VeriMove™

Version 3.8.0

VeriMove™ Reference Guide

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1 - Input and Output Fields

In this section

Input Fields

VeriMove uses the field names described next to build input definitions. These descriptions include field name, field description, and the maximum character length for each field. VeriMove allows your input and output files to be in whatever layout you want as long as you define the position of each field.

Table 1: VeriMove Input Field Descriptions

Field Name	Length	Description
Box Number	10	Box number for the input address. The box number is used with PO BOX, Rural Route (RR) or Highway Contract (HC) address types. EXAMPLE In the address "RR 3 BOX 4," the number "4" represents the box number.
Carrier Route	4	Input carrier route code associated with the input address. This is a four-character code which identifies the mail carrier for the delivery address.
CASS - Detail Result Indicator	250	This field is required when you use External CASS, External DPV, External LACS[Link], or External Suite[Link] processing and choose Use Statistics in Input Field(s) as the statistics source.
CASS - EWS Match Indicator	1	EWS match indicator generated during CASS processing of the input record. This field is optional when you use External CASS processing. This field is not used for Internal CASS processing.
CASS - DPV CMRA	1	This field indicates if a CMRA match was generated during DPV processing. This field is required when External DPV processing is used.
CASS - DPV Footnote	24	DPV Footnote code generated during DPV processing. This field is required when External DPV processing is used with the "Use Manually Registered Statistics" option.
CASS - DPV Delivery Point Info	1	This field is used to manually supply DPV Delivery Point Information. • Y — Match primary & secondary (if present) • N — No DPV match • D — Primary match - missing secondary • S — Primary match - secondary did not match • Blank — No DPV results This field is used for External CASS processing only. This field is not used for Internal CASS processing.

Field Name	Length	Description
CASS - LACS^{Link} Footnote	2	LACS^{Link} Footnote code generated during CASS processing of the input record. This field is required when External LACS^{Link} processing is used with the "Use Manually Registered Statistics" option.
CASS - Match Level Indicator	1	CASS flag indicating the address CASS matched to a street level. This field is required if using External CASS processing with the "Use Manually Registered Statistics" option.
CASS - Suite^{Link} Footnote	2	Suite^{Link} Footnote code generated during CASS processing of the input record. This field is required when External Suite^{Link} processing is used with the "Use Manually Registered Statistics" option.
CASS - ZIP + 4 CMRA Present	1	This field identifies whether a CMRA was found during CASS processing of the input record.
CASS - ZIP + 4 Indicator	1	This field is used to manually indicate ZIP + 4 coding. • 4 — ZIP + 4 coded • Blank — Not coded This field is used for External CASS processing only. This field is not used for Internal CASS processing.
CASS - ZIP + 4 LACS^{Link} Flag	1	LACS^{Link} match indicator generated during CASS processing of the input record. This field is optional when you use External CASS processing. This field is not used for Internal CASS processing.
CASS - ZIP Type	1	CASS flag indicating the ZIP type associated with the input record.
City Name	28	City name associated with the input address.
City, State, ZIP, ZIP + 4 Line - Primary	70	Input address Last Line. The Last Line of an address block contains the city name, state, ZIP and Plus 4. If you use this field you cannot use the field `Name/Address Scan Line 7.`
City, State, ZIP, ZIP + 4 Line - Secondary	70	The line is block scanned to determine type (for example, name, address, etc.) from an address block where the address information floats from one address line to the other in each record read. If you use this field you cannot use the field `Name/Address Scan Line 8.`
County Code	5	Postal county code associated with the input address. The drop down field definition box on the Input Definition tab describes the county code as the Federal Information Processing Standard (FIPS) Code that is comprised of the 2-digit state code followed by the 3-digit county code.

Field Name	Length	Description
Data Transfer Field 1—5	200	These fields are used to transfer information directly from the input record to the output record. Each field can be from 1 to 200 positions in length. If you define an input field (for example, Data Transfer Field 1) you MUST define a corresponding output field (for example, Data Transfer Field 1).
		EXAMPLE
		Here is a sample of the job def XML input section:
		<Field>
		<FieldType>Data Transfer Field 1</FieldType>
		<Start>235</Start>
		<Length>10</Length>
		</Field>
		<Field>
		<FieldType>Data Transfer Field 2</FieldType>
		<Start>245</Start>
		<Length>8</Length>
		</Field>
		<Field>
		<FieldType>Data Transfer Field 3</FieldType>
		<Start>253</Start>
		<Length>6</Length>
		<Field>
		<Field>
		<FieldType>Data Transfer Field 4</FieldType>
		<Start>259</Start>
		<Length>12</Length>
		</Field>
		<Field>
		<FieldType>Data Transfer Field 5</FieldType>
		<Start>271</Start>
		<Length>11</Length>
		</Field>
Delivery Point Barcode	12	Input address 12-digit delivery point barcode. This should include the ZIP + 4 code, delivery point and the check digit.
Delivery Point Barcode Code	2	Input address delivery point barcode. This is the tenth and eleventh digits of the delivery point barcode.

Field Name	Length	Description
DPV Footnote	2	DPV Footnote code generated during DPV processing. This field is required when External DPV processing is used.
Firm Name Line	70	Firm name (business name). If you use this field you cannot use the field `Name/Address Scan Line 4`.
First Name - Primary	20	First name for the name listed first in the record. You can enter up to two individual first names. EXAMPLE You have the following record in your input file: Dr. John A. Smith Mrs. Kristen K. Smith, CPA 123 Main St. Oak Park, IL 60302 For this record, the field First Name - Primary would contain "John" because "John A. Smith" is the name listed first in the record.
First Name - Secondary	20	First name for the name listed second in the record. You can enter up to two individual first names. EXAMPLE You have the following record in your input file: Dr. John A. Smith Mrs. Kristen K. Smith CPA 123 Main St. Oak Park, IL 60302 For this record, the field First Name - Secondary would contain "Kristen" because "Kristen K. Smith" is the name listed second in the record.
First Name Suffix - Primary	10	First suffix of the name listed first in the record. You can specify up to two name suffixes. Use the First Name Suffix - Secondary field to specify another suffix for the name listed first in the record. Examples of name suffixes include genetic suffixes (for example, Jr., Sr., I, II, etc.) or professional suffixes (ATTY, MD, DO, CPA, etc.). EXAMPLE You have the following record in your input file: John A. Smith II MD Kristen K. Smith CPA JD 123 Main St. Oak Park, IL 60302 For this record, the field First Name Suffix - Primary would contain "II" because "John A. Smith II MD" is the name listed first in the record and "II" is the first suffix in the name.

Field Name	Length	Description
First Name Suffix - Secondary	10	Second suffix for the name listed first in the record. You can specify up to two first name suffixes. Examples of name suffixes include genetic suffixes (for example, Jr., Sr., I, II, etc.) or professional suffixes (ATTY, MD, DO, CPA, etc.).
		EXAMPLE
		You have the following record in your input file:
		John A. Smith II MD Kristen K. Smith CPA JD 123 Main St. Oak Park, IL 60302
		For this record, the field First Name Suffix - Secondary would contain "MD" because "John A. Smith II MD" is the name listed first in the record and "MD" is the second suffix in the name.
First Name Title - Primary	10	First title for the name listed first in the record. Examples of name titles include gender-specific titles (for example, Mr., Mrs., Miss, etc.) or professional titles (for example, Dr., Major, etc.). This field is used when identifying input name information that is in a parsed format.
		Up to two titles can be identified. If the first name title is gender-specific, the second name title could be a professional title, or vice versa. To identify a second name title for the name listed first in the record, use the First Name Title - Secondary field.
		EXAMPLE
		You have the following record in your input file:
		Rev. Dr. John A. Smith II Mrs. Kristen K. Smith CPA 123 Main St. Oak Park, IL 60302
		For this record, the field First Name Title - Primary would contain "Rev." because "Rev. Dr. John A. Smith II" is the name listed first in the record and "Rev." is the first title in the name.
First Name Title - Secondary	10	Second title for the name listed first in the record. This field is used when identifying input name information that is in a parsed format. Examples of name titles include gender-specific titles (for example, Mr., Mrs., Miss, etc.) or professional titles (for example, Dr., Major, etc.).
		Note: Up to two name titles can be identified. If the first name title is gender-specific, the second name title could be a professional title, or vice versa.
		EXAMPLE
		You have the following record in your input file:
		Rev. Dr. John A. Smith II Mrs. Kristen K. Smith CPA 123 Main St. Oak Park, IL 60302
		For this record, the field First Name Title - Secondary would contain "Dr." because "Rev. Dr. John A. Smith II" is the name listed second in the record and "Dr." is the second title in the name.

Field Name	Length	Description
House Number	10	House number. This field is used when identifying input address information that is in a parsed format.
Hyphenated Surname - Primary	20	Hyphenated surname (the second surname) for the name listed first in the record. This field is used when identifying input name information that is in a parsed format. EXAMPLE You have the following record in your input file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Hyphenated Surname - Primary would contain "Polk-Dietrich" because "Dr. Sarah A. Polk-Dietrich" is the name listed first in the record.
Hyphenated Surname - Secondary	20	Hyphenated surname (the second surname) for the name listed second in the record. This field is used when identifying input name information that is in a parsed format. EXAMPLE You have the following record in your input file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Hyphenated Surname - Secondary would contain "Smith-Jackson" because "Dr. Kristen K. Smith-Jackson" is the name listed second in the record.
Middle Name - Primary	20	Middle name of the name listed first in the record. EXAMPLE You have the following record in your input file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Middle Name - Primary would contain "A." because "Dr. Sarah A. Polk-Dietrich" is the name listed first in the record.
Middle Name - Secondary	20	Middle name of the name listed second in the record. EXAMPLE You have the following record in your input file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Middle Name - Secondary would contain "K." because "Dr. Kristen K. Smith-Jackson" is the name listed second in the record.

Field Name	Length	Description
Name/Address Scan Line 1	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the first line of the address. You can specify up to 8 lines. If you use this field you cannot use the field `Personal Name Line - Primary`.
Name/Address Scan Line 2	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the second line of the address. You can specify up to 8 lines. If you use this field you cannot use the field `Personal Name Line - Secondary`.
Name/Address Scan Line 3	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the third line of the address. You can specify up to 8 lines.
Name/Address Scan Line 4	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the fourth line of the address. You can specify up to 8 lines. If you use this field you cannot use the field `Firm Name Line`.
Name/Address Scan Line 5	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the fifth line of the address. You can specify up to 8 lines. If you use this field you cannot use the field `Street Address Line - Primary`.
Name/Address Scan Line 6	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the sixth line of the address. You can specify up to 8 lines. If you use this field you cannot use the field `Street Address Line - Secondary`.
Name/Address Scan Line 7	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the seventh line of the address. You can specify up to 8 lines. If you use this field you cannot use the field `City, State, ZIP, ZIP + 4 Line - Primary`.

Field Name	Length	Description
Name/Address Scan Line 8	70	Use this field to invoke the VeriMove Name and Address Scanner. The Name and Address Scanner scans unparsed addresses to identify the type of address information in each of the address lines (for example, name, firm, address, city, state, ZIP Code). This field contains the data returned for the eighth line of the address. You can specify up to 8 lines. If you use this field you cannot use the field `City, State, ZIP, ZIP + 4 Line - Secondary.`
Non-Conventional Address Name	20	Non-conventional address name associated with the input address. PO box, rural route (RR), or highway contract (HC) are non-conventional address names.
		EXAMPLE
		You have the following address in your input file.
		Jim A. Johnson RR 2 Box 123 Smithtown, NY 12180
		For this record, the field Non-Conventional Address Name would contain "RR" because rural routes are non-conventional addresses.
Non-Conventional Address Number	3	Rural route or highway contract number associated with the input address. This field is used when identifying input address information that is in a parsed format.
		EXAMPLE
		You have the following address in your output file.
		Jim A. Johnson RR 2 Box 123 Smithtown, NY 12180
		For this record, the field Non-Conventional Address Number would contain "2" because rural routes are non-conventional addresses.
Personal Name Line - Primary	70	Personal name information of the name listed first in the record. This field is used when the input name information is not in a parsed format. If you use this field you cannot use the field Name/Address Scan Line 1.
		EXAMPLE
		You have the following record in your input file:
		Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302
		For this record, the field Personal Name Line - Primary would contain "Dr. Sarah A. Polk-Dietrich" because that is the name listed first in the record.
		NOTE: A comma in the Personal Name field represents a "Last Name, First Name" ordering. Words appearing before the first comma will be transposed to the end of the name before parsing occurs.
		EXAMPLE
		"Smith, John Adam" will be transformed to "John Adam Smith" before name parsing occurs.

Field Name	Length	Description
Personal Name Line - Secondary	70	Personal name information of the name listed second in the record. This field is used when the input name information is not in a parsed format. If you use this field you cannot use the field Name/Address Scan Line 2.
		EXAMPLE
		You have the following record in your input file:
		Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302
		For this record, the field Personal Name Line - Secondary would contain "Dr. Kristen K. Smith-Jackson" because that is the name listed second in the record.
		NOTE: A comma in the Personal Name field represents a "Last Name, First Name" ordering. Words appearing before the first comma will be transposed to the end of the name before parsing occurs.
		EXAMPLE
		"Smith, John Adam" will be transformed to "John Adam Smith" before name parsing occurs.
Private Mail Box / Mail Stop Designator	10	Private mail box/mail stop designator. Examples of a private mail box/mail stop designator would be PMB (Private Mail Box), MSC (Mail Stop Code), etc. This field is used when identifying input address information that is in a parsed format.
Private Mail Box / Mail Stop Number	10	Private mail box/mail stop number. This field is used when identifying input address information that is in a parsed format.
Second Name Suffix - Primary	10	First suffix for the name listed second in the record. Examples of name suffixes include genetic suffixes (for example, Jr., Sr., I, II, etc.) or professional suffixes (for example, ATTY, MD, DO, CPA, etc.).
		EXAMPLE
		You have the following record in your input file:
		John Smith II MD Kristen Smith CPA JD 123 Main St. Oak Park, IL 60302
		For this record, the field Second Name Suffix - Primary would contain CPA because "Kristen Smith CPA JD" is the name listed second in the record and "CPA" is the first suffix in the name.
Second Name Suffix - Secondary	10	Second suffix for the name listed second in the record. Examples of name suffixes include genetic suffixes (for example, Jr., Sr., I, II, etc.) or professional suffixes (for example, ATTY, MD, DO, CPA, etc.) suffixes.
		EXAMPLE
		You have the following record in your input file:
		John Smith II MD Kristen Smith CPA JD 123 Main St. Oak Park, IL 60302
		For this record, the field Second Name Suffix - Secondary would contain "JD" because "Kristen Smith CPA JD" is the name listed second in the record and "JD" is the second suffix in the name.

Field Name	Length	Description
Second Name Title - Primary	10	First title for the name listed second in the record. Up to two titles can be identified. If the first title is gender-specific, the second name title can be a professional title and vice versa. This field is used when identifying input name information that is in a parsed format. Example of name titles include gender-specific titles (for example, Mr., Mrs., Miss, etc.) or professional titles (for example, Dr., Major, etc.). EXAMPLE You have the following record in your input file: Lt. Gen. John Smith II Rev. Dr. Kristen Smith 123 Main St. Oak Park, IL 60302 For this record, the field Second Name Title - Primary would contain "Rev." because "Rev. Dr. Kristen Smith" is the name listed second in the record and "Rev." is the first title in the name.
Second Name Title - Secondary	10	Second title for the name listed second in the record. Up to two titles can be identified. If the first title is gender-specific, the second title can be a professional title. Examples of name titles include gender-specific titles (for example, Mr., Mrs., Miss, etc.) and professional titles (for example, Dr., Major, etc.). This field is used when identifying input name information that is in a parsed format. EXAMPLE You have the following record in your input file: Lt. Gen. John Smith II Rev. Dr. Kristen Smith 123 Main St. Oak Park, IL 60302 For this record, the field Second Name Title - Secondary would contain "Dr." because "Rev. Dr. Kristen Smith" is the name listed second in the record and "Dr." is the second title in the name.
State Abbreviation	2	Input two-character state abbreviation (for example, IL, AL, etc.). This field is used when identifying input address information that is in a parsed format.
Street Address Line - Primary	70	Primary street line. The primary street address line is the street address that is found above the last line in an address block. The last line is the city, state, ZIP line. If you use this field you cannot use the field Name/Address Scan Line 5. EXAMPLE You have the following record in your input file: John Smith II Apt 2 123 Main St. Oak Park, IL 60302 For this record, the field Street Address Line - Primary would contain "123 Main St." because that is the line above the last line of the address.

Field Name	Length	Description
Street Address Line - Secondary	70	Alternate street address line. The alternate street address line is the street address that is found above the primary address line in an address block. If you use this field you cannot use the field Name/Address Scan Line 6. EXAMPLE You have the following record in your input file: John Smith II Apt 2 123 Main St. Oak Park, IL 60302 For this record, the field Street Address Line - Secondary would contain "Apt 2" because that is the line above the primary street address line.
Street Address Post-Directional	10	Post-directional for the input address (for example, North, South, East, West, etc.). This field is used when identifying input address information that is in a parsed format. EXAMPLE In the street address "142 Main St North," "North" is the post-directional.
Street Address Pre-Directional	10	Input address pre-directional (for example, N, S, etc.). This field is used when identifying input address information that is in a parsed format. EXAMPLE In the street address "142 S Main St," "S" is the pre-directional.
Street Name	28	Input address street name. This field is used when identifying input address information that is in a parsed format.
Street Suffix	10	Input address street suffix (for example, RD, ST, CIR, etc.). This field is used when identifying input address information that is in a parsed format. EXAMPLE In the street address "142 S Main RD," "RD" (road) is the street suffix.
Surname - Primary	20	Surname for the name listed first in the record. This field is used when identifying input name information that is in a parsed format. EXAMPLE You have the following record in your input file: John Smith Kristen Frank 123 Main St. Oak Park, IL 60302 For this record, the field Surname - Primary would contain "Smith" because "John Smith" is the name listed first in the record.

Field Name	Length	Description
Surname - Secondary	20	Surname for the name listed second in the record. This field is used when identifying input name information that is in a parsed format. EXAMPLE You have the following record in your input file: John Smith Kristen Frank 123 Main St. Oak Park, IL 60302 For this record, the field Surname - Secondary would contain "Frank" because "Kristen Frank" is the name listed second in the record.
Unit Designator - Primary	10	Primary unit designator for the first unit listed in the record. Examples of a unit designator would be APT (apartment), STE (suite) UNIT, etc. This field is used when identifying input address information that is in a parsed format. EXAMPLE You have the following record in your input file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Designator - Primary would contain "Apt" because "Apt" is the first unit designator in the record.
Unit Designator - Secondary	10	Secondary unit designator for the second unit listed in the record. Examples of a unit designator include APT (apartment), STE (suite), UNIT, etc. This field is used when identifying input address information that is in a parsed format. EXAMPLE You have the following record in your input file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Designator - Secondary would contain "Floor" because "Floor" is the second unit designator in the record.
Unit Number - Primary	10	Unit designator number for the first unit listed in the record. Examples of a unit number are an apartment number or suite number. This field is used when identifying input name information that is in a parsed format. EXAMPLE You have the following record in your input file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Number - Primary would contain "2" because "Apt 2" is the first unit designation in the record.

Field Name	Length	Description
Unit Number - Secondary	10	Unit designator number for the first unit listed in the record. Examples of a unit number include an apartment number or suite number. This field is used when identifying input name information that is in a parsed format. EXAMPLE You have the following record in your input file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Number - Secondary would contain "14" because "Floor 14" is the second unit designation in the record.
URB Information	28	Location of the input urbanization information. This field is used when identifying input address information that is in a parsed format.
ZIP + 4 Code	4	Location of the input ZIP + 4 code. This is a four-digit number that represents the last four numbers of the nine-digit ZIP + 4 code. This field is used when identifying input address information that is in a parsed format.
ZIP + 4 Footnote	2	Location of the ZIP + 4 footnote code generated during CASS processing. This field is required when External CASS processing is used. This field is not available when using Internal CASS processing.
ZIP Code	5	Location of the input ZIP Code.

Output Fields

VeriMove uses the field names described next to build output definitions. These descriptions include field name, field description, and the maximum character length for each field. VeriMove allows your input and output files to be in whatever layout you want as long as you define the position of each field.

Table 2: VeriMove Output Fields

Field Name	Length	Description
ANK[Link] Return Code	2	This is the ANK[Link] Return Code code encountered while processing the input record. For more information, see "Return Codes and Footnotes".
Auto-Carrier Route	1	Auto-carrier route information in the output file location specified by this field.

Field Name	Length	Description
Box Number Primary	10	Box number for the standardized output address. The box number is used with P.O. box, rural route (RR), or highway contract (HC) address types. This field uses a parsed address format. EXAMPLE In the address "RR3 BOX 4," the number "4" represents the box number.
Box Number Secondary	10	Second box number for the standardized output address. The box number is used with P.O. box, rural route (RR) or highway contract (HC) address types. This field uses a parsed address format. EXAMPLE In the address "RR3 BOX 4," the number "4" represents the box number.
Business Name Match Percent	3	The highest percentage of match reached for a record during Business Name Matching. To achieve a Business Name Match, a record must match at or above 65%. For example, the value 70% indicates that 70% of the Business Name in the input record matched to the NCOA[Link] database and a Business Name Match was made. In another example, the value 35% indicates that only 35% of the Business Name in the input record matched to the NCOA[Link] database and a Business Name Match was not made because the minimum 65% Business Name Match percentage was not achieved.
Carrier Route Code	4	Carrier route code for the standardized output address. This four-character code identifies the mail carrier for the delivery address.
CASS - AbbrCity Name	30	CASS processing results for abbreviated city name. This output field is only available with Internal CASS processing.
CASS - Advanced Barcode	14	CASS processing results for the returned 14-digit barcode consists of the beginning frame character, ZIP Code, ZIP + 4, delivery point, check digit, and end framing character. This output field is only available with Internal CASS processing.
CASS - Alternate Street	30	CASS processing results for the returned alternate street name field. This output field is only available with Internal CASS processing.

Field Name	Length	Description
CASS - Alternate Street Type	1	CASS processing results for Alternate Street Type. This output field is only available with Internal CASS processing.
		B Base street
		A Alias (other)
		D Alternate street
		P Preferred alias
		X Abbreviated alias
CASS - Congressional District	2	CASS processing results for Congressional District. This output field is only available with Internal CASS processing.
CASS - County Name	30	CASS processing results for County Name. This output field is only available with Internal CASS processing.
CASS - Default Match Level	1	CASS processing results for Default Match Level. This output field is only available with Internal CASS processing.
		Y Carrier route, or ZIP + 4, or DPBC default values returned
		Blank No default values returned
CASS - Delivery Point	3	CASS processing results for delivery point barcode field. This output field is only available with Internal CASS processing.

Field Name	Length	Description
CASS - DPV Flags	3	CASS processing results for DPV Flags. This output field is only available with Internal CASS processing.

Byte 1 (DPV)

N	Not a valid delivery point. The USPS cannot deliver mail to this address.
	• Y - Delivery point validated. Primary range and secondary range (when present) are valid. The USPS can deliver mail to this address.
S	Valid primary range. Secondary range is present but is not confirmed. The USPS can deliver mail to this address.
D	Valid primary range. Secondary range is missing. The USPS can deliver mail to this address.
	• Byte 2 (CMRA)
Y	The address is a valid Commercial Mail Receiving Agent (CMRA).
N	The address is a confirmed delivery point but is not a valid CMRA.
Blank	This field is blank if the address is not a confirmed delivery point.
	• Byte 3 (False Positive Flag)
Y	The address is not a confirmed delivery point and a positive response is received from the False Positive File
N	The address is not a confirmed delivery point and a negative response is received from the False Positive File. This field is blank if the address is a confirmed delivery point.
Blank	The False/Positive Table was not queried

Field Name	Length	Description
CASS - DPV Footnote	19	CASS processing results for DPV Footnote. This field defines the standard footnote codes returned during Delivery Point Validation (DPV) Option processing. Finalist returns up to six two-byte footnote codes for each address. This output field is only available with Internal CASS processing.

A1	Input address did not match to the ZIP + 4 File
AA	Input address matched to the ZIP + 4 File
BB	Input address matched to DPV (all components)
CC	Input address primary number matched to DPV but secondary number did not match (present but invalid).
F1	Input address matched to a military ZIP Code
G1	Input address matched to a General Delivery address
N1	Input address primary number matched to DPV but address is missing secondary number
M1	Input address primary number missing
M3	Input address primary number is invalid
P1	Input address missing PO, RR, or HC Box number
P3	Input address PO, RR, or HC box number invalid
PB	Input address is a P.O. Box Street Address (PBSA)
R1	Input address matched to CMRA but secondary number is not present
R7	Input address is a Carrier Route R777
RR	Input address matched to CMRA
U1	Input address matched to a unique ZIP Code

Field Name	Length	Description
CASS - DPV No Stat Flag	1	CASS processing results for DPV No Stat Table Flag. This output field is only available with Internal CASS processing.

Y	Found in the DPV No-Stat Table
N	Not found in the DPV No-Stat Table

Field Name	Length	Description
CASS - DPV Vacant Flag	1	CASS processing results for DPV Vacant Table Flag. This output field is only available with Internal CASS processing.

Y	Found in the DPV Vacant Table
N	Not found in the DPV Vacant Table

Field Name	Length	Description
CASS - FIPS Code	5	CASS processing results for the FIPS Code. Positions 1 and 2 contain the state code. Positions 3 through 5 contain the county code. This output field is only available with Internal CASS processing.

Field Name	Length	Description
CASS - Five Digit Barcode	8	CASS processing results for the Five Digit Barcode consisting of a frame character, ZIP Code, check digit, and a frame character. This output field is only available with Internal CASS processing.
CASS - Five Digit Scheme	5	CASS processing results for the Five Digit Scheme (returned 5-digit combined ZIP Code). This output field is only available with Internal CASS processing.
CASS - Full City Name	30	CASS processing results for the Full City Name. This output field is only available with Internal CASS processing.
CASS - LACS Match Flag	1	CASS processing results for LACS^{Link} Match Flag. This output field is only available with Internal CASS processing.

L   Eligible for LACS^{Link} processing

Blank   No LACS^{Link}

Field Name	Length	Description
CASS - LACS Return Code	2	CASS processing results for the LACS^{Link} Return Code. This output field is only available with Internal CASS processing.

A   LACS^{Link} processing successful. Record matched through LACS^{Link} processing.

00   LACS^{Link} processing failed. No matching record found during LACSLink processing.

09   LACS^{Link} processing matched the input address to an older highrise default address. The address has been converted. However, rather than provide an imprecise address, LACSLink processing does not provide a new address.

14   LACS^{Link} processing failed. Match found during LACS^{Link} processing but conversion did not occur due to other USPS regulations.

92   LACS^{Link} processing successful. Record matched through LACS^{Link} processing. Unit number dropped on input.

Field Name	Length	Description
CASS - LOT Code	5	CASS processing results for Line of Travel (LOT) code field. Used for output information only. If LOT unavailable, the default value is 0000D. This output field is only available with Internal CASS processing.

Field Name	Length	Description
CASS - Match Level	1	CASS processing results for Match Level flag. This output field is only available with Internal CASS processing.
		F Firm record match
		G General delivery match
		H Highrise match
		P PO box match
		R Rural route/highway contract match
		S Street level match
CASS - PMB Unit info	15	CASS processing results for the PMB Unit. This output field is only available with Internal CASS processing.
CASS - Returned Error Code	4	CASS processing results for the Returned Error Code. This output field is only available with Internal CASS processing.
CASS - Seasonal Flag	12	CASS processing results for Seasonal Flag. The seasonal delivery indicator beginning with January. This output field is only available with Internal CASS processing.
		Y Deliver mail in this month
		N Do not deliver mail in this month
CASS - Street Type	1	CASS processing results for the Street Type. This output field is only available with Internal CASS processing.
		B Base
		X Abbreviated
		P Preferred
		A Other alias
		D Alternate at Delivery
CASS - SuiteLink Return Code	2	CASS processing results for Suite[Link] Return Code. This output field is only available with Internal CASS processing.
		A Successful Suite[Link] match
		00 Failed Suite[Link] match
CASS - ZIP + 4 Sent to DPV	4	CASS processing results for the ZIP + 4 used by DPV. This output field is only available with Internal CASS processing.

Field Name	Length	Description
CASS - ZIPMOVE Indicator	1	CASS ZIPMOVE indicator. The ZIPMOVE indicator specifies whether a CASS match was determined using a ZIPMOVE record. This output field is only available with Internal CASS processing.
		No CASS match was not determined using a ZIPMOVE record.
		Yes CASS match determined using a ZIPMOVE record.
City Name	28	City name for the standardized output address in the output file location specified by this field.
City, State, ZIP, ZIP + 4 Line	70	Last line of the output record (city, state, ZIP code, and ZIP + 4 code). Use this field to return address information in a non-parsed label line format.
County Code	5	County code for the standardized output address in the output file location specified by this field. The drop down field definition box on the Output Definition tab describes the county code as the Federal Information Processing Standard (FIPS) Code that is comprised of the 2-digit state code followed by the 3-digit county code.

Field Name	Length	Description
Data Transfer Field 1—5	200	These fields are used to transfer information directly from the input record to the output record. Each field can be from 1 to 200 positions in length. If you define an input field (for example, Data Transfer Field 1) you MUST define a corresponding output field (for example, Data Transfer Field 1).
		EXAMPLE
		Here is a sample of the job def XML input section:
		<Field>
		<FieldType>Data Transfer Field 1</FieldType>
		<Start>235</Start>
		<Length>10</Length>
		</Field>
		<Field>
		<FieldType>Data Transfer Field 2</FieldType>
		<Start>245</Start>
		<Length>8</Length>
		</Field>
		<Field>
		<FieldType>Data Transfer Field 3</FieldType>
		<Start>253</Start>
		<Length>6</Length>
		</Field>
		<Field>
		<FieldType>Data Transfer Field 4</FieldType>
		<Start>259</Start>
		<Length>12</Length>
		</Field>
		<Field>
		<FieldType>Data Transfer Field 5</FieldType>
		<Start>271</Start>
		<Length>11</Length>
		</Field>
Delivery Point	2	Delivery point code for the standardized output address.
Delivery Point Barcode	12	Output delivery point barcode consisting of a ZIP + 4, delivery point code, and check digit.

Field Name	Length	Description
Firm Name Line	70	Company name. Use this field to return the original firm name information in a non-parsed label line format.
First Name Primary	20	First name for the name listed first in the record. You can enter up to two individual first names. EXAMPLE You have the following record in your output file: Dr. John A. Smith Mrs. Kristen K. Smith, CPA 123 Main St. Oak Park, IL 60302 For this record, the field First Name Primary would contain "John" because "Dr. John A. Smith" is the name listed first in the record.
First Name Secondary	20	First name for the name listed second in the record. You can enter up to two individual first names. EXAMPLE You have the following record in your output file: Dr. John A. Smith Mrs. Kristen K. Smith, CPA 123 Main St. Oak Park, IL 60302 For this record, the field First Name Secondary would contain "Kristen" because "Mrs. Kristen K. Smith" is the name listed first in the record.
First Name Suffix - Primary	10	First suffix for the name listed first in the record. You can specify up to two suffixes. Use the field First Name Suffix Secondary to specify another suffix for the first name listed in the record. Examples of name suffixes include genetic types (for example, Jr., Sr., I, II, etc.) or professional types (for example, ATTY, MD, DO, CPA, etc.). EXAMPLE You have the following record in your output file: John A. Smith II MD Kristen K. Smith CPA JD 123 Main St. Oak Park, IL 60302 For this record, the field First Name Suffix - Primary would contain "II" because "John A. Smith II MD" is the name listed first in the record and "II" is the first suffix in the name.

Field Name	Length	Description
First Name Suffix Secondary	10	Second suffix for the name listed first in the record. Examples of name suffixes include a genetic type (for example, Jr., Sr., I, II, etc.) or a professional type (for example, ATTY, MD, DO, CPA, etc.).
		EXAMPLE
		You have the following record in your output file:
		John A. Smith II MD Kristen K. Smith CPA JD 123 Main St. Oak Park, IL 60302
		For this record, the field First Name Suffix Secondary would contain "MD" because "John A. Smith II MD" is the name listed first in the record and "MD" is the second suffix in the name.
First Name Title - Primary	10	First title for the name listed first in the record. Up to two titles can be identified. To identify the location for a second title, use the field First Name Title Secondary. Examples of name titles would include gender-specific titles (for example, Mr., Mrs., Miss) or professional titles (for example, Dr., Major). This field is used when identifying input name information that is in a parsed format.
		EXAMPLE
		You have the following record in your output file:
		Rev. Dr. John A. Smith II Mrs. Kristen K. Smith CPA 123 Main St. Oak Park, IL 60302
		For this record, the field First Name Title - Primary would contain "Rev." because "Rev. Dr. John A. Smith II" is the name listed first in the record and "Rev." is the first title in the name.
First Name Title Secondary	10	Second title for the name listed first in the record. Examples of name titles include gender-specific titles (for example, Mr., Mrs., Miss) or professional titles (for example, Dr., Major). This field is used when identifying input name information that is in a parsed format.
		EXAMPLE
		You have the following record in your output file:
		Rev. Dr. John A. Smith II Mrs. Kristen K. Smith CPA 123 Main St. Oak Park, IL 60302
		For this record, the field First Name Title Secondary would contain "Dr." because "Rev. Dr. John A. Smith II" is the name listed first in the record and "Dr." is the second title in the name.
Forwarding Address Post-Directional	10	Post-directional for the forwarding address (for example, North, South, East, West, etc.). Use this field when a parsed address format is needed for the new forwarding address.
		EXAMPLE
		In the address "142 Main St North," "North" is the post-directional.

Field Name	Length	Description
Forwarding Address Pre-Directional	10	Pre-directional for the forwarding address (for example, N, S, E, W, etc.). Use this field when a parsed address format is needed for the new forwarding address. EXAMPLE In the address "142 S Main St," "S" is the pre-directional.
Forwarding Carrier Route Code	4	Postal carrier route code associated with the forwarding address. This four-character code identifies the mail carrier for the new delivery address.
Forwarding City Name	28	City name associated with the forwarding address. Use this field when a parsed address format is needed for the forwarding address.
Forwarding City, State, ZIP, ZIP + 4 Line	70	Last line information (city, state, ZIP code, and ZIP + 4) for the forwarding address. Use this field to return address information in a non-parsed label line format.
Forwarding Delivery Point Barcode	12	Twelve-digit postal barcode associated with the forwarding address. This barcode includes the ZIP + 4 code, delivery point and check digit.
Forwarding Effective Date	6	Effective date of the forwarding address. This date is in a YYYYMM format where "YYYY" identifies the year and "MM" identifies the month. EXAMPLE If the forwarding address took effect in January 2010, the Forwarding Effective Date would be 201001.
Forwarding House Number	10	House number for the forwarding address. Use this field when a parsed address format is needed for the new forwarding address.
Forwarding Indicator	1	Forwarding indicator: **Y** Yes. The name/address pair contains a change of address. **N** No. The name/address pair does not contain a change of address.
Forwarding Postal Delivery Point	2	Two-digit delivery point associated with the forwarding address. The delivery point is a component used in a delivery point barcode and contains the last two digits of the house number. This field uses a parsed address format for the new forwarding address.
Forwarding State Abbreviation	2	Two-character state abbreviation associated with the forwarding address (for example, AL, IL, etc.). This field uses a parsed address format for the forwarding address.

Field Name	Length	Description
Forwarding Street Address Line	70	Alternate street address line for the forwarding address. This field returns address information in a non-parsed label line format.
		Note: The Forwarding Street Address Line field does not contain Secondary Address information if either of the following conditions exist:
		• The Forwarding Street Address Line - Secondary field is defined.
		• The Forwarding Street Address Line - Secondary Overflow field is defined AND Secondary Address information cannot fit in the space allocated for the Forwarding Street Address Line field.
Forwarding Street Address Line - Secondary	70	Forwarding secondary address information for the forwarding address. When defined (along with the Forwarding Street Address Line), the forwarding secondary address information is placed in this field instead of the Forwarding Street Address Line. If you do not define either the Forwarding Street Address Line - Secondary field or the Forwarding Street Address Line - Secondary Overflow field, the secondary address information is placed in the Forwarding Street Address Line.
		The Forwarding Street Address Line - Secondary output field and the Forwarding Street Address Line - Secondary Overflow output field are mutually exclusive. You can only define one of these fields for your output definition. If you define both, VeriMove generates an error message.
		This field returns forwarding address secondary information in a non-parsed label line format. The USPS recommends a minimum length of 25 for this field.
Forwarding Street Address Line - Secondary Overflow	70	Forwarding secondary address information for the forwarding address. When defined (along with the Forwarding Street Address Line), the forwarding secondary address information only prints in this field if the Forwarding Street Address Line is not long enough to hold the forwarding address secondary information and truncation would occur. If the entire address can fit in the Forwarding Street Address field, this field is blank. If you do not define either the Forwarding Street Address Line - Secondary field or the Forwarding Street Address Line - Secondary Overflow field, the secondary address information is placed in the Forwarding Street Address Line.
		The Forwarding Street Address Line - Secondary output field and the Forwarding Street Address Line - Secondary Overflow output field are mutually exclusive. You can only define one of these fields for your output definition. If you define both, VeriMove generates an error message.
		This field returns forwarding address secondary information in a non-parsed label line format. The USPS recommends a minimum length of 25 for this field.

Field Name	Length	Description
Forwarding Street Name	28	Street name of the forwarding address. This field uses a parsed address format for the forwarding address.
Forwarding Street Suffix	10	Street suffix for the forwarding address (for example, RD, ST, CIR, TER, etc.). This field uses a parsed address format for the forwarding address. EXAMPLE In the address "142 S Main RD," "RD" (road) is the street suffix.
Forwarding Type Code	1	Forwarding type code which identifies the level at which the input address was matched to a forwarding address. If the field is blank, no move has been identified. **I** The input address was matched to a forwarding address on the individual level. This means that the entire name in the input record matched the entire name on the forwarding address. **F** The input address was matched to a forwarding address on the family level. This means that only the last name in the input record matched the last name in the forwarding address. **B** The input address was matched to a forwarding address using a business (firm) name.
Forwarding Unit Designator	10	Unit designator for the forwarding address. This field uses a parsed address format for the forwarding address. EXAMPLE Examples of unit designators include APT (apartment), STE (suite), and UNIT.
Forwarding Unit Number	10	Unit number for the forwarding address. This field uses a parsed address format for the forwarding address. EXAMPLE Unit numbers include apartment number, suite number, etc.
Forwarding ZIP + 4 Code	4	Last four numbers of the nine-digit ZIP + 4 code for the forwarding address. This field uses a parsed address format for the forwarding address.
Forwarding ZIP Code	5	Five-digit ZIP code associated with the forwarding address. This field uses a parsed address format for the forwarding address.
General Return Code	1	Indicates if the address CASS coded and matched. **0** Address CASS coded and matched. **1** Address either did not CASS code or did not match.

Field Name	Length	Description
House Number - Primary	10	Primary house number. This field uses a parsed address format.
House Number - Secondary	10	Secondary house. This field uses a parsed address format.
Hyphenated Surname - Primary	20	Hyphenated surname for the name listed first in the record. This field uses a parsed address format. EXAMPLE You have the following record in your output file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Hyphenated Surname - Primary would contain "Polk-Dietrich" because "Dr. Sarah A. Polk-Dietrich" is the name listed first in the record.
Hyphenated Surname - Secondary	20	Hyphenated surname for the name listed second in the record. This field uses a parsed address format. EXAMPLE You have the following record in your output file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Hyphenated Surname - Secondary would contain "Smith-Jackson" because "Dr. Sarah A. Polk-Dietrich" is the name listed second in the record.

Field Name	Length	Description
Input Unit Location	2	This field contains a two-byte ASCII representation of the binary value for the input unit location. The input unit location indicates the source of the data that the CASS engine used to create the unit information.
		1 Unit information created from data in Address Line 1
		2 Unit information created from data in Address Line 2
		3 Unit information created from data in Address Line 1 and Line 2
		4 Unit information created from data in Unit 1 Field
		5 Unit information created from data in Unit 2 Field
		6 Unit information created from data in Unit 1 and Unit 2 Fields
		7 Unit information created from data in Address Line 1 and the Unit 1 Field
		8 Unit information created from data in Address Line 1 and the Unit 2 Field
		9 Unit information created from data in Address Line 2 and the Unit 1 Field
		10 Unit information created from data in Address Line 2 and the Unit 2 Field
		11 Unknown
Input Address Location	2	This field contains a two-byte ASCII representation of the binary value for the input address location. The input address location indicates the source of the data that the CASS engine used to create the address line.
		1 Address line created from data in Address Line 1
		2 Address line created from data in Address Line 2
		3 Address line created from data in Address Line 1 and Line 2
		9 All lines used - address not coded
LACS^{Link} Footnote	2	LACS^{Link} Footnote code generated during CASS processing of the input record. This field is generated during Internal CASS processing. Optionally, if you are using External CASS processing, you can add this field to your output definition.
Line of Travel (LOT)	5	The Line of Travel (LOT) output field cannot be populated for new addresses. If you have previously defined a Line of Travel (LOT) output field, that field will always be blank.
		Note: In previous releases, VeriMove placed the output Line of Travel (LOT) information in the Output File location specified by the Line of Travel (LOT) field. The information included the LOT code and indicator. This output field option will be removed in a future VeriMove release. If you are currently using this output field, you should plan to remove this field in the near future.

Field Name	Length	Description
Match Indicator	1	Match indicator. **M** Match. Change of address found. **N** No match. No change of address found.
Middle Name - Primary	20	Middle name for the name listed first in the record. EXAMPLE You have the following record in your output file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Middle Name - Primary would contain "A." because "Dr. Sarah A. Polk-Dietrich" is the name listed first in the record.
Middle Name - Secondary	20	Middle name for the name listed second in the record. EXAMPLE You have the following record in your output file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Middle Name - Secondary would contain "K." because "Dr. Kristen K. Smith-Jackson" is the name listed second in the record.
NCOA Audit 48 Byte Object EMDP Component	16	Final 48-byte Object EMDP Component used during processing through NCOA^{Link}. The data for this field is in hexadecimal. This field should contain the same value as the Audit EMDP field. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit 48 Byte Object Name Component	40	Final 48-byte Object Name Component used during processing through NCOA^{Link}. The data for this field is in hexadecimal. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit 48 Byte Object SHA	40	Final 48 byte Object SHA used during processing through NCOA^{Link}. The data for this field is in hexadecimal. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit Data Retrieved	16	Final Data Retrieved obtained during processing through NCOA^{Link}. This data is used to calculate other audit data. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit Drop Flag	1	Final Drop Flag encountered during processing through NCOA^{Link}. This indicates whether or not a match was obtained by dropping part of the address. This output field is needed for USPS audits and should not be used for any other purpose. The footnote codes should be used instead.

Field Name	Length	Description
NCOA Audit Drop N Flag	1	Final Drop N Flag encountered during processing through NCOA[Link]. This indicates whether or not part of the name was dropped to obtain a match. This output field is needed for USPS audits and should not be used for any other purpose. The footnote codes should be used instead.
NCOA Audit EMDP	16	Final EMDP used during processing through NCOA[Link]. The data for this field is in hexadecimal. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit EMDP SHA	40	Final EMDP SHA value used during processing through NCOA[Link]. The data for this field is in hexadecimal. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit Gender	1	Final Gender indicated on the final USPS COA record during processing through NCOA[Link]. This output field is needed for USPS audits and should not be used for any other purpose. The footnote codes should be used instead.
NCOA Audit Hint Byte	8	Final Hint Byte encountered during processing through NCOA[Link]. This output field is needed for USPS audits and should not be used for any other purpose. The footnote codes should be used instead.
NCOA Audit Middle Name	2	First two characters of the final Middle Name encountered in the USPS COA record during processing through NCOA[Link]. This output field is needed for USPS audits and should not be used for any other purpose. The footnote codes should be used instead.
NCOA Audit Query Address	125	CASS coded address used to obtain the final NCOA[Link] results. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit Query Name	62	Name information used to obtain the final NCOA[Link] results. It will either contain the entire business name or individual name. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit Result Value	17	Final 17-digit result value obtained during processing through NCOA[Link]. This data is used to calculate other audit data. This output field is needed for USPS audits and should not be used for any other purpose.
NCOA Audit ZIP + 4 Addon	4	Final ZIP + 4 Addon used during the processing through NCOA[Link]. The ZIP + 4 addon is the ZIP + 4 used to obtain the match; it may not be the actual ZIP + 4 of the forwarding address. This output field is needed for USPS audits and should not be used for any other purpose.

Field Name	Length	Description	
NCOA DPV Footnote	2	Final DPV footnote code encountered while processing the input record.	
		AA	Input address matched to the ZIP + 4 File (includes nondeliverable matches).
		A1	Input address not matched to the ZIP + 4 File.
		BB	Input address matched to DPV (all components).
		CC	Input address primary number matched to DPV but secondary number not matched (present but invalid).
		N1	Input address primary number matched to DPV but high-rise address missing secondary number.
		M1	Input address primary number missing.
		M3	Input address primary number invalid.
		P1	Input address missing PO, RR, or HC box number.
		P3	Input address PO, RR, or HC box number is invalid.
		RR	Input address matched to CMRA and PMB designator is present.
		R1	Input address matched to CMRA but PMB designator is not present.
NCOA Forwarding City Name Abbreviated	13	Abbreviated city name associated with the forwarding address. Use this field when you want to use a parsed address format for the forwarding address.	

Field Name	Length	Description
NCOA Forwarding Footnote	2	Final NCOA footnote code encountered while processing the input record in the Output File location specified by this field. Valid NCOA forwarding footnote values for this field are:

A COA Match: The input record matched to a business, individual or family type record. A new address could be furnished.

00 NO Match: The input record could not be matched. A new address could not be furnished.

01 Found COA: Foreign Move: The input record matched to a business, individual or family type record but the new address was outside the USPS delivery area.

02 Found COA: Moved Left No Address (MLNA): The input record matched to a business, individual or family type record and the new address was not provided to USPS.

03 Found COA: Box Closed No Order (BCNO): The input record matched to a business, individual or family type record which contains an old address of PO BOX that has been closed without a forwarding address provided.

04 Cannot match COA: Street Address with Secondary: In the STANDARD processing mode utilizing Family matching logic the input record matched to a family record type with an old address that contained secondary information which obtained a ZIP + 4 street level match. The input record does not contain secondary information.

05 Found COA: New 11-digit DPBC is Ambiguous: The input record matched to a business, individual or family type record. The new address could not be converted to a deliverable address because the DPBC represents more than one delivery point.

06 Cannot Match COA: Conflicting Directions: Middle Name Related: There is more than one COA (individual or family type) 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.

07 Cannot Match COA: Conflicting Directions: Gender Related: There is more than one COA (individual or family type) 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.

08 Cannot Match COA: Other Conflicting Instructions: The input record matched to two business, individual or family type records. The two records were compared and due to differences in the new addresses, a match could not be made.

09 Cannot Match COA: High-rise Default: The input record matched to a family record from a high-rise address that was 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.

Field Name	Length	Description
	10	Cannot Match COA: Rural Default: The input record matched to a family 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.
	11	Cannot Match COA: Individual Match: Insufficient COA Name for Match: There is an individual or family type record with the same surname and address but there is insufficient name information in the NCOA^{Link} record to produce a match using individual matching logic.
	12	Cannot Match COA: Middle Name Test Failed: The input record matched to an individual or family record with the same address and surname. However, a match cannot be made because the input name conflicts with the middle name or initials in NCOA^{Link}. This return code is only obtained when using individual matching logic.
	13	Cannot Match COA: Gender Test Failed: The input record matched to an individual or family type record. A match cannot be made because the gender of the name on the input record conflicts with the gender of the name in NCOA^{Link}.
	14	Found COA: New Address Would Not Convert at Run Time: The input record matched to a business, individual or family type record. The new address could not be converted to a deliverable address.
	15	Cannot Match COA: Individual Name Insufficient: The input record matched an NCOA^{Link} record with the same address and surname. A match cannot be made because the input record does not contain a first name or contains initials only.
	16	Cannot Match COA: Secondary Number Discrepancy: The input record matched to a street level individual or family record. However, a match is prohibited based on one of the following reasons: 1) There is conflicting secondary information on the input and master file 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.
	17	Cannot Match COA: Other Insufficient Name: The input record matched to an individual or family record. The input name is different or not sufficient enough to produce a match.
	18	Cannot Match COA: General Delivery: The input record matched to a family record from a General Delivery address. This address situation requires individual name matching logic to obtain a match and individual names do not match.
	19	Found COA: New Address not ZIP + 4 coded: There is a change of address on file but the new address cannot be ZIP + 4 coded and therefore there is no 11-digit delivery point bar code to store or return.

Field Name	Length	Description
	20	Cannot Match COA: Conflicting Directions after re-chaining: Multiple NCOA[Link] records were potential matches for the input record. The NCOA[Link] records contained different new addresses and a single match result could not be determined.
	66	Daily Delete: The input record matched to a business, individual or family type 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 NCOA[Link] and no mail may be forwarded from this address. • 77 — ANK[Link] Primary Return Code: Indicates that the input matched to an ANK[Link] record with a move effective date between 19 and 48 months old. Never provides a new address.
	91	COA Match: Secondary Number dropped from COA: The input record matched to an NCOA[Link] record. The NCOA[Link] record had a secondary number and the input address did not. The record is a ZIP + 4 street level match.
	92	COA Match: Secondary Number Dropped from input address: The input record matched to an NCOA[Link] record, but the input address had a secondary number and the NCOA[Link] record did not. The record is a ZIP + 4 street level match. > **Note:** A blank footnote code is generated for input records that are missing an input name.
NCOA Forwarding Intermediate Footnotes	8	Last four NCOA[Link] footnote codes that were encountered before obtaining the final results.
Non-Conventional Address Name - Primary	20	Non-conventional address name that appears first in the record. Non-conventional address names include PO BOX, RR, or HC. EXAMPLE You have the following address in your output file. Joe Doe RR 1 Box 12 PMB 596 Herndon VA 22071-2716 For this record, the field Non-Conventional Address Name - Primary would contain "RR" because "RR" is the first non-conventional address name in the address.
Non-Conventional Address Name - Secondary	20	Non-conventional address name that appears second in the record. Non-conventional address names include PO BOX, RR, or HC.

Field Name	Length	Description
Non-Conventional Address Number - Primary	3	Non-conventional address number that appears first in the record. Non-conventional address numbers include rural route or highway contract addresses. This field uses a parsed address format. EXAMPLE You have the following address in your output file. Joe Smith RR 1 Box 12 PMB 596 Herndon VA 22071-2716 For this record, the field Non-Conventional Address Number - Primary would contain "1" because "1" is the first non-conventional address number in the address.
Non-Conventional Address Number - Secondary	3	Non-conventional address number that appears second in the record. Non-conventional address numbers include rural route or highway contract addresses. This field uses a parsed address format.
Personal Name Line - Primary	70	Personal name line that is listed first in the record. This field returns original name information in a non-parsed label line format. EXAMPLE You have the following record in your output file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Personal Name Line - Primary would contain "Dr. Sarah A. Polk-Dietrich" because that is the first name listed in the record.
Personal Name Line - Secondary	70	Personal name line that is listed second in the record. This field returns original name information in a non-parsed label line format. EXAMPLE You have the following record in your output file: Dr. Sarah A. Polk-Dietrich Dr. Kristen K. Smith-Jackson 123 Main St. Oak Park, IL 60302 For this record, the field Personal Name Line - Secondary would contain "Dr. Kristen K. Smith-Jackson" because that is the second name listed in the record.
Post-Directional - Primary	10	Primary post-directional. This field uses a parsed address format. EXAMPLE In the street address "142 Main St North," "North" is the post-directional.

Field Name	Length	Description
Post-Directional - Secondary	10	Secondary post-directional. This field uses a parsed address format. EXAMPLE In the street address "142 Main St North," "North" is the post-directional.
Pre-Directional - Primary	10	Primary pre-directional. This field uses a parsed address format. EXAMPLE In the street address "142 S Main St," "S" is the pre-directional.
Pre-Directional - Secondary	10	Secondary pre-directional. This field uses a parsed address format. EXAMPLE In the street address "142 S Main St," the S would be the pre-directional.
Private Mail Box / Mail Stop Designator	10	Private Mail Box/Mail Stop Designator. Examples of a private mail box/mail stop designator would be PMB (Private Mail Box), MSC (Mail Stop Code), etc. This field uses a parsed address format. EXAMPLE You have the following address in your output file. Joe Doe RR 1 Box 12 PMB 596 Herndon VA 22071-2716 For this record, the field Private Mail Box/Mail Stop Designator would contain "PMB".
Private Mail Box / Mail Stop Code	10	Private Mail Box (PMB)/ Mail Stop Code (MSC). This field uses a parsed address format. EXAMPLE You have the following address in your output file. Joe Doe RR 1 Box 12 PMB 596 Herndon VA 22071-2716 For this record, the field Private Mail Box/Mail Stop Code would contain "596".
Second Name Suffix - Primary	10	First suffix for the first name listed second. Examples of name suffixes include genetic types (for example, Jr., Sr., I, II, etc.) or professional types (for example, ATTY, MD, DO, CPA, etc.). EXAMPLE You have the following record in your output file: John Smith II MD Kristen Smith CPA JD 123 Main St. Oak Park, IL 60302 For this record, the field Second Name Suffix - Primary would contain "CPA" because "Kristen Smith CPA JD" is the name listed second in the record and "CPA" is the first suffix in the name.

Field Name	Length	Description
Second Name Suffix - Secondary	10	Second suffix for the name listed second in the record. Examples of name suffixes include genetic types (for example, Jr., Sr., I, II, etc.) or professional types (for example, ATTY, MD, DO, CPA, etc.). EXAMPLE You have the following record in your output file: John Smith II MD Kristen Smith CPA JD 123 Main St. Oak Park, IL 60302 For this record, the field Second Name Suffix - Secondary would contain "JD" because "Kristen Smith CPA JD" is the name listed second in the record and "JD" is the second suffix in the name.
Second Name Title - Primary	10	First title for the name listed second in the record. Up to two name titles can be identified. Examples of name titles include gender-specific titles (for example, Mr., Mrs., Miss) or professional titles (for example, Dr., Major). This field uses a parsed address format. EXAMPLE You have the following record in your output file: Lt. Gen. John Smith II Rev. Dr. Kristen Smith 123 Main St. Oak Park, IL 60302 For this record, the field Second Name Title - Primary would contain "Rev." because "Rev. Dr. Kristen Smith" is the name listed second in the record and "Rev." is the first title in the name.
Second Name Title - Secondary	10	Second title for the name listed second in the record. Up to two name titles can be identified. Examples of name titles include gender-specific titles (for example, Mr., Mrs., Miss) or professional titles (for example, Dr., Major). This field uses a parsed address format. EXAMPLE You have the following record in your output file: Lt. Gen. John Smith II Rev. Dr. Kristen Smith 123 Main St. Oak Park, IL 60302 For this record, the field Second Name Title - Secondary would contain "Dr." because "Rev. Dr. Kristen Smith" is the name listed second in the record and "Dr." is the second title in the name.
State Abbreviation	2	Two-character state abbreviation for the output standardized address. This field uses a parsed address format.

Field Name	Length	Description
Street Address Line - Primary	70	Primary street address line. This field returns address information in a non-parsed label line format. The USPS recommends this field have a minimum length of 25. **Note:** The Street Address Line - Primary field does not contain Secondary Address information if either of the following conditions exist: • The Street Address Line - Secondary field is defined. • The Street Address Line - Secondary Overflow field is defined AND Secondary Address information cannot fit in the space allocated for the Street Address Line - Primary field.
Street Address Line - Secondary	70	Secondary street address line information for the street address line. When defined (along with the Street Address Line - Primary), the secondary address information always prints in this field instead of the Street Address Line - Primary field. If you do not define either the Street Address Line - Secondary field or the Street Address Line - Secondary Overflow field, the secondary address information is placed in the Street Address Line - Primary. The Street Address Line - Secondary output field and the Street Address Line - Secondary Overflow output field are mutually exclusive. You can only define one of these fields for your output definition. If you define both, VeriMove generates an error message. This field returns the address secondary information in a non-parsed label line format. The USPS recommends a minimum length of 25 for this field.
Street Address Line - Secondary Overflow	70	Secondary street address information for the street address line. When defined (along with the Street Address Line - Primary), the secondary address information only prints in this field if the Street Address Line - Primary is not long enough to hold the entire street address line and truncation would occur. If you do not define either the Street Address Line - Secondary field or the Street Address Line - Secondary Overflow field, the secondary address information is placed in the Street Address Line - Primary. The Street Address Line - Secondary output field and the Street Address Line - Secondary Overflow output field are mutually exclusive. You can only define one of these fields for your output definition. If you define both, VeriMove generates an error message. This field returns address secondary information in a non-parsed label line format. If the entire address can fit in the Street Address Line - Primary field, this field is blank. The USPS recommends a minimum length of 25 for this field.
Street Address Name - Primary	28	Primary street address name. This field uses a parsed address format.

Field Name	Length	Description
Street Address Name - Secondary	28	Secondary street address name. This field uses a parsed address format.
Street Suffix - Primary	10	Primary street suffix. This field uses a parsed address format. EXAMPLE Examples of street suffixes include RD, ST, CIR, and TER.
Street Suffix - Secondary	10	Secondary street suffix. This field uses a parsed address format. EXAMPLE Examples of street suffixes include RD, ST, CIR, and TER.
Suite[Link] Footnote	2	Suite[Link] Footnote code generated during CASS processing of the input record. This field is generated during Internal CASS processing. Optionally, if you are using External CASS processing, you can add this field to your output definition. Valid values are:

Suite[Link] Footnote valid values:

A1	Exact Match. All words in the business name matched.
A2	Good Match. All but one word in the business name matched.
A3	Poor Match. At least one word in the business name matched.
B0	No match.
C0	The name does not contain words that can be used for matching.
D0	The ZIP + 4 provided was not a high rise default.
E0	The database has expired.

Field Name	Length	Description
Surname - Primary	20	Surname for the name listed first in the record. This field uses a parsed address format. EXAMPLE You have the following record in your output file: Lt. Gen. John Smith II Rev. Dr. Kristen Jones 123 Main St. Oak Park, IL 60302 For this record, the field Surname - Primary would contain "Smith" because "Lt. Gen. John Smith II" is the name listed first in the record.

Field Name	Length	Description
Surname - Secondary	20	Surname for the name listed second in the record. This field uses a parsed address format. EXAMPLE You have the following record in your output file: Lt. Gen. John Smith II Rev. Dr. Kristen Jones 123 Main St. Oak Park, IL 60302 For this record, the field Surname - Secondary would contain "Jones" because "Rev. Dr. Kristen Jones" is the name listed second in the record.
Unit Designator - Primary	10	Unit designator listed first in the record. Examples of unit designators include APT (apartment) and STE (suite). This field uses a parsed address format. EXAMPLE You have the following record in your output file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Designator - Primary would contain "Apt" because "Apt" is the first unit designator in the record.
Unit Designator - Secondary	10	Unit designator listed second in the record. Examples of unit designators include APT (apartment) and STE (suite). This field uses a parsed address format. EXAMPLE You have the following record in your output file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Designator - Secondary would contain "Floor" because "Floor" is the second unit designator in the record.
Unit Number - Primary	10	Unit number that appears first in the record. Examples of unit designator numbers include apartment number or suite number. This field uses a parsed address format. EXAMPLE You have the following record in your output file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Number - Primary would contain "2" because "2" is the first unit number in the record.

Field Name	Length	Description
Unit Number - Secondary	10	Unit number that is listed second in the record. Examples of unit designator numbers include apartment number or suite number. This field uses a parsed address format. EXAMPLE You have the following record in your output file: John Smith Apt 2 Floor 14 123 Main St. Oak Park, IL 60302 For this record, the field Unit Number - Secondary would contain "14" because "14" is the second unit number in the record.
URB Information	28	Urbanization information for the record. Urbanization denotes an area, sector, or development within a geographic area. This field uses a parsed address format. EXAMPLE You have the following record in your output file: Mr. John Smith URB Fair Oaks Ave Wilson Churchill 123 Rio Piedras PR 00926-0123 For this record, the field URB Information would contain "URB Fair Oaks".
ZIP + 4 Code	4	ZIP + 4 code. The ZIP + 4 code is the last four numbers of the nine-digit ZIP + 4. This field uses a parsed address format. EXAMPLE You have the following record in your output file: John Smith Apt 2 123 Main St. Oak Park, IL 60302-3243 For this record, the field ZIP + 4 Code would contain "3243".
ZIP + 4 Footnote	2	Final CASS footnote code encountered while processing the input record. **AA** Input address ZIP + 4 matched **A1** Input address ZIP + 4 not matched
ZIP Code	5	Five-digit ZIP Code. This field uses a parsed address format. EXAMPLE You have the following record in your output file: John Smith Apt 2 123 Main St. Oak Park, IL 60302-3243 For this record, the field ZIP Code would contain "60302".

2 - XML Tag Examples

In this section

Understanding VeriMove XML Tags

This chapter provides examples of typical VeriMove XML job definition tags. For more information on each field defined by these XML tags, see **Input and Output Fields** on page 3.

Defining NCOA/Link Customers, Operators, and BALAs

This section provides examples of the XML tags used to set up these NCOA^{Link} options:

- Operator IDs
- Broker/Agent/List Administrators
- Customers

Defining NCOA^{Link} Operators

The following XML tags define NCOA^{Link} operators.

```
<NCOAOperatorDef>
     <OperatorID>12 Alphanumeric Characters</OperatorID>
     <OperatorName>50 Alphanumeric Characters</OperatorName>
</NCOAOperatorDef>
```

Broker/Agent/List Administrators Screens and XML Tags

The following XML tags define Brokers/Agents/List Administrators (BALA).

```
<NCOABrokerAgentDef>
    <ID>6 Alphanumeric Characters</ID>
    <CompanyName>50 Alphanumeric Characters</CompanyName>
    <Address>50 Alphanumeric Characters</Address>
    <City>28 Alphanumeric Characters</City>
    <State>AL</State>
    <ZipCode>12345</ZipCode>
    <ZipPlus4>1234</ZipPlus4>
    <PhoneNumber>10 Numeric Characters</PhoneNumber>
    <NAICSSIC>6 Alphanumeric Characters</NAICSSIC>
    <DateSigned>MMDDYYYY</DateSigned>
```

```
        <Website>www.brokers.com</Website>
</NCOABrokerAgentDef>
<NCOAListAdminDef>
    <ID>6 Alphanumeric Characters</ID>
    <CompanyName>50 Alphanumeric Characters</CompanyName>
    <Address>50 Alphanumeric Characters</Address>
    <City>28 Alphanumeric Characters</City>
    <State>OK</State>
    <ZipCode>54321</ZipCode>
    <ZipPlus4>7777</ZipPlus4>
    <PhoneNumber>10 Numeric Characters</PhoneNumber>
    <NAICSSIC>6 Alphanumeric Characters</NAICSSIC>
    <DateSigned>MMDDYYYY</DateSigned>
    <Website>www.ListAdminInc.net</Website>
  </NCOAListAdminDef>
```

Defining Customer Information

The following XML tags define Customer information.

```
<NCOACustomerDef>
    <CustomerID>123456</CustomerID>
    <CompanyName>50 Alphanumeric Characters</CompanyName>
    <Type>I|M|R</Type>
    <Address>50 Alphanumeric Characters</Address>
    <City>28 Alphanumeric Characters</City>
    <State>IL</State>
    <ZipCode>60542</ZipCode>
    <PhoneNumber>10 Numeric Characters</PhoneNumber>
    <NAICSSIC>6 Numeric Characters</NAICSSIC>
    <Signer>50 Alphanumeric Characters</Signer>
    <Title>50 Alphanumeric Characters</Title>
    <DateSignerSigned>MMDDYYYY</DateSignerSigned>
    <ClassOfMail>A|B|D|C|E|F|G|H|I|J|K|L|M|N|O</ClassOfMail>
    <MailListName>sdg</MailListName>
    <MailingFrequency>01-52|99</MailingFrequency>
    <PreProcess>N|Y|D|P|B</PreProcess>
    <PostProcess>N|Y|D|P|B</PostProcess>
    <DateLicenseeSigned>MMDDYYYY</DateLicenseeSigned>
    <PAFID>6 Numeric Characters</PAFID>
    <HighMatchIndicator>N|A|S|R</HighMatchIndicator>
    <MailerID>123456</MailerID>
    <Email>ncoa@pb.com</Email>
    <Website>www.pb.com</Website>
    <AlternativePAF>A</AlternativePAF>
</NCOACustomerDef>
```

Defining External CASS Jobs

The section includes examples of XML tags that define a VeriMove job definition for External CASS processing.

External CASS Job Tags

```
<FTIDef>
    <NCOACustomerDef>
        <CustomerID>123456</CustomerID>
        <CompanyName>hklshg</CompanyName>
        <Type>M</Type>
        <Address>162 main</Address>
        <City>lisle</City>
        <State>IL</State>
        <ZipCode>60542</ZipCode>
        <PhoneNumber>5555555555</PhoneNumber>
        <TaxIDNumber>123456</TaxIDNumber>
        <NAICSSIC>123456</NAICSSIC>
        <Signer>sdf</Signer>
        <Title>sgsg</Title>
        <DateSignerSigned>06162009</DateSignerSigned>
        <ClassOfMail>F</ClassOfMail>
        <MailListName>sdg</MailListName>
        <MailingFrequency>99</MailingFrequency>
        <PreProcess>N</PreProcess>
      <PostProcess>N</PostProcess>
        <DateLicenseeSigned>03162009</DateLicenseeSigned>
        <PAFID>123456</PAFID>
        <HighMatchIndicator>N|A|S|R</HighMatchIndicator>
        <MailerID>123456</MailerID>
        <Email>ncoa@pb.com</Email>
        <Website>www.pb.com</Website>
        <AlternativePAF>A</AlternativePAF>
    </NCOACustomerDef>
    <NCOABrokerAgentDef>
        <ID>UUUUUU</ID>
        <CompanyName>DDDDDDDDD</CompanyName>
        <Address>DDDDDDDDDD</Address>
        <City>DDDDDDDDDD</City>
        <State>AL</State>
        <ZipCode>12345</ZipCode>
        <ZipPlus4>1234</ZipPlus4>
        <PhoneNumber>4444444444</PhoneNumber>
```

```
                <TaxIDNumber>444444444444</TaxIDNumber>
                <NAICSSIC>GGGGGG</NAICSSIC>
                <DateSigned>06162009</DateSigned>
                <Website>www.brokers.com</Website>
        </NCOABrokerAgentDef>
        <NCOAListAdminDef>
                <ID>LISTAD</ID>
                <CompanyName>List Admin</CompanyName>
                <Address>List Admin Address</Address>
                <City>List adamin city</City>
                <State>OK</State>
                <ZipCode>54321</ZipCode>
                <ZipPlus4>7777</ZipPlus4>
                <PhoneNumber>9999999999</PhoneNumber>
                <TaxIDNumber>222222222222</TaxIDNumber>
                <NAICSSIC>GGGGGG</NAICSSIC>
                <DateSigned>06162009</DateSigned>
                <Website>www.ListAdminInc.net</Website>
        </NCOAListAdminDef>
        <JobDef>
                <VERSION>1</VERSION>
                <USPSDataSource>NCOALink</USPSDataSource>
                <NCOADataPath>\\ad002\NCOALink\Tables</NCOADataPath>
                <UseDailyDelete>No</UseDailyDelete>
                <NCOAMatchingMethod>Standard</NCOAMatchingMethod>
                <NCOAProcessingCategory>SYS TEST
                        </NCOAProcessingCategory>
                <NCOAMoveStarting>00</NCOAMoveStarting>
                <NCOAMoveThrough>48</NCOAMoveThrough>
                <NCOARequestedExtendedProcessing>Yes
                        </NCOARequestedExtendedProcessing>
                <NCOADateReceived>01012009</NCOADateReceived>
                <NCOADateReturned>06162009</NCOADateReturned>
                <CopyInputToOutput>Yes</CopyInputToOutput>
                <DoNotOverlay>Yes</DoNotOverlay>
                <MatchingMethod>Standard</MatchingMethod>
                <ProcessRecordStart>1</ProcessRecordStart>
                <ProcessRecordStop>100</ProcessRecordStop>
                <Indexing>Relative</Indexing>
                <CharacterSet>ASCII</CharacterSet>
                <AppendCRLF>Yes</AppendCRLF>
                <InputFilePath>C:\PB\VeriMove\SampleData\SampleData.dat
                        </InputFilePath>
                <OutputFile1Type>MatchedAndUnmatched</OutputFile1Type>
                <OutputFile1Path>C:\PB\VeriMove\SampleData
                        \SampleOutput1WIN.dat
                        </OutputFile1Path>
                <OutputFile2Type>MatchedANKOnly</OutputFile2Type>
                <OutputFile2Path>C:\PB\VeriMove\SampleData
                        \SampleOutput2.dat
                        </OutputFile2Path>
                <SampleFrequency>0</SampleFrequency>
                <SampleReportFilePath>demosam.sam</SampleReportFilePath>
```

```
            <StatisticsReportFilePath>C:\PB\VeriMove
                \SampleData\SampleStats.txt
                </StatisticsReportFilePath>
    <DPV>
        <UseDPV>Yes</UseDPV>
        <DPVProcessing>External</DPVProcessing>
        <DPVStatsSource>Manual Configuration</DPVStatsSource>
        <DPVProductName>My DPV</DPVProductName>
        <DPVProductVersion>My DPV Ver</DPVProductVersion>
        <DPVReleaseDate>20090316</DPVReleaseDate>
    </DPV>
    <LACSLink>
        <UsingLACSLink>Yes</UsingLACSLink>
        <LACSLinkProcessingType>External
            </LACSLinkProcessingType>
        <LACSLinkStatsSource>Manual Configuration
            </LACSLinkStatsSource>
        <LACSLinkProductName>My LACS</LACSLinkProductName>
        <LACSLinkProductVersion>0022</LACSLinkProductVersion>
        <LACSLinkReleaseDate>20090317</LACSLinkReleaseDate>
    </LACSLink>
    <SuiteLink>
        <UsingSuiteLink>Yes</UsingSuiteLink>
        <SuiteLinkProcessingType>External
            </SuiteLinkProcessingType>
        <SuiteLinkStatsSource>Manual Configuration
            </SuiteLinkStatsSource>
        <SuiteLinkProductName>My SuiteLink
            </SuiteLinkProductName>
        <SuiteLinkProductVersion>650</SuiteLinkProductVersion>
        <SuiteLinkReleaseDate>20090318</SuiteLinkReleaseDate>
    </SuiteLink>
    <ExternalCASSProcessing>
        <CASSStatsSource>Manual Configuration</CASSStatsSource>
        <CASSProductName>My Finalist</CASSProductName>
        <CASSProductVersion>8.00.00.M.01</CASSProductVersion>
        <CASSReleaseDate>20090315</CASSReleaseDate>
        <RuralRouteHighwayContract>RouteDefault
            </RuralRouteHighwayContract>
        <POBox>Default</POBox>
    </ExternalCASSProcessing>
    <InputRecordLength>360</InputRecordLength>
    <InputLayout>
        <Field>
            <FieldType>Personal Name Line - Primary</FieldType>
            <Start>27</Start>
            <Length>50</Length>
        </Field>
        <Field>
            <FieldType>Street Address Line - Primary</FieldType>
            <Start>181</Start>
            <Length>64</Length>
        </Field>
```

```
            <Field>
                <FieldType>State Abbreviation</FieldType>
                <Start>273</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>ZIP Code</FieldType>
                <Start>275</Start>
                <Length>5</Length>
            </Field>
            <Field>
                <FieldType>ZIP + 4 Code</FieldType>
                <Start>280</Start>
                <Length>4</Length>
            </Field>
            <Field>
                <FieldType>Carrier Route</FieldType>
                <Start>287</Start>
                <Length>4</Length>
            </Field>
            <Field>
                <FieldType>House Number</FieldType>
                <Start>292</Start>
                <Length>10</Length>
            </Field>
            <Field>
                <FieldType>Street Address Pre Directional
                    </FieldType>
                <Start>302</Start>
                <Length>2</Length>
                </Field>
            <Field>
                <FieldType>Street Name</FieldType>
                <Start>304</Start>
                <Length>28</Length>
            </Field>
            <Field>
                <FieldType>Street Address Post Directional
                    </FieldType>
                <Start>332</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>Street Suffix</FieldType>
                <Start>334</Start>
                <Length>4</Length>
            </Field>
            <Field>
                <FieldType>Unit Number - Primary</FieldType>
                <Start>342</Start>
                <Length>10</Length>
                </Field>
            <Field>
```

```
    <FieldType>City Name</FieldType>
    <Start>245</Start>
    <Length>28</Length>
</Field>
<Field>
    <FieldType>Unit Designator - Primary</FieldType>
    <Start>352</Start>
    <Length>4</Length>
</Field>
<Field>
    <FieldType>CASS - ZIP Rural Route Indicator
        </FieldType>
    <Start>357</Start>
    <Length>1</Length>
    <CASSFieldIndicator>R</CASSFieldIndicator>
</Field>
<Field>
    <FieldType>CASS - ZIP Apartment Indicator
        </FieldType>
    <Start>358</Start>
    <Length>1</Length>
    <CASSFieldIndicator>3</CASSFieldIndicator>
</Field>
<Field>
    <FieldType>CASS - ZIP Code Indicator</FieldType>
    <Start>359</Start>
    <Length>1</Length>
    <CASSFieldIndicator>0</CASSFieldIndicator>
</Field>
<Field>
    <FieldType>CASS - Detail Result Indicators
        </FieldType>
    <Start>100</Start>
    <Length>250</Length>
</Field>
<Field>
    <FieldType>CASS - Match Level Indicator</FieldType>
    <Start>426</Start>
    <Length>1</Length>
</Field>
<Field>
    <FieldType>CASS - ZIP + 4 Indicator</FieldType>
    <Start>427</Start>
    <Length>1</Length>
</Field>
<Field>
    <FieldType>CASS - ZIP Type</FieldType>
    <Start>428</Start>
    <Length>1</Length>
</Field>
<Field>
    <FieldType>CASS - ZIP + 4 LACS Flag</FieldType>
    <Start>429</Start>
```

```
                    <Length>1</Length>
            </Field>
            <Field>
                <FieldType>CASS - EWS Match Indicator</FieldType>
                <Start>430</Start>
                <Length>1</Length>
            </Field>
            <Field>
                <FieldType>CASS - ZIP + 4 CMRA Present</FieldType>
                <Start>431</Start>
                <Length>1</Length>
            </Field>
            <Field>
                <FieldType>CASS - DPV Footnote</FieldType>
                <Start>432</Start>
                <Length>24</Length>
            </Field>
            <Field>
                <FieldType>CASS - DPV Delivery Point Info
                    </FieldType>
                <Start>456</Start>
                <Length>1</Length>
            </Field>
            <Field>
                <FieldType>CASS - DPV CMRA</FieldType>
                <Start>457</Start>
                <Length>1</Length>
            </Field>
            <Field>
                <FieldType>CASS - LACSLink Footnote</FieldType>
                <Start>458</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>CASS - SuiteLink Footnote</FieldType>
                <Start>460</Start>
                <Length>2</Length>
            </Field>
    </InputLayout>
    <OutputRecordLength>510</OutputRecordLength>
    <OutputLayout>
            <Field>
                <FieldType>Personal Name Line - Secondary
                    </FieldType>
                <Start>291</Start>
                <Length>64</Length>
            </Field>
            <Field>
                <FieldType>Forwarding City Name</FieldType>
                <Start>355</Start>
                <Length>28</Length>
            </Field>
            <Field>
```

```
            <FieldType>Forwarding State Abbreviation
                </FieldType>
            <Start>383</Start>
            <Length>2</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Delivery Point Barcode
                </FieldType>
            <Start>385</Start>
            <Length>12</Length>
        </Field>
        <Field>
          <FieldType>Forwarding Carrier Route Code</FieldType>

            <Start>397</Start>
            <Length>4</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Effective Date</FieldType>
            <Start>402</Start>
            <Length>6</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Type Code</FieldType>
            <Start>408</Start>
            <Length>1</Length>
        </Field>
        <Field>
            <FieldType>House Number - Primary</FieldType>
            <Start>437</Start>
            <Length>10</Length>
        </Field>
        <Field>
            <FieldType>Pre Directional - Primary</FieldType>
            <Start>447</Start>
            <Length>2</Length>
        </Field>
        <Field>
            <FieldType>Street Address Name - Primary
                </FieldType>
            <Start>449</Start>
            <Length>28</Length>
        </Field>
        <Field>
            <FieldType>Street Suffix - Primary</FieldType>
            <Start>477</Start>
            <Length>4</Length>
        </Field>
        <Field>
            <FieldType>Post Directional - Primary</FieldType>
            <Start>481</Start>
            <Length>2</Length>
        </Field>
```

```
            <Field>
                <FieldType>Unit Designator - Primary</FieldType>
                <Start>483</Start>
                <Length>4</Length>
            </Field>
            <Field>
                <FieldType>Unit Number - Primary</FieldType>
                <Start>487</Start>
                <Length>8</Length>
            </Field>
            <Field>
                <FieldType>NCOA Forwarding Footnote</FieldType>
                <Start>410</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>LACS Footnote</FieldType>
                <Start>495</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>NCOA DPV Footnote</FieldType>
                <Start>497</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>NCOA ZIP + 4 Footnote</FieldType>
                <Start>499</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>SuiteLink Footnote</FieldType>
                <Start>643</Start>
                <Length>2</Length>
            </Field>
            <Field>
                <FieldType>Business Name Match Percent</FieldType>
                <Start>2340</Start>
                <Length>3</Length>
            </Field>
        </OutputLayout>
    </JobDef>
</FTIDef>
```

Defining External CASS Job Definition

This section includes an example of basic Job Definition XML tags and acceptable values for External CASS processing. Each field that is defined by these XML tags is described in detail in **Input and Output Fields** on page 3.

External CASS Job Definition XML Tags

```
<JobDef>
    <VERSION>1</VERSION>
    <USPSDataSource>NCOALink</USPSDataSource>
    <NCOADataPath>\\ad002\NCOALink\Tables649</NCOADataPath>
    <UseDailyDelete>Yes|No</UseDailyDelete>
    <NCOAMatchingMethod>1|2|3|4|5</NCOAMatchingMethod>
    <NCOAProcessingCategory>EMPTRAIN|INTDBTST|MKTGTEST|
        NORMAL|STAGE I|STAGE II|SYSTEST</NCOAProcessingCategory>
    <NCOAMoveStarting>00-48</NCOAMoveStarting>
    <NCOAMoveThrough>06-48</NCOAMoveThrough>
    <NCOARequestedExtendedProcessing>Yes|No
        </NCOARequestedExtendedProcessing>
    <NCOADateReceived>MMDDYYYY</NCOADateReceived>
    <NCOADateReturned>MMDDYYYY</NCOADateReturned>
    <CopyInputToOutput>Yes|No</CopyInputToOutput>
    <DoNotOverlay>Yes|No</DoNotOverlay>
    <MatchingMethod>1|2|3|4</MatchingMethod>
    <ProcessRecordStart>1</ProcessRecordStart>
    <ProcessRecordStop>100</ProcessRecordStop>
    <Indexing>Relative</Indexing>
    <CharacterSet>ASCII|EBCDIC</CharacterSet>
    <AppendCRLF>Yes|No</AppendCRLF>
    <InputFilePath>C:\PB\VeriMove\SampleData
        \SampleData.dat</InputFilePath>
    <OutputFile1Type>Matched|Unmatched|
        MatchedAndUnmatched|MatchedOnlyNonANK|
        MatchedANKOnly</OutputFile1Type>
    <OutputFile1Path>C:\PB\VeriMove\SampleData\
        SampleOutput1WIN.dat</OutputFile1Path>
    <OutputFile2Type>None|Matched|Unmatched|
        MatchedAndUnmatched|MatchedOnlyNonANK|
        MatchedANKOnly</OutputFile2Type>
    <OutputFile2Path>C:\PB\VeriMove\SampleData\
        SampleOutput2.dat</OutputFile2Path>
    <SampleFrequency>0</SampleFrequency>
    <SampleReportFilePath>demosam.sam</SampleReportFilePath>
    <StatisticsReportFilePath>C:\PB\VeriMove\
```

```
            SampleData\SampleStats.txt</StatisticsReportFilePath>
<DPV>
<UseDPV>Yes|No</UseDPV>
<DPVProcessing>External</DPVProcessing>
<DPVStatsSource>Input Field Defined</DPVStatsSource>
</DPV>
<LACSLink>
<UsingLACSLink>Yes|No</UsingLACSLink>
<LACSLinkProcessingType>External</LACSLinkProcessingType>
<LACSLinkStatsSource>Input Field Defined
     </LACSLinkStatsSource>
</LACSLink>
<SuiteLink>
<UsingSuiteLink>Yes|No</UsingSuiteLink>
<SuiteLinkProcessingType>External</SuiteLinkProcessingType>
<SuiteLinkStatsSource>Input Field Defined
     </SuiteLinkStatsSource>
</SuiteLink>
<ExternalCASSProcessing>
<CASSStatsSource>Input Field Defined</CASSStatsSource>
<RuralRouteHighwayContract>RouteDefault|
     RouteNumberInUnit|BoxNumberInUnit
     </RuralRouteHighwayContract>
<POBox>Default|BoxNumberInUnit|BoxNumberInStreet</POBox>
</ExternalCASSProcessing>
```

Defining External CASS Input Definition

This section provides an example of Input Definition XML tags and acceptable values for External CASS processing. For more information on each field defined by these XML tags, see **Input and Output Fields** on page 3.

Input Definition XML Tags

```
<InputRecordLength>360</InputRecordLength>
<InputLayout>
    <Field>
        <FieldType>Personal Name Line - Primary</FieldType>
        <Start>27</Start>
        <Length>70 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Street Address Line - Primary</FieldType>
```

```
        <Start>181</Start>
        <Length>70 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>State Abbreviation</FieldType>
        <Start>273</Start>
        <Length>2 Alphabetic Characters</Length>
    </Field>
    <Field>
        <FieldType>ZIP Code</FieldType>
        <Start>275</Start>
        <Length>5 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>ZIP + 4 Code</FieldType>
        <Start>280</Start>
        <Length>4 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Carrier Route</FieldType>
        <Start>287</Start>
        <Length>4 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>House Number</FieldType>
        <Start>292</Start>
        <Length>10 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Street Address Pre Directional</FieldType>
        <Start>302</Start>
        <Length>10 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Street Name</FieldType>
        <Start>304</Start>
        <Length>28 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Street Address Post Directional</FieldType>
        <Start>332</Start>
        <Length>10 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Street Suffix</FieldType>
        <Start>334</Start>
        <Length>10 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Unit Number - Primary</FieldType>
        <Start>342</Start>
        <Length>10 Alphanumeric Characters</Length>
    </Field>
```

```
<Field>
    <FieldType>City Name</FieldType>
    <Start>245</Start>
    <Length>28 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>Unit Designator - Primary</FieldType>
    <Start>352</Start>
    <Length>10 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>CASS - ZIP Rural Route Indicator</FieldType>
    <Start>357</Start>
    <Length>1</Length>
    <CASSFieldIndicator>1|2|3</CASSFieldIndicator>
</Field>
<Field>
    <FieldType>CASS - ZIP Apartment Indicator</FieldType>
    <Start>358</Start>
    <Length>1</Length>
    <CASSFieldIndicator>1|2|3</CASSFieldIndicator>
</Field>
<Field>
    <FieldType>CASS - ZIP Code Indicator</FieldType>
    <Start>359</Start>
    <Length>4</Length>
    <CASSFieldIndicator>4 Numeric Characters
     </CASSFieldIndicator>
</Field>
<Field>
    <FieldType>CASS - Detail Result Indicators</FieldType>
    <Start>100</Start>
    <Length>200 Numeric Characters</Length>
</Field>
</InputLayout>
```

Defining External CASS Output Definition

This section provides an example of Input Definition XML tags and acceptable values for External CASS processing. For more information on each field defined by these XML tags, see **Input and Output Fields** on page 3.

Output Definition XML Tags

```
<OutputRecordLength>510</OutputRecordLength>
<OutputLayout>
    <Field>
        <FieldType>Personal Name Line - Secondary</FieldType>
        <Start>291</Start>
        <Length>70 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding City Name</FieldType>
        <Start>355</Start>
        <Length>28 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding State Abbreviation</FieldType>
        <Start>383</Start>
        <Length>2 Alphabetic Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Delivery Point Barcode</FieldType>
        <Start>385</Start>
        <Length>12 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Carrier Route Code</FieldType>
        <Start>397</Start>
        <Length>4 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Effective Date</FieldType>
        <Start>402</Start>
        <Length>YYYYMM</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Type Code</FieldType>
        <Start>408</Start>
        <Length>I|F|B</Length>
    </Field>
    <Field>
        <FieldType>House Number - Primary</FieldType>
        <Start>437</Start>
        <Length>10 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Pre Directional - Primary</FieldType>
        <Start>447</Start>
        <Length>10 Alphanumeric Characters</Length>
    </Field>
```

```
<Field>
    <FieldType>Street Address Name - Primary</FieldType>
    <Start>449</Start>
    <Length>28 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>Street Suffix - Primary</FieldType>
    <Start>477</Start>
    <Length>10 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>Post Directional - Primary</FieldType>
    <Start>481</Start>
    <Length>10 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>Unit Designator - Primary</FieldType>
    <Start>483</Start>
    <Length>10 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>Unit Number - Primary</FieldType>
    <Start>487</Start>
    <Length>10 Numeric Characters</Length>
</Field>
<Field>
    <FieldType>NCOA Forwarding Footnote</FieldType>
    <Start>410</Start>
    <Length>2 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>LACS Footnote</FieldType>
    <Start>495</Start>
    <Length>2 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>NCOA DPV Footnote</FieldType>
    <Start>497</Start>
    <Length>2 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>NCOA ZIP + 4 Footnote</FieldType>
    <Start>499</Start>
    <Length>AA|A1|M1|M3|P1|P3</Length>
</Field>
<Field>
    <FieldType>SuiteLink Footnote</FieldType>
    <Start>829</Start>
    <Length>2 Alphanumeric Characters</Length>
</Field>
<Field>
    <FieldType>Business Name Match Percent</FieldType>
    <Start>2340</Start>
```

```
            <Length>3</Length>
        </Field>
    </OutputLayout>
    </JobDef>
```

Defining Internal CASS Jobs

This section includes an example of XML tags that define a VeriMove job definition for Internal CASS processing. Each field that is defined by these XML tags is described in detail in. Internal CASS processing is not available on the IBM i platform.

Internal CASS Job XML Tags

```
<FTIDef>
    <NCOACustomerDef>
        <CustomerID>123456</CustomerID>
        <CompanyName>hklshg</CompanyName>
        <Type>M</Type>
        <Address>162 main</Address>
        <City>lisle</City>
        <State>IL</State>
        <ZipCode>60542</ZipCode>
        <PhoneNumber>5555555555</PhoneNumber>
        <TaxIDNumber>123456</TaxIDNumber>
        <NAICSSIC>123456</NAICSSIC>
        <Signer>Internal Tester</Signer>
        <Title>System Tester</Title>
        <DateSignerSigned>06162009</DateSignerSigned>
        <ClassOfMail>F</ClassOfMail>
        <MailListName>sdg</MailListName>
        <MailingFrequency>99</MailingFrequency>
        <PreProcess>N</PreProcess>
        <PostProcess>N</PostProcess>
        <DateLicenseeSigned>06162009</DateLicenseeSigned>
        <PAFID>123456</PAFID>
        </NCOACustomerDef>
    <NCOABrokerAgentDef>
        <ID>UUUUUU</ID>
        <CompanyName>DDDDDDDDDD</CompanyName>
        <Address>DDDDDDDDDD</Address>
        <City>DDDDDDDDDD</City>
        <State>AL</State>
```

```
                    <ZipCode>12345</ZipCode>
                    <ZipPlus4>1234</ZipPlus4>
                    <PhoneNumber>4444444444</PhoneNumber>
                    <TaxIDNumber>444444444444</TaxIDNumber>
                    <NAICSSIC>GGGGGG</NAICSSIC>
                    <DateSigned>03032009</DateSigned>
          </NCOABrokerAgentDef>
          <NCOAListAdminDef>
                    <ID>LISTAD</ID>
                    <CompanyName>List Admin</CompanyName>
                    <Address>List Admin Address</Address>
                    <City>List adamin city</City>
                    <State>OK</State>
                    <ZipCode>54321</ZipCode>
                    <ZipPlus4>7777</ZipPlus4>
                    <PhoneNumber>9999999999</PhoneNumber>
                    <TaxIDNumber>222222222222</TaxIDNumber>
                    <NAICSSIC>GGGGGG</NAICSSIC>
                    <DateSigned>03032009</DateSigned>
          </NCOAListAdminDef>
          <NCOAOperatorDef>
                    <OperatorID>ADAMCOLLINSO</OperatorID>
                    <OperatorName>Adam TEST Collinsion</OperatorName>
          </NCOAOperatorDef>
          <JobDef>
                    <VERSION>1</VERSION>
                    <USPSDataSource>NCOALink</USPSDataSource>
                    <NCOADataPath>P:\VMVE_NCOALINK_HASH</NCOADataPath>
                    <UseDailyDelete>No</UseDailyDelete>
                    <NCOAMatchingMethod>Standard</NCOAMatchingMethod>
                    <NCOAProcessingCategory>STAGE I</NCOAProcessingCategory>
                    <NCOAMoveStarting>00</NCOAMoveStarting>
                    <NCOAMoveThrough>99</NCOAMoveThrough>
                    <NCOARequestedExtendedProcessing>Yes
                        </NCOARequestedExtendedProcessing>
                    <NCOADateReceived>04042009</NCOADateReceived>
                    <NCOADateReturned>05052009</NCOADateReturned>
                    <CopyInputToOutput>Yes</CopyInputToOutput>
                    <DoNotOverlay>Yes</DoNotOverlay>
                    <UseUnconfirmedPlus4>Yes</UseUnconfirmedPlus4>
                    <MatchingMethod>Standard</MatchingMethod>
                    <ProcessRecordStart>0</ProcessRecordStart>
                    <ProcessRecordStop>0</ProcessRecordStop>
                    <CharacterSet>ASCII</CharacterSet>
                    <AppendCRLF>Yes</AppendCRLF>
                    <InputFilePath>C:\Documents\stg1.txt</InputFilePath>
                    <OutputFile1Type>MatchedAndUnmatched</OutputFile1Type>
                    <OutputFile1Path>D:\NCOALink\STG10226s.out1.TXT
                        </OutputFile1Path>
                    <OutputFile2Type>MatchedANKOnly</OutputFile2Type>
                    <OutputFile2Path>D:\NCOALink\STG10226s.out2.TXT
                        </OutputFile2Path>
                    <SampleFrequency>0</SampleFrequency>
```

```
        <SampleReportFilePath></SampleReportFilePath>
        <StatisticsReportFilePath>D:\NCOADATA\STG1.STATS.TXT
            </StatisticsReportFilePath>
<DPV>
    <UseDPV>Yes</UseDPV>
    <DPVDataFilePath>\\ad002\DPV</DPVDataFilePath>
    <DPVFileType>FLAT</DPVFileType>
    <DPVNoStat>YES</DPVNoStat>
    <DPVVacant>YES</DPVVacant>
    <DPVProcessing>Internal</DPVProcessing>
    <DPVStatsSource>Input Field Defined</DPVStatsSource>
</DPV>
<LACSLink>
    <UsingLACSLink>No</UsingLACSLink>
    <LACSLinkProcessingType>Internal</LACSLinkProcessingType>
    <LACSLinkDataLocation>05052009</LACSLinkDataLocation>
    <LACSLinkStatsSource>Input Field Defined
        </LACSLinkStatsSource>
</LACSLink>
<SuiteLink>
    <UsingSuiteLink>Yes</UsingSuiteLink>
    <SuiteLinkProcessingType>Internal</SuiteLinkProcessingType>
    <SuiteLinkDataLocation>databasepath</SuiteLinkDataLocation>
</SuiteLink>
<InternalCASSProcessing>
  <CityFilePath>\\ad002\CASS\city.dir</CityFilePath>
  <PrimaryZip4FilePath>\\ad002\CASS\zip4us.dir
      </PrimaryZip4FilePath>
  <USPS3553ReportFilePath>D:\NCOADATA\state13553.txt
      </USPS3553ReportFilePath>
  <CASSAssignCarrierRoutes>Yes</CASSAssignCarrierRoutes>
  <CASSAssignAbbreviatedCity>No</CASSAssignAbbreviatedCity>
  <CASSUseEarlyWarningSystem>No</CASSUseEarlyWarningSystem>
  <EarlyWarningSystemFilePath></EarlyWarningSystemFilePath>
</InternalCASSProcessing>
<InputRecordLength>998</InputRecordLength>
<InputLayout>
    <Field>
        <FieldType>Street Address Line - Primary</FieldType>
        <Start>125</Start>
        <Length>67</Length>
    </Field>
    <Field>
        <FieldType>URB Information</FieldType>
        <Start>97</Start>
        <Length>28</Length>
    </Field>
    <Field>
        <FieldType>City, State, ZIP, ZIP + 4 Line - Primary
            </FieldType>
        <Start>193</Start>
        <Length>42</Length>
    </Field>
```

```
        <Field>
            <FieldType>Personal Name Line - Primary</FieldType>
            <Start>30</Start>
            <Length>66</Length>
        </Field>
</InputLayout>
<OutputRecordLength>998</OutputRecordLength>
<OutputLayout>
        <Field>
            <FieldType>NCOA Audit Query Name</FieldType>
            <Start>299</Start>
            <Length>62</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit Query Address</FieldType>
            <Start>361</Start>
            <Length>125</Length>
        </Field>
        <Field>
          <FieldType>Forwarding Urbanization Name</FieldType>
          <Start>486</Start>
          <Length>28</Length>
        </Field>
        <Field>
            <FieldType>Forwarding House Number</FieldType>
            <Start>514</Start>
            <Length>10</Length>
        </Field>
        <Field>
          <FieldType>Forwarding Address Pre Directional</FieldType>

            <Start>524</Start>
            <Length>2</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Street Name</FieldType>
            <Start>526</Start>
            <Length>28</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Street Suffix</FieldType>
            <Start>554</Start>
            <Length>4</Length>
        </Field>
        <Field>
        <Field>
            <FieldType>Forwarding Address Post Directional
                </FieldType>
            <Start>558</Start>
<Length>2</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Unit Designator</FieldType>
```

```
            <Start>560</Start>
            <Length>4</Length>
    </Field>
    <Field>
            <FieldType>Forwarding Unit Number</FieldType>
            <Start>564</Start>
            <Length>8</Length>
    </Field>
    <Field>
            <FieldType>Forwarding City Name</FieldType>
            <Start>572</Start>
            <Length>28</Length>
    </Field>
    <Field>
            <FieldType>Forwarding State Abbreviation</FieldType>
            <Start>600</Start>
            <Length>2</Length>
    </Field>
    <Field>
            <FieldType>Forwarding Delivery Point Barcode</FieldType>
            <Start>602</Start>
            <Length>12</Length>
    </Field>
    <Field>
            <FieldType>Forwarding Carrier Route Code</FieldType>
            <Start>614</Start>
            <Length>4</Length>
    </Field>
    <Field>
            <FieldType>NCOA Audit Drop Flag</FieldType>
            <Start>618</Start>
            <Length>1</Length>
    </Field>
    <Field>
            <FieldType>NCOA Audit Drop N Flag</FieldType>
            <Start>619</Start>
            <Length>1</Length>
    </Field>
    <Field>
            <FieldType>Forwarding Effective Date</FieldType>
            <Start>620</Start>
            <Length>6</Length>
    </Field>
    <Field>
            <FieldType>NCOA Audit Middle Name</FieldType>
            <Start>626</Start>
            <Length>2</Length>
    </Field>
    <Field>
            <FieldType>NCOA Audit Gender</FieldType>
            <Start>628</Start>
            <Length>1</Length>
    </Field>
```

```
        <Field>
            <FieldType>NCOA Audit Hint Byte</FieldType>
            <Start>629</Start>
            <Length>8</Length>
        </Field>
        <Field>
            <FieldType>NCOA Forwarding Footnote</FieldType>
            <Start>637</Start>
            <Length>2</Length>
        </Field>
        <Field>
            <FieldType>NCOA ZIP + 4 Footnote</FieldType>
            <Start>639</Start>
            <Length>2</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit EMDP</FieldType>
            <Start>643</Start>
            <Length>16</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit EMDP SHA</FieldType>
            <Start>659</Start>
            <Length>40</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit 48 Byte Object- EMDP Component
                </FieldType>
            <Start>699</Start>
            <Length>16</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit 48 Byte Object Name Component
                </FieldType>
            <Start>715</Start>
            <Length>40</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit 48 Byte Object SHA</FieldType>
            <Start>755</Start>
            <Length>40</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit Data Retrieved</FieldType>
            <Start>795</Start>
            <Length>16</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit Result Value</FieldType>
            <Start>811</Start>
            <Length>17</Length>
        </Field>
        <Field>
```

```
            <FieldType>Forwarding Type Code</FieldType>
            <Start>828</Start>
            <Length>1</Length>
        </Field>
        <Field>
            <FieldType>Street Address Line - Primary</FieldType>
            <Start>829</Start>
            <Length>70</Length>
        </Field>
    </OutputLayout>
  </JobDef>
</FTIDef>
```

Defining Internal CASS Job Definition

This section provides an example of basic Job Definition XML tags and acceptable values for Internal CASS processing. Each field that is defined by these XML tags is described in detail in **Input and Output Fields** on page 3.

Internal CASS Job Definition XML Tags

```
<JobDef>
    <VERSION>1</VERSION>
    <USPSDataSource>NCOALink</USPSDataSource>
    <NCOADataPath>\\ad002\NCOALink\TablesLive649
        </NCOADataPath>
    <UseDailyDelete>Yes|No</UseDailyDelete>
    <NCOAMatchingMethod>1|2|3|4|5</NCOAMatchingMethod>
    <NCOAProcessingCategory>EMP TRAIN|
        INT DB TST|MKTG TEST|NORMAL|
        STAGE I|STAGE II|SYS TEST
        </NCOAProcessingCategory>
    <NCOAMoveStarting>00-48</NCOAMoveStarting>
    <NCOAMoveThrough>06-48</NCOAMoveThrough>
    <NCOARequestedExtendedProcessing>Yes|No
        </NCOARequestedExtendedProcessing>
    <NCOADateReceived>MMDDYYYY</NCOADateReceived>
    <NCOADateReturned>MMDDYYYY</NCOADateReturned>
    <CopyInputToOutput>Yes|No</CopyInputToOutput>
    <DoNotOverlay>Yes|No</DoNotOverlay>
    <MatchingMethod>1|2|3|4</MatchingMethod>
    <ProcessRecordStart>1</ProcessRecordStart>
```

```
<ProcessRecordStop>100</ProcessRecordStop>
<Indexing>Relative</Indexing>
<CharacterSet>ASCII|EBCDIC</CharacterSet>
<AppendCRLF>Yes|No</AppendCRLF>
<InputFilePath>C:\PB\VeriMove\SampleData
    \SampleData.dat</InputFilePath>
<OutputFile1Type>Matched|Unmatched|
    MatchedAndUnmatched|MatchedOnlyNonANK|
    MatchedANKOnly</OutputFile1Type>
<OutputFile1Path>C:\PB\VeriMove\SampleData
    \SampleOutput1WIN.dat</OutputFile1Path>
<OutputFile2Type>None|Matched|Unmatched|
    MatchedAndUnmatched|MatchedOnlyNonANK|
    MatchedANKOnly</OutputFile2Type>
<OutputFile2Path>C:\PB\VeriMove\SampleData
    \SampleOutput2.dat</OutputFile2Path>
<SampleFrequency>0</SampleFrequency>
<SampleReportFilePath>demosam.sam</SampleReportFilePath>
<StatisticsReportFilePath>C:\PB\VeriMove\
    SampleData\SampleStats.txt
    </StatisticsReportFilePath>
<DPV>
<UseDPV>Yes|No</UseDPV>
<DPVProcessing>External</DPVProcessing>
<DPVStatsSource>Input Field Defined</DPVStatsSource>
</DPV>
<LACSLink>
<UsingLACSLink>Yes|No</UsingLACSLink>
<LACSLinkProcessingType>External</LACSLinkProcessingType>
<LACSLinkStatsSource>Input Field Defined
    </LACSLinkStatsSource>
</LACSLink>
<SuiteLink>
<UsingSuiteLink>Yes|No</UsingSuiteLink>
<SuiteLinkProcessingType>External</SuiteLinkProcessingType>
<SuiteLinkStatsSource>Input Field Defined
    </SuiteLinkStatsSource>
</SuiteLink>
<InternalCASSProcessing>
<CityFilePath>C:\PitneyBowes\Finalist
    \db\city.dir</CityFilePath>
<PrimaryZip4FilePath>C:\PitneyBowes
    \Finalist\db\zip4us.dir</PrimaryZip4FilePath>
<USPS3553ReportFilePath>C:\PB\VeriMove
    \SampleData\Sample3553.txt</USPS3553ReportFilePath>
<CASSAssignCarrierRoutes>Yes|No</CASSAssignCarrierRoutes>
<CASSAssignAbbreviatedCity>Yes|No</CASSAssignAbbreviatedCity>
<CASSUseEarlyWarningSystem>Yes|No</CASSUseEarlyWarningSystem>
<EarlyWarningSystemFilePath>C:\PitneyBowes
    \Finalist\db\ewsmmdd.txt
    </EarlyWarningSystemFilePath>
</InternalCASSProcessing>
```

Defining Internal CASS Input Definition

This section provides an example of Input Definition XML tags and acceptable values for Internal CASS processing. For more information on each field defined by these XML tags, see **Input and Output Fields** on page 3.

Input Definition XML Tags

```
<InputRecordLength>998</InputRecordLength>
<InputLayout>
    <Field>
        <FieldType>Street Address Line - Primary</FieldType>
        <Start>125</Start>
        <Length>28 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>URB Information</FieldType>
        <Start>97</Start>
        <Length>28 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>City, State, ZIP, ZIP + 4 Line - Primary
          </FieldType>
        <Start>193</Start>
        <Length>70 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Personal Name Line - Primary</FieldType>
        <Start>30</Start>
        <Length>70 Alphanumeric Characters</Length>
    </Field>
</InputLayout>
```

Defining Internal CASS Output Definition

This section provides an example of Input Definition XML tags and acceptable values for Internal CASS processing. For more information on each field defined by these XML tags, see **Input and Output Fields** on page 3.

Output Definition XML Tags

```
<OutputRecordLength>998</OutputRecordLength>
<OutputLayout>
    <Field>
        <FieldType>NCOA Audit Query Name</FieldType>
        <Start>299</Start>
        <Length>62 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>NCOA Audit Query Address</FieldType>
        <Start>361</Start>
        <Length>125 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Urbanization Name</FieldType>
        <Start>486</Start>
        <Length>28 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding House Number</FieldType>
        <Start>514</Start>
        <Length>10 Numeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Address Pre Directional
            </FieldType>
        <Start>524</Start>
        <Length>2 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Street Name</FieldType>
        <Start>526</Start>
        <Length>28 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Street Suffix</FieldType>
        <Start>554</Start>
        <Length>4 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Address Post Directional
            </FieldType>
        <Start>558</Start>
        <Length>2 Alphanumeric Characters</Length>
    </Field>
    <Field>
        <FieldType>Forwarding Unit Designator</FieldType>
        <Start>560</Start>
```

```
            <Length>4 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Unit Number</FieldType>
            <Start>564</Start>
            <Length>8 Numeric Characters</Length>
        </Field>
        <Field>
            <FieldType>Forwarding City Name</FieldType>
            <Start>572</Start>
            <Length>28 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>Forwarding State Abbreviation</FieldType>
            <Start>600</Start>
            <Length>2 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Delivery Point Barcode
                </FieldType>
            <Start>602</Start>
            <Length>12 Numeric Characters</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Carrier Route Code</FieldType>
            <Start>614</Start>
            <Length>4 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit Drop Flag</FieldType>
            <Start>618</Start>
            <Length>Yes|No</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit Drop N Flag</FieldType>
            <Start>619</Start>
            <Length>Yes|No</Length>
        </Field>
        <Field>
            <FieldType>Forwarding Effective Date</FieldType>
            <Start>620</Start>
            <Length>YYYYMM</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit Middle Name</FieldType>
            <Start>626</Start>
            <Length>2 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>NCOA Audit Gender</FieldType>
            <Start>628</Start>
            <Length>1 Alphanumeric Character</Length>
        </Field>
```

```
            <Field>
                <FieldType>NCOA Audit Hint Byte</FieldType>
                <Start>629</Start>
                <Length>8 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA Forwarding Footnote</FieldType>
                <Start>637</Start>
                <Length>2 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA ZIP + 4 Footnote</FieldType>
                <Start>639</Start>
                <Length>AA|A1|M1|M3|P1|P3</Length>
            </Field>
            <Field>
                <FieldType>NCOA Audit EMDP</FieldType>
                <Start>643</Start>
                <Length>16 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA Audit EMDP SHA</FieldType>
                <Start>659</Start>
                <Length>40 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA Audit 48 Byte Object-
                    EMDP Component</FieldType>
                <Start>699</Start>
                <Length>16 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA Audit 48 Byte Object
                    Name Component</FieldType>
                <Start>715</Start>
                <Length>40 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA Audit 48 Byte Object SHA</FieldType>
                <Start>755</Start>
                <Length>40 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA Audit Data Retrieved</FieldType>
                <Start>795</Start>
                <Length>16 Alphanumeric Characters</Length>
            </Field>
            <Field>
                <FieldType>NCOA Audit Result Value</FieldType>
                <Start>811</Start>
                <Length>17 Alphanumeric Characters</Length>
            </Field>
            <Field>
```

```
            <FieldType>Forwarding Type Code</FieldType>
            <Start>828</Start>
            <Length>I|F|B</Length>
        </Field>
        <Field>
            <FieldType>Street Address Line - Primary</FieldType>
            <Start>829</Start>
            <Length>70 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>SuiteLink Footnote</FieldType>
            <Start>829</Start>
            <Length>2 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Returned Error Code</FieldType>
            <Start>829</Start>
            <Length>4 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - AbbrCity Name</FieldType>
            <Start>833</Start>
            <Length>30 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Advanced Barcode</FieldType>
            <Start>863</Start>
            <Length>14 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Alternate Street</FieldType>
            <Start>877</Start>
            <Length>30 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Alternate Street Type</FieldType>
            <Start>907</Start>
            <Length>1 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Congressional District</FieldType>
            <Start>908</Start>
            <Length>2 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - County Name</FieldType>
            <Start>910</Start>
            <Length>30 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Default Match Level</FieldType>
            <Start>940</Start>
            <Length>1 Alphanumeric Characters</Length>
```

```
                    </Field>
                    <Field>
                        <FieldType>CASS - Delivery Point</FieldType>
                        <Start>941</Start>
                        <Length>3 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - DPV Flags</FieldType>
                        <Start>944</Start>
                        <Length>3 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - DPV Footnote</FieldType>
                        <Start>947</Start>
                        <Length>19 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - DPV No Stat Flag</FieldType>
                        <Start>966</Start>
                        <Length>1 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - DPV Vacant Flag</FieldType>
                        <Start>967</Start>
                        <Length>1 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - FIPS Code</FieldType>
                        <Start>968</Start>
                        <Length>5 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - Five Digit Barcode</FieldType>
                        <Start>973</Start>
                        <Length>8 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - Five Digit Scheme</FieldType>
                        <Start>981</Start>
                        <Length>5 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - Full City Name</FieldType>
                        <Start>986</Start>
                        <Length>30 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - Lacs Match Flag</FieldType>
                        <Start>1016</Start>
                        <Length>1 Alphanumeric Characters</Length>
                    </Field>
                    <Field>
                        <FieldType>CASS - Lacs Return Code</FieldType>
```

```
            <Start>1017</Start>
            <Length>2 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Lot Code</FieldType>
            <Start>1019</Start>
            <Length>5 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Match Level</FieldType>
            <Start>1024</Start>
            <Length>1 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - PMB Unit info</FieldType>
            <Start>1025</Start>
            <Length>15 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Returned Error Code</FieldType>
            <Start>1041</Start>
            <Length>4 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Seasonal Flag</FieldType>
            <Start>1045</Start>
            <Length>12 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - Street Type</FieldType>
            <Start>1057</Start>
            <Length>1 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - SuiteLink Return Code</FieldType>
            <Start>1058</Start>
            <Length>2 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS - ZIP + 4 Sent to DPV</FieldType>
            <Start>1060</Start>
            <Length>4 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>CASS ZIPMOVE Indicator</FieldType>
            <Start>1064</Start>
            <Length>1 Alphanumeric Characters</Length>
        </Field>
        <Field>
            <FieldType>Business Name Match Percent</FieldType>
            <Start>2340</Start>
            <Length>3</Length>
        </Field>
```

```
            </OutputLayout>
```

3 - Return Codes & Footnotes

In this section

Return Codes

VeriMove may return the following NCOA^{Link} return codes during a COA match attempt:

- Column 1 — Return code
- Column 2 — Return code description
- Column 3 — Indicates if a new address was provided
- Column 4 — How the answer was derived: either by data (D), which is returned in lieu of the 12-digit Delivery Point Barcode, or (S) software.

These codes are found on the Processing Summary reports.

Table 3: NCOA^{Link} Return Codes and Descriptions

Return Code	Description		New Address Provided	Derived by Data (D) or Software (S)
A	**COA Match**	The input record matched to a business, individual or family type master file record. A new address could be furnished. Please Note: If this return code is achieved then no other matching attempts are permitted regardless of the PROCESSING mode.	Y	D
00	**No Match**	The input record COULD NOT BE matched to a master file 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 business, individual or family type master file 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 then no other matching attempts are permitted regardless of the PROCESSING mode.		N	D

Return Code	Description	New Address Provided	Derived by Data (D) or Software (S)
02	`Found COA: Moved Left No Address (MLNA)` – The input record matched to a business, individual or family type master file record and 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 no other matching attempts are permitted regardless of the PROCESSING mode.	N	D
03	`Found COA: Box Closed No Order (BCNO)` – The Input record matched to a business, individual or family type master file record which contains an old address of PO BOX that 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 then no other matching attempts 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 matched to a family record type on the master file with an old address that contained secondary information which obtained a ZIP + 4 street level match. The input record does not contain secondary information. 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 business, individual or family type master file record. The new address on the master file 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 then no other matching attempts are permitted regardless of the PROCESSING mode.	N	D
06	`Cannot Match COA: Conflicting Directions: Middle Name Related` – There is more than one COA (individual or family type) 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 then no other matching attempts are permitted regardless of the PROCESSING mode.	N	D

Return Code	Description	New Address Provided	Derived by Data (D) or Software (S)
07	`Cannot Match COA: Conflicting Directions: Gender Related`—There is more than one COA (individual or family type) 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 then no other matching attempts are permitted regardless of the PROCESSING mode.	N	D
08	`Cannot Match COA: Other Conflicting Instructions` – The input record matched to two master file (business, individual or family type) records. The two records in the master file 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 then no other matching attempts are permitted regardless of the PROCESSING mode.	N	D
09	`Cannot Match COA: High-rise Default` – The input record matched to a family record on the master file 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 matched to a family record on the master file 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 master file (individual or family type) record with the same surname and address but there is insufficient name information on the master file 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, continue the Individual logic sequence. If the subsequent individual sequence does not prohibit further attempts it is required to attempt the match again using FAMILY matching logic.	N	D

Return Code	Description	New Address Provided	Derived by Data (D) or Software (S)
12	`Cannot Match COA: Middle Name Test Failed` – The input record matched to an individual or family record on the master file with the same address and surname. However, a match cannot be made because the input name contains a conflict with the middle name or initials on the master file record. This return code is only obtained when using individual matching logic. Please Note: If this return code is achieved then no other matching attempts are permitted regardless of the PROCESSING mode.	N	S
13	`Cannot Match COA: Gender Test Failed` – The input record matched to a master file (individual or family type) 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 master file 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 it is required to attempt the match again using FAMILY matching logic.	N	S
14	`Found COA: New Address Would Not Convert at Run Time` – The input record matched to a master file (business, individual or family type) 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 then no other matching attempts are permitted regardless of the PROCESSING mode. Footnote 14 is caused when the software is unable to recreate a unique address from the returned 11-Digit ZIP Code. Here are the conditions that can potentially cause a FN 14: • Failure to locate the returned 11-Digit ZIP Code in the RV9 database (this should be very rare) • Failure to identify a unique Delivery Point for a given 11-Digit ZIP Code. Footnote 14 exists specifically because the 11-Digit Delivery Point is not unique.	N	S
15	`Cannot Match COA: Individual Name Insufficient` – There is a master file record with the same address and surname. A match cannot be made because the input record does not contain a first name or contains initials only. 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 it is required to attempt the match again using FAMILY matching logic.	N	S

Return Code	Description	New Address Provided	Derived by Data (D) or Software (S)
16	`Cannot Match COA: Secondary Number Discrepancy` – The input record matched to a street level individual or family type record. However, a match is prohibited based on 1 of the following reasons: 1) There is conflicting secondary information on the input and master file 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 then no other matching attempts are permitted regardless of the PROCESSING mode.	N	S
17	`Cannot Match COA: Other Insufficient Name` – The input record matched to an individual or family master file record. The input name is different or not sufficient enough to produce a 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 it is required to attempt the match again using FAMILY matching logic.	N	S
18	`Cannot Match COA: General Delivery` – The input record matched to a family record on the master file 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` – 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. 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 no other matching attempts are permitted regardless of the PROCESSING mode.	N	D
20	`Cannot Match COA: Conflicting Directions after re-chaining` – Multiple master file records were potential matches for the input record. The master file 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 then no other matching attempts are permitted regardless of the PROCESSING mode.	N	D

Return Code	Description	New Address Provided	Derived by Data (D) or Software (S)
66	`Daily Delete` – The input record matched to a business, individual or family type master file 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 master file and that no 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 then no other matching attempts are permitted regardless of the PROCESSING mode.	N	S
77	ANK[Link] Primary Return Code – Indicates that the input matched to an ANK[Link] record with a move effective date between 19 and 48 months old. Never provides a new address.	N	D
91	`COA Match: Secondary Number dropped from COA` – The input record matched to a master file record. The master file record had a secondary number and the input address did not. The record is a ZIP + 4 street level match. Please Note: This return code is derived from Individual matching logic only. If this return code is achieved then no other matching attempts are permitted regardless of the PROCESSING mode.	Y	S
92	`COA Match: Secondary Number Dropped from input 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 match. Please Note: This return code is derived from individual matching logic only. If this return code is achieved then no other matching attempts are permitted regardless of the PROCESSING mode.	Y	S

DPV Footnotes

The table below lists additional footnote codes that could be returned as a result of DPV processing. These codes are found on your DPV Processing reports.

Note: These codes are all generated during the DPV process. The Process indicator of "ZIP + 4" or "DPV" denotes from which portion of DPV processing the return code was generated.

Table 4: DPV Footnote Descriptions

Code	Description	Process
AA	Input Address ZIP + 4 match	ZIP + 4
A1	Input Address ZIP + 4 not matched	ZIP + 4
F1	Input address matched to a military ZIP Code	ZIP + 4
G1	Input address matched to a General Delivery address.	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 Invalid PO, RR, or HC Box number	ZIP + 4
PB	Input address is a P.O. Box Street Address (PBSA)	ZIP + 4
U1	Input address matched to a unique ZIP Code	ZIP + 4
BB	Input Address DPV matched (all components)	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
R7	Input address is a Carrier Route R777	DPV
RR	Input Address DPV matched to CMRA	DPV

LACS/Link Footnotes

The table below lists additional footnote codes that could be returned as a result of LACS^{Link} processing.

Table 5: LACS^{Link} Footnote Descriptions

Code	Description	Process
A	('A' and space) Match	LACS^{Link}
00	No Match	LACS^{Link}
14	Match – Cannot Convert New Address	LACS^{Link}
92	92: Match with Unit Dropped	LACS^{Link}

Suite/Link Footnotes

The table below lists additional footnote codes that could be returned as a result of Suite^{Link} processing.

Table 6: Suite^{Link} Footnote Descriptions

Code	Description	Process
A1	Exact Match - All words in the business name matched	Suite^{Link}
A2	Good Match - All but one word in the business name matched	Suite^{Link}
A3	Poor Match - At least one word in the business name matched	Suite^{Link}
B0	No match	Suite^{Link}
C0	The name does not contain words that can be used for matching.	Suite^{Link}

Code	Description	Process
D0	The ZIP + 4 provided was not a high rise default.	Suite[Link]
E0	The database was expired.	Suite[Link]

4 - Glossary

In this section

Terms

This section contains an alphabetical listing of terms used in this guide. Its purpose is to define and clarify programming terms, terms that may have multiple definitions, and terms that apply only to this guide.

Alphabetic character

Any one of the letters A through Z (upper case and lower case).

Alphanumeric character

Any one of the alphabetic characters, or any one of the digits 0 through 9.

Batch job

A batch job consists of a predefined group of processing actions that are done with little or no interaction between a user and the system. A user puts the batch job on a job queue (or list), where it waits until the system is ready for it.

Bit

A unit of data used to make up the bytes of information to be used in processing. Either of the binary digits 0 or 1.

Byte

A group of 8 adjacent bits. In the EBCDIC and ASCII coding systems, 1 byte represents a character, such as 1 letter in the alphabet. In the double-byte coding system, 2 bytes represent a character.

Carrier code

A code assigned to each address on a mail carrier's route.

CASS

USPS Coding Accuracy Support System.

Character

Any letter, number or other symbol in the data character set that is part of the organization, control, or representation of data.

CMRA

Private companies offering mailbox rental services to individuals and businesses are Commercial Mail Receiving Agents (CMRA). See also PMB.

Coded output file

Output file that contains processed records coded with ZIP + 4 and/or carrier route codes.

Constant

Data that has an unchanging, predefined value to be used in processing. A constant does not change during the running of the program, while the contents of a field or variable can.

Customer file

An input or output file that contains customer's names and addresses.

Default value

A value supplied by the system that is used when no other value is specified by the user.

Delivery Point Validation (DPV)

Delivery Point Validation (DPV) processing uses DPV data available from the USPS to determine whether an address actually exists. The Delivery Point Validation (DPV) process can verify the existence of an address to as fine a level as an apartment or suite. Mailers can use the Delivery Point Validation (DPV) Option to ensure the addresses in their address file are actual physical addresses to which the USPS delivers mail. The USPS regulations require Delivery Point Validation (DPV) processing for all NCOA^{Link} license levels. DPV is part of CODE-1 Plus and Finalist. USPS CASS regulations require Delivery Point Validation (DPV) processing to generate the USPS Form 3553 (USPS CASS Summary Report).

Directional

A prefix or suffix on an address that identifies a direction. Predirectionals precede street names, such as W. Terry Avenue. Post directionals follow street names, such as 23 Democracy Avenue, NW.

Dropped address information

Address elements dropped during the matching process.

Early Warning System (EWS)

USPS CASS 2002-2003 regulations require all CASS-certified software to be able to read the USPS Early Warning System (EWS) File. The Early Warning System (EWS) Option verifies input addresses that are not found in the current ZIP + 4 File against the USPS EWS File. If an input address is found in the EWS File, the input address is not matched to any similar addresses in the current ZIP + 4 File. Instead, the input address fails and is not coded until the ZIP + 4 File is updated with the correct address from the USPS EWS File.

Embedded blank

A space between the characters in a unit of data.

Field

A group of related characters (such as a name or amount) that are treated as a unit in a record.

File

A generic term for a set of related records treated as a unit.

Firm name

The company name associated with an address.

General delivery

Mail picked up at post offices by customers who do not use a post office box.

High-rise delivery point

An address in an apartment or office building that accepts mail for tenants or companies within the building.

Highway contract route

A mail route assigned to a private carrier on a contract basis. The post office sometimes assigns contracts for sparsely populated rural areas.

Input file

Contains variable data used for input. It is typically a name-and-address file, but may contain any type of data. The input file is described by the user. It may have any file attributes and may reside on either disk or tape.

Job description

A set of characters that defines how the system handles a job.

Job queue

A waiting list. In this case, a list of the jobs waiting for processing.

LACS^{Link}

The USPS LACS^{Link} database contains data on address conversions.

Leading zeros

Zeroes that are place-holders to the left of numbers that are right-aligned and smaller than the specified field length.

Library

An object on disk that serves as a directory of other objects. A library groups related objects, and enables you to find objects by name.

List codes

A generic term for codes placed next to records in a file. A list code might be used to sort records or perform other operations that require codes to identify like records.

Match attempts

Number of tries the system made to match the input address.

Matching algorithm

Program logic that controls address matching.

Member

Different files within a library. On the IBM i platform, files within files containing similar attributes.

National character

One of the characters $, @, #, or _ (underscore).

NCOA

National Change of Address system.

NCSC

National Customer Support Center. Located in Memphis, TN, the NCSC has responsibility for the NCOA^{Link} certification process.

Numeric character

Any one of the digits 0 through 9.

Packed data

Data that is in a packed decimal format.

Packed decimal format

Representation of a decimal value in which each byte within a field represents two numeric digits except the rightmost byte, which contains one digit in bits 0 through 3 and the sign in bits 4 through 7. For all other bytes, bits 0 through 3 represent one digit; bits 4 through 7 represent one digit. For example, the decimal value for +123 would be represented as 0001 0010 0011 1100 in binary notation, or X'123C' in hexadecimal notation. Note that some computers use alternative representations for packed decimal numbers.

Packed field

A field that contains data in packed decimal format.

PAF

Processing Acknowledgment Form. A form required by the USPS that details information about the customer using move update services.

Parameter

Data passed to or received from another program.

Record

A collection of related data or words, treated as a unit, such as one name, address, and telephone number.

Record layout

Layout of a record, showing all the fields it contains along with each field's length, type, and position in the record.

Record position

The position in a record where a field is located.

Record types

The Postal Service categorizes addresses and assigns each category a code called a record type. For example a rural route is assigned a record type of "R."

REST

Representational State Transfer (REST) relies on a stateless, client-server, cacheable communications protocol and, in almost all cases, uses the HTTP protocol. REST (sometimes spelled "ReST") is an architecture style for designing networked applications. The USPS REST web services protocols can be used to download large files from the USPS servers.

Return codes

Codes produced by the system that indicate matching success and either changes made or discrepancies found in the input address during matching.

Rural route

A delivery route operated in communities lacking convenient postal facilities and maintained by area residents.

Secure Hash Algorithm (SHA)

As used in the USPS NCOA^{Link}, SHA is a FIPS-standard data encoding technique that produces a mathematical value unique to every name/address combination presented.

SOAP

Simple Object Access Protocol (SOAP) is an XML-based protocol that lets you exchange info over a particular protocol (for example, HTTP or SMTP) between applications. SOAP uses XML for its messaging format to relay the information.

Suite^{Link}

The USPS Suite^{Link} database contains data on business addresses that were identified as high-rise default records during CASS processing. VeriMove uses the USPS Suite^{Link} database to correct the secondary (suite) information in business addresses identified in the input file as high-rise default records. Records that have been processed through CASS Certified^{TM} ZIP + 4$^{®}$ matching software and identified as high-rise defaults are potential candidates for Suite^{Link} processing. Suite^{Link} reporting is now required for all levels of production NCOA^{Link} processing. USPS CASS regulations require Suite^{Link} processing to generate the USPS Form 3553 (USPS CASS Summary Report).

ZIP Code

A 5-digit code identifying the post office or delivery station associated with an address.

ZIP + 4 Code

A 4-digit code added to a ZIP Code. The first two digits designate a sector that corresponds to a portion of a zone, rural route, several city blocks, or a large building. A company on one floor of a large office building can have its own ZIP + 4 Code.