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# NCOA DATA SERVICES AND DIAGNOSTIC CODES

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WVRP

# **NCOA Data Services and Diagnostic Codes**

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# NCOA Data Services and Diagnostic Codes

## **Definitions**

**CASS: (Coding Accuracy Support System) Certification** is a program that was developed by the USPS to test the accuracy of address-matching software and improve the accuracy of postal coding, such as ZIP+4 Code®, carrier route and 5-digit ZIP Code coding.

**CMRA: Commercial Mail Receiving Agent** is a process that identifies addresses of commercial mail receiving agents such as UPS and FedEx.

**COA: Change of Address** refers to temporary or permanent change-of-address data (COA) filed with the USPS consisting of names, addresses and company names of individuals, families, and businesses who have filed a change-of-address.

**DPV: Delivery Point Validation™ (DPV®)** is the process of verifying that an address is actually deliverable, meaning that mail can be sent to that address. A submitted address is checked against an authoritative database, and if there's a matching entry in the database, the submitted address is declared "valid".

**LACSLINK: Locatable Address Conversion System** is an automated method of identifying addresses for local municipalities that have implemented a 911 emergency system that converts address. It is a secure dataset of converted addresses and involves changing rural-style addresses to city-style addresses based on an established national grid system.

**NCOALink: National Change of Address** is a system the USPS uses to compare mailing lists to COA data. This identifies any COA, when they moved, the address they moved to and the type of move such as a business move or family move.

# NCOA Data Services and Diagnostic Codes

## ***Data Services Return Codes***

### **(List Header: *Return Code*)**

<b>Code</b>	<b>Description</b>
10	<b>Invalid Address</b>
11	<b>Invalid City/ST/ZIP®</b>
12	<b>Invalid State</b>
13	<b>Invalid City</b>
17	<b>Insufficient data</b> — The delivery address and/or secondary address data was missing, or the ZIP Code and either the city or state data were missing.
21	<b>Address Not Found</b>
22	<b>Multiple Response</b>
23	<b>Error in Primary</b> - A match was found in the NCOALink or LACSLink database but the new address could not be supplied. These records retain the original address even though the customer you have at that address no longer resides there. <b>Possible causes:</b> <ul style="list-style-type: none"><li>- A COA card was filed by the customer with the USPS, however the new address they provided did not match an address the USPS recognizes as deliverable.</li><li>- When using NCOALink LSP with ANKLink service, an ANKLink match was found. This indicates the move occurred 19-48 months ago. The new address cannot be provided with LSP service (18 months).</li><li>- A LACSLink match (see “39” on page 1047) was found but the new LACSLink converted address could not be reconstructed.</li></ul>
24	<b>Error in Secondary</b> - DSF2 validated the address based only on primary address information. A walk sequence number is assigned but no secondary address information is appended. (DSF2 only)
26	<b>Box Closed (NCOALink only)</b> - A match was found to a COA record, but mail was being delivered to a PO Box that since has been closed. No forwarding address was supplied for that customer. These records retain the original address.
27	<b>No Forwarding Address (NCOALink only)</b> - A match was found to a COA record but the customer did not provide a forwarding address to the USPS. These records retain the original address.
28	<b>Foreign Move (NCOALink only)</b> - A match was found to a COA record, but the customer moved out of the country. NCOALink processing follows only domestic moves. These records retain the original address.
31	<b>Single Response.</b> A unique ZIP + 4®match was made to the USPS® ZIP+4 file and no further information is necessary.
32	<b>Default Response.</b> A match was made to the USPS ZIP + 4 file. With more information (e.g., a suite or apartment number) a unique ZIP + 4 would be assigned. Default ZIP + 4 codes are assigned to certain buildings or highrises. Within the high-rise there may be more specific ZIP + 4 Codes for specific floors, suite ranges, or even firms within a building.

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- 33 **Non-Deliverable**
- 36 **Individual Move (NCOALink™ only)** - A match was found to a COA record filed as an individual move, new address provided.
- 37 **Family Move (NCOALink only)** - A match was found to a COA record filed as a family move, new address provided.
- 38 **Business Move (NCOALink only)** - A match was found to a COA record filed as a business move, new address provided.
- 39 **LACSLink™ Conversion (LACSLink only)** - A match was found to a LACSLink record, new address data provided.  
The customer did not actually move, but the address information has been updated due to the 911 emergency system, which was implemented to convert rural-style addresses to city style addresses or a street address has been renamed or renumbered.
- 98 **Non-USPS ZIP (NCOALink only)**

## **ZIP + 4 Footnote Codes**

### **(List Header: Footnote)**

<b>Code</b>	<b>Description</b>
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*Note: This encoding process may return more than one Footnote Code for a record.*

- A ZIP Code Corrected** — The original ZIP Code was incorrect for the delivery address given and was changed to the correct ZIP Code.
- B City/State Corrected** — The city and state were corrected to correspond to the matched address for the other information provided.
- C Invalid City/State/ZIP** — A matching address could not be found in the National Database within the City, State or ZIP Code and the City and/or State and/or ZIP Code were not corrected.
- D Non-Deliverable Address** — The address was found in the National Database, but was specifically flagged by the Postal Service as a non deliverable address. For example, a non-deliverable address might be a loading dock at the rear of a building or an address within a building complex where the postal carrier delivers only to the main office. No ZIP Code™ is assigned to non-deliverable addresses.
- E ZIP Assigned for Multiple Response** — Multiple responses were found in the National Database and they were all in the same 5-digit ZIP Code and/or Carrier Route. A 5-digit ZIP Code and/or Carrier Route was assigned.
- F Address Not Found** — A match, or close match, for the data in the delivery address field could not be found in the National Database within the ZIP Code or city and state entered. Possible causes:
  - The street number or unit number is out of range.
  - The street name was not found. The encoding process corrects many misspelled street names but some misspellings will not be identified as matches. In general, the encoding process tends to ignore vowels, but is more sensitive to consonants.

# NCOA Data Services and Diagnostic Codes

- The predirectional or postdirectional was incorrect.
- Some occurrences of multiple words can cause an address not to be found. If the actual street name is *Greenview* and it was entered as *Green View* it may not be found in the database. Similarly, if the actual address was *Green View* and it was entered as *Greenview* it may not be found.
- Sometimes abbreviated street names will not be found in the database. For example, *MLK Drive* may not be recognized as *Martin Luther King, Jr. Drive*.
- Non-address information is included in the delivery address.

**G**

**Firm Used in Address** — Part or all of the firm information was used to supplement or replace the delivery address information, in order to encode the input address.

**H**

**Missing Apartment/Suite Number** — The address was missing an apartment or suite number as compared to the National Database.

**I**

**Insufficient/Incorrect Data** — The given delivery address was found in the database but there were multiple occurrences of the address because of a missing address element.

**J**

**Dual Address Identified** — A dual address is a single address line that contains two addresses, such as PO Box and street information. A dual address may contain more than just street and PO Box addresses.

**K**

**Multiple Input Used Non-PO Box** — Obsolete starting with CASS™ Cycle K.

**L**

**Delivery Address Component Changed** — One or more components of the delivery address was changed. For example, *Street* was changed to *Avenue*.

**M**

**Street Name Spelling Changed** — The street name portion of the delivery address was changed to the correct spelling.

**N**

**Delivery Address Standardized** — The delivery address was corrected to the USPS® standardized format.

**O**

**Plus 4/CRRT Multiple Response** — Assigned when a multiple response condition (Return Code 22) is encountered during address matching due to an input address matching to two address range records where the only difference between the two records is the plus 4 or Carrier Route.

**P**

**Better Delivery Address Exists** — The address was found in the National Database and the Plus 4 assigned; however a better or more complete address exists and should be used.

**Q**

**EWS (Early Warning System) Match** — The address matches an address range in the EWS file. The EWS file contains address ranges for new addresses not yet incorporated into the ZIP + 4 ®/ eLOT™ database.

**R**

**City Abbreviated** — The city name after address standardization was too long to fit in the space allocated so it was abbreviated. If a standardized abbreviated city name exists in the database, the standardized abbreviation is used. Otherwise, the city name is shortened by removing vowels until the city name is short enough to fit in the allocated field space.

# NCOA Data Services and Diagnostic Codes

- S** **Incorrect Secondary Number** — The suite, apartment, or unit number was not in the range of valid numbers.
- T** **Magnet Street Multiple response** — The input address was not encoded due to Magnet Street matching rules and a multiple response (return code 22) was generated.
- U** **Unofficial PO Name** — The city name was not an official USPS® Post Office™ name. This occurs most often with “prestige” localities or smaller communities that do not have their own Post Office. The city name answer will be changed to the official Post Office designation.
- V** **Unverifiable City/State** — The city or state could not be verified as corresponding to the 5-digit ZIP Code.
- W** **Small Town Default** — Obsolete starting with CASS Cycle K.
- X** **Unique ZIP Code Default** — The 5-digit ZIP is unique and the Plus 4 is the default Plus 4 for that unique ZIP Code.
- Y** **Input ZIP Removed** — The input ZIP Code was removed during encoding.
- Z** **ZIP Move Match** — The input address was encoded by using ZIP Move data

## **DPV Footnotes**

Code	Description
AA	ZIP+4 matched
A1	ZIP+4 did not match
BB	Entire address confirmed
CC	Confirmed address in by dropping secondary information
F1	Matched to a military address
G1	Matched to a general delivery address
N1	Confirmed a highrise or box type address without secondary information
M1	Primary number missing from address
M3	Address was not confirmed
P1	Box type address missing box number
P3	Box type address with invalid box number
PB	Street style address associated with USPS PO Boxes.
R7	Carrier Route R777 addresses not receiving mail delivery
	Because there is no delivery, a Plus-4 is not assigned
RR	Confirmed address with PMB information
R1	Confirmed address without PMB information
U1	Matched to a unique ZIP Code

# NCOA Data Services and Diagnostic Codes

## Record Types

Record Type	Description
C	Matched to Multi-Carrier Record
F	Matched to Firm Record
G	Matched to General Delivery Record
H	Matched to High-rise or Apartment Building Record
M	Matched to Military Record
P	Matched to PO Box Record
R	Matched to Rural Route Record (Rural Route/Highway Contract)
S	Matched to USPS Street Record
U	Matched to Unique 5-Digit ZipCode Record

## DPV CMRA Codes

Code	Description
blank	Not tested
N	Tested and is not a Commercial Mail Receiving Agent
Y	Tested and is a Commercial Mail Receiving Agent

## DPV Vacant

Code	Description
Space	No look up
Y	Confirmed
N	Not Confirmed

## COA Match Flags

Match Flag	Description
C	<b>Undeliverable.</b> The carrier filed an action indicating that delivery to this person at this address cannot be accomplished.
F	<b>Foreign Move.</b> The customer has moved to a foreign address.
G	<b>Box Closed.</b> The customer's PO Box has been closed and no forwarding address was filed.
K	<b>No Forwarding Address.</b> The customer has moved and left no forwarding address.
M	<b>Forwardable Move.</b> The customer has moved and left a forwarding address.
P	<b>Error in Primary.</b> The new primary address did not match to DSF2™. (DSF2/NCOALink only)
S	<b>Error in Secondary.</b> The new primary address matched to DSF2 but the secondary address could not be verified.

# NCOA Data Services and Diagnostic Codes

## **COA Move Date (Month/Year)**

This defines the Month and Year on which the move became effective based on month and year which goes back 48 months from the date the data was updated. Data is returned to this field during Move Update processing.

## **COA Move Types**

Move Type	Description
B	Business
F	Family
I	Individual
L	LACSLink Conversion

## **NCOALink**

Footnote	Match or No Match Description
A	<b>Match COA Match.</b> The input record matched a COA record.
91	<b>Match COA Match:</b> Secondary Number dropped from COA. The input record match a COA record. The COA record had a secondary number and the input record did not. The record is a ZIP + 4® street level match.
92	<b>Match COA Match:</b> Secondary Number Dropped from input address. The input record match a COA record. The input record had a secondary number and the COA record did not. The record is a ZIP + 4 street level match.
00	<b>No COA Match.</b> The input record did not match a COA record.
01	<b>Match Found COA:</b> Foreign Move. Foreign Move. The customer has moved to a foreign address.
02	<b>Match Found COA:</b> Moved Left No Address (MLNA). The input record matched a COA record, but there was no new address provided.
03	<b>Match Found COA:</b> Box Closed No Order (BCNO). The input record matched a COA record, but the PO BOX has been closed and no forwarding addresses was provided.
04	<b>No COA Match:</b> Street Address with Secondary. While in Standard mode, the Family matching logic was used and matched a family record type with an address that contained secondary address information. The input record doesn't contain secondary address information. The individual matching logic should be used and individual names do not match.
05	<b>Match Found COA:</b> New 11-digit DPBC is Ambiguous. The input record matched a COA record. The new address could not be converted to a deliverable address because the Delivery Point Barcode (DPBC) represents more than one delivery point.
06	<b>No COA Match:</b> Conflicting Directions: Middle Name Related. There is more than one COA record and the middle names or initials are different. A single match could not be determined.

# NCOA Data Services and Diagnostic Codes

07      **No COA Match:** Conflicting Directions: Gender Related. There is more than one COA record and the genders are different. A single match could not be determined.

08      **No COA Match:** Other Conflicting Instructions: The input record matched two records. A match could not be made.

09      **No COA Match:** High-rise Default. The input record matched a COA record from a High-rise address. This requires individual name matching and individual names do not match.

10      **No COA Match:** Rural Default. The input record matched a COA record from a Rural Route or Highway Contract Route. This requires individual name matching and individual names do not match.

11      **No COA Match:** Individual Match: Insufficient COA Name for Match. The input record matched a COA record with the same surname and address, but there is insufficient name information on the COA record to produce a match.

12      **No COA Match:** Middle Name Test Failed. The input record matched a COA record, but a match could not be made because the middle name or initial or the input record does not match the middle name or initial of the COA record.

13      **No COA Match:** Gender Test Failed. The name of the input record matched a name of a COA record, but the genders could not be matched.

14      **Match Found COA:** New Address Would Not Convert at Run Time. The input matched a COA record, but the new address could not be converted to a deliverable address.

15      **No COA Match:** Individual Name Insufficient. The input record matches the address and surname of a COA record, but the input record does not contain a first name or contains only initials.

16      **No COA Match:** Secondary Number Discrepancy. The input record matched a street level COA record, but a match was not made because of one of the following reasons:  
• There is conflicting secondary information  
• The input record contained secondary information and matched to a family record that doesn't contain secondary information. This requires individual matching and individual names do not match.

17      **No COA Match:** Other insufficient Name. The input record matched a COA record, but the input name is different or insufficient.

18      **No COA Match:** General Delivery. The input record match a family COA record from a General Delivery address. The address requires individual name matching logic and the individual names do not match.

19      **Match Found COA:** New Address not ZIP + 4® coded. A COA is on file, but the new address can not be ZIP + 4 encoded. Also used for temporary moves. There is not a way to distinguish the type of match at this time.

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20      **No COA Match:** Conflicting Directions after re-chaining. Multiple COA matches were found and a single match could not be determined.

66      **No Match.** This input record matched a COA record that is present in the daily delete file. No mail may be forwarded from this address.

## **LACSLink Return Codes**

### **Return Code Description**

A      **LACSLink Record Match** - The input record matched to a record in the master file. A new address could be furnished.

00      **No Match** - The input record COULD NOT BE matched to a record in the master file. A new address could not be furnished

09      **LACSLink Record Match: Highrise Default** – The input record matched to a record in the master file, but the old address is a highrise default.

14      **Found LACSLink Record: New Address Would Not Convert at Run Time** - The input record matched to a record in the master file. The new address could not be converted to a deliverable address

92      **LACSLink Record: Secondary Number Dropped from Input Address** – The input record matched to a master file record, but the input address had a secondary number and the master file

## **SuiteLink Return Codes**

### **Return Code Description**

No value      **SuiteLink lookup was not performed.**

00      **No Match** - A SuiteLink lookup was attempted, but a SuiteLink match was not made. An Improved Business address could not be furnished.

A      **SuiteLink Match** - The input record matched to a record in the master file. An Improved Business address could be furnished.

## **DPV - Confirmation Codes**

### **Code Description**

Blank      **Address was not submitted for confirmation.** This error could occur for one of several reasons:

- The record did not receive a Return Code of 31 or 32 during ZIP + 4® encoding.
- The record was not part of the selection set.
- The record was added to the list after DPV processing was performed.

# NCOA Data Services and Diagnostic Codes

Y	<b>Confirmed entire address</b>
N	<b>Could not confirm address.</b> The address was either invalid or did not correspond to an active delivery point.
S	<b>Confirmed address by dropping secondary information.</b>
D	<b>Confirmed a high rise or PO Box type address</b> without secondary information.

## ***Suppression Footnotes***

### **Footnote Description**

A1	<b>Business or Shopping Center</b>
A3	<b>Prison Address</b>
D1	<b>Deceased</b>
M1	<b>DMA Mail Preference Service (do not mail)</b>