1 General

- 1.1 The LACS^{Link®} data product is provided by USPS to give mailers a tool to obtain converted addresses that are changed from rural-style to city-style addresses or existing city-style addresses that have been renumbered or renamed. The input to a LACS^{Link} lookup consists of a 50-character field containing a non-parsed address and a 5-digit ZIP Code. When a match is obtained, the output will be a new 11-digit Delivery Point Code (DPC) with a Hint Byte to allow the reversing of the DPC into a text address. The LACS^{Link} Product enables Licensees to provide the updated address when a converted address matches the LACS^{Link} file.
- 1.2 To develop, distribute, or utilize the LACS^{Link} Product, the Licensee must meet all requirements and specifications contained within the License Agreement, the most current version of this document, and the most current version of the Software Developer's Guide shall apply to the use of the LACS^{Link} Product unless explicitly allowed, prohibited, or modified by USPS in writing. Copies of this document and updates to the License Agreement or the Certification Procedures will be posted on the PostalPro website at https://postalpro.usps.com/address-quality/lacslink.

2 Purpose

- 2.1 The purpose of these performance requirements is to enhance the processing and delivery of mail, and provide mutual cost reduction opportunities through improved efficiency by ensuring USPS® customers have access to the following address list services:
 - Acceptable standardization and address matching services
 - Detection of undeliverable addresses (excluding change of address)
 - Methods to obtain changes to or conversions of addresses

Version 6: 2/12/2018 Page 1 of 16

2.2 Another purpose of the performance requirements is to establish standard performance and service criteria for licensed LACS^{Link} Software Developers.

3 Product Description

- 3.1 The LACS^{Link} Product utilizes secure datasets (hash tables) that will only provide converted address information when queried through a software interface with a specific algorithm of the old address from a mailer's address list which matches the algorithm of the information as it appears in the LACS^{Link} database.
- 3.2 The input algorithm uses a complete address, a 5-digit ZIP Code, and an unparsed address to obtain a match.

4 Fulfillment

4.1 LACS^{Link} product updates will be provided monthly via electronic media to Licensees.

5 General Requirements

- 5.1 A Licensee wishing to provide LACS^{Link} processing must first obtain (either by purchase or developer license) a licensed and certified LACS^{Link} Interface Product.
 - 5.1.1 The interface must be reviewed, tested, and approved by USPS prior to any actual use and/or distribution of the LACS^{Link} Product for processing in a production environment to ensure that all license requirements are met.
- 5.2 The USPS may consider an additional agreement to allow the use of LACS^{Link} outside of CASS Certified[™] operations and for non-mailing purpose. In these cases, the users will be required to demonstrate to the satisfaction of USPS that they warrant this consideration. Refer to paragraph 7.9 Standalone Users.
- 5.3 To provide the most up-to-date address conversions, Licensees will synchronize the products with the most current updates.

Version 6: 2/12/2018 Page 2 of 16

- 5.4 USPS-supplied LACS^{Link} updates more than 105 days old shall be destroyed using common practice for disposal of sensitive materials. Examples of acceptable methods of destruction include shredding, punching, incinerating, breaking the physical electronic media, or permanent file deletion.
- 5.5 The Licensee shall ensure that its customers understand the LACS^{Link} process and output.
- 5.6 The Licensee is responsible for providing all necessary customer support for its services. The Licensee's customers requiring technical information must contact a customer service group managed by the Licensee. The Licensee's customer service group shall be responsible for providing resolution to all inquiries concerning the processing output.

6 Specific Requirements

- 6.1 Licensees must access the LACS^{Link} Product using USPS-certified LACS^{Link} software.
- 6.2 The Licensee shall utilize a monthly release of the ZIP + 4[®] and monthly release of the City/State products. Refer to Exhibit B to determine the current dates for these products.
- 6.3 Licensees must be capable of:
 - 6.3.1 Responding to all address inquiries from subscribers and the Licensor.
 - 6.3.2 Updating the LACS^{Link} system with a full file replacement monthly via electronic media.
 - 6.3.3 Providing USPS with access to any resource used in performance of this license and with the necessary equipment and/or reports to monitor performance at the Licensee's facility.
- 6.4 In the event that a problem is identified by USPS that is related to the LACS^{Link} process, 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.

Version 6: 2/12/2018 Page 3 of 16

- 6.4.1 When directed to correct software deficiencies, Licensees will be given 30 days from the date of the notification in which to remedy the deficiencies and retest.
- 6.4.2 If Licensee fails to remedy the deficiencies within 30 days, a suspension notice will be issued. The suspension notice will direct Licensee to cease all LACS^{Link} activities during the term of suspension and remedy all deficiencies within 60 days to regain good standing. USPS will also discontinue data fulfillment during the term of suspension.
- 6.4.3 At the end of the term of suspension, the License Agreement between the Licensee and USPS will be terminated if the Licensee has not successfully remedied all deficiencies.
- 6.5 Licensee is responsible for distributing license-related electronic correspondence from USPS to the appropriate personnel within the Licensee's organization.

7 False Positive Reporting and Stop Processing

- 7.1 Per the License Agreement, the LACS^{Link} Product shall not be used to facilitate creation of address lists artificially.
- 7.2 To detect conditions where address records appear to be the result of artificial manufacture, and not legitimately obtained, a table of artificially-manufactured addresses is provided as part of the product. Once the 11-digit ZIP Code has been retrieved, it must be compared to the 11-digit in the header file (Ilkhdr01.dat). If the 11-digit codes match, a false positive record has been identified.
- 7.3 The Licensee shall design or purchase a design for a false positive reporting and stop processing function.

7.4 Licensed NCOA Full Service Providers

7.4.1 Any time an address encounters a match to the False Positive table, the Licensee may continue processing, but must notify USPS immediately

Version 6: 2/12/2018 Page 4 of 16

- of the customer's name and address using one of the two options identified in the *LACS*^{*Link*} *False Positive File Layout* (Exhibit A).
- 7.4.2 The Licensee must transfer a file containing the affected addresses from each address list to Dsf2stop@usps.gov with the subject line LACS^{Link}
 False Positive.

7.5 MASS™ Processing on MLOCR Equipment

- 7.5.1 Any time an address encounters a match to the False Positive table, the MLOCR equipment may continue processing, but the service providers must notify USPS immediately of the occurrence using one of the processes identified in the LACS^{Link} False Positive File Layout (Exhibit A).
- 7.5.2 The service provider must transfer a file containing the affected addresses from each address list to Dsf2stop@usps.gov or via fax to 650-577-2500 with the subject line LACS^{Link} False Positive.
- 7.5.3 USPS reserves the right to require a Licensee to suspend a service provider's ability to perform processing when multiple incidents of artificial address detection occur.

7.6 Third-Party Service Providers

- 7.6.1 Third-Party Service Providers are classified as commercial users processing lists for third parties performing production and creation of mail with the direct intent of producing mail that will appear in the mail stream.
- 7.6.2 While there are no restrictions on the elapsed time between the creation of the list and the actual mail processing, the data must remain unchanged from one step to the next as processed by the CASS Certified™ software components, as well as meeting the same monthly product cycle for the certified product.
- 7.6.3 USPS will consider entering into an additional agreement that may assist in more efficient processing. Under this agreement, these

Version 6: 2/12/2018 Page 5 of 16

providers would not be allowed to process their own mail lists at any time. Providers that process their own mail lists must default to the Stop Processing for End Users identified in this section.

7.7 **End Users**

- 7.7.1 End Users are classified as customers receiving a CASS Certified product, which includes LACS^{Link} from a CASS[™] manufacturer.
- 7.7.2 Any time an address encounters a match to the False Positive table, the interface must cease the LACS^{Link} process on addresses for the specific address list. The function shall be halted immediately for that specific address list. Processing of other address lists may continue. The Licensee may continue to standardize the remaining addresses on this list if desired.
- 7.7.3 The Licensee shall immediately notify the customer that the processing was halted due to unauthorized exposure to an apparent artificially created address.
- 7.7.4 The Licensee's software interface shall be designed to include a unique one-time- only, restart code to restore the processing capability (i.e., cannot be used after the first occurrence to bypass any further stop processing error codes).
- 7.7.5 The Licensee shall notify USPS immediately of the customer's name and address using one of the two options identified in the LACS^{Link} False Positive File Layout (Exhibit A). The Licensee must transfer a file containing the affected addresses from each address list to

 Dsf2stop@usps.gov with the subject line LACS^{Link} False Positive.
- 7.7.6 USPS reserves the right to require a Licensee to suspend a customer's ability to perform processing when multiple incidents of artificial address detection occur, or for other non-compliant issues.

Version 6: 2/12/2018 Page 6 of 16

7.7.7 The following error code explanation regarding the stop processing function shall be placed in all documentation provided to the customer regarding a false positive match:

"Processing was terminated due to the detection of what is determined to be an artificially created address. No address beyond this point has been processed using this product. In accordance with the License Agreement between USPS and <Licensee>>, the LACS^{Link} product shall be used to convert legitimately obtained addresses only, and shall not be used for the purpose of artificially creating address lists. Continuing use of this product requires compliance with all terms of the License Agreement. If the customer believes this address was identified in error, contact the Licensee."

7.7.8 USPS will consider entering into an additional agreement that may assist in more efficient processing for mailing activities that demonstrate a low-risk of abuse. In these cases, the users will be required to demonstrate to the satisfaction of USPS that their ability to prepare and enter mail would suffer a severe negative impact by the termination of the CASS/LACS^{Link} software.

7.8 Call Center Operations

Where CASS Certified software is used within a call center environment, USPS will consider permitting a false positive reporting option in lieu of the stop processing requirement.

7.9 Standalone Users

- 7.9.1 Standalone Users are classified as customers receiving specially packaged LACS^{Link} from a Licensed Service Provider.
- 7.9.2 CASS Certified software developers can create specially designed packages that will allow these users limited LACS^{Link} Quick Access write-capability for interactive use outside of CASS operations and for non-mailing purposes.

Version 6: 2/12/2018 Page 7 of 16

- 7.9.3 USPS will consider entering into an additional agreement with standalone users that may assist in more efficient use of this modified LACS^{Link} under the given design specifications. In these cases, the users will be required to demonstrate to the satisfaction of USPS that they warrant this consideration.
- 7.10 <u>Developers</u> must be able to provide false positive reporting and stop processing functions as defined in the Licensee Performance Requirements.
- 7.11 Licensees will design a process code that will cause the LACS^{Link} product interface to stop working when the LACS^{Link} data has aged more than 105 days from the product date.

8 Quality Standards and Testing Criteria

- 8.1 The LACS^{Link} Product is subject to periodic audit and evaluation by USPS to verify the Licensee's process and adherence to the conditions of the LACS^{Link} License Agreement.
 - 8.1.1 The USPS audit file must be processed through the same LACS^{Link} system used for customer processing.
 - 8.1.2 The audit file will test the Licensee's LACS^{Link} software with a series of known convertible addresses and known non-convertible addresses to validate the Licensee's ability to query the LACS^{Link} product, and return the appropriate output and responses.
 - 8.1.3 In conjunction with CASS certification, audit file testing will be performed annually or as specified by USPS.
 - 8.1.3.1 If necessary, subsequent testing, due to failures, must be completed within the same CASS cycle to prevent suspension and/or termination.

Version 6: 2/12/2018 Page 8 of 16

- 8.1.4 Upon validation, the Licensee will receive official notification of the audit results from USPS.
 - 8.1.4.1 Notification will be given when the audit file can be retrieved from the Licensee's USPS account via the internet.
 - 8.1.4.2 The Licensee's output file and supporting documentation derived from the LACS^{Link} process will be posted to the same account.
- 8.1.5 The License must meet the following LACS^{Link} audit requirements.
 - 8.1.5.1 The percentage of audit file input records that achieve the correct result shall not be less than 98.5% when compared to USPS expected results.
 - 8.1.5.2 The audit file 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.
 - 8.1.5.3 The audit file output must correctly provide all LACS^{Link} elements with 100% accuracy.
- 8.2 The LACS^{Link} interface will be tested with a CASS/ LACS^{Link} Stage II test file in accordance with this Licensee Performance Requirements document.
- 8.3 When a problem related to the LACS^{Link} process is identified, 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.

9 Expected Output

- 9.1 For each address submitted by a customer, the Licensee's LACS^{Link} software must be able to return the following output:
 - a. Each original unaltered input address as it was presented.
 - When a match is made, a standardized new address with 11-digit
 Delivery Point Barcode (DPBC), standard return codes (listed in Exhibit C), and the specific address utilized in the query that obtained the match

Version 6: 2/12/2018 Page 9 of 16

- c. For each mailing address not matched to the LACS^{Link} Product, all elements as appropriate in items a and b.
- d. The urbanization name information for converted (updated) addresses, when applicable.

9.2 LACS^{Link} Return Information Usage

- 9.2.1 Mailers who do not want to update their customer's original address information when LACS^{Link} returns an updated address, may not use the ZIP + 4 code associated with the new address.
- 9.2.2 Mailers may continue to use the original address with only the 5-digit ZIP Code associated with the original address. This exception is allowed if the original address continues to exist in the ZIP + 4 file and DPV confirms using CASS Certified software.
- 9.2.3 For mailpieces processed through MASS certified MLOCRs for the purpose of claiming automation prices. the LACS^{Link} address along with its corresponding 11-digit barcode is required to be sprayed on the mailpiece.

10 Standards of Performance

- 10.1 NCOA^{Link®} Full Service Provider Licensees are permitted to bundle services such as NCOA^{Link} service and merge/purge with the LACS^{Link} service. Charges for such bundled services must be separated from LACS^{Link}, but may be consolidated on one bill provided to the Licensee's customer.
- 10.2 Since multiple LACS^{Link} License awards are anticipated, the marketplace will establish a competitive price for the service. However, the intent of USPS is that this service will be widely available at reasonable cost to customers.
- 10.3 The Licensee shall establish a central email address for receipt and disbursement of USPS[®] electronic correspondence within the Licensee's organization. The email address must be <a href="mailto:ncscinfo@<yourcompany.com>">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. The licensee will

Version 6: 2/12/2018 Page 10 of 16

subsequently distribute all applicable USPS notifications internally to ensure receipt by the proper staff. Such correspondence will also be sent to the pertinent contacts provided during the application process; however, in the event of "bounce backs" successful delivery via the central e-mail address will be considered confirmation of receipt.

Version 6: 2/12/2018 Page 11 of 16

EXHIBIT A

LACS^{Link} FALSE POSITIVE FILE LAYOUT

LACS^{Link} FALSE POSITIVE HEADER RECORD

FIELD REFERENC NUMBERS	CE FIELD DESCRIPTION	LOGICAL LENGTH	POSITION FROM/THE	RELATIVE CONTENT RU NOTES
1	MAILER'S COMPANY NAME	40	01 - 40	
2	MAILER'S ADDRESS LINE	58	41 - 98	
3	MAILER'S CITY NAME	28	99 - 126	
4	MAILER'S STATE NAME	02	127 - 128	
5	MAILER'S 9-DIGIT ZIP	09	129 - 137	
6	TOTAL RECORDS PROCESSED	09	138 - 146	
7	TOTAL RECORDS LACS ^{Link} MATCHED	09	147 - 155	
8	FILLER	25	156 - 180	

FIELD DESCRIPTIONS DEFINITIONS

TOTAL RECORDS PROCESSED	The total number of records processed from the entire list.
TOTAL RECORDS LACS ^{Link} MATCHED	The total number of records that returned a new address,
	return codes A and 92.

Version 6: 2/12/2018 Page 12 of 16

EXHIBIT A

LACS^{Link} FALSE POSITIVE DETAIL RECORD (OPTION #1)

FIELD REFERENCE NUMBERS	FIELD DESCRIPTION	LOGICAL LENGTH	POSITION FROM/THRU	RELATIVE CONTENT NOTES
1	STREET PRE-DIRECTIONAL	02	01 - 02	
2	STREET NAME	28	03 - 30	
3	STREET SUFFIX ABBR	04	31 - 34	
4	STREET POST-DIRECTIONAL	02	35 - 36	
5	ADDRESS PRIMARY NUMBER	10	37 - 46	
6	ADDRESS SECONDARY ABBR	04	47 - 50	
7	ADDRESS SECONDARY NUMBER	08	51 - 58	
8	MATCHED ZIP CODE	05	59 - 63	
9	MATCHED PLUS 4	04	64 - 67	
10	FILLER	113	68 - 180	

Reference numbers 1-9 are from the input address.

LACS^{Link} FALSE POSITIVE DETAIL RECORD (OPTION #2)

FIELD REFERENCE NUMBERS	FIELD DESCRIPTION	LOGICAL LENGTH	POSITION FROM/THRU	RELATIVE CONTENT NOTES
1	INPUT -ADDRESS	64	01 - 64	
2	MATCHED ZIP CODE	05	65 - 69	
3	MATCHED PLUS 4	04	70 - 73	
4	FILLER	107	74 - 180	

Version 6: 2/12/2018 Page 13 of 16

EXHIBIT A

LACS^{Link} FALSE POSITIVE FILE LAYOUT

OPTIONAL LACS^{Link} FALSE POSITIVE NOTIFICATION FOR MASS MLOCR EQUIPMENT PROCESSES

Service Providers using MASS™ MLOCR equipment can capture images of mailpieces that cause False Positive table matches. The providers must send these captured images to USPS as prescribed in 7.5.2 with the following MLOCR Owner's information:

- 1. Service Bureau name
- 2. Address
- 3. City name
- 4. State
- 5. 9-digit ZIP Code
- 6. Equipment ID
- 7. Run ID of the False Positive match as it occurred (if known)
- 8. Date of the False Positive match
- 9. Time of the False Positive match
- 10. Return address on the mailpiece

Version 6: 2/12/2018 Page 14 of 16

EXHIBIT B

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 bimonthly updates. However, USPS recommends LACS^{Link} Licensees to update these files on a monthly basis in order to obtain the best possible results from the LACS^{Link} process.

The following chart is provided to assist in determining which data release is considered the most current for LACS^{Link} 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)

Version 6: 2/12/2018 Page 15 of 16

LACS^{Link} RETURN CODE DESCRIPTIONS

Return Codes should only be returned if you actually go to the llk.hsl hash table.

Return	Description	Address*	How**
Code			
Α	LACS ^{Link} Record Match – The input record matched to a record in the	Υ	D
	master file. A new address could be furnished.		
00	No Match – The input record COULD NOT BE matched to a record in the	Ν	D
	master file. A new address could not be furnished.		
14	LACS ^{Link} Record Match: New Address Would Not Convert at Run	Ν	S
	Time – The input record matched to a record in the master file. The new		
	address could not be converted to a deliverable address.		
92	LACS ^{Link} Record Match: Secondary Number Dropped from Input	Υ	S
	Address – The input record matched to a master file record, but the input		
	address had a secondary number and the master file record did not. The		
	record is a ZIP + 4 street level or highrise match.		

* Y = New Address

N = New Address not provided

****D** = Derived by data – returned in lieu of 11-digit

S = Derived by software

Version 6: 2/12/2018 Page 16 of 16