

**NCOA^{Link}® MAIL PROCESSING EQUIPMENT
SOFTWARE DEVELOPER
SOFTWARE and HARDWARE PERFORMANCE REQUIREMENTS**

1 General

1.1 The NCOA^{Link} Product provides mailers with a tool to update and correct prepared mailpieces that will be submitted to the USPS for acceptance and delivery. The NCOA^{Link} Mail Processing Equipment (MPE) Product analyzes the names and addresses on prepared mailpieces and facsimiles. The NCOA^{Link} MPE Product provides forwarding text and delivery point code information after a match is made to the name and address information provided from the mailer's Mail Processing Equipment. A CASS Certified™ ZIP + 4® address matching product matches and standardizes addresses input to the NCOA^{Link} Product for name and address matching. Using the NCOA^{Link} MPE Product will allow mailers to ensure mailpieces have the most up-to-date names and addresses.

2 Purpose

2.1 The purpose of these performance requirements is to establish standard criteria of performance that USPS requires NCOA^{Link} Mail Processing Equipment Software Developers ("Developers") to comply with. The software will enable NCOA^{Link} MPE Data User Licensees to have access to the following address services:

- Acceptable standardization and address matching services.
- Detection of undeliverable addresses due to change of address.
- New address when a name and old address match to the change-of-address file.

2.2 Developer's MPE matching software must adhere to specific USPS requirements regarding the services as well as to the matching rules and specifications herein. Developers must use CASS Certified software for ZIP + 4 processing. In addition, Developers will be tested on a periodic basis using an NCOA^{Link} test address file similar to CASS™. CASS is an existing USPS certification process available to all commercial firms.

2.3 Developer is responsible for programming all necessary NCOA^{Link} MPE software. Prior to any use, sale and/or distribution of Developer's NCOA^{Link} MPE software,

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Developer must obtain a separate license under one or more of the license categories authorizing said use, sale and/or distribution.

3 Product Description

- 3.1 The NCOA^{Link} Product utilizes what is referred to as "hash" tables. The hash tables are secure datasets that will only provide new address information when queried with a specific algorithm of the name and old address from a mailer's NCOA^{Link} MPE platform, which matches the information as it appears on a USPS Change-of-Address form (PS 3575).
- 3.2 Extensive programming will be required to interface the MPE software/hardware with the NCOA^{Link} Product. An MPE software interface will customize the type of input format, provide the desired output and contain appropriate links with ZIP + 4 matching software.
- 3.3 Weekly updates to the NCOA^{Link} Product datasets (hash tables) will be provided via DVD to Licensees. Licensees must utilize the current CASS ZIP + 4 product with the NCOA^{Link} updates to provide the up-to-date address on the existing mailpieces. Refer to Figure 2 for acceptable use dates of the ZIP + 4 product. The NCOA^{Link} Product release must be synchronized with the ZIP + 4 data release.
- 3.4 The Developer and Licensee, in order to use the NCOA^{Link} Product, must meet all requirements and specifications contained within the NCOA^{Link} Mail Processing Equipment Data User License Agreement, the most current version of these Performance Requirements, and the most current version of the Software Developer Guide (SDG), unless modified by USPS in writing.

4 Definition

- 4.1 Prior to NCOA^{Link} MPE processing, all Multiline Optical Character Readers (MLOCR) must be MASS certified and all input addresses must be processed through CASS Certified matching software to obtain ZIP + 4/DPC coded address information. For every address that is successfully ZIP + 4/DPC coded, complete customer name information will also be passed to the NCOA^{Link} MPE platform. Any new address, which is provided back from the NCOA^{Link} MPE platform as a result

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of match, will also be appended with the ZIP + 4/DPC information along with the text representation of the new address. ZIP + 4 results must be obtained within the valid window for processing based on the date NCOA^{Link} MPE processing is performed and the chart of valid ZIP + 4 dates provided in Figure 2.

4.2 In order for a Licensee to use the NCOA^{Link} MPE Product:

4.2.1 Licensee must have obtained MASS certification on the MLOCR and its components for which the NCOA^{Link} MPE Product will reside.

4.2.2 The NCOA^{Link} MPE Product must submit a series of inquiries to USPS secure hash tables that will yield a new address for the purpose of updating prepared mailpieces when both the name and old address are matched (NCOA^{Link} MPE process). Input is in the form of a complete name and a standardized address. The direct output contains the 11-digit Delivery Point Barcode (DPBC), the move effective date, two characters of the middle name (if present on the COA) and gender identification. The software must convert the information to a normalized street address in accordance with the SDG.

5 General Requirements

5.1 Any Developer wishing to use, sell and/or distribute NCOA^{Link} MPE software interface must first develop software that uses as its address input the 9-digit ZIP + 4 code and standardized address output from the USPS CASS Certified software. The NCOA^{Link} MPE software interface will use this information along with the complete name as it appears on the input mailpiece or facsimile to obtain a match to a COA record. The NCOA^{Link} Product cannot assign a ZIP + 4 code nor will it respond to a non-ZIP + 4 coded address. The Developer must perform a process quality review. USPS must review, and approve the software's performance prior to any actual NCOA^{Link} MPE processing occurring in a production environment to ensure that all license requirements are met. Upon USPS determining that Developer has met all requirements in the license and that the software meets all USPS requirements, USPS will provide the Developer a certification notice for its proposed MPE software interface.

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- 5.2 Developer shall not export the NCOA^{Link} Product and/or datasets outside the boundaries of the United States of America or its territories.
- 5.3 As a licensee of the USPS, Developer agrees that any and all data, source code, or information received from the USPS or otherwise obtained or developed in the course of, or as the result of, the performance of the license agreement with USPS shall:
- 5.3.1 Be kept in strict confidence and shall not be disclosed in any manner to any organization (including professional societies) other than the USPS until released of such obligation by the USPS in writing, and,
 - 5.3.2 When in Developer's possession, be provided with adequate physical, technical and administrative safeguards to prevent unauthorized access, disclosure, misuse, or attention.
- 5.4 Copies of this document and any new updates to the NCOA^{Link} Mail Processing Equipment Software Developer License Agreement, the Performance Requirements, or the Certification Procedures will be posted on the RIBBS website at https://ribbs.usps.gov/ncoalink/documents/tech_guides/MPE_INFO/DEV_INFO/
- 5.5 Licensee must incorporate use of the Daily Delete process into all NCOA^{Link} MPE processing. The Daily Delete file is available from the USPS Electronic Product Fulfillment website. Instructions for use of this process must be obtained from the Licensee's software interface supplier.

6 Specific Requirements

- 6.1 Developers must create MPE software and hardware interface for licensing that will access the NCOA^{Link} Product.
- 6.2 A single NCOA^{Link} MPE system may interface with a single MLOCR or be optionally multiplexed to no more than three MLOCRs. A multiplexed configuration may be considered a single certified NCOA^{Link} MPE configuration, provided that all other license requirements are satisfied.

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- 6.3 Licensee shall not enable any technology or system to interface with the NCOA^{Link} MPE Product or pass to any manner, the COA information obtained from the NCOA^{Link} Product, other than specifically authorized by the USPS.
- 6.4 Licensees shall not copy, retain, store or archive in any manner, change-of-address (COA) information obtained from the NCOA^{Link} Product. This information shall only be applied to mailpieces or facsimiles as deemed appropriate, after which it shall be destroyed completely within 45 days.
- 6.5 Developer shall establish an application within the NCOA^{Link} MPE software for providing COA information back to the customer in an electronic file.
- 6.6 Software must use USPS CASS Certified Address Matching software parsed, standardized output to query the NCOA^{Link} Product.
- 6.7 MLOCR hardware must maintain current MASS certification at all times.
- 6.8 Software must contain features to meet the provisions of Standards of Performance as summarized here and detailed in Paragraph 9.0 below.
- a. Record and store required reporting information from mailpiece processing.
 - b. Produce reports in expected format upon request.
 - c. Repair all software and hardware deficiencies promptly.
- 6.9 Software must generate and maintain a record of all specific reports as required in paragraph 14.0 below.
- 6.10 Software will provide a method for validating existence and active status of unique Platform IDs prior to the acceptance of a mailpiece for processing. The Platform ID is defined in paragraph 14.2 below.
- 6.11 Software must be able to:
- a. Process full file replacements via DVD.
 - b. Process prepared mailpieces of at least 100 unique names and addresses with valid and active Platform IDs.

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- c. Reject prepared mailpieces of less than 100 unique names and addresses.
- d. Reject processing requests for invalid or inactive Platform IDs.
- e. Access the NCOA^{Link} MPE system as required by the NCOA^{Link} MPE Software Developer Guide.
- f. Translate the new Delivery Point Codes returned into standardized addresses where matches are found.
- g. Assign all applicable standard return codes.
- h. Perform the following processing options:

| Option | Description | Code |
|-------------------------|---|-------------|
| Business only | Software system will provide new address information for Business moves only. | B |
| Individual only | Software system will provide new address information for Individual moves only. | I |
| Individual and Business | Software system will provide new address information for Individual and Business moves only. | C |
| Standard | Software system will not restrict any matches or prohibit the return of information based on move types (Business, Individual or Family). | S |
| Residential | Software will provide new address information for Individual and Family moves only. | R |

- i. Process standard matching logic inquiries in the following order:

| | |
|------------|--|
| Business | Match on business name. |
| Individual | Match on first name, middle name, surname and title required. Gender is checked and nickname possibilities are considered. |
| Family | Match on surname only. |

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- j. Prohibit surname only matching except as allowed in Standard and Residential matching logic.
 - k. Allow User to select time frame shorter than the NCOA^{Link} Product but no less than six months. (Time period covered and total matches rejected must be reported in the Customer Service Log.)
 - l. Provide return code only processing options.
 - m. Provide and storing all statistical reports and data files as required.
 - n. Enforce a 45-day expiration date based on the date of the NCOA^{Link} Product.
 - o. Provide adequate security that will prohibit unauthorized access to or use of the software and the NCOA^{Link} MPE Product.
 - p. Process specialized USPS certification, audit or test decks.
- 6.12 Hardware must be able to:
- a. Provide Licensor with current identification/documentation for major system components that may impact the performance of their NCOA^{Link} MPE process, including any third-party software/services used for each certified MPE platform. Major components include, but are not limited to, MLOCR make, model, serial number and date of last MASS certification, camera type and model number, character recognition, software name and version number, transport type and operating speed, ink jet sprayer type and model, ZIP + 4/DPC software name and version.
 - b. Meet all requirements specified in the Licensee Performance Requirements.
 - c. Update all CASS software databases monthly
 - d. Provide USPS and customers with required reports at specified frequencies.
 - e. Apply customers' mailpieces and facsimiles with Delivery Point Code information for all input addresses that are ZIP+ 4 coded via the Licensee's CASS software.
- 6.13 Licensee shall not add, modify or delete features of their certified NCOA^{Link} MPE platform that impact the provision of NCOA^{Link} MPE services, without prior written approval of the Licensor.
- 6.14 Developer shall provide the USPS with access to any resource used in performance of this license and with the necessary equipment and/or reports to monitor compliance at the NCOA^{Link} MPE Developer's facility.

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- 6.15 Licensee shall establish a central email address for receipt and disbursement of USPS electronic correspondence within Licensee's organization.
- 6.16 For each mailpiece or facsimile batch processed through the NCOA^{Link} MPE service, the Licensee must provide the customer with PS Form 3553 or approved facsimile that reflects all pertinent information regarding the MASS ZIP + 4/DPC processing segment of the service.

7 Basic NCOA^{Link} Product Output

- 7.1 The MPE software must include USPS standardized return codes to provide consistency of products and facilitate USPS evaluation of customer data.
- 7.2 For each address submitted to the NCOA^{Link} MPE Product, the MPE software must return the following output:
- a. Each original unaltered input address as it was presented.
 - b. The standardized input address appended with the correct ZIP + 4/DPC, other postal values and any other intelligence flags or footnotes that result from the CASS processing segment.
 - c. For each mailing address for which there is a match to the NCOA^{Link} MPE hash table(s) as defined in this document, the 11-digit DPBC and a conversion to a standardized address, and standard return codes as listed in Figure 1. MPE software shall assign all applicable standard return codes.
 - d. When a match is made, the following elements must be returned: the move effective date (CCYYMM), specific name and address utilized in the query that obtained the match, and the move type. The move type is determined by the software based on the specific name inquiry utilized to obtain the match.
 - e. For each mailing address for which there is not a match to the NCOA^{Link} MPE hash table(s), the MPE software must return all elements as appropriate under a and b as well as any standard return codes as may be appropriate under Figure 1.
 - f. The urbanization name information, when applicable.
 - g. The carrier route information for new (updated) addresses.
 - h. DPV results, if requested.
 - i. LACS^{Link} results, if requested.

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- j. Suite^{Link} results, if requested.
- k. Processing summary report (see Section 14.6) containing information to identify the specific Run and the statistics resulting from the NCOA^{Link} MPE process.

8 Software Quality Standards and Testing Criteria

- 8.1 The NCOA^{Link} MPE software will be subject to periodic process quality reviews (audits) and evaluation of its adherence to the conditions of the NCOA^{Link} MPE License Agreement for which it was designed. Please note that the USPS audit file must be processed through the same NCOA^{Link} MPE system Licensees use for customer processing.
- 8.2 The NCOA^{Link} MPE software must provide the necessary output as described in section 7 using the specific USPS format as described in Figure 3. Upon notification of the transmission of an audit file/deck, it can be retrieved from Developer's specific USPS account via the Internet. The audit output and supporting documentation derived from the NCOA^{Link} MPE process will be posted to the same account.
- 8.3 The audit file/deck will test the NCOA^{Link} MPE software with a series of known forwardable addresses and known non-forwardable addresses to validate the MPE software's ability to query the NCOA^{Link} Product and return the appropriate output and responses.
- 8.4 The audit will also verify the administrative output, including all reports, of the NCOA^{Link} MPE process. When submitting the reports to the USPS, they should reflect the appropriate code of the Processing Category. The reports include:
 - Software Developer Certification Checklist
 - Customer Service Log (CSL)
 - Processing Acknowledgement Form (PAF)
 - PS Form 3553
 - Processing Summary Report

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- 8.5 Auditing will be performed once annually or as specified by the USPS. If necessary, subsequent audits due to failures must be completed and passed within the annual license period to prevent suspension and/or termination.
- 8.6 Upon validation of the results, Developer will receive official notification of the audit results from the USPS.
- 8.7 The MPE software and hardware must provide accurately matched and sprayed responses for at least 95% of the inquiries where data to support these responses are known to be in the USPS file and shall produce no unexpected matches or results.
- a. The percentage of audit file/deck input name and address records that achieve the correct result shall not be less than 95% when compared to the USPS expected results.
 - b. The audit file/deck output shall not result in a match that is not expected and would result in returning incorrect information that would eventually cause the misdirection of mail.
 - c. The audit file output must correctly provide all NCOA^{Link} address elements with 100% accuracy.
- 8.8 In the event that a problem is identified by the USPS that is related to the NCOA^{Link} MPE process, the USPS will, at its sole discretion, direct correction of the problem and/or exercise the suspension or termination provisions of the License, as it deems appropriate by the situation.

9 *Hardware Quality Standards and Testing Criteria*

- 9.1 To evaluate the performance of the complete platform and the name and address matching performed by the NCOA^{Link} MPE system, it is necessary to test the quality of the input provided by the Licensee's system and produced results.
- 9.2 The name and address matches produced by the Licensee's complete platform during the initial and subsequent tests shall be identical in terms of accuracy and number of matches when compared to the output produced by the USPS.
- 9.3 USPS may provide a test input name and address deck/file to be processed by the Licensee. The test deck will run against the USPS NCOA^{Link} Product to determine

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the expected matches prior to Licensee performing the test and determining acceptability.

- 9.4 The output media provided by the Licensee to USPS must match the specifications provided to the Licensee by USPS. Failure of the USPS to use the Licensee's output media or data shall constitute a failure.
- 9.5 Upon acceptance, the Licensee shall provide the NCOA^{Link} MPE service to its customers in the identical manner tested and approved by USPS. This will be performed by the evaluation of the test results based on the following criteria:
- 9.5.1 The percentage of records ZIP + 4/DPC coded and passed to the Licensee's NCOA^{Link} Mail Processing Equipment shall not be less than 90% of the total number of mailpieces in the test deck.
- 9.5.2 The percentage of records containing the optical lifted input name and address information provided to the Licensee's NCOA^{Link} Mail Processing Equipment that achieve the correct result shall not be less than 95% when compared to the USPS matching output. A correct result is determined by the Licensee's input producing the expected match or no match result.
- 9.6 The optically lifted input name and address information provided to the NCOA^{Link} Product by the MPE process shall not produce an unexpected match to the NCOA^{Link} Product, which will result in the misdirection of a mailpiece.
- 9.7 The NCOA^{Link} MPE text and Delivery Point barcode information is applied to the appropriate mailpiece in the test deck by the Licensee and are within specifications, legible, easily discernible and interpretable by the Licensor.
- 9.8 During the NCOA^{Link} MPE process, each address input to the NCOA^{Link} Product must be standardized and appended with the correct ZIP + 4/DPC information applied by Licensee's MPE software must be identical to the results obtained when the test input addresses are run using MASS.
- 9.9 Licensee's ZIP + 4/DPC matching software results will be measured by using the MASS certification process.
- 9.10 Licensee must maintain current MASS certification for the ZIP + 4/DPC software used in their MPE process and only run the ZIP + 4/DPC software in its MASS

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approved configuration in conjunction with NCOA^{Link} responses for at least 95% of the inquiries where data to support these responses are known to be in the USPS file and shall produce no unexpected results.

9.11 A 100% accuracy performance or standard shall be used for application of the NCOA^{Link} MPE obtained information to its correct mailpiece/facsimile. A 96% accuracy performance or standard shall be used for applied ZIP + 4 codes and 100% accuracy performance for DPC assignments as measured against the MASS certification process.

9.12 Address standardization accuracy for those addresses submitted to the NCOA^{Link} Product shall be 99% when measured against USPS Publication 28 (Postal Addressing Standards) and any standardization requirement in the Licensee Performance Requirements.

9.13 If Licensee makes changes to their existing NCOA^{Link} MPE certified system(s), including moving, relocating, upgrading, reassembling, or changes in ownership, they must request a 45-day courtesy to continue NCOA^{Link} MPE processing.

9.13.1 Licensee must notify the MASS Department within seven days of any changes to the existing NCOA^{Link} MPE system to be considered for the 45-day courtesy.

9.13.2 During the courtesy period, the Licensee must receive NCOA^{Link} MPE recertification. If the Licensee fails to recertify within the 45 period, the MPE system may become ineligible to continue processing mailpieces through the NCOA^{Link} Product.

10 Licensee Certification

See Certification Procedures at

https://ribbs.usps.gov/ncoalink/documents/tech_guides/MPE_INFO/DEV_INFO/MP_E_DEV_CERT_PROC.PDF

11 Standards of Performance

11.1 Licensee must, prior to processing any mailpieces through the NCOA^{Link} MPE Product, have on file for each customer submitting mailpieces, a fully executed NCOA^{Link} Mail Processing Equipment Processing Acknowledgment Form (PAF). A dataset containing all information from these executed forms must be

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maintained within the software and made available for Postal Service™ review for a period of six (6) years from date of execution. The MPE software must provide for extraction of required PAF information to fulfill the Licensees' monthly reporting requirements.

- 11.1.1 For storage and retrieval purposes, hardcopy PAF documents may be scanned and stored electronically allowing Licensee to store or archive the original completed documents either on-site or off-site in a secure location. Images of scanned documents may be used to satisfy audit requirements. Licensee must be able to retrieve the original documents upon request from USPS.
- 11.2 If applicable, Licensee must return all mailpieces and mailpiece facsimiles and/or output files or reports within 72 hours of processing unless a longer period is specified by the customer in writing. (Business days are defined as Monday through Friday.) The fulfillment cycle starts the day the customer mailpieces are received by the Licensee.
- 11.3 Software must record Licensee service log, which will include the Customer PAF ID as prescribed in Section 14.2. These service logs will be maintained to be made available for Postal Service review for a period of five (5) years. The customers' written requests for longer turnaround times shall be reported on the log, maintained with the PAFs, and retained for five (5) years. This service log must also be kept on a computer file and shall be submitted to the USPS electronically (see Reports Section for format).
- 11.4 Developer shall repair or have repaired all software and hardware deficiencies related to the NCOA^{Link} MPE system within 30 days of identification of said deficiencies.
- 11.5 Licensee is responsible for redistributing license related electronic correspondence from USPS to the appropriate personnel within Licensee's organization. Pursuant to Paragraph 6.14, all electronic correspondence will be directed to a central email address within Licensee's organization. The email address must be ncscinfo@<yourcompany.com>. In the event that this address is already assigned for some other purpose, an alternate address must be submitted to USPS for approval. Licensee will subsequently distribute all applicable USPS notifications internally to ensure receipt by the proper staff.

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Such correspondence will also be sent to the pertinent contacts provided during the application process but in the event of “bounce backs” successful delivery via the central email address will be considered confirmation of receipt.

- 11.6 If software automatically creates Platform IDs, Developer must allow a manual override of the Platform IDs to conform to the reporting standards of the NCOA^{Link} MPE PAF.

12 Mail Processing Equipment Terms and Operational Modes

- 12.1 To ensure consistency within the collective interactions between USPS and each NCOA^{Link} MPE Licensee, the following terms are defined with respect to NCOA^{Link} MPE processing.
- 12.1.1 The term **‘Job’** describes all the mail that is collectively combined into a single mailing. As a result, every individual Job must correspond to a specific and unique mailing (postage) statement. Separate Jobs cannot be combined into a single mailing, and therefore cannot be combined onto a single mailing (postage) statement.
- 12.1.2 The term **‘Run’** describes the processing of mail for a specific customer of the NCOA^{Link} MPE Licensee. Multiple customers cannot be combined into a single Run due to insufficient volumes. Multiple Runs can be combined into a single Job. Licensees are required to maintain a record identifying the specific customer in each Run.
- 12.1.3 The term **‘Co-mingle’** describes the receipt of mail from multiple sources and/or multiple sites for processing each as a single Run and combining these mailpieces in a Job for a single mailing. These mailpieces cannot be shuffled during processing. When co-mingling, each set of mailpieces will be reported separately and each mail owner will have a current completed and signed NCOA^{Link} Mail Processing Equipment Processing Acknowledgement Form on file.
- 12.2 NCOA^{Link} MPE Active processing consists of five operational modes.
- 12.3 Licensee **must** have the Mail Processing Equipment in one of five operational modes described below, at all times when using Mail Processing Equipment connected to the certified NCOA^{Link} MPE platform.

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- 12.4 ***Forwardable Mailpiece*** - Processing in which ZIP + 4/DPC information is obtained and mailpieces that are matched to the NCOA^{Link} Product are sprayed with updated COA information for individuals, families and businesses. These mailpieces are immediately entered into the mailstream.
- 12.4.1 For the purpose of returning COA information back to customers, the following options are acceptable:
- 12.4.1.1 Mailpieces with COA information may be outsourced for photocopy images for return to the customer.
- 12.4.1.2 Electronic images, records or reports for the return of COA information.
- 12.5 ***Notification via Returned Mailpiece*** – Processing in which mailpieces that have been updated with new address information for individuals, businesses and families are returned to the mailer. Licensees must separate the mailpieces updated through the NCOA^{Link} MPE process from all other mailpieces in the Run for return to the customer. To ensure that a mailer receives address corrections pertaining only to the customers on their list, the Licensee must process each requesting mailer individually under this option. Multiple mailers cannot be combined into a single Run when using this option. No updated mailpieces processed in this mode are entered into the mailstream.
- 12.5.1 In this mode of processing, updated COA information is sprayed directly on the mailpieces. On mailpieces in which new address information obtained from the NCOA^{Link} MPE process is unavailable or unknown, the literal “NEW ADDRESS INFORMATION UNKNOWN” is sprayed on the mailpiece.
- 12.5.2 Licensees are required to ensure its customers (mailers) fully understand and agree to the outcome of this option on their mailpieces. Specifically the fact that mailpieces will be updated with new address information or the mailpiece will be sprayed with the literal “NEW ADDRESS INFORMATION UNKNOWN.”
- 12.5.3 Licensee must return mailpieces that have received updated address information as a result of the NCOA^{Link} MPE process within 72 hours of processing, unless a longer period is specified by the customer in writing.

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- 12.6 ***Mailpiece Facsimile*** – Processing in which mailpiece facsimiles processed in a Run contain name and address information and do not bear any postage or endorsement of any kind. Licensees must ensure that the mailpiece facsimiles accepted for this type of processing are constructed in a method, and with materials, that will be accurately read and processed by the Licensee’s Mail Processing Equipment. No mailpieces processed in this mode are entered into the mailstream.
- 12.6.1 In this mode, updated COA information is sprayed directly on the mailpieces. On mailpieces in which new address information obtained from the NCOA^{Link} MPE process is unavailable or unknown, the literal “NEW ADDRESS INFORMATION UNKNOWN” is sprayed on the mailpiece.
- 12.6.2 All mailpiece facsimiles must contain name and address information in a manner that is representative of the way it would appear on an actual mailpiece.
- 12.6.3 Processing in Mailpiece Facsimile mode enables mailers to update the address information for those individuals, businesses and families that have moved.
- 12.6.4 To ensure that a mailer receives address corrections pertaining only to the customers on their list, the Licensee must process each requesting mailer individually under this option. Multiple mailers cannot be combined into a single Run when using this option.
- 12.6.5 Licensees are required to ensure its customers (mailers) fully understand and agree to the outcome of this option on their mailpieces. Specifically the fact that mailpieces will be updated with new address information or the mailpiece will be sprayed with the literal “NEW ADDRESS INFORMATION UNKNOWN.”
- 12.6.6 In order to provide the requesting customer with a clear indication of the overall quality of their customer list, all submitted mailpiece facsimiles must be ZIP + 4/DPC barcoded whether or not an NCOA^{Link} MPE match is attained. Additionally, the NCOA^{Link} MPE facsimile customer shall be provided with a PS Form 3553 that reflects all pertinent information

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regarding CASS ZIP + 4/DPC and MASS processing segment of the NCOA^{Link} MPE service.

12.6.7 Licensee must return mailpiece facsimiles back to the customer within 72 hours of processing, unless a longer period is specified by the customer in writing.

12.7 **DBCS (Delivery Barcode Sorter)** – Letter mail processed in a Run using DBCS equipment in which no COA information is sprayed on mailpieces. Mailpieces are outsorted to a bin designated for undeliverable-as-addressed (UAA) mail and either returned to the customer (mailer) or destroyed.

12.7.1 For the purpose of returning COA information back to customers, electronic images, records or reports are acceptable.

12.8 **Flats** – Processing in which ZIP+ 4/DPC information is obtained and mailpieces that are matched to the NCOA^{Link} Product are sprayed with updated COA information for individuals, families and businesses. These mailpieces are immediately entered into the mailstream.

12.8.1 Per section 6.6, for Licensees who are authorized to return COA information back to customers, the following options are acceptable:

12.8.1.1 Mailpieces with COA information may be outsorted for photocopy images for return to the customer.

12.8.1.2 Electronic images, records or reports for the return of COA information.

12.8.2 Flats can be processed in the following modes: Forwardable Mailpiece; Notification via Return Mailpiece; and Mailpiece Facsimile.

12.8.3 For the processing of flat mailpieces in which no COA information is sprayed, the mailpieces are outsorted to a bin designated for UAA mail and either returned to the mailer, destroyed or mailed at full rate.

12.9 The Mail Processing Equipment must be notified of the operational mode by the Licensee depending upon the type of processing that is performed on the certified NCOA^{Link} MPE platform.

12.10 The literal “NEW ADDRESS INFORMATION UNKNOWN” is provided in lieu of address information for Mailpiece Facsimile, Notification via Return Mailpiece, DBCS and Flats processing under the following conditions:

- Moved, Left No Address

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- Post Office Box Closed
- Foreign Moves
- New Address cannot be provided
- New Address would not convert
- New Address not ZIP + 4 or DPV confirmed

13 Advertising

- 13.1 Developer is prohibited from representing to third parties that USPS has certified Developer's MPE product until USPS issues a product certification notice to Developer. Prior to receiving the product certification notice from USPS, Developer may only represent that it has "applied" to receive product certification, and is prohibited from making any representations or warranties as to the availability of its product and/or the ability of the product to support the NCOA^{Link} Product.
- 13.2 As stated in Section 2.3, prior to any use, sale and/or distribution of Developer's NCOA^{Link} MPE software, Developer must obtain a separate license under one or more of the license categories authorizing said use, sale and/or distribution.

14 Reports

- 14.1 Prior to any NCOA^{Link} MPE processing, and once annually thereafter, the Licensee shall obtain a complete and signed copy of the NCOA^{Link} MAIL PROCESSING EQUIPMENT PROCESSING ACKNOWLEDGEMENT FORM (PAF) from each of its customers and for any internal mailpiece processing. The hardcopy completed forms are to be maintained by the Licensee and made available for Postal Service review for a period of six years from the date of execution.
- 14.1.1 For specific information with regards to completion of PAFs, please reference the PAF Guide on the RIBBS website at https://ribbs.usps.gov/ncoalink/documents/tech_guides/PAF_GUIDE.PDF.
- 14.2 The Licensee will assign each NCOA^{Link} MPE customer list a unique NCOA^{Link} MPE PAF ID. This ID will be used by the software to verify that the customer has a valid, active PAF on file with the Licensee. *Refer to Exhibit A for additional details regarding the PAF ID.* The format of the ID will be an eighteen character alphanumeric field consisting of four sub-parts. Positions 1-2 are alpha with a

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special character in Position 3 and filler in Position 4, which together will identify the Licensee to the USPS and the specific Mail Processing Equipment used for processing and will be assigned to the Licensee by the USPS. Positions 5-10 are numeric and will identify the business in which the mail owner engages by the North American Industry Classification System (NAICS). The mail owner may obtain the appropriate NAICS from the internet at www.census.gov/epcd/www/naics.html. Positions 11-12 are numeric and will identify the frequency of NCOA^{Link} MPE processing on an annual basis (value range 01-52). If multiple lists are processed at different frequencies under the same ID, positions 11-12 must contain "99." Positions 13-18 may be alpha, numeric, or alphanumeric and will identify the customer to the Licensee and to the USPS; this portion of the ID is assigned by the Licensee. This ID will be used to streamline the USPS disclosure accounting procedures. The Licensee will ensure that each of its customers has a unique and never duplicated Platform ID. The software must not allow duplicate IDs. The ID shall be assigned by the Licensee upon execution of the Processing Acknowledgement Form and be used throughout the system as prescribed. The unique and complete 18-character Customer ID will be recorded on the PAF. The form will not be complete and acceptable if this ID is omitted or erroneous.

- 14.3 The software must be capable of producing a monthly performance reports by system platform.
- **Customer Service Log** - record of all Runs processed through the NCOA^{Link} MPE service and the resultant statistics. Service log information must be kept in sequential order by date. Requirement: one record per Run processed.
 - **PAF Customer Information Log** – record of all customer information contained on the PAF and key ID and date information of the Licensee and applicable third parties. Minimum Requirement: one record per PAF ID appearing in the corresponding Customer Service Log.
 - **Broker/Agent/List Administrator Log** – record of all third party List Brokers/Agents and/or List Administrators handling the address lists of their clients that are processed through the NCOA^{Link} MPE service.

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Minimum Requirement: one record per third party ID appearing in the PAF Customer Information Log.

- 14.4 The report begins on the first day of the month and terminates on the last day of the month. The report will be maintained and made available for Postal Service review for a period of 5 years at the Licensee's facility. The electronic report file layout follows Section 14.
- 14.5 The monthly Customer Service Log report will be named using a four-part eight-character identification scheme. The first character will identify the report: "C" for Customer Service Log. Characters 2-5 will contain the USPS-assigned four-character Licensee identification code. The sixth character will identify the month of the report; refer to the chart following this paragraph. The last two characters will identify the year of the report by the last two digits of the calendar year.

| Month | Code |
|-----------|------|
| January | 1 |
| February | 2 |
| March | 3 |
| April | 4 |
| May | 5 |
| June | 6 |
| July | 7 |
| August | 8 |
| September | 9 |
| October | A |
| November | B |
| December | C |

- 14.4 NCOA^{Link} MPE process is intended solely for use as a tool to update prepared mailpieces. Testing of any kind using NCOA^{Link} MPE process is strongly discouraged by the USPS. However, the USPS does acknowledge that certain testing is necessary. In an effort to obtain an accurate statistical reporting regarding addresses updated by the NCOA^{Link} MPE process, the type of processing must be accurately and consistently recorded. Therefore, the following list of codes must be used to populate the "PROCESSING CATEGORY" field in the service log:

| Code | Description | Disposition of Results |
|-----------|---------------------------|------------------------------|
| EMP TRAIN | File processed as part of | Results discarded; no update |

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| | | |
|------------|---|--|
| | employee training. | performed or information released. |
| INT DB TST | Testing involving proprietary Licensee database. | No updates performed; results discarded after analysis. |
| MKTG TEST | Testing involving external customer lists. No PAF is required; however the company name for which processing was performed must be captured in the CSL in position 1423-1452. | Return information consists of statistics only; COA data is discarded as sensitive data, not returned to customer. |
| NORMAL | Process mailpieces and facsimiles for update prior to mailing. | COA information provided to mailer. |
| STAGE I | Test of matching performance against USPS self-test file. | Results used for internal program analysis and subsequently discarded. |
| STAGE II | Test of matching performance scored by USPS. | Output transmitted to USPS for evaluation and discarded when test results finalized. |
| SYS TEST | File processed as part of system testing such as loading of USPS file updates. | Results discarded; no updates performed or information released. |

14.5 NCOA^{Link} MPE Licensees must electronically transmit all required monthly reports to the NCSC. The software must allow for information retrieval based on the input of a date range.

14.6 Software must be able to produce an electronic or hardcopy report for up to 30 days after NCOA^{Link} MPE processing summarizing the processing of each Run. The report shall be named NCOA^{Link} MPE Processing Summary Report. The report may contain any and all information gathered to fulfill the requirements of Section 14.3 and information from other processes as desired. At a minimum, the processing summary must contain:

- Licensee Company Name
- Mail Processing Equipment Serial Number
- Mailing Statement Sequence Number (that will be used on the mailing (postage) statement for each Job)
- Customer PAF ID assigned to each Run
- Mailer Company Name
- Total Number of Mailpieces Processed for Run
- Standard Output Returned flag
- Matching Logic Applied flag
- Data Returned flag

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- Class of Mail Processed for each Run
- Date NCOA^{Link} MPE Processing Completed
- Date Mailpieces Received
- Date Mailpieces Returned to Customer
- Total Number of Records Processed
- Total Number of Records Matched – NCOA^{Link}
- Total Number of Records Matched – ANK^{Link}
- Move Activity Summary by Return Codes – This section consists of 15 data elements providing a Move Activity Summary (Age of Change of Address) for the nine NCOA^{Link} Match Return Codes.
 - The Return Codes are separated into three groupings:
 - Moved, New Address Provided (Return Codes A, 91 & 92)
 - Moved, No New Address Available (Return Codes 01, 02 & 03)
 - Moved, Unable to Provide New Address (Return Codes 05, 14 & 19)
 - The Move Effective Dates are separated into five groupings:
 - Sum of Months 00-03
 - Sum of Months 04-06
 - Sum of Months 07-12
 - Sum of Months 13-18
 - Sum of Months 19 and older

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Exhibit A

**NCOA^{Link®} Mail Processing Equipment (MPE)
PAF Requirements**

This document pertains to MPE Data Users; MPE Licensees who elect to return an electronic file to customers; and End Users processing in the WAN (cloud) environment.

PAF ID – Positions 1-18

Positions 1-4: Licensee Platform ID

- In this field, enter your MPE Platform ID

Positions 5-10: Mail Owner NAICS Code

- Enter the six-digit NAICS code
- To obtain the appropriate NAICS code, go to www.census.gov/epcd/www/naics.html
- For jackpot or consolidator mail, use the NAICS code 561499
- If using a *FASTforward* PAF, enter six 8s (888888) as the NAICS code until you have transitioned to the MPE PAF
- Once you are using the MPE PAF, use the appropriate NAICS code

Positions 11-12: Frequency of Processing

- This field identifies the frequency of MPE processing on annual basis (value range 01-52)
- If multiple lists are processed at different frequencies under same ID, enter '99'
- Use your best estimation when entering this field

Positions 13-18: Mailer ID (Licensee assigned)

- Use your current Job ID
- This field is six-digits (alphanumeric)
- On the MPE PAF, the field 'USPS Mailer ID' is not related to the Mailer ID field in the Customer Service Log.

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| Record From | Position To | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|-------------|-------------|--|--------|-------|------------|------------|
| 1 | 4 | LICENSEE PLATFORM ID (left justified; space filled) | 4 | X(4) | Yes | |
| 5 | 18 | NUMBER OF RECORDS | 14 | 9(14) | Yes | |
| 1 | 18 | PAF ID | 18 | X(18) | | Yes |
| | | 1-4 Licensee Platform ID (USPS assigned) (left justified; space filled) | | | | Yes |
| | | 5-10 Mail Owner NAICS Code | | | | Yes |
| | | 11-12 Frequency of processing | | | | Yes |
| | | 13-18 Mailer ID (Licensee assigned) | | | | Yes |
| 19 | 28 | PROCESSING CATEGORY (Descriptions available in the Licensee Performance Requirements) | 10 | X(10) | Filler | Yes |
| | | EMP TRAIN | | | | |
| | | INT DB TST | | | | |
| | | MKTG TEST | | | | |
| | | NORMAL | | | | |
| | | STAGE I | | | | |
| | | STAGE II | | | | |
| | | SYS TEST | | | | |
| 29 | 29 | ADDITIONAL NOTES - The literal "A" in this field denotes that mailpieces and/or COA Data are not returned to the customer within 72 hours. | 1 | X(1) | Filler | Yes |
| 30 | 32 | FILLER | 3 | X(3) | Filler | Filler |
| 33 | 33 | STANDARD OUTPUT RETURNED | 1 | X(1) | Filler | Yes |
| | | Y = All NCOA ^{Link} required output returned to client including COA Data (new addresses provided) i.e. Processing Via Returned Mailpiece – COA Data Sprayed on mailpiece | | | | |
| | | Z = All NCOA ^{Link} required output returned to client excluding COA Data (new addresses not provided) i.e. FLATS Mode – No COA Data Sprayed on the mailpiece; mailpieces are outsorted | | | | |
| | | X = Nothing is returned to the customer i.e. Normal processing, active mode all mailpieces are deposited in the mailstream with no change of address information going back to the customer. | | | | |
| 34 | 34 | MATCHING LOGIC APPLIED | 1 | X(1) | Filler | Yes |
| | | S = Standard (Business, Individual and Family matches allowed) | | | | |
| | | I = Individual only | | | | |
| | | B = Business only | | | | |
| | | C = Individual and Business only | | | | |
| | | R = Individual and Family only | | | | |
| 35 | 35 | DATA RETURNED | 1 | X(1) | Filler | Yes |
| | | C = COA Data Returned (including return codes and processing statistics) | | | | |
| | | F = Return Codes (no COA data included; may include processing statistics; for MPE outsourced mailpieces without new address information also apply) | | | | |
| | | S = Statistics only (no COA data or footnotes provided) – Provision of Processing Summary Report and any counts related to the file. No specific mailpieces or address records are identified. | | | | |
| | | X = MPE Only – Nothing Returned – No reports, statistics, or COA Data is returned to the customer. Prior to use contact the NCSC. | | | | |

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| Record From | Position To | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|--|-------------|---|--------|-------|------------|------------|
| 36 | 37 | NUMBER OF MONTHS REQUESTED | 2 | 9(2) | Filler | Yes |
| | | By request of list owner, number of months for which COA data accepted (≥6) | | | | |
| 38 | 38 | CLASS OF MAIL | 1 | X(1) | Filler | Yes |
| | | A = First-Class only | | | | |
| | | B = Periodicals only | | | | |
| | | C = Standard Mail only | | | | |
| | | D = Package Services only | | | | |
| | | E = First-Class & Periodicals | | | | |
| | | F = First-Class & Standard Mail | | | | |
| | | G = First-Class & Package Services | | | | |
| | | H = Periodicals & Standard Mail | | | | |
| | | I = Periodicals & Package Services | | | | |
| | | J = Standard Mail & Package Services | | | | |
| | | K = First-Class, Periodicals & Standard Mail | | | | |
| | | L = First-Class, Periodicals & Package Services | | | | |
| | | M = First-Class, Standard Mail & Package Services | | | | |
| | | N = Periodicals, Standard Mail & Package Services | | | | |
| | | O = First-Class, Periodical, Standard Mail, Package Services | | | | |
| Processing Date Information | | | | | | |
| 39 | 46 | DATE MAIL RECEIVED FROM CUSTOMER | 8 | 9(8) | Filler | Yes |
| 47 | 54 | DATE NCOA ^{Link} PROCESSING BEGAN | 8 | 9(8) | Filler | Yes |
| 55 | 62 | DATE NCOA ^{Link} PROCESSING COMPLETED | 8 | 9(8) | Filler | Yes |
| 63 | 70 | DATE MPE OUTPUT RETURNED TO CUSTOMER | 8 | 9(8) | Filler | Yes |
| | | Numeric. Format CCYYMMDD. | | | | |
| 71 | 81 | TOTAL NUMBER OF RECORDS PROCESSED | 11 | 9(11) | Yes | Yes |
| 82 | 92 | TOTAL NUMBER OF NCOA ^{Link} QUERIES PERFORMED | 11 | 9(11) | Yes | Yes |
| 93 | 103 | TOTAL NUMBER OF RECORDS MATCHED | 11 | 9(11) | Yes | Yes |
| 104 | 114 | TOTAL NUMBER OF MATCHES REJECTED | 11 | 9(11) | Yes | Yes |
| 115 | 125 | TOTAL NUMBER OF RECORDS Matched to ZIP + 4 File | 11 | 9(11) | Opt | Opt |
| 126 | 136 | TOTAL NUMBER OF RECORDS DPV CONFIRMED (Count of DPV Return Code: Y S and D) | 11 | 9(11) | Opt | Opt |
| CASSTM/MASSTM Product Information | | | | | | |
| 137 | 166 | CASS/MASS Software Name* | 30 | X(30) | Filler | Yes |
| 167 | 178 | CASS/MASS Software Version* | 12 | X(12) | Filler | Yes |
| 179 | 186 | CASS/MASS Directory (Data) Release Date* | 8 | 9(8) | Filler | Yes |
| | | Numeric. Format CCYYMMDD | | | | |
| NCOA^{Link} Product Information | | | | | | |
| 187 | 216 | NCOA ^{Link} Software Name | 30 | X(30) | Filler | Yes |
| 217 | 228 | NCOA ^{Link} Software Version | 12 | X(12) | Filler | Yes |
| 229 | 236 | NCOA ^{Link} Data Release Date | 8 | 9(8) | Filler | Yes |
| | | Numeric. Format CCYYMMDD. | | | | |
| 237 | 286 | FILLER | 50 | X(30) | Filler | Filler |

* - Data for these fields is required to be captured no later than October 1, 2009.

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| Record From | Position To | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|--|-------------|---|--------|-------|------------|------------|
| ZIP + 4 File Match Statistics | | | | | | |
| 287 | 297 | ZIP + 4 File: Total matched to PO Box | 11 | 9(11) | Opt | Opt |
| 298 | 308 | ZIP + 4 File: Total matched to HCR Exact | 11 | 9(11) | Opt | Opt |
| 309 | 319 | ZIP + 4 File: Total matched to RR Default | 11 | 9(11) | Opt | Opt |
| 320 | 330 | ZIP + 4 File: Total matched to Firm | 11 | 9(11) | Opt | Opt |
| 331 | 341 | ZIP + 4 File: Total matched to General Del | 11 | 9(11) | Opt | Opt |
| 342 | 352 | ZIP + 4 File: Total matched to High-rise Default | 11 | 9(11) | Opt | Opt |
| 353 | 363 | ZIP + 4 File: Total matched to Military | 11 | 9(11) | Opt | Opt |
| 364 | 374 | ZIP + 4 File: Total matched to Non-Deliverable | 11 | 9(11) | Opt | Opt |
| 375 | 385 | ZIP + 4 File: Total matched to RR Exact | 11 | 9(11) | Opt | Opt |
| 386 | 396 | ZIP + 4 File: Total matched to Street | 11 | 9(11) | Opt | Opt |
| 397 | 407 | ZIP + 4 File: Total matched to HCR Default | 11 | 9(11) | Opt | Opt |
| 408 | 418 | ZIP + 4 File: Total matched to Highrise Exact | 11 | 9(11) | Opt | Opt |
| 419 | 429 | ZIP + 4 File: Total matched to Other | 11 | 9(11) | Opt | Opt |
| 430 | 440 | ZIP + 4 File: Total matched to Pos LACS | 11 | 9(11) | Opt | Opt |
| 441 | 451 | ZIP + 4 File: Total matched to EWS | 11 | 9(11) | Opt | Opt |
| New Address Provided by NCOA^{Link} | | | | | | |
| 452 | 462 | A – Match | 11 | 9(11) | Yes | Yes |
| 463 | 473 | 91 – Match with Secondary Number Dropped on COA (Old Side) | 11 | 9(11) | Yes | Yes |
| 474 | 484 | 92 – Match with Secondary Number Dropped on Input | 11 | 9(11) | Yes | Yes |
| From NCOA^{Link} File Build | | | | | | |
| 485 | 495 | 01 – Match – Foreign Move | 11 | 9(11) | Yes | Yes |
| 496 | 506 | 02 – Match – Moved Left No Address | 11 | 9(11) | Yes | Yes |
| 507 | 517 | 03 – Match – PO Box Closed | 11 | 9(11) | Yes | Yes |
| 518 | 528 | 04 – No Match – Family move from Street Address w/Secondary | 11 | 9(11) | Yes | Yes |
| 529 | 539 | 05 – Match – New 11 digit DPBC is ambiguous | 11 | 9(11) | Yes | Yes |
| 540 | 550 | 06 – No Match – Middle Name Related | 11 | 9(11) | Yes | Yes |
| 551 | 561 | 07 – No Match – Gender Related | 11 | 9(11) | Yes | Yes |
| 562 | 572 | 08 – No Match – Conflicting Instructions | 11 | 9(11) | Yes | Yes |
| 573 | 583 | 09 – No Match – Family move from Highrise default | 11 | 9(11) | Yes | Yes |
| 584 | 594 | 10 – No Match – Family move from Rural/HC Route default | 11 | 9(11) | Yes | Yes |
| 595 | 605 | 11 – No Match – Individual move – Insufficient name data | 11 | 9(11) | Yes | Yes |
| 606 | 616 | 18 – No Match – Family move from General Delivery | 11 | 9(11) | Yes | Yes |
| 617 | 627 | 19 – Match – New Address not ZIP + 4 codeable | 11 | 9(11) | Yes | Yes |
| 628 | 638 | 20 – No Match – Multiple Response – Conflicting Directions | 11 | 9(11) | Yes | Yes |
| From NCOA^{Link} File Run | | | | | | |
| 639 | 649 | 12 – No Match – Middle Name test failed | 11 | 9(11) | Yes | Yes |
| 650 | 660 | 13 – No Match – Gender test failed | 11 | 9(11) | Yes | Yes |
| 661 | 671 | 14 – Match – New Address would not convert | 11 | 9(11) | Yes | Yes |

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| Record From | Position To | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|--|-------------|--|--------|-------|------------|------------|
| 672 | 682 | 15 – No Match – Individual Name insufficient on input to match | 11 | 9(11) | Yes | Yes |
| 683 | 693 | 16 – No Match – Secondary Number discrepancy | 11 | 9(11) | Yes | Yes |
| 694 | 704 | 17 – No Match – Different First Name | 11 | 9(11) | Yes | Yes |
| From “Daily Delete” Process | | | | | | |
| 705 | 715 | 66 – No Match – Input Address appears in “Daily Delete” suppression file | 11 | 9(11) | Yes | Yes |
| Footnote from DPV Processing of Input Addresses | | | | | | |
| 716 | 726 | AA – ZIP + 4 File Match. | 11 | 9(11) | Opt | Opt |
| 727 | 737 | A1 – ZIP + 4 File No Match | 11 | 9(11) | Opt | Opt |
| 738 | 748 | M1 – Primary Number missing | 11 | 9(11) | Opt | Opt |
| 749 | 759 | M3 – Primary Number invalid | 11 | 9(11) | Opt | Opt |
| 760 | 770 | P1 – Missing PO, RR or HC Box number | 11 | 9(11) | Opt | Opt |
| 771 | 781 | P3 – Invalid PO, RR or HC Box number | 11 | 9(11) | Opt | Opt |
| 782 | 792 | BB – DPV matched (all components) | 11 | 9(11) | Opt | Opt |
| 793 | 803 | RR – DPV matched to CMRA | 11 | 9(11) | Opt | Opt |
| 804 | 814 | CC – Primary Number Match – Secondary present but invalid | 11 | 9(11) | Opt | Opt |
| 815 | 825 | N1 – Primary Number Match – Secondary missing | 11 | 9(11) | Opt | Opt |
| 826 | 836 | R1 – DPV matched to CMRA – PMB number not present | 11 | 9(11) | Opt | Opt |
| Move Activity Summary | | | | | | |
| 837 | 847 | ADDRESSES MATCHED MONTH 0 | 11 | 9(11) | Yes | Yes |
| 848 | 858 | ADDRESSES MATCHED MONTH 1 | 11 | 9(11) | Yes | Yes |
| 859 | 869 | ADDRESSES MATCHED MONTH 2 | 11 | 9(11) | Yes | Yes |
| 870 | 880 | ADDRESSES MATCHED MONTH 3 | 11 | 9(11) | Yes | Yes |
| 881 | 891 | ADDRESSES MATCHED MONTH 4 | 11 | 9(11) | Yes | Yes |
| 892 | 902 | ADDRESSES MATCHED MONTH 5 | 11 | 9(11) | Yes | Yes |
| 903 | 913 | ADDRESSES MATCHED MONTH 6 | 11 | 9(11) | Yes | Yes |
| 914 | 924 | ADDRESSES MATCHED MONTH 7 | 11 | 9(11) | Yes | Yes |
| 925 | 935 | ADDRESSES MATCHED MONTH 8 | 11 | 9(11) | Yes | Yes |
| 936 | 946 | ADDRESSES MATCHED MONTH 9 | 11 | 9(11) | Yes | Yes |
| 947 | 957 | ADDRESSES MATCHED MONTH 10 | 11 | 9(11) | Yes | Yes |
| 958 | 968 | ADDRESSES MATCHED MONTH 11 | 11 | 9(11) | Yes | Yes |
| 969 | 979 | ADDRESSES MATCHED MONTH 12 | 11 | 9(11) | Yes | Yes |
| 980 | 990 | ADDRESSES MATCHED MONTH 13 | 11 | 9(11) | Yes | Yes |
| 991 | 1001 | ADDRESSES MATCHED MONTH 14 | 11 | 9(11) | Yes | Yes |
| 1002 | 1012 | ADDRESSES MATCHED MONTH 15 | 11 | 9(11) | Yes | Yes |
| 1013 | 1023 | ADDRESSES MATCHED MONTH 16 | 11 | 9(11) | Yes | Yes |
| 1024 | 1034 | ADDRESSES MATCHED MONTH 17 | 11 | 9(11) | Yes | Yes |
| 1035 | 1045 | ADDRESSES MATCHED MONTH 18 | 11 | 9(11) | Yes | Yes |
| 1046 | 1056 | ADDRESSES MATCHED MONTH 19 | 11 | 9(11) | Yes | Yes |
| 1057 | 1067 | ADDRESSES MATCHED MONTH 20 | 11 | 9(11) | Yes | Yes |
| 1068 | 1078 | ADDRESSES MATCHED MONTH 21 | 11 | 9(11) | Yes | Yes |
| 1079 | 1089 | ADDRESSES MATCHED MONTH 22 | 11 | 9(11) | Yes | Yes |

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|---|-------------|--|--------|-------|------------|------------|
| 1090 | 1100 | ADDRESSES MATCHED MONTH 23 | 11 | 9(11) | Yes | Yes |
| 1101 | 1111 | ADDRESSES MATCHED MONTH 24 | 11 | 9(11) | Yes | Yes |
| 1112 | 1122 | ADDRESSES MATCHED MONTH 25 | 11 | 9(11) | Yes | Yes |
| 1123 | 1133 | ADDRESSES MATCHED MONTH 26 | 11 | 9(11) | Yes | Yes |
| 1134 | 1144 | ADDRESSES MATCHED MONTH 27 | 11 | 9(11) | Yes | Yes |
| 1145 | 1155 | ADDRESSES MATCHED MONTH 28 | 11 | 9(11) | Yes | Yes |
| 1156 | 1166 | ADDRESSES MATCHED MONTH 29 | 11 | 9(11) | Yes | Yes |
| 1167 | 1177 | ADDRESSES MATCHED MONTH 30 | 11 | 9(11) | Yes | Yes |
| 1178 | 1188 | ADDRESSES MATCHED MONTH 31 | 11 | 9(11) | Yes | Yes |
| 1189 | 1199 | ADDRESSES MATCHED MONTH 32 | 11 | 9(11) | Yes | Yes |
| 1200 | 1210 | ADDRESSES MATCHED MONTH 33 | 11 | 9(11) | Yes | Yes |
| 1211 | 1221 | ADDRESSES MATCHED MONTH 34 | 11 | 9(11) | Yes | Yes |
| 1222 | 1232 | ADDRESSES MATCHED MONTH 35 | 11 | 9(11) | Yes | Yes |
| 1233 | 1243 | ADDRESSES MATCHED MONTH 36 | 11 | 9(11) | Yes | Yes |
| 1244 | 1254 | ADDRESSES MATCHED MONTH 37 | 11 | 9(11) | Yes | Yes |
| 1255 | 1265 | ADDRESSES MATCHED MONTH 38 | 11 | 9(11) | Yes | Yes |
| 1266 | 1276 | ADDRESSES MATCHED MONTH 39 | 11 | 9(11) | Yes | Yes |
| 1277 | 1287 | ADDRESSES MATCHED MONTH 40 | 11 | 9(11) | Yes | Yes |
| 1288 | 1298 | ADDRESSES MATCHED MONTH 41 | 11 | 9(11) | Yes | Yes |
| 1299 | 1309 | ADDRESSES MATCHED MONTH 42 | 11 | 9(11) | Yes | Yes |
| 1310 | 1320 | ADDRESSES MATCHED MONTH 43 | 11 | 9(11) | Yes | Yes |
| 1321 | 1331 | ADDRESSES MATCHED MONTH 44 | 11 | 9(11) | Yes | Yes |
| 1332 | 1342 | ADDRESSES MATCHED MONTH 45 | 11 | 9(11) | Yes | Yes |
| 1343 | 1353 | ADDRESSES MATCHED MONTH 46 | 11 | 9(11) | Yes | Yes |
| 1354 | 1364 | ADDRESSES MATCHED MONTH 47 | 11 | 9(11) | Yes | Yes |
| 1365 | 1375 | ADDRESSES MATCHED MONTH 48 | 11 | 9(11) | Yes | Yes |
| 1376 | 1387 | Operator ID | 12 | X(12) | Filler | Yes |
| 1388 | 1417 | FILLER | 30 | X(30) | Filler | Filler |
| 1418 | 1422 | Mailing ZIP Code | 5 | 9(5) | Filler | Yes |
| 1423 | 1452 | Marketing Test – List Owner Company Name (Company for whom the marketing test is being completed) | 30 | X(30) | Filler | Yes |
| DPV Statistics based on ZIP + 4 File Record Type | | | | | | |
| 1453 | 1463 | ZIP + 4 File: Street (S) Records DPV Confirmed (Y, S or D) | 11 | 9(11) | Opt | Opt |
| 1464 | 1474 | CMRA Presented | 11 | 9(11) | Opt | Opt |
| 1475 | 1485 | CMRA Validated | 11 | 9(11) | Opt | Opt |
| 1486 | 1496 | ZIP + 4 File: High Rise (H) Records DPV Confirmed (Y, S or D) | 11 | 9(11) | Opt | Opt |
| 1497 | 1507 | CMRA Presented | 11 | 9(11) | Opt | Opt |
| 1508 | 1518 | CMRA Validated | 11 | 9(11) | Opt | Opt |
| 1519 | 1529 | ZIP + 4 File: PO Box (P) Records DPV Confirmed (Y, S or D) | 11 | 9(11) | Opt | Opt |

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NCOA^{Link} Monthly Customer Service Log Report (CSL File)

| Record From | Position To | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|---|-------------|--|--------|-------|------------|------------|
| 1530 | 1540 | ZIP + 4 File: RR/HC (R) Records DPV Confirmed (Y, S or D) | 11 | 9(11) | Opt | Opt |
| 1541 | 1551 | CMRA Presented | 11 | 9(11) | Opt | Opt |
| 1552 | 1562 | CMRA Validated | 11 | 9(11) | Opt | Opt |
| 1563 | 1573 | ZIP + 4 File: Firm (F) Records DPV Confirmed (Y, S or D) | 11 | 9(11) | Opt | Opt |
| 1574 | 1584 | CMRA Presented | 11 | 9(11) | Opt | Opt |
| 1585 | 1595 | CMRA Validated | 11 | 9(11) | Opt | Opt |
| 1596 | 1606 | ZIP + 4 File: General Delivery (G) Records DPV Confirmed (Y, S or D) | 11 | 9(11) | Opt | Opt |
| 1607 | 1617 | Total Primary Number Error | 11 | 9(11) | Opt | Opt |
| 1618 | 1672 | Filler (Changed to Filler effective Oct. 1, 2009) | 55 | X(55) | Filler | Filler |
| 1673 | 1683 | Total Secondary Number Error | 11 | 9(11) | Opt | Opt |
| 1684 | 1694 | Street (S) Records with Secondary Number Error | 11 | 9(11) | Opt | Opt |
| 1695 | 1705 | High Rise (H) Records with Secondary Number Error | 11 | 9(11) | Opt | Opt |
| 1706 | 1716 | Firm (F) Records with Secondary Number Error | 11 | 9(11) | Opt | Opt |
| 1717 | 1766 | FILLER | 50 | X(50) | Filler | Filler |
| LACS^{Link} Return Codes | | | | | | |
| 1767 | 1777 | A – LACS Record Match | 11 | 9(11) | Opt | Opt |
| 1778 | 1788 | 00 – No Match | 11 | 9(11) | Opt | Opt |
| 1789 | 1799 | 14 – Match – Found LACS Record – New Address would not convert | 11 | 9(11) | Opt | Opt |
| 1800 | 1810 | 92 – Match with Secondary Number Dropped on Input | 11 | 9(11) | Opt | Opt |
| From DPV Processing of Input Addresses – Additional Footnote Codes | | | | | | |
| 1811 | 1821 | F1 – Military | 11 | 9(11) | Opt | Opt |
| 1822 | 1832 | U1 – Unique ZIP Code | 11 | 9(11) | Opt | Opt |
| 1833 | 1843 | G1 – General Delivery | 11 | 9(11) | Opt | Opt |
| From NCOA^{Link} File Run – Additional Footnote Code | | | | | | |
| 1844 | 1854 | NL – New address not DPV confirmable with vendor software. (Required only when this code is returned to the customer)*** This field is only for list processing and should MPE Equipment develop the technology, it will become required | 11 | 9(11) | Yes | Yes |
| ANK^{Link} and corresponding NCOA^{Link} Return Codes and Definition | | | | | | |
| 1855 | 1865 | 77 – A – Match | 11 | 9(11) | Yes | Yes |
| 1866 | 1876 | 77 – 91 – Match with Secondary No. Dropped on COA (Old Side) | 11 | 9(11) | Yes | Yes |
| 1877 | 1887 | 77 – 92 – Match with Secondary Number Dropped on Input | 11 | 9(11) | Yes | Yes |
| 1888 | 1898 | 77 – 01 – Match – Foreign Move | 11 | 9(11) | Yes | Yes |
| 1899 | 1909 | 77 – 02 – Match – Moved Left No Address | 11 | 9(11) | Yes | Yes |
| 1910 | 1920 | 77 – 03 – Match – PO Box Closed | 11 | 9(11) | Yes | Yes |

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| Record From | Position To | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|--|-------------|---|--------|--------|------------|------------|
| 1921 | 1931 | 77 – 04 – No Match – Family move - Street Address w/Secondary | 11 | 9(11) | Yes | Yes |
| 1932 | 1942 | 77 – 05 – Match – New 11 digit DPBC is ambiguous | 11 | 9(11) | Yes | Yes |
| 1943 | 1953 | 77 – 06 – No Match – Middle Name Related | 11 | 9(11) | Yes | Yes |
| 1954 | 1964 | 77 – 07 – No Match – Gender Related | 11 | 9(11) | Yes | Yes |
| 1965 | 1975 | 77 – 08 – No Match – Conflicting Instructions | 11 | 9(11) | Yes | Yes |
| 1976 | 1986 | 77 – 09 – No Match – Family move from Highrise default | 11 | 9(11) | Yes | Yes |
| 1987 | 1997 | 77 – 10 – No Match – Family move from Rural/HC Route default | 11 | 9(11) | Yes | Yes |
| 1998 | 2008 | 77 – 11 – No Match – Individual move – Insufficient name data | 11 | 9(11) | Yes | Yes |
| 2009 | 2019 | 77 – 18 – No Match – Family move from General Delivery | 11 | 9(11) | Yes | Yes |
| 2020 | 2030 | 77 – 19 – Match – New Address not ZIP + 4 codeable | 11 | 9(11) | Yes | Yes |
| 2031 | 2041 | 77 – 20 – No Match – Multiple Response – Conflicting Directions | 11 | 9(11) | Yes | Yes |
| 2042 | 2052 | 77 – 12 – No Match – Middle Name test failed | 11 | 9(11)) | Yes | Yes |
| 2053 | 2063 | 77 – 13 – No Match – Gender test failed | 11 | 9(11) | Yes | Yes |
| 2064 | 2074 | 77 – 14 – Match – New Address would not convert | 11 | 9(11) | Yes | Yes |
| 2075 | 2085 | 77 – 15 – No Match – Individual Name insufficient on input | 11 | 9(11) | Yes | Yes |
| 2086 | 2096 | 77 – 16 – No Match – Secondary Number discrepancy | 11 | 9(11) | Yes | Yes |
| 2097 | 2107 | 77 – 17 – No Match – Different First Name | 11 | 9(11) | Yes | Yes |
| 2108 | 2118 | 77 – 66 – No Match – Input Address appears in “Daily Delete” suppression file | 11 | 9(11) | Yes | Yes |
| 2119 | 2129 | 77 – Total records matched using ANK ^{Link} | 11 | 9(11) | Yes | Yes |
| LACS^{Link} Return Codes – Additional Return Code | | | | | | |
| 2130 | 2140 | 09 – LACS ^{Link} – Old Address Highrise Default – No New Address | 11 | 9(11) | Opt | Opt |
| NCOA^{Link} Product Version | | | | | | |
| 2141 | 2141 | NCOA ^{Link} Product Version | 1 | X(1) | Filler | Yes |
| | | A = 48 HASH | | | | |
| | | B = 48 FLAT | | | | |
| | | C = 18 HASH | | | | |
| | | D = 18 FLAT | | | | |
| | | E = ANK HASH | | | | |
| | | F = ANK FLAT | | | | |
| 2142 | 2142 | High Match Rate Description – NCOA ^{Link} Match Percentage Greater than 20 % | 1 | X(1) | Filler | Opt |
| | | A = ANK ^{Link} Extract File (FSP Only) | | | | |
| | | S = Stage I or Stage II File | | | | |
| | | R = Returned Mail File | | | | |

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NCOA^{Link} Monthly Customer Service Log Report (CSL File)

| Record From | Record From | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|---|-------------|--|--------|--------|------------|------------|
| Filler (Formerly SUITE^{Link} Product Information) | | | | | | |
| 2143 | 2192 | Filler | 50 | X(50) | Filler | Filler |
| SUITE^{Link} Return Codes | | | | | | |
| 2193 | 2203 | Suite ^{Link} Return Code A – Match | 11 | 9(11) | Opt | Opt |
| 2204 | 2214 | Suite ^{Link} Return Code 00 – No Match | 11 | 9(11) | Opt | Opt |
| NCOA^{Link} Return Codes (Continued) | | | | | | |
| 2215 | 2225 | NCOA ^{Link} Return Code 21 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2226 | 2236 | NCOALink Return Code 22 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2237 | 2247 | NCOA ^{Link} Return Code 23 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2248 | 2258 | NCOA ^{Link} Return Code 24 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2259 | 2269 | NCOA ^{Link} Return Code 25 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2270 | 2280 | NCOA ^{Link} Return Code 26 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2281 | 2291 | NCOA ^{Link} Return Code 27 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2292 | 2302 | NCOA ^{Link} Return Code 28 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2303 | 2313 | NCOA ^{Link} Return Code 29 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2314 | 2324 | NCOA ^{Link} Return Code 30 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| ANK^{Link} Return Codes (Continued) | | | | | | |
| 2325 | 2335 | 77 – 21 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2336 | 2346 | 77 – 22 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2347 | 2357 | 77 – 23 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2358 | 2368 | 77 – 24 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2369 | 2379 | 77 – 25 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2380 | 2390 | 77 – 26 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2391 | 2401 | 77 – 27 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2402 | 2412 | 77 – 28 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2413 | 2423 | 77 – 29 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| 2424 | 2434 | 77 – 30 – To Be Determined | 11 | 9(11) | *Yes* | *Yes* |
| Filler (Formerly Address Quality Product Information) | | | | | | |
| 2435 | 2638 | Filler | 204 | X(204) | Filler | Filler |
| DPV Return Codes | | | | | | |
| 2639 | 2649 | Count of DPV Return Code = Y* | 11 | 9(11) | Opt | Opt |
| 2650 | 2660 | Count of DPV Return Code = S* | 11 | 9(11) | Opt | Opt |
| 2661 | 2671 | Count of DPV Return Code = D* | 11 | 9(11) | Opt | Opt |
| 2672 | 2682 | Count of DPV Return Code = N* | 11 | 9(11) | Opt | Opt |
| 2683 | 2693 | Count of DPV Return Code = BLANK* | 11 | 9(11) | Opt | Opt |
| 2694 | 2704 | Count of DPV Vacant Flag = Y* | 11 | 9(11) | Opt | Opt |
| 2705 | 2715 | Count of DPV CMRA Flag* | 11 | 9(11) | Opt | Opt |
| 2716 | 2726 | Count of DPV No Stat Flag* | 11 | 9(11) | Opt | Opt |
| Move Activity Summary for the Processing Summary Report | | | | | | |
| 2727 | 2737 | Sum of Match Return Codes A, 91 & 92 with Move Effective Month: Mon 0-3* | 11 | X(11) | Yes | Yes |
| 2738 | 2748 | Sum of Match Return Codes A, 91 & 92 with Move Effective Month: Mon 4-6* | 11 | X11 | Yes | Yes |

* - Data for these fields is required to be captured no later than October 1, 2009.

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NCOALink Monthly Customer Service Log Report (CSL File)

| Record From | Record From | Field Name & Description | Length | COBOL | MPE Header | MPE Detail | |
|--|-------------|---|--------|-------|------------|------------|--|
| 2749 | 2759 | Sum of Match Return Codes A, 91 & 92 with Move Effective Month: Mon 7-12* | 11 | X(11) | Yes | Yes | |
| 2760 | 2770 | Sum of Match Return Codes A, 91 & 92 with Move Effective Month: Mon 13-18* | 11 | X(11) | Yes | Yes | |
| 2771 | 2781 | Sum of Match Return Codes A, 91 & 92 with Move Effective Month: Mon 19+* | 11 | X(11) | Yes | Yes | |
| 2782 | 2814 | Filler | 33 | X(33) | Filler | Filler | |
| MAIL PROCESSING EQUIPMENT REPORTING | | | | | | | |
| 2815 | 2817 | MPE Processing Modes | 3 | X(3) | Filler | Yes | |
| | | ACT = Active Processing, all mailpieces enter the mailstream with COA Information sprayed on the mailpiece. COA Data may only be returned via an electronic option. NRP = Notification via returned mailpiece. All Mailpieces are outsourced for return to the customer. Mailpieces or photocopies must be returned to the customer. Mailpieces do not enter the mailstream without further handling. FAC = Facsimile – Facsimiles of mailpieces are processed through the MPE. COA Information or appropriate NCOALink Return Code is sprayed on the mailpiece. All mailpieces are returned to the customer. DBS = Delivery Point Barcode Reader – No COA information is sprayed on the mailpieces. FLT = Flats Processing. 1. All mailpieces enter the mailstream with COA Information sprayed on the mailpiece. 2. If unable to spray COA information on the mailpieces, the outsourced mailpieces are returned to the customer, destroyed or mailed at full rate. 3. COA Data may only be returned via an electronic option if applicable. NOTE: Any Flats processing is reported as processing mode FLT. | | | | | |
| 2818 | 2818 | Mail Pieces Returned to Customer | 1 | X(1) | Filler | Yes | |
| 2819 | 2819 | Photocopies of Mailpieces Returned to Customer | 1 | X(1) | Filler | Yes | |
| 2820 | 2820 | Electronic Image of Mailpiece Returned to Customer | 1 | X(1) | Filler | Yes | |
| 2821 | 2821 | Electronic Record of Returned to Customer | 1 | X(1) | Filler | Yes | |
| 2822 | 2822 | Electronic Report Returned to Customer | 1 | X(1) | Filler | Yes | |
| 2823 | 2835 | Unique MPE Serial Number | 13 | X(13) | Filler | Yes | |
| Move Activity Summary for the Processing Summary Report (continued) | | | | | | | |
| 2837 | 2847 | Sum of Match Return Codes 01, 02 & 03 with Move Effective Month: Mon 0-3* | 11 | X(11) | Yes | Yes | |
| 2848 | 2858 | Sum of Match Return Codes 01, 02 & 03 with Move Effective Month: Mon 4-6* | 11 | X(11) | Yes | Yes | |
| 2859 | 2869 | Sum of Match Return Codes 01, 02 & 03 with Move Effective Month: Mon 7-12* | 11 | X(11) | Yes | Yes | |
| 2870 | 2880 | Sum of Match Return Codes 01, 02 & 03 with Move Effective Month: Mon 13-18* | 11 | X(11) | Yes | Yes | |
| 2881 | 2891 | Sum of Match Return Codes 01, 02 & 03 with Move Effective Month: Mon 19+* | 11 | X(11) | Yes | Yes | |
| 2892 | 2902 | Sum of Match Return Codes 05, 14 & 19 with Move Effective Month: Mon 0-3* | 11 | X(11) | Yes | Yes | |
| 2903 | 2913 | Sum of Match Return Codes 05, 14 & 19 with Move Effective Month: Mon 4-6* | 11 | X(11) | Yes | Yes | |
| 2914 | 2924 | Sum of Match Return Codes 05, 14 & 19 with Move Effective Month: Mon 7-12* | 11 | X(11) | Yes | Yes | |
| 2925 | 2935 | Sum of Match Return Codes 05, 14 & 19 with Move Effective Month: Mon 13-18* | 11 | X(11) | Yes | Yes | |
| 2936 | 2946 | Sum of Match Return Codes 05, 14 & 19 with Move Effective Month: Mon 19+* | 11 | X(11) | Yes | Yes | |
| 2947 | 2999 | Filler | 53 | X(53) | Filler | Filler | |
| 3000 | 3000 | Record Type – H = Header/ D = Detail | 1 | X(1) | Yes | Yes | |
| | | CR/LF | | | | | |
| | | Carriage Return/Line Feed required at end of the record. | | | | | |

* - Data for these fields is required to be captured no later than October 1, 2009.

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Key

Filler – blank

Yes – required

Opt – Optional output, licensee has the option to provide the data

* Yes * – field is required, but the return code has not yet been defined.

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NCOA^{Link} MONTHLY Processing Acknowledgement Report (PAF File)

| Record From | Position To | Field Name & Description | Length | COBOL | MPE Header | MPE Detail |
|-------------|-------------|--|--------|-------|------------|------------|
| 1 | 4 | LICENSEE PLATFORM ID | 4 | X(4) | Yes | |
| 5 | 18 | NUMBER OF RECORDS | 14 | 9(14) | Yes | |
| 1 | 18 | PAF ID | 18 | X(18) | | Yes |
| | | 1-4 Licensee Platform ID (USPS assigned) | | | | Yes |
| | | 5-10 Mail Owner NAICS Code | | | | Yes |
| | | 11-12 Frequency of processing | | | | Yes |
| | | 13-18 Mail Owner ID (Licensee assigned) | | | | Yes |
| 19 | 68 | Company Name | 50 | X(50) | Filler | Yes |
| 69 | 118 | Address | 50 | X(50) | Filler | Yes |
| 119 | 146 | City | 28 | X(28) | Filler | Yes |
| 147 | 148 | State | 2 | X(2) | Filler | Yes |
| 149 | 153 | ZIP Code | 5 | X(5) | Filler | Yes |
| 154 | 157 | ZIP Code Plus | 4 | X(4) | Filler | Yes |
| 158 | 167 | Telephone Number | 10 | X(10) | Filler | Yes |
| 168 | 217 | Name of Person signing PAF | 50 | X(50) | Filler | Yes |
| 218 | 267 | Title of person signing PAF | 50 | X(50) | Filler | Yes |
| 268 | 275 | Date Signed by Customer Numeric: Format - CCYYMMDD | 8 | 9(8) | Filler | Yes |
| 276 | 276 | Type of PAF (I – Initial, R – Renewal, M – Modification) | 1 | X(1) | Filler | Yes |
| 277 | 306 | List Name | 30 | X(30) | Filler | Yes |
| 307 | 321 | Mailer ID (optional) | 15 | X(15) | Filler | Yes |
| 322 | 333 | FILLER (Changed to Filler effective Oct. 1, 2009) | 12 | X(12) | Filler | Yes |
| 334 | 383 | Parent Company | 50 | X(50) | Filler | Yes |
| 384 | 433 | Alternate Company Used for marketing purposes or 'dba' name | 50 | X(50) | Filler | Yes |
| 434 | 481 | Filler | 48 | X(48) | Filler | Filler |
| 482 | 489 | Date Signed by NCOA ^{Link} Licensee Numeric: Format - CCYYMMDD | 8 | 9(8) | Filler | Yes |
| 490 | 553 | Email address of person signing PAF (optional) | 64 | X(64) | Filler | Yes |
| 554 | 593 | Company web site (optional)* | 40 | X(40) | Filler | Yes |
| 594 | 594 | Equivalent Alternative PAF Indicator – The literal 'A' in this field indicates an Alternative PAF was used.* | 1 | X(1) | Filler | Yes |
| 595 | 599 | Filler (Changed to Filler effective Oct. 1, 2009) | 5 | X(5) | Filler | Yes |
| 600 | 600 | Record Type – H = Header/ D = Detail | 1 | X(1) | Yes | Yes |
| | | CR/LF | | | | |

* - Data for these fields are to be captured no later than October 1, 2009.

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Figure 1
NCOA^{Link} MPE Return Code Descriptions

Code = Return Code Description = Explanation of Return Code

Address = "Y" = New Address provided

How = "D" = Derived by data – returned in lieu of 11 digit

"N" = New Address not provided

"S" = Derived by software

| Code | Description | Address | How |
|------|---|---------|-----|
| A | COA Match - The input record matched to a COA record. A new address could be furnished. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | Y | D |
| 66 | Daily Delete – The input record matched to a business, individual or family type COA 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 COA master file and that <u>no</u> mail may be forwarded from this address. This return code may be returned regardless of the processing mode, matching logic or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | S |
| 00 | No Match - The input record COULD NOT BE matched to a COA record. A new address could not be furnished. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: When processing in any mode and this return code is received it is required to attempt the match again using the next level of matching logic allowed by the processing mode. | N | D |
| 01 | Found COA: Foreign Move – The input record matched to a COA record but the new address was outside the USPS delivery area. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 02 | Found COA: Moved Left No Address (MLNA) – The input record matched to a COA record, but the new address was not provided to USPS. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved then <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 03 | Found COA: Box Closed No Order (BCNO) – The Input record matched to a COA record containing an old address of PO BOX, which has been closed without a forwarding address provided. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 04 | Cannot match COA: Street Address with Secondary – In the STANDARD mode utilizing Family matching logic the input record was a potential match to a family type COA record with an old address that contained secondary information. The input record does not contain secondary information. The record is a ZIP + 4 street level match. This address match situation requires individual name matching logic to obtain a match and individual names do not match. Please Note: This return code is only obtained when processing in the STANDARD mode using Family matching logic. | N | D |
| 05 | Found COA: New 11-digit DPBC is Ambiguous – The input record matched to a COA record. The new address on the COA record could not be converted to a deliverable address because the DPBC represents more than one delivery point. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |

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NCOA^{Link} MPE Return Code Descriptions – continued

| Code | Description | Address | How |
|------|---|---------|-----|
| 06 | Cannot Match COA: Conflicting Directions: Middle Name Related –There is more than one COA 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. This return code is only obtained when using individual matching logic. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 07 | Cannot Match COA: Conflicting Directions: Gender Related –There is more than one COA 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. This return code is only obtained when using individual matching logic. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 08 | Cannot Match COA: Other Conflicting Instructions – The input record was a potential match to two COA records. The two records were compared and due to differences in the new addresses, a match could not be made. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 09 | Cannot Match COA: High-rise Default – The input record was a potential match to a family COA record 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. Please Note: This return code is only obtained when processing in the STANDARD mode using Family matching logic. | N | D |
| 10 | Cannot Match COA: Rural Default – The input record was a potential match to a family COA record 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. Please Note: This return code is only obtained when processing in the STANDARD mode using Family matching logic. | N | D |
| 11 | Cannot Match COA: Individual Match: Insufficient COA Name for Match – There is a COA record with the same surname and address but there is insufficient first/middle name information on the COA record to produce a match using individual matching logic. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual Logic, discontinue the Individual logic sequence and go straight to the FAMILY matching logic. | N | D |
| 12 | Cannot Match COA: Middle Name Test Failed – The input record was a potential match to a COA record. A match cannot be made because the input name contains a conflict with the middle name or initials on the COA record. This return code is only obtained when using individual matching logic. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | S |
| 13 | Cannot Match COA: Gender Test Failed – The input record was a potential match to a COA 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 COA record. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual logic, discontinue the Individual logic sequence and go straight to FAMILY matching logic. | N | S |
| 14 | Found COA: New Address Would Not Convert at Run Time – The input record matched to a COA record. The new address could not be converted to a deliverable address. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | S |

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NCOA^{Link} MPE Return Code Descriptions – continued

| Code | Description | Address | How |
|------|---|---------|-----|
| 15 | Cannot Match COA: Individual Name Insufficient – The input record was a potential match to a COA record that contains a first initial and middle initial/name [ex. C M Smith or C Mary Smith]. A match cannot be made because the input middle initial/name is missing or does not equal the middle initial/name on the COA. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual logic, discontinue the Individual logic sequence and go straight to FAMILY matching logic. | N | S |
| 16 | Cannot Match COA: Secondary Number Discrepancy – The input record was a potential match to a street level COA record. However, a match is prohibited based on one of the following reasons: 1) There is conflicting secondary information on the input and COA 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. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | S |
| 17 | Cannot Match COA: Other Insufficient Name – The input record was a potential match to a COA record that contains a full first name and full middle name. The input middle initial/name is missing or different from the middle name on the COA. A match cannot be made because the first name on the COA was truncated (drop-n flag) and the middle names must be equal in order to make this match. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual Logic, discontinue the Individual logic sequence and go straight to FAMILY matching logic. | N | S |
| 18 | Cannot Match COA: General Delivery – The input record was a potential match to a COA record from a General Delivery address. This address situation requires individual name matching logic to obtain a match and individual names do not match. Please Note: This return code is only obtained when processing in the STANDARD mode using Family matching logic. | N | D |
| 19 | Found COA: New Address not ZIP+4 coded or New address primary number not DPV confirmable – 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, or the new address primary number cannot be confirmed on DPV. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 20 | Cannot Match COA: Conflicting Directions after re-chaining – Multiple COA records were potential matches to the input record. The COA records contained different new addresses and a single match result could not be determined. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | N | D |
| 91 | COA Match: Secondary Number dropped from COA – The input record matched to a COA record. The COA record had a secondary number and the input address did not. Please Note: This return code is derived from Individual and business matching logic only. If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | Y | S |
| 92 | COA Match: Secondary Number Dropped from input address – The input record matched to a COA record. The input address had a secondary number and the COA record did not. The record is a ZIP + 4 street level match. Please Note: This return code is derived from individual and business matching logic only. If this return code is achieved, <u>no other matching attempts</u> are permitted regardless of the PROCESSING mode. | Y | S |

Please Note: When processing in STANDARD mode and return codes 00, 11, 13, 15 and 17 are received utilizing Individual Logic it is required to attempt the match again using FAMILY matching logic.

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NCOA^{Link} MPE Return Code Matrix

| Code | Received during Business matching logic | Received during Individual matching logic | Received during Family matching Logic | Retry matching attempts |
|------|---|---|---------------------------------------|---|
| A | YES | YES | YES | NO |
| 00 | YES | YES | YES | attempt the match again using the next level of matching logic allowed by the processing mode |
| 01 | YES | YES | YES | NO |
| 02 | YES | YES | YES | NO |
| 03 | YES | YES | YES | NO |
| 04 | NO | NO | YES | NO |
| 05 | YES | YES | YES | NO |
| 06 | NO | YES | NO | NO |
| 07 | NO | YES | NO | NO |
| 08 | YES | YES | YES | NO |
| 09 | NO | NO | YES | NO |
| 10 | NO | NO | YES | NO |
| 11 | NO | YES | NO | When processing in the STANDARD mode and this return code is received utilizing Individual Logic it is required to attempt the match again using FAMILY matching logic. |
| 12 | NO | YES | NO | NO |
| 13 | NO | YES | NO | When processing in the STANDARD mode and this return code is received utilizing Individual Logic it is required to attempt the match again using FAMILY matching logic. |
| 14 | YES | YES | YES | NO |
| 15 | NO | YES | NO | When processing in the STANDARD mode and this return code is received utilizing Individual Logic it is required to attempt the match again using FAMILY matching logic. |
| 16 | NO | YES | YES | NO |
| 17 | NO | YES | NO | When processing in the STANDARD mode and this return code is received utilizing Individual Logic it is required to attempt the match again using FAMILY matching logic. |

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NCOA^{Link} MPE Return Code Matrix - continued

| Code | Received during Business matching logic | Received during Individual matching logic | Received during Family matching logic | Retry matching attempts |
|------|---|---|---------------------------------------|-------------------------|
| 18 | NO | NO | YES | NO |
| 19 | YES | YES | YES | NO |
| 20 | YES | YES | YES | NO |
| 66 | YES | YES | YES | NO |
| 91 | NO | YES | NO | NO |
| 92 | NO | YES | NO | NO |

New address information is returned only on the following return codes: A, 91, 92

Return Codes that indicate a COA was found but was unable to provide a new address: 01, 02, 03, 05, 14, 19

Return Codes that return a move effective date: A, 91, 92, 01, 02, 03, 05, 14, 19

Return Codes that should not return a move effective date: 04, 06, 07, 08, 09, 10, 11, 18, 20

Return Codes in which the move effective date must be discarded: 12, 13, 15, 16, 17

Return Codes that indicate potential matches but could not make the match due to rules: 04, 06, 07, 08, 09, 10, 11, 12, 13, 15, 16, 17, 18, 20

Return Codes returned during Individual logic only: 06, 07, 11, 12, 13, 15, 17, 91, 92

Return Codes returned during Family logic only: 04, 09, 10, 18

Return Codes that require Family matching attempts when processing in STANDARD mode: 00, 11, 13, 15, 17

Return Codes that do not allow retry of matching logic: A, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 12, 14, 16, 18, 19, 20, 91, 92

Other Footnote Descriptions – OPTIONAL

| Code | Description | Process |
|------|--|---------|
| AA | Input Address ZIP + 4 match | ZIP + 4 |
| A1 | Input Address ZIP + 4 not matched | ZIP + 4 |
| M1 | Input Address Primary Number Missing | ZIP + 4 |
| M3 | Input Address Primary Number Invalid | ZIP + 4 |
| P1 | Input Address Missing PO, RR, or HC Box number | ZIP + 4 |
| P3 | Input Address PO, RR, or HC Box number invalid | ZIP + 4 |
| BB | Input Address DPV matched (all components) | DPV |
| RR | Input Address DPV matched to CMRA | DPV |
| CC | Input Address DPV Primary Number match, Secondary Number not Matched (secondary number present but is not DPV confirmed) | DPV |
| N1 | Input Address DPV Primary Number match, High-Rise Address Missing Secondary Number | DPV |
| R1 | Input Address DPV matched to CMRA but PMB Number not Present | DPV |
| F1 | Input Address matched to a Military Address | DPV |
| G1 | Input Address matched to a General Delivery Address | DPV |
| U1 | Input Address matched to a Unique ZIP Code | DPV |

Note: These codes are all generated during the CASS process. The Process indicator of “ZIP + 4” or “DPV” denotes from which portion of CASS processing the footnotes were generated.

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Figure 2

Per the USPS DMM[®], the ZIP + 4 and City/State data must be updated by ZIP + 4 and City/State Product users within 45 days of the USPS release date. For general use, a data release is valid for 105 days from the USPS release date and users may elect to receive bi-monthly updates. However, NCOA^{Link} MPE Licensees are required to update these files on a monthly basis in order to obtain the best possible results from the NCOA^{Link} MPE process. The following chart is provided to assist in determining which data release is considered the most current for NCOA^{Link} MPE Licensees.

| Release | Required Use Date | Last Use Date |
|----------------|--------------------------|--------------------------------------|
| January 15 | March 1 | March 31 |
| February 15 | April 1 | April 30 |
| March 15 | May 1 | May 31 |
| April 15 | June 1 | June 30 |
| May 15 | July 1 | July 31 |
| June 15 | August 1 | August 31 |
| July 15 | September 1 | September 30 |
| August 15 | October 1 | October 31 |
| September 15 | November 1 | November 30 |
| October 15 | December 1 | December 31 |
| November 15 | January 1 | January 31 |
| December 15 | February 1 | February 28 (Feb 29 in leap year) |

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Figure 3

| TEST CLIENT INPUT FILE HEADER RECORD | | | | |
|---|-------------|---|--------|--------|
| RECORD FROM | POSITION TO | FIELD NAME | LENGTH | COBOL |
| 1 | 8 | NCSC AUDIT FILE CREATED DATE(YYYYMMDD) | 8 | 9(08) |
| 9 | 14 | NCSC AUDIT FILE CREATED TIME(HHMMSS) | 6 | 9(06) |
| 15 | 18 | NCSC AUDIT FILE NUMBER | 4 | 9(04) |
| 19 | 26 | NCSC NCOA ^{Link} RELEASE DATE | 8 | 9(08) |
| 27 | 34 | NCSC ZIP+4 RELEASE DATE | 8 | 9(08) |
| 35 | 42 | NCSC DPV RELEASE DATE | 8 | 9(08) |
| 43 | 43 | NCSC TYPE (Audit, Certification, Stage) | 1 | X(01) |
| | | | | |
| 44 | 298 | FILLER | 255 | X(255) |
| 299 | 300 | CARRIAGE RETURN LINE FEED | 2 | X(02) |

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| TEST CLIENT INPUT FILE DETAIL RECORD | | | | |
|---|-------------|---|--------|-------|
| RECORD FROM | POSITION TO | FIELD NAME | LENGTH | COBOL |
| 1 | 28 | INPUT CUSTOMER KEY | 28 | X(28) |
| 29 | 29 | INPUT NAME PARSED (Y,N) | 1 | X(01) |
| 30 | 95 | INPUT CUSTOMER NAME | 66 | X(66) |
| | NOTE: | The information found in the INPUT CUSTOMER NAME will be fixed length. The data contained within the field may be presented as a single field or it may be parsed. If the name is a business, then the name will start in the first position. | | |
| 30 | 35 | INPUT PREFIX TITLES | 6 | X(06) |
| 36 | 50 | INPUT CUSTOMER FIRST NAME | 15 | X(15) |
| 51 | 65 | INPUT CUSTOMER MIDDLE NAME | 15 | X(15) |
| 66 | 85 | INPUT CUSTOMER LAST NAME | 20 | X(20) |
| 86 | 91 | INPUT SUFFIX TITLES | 6 | X(06) |
| 92 | 95 | FILLER | 4 | X(04) |
| | | | | |
| 96 | 96 | INPUT ADDRESS PARSED (Y,N) | 1 | X(01) |
| 97 | 124 | INPUT CUSTOMER URBANIZATION NAME | 28 | X(28) |
| 125 | 191 | INPUT CUSTOMER ADDRESS | 67 | X(67) |
| | NOTE: | The information found in the INPUT CUSTOMER ADDRESS will be fixed length. The data contained within the field may be presented as a single field or it may be parsed. | | |
| 125 | 134 | INPUT PARSED PRIMARY NUMBER | 10 | X(10) |
| 135 | 136 | INPUT PARSED PRE-DIRECTIONAL | 2 | X(02) |
| 137 | 164 | INPUT PARSED PRIMARY NAME | 28 | X(28) |
| 165 | 168 | INPUT PARSED SUFFIX | 4 | X(04) |
| 169 | 170 | INPUT PARSED POST-DIRECTIONAL | 2 | X(02) |
| 171 | 174 | INPUT PARSED UNIT DESIGNATOR | 4 | X(04) |
| 175 | 182 | INPUT PARSED SECONDARY NUMBER | 8 | X(08) |
| 183 | 191 | FILLER | 9 | X(09) |
| | | | | |
| 192 | 192 | INPUT LAST LINE PARSED (Y,N) | 1 | X(01) |
| 193 | 234 | CUSTOMER LAST LINE | 42 | X(42) |
| | NOTE: | The information found in the INPUT CUSTOMER LAST LINE will be fixed length. The data contained within the field may be presented as a single field or it may be parsed. | | |
| 193 | 220 | INPUT CITY NAME | 28 | X(28) |
| 221 | 222 | INPUT STATE | 2 | X(02) |
| 223 | 227 | INPUT FIVE DIGIT ZIP | 5 | X(05) |
| 228 | 231 | INPUT ZIP+4 ADDON | 4 | X(04) |
| 232 | 234 | FILLER | 3 | X(03) |
| | | | | |
| 235 | 298 | FILLER | 64 | X(64) |
| 299 | 300 | CARRIAGE RETURN LINE FEED | 2 | X(02) |

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| TEST CLIENT OUTPUT FILE HEADER RECORD | | | | |
|--|-------------|---|--------|--------|
| RECORD FROM | POSITION TO | FIELD NAME | LENGTH | COBOL |
| 1 | 8 | NCSC AUDIT FILE CREATED DATE(YYYYMMDD) | 8 | 9(08) |
| 9 | 14 | NCSC AUDIT FILE CREATED TIME(HHMMSS) | 6 | 9(06) |
| 15 | 18 | NCSC AUDIT FILE NUMBER | 4 | 9(04) |
| 19 | 26 | NCSC NCOA ^{Link} RELEASE DATE | 8 | 9(08) |
| 27 | 34 | NCSC ZIP+4 RELEASE DATE | 8 | 9(08) |
| 35 | 42 | NCSC DPV RELEASE DATE | 8 | 9(08) |
| 43 | 43 | NCSC TYPE (Audit, Certification, Stage) | 1 | X(01) |
| 44 | 298 | FILLER | 255 | X(255) |
| 299 | 306 | OUTPUT AUDIT FILE CREATED DATE(YYYYMMDD) | 8 | 9(08) |
| 307 | 312 | OUTPUT AUDIT FILE CREATED TIME(HHMMSS) | 6 | 9(06) |
| 313 | 320 | PROCESSED AGAINST NCOA ^{Link} RELEASE DATE | 8 | 9(08) |
| 321 | 328 | PROCESSED AGAINST ZIP+4 RELEASE DATE | 8 | 9(08) |
| 329 | 336 | PROCESSED AGAINST DPV RELEASE DATE | 8 | 9(08) |
| 337 | 340 | PROCESSED ON PLATFORM ID | 4 | X(04) |
| 341 | 998 | FILLER | 658 | X(658) |
| 999 | 1000 | CARRIAGE RETURN LINE FEED | 2 | X(02) |

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| TEST CLIENT OUTPUT FILE DETAIL RECORD | | | | |
|--|-------------|---|--------|-------|
| RECORD FROM | POSITION TO | FIELD NAME | LENGTH | COBOL |
| 1 | 28 | INPUT CUSTOMER KEY | 28 | X(28) |
| 29 | 29 | INPUT NAME PARSED (Y,N) | 1 | X(01) |
| 30 | 95 | INPUT CUSTOMER NAME | 66 | X(66) |
| | NOTE: | The information found in the INPUT CUSTOMER NAME will be fixed length. The data contained within the field may be presented as a single field or it may be parsed. If the name is a business, then the name will start in the first position. | | |
| 30 | 35 | INPUT PREFIX TITLES | 6 | X(06) |
| 36 | 50 | INPUT CUSTOMER FIRST NAME | 15 | X(15) |
| 51 | 65 | INPUT CUSTOMER MIDDLE NAME | 15 | X(15) |
| 66 | 85 | INPUT CUSTOMER LAST NAME | 20 | X(20) |
| 86 | 91 | INPUT SUFFIX TITLES | 6 | X(06) |
| 92 | 95 | FILLER | 4 | X(04) |
| | | | | |
| 96 | 96 | INPUT ADDRESS PARSED (Y,N) | 1 | X(01) |
| 97 | 124 | INPUT CUSTOMER URBANIZATION NAME | 28 | X(28) |
| 125 | 191 | INPUT CUSTOMER ADDRESS | 67 | X(67) |
| | NOTE: | The information found in the INPUT CUSTOMER ADDRESS will be fixed length. The data contained within the field may be presented as a single field or it may be parsed. | | |
| 125 | 134 | INPUT PARSED PRIMARY NUMBER | 10 | X(10) |
| 135 | 136 | INPUT PARSED PRE-DIRECTIONAL | 2 | X(02) |
| 137 | 164 | INPUT PARSED PRIMARY NAME | 28 | X(28) |
| 165 | 168 | INPUT PARSED SUFFIX | 4 | X(04) |
| 169 | 170 | INPUT PARSED POST-DIRECTIONAL | 2 | X(02) |
| 171 | 174 | INPUT PARSED UNIT DESIGNATOR | 4 | X(04) |
| 175 | 182 | INPUT PARSED SECONDARY NUMBER | 8 | X(08) |
| 183 | 191 | FILLER | 9 | X(09) |
| | | | | |
| 192 | 192 | INPUT LAST LINE PARSED (Y,N) | 1 | X(01) |
| 193 | 234 | CUSTOMER LAST LINE | 42 | X(42) |
| | NOTE: | The information found in the INPUT CUSTOMER LAST LINE will be fixed length. The data contained within the field may be presented as a single field or it may be parsed. | | |
| 193 | 220 | INPUT CITY NAME | 28 | X(28) |
| 221 | 222 | INPUT STATE | 2 | X(02) |
| 223 | 227 | INPUT FIVE DIGIT ZIP | 5 | X(05) |
| 228 | 231 | INPUT ZIP + 4 ADDON | 4 | X(04) |
| 232 | 234 | FILLER | 3 | X(03) |
| | | | | |
| 235 | 298 | FILLER | 64 | X(64) |
| | | | | |
| | NOTE: | The following fields reflect the results of input name after the utilization of a name parser. This is the final parsed name information utilized in the process which was responsible for the final result. If the name is a business, then the name will start in the first position. If no match (return code 00) then this field will be blank. | | |
| 299 | 304 | QUERY PREFIX TITLE | 6 | X(06) |
| 305 | 319 | QUERY CUSTOMER FIRST NAME | 15 | X(15) |
| 320 | 334 | QUERY CUSTOMER MIDDLE NAME | 15 | X(15) |
| 335 | 354 | QUERY CUSTOMER LAST NAME | 20 | X(20) |
| 355 | 360 | QUERY SUFFIX TITLE | 6 | X(06) |

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| TEST CLIENT OUTPUT FILE DETAIL RECORD | | | | |
|--|-------------|--|--------|--------|
| RECORD FROM | POSITION TO | FIELD NAME | LENGTH | COBOL |
| | NOTE: | The following fields reflect the results of the input address after the utilization of a certified CASS ZIP+4 system. This is the final address information that was utilized in the process which was responsible for the final result. | | |
| 361 | 388 | QUERY PARSED URBANIZATION NAME | 28 | X(28) |
| 389 | 398 | QUERY PARSED PRIMARY NUMBER | 10 | X(10) |
| 399 | 400 | QUERY PARSED PRE-DIRECTIONAL | 2 | X(02) |
| 401 | 428 | QUERY PARSED PRIMARY NAME | 28 | X(28) |
| 429 | 432 | QUERY PARSED SUFFIX | 4 | X(04) |
| 433 | 434 | QUERY PARSED POST-DIRECTIONAL | 2 | X(02) |
| 435 | 438 | QUERY PARSED UNIT DESIGNATOR | 4 | X(04) |
| 439 | 446 | QUERY PARSED SECONDARY NUMBER | 08 | X(08) |
| 447 | 474 | QUERY PARSED CITY NAME | 28 | X(28) |
| 475 | 476 | QUERY PARSED STATE | 2 | X(02) |
| 477 | 481 | QUERY FIVE DIGIT ZIP | 5 | X(05) |
| 482 | 485 | QUERY ZIP + 4 ADDON | 4 | X(04) |
| | | | | |
| 486 | 513 | RESULT PARSED URBANIZATION NAME | 28 | X(28) |
| 514 | 523 | RESULT PARSED PRIMARY NUMBER | 10 | X(10) |
| 524 | 525 | RESULT PARSED PRE-DIRECTIONAL | 2 | X(02) |
| 526 | 553 | RESULT PARSED PRIMARY NAME | 28 | X(28) |
| 554 | 557 | RESULT PARSED SUFFIX | 4 | X(04) |
| 558 | 559 | RESULT PARSED POST-DIRECTIONAL | 2 | X(02) |
| 560 | 563 | RESULT PARSED UNIT DESIGNATOR | 4 | X(04) |
| 564 | 571 | RESULT PARSED SECONDARY NUMBER | 08 | X(08) |
| 572 | 599 | RESULT PARSED CITY NAME | 28 | X(28) |
| 600 | 601 | RESULT PARSED STATE | 2 | X(02) |
| 602 | 606 | RESULT FIVE DIGIT ZIP | 5 | X(05) |
| 607 | 610 | RESULT ZIP+4 ADDON | 4 | X(04) |
| 611 | 613 | RESULT DBPC (including check digit) | 3 | X(03) |
| 614 | 617 | RESULT CARRIER RTE | 4 | X(04) |
| 618 | 618 | *RESULT DROP FLAG | 1 | X(01) |
| 619 | 619 | *RESULT DROP N FLAG | 1 | X(01) |
| 620 | 625 | RESULT MOVE EFFECTIVE DATE | 6 | X(06) |
| 626 | 627 | *RESULT MIDDLE NAME/Initials(returned from NCOA/Link) | 2 | X(02) |
| 628 | 628 | *RESULT GENDER (returned from NCOA/Link) | 1 | X(01) |
| 629 | 636 | *RESULT HINT BYTE (after expansion) | 8 | X(08) |
| 637 | 638 | RESULT NCOA LINK FOOTNOTE | 2 | X(02) |
| 639 | 640 | RESULT ZIP+4 FOOTNOTE | 2 | X(02) |
| 641 | 642 | RESULT DPV FOOTNOTE | 2 | X(02) |
| 643 | 658 | HEX VALUE OF THE EMDP (from input address) | 16 | X(16) |
| 659 | 698 | HEX VALUE OF THE SHA OF EMPD (from input address) | 40 | X(40) |
| 699 | 714 | HEX VALUE OF THE FIRST 8 CHARACTERS OF 48 BYTE OBJECT | 16 | X(16) |
| 715 | 729 | FIRST NAME OF THE 48 BYTE OBJECT | 15 | X(15) |
| 730 | 749 | LAST NAME OF THE 48 BYTE OBJECT | 20 | X(20) |
| 750 | 754 | SUFFIX NAME OF THE 48 BYTE OBJECT | 5 | X(05) |
| 755 | 794 | HEX VALUE OF THE SHA OF 48 BYTE OBJECT | 40 | X(40) |
| 795 | 810 | HEX VALUE OF THE DATA RETRIEVED (before reorder) | 16 | X(16) |
| 811 | 827 | DECIMAL VALUE OF THE 17 DIGIT RESULT VALUE | 17 | X(17) |
| 828 | 828 | RESULT MOVE TYPE (Family, Individual, Business)(F,I,B) | 1 | X(01) |
| 829 | 836 | OPTIONAL – INTERMEDIATE RETURN CODES | 8 | X(08) |
| 837 | 838 | ANK ^{Link} RETURN CODE (77) | 2 | X(02) |
| 839 | 840 | FUTURE RETURN CODE | 2 | X(02) |
| 841 | 997 | FILLER | 157 | X(157) |
| 998 | 998 | RECORD TYPE (Header/Detail) (H,D) | 1 | X(01) |
| 999 | 1000 | CARRIAGE RETURN LINE FEED | 2 | X(02) |

***The following fields of returned data used for analysis must not be returned to the customer: result drop flag, result drop n flag, result middle name, result gender and result hint byte.**

APPENDIX B NCOA^{Link}® MAIL PROCESSING EQUIPMENT DATA USER

NCOA^{Link} MAIL PROCESSING EQUIPMENT OPERATIONAL SPECIFICATIONS

General

The forwarding information text and delivery point code returned by the NCOA^{Link} MPE system after a match is made to the name and address information provided from the Licensee's Mail Processing Equipment shall only be applied to the mailpiece or mailpiece facsimile in accordance with the specifications stated in this Appendix. The Licensor reserves the right to modify these specifications at any time upon 30 calendar days notice.

The Licensee shall ensure all mailpieces are appropriate for processing through the NCOA^{Link} MPE platform. Mailpieces must have a background that provides sufficient contrast to the NCOA^{Link} MPE information, including the delivery point barcode that enables effective USPS processing. Mailpieces must also have an adequate clear area for the application of NCOA^{Link} MPE information, as well as appropriate design, window location, and length. The Licensee shall further ensure that no NCOA^{Link} MPE information is printed over pre-existing information.

The information to be applied to the mailpieces or facsimiles as a result of NCOA^{Link} MPE processing consists of two major segments: 1) The NCOA^{Link} MPE text information that represents the new (forwarded to) address, and 2) the delivery point barcode associated with the new address.

NCOA^{Link} MPE Text Information

The NCOA^{Link} MPE text information is an uppercase alphanumeric string consisting of four components which must be applied, as specified in this appendix, to every mailpiece or facsimile matched to the NCOA^{Link} Product. The maximum number of characters that comprises the complete text information (all components) is 42. The applied NCOA^{Link} MPE text information must, in the sole judgment of the United States Postal Service, be legible, discernible, and easily interpreted by the Postal carrier attempting delivery. All components are required unless omission is specifically authorized in this Appendix. Components are as follows:

NCOA^{Link} MPE Visual Cue

The Visual Cue alerts the postal carrier that the mailpiece is destined to an address within the carrier's delivery route. This cue is the acronym "COA", meaning "Change Of Address." This field is resident on the Licensee's Mail Processing Equipment and is not returned by the NCOA^{Link} Product. The Licensee's Mail Processing Equipment will apply the NCOA^{Link} MPE Visual Cue to the mailpiece or mailpiece facsimile and immediately follow it (with no intervening spaces) with the NCOA^{Link} MPE Platform Identifier.

NCOA^{Link} MPE Platform Identifier

A three character alphanumeric identifier is assigned by the USPS to each certified NCOA^{Link} MPE platform within the Licensee's operation. This identifier provides an audit trail on the mailpiece for problem resolution. The Platform Identifier is resident on the Licensee's Mail Processing Equipment and is not returned by the USPS NCOA^{Link} system, for example "AA-".
Note: The "-" is a significant character in the identification methodology. When applied to each mailpiece or mailpiece facsimile, this information is immediately preceded by the NCOA^{Link} MPE Visual Cue (with no intervening spaces). However, the Licensee's Mail Processing Equipment must provide a space equal to the width of a full character following this NCOA^{Link} MPE Platform Identifier, and before the New Address Delivery Line.

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New Address Delivery Line

The delivery line of the new (forwarded to) address is presented as part of the NCOA^{Link} MPE text information to enable the USPS carrier to deliver the mailpiece. This field is returned to the Licensee's Mail Processing Equipment by the USPS NCOA^{Link} system only when a match occurs to an NCOA^{Link} COA record that contains a forwardable address. Although, the number of characters returned in this field will vary, the maximum number of characters for this field is 29.

The NCOA^{Link} Product provides the new delivery address information in the Address Line field of the Output Record. This field includes all the appropriate delivery address elements for the new delivery address (i.e., primary number, pre directional, street name, suffix, post directional, secondary descriptor, and secondary number). The NCOA^{Link} MPE Product returns the alpha characters in an upper case letter format, and returns a pound sign (#) in lieu of all secondary unit descriptors (APT, STE, etc.). Each element within this field is separated by the presence of a space, except that no space is provided between the pound sign (#) and the secondary number. The lack of space between the pound sign (#) and the secondary number must be maintained during application to the mailpiece or mailpiece facsimile. The Licensee's Mail Processing Equipment must print every character (including spaces) supplied in this field up through and including the last significant character. The Licensee's Mail Processing Equipment must provide a space equal to the width of a full character both between the platform identifier which precedes the New Delivery Address Line and following the New Delivery Address Line and before the New ZIP Code.

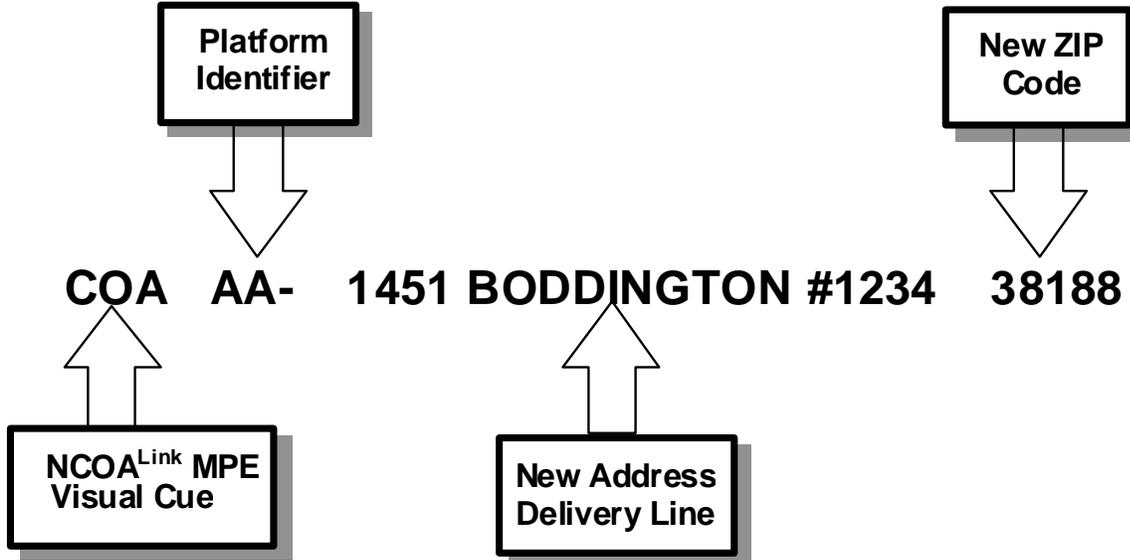
New ZIP Code

The New ZIP Code is the numeric five-digit ZIP Code of the new address. This data is returned to the Licensee's Mail Processing Equipment by the NCOA^{Link} Product. The NCOA^{Link} Product provides the new delivery address ZIP Code and ZIP + 4 code information, followed by the two character delivery point code and the appropriate correction character in Position 602 – 613 of the Output Record. The Licensee's Mail Processing Equipment must convert the entire field to an Intelligent Mail[®] barcode for application to the mailpiece. In addition, the Licensee's Mail Processing Equipment must use the first five characters from this field to apply the ZIP Code for the new address in numeric form. The Licensee's Mail Processing Equipment must print the numeric ZIP Code with the required spacing between and immediately after the last significant character of the new delivery address.

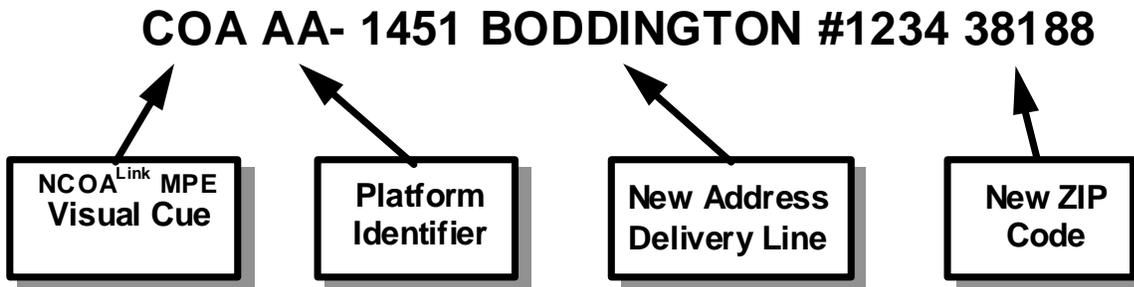
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Example of components within NCOA^{Link} MPE text information:



Example of contextually correct NCOA^{Link} MPE text information:



Human Readable Printing Requirements

All printed NCOA^{Link} MPE text information must be easily read and interpretable by humans. These general requirements as well as the specific requirements defined within this Appendix shall apply.

1. Printing shall be of sufficient quality that it can be easily read and there is no ambiguity between similarly shaped characters (e.g., the “5”, “S” and “6”; the alpha “O”, “Q” and numeric “0”).
2. Characters shall be printed in black ink and shall have a high contrast relative to their background. Print contrast shall be uniform throughout each character.
3. Printing shall be clean and sharp. Smudges, voids within the character strokes, fill-ins, and extraneous ink outside character boundaries are not acceptable.

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4. Printing shall be in a sans serif type style (font) that is easily readable. Italic, script and highly stylized fonts, as well as dot matrix characters with separated matrix elements are not acceptable.
5. No lower case alphabetic characters are acceptable.
6. Special characters currently used in NCOA^{Link} MPE text information are:
“-”, “#”, “&”, “/”, and “.”
7. The printing system shall be capable of printing up to 42 text characters per line and shall have constant pitch of 10 characters per inch for the preferred NCOA^{Link} MPE information placement area and a constant pitch of 12 characters per inch for the transitional NCOA^{Link} MPE information placement area.
8. Spacing between words and/or components as required shall be one full character in width.
9. The line of print shall not be skewed (slanted) more than five degrees relative to the bottom edge of the mailpiece or facsimile.
10. Overlapping of characters (i.e., kerning) is not acceptable.

NCOA^{Link} MPE Dimensional Requirements

To achieve the USPS desired consistency of service and enable the application of NCOA^{Link} MPE information to the widest possible range of mailpiece sizes that mailers desire to use, the following requirements must be met by the Licensee:

Initially, there will be two possible physical locations on the mailpiece or facsimile where the NCOA^{Link} MPE text information may be applied. The preferred (and ultimately only allowable) placement area for the applied NCOA^{Link} MPE information will be as described under NCOA^{Link} MPE Information Requirements.

NCOA^{Link} MPE Information Requirements

Placement

The preferred area in which NCOA^{Link} MPE text information will be applied is above the delivery point barcode and will fit completely within the barcode clear zone of the mailpiece. It is defined by these specifications:

- A. Left: Left edge of the NCOA^{Link} MPE text information will be no greater than 1/4 inch and no less than 1/16 inch from the left edge of the barcode clear zone.
- B. Bottom: Bottom of the NCOA^{Link} MPE text information is no greater than 1/8 inch and no less than 1/10 inch from the top of the delivery point barcode.
- C. Top: Top of the NCOA^{Link} MPE text information must be within 5/8 inch from the bottom edge of the mailpiece.

NCOA^{Link} MPE Characters

NCOA^{Link} MPE characters will be printed at 10 characters per inch (CPI).

Character dimension requirements are:

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1. Height: The character height shall be 140 mils (0.140 inch) maximum and 125 mils (0.125 inch) minimum.
2. Width: Each character and its related space will occupy 100 mils (0.100 inch) in width. There must be a clear vertical space between each character.
3. Aspect Ratio: The aspect ratio of a character relates its height to its width along the centerline axis of each character. The mean average aspect ratio of the characters shall be 1:1.45 (width to height).
4. Word Spacing: The space between words shall be a horizontal clear space that is equal to the width of one full size character, such as a capital M.

These character requirements are the minimum standards that must be produced. The Licensee may propose alternate dimensions for Licensor consideration.

Separation Between NCOA^{Link} MPE Text Information and Delivery Point Barcode

Separation between NCOA^{Link} MPE text information and the delivery point barcode must be no greater than 1/8 inch and no less than 1/10 inch. The separation distance must be uniform for the entire length of the delivery point barcode.

Barcode Dimensions and Spacing

Barcode dimensions must adhere to the regulations set forth in the *DMM*[®] 708.4.3.2 for the Intelligent Mail[®] barcode. Measured over any 1/2 inch, horizontal spacing must be 22 ± 2 bars per inch.

Barcode Placement

Placement of the barcode on the mailpiece is as follows:

- A. Left: The first bar of the barcode must be printed between 4 1/4 inch and 3 1/2 inch from the right edge of the mailpiece.
- B. Bottom: Bottom of the barcode must be 1/4 inch from the bottom edge of the mailpiece.

Mailpieces with Windows

Licensee shall not use Mail Processing Equipment to process any mailpieces through the NCOA^{Link} Product with a window that intrudes into the USPS barcode clear zone.

SEE EXAMPLE 1 FOR REPRESENTATION OF A MAILPIECE WITH PREFERRED NCOA^{Link} MPE INFORMATION PLACEMENT.

NCOA^{Link} MPE Compatible Letters and Cards

All mailpieces processed through the certified NCOA^{Link} MPE Platform must meet all the general and specific standards in the following sections of the *DMM*: **Commercial Letters and Cards** (Barcode Placement); **Commercial Flats** (Barcode Placement); and **Special Standards** (Technical Specifications).

When the preferred placement area is utilized, any USPS automation compatible mailpiece that can accommodate the currently defined USPS barcode clear zone may be a candidate for NCOA^{Link} MPE processing.

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Alternative Addressing Formats

Mailpieces or mailpiece facsimiles that use Alternative Addressing Formats as described in the *DMM* section 602.3 shall not have NCOA^{Link} MPE information applied. Alternative Addressing Formats are used solely for the purpose of delivery to a specific address. Alternative Addressing includes exceptional address formats that combine a possible recipient's name and one of the following: "current resident", "current occupant", "resident", or "occupant." For the purpose of the Move Update standard, "address" means a specific address associated with a specific occupant name.

Application of Standard Literal

The standard literal that may be returned from the NCOA^{Link} Mail Processing Equipment during NOTIFICATION VIA RETURNED MAILPIECE and FACSIMILE processing is "**NEW ADDRESS INFORMATION UNKNOWN.**"

When a match is made to the name and address information passed by the Licensee's system to the USPS NCOA^{Link} System, and the Change Of Address record matched to indicates one of three possible conditions: 1) Moved, Left No Address, 2) Post Office Box Closed, or 3) Foreign Move, the text returned by the NCOA^{Link} MPE system will be the literal "**NEW ADDRESS INFORMATION UNKNOWN.**" No delivery point barcode will be returned. The literal shall be applied instead of, and in the same position as the New Address delivery Line and New ZIP Code components of the NCOA^{Link} MPE text information. The NCOA^{Link} MPE Visual Cue and the Platform Identifier must be printed along with the standard literal.

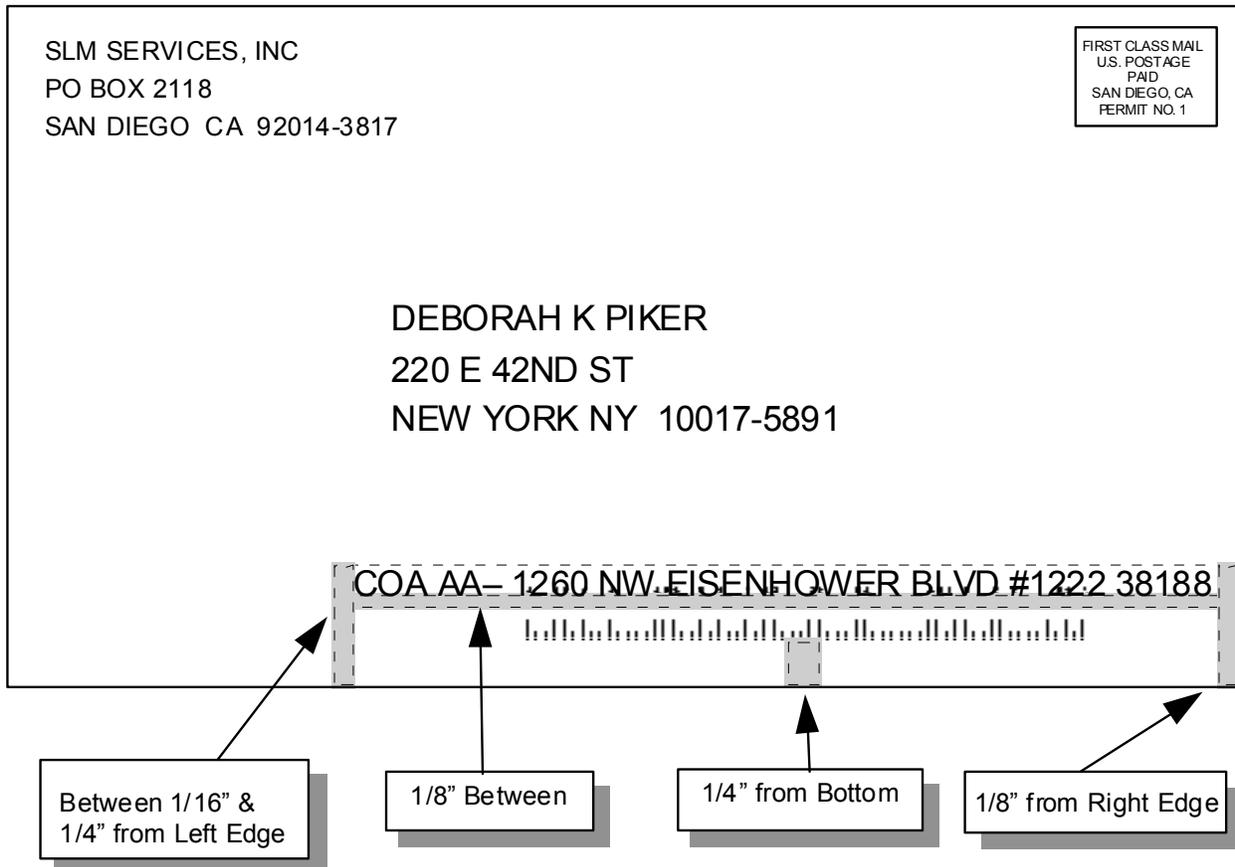
SEE EXAMPLE 2 FOR REPRESENTATION OF APPLIED LITERAL.

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EXAMPLE 1

Example of a mailpiece with preferred NCOA^{Link} MPE information placement:



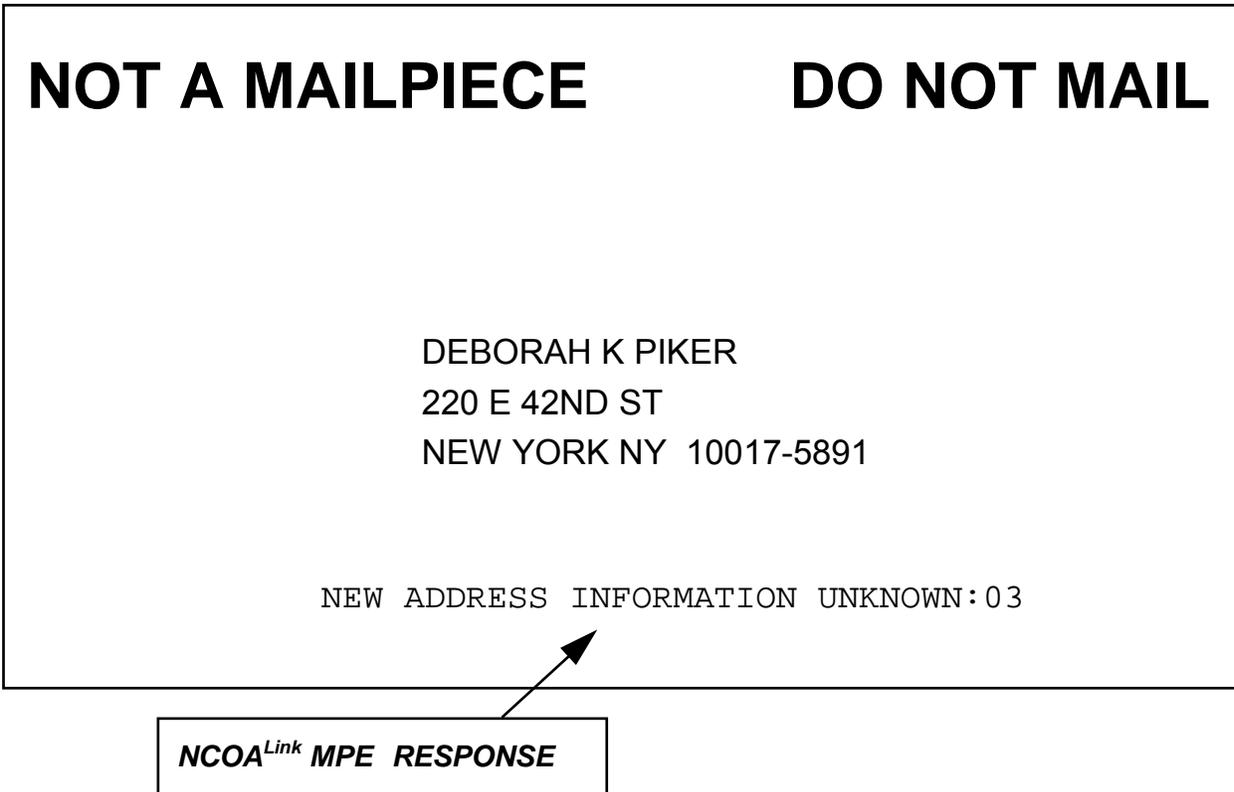
Note: Example not to scale.

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EXAMPLE 2

Example of a mailpiece facsimile with literal in preferred NCOA^{Link} MPE information placement area:



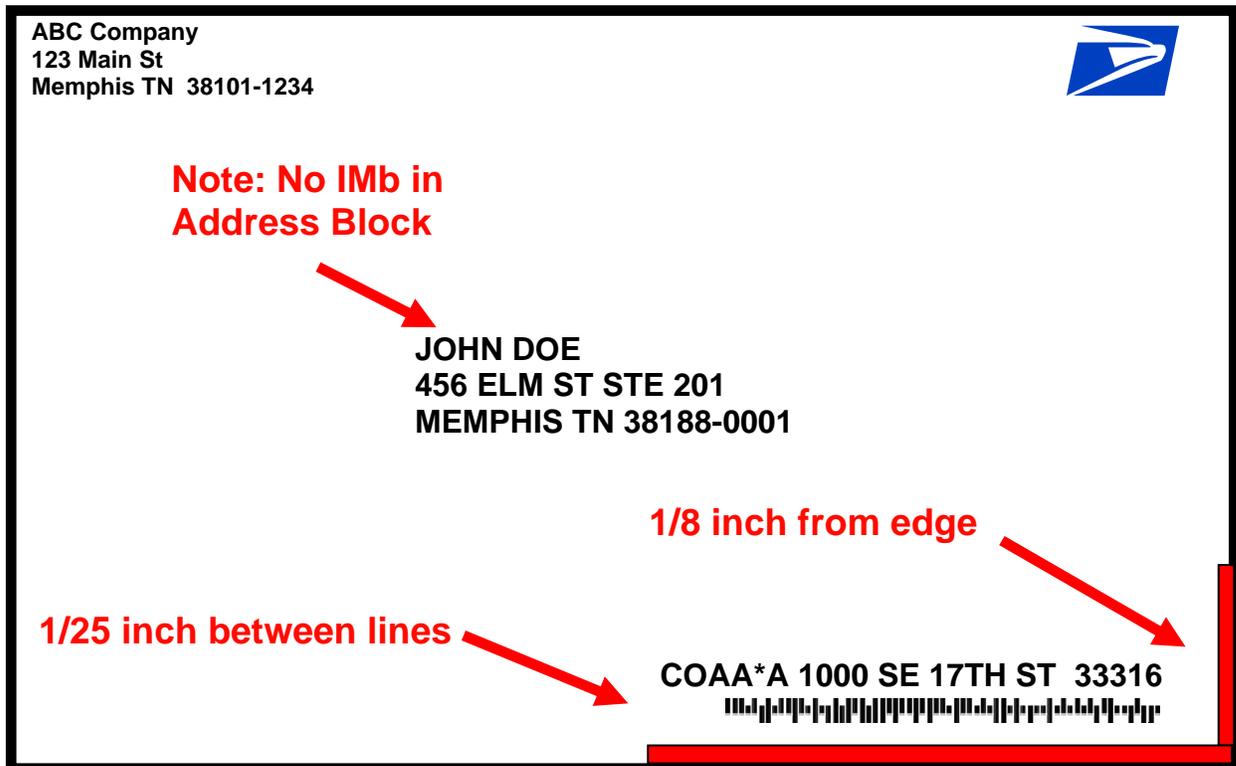
Note: Example not to scale.

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EXAMPLE 3

Example of a flat-sized mailpiece facsimile with IMb with COA information printed



Note: Example not to scale.

EXHIBIT B



NCOA^{Link}® MAIL PROCESSING EQUIPMENT
PROCESSING ACKNOWLEDGEMENT FORM

The collection of information on this Processing Acknowledgement Form (PAF) is required by the Privacy Act of 1974. The United States Postal Service (USPS) requires that each NCOA^{Link} Mail Processing Equipment (MPE) Data User Licensee have a completed NCOA^{Link} MPE PAF for each of their NCOA^{Link} MPE customers prior to providing the NCOA^{Link} MPE service. The Licensee is also required by the USPS to retain a copy of the completed form for each of its customers and to obtain an updated PAF from each of its customers at minimum once per year. Any signature upon this PAF shall be considered valid for all purposes and have the same effect whether it is an ink-signed hardcopy document or equivalent alternative.

MAIL OWNER

I, the undersigned, an authorized representative of:

Company Name

Address

City

State

ZIP+4

Telephone Number

NAICS

USPS Mailer ID
(optional)

E-mail Address
(optional)

Parent Company Name

Marketing or "DBA" Company Name or Primary Affiliate Company Name
(if applicable)

Company Website (optional)

Name (Please print)

Title

Signature

Date

do hereby acknowledge that I have received and reviewed the NCOA^{Link} Mail Processing Equipment Information Package supplied to me by _____, an NCOA^{Link} MPE Data User Licensee. I also understand that the sole purpose of the NCOA^{Link} MPE service is to provide:

1. Mailpiece redirection (via re-addressing) due to customer moves for mailpieces that I have submitted to the Licensee for mailing;
2. A mailpiece correction service for my customer addresses that will be used for preparation of future mailings. The mailpiece facsimiles that I have submitted to the Licensee will be returned within 72 hours of processing, unless I authorize a longer time period in writing; or
3. Mailpiece address correction service in which mailpieces that obtain address correction information as a result of this process will be separated from my mailing and returned either in the form hardcopy or photocopied mailpieces and returned within 72 hours of processing by the Licensee, unless I authorize a longer time period in writing. The information provided to me for this service will be used for preparation of future mailings.

Furthermore, I understand that the NCOA^{Link} MPE process may not be used to create or maintain new movers' lists.

LICENSEE

Business Name (Please print)

Name (Please print)

Title

Signature

Date

Telephone Number

Fax Number

For Licensee Use Only

PAF ID:

EXHIBIT C

NCOA^{Link} Mail Processing Equipment Data User Required Text Document

<<Licensee company name>> is a non-exclusive Licensee of the USPS[®] (United States Postal Service[®]) to provide NCOA^{Link} MPE processing.

MPE Data Users receive the full 18-month data set provided weekly under direct license from the USPS.

The full NCOA^{Link} file is a consolidated file of move information that on average contains approximately 160 million permanent changes-of-address (COAs) filed with the United States Postal Service (USPS). These COAs are retained on the file for a four-year period from the move-effective date and the file is updated weekly.

Before being added to the NCOA^{Link} file, the **Old** address supplied by the Postal customer must be ZIP + 4 coded. The **New** addresses must be ZIP + 4 coded and validated using the USPS' proprietary database of actual delivery points. (NOTE: The delivery point database does not include NAMES or COA information.) Each delivery point confirmed **New** address is included on the NCOA^{Link} file. If unable to validate the **New** address, the NCOA^{Link} MPE process will indicate that a move exists but will not provide the undeliverable **New** address.

New address information is provided only when a match to the old name and address is attained. The typical profile of the **New** address information contained on the NCOA^{Link} file is as follows:

- 80.92% Forwardable moves containing delivery point confirmed **New** addresses –
New address provided
- 1.18% Moves containing unconfirmed **New** addresses – **New** address not provided
- 13.80% Moved, Left No Address**
- 3.92% PO Box Closed**
- 0.18% Foreign Moves**

** The literal "NEW ADDRESS INFORMATION UNKNOWN" is provided in lieu of address information for Mailpiece Facsimile, Notification via Returned Mailpiece, DBCS and Flats processing only.

When possible, postal customers who move multiple times within the NCOA^{Link} time period are "linked" or "chained" to ensure that the latest address is furnished when an NCOA^{Link} match is attained. This is not always possible if subsequent COAs are not filed in exactly the same manner as a COA filed previously (e.g., name spelling differences or conflicting secondary information).

The provision of change-of-address information is controlled by strict name and address matching logic. NCOA^{Link} MPE processing will only provide new address information when queried with a specific algorithm of the name and old address from a mailers' mailpieces, which matches the information on the NCOA^{Link} Product. Data contained in and information returned by the NCOA^{Link} MPE process is determined by the name and move type (Business, Individual, or Family) indicated on a Postal customer's Change-of-Address form.

The data contained within the NCOA^{Link} Product is comprised of approximately 40% family moves, 54% individual moves, and 6% business moves.

All matches made to the NCOA^{Link} file require a ZIP + 4 coded, standardized old address.

There are five separate and distinct services that may be provided to a mailer by the NCOA^{Link} MPE Licensee. These services fall under the NCOA^{Link} MPE Active mode of processing, in which address information is returned or sprayed on mailpieces only when there is updated COA information.

- **Forwardable Mailpiece** – Processing in which mailpiece redirection due to customer moves via the Licensee’s NCOA^{Link} Mail Processing Equipment.
- **Notification Via Returned Mailpiece** – Processing in which updated COA information is sprayed on mailpieces and returned to the mailer via hardcopy or photocopied mailpieces.
- **Mailpiece Facsimile** – Processing in which updated COA information is sprayed directly on mailpiece facsimiles and returned to the mailer.
- **DACS (Delivery Barcode Sorter)** – Processing of letter mail in which no COA information is sprayed on mailpieces. Mailpieces are outsourced to a bin designated for UAA mail and either returned to the mailer, destroyed or mailed at full rate.
- **Flats** – Flats processing in which mailpiece redirection due to customer moves via the Licensee’s NCOA^{Link} Mail Processing Equipment. Can be processed in the following modes: Forwardable Mailpiece; Notification via Returned Mailpiece; and Mailpiece Facsimile. If flat mailpieces are processed on equipment in which COA information is unable to be sprayed on the mailpieces, mailpieces are either returned to the mailer, destroyed or mailed at full rate.

The USPS has established a process called the “Rules Table.” This process will produce matches that otherwise would not be possible, i.e. JOHNY and JOHNNY.

All nickname possibilities are derived from a standard USPS nickname list. In considering alternate presentations of an input name and address do not match to the NCOA^{Link} file and alternative queries are attempted, any variations which obtain NCOA^{Link} matches may be provided to the NCOA^{Link} MPE customer for analysis, depending on the mode of processing.

When a match or a near match of an input name and address to NCOA^{Link} MPE Product is identified, a report of the standard NCOA^{Link} return codes may be provided by the MPE Data User, upon customer request. This report indicates the type of match made or the reason that a match could not be made.

MPE Data Users must offer the standard output format of the NCOA^{Link} MPE process to customers, if requested, with no file manipulation by the Data User.

NCOA^{Link} MPE processing has the potential to reduce returned mail, yet the USPS does not make any guarantees, express or implied, on the reduction of such mail. Thus any costs associated with returned mail are the Licensees’ and/or their customers’ sole responsibility.

An NCOA^{Link} MPE customer with questions about the specific results returned from an NCOA^{Link} MPE process must first contact the processor for explanation and resolution.

Prior to the processing of NCOA^{Link} MPE data, every customer must have completed and returned to their NCOA^{Link} MPE Data User Licensee the “NCOA^{Link} MAIL PROCESSING EQUIPMENT PROCESSING ACKNOWLEDGEMENT FORM” provided to them by their Licensee. It is inappropriate to misrepresent any of the information on the form. Punitive action will be taken by the USPS if the customer or licensee is found to have knowingly supplied false information. Depending on the severity of the offense, actions may include litigious or even criminal charges being brought against the offender.

The following trademarks are owned by the United States Postal Service®: CASS, NCOA^{Link}, United States Postal Service, USPS and ZIP + 4.