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REPORT TO THE CONGRESS

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Observations And Questions On The Development Of The New National Bulk Mail System B-114874

United States Postal Service

**BY THE COMPTROLLER GENERAL
OF THE UNITED STATES**

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COMPTROLLER GENERAL OF THE UNITED STATES

WASHINGTON, D.C. 20548

B-114874

To the Speaker of the House of Representatives
and the President pro tempore of the Senate

This is our report entitled, "Observations and Questions on the Development of the New National Bulk Mail System."

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Postal Reorganization Act of August 12, 1970 (39 U.S.C. 2008).

Copies of this report are being sent to the Director, Office of Management and Budget; the Postmaster General; and each member of the Board of Governors of the United States Postal Service.

A handwritten signature in black ink, reading "James B. Stacks".

Comptroller General
of the United States

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ABBREVIATIONS

ASF auxiliary service facility
BMC bulk mail center
GAO General Accounting Office
NBMS National Bulk Mail System
SCF sectional center facility

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

OBSERVATIONS AND QUESTIONS ON
THE DEVELOPMENT OF THE NEW
NATIONAL BULK MAIL SYSTEM
U.S. Postal Service
B-114874

D I G E S T

WHY THE REVIEW WAS MADE

The Postal Service is investing nearly \$1 billion in a new nationwide system to improve service for mailing parcels, circulars, and other bulk mail, but not first-class mail (letters).

It is called the National Bulk Mail System (NBMS) and will consist of 21 new bulk mail centers and 12 new auxiliary facilities. (See map on p. 5.)

Bulk mail amounts to about one-third of all mail.

As of June 30, the Service had committed \$849 million of a total budget of \$950 million to this program.

Because of its cost and importance, GAO is issuing this report, which

- describes how the system will operate,
- discusses the planning behind it, and
- points to potential problems ahead.

FINDINGS AND CONCLUSIONS

The Postal Service estimated, in 1971, that the cost to construct and equip the new

system would total \$950 million. This estimate is still reasonably accurate.

Omissions in the initial estimate understated the expected cost of the system, but these were offset by underruns in some items as of March 1. (See pp. 11 and 12.)

The Postal Service has calculated that the system will result in a financial benefit of \$500 million annually by 1984--the year that the Service is supposed to be self-sustaining.

This projection may prove correct, but it is far from certain for two reasons:

- The uncertainty of the Service's future share of the parcel delivery market and future revenues. (See p. 13 and pp. 16 to 18.)
- The uncertainty of the accuracy of the Service's prediction of how the new system will affect its overall costs. (See p. 14.)

Problems in preventing further parcel post volume losses

Although the National Bulk Mail System is expected to improve

the quality of service provided by the Postal Service, it may not overcome the competitive advantage of its principal competitor.

The Service has not only failed to share in the growth of the market, in recent years, but lost part of its previous business.

Most of this loss has been in the short-haul categories--distances up to 600 miles.

In 1963 the Service handled about 540 million parcels for delivery within this distance. By 1973, volume had decreased about 49 percent to 276 million. This occurred in a period when total parcel volume was increasing about 28 percent. (See p. 16.)

The principal reason for this loss was because competitors had

- better service,
- speedier deliveries,
- less damage to parcels, and
- lower rates.

The system's *proposed* delivery standards for distances up to 600 miles will not equal the *present* delivery standards of the Service's principal competitor. Tests performed by a contractor show that the average days to deliver parcels by this competitor currently are fewer than under the new system's proposed standards.

Under the system some parcels will move longer distances and take more time before being sorted and delivered than at present--especially in areas where the Postal Service has been experiencing its greatest loss of parcel volume.

Any significant deterioration of service in these areas will only cause additional loss of volume.

Postal Service officials said that a recent study has been made to determine the feasibility of having some parcels retained at the local post office or sectional center facility for processing and sorting to minimize any deterioration of service. The Service estimates that about 7 percent of the total daily parcel volume will bypass the system in this manner.

However, this modification will affect only a small portion of the parcel post volume in the shorter zones. Additional holdouts or modifications to the National Bulk Mail System may be needed so that the Postal Service can compete adequately with its competitors.

RECOMMENDATIONS

The Postmaster General should analyze the national bulk mail routing system periodically to insure that the most effective and efficient system possible is operated. (See p. 27.)

AGENCY ACTIONS AND UNRESOLVED
ISSUES

The Postmaster General stated that the Service plans to analyze the routing system periodically as GAO recommended.

He said that, even when very pessimistic projections are used for parcel post volume, the new system will still yield a very favorable return on investment. On the other hand, he agreed with GAO that the precise dimensions of the financial benefits will not be known until after the system is fully operational.

The Postal Service does not believe that the system will work against its ability to retain its share of an expanding parcel post market. However, as discussed on pages 16 and 19, delivery standards for the shorter parcel post zones, even though better than the Service's current performance, will not be as good as the current delivery standards of the Service's principal competitor.

Unless routing modifications are made, the Service probably will have difficulty in preventing further losses of parcel volume.

This cannot be proven because the new system has not been implemented, and the Service may be able to compete adequately with its principal competitor and achieve its goal of delivering at least 95 percent of all parcels handled within its delivery standards. (See p. 28.)

MATTERS FOR CONSIDERATION
BY THE CONGRESS

This report contains information on the Postal Service's first major effort to improve postal operations and a recommendation for improving the new system.

This information should assist committees and Members of the Congress in reviewing postal operations.

CHAPTER 1

INTRODUCTION

The Postal Service is investing about \$1 billion in a nationwide system for processing bulk mail -- the National Bulk Mail System (NBMS). The system, formally approved on March 11, 1971, will consist of 21 bulk mail centers (BMCs) and 12 auxiliary service facilities (ASFs) spaced across the country. By volume, bulk mail accounts for about one-third of all mail. It includes parcels, circulars, and other nonletter mail.

The Service expects the entire system to be operational by late 1975. The individual facilities are in varying stages of construction. Certain of them are already substantially complete, while some are in the early stages of construction. As of June 30, 1974, the Service had committed \$849 million of the total budget of \$950 million authorized by the Service. Under agreements with the Department of the Army, the Corps of Engineers is constructing these facilities. The Corps is responsible for awarding construction contracts, monitoring the construction, and procuring the mechanization.

A 1970 study by a consulting firm to determine the benefits to be derived by a bulk mail system showed that such a national system would save about \$300 million annually. The savings were determined on the basis of an analysis of the 1969 bulk mail costs and what the costs would have been in 1969 had the bulk mail system been implemented.

In 1971 the Postal Service initiated a major effort -- NBMS -- to halt the decline in parcel post volume. By improving service, the Postal Service hoped to at least maintain its volume and prevent further losses of volume. Of equal importance, the Service expected significant economies from the advanced mechanization of such a system.

The Service has recently stated to a congressional committee that by 1984 the system would increase revenues and reduce costs amounting to about \$500 million annually. This figure was based on a June 1972 study by a consulting firm.

In fiscal year 1969 the Postal Service handled 644 million parcels. By 1973, volume had declined to about 475 million parcels. The Service has predicted a further decline to about 430 million by 1977.

Both benefits--reduced costs and increased revenues--would help the Service achieve its congressionally mandated goal of becoming self-sufficient by 1984.

ESTABLISHMENT OF THE POSTAL SERVICE

In April 1967 the President established a Commission on Postal Organization to review postal operations to determine the feasibility and desirability of transferring the postal service to a Government corporation or some other form of organization. This step was taken because of increasing concern about postal activities.

The Commission concluded that the former Post Office Department had been operated as an ordinary Government agency, when it was, in fact, a business--a big business. The Commission's June 1968 report stated that "the challenges faced by this major business activity cannot be met through the present inappropriate and outmoded form of postal organization." The Commission recommended establishing a postal corporation to operate the postal service on a self-supporting basis.

The Congress, receptive to the Commission's recommendations, passed the Postal Reorganization Act (39 U.S.C. 101), which terminated the Post Office Department and created the Postal Service, effective July 1, 1971.

NEED FOR MECHANIZATION TO IMPROVE PRODUCTIVITY

The Postal Service's most pressing financial and operating problems are principally due to the fact that the Service is a labor intensive organization. In fiscal year 1973, \$8.3 billion, or 85 percent of the Service's total expenses of \$9.8 billion, was for salaries and benefits for about 701,000 employees.

Because future salary increases are inevitable (assuming an increase of 5.5 percent a year, the current average annual postal salary, including fringe benefits, of about \$13,500 will increase to about \$23,000 annually by 1984),

the Postal Service is striving to increase employee productivity through mechanization and thus minimize the postage rate increases that would otherwise be required for the Service to become self-supporting.

Mechanization inhibited in the past

One of the principal observations of the President's Commission on Postal Organization was that there was a "mechanization gap" in the Post Office Department--a failure to take advantage of available technology to improve productivity.

The Commission attributed this situation to the prior inability of the Post Office Department to obtain the funds needed for capital investments. The Commission's report stated:

"Both capital and operating funds are obtained simultaneously through the appropriations process, and when total obligations must be reduced in the interest of economy, it is often the capital funds which are cut since capital needs always seem more deferable than operating needs. The capital needs of the Post Office, furthermore, usually rank low on the scale of national priorities."

Funds now available

The Postal Reorganization Act gave the Service a means to finance its capital investments. The act authorizes the Service to borrow money and to issue and sell obligations. It states:

"The aggregate amount of any such obligations outstanding at any one time shall not exceed \$10,000,000,000." 39 U.S.C. 2005 (1970)

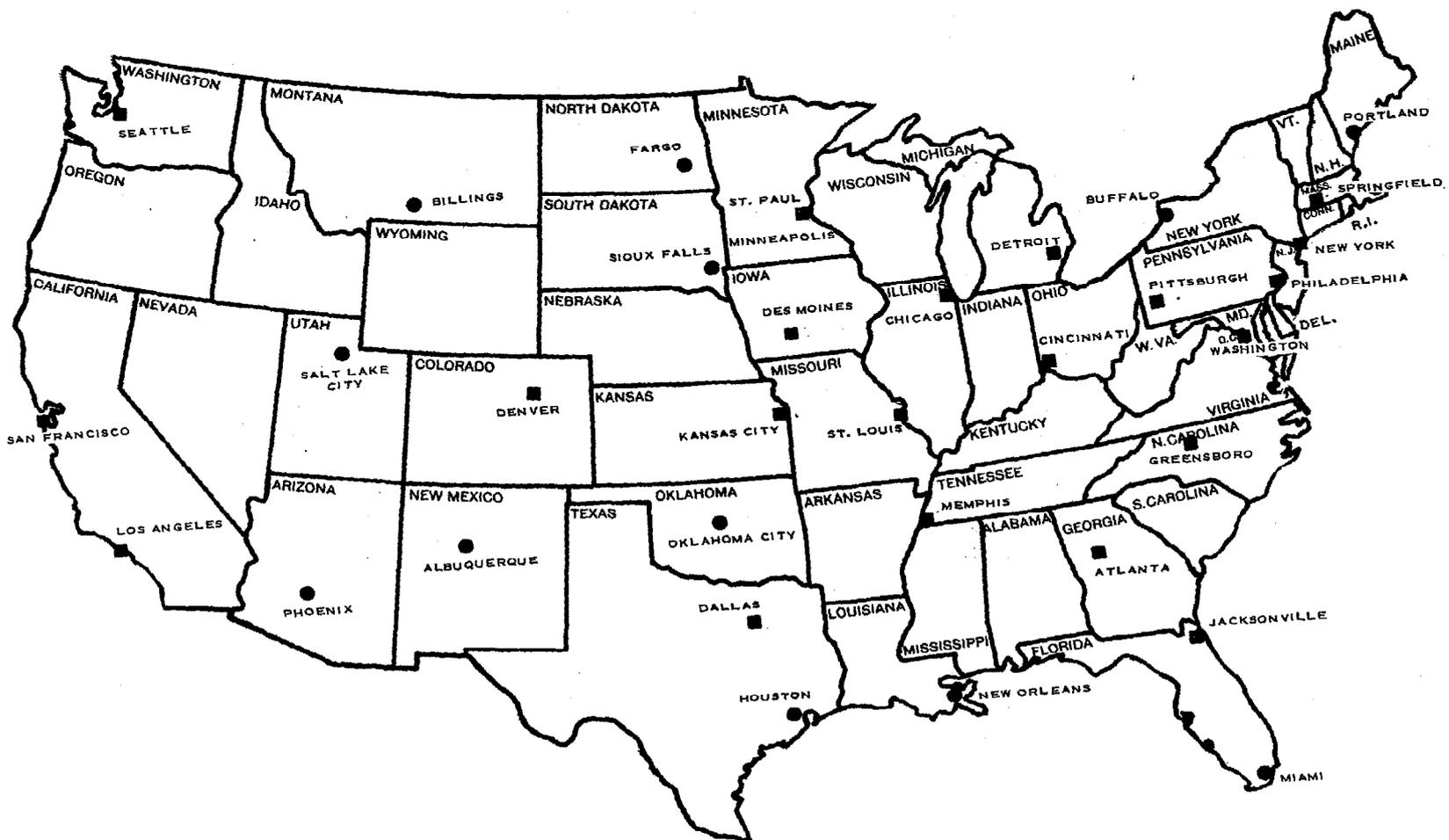
Through fiscal year 1974, the Service had borrowed \$750 million. Its fiscal year 1975 budget indicated its intent to borrow \$500 million more.

NBMS FIRST NEW NATIONWIDE SYSTEM

NBMS represents the Postal Service's first large-scale use of its funding authority to develop a new nationwide mail processing system. It will process all fourth-class mail (parcels), third-class mail (circulars), and nonpreferential second-class mail (nontime value magazines). Appendix II describes in detail the types of mail to be handled.

The Postal Service has also been considering development of a nationwide system--the Preferential Mail System--for handling the other classes of mail, such as first-class letters. As presently conceived, this system would cost about \$4 billion. The Service plans to develop NBMS and to evaluate its success before it takes action on the Preferential Mail System. In a report to the Chairman, Senate Committee on Post Office and Civil Service (B-114874, Oct. 30, 1973), we presented our observations on the Preferential Mail System.

NETWORK CONFIGURATION: ■ 21 BULK MAIL CENTERS
● 12 AUXILIARY SERVICE FACILITIES



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CHAPTER 2

OPERATION OF NBMS

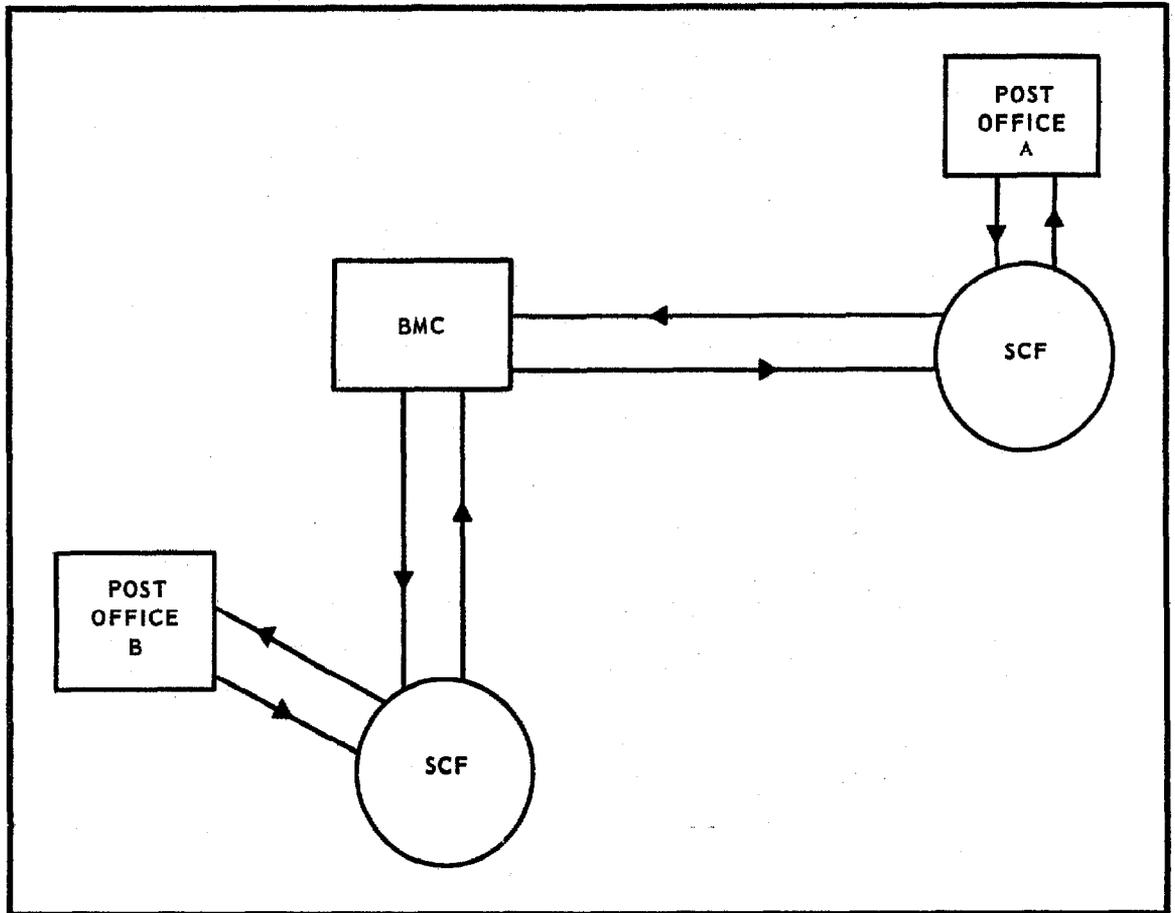
NBMS will consist of 21 large processing plants (BMCs) and 12 ASFs strategically located throughout the continental United States. A map of the system is shown on the preceding page.

Each BMC will serve a defined geographical area. Essentially, a BMC will function as a distribution center where bulk mail originating and coming into a BMC service area will be processed on mechanized sorting equipment where it will be separated for transport (1) to another BMC or (2) if destined for a location within the center's service area, to the appropriate sectional center facility¹ (SCF) or ASF. According to the Postal Service, this concentration of the mails justifies much more and higher orders of mechanization than under the prior decentralized system.

There will be two primary types of mail movement under the NBMS: (1) within a center service area and (2) between service areas.

The following diagram illustrates the general movement within a service area. As shown, bulk mail will be transported from individual post offices to the cognizant SCF and thence to a BMC. At the center, the mail will be sorted and transported to the appropriate post offices via an SCF.

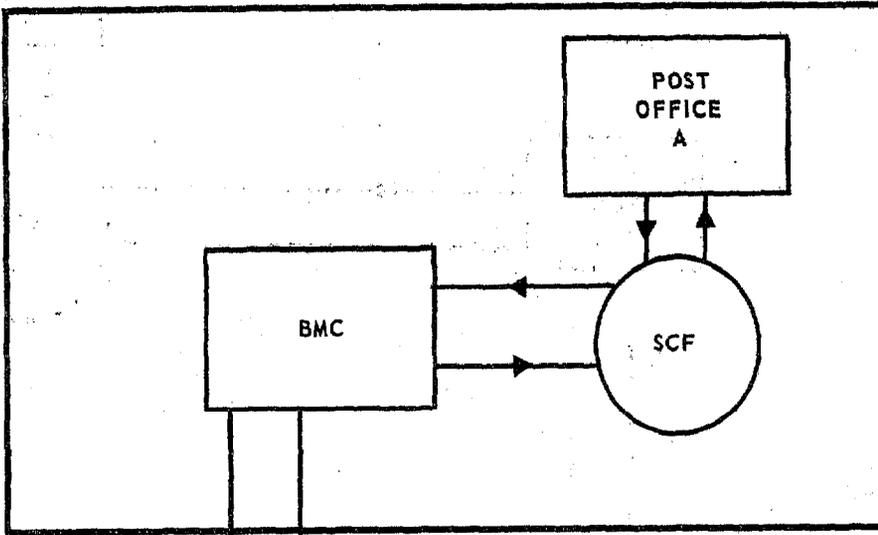
¹ A central facility for working mail to and from assigned satellite offices.



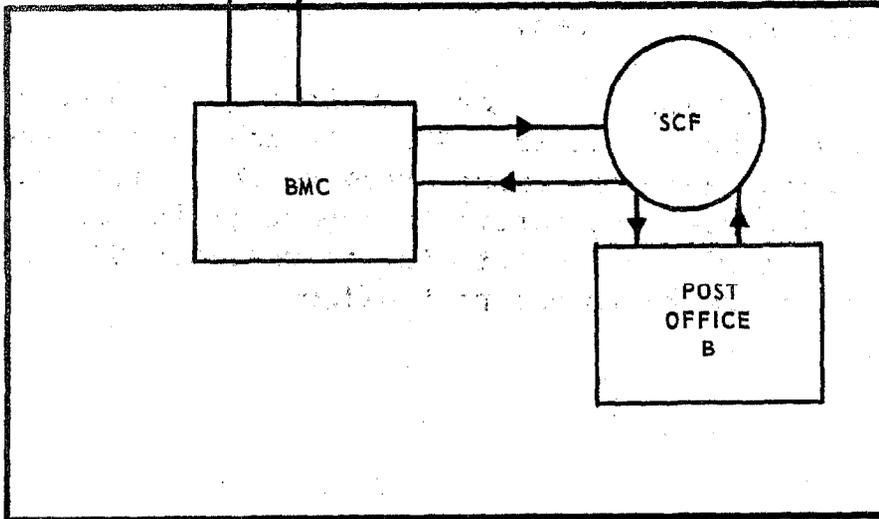
The following diagram illustrates the general movement between BMC service areas.

As shown, mail will flow from individual post offices to a BMC via the appropriate SCF. At the center, the mail will be sorted and then transported to the center within whose service area the destination post office is located. From there it will be sent to the appropriate SCF for distribution to the recipient post office.

BMC SERVICE AREA



BMC SERVICE AREA



The Postal Service has compared NBMS with the existing system, as follows:

"We now have 73 principal shipping points across the country. At most of these shipping points we do some processing. We are going to reduce those to 21. We will have no intermediate processing, once the mail has gone through its originating bulk mail center. Then it will be put in the transportation system and transported to the destinating bulk mail center."

* * * * *

"This system, then, effects a reduction in handling of the order of magnitude of 2½ to 1. We will be able to get more concentrated shipping quantities because of concentrating the handling at one point, and be able to take more advantage of the cube of the vehicle¹ and, hopefully, through that means to lower costs and improve service." (Hearings before a Subcommittee of the Committee on Appropriations, House of Representatives, on the Treasury, Postal Service, and General Government Appropriations for fiscal year 1973, 92d Cong., 2d sess., part 2, p. 29).

Expressed in another way, the principal advantages of NBMS are that (1) because of the volumes handled at individual facilities, economies of scale² in operating costs are possible with automated processing equipment and (2) moving bulk mail in greater volumes over fewer routings should result in more efficient use of transportation.

¹ Cube of vehicle relates to the interior capacity of the truck used for hauling mail.

² Economies of scale exist when an increase in mail volume results in a decrease in the average or unit cost of processing mail.

The following table presents a profile of the types of mail to be handled by NBMS, based on 1973 experience.

Type of mail	Pieces		Weight		Cube	
	Number (millions)	Per- cent- age	Pounds (millions)	Per- cent- age	Cu. Ft. (millions)	Per- cent- age
Second class	8,039.2	25.4	2,899.3	30.7	136.4	21.4
Third class	22,689.1	71.8	2,384.6	25.2	122.6	19.2
Fourth class:						
Parcel post	475.4	1.5	2,708.9	28.7	299.5	46.9
Other	<u>417.7</u>	<u>1.3</u>	<u>1,455.9</u>	<u>15.4</u>	<u>79.9</u>	<u>12.5</u>
Total	<u>31,621.4</u>	<u>100.0</u>	<u>9,448.7</u>	<u>100.0</u>	<u>638.4</u>	<u>100.0</u>

This mail accounted for revenue of \$2,134.7 million. Parcel post accounted for about \$612 million, or 28.7 percent, of this amount. As discussed in subsequent chapters, the economic success of NBMS largely depends on the future volume of parcel post.

CHAPTER 3

ECONOMICS OF NBMS

Despite certain omissions, overruns, and underruns the Postal Service's 1971 cost estimate of constructing and equipping NBMS still appears reasonably correct. However, the financial benefits of NBMS are uncertain.

VALIDITY OF COST ESTIMATES

The Postal Service initially estimated, in early 1971, that it would cost \$950 million to construct and equip NBMS. This estimate still looks reasonably accurate.

Although omissions in the estimate understated the expected cost of the system, these were offset by underruns in certain budgeted items. Thus, at March 1, 1974, the items in the initial estimate (\$950 million) were then estimated to cost about \$813 million--an underrun of about \$137 million. This amount was within \$31 million of covering the omissions totalling about \$75 million, as well as the contract modifications and contractor's claims totalling about \$93 million which had been identified to that time. The 3-percent overrun is not far off target.

The following table summarizes the financial status of NBMS at March 1, 1974.

Original estimate:	<u>Initial estimate</u>	<u>Current estimate</u>	<u>Overrun or underrun (-)</u>
Site acquisition	\$ 41,950	\$ 32,941	\$ - 9,009
Building foundation	21,320	25,266	3,946
Building steel and building enclosure	83,900	53,032	- 30,868
General contract	508,405	476,594	- 31,811
Mechanization equipment	192,000	140,477	- 51,523

Original estimate:	<u>Initial estimate</u>	<u>Current estimate</u>	<u>Overrun or underrun (-)</u>
ASFs	\$ 24,000	\$ 23,055	\$ - 945
Associate office modifications	38,615	8,428	- 30,187
Design	<u>39,810</u>	<u>52,845</u>	<u>13,035</u>
Total	<u>950,000</u>	<u>812,638</u>	<u>-137,362</u>

Omissions:

Corps of Engineers support		34,000	34,000
Research and development		<u>41,300</u>	<u>41,300</u>
Total		<u>75,300</u>	<u>75,300</u>

Additions:

Contract modifications		66,524	66,524
Contractor claims		<u>26,301</u>	<u>26,301</u>
Total	-	<u>92,825</u>	<u>92,825</u>

Status at March 1, 1974	<u>\$950,000</u>	<u>\$980,763</u>	<u>\$ 30,763</u>
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Probably the amount of the overrun will increase as further contract modifications are authorized and additional claims are submitted by contractors.

In addition, the Postal Service also anticipates a one-time expenditure of about \$63 million for startup costs, covering items such as relocating and training personnel. These costs were not considered by the Service in making its initial estimate of the cost of implementing and operating NBMS.

FINANCIAL BENEFITS UNCERTAIN

The Postal Service has calculated that implementing NBMS will result in a financial benefit of \$500 million annually

by 1984 through a combination of reduced costs and increased revenue. This projection may prove correct. It is far from certain, however, for two reasons:

1. The uncertainty of the Service's future share of the parcel market; hence, uncertainty about future revenue.
2. The uncertainty of the accuracy of the Service's prediction of how NBMS will affect its overall costs.

Future parcel volume and revenue uncertain

The Service initially estimated, on the basis of a study by a contractor, that implementing NBMS would save about \$300 million annually. Subsequently the Service had another contractor perform a more sophisticated study which was used as a basis for congressional testimony on NBMS. This latter study indicates that by 1984, the annual benefits would be about \$500 million--comprising a combination of a cost reduction of about \$100 million and a revenue increase of about \$400 million over that which could be expected with the existing system.

Future revenues uncertain

The added revenue to be realized under NBMS is premised entirely on an increase in parcel post volume beyond that anticipated for the present system. Thus, the Postal Service's analysis shows the following for fiscal year 1984:

	<u>Parcel post</u>	
	<u>Volume</u>	<u>Revenue</u>
Present system	270,000,000	\$373,000,000
NBMS	<u>565,000,000</u>	<u>780,000,000</u>
Difference	<u>295,000,000</u>	<u>\$407,000,000</u>

The Service expects to prevent further losses in its share of the parcel market with NBMS by quicker and more consistent delivery times with less parcel damage. But, as discussed in the following chapter, the competition is such

that even these improvements may not be sufficient to maintain or increase parcel post volume. (Chapter 4 discusses in detail problems bearing on the Service's ability to prevent further losses of parcel post volume.) Also the study assumes passivity on the part of the competition. In our opinion, the competition can be expected to react to NBMS with further service improvements of its own, starting from a base that already provides service generally better than expected of NBMS. Further, the prices to be charged for parcel delivery by the Service and its competition in the future are presently indeterminable. One or the other could have an advantage that would affect the relative shares of the market.

Future costs uncertain

The economic benefits of NBMS also depend, to a lesser extent, on the accuracy of the Service's estimate of the system's impact on overall postal costs. In calculating its expected costs with NBMS, the Postal Service had to consider:

1. The costs of operating the new system, as a separate entity.
2. The revised cost of operating the existing system, based on the transfer of a certain part of its workload to NBMS.

The Postal Service analysis used information developed by its accounting system which accumulates total cost by major object classifications, such as travel, salaries, etc. It is not a cost accounting system which accumulates costs by types or classes of mail.

To develop this information, the Service uses statistical sampling to relate its object costs to the various classes of mail. At present, about 50 percent of its costs are so assigned; the remaining 50 percent--called institutional costs--are treated as fixed and as applying to postal operations generally, rather than any specific class of mail.

The costs assigned to specific classes of mail--called attributable costs--will vary proportionately with changes in mail volume.

The Service's estimate of the cost impact of NBMS was based on projecting the future cost of operations based on the increases in these variable costs, as bulk mail volume increased. While this is an acceptable procedure, the Service's determination of costs and cost variability may not be reliable. The Service has contracted out for studies aimed at developing better cost information. According to the Service:

"The present emphasis is on identifying and quantifying the parameters affecting cost variability. The Postal Service is now of the view that, given the limitations of available data, an analysis of the cost-causing factors within each cost function must precede any attempt to improve the attribution of costs to classes of mail."

Therefore the Service's estimate of the future cost impact of NBMS may prove incorrect. Thus the Service might not have identified all the costs associated with current bulk mail processing and therefore may not have projected an accurate picture of either the costs of NBMS or the residual costs of the existing system. In addition, to the extent that variable costs were not identified, future costs would be understated.

These doubts cannot be resolved with information currently available. The effect of any adjustments that might be made is also unknown. The actual savings might exceed those estimated, and they might be less.

CHAPTER 4

PROBLEMS IN PREVENTING FURTHER PARCEL POST VOLUME LOSSES

The Postal Service's greatest loss of parcel volume from 1963 to 1973 was in the zones¹ local through 4, or the shorter distances that parcels travel. About 58 percent of the parcel post handled in fiscal year 1973 moved through these zones. One reason for this loss of volume appears to be attributable to the lower rates and the faster service offered by the Postal Service's principal competitor.

The NBMS delivery standards for these parcel post zones, even though better than the Service's current performance, will not be as good as the current delivery standards of the Postal Service's principal competitor. The Service has recently decided to modify part of the NBMS routing system to help it provide faster delivery of parcel post for certain shorter zone deliveries. However, this modification will affect only a small portion of the parcel post volume in the shorter zones.

If parcel post is delivered in accordance with the NBMS standards and if the Postal Service's principal competitor delivers parcel post in accordance with its current standards, it will be difficult for the Service to prevent further losses of parcel volume or attract new customers without additional modifications to the routing plan for NBMS.

DIFFICULTY PREVENTING FURTHER LOSSES OF PARCEL POST VOLUME

From 1963 to 1973, parcel post volume handled by the Postal Service had decreased by about 40 percent, or about 314 million pieces. More recently, Postal Service records show that from 1969 to 1973, volume decreased by about 168 million pieces, or about 26 percent. The 1973 Postal Economic

¹ Zones are distances between the dispatching SCF of the originating post office and the SCF of destinating post office. The continental United States is divided into nine zones.

Forecast predicts that by 1977 parcel post volume handled by the Service will be only about 430 million parcels, or 9 percent less than the 1973 volume.

According to Postal Service records, the greatest volume loss was in the areas where parcels traveled less than 600 miles (originated and destinated within postal zones local and 1 through 4).

As the following chart shows, the Service handled about 539 million parcels in these zones in 1963, whereas in 1973 volume decreased to 276 million--a reduction of about 49 percent. Market research performed by contractors and studies performed by the Service showed that this decrease occurred in a period when the total parcel volume market was increasing by about 28 percent. Therefore, the Service not only failed to share in the growth of the market, but lost part of its previous business.

The chart below shows the percentage of increase or decrease by zone in parcel post volume during fiscal years 1963-73.

<u>Zones</u>	<u>1963</u>	<u>1973</u>	Percent increase (+) or decrease (-)
Local	23,834	14,789	-38
1 and 2	224,285	110,223	-51
3	136,624	69,250	-49
4	154,733	81,534	-47
5	122,479	73,532	-40
6	51,196	38,853	-24
7	28,407	37,232	+31
8	<u>47,465</u>	<u>50,001</u>	+ 5
Total	<u>789,023</u>	<u>475,414</u>	-40

The principal reasons for this volume loss were that the Postal Service's competitors offered faster service, handled parcels with less damage, and charged lower rates. A contractor study performed in 1971 for the Postal Service showed that the Service's principal competitor provides fast, reliable service at competitive prices and has an excellent reputation for handling shipments, as evidenced by low levels of loss and damage. However, according to the study, the Service's reputation for service was significantly below that of its principal competitor. The study noted that parcel post delivery is considered slow and erratic; loss and damage is more severe than with the Service's principal competitor.

The Service has experienced a significant number of parcels lost and an increase in damage claims in recent years. Service records showed that insurance claims increased from \$9 million in 1966 to about \$19 million in 1972, or about 111 percent.

In November 1971 a private consulting firm in conjunction with the Postal Service conducted an extensive test mailing of fragile and nonfragile parcels. The test results showed that surface shipments made via the principal competitor were significantly faster than those of the Postal Service. Also interior damage to fragile parcels was 361 percent greater, and exterior damage was 258 percent greater to packages shipped by the Service than those shipped by its principal competitor. This report concluded that achieving parity in speed of delivery for parcels lacks significance from management's point of view unless parity is also achieved in the condition of the package and its contents.

The NBMS service standards may not be entirely competitive with those of its principal competitor in the above noted short-haul areas. On the basis of our analysis of the NBMS standards and the Service's principal competitor's present delivery standards, the following chart illustrates the differences between NBMS standards and the competitor's standards.

<u>Postal zones</u> <u>(radius in miles)</u>	<u>Delivery standards</u>		
	<u>NBMS</u>	<u>Principal competitor</u>	<u>Difference</u>
Local (35 miles)	2 days	1 day	1 day
1 and 2 (150 miles)	3 days	1 day	2 days
3 (300 miles)	3 days	2 days	1 day
4 (600 miles)	4 days	3 days	1 day

This chart shows that the service standards planned for NBMS are not as good as the current standards of its principal competitor. In addition, a test performed by a private contractor showed that the average number of days to deliver parcels by the Postal Service's principal competitor is currently faster than the system's proposed delivery standards. The NBMS delivery standards are based on the premise of delivering 95 percent of the parcel volume within the standards. We could not make a similar comparison of the Service's principal competitor's delivery service experience at a 95-percent level because of insufficient information.

In summary, it is questionable whether NBMS will give any faster service to prevent further volume losses.

Also the Service is not competitive in the rates charged for parcels in the shorter zones which weigh between 1 pound and 25 pounds. The rates charged by the Service's principal competitor, which unlike those of the Service include insurance coverage, are lower than Postal Service rates throughout the entire zones one and two which accounted for 23 percent of all parcels handled by the Service during fiscal year 1973. For example, a parcel weighing 25 pounds mailed through the Service would cost \$2.10, whereas the same parcel mailed through the Service's principal competitor would cost only \$1.75.

DELIVERY TIME MAY INCREASE

One NBMS objective is to reduce the time or number of days it takes to deliver parcels so as to enable the Postal Service to prevent further losses of parcel post volume. NBMS will eliminate parcel sorting operations at SCFs and all but local

holdout¹ parcels will be transported to a BMC for processing and sorting. Many parcels will be transported substantial distances before they are sorted. As a result, the number of days to deliver parcels in short distance situations will likely increase, further hampering the Service's efforts to prevent further losses of parcel volume in the short-haul distances. (See chart on p. 17.)

The Service in various geographical areas is currently delivering parcel post locally in less than 2 days and parcels moving through less than two zones are being delivered in less than 3 days. These areas are experiencing less than or about the same delivery times as the standards proposed for NBMS. Standards issued by the Service for delivery of parcel post show that mail to be delivered within an SCF area and to certain adjoining SCFs should receive overnight delivery. This standard would correspond to the zone local and a large portion of zones 1 and 2 on the chart on page 17.

In addition, the Postal Service in 1971 established a Managed Parcel Post Program in Birmingham, Alabama. This program improved service to surrounding SCFs and provided for the shipment of outgoing mail direct to its destination, thereby eliminating intermediate handlings. This program has resulted in 60 percent of the parcel post mail being delivered overnight within the district. The remaining parcel post is being delivered on the second day within Alabama, and delivery time is also being reduced for parcels going to other areas of the country. Postal Service officials stated that the greatest benefits from this program will be in the local delivery area; however, improvements will be experienced throughout all zones. Such a program would improve service (number of days to deliver) in the areas where the Postal Service has been experiencing its greatest loss in parcel volume.

Under NBMS, a parcel originating and destinating within an SCF service area generally will be transported from the

¹ Local holdout refers to retaining parcels addressed for delivery within the postal area of the post office at which mailed; these parcels never reach the BMC.

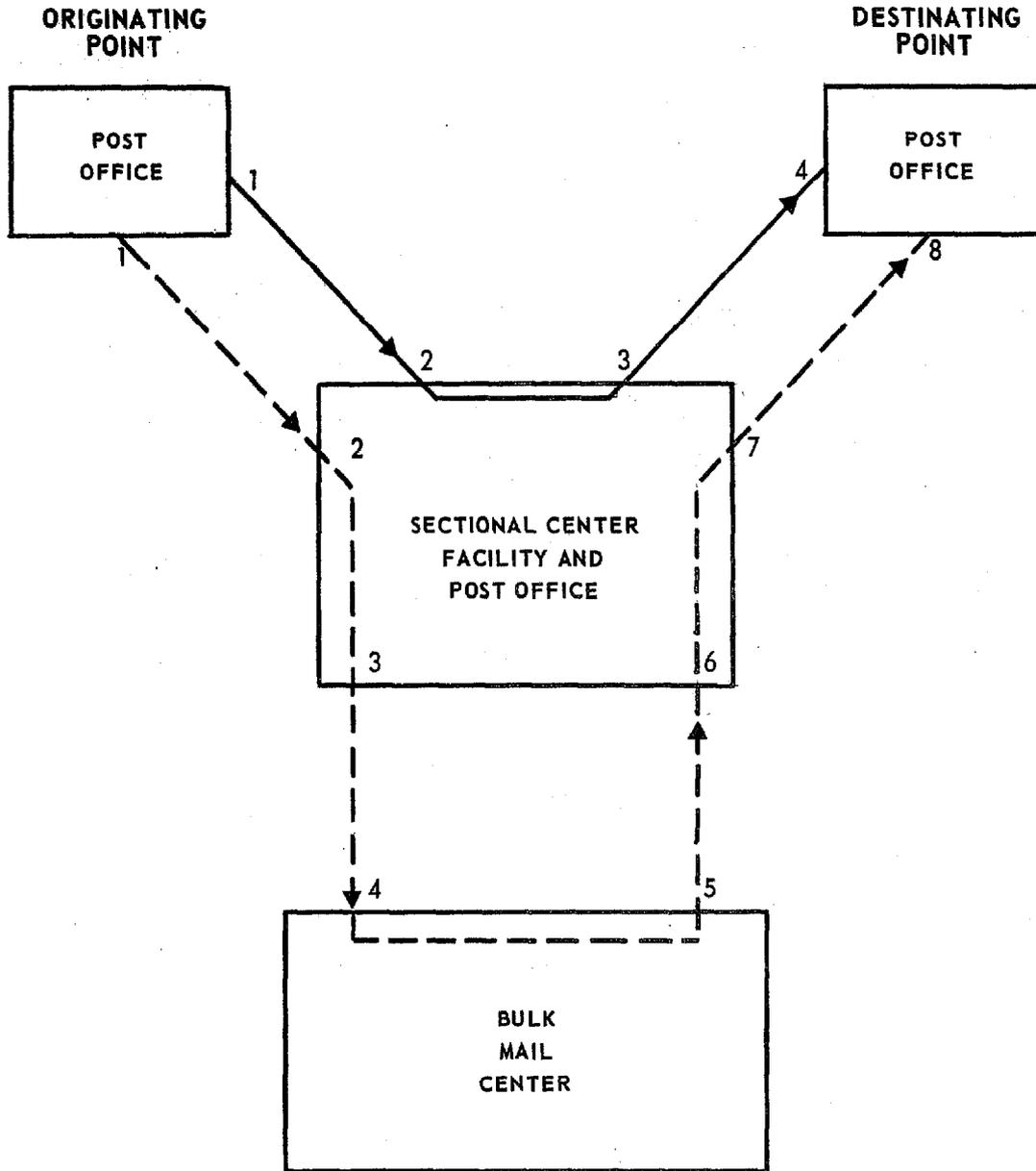
originating post office (handling point #1 on schematic drawing p. 22) to its SCF, where the parcel will be unloaded (handling point #2) and reloaded (handling point #3) on a truck going to the BMC. At the BMC, the parcel will be unloaded (handling point #4), processed and sorted, then reloaded (handling point #5) for dispatch back to the SCF. At the SCF, the parcel is unloaded (handling point #6) and cross-docked to be reloaded (handling point #7) on a truck destined for the destinating post office. The parcel is then unloaded (handling point #8) and sorted to carrier route. This procedure will result in handling the mail eight different times whereas under the current bulk mail system, mail is handled only 4 times, as follows.

Mail originates at a local post office and is loaded (handling point #1) on a truck destined for the SCF. At the SCF the parcel is unloaded (handling point #2), sorted, and reloaded (handling point #3) on a truck destined for the post office of destination. Then the parcel is unloaded (handling point #4) and sorted to carrier route for delivery.

Postal Service officials originally stated that cities or areas being provided overnight delivery of parcels will not be given such service under NBMS because of the rigid routing system and the fact that no sorting of parcels will be performed at SCFs. Under this concept, NBMS, therefore, could result in a greater loss of parcel volume in the short-haul areas, rather than an increase. The Postal Service's principal competitor is currently providing about 1- and 2-day delivery in the short zones (see p. 19) and at less cost to the customer in the short-haul areas. Therefore, it appears the Service will lose additional volume if NBMS is implemented without modifying the planned routing of parcels.

The number of days to deliver parcels between post offices which are close together but which are in different facility service areas will also increase. This increased number of days is caused by the parcels being shipped longer distances under NBMS than under the existing system. The chart on page 23 shows several examples when parcels received at some post offices could require substantially longer travel before being distributed under NBMS than under the current system, and, as a result, the number of days to deliver parcels under NBMS could increase.

**EXAMPLE OF THE NUMBER OF HANDLINGS UNDER
PRESENT BULK MAIL SYSTEM AND NATIONAL
BULK MAIL SYSTEM**



Numbers indicate handling points only
 ——— Indicates how a parcel would move today
 - - - - Indicates how a parcel will move under the NBMS

Selected Parcel Routing Distances Under
Present Bulk Mail Operations Compared With
Routing Under NBMS

<u>Origin</u>	<u>NBMS routing</u>	<u>Destination</u>	<u>Stand- ard highway mileage to des- tina- tion direct</u>	<u>Stand- ard highway mileage via NBMS</u>	<u>Increased mileage under NBMS for selec- ted parcel routing</u>
El Paso, Tex.	Albuquerque- Denver- Dallas	Midland, Tex.	301	1,794	^a 1,483
Lafay- ette, La.	New Orleans- Memphis- Dallas- Houston	Lake Charles, La.	76	1,400	^b 1,324
Ama- rillo, Tex.	Oklahoma City- Dallas	Lubbock, Tex.	121	791	^b 670
Pensa- cola, Fla.	New Orleans- Memphis- Jackson- ville	Panama City, Fla.	103	1,536	^c 1,433
Nash- ville, Tenn.	Memphis- Atlanta	Knoxville, Tenn.	178	771	^d 593

^a Regional officials have not requested that parcels moving between these cities be held out and shipped directly.

^b Local holdouts between these locations will be made.

^c Postal Service officials stated that, if regional officials ask for local holdouts between these locations, it will be allowed.

^d No local holdouts of parcels have been approved.

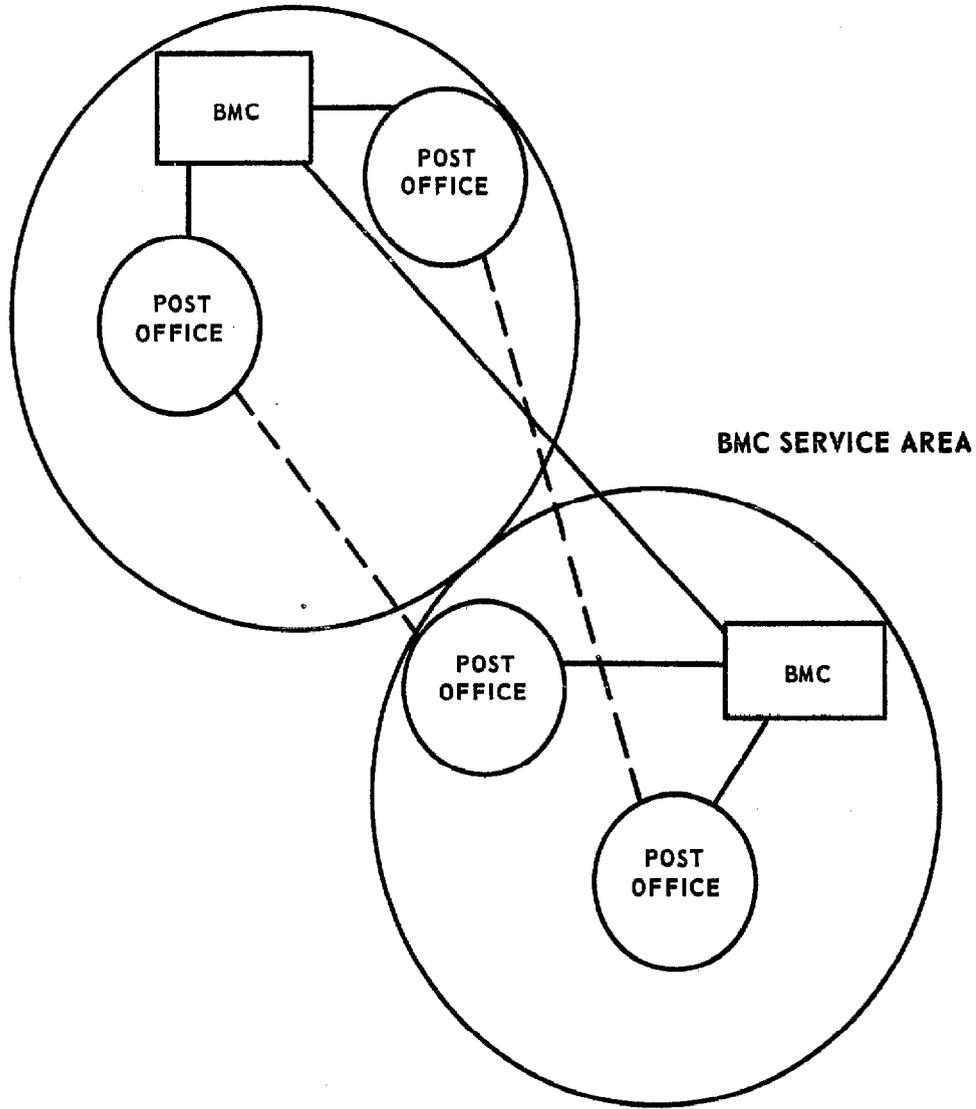
As noted previously, about 58 percent of the parcel post volume handled by the Postal Service traveled 600 miles or less. Further, about 26 percent of the volume travels less than 160 miles. Because the Service's loss of parcel post during the last 10 years has been in these zones, any significant deterioration of service in these zones will probably cause additional loss of volume.

On the basis of our analysis of NBMS, there are many examples such as those shown in the chart on page 23. Additional distance that parcels will travel will occur whenever a parcel originates at a post office in one BMC service area and destines at a post office in an adjacent BMC service area. The drawing on page 25 shows various examples of this situation. A policy of making exceptions to meet service standards for each situation when parcels will be traveling excessive distances will result in a deterioration in NBMS concept. In addition, processing capability will need to be reestablished at each associated office and SCF where exceptions are made. Increased operating costs for handling bulk mail will result. The system that would result from this approach would be similar, in some respects, to the current processing system.

RECENT ROUTING MODIFICATIONS PLANNED FOR NBMS

Postal Service officials stated that a recent study has been made to determine the feasibility of having certain parcels retained at the local post office or SCF for processing and sorting to minimize any deterioration of service. Current Postal Service statistics, based on a detailed analysis of 13 BMCs and 7 ASFs, show that about 7 percent of the daily parcel volume will be retained at the local post office or SCF. As indicated earlier, the area where the Postal Service has experienced or will experience problems is competing for the parcel volume in the shorter distances which accounted for about 58 percent of the 1973 volume.

BMC SERVICE AREA



BMC SERVICE AREA

----- Represents direct movement of parcels similar to the present day system

————— Represents the movement of parcels under the NBMS

The Service's modification plan requires that mail which will be delivered locally will be held out for local sorting and processing if it can be separated by

- a window clerk behind the counter,
- the mailer at the dock, and
- the mailer on the street in a cooperative program.

The plan states that under no circumstances should originating parcels be worked to make the holdout, in other words, delay the majority of the parcels to capture the minority.

We believe additional holdouts or modifications to the planned NBMS routing system may still be needed to insure that the most efficient and effective system possible is implemented which will allow the Service to more adequately compete with its principal competitor.

CONCLUSION

About 58 percent of parcel post volume handled by the Postal Service traveled 600 miles or less. Further, 26 percent of the parcel post volume travels less than 160 miles. The Service's greatest loss of volume during the last 10 years has been in these areas.

The service standards planned for NBMS are not as good as the current standards of its principal competitor, particularly in the areas where the greatest percentage of parcel post has been lost. Also the delivery times of parcel post may increase because of the longer distances that parcels will be shipped before being sorted and delivered. Any significant deterioration of service in these areas will only cause additional loss of parcel volume. Also, for the Postal Service to get back to its prior position in the market and prevent further losses of volume, it cannot afford to implement a system that will not result in increasing parcel volume throughout most zones, particularly the shorter distance zones, where the Service has been losing the most volume.

We concur with the Postal Service's decision to modify the originally planned NBMS parcel routing system. This

modification will probably affect only the delivery of parcels in the local zone and part of zone 1. Therefore, additional studies should be made to determine other areas where modifications to the routing system should be made so as to make the NBMS as competitive as possible.

RECOMMENDATION TO THE POSTMASTER GENERAL

We recommend that the Postmaster General require that a plan be established to insure that the NBMS routing system is periodically analyzed so that the most effective and efficient system possible is implemented and operated.

CHAPTER 5

AGENCY COMMENTS AND GAO EVALUATION

By letter dated June 17, 1974 (see app. I), the Postmaster General stated:

- He appreciated the report's observation on the correctness of the Service's cost estimates and he concurred with our recommendation.
- The Service plans to analyze NBMS routing on a continuing basis to insure the system's optimization.
- Much of our report revolves around the projections of potential benefits from NBMS. He noted that these projections assume an increase in the Service's parcel post volume over the next 10 years, which is based upon the Service retaining its share of an expanding parcel market.
- He could find nothing unreasonable about this projection, but the Service had examined the cost and benefits of NBMS over a range of projected conditions and found that, even when very pessimistic projections are used for future parcel post volume, NBMS will still yield a very favorable return on investment.
- The precise dimensions of the financial benefits from NBMS, on the other hand, will not be known until after the system is fully operational.
- He believes, however, the Service has adequately dealt with all significant affected costs of the system in its cost-benefit analysis and that the benefits will more than justify the costs.

We again state, as on page 15, that because the Service currently cannot adequately identify and quantify the parameters affecting cost variability, its estimate of future cost impact of NBMS may prove incorrect. These doubts cannot be resolved with information currently available. The effect of any adjustments that might be made is also unknown. The actual cost savings could exceed those estimates and they could be less.

The Postmaster General does not believe the delivery standards of NBMS will work against the Service's ability to retain its share of an expanding parcel post market. However, as discussed on pages 16 and 19, the NBMS delivery standards for the shorter parcel post zones, even though better than the Service's current performance, will not be as good as the current delivery standards of the Service's principal competitor. This fact is further emphasized by the Service's decision to modify part of the NBMS routing system so as to provide faster delivery of parcel post for certain shorter zone deliveries. We believe that, unless additional routing modifications are made, the Service probably will have difficulty in preventing further losses of parcel volume. However, this is tentative because the NBMS has not been implemented and the Service may be able to adequately compete with its principal competitor and achieve its goal of delivering at least 95 percent of all parcels handled within its delivery standards.

The Postmaster General believes that with NBMS the Service will be in a better position to meet competition in the future. We agree; however, it is still questionable whether the system will improve the Service's parcel market position sufficiently to justify the estimated \$1 billion expenditure.

CHAPTER 6

SCOPE OF REVIEW

Our review was directed toward an evaluation of and problems involved in planning NBMS. We made our review at the Postal Service headquarters in Washington, D.C., and the Postal Service regional office in New York City and

- evaluated policies, procedures, studies, reports, and contracts relating to NBMS, particularly the cost analysis studies used by the Postal Service to justify the economics of the system;
- made field visits to post offices in the New York area;
- discussed NBMS with local and headquarters postal officials; and
- discussed parcel post operations with competitors of the Postal Service for delivering parcel post.



THE POSTMASTER GENERAL
Washington, DC 20260

June 17, 1974

Dear Mr. Lowe:

Thank you for the opportunity to comment on your draft report entitled "Observations on the Development of the National Bulk Mail System."

The report's principal observations are (1) the Service's cost estimates for the National Bulk Mail System (NBMS) appear reasonably correct, (2) the financial benefits will remain uncertain until the system is operational, and (3) certain features of the system - specifically its delivery standards - appear to work against increasing parcel post volume. The report recommends that the Service analyze the NBMS routing system on a continuing basis to insure that the most effective and efficient system possible is implemented and operated.

We appreciate the report's observation on the correctness of our cost estimates, and concur in its recommendation, which is entirely in keeping with the Service's own plans for analyzing NBMS routing on a continuing basis to insure the system's optimization. We do have comments on the report's other observations.

Financial Benefits

Much of the report revolves around one of our projections of potential benefits from NBMS - a projection which assumes an increase in our parcel post volume over the next ten years, based upon our retaining our share of an expanding market.

We find nothing unreasonable about this projection, but in any case, we have examined the cost/benefits of the NBMS over a range of projected conditions and have found that even when very pessimistic projections are used for future parcel post volume, NBMS will still yield a very favorable return on investment.

NBMS, of course, is a total system for handling all bulk mail - not just parcel post. As the report itself notes, in the profile of mail that will be handled by the NBMS, parcel post looms very large only in terms of cubage. In terms of revenue and weight it accounts for only a third of NBMS volume, and in terms of pieces it amounts to less than two percent.

APPENDIX I

The system is designed to deal with a number of pressing operational problems arising out of outmoded facilities, inadequate mechanization and unsatisfactory processing methods, all of which have contributed to the damage, delays and costs described in the report. After weighing the alternatives of doing nothing or trying various piecemeal approaches or installing a totally new system, we chose the latter alternative.

Although it is true that the precise dimensions of the financial benefits from NBMS will not be known until after the system is fully operational, we believe that we have adequately dealt with all the significant affected costs of the system in our cost/benefit analysis, that the system's benefits will more than justify its costs, and that our decision to proceed with NBMS was correct.

Future Parcel Post Volume and NBMS Delivery Standards

We do not believe our delivery standards will work against our ability to retain our share of an expanding parcel post market.

The delivery standards we have set in conjunction with NBMS are very conservatively stated to insure that they can and will be met for at least 95% of all pieces handled. As your report notes, it is not certain how often our competitors meet their standards. We believe that in terms of actual delivery performance we will adequately meet our competition. And, as your report notes, if there are situations where lengthy haulage adversely affects delivery schedules, we can make adjustments to the system through local hold outs.

Incidentally, our market analysis indicates that to most customers a one day difference in delivery standards is not critical, so long as the service is consistent, packages are not damaged, and the price is right. NBMS will provide consistent service, greatly reduce parcel damage and cut costs. Taken in conjunction with our efforts to improve the training of the personnel who handle parcel post and our various management improvement efforts, we believe that with NBMS the Service will be in a much better position to meet competition in the future than we have been in the past.

Sincerely,



E. T. Klassen

Mr. Victor L. Lowe, Director
General Government Division
U. S. General Accounting Office
Washington, D. C. 20548

TYPES OF MAIL TO BE HANDLED BY
THE NATIONAL BULK MAIL SYSTEM

1. Fourth class:

Zone-rated parcel post
Catalogs
Special fourth-class rate (book, films)
Library rate

2. Third class (processed as sacks):

Bulk rate--Small parcels
Letter-size circulars
Flats (note a)
Small catalogs

Third-class rate--Letter-size circulars
Flats

3. Nonpreferential second class (processed in sacks or bundles):

Weekly newspapers
Nontime value magazines
Second-class controlled circulation pieces (trade magazines)

^aPieces of third-class letter mail which are too large to be distributed with normal letter mail processing procedures--mail in envelopes larger than 6x11-1/2 inches.

APPENDIX III

PRINCIPAL OFFICIALS OF
THE POSTAL SERVICE
RESPONSIBLE FOR ACTIVITIES
DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
POSTMASTER GENERAL:		
Elmer T. Klassen	Jan. 1972	Present
Merrill A. Hayden (acting)	Oct. 1971	Dec. 1971
Winton M. Blount	Jan. 1969	Oct. 1971
DEPUTY POSTMASTER GENERAL:		
Vacant	Oct. 1972	Present
Merrill A. Hayden	Sept. 1971	Sept. 1972
Vacant	Jan. 1971	Sept. 1971
ASSISTANT POSTMASTER GENERAL, BUREAU OF OPERATIONS:		
Frank J. Nunlist	Apr. 1969	June 1971
SENIOR ASSISTANT POSTMASTER GENERAL, MAIL PROCESSING GROUP:		
Harold F. Faught	Aug. 1971	June 1973
SENIOR ASSISTANT POSTMASTER GENERAL FOR OPERATIONS:		
Edward V. Dorsey	June 1973	Present
ASSISTANT POSTMASTER GENERAL FOR BULK MAIL:		
E. S. Brower	Nov. 1971	Present

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