS Form 3553 document. In completing PS Form 3553, addresses confirmed by DirectDPV (NOT FOUND) will be reflected in section C, item c (*DirectDPV*).

9.10.2 Where the ZIP + 4 and delivery point value are found in the DirectDPV data, the address must be recreated from the DirectDPV data or resubmitted to CASS Certified software and updated to qualify for automation rates. Addresses unconfirmed by DirectDPV (FOUND WITH ALL ZEROS) that are reprocessed through CASS Certified software will be reflected in the section C, item a (*ZIP + 4/DPV Confirmed*).

9.10.3 When an all zero 11-digit is found in the DirectDPV data, the address must be resubmitted to CASS Certified software and updated to qualify for automation rates. Addresses confirmed and converted by DirectDPV (FOUND WITH CONVERTED 11-DIGIT) will be reflected in section C, item c (*DirectDPV*).

**Licensee Performance Requirements
DPV™ Product
Licensed Service**

**Appendix A
DPV False Positive File Layout**

DPV FALSE POSITIVE HEADER RECORD

| FIELD REFERENCE NUMBERS | FIELD DESCRIPTION | LOGICAL LENGTH | RELATIVE POSITION FROM/THRU | CONTENT NOTES |
|-------------------------------|-----------------------------|-------------------|-----------------------------------|------------------|
| 1 | MAILER'S COMPANY NAME | 40 | 01 - 40 | |
| 2 | MAILER'S ADDRESS LINE | 58 | 41 - 98 | |
| 3 | MAILER'S CITY NAME | 28 | 99 - 126 | |
| 4 | MAILER'S STATE NAME | 02 | 127 - 128 | |
| 5 | MAILER'S 9DIGIT ZIP | 09 | 129 - 137 | |
| 6 | TOTAL RECORDS PROCESSED | 09 | 138 - 146 | |
| 7 | TOTAL RECORDS DPV MATCHED | 09 | 147 - 155 | |
| 8 | % MATCH RATE TO DPV | 09 | 156 - 164 | |
| 9 | % MATCH RATE TO ZIP + 4 | 09 | 165 - 173 | |
| 10 | NUMBER OF ZIP CODES ON FILE | 05 | 174 - 178 | |
| 11 | NUMBER OF FALSE POSITIVES | 02 | 179 - 180 | |

FIELD DESCRIPTION DEFINITIONS

| | |
|------------------------------------|--|
| TOTAL RECORDS PROCESSED | The total number of records processed. |
| TOTAL RECORDS DPV MATCHED | The total number of records that DPV confirmed returning the DPV return codes S, Y, or D. |
| % MATCH RATE TO DPV | Determined by dividing the TOTAL RECORDS DPV MATCHED by the TOTAL RECORDS PROCESSED. Take that number and multiply it by 100 giving the % MATCH RATE TO DPV. |
| % MATCH RATE TO ZIP + 4 | Determined by dividing the Match Rate to ZIP + 4 Total by the TOTAL RECORDS PROCESSED. Take that number and multiply by 100 giving the % MATCH RATE TO ZIP + 4. |
| NUMBER OF ZIP CODES ON FILE | The total number of ZIP Codes on the file being processed. |
| NUMBER OF FALSE POSITIVES | The total number of false positive records found in the false positive table (dph.hsf) when processed through DPV. |
| Match Rate to ZIP + 4 Total | The total number of matches obtained from the CASS Certified™ address matching portion of the process before going to DPV. A return of footnote code AA from your address matching engine means you need to add to this total field. This field is not returned in the above header information, but is used for the calculations to obtain the percentages. |

**Licensee Performance Requirements
DPV™ Product
Licensed Service**

Appendix A (continued)

Calculating Percentages for the DPV False Positive Header Record

Formulas

- *% MATCH RATE TO DPV = (TOTAL RECORDS DPV MATCHED ÷ TOTAL RECORDS PROCESSED) x 100*
- *% MATCH RATE TO ZIP + 4 = (Match Rate to ZIP + 4 Total ÷ TOTAL RECORDS PROCESSED) x 100*

Examples

If

TOTAL RECORDS PROCESSED = 703,156
TOTAL RECORDS DPV MATCHED = 26,679
Match Rate to ZIP + 4 = 703,055

Then

% MATCH RATE TO DPV = 26,679 ÷ 703,156 = 0.037941 x 100 = 3.7%

And

% MATCH RATE TO ZIP + 4 = 703,055 ÷ 703,156 = 0.999856 x 100 = 99.9%

And

% MATCH RATE TO ZIP + 4 = 99.9% - % MATCH RATE TO DPV = 3.7% (96.2%)

Note: Check to see if the difference between *% MATCH RATE TO ZIP + 4* and *% MATCH RATE TO DPV* is > 49% (96.2% > 49%). If > 49%, notification must be made to USPS immediately at Dsf2stop@usps.gov using the DPV False Positive Header Record layout (Appendix A).

**Licensee Performance Requirements
DPV™ Product
Licensed Service**

Appendix A (continued)

DPV FALSE POSITIVE RECORD

| FIELD REFERENCE NUMBERS | FIELD DESCRIPTION | LOGICAL LENGTH | RELATIVE POSITION FROM/THRU | CONTENT NOTES |
|--|------------------------------|---------------------------|--|--------------------------|
| 1 | STREET PRE-DIRECTIONAL | 02 | 01 - 02 | |
| 2 | STREET NAME | 28 | 03 - 30 | |
| 3 | STREET SUFFIX ABBR | 04 | 31 - 34 | |
| 4 | STREET POST-DIRECTIONAL | 02 | 35 - 36 | |
| 5 | ADDRESS PRIMARY NUMBER | 10 | 37 - 46 | |
| 6 | ADDRESS SECONDARY ABBR | 04 | 47 - 50 | |
| 7 | ADDRESS SECONDARY NUMBER | 08 | 51 - 58 | |
| 8 | MATCHED ZIP CODE | 05 | 59 - 63 | |
| 9 | MATCHED PLUS 4 | 04 | 64 - 67 | |
| 10 | FILLER | 113 | 68 -180 | |

Reference numbers 1–7 are from the input address.
References numbers 8 and 9 are from the matched records.

**Licensee Performance Requirements
DPV™ Product
Licensed Service**

**Appendix B
Standard Footnotes**

Standard footnotes shall be provided to customers on request.

| | |
|----|--|
| 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 Military Address |
| G1 | Input Address Matched to a General Delivery Address |
| N1 | Input Address Primary Number Matched to DPV but Address Missing Secondary Number |
| M1 | Input Address Primary Number Missing |
| M3 | Input Address Primary Number Invalid |
| P1 | Input Address RR, or HC Box number Missing |
| 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 Unique ZIP Code |

When a match is been made in the address matching software, move Y to the DPV return code and spaces to all other flags for footnotes F1, G1, and U1.

Footnotes are for +4 matching and DPV/DSF2. Do not use footnotes for Early Warning System (EWS) matches.

Footnote *N1* does not apply to PO Box records. Move the *N1* on high-rise and street records when the delivery type is blank.

Footnote *RR* vs. *R1* – Use *R1* if the original input contains a pound sign (#) and a secondary number, but during the address matching process a match is made to a ZIP + 4 that changes the # to a unit designator.

Example:

Input: CMRA To Go
 130 Skyline Dr #16
 Memphis TN 38119

There is no PMB information on this record; return the R1 footnote.

ZIP + 4 Match: CMRA TO GO
 130 SKYLINE DR STE 16
 MEMPHIS TN 38119-1234

There is PMB information on this record; return the RR footnote.

ZIP + 4 Match: CMRA TO GO
 130 SKYLINE DR #16
 MEMPHIS TN 38119-1234

**Licensee Performance Requirements
DPV™ Product
Licensed Service**

Appendix C

Double Pound Signs (#)

When you are trying to match to an address that contains double pound signs (e.g., 123 Main Street #123 #456), if you match to either of the secondary address components in DPV, you will return Y.

See *Grading Issues* on RIBBS at <http://ribbs.usps.gov/files/CASS/archives/2003MIN.doc> for details on Double # matching.

Abbreviated Aliases

Software can return the street name or the abbreviated alias.

No-Stat Table

The use of the No-Stat table is mandatory for cycle M. If you do not use the No-Stat table during cycle L, you may receive false positive matches for some addresses.

Validate a Secondary of #0 in Cycle M

To validate a secondary of #0, the match must be made to a high-rise exact record and a significant leading zero in the secondary before you return Y and footnote *AABB*. Otherwise, you must return an S and footnote *AACC*.

**Licensee Performance Requirements
DPV™ Product
Licensed Service**

Appendix D

Return Codes and Footnotes with Suggestions for Mailers

| DPV Return Code | Footnote | Suggestion |
|------------------------|-----------------|--|
| N | AA | Verify the address. The address validated on the CASS Certified™ software engine, but cannot be validated in the DPV process. |
| N | AA M1 | Verify the Primary Number. It is not present. The address validated on the CASS Certified software engine, but cannot be validated in the DPV process. |
| N | AA M3 | Verify the Primary Number. It is present but not valid. The address validated on the CASS Certified software engine, but cannot be validated in the DPV process. |
| N | AA P1 | Verify the box number. It is not present for this RR or HC address, but needed for verification in the DPV process. |
| N | AA P3 | Verify the box number. It is present for this PO Box, RR or HC address, but cannot be confirmed in the DPV process. |
| Y | AA BB | No action needed. The address validated to all components. |
| Y | AA RR | No action needed. The address validated. It has been found in the CMRA table with PMB information present. |
| Y | AA R1 | The address validated. It has been found in the CMRA table without PMB information. |
| Y | AA F1 | The address matched on the CASS Certified software engine. Move Y to DPV return code and spaces to all other flags. |
| Y | AA G1 | The address matched on the CASS Certified software engine. Move Y to DPV return code and spaces to all other flags. |
| Y | AA U1 | The address matched on the CASS Certified software engine. Move Y to DPV return code and spaces to all other flags. |
| S | AA CC | Verify secondary information. It is present, but cannot be confirmed in the DPV process. |
| S | AA P3 | Verify the box number. It is present for this PO Box, RR or HC address, but cannot be confirmed in the DPV process. |
| S | AA CC RR | Verify secondary information. It is present, but cannot be confirmed in the DPV process. It has been found in the CMRA table with PMB info present. |
| S | AA CC R1 | Verify secondary information. It is present, but cannot be confirmed in the DPV process. It has been found in the CMRA table without PMB information, but is not required for USPS delivery. |
| D | AA P1 | Verify the box number. It is not present for this RR or HC address, but needed for verification in the DPV process. |
| D | AA N1 | Verify secondary information. It is not present. |
| D | AA N1 RR | Verify secondary information. It is not present. It has been found in the CMRA table with PMB information present. |
| D | AA N1 R1 | Verify secondary information. It has been found in the CMRA table without PMB information, but is not required for USPS delivery. |
| Blank | A1 M1 | Get correct address. This address cannot be found in CASS Certified software engine, so it is not presented to the DPV process. |
| Blank | A1 M3 | Get correct address. This address cannot be found in CASS Certified software engine, so it is not presented to the DPV process. |
| Blank | A1 | Get correct address. This address cannot be found in CASS Certified software engine, so it is not presented to the DPV process. |

**Licensee Performance Requirements
DPV™ Product
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**Appendix E
Public Seeds**

Five test address (public seed) records are available for customers to use in testing the *False Positive Reporting and Stop Process* requirements of the license. Customers should insert one or more of these records into their test address files and process the lists normally. The program should recognize that a seed address has been submitted and initiate the *False Positive Reporting and Stop Processing* function. The seed matches should be processed and reported as usual. NCSC will account for these matches as public seeds and not charge the event to the customer.

Go to <http://ribbs.usps.gov/files/DPV/DPVINFO/PUBLICSEEDS.TXT> for a list of public seed records.