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POSTAL SERVICE

Service and Cost Aspects of the Dakota Central Area Mail Processing Center





United States
General Accounting Office
Washington, D.C. 20548

General Government Division

B-251104.2

October 18, 1994

The Honorable Robert C. Byrd
Chairman, Committee on Appropriations
United States Senate

Dear Mr. Chairman:

This report responds to the Committee's directive in Senate Report 102-353 that we review mail service in the communities served by the Dakota Central Area Mail Processing Center in Huron, SD. We assessed the validity of the concerns of postal customers that the new Center, which opened in July 1993, would not be able to maintain overnight mail service in the area. We tested and compared mail service in Aberdeen, SD, which processes its own mail, with service in and between other communities whose mail is processed at the Center. In addition, because the main purpose of the Center was to save money, we compared (1) the cost of the Center with the projected costs and (2) the number of personnel and workhours devoted to mail processing before and after the consolidation.

Background

This is our second report on the Dakota Central Center. The first,¹ issued before the Center opened, showed that (1) the consolidation would slow mail service to certain locations—this was not disclosed in the Postal Service's consolidation plan for the Center—and (2) the plan overstated improvements in mail service that were to occur. Because of the concerns about deterioration in service, the Postal Service later modified the consolidation by dropping Aberdeen, SD, from the communities whose mail would be trucked to the Center for processing.² As a result, the principal post offices in the consolidations are Huron, Watertown, and Mitchell, SD. Figure I.1 shows the overnight service area for the Dakota Central Center and the communities where we tested mail service.

The benefits traditionally expected of consolidated area mail processing centers, as outlined in postal guidelines for their development and implementation, have been (1) a savings in mail processing costs and (2) the maintenance of the same or better delivery service. In October 1992, postal headquarters suspended action on new consolidation

¹See Postal Service: Service Impact of South Dakota Mail Facility Not Fully Recognized (GAO/GGD-93-62, Feb. 25, 1993).

²This modification eliminated some of the situations where service would be slowed; however, Watertown lost overnight service to Fargo, ND, and Wilmar, MN, because of the consolidation.

proposals to examine the concept and revise guidelines to ensure that they supported the Service's priorities for "customer service, employee obligations, and operating efficiency." At the conclusion of our work, the Service was revising and testing new guidelines for development, implementation, and evaluation of the performance of area mail processing centers.

Results in Brief

Our mail test of First Class letters showed that Aberdeen, which processes its own mail, had slightly better overnight delivery than the communities served by the Dakota Central Center. However, service in and between the communities served by the Center was generally within the range of the Postal Service's performance standard for overnight delivery and substantially exceeded most other performance elsewhere in the nation during the period we did our test.

Construction costs of the Center as well as first-year operating costs significantly exceeded estimates in the consolidation plan. The Service had planned to renovate an existing building for the Center at a cost of about \$624,000 but instead designed and built a new facility on newly purchased land at a cost of about \$3 million. Although the Service projected that the Center would reduce personnel costs, the number of employees and workhours devoted to mail processing and customer service increased by 44 percent compared to the year before, when mail processing operations were decentralized.

Because of the ongoing concern over service among postal customers in this area, the cost difficulties encountered at the Center, and the possibility that the Service may bring more communities under it, the Postmaster General agreed with our recommendation to do a postimplementation review of the Dakota Central Center for both delivery performance and cost.

Objective, Scope, and Methodology

Our objective was to determine if overnight delivery service was being provided in the area served by the Dakota Central Area Mail Processing Center. We also compared certain projected and actual costs related to establishing operations at the Center.

To assess overnight First Class mail delivery service, we mailed 1,321 First Class letters from a judgmental sample of locations within the 1-day service area of Dakota Central. We selected for our test the three principal

communities in the consolidated area; Huron, Mitchell, and Watertown. To test for differences in service between the consolidated communities and one that was not included in the plan, we included Aberdeen. We arbitrarily selected 12 outlying towns and sent 3 letters to each of the 4 principal communities for a total of 144 letters. We also selected arbitrarily 8 remote towns that were included in the consolidation and sent a total of 48 First Class letters between these towns. Mailings were sent from a judgmental sample of mail boxes and post offices in each community to a single address in the recipient community. Table 1 shows our test design.

Table 1: Communities in the Mail Test and Number of Letters Mailed

From	To				
	Aberdeen	Huron	Mitchell	Watertown	Remote town
Aberdeen	270	N/A	N/A	N/A	N/A
Huron	15 ^a	270	N/A	N/A	N/A
Mitchell	18 ^a	9 ^a	61	N/A	N/A
Watertown	21 ^a	12 ^a	14 ^a	405 ^b	N/A
Outlying town	36 ^a	36 ^a	36 ^a	36 ^a	N/A
Remote town	N/A	N/A	N/A	N/A	48 ^a

Legend: N/A = There was no mailing to this community from the other.

^aIndicates a lack of generalizability due to number of mailings and/or the method used to select the community. Results only demonstrate a possible trend, not conclusive evidence.

^bMailings took place on two occasions, one in February 1994 and one in March 1994, because of an addressing error.

To determine rates for overnight delivery, we determined the percentage of the test mailings that arrived overnight and compared this performance to the Service’s goal of 95 percent as well as to the average on-time performance nationwide for 1-day mail during the same period. See appendix I for a more detailed description of the mail test.

To compare projected and actual costs of the new facility, we analyzed the Dakota Central consolidation plan and various financial and service records on the construction and operation of the new facility. We discussed the implementation of the Center and its effect on costs and service with postal officials in communities affected by the consolidation. We also reviewed workhour and other data on postal operations in Huron, Mitchell, and Watertown, SD, before and after the Center opened.

One purpose of installing automation in a center such as Dakota Central is to allow barcodes to be applied to letters, which should reduce sorting costs at other automated processing centers where the mail is destined. We determined how certain processing costs were affected in the Dakota Central area but did not determine how Dakota Central barcoding affected processing costs at locations outside the Dakota Central area. Similarly, we did not determine delivery times for Dakota Central mail destined outside of the overnight delivery area.

We did our review from December 1993 through June 1994 in accordance with generally accepted government auditing standards. The Postmaster General provided written comments on a draft of this report, which are summarized at the end of this letter and reprinted in appendix II.

On-Time Service Generally Attained in the Overnight Delivery Area

We tested actual delivery times for First Class letters mailed within and between the four principal communities of Aberdeen, Huron, Watertown, and Mitchell, SD. Aberdeen provided a benchmark because it was not included in the consolidation, and its mail was processed at the local post office. Mail from the other 3 communities went to the Dakota Central Center in Huron for processing, a round-trip distance of 184 miles for Watertown, 104 miles for Mitchell, and 4 miles for Huron.

Aberdeen had the best performance, with over 99 percent of our letters received the next day. Watertown had an overall overnight delivery rate of 97 percent, and Huron had 93 percent. Our results in Mitchell were much lower; only about 57 percent of our letters were received the next day. Initially, postal officials were unable to explain why the performance in Mitchell was so low. However, after some research, they said that the delayed letters, which carried a street address, were delivered to a post office box maintained by the addressee and that the delay occurred between the post office box and our receipt at the street address. They believed that the letters were likely available at the addressee's post office box the day after being mailed and that Mitchell's overnight service was higher than our test indicated.

Ninety-two percent of letters mailed between communities arrived overnight. However, because of the uncertainty regarding the Mitchell test results, the actual rate may be higher than 92 percent. The specific results are shown in table 2.

Table 2: Results of Mailings Within and Between the Principal Communities

From	To							
	Aberdeen		Huron		Mitchell		Watertown	
	Number mailed	Number received overnight	Number mailed	Number received overnight	Number mailed	Number received overnight	Number mailed	Number received overnight
Aberdeen	270	269	N/A	N/A	N/A	N/A	N/A	N/A
Huron	15	15	270	252	10	6	12	12
Mitchell	18	18	9	8	61	35	12	12
Watertown	21	21	12	12	14	9		
First mailing							270	266
Second mailing							135	125

Legend: N/A = There was no mailing to this community from the other.

Overall, these results compare favorably to the Service’s goal of 95 percent³ for on-time delivery and the average of 79 percent for overnight mail in urban areas throughout the nation during that quarter.⁴

We also tested the mail delivery from and between smaller towns adjacent to these communities, including those near the end of the principal mail routes in the area. Although the number of mailings included in this part of the test was too small to provide conclusive information, we did these mailings for general insight into whether there might be delivery problems in these areas. These results are shown in tables 3 and 4.

³The 95-percent confidence intervals applicable to our tests are shown on page 15.

⁴The national average is based on the quarterly measurement of First Class mail service by Price Waterhouse under contract to the Postal Service. Delivery time is tracked in 96 cities nationwide. During the period of our review, none of the cities met the 95-percent standard; performance ranged from 52 percent in New York City to 92 percent in Wichita.

Table 3: Results of Mailings From Outlying Towns to Principal Communities

From	To							
	Aberdeen		Huron		Mitchell		Watertown	
	Number mailed	Number received overnight	Number mailed	Number received overnight	Number mailed	Number received overnight	Number mailed	Number received overnight
Groton	3	3	3	3	3	0	3	0
Langford	3	3	3	0	3	0	3	0
Britton	3	3	3	3	3	0	3	0
Wessington	3	2	3	3	3	2	3	3
Wolsey	3	2	3	3	3	2	3	2
Hitchcock	3	2	3	2	3	2	3	3
Alexandria	3	3	3	3	3	3	3	3
Bridgewater	3	3	3	3	3	3	3	3
Parkston	3	3	3	2	3	3	3	3
De Smet	3	0	3	0	3	0	3	0
Henry	3	3	3	3	3	3	3	0
Willow Lake	3	3	3	3	3	3	3	0

Table 4: Results of Mailings Between Remote Towns

From	Rosholt		Eureka	
	Number mailed	Number received overnight	Number mailed	Number received overnight
Big Stone City	3	3	3	3
Eureka	N/A	N/A	N/A	N/A
Fort Thompson	N/A	N/A	N/A	N/A
Conde	3	2	3	3
Reliance	N/A	N/A	N/A	N/A
Hurley	3	3	3	3
Gary	3	3	3	3
Rosholt	N/A	N/A	N/A	N/A

To							
Fort Thompson		Reliance		Bruce		Big Stone City	
Number mailed	Number received overnight	Number mailed	Number received overnight	Number mailed	Number received overnight	Number mailed	Number received overnight
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	0	3	3	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	3	3	3	3
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	3	3	3	2
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3	0	3	3	N/A	N/A	N/A	N/A

Legend: N/A = There was no mailing to this community from the other.

Start-Up and Operating Costs Have Significantly Exceeded Estimates

Estimated first-year start-up costs for the Center in the consolidation plan were \$1.46 million. Actual costs were \$3.26 million. The principal reason for the large difference is that the plan called for renovation of an existing building in Huron to house the Center. However, after the plan was approved by postal headquarters, the Service decided to purchase land and construct a new building, at a cost of about \$3 million versus the \$624,000 planned for renovation. A district official in Sioux Falls who was present throughout the planning and development of the Center told us that after the plan was approved and officials looked more closely at their needs, they decided that the building planned for renovation would not be large enough. Factors that apparently contributed to the miscalculation were that (1) no facilities experts were involved in the site selection until after the plan was approved and (2) after the plan was approved, Pierre and Mobridge, SD, were expected to eventually be included in the consolidation, thereby calling for a larger facility than was provided for in the plan. At the conclusion of our work, postal officials said that they were reevaluating whether other communities would be brought into the consolidation.

Transportation costs also exceeded projected amounts. The plan estimated that annual truck transportation costs, excluding the one-time indemnity cost of cancelling transportation contracts, would decrease by about \$73,000 because of the consolidation. Instead, they increased by about \$538,000 annually. One reason, according to a Postal Service

transportation official, was because Aberdeen was dropped from the consolidation, the Service had to maintain Aberdeen's overnight network as well as the Dakota Central network. Also, price increases that boosted highway transportation contract amounts were not recognized in the plan. The unrecognized increases in truck transportation costs are somewhat offset by the fact that projected air transportation costs of about \$382,000 annually were not being incurred. The plan expected that Dakota Central would be linked to Minneapolis by daily air service connecting with the Service's Express Mail network and commercial flights. This service is not a part of the current Dakota Central operation.

Workhours and the number of personnel assigned to mail processing and customer service significantly increased in the area after Dakota Central opened. We compared the number of employees assigned to this work in the Huron, Watertown, and Mitchell post offices before the consolidation to the amounts experienced by Dakota Central during the comparable period after it was fully operational. Specifically, we compared postal accounting periods 1 through 5 of fiscal year 1993 (mid-September 1992 through early February 1993) for the three post offices with the same periods in postal fiscal year 1994 for Dakota Central, which opened in July 1993. We excluded amounts estimated by postal officials for Dakota Central work that was transferred from Sioux Falls.

Employment and workhours both increased by about 44 percent. While overall employment and workhours were reduced at the post offices, they increased much more than expected at Dakota Central. For example, the plan provided for 24 nonsupervisory employees at the Center, but 56 were assigned in 1994.

The increase does not appear to be entirely attributable to an increase in mail volume. Differences in the way mail is counted before and after the consolidation preclude a precise comparison of before and after volumes. Postal officials said that there were no major new mailers or mail recipients in the area. To some extent, the exclusion of Aberdeen from the consolidation may have prevented the Center from receiving as much mail volume as planned, thereby causing the Center to be less efficient than expected. However, this factor alone would not appear to account for such a significant increase in the number of mail processing employees and workhours.

Status of Prior Recommendations and Need for Postimplementation Review

In our previous report on Dakota Central, we recommended that the Postal Service take steps to avoid or minimize service problems associated with the consolidation. Subsequently, we made additional recommendations to address service and cost problems with a similar consolidation in Waterloo, IA.⁵ Responding to recommendations in these two reports, the Postmaster General said that new guidelines were being developed for planning and evaluating area mail processing consolidations. He said that the new guidelines would require postimplementation reviews for each consolidation. In late 1992, postal headquarters began developing the new guidelines. At the conclusion of our work in South Dakota, the guidelines were still being tested, and no target date had been set for their issuance.

We believe that a postimplementation review of the Center would be beneficial because (1) service is a major ongoing concern among customers in the South Dakota area, (2) costs appear to have exceeded the amounts expected, and (3) the Service is considering bringing other communities under Dakota Central. However, because the area mail processing concept is in suspension and there are no guidelines requiring postimplementation reviews, no requirement exists for a review of the Center's effectiveness.

Recommendation to the Postmaster General

We recommend that the Postmaster General require that a postimplementation review of Dakota Central be made to ensure that it is achieving planned delivery performance and to more fully understand why it is not achieving planned savings.

Agency Comments

The Postmaster General provided written comments on a draft of this report, which are included in appendix II. He said that the Service initiated a postimplementation review of the Dakota Central Center for performance and savings and that the review should be completed in early January 1995. He also said that the Service planned to issue revised area mail processing guidelines by the end of the year, and they will contain a requirement for timely postimplementation reviews of each mail processing consolidation.

⁵See Postal Service: Planned Benefits of Iowa Automated Mail Facility Not Realized (GAO/GGD-94-78, Apr. 8, 1994).

We are sending copies of this report to the South Dakota congressional delegation and the Postmaster General. Copies will also be made available to others upon request.

Major contributors to this report are listed in appendix III. Please call me on (202) 512-8387 if you have any questions about this report.

Sincerely yours,

A handwritten signature in black ink that reads "J. William Gadsby". The signature is written in a cursive style with a large initial "J" and a long horizontal stroke across the middle.

J. William Gadsby
Director, Government Business
Operations Issues

Description of Mail Test Design

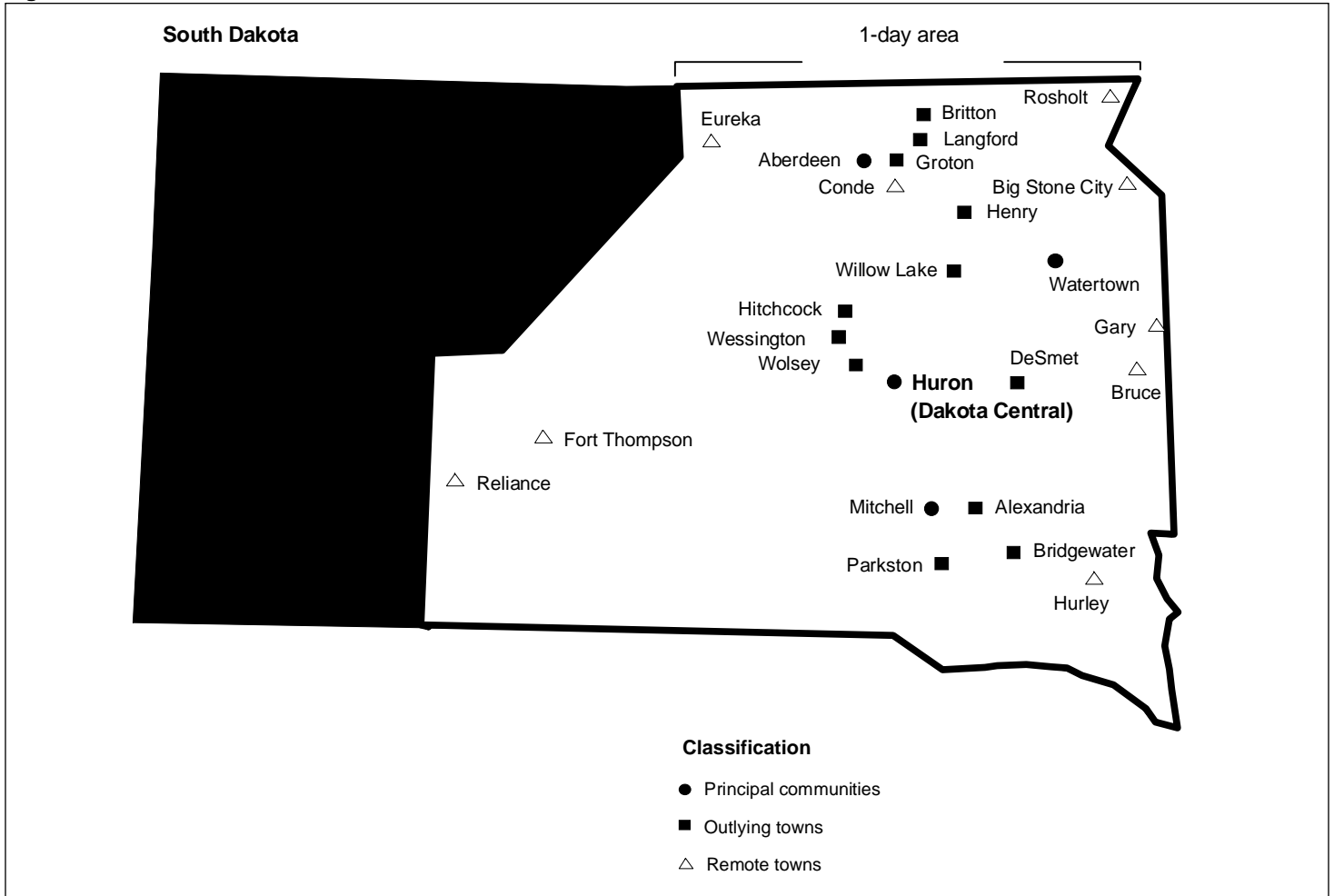
The mail test was designed to obtain data on the mail delivery times within and among the various communities that were affected by the Dakota Central consolidation. Our test involved mailing 1,321 First Class letters at various judgmentally selected locations within the area and then determining the overnight delivery rates. Our primary interest was to determine whether overnight delivery had been reduced within the principal communities as a result of the consolidation. Therefore, we sent slightly more than 75 percent of the letters within the communities of Aberdeen, Huron, Mitchell, and Watertown, SD. We sent another 9 percent between these principal communities, 11 percent from outlying towns to the four principal communities, and the remaining 5 percent between 8 remote towns. Except for the four principal communities, the selection of locations and numbers of letters mailed was not intended to provide generalizable information.

Within the principal communities, the number of letters mailed was sufficient to provide 95-percent confidence that if the test were repeated the results would be similar. We sent all letters separately so that they would be treated as single units rather than as batched mail. Batched mail would either have all been delivered overnight or none would have been delivered overnight.

- Mail within the principal communities of Huron, Aberdeen, Mitchell, and Watertown, SD: We mailed letters (405 in Watertown, 270 each in Aberdeen and Huron, and 61 in Mitchell) from various mail boxes and post offices in each community to a central address in the same town. Because of an addressing error, we tested Watertown twice (270 in February and 135 in March). We have no evidence to indicate that there were any significant differences between the two Watertown tests except for the addressing error.
- Mail between the four principal communities of Aberdeen, Mitchell, Huron, and Watertown: We mailed 123 letters from a single location in each community to a single address in each of the other 2 communities.
- Mail from outlying towns to the four principal communities: We mailed 144 letters from 12 smaller towns adjacent to the communities to a single address in the 4 communities.
- Mail between remote towns: We mailed 48 letters between 9 towns located near the end of mail routes originating from each of the 4 principal communities.

See figure I.1 for a map showing the location of these communities.

Figure I.1: Location of Communities in the Mail Test



Source: Postal Service.

If we were to repeat our test within the four principal communities, we can be 95-percent confident that the proportion of overnight deliveries within Aberdeen would range between 100.0 and 98.9. In Huron, the similar range would be between 96.3 and 90.3. In Watertown, the range would be from 98.3 to 94.7.¹

¹Because of the problem encountered in regard to the Mitchell test, we did not compute similar statistics for this community.

Appendix I
Description of Mail Test Design

The selection of outlying and remote towns was judgmentally made to cover the major delivery routes in the area and to give insight into whether this mail experienced on-time or delayed delivery. In addition, the number of mailings was too small to permit the results to be generalizable.

We conducted our mail test in February and March 1994. The results of our mail test cannot be generalized to other weeks or months of the year. Mail processing and delivery performance can vary over time due to changing mail volumes, weather conditions, employee absence, equipment performance, and many other factors.

Letters were deposited before the final scheduled pick up for the day. The mail was sent early in the workweek, and the results cannot be generalized to the weekends. In fact, the distribution process changes on weekends when some mail is trucked to Sioux Falls, SD, for processing.

Comments From the Postal Service

MARVIN RUNYON
PRESIDENT GENERAL, CEO



October 3, 1994

Mr. J. William Gadsby
Director, Government Business
Operations Issues
United States General Accounting Office
Washington, DC 20548-0001

Dear Mr. Gadsby:

Thank you for providing us an opportunity to comment on the draft report entitled, POSTAL SERVICE: Service and Cost Aspects of the Dakota Central Area Mail Processing Center.

The report recommends that a post-implementation review of the Dakota Central facility be made to ensure that it is achieving planned delivery performance and to understand why it is not achieving planned savings. The Vice President, Midwest Area Operations, has already initiated that review. We expect that the review will be completed in early January and will help us identify changes that we can make to improve the Center's operating efficiency and thereby achieve additional cost savings.

As the report notes, delivery service to the communities served by the Center is substantially better than in most other areas of the country. The adjustments we make in the Center's operations will maintain that high level of service.

We plan to issue the revised Area Mail Processing Guidelines by the end of this year. Those guidelines will contain a requirement for the area vice president to conduct a timely post-implementation review for each area mail processing consolidation.

We appreciate your continuing interest in this matter. We fully expect that the Dakota Central facility will continue to serve in the best interests of the surrounding communities by providing them with consistent and reliable delivery service.

If you wish to discuss any of my comments, my staff is available at your convenience.

Best regards,

A handwritten signature in black ink that reads "Marvin Runyon".

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