March 31, 1999

## M. RICHARD PORRAS CHIEF FINANCIAL OFFICER AND SENIOR VICE PRESIDENT

## JOHN F. KELLY VICE PRESIDENT, EXPEDITED AND PACKAGE SERVICES

JAMES F. GRUBIAK VICE PRESIDENT, INTERNATIONAL BUSINESS UNIT

### SUBJECT: Review of United States Postal Service's Economic Analysis and Forecasting Audit Report Number RG-AR-99-001

Attached is our final report on Economic Analysis and Forecasting by the United States Postal Service. We have incorporated your responses to the draft audit report and included it separately as an appendix.

The audit disclosed differences between USPS' revenue and cost projections and actual performance that could impair planning for future growth, create difficulties in growing market share for products, and delay timely implementation of USPS projects. Management agreed to our recommendations and has planned or implemented actions that are responsive to each of the audit recommendations.

The courtesy and cooperation shown the auditors by your staff is appreciated. If you have any questions, please have your staff contact me or Wayne Goleski, Director of Revenue Generation, at (703) 248-2300.

//Signed// Sylvia L. Owens Assistant Inspector General for Revenue/Cost Containment

### Attachment

cc: Allan Kiel John Gunnels Malcolm Harris Jean Parris

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# **EXECUTIVE SUMMARY**

Introduction	We have completed an audit of the United States Postal Service's (USPS) economic analysis and forecasting process. The Office of Inspector General (OIG), in cooperation with the Postal Inspection Service, initiated this review with two objectives: (1) to determine the effect on long-term improvements and sustained organizational performance; and (2) to analyze the accuracy and completeness of current methods.
Results in Brief	The USPS has utilized statistical programs for approximately 40 years. Early efforts involved collecting origination and destination data. Efforts have evolved to determine short- and long-term volume and revenue forecasts using econometric modeling. The Postal Reorganization Act of 1970 necessitated increased emphasis on forecasting because it required the USPS to recover costs for each class of mail on a projected basis.
	Our review and analysis of various USPS forecasts concluded that the USPS and its Economic Analysis and Forecasting group (now the Demand Forecasting and Economic Analysis group) had made substantial progress in projecting both total mail volume and revenue. Our comparative analysis of Economic Analysis and Forecasting's forecasts for the 1994 Postal Rate Case (R94-1) to actual mail volume revealed yearly differences ranged from7 percent to 1.1 percent for the period 1994-1997. Since the USPS Corporate Finance Office utilized Economic Analysis and Forecasting's forecast as a baseline, annual operating budget forecasts, when compared to actual, showed similar differences. The Corporate Finance Office's forecast of total mail volume to actual mail volume ranged from7 percent to 0.6 percent for the period 1994-1998. Additionally, Finance's planned total revenue varied from -1.2 percent to 1.3 percent from actual during the same period.
	Despite the foregoing, our analyses of forecasts for specific products disclosed large differences in forecasts

for two specific products disclosed large differences in forecasts Expedited and Package Services. Specifically, these differences were identified among Economic Analysis

	and Forecasting, Corporate Finance Office operating budgets, Business Plan forecasting, and actual performance of Expedited and Package Services and international products.
	These differences were caused primarily by:
	<ul> <li>Limited communications between management groups, and</li> <li>Forecasts and business plans designed using multiple assumptions and consultants.</li> </ul>
	Differences between USPS' revenue and cost projections and actual performance could impair planning for future growth, create difficulties in growing market share for products, and delay timely implementation of USPS projects.
Recommendations	On the basis of our audit, we offer the following recommendations:
	The Chief Financial Officer and Senior Vice President should:
	<ol> <li>Continue periodic meetings between Economic Analysis and Forecasting management and managers of Expedited and Package Services, International Business Unit, Budget, and operational areas to discuss factors affecting the market environment.</li> </ol>
	<ol> <li>Continue periodic forecasts by the Economic Analysis and Forecasting group to track short-term changes.</li> </ol>
	<ol> <li>Reduce USPS costs for contracting development of business plans by utilizing resources of the Economic Analysis and Forecasting group when possible.</li> </ol>
	<ol> <li>Identify and implement best practices by benchmarking the forecasting process.</li> </ol>

Summary of Management Response	The Chief Financial Officer and Senior Vice President, and the Vice President of Expedited Package Services concurred with the recommendations contained in the report. Their response to the recommendations included a summary of initiatives the USPS has in progress, completed, or planned, addressing these issues. We summarized these responses in the report and included the full text of the comments in the Appendix. Management's comments were responsive to our
	Management's comments were responsive to our recommendations.

# INTRODUCTION

Background	The USPS has utilized statistical programs for approximately 40 years. Early efforts involved collecting origination and destination data. Efforts have evolved to determining short- and long-term volume and revenue forecasts using econometric modeling. The Postal Reorganization Act of 1970 necessitated increased emphasis on forecasting because it required the USPS to recover costs for each class of mail. Today, the Economic Analysis and Forecasting group utilizes statistical data to develop cost information and data from Corporate Finance to develop revenue information. Revenue, Pieces, and Weights data is utilized to attribute revenue and volume to each class and sub- class of mail. The function of the USPS Economic Analysis and Forecasting group is to produce financial and economic analysis including econometric modeling of USPS' product information.
	Economic Analysis and Forecasting also serves the USPS in an advisory capacity on issues related to pricing, costing, investments, and other financial matters. The Economic Analysis and Forecasting group is responsible for developing and coordinating volume forecasts and other economic presentations for Corporate Finance and the Postal Rate Commission. Other groups, such as Expedited and Package by class and sub-class of mail for both short- and long-term (10 years); 2) conducting special studies, such as the household diary study, (ongoing for 11 years), and 3) analyzing competitors' strategies.
	Expedited and Package Services was created in January 1997 and combined Priority Mail (1 day, 2-3 days, and global), Expedited Mail (formerly Express Mail), and Parcel Post (which is part of Standard B mail). The Expedited and Package Services market presents the USPS with an opportunity for growth, profitability, and enhancement of its position in the marketplace.
	The 1998 Expedited and Package Services Business Plan's fundamental goals were to satisfy customers,

improve service delivery, and increase revenue. To accomplish this, Expedited and Package Services focused on two specific types of customers; a) bulk

	shippers of light weight, low dollar-value business to residences; and b) small office and home office businesses with special emphasis on ethnic businesses. In Fiscal Year (FY) 1997, Expedited and Package Services revenues totaled more than \$5.4 billion.
	The International Business Unit was formed in June 1995 and became operational in 1996. The International Business Unit introduced a new, independent business function within USPS. The realignment of the international mail function within USPS fostered a widespread expectation of superior growth.
	In a presentation to the Board of Governors in January 1996, International Business Unit's Vice President stated his vision of the International Business Unit by the year 2005. Specifically, the Vice President stated, in 2005, the USPS would be the major global supplier of direct marketing, package delivery services, and related business transactions to business customers worldwide. By 2005, the Vice President of International Business Unit projected that the USPS would become the leader in global mail and package services, as well as become, a major contributor of revenue and growth to the USPS.
	To accomplish this vision, the International Business Unit would continue to maintain universal service while providing enhanced service to the key regions of the world, with initial focus on nine countries <sup>1</sup> . Also, International Business Unit would form alliances to help deliver an integrated package of services and products. In FY 1997, International Business Unit revenues totaled more than \$1.7 billion.
Objective, Scope, and Methodology	The OIG, in cooperation with the Inspection Service, initiated this review with two objectives: (1) to determine the effect on long-term improvements and sustained organizational performance; and (2) to analyze the accuracy and completeness of current methods. To address our objectives, we reviewed the USPS' volume and revenue forecasts for FY 1994-1997. We analyzed projections made by the USPS' Economic Analysis and Forecasting group and budget data prepared by the

<sup>&</sup>lt;sup>1</sup> The nine countries were Argentina, Brazil, Canada, Chile, China, Germany, Japan, Mexico, and the United Kingdom.

USPS' Corporate Finance Office. We interviewed USPS management and operating officials, evaluated internal reports on statistical systems and revenue tracking, and reviewed statistical information prepared by consultants, as well as the cost and revenue analysis reports for both domestic and international mail for FYs 1995-1997.

In addition, we reviewed Revenue, Pieces, and Weight reports for FYs 1994 -1998. We also selected the USPS' International Business Unit and the Expedited and Package Services offices for a detailed review of revenue and volume forecasting because of the higher incidence of variances from the baseline forecast developed by the Economic Analysis and Forecasting group. The review of International Business Unit and Expedited and Package Services therefore included an analysis of their business plans since their creation in 1996, evaluation of internal reports, and review of statistical information prepared by consultants.

This review was conducted from May 1998 through January 1999 in accordance with generally accepted government auditing standards and included tests of management controls as deemed necessary. We discussed our conclusions and observations with appropriate management officials and included their comments, where appropriate.

# AUDIT RESULTS

Differences Between Forecasting and Actual Performance	Our review of Economic Analysis and Forecasting's forecasts, Corporate Finance's operating budgets and related business plans, disclosed substantial differences when compared with actual performance for Expedited and Package Services and International Business Unit individual products. These differences were caused primarily by: • limited communications between management
	<ul> <li>Inflited communications between management groups, and</li> <li>forecasts and business plans designed using multiple assumptions and consultants.</li> </ul>
	Differences between USPS' revenue, and cost projections and actual performance could impair planning for future growth, create difficulties in the growing market share for products, and delay timely implementation of USPS projects (i.e. capital investments and specific Expedited and Package Services enhancements such as Priority Mail Processing Centers, delivery confirmation, etc.).
	Economic Analysis and Forecasting must be maintained by the USPS because of requirements in the Postal Reorganization Act of 1970 <sup>2</sup> that USPS revenues must equal operating costs, debt reductions, and future contingencies. Also, each product should generate revenue equal to or in excess of its attributable costs without cross-subsidization from other products. Our audit identified three conditions as follows:
A. Expedited and Package Services Volume Forecasting	Our review disclosed that management in Corporate Finance and Expedited and Package Services uses Economic Analysis and Forecasting's forecasts as baselines; however, these baseline forecasts are adjusted each year by Economic Analysis and Forecasting's customers to prepare either USPS' yearly operating budget or Expedited and Package Services' business plan. A comparative analysis of Economic Analysis and Forecasting's forecasts for the Postal

<sup>&</sup>lt;sup>2</sup> The Postal Reorganization Act of 1970, Sections 2009, 3621, and 3622.

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Rate Commission case (R94-01) and adjusted forecasts used in the operating budget when compared to actual performance for Priority Mail and Expedited Mail in FYs 1995-1997<sup>3</sup> showed substantial differences.

Comparison of Economic Analysis and Forecasting's forecasts of Priority Mail to actual volumes disclosed differences from 17.976 million pieces (2.1 percent) in FY 1995 to 90.709 million pieces (8.5 percent) in FY 1997. Comparison of budget volume differences to actual volumes also ranged from -44,349 million pieces (-4.7 percent) to 84.773 million pieces (9.8 percent) as shown in Chart 1:



Similar differences were also disclosed in our analysis of Expedited Mail. We found that Economic Analysis and Forecasting's volume forecasts when compared to

<sup>&</sup>lt;sup>3</sup> Parcel Post analysis was not performed because Standard B information was not available on a line item basis.

actual, varied between 1.428 to 6.405 million pieces (2.5 percent to 10.1 percent) and the operating budget differences to actual varied from 0 percent to 6.7 percent as depicted in Chart 2:



The most recent Economic Analysis and Forecasting forecast was completed in February 1998. The Revenue, Pieces, and Weights report showed actual revenue for Priority and Expedited Mail for the third quarter of FY 1998 exceeded projections by 1.53 percent and 1.08 percent, respectively. However, the prior Economic Analysis and Forecasting forecast in December 1997 showed differences of 6.7 percent and 3.61 percent respectively for the same period.

The February 1998 forecast also made changes in projections for Priority Mail from the December 1997 forecast for future years. For example, the February forecast exceeded the December forecast for Priority Mail by 6.18 percent in 1998, 11.81 percent in 1999, and 16.96 percent in 2000. The total difference in revenue projected for just those 3 years was \$1.5 billion. Management advised that current forecasts included different assumptions concerning competitors pricing, as well as other product features not contained in the December 1997 forecast. Management also advised neither forecast included any effect of change in market share created by Delivery Confirmation or Priority Mail Processing Centers.

Expedited and Package Services management, in conjunction with consultants, generated the Expedited and Package Services Business Plan utilizing the Economic Analysis and Economic forecast as a
Economic Analysis and Forecasting forecast as a baseline. The Business Plan, however, included initiatives for Delivery Confirmation and or Priority Mail Processing Centers. The Business Plan's projections for Expedited and Package Services' products were much higher than the Economic Analysis and Forecasting projections. For example, the 1998 Business Plan projected Priority Mail revenue to grow at an annual rate of 14.9 percent between the years 1998 and 2000. The Economic Analysis and Forecasting forecast projected annual revenue growth at a rate of about 8 percent. Through the third quarter of 1998, actual revenue was 14.3 percent higher than 1997 revenue.
Standard B mail is comprised of Parcel Post, Bound Printed Matter, Special Standard Mail, Library Mail, and Domestic Mail Fees. Approximately 50 percent of the Standard B revenue is generated by Parcel Post. The Economic Analysis and Forecasting and Expedited and Package Services' projections for Parcel Post volume vary even more than Priority Mail. For example, an Economic Analysis and Forecasting projection for Parcel Post volume in 2002 is 307 million pieces while Expedited and Package Services projects 660 million pieces. Chart 3 illustrates the differences between the two projections.
Parcel Post Volume Comparison (In thousands)
700,000 600,000 - 500,000 - 400,000 - 300,000 -



	Expedited and Package Services' management advised that they had used two consultants. One consultant generated the Business Plan and the second performed market research. The Economic Analysis and Forecasting group contracted with three different consultants to generate their forecasts. Based on our review, Expedited and Package Services' management is closer to achieving its established goals. The Economic Analysis and Forecasting groups forecast and operating budget projections have improved over prior years. Increased interaction between the groups should and result in greater reliability of forecasts and enhance the financial accuracy of the USPS.
C. International Business Unit Business Plans	As previously reported in OIG's Report Number RG-MA- 98-005, <sup>4</sup> the FYs 1996-1998 International Business Unit Business plans projected international business growth based on increased revenues and contributions from new products and services. The new products and services included Global Package Link, Global Priority Mail, Direct Entry, Inbound, and Global Customized Solutions. To date, the International Business Unit has not generated the revenue growth expected as of FY 1998. The inability to achieve the revenue goals was due to several factors including initial unrealistic revenue goals and inaccurate volume and revenue accountability. We analyzed actual revenue and reported costs for FYs 1995-1997 from the International Cost and Revenue Analysis reports and the actual revenue and reported costs for FY 1998 from the International Business Unit Summary Report through accounting period eight. Actual revenues represented 28, 22, and 51 percent of the FYs 1996-1998 International Business Unit projections, respectively.

<sup>&</sup>lt;sup>4</sup> Review of Revenue Forecasting-International Business Unit, September 29, 1998.

	<ul> <li>International Business Unit officials advised that:</li> <li>they have recently begun to work more closely with the Economic Analysis and Forecasting group,</li> <li>regular monthly meetings are currently being held, and the International Business Unit has been developing a close working relationship with the Corporate Finance Office.</li> </ul>
Recommendations	We offer the following recommendations:
	The Chief Financial Officer and Senior Vice President should:
	<ol> <li>Continue periodic meetings between Economic Analysis and Forecasting management and managers of Expedited and Package Services, International Business Unit, Budget, and operational areas to discuss factors affecting the market environment.</li> </ol>
Management's Response	The Chief Financial Officer and Senior Vice President, and the Vice President of Expedited Package Services concurred with this recommendation. They advised that they had established a new organization in the Department of the Controller to serve as a focal point for revenue and expense forecasting under a Manager, Forecasting. This is intended to draw together the collective knowledge and expertise in forecasting and to integrate better with other areas of the organization, including Budget, Marketing, Expedited/Package Services and International.
	Improvements in the revenue and volume forecasting and planning process for national targets have also been instituted. For the Establish 2000 management cycle, the Forecasting unit worked closely with Marketing and the Strategic Business Units to develop FY 2000 targets by class of mail. Joint reviews of forecasting assumptions and detailed forecasts were completed. Particular attention was given to Priority and International products. This Establish 2000 Outlook will serve as the basis for the Operating Budget and business plans.
	Other recent developments will also contribute to an improved process. The creation of Finance Managers in the Strategic Business Units has improved the liaison with

	Forecasting the office. The current forecasting process requires meeting with the business drivers to review competitor moves and assumptions before creating each forecast. Management created an internal review process for international rates, which allows for the continuous transfer of information. These process improvements are ongoing. Finally, as part of the <i>CustomerPerfect!</i> ongoing improvement efforts, there are five task forces focusing on incorporating customer and market requirements into the planning process and integrating the planning process.
Evaluation of Management's Response	Management's comments are responsive to our recommendation.
Recommendation	<ol> <li>Continue periodic forecasts by Economic Analysis and Forecasting to track short-term changes.</li> </ol>
Management's Response	The Chief Financial Officer and Senior Vice President concurred with the recommendation. He advised that the Demand Forecasting and Economic Analysis unit (formerly Economic Analysis and Forecasting) continuously monitors revenue and volume trends and produces updated forecasts.
Evaluation of Management's Response	Management's comments are responsive to our recommendation.

Recommendation	<ol> <li>Reduce USPS costs for contracting development of business plans by utilizing resources of the Economic Analysis and Forecasting group, when possible.</li> </ol>
Management's Response	The Chief Financial Officer and Senior Vice President concurred with the recommendation. In his response, he stated that better communication and cooperation with Marketing and the business units concerning forecasts should reduce the need for multiple forecasting resources. In his memorandum of March 3, 1999 the Vice President of Expedited Package Services indicated his expectation to limit contractor support to providing market and competitive information. The International Business Unit will be expanding its working relationship with Demand Forecasting and Economic Analysis through the new internal review process for international rates, and regularly scheduled meetings to discuss international market and economic conditions. This improved communication will diminish the need for contractual support when developing international business plans; and will improve the quality of official forecasts of international revenues and volumes.
Evaluation of Management's Response	Management's comments are responsive to our recommendation
Recommendation	4. Identify and implement best practices by benchmarking
	the forecasting processes.

consultants, whose research keeps them current with new developments.

Evaluation of Management's Response Management's comments are responsive to our recommendation. We would appreciate being kept informed about the efforts to benchmark with the forecasting processes in other organizations.

# Major Contributors to this Report:



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M. RICHARD PORRAS CHIEF FINANCIAL OFFICER SENIOR VICE PRESIDENT

UNITED STATES POSTAL SERVICE

March 24, 1999

MS. OWENS

SUBJECT: USPS Response to the Inspector General's Draft Audit Report - Review of Economic Analysis and Forecasting

This is in response to your February 26 transmittal of the draft Audit Report - Review of Economic Analysis and Forecasting by the United States Postal Service (98-RA-008-RG-000).

During the past year, the Inspector General reviewed the economic analysis and forecasting process. You have made some recommendations to improve the process through increased communication and better coordination between Finance and other organizations.

As the attached detailed response indicates, we have recently made organization and process changes that address the issues you raised. These changes should provide a better linkage between forecasting and other planning activities in the Postal Service and allow us to more effectively utilize our forecasting resources.

Please let me know if I can be of further assistance.

Richard Iman M. Richard Porras

Attachment

cc: John Kelly James Grubiak

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#### Response to OIG Audit Report - Review of Economic Analysis and Forecasting Detailed Postal Service Actions

#### 1. Continue periodic meetings between Economic Analysis and Forecasting management and managers of Expedited/Package Services, International Business Unit, Budget and operational areas to discuss factors affecting the market environment.

We concur with the recommendation. In the time since this report was written, we established a new organization in the Department of the Controller to serve as a focal point for revenue and expense forecasting under a Manager, Forecasting. Our intent is to draw together the collective knowledge and expertise in forecasting and to integrate better with other areas of the organization, including Budget, Marketing, Expedited/Package Services and International.

We have also instituted improvements in the revenue and volume forecasting and planning process for national targets. For the Establish 2000 management cycle, our Forecasting unit worked closely with Marketing and the Strategic Business Units to develop FY 2000 targets by class of mail. We jointly reviewed forecasting assumptions and detailed forecasts. Particular attention was given to Priority and International products. This Establish 2000 Outlook will serve as the basis for the Operating Budget and business plans.

Other recent developments will also contribute to an improved process. The creation of Finance Managers in the Strategic Business Units has improved the liaison with Forecasting. The current forecasting process requires meeting with the business drivers to review competitor moves and assumptions before creating each forecast. We have created an internal review process for international rates, which allows for the continuous transfer of information. These process improvements are ongoing. Finally, as part of the CustomerPerfect! ongoing improvement efforts, there are five task forces focusing on incorporating customer and market requirements into the planning process and integrating the planning process (Baldrige Tasks 2.1c, 2.1d, 2.1e, 3.1b, and 4.2b.)

# 2. Continue periodic forecasts by Economic Analysis and Forecasting group to track short term changes.

We concur with the recommendation. The Demand Forecasting and Economic Analysis unit (formerly Economic Analysis and Forecasting) continuously monitors revenue and volume trends and produces updated forecasts.

# 3. Reduce USPS costs for contracting development of business plans by utilizing resources of the Economic Analysis and Forecasting group when possible.

We concur with the recommendation. Better communication and cooperation with Marketing and the business units concerning forecasts should reduce the need for multiple forecasting resources. In his memorandum of March 3 (attached), Mr. Kelly indicated his expectation to limit contractor support to providing market and competitive information. The International Business Unit will be expanding its working relationship with Demand Forecasting and Economic Analysis through the new internal review process for international rates, and regularly scheduled meetings to discuss international market and economic conditions. This improved communication will diminish the need for contractual support when developing international business plans; and will improve the guality of official forecasts of international revenues and volumes.

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#### 4. Identify and implement best practices by benchmarking the forecasting process.

We concur with the recommendation. We support the method of benchmarking as a way to seek continuous improvement. Within the next 18 months, we plan to initiate an effort to review forecasting processes in other organizations and to identify and implement changes we believe would improve our process. Three key forces have caused Demand Forecasting to profit from improvements in forecasting methods outside the Postal Service. First, traditionally, the function has hired outside professionals into this area and, in fact, two of the four individuals who have held the management position were recruited from the outside. Second, postal rate making subjects the Service's forecasting to intense outside scrutiny. Lastly, Demand Forecasting and Economic Analysis has judiciously used outside consultants whose research keeps them current with new developments.

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Ms. Sylwe Owens
 Assistant Inspector General for Revenue/Cost Containment.

SUBJECT: E/PS Addit Report-Review Response

Reference is made to your report dated Fabruary 26, 1995, concerning the difference in the Sconomic Analysis and Horecesting and the Business Plan by the E/PS group. Berger I respond to your recommendations, of metry to explain some rationale that over a five-year projection, there will be some major differences. In the Business Plan, we make some assumptions that several things will change over a given derived. Examples would be that we improve service levels, change the brand to take advantage of marketing opportunities, increase advertising sponding new facilities for packages, etc. In some respects it is utopta – marketing driving operations. Not real, out an interesting thought. What names aging is that long term it is healthy to have some differences.

Now, let me reacond to your recommondations. We bave put if a process that for Y 2000, both finance and marketing will jointly agree on the revenue projections. In addition we will meet on a regular basis to update the actual performance, share information and get ready for 2001. This will require us to update our 9.4(1000) Plan to reflect the agreed upon projections. It doubt also change the outyear projections Since the Business Plan is pretty complete, except for updates, we will not update consultants extensively, but we will continue the contract that provides us the information on the market and our competitors.

f any further information is required, please contact out

John F. Kellv

jak co: Allen Kane Richard Ponas