

**REVIEW OF THE RESULTS ACT IMPLEMENTATION  
THROUGH THE CONSOLIDATED INFORMATION  
SYSTEM AT THE UNITED STATES MINT**

**OIG-00-123**

**SEPTEMBER 15, 2000**



**Office of Inspector General**

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**United States Department of the Treasury**



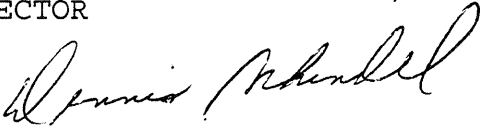
OFFICE OF  
INSPECTOR GENERAL

DEPARTMENT OF THE TREASURY

WASHINGTON, D.C. 20220

September 15, 2000

MEMORANDUM FOR JAY W. JOHNSON, DIRECTOR  
UNITED STATES MINT

FROM: Dennis S. Schindel   
Assistant Inspector General for Audit

SUBJECT: Audit Report on Review of the Results Act  
Implementation Through the Consolidated  
Information System at the United States Mint

This memorandum transmits the subject final audit report. The overall audit objective was to determine whether the Mint's Consolidated Information System (COINS) provides accurate, timely, reliable, and valid information in order to assess the progress towards achieving established performance goals as required by the Government Performance and Results Act of 1993 (Results Act). We did not question whether the performance measures adopted by the Mint were the best possible measures of the circulating coin activities. Nor did we conduct a complete systems capability review of COINS and all its composite modules. We limited our review to assessing the ability of COINS and its modules to support performance reporting.

Our audit revealed that although COINS may eventually be capable of providing the necessary data for performance reporting, it is not currently able to fully support the performance reporting requirements of the Mint. We focused our performance reporting review on three performance measures for circulating coinage. We found that COINS production data contained errors and could not always be relied upon, and management controls over data input needed to be improved. We also found that clear working definitions of data elements were needed, and the development and refinement of some cost allocations needed to be performed.

We recognize that at the time of this review, the Mint had not been able to sufficiently address a number of the data and reporting issues due to other priorities. While the Results Act is a priority for the Mint, other priorities such as full implementation of COINS, efforts for Year 2000 compliance, introduction of the new commemorative quarters, and certain other

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factors including loss of critical information system staff have impacted Results Act reporting. Also, since our review focused on COINS' ability to support performance measure data only, our results are not representative of the overall effectiveness of the COINS system.

We made four recommendations to improve the data quality and timeliness needed to enhance the Mint's efforts to move forward in reporting its performance goals. The Mint concurred with all our recommendations and provided, collectively, a satisfactory action plan to improve the reporting of performance measures and results through COINS. The Mint's response to our recommendations is included as Appendix 2. We have made adjustments to the report where appropriate based on these comments.

We appreciate the courtesies and cooperation provided to our auditors during the audit. If you wish to discuss this report, you may contact me at (202) 927-5400 or a member of your staff may contact Barry L. Savill, Director, Program Audits at (202) 283-0151.

Attachment

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## Overview

This report presents the results of our audit to determine whether the United States Mint's (Mint) Consolidated Information System (COINS) provides accurate, timely, reliable and valid performance measurement information. Such information is needed in order to assess the progress of the Mint in achieving established performance goals as required by the Government Performance and Results Act of 1993 (the Results Act). Mint officials stated that COINS is the first Enterprise Resource Planning (ERP) system in the federal sector, and will integrate 15 modules in manufacturing, finance, marketing and customer service to provide accurate and timely information for operational and strategic decisions. In order to become Year 2000 compliant, the Mint implemented COINS October 1, 1998.

Mint officials expressed concern that our review covered the first two quarters of their implementation. They stated that a temporary degradation of reporting capabilities is common when initially implementing a complex and dynamic ERP system. Also, not all modules of the system were completely developed. They told us that the executive management module was not yet available, so on-line, real time Government Performance and Results Act (GPRA) performance data and reports could not be produced by COINS. However, the PeopleSoft system, the core management information system of COINS, should provide the necessary data that would be used to formulate the performance equations and reports.

We found that although COINS may eventually be capable of providing the necessary data for performance reporting, it is not currently able to fully support the performance reporting requirements of the Mint. The system could not provide essential cost information and contained erroneous production information. Also, the Mint needed to better define its measures, refine its cost allocations, and improve management controls over data collection and reporting. As a result, the Mint could not rely on COINS to produce timely, accurate, or valid data for its performance reporting. To meet a mid-year performance status reporting requirement, the Mint had to estimate certain costs, and manually collect and manipulate data from the system or other financial and production reports to use in its performance measures.

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The Results Act requirements are a priority for Mint officials, however, before and during our audit, other factors affected their ability to develop COINS capabilities to fully support their performance measurement needs. COINS was in its initial implementation phase, some of the performance measures were changed for the new fiscal year, and the Mint was focused on other critical priorities such as Year 2000 (Y2K) compliance, the introduction of the new commemorative quarters, and record bullion sales. The Mint also experienced substantial personnel losses to its information system staff that hampered its ability to work on all these problems effectively. We recognized that the Mint faced many challenges simultaneously and changed its performance measures in an evolving process to better meet Results Act goals. We are making four recommendations to help the Mint develop a better systematic process for ensuring that future performance results are timely, accurate, reliable and valid.

## Background

Congress enacted the Results Act to improve the confidence of the American people in the capability of the Federal Government to operate efficiently. The Results Act systematically holds Federal agencies accountable for achieving program results. Accordingly, the Results Act requires Federal agencies to more effectively plan, budget, execute, evaluate, and account for their programs and activities. Federal managers are required to establish performance-based management systems to accomplish goals and measure results. The goals are to be expressed in objective, quantifiable, and measurable form.

The Results Act also requires Federal agencies to meet the following time frames for implementation:

- report annually on actual performance compared to goals with the first report due March 2000; and
- include actual program performance results for the past three fiscal years (FYs) in annual reports beginning in FY 2002.

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To meet these reporting requirements, the Mint needs accurate, timely, reliable, and valid data. Accuracy is the extent to which the data items are free from error. Timeliness is whether data sources about recent performance are available when needed to improve program management and report to Congress. Reliability refers to the precision, or accuracy, with which performance is measured. Validity is whether the data collected match the intended area of performance or the extent to which the measure represents actual performance.

Based on the mission mandated by Congress, the Mint identified its three major business activities: Production of Circulating Coinage; Production and Sales of Numismatic and Bullion Coinage; and Protection of Assets. Only the Mint facilities located in Philadelphia, Pennsylvania and Denver, Colorado manufacture circulating coinage for the American people.

In FY 1996, the Mint began setting the stage for acquiring the COINS. In October 1998, the Mint implemented COINS at the Philadelphia and Denver Mint facilities. COINS replaced most of the Mint's legacy systems and enabled the Mint to become Year 2000 compliant. The new system fulfills the Mint's strategic objective to acquire an integrated business information system to address most of its manufacturing, marketing, and financial requirements. To provide accurate, meaningful, and timely information required by management, COINS implementation was a critical success factor in the attainment of many Mint information technology goals.

For FY 1999 Results Act reporting, the Mint officials revised their previous performance measures pertaining to circulating coins. Current measures focus on producing coins and maintaining inventories at sufficient levels to meet Federal Reserve Bank requirements, reducing the cost of producing circulating coins, and improving other major business activities at the Mint. As a result, more than half of the Mint's Results Act measures involved circulating coinage.

In June 1998, the U.S. General Accounting Office (GAO) reported on its observations of the Treasury's Fiscal Year 1999 Annual Performance Plan submitted to Congress as required by the Results

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Act.<sup>1</sup> The Mint was not specifically included in GAO's report. However, GAO's observations identified areas for all bureaus to give focus. Included in GAO's findings was one that stated that Treasury's Results Act plan was incomplete in that some of the performance measures for its bureaus and offices were still being developed and defined. As an example, the GAO report highlighted one bureau's performance measure as not being supported by complete information such as definitions, data sources, level of detail, and data reliability.

This audit is one in a series of audits planned by the Office of the Inspector General designed to assist Treasury bureaus in meeting the requirements of the Results Act. We focused on the four Treasury bureaus that were pilot programs for Results Act implementation, the Mint being one. The 1998 GAO report and its findings further highlighted the need to continue to systematically review all aspects of Results Act implementation at the Treasury bureaus, and since the Mint was not specifically addressed in the GAO report, we planned and initiated this effort.

Appendix 1 shows the Mint's two strategic goals for circulating coinage, the associated performance measures for the goals, and whether the measures were included in our review.

## Objective, Scope and Methodology

Our overall audit objective was to determine whether the Mint's COINS provides accurate, timely, reliable, and valid information in order to assess the progress towards achieving established performance goals as required by the Results Act. Specifically, we determined to what extent control weaknesses and data limitations affected the Mint's ability to assess its achievement of performance goals. We interviewed Departmental personnel to identify established policies and oversight activities. We discussed or reviewed relevant Federal laws, regulations, policies, procedures, reports, and other guidance. We interviewed Mint officials and staff to obtain current information for implementing the Results Act and

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<sup>1</sup> *The Results Act: Observations on Treasury's Fiscal Year 1999 Annual Performance Plan* (GAO/GGD-98-149), dated June 30, 1998.



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COINS planned operations for measuring performance against goals and objectives.

The Mint has nine performance measures, five of which are associated with circulating coins, three with numismatic operations, and one with its protective services. Because of the number of measures, we chose to focus on circulating coin operations in this review. We selected three of the five measures for circulating coins that dealt with productivity and efficiency (see Appendix 1) and that relied on COINS for reporting. Because COINS was not implemented at the circulating production sites until October 1998, our audit scope was limited to coins produced at the Philadelphia and Denver Mint facilities during FY 1999. We performed audit work at Mint Headquarters in Washington, D.C., and obtained production and payroll data for the Philadelphia and Denver Mint facilities to help evaluate the performance measures. We identified the source documents, such as production reports and verified data to the production statistics generated in COINS printouts up to March 31, 1999. We also reviewed and analyzed payroll statistics generated in COINS printouts and related payroll documents up to February 28, 1999. In addition, we reviewed support documentation for FY 1999 mid-year performance results reported to the Department on May 17, 1999.

We did not assess the overall capability of the COINS system modules implemented in terms of their ability to support manufacturing, finance, marketing, customer service, and other activities. Also, our audit was limited to assessing the performance data generated and provided by the Mint, rather than assessing whether the performance measures themselves were appropriate. We did not determine whether the Mint could have developed better measures to assess the achievement of performance goals. Our on-site fieldwork was conducted between January and June 1999.

We conducted this audit in accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and included such audit tests as were determined necessary.

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## Audit Results

### COINS Is Not Currently Able To Fully Support Results Act Reporting

Although the Consolidated Information System may be capable of providing the necessary data for reporting performance, it is not currently able to fully support the performance reporting requirements of the Mint. Under the Results Act, agencies are responsible for developing credible verification and validation procedures to report performance information, identifying data limitations, and discussing how the data limitations affect the credibility of performance information in performance plans and reports. During our audit, Mint officials stated that COINS is the first Enterprise Resource Planning system in the federal sector, and will integrate 15 modules in manufacturing, finance, marketing and customer service to provide accurate and timely information for operational and strategic decisions. Mint officials presented or demonstrated various applications that COINS can perform and the associated benefits of an integrated Mint-wide resource planning system. However, the system is newly implemented and has not been completely developed to include data and analysis necessary to fully support Results Act reporting requirements.

We focused our review of performance reporting on three of the five circulating coin performance measures shown in Appendix 1. During the review, Mint officials acknowledged that currently they could not rely on COINS to provide all the information they needed to develop and report those three measures. They acknowledged that the system could not provide actual cost data broken out by departments and accounts for two measures. Also, for the third measure, COINS production and payroll data (detailed labor charges) was either erroneous or unreliable, and management controls over data input needed to be improved. Finally, for all three measures we found that clear, detailed working definitions of exactly what data elements were needed to support each measure were lacking, and the development and refinement of some cost allocations needed to be performed. As a result, COINS is not able to timely generate complete and accurate data needed to address the performance measures.

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At the time of our audit, the Mint could not sufficiently address these performance measurement data and reporting issues. The Mint was under some pressure to implement COINS by October 1, 1998, in order to become Y2K compliant, however not all modules of COINS were completed or ready for use. The executive management module, which would provide on-line, real time GPRA performance data had not yet been addressed. Mint officials told us that although the Results Act is a priority for them, other priorities such as the implementation of COINS, efforts for Year 2000 compliance, the introduction of the new commemorative quarters, and certain other factors including loss of critical information system staff have impacted on their ability to address these issues.

Mint officials plan to develop assurances that: (1) the necessary data is in or will be in COINS; (2) the data items are accurate, reliable, valid, and available in a timely manner; and (3) the performance measure definitions will be established with needed detail. The Mint officials plan to use the services of an Independent Public Accountant and a private information technology contractor to assist them and perform an independent system verification and validation test.

**COINS Did Not Provide Actual Costs Needed for Performance Measures Related to the Average Cost for 1,000 Units of Circulating Clad Coinage (1-6) and Circulating Pennies (1-7)**

We found that COINS was not able to generate or report data at the level of detail needed for these two performance measures -- "average cost per 1000 units of circulating clad coinage (including metal)" and "average cost per 1000 units of circulating pennies (including metal)." Mint officials told us that total costs included labor, metal cost, fabrication, and other services and expenses, as well as shipping costs to the Federal Reserve Banks. However, COINS could not readily provide actual costs for each of these cost categories or support for the various cost elements by department and accounts that should be included in the measures. We learned that the Mint developed a FY 1999 standard cost for each coin denomination and used these standard costs to prepare its quarterly profit and loss statements. In May 1999, Mint officials used data from the profit and loss statements to report the performance measure information in their mid-year status report to the Department.

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Mint officials told us that there was a problem with extracting the needed actual cost data from COINS, because the system did not have all the programs and mechanisms needed for the performance measures and, therefore, could not generate all of the required reports. In addition, there were data allocation and query problems that needed to be corrected to satisfy the performance measurement requirements. Since COINS could not provide actual and complete cost data in the manner needed, we could not determine whether the system would provide timely, accurate, and valid information for the two performance measures.

**COINS Did Not Provide Complete and Accurate Data for the Performance Measure (1-8) - Clad Coins Produced Per Circulating Production Payroll Dollar**

***Production data in COINS was inaccurate and needs to be improved***

We found that the coin production data obtained from the COINS at Headquarters did not reconcile with the production data available at the Philadelphia Mint. First quarter FY 1999 production entry data contained errors in about 98 percent of the daily entries. This made it impossible to verify the daily production counts in COINS. Mint officials explained that since COINS was new, their personnel made mistakes inputting the daily production data. They further explained that during initial system implementation, production personnel and supervisors input the data rather than personnel fully trained on the use of the COINS system. After this problem was identified, in February 1999, an individual with more system capability was used to input the data. Consequently, we compared the source documentation for March 1999, with the COINS output and found, that accuracy was substantially better. However, there were still some input errors, including inconsistent entry dates and omitted production.

The Mint was required to submit a mid-year budget execution review to the Department that provided a status of the performance measures. Because of the problems mentioned above, Mint officials could not rely on COINS to provide accurate production information for this performance measure. They told us that the first and second quarter production figure of 3.4 billion clad coins used in the performance measure equation had to be obtained from manual records and reporting. However, Mint staff determined after

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submitting their report to the Department that this number was incorrect and should have been about 3.8 billion clad coins. In this case, productivity was understated. New commemorative quarters produced during the period at the Denver and Philadelphia Mint had not been included.

In an additional issue related to production reporting, we found some areas relating to data entry and internal controls that could be improved. The original production data entry documents did not specify which day's production was being reported, the person making the entry, and the person who checked and verified the data. The input document contained a "transaction" date and time that we were told usually reflected the day the data was entered into COINS, and which usually represented the previous day's production. Consequently, neither Mint personnel nor we could determine from the COINS printout information what the day of production was for any given entry. This information is needed if the Mint is to compare the COINS output data to the source input documents in order to verify the accuracy of the data.

During the audit we suggested that it would be a good internal control to have a person check and verify the daily counts and daily COINS production entries and sign the input form. The COINS output should include the day of production, the manufacturing site, the various coin production figures and the identification of the person who made the COINS entry and date of entry. Mint management officials will need this data for internal control purposes, and auditors will need this data in order to verify and validate Results Act reports in the future.

*COINS could not provide the detailed labor cost data needed*

COINS was not able to provide complete, accurate and timely labor cost data at the detail level needed to support the reporting of performance measure 1-8. We requested that Mint Headquarters staff provide specific production payroll data from COINS so that we could then compare it to source data from the two Mints. For a variety of reasons, it required several attempts to obtain usable data. For example, we received different payroll figures from different sources within the Mint. Also, confusion about the definition (discussed later) of the labor categories that should be used in developing the measure also contributed to the erroneous data we

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received. The Mint could not readily tell us which costs by department and accounts should be correctly included in the measure. Consequently, the Office of the Deputy Chief Financial Officer (DCFO) undertook to clarify the definition and obtain correct figures. They provided production payroll costs in support of this measure of \$15.2 million through the end of February 1999.

The DCFO staff also went to the Philadelphia Mint to work with the accountant there to verify that the numbers we were given were correct. After their reconciliation of the Philadelphia payroll to the National Finance Center records, they discovered that general expenses in a number of payroll accounts were omitted. The expenses in these accounts needed to be prorated to the circulating coin production and the numismatic coin production. After this was accomplished, they determined that the payroll costs should be increased to \$16.6 million. We were not provided a reconciliation for the Denver Mint's payroll amounting to \$6.6 million, but DCFO staff stated that their comparison to National Finance Center records showed the payroll was reasonably close. We did not independently verify the payroll, as the results would not have changed the nature of our findings.

In order to meet a requirement for mid-year performance measure status reporting to the Department, the Mint had to estimate the labor charges for March, because it stated that it would take too long to obtain the information through COINS and perform a manual allocation of charges to circulating coins. In our discussions, Mint officials recognized and agreed that there were inconsistencies in what was believed to be the proper definition of this performance measure. They also acknowledged that work needs to be done to create the proper queries into COINS, and on refining the allocation of labor costs so that COINS can fully support this process with accurate, reliable, valid and timely data. Until this is accomplished, the process will be time consuming, require much manual gathering and manipulation of data and be susceptible to errors. Also, users of the performance data may not be obtaining accurate reports for management or budget decisions.

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## **Performance Measures Need To Be Clearly Defined And Documented**

We found that the three performance measures we reviewed needed to be more clearly and consistently defined and documented. Management officials need clearly documented data elements for all performance measures to track actual performance and subsequently provide the necessary performance reports. In its mid-year status report to the Department, the Mint used a different definition than it started with for two measures (1-6 and 1-7), and included invalid labor costs in the third (1-8). Throughout the course of our audit, we received different working definitions of the measures depending on with whom we talked. If the definitions of these measures and their composite elements are not clearly defined in detail, the Mint would provide inconsistent, unreliable, and potentially invalid results in its performance reports. It is important to resolve these problems in order to support verification and validation audits in the future. Mint officials recognized the inconsistencies we found and our concerns over the definitions, and began addressing the issues during our review.

### **Performance Measures 1-6 and 1-7 Need Clarification, Refinement and Better Documentation**

We found that the definitions associated with these two measures -- "average cost per 1000 units of circulating clad coinage (including metal)" and "average cost per 1000 units of circulating pennies (including metal)" need to be clarified, refined, and better documented. The Mint reported to OMB and Congress that the calculation for the two selected performance measures involved total costs divided by production multiplied by 1,000 units of coins. However, in providing support for its May 17, 1999 mid-year budget execution and status of performance measures report, the Mint indicated that instead of using the amount of coins manufactured or produced during the period, it used the amount of coins shipped to represent production. The decision to change an element of the performance measure's composition was not well documented, nor were justifications for making a change in the measure during the year. In our opinion, this change was not adequately disclosed in the mid-year status report.

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The number of coins shipped is not necessarily the same as the number produced and using one instead of the other can produce different results when entered into the performance formula. For example, in FY 1998, the Mint produced 15.1 billion circulating coins and shipped 16.6 billion coins to the Federal Reserve Banks. By using shipped coins in this case, it would appear that the Mint's cost to produce 1,000 coins would be less and, thereby, be considered more efficient. Admittedly, small changes in large numbers will not yield significant variation. However, in our opinion, if the numbers used in the formula change from period to period, it would dilute the strength of any conclusions that could be drawn or render invalid trends that could be established.

In our discussion of this issue, Mint officials made arguments why the measure would be better using shipped coins, which we could accept. However, the definition of the costs used for these measures (the other half of the performance equation) is more complicated and requires allocations of costs between business lines as well as between clad coins and the penny. The specific cost accounts used and departments involved in creating the overall cost used in the formula need to be identified. The allocation formulas used need to be described and defined. Costs associated with penny production should not be included in the clad coin measure and vice versa. Mint officials agreed that these measures needed to be set and clearly defined in detail. It is important that this is done so that COINS can be programmed to extract the correct data and formulate and compute the equations supporting each measure. This will help ensure the accurate reporting needed to satisfy Results Act requirements.

#### **Performance Measure 1-8 Needs Clarification, Consistency and Better Documentation**

We encountered difficulties in establishing the proper definition of the payroll amount used in the equation for this performance measure "clad coins produced per circulating production payroll dollar." During the audit, we found inconsistencies and some confusion as to what labor categories or accounts were included in this measure. Various Mint officials provided different definitions of the terms "circulating production payroll dollar." Mint officials provided three different definitions for the payroll data used in calculating the projected and actual results for the performance measure. The definitions varied from excluding to including the penny, adding certain



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indirect labor at the production facilities, and to adding certain headquarters labor charges.

We also found that the circulating production payroll amount used to calculate the measure included payroll (labor) charges for the penny. The production part of the equation only (and correctly) used clad coins produced. Therefore, we stated that the measure should only include costs associated with clad coins. Where the Mint has production labor charges that are directly or indirectly related to manufacturing, but cannot be attributed to a specific coin or applicable overhead labor charges, these charges need to be prorated between circulating and numismatic coin manufacture. Next, the circulating portion of the prorated charges should be allocated among the specific coin denominations.

Mint officials acknowledged the inconsistencies in the definitions that were provided us, and the need to firmly establish and document the exact definition for this measure to include a detailed description of the labor cost accounts used and any allocation methodologies employed. Mint officials recognized that they did not have a procedure in place to ensure that the correct definitions for the measures were clarified, documented and consistently applied. We discussed the inconsistency of including penny costs and the allocation methodology with the Chief Financial Officer on May 27, 1999. He agreed that the penny labor charges should not be included in the measure. Financial personnel are now working to establish these definitions and labor cost allocation methodologies.

## Conclusions

We found that COINS could not provide essential cost information and contained erroneous production information. Also, the Mint maintained inconsistent working definitions and cost allocations for each measure. Mint officials represented that COINS is a highly sophisticated and capable system that can, or will in the future, provide for most of their information needs. However, they recognized that more work is necessary before it can fully support Mint management in terms of the Results Act. Their performance measures need to be defined in detail to include the specific accounts and departments from which actual cost data will be obtained. These

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definitions should be clearly documented so that all personnel will be consistent and clear as to their composition. Information systems personnel will also need these details in order to “map” the measures to the system so that COINS will be able to extract the data needed, manipulate it, and arrange it in such a way that will fully support management. Mint officials stated that they were confident in the capabilities of COINS and that it was designed to collect and store accounting and operational information at the lowest level of detail so that it could support any anticipated need.

We found that the administration or documentation of the performance measurement and reporting process as well as some management controls need to be improved. How performance measures are developed or changed and the logic that supports them should be documented. The various processes or subsystems the Mint uses to address, identify, collect, assemble, and report actual performance data should also be outlined and documented to eliminate misinterpretation internally as well as support a verification and validation process. Management controls should be established at critical points in the data collection and reporting process to help ensure accuracy. Mint officials recognized the weaknesses noted and have begun the process of addressing them.

## Recommendations

1. The Director of the Mint should ensure that the Mint’s performance measures are clearly defined and explained, and specifically identify the data components that should be used to calculate the performance. The definition of the performance measure should explain the nature of the performance that is being measured and also disclose any data limitations. The working definitions and the calculation methods should be clearly documented and disseminated to relevant offices throughout the organization.

### Management Response and OIG Comment

The Mint concurred with the recommendation. They agreed that the performance measures they use should be clearly and concisely defined and documented. They agree that they should perform a detailed mapping of the data elements used with their performance

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measures to the data elements included in the COINS system. They project that this should be accomplished by December 2000. The OIG is satisfied that the Mint understands the points raised within our recommendation and will take satisfactory action to address them. The Mint initiated the data mapping process during the course of the audit.

2. The Director of the Mint should ensure that all performance measurement cost elements are included in COINS and completely and accurately reflect performance data for all measures that rely on COINS. This would include all programs and allocation mechanisms to determine and compute the actual unit costs for all circulating coinage manufactured, and the number of clad coins produced for a specific payroll amount. It should also include an improved query to retrieve the payroll data from COINS, and an appropriate and finalized method for allocating labor costs that may not be easily attributable to particular strategic business units.

#### Management Response and OIG Comment

The Mint generally concurred with the recommendation. The Mint correctly understood that we are specifically referring to a detailed distribution of labor costs to specific products. Although labor distribution information is currently included in summary form in COINS, the Mint indicated the detailed labor distribution data will be included within COINS with the implementation of a Human Resources Information System. This module is scheduled for implementation in July 2001, and the Mint believes it will allow the "capturing of labor charges within PeopleSoft by individual employee, and permit the full functionality of tracking an individual's labor to a product." We believe the efforts currently underway within the Mint will ultimately satisfy our recommendation.

3. The Director of the Mint should ensure that proper procedures are established for making daily production counts and entries, and for checking and verifying the data; that staff is trained to enter daily production data into COINS, and check and verify the input data; and that COINS production reports are periodically reconciled to Mint input to ensure reliability of COINS data.

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### Management Response and OIG Comment

The Mint concurred with this recommendation. It stated in its response that it has made progress in this area. Mint officials are working on an extensive effort to develop standard operating procedures (SOPs) for tracking and maintaining data Mint-wide. New reports are being developed that will enable users to verify data input and facilitate a reconciliation process. The Mint is also updating the COINS Library, which provides users with written SOPs, "How To" documents and User Tips on the efficient and proper use of the COINS system. In the audit report, we acknowledged the Mint made some positive adjustments in the personnel assigned to enter production data into COINS. The OIG believes the Mint is making the changes necessary to address this recommendation, but notes that no timeframes for completion were provided.

4. The Director of the Mint should ensure that procedures are implemented for verifying and validating performance data to ensure that information collected and reported is accurate, reliable, consistent and complete. This may include periodic sampling, reconciling data, and reviewing data collection, maintenance, and processing techniques as well as disclosing data limitations in performance reports and performance plans.

### Management Response and OIG Comment

The Mint concurred with the recommendation. The Mint will rely on the review of performance measurement information by an Independent Public Accountant as a part of the financial statement audit. In addition, they agree that verification and validation of performance measure information throughout the year should be enhanced. The Mint plans to institute a multi-tiered review process, which will involve the dual review of all performance measure information by an independent staff member, one who is independent of the person preparing the performance measurement data, as well as a review by an appropriate supervisor. Additionally, the Mint plans to develop methodologies to "spot check" data input into the COINS system. These methodologies will include the development of a SOP to direct financial managers to do a periodic verification of data entered into COINS. The OIG believes that these efforts should satisfy the

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recommendation, but notes that no timetable for completion was provided.

## **CIRCULATING PERFORMANCE MEASURES**

The following table shows the Mint's two strategic goals for circulating coins, their associated performance measures, and whether the measures were included in our review.

**Table 1**  
Mint Performance Measures for Circulating Coinage  
September 11, 1998 to May 17, 1999

<b><u>Strategic Goal/Performance Measure</u></b>	<b>Included In Our Review</b>
<i>Strategic Business Activity: Circulating Coinage</i>	
<b>Produce coins and maintain inventories at sufficient levels to meet Federal Reserve Bank demand.</b>	
1. Frequency of time meeting a minimum inventory level.	
2. Federal Reserve Bank Customer Satisfaction Survey – 85 %.	
<b>By 2003, reduce the average unit cost of circulating coinage by 15 percent (including metal costs). The baseline year is FY 1998.</b>	
3. Average cost per 1000 units of circulating clad coinage (including metal). (Performance Measure # 1-6)	X
4. Average cost per 1000 units of circulating pennies (including metal). (Performance Measure # 1-7)	X
5. Clad coins produced per circulating production payroll dollar. (Performance Measure # 1-8)	X

# MANAGEMENT RESPONSE

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DEPARTMENT OF THE TREASURY  
UNITED STATES MINT  
WASHINGTON, D.C. 20220

JUL 31 2000

MEMORANDUM FOR DENNIS S. SCHINDEL  
ASSISTANT INSPECTOR GENERAL FOR AUDIT

FROM: Jay Weinstein *[Signature]*  
Associate Director/Chief Financial Officer

SUBJECT: Draft audit report entitled "Review of Results Act  
Implementation through the Consolidated Information System  
at the United States Mint (ADO-99-013)"

The purpose of this memorandum is to respond to the draft audit report entitled "Review of Results Act Implementation through the Consolidated Information System at the United States Mint (ADO-99-013) dated March 27, 2000." We appreciate the opportunity to review the draft report and provide our response for the record.

## Background

In the first quarter of FY 1999, we brought our Mint-wide Consolidated Information System (COINS) on-line. The first Enterprise Resource Planning system (ERP) in the federal sector, COINS integrates 15 modules in manufacturing, finance, marketing and customer service to provide accurate, timely information for operational and strategic decisions. COINS has so streamlined financial reporting that we now close our books within 10 days of the end of the month in contrast to the 70 days after the end of the quarter common before the implementation of COINS. The effectiveness of COINS is evident by our earning of a sixth consecutive unqualified opinion on our financial statement audit. This sixth consecutive unqualified opinion was rendered in the initial year of implementation for our complex and comprehensive ERP system. The Mint's implementation of the COINS system has been properly recognized as a tremendous positive achievement by the information technology and financial communities in both the federal and non-federal arena and has been cited in numerous publications as a resounding success.

It is unfortunate that the OIG chose to audit COINS data following the first quarter of implementation. The OIG was advised at the entrance conference on November 30<sup>th</sup>, 1998, that an audit following the first quarter of ERP implementation would not be the most efficient use of its scarce audit resources. A temporary degradation of reporting capabilities is common after the implementation of a complex and dynamic ERP system as an organization becomes accustomed to using the new system, as processes are reengineered for enhanced efficiency in an ERP environment, and as reporting

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requirements continuously evolve. In addition, the auditors were advised at the entrance conference that the executive management module of COINS had not yet been implemented, due to the limited time available to implement COINS by October 1, 1998, as mandated for Y2K compliance. We advised the auditors that although COINS had not been programmed to generate on-line, real time GPRA performance data, the information could and would be extracted from the PeopleSoft system.

### Summary of Our Response

We chose to interpret the major direction of your recommendations to be focused on improvements to data input and the reporting functionality of COINS, with which we generally concur, rather than as unfounded criticisms of the basic system. In fact, since the time you conducted your fieldwork, we have already refined our COINS processing and/or taken action to correct some of the issues your report addresses.

While we generally agree with the recommendations, we do take exception to the manner in which some of the findings are characterized and the failure of the report to properly explain relevant contextual considerations-- such as the timing of the audit and the normal "shake-out" that is encountered in large systems implementation. For example, the draft report fails to properly distinguish between short-term concerns about data input and reporting capabilities of COINS--- which are a natural extension of a complex ERP implementation--- and fundamental systemic issues with COINS, which the evidence simply does not support but the report implies. The overall accuracy and reliability of basic COINS data is proven beyond question. We believe that the issues mentioned in the OIG's report are properly classified as reporting issues that are naturally encountered during the implementation phase of a large scale, dynamic and complex ERP system such as the Mint's COINS system. This is especially relevant given the fact that your fieldwork largely covered the first quarter of FY 1999, the very same period in which the system was being implemented. We wished you would have characterized your findings in this context rather than implying, as we believe your report does, that there are systematic flaws in the COINS system and is therefore unreliable, which is not the case.

### Mint's Response to Each Recommendation

**Recommendation #1:** The Director of the Mint should ensure that its performance measures are clearly defined and explained, and specifically identify the data components that should be used to calculate the performance. The definition of the performance measure should explain the nature of the performance that is being measured and also disclose any data limitations. The working definitions and the calculation methods should be clearly documented and disseminated to relevant offices throughout the organization.

**Mint Response:** The performance measures used by the Mint are clearly and concisely defined in the Mint's annual performance plan. The Mint's annual performance plan is included in the Departmental Budget, the OMB Budget and in the Congressional Justification. The Mint agrees that a detailed mapping must be prepared of the data elements used with our performance measures to the data



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elements included with the COINS system. This detailed mapping should be completed by December 2000 and, as recommended, will be disseminated to relevant offices throughout the organization.

**Recommendation #2:** The Director of the Mint should ensure that all performance measurement cost elements are included in COINS and completely and accurately reflect performance data for all measures that rely on COINS. This would include all programs and allocation mechanisms to determine and compute the actual unit costs for all circulating coinage manufactured, and the number of clad coins produced for a specific payroll amount. It should also include an improved query to retrieve the payroll data from COINS; and an appropriate and finalized method for allocating labor costs that may not easily be attributable to particular strategic business units.

**Mint Response:** This recommendation consists of several distinct parts and we will address each separately. With the exceptions noted below, we concur with the recommendation.

The first part of the recommendation is that "The Director of the Mint should ensure that all performance measurement cost elements are included in COINS and completely and accurately reflect performance data for all measures that rely on COINS". It is important to note that labor distribution information is included at a summary level in the current version of the Mint's ERP. Accordingly, payroll data in total, is resident within the current COINS system. Detailed labor distribution data will be included within the Mint's ERP system with the implementation of the Human Resources Information System (HRIS). The HRIS is scheduled for implementation in July 2001. With HRIS, labor distribution will be accomplished in the PeopleSoft project module and should provide labor data in a more timely manner than the current labor distribution system. Specifically, the greater detail provided by the labor distribution functionality of HRIS will include the capturing of labor charges within PeopleSoft by individual employee and permits the full functionality of tracking an individual's labor to a product. We believe that all relevant performance measurement cost elements are currently included in COINS, but that a better audit trail could be developed. The implementation of the HRIS and the detailed data element mapping discussed in recommendation #1 will adequately address this issue.

The development of an improved payroll query from COINS is the second part of the recommendation. The detailed data mapping outlined in our response to recommendation #1 and the implementation of HRIS mentioned above will facilitate an improved payroll query, as recommended.

The final part of the recommendation calls for an "appropriate and finalized method for allocating labor costs that may not easily be attributable to particular strategic business units". Labor costs that may not easily be attributable to particular strategic business units are largely General and Administrative expenses (G&A). Currently, the Mint allocates G&A expenses based on a study

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conducted in 1996 by Coopers and Lybrand, and subsequently reviewed by our independent public accountant. The Mint has received four consecutive unqualified opinions since the implementation of this allocation methodology.

**Recommendation #3:** The Director of the Mint should ensure that proper procedures are established for making daily production counts and entries, and checking and verifying the data; staff is trained to enter daily production data into COINS, and check and verify the input data; and COINS production reports are periodically reconciled to Mint input to ensure reliability of COINS data.

**Mint Response:** The Mint agrees to ensure proper procedures are in place for the recording of production entries into our ERP system. Daily production is currently counted. Therefore, we recommend that the first sentence should be changed from "the Director of the Mint should ensure that proper procedures are established for making daily production counts and entries..." to "the Director of the Mint should ensure that proper procedures are established for making daily production entries..." With the change noted in the previous sentence, the Mint concurs with this recommendation.

In fact, since the completion of the audit fieldwork, much progress has been made in this area. We are currently undertaking an extensive effort to develop SOP's for tracking and maintaining data Mint-wide. Many new reports are being developed that will enable users to verify data input and to facilitate the reconciliation process. The Mint has also undertaken efforts to update the COINS Library, which provides users with written SOP's, How-To documents and user tips on the efficient and proper use of the COINS system.

**Recommendation #4:** The Director of the Mint should ensure that procedures are implemented for verifying and validating performance data to ensure that information collected and reported is accurate, reliable, consistent and complete. This may include periodic sampling, reconciling data, and reviewing data collection, maintenance, and processing techniques as well as disclosing data limitations in performance reports and performance plans.

**Mint Response:** The Mint concurs with this recommendation. On an annual basis, performance measures included in the Mint's annual performance plan and performance report are included in the Management Discussion and Analysis (MD&A) section in the Mint's annual report that accompanies the Mint's annual audited financial statements. As such, performance measurement information included in the MD&A is subject to review by the Mint's Independent Public Accountant (IPA). During this review, the Independent Public Accountant analyzes Mint performance data for reasonableness and for consistency with the Mint's audited financial statements. Currently, a subset of measures from the Mint's annual performance plan and performance report is included in the MD&A section of the Mint's annual report.

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We agree that besides the assurance the annual audit provides, verification and validation of performance measure information throughout the year should be enhanced. We plan to institute a multi-tiered review process. This process will involve the dual review of all performance measure information by an independent staff member, independent of the person preparing the performance measure data, as well as by appropriate supervisory personnel. This multi-tiered review will be evidenced by the initialing of relevant supporting documentation by the supervisor and by the independent staff. Additionally, we will be developing methodologies to "spot check" data input into the COINS system. These methodologies will include the development of a SOP to direct financial managers to do a periodic verification of data entered into COINS.

### Additional Information to Correct Factual Errors or Negative Connotations Contained in the IG's Draft Report

In addition to responding to each of your recommendations, I would also like to provide additional information that addresses some of the more troubling factual errors or negative connotations contained in the report.

**Issue A:** On page 6, the report states Mint officials acknowledged that currently they could not rely on COINS to provide all the information they need to develop and report those three measures.

**Mint Response:** During the entrance conference on November 30, 1998, the auditors were advised that the executive management module of COINS had not yet been implemented, due to the limited time available to implement COINS by the Y2K mandated October 1, 1998, timeframe. **We advised the auditors that although COINS had not been programmed to generate on-line, real time GPRA performance data, the information could and would be extracted from the PeopleSoft system.** To recast this straightforward provision of relevant information by saying "Mint officials acknowledged that currently they could not rely on COINS....." is inaccurate and incorrectly characterizes our high level of confidence in our ERP system. The choice of such language in your report does nothing except to place unwarranted doubt on the capabilities and functionality of our newly implemented ERP system.

**Issue B:** On page 7, the report states, "We learned that the Mint developed a FY 1999 standard cost for each coin denomination and used these standard costs to prepare its quarterly profit and loss statements. In May 1999, Mint officials used data from the profit and loss statements to report the performance measure information in their mid-year status report to the Department. Mint officials told us that there was a problem with extracting the needed actual cost data from COINS, because the system did not have all the programs and mechanisms needed for the performance measures and therefore, could not generate all of the required reports." Several sentences later the report states "Since COINS could not provide actual and complete cost data in the manner needed, we could

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not determine whether the system would provide timely, accurate, and valid information for the two performance measures.”

**Mint Response:** The COINS system produces actual cost data. Actual profit and loss statements are issued monthly. Variances are applied against standard costs to produce the monthly actual results. This actual cost functionality was in place in May 1999, rendering the OIG’s statement above as incorrect. Additionally, the issue of whether COINS produces timely, accurate and valid information was determined conclusively with the sixth consecutive unqualified opinion on our FY 1999 financial statements.

In regard to statements that the COINS system could not provide “actual cost” or did not contain actual costs elements by department, we feel that these are misleading and inaccurate statements. During the review, there were a number of discussions concerning standard vs. actual costs and how the COINS system was configured. The Mint explained that the COINS system is a standard costing system and that differences between standard and actual cost are captured in variance accounts. In addition, we explained that the amounts contained in the variance accounts are allocated to the products sold by the Mint, thereby arriving at actual cost. These practices are the normal convention used in costing products manufactured in a continuous process operation as was explained to the auditor assigned to this review.

**Issue C:** On page 8, the report states, “The Mint was required to submit a mid-year budget execution review to the Department that provided a status of the performance measures. Because of the problems mentioned above, Mint officials could not rely on COINS to provide accurate production information for this performance measure. They told us that the first and second quarter production figure of 3.4 billion clad coins used in the performance measure equation had to be obtained from manual records and reporting. However, Mint staff determined after submitting their report to the Department that this number was incorrect and should have been 3.8 billion clad coins”.

**Mint Response:** As we stated in our response to recommendation #4, we will be taking measures to further enhance the already high level of reliability of our performance measure information. Such measures will include improving the verification of performance measure computations and developing procedures to validate data input into the Mint’s ERP system. The Mint’s FY 1999 mid year budget execution review was an extremely accurate document. Data from the COINS system was the foundation of this document. The mid year budget execution review used coins shipped as the basis to calculate our circulating performance measures. Since we were shipping all that we produced, using coins shipped as the calculation basis provided a very close approximation of the result that could be expected from using coins produced as the basis to calculate these performance measures. Nevertheless, we agree with the auditors that we should be reporting on the basis of coins produced and we will develop a methodology to

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provide this information for GPRA reporting purposes at the earliest practical date.

**Issue D:** On page 9, the report states, "COINS was not able to provide complete, accurate and timely labor cost data at the detailed level needed to support the reporting of performance measure 1-8. We requested that Mint headquarters staff provide specific production payroll data from COINS so that we could then compare it to source data from the two Mints. For a variety of reasons, it required several attempts to obtain usable data."

**Mint Response:** I would like to add for the record additional information to clarify this issue for anyone reading the audit report unfamiliar with the Mint's current payroll system. The payroll data contained in the COINS system is complete and accurate and is easily tied back to the source data received from the National Finance Center (NFC). As in any payroll data collection, it is dependent upon employees filling out their time cards correctly and the timekeepers entering the data correctly into the PC-Tare system. This information is transmitted to NFC, payroll is processed, disbursements made, and the data returned to the Mint on a tape. The Mint receives the payroll data tape from NFC approximately two weeks after the end of each pay period. The Mint has no control over the time period required for NFC to produce this tape and therefore must live within this time constraint. The tape is processed through the Mint's Labor Distribution System (LDS) and a summary data file is created for posting into the COINS system. The data from the LDS system is summarized by account, cost center (department), and project code/product code for posting into the COINS system. From a data perspective, the only detail information not transferred to the COINS system pertains to employees' personnel data (name, social security, etc.) and detailed payroll data (hours worked, per hour rate, GS schedule, etc), thereby making it nearly impossible for the auditors to track an individual's labor to a specific product. It was never intended that the design of the COINS system would include this level of detail. Nevertheless, summary payroll data from the COINS system can be traced back to the LDS system and data from the LDS system can be traced back to the individual employee's timesheet. Data is checked each time payroll data is posted and corrections are made to the original documents and provided for processing by timekeepers and NFC. Corrections are posted in COINS in subsequent pay periods.

**Issue E:** On page 10, the report says "In order to meet a requirement for mid-year performance measure status reporting to the Department, the Mint had to estimate the labor charges for March, because it stated that it would take too long to obtain the information through COINS and perform a manual allocation of charges to circulating coins."

**Mint Response:** We agree that the Mint had to estimate labor charges for March and that the performance measure reporting included this estimate. However, the audit report does not include the explanation that was provided to the auditors,

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making it appear that the Mint's estimates were whimsical and that COINS is flawed. Specifically, the Mint began monthly closing of our ERP system in late February/early March 1999 after the conclusion for the FY 1998 audit. We started by closing October 1998 and rolling forward sequentially. This method of monthly sequential closing was preferred to quarterly closings because it provided a greater degree of data integrity and allowed us to become more familiar with the intricacies of the system. By early May 1999, coinciding with the due date of the mid-year budget execution review, monthly ERP closings were completed through February 1999. Accordingly, labor charges had to be estimated for March 1999. By the summer of 1999, the Mint was able to close the books and produce actual financial information by 10 days after month end. It is unfortunate that this explanation, which was told to the auditors, was not included in the report.

I am requesting that you include our complete response in your final report. If you have any questions, please do not hesitate to call me.

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