

# TrueNCOA's Data Dictionary

## Field Descriptions

NOTE: All input fields will be included in your output file. These fields will be prefixed with 'input\_'. For example, a first name input will be named: input\_first\_name.

FIELD NAME	DESCRIPTION
Household Position	Household Position indicates the order in which a record's constituents were screened. For example, if a record includes two individuals (spouses), then the first individual will have an order index of '1' and the second individual or spouse will have an order index of '2'.
Name ID	A unique identifier given to your records by our system. This Name Id is different from Record Id. This Name Id will be the same for moves with updated addresses.
Individual Record ID	A unique identifier given to your records by our system. Different from Name Id, this Id is unique to each input record. This Record Id will be the same for moves with updated addresses.
First Name	Displays the first name of the constituent.
Last Name	Displays the last name of the constituent.
Company Name	Displays the name of the company on the record.
Street Number	The Primary Address Number for the parsed address.
Street Pre Direction	The Address Pre Direction (W, NE, etc.) for the parsed address.
Street Name	The Street Name for the parsed address.
Street Post Direction	The Address Post Direction (S, SW, etc.) for the parsed address.
Street Suffix	The Address Suffix (AVE, ST, CT, etc.) for the parsed address.
Unit Type	Identifies the type of unit (Apartment, Unit, etc.) for the parsed address.
Unit Number	Identifies the Unit number for the parsed address.
Private MailBox Number	Identifies the Private Mailbox Number.
City Name	City Name for the given address.
State Code	2-digit State Abbreviation (IL, NY, CA, etc) for the given address.

FIELD NAME	DESCRIPTION
Postal Code	Contains the 5-digit Zip Code for the given address.
Postal Code Extension	Contains the +4 Code for the given address.
Postal Carrier Route	4-digit Carrier Route Number indicates a group of mailing addresses that receive the same code to aid in mail delivery efficiency.
Address Status:	Identifies if an address is Valid, Multi-Matched, or Invalid, and were not matched to the USPS Database. <ul style="list-style-type: none"> <li>• V - Valid (match to USPS database)</li> <li>• M - Multi-match (typically missing prefix or suffix, such as North or South)</li> <li>• N - Invalid (no match)</li> </ul>
Error Number	Error and warning codes that identify what took place during DPV and may be hindering delivery. <i>See DPV Error Table</i>
Address Type	Identifies the different type of delivery address. <ul style="list-style-type: none"> <li>• F - ZIP+4 Match on the Company Name</li> <li>• G - General Delivery Record</li> <li>• H - High Rise Record</li> <li>• P - PO Box Record</li> <li>• R - Rural Route Record</li> <li>• S - Street Record</li> </ul>
Delivery Point	A 2-digit code that identifies the individual mail delivery location for this address.
Check Digit	Check Digit for each deliverable record in the database.
Delivery Point Verification	Delivery Point Verification Codes are a set of 6 characters that identify whether a building physically exists, whether it accepts mail, whether it is a vacant address, etc.  <i>See Delivery Point Verification Codes Table</i>
Delivery Point Verification Notes	Delivery Point Verification Footnotes that identify what took place during DPV. <ul style="list-style-type: none"> <li>• AA - ZIP4 matched</li> <li>• A1 - ZIP4 did not match</li> <li>• BB - HSA_DPV confirmed entire address</li> <li>• CC - HSA_DPV confirmed address by dropping secondary info</li> <li>• F1 - Military Match</li> <li>• G1 - General Delivery Match.</li> <li>• N1 - HSA_DPV confirmed a highrise or box type address w/o secondary info</li> <li>• M1 - Primary number missing from address</li> <li>• M3 - Could not confirm address</li> <li>• P1 - Box type address missing box number</li> <li>• P3 - Box number invalid</li> <li>• RR - HSC_DPV confirmed address</li> <li>• R1 - HSC_DPV confirmed a highrise or box type address w/o secondary info</li> </ul>

FIELD NAME	DESCRIPTION
	<ul style="list-style-type: none"> <li>U1 - Unique ZIP Code Match.</li> </ul>
Vacant	<p>Indicates if an address has been identified as vacant; this address may have been previously active, but now has been unoccupied for over 90 days.</p> <ul style="list-style-type: none"> <li>Y – Vacant</li> <li>N - Occupied</li> </ul>
Congressional District Code	2-digit Congressional District Code indicates which congressional district each address is located within.
Area Code	Displays the area code for the given address.
Latitude	Latitude calculated by individual ZIP+4.
Longitude	Longitude calculated by individual ZIP+4.
Time Zone	Displays the time zone for the given address.
County Name	Displays the name of the county for the given address.
County FIPS Code	3-digit county federal information processing standards (FIPS) code. This code helps define geographic locations for public alerting systems.
State FIPS Code	2-digit state federal information processing standards (FIPS) code. This code helps define geographic locations for public alerting systems.
Barcode	Delivery Point Barcode gives a 12-digit number that can be used in the creation of a barcode used for mailings.
Locatable Address Conversion System	Locatable Address Conversion System indicator; the change of rural-style addresses to city-style addresses.
Line of Travel	The Line of Travel number indicates the first occurrence of delivery made to the add-on range within the carrier route.
Ascending/Descending	LOT order indicator gives the approximate delivery order within the sequence number.
Move Applied	Contains the date (YYYYMMDD) the record was processed through NCOA.
Move Type	<p>Indicates the type of move on the addressee's change of address order.</p> <ul style="list-style-type: none"> <li>I - Individual Match</li> <li>F - Family Match</li> <li>B - Business Name Match</li> </ul>
Move Date	The date the move was filed with the USPS, in YYYYMM format.

FIELD NAME	DESCRIPTION
Move Distance	The distance between the old dwelling unit and the new dwelling unit. This is measured in miles; with up to 9,999 miles and two decimal points included from centroid zip.
Match Flag	Flag that indicates the move status applied during NCOA processing. <ul style="list-style-type: none"> <li>• M – Moved</li> <li>• G - PO Box Closed</li> <li>• K - Moved, left no forwarding address</li> <li>• F - Moved to a Foreign Country</li> </ul>
NXI	Status code returned during NCOA processing; This code identifies if a new address was provided and gives description of why or why not.  <i>See NXI and ANK Table</i>
ANK	ANK Flag indicates whether a 19-48 Month move took place.  <i>See NXI and ANK Table</i>
Residential Delivery Indicator	Identifies whether a delivery type is classified as Residential or Business. <ul style="list-style-type: none"> <li>• Y – Residential</li> <li>• N - Business</li> </ul>
Record Type	Indicates if an address is considered active, historical, or current by the USPS. <ul style="list-style-type: none"> <li>• A - Active; no move was applied; may or may not be the current address</li> <li>• C - Current; move was applied, and this is the current record</li> <li>• H - Historical or previous address</li> </ul>
Country Code	2-digit country abbreviation.
Address Line 1	Identifies the primary address information of the address. This field combines street number, street pre direction, street name, and street post direction.
Address Line 2	Identifies the secondary address information of the address. This field combines unit type and unit number.
Address Id	An identifier that is unique for each address. For Example: 123 Main Street, Chicago, IL will always have an Address_Id of 12345. The owner may change for this address, but the Address Id will always be the same.
Household Id	An identifier that is unique to each household. For example, Jane and John Smith's Household Id will always be the same for as long as they live at the same household. The Household Id is unique based off of both Individual Names and Addresses. This Id is different from the Individual Id.

## Footnotes

### Delivery Point Verification Codes Table

**NOTE:** If the DPV\_ field is empty, the Address was not submitted for confirmation. The record must first pass CASS certification to be passed to DPV. Any records which fail the preliminary CASS validation will not have a code in the DPV\_ field.

POSITION	DESCRIPTION	CODES
Position 1 = DPV Confirmation Indicator	<p>The DPV Confirmation Indicator is the primary method used by the USPS to determine whether an address was considered deliverable or undeliverable.</p> <p><i>Field contains the results of the call to the DPV Confirmation Hash Table: dph.hsa</i></p>	<ul style="list-style-type: none"> <li>• Y - Address was DPV confirmed for both primary and (if present) secondary numbers.</li> <li>• D - Address was DPV confirmed for the primary number only, and Secondary number information was missing.</li> <li>• S - Address was DPV confirmed for the primary number only, and Secondary number information was present but unconfirmed.</li> <li>• N - Both Primary and (if present) Secondary number information failed to DPV Confirm.</li> <li>• Blank - Address not presented to hash table.</li> </ul>
Position 2 = DPV CMRA Indicator	<p>* CMRA Indicates a private business that acts as a mail-receiving agent for specific clients.</p> <p><i>Field contains the results of the call to the DPV CMRA Hash Table: dph.hsc</i></p>	<ul style="list-style-type: none"> <li>• Y = Address was found in CMRA table.</li> <li>• N = Address was not found in CMRA table.</li> <li>• Blank = Address not presented to hash table.</li> </ul>
Position 3 = DPV False Positive Indicator	<p>The False Positive table flags the False Positive addresses. This is a flag to determine whether a mailing list is being generated or created during validation. Creating a mailing list through DPV certification is not allowed by the USPS.</p> <p><i>Field contains the results of the call to the DPV False Positive Hash Table: dph.hsf</i></p>	<ul style="list-style-type: none"> <li>• Y = Address was found in False Positive table.</li> <li>• N = Address was not found in False Positive table.</li> <li>• Blank = Address not presented to hash table.</li> </ul>
Position 4 = Vacant Indicator (New)	<p>A delivery point was active in the past, but is currently vacant (in most cases, unoccupied over 90 days) and not receiving delivery.</p>	<ul style="list-style-type: none"> <li>• Y = Address was found in VACANT table.</li> <li>• N = Address was not found in VACANT table.</li> </ul>

POSITION	DESCRIPTION	CODES
	<i>Field contains the results of the call to the DPV VACANT Hash Table: dph.hsv</i>	<ul style="list-style-type: none"> <li>Blank = Address not presented to hash table.</li> </ul>
Position 5 = DSF2 No Stats Indicator (New)	<p>Indicates the address is not receiving delivery, and the address is not counted as a possible delivery. These addresses are not receiving delivery because A) delivery has not been established; B) customer receives mail as a part of a drop; or C) the address is no longer a possible delivery because the carrier destroys or returns all of the mail.</p> <p><i>Field contains the results of the call to the DPV NOSTATS Hash Table: dph.hsx</i></p>	<ul style="list-style-type: none"> <li>Y = Address was found in NOSTATS table.</li> <li>N = Address was not found in NOSTATS table.</li> <li>Blank = Address not presented to hash table.</li> </ul>
Position 6 = PBSA Indicator - P.O. Box Street-Style Address (New)	Identifies which Street addresses in a database are actually Post Office Box physical locations	<ul style="list-style-type: none"> <li>Y = Address is actually a PO Box physical address</li> <li>N = Address was not found in PBSA table.</li> <li>Blank = Address not presented to hash table.</li> </ul>

## NXI and ANK Table

### NXI

RETURNED CODE	CAPTION	DESCRIPTION
A	Full Address Match	Matched record and a new address has been provided (NCOALink 18Month Service code only).
00	No Matching Address - No new address provided	No Match (NCOALink 18-month Service code only)
01	New address outside US - no new address provided	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	No forwarding address	Found COA: Moved Left No Address - The input record matched to a business, individual or family type master file record and the new address was not provided to USPS.
03	Closed PO box - No new address provided	Found COA: Box Closed No - 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.

RETURNED CODE	CAPTION	DESCRIPTION
04	Address 2 Missing for family move - No new address provided	Cannot match COA: Street Address with Secondary - The input record matched to a family record type on master file with an old address that contained secondary information. 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	Too many matches - No new address provided	Found COA: New 11-digit DPBC (Delivery Point Barcode) 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	Partial Match - No new address provided	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	Partial Match - No new address provided	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	Too many possible matches - No new address provided	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	Family move address does not match individual name - No new address provided	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	Family move address does not match individual name	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	Only last name was matched - No new address provided	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	Middle name does not match - No new address provided	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	Gender does not match - No new address provided	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

RETURNED CODE	CAPTION	DESCRIPTION
		name on the input record conflicts with the gender of the name on the master file record.
14	Undeliverable Address - No new address provided	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	First name is missing - No new address provided	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	No matching apt number - No new address provided	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	First name doesn't match - No new address provided	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	Family move with General address - No new address provided	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	No Zip Code found - No new address provided	Found COA: New Address not ZIP+4 coded - 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.
20	Cannot determine single address - No new address provided	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	Deleted address with no forwarding address.	Daily Delete - The input record matched to a business, individual or family type master file record with an old address that is present in the daily delete file. The presence of an address in the daily delete file means that a COA with this address is pending deletion from the master file and that no mail may be forwarded from this address.
91	Matched; secondary address may be missing	Found COA: 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. A new address was provided.
92	Matched; secondary address may be incorrect	Found COA: 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. A new address was provided.



## ANK

RETURNED CODE	CAPTION	DESCRIPTION
77	<b>ANK</b> - Address Not Known	The record was not found. You should suppress these records from your database or flag these records for deletion and not mail to them.
48	48 Month NCOA	The record was found in the 48 month NCOA. This record moved between 19-48 months ago.

## DPV Error and Warning Codes Table

ERROR AND WARNING GROUP	CAPTION	DESCRIPTION
1	State Not Found	1.1 State not found
2	City Not Found	2.1 City not found
3	Street Not Found	3.1 Street not found
4	Address Not Found	4.1 Address not found
5	Can't Assign +4	5.1 Incomputable +4 range 5.2 +4 unavailable
6	Multiple Matches	6.1 Multiple streets match 6.2 Multiple addresses match 6.3 Cardinal Rule multiple match
7	Time/Space Error	7.1 Time ran out 7.2 Output too long
8	Company Warning	8.1 Company phonetic match used 8.2 First company match used
9	State Corrected	9.1 State determined from city 9.2 State determined from ZIP
10	City Corrected	10.1 City phonetic match used 10.2 City determined from ZIP 10.3 Acceptable city name used
11	Street Corrected	11.0 Address component Chg/Del/Add

ERROR AND WARNING GROUP	CAPTION	DESCRIPTION
		11.1 Street phonetic match used 11.2 Pre-direction dropped 11.3 Pre-direction added 11.4 Suffix dropped 11.5 Suffix added 11.6 Post direction dropped 11.7 Post direction added 11.8 Pre-direction standardized 11.9 Street standardized 11.10 Suffix standardized 11.11 Post direction standardized 11.12 Street missing 11.13 Alternate address used 11.14 Address Standardized 11.15 Dual address - Used PO Box 11.16 Dual address - Used Non-PO Box 11.17 Street Alias match - Better delivery address exists
12	Unit/Box Warning	12.1 Unit standardized 12.2 Unit missing 12.3 Unit not found 12.4 Unit unverified 12.5 Rural box not found
13	Leftovers Found	13.1 Leftovers found
14	ZIP/Route Warning	14.1 No ZIP Code Available 14.2 Incorrect ZIP Code was changed to correct ZIP 14.3 +4 changed 14.4 Route changed 14.5 +4 added 14.6 Route added 14.7 ZIP assigned for Multi-matched address 14.8 Unique ZIP match 14.9 Small town default match
15	Address Type Warning	15.0 ZIP Code Changed 15.1 Highrise Default 15.2 Highrise Exact 15.3 Rural Route Default 15.4 Rural Route Exact 15.5 Early Warning System match. 15.6 LACSLink Conversion Match 15.7 SuiteLink Match - Suite Returned 15.8 SuiteLink Match - No Suite Returned
A1-A10		This indicates which Address block was used to code the record