February 23, 2010

From: Calvin L. Scovel III
   Chairman, Recovery Funds Working Group Committee

To: Chairman Devaney

I am pleased to provide you the final report, "Recovery Act Data Quality: Errors in Recipient Reports Obscure Transparency," which the Recovery Accountability and Transparency Board reviewed and approved on February 19, 2010.
RECOVERY ACT DATA QUALITY: ERRORS IN RECIPIENTS' REPORTS OBSCURE TRANSPARENCY

Date Issued: February 23, 2010

Prepared by the
Office of Inspector General
U. S. Department of Transportation
February 23, 2010

The Honorable Earl E. Devaney
Chairman
Recovery Accountability and Transparency Board
Washington, D.C.

Dear Chairman Devaney:

The American Recovery and Reinvestment Act of 2009 (Recovery Act) provides $787 billion in Federal funds to jump-start the economy, create or save jobs, and invest in long-term economic growth. To ensure these funds are spent wisely, the Recovery Act calls for unprecedented levels of transparency and accountability, requiring certain fund recipients, including state and local government agencies and contractors, to provide quarterly reports on their use of $275 billion in Recovery Act grants, loans, and contracts. These reports are to include almost 100 data elements, such as the type, date, and amount of award; project description; and the number of jobs created on each project. Federal agencies are to perform data quality reviews of this information and notify recipients of data errors that need to be corrected before reports are made available on www.Recovery.gov—a website specifically designed to provide the public with Recovery Act data that are transparent and easily retrievable.

For the first reporting cycle ending October 29, 2009, 130,362 recipient award reports had been posted on the www.Recovery.gov website. On November 19, 2009, you testified that the data were “riddled with inaccuracies and contradictions.” In one case, a $10 million contract was recorded as a $10 billion contract due to a misplaced decimal. Recipients also reported incorrect or

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nonexistent congressional districts. Additionally, some recipients simply did not comply with the law to submit reports on their use of Recovery Act funds.

To promote accountability and transparency on the use of Recovery Act funds, the Recovery Accountability and Transparency Board (Recovery Board) worked with Federal Inspectors General to establish a multi-phased approach for reviewing agency oversight of Recovery Act recipient data. The first phase, conducted before the start of the first recipient reporting cycle, provided a snapshot of agencies’ data review processes. The second phase, conducted after the first reporting cycle ended, was a review of data oversight at seven agencies—the Departments of Defense (DoD), Education, Health and Human Services (HHS), Justice (DOJ), Interior, and Transportation (DOT) and the General Services Administration (GSA)—by their respective Office of Inspectors General (OIG).

This report summarizes the results of the second phase reviews. Specifically, it describes (1) identified data errors and omissions in recipients’ first cycle reports and factors that may have contributed to them and (2) actions taken by agencies, the Office of Management and Budget (OMB), and the Recovery Board to improve the quality of the data that recipients will submit in future reporting cycles.

The information in this report is based on an analysis of agency responses to a questionnaire DOT OIG developed in conjunction with the other OIGs. Using the standardized questionnaire, OIGs obtained anecdotal information from their respective agencies on the most prevalent data errors, causes of inaccurate or missing data, and efforts to improve the quality of the data recipients submitted. The OIGs reviewed their agencies' responses, conducted follow-up work when necessary, and submitted the final responses to DOT OIG. The agencies' reviews were conducted from December 2009 to January 2010. Exhibit A contains additional details on the objective, scope, and methodology.

2 The Recovery Accountability and Transparency Board was created by the American Recovery and Reinvestment Act of 2009 with two goals: (1) to provide transparency in relation to the use of Recovery-related funds and (2) to prevent and detect fraud, waste, and mismanagement. Twelve Inspectors General from various Federal agencies serve with Chairman Earl E. Devaney. The Recovery Board issues quarterly and annual reports to the President and Congress, and if necessary, “flash reports” on matters that require immediate attention.

Results In Brief

Each of the seven agencies reviewed had identified a number of inaccuracies in the data that Recovery Act fund recipients provided for the first reporting cycle. The most prevalent errors were in key award and job elements. For example, one recipient received an award of $3.5 million but reported only $367,000. The seven agencies also identified more than 3,300 recipients who did not report data for the first cycle.4 Having complete and accurate data are critical for showing the public how, when, and where its tax dollars are being spent and assessing the Recovery Act's impact on the economy. Surveyed agencies found several factors that contributed to errors and recipients' failure to report, including misinterpretation of guidance and technical challenges.

In December 2009, OMB issued updated guidance in an effort to improve the quality of recipient reported data. The guidance now requires Federal agencies to provide recipients with detailed award information for key data elements—most of which were identified as containing the most prevalent errors by the seven agencies surveyed. The Recovery Board and Federal agencies have also taken steps aimed at improving the quality of recipient data. For example, the Recovery Board has enhanced the automated recipient reporting system to alert users of potential data errors. A majority of the seven Federal agencies surveyed also stated that they developed or updated their tools to electronically check for significant errors or anomalies. Finally, all seven agencies stated that they have, at a minimum, updated their guidance on Recovery Act reporting requirements.

Background

The Recovery Act requires certain recipients of Recovery Act funds to provide quarterly reports, beginning in October 2009, with specific details about the funds they received. The reports are to include the total amount of funds received, a list of projects for which the funds are being used, and information about the number of jobs created or saved as a result of the funds received. On June 22, 2009, OMB issued guidance5 to Federal agencies and funding recipients with information to effectively implement reporting requirements on the use of Recovery Act funds. OMB, the Recovery Board, Federal agencies, OIGs, and recipients all share responsibility for data quality. The guidance requires that prime recipients enter their data into www.FederalReporting.gov, the online web portal for collecting all

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4 For the first reporting cycle, of the 134,721 prime recipients required to report in the first reporting cycle, Federal agencies identified 4,359 that failed to report.
Recovery Act recipient award reports. The guidance also requires that within 22 to 29 days after each quarter (October 22, 2009, to October 29, 2009), Federal agencies are to perform a limited data quality review of the information submitted and notify recipients if two key data problems are found—material omissions and significant reporting errors. For example, for the quarter ending September 30, 2009, between October 22 and October 29, 2009, Federal agencies were to perform a limited data quality review and notify fund recipients of any key data problems found.

In September 2009, as part of the multi-phased reviews being conducted by the Recovery Board in conjunction with OIGs responsible for Recovery Act oversight, 21 Offices of Inspector General assessed whether their agencies had processes for conducting limited data quality reviews of recipient award reports. The OIGs found that 17 of the 21 agencies had designed processes to identify significant errors and material omissions. However, the reviews did not test the effectiveness of the agencies' processes nor did they look at the accuracy of any specific data elements. In November, GAO found that while recipients had made good faith efforts to ensure complete and accurate reporting, there was a range of significant reporting and quality issues that needed to be addressed, such as erroneous or questionable data entries and full-time equivalent calculations for jobs.

On December 18, 2009, 2 weeks before the start of the second reporting cycle, OMB updated its guidance to further improve the quality of the data Recovery Act recipients submitted. The guidance incorporates lessons learned from the first reporting cycle outlining steps Federal agencies should take to identify non-reporting recipients and bring them into compliance; and it simplifies how job estimates are calculated and reported.

**Agencies Identified Inaccuracies and Contributing Factors**

For the first reporting cycle, each of the seven agencies identified a number of inaccuracies—most prevalent were errors in key award and job elements—and over 3,300 missing reports. Surveyed agencies found several factors that contributed to these errors and omissions including misinterpretation of guidance and technical challenges.

**Errors in Key Award and Job Elements Were the Most Prevalent**

The most common inaccuracies in recipients’ first quarterly reports were in key award identification and job elements (see Table 1). Accurate data in these

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elements are critical for showing the public how, when, and where its tax dollars are being spent and in assessing the Recovery Act's impact on the economy.

Table 1: Description and Importance of Key Award Identification and Job Elements

<table>
<thead>
<tr>
<th>Description</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data Universal Numbering System (DUNS) number</strong></td>
<td>A unique 9-digit number assigned to businesses and other entities doing business with the government. Currently, there are more than 100 million businesses worldwide with DUNS numbers. Allows agencies and the public to identify and track businesses receiving Recovery Act funds.</td>
</tr>
<tr>
<td><strong>Treasury Account Symbol (TAS) code/ Catalog of Federal Domestic Assistance (CFDA) number</strong></td>
<td>A unique number that identifies both the Federal agency and the funding program source. Allows agencies and the public to identify and track the source of Recovery Act funding at the agency, as well as the program level.</td>
</tr>
<tr>
<td><strong>Awarding Agency code/Funding Agency code</strong></td>
<td>Unique 4-digit codes for the Federal agency that awards/distributes Recovery Act funds to recipients. Allows agencies and the public to identify and track the agencies that awarded and funded Recovery Act grants and loans.</td>
</tr>
<tr>
<td><strong>Award number/date/amount</strong></td>
<td>A unique identifier assigned by the agency to individual grants or loans, date awarded, and total amount of Recovery Act funds received. Provides agencies and the public with specific information on each Recovery Act grant or loan awarded.</td>
</tr>
<tr>
<td><strong>Jobs number</strong></td>
<td>An estimate of the number of jobs created or retained. Provides Federal agencies and the public with the impact of the Recovery Act.</td>
</tr>
</tbody>
</table>

Source: OIG Analysis of Recovery Act Reporting Guidance

The seven agencies identified numerous instances of incorrect award identification and job data. While many descriptions of these errors were general, such as the recipient entered the wrong DUNS number—one DOJ office found that 31 percent of the data inaccuracies it identified resulted from incorrect DUNS numbers—more specific descriptions of errors were also provided. For example:

- DOT officials identified 1,200 jobs that were erroneously listed under the Veterans Administration because the Iowa Department of Transportation entered the wrong funding agency code.

- Education officials found that one state incorrectly used the Treasury Account Symbol (TAS) code for the Department of Homeland Security instead of the code for Education for 3 of its 11 awards.
• Interior officials found that one recipient reported 10,000 jobs created for a $5.25 million award. Based on the data, the 10,000 people earned, on average, an annual salary of $525, well below the minimum wage required under the Recovery Act provisions.

• GSA officials found one recipient who incorrectly reported an award amount of $367,000 when the actual award amount was $3.5 million.

At OMB's request, all Federal agencies identified about 4,400 Recovery Act recipients who failed to submit a report during the first reporting cycle. Six of the seven OIGs participating in this second phase review validated their agency's list of non-reporters—a total of 1,499 non-reporters or 34 percent of the total agencies reported.7 OIGs identified an additional 38 recipients that the agencies should have identified as non-reporters. OIGs also identified 39 recipients that should not have been listed as non-reporters—27 were duplicates and 12 had reported.8 Generally, agencies identified recipients who failed to report by comparing their universe of award recipients (using various internal and external databases) to reports extracted from www.FederalReporting.gov.

Federal Agencies Identified Several Factors that Contributed to Report Errors

The seven agencies identified several factors that contributed to errors discovered in recipient award reports. The most common factors were (1) recipients misinterpreting OMB and agency guidance, (2) technical challenges, (3) recipients not knowing or having incorrect codes or numbers, and (4) human error.

For example, HHS officials told us that many of their recipients had difficulty understanding OMB's guidance on estimating jobs because it required many complicated calculations, particularly for cost-of-living adjustments. In some cases where recipients realized that mistakes had been made, they were unable to change agency identified errors because of limitations within the recipient reporting system. In another instance, one agency's review of 22 recipient award reports found multiple errors in the award, order, and DUNS number data elements. However, the recipients were not able to correct the errors because the recipient reporting system did not allow these elements to be changed once a report was submitted.

Regarding recipients who failed to submit reports, OMB required all Federal agencies to contact non-reporters to determine the specific reasons they had not

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7 The list of non-reporters for DoD was not validated.
8 One agency accounted for 30 of the 39 recipients that should not have been listed as non-reporters.
submitted reports. In response to their inquiries, agencies learned that generally, technical challenges and misinterpreting OMB and agency guidance were the reasons for recipients' failure to report. For example, some recipients reported that they were unable to submit a report to www.FederalReporting.gov because they did not have a valid Federal reporting personal identification number. Other recipients reported that they were not aware they were required to report. For example, some DOJ recipients who received a Recovery Act grant in September 2009, failed to report because they had not accepted the award by September 30, 2009.

**OMB, Recovery Board, and Agencies Have Taken Actions Intended to Improve the Quality of Recipient Award Reports**

Before the first reporting cycle, most Federal agencies had established data quality review processes and contacted recipients to clarify reporting requirements. For example, GSA established an outreach call center to provide recipients with registration, reporting, and data quality review information. Agencies, when conducting data quality reviews, also used a variety of automated and manual quality checks to assess recipient providedreported data. According to agency officials, when significant errors were identified they contacted recipients or flagged the data and provided comments in www.FederalReporting.gov. Despite these efforts, a substantial number of data inaccuracies were still identified. In an effort to further improve the quality of reported data, OMB issued updated guidance in December 2009, and the Recovery Board and Federal agencies have also taken steps aimed at improving the quality of recipient data.

OMB’s updated guidance outlines steps Federal agencies must take to improve the quality of Recovery Act data, report job estimates, and have recipients comply with reporting requirements. To better ensure that recipients have the correct award data readily available to enter into the recipient reporting system, Federal agencies are now required to provide each recipient with detailed award information for eleven key data elements. These elements closely align with those identified by the seven agencies as containing the most prevalent errors (see Table 2).
Table 2: Comparison of OMB’s List of Data Elements Federal Agencies Are Now Required To Provide to Recipients with Surveyed Agencies Prior Reporting Errors

<table>
<thead>
<tr>
<th>Data Elements</th>
<th>Agencies Must Provide to Recipients for Second Reporting Cycle</th>
<th>Had Significant Errors During First Reporting Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Code</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Award Amount</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Award Date</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Award Number</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Award Type</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Awarding Agency Code</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CFDA Number</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>DUNS Number*</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Funding Agency Code</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Government Contracting Office Code</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Jobs Number*</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Order Number</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>TAS Code</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Source: OMB and Federal agencies

* Agencies cannot provide, and are not required to provide recipients with the DUNS or job numbers because this information is determined by the recipients.

OMB’s updated guidance also reemphasized that Federal agencies should focus their data quality review efforts, at a minimum, on significant errors and material omissions. However, OMB guidance now defines significant errors as inaccurate information within four data elements: (1) award amount, (2) jobs retained or created, (3) award number, and (4) recipient name. It also defines material omissions as a failure of a Recovery Act recipient to report on an award as required by the terms of that award. Further, agencies must provide OMB a summary of their significant errors and a list of recipients who failed to report.

Further, OMB simplified how job estimates are calculated and reported. During the first reporting cycle, a significant number of recipients and the Government Accountability Office (GAO)9 expressed concern with the complex process for reporting job estimates. In response, OMB modified its guidance to require recipients to report job estimates on a quarterly, rather than cumulative basis. Additionally, it no longer requires recipients to determine if a job was created or retained but to report only whether jobs are funded by Recovery Act dollars.

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OMB’s new guidance also encourages Federal agencies to focus their data quality efforts on possible data inconsistencies across elements that are logically related. For example, if an agency code indicates that the agency issues grants only, then contracts should not appear under that code. During the second reporting cycle, the Recovery Board began analyzing recipient award reports for such data inconsistencies and providing the results to agencies for further review.

The Recovery Board has also taken action to improve the quality of data submitted by recipients. Specifically, it has enhanced the Recovery Act recipient reporting system (www.FederalReporting.gov) by adding both hard and soft edit checks. Hard edit checks generate an error message and will not accept the report when a recipient enters inconsistent information in certain elements, such as a congressional district that does not match the zip code or an amount received that is greater than the amount awarded. As a result, during the second reporting cycle the Recovery Board did not find any reports with incorrect or nonexistent congressional districts. Soft edit checks generate an alert message for certain elements but will still accept the report if the recipient enters information that is questionable, such as entering a large dollar value (e.g., $500,000) into the field for amount received and reporting the number of jobs created as less than one. Also, the Recovery Board doubled the number of its help desk staff to answer registration and reporting questions from recipients and provided training to over 4,000 individuals on Recovery Act reporting requirements.

Finally, the seven agencies noted that they have taken steps to improve the quality of recipient reported data for the second reporting cycle. For example, all seven agencies surveyed stated that they had modified their data quality review processes to better align with OMB’s updated guidance or have updated their frequently asked questions and answers, tip sheets, or guidance regarding Recovery Act reporting requirements or both. Further, a majority of the seven Federal agencies surveyed stated that they developed or updated their tools to electronically check for significant errors or anomalies.

**Observations**

Complying with Recovery Act requirements to provide unprecedented levels of transparency has been a daunting task for Federal agencies and recipients. While a large number of fund recipients met the first quarterly reporting requirement, the reliability and accuracy of these reports remain in question—despite Federal agencies’ good faith efforts to ensure recipients submitted accurate, complete, and timely data on the use of funds. The actions taken by OMB, the Recovery Board, and Federal agencies to date and the high level of cooperation among stakeholders should go a long way in improving the quality of these data. In moving forward, however, further action will be needed by these entities to meet the level of
accountability called for in the Recovery Act. Of particular concern is the need for timely and executable reporting guidance from OMB, continued enhancements to the recipient reporting system by the Recovery Board, and continued outreach and improved data quality review processes from Federal agencies. Coordination and heightened vigilance will be critical to addressing these concerns.

DOT OIG appreciates the courtesies and cooperation of the Offices of Inspector General, Recovery Board staff, and Federal agency officials during this review. We provided a draft of the report to OIGs and agencies that participated in the review and incorporated their comments, as appropriate. If you have any questions concerning this report, please call me at (202) 366-1959, or Madeline Chulumovich, Special Assistant for Economic Recovery, at (202) 366-6512.

Sincerely,

Calvin L. Scovel III
Chairman
Recovery Funds Working Group Committee
Recovery Accountability and Transparency Board
Exhibit A. Objectives, Scope, and Methodology

In December 2009, seven Office of Inspectors General (OIG)—Department of Defense (DoD), Education, Health and Human Services (HHS), Justice, Interior, and Transportation (DOT); and the General Services Administration (GSA)—initiated a review of their agencies' oversight of Recovery Act recipient reporting during the first reporting period ending on October 29, 2009. The objectives of this review were to determine whether each participating OIG's agency: (1) identified inaccurate data or missing recipient award reports, (2) identified the cause(s) of the inaccurate data or missing recipient award reports, and (3) mitigated the causes and errors. To address these objectives, the participating OIGs conducted expeditious reviews of their respective agencies to identify actions taken to ensure the data submitted by Recovery Act recipients was accurate, complete, and timely.

DOT OIG, serving as the lead OIG, developed a data collection instrument or questionnaire that laid out standard questions that each of the seven OIGs were to ask their respective agency. Using the questionnaire, OIGs obtained anecdotal information from their agency on the most prevalent errors, causes of the inaccurate or missing data, and efforts to improve the quality of the data submitted by recipients during the first recipient reporting cycle. The OIGs reviewed their agencies' responses and conducted follow-up work, when necessary. The OIGs also provided the agencies with data anomalies identified by the Recovery Board. Agencies were asked to review these reports and determine whether these anomalies were identified during their data quality reviews.

Six of the OIGs validated their agencies' lists of Recovery Act fund recipients who failed to submit reports to www.FederalReporting.gov in October 2009, as required. The OIGs developed their own methodologies to validate the lists, which included conducting electronic and manual comparisons of recipient lists with downloaded data from www.Recovery.gov and checking the results of those comparisons with their agencies' lists of recipients who failed to report. The lists of recipients were generated using internal agency databases, such as Education's Grants Administration and Payment System, and downloading lists of awards published on websites such as, www.USAspending.gov, www.fpds.gov, and www.FedBizOpps.gov, which contain information on Federal contracts, grants, and loans.

The seven OIGs submitted the results of their reviews to DOT OIG, which analyzed the data for common themes and consolidated the results into one report. These reviews were not conducted in accordance with Generally Accepted Government Auditing Standards, but were planned and performed to obtain sufficient, appropriate evidence to provide a reasonable basis for the information and conclusions contained in this report. The reviews were conducted from December 2009 through January 2010.