EXECUTIVE SUMMARY

Approximately 17 percent of the nation's population moves each year. In FY 1998, the Postal Service processed 44 million change-of-address (COA) orders.

The estimated annual volume of undeliverable-as-addressed (UAA) mail in FY1998 was 5.4 billion pieces, with an average per piece cost of $0.29, and the following disposition:

- 2.1 billion (39 percent) pieces forwarded
- 1.3 billion (24 percent) pieces returned to sender
- 2.0 billion (37 percent) pieces treated as waste

The mobility of the American public and the resulting UAA volume creates formidable obstacles for business mailers to maintain high-quality mailing lists. The associated costs of UAA mail represents a challenge to both the Postal Service and the mailing industry.

Most UAA mail is either First-Class (58 percent) or Standard Mail (A) (38 percent). Of the total UAA volume, 47 percent is sent to Computerized Forwarding System (CFS) units for processing, 34 percent is treated as waste by the delivery unit, and 19 percent is forwarded or returned from the delivery unit without CFS processing.

The FY 1998 cost for processing UAA mail was approximately $1.5 billion. The largest costs are for forwarding ($438 million) and for returning to sender ($768 million). The costs of all categories of UAA mail handling are charged to the customer, either directly (as part of a fee) or indirectly (as part of the rate). The average cost per piece was 21cents for forwarded mail and 59cents for returned mail.

CFS units provide efficient, low cost, high volume processing of UAA mail. They processed 2.5 billion pieces of UAA mail in FY 1998 and reduced their operating per piece cost from 15cents (in FY 1993) to 10cents (in FY 1998).

In the five years since the last UAA volume study, the volume of forwarded or returned to sender mail increased while the volume treated as waste decreased. In all cases, the unit cost for each disposition decreased.

The following table shows the related volumes, cost per piece and total cost.

	VOLUME (billions)		UNIT COST ¢ / Piece		TOTAL COST ($ millions)	
	1993	1998	1993	1998	1993	1998
Forwarded	1.9	2.1	23¢	21¢	444	438
Returned to Sender	0.8	1.3	75¢	59¢	638	768
Treated as Waste	2.1	2.0	5¢	4¢	104	86

Increased use of the Move Update programs, including NCOA, *FASTforward*℠, Address Change Service (ACS) processing and address correction notifications, contributed to the reduction in total UAA mail when measured as a percent of total volume. UAA as a percentage of total volume decreased since the previous (1994) study from 2.84% to 2.72%. This reduction represents over 237 million pieces of mail and an estimated cost avoidance of $69 million in UAA processing costs.

The total cost avoidance associated with the Move Update programs is estimated at $1.5 billion. This savings is based upon the estimated cost of processing the additional 5.3 billion mail pieces. These mailpieces would have been UAA due to change of address, but were identified and the corrections provided to mailers via one of the Move Update tools.

BACKGROUND AND PURPOSE

Definition of Undeliverable-As-Addressed Mail

Undeliverable-as-addressed (UAA) mail is all mail that cannot be delivered to the person or business at the address specified. The following are reasons for which mail may be considered undeliverable:

- The individual, business, or organization to which it is addressed has moved
- The address is incomplete, illegible, or incorrect
- The addressee is unknown or deceased
- The addressee refuses or fails to claim the mail
- Postage has not been paid

Mail which is identified as undeliverable-as-addressed may be forwarded, returned to the sender, properly treated as waste, or treated as dead mail, depending on the treatment authorized for that class of mail and the mailer ancillary endorsement

Purpose

The purpose of the study is to provide information on the volume and characteristics of UAA mail and the costs of the various processes involved in handling UAA mail and related services.

Background

This study was conducted using the 1998 annual volumes from all Computerized Forwarding System (CFS) units. In addition, the tables and analysis include sampling data gathered from numerous delivery and CFS units (sampled during the first two weeks of May, 1999). This report provides an update of two previous studies which used 1981 and 1993 data, conducted in 1982 (USPS Economics and Cost Benefits Division Report) and 1994 (by Price Waterhouse).

CFS Headquarters Operations

CFS Headquarters operations include staff members responsible for overseeing CFS field operations, monitoring performance, handling equipment deploys, establishing policy, and developing future enhancements. It also covers the cost of programming changes and support for the existing software.

Address Management - National Customer Support Center

Address Management at the National Customer Support Center (NCSC) in Memphis, Tennessee, is chartered with administering USPS address management policies. NCSC UAA programs are divided into two categories: Move Update and Address Quality.

Move Update

National Change of Address (NCOA) consists of more than 115 million permanent change-of-address (COA) orders which cover 36 months of COA activity. The data is updated weekly. 22 commercial NCOA licensees offer:

Address change updating before mailing
Standardization of all input addresses
ZIP+4 coding
CASS certification requirement
National Deliverability Index (NDI) report

***FASTforward* (MLOCR and MLC)** system contains an estimated 25 million permanent change-of-address (COA) records, reflecting the most recent 8 months of COA activity. The data is updated weekly. FASTforward consists of a licensed computer system with name and address matching software and the COA database. There are two versions of *FASTforward*:

Multi-line OCR (mail processing)
Mailing List Correction (list processing)

Address Change Service (ACS) is an automated electronic enhancement to the traditional manual process for providing address correction information for UAA mail.

Computerized Forwarding Systems (CFS) operations support by the NCSC includes maintaining the communication network between the over 220 local CFS units. Responsibilities include polling and consolidating the local CFS database information daily and enabling the fulfillment of the National Move Update services (NCOA, *FASTforward*, ACS, etc.)

Address Quality

Delivery Sequence File (DSF) is a high-quality address matching service provided through 10 licensees. DSF includes:

Address validation and standardization
Deliver point and carrier route ID coding
Seasonal and vacant delivery indicators
ZIP+4 coding
Delivery sequencing
Undeliverable addresses other than COA's

Address Element Correction (AEC) is a quality process developed by the Postal Service with industry support. AEC focuses on inaccurate addresses, specifically those addresses that cannot be matched to ZIP+4 code using commercially available software. AEC uses special programs to resolve ambiguous addresses, standardizing them and supplying the missing or correct address elements.

Coding Accuracy Support System (CASS) measures the accuracy of address matching software.

Multiline Accuracy Support System (MASS) is an extension of CASS. MASS measures the ability of multiline optical character readers to apply accurate delivery point barcodes.

Locatable Address Conversion System (LACS) is an address quality matching tool used by licensed vendors to provide:

Updates of addresses changed due to 911 addressing conversions
Updates for rural route addresses that have been converted to city style addresses
Updates for addresses in communities with renaming or renumbering adjustments

National Deliverability Index (NDI) provides uniform methodology to evaluate deliverability of address lists.

Addresses on lists are matched and standardized against the ZIP+4 file
NDI includes apartment / suite numbers and other critical address elements
Processed and report generated through NCOA and *FASTforward* (MLC) providers

SAMPLING AND DATA COLLECTION

Sampling Methodology

First-stage sample

From the 1,297 offices in the Revenue, Pieces and Weight (RPW) Panel, 154 (11.9%) were sampled in this study. The RPW panel is the Postal Service's official probability sampling system for estimating volume, revenue, and weight of mail. This panel was used because it was constructed based on variability information possessed by USPS.

As seen below, 5% to 15% offices in CAGs A through F in the RPW were included in the sample. 16% to 20% of CAGs G through L were included.

CAG	Total Offices	RPW Panel Offices	Sampling Fraction	Number of units reporting
A	101	101	0.059	6
B	177	177	0.119	21
C	715	715	0.112	80
D	616	66	0.136	9
E	1,500	53	0.094	5
F	1,964	48	0.146	7
G	3,020	30	0.200	6
H	3,720	26	0.192	5
J	4,908	25	0.200	5
K	9,295	32	0.188	6
L	1,667	24	0.167	4
Total	27,683	1297	0.119	154

Second-stage sample

Within each of the 154 post offices reporting, five routes were examined. These routes consisted of City, Rural, and PO Box delivery. For offices that contained less than five routes, all routes were chosen.

Data Collection Methods

The data collection was conducted during a two-week period. There were eleven data collection forms for the study, seven to be completed by sampled delivery units and four to be completed by sampled CFS units. In addition, CFS units were asked to submit copies of the CFS Daily Report and the Address Information Operation Analysis Report (also called the 3925 Report).

Data Collection Results

A total of 154 delivery units participated in the study. This represents an increase of 25 units from the previous study. This sample contained the data from 666 delivery routes. For the characterization of the UAA mail pieces, a total of 34,094 pieces were identified and analyzed from among the estimated 1.25 million pieces scheduled for delivery on the sampled routes.

There are a total of 221 CFS units, of which 122 provided detailed cost and volume information. This represents eight more CFS units than in the previous study. National CFS volumes that included all units were also used.

FY 98 RPW Volume and UAA Volume Comparison
Volume Reported in Millions

Mail Class	**RPW Volume**	Percent	UAA Volume	Percent	**Percent UAA**
First Class	101,172.828	51.22%	3,121.947	58.03%	3.09%
Periodicals	10,316.591	5.22%	178.386	3.32%	1.73%
Standard A	82,874.650	41.96%	2,057.722	38.25%	2.48%
Standard B	971.434	0.49%	8.170	0.15%	0.84%
International	943.968	0.48%	4.630	0.09%	0.49%
Priority	1,163.831	0.59%	8.287	0.15%	0.71%
Express	66.244	0.03%	0.860	0.02%	1.30%
Mailgram	4.302	0.00%	0.000	0.00%	0.00%
Total	**197,513.848**	100.00%	5,380.002	100.00%	**2.72%**

FY81 – FY93 – FY98 Comparison
Volume Reported in Millions

UAA Mail Overview	FY 81	FY 93	FY 98
Annual National Mail Volume	**109,244.891**	**170,623.520**	**197,513.848**
UAA Volume	**2,755.300**	**4,842.271**	**5,380.002**
UAA as a Percent of Annual Volume	**2.52%**	**2.84%**	**2.72%**
UAA Mail Class Information			
First Class	56.80%	51.30%	58.28%
Second Class / Periodicals	6.60%	4.40%	3.32%
Third Class / Standard A	36.10%	44.20%	38.25%
Fourth Class / Standard B	0.50%	0.10%	0.15%
UAA Mail Disposition Information			
Forwarded	46.60%	39.60%	38.91%
Returned to Sender	18.20%	17.30%	24.36%
Treated as Waste	35.20%	43.10%	36.73%
Forwarding to Other Locations			
Local Forwarding Order	51.90%	54.70%	43.91%
Non-local Forwarding Order	48.10%	45.30%	56.09%

Summary Costs for Processing Undeliverable-As-Addressed Mail

	A Annual Volume (Thousands)	B Cost/Piece	C Annual Cost (Thousands)
1. Processing Change of Address Cards	44,122	$2.0678	**$91,238**
2. Mail pieces Forwarded	2,093,190	$0.2091	**$437,610**
3. Mail pieces Returned			
a. Free	1,208,235	$0.5104	$616,672
b. Postage Due	102,361	$1.4771	$151,193
Mail pieces Returned Subtotal	1,310,596	$0.5859	**$767,865**
4. Mail pieces Treated As Waste	1,976,217	$0.0434	**$85,752**
5. Fulfilling Address Correction Requests			
a. Form 3547	192,985	$0.3266	$63,022
b. Form 3579	21,056	$0.7559	$15,916
Manual Hardcopy Processing Subtotal	214,042	$0.3688	$78,938
c. ACS Nixie at CFS Units	65,502	$0.1661	$10,879
d. ACS Nixie at Delivery Units	65,502	$0.3298	$21,604
e. ACS COA Processing	106,245	$0.2186	$23,222
Electronic Notification Subtotal	171,747	$0.3243	$55,705
Fulfilling Address Correction Requests Subtotal			**$134,643**
6. Other UAA Support			
a. Move Update			$7,306
b. Address Quality			$3,675
c. CFS Headquarters Operations			$8,697
Other UAA Support Subtotal			**$19,678**
7. Total Overall Cost			**$1,536,786**
8. Average Total Cost per Piece			**$0.2856**

MOVE UPDATE

The Effect of USPS Change-of-Address Quality Tools (Cost Avoidance)

In 1998, with an average match rate of 4.41%, NCOA licensees identified more than 4.8 billion mail addresses, from their customers mailing lists, that had changed and would have resulted in the mail becoming UAA (requiring additional handling). The effect of those pieces, had they been created and sent without address changes, would have been to significantly increase (almost double) the total UAA volume handled by the US Postal Service. Including address change identification from *FASTforward* processing and notifications from USPS ACS systems (ACS electronic notification and 3547, 3579 hardcopy notifications), the total UAA volume would have increased by more than 5.2 billion mail pieces. The additional (USPS) cost would have exceeded $1.5 billion. This extra cost does not include additional capital requirements that would have been necessary to allow the increased volume to be processed. The total weighted cost per piece of UAA mail ($0.2856) was used to determine the USPS costs that were avoided by use of these move update tools.

According to USPS volumes as reported by NCOA / *FASTforward* providers and CFS units:

Volume avoided by NCOA matching	4,830,521,256	
Volume avoided by FASTforward		
MLOCR	24,453,007	
MLC	56,386,376	
Volume of ACS updates	143,571,443	
Volume of address correction updates		
3547	192,985,251	
3579	21,056,495	
Conservative estimate of UAA volume avoided	5,268,973,828	
Unit cost per UAA piece (total weighted cost)	$ 0.2856	
Total Costs avoided		**$ 1,504,818,925**

Total cost avoided because of the NCOA, *FASTforward,* ACS address change or Address Change (hardcopy) notification is estimated at $1.5 billion in 1998.

This savings has allowed the USPS to keep costs down and manage the address redirections that are required without significant capital investment. The volume does not include address corrections that resulted from use of other USPS address list quality tools such as DSF, AEC or LACS.

Background

The United States Postal Service has identified more than 145 million delivery points in the United States. In 1998, more than 44 million address change requests were filed with the USPS. Statistics reported by the US Census Bureau confirm that about 43 million persons or 17-20% of the US population moves each year. When the addressee no longer accepts mail at the delivery point indicated on the mail piece, one of three things will happen. Depending upon the class of mail and the length of time that the change of address request has been in effect, the Postal Service will do one of the following:

- Forward or redirect to the new or correct address
- Return to sender
- Treat as waste

The NCOA database, accessed through one of the matching engines (NCOA or *FASTforward*), provides a reliable means of redirecting mail to persons or businesses that have changed the location where they receive mail. With the increasing transitory nature of the US population, it is difficult to imagine what the costs and service levels would be like without NCOA and the other change-of-address quality tools. These Move Update processes provide customers with an opportunity to have future mail pieces correctly addressed and redirected to the new delivery point. Once a form 3575 is submitted and verified by USPS, the change is entered into the NCOA database. The USPS uses this database to redirect mail and to provide address change information in accordance with specific guidelines. When a piece of mail enters the USPS process and still requires redirection, the additional costs are quite significant. Forwarding costs are (on average) $0.21 to forward and $0.59 to return a mail piece. First class mail pieces are redirected for one year at no additional cost to either the mailer or the addressee.

USPS Address Management at the National Customer Support Center (NCSC), located in Memphis, Tennessee is chartered with administering USPS address management policies. They maintain the National Change of Address (NCOA) database, promoting the use of the database to redirect mail internally (through the CFS processes) and externally (pro-actively, primarily through NCOA and FASTforward licensees). The cost for address correction through the NCOA and *FASTforward* processes is relatively low (about $2-5 per 1000 names checked) and the value of these updates is well understood. In 1998, more than 109 billion records were compared to the database by mailers using NCOA processing. A match rate of 4.41% which equals more than 4.8 billion mail pieces that could have been sent through the USPS processes and would have required special handling were identified and changes automatically made. Other processes used for mailing list maintenance include *FASTforward* and Address Change Service (ACS). The *FASTforward* processes checked more than 5 billion mail pieces or names on lists and identified (and updated) 81 million. ACS provided 144 million address corrections.

One way to keep the cost of the additional handling to a minimum is to reduce the volume of mail that is undeliverable as originally addressed (UAA). When a mailer uses the NCOA database and related processes to maintain their mailing lists and prevent UAA mail from entering the mail stream, they help keep the costs down.

In 1997, the USPS introduced the Move Update requirement. The purpose of this requirement was to encourage customers to use mailing list maintenance practices that would maximize the number of First Class mail pieces that are deliverable as addressed. The primary purpose is to maintain the focus on updating due to change-of-address.

The Move Update requirement requires mailers to select from one of the following four methods to remain eligible for discounted First Class rates:

- National Change of Address (NCOA)
- Address Change Service (ACS)
- *FASTforward*
- Ancillary Service Endorsements

There are some mailers who have earned an exemption from this requirement by maintaining (and routinely verifying) UAA volumes of less than 1%. These are primarily utilities or other mailers who employ strict means of insuring address accuracy.

The response to the Move Update requirement is varied. Many had been using the NCOA or ACS process or ancillary endorsements for years. (*FASTforward* was not available until 1997). Some mailers will check their list prior to each mailing. Others will divide their list into sixths and process only one portion per month. Some use ancillary endorsements, which require payment for separate address change information or for the return of each piece of UAA mail. Since address correction is manual, the mailer may or may not correct their mailing list. Although it is not required for Standard (A) mail, many mailers recognize the value and maintain their lists using one of the Move Update processes. In fact, one government agency computed an annual savings of more than $3 million each of the past two years along with the added benefits of improved service levels and increased customer satisfaction.

UAA Reduction Efforts Timeline

The following efforts have been implemented to manage the cost and volume of UAA mail.

1981	Address Management System (ZIP+4 database)
1985	Address Change Service (ACS) for Periodicals – COA only
1986	National Change of Address (NCOA) licensed
1988	National Deliverability Index report
1989	ACS for Standard Mail (A) and 2nd generation Nixies
1990	ACS for First-Class Mail
1991	ACS for Standard Mail (B)
1991	Coding Accuracy Support System (CASS)
1991	Multi-line Accuracy Support System (MASS)
1991	Locatable Address Conversion System (LACS)
1992	Delivery Sequence File (DSF) licensed
1993	Address Element Correction Service (AEC)
1995	ACS Shipper Paid Forwarding (SPF) for Standard Mail (B)
1997	ACS Shipper Paid Forwarding (SPF) for Standard Mail (A)
1997	*FASTforward* (MLOCR and MLC) licensed
1997	Move Update Requirement for First-Class discounted mail
1997	Ancillary Service Endorsements simplified and reduced to four:

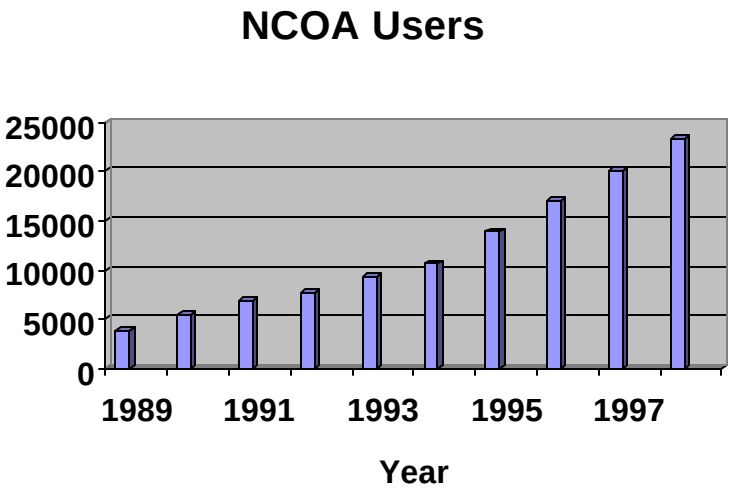
- Address Service Requested
- Forwarding Service Requested
- Return Service Requested
- Change Service Requested

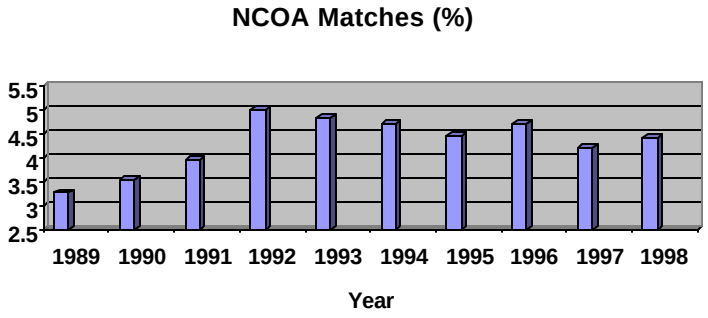
USPS Address Management Tools (Move Update)

National Change of Address (NCOA)

The most widely used method of address maintenance is through the use of the address-matching service known as NCOA. Twenty-two commercial NCOA licensees provide services that verify or correct ZIP codes, standardize the format for addresses, city and state names, and append ZIP+4 codes, carrier route codes and delivery point barcode information. Then, the list is compared to the NCOA database and new addressing information is provided for the names and old addresses that exactly match.

In 1998, more than 23,400 customers compared their lists to the NCOA database. More than 109 billion records were compared; more than 4.8 billion records (4.41%) matched (identifying potential mail pieces that would require re-direction).



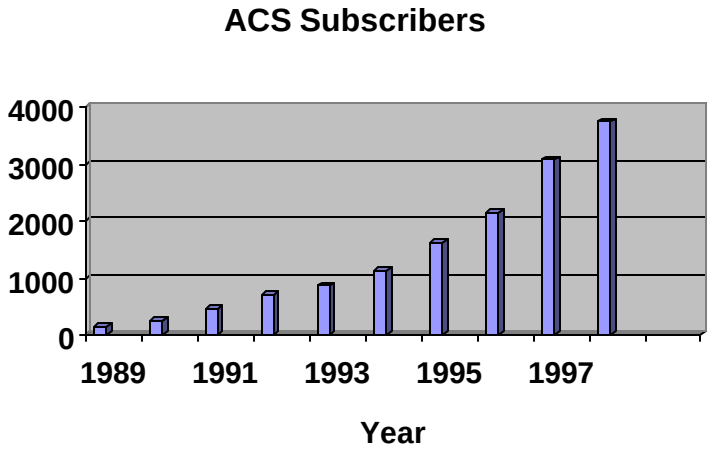


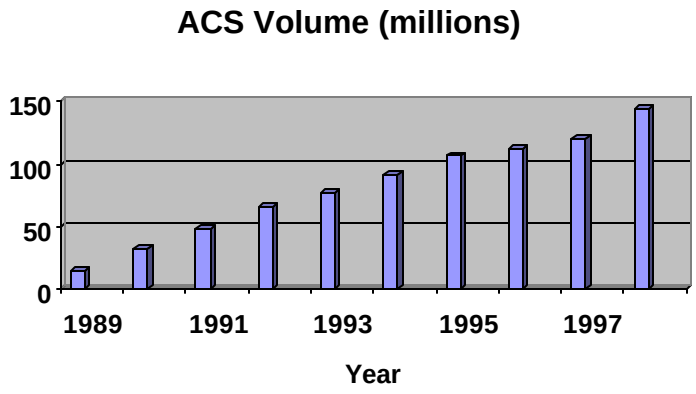
These graphs show that the volume of mail that was compared to the NCOA database has been consistently rising since NCOA was introduced. This makes sense since both the mailer and the USPS save as a result. The mailer receives updated address information, which allows a higher percentage of outgoing mail to reach the targeted customer in the targeted geography. The USPS avoids significant additional cost and is able to keep presorted mail rates low, competitive and attractive to mailers.

Address Change Service (ACS)

Participants add a unique code to each mail piece that identifies the ACS participant and another one that identifies the person to whom the mail piece is being sent. Information regarding the addressee that no longer receives mail at the identified address is provided to the ACS participant either electronically or by hardcopy. The new address or reason for non-delivery is provided to the mailer. Participants are charged for this service on a per-piece basis.

In 1998, more than 3740 subscribers and 144 million pieces were processed using ACS.





ACS is a cost-effective process that quickly notifies subscribers of address changes in a manner (digitally) that allows for rapid update of the mailing process, with the potential of eliminating subsequent mailings that would require redirection. Although a hardcopy option is available, the electronic version, which is less expensive and more efficient for both the subscriber and the USPS, is the preferred method of address change notification.

FASTforward

The *FASTforward* system consists of two different product offerings. The first product (MLOCR) compares letter mail that has already been addressed. The names and addresses are compared against the most recent 8 months of information from the NCOA database. Records (mail pieces that are scanned with Optical Character Reading (OCR) equipment are compared and those that match are identified, the new addresses and both the ZIP+4 and Delivery Point Sequencing (DPS) information are applied. The second product (MLC) compares mailing lists against the same 8 months data. Matches are handled in a manner similar to NCOA processed records. The equipment and software for both *FASTforward* products is the property of the USPS and is provided to qualified licensees.

In 1997, *FASTforward* debuted. In 1998, more than 2.3 billion records were processed using the MLOCR product with more than 24 million matches (1.03%). The MLC product was used to identify more than 56 million address changes (1.86%) from more than 3 billion records checked.

Ancillary Service Endorsements

Another acceptable method for complying with the Move Update requirement and securing the reduced First Class rate is through the use of ancillary service endorsements. The purpose of these endorsements is to inform the USPS of how to notify the mailer of a changed address and the desired manner of processing the UAA mail piece. There are 3 different eligible endorsements: Return Service Requested, Address Service Requested and Change Service Requested. Forwarding Service Requested does not satisfy the Move Update requirement. Address Correction Requested (ACR) is no longer a valid endorsement.

The following descriptions of the effect of the endorsements refer only to First Class mail products. For other mail classes, the effects may be slightly different.

Return Service Requested will result in notification of the address change or the reason for non-delivery on the original mail piece that is returned to the sender at no additional charge.

Address Service Requested will forward the mail piece for the first 12 months, while separately notifying the mailer of the new address (fee charged). During the next 6 months, the mail piece is returned with the new address. After 18 months, or if undeliverable, the mail piece is returned with the reason for non-delivery.

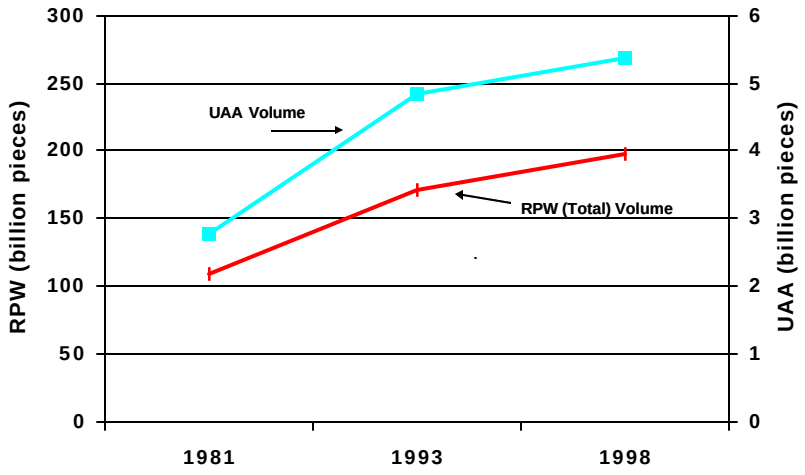
Change Service Requested is used in conjunction with electronic ACS. The ACS participant receives address change notification without forwarding or return of the mail piece.

The use of an ancillary service endorsement allows mailers who do not use automated equipment to receive the new address information. These endorsements may also be used in conjunction with one of the address hygiene services (such as NCOA or *FASTforward*) to further increase the accuracy of mailing lists.

Value of Move Update

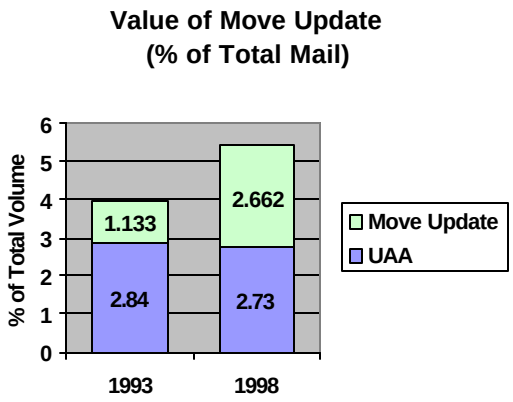
The total volume of UAA mail has been quantified three times since 1980. Between 1981 and 1993, while the total mail volume increased by 56%, the UAA volume grew at a rate of 76%. From 1993 to 1998, with the total mail volume increasing 16%, the UAA volume only increased by 11%.

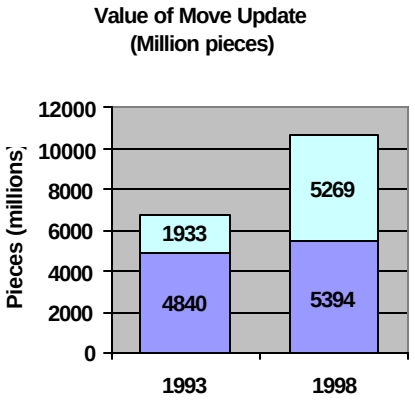
RPW and UAA Volume Comparison – 1981, 1993, 1998



Move update programs have been introduced to help reduce the volume of mail that enters the USPS system, ultimately requiring additional handling and redirection. The graphs below show the effectiveness of the NCOA database, with its use through either external licensees or internal processes (CFS). Comparisons of the 1998 data and the previous (1993) study data show the value of the move update services quite clearly. These assume that each updated record from the NCOA database would prevent one piece of mail from becoming UAA.

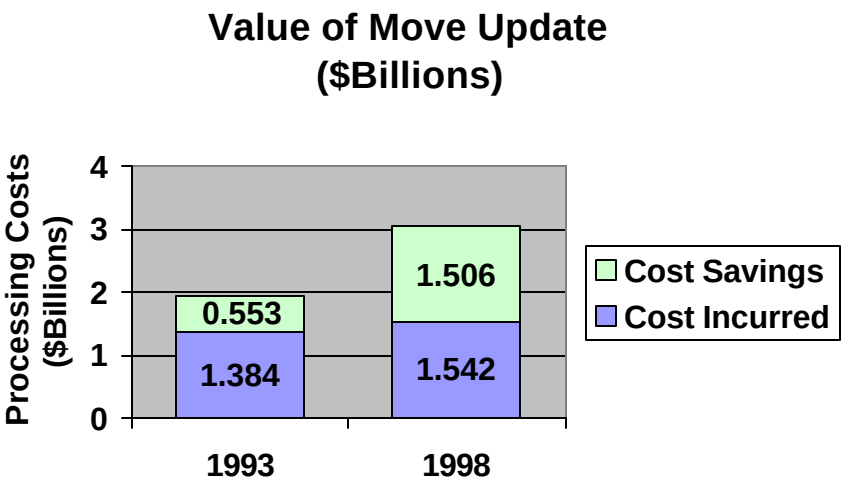
The first two graphs show the value of Move Update products and services. The upper sections of the bar graphs (labeled Move Update) show the volume and percentage of total mail volume that never reaches the USPS mail stream. The lower sections (labeled UAA) show the actual volumes that were processed in USPS facilities. During this timeframe, it should be noted, the total mail volume increased by 27 billion.





This final graph shows the costs that the USPS did not incur as a result of mailers checking and correcting their lists. The total UAA volume managed by the USPS, and the volume that was identified and changed prior to the USPS mail stream amounted to 6.8 billion pieces 1993 and 10.7 billion pieces in 1998.

The Move Update savings has helped keep postage rates lower than they otherwise would have been. In fact, the cost savings to the mailers is even greater because of the increased delivery of their mail pieces to the desired customer, at the anticipated location, without time delays, wasted effort or materials (including postage).



ADDENDUM

Address Deficiency Study

Purpose and Overview of Study

The Address Deficiency Study was conducted as part of the broader USPS Undeliverable as Addressed (UAA) mail cost study. The purpose of this data collection study was to identify address deficiencies in the mail stream and to estimate the percentage of mail pieces having specific deficiency types. This effort updated the 1993 Operation Mail study used to identify the magnitude of issues related to address hygiene. U.S. Postal Service Address Management (AMS) teamed with PricewaterhouseCoopers (PwC) to perform the study.

The study involved randomly selecting letter mail pieces at specified Processing and Distribution Centers (P&DCs) nationwide, and subsequently analyzing those mail pieces for specific address deficiencies. Eighty AMS Managers and Specialists nationwide participated in the study. Each AMS Manager or Specialist visited a designated plant to sample 200 pieces of letter mail. Using the AMS National database, the AMS Managers and Specialists then reviewed and analyzed photocopies of each of the mail pieces to identify and record address deficiencies and other mail piece information. The assistance of the Delivery Unit and the assigned letter carrier was sometimes requested to clarify questionable findings. Upon completion of the analysis, the AMS Manager or Specialist summarized the study results by ZIP Code and mail class. The study was performed between June 20, 1999 and July 16, 1999.

Address Deficiencies

A number of address deficiencies were analyzed in the study. Deficiency types were made up of first line errors (modifications to the original piece due to addressee name errors), delivery line address errors or omissions, and last line address errors or omissions. First line modifications to the original piece included changes of address (indicated by a yellow COA label affixed by the Computerized Forwarding System) and Return to Sender carrier endorsements. Delivery line deficiencies related to errors in street name, house or PO Box number, secondary number, street directional/suffix, and rural routes or rural box numbers. Last line deficiencies related to errors in the ZIP Code, city, or state listed on the letter.

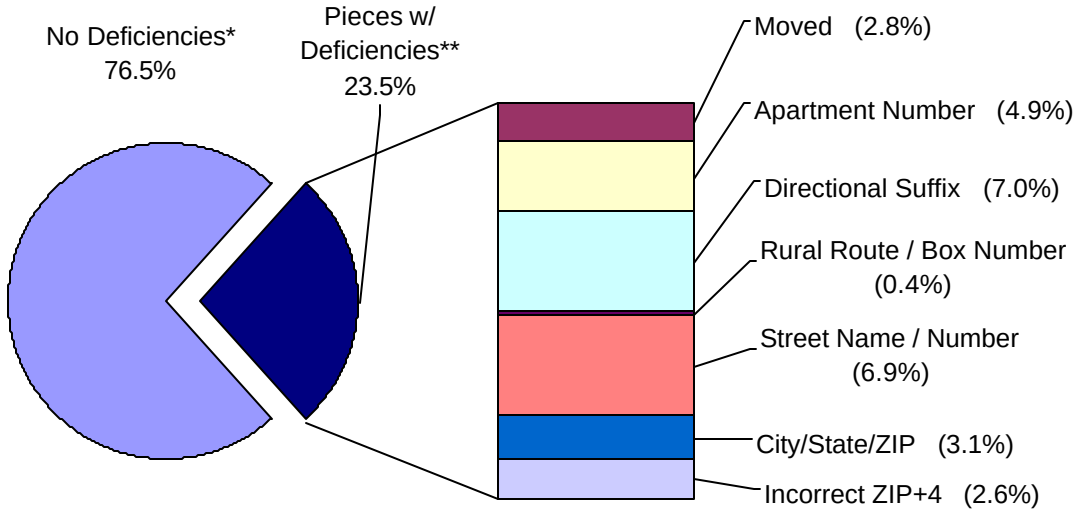
The specific categories used in the study were similar to those of the Operation Mail study with some exceptions. Because Operation Mail was performed by carriers, deficiencies regarding the named customer included detail that could not, in this study, be gathered by AMS Managers using the AMS National database. The current study did include additional categories of information. Lack of standardization of street directionals and suffixes, as well as city and state names was noted, as was the use (correct and incorrect) of ZIP+4. General piece information (regarding business or household sender and destination, PO Box delivery, machine-printing of addresses, use of barcodes, etc.) was compiled for each letter, as well.

Importance of Address Accuracy and Standardization

As the Postal Service continues to expand its use of automated mail processing equipment, there are considerable cost savings due to the reduction in human handling of mail. However, in cases where automated equipment cannot process a mail piece due to significant address deficiencies, the full potential of cost savings due to automation cannot be realized. Because manual handling of mail is much more costly than automated processing, it is important to limit the extent of addressing deficiencies. Doing so may reduce overall mail processing costs significantly.

Address standardization is also of high importance. The final benefit of address standardization is the “deliverability” of a mail piece. Complete addresses that match AMS files and directories have a better chance of being promptly and correctly delivered. Printing complete information on a mail piece and eliminating extraneous information that can confuse delivery personnel or be misread by postal equipment, enhances on-time mail delivery. AMS is continuing to explore ways to improve the processing and delivery of mail in a timely, cost-effective manner. Address standardization is a positive step toward improved address quality and is a cost-effective operation for both postal customers and the Postal Service.

Actual Address Deficiencies by Aggregate Type



* Pieces with "no deficiencies" include those with correct but non-standardized addresses. More than 9% of pieces sampled had non-standardized address elements.

** Because a single piece may have multiple address deficiencies, the percentages of pieces having each deficiency type do not sum to the overall percentage of pieces with deficiencies.