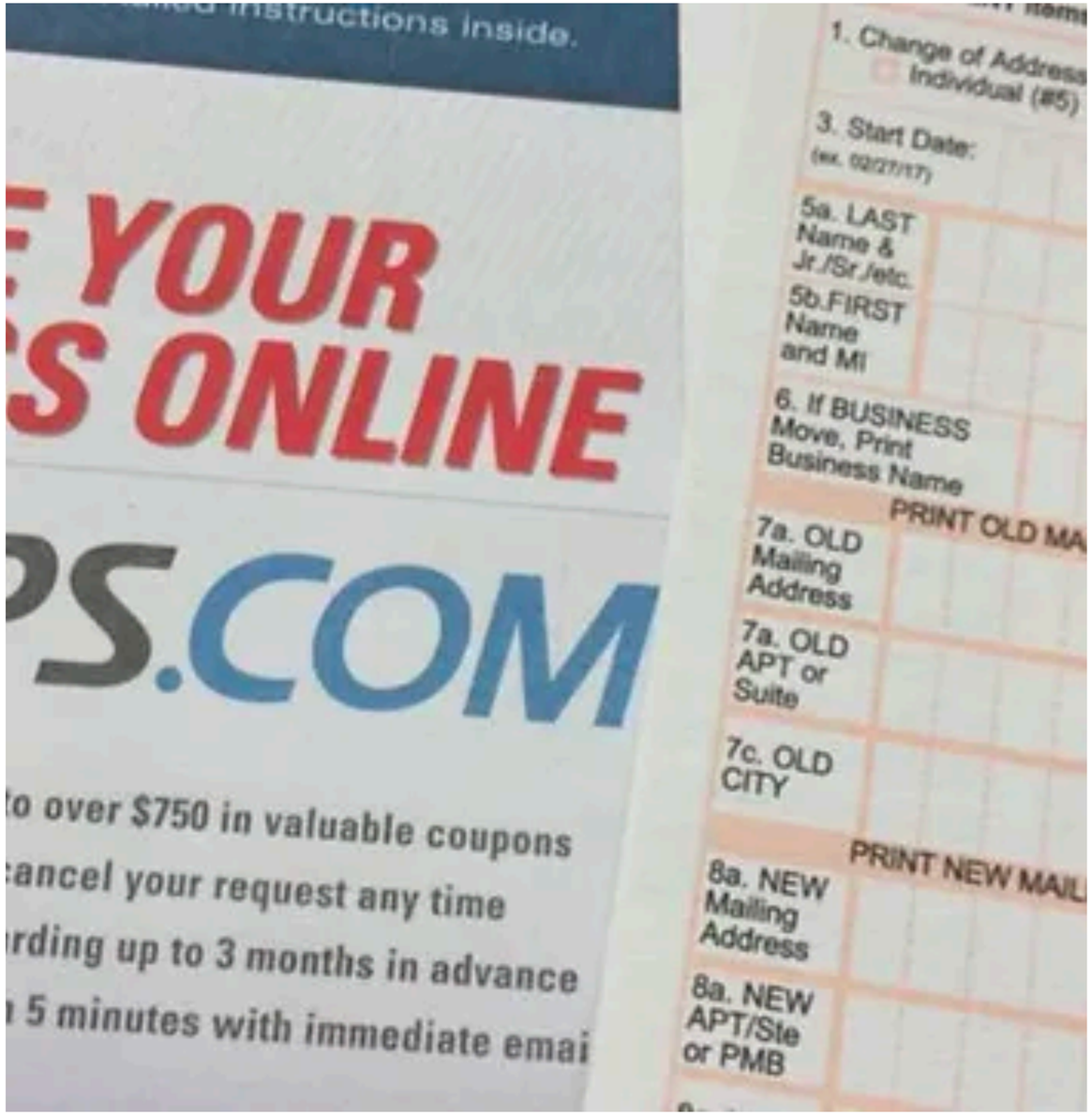
National Change of Address

& Data Analysis

Vico Bertogli | Cause of America | 2023-11-25

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



NCOALink®

NCOA is a system of record for all COA requests and is used to produce the NCOA[Link] product.
The NCOA[Link] Product is a secure dataset of approximately 160 million permanent change-of-address (COA) records constructed from names and addresses of individuals, families, and businesses who have filed a change-of-address with the Postal Service™. Developed with secure data store technology to increase security of postal customer data and protect the privacy of this information, the NCOA[Link] Product enables mailers to process mailing lists and update lists with new addresses prior to mailing. The NCOA[Link] data is provided on a regular basis to companies that have been licensed by the Postal Service.

https://postalpro.usps.com/mailing-and-shipping-services/NCOALink

More insight into NCOA

- 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.
- NCOA also provides Locatable Address Conversion System (LACSLink) which is an address updating system that identifies when a street is renamed or the house number and/or unit/apt number is changed. In this case the resident will be listed at a different address but will not be listed as moved.

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/mailing-and-shipping-services/NCOALink

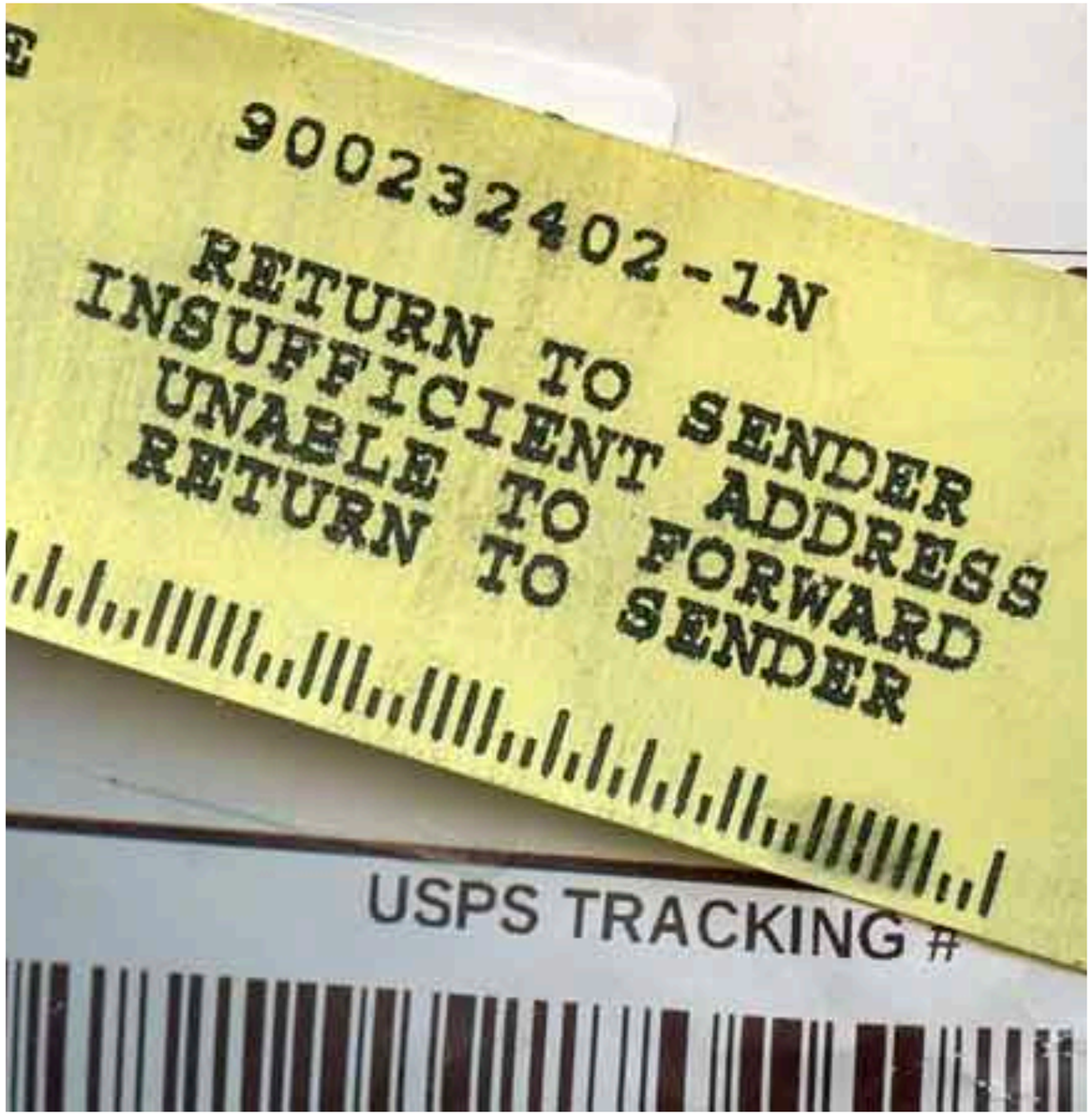
What can a service provider offer?

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

- 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.

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

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.

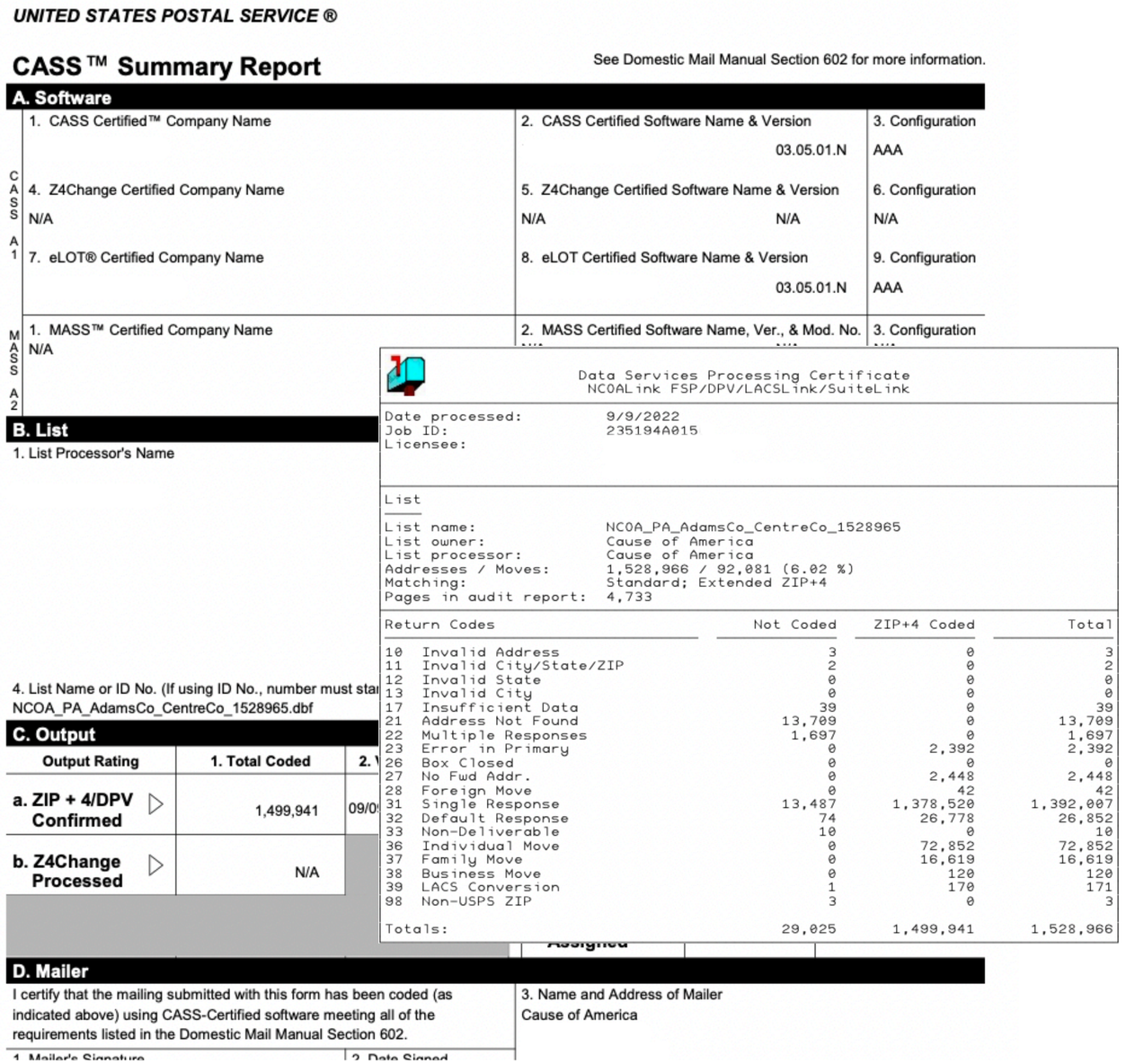
By validating addresses using DPV, businesses can help ensure that their mailings are accurate and deliverable, which can help improve the effectiveness of their direct mail campaigns and reduce the costs associated with undeliverable mail.

Address move updates

- The NCOA service's main feature is providing address updates to lists where people have moved
- 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

- 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 certificate files you should expect are the:
  - Data Services Processing certificate
  - CASS Report / USPS Form 3553



UNITED STATES POSTAL SERVICE ®

CASS ™ Summary Report

See Domestic Mail Manual Section 602 for more information.

A. Software

CASS A1

1. CASS Certified™ Company Name	2. CASS Certified Software Name & Version	3. Configuration
	03.05.01.N	AAA
4. Z4Change Certified Company Name	**5. Z4Change Certified Software Name & Version**	**6. Configuration**
N/A	N/A N/A	N/A
7. eLOT® Certified Company Name	**8. eLOT Certified Software Name & Version**	**9. Configuration**
	03.05.01.N	AAA

MASS A2

1. MASS™ Certified Company Name	2. MASS Certified Software Name, Ver., & Mod. No.	3. Configuration
N/A		

B. List

1. List Processor's Name

4. List Name or ID No. (If using ID No., number must sta
NCOA_PA_AdamsCo_CentreCo_1528965.dbf

C. Output

Output Rating	1. Total Coded	2.
a. ZIP + 4/DPV Confirmed	1,499,941	09/0
b. Z4Change Processed	N/A	

D. Mailer

I certify that the mailing submitted with this form has been coded (as indicated above) using CASS-Certified software meeting all of the requirements listed in the Domestic Mail Manual Section 602.

3. Name and Address of Mailer
Cause of America

1. Mailer's Signature | 2. Date Signed

Data Services Processing Certificate
NCOALink FSP/DPV/LACSLink/SuiteLink

Date processed: 9/9/2022
Job ID: 235194A015
Licensee:

List

List name: NCOA_PA_AdamsCo_CentreCo_1528965
List owner: Cause of America
List processor: Cause of America
Addresses / Moves: 1,528,966 / 92,081 (6.02 %)
Matching: Standard; Extended ZIP+4
Pages in audit report: 4,733

Return Codes	Not Coded	ZIP+4 Coded	Total
10 Invalid Address	3	0	3
11 Invalid City/State/ZIP	2	0	2
12 Invalid State	0	0	0
13 Invalid City	0	0	0
17 Insufficient Data	39	0	39
21 Address Not Found	13,709	0	13,709
22 Multiple Responses	1,697	0	1,697
23 Error in Primary	0	2,392	2,392
26 Box Closed	0	0	0
27 No Fwd Addr.	0	2,448	2,448
28 Foreign Move	0	42	42
31 Single Response	13,487	1,378,520	1,392,007
32 Default Response	74	26,778	26,852
33 Non-Deliverable	10	0	10
36 Individual Move	0	72,852	72,852
37 Family Move	0	16,619	16,619
38 Business Move	0	120	120
39 LACS Conversion	1	170	171
98 Non-USPS ZIP	3	0	3
Totals:	29,025	1,499,941	1,528,966

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
- NCOA can identify undeliverable addresses
    - Most states also require a mailing address if a voter does not or cannot receive mail at their registration address. This is more commonly found in mail-in states
- 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 showing as having voting in multiple states
    - In the majority of cases we've canvassed, the individual was unaware a vote was cast in their name from their prior residence

National Voter Registration Act

52 U.S. Code § 20507 - Requirements with respect to administration of voter registration

Purpose

(4)conduct a general program that makes a reasonable effort to remove the names of ineligible voters from the official lists of eligible voters by reason of—

(A)the death of the registrant; or

(B)a change in the residence of the registrant, in accordance with subsections (b), (c), and (d);

Program

(1)A State may meet the requirement of subsection (a)(4) by establishing a program under which—

(A)change-of-address information supplied by the Postal Service through its licensees is used to identify registrants whose addresses may have changed; and

(B)if it appears from information provided by the Postal Service that—

(i)a registrant **has moved** to a different residence address in the same registrar's jurisdiction in which the registrant is currently registered, **the registrar changes the registration records to show the new address and sends the registrant a notice of the change by forwardable mail** and a postage prepaid pre-addressed return form by which the registrant may verify or correct the address information; or

(ii)the registrant **has moved** to a different residence address not in the same registrar's jurisdiction, the registrar uses the notice procedure described in subsection (d)(2) to confirm the change of address.

National Voter Registration Act

52 U.S. Code § 20507 - Requirements with respect to administration of voter registration

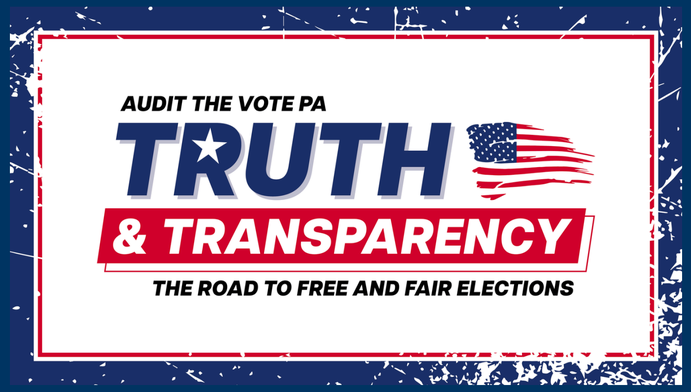
Requirements

(2)
(A) A State shall complete, **not later than 90 days prior to the date of a primary or general election for Federal office**, any program the purpose of which is to systematically remove the names of ineligible voters from the official lists of eligible voters.
(B) Subparagraph (A) shall not be construed to preclude—
(i) the removal of names from official lists of voters on a basis described in paragraph (3)(A) or (B) or (4)(A) of subsection (a); or
(ii) correction of registration records pursuant to this chapter.

Removals

(d) Removal of names from voting rolls
(1) A State shall not remove the name of a registrant from the official list of eligible voters **in elections for Federal office** on the ground that the registrant has changed residence unless the registrant—
(A) confirms in writing that the registrant has changed residence to a place outside the registrar's jurisdiction in which the registrant is registered; or
(B)
(i) has failed to respond to a notice described in paragraph (2); and
(ii) has not voted or appeared to vote (and, if necessary, correct the registrar's record of the registrant's address) in an election during the period beginning on the date of the notice and ending on the day after the date of the second general election for Federal office that occurs after the date of the notice.

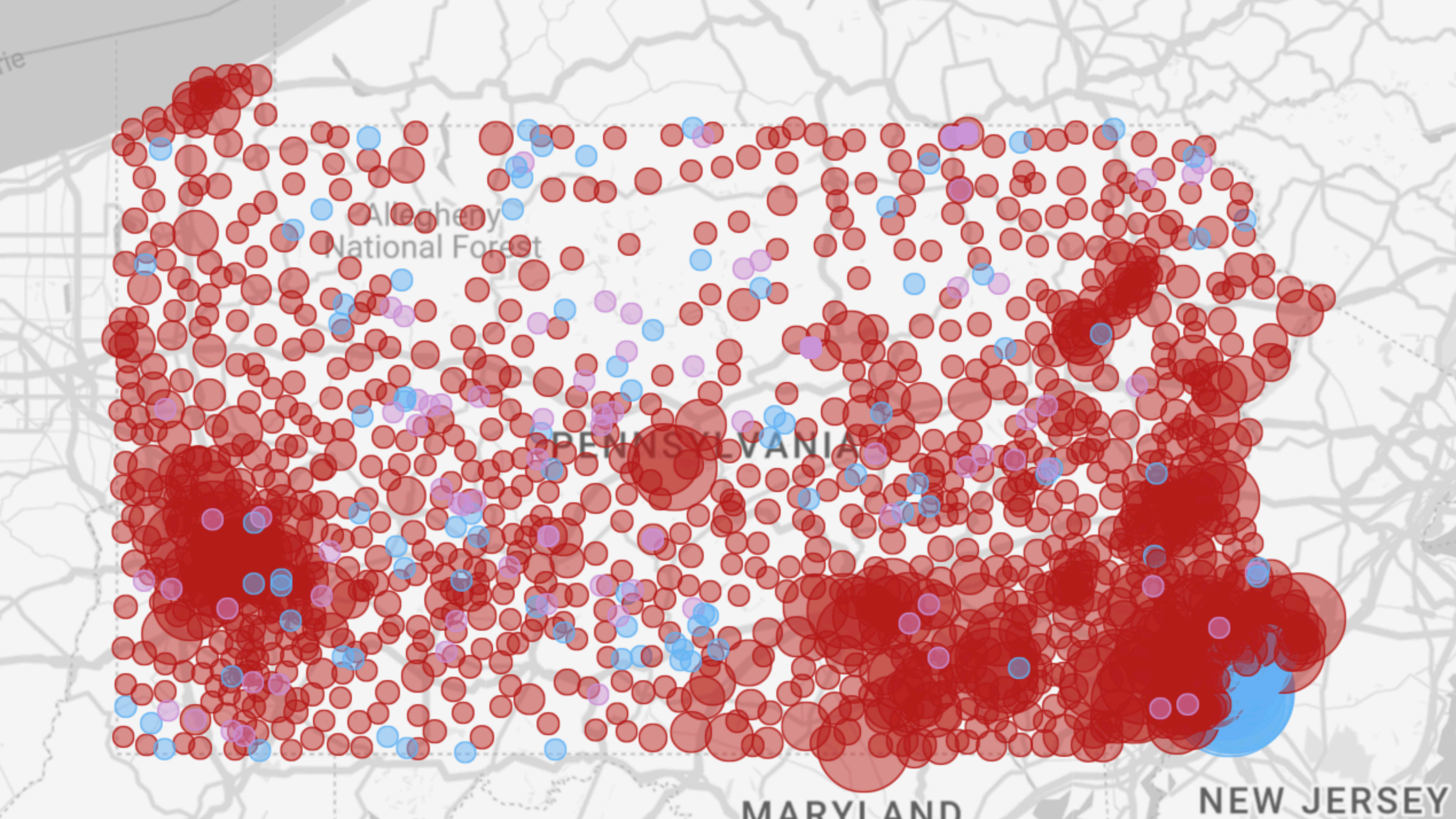
What did we find in Pennsylvania in 2022?



240,000+ OUT OF STATE REGISTRATIONS

Voter roll Move examples

State_ID	Move_Date	REGISTERED_ADDRESS	MOVE_ADDRESS	Full_Name	Return_Code
01***4731	2018-09-01	6** LI****N H** W** H** THOMASVILL...	1** CA****T A** # O YORK PA 17406-1...	LA**Y E** ME******R	36
11***9407	2020-03-01	5** N** BR*****N A** UPPER DARBY P...	P** B** 1** HAVERTOWN PA 19083-59...	XA***R DA**D RO*****N	36
01***7844	2019-02-01	5** NE****D R** EDINBORO PA 16412	7** WA**R S** FAIRVIEW PA 16415-1228	CL**K DE****E	38
02***7959	2020-01-01	1** SA**H S** BRIDGEVILLE PA 15017	5** 1** S** OAKDALE PA 15071-1116	LI**A L** FE****L	36
00***3321	2020-03-01	1** RA****W D** KITTANNING PA 162...	4** HA*****N S** APT A FORT CAMPB...	J** LU****C	37
00***3630	2018-04-01	9** 3** A** BEAVER FALLS PA 15010	1** 3** A** NEW BRIGHTON PA 15066-...	J** R** GO*****Z	36
01***6135	2020-03-01	1** E** BU****K A** YEADON PA 19050	P** B** 5** LANSDOWNE PA 19050-94...	PA***A L** CR**M	36
10***2994	2019-06-01	3** CH*****T S** 417 PHILADELPHIA ...	2** RI**R P** D** NEW PALTZ NY 1256...	AI***N BR**N RO******E	36
02***7654	2020-04-01	9** WA******N R** COATESVILLE PA 1...	4** MA***T S** POTTSVILLE PA 17901...	J** L** BE****N	36
10***6967	2019-10-01	6** RE***N D** WEST CHESTER PA 19...	2** ST*********E D** EXTON PA 19341-...	AN***W PE***R HE***N	36
00***2207	2020-02-01	2** AL***A B** T01 PITTSBURGH PA 1...	2** DE**R D** VERONA PA 15147-1171	DO****Y J** G**	37
10***3864	2018-07-01	1** S** BI***P A** F** F** SECANE PA ...	3** E** BA******E A** A** M** CLIFTO...	MO*****D DO***Y KE***H	36
10***9053	2019-04-01	2** BE******N R** PITTSBURGH PA 15...	2** RI**E A** WILKINSBURG PA 15221-...	SH***A YO**G	36
10***8578	2019-09-01	2** W** LI****N S** 3 SHAMOKIN PA 1...	3** W** 7** S** MOUNT CARMEL PA 1...	SA**H EL******H FR****N	36
00***8549	2018-07-01	9** FI******N R** BADEN PA 15005	1** 1** A** N** A** 2** FRANKLIN TN 3...	J** P** SI***Y	36


Allegheny
National Forest
PENNSYLVANIA
MARYLAND
NEW JERSEY

	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

How do you use NCOA to find this in your state?

Understanding NCOA data

COA Move Date

- 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

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
  - Can refer to bad or non-existent addresses
  - Can also refer to addresses the USPS does not deliver to
- 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 but the registered voter didn’t actually move.
  - A match was found to a LACSLink record, new address data provided but the registered voter didn’t actually move.
- 98 Non-USPS Zip

Understanding NCOA data

DPV Footnotes

- DPV Footnote codes to filter out
  - F1 - matched to a military address
  - G1
    - Matched to a general delivery address
    - General Delivery addresses typically indicate a temporary mailing address

- DPV Footnote codes to consider
  - N1 - Confirmed high rise or box type without secondary information (ex: APT #)
  - M1 - Primary number missing from address
  - P1 - 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

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

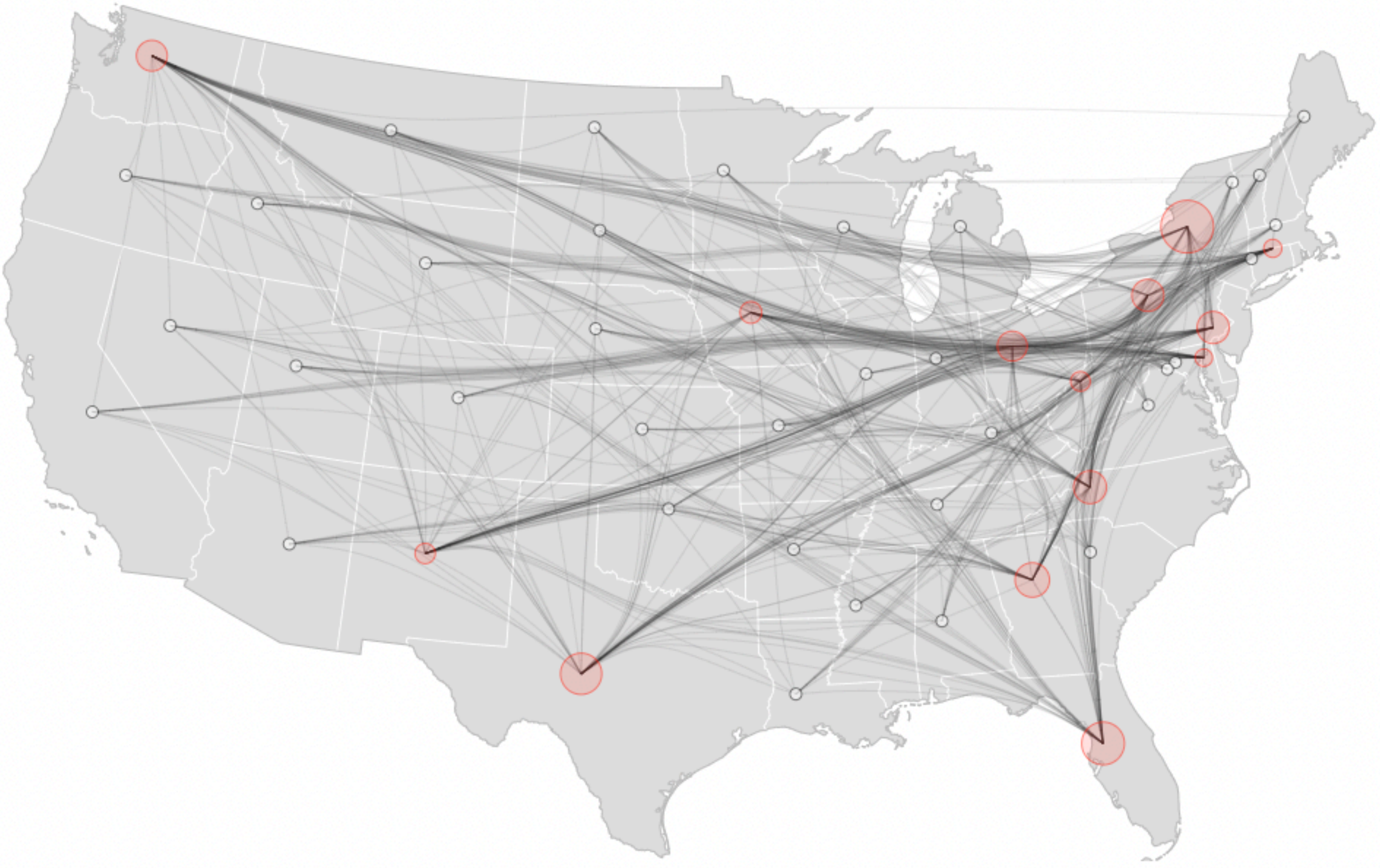
- To avoid identifying military moves, additionally filter out moves to states “AA”, “AE”, and “AP”
- Another mechanism to identify PO Boxes is to look at the Carrier Route (CRRT) for values that start with “C77”, or simply put C770 through C779
  - A match was found to a LACSLink record, new address data provided but the registered voter didn’t actually move.
- Carrier Routes (CRRT) C000 represent things like university dorms, assisted living centers or military base residential addresses. You may also find that it’s often the loading dock of a post office or a large business where they deliver to a front desk.
- DPV (DPV Vacant column) 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 but most often it indicates temporary vacancy.
- ZIP+4 footnote codes can indicate specific errors with the address

November 2023 NCOA
sneak peek

November 2023 NCOA insight

A sneak peek

- Currently 14 states have participated, with 3-5 more expecting in the coming week
- States that have already had their data run make up 217 electoral college votes
- Over 100 million voter records were ran through the NCOA database
- Over three million registrations were identified as having permanently moved to a new state
    - To put this in context, Biden supposedly beat Trump by seven million votes



Questions?