

# WHAT IS NCOA?



- NCOA stands for “National Change of Address”
- The United States Postal Service created this service in the mid-eighties
- The program was created to save money by reducing the amount of undeliverable mail that is returned and to help businesses and organizations keep their mailing lists current and accurate
- NCOA is a general term, while NCOALink is the product developed to facilitate this process

# MORE INSIGHT INTO NCOA

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- NCOA compares a business's mailing list against the USPS's database of change-of-address information to identify customers who have moved and update their address accordingly.
  - NCOA can help businesses reduce undeliverable mail, improve the accuracy and deliverability of their mailings, and potentially save money on postage costs.
  - NCOA provides several types of address move updates, including permanent move updates, individual/household move updates, business move updates, and family move updates.
  - NCOA also provides address standardization, which ensures that mailing addresses are in the correct format and comply with USPS guidelines.
  - There are different tiers of NCOA service providers, including full-service providers and limited-service providers. Full-service providers offer a more comprehensive range of services.
  - NCOA is typically used by businesses that send a high volume of mail, such as direct mail campaigns or subscription-based services, but it can also be useful for smaller businesses and non-profit organizations.
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# NCOA SERVICE PROVIDER TIERS: WHAT YOU NEED TO KNOW



- Two main types of NCOA Licensing tiers for our purposes
- Full Service Providers (*Highest Tier*)
  - FSPs can provide services to unrelated third parties, which must be at least 51% of their NCOALink processing, and process no more than 49% of records internally. FSPs receive 48 months of COA data on a weekly basis from the USPS via Electronic Product Fulfillment.
- Limited Service Providers
  - LSPs can both provide services to third parties and use the product internally. LSPs receive 18 months of COA data on a weekly basis from the USPS via Electronic Product Fulfillment.
  - <https://postalpro.usps.com/mailling-and-shipping-services/NCOALink>

# WHAT CAN A SERVICE PROVIDER OFFER?

1. **Address Standardization:** NCOA service standardizes address data to match USPS requirements, ensuring that address information is formatted consistently and accurately.
2. **Move Update:** NCOA service compares the addresses on a mailing list with the USPS's database of change-of-address filings to identify and update addresses that have changed.
3. **Delivery Point Validation:** NCOA service validates the accuracy of the addresses on a mailing list by checking them against the USPS's Delivery Point Validation (DPV) system, which verifies that the address exists and is deliverable.
4. **Presort Qualification:** NCOA service helps businesses and organizations qualify for discounted postage rates by verifying that their mailing list meets USPS requirements for presorting and address accuracy.





# ADDRESS STANDARDIZATION

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- USPS uses address standardization and verification when anything is shipped
  - This standardization is one of the key components of the CASS certification, Coding Accuracy Support System
  - CASS was developed by USPS to improve the accuracy of address matching by standardizing address data and verifying its accuracy
  - One of the main features of CASS is address standardization, which involves comparing address data against the USPS database to identify any discrepancies or errors. CASS-certified software uses sophisticated algorithms to parse and standardize address data, including street names, city names, and ZIP codes, to ensure that the address data is accurate and formatted correctly according to USPS guidelines.
  - The CASS certification process includes several components, including address standardization, ZIP code validation, and delivery point validation.
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# ADDRESS STANDARDIZATION EXAMPLE

Let's say a business has a mailing list with the following address information:

**123 Main Street  
Apartment 4  
Anytown, CA 12345**

To standardize this address using USPS guidelines, the address would be broken down into its component parts: street address, apartment number (or other secondary unit), city, state, and ZIP code. The address would then be standardized according to the USPS address format, which typically looks like this:

**123 MAIN ST APT 4  
ANYTOWN CA 12345-6789**

The standardized address follows several USPS guidelines:

- The street address is in all caps and contains no punctuation or abbreviations
- The secondary unit (in this case, "APT 4") is included on the same line as the street address, also in all caps
- The city and state are both capitalized and abbreviated
- The ZIP code is formatted as a 5-digit code, followed by a hyphen and a 4-digit code (if applicable)

By standardizing the address in this way, the business can ensure that the address is accurate and complete, and that it complies with USPS guidelines for mail delivery. This can help improve the deliverability of their mailings and reduce the risk of undeliverable mail.

# DELIVERY POINT VALIDATION (DPV)

- DPV is a process used by the USPS to verify that a given mailing address is a valid delivery point
- During the DPV process, the USPS compares the address information provided by the mailer to its database of delivery points
- A delivery point is a specific address that corresponds to a single mailbox or point of delivery.
- The process verifies that the address is a known delivery point and that mail can be delivered to that address
- DPV also checks the accuracy of the secondary address components, such as apartment or suite numbers. If the secondary address components are incorrect or incomplete, the DPV process will identify the error and provide a suggested correction to the mailer.





# ADDRESS STANDARDIZATION EXAMPLE

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Let's say a business has a mailing list with the following address information:

**123 Main St  
Anytown, CA 12345**

To validate this address using DPV, the USPS would first check its database to determine if this address is a known delivery point. If the address is not a known delivery point, the USPS would flag the address as invalid or undeliverable.

If the address is a known delivery point, the USPS would then verify that the address is accurate and complete. For example, the USPS might check to see if the address is missing any secondary unit information (such as an apartment or suite number), or if the ZIP code is incorrect or incomplete.

If the address is found to be inaccurate or incomplete, the USPS would flag the address as invalid or undeliverable, and may provide a suggested correction to the mailer.

For example, if the correct address was actually "**123 Main St, Apt 4, Anytown, CA 12345**", the USPS might suggest adding the "Apt 4" to the address to ensure that it can be delivered to the correct location.

By validating addresses using DPV, businesses can help ensure that their mailings are accurate and deliverable, which can help improve the effectiveness of their direct mail campaigns and reduce the costs associated with undeliverable mail.

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# ADDRESS MOVE UPDATES



- The NCOA service's main feature is providing address updates to lists where people have moved
- There are several different types of moves the NCOA service identifies, including permanent and temporary moves
- The NCOA service can identify whether an individual, family, or business has moved
- If a move occurred within the time period your service provider goes back to, the new address will be provided

# NCOA CERTIFICATES

UNITED STATES POSTAL SERVICE®

**CASS™ Summary Report**

See Domestic Mail Manual Section 902 for more information.

**A. Software**

1. CASO-Certified™ Company Name	2. CASO-Certified Software Name & Version 03.03.01.04 AAA	3. Configuration Form-7E
4. ZEXchange-Certified Company Name N/A	5. ZEXchange-Certified Software Name & Version N/A N/A	6. Configuration N/A
7. eLDTB-Certified Company Name	8. eLDTB-Certified Software Name & Version 03.03.01.04 AAA	9. Configuration Form-7E
10. MARS™ Certified Company Name N/A	11. MARS-Certified Software Name, Ver., & Mod. No. N/A N/A	12. Configuration N/A

**B. List**

1. List Processor's Name	2. Date Last Processed 9/19/2002 N/A + eLDT 9/19/2002 2. CPS N/A	3. State of Database Prior, Used a. ZIP + 4® 9/19/2002 b. ZIP Range N/A + eLDT 9/19/2002 c. CPS N/A
4. List Name or ID No. If listing ID No., number must start with 000 N00A_P01_Altavaca_Ontario_120901.dtf	5. Number of Lists 1	6. Total Records Submitted for Processing 1,029,393

**C. Output**

Output Rating	1. Total Coded	2. Validation Percent Form-7E 1,029,393 26.042522 03/08/2002	Output Rating	1. Total Coded	2. Validation Percent Form-7E 1,029,393 00.000000 03/08/2002
a. ZIP + 4® Confirmed	N/A		b. CRIT Coded	1,013,862	00.000000 - 12/08/2002 Form-7E
c. ZEXchange Processed			d. eLDT Assigned	1,029,393	00.000000 - 12/08/2002

**D. Notes**

I certify that the listing submitted with this form has been 100% job indicated, done using CASO-Certified software meeting all of the job requirements listed in the Domestic Mail Manual Section 902.

1. Mailer's Signature

2. Date Signed

3. Name and Address of Mailer  
Carrier or Agent

- When you leverage the NCOA service, your list processor should provide you summary certificates
- These indicate who ran the data, what was done, and a summary of what was identified
- The three certificate files you should expect are the:
  - Data Services Processing certificate
  - CASS Report / USPS Form 3553



















































 Data Services Processing Certificate NCDA Link: FSP/DPV/LACS Link/Suita Link					
Date processed:	8/8/2002				
Job ID:	2391940819				
License(s):					
Link:					
List name:	NCDA_PA_AddressCo_CentreCo_1528065				
List owner:	Cause of America				
List processor:	Cause of America				
Addresses / Rows:	1,528,066 / 92,691 (5.92 %)				
Matching:	Standard: Extended ZIP+4				
Pages in audit report:	4,733				
Return Codes					
	Ret Coded	ZIP+4 Coded	Total		
18 Invalid Address	3	0			
11 Invalid City/State/ZIP	2	0			
12 Invalid State	0	0			
13 Invalid City	0	0			
17 Insufficient Data	20	0	3		
21 Address Not Found	13,748	0	13,748		
22 Multiple Responses	1,697	0	1,697		
23 Error in Priority	0	2,302	2,302		
26 Box Closed	0	0			
27 No Fed Addr.	0	2,443	2,443		
28 Foreign Move	0	42	42		
31 Single Response	12,437	1,376,559	1,409,641		
30 Default Response	74	20,773	20,855		
33 Non-Deliverable	10	0	1		
36 Individual Move	0	72,852	72,852		
37 Family Move	0	10,919	10,919		
38 Business Move	0	139	139		
39 LACS Conversion	1	170	177		
98 Non-LSPS ZIP	3	0			
Totals:	29,625	1,409,941	1,528,066		



# HOW DOES THIS APPLY TO THE VOTER ROLLS?



- Most states require someone to register at their current address
- The voter registration lists are no different than any other mailing list - in fact many candidates purchase the lists for the purposes of mailing literature
- The vast majority of states have residency requirements in place that need to be met in order to register and to vote
- Most states have laws in place that require them to leverage a program that utilizes the NCOA on a periodic basis
- We can identify through the NCOA service who is no longer living in the state, their county, or even in their city
- We've identified cases of people registered in multiple states and voting in multiple states

	County	OOS Registrations	Active OOS Registrations	Total Registrations	OOS Percent of Total Registrations ▾
1.	PIKE	2,131	694	44,463 	4.79 
2.	PHILADELPHIA	44,173	27,938	1,063,990 	4.15 
3.	CENTRE	3,975	2,542	106,437 	3.73 
4.	YORK	11,240	3,381	310,540 	3.62 
5.	CHESTER	13,562	3,545	379,722 	3.57 
6.	MONROE	3,979	1,363	112,861 	3.53 
7.	DELAWARE	12,780	4,959	413,354 	3.09 
8.	ALLEGHENY	28,826	14,648	933,476 	3.09 
9.	NORTHAMPTON	6,895	3,479	223,722 	3.08 
10.	MONTOUR	348	243	11,708 	2.97 
11.	CUMBERLAND	5,322	2,797	185,742 	2.87 
12.	DAUPHIN	5,531	2,173	193,646 	2.86 
13.	ADAMS	2,023	543	72,101 	2.81 
14.	BUCKS	12,529	7,426	479,635 	2.61 
15.	BRADFORD	955	297	37,500 	2.55 
16.	FRANKLIN	2,530	795	99,509 	2.54 
17.	WAYNE	898	300	35,406 	2.54 
18.	LEHIGH	6,000	2,830	237,644 	2.52 
19.	MONTGOMERY	14,917	5,332	604,444 	2.47 
20.	MERCER	1,771	880	72,112 	2.46 
21.	BUTLER	3,322	2,047	136,393 	2.44 
22.	SUSQUEHANNA	651	418	26,881 	2.42 
23.	BERKS	6,448	1,610	266,366 	2.42 
24.	LANCASTER	8,324	3,993	349,889 	2.38 
25.	TIOGA	615	247	26,131 	2.35 



# UNDERSTANDING NCOA DATA - COA MOVE DATE

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- Represents the Month and Year that the move became effective
    - Typically the month proceeding the filing of the COA
  - Always shows as the first of the month
  - Goes back as far as 48 months with a Full Service Provider
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# UNDERSTANDING NCOA DATA - RETURN CODES

- 10 Invalid Address
- 11 Invalid City/State/Zip
- 12 Invalid State
- 13 Invalid City
- 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
- 21 Address Not Found
  - Cannot find the address in the database
- 22 Multiple Response
  - Getting too many responses to make a determination
- 23 Error in Primary
  - 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.
  - Possible causes:
    - 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.
    - LACSLink match was found but the new LACSLink converted address could not be reconstructed
- 26 Box Closed
  - NCOALink Only
  - Match was found to a COA record, but mail was being delivered to a PO Box that has since closed. No forwarding address supplied for customer.



# UNDERSTANDING NCOA DATA - RETURN CODES

- **27 No Forwarding Address**

- NCOALink only
- A match was found to a COA record, but the customer did not provide a forwarding address

- **28 Foreign Move**

- NCOALink only
- A match was found to a COA record but the customer moved out of the country
- NCOALink only processes domestic moves

- **31 Single Response**

- A unique Zip+4 match was made and no further information is necessary

- **32 Default Response**

- A match was made returning more information on the address

- **33 Non-deliverable**

- **36 Individual move (NCOALink only)**

- **37 Family Move (NCOALink only)**

- **38 Business Move (NCOALink only)**

- **39 LACSLink Conversion**

- A match was found to a LACSLink record, new address data provided
- Customer didn't actually move, but address was updated due to the 911 emergency system which was implemented to convert rural addresses to city style addresses

- **98 Non-USPS Zip**

# UNDERSTANDING NCOA DATA - DPV FOOTNOTES

- DPV Footnote codes to filter out
  - FI - matched to a military address
  - GI
    - Matched to a general delivery address
    - General Delivery addresses typically indicate a temporary mailing address
- DPV Footnote codes to consider
  - NI - Confirmed high rise or box type without secondary information (ex:APT #)
  - MI - Primary number missing from address
  - PI - Box Type address missing box number
  - P3 - Box type address with invalid box number
  - PB - Street address associated with USPS PO Boxes
  - R7 - Carrier Route R777 addresses don't receive mail delivery

G1 – General Delivery Address – Temporary Move

N1- Sent to front desk of building – not to individual.

States sending to Bad Addresses –



# UNDERSTANDING NCOA DATA - DPV CMRA

- DPV CMRA stands for “Commercial Mail Receiving Agency”
- Indicates whether address belongs to business such as FedEx, UPS, or other service that accepts mail from USPS on behalf of third parties
- Possible DPV CMRA codes
  - Blank - Not Tested
  - N - Tested and is not a CMRA
  - Y - Tested and is a CMRA



# UNDERSTANDING NCOA DATA - ADDITIONAL CONSIDERATIONS

- To avoid identifying military moves, additionally filter out moves to states “AA”, “AE”, and “AE”
- Another mechanism to identify PO Boxes is to look at the Carrier Route (CRRT) for values C770 or C771, easy to verify with Google Maps
- Carrier Routes (CRRT) C000 represent things like university dorms, assisted living centers or military base residential addresses
- DPV also offers an indication as to whether an address is currently vacant. Sometimes by the time the address is canvassed, someone new has moved in. Most often indicates temporary vacancy.
- ZIP+4 footnote codes can indicate specific errors with the address

[data@causeofamerica.org](mailto:data@causeofamerica.org) <data@causeofamerica.org>;

[vico@causeofamerica.org](mailto:vico@causeofamerica.org)

[National Change of Address \(NCOA\) Request Form \(causeofamerica.org\)](https://causeofamerica.org/ncoa-request-form)

