

NCOA^{Link}® Layout 800

Input Data	Begin	End	Length	Description
Client input data	1	200	200	Original input data padded to 200 characters. For lists with a record length greater than 200 characters, the original input data will be padded to the next higher multiple of 100. All subsequent fields will be moved accordingly.
Standardized Data	Begin	End	Length	Description
std_deladr	201	248	48	Delivery address
std_secadr	249	278	30	Secondary address
std_urban	279	318	40	Urbanization (for Puerto Rico addresses)
std_city	319	346	28	City name
std_city13	347	359	13	13-character city name as provided by USPS®
std_state	360	361	2	State
std_zip	362	366	5	USPS 5-digit ZIP Code™
std_zip4	367	370	4	ZIP + 4® or blank if ZIP + 4 not found
std_dlvpt	371	372	2	Delivery point
std_chkdgt	373	373	1	Legacy check digit
std_crrt	374	377	4	Carrier route code
std_lotno	378	381	4	Line of Travel (LOT) number for carrier route mailings
std_lotord	382	382	1	LOT ascending or descending sort flag
std_status	383	388	6	Status/error codes (See Appendix A)
std_zipflg	389	389	1	ZIP Code change flag 1 = ZIP Code not changed, address is in a valid range for input ZIP Code 2 = ZIP Code changed, address is in a valid range for new ZIP Code Blank = ZIP Code could not be validated
std_lacind	390	390	1	LACS ^{Link} ® indicator Y = Address might need 911 conversion (from box to street address) N = Address does not need conversion Blank = Address was not assigned (not ZIP + 4 coded)
std_z4ews	391	391	1	EWS consists of records containing partial address information limited to the street name, pre- and post-directionals and a ZIP Code. For an address record to be EWS eligible, it must be an address not present on the most recent monthly production ZIP + 4 file. EWS flag Y = Matched to EWS file N = Not an EWS match
std_adrtyp	392	392	1	Address match type F = Firm G = General delivery H = High-rise apartment or office building M = Military P = Post Office Box™ R = Rural route or highway contract S = Street U = Unique Blank = Unassigned (not ZIP + 4 coded)
std_aprtind	393	393	1	National Deliverability Index (NDI) scoring for apartment addresses 1 = Apartment address without apartment number 2 = Apartment address with apartment number (Affirmed) Blank = Not an apartment address
std_rrind	394	394	1	National Deliverability Index (NDI) scoring for RR/HC addresses 1 = RR/HC address without Box number 2 = RR/HC address with Box number (Affirmed) Blank = Not a RR/HC address
std_rsvd2	395	397	3	U.S. Congressional District
std_cntycd	398	400	3	Three digit county code
std_code	401	402	2	Flag of '00' to indicate if the address in std_deladr or std_secadr has been truncated. We suggest keeping the input address if this is '00'.
dpv_vacant	403	403	1	Vacant indicator Y = Location has been vacant for 90+ days N = Not a vacant address Blank = Record not presented for vacant match (not ZIP + 4 coded)
dpv_flag	404	404	1	Indicates whether or not a record matched to the DPV database Y = Delivery point validated; primary number valid and secondary number (when present) valid D = Valid primary number; input missing secondary number (primary for RR) S = Valid primary number; secondary number (primary for RR) present and not confirmed, or a single trailing alpha on a primary number was dropped to make a DPV match N = No delivery point validation Blank = Record not presented for DPV match (not ZIP + 4 coded)

dpv_cmra	405	405	1	Indicates whether or not the address is a Commercial Mail Receiving Agency (CMRA) Y = Address is a CMRA N = Address is not a CMRA Blank = Record not presented for CMRA match (not ZIP + 4 coded)
dpv_ftnts	406	417	12	DPV footnotes AA = Input address ZIP + 4 match A1 = Input address ZIP + 4 not matched BB = Input address DPV matched (all components) CC = Input address primary number DPV matched, secondary number not DPV matched, secondary number not required C1 = Input address primary number DPV matched, secondary number not DPV matched, secondary number required F1 = Input address matches a military address G1 = Input address matches a general delivery address IA = Informed address identified M1 = Input address primary number missing M3 = Input address primary number invalid N1 = Input address primary number DPV matched, secondary number missing, secondary number required NL = An NCOA ^{Link} move address cannot be DPV confirmed. A return code of NL means that the NCOA ^{Link} directory data does not exactly match the DPV directory data. This may happen because the NCOA ^{Link} directories are updated more frequently than the DPV directories. PB = Identified PO Box Street Address P1 = Input address missing PO, RR, or HC Box number P3 = Input address PO, RR, or HC Box number invalid RR = Input address DPV matched to CMRA R1 = Input address DPV matched to CMRA but PMB number not present R7 = Address assigned to phantom route R777 or R779 TA = Input address primary number DPV matched by dropping trailing alpha U1 = Input address matches a unique address
lac_rtncod	418	419	2	USPS LACS ^{Link} return codes A = LACS ^{Link} record match, a converted address is provided in the standardized address data fields 00 = No match, and no converted address 09 = LACS ^{Link} matched an input address to an old address, which is a 'highrise default' address, no new address is provided 14 = Found LACS ^{Link} record, but could not convert the data to a deliverable address 92 = LACS ^{Link} record matched after dropping the secondary number from input Blank = Record not presented for LACS ^{Link} match
ste_rtnod	420	421	2	USPS Suite ^{LinkTM} return codes A = Suite ^{Link} record match, suite information is added to the standardized address 00 = No match, and no suite information added Blank = Record not presented for Suite ^{Link} match
std_resvd	422	467	46	Reserved space (future use)
COA Data				
coa_deladr	468	515	48	Delivery address
coa_urban	516	555	40	Urbanization (for Puerto Rico addresses)
coa_city	556	583	28	City name
coa_city13	584	596	13	13-character city name as provided by USPS
coa_state	597	598	2	State
coa_zip	599	603	5	ZIP Code
coa_zip4	604	607	4	ZIP + 4
coa_dlvptnt	608	609	2	Delivery point
coa_chkdgt	610	610	1	Legacy check digit
coa_crrt	611	614	4	Carrier route code
coa_lotno	615	618	4	Line of Travel (LOT) number for carrier route mailings
coa_lotord	619	619	1	LOT ascending or descending sort flag
coa_lacind	620	620	1	LACS ^{Link} flag Y = Address converted by LACS ^{Link} N = Address looked up with LACS ^{Link} but not converted S = A LACS ^{Link} conversion was made, but it was necessary to drop the secondary information Blank = Record not presented for LACS ^{Link} match
coa_adrtyp	621	621	1	Address match type F = Firm G = General delivery H = High-rise apartment or office building M = Military P = Post Office Box R = Rural route or highway contract S = Street U = Unique Blank = Unassigned
coa_resvd1	622	630	9	U.S. Congressional District for new address
coa_movdat	631	636	6	Date NCOA ^{Link} or PCOA move became effective (YYYYMM format)

coa_movtyp	637	637	1	Type of match made to NCOA ^{Link} or PCOA database B = Business F = Family I = Individual P = Proprietary change-of-address (if optional service requested) R = LACS ^{Link} S = Suite ^{Link}
coa_dlvcod	638	638	1	USPS NCOA ^{Link} Delivery Code New Address is provided only for records with code "M", "S", "T" or "L" M = Forwardable move S = Forwardable move, secondary address cannot be confirmed K = Moved, left no forwarding address G = PO Box TM closed F = Moved to a foreign address P = Temporary move, or moved and new primary address can not be confirmed or converted to a deliverable address; no forwarding address provided L = LACS ^{Link} conversion T = Suite ^{Link} match 1 = PCOA match
coa_chgind	639	639	1	Change flag. New address provided for records with "A" only A = New address provided (forwardable move, LACS ^{Link} update or Suite ^{Link} match) B = Possible move C = No match D = Moved; no new address available
coa_rtncod	640	641	2	USPS NCOA ^{Link} Return Codes. See Appendix B for codes. This field is not altered during PCOA processing and may reflect that a non-forwardable move was found during NCOA ^{Link} processing prior to finding a forwardable move during PCOA processing.
coa_cmra	642	642	1	Indicates whether or not the new address is a Commercial Mail Receiving Agency (CMRA) Y = New address is a CMRA N = New address is not a CMRA Blank = Record not presented for CMRA match
coa_resvd2	643	651	9	Reserved space (future use)
coa_name	652	691	40	Name used for matching
Future Use				
coa_resvd	692	736	45	Reserved space (future use)
DSF^{2®} Data				
dsf2wlkseq	737	744	8	Walk sequence number
dsf2adrtyp	745	745	1	Address type B = Business R = Residential G = General delivery U = Undetermined Blank = Non-match to Delivery Sequence File
dsf2eduind	746	746	1	Educational indicator Y = Address is an educational institution N = Address is not an educational institution Blank = No lookup attempted
dsf2dlvtyp	747	747	1	Delivery type code 1 = Curb - A delivery point with a mail receptacle located at the curb 2 = NDCBU - A delivery point that is serviced by cluster boxes, also known as Neighborhood Delivery and Collection Box Units (NDCBU) assigned to a bank of boxes or floors 3 = Central - A delivery point within a building that has two or more ZIP + 4 codes 4 = Door slot - A delivery point not serviced by Curb, NDCBU or Central Blank = Non-match to Delivery Sequence File
dsf2vacant	748	748	1	Vacant indicator Y = Location has been vacant for 90+ days N = Not a vacant address Blank = Record not presented for vacant match (not ZIP + 4 coded)
dsf2season	749	749	1	Seasonal indicator Y = Seasonal address N = Not a seasonal address Blank = Record not presented for seasonal match (not ZIP + 4 coded)
dsf2thrwbk	750	750	1	Throwback indicator Y = PO Box Delivery. The address associated with this delivery point is a street address, however delivery is only made to the customer's PO Box address. DSF ² will not cross-reference the street address to the appropriate PO Box. The USPS may not deliver mail addressed for the street delivery point to the PO Box unless the PO Box is also included in the address. N = Not a throwback address Blank = Record not presented to Delivery Sequence File (not ZIP + 4 coded)

dsf2drpind	751	751	1	Delivery point drop indicator The delivery point drop indicator specifies whether or not a delivery point is a drop site. A drop is a single delivery point or receptacle that services multiple families and/or businesses. The site distributes mail for a drop site internally. Commercial mailbox companies or Commercial Mail Receiving Agencies (CMRA's) are also classified as drop sites because the carrier delivers the mail to one point, and the company distributes mail to specific boxes. Y = Delivery point is a drop N = Delivery point is not a drop Blank = Record not presented to Delivery Sequence File (not ZIP + 4 coded)
dsf2drpcnt	752	754	3	Number of deliveries at the drop
dsf2nostat	755	755	1	USPS No Stat indicator Y = Update may be needed within the USPS delivery database N = No update needed within the USPS delivery database Blank = Record not presented to Delivery Sequence File (not ZIP + 4 coded)
dsf2score	756	757	2	Mail Score 1 = Address matched to the DSF ² file 2 = Address marked as a seasonal address 3 = Primary address matched the DSF ² file. However, the secondary address did not match to the DSF ² file. This address may or may not be deliverable. 4 = Address did not match the DSF ² file. Primary information is missing or invalid and prevented a direct match to the DSF ² file. Record may be undeliverable. 5 = This score is not currently used 6 = Address marked as being vacant for 90 or more days. Address information is accurate but is undeliverable. 7 = Address fields may be incomplete or contain data that cannot match to the Delivery Sequence and ZIP + 4 files.
dsf_resvd	758	761	4	Reserved space (future use)
Telephone				
std_phone	762	771	10	Phone number
Optional Flags				
opt_flags	772	779	8	Optional return codes A = Advanced Address Correction U = Apartment/unit number corrected or appended P = PCOA (Proprietary change of address) L = PCOA Plus (Proprietary change of address)
Suppression Flags				
supp_flags	780	789	10	Suppression & duplicate match flags A = Deceased B = DMA Do not mail C = Prison D = Duplicate record E = Keep record F = Non duplicate
Gender Flag				
std_gender	790	790	1	Gender code B = Both C = Company F = Female M = Male U = Unknown/undetermined Blank = No input name
Future Use				
resvd1	791	800	10	Reserved space (future use)

Appendix A

Status Codes	
A status code tells you how an address was corrected or standardized. The code contains six characters, and each character tells you something about how the record was changed.	
Code	Description
1st Character	
S	Input address was correct or standardized
2nd Character (address)	
N	No significant change to address
Y	Address changed
3rd Character (urbanization)	
N	No significant change to urbanization
Y	Urbanization changed
4th Character (city)	
N	No significant change to city
Y	City changed
5th Character (state)	
N	No significant change to state
Y	State changed
6th Character (ZIP/ZIP + 4)	
N	No significant change to ZIP
Y	ZIP changed
4	ZIP + 4 changed

Error Codes	
An error code tells you the address failed to validate against the official USPS data. The code indicates the reason the address is invalid or incomplete.	
Code	Description
E10	Unable to process due to insufficient data
E11	Invalid City, State and/or ZIP
E12	Foreign address
E19	Unhandled exception; contact support
E20	Unable to validate due to invalid, missing, insufficient, or conflicting address details
E31	Missing primary number and street name, or cannot identify a primary address line
E32	Unrecognized street name
E33	Missing or unrecognized primary number
E34	Invalid primary number
E40	Unable to resolve multiple matches for primary address
E41	Unable to resolve multiple matches due to invalid or missing directional/s
E42	Unable to resolve multiple matches due to invalid or missing suffix
E43	Unable to resolve multiple matches due to both suffix and directional/s that are invalid or missing
E45	Unable to resolve multiple matches due to invalid or missing urbanization
E46	Unable to resolve multiple matches due to invalid or missing city name
E47	Unable to resolve multiple matches due to invalid or missing ZIP
E48	Unable to resolve multiple matches due to invalid or missing ZIP+4
E50	EWS match
E60	USPS does not deliver to this address
E61	Unable to DPV validate the address

Appendix B

NCOA^{Link} Return Codes

A = COA match

The input record matched to a business, individual or family type master file record. A new address could be returned.

00 = No match

The input record could not be matched to a master file record. A new address could not be returned.

01 = Found COA: Foreign move

The input record matched to a business, individual or family type master file record but the new address was outside USPS delivery area.

02 = Found COA: Moved left no address (MLNA)

The input record matched to a business, individual or family type master file record and the new address was not provided to USPS.

03 = Found COA: Box closed no order (BCNO)

The input record matched to a business, individual or family type master file record which contains an old address of PO Box that has been closed without a forwarding address provided.

04 = Cannot match COA: Street address with secondary

In the Standard mode utilizing Family matching logic, the input record matched to a family record type on the master file with an old address that contained secondary information which obtained a ZIP + 4 street level match. The input record does not contain secondary information. This address match situation requires individual name matching logic to obtain a match and individual names do not match.

05 = Found COA: New 11-digit DPBC is ambiguous

The input record matched to a business, individual or family type master file record. The new address on the master file record could not be converted to a deliverable address because the DPBC represents more than one delivery point.

06 = Cannot match COA: Conflicting directions: Middle name related

There is more than one COA (individual or family type) record for the match algorithm and the middle names or initials on the COAs are different. Therefore, a single match result could not be determined.

07 = Cannot match COA: Conflicting directions: Gender related

There is more than one COA (individual or family type) record for the match algorithm and the genders of the names on the COAs are different. Therefore, a single match result could not be determined.

08 = Cannot match COA: Other conflicting instructions

The input record matched to two master file (business, individual or family type) records. The two records in the master file were compared and due to differences in the new addresses, a match could not be made.

09 = Cannot match COA: High-rise default

The input record matched to a family record on the master file from a high-rise address ZIP + 4 coded to the building default. This address match situation requires individual name matching logic to obtain a match and individual names do not match.

10 = Cannot match COA: Rural default

The input record matched to a family record on the master file from a Rural Route or Highway Contract Route address ZIP + 4 coded to the route default. This address situation requires individual name matching logic to obtain a match and individual names do not match.

11 = Cannot match COA: Individual match: Insufficient COA name for match

There is a master file (individual or family type) record with the same surname and address but there is insufficient name information on the master file record to produce a match using individual matching logic.

12 = Cannot match COA: Middle name test failed

The input record matched to an individual or family record on the master file with the same address and surname. However, a match cannot be made because the input name contains a conflict with the middle name or initials on the master file record.

13 = Cannot match COA: Gender test failed

The input record matched to a master file (individual or family type) record. A match cannot be made because the gender of the name on the input record conflicts with the gender of the name on the master file record.

14 = Found COA: New address would not convert at run time

The input record matched to a master file (business, individual or family type) record. The new address could not be converted to a deliverable address.

15 = Cannot match COA: Individual name insufficient

There is a master file record with the same address and surname. A match cannot be made because the input record does not contain a first name or contains initials only.

16 = Cannot match COA: Secondary number discrepancy.

The input record matched to a street level individual or family type record. However, a match is prohibited based on 1 of the following reasons: 1) There is conflicting secondary information on the input and master file record; 2) the input record contained secondary information and matched to a family record that does not contain secondary information. In item 2, this address match situation requires individual name matching logic to obtain a COA match and individual names do not match.

17 = Cannot match COA: Other insufficient name

The input record matched to an individual or family master file record. The input name is different or not sufficient enough to produce a match.

18 = Cannot match COA: General delivery

The input record matched to a family record on the master file from a General Delivery address. This address situation requires individual name matching logic to obtain a match and individual names do not match.

19 = Found COA: New Address not ZIP + 4 coded.

New address primary number not DPV confirmable or Temporary Change Of Address. There is a change of address on file but the new address cannot be ZIP + 4 coded and therefore there is no 11-digit DPBC to store or return, the new address primary number cannot be confirmed on DPV or the new address is temporary

20 = Cannot match COA: Conflicting directions after re-chaining

Multiple master file records were potential matches for the input record. The master file records contained different new addresses and a single match result could not be determined.

66 = Daily delete

The input record matched to a business, individual or family type match that is present in the daily delete file. No change is returned. Records in the daily delete file are pending deletion. Reasons include the following: move was filed as family when it should have been individual, move filed that should not have been, mistakes in data provided to the USPS.

91 = COA Match: Secondary number dropped from COA

The input record matched to a master file record. The master file record had a secondary number and the input address did not. The record is a ZIP + 4 street level match.

92 = COA Match: 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 record did not. The record is a ZIP + 4 street level match.