

Diagnostic Code Guide

The codes defined in this document provide information regarding the deliverability of pieces to specific addresses, and the services recommended for each code.

ZIP + 4 Encoding

There are three parts to the encoding process, CASS, DPV Confirmation, and LACSLink conversion. During CASS, an address is compared against a valid range of addresses assigned for a street. For example, you are mailing to 16 Maple St, and the CASS range for Maple St is from 1 to 100, since 16 Maple St is within that range, the record will be flagged as valid. Valid CASS records are flagged with Return Codes 31 and 32.

The record will then move to Delivery Point Validation (DPV) processing. If a valid match was found during CASS, the address is compared against the DPV database of valid delivery points. Although the address of 16 Maple St matches the valid range of 1 to 100, due to gaps delivery points, the address may not physically exist. Addresses can be DPV confirmed will get a DPV Confirmation Code of Y, S, or D.

Finally, addresses that pass CASS and DPV are compared to the database of Locatable Address Conversions (LACS). LACS compares addresses against the database of USPS conversions to 911 Locatable Addresses. The goal of LACS is to convert Rural Route and Highway Contract addresses (such as RR2 Box 10 or HC2 Box 10) to city-style addresses that can be found by following street signs and house numbers. Valid LACS records are flagged with Return Code 39.

NCOA Matching

When you submit a list for National Change of Address (NCOALink) updates, you must begin with a valid address. (Return Codes 31, 32, or 39 with a DPV Confirmation Code of Y, S, D are considered valid.) Addresses that do not pass the ZIP + 4 encoding process above can not be matched by NCOALink processing.

Refer to the following tables for more information on specific codes:

- Table 1, “Z4, DPV - Confirmation Codes,” on page 2
- Table 2, “Return Codes,” on page 2

Table 1: Z4, DPV - Confirmation Codes

Code	Description	Recommended Service
blank	Address was not submitted for confirmation. This error could occur for one of several reasons: <ul style="list-style-type: none"> 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. 	NA
Y	Confirmed entire address	NCOA
N	Could not confirm address. The address was either invalid or did not correspond to an active delivery point.	ARS
S	Confirmed address by dropping secondary information	ARS and/or NCOA
D	Confirmed a high rise or PO Box type address without secondary information	ARS and/or NCOA

Table 2: Return Codes

Code	Description	Recommended Service
10	Invalid Address — The delivery address included a dual address, usually a route and a box number, but the order of these numbers was inconsistent with addressing standards, so no ZIP + 4 assignment could be confidently made.	ARS
11	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.	ARS
12	Invalid State — The state abbreviation was not correct and no matching delivery address was found for the given ZIP Code.	ARS
13	Invalid City — The city name was not correct and no matching delivery address was found for the given ZIP Code.	ARS
17	Insufficient Data — The delivery address and/or secondary address data was missing, or the ZIP Code and either the city or state data were missing.	ARS
21	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: <ul style="list-style-type: none"> 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. 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 <i>Greenview</i> and it was entered as <i>Green View</i> it may not be found in the database. Similarly, if the actual address was <i>Green View</i> and it was entered as <i>Greenview</i> it may not be found. Sometimes abbreviated street names will not be found in the database. For example, <i>MLK Drive</i> may not be recognized as <i>Martin Luther King, Jr Drive</i>. Non-address information is included in the delivery address. 	ARS

Table 2: Return Codes (Continued)

Code	Description	Recommended Service
22	Multiple Responses — The delivery address was found in the National Database but there were multiple occurrences of the address because of a missing address element. Possible causes: <ul style="list-style-type: none"> The street number was missing. A required predirectional or postdirectional was missing. For example, the delivery address was entered as <i>113 Maple St.</i> and there were actual addresses at <i>113 N Maple St.</i> and <i>113 S Maple St.</i> The suffix was missing and there were multiple addresses with the same name. For example, the delivery address was entered as <i>113 Maple</i> and there were entries in the National Database for <i>113 Maple St</i> and <i>113 Maple Dr.</i> 	ARS
Return Codes 23-30 and 33-38 result from NCOA processing. No further services are required.		
23	Error in Primary	NA
24	Error in Secondary	NA
26	Box Closed (NCOALink only)	NA
27	No Forwarding Address (NCOALink only)	NA
28	Foreign Move (NCOALink only)	NA
29	No Stats (DSF2™ only). Addresses where delivery has not been established, the address is not to be counted as a possible delivery.	NA
30	DSF2 Vacant (DSF2 only)	NA
31	Single Response — The delivery address was found in the National Database and no further information was required.	NCOA
32	Default Response — The delivery address was found in the National Database and a default ZIP Code™ was assigned, however with more information, such as a suite or apartment number, a unique ZIP + 4 would be assigned. Default ZIP® codes are assigned to certain buildings or high-rise. Within the high-rise there may be more specific ZIP codes for certain floors, suite ranges or even firms within the building.	ARS and/or NCOA
33	Non-deliverable — The delivery address was found in the National Database, but it 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.	NA
34	DSF2 Seasonal (DSF2 only)	NA
35	DSF2 Match (DSF2 only)	NA
36	Individual Move (NCOALink™ only)	NA
37	Family Move (NCOALink only)	NA
38	Business Move (NCOALink only)	NA
39	LACSLink™ Conversion (LACSLink only)	NCOA
98	Non-USPS® ZIP — The address was determined, using the National Database, to be a non-USPS ZIP Code™. For example, the Canadian Postal Code B2H 567.	NA
99	Assigned when an unexpected error occurs during the ZIP + 4® Encoding process. The original information will be left in the other fields in the address group.	ARS