

**Annual MASS™ Meeting Minutes
Cycle L 2007–2008
February 1st 2006**

IMAQ CORE FUNCTION and IMAQ CORPORATE VISION

The core function of Intelligent Mail & Address Quality (IMAQ) is to provide value added product and service offerings. These offerings enable the USPS customers to better manage the quality of their mail while maximizing USPS' field operations ability to efficiently deliver mail as addressed.

IMAQ CORPORATE VISION

The IMAQ corporate vision is the “ability to meet new challenges, solve problems of today and anticipate the needs of the future.”

MASS™ CYCLE L 2007 - 2008

The annual MASS™ meeting was hosted by the National Customer Support Center (NCSC) in Memphis TN on February 1st 2006. Jan Caldwell opened the meeting, welcoming everyone to Memphis and the NCSC. The following minutes constitute a record of the discussions held during the MASS meeting for 2007-2008 Cycle L.

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ANNUAL MEETING

The annual CASS™ meeting has been moved to February in order to allow software developers/vendors to get their software into the hands of their customers no later than May 1st of each year.

OVERVIEW

The United States Postal Service, in cooperation with the mailing industry, developed the certification programs to evaluate the accuracy of software and equipment - Five Digit, ZIP+4®, Carrier Route, and Delivery Point code. Address management has a long standing tradition of developing new addressing tools. CASS is following this tradition. As address matching technology evolves, CASS continues to evolve.

In the past a CASS merge test consisted of:

- Carrier Route
- 5-digit ZIP Code
- ZIP+4
- Delivery Point Code (DPC)

Today a merge test contains all of the above plus:

- eLOT™
- DPV™
- DSF2™
- RDI™
- LACS^{Link™}

We also offer:

- State Tests (*including Puerto Rico*)
- Z4Change Certification
- RDI Utility
- LACS^{Link™} Utility
- eLOT Utility
- Online Ordering - <http://ribbs.usps.gov/files/cass/orders>

For MASS™ Testing we offer:

- MLOCR
- Encoding
- Remote Video Encoding (RVE)
- Local Video Encoding (LVE)
- Manifest
- FLATS
- 100 piece courtesy test deck (for system evaluation prior to MASS testing)

The Certification Department in conjunction with the Link Development group and Engineering will add the following tests for 2007-2008 Cycle L.

NEW CYCLE TESTS

- ❖ ZIP+4 certification required
- ❖ Tighter restrictions on street name spelling variations (Optional for Cycle L)
- ❖ Last Line Matching Logic
- ❖ LACS^{Link™} certification required
- ❖ Suite^{Link™} (Optional for Cycle L)

CASS™ ONLINE ORDERING

CASS online ordering is available, for access go to <https://ribbs.usps.gov/files/cass/orders>. We encourage you to use the online ordering process. In the near future the only way to order a Stage II test will be through the online ordering process.

The current format is undergoing a transformation; when completed, it will look just like the CASS order form.

Some required fields will include – product name/version, acknowledgement statement, as well as the name of the person ordering the test.

MASS online ordering is currently not available. It is our goal to have it up and running prior to Cycle L.

CASS CYCLE L REQUIREMENTS

REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

For Cycle L, a ZIP+4 can only be assigned when the primary number DPV confirms. This means software can only make a ZIP+4 match when the confirmation code is Y, S or D. Software must continue to return footnote codes.

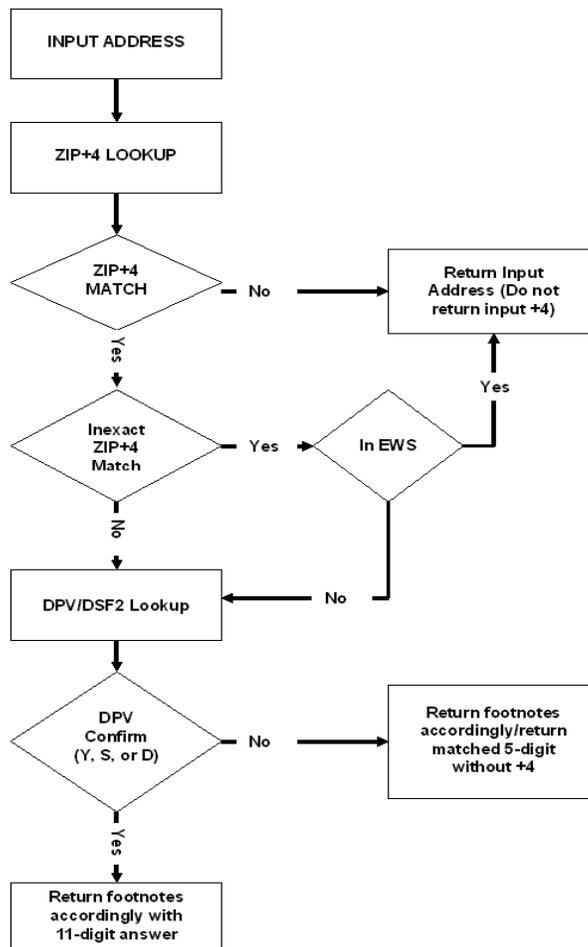
DPV/DSF2 FOOTNOTE CODES:

AA	Input Address Matched to the ZIP+4 file	P1	Input Address RR or HC Box number invalid
A1	Input Address Not Matched to the ZIP+4 file	P3	Input Address PO, RR, or HC Box number invalid
BB	Input Address Matched to DPV (<i>all components</i>)	RR	Input Address Matched to CMRA and PMB designator present (PMB 123 or #123)
CC	Input Address Primary Number Matched to DPV but Secondary Number not Matched (<i>present but invalid</i>)	R1	Input Address Matched to CMRA but PMB designator present (PMB 123 or #123)
N1	Input Address Primary Number Matched to DPV but Address Missing Secondary Number	F1	Input Address Matched to a Military Address
M1	Input Address Primary Number Missing	G1	Input Address Matched to a General Delivery Address
M3	Input Address Primary Number Invalid	U1	Input Address Matched to a Unique ZIP Code
On footnotes of F1, G1 and U1 move “Y” to the DPV return code and spaces to all other flags.			

Note: This is ONLY an example of the process; your software may have an alternate flow.

ZIP+4® PROCESSING FLOWCHART

- Start with an input address; Perform ZIP+4 lookup - software will return a match or a no match.
- If software returns a no match – return the input address. Do not return the +4.
- If software returns a match, check to see if it is an inexact match (*an inexact match means you changed one of your street components*)
- If it is an inexact match – search the EWS file.
- If the EWS file shows a match, return the input address and consider this a no match (*this is the current process*)
- If there is no inexact match or if the address is not in the EWS file, perform a DPV™ lookup.
- If DPV returns a Y, S, or D, return the match. Return the 11-digit and the footnote.
- If the DPV returns a no match, return the DPV™ footnote and the 5-digit only.



(Recap)

When the address matches to ZIP+4, but the primary number does not DPV confirm, software must return only the 5-digit ZIP Code and Carrier Route code. When there is a no match on ZIP+4, software should continue to return the input. If the input contains an add-on, do not return the add-on in the answer field.

REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

EXAMPLE #1 (When to assign ZIP+4 Code)

The address-matching software parses the input address. The primary street name is **West Loop**, post directional is **S**, and the secondary information is **Ste 410**. The address-matching software searches the ZIP+4 file for all addresses in ZIP Code **77401** with the primary street name of **West Loop**, post directional **S**, and secondary information of **Ste 410**. A match is made with the 5-digit ZIP Code, street name, post directional, secondary information and primary number. The address-matching software will now go to the DPV file with the primary and secondary number. If the primary number DPV confirms, software will then be able to assign the ZIP+4 Code; set the DPV flag to “Y” and return footnote codes of AA and BB.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	6750	WEST	LOOP	S	STE	410	77401	4197		Y

INPUT:	6750 WEST LOOP S STE 410
	BELLAIRE TX 77401

MATCH:	6750 WEST LOOP S STE 410 (ALL COMPONENTS DPV CONFIRM)
	BELLAIRE TX 77401-4197

FOOTNOTE CODE:	AA BB
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- Current Rule: Required Match
- Cycle L Rule: No Change
- DPV Return Code: Y
- Delivery Point Validated/Primary Valid and Secondary Number (when present) valid

EXAMPLE #2 (When to assign ZIP+4 Code)

On the ZIP+4 file RR, HC and PO Box are in the street name field, the box number is in the primary range field (low and high). The address-matching software parses the input address. The procedure is the same for RR addresses and other addresses. In this example the primary street name contains **RR 4**, with primary number **347C**. A match is made on the ZIP+4 file to a single rural route box with the input 5-digit ZIP Code, street name, and box number. The address-matching software will now go to the DPV file with the primary number. If the primary number DPV confirms, software will then be able to assign the ZIP+4 Code; set the DPV flag to “Y” and return footnote codes of AA and BB.

Again, there is no change to current requirements.

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REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	347C	RR 4					40456	8748		Y

INPUT:	RR 4 BOX 347C
	MOUNT VERNON KY 40456

MATCH:	RR 4 BOX 347C (ALL COMPONENTS DPV CONFIRM)
	MOUNT VERNON KY 40456-8748

FOOTNOTE CODE:	AA BB
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- Current Rule: Required Match
- Cycle L Rule: No Change
- DPV Return Code: Y
- Delivery Point Validated/Primary Valid and Secondary Number (when present) valid

EXAMPLE #3 (When NOT to assign ZIP+4 Code)

If the ZIP+4 file contains an address range of **201 – 299** but **211** does not DPV confirm; no match should be made to the address inside the ZIP+4 range. The ZIP+4 certification will not allow software to return the +4 Code from the ZIP+4 file. The address-matching software can only return the 5 digit from the ZIP+4 file – the DPV flag is set to 'N'. In this example the **state does not agree** with ZIP Code **35674**; software should correct the state to Alabama. Footnote codes are AA and M3. Input address matched to ZIP+4 file; however, the primary number did not DPV confirm.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	201 - 299	ANDREWS	DR				35674	5840		N

INPUT:	211 ANDREWS DR
	TUSCUMBIA TX 35674

MATCH:	211 ANDREWS DR (PRIMARY # DOES NOT DPV CONFIRM)
	TUSCUMBIA AL 35674

FOOTNOTE CODE:	AA M3
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- Current Rule: Required Match
- Cycle L Rule: Correct State and Return 5-Digit from ZIP+4
- DPV Return Code: N
- No Delivery Point Validated

REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

EXAMPLE #4 (When NOT to assign ZIP+4 Code)

On the ZIP+4 file RR, HC and PO Box are in the street name field, the box number is in the primary range field (low and high). The address-matching software parses the input address. The procedure is the same for RR addresses and other addresses. In this example the primary street name contains **RR 4**; however the **primary box number is missing**. The absence of the primary number (box number) means no DPV confirmation. Software can only return 5 digit from the ZIP+4 file or from the input address. Footnote code is AA and P1.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
		RR4					40456	9804	R	N

INPUT:	RR 4
	MOUNT VERNON KY 40456

MATCH:	RR4 (PRIMARY # DOES NOT DPV CONFIRM)
	MOUNT VERNON KY 40456

FOOTNOTE CODE:	AA P1
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- Current Rule: Required Match
- Cycle L Rule: Return 5-Digit from ZIP+4
- DPV Return Code: N
- No Delivery Point Validated

EXAMPLE #5 (When NOT to assign ZIP+4 Code)

If the ZIP+4 file contains an address range of **400 – 498** but **462** does not DPV confirm; no match should be made to the address inside the ZIP+4 range. The ZIP+4 certification will not allow software to return the +4 Code from the ZIP+4 file. The address-matching software can only return the 5 digit from the ZIP+4 file; the input did not contain a 5-digit ZIP Code – the DPV flag is set to 'N'. Footnote codes are AA and M3.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	400 – 498	RUSSELL	ST				76108	1619		N

INPUT:	462 RUSSELL ST
	LAKESIDE TX

MATCH:	462 RUSSELL ST (PRIMARY # DOES NOT DPV CONFIRM)
	LAKESIDE TX 76108

FOOTNOTE CODE:	AA M3
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- Current Rule: Required Match
- Cycle L Rule: Return 5-Digit from ZIP+4
- DPV Return Code: N
- No Delivery Point Validated

REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

EXAMPLE #6 (When to assign ZIP+4 Code)

The ZIP+4 file contains records that may be used to identify a commercial building, apartment complex, highrise, wing or floor of a building, group of apartment mail boxes, or physical location other than a street. Highrise/building records are identified on the ZIP+4 file as record type H. A default highrise/building contains the building street address in the primary range field and spaces in the secondary range filed. If there is a single record type H for this primary address, the ZIP+4 Code is the same for everyone in the building.

If multiple records of type H exist for this address, the default code is the only record with blank secondary fields.

The address-matching software parses the input address. The primary street name is **Washington**, suffix is **Ave**, and the secondary information is **# 8909**. The address-matching software searches the ZIP+4 file for all addresses in ZIP Code **07712** with the primary street name of **Washington**, suffix **Ave**, and secondary information of **# 8909**. A match is made with the 5-digit ZIP Code, and street name, however the secondary number is invalid and does not match. The address-matching software will now go to the DPV™ file with the primary number. The new ZIP+4 certification will allow the +4 to be assigned from the ZIP+4 file since the primary number **1266** DPV confirmed. Software returned code 'S' to let the end user know that the primary number was valid, but the secondary number did not DPV confirm. Footnote code is set to AA and CC.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	1266	WASHINGTON	AVE				07712	6381	H	S
	1266	WASHINGTON	AVE		APT	1 – 17	07712	6366	H	

INPUT:	1266 WASHINGTON AVE # 8909
	ASBURY PARK NJ 07712

MATCH:	1266 WASHINGTON AVE # 8909 (PRIMARY # DOES DPV CONFIRM)
	ASBURY PARK NJ 07712-6381

FOOTNOTE CODE:	AA CC
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- Current Rule: Required Match
- Cycle L Rule: No Change
- DPV Return Code: S
- Valid Primary Number; but Secondary (primary for Rural Route) present and is not confirmed

REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

EXAMPLE #7 (When to assign ZIP+4 Code)

As in the previous example, a default highrise/building contains the building street address in the primary range field and spaces in the secondary range field.

The address-matching software parses the input address. In this example, **25 Nesbit St** in ZIP Code **07103** matches to a high-rise default on ZIP+4 and the primary number does DPV confirm. Software will return 'D' to indicate that the input is missing secondary information; however, primary number **25** did DPV confirm. Footnote code AA is added to show that the input address matches to ZIP+4. N1 is added to show that the primary number matched to DPV, but the address is missing the secondary number. Software will return the +4 Code of **3628** from the high-rise default record.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	25	NESBIT	ST				07103	3628	H	D
	17 – 53	NESBIT	ST				07103	3622	S	

INPUT:	25 NESBIT ST
	NEWARK NJ 07103

MATCH:	25 NESBIT ST (PRIMARY # DOES DPV CONFIRM)
	NEWARK NJ 07103-3628

FOOTNOTE CODE:	AA N1
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- Current Rule: Required Match
- Cycle L Rule: No Change
- Valid Primary; Input Missing Secondary (primary for rural route)
- Note: Return Code "D" is applicable to all record types but street

REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

EXAMPLE #8 (When NOT to assign ZIP+4 Code)

The address-matching software parses the input address. The software searches the ZIP+4 file for all addresses in ZIP Code **56180** with the primary street name of **Fox Run**, and suffix **Rd**. The input address of **1 Fox Run Rd** in ZIP Code **56180** **does not match** to the ZIP+4 file. Software can only return the input 5-digit and A1 (input address NOT matched to the ZIP+4 file) footnote code.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV

INPUT:	1 FOX RUN RD
	WALNUT GROVE MN 56180

MATCH:	1 FOX RUN RD (DID NOT ZIP+4 MATCH)
	WALNUT GROVE MN 56180

FOOTNOTE CODE:	A1
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- Current Rule: No Match Return Input
- Cycle L Rule: No Change

EXAMPLE #9 (When NOT to assign ZIP+4 Code)

The address-matching software parses the input address. **J312 Huntington Ave** has an input ZIP+4 of **02136-5555**. The software searches the ZIP+4 file for all addresses in ZIP Code **02136** with the primary street name of **Huntington**, and suffix **Ave**. The input address of **J312 Huntington Ave** in ZIP Code **02136** and the input ZIP+4, **02136-5555** **does not match** to the ZIP+4 file. The ZIP+4 Code is invalid. Software can only return the input 5-digit along with A1 footnote code. **DO NOT** return the input +4.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV

INPUT:	J312 HUNTINGTON AVE
	HYDE PARK MA 02136-5555

MATCH:	J312 HUNTINGTON AVE (DID NOT ZIP+4 MATCH)
	HYDE PARK MA 02136

FOOTNOTE CODE:	A1
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- Current Rule: No Match Return Input
- Cycle L Rule: Return Input 5-Digit only

REQUIREMENT FOR ZIP+4® & DPV™/DSF2™

DPV TIEBREAKER

In the past, software could optionally use DPV to resolve multiple responses. In Cycle L, this is no longer optional.

EXAMPLE #10 (When to assign ZIP+4 Code)

Address-matching software **must use** DPV to resolve multiple responses. Only when **one** candidate record DPV confirms will software be required to make the match. In this example, address-matching software is required to make the match to "WEST" since it is the only one that DPV confirms. If neither address DPV confirms – follow existing Cardinal Rule.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	300 – 398	7 TH	AVE	W			58078	1648	Y	
	300 – 398	7 TH	AVE	E			58078	2731	N	

INPUT:	300 7 TH AVE
	WEST FARGO ND 58078

MATCH:	300 7 TH AVE W (ALL COMPONENTS DPV CONFIRM)
	WEST FARGO ND 58078-1648

FOOTNOTE CODE:	AA BB
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- Current Rule: Optional Match
- Cycle L Rule: Required Match

STREET NAME SPELLING VARIATIONS

CASS™ has been testing minor street name misspellings. In Cycle L, street name misspellings will be more complex. CASS will only test street name spelling variations on long street names.

The common practice to all address-matching software is the treatment of the input address as a collection of separate elements: house number, pre-direction, street name, suffix, etc. This practice allows the independent comparison of the separate elements of the input address to the ZIP+4 database, which is structured in the same format. Because the addressing practices used by customers are so varied (correction of misspellings and phonetic determination) and because the ZIP+4 database is structured to facilitate database management, simply comparing the input address elements to the ZIP+4 database may not be possible. Therefore, the number of insertions/deletions in the street name will be a developmental business decision and not a USPS policy.

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EXAMPLE #11 (When to assign ZIP+4 Code)

Developers are expected to correct the street name misspelling and assign the ZIP+4® code within the input ZIP Code based on the ZIP+4 certification requirements.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	1	SCHOOLHOUSE	RD				01002	9603		Y

INPUT:	1 CCHOOLHOUSE RD AMHERST MA 01002
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MATCH:	1 – 99 SCHOOLHOUSE RD (ALL COMPONENTS DPV CONFIRM) AMHERST MA 01002-9603
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FOOTNOTE CODE:	AA BB
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➤ Cycle L Rule: Optional Match

EXAMPLE #12 (When to assign ZIP+4 Code)

Developers are expected to correct the street name misspelling and assign the ZIP+4® code within the input ZIP Code based on the ZIP+4 certification requirements.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	1 – 87	WASHINGTON	AVE				01060	2822		Y

INPUT:	33 ASHINGTON AVE NORTHAMPTON MA 01060
---------------	--

MATCH:	33 WASHINGTON AVE (ALL COMPONENTS DPV CONFIRM) NORTHAMPTON MA 01060-2822
---------------	---

FOOTNOTE CODE:	AA BB
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➤ Cycle L Rule: Optional Match

LAST LINE LOGIC

The W5 category will now change from a no-match to a match category. Software will be allowed to make an exact match in the input ZIP Code.

Last Line Matching Policy:

When input ZIP and City/State are from a different finance number,

- Exact match within the ZIP Codes associated with the input City/State,
- Inexact match within ZIP Codes associated with the input City/State (*An inexact match means that you changed one of your street components*).
- Exact match within the ZIP Code.

EXAMPLE #13 (When to assign ZIP+4 Code)

Addresses maybe presented that have a City/State that is associated with one finance number and a ZIP Code that is associated with a different finance number. This can easily result from data entry errors, where one miskey of the ZIP Code or state can mean a significant change. When the address-matching software attempts to match the address, it must give preference to the input city name and search for an exact match within ZIP Codes associated with the input City/State. If it does not find a match software can search for an inexact match within ZIP Codes associated with the input city name. If a match is still not found, software can search for an exact match within the input ZIP Code.

This is an example where the input ZIP Code and City/State have different finance numbers: an **exact match** is made to the ZIP+4 file in the **input ZIP Code** and the City/State is changed to **Union Grove AL**. The ZIP+4 assignment is based on ZIP+4 certification requirements.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	300 – 398	HIGHLANDS					35175	7804		Y

INPUT:	302 HIGHLANDS
	BOYNTON BEACH FL 35175

MATCH:	302 HIGHLANDS (ALL COMPONENTS DPV CONFIRM)
	UNION GROVE AL 35175-7804

FOOTNOTE CODE:	AA BB
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- Cycle L Rule: Required Match

MASS™ CYCLE L 2007 - 2008

REQUIREMENT FOR LACS^{Link™}

In Cycle J, LACS^{Link} was mandatory for CASS developers only. Beginning with Cycle L, LACS^{Link} will be required for all CASS/MASS customers.

MASS™ CYCLE L REQUIREMENTS

NEW CYCLE L TESTS FOR MASS

- DPV™ certification required
- ZIP+4® certification required
- LACS^{Link™} certification required
- 350 piece courtesy State/Region test

REQUIREMENT FOR ENHANCED ZIP+4 & DPV/DSF2

In the past, DPV was not required for MASS certification. Beginning in Cycle L, DPV and ZIP+4 certification will be a requirement for MASS.

MASS will only be allowed to spray an 11-Digit Barcode when the primary number DPV confirms. This means address-matching software can only make a ZIP+4 match when the confirmation code is Y, S or D.

DPV REQUIREMENT FOR MASS

On an MLOCR machine, the software finds the position of an address block on the mail piece, and passes this location to the OCR software. An address on a mail piece that can be read and can be matched against the address in the ZIP+4 file retrieves an 11-digit delivery point barcode (DPBC).

EXAMPLE #1 (When NOT to assign ZIP+4 Code)

The address-matching software searches the ZIP+4 file for 1683 Route 35 N, in ZIP Code 08751. In this example the ZIP+4 file contains an address range of **1681 – 1699**, however the primary number **1683** does not DPV confirm; **no match** should be made to the address inside the ZIP+4 range. Software can only return the 5-digit from the ZIP+4 file.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	REC TYPE	DPV
	1681 - 1699	ROUTE 35		N			08751	1740		N

INPUT:	1683 ROUTE 35 N
	SEASIDE HEIGHTS NJ 08751

MATCH:	1683 ROUTE 35 N (PRIMARY # DOES NOT DPV CONFIRM)
	SEASIDE HEIGHTS NJ 08751

MASS will not be required to return Footnote or Return codes.

REQUIREMENT FOR LACS^{Link™} (Locatable Address Conversion System)

LACS data has been gathered since 1988. In 1994, LACS was put in AMS. In 1995, application improvements lead to increase LACS input from filed offices.

LACS will provide a new address when an address has been converted due to changes by government and municipalities.

- Most records in LACS reflect changes from rural box addressing to street style addressing for E911 conversions.
EX: Old address: RR 1 Box 127A New Address: 17255 Scenic RD
- Some records in LACS represent changes to street-style addresses
EX: Old address: 905 France Ave New Address: 1125 Freedom Dr
- Some LACS records reflect PO Box renumbering
EX: Old Address: PO Box 123 New Address: PO Box 555123

LACS^{Link™}

1. ZIP+4 file displays the LACS indicator for old LACS records as long as the records live in the AMS database.
2. CASS certified software is required to recognize the LACS indicator in the ZIP+4 file.
3. LACS processing of address lists have been a function of NCOA. These licensees were authorized to process addresses for LACS conversion.
4. LACS^{Link} provides LACS data as a secure hash table.
5. LACS^{Link} will allow the USPS to distribute LACS address conversion information as a separate product.
6. The input to the LACS lookup is a display of the address, 50 characters in length, and a five-digit ZIP Code.
7. The address must be in standardized unparsed format, but not necessarily ZIP+4 coded. Keeping in mind that a change in one letter or space creates a different SHA value, the standardized address and numbers that are to be an input must exactly match the SHA value that was SHA'd to make the list. To aid in the standardizing of street style addresses, a table will be provided that will include a 5-digit ZIP Code and the Indicia (Pre-directional, Street Name, Suffix, and Post-directional) as it appears in the USPS LACS database. If the process verifies that the input address exists in the LACS table, the 11-digit ZIP Code + a hint byte of the new address will be returned. The 11-digit look-up and the hint byte table will provide the new address.

System Requirements:

5 LACS ^{Link} data table	33MB each
Binary Hash Table	16MB
Subtotal	181 MB
Street Name Table	4MB
1 Hint Byte Table	33MB
RV9 Table	112MB (max)
Total	330MB

MASS™ CYCLE L 2007 - 2008

EXAMPLE #1 Match to “Exact” Non-LACS Record

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	LACS IND	DPV
	10 – 21	RR 1					62818	9704		Y

INPUT:	RR 1 BOX 21
	BROWNS IL 62818

LACS^{Link™}: Not Needed

EXAMPLE #2 LACS Indicated Record Match

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	LACS IND	DPV
	1348 – 1350	RR 1					74901	9761	L	

INPUT:	RR 1 BOX 1348
	ARKOMA OK 74901

LACS^{Link™}: YES

EXAMPLE #3 Rural Route Default Match

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	LACS IND	DPV
		RR 1					62818	9801		

INPUT:	RURAL ROUTE 1 BOX 1348
	BROWNS IL 62818

LACSLINK™: YES

MASS™ CYCLE L 2007 - 2008

EXAMPLE #4 ZIP + 4® No-Match

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	LACS IND	DPV

INPUT:	1705 S JORDAN RD
	BRIGGS TN 38405

ZIP + 4 Match: NO

“Fuzzy” Match to Street Name Table

Street Name Table: 38405 S Jordan Rd

LACS^{Link™}: YES

INPUT:	1708 S JORDAN DR
	BRIGGS TN 38405

ZIP + 4® Match: NO

“Fuzzy” Match to Street Name Table

Street Name Table: 38405 S Jordan Rd

LACS^{Link™}: YES

EXAMPLE #5 No Match to RR, HC, PO Box

If the input street name is a RR or HC type street name or PO Box and **is not** present in the street name table, **do not** do a fuzzy name comparison and there is no need to perform a LACS^{Link™} lookup.

ZIP+4 FILE:	PRIMARY RANGE	STREET NAME	SUF FIX	POST DIR	DESIG-NATOR	SEC RANGE	ZIP CODE	+4 CODE	LACS IND	DPV

INPUT:	RR 11
	BRIGGS TN 38405

ZIP + 4® Match: NO

Street Name Table: 38405 RR1

LACS^{Link™}: NO

MASS™ CYCLE L 2007 - 2008

ONECODE^{SOLUTION} BARCODE (formerly known as 4-STATE CB) TESTING FOR MASS

In April the Certification Department will offer ONECODE^{SOLUTION} BARCODE testing for MASS. This will be an optional test.

FEE SCHEDULE

Fees are applied to certification period from August 1 – July 31

Fee Based Certification	Aug/Oct New Cycle	Nov/Dec	Jan	Feb	Mar	Apr	May	June	July	After July 31, for Current Cycle
CASS FEES	\$200	\$200	\$200	\$500	\$500	\$600	\$700	\$800	\$900	\$1000
MASS MFG (MLOCR)		\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$1500
MASS END USERS (MLOCR)					\$500	\$500	\$500	\$500	\$500	\$1500
MASS MFG (ENCODER)		\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$300	\$1000
MASS END USERS (ENCODER)					\$300	\$300	\$300	\$300	\$300	\$1000

NEW PRODUCTS

Suite^{Link}™ (optional for Cycle L)

The purpose of the Suite^{Link} product is to improve business addressing by adding known secondary (suite) numbers to allow delivery sequencing where it would otherwise not be possible. Given a business name and an associated ZIP+4[®] coded address that matches to a high-rise default, the Suite^{Link} process will return the appropriate suite number when available.

Keys will be built using the significant words in a business name and the building's Enhanced Modified Delivery Point (EMDP).

Each key that successfully returns a suite number is used to build confidence in the match.

Building an Enhanced Snapp Modified Delivery Point (EMDP)

The EMDP is a numeric representation of a delivery point. It is created using the "street level" 9-digit ZIP Code and the primary number. You should not use the secondary number or descriptor when building EMDP for Suite^{Link}.

Sample EMDP:

5-DIGIT ZIP CODE	4-DIGIT ADD-ON	7 DIGITS OF PRIMARY #	2 ALPHAS FROM PRIMARY #
12345	6759	0000123	A

Example of Keys	Suite ^{Link} Example (Cont.)
<p>Input record: Investment Bank of America 123 Main St 12345-6789</p> <p>Businesses at 123 Main St: Poplar Medical Sales Ste 212 Polar Auto Sales Memphis Ste 214 Poplar Auto Repair Ste 216 Wilson Law Firm Ste 218 Boyce's Kayaks Ste 220</p> <p>Keys that will be built to probe the Suite^{Link}™ product: EMDP-America Bank Investment EMDP-America EMDP-Bank EMDP-Investment</p> <p>*Note that "of" will be omitted because it appears in the noise word table.</p>	<p>Input: Poplar Auto Sales 123 Main St (Suite Missing) 12345-6790 (High-rise Default)</p> <p>Lookup key: SHA of EMDP-Auto Poplar Sales Returns: No Matches Lookup Key: SHA of EMDP-Poplar Returns: 212, 214, 216 Lookup Key: SHA of EMDP-Auto Returns: 214, 216 Lookup Key: SHA of EMDP-Sales Returns: 212, 214</p> <p>Output: 214</p>

Current Plan

- Alpha testing completed as of March 1, 2006
- Beta testing has begun and will run through April 30, 2006
- Product rollout mid May 2006

NEW PRODUCTS cont'd

Z4INFO

Overview

- The Z4Info file is an add-on utility to the ZIP+4® address matching file
- It is provided free of charge to Address Matching Engine Developers
- May be integrated into their current products and processes to improve address quality
- When the pattern of the primary and secondary attributes does not match explicitly to the ZIP+4 file, Z4Info provides a code describing the acceptable formats for the primary and secondary information in a particular ZIP+4 block face
- There may be more than one pattern indicated for a single ZIP+4 range

Process

- Establish the pattern of the input address
- Does this pattern exist on the ZIP+4 product?
- If it does not, check for this pattern in Z4Info
- If the pattern exists in Z4Info, use the attribute
- If it does not exist, quarantine the attribute
 - Quarantine means isolate this extraneous information and do not include it in the standardized address
 - Disposition of the quarantined information is discretionary
 - Move it, Hide it, Discard it

NEW PRODUCTS cont'd

Z4INFO

Example 5200 Park Ave Ste B
 Memphis TN 38119-3500

- The pattern for this address is numeric primary and alpha secondary (numeric alpha).
- The pattern is not revealed by the ZIP+4® product.
- The Z4Info file returns a letter code for both the primary and secondary address attributes.
- The letter code B is returned for the primary and the letter code J for the secondary.

5200 Park Ave Ste B
 Memphis TN 38119-3500

Code	Definition
A	Only a Fraction
<u>B</u>	<u>Numeric only</u>
C	Numeric + Fraction
D	Numeric-Alpha
E	Numeric-Alpha + Fraction
F	Numeric-Alpha-Numeric
G	Numeric-Alpha-Numeric + Fraction
H	Numeric-Alpha-Numeric-Alpha
I	Numeric-Alpha-Numeric-Alpha + Fraction
<u>J</u>	<u>Alpha Only</u>
K	Alpha + Fraction
L	Alpha-Numeric
M	Alpha-Numeric + Fraction
N	Alpha-Numeric-Alpha
O	Alpha-Numeric-Alpha + Fraction
P	Alpha-Numeric-Alpha-Numeric
Q	Alpha-Numeric-Alpha-Numeric + Fraction
R	Alpha-Numeric-Alpha-Numeric-Alpha
S	Alpha-Numeric-Alpha-Numeric-Alpha + Fraction

- Z4Info confirms that numeric primary and alpha secondary is the correct pattern.
- Include Ste B in the standardized address.

- **Utility Add-on**
- **Use is optional**
- **Free to Engine Developers**
- **Built Weekly**
- **Available on RIBBS in April 2006**

SIGNIFICANT MILESTONES

ANNUAL MEETING FEB 2006

OFFICIAL RULES RELEASE MAR 2006

OneCode^{SOLUTION} BARCODE TESTING MASS™ APR 2006

STAGE I FILE RELEASE JUN 2006

STAGE II FILE RELEASE AUG 2006

MASS™ TEST DECKS AVAILABLE NOV 2006

DEVELOPERS/MANUFACTURERS CERTIFICATION COMPLETED MAR 2007

BEGIN SOFTWARE RELEASE..... APR 2007

DEADLINE SOFTWARE RELEASED TO END-USERS MAY 1, 2007

The Address Quality Symposium will be held at the National Postal Forum April 2 – 5, 2006. An Address Quality Specialist Certificate is given if you attend certain sessions. We encourage all of you to attend.



NPF®
NATIONAL POSTAL FORUM
*Where knowledge
and innovation connect.*

APRIL 2-5, 2006 ORLANDO, FLORIDA

Brand New!

Address Quality Symposium

Address Quality Specialist Certificate



NPF[®]
NATIONAL POSTAL FORUM

*Where knowledge
and innovation connect.*

Address Quality Symposium

Recognizing the critical role that addressing plays in effective mailings, this event emphasizes the need to identify and establish operational disciplines the routinely correct and improve database accuracy. All new workshops and special sessions will give attendees an opportunity to hear direct from Postal executives, vendors, and industry leaders about strategies and tools that meet the addressing challenges of today.

- 4 in-depth Address Quality Symposium sessions
- 4 all new Address Management workshops
- 9 additional workshops in the Address Accuracy & Intelligent Mail Track



NPF[®] *Where knowledge
and innovation connect.*
NATIONAL POSTAL FORUM

Address Quality Specialist Certificate

Mailers will be able to take their companies to the next level in Address Quality after completing the requirements of the AQS certificate. To be awarded an AQS certificate, recipients will need to:

- attend both of the NPF Address Quality Symposium sessions Wednesday afternoon on April 5th
- attend any two of the workshops listed from the Addressing Accuracy & Intelligent Mail Track
- complete an online survey about addressing and database practices

Successful participants will be recognized industry wide as specialists in Address Quality.

QUESTIONS & ANSWERS

MASS™ Meeting Q & A's

Question: Is DPV™ required for all MASS™ End Users?

Answer: Yes

Question: Will customers be required to run ZIP+4 certification in order to print a 3553 form?

Answer: The mailer must complete a 3553 Form for each mailing claimed at all automation rates and all carrier route rates.

Question: Will you raise the error percentage rate above the 1% requirement for Postal Form 3553 counts.

Answer: No

Discussion item(s):

- (2) DPV configurations available:
- Hash table
 - Flat (text) file - allows for transactional updates