

U.S. Department of Labor

Office of Inspector General—Office of Audit

**REPORT TO OFFICE OF PUBLIC
AFFAIRS**



**THE DEPARTMENT REMAINS VULNERABLE TO
PREMATURE RELEASE OF EMBARGOED
ECONOMIC DATA**

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BRIEFLY...

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THE DEPARTMENT REMAINS VULNERABLE TO PREMATURE RELEASE OF EMBARGOED ECONOMIC DATA

WHY OIG CONDUCTED THE REVIEW

On September 16, 2014, embargoed economic data from the Producer Price Index (PPI) report was prematurely released by a news organization during the Department of Labor's press lock-up. Lock-ups are used to allow early access to embargoed economic data for select news organizations to prepare summaries and analysis of the data, thereby improving the public's understanding of the data when it is released. Because embargoed data can impact financial markets, controls over the lock-up are critical in protecting the data from unauthorized use and disclosure. In our January 2014 report, we found news organizations could profit from their presence in the lock-up as they gained an unfair competitive advantage as a result of being granted early access to the data.

WHAT OIG DID

We conducted a review to determine the following:

Did the Department identify the issue(s) that caused the premature release of embargoed PPI data and implement corrective actions to prevent a reoccurrence?

READ THE FULL REPORT

To view the report, including the scope, methodology, and full agency response, go to: <http://www.oig.dol.gov/public/reports/oa/2016/17-16-001-01-001>.

WHAT OIG FOUND

The Department identified one of two issues that caused the premature release of embargoed data, but did not implement adequate corrective actions to prevent a reoccurrence. First, staff made changes to network equipment, which bypassed controls and provided an active internet connection to a news organization during a live lock-up. The Department identified this and took immediate action to prevent changes to network equipment during a lock-up; however, it continued to lack adequate policies and procedures to ensure network equipment was configured and operating properly when changes were made and did not ensure staff attending lock-ups were appropriately trained. Second, a news organization used data-queuing software that exploited the active internet connection and automatically transmitted data — without any human interaction — before the embargo ended. The Department did not identify this as an issue. News organizations use this software for faster data transmission when an embargo ends, but it provides no benefit to the general public or the Department and increases the likelihood of a premature data release.

We also found the Department did not have procedures to identify and respond to a premature release and did not have a designated authorizing official to ensure appropriate controls were in place over the lock-up system.

WHAT OIG RECOMMENDED

We previously recommended the Department either eliminate the competitive advantage for news organizations or discontinue use of the lock-up. In this report, we made five recommendations to strengthen the Department's controls over the lock-up.

Agency officials generally agreed with our recommendations.

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U.S. Department of Labor

Office of Inspector General
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March 25, 2016

INSPECTOR GENERAL'S REPORT

Stephen Barr
Senior Managing Director
Office of Public Affairs
200 Constitution Avenue, NW
Washington, DC 20210

The Department of Labor prepares and disseminates reports for seven Principal Federal Economic Indicators, as well as the Unemployment Insurance weekly claims. Because the data in these reports has the potential to move financial markets, the Department protects this data via an embargo, meaning the data cannot be disseminated or used in any unauthorized manner before its release to the public. The Department provides select news organizations early (pre-release) access to this data under lock-up conditions 30 minutes prior to its official release. Given the impact the data can have on markets, news organizations participating in lock-ups are in competition amongst themselves to provide the data to paying clients as fast as possible.

On September 16, 2014, during the embargo for the August 2014 Producer Price Index (PPI) report, a news organization in the Department's press lock-up room inadvertently broke the embargo by transmitting data from the PPI report to outside parties two minutes prior to the official release time. This premature release of data was immediately discovered and disclosed by the news organization reporters to Department staff in the lock-up room. As part of its response to the incident, the Department's Office of Public Affairs (OPA) — the agency responsible for administering the lock-up — prepared a report to identify the cause of the premature release and propose corrective actions for the Department to take.

Given the PPI data's premature release, we conducted a review to answer the following question:

Did the Department identify the issue(s) that caused the premature release of embargoed PPI data and implement corrective actions to prevent a reoccurrence?

RESULTS IN BRIEF

The Department identified one of two issues that caused the premature release of embargoed data, but did not implement adequate corrective actions to prevent a reoccurrence. First, staff made changes to network equipment, which bypassed controls and provided an active internet connection to a news organization during a live lock-up. The Department identified this and took immediate action to prevent changes to network equipment during a lock-up; however, it continued to lack adequate policies and procedures to ensure network equipment was configured and operating properly when changes were made and did not ensure staff attending lock-ups were appropriately trained. Second, a news organization used data-queuing software that exploited the active internet connection and automatically transmitted data — without any human interaction — before the embargo ended. The Department did not identify this as an issue. News organizations use this software for faster data transmission when an embargo ends, but it provides no benefit to the general public or the Department and increases the likelihood of a premature data release.

We also found the Department did not have procedures to identify and respond to a premature release and did not have a designated authorizing official to ensure appropriate controls were in place over the lock-up system.

BACKGROUND

The Office of Management and Budget (OMB) has issued guidance related to the dissemination of statistical products released by federal statistical agencies. This guidance allows, but does not require, agencies to provide news organizations early access to these products to foster improved public understanding of the data when first released. The Department has chosen to provide early access to select news organizations to maximize the public's access to informed discussions about the data when released.

The Department's lock-up is administered by OPA, which provides staff to monitor each lock-up and maintains and updates policy for the lock-up as needed. The Office of the Assistant Secretary for Administration and Management (OASAM) provides support for information technology (IT) infrastructure in the lock-up. The Bureau of Labor Statistics (BLS) is responsible for preparing — and maintaining the confidentiality of — embargoed data reports being released in the lock-up (including the PPI report) and answering questions from reporters during lock-ups. The Employment and Training Administration (ETA) also uses the lock-up to release the Unemployment Insurance Weekly Claims Report. The Department has issued guidance to aid agencies in the administration of their duties related to the lock-up.

In January 2014, we reported on competitive advantages news organizations participating in lock-ups, and the clients to whom they provide data, may have.¹ These organizations can profit from their early access by charging clients for providing economic data feeds formatted for computerized algorithmic trading that can be executed as soon as the embargo is lifted. In contrast, individuals and companies without early access have to wait for the Department to post the information to its websites. According to OPA's former Senior Advisor of Communications and Public Affairs' Congressional testimony:²

Algorithmic trading introduces new security variables into a lock-up system not originally designed to guard against market-moving disruptions that could be caused by the release of government data to certain traders just seconds before the rest of the general public. A few years ago, a few seconds here or there would not have had much of an impact. Today, fractions of a second can equate to millions or even billions of dollars in market movements.

RESULTS

While the Department identified one of the two issues that caused the premature release of embargoed data, it has not implemented adequate corrective actions to prevent a reoccurrence.

There were two conditions that caused the premature release of embargoed PPI data in September 2014. First, OASAM IT staff made changes to network equipment during a live lock-up, which bypassed the Department's controls and provided an active internet connection before the embargo ended for one of the news organizations in the lock-up. Second, this news organization used data-queuing software that automatically transmitted the embargoed information out of the lock-up as soon as it found the active connection, even though the Department had not yet ended the embargo. Had either condition been an isolated occurrence, the data would not have been released prematurely. However, each condition creates unnecessary risk to embargoed data and needs to be addressed in order to protect the data against another premature release.

The Department identified the changes to network equipment during a live lock-up as a condition that contributed to the premature release of embargoed data, and took immediate action following the incident to prohibit IT staff from making changes during a live lock-up. However, it continued to lack adequate policies and procedures to ensure

¹ Report Number 17-14-001-03-315, Controls Over the Release of the UI Weekly Claims Report Need Improvement, issued January 2, 2014

² Congressional testimony was provided before the House Committee on Oversight and Government Reform on June 6, 2012, regarding the integrity of the Department's release of important national economic data to the American people.

network equipment would be configured correctly whenever any changes were made to it, and did not ensure staff attending lock-ups were adequately trained to protect embargoed data.

The Department did not identify the use of data-queuing software as a condition that contributed to the premature release. Embargoed data continues to be at risk of premature release because the Department continues to allow news organizations to use data-queuing software in the lock-up. The use of this software provides no benefit to the general public or the Department and increases the likelihood of a premature release.

We also found the Department did not have procedures for identifying and responding to a premature release, and did not have a designated system owner or authorizing official to ensure appropriate information security controls were in place over the lock-up system.

**THE DEPARTMENT DID NOT FULLY IMPLEMENT
CORRECTIVE ACTIONS TO ADDRESS IDENTIFIED
RISKS THAT CONTRIBUTED TO THE PREMATURE
RELEASE**

The Department took steps to improve weaknesses it identified as contributing to the premature release of PPI data, but did not fully implement corrective actions to ensure changes to network equipment were adequately controlled and staff attending lock-ups were properly trained to protect embargoed data.

**POLICIES FOR TROUBLESHOOTING AND CONTROLLING
CHANGES TO NETWORK EQUIPMENT WERE NOT
ADEQUATE**

In its report on the PPI data's premature release, OPA identified human error by Department staff as contributing to the PPI data's premature release. Prior to the start of the lock-up, several news organizations complained about a lack of internet connectivity and were concerned they would not be able to transmit information when the embargo ended. In an attempt to fix the problem, OASAM IT staff resorted to plugging and unplugging various network equipment and cables during the lock-up so news organizations would have internet connectivity when the embargo ended. Although Department staff and management were unable to identify the specific actions OASAM IT staff took that led to the PPI data's premature release, it was during these troubleshooting efforts that OASAM IT staff inadvertently bypassed security controls in place to protect embargoed data, thereby providing one news organization an active internet connection out of the lock-up.

In response to the incident, OPA took immediate action to prohibit troubleshooting during a lock-up. While this new policy reduces the risk of a similar incident occurring during a live lock-up, it does not address how the Department will handle

troubleshooting or control changes to network equipment at other times. Absent such procedures, the risk remains that staff who make changes will inadvertently bypass security controls intended to keep embargoed data secure during a lock-up.

The human error during troubleshooting occurred because Departmental guidance governing the lock-up system only required a review and response to change requests from news organizations. It did not include change control procedures covering *all* changes to the lock-up system as required by the Department's Computer Security Handbook.³

The Computer Security Handbook lists the required minimum standards for documenting, authorizing, and controlling configuration changes, including the following:

- Information system personnel must employ a documented configuration change control process to ensure all proposed changes to the information system are authorized, documented, controlled, retained and audited.
- The configuration change control process must involve the systematic proposal, justification, implementation, testing, review and disposition of changes to the system, including system upgrades and modifications.

The Department has taken action to prevent any changes from occurring during a lock-up. However, when changes are made, the Department still needs to establish detailed policies and procedures for authorizing, documenting, and controlling changes. The trial and error method of troubleshooting the Department performed during the September 2014 incident did not meet departmental standards for authorizing, documenting, and controlling changes. In addition, during our review we traced four Ethernet cables from news organization workstations to their assigned ports on the Department's network switches and found one of the cables was plugged into the wrong switch. Without adequate change control procedures, the Department has no way to ensure the lock-up system is configured and operating as intended. To adequately protect embargoed data, troubleshooting should not be performed in the 30 minute timeframe of the lock-up, and when it is performed, detailed policies and procedures must be in place and followed.

STAFF INVOLVED IN LOCK-UPS WERE NOT PROPERLY TRAINED TO PROTECT EMBARGOED DATA

In addition to errors caused by the lack of change control procedures, a lack of training and understanding of security protocols in the lock-up contributed to the premature release of PPI data.

In its report on the incident, OPA identified a need for better training and included the following corrective action related to training:

³ Department of Labor Computer Security Handbook Edition 5, Volume 0, Section 3.1.2

Additional training will be scheduled for OPA and [OASAM] staff. Lock-ups are a mission critical activity. Press officers should be provided refresher training on lock-up procedures and what to do in an emergency. The general [OASAM] support staff has training and familiarization to support workstations, virtual environments and basic connectivity issues.

BLS, in its own internal incident report, highlighted the importance of training, stating:

The action taken by the [OASAM] technician during the lockup period, which was intended to be corrective, reflects a fundamental misunderstanding of the purpose of the lockup facility. The technician placed higher value on restoring connectivity than on keeping embargoed data secure. As IT staff change over time, BLS and [the Department] must ensure that any technicians servicing the lockup facility understand the primary importance of protecting pre-release data.

The Department's lock-up guidance states staff assigned to a lock-up must receive training covering general procedures and training from BLS on the confidentiality of data. In addition, the Department's Computer Security Handbook requires IT personnel responsible for incident response — such as the OASAM IT staff that conducted troubleshooting on the lock-up system — be provided training for their roles and annual refresher training.

However, OPA, OASAM, and BLS did not work together to provide training for staff involved in lock-ups. Specifically, OASAM IT staff responsible for troubleshooting issues in the lock-up did not receive training from either OPA, which is responsible for administering the lock-up, or BLS, which is responsible for the confidentiality of data. Instead, OASAM IT staff received IT-related training from OASAM management on the configuration of the lock-up system and general lock-up procedures. In addition, BLS was not involved in training OPA staff responsible for administering the lock-up. The lack of coordination in training contributed to the premature release because none of the staff in the lock-up knew who was responsible for deciding which actions to take when news organizations first reported connectivity problems (i.e., proceed with the lock-up while troubleshooting the connectivity issues, or cancel the lock-up). Furthermore, OASAM IT staff did not understand that protecting the confidentiality of embargoed data was more important than repairing the connectivity issues.

While both OPA and BLS identified the need to provide additional staff training following the September 2014 incident, the Department has not yet implemented a collaborative, structured training program to ensure all staff involved in lock-ups receive training to protect embargoed data. Until the Department can ensure all staff with lock-up responsibilities are properly trained to protect embargoed data, there is an increased likelihood of another premature release.

THE DEPARTMENT DID NOT ADEQUATELY ADDRESS RISKS ASSOCIATED WITH DATA-QUEUING SOFTWARE BEING USED BY NEWS ORGANIZATIONS

Although not identified by the Department as an issue, the news organizations' use of data-queuing software during lock-ups directly contributed to the incident. While the Department was aware news organizations used this software, OPA and BLS management did not express concern over, and had no plans to regulate, its use despite the risks it posed to the security of embargoed data. While the use of data-queuing software may support the business needs of news organizations (which includes preparing and transmitting raw data and headlines for paying clients), it provides no benefit to the general public or the Department.

Many news organizations participating in lock-ups utilize software that pre-loads (queues) embargoed data for faster transmission as soon as an embargo ends. Once activated, this software continually searches for an active internet connection, and without any human interaction, transmits data the moment a connection is found, even if that occurs prior to the end of the embargo period.

In its report, OPA concluded that embargoed PPI data was prematurely released by a news organization because of equipment failure and human error and noted the Department did not believe there was any intent by the news organization to circumvent procedures or break the embargo. However, while equipment failure and subsequent human error during troubleshooting resulted in information security controls being bypassed, these actions simply provided an active internet connection for at least one news organization. The premature release occurred because the news organization was using software with embargoed data queued for transmission, and this software automatically released the data when it detected the connection that resulted from the Department's troubleshooting during the lock-up. The embargoed data would not have been released prematurely if the news organization had not been using data-queuing software and instead the data required manual intervention to be released.

We identified two previous instances in December 2008 where a news organization prematurely released embargoed data. In one instance, data was released 3.5 minutes early, and in the other case, data was released approximately 25 seconds early. As with the incident in September 2014, the Department did not identify data-queuing as an issue. According to BLS management, both premature releases were caused by a customized Ethernet cable that was able to bypass the network cut-off devices the Department had installed to prohibit data transmissions prior to the end of the embargo period.⁴ An official statement released by BLS and OPA regarding the incidents concluded that both were accidental and caused by recent technical changes in

⁴ Following the second incident, the Department identified the issue with the network cut-off devices and took action to prohibit use of the equipment in the lock-up.

hardware configuration.⁵ However, embargoed information does not get automatically released because a network cut-off device is bypassed and provides an active connection. The news organization would have to initiate the transmission by taking an action, such as intentionally pressing a button to transmit before the end of the embargo period. Based on the limited information available regarding these two incidents, a major contributing factor to the early releases was the use of data-queuing software by a news organization.

Despite the clear risk that data-queuing software presents to the security of embargoed data, OPA and BLS management did not express concern over its use in the lock-up and said they had no plans to regulate it. OPA management stated that news organizations' software is not subject to Department review and approval. Department officials stated the risk posed by the use of this software is mitigated by the controls it has instituted over the lock-up.

However, prior to granting early access to embargoed data, OMB requires agencies to "...establish whatever security arrangements are necessary and impose whatever conditions on the granting of access are necessary to ensure that there is no unauthorized dissemination or use" of that data.⁶ The Department can establish additional controls to ensure there is no unauthorized use or dissemination of embargoed data, such as prohibiting the use of data-queuing software, which has contributed to premature releases of embargoed data.

Each news organization reporter must sign an *Agreement for Participation in U.S. Department of Labor Lock-Ups* stating they will not transmit information outside the lock-up before the official release time. It is the news organizations' responsibility to ensure they comply with this agreement, not the Department's. Therefore, any news organization that releases embargoed data prematurely has violated its signed agreement, whether intentional or not.

This agreement also contains an acknowledgment that the Department may impose a sanction⁷ if the terms of the agreement are violated. However, the Department has chosen not to sanction news organizations that violate the agreement unintentionally. Without the threat of being sanctioned, news organizations can simply rely on the Department's controls to prevent them from breaking the embargo, accepting the risk of using data-queuing software because it allows them to transmit information to their paying subscribers as fast as possible.

The *U.S. Department of Labor Press Lock-ups Policy Statement and News Organization Agreement*, which every news organization also signs, states the Department reserves the right to sanction actions that lead or might contribute to a premature release. When a news organization uses data-queuing software that could

⁵ <http://www.bls.gov/bls/statement122008.htm>

⁶ OMB Statistical Policy Directive No. 3, Section 5.(a).

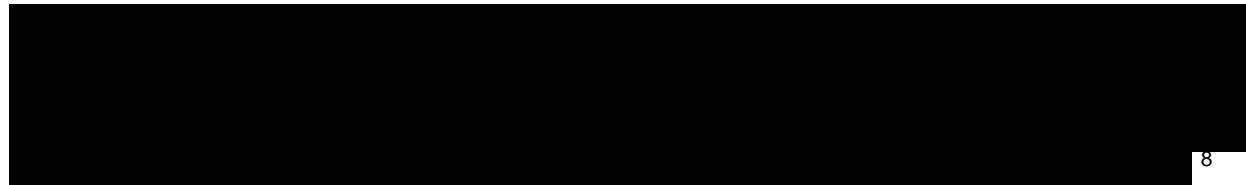
⁷ Sanctions can include suspension or even a permanent ban from the lock-up.

transmit embargoed data before the official release time and relies on the Department's controls to prevent it from breaking the embargo, these are actions that have led, or might contribute to, premature releases, and are therefore within the rights of the Department to sanction.

While the use of data-queuing software may support the business needs of news organizations, it does not support the Department's intended purpose of providing lock-ups. The Department provides news organizations early access to embargoed data to foster improved public understanding of the data when it is first released. Lock-ups serve this purpose by providing reporters the opportunity to read, review, ask questions about, and compose coverage of the data. Although news organizations do use lock-ups to ask questions and prepare stories for the general public, their use of this early access to queue up information for faster transmission to paying clients facilitates a competitive advantage and does not benefit the public or the Department. As such, the use of data-queuing software that can transmit data before the official release time puts embargoed data at unnecessary risk.

THE DEPARTMENT DID NOT HAVE PROCEDURES FOR IDENTIFYING OR RESPONDING TO A PREMATURE RELEASE

The Department did not have policies or procedures to ensure it would be able to identify a premature release of embargoed data and respond appropriately.



⁸, the Department did not have policies or procedures to ensure staff responded appropriately to a premature release. At a minimum, such a process should include: (a) steps for verifying a premature release occurred; and (b) subsequent actions for staff to take, which could involve coordination between staff inside the lock-up and staff located outside. Such a process should also require all staff participating in the lock-up to have defined roles and responsibilities. However, OPA, OASAM, and BLS staff present during the September 2014 incident provided conflicting information as to who was responsible for making critical decisions about the lock-up. For example, no one could recall who made the decision to proceed with the lock-up after the connectivity issues were identified, and there was no consensus on who had the authority to make that decision.

⁸ Due to the sensitive nature of this information, it was redacted from the report.

OMB Statistical Policy Directive No. 4 requires the equitable and timely release of statistical data to the general public and states that if an embargo is broken an agency must release the data to the public immediately. However, BLS officials noted this directive does not apply to the PPI data because it is a Principal Federal Economic Indicator and is covered under OMB Statistical Policy Directive No. 3, which does not address what agencies should do when an embargo is broken and was last revised in 1985, prior to the introduction of computer equipment in the lock-up. Given the lack of direction in the OMB guidance on responding to premature releases of Principal Federal Economic Indicators, we believe the Department should follow the guidance established in OMB Statistical Policy Directive No. 4 for all its lock-ups because the goal of an equitable and timely release of embargoed statistical data will benefit the general public far more than taking no action at all.

It is imperative that the Department establish policies and procedures to enable it to respond quickly and appropriately when an embargo is broken to minimize the inequities that occur when one group of people, such as the paying clients of a news organization, have access to embargoed data before it is released to the general public.

**THE DEPARTMENT DID NOT DESIGNATE AN
AUTHORIZING OFFICIAL TO ENSURE APPROPRIATE
CONTROLS WERE IN PLACE OVER THE LOCK-UP
SYSTEM**

The Department operated the lock-up system without obtaining an authority to operate, contributing to the lack of change control procedures and resulting in a lack of accountability over the system. Although four agencies — OASAM, OPA, BLS and ETA — were tasked with varying responsibilities related to the lock-up, there was no designated system owner or authorizing official with overall responsibility for ensuring appropriate controls were in place to protect embargoed data.

The Computer Security Handbook defines an information system as “...a discrete set of information resources organized for the collection, processing, maintenance, transmission and dissemination of information” and requires that all Department of Labor information systems obtain authority to operate from an authorizing official prior to being placed in operation. The authorizing official accepts full responsibility for security of the system and is fully accountable for any adverse impacts to the agency if a security breach occurs. This provides accountability and ensures each information system is operated with appropriate management review and that there is ongoing monitoring of security controls.

According to Department officials, they did not obtain an authority to operate the lock-up system because they reasoned the system was not connected to any other networks in the Department and it had previously been assessed for security vulnerabilities.⁹

⁹ At the Department’s request, Sandia National Laboratories conducted a security review of the lock-up facility, including the lock-up system, in 2011-2012.

However, because the lock-up system met the definition of an information system — a discrete set of information resources used to disseminate information (i.e., embargoed data) — the Department was required to obtain an authority to operate before placing the system into operation. In addition, the security review the Department relied on was “limited to observation and assessment.” The review team did not assess the effectiveness of implemented processes under “live” conditions and was unable to conduct penetration testing on the lock-up system. The review team was also unable to confirm if the Department had implemented corrective actions for three weaknesses identified during the review. Because the Department did not obtain an authority to operate the lock-up system, it lacked the accountability necessary to ensure it implemented the appropriate information security controls to protect embargoed data during the lock-up. Although we identified several control weaknesses during our review, the scope of our work was limited and other weaknesses may exist that we did not discover.

**ACTION STILL NEEDED ON PRIOR AUDIT REPORT
RECOMMENDATION**

In January 2014, we reported that some news organizations are able to profit from their presence in the lock-up by selling to traders high-speed data feeds of economic data formatted for computerized algorithmic trading. Because these news organizations have early access to embargoed data, they are able to queue it for their data feeds/applications, allowing their clients to get this information faster than the general public, which has to wait to download the data after it gets posted to the Department’s websites. We recommended the Department develop and implement a strategy to achieve an equitable release of embargoed economic data and eliminate any competitive advantage that news organizations inside the lock-up and their clients may have; or, absent a viable solution, consider discontinuing the use of the press lock-up to provide news organizations early access to embargoed data. This recommendation remains unresolved.

The use of data-queuing software by news organizations facilitates this competitive advantage by allowing news organizations to get information to their clients even faster than a transmission requiring human interaction. As long as the Department allows this practice to continue, it further enables news organizations to financially benefit from their early access and increases the risk that embargoed data will be prematurely released. To ensure an equitable release of embargoed data, the Department must eliminate any competitive advantage provided to news organizations in the lock-up and/or their clients.

OIG RECOMMENDATIONS

We recommend the Senior Managing Director for Communications and Public Affairs work together with the Assistant Secretary for Administration and Management and the Commissioner for Labor Statistics to:

1. Prohibit the use of software that queues data for transmission without human interaction and develop sanctions for non-compliance.
2. Develop and implement policies and procedures for troubleshooting and controlling changes to network equipment supporting the lock-up to ensure all changes are documented, authorized, and tested prior to a lock-up.
3. Develop and implement policies and procedures for a collaborative and structured training program to ensure all staff with lock-up responsibilities receive annual training covering the fundamental purpose of the lock-up and the importance of protecting embargoed data.
4. Develop and implement policies and procedures to ensure it can identify and respond appropriately if an embargo is broken, including the establishment of clearly defined roles and responsibilities for staff responding to a premature release.
5. Obtain an authority to operate the lock-up system to ensure appropriate information security controls are in place to protect embargoed data from premature release.

MANAGEMENT RESPONSE

The Senior Managing Director of OPA concurred with four of the five recommendations to strengthen the Department's controls over the lock-up. Although OPA neither concurred nor disagreed with the recommendation to prohibit the use of data-queuing software, it stated it will hold discussions with news organizations on the use of this software and whether to apply sanctions in instances where news organizations feel they are not completely at fault for a premature release.

OPA believes the risk presented by the use of data-queuing software is overstated in our report. However, before allowing early access to embargoed economic data, OMB requires agencies to "...establish whatever security arrangements are necessary and impose whatever conditions on the granting of access are necessary to ensure that there is no unauthorized dissemination or use" of that data.¹⁰ The continued use of data-queuing software presents an unnecessary risk to embargoed data. Additionally, every

¹⁰ OMB Statistical Policy Directive No. 3, Section 5.(a).

news organization in the lock-up signs multiple agreements stating they will not release embargoed data before the official release time. When a news organization prematurely releases data because they relied solely on controls set up by the Department instead of relying on their own controls, the news organization violated the agreement.

OPA also expressed concern about our assertion that data-queuing software was a contributing factor to the previous premature releases that occurred in 2008 and noted the Department was unaware of any evidence that supports or suggests data-queuing played a role in either incident. However, the Department did not provide any evidence or explanation to support its conclusions that these incidents were accidental. Embargoed data cannot release itself simply because a network cutoff device is bypassed.

In addition, OPA noted it was not feasible or appropriate for the Department to implement guidance from OMB Statistical Policy Directive No. 4 for its lock-ups because OMB has specifically stated the requirements of this directive do not apply to the release of Principal Federal Economic Indicators, which are covered by OMB Statistical Policy Directive No. 3. However, OMB Statistical Policy Directive No. 3 — which has not been updated since 1985 when news organizations used land-line telephones to release data — provides no guidance to agencies on responding to premature releases of Principal Federal Economic Indicators. Although the Department indicates it has, and will, take action to determine if a premature release has occurred and what steps should be taken following each incident, it has no policies or procedures to ensure it can do this appropriately. We recommended the Department implement policies and procedures to ensure it responds appropriately if an embargo is broken. Because Principal Federal Economic Indicators have the potential to move financial markets, we believe the most appropriate and equitable way of responding to a premature release is to release the data immediately to the public. Adopting this requirement does not go “against established OMB directives” because there is nothing in OMB Statistical Policy Directive No. 3 that would prevent the Department from releasing data immediately in response to a premature release.

Management’s response to our draft report is included in its entirety in Appendix B.

We appreciate the cooperation and courtesies that OPA, OASAM, and BLS personnel extended to the Office of Inspector General during this review. OIG personnel who made major contributions to this report are listed in Appendix C.



Elliot P. Lewis
Assistant Inspector General
for Audit

Appendices

APPENDIX A

**OBJECTIVE, SCOPE, METHODOLOGY, AND
CRITERIA**

OBJECTIVE

Did the Department identify the issue(s) that caused the premature release of embargoed PPI data and implement corrective actions to prevent a reoccurrence?

SCOPE

The review covered the Department’s controls over the release of embargoed data reports from its press lock-up room in Washington, DC, specifically focusing on the premature release of PPI data that occurred on September 16, 2014. In some instances our work included reviewing whether information system controls for the lock-up met federal and departmental standards, but was limited to only those controls relevant to our review (e.g., controlling changes, providing training, obtaining authority to operate).

We conducted fieldwork at the OPA, OASAM, and BLS offices in Washington, DC.

We conducted this review in accordance with Quality Standards for Inspections issued by the President’s Council on Integrity and Efficiency. Those standards require that we possess adequate professional competency, adequately plan our work, and obtain sufficient, competent and relevant evidence to sustain the findings and conclusions. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objective.

METHODOLOGY

To achieve our objective, we reviewed applicable federal and departmental criteria that covered controls over the Department’s press lock-up room. We also interviewed OPA, OASAM, and BLS officials to obtain an understanding of how embargoed data reports are released via the lock-up room, and interviewed three news organizations that regularly attend print media lock-up events at the Department, including the PPI lock-up on September 16, 2014, to obtain an understanding of the process news organizations use to disseminate data from the lock-up room.

To gain an understanding of the design of, and controls over, the lock-up system, we conducted walkthroughs of the lock-up room located at the Department’s headquarters in Washington, DC; reviewed applicable policies and procedures; and reviewed network design documentation for the lock-up system (including new organization design requests).

CRITERIA


- OMB Statistical Policy Directive No. 3
- OMB Statistical Policy Directive No. 4
- Department of Labor Computer Security Handbook
- Department of Labor Media Lock-up Rooms Guidance

OPA's RESPONSE

U.S. Department of Labor

Office of Public Affairs
Washington, D.C. 20210

MAR 10 2016

MEMORANDUM FOR: ELLIOT P. LEWIS
Assistant Inspector General for AuditFROM: STEPHEN BARR 
Senior Managing Director
Office of Public AffairsSUBJECT: Management Response to Office of Inspector General Draft Report
No. 17-16-001-01-001, *The Department Remains Vulnerable to
Premature Release of Embargoed Economic Data*

This response addresses Office of Inspector General (OIG) Draft Report Number 17-16-001-01-001, "*The Department Remains Vulnerable to Premature Release of Embargoed Economic Data.*" The Office of Public Affairs (OPA), the Bureau of Labor Statistics (BLS), and the Office of the Assistant Secretary for Administration and Management (OASAM) appreciate the opportunity to review and provide comments.

As you know, management has worked closely with your staff over the past year as they have investigated the September 2014 early-release incident and reviewed lock-up room processes. As the Draft Report briefly references, many of the current processes stem from a 2011-2012 security review commissioned by the Department that resulted in a recommendation that news organizations in the lock-up room only be allowed to use equipment and transmission devices supplied and installed by the Department. News organizations at that time objected to the plan, alleging that it would be a violation of their First Amendment rights and amounted to unjustified interference by the government into such areas as the use of proprietary software in their publishing and information dissemination systems. To reconcile these interests, news organizations were permitted to retain the use of their proprietary software, agreed to use only hardware and equipment purchased through a secure supply chain, and agreed to enhanced security practices.

While we appreciate OIG's efforts to improve lock-up room operations and take added steps to protect the integrity of embargoed data, management continues to have concerns with several of the OIG's conclusions and assertions in the Draft report. Our primary concerns include:

- On page 3 of the Draft Report, the OIG states that the September 2014 incident was the result of a confluence of events, including equipment failure and human error (IT staff intervention), and the use of data-queuing software by a news organization. The Draft Report gives great prominence to the purported risk presented by this software, but also notes that the use of data-queuing software, on its own, would not result in a premature release.¹ Management agrees that, on its own, data-queuing software cannot cause a premature release, and maintains that the OIG's continued assertion of significant risk is overstated.

¹ "Had either condition been an isolated occurrence, the data would not have been released prematurely." (pg 3)

OPA and BLS also object to the statements that management did not express concerns with the use of data-queuing software. As noted on page 7 of the Draft Report, DOL made sure to account for the use of such software in the network configuration and design while implementing the security enhancements discussed above. The Department was acutely aware of the primary concerns of the news organizations (i.e., the speed at which they are able to transmit data after the embargo ends), and worked to design a system that addressed those concerns, while providing security against unintended premature release – *barring manual intervention* (i.e., an intentional effort to by-pass security controls).

- On page 7, the OIG refers to two incidents that occurred in 2008 and asserts that a major contributing factor was data-queuing software. The report also notes that both premature releases were caused by “a customized Ethernet cable that was able to bypass the network cut-off devices that the Department had installed to prohibit data transmissions prior to the end of the embargo period.” The Department has two concerns with the OIG referencing the 2008 incidents: 1) the Department is unaware of any evidence that supports or suggests data-queuing played a role in either incident; and 2) as referenced above, the Department’s 2011-2012 security review resulted in significant changes to the lock-up room’s configuration and the access available to news organizations, making it very difficult for news organizations to introduce hardware or cables that can bypass DOL security controls. Saying that all three incidents are related— other than the fact there was a premature release of information – particularly without providing evidence, is simply wrong.
- On page 9 of the Draft Report, the OIG states that, “[g]iven the lack of direction in the [Office of Management and Budget (OMB)] guidance on responding to premature releases of Principal Federal Economic Indicators, we believe the Department should follow the guidance established in OMB Statistical Policy Directive [(SPD)] No. 4 for all its lock-ups because the goal of an equitable and timely release of embargoed statistical data will benefit the general public far more than taking no action at all.” The Department disagrees with this “recommendation” because it is not feasible or appropriate for us to implement it. OMB specifically states in the scope section of SPD No. 4 that, “the Directive excludes coverage of the Principal Federal Economic Indicators addressed in Statistical Policy Directive No. 3, *Compilation, Release, and Evaluation of Principal Federal Economic Indicators*, which have their own established release and evaluation procedures.” It is inappropriate for a Department’s OIG to insist that the Department should apply requirements that OMB has specifically stated do not apply to PFEIs, such as PPI. Not only has OMB indicated that SPD No. 4 does not apply to PFEIs, OMB has directed that SPD No. 3 is to be the sole authority for PFEIs. BLS cannot go against established OMB directives. It is also important to note that, were we to do so, in a future audit we could be found to not have followed explicit, existing OMB guidance. The OIG’s statement is also misleading when it implies that without adopting SPD No. 4 for all its lock-ups, the Department would take “no action at all” to release the statistical data when a premature release occurs. In fact, the Department has, and will, take action to determine if a premature release has occurred and what steps should be

taken following each incident, including the release of the data, as soon as it is appropriate to do so. Moreover, including this “recommendation” in the Results section of the report without a corresponding recommendation in the OIG Recommendations section is inappropriate. For reasons of feasibility and appropriateness identified above, the Department requests that this “recommendation” in the Results section be removed from the report.

Management would also like to provide (and in some cases reiterate) technical comments that should assist in clarifying the purpose of and participants in the lock-up room.

- Pages 1 and 2 of the Draft Report note that the Department provides “select” news organizations with pre-release access to embargoed data under lock-up conditions. Management is concerned the word “select” may be misunderstood by general readers. The Department credentials news organizations and we accept all who submit applications and show they are primarily a journalistic enterprise, so we recommend replacing “select” with “credentialed.”
- Page 2 of the Draft Report refers to BLS’ role in the lock-up room, but does not note that the Employment and Training Administration (ETA) also prepares embargoed data reports that are released through lock-up procedures.

Finally, management is concerned with the description on page 9 of our ability to detect if an embargo has been broken, and would recommend a portion of that section of the Report be redacted for security purposes.²

The following are management’s responses to the five Draft Report recommendations:

Recommendation 1: Prohibit the use of software that queues data for transmission without human interaction and develop sanctions for non-compliance.

Management Response: For the reasons outlined above, management neither concurs nor disagrees with this recommendation. However, OPA will undertake discussions with news organizations on their use of proprietary software, including software to queue data for transmission. The discussions will include whether to apply sanctions in instances, such as those of September 2014, when the news organizations may feel that they are not completely at fault for a premature release. BLS and ETA will join in these discussions, as necessary, and DOL will continue to explore the OIG’s previous recommendation that press lock-ups be ended.

Recommendation 2: Develop and implement policies and procedures for troubleshooting and controlling changes to network equipment supporting the lock-up to ensure all changes are documented, authorized, and tested prior to a lock-up.

Management Response: Management concurs with the intent of this recommendation but would like to clarify that there have always been processes in place to address change requests to

² Specifically, Management would recommend redacting the paragraph that begins, “The first step” and the first half of the sentence in the following paragraph (through “network”).

news organization equipment. Once a change request is made, it is discussed with technical staff in the Office of the Chief Information Officer (OCIO) and implemented by the Department, as appropriate. News organizations are able to validate equipment changes during one of the twice monthly maintenance windows facilitated by the Department.

As a result of the September 2014 incident, Management also prohibited network equipment or connection troubleshooting during a lock-up.

We will update internal guidance to better reflect these processes.

Recommendation 3: Develop and implement policies and procedures for a collaborative and structured training program to ensure all staff with lock-up responsibilities receive annual training covering the fundamental purpose of the lock-up and the importance of protecting embargoed data.

Management Response: Management concurs with this recommendation. OPA and BLS have held conversations to discuss a framework for this training and intend to roll-out a structured, reoccurring program in FY 16 Q3.

Recommendation 4: Develop and implement policies and procedures to ensure it can identify and respond appropriately if an embargo is broken, including the establishment of clearly defined roles and responsibilities for staff responding to a premature release.

Management Response: Management concurs with this recommendation. BLS, starting in February, has ensured that a senior management official is in the print media lock-up to make on-the-spot decisions in the event an embargo is broken. OPA will hold discussions with ETA to more clearly define roles and responsibilities inside the lock-up.

Recommendation 5: Obtain an authority to operate the lock-up room system to ensure appropriate information security controls are in place to protect embargoed data from premature release.

Management Response: Management concurs with this recommendation and has begun the process to obtain an ATO, with an anticipated completion date of FY 16 Q3. However, management believes it is extremely unlikely that an ATO would have prevented the September 2014 incident from occurring. Further, management – in consultation with staff in IT security – determined in 2012 that an ATO was not required for the lock-up room given the detailed security review that had recently been completed and because the underlying infrastructure was and remains standalone. The Department's decision to obtain an ATO now is in lieu of engaging an independent security organization for a new or additional assessment.

Thank you again for the opportunity to comment on this Draft Report. Please be assured that Management is committed to safeguarding sensitive economic data and protecting the integrity of the economic data that is used by the government, private industry, academia and others who focus on economic and labor trends and policies.

As the Department has previously indicated,³ we are exploring the value of press lock-ups and how best to disseminate economic data to the public and to news organizations. The Department routinely explores opportunities to improve its data releases and ways to better explain the data and make it more user-friendly. We will also continue seeking ways to improve the presentation of the data. As part of our effort to respond to your recommendations, I will ask BLS to circulate this OIG report to other federal agencies that provide pre-release access to Principal Federal Economic Indicators via press lock-ups.

Please feel free to contact me if you have any questions. Thank you for the opportunity to provide comments.

cc: Erica L. Groshen, BLS
T. Michael Kerr, OASAM
Edward C. Hugler, OASAM
William J. Wiatrowski, BLS
Nancy Ruiz de Gamboa, BLS
Chris Yerxa, OASAM
Sarah Harding, OASAM
Leslie Bennett, BLS

³ Controls Over the Release of the UI Weekly Claims Report Need Improvement, Employment and Training Administration, Report Number 17-14-001-03-315, January 2, 2014;
<http://www.oig.dol.gov/public/reports/oa/2014/17-14-001-03-315.pdf>

APPENDIX C

ACKNOWLEDGEMENTS

Key contributors to this report were: Tracy Katz (Audit Director), Steve Sovich (Audit Manager), Grover Fowler, Jr., Steven Grubb, and Christine Allen.

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Online: <http://www.oig.dol.gov/hotlineform.htm>

Telephone: 1-800-347-3756
202-693-6999

Fax: 202-693-7020

Address: Office of Inspector General
U.S. Department of Labor
200 Constitution Avenue, N.W.
Room S-5506
Washington, D.C. 20210