Report on Procedures and Practices for the Equitable and Timely Provision of Data to the Public

Team Members

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Team of Experts 60-Day Report

Overview

On September 27, 2024, Acting Secretary of Labor Julie Su directed the establishment of a Team of Experts (or "Team") to conduct an inquiry into the Bureau of Labor Statistics ("BLS" or "Bureau") procedures and practices for the equitable and timely provision of data to the public. The focus of the inquiry included the Bureau's formal data releases and its customer service to the public, identifying potential improvements and vulnerabilities. This arose from recent concerns about the timing of public data releases and other communications with data users, stemming from three incidents that came to light earlier in 2024. The Team was asked to provide a report to the BLS Commissioner, with copies to Department of Labor ("Department") leadership, within 60 days of its formal establishment on September 27, 2024.

The Team was chaired by Stephanie Swirsky, former career Deputy Assistant Secretary for Policy at the Department of Labor, with experts from the Office of the Chief Financial Officer (Dylan Sacchetti and Sophia Carty); the Office of the Assistant Secretary for Administration and Management, Office of the Chief Information Officer (Rick Kryger and Madhu Murthy); the Office of the Assistant Secretary for Policy (Alison Spock and Scott Gibbons); the Bureau of Economic Analysis and the Census Bureau at the Department of Commerce (Vipin Arora and Megan Kindelan); and two members of the public (Maurine Haver of Haver Analytics and Jonathan Schwabish of the Urban Institute). Al Goshi, Sarah Naji, Deena Jih, and Stefan Babich from the Department's Office of the Solicitor provided legal advice and support. BLS provided staff for liaison support to facilitate scheduling of briefings and interviews with appropriate BLS leaders and staff. The Team thanks Leslie Bennett and Eric Molina for their hard work, professionalism, and assistance in its work.

The Team looked at issues related to the timing and process of scheduled data releases and equitable access to BLS information outside of the formal data releases. The Team was directed to conduct fact-finding and provide recommendations within 60 days for BLS Commissioner Erika McEntarfer to consider that would improve the processes and outcomes for BLS data releases and public information sharing.

While each incident in 2024 was unique and unrelated, Department leadership determined that an external review could be beneficial to BLS to explore steps that can be taken to help avoid recurrence of these types of incidents and identify any additional vulnerabilities. None of the incidents involved the security, confidentiality, accuracy, or integrity of the Bureau's core data work; rather, they were related to the timing of the public release of data and the Bureau's customer service responses, outside of the formal release process.

BLS conducted extensive internal reviews of each occurrence and initiated actions in each area to help prevent further incidents and mitigate risk prior to the appointment of the Team of Experts. BLS also referred each of the incidents to the Office of the Inspector General at the Department of Labor, which may be conducting investigations or audits into the incidents. The Team of Experts' inquiry was neither an investigation nor an audit. The Team of Experts was not an investigatory body; rather, it was an independent fact-finding body brought together to develop initial findings and recommendations about potential improvements for consideration by BLS and Department of Labor leadership. By design, its members represented expert users of BLS data, experts from the Department of Labor and other Federal statistical agencies, and expert process and technology professionals.

Summary of Incidents

Super User Incident

In February 2024, BLS received more than normal information requests regarding unusual patterns in one element of the Consumer Price Index (CPI) for January 2024. In response to these inquiries, a BLS staff member sent an email to 50 external users (dubbed by the staff member as "super users") in an attempt to explain the unusual patterns. This email raised a few problems, including the inaccuracy of the information, a violation of BLS policy to not respond to multiple users, and the erroneous implication that there was a special group of stakeholders (super users). The Bureau's inquiry uncovered that this staff member had previously communicated with this group regarding other methodological questions. While none of the communications contained BLS confidential information, they had not been approved by BLS management.

Since that time, BLS has taken a number of actions to improve communication with the public, update communication protocols, expand staff training, and revise performance standards to strengthen oversight and accountability.

Early Release of CPI and Real Earnings Data

In May 2024, five files related to the CPI and Real Earnings data were released on the Bureau's public website 32 minutes prior to the scheduled release. This incident was caused by a contractor beginning to process the news release files two minutes before the firewall rules locked down communications between the BLS servers and the BLS public download site. The early release of the five files was identified immediately and no additional files were released until the scheduled 8:30 a.m. time when the press release and all the materials were made public.

The Bureau's inquiry determined that a second safeguard failed to stop the early release of the five files. Since that time, BLS has taken steps to strengthen its technological

safeguards, and has revised its communications, policies, and procedures, including requiring that only Federal employees play roles in data release processing.

Delayed Release of Current Employment Statistics (CES) Preliminary Benchmark Announcement

In response to high public interest in the 2024 CES preliminary benchmark revision, BLS announced that it would release the annual benchmark on August 21, 2024, at 10:00 a.m. Due to a variety of technical challenges in the IT system, the information was not posted until 10:32 a.m. Because this was a preliminary benchmark announcement and not a press release, there were no back-up plans in place. The delay was exacerbated by a lack of communication among BLS staff about how to address the delay and respond to public inquiries. This resulted in some staff disclosing the information that had not yet been posted on the website in their responses to public telephone inquiries.

BLS launched an internal review and continues to look at its processes and communications procedures used in all data releases for consistency, effectiveness, protocols, and safeguards. BLS instituted an all-clear protocol to ensure full awareness when a release is public. Once an all-clear message is received, BLS employees are free to discuss, email, and brief external parties on the issued news release, per the standard processes.

BLS' Initial Findings

BLS determined human error to be the root cause of two of the three incidents and a technology update glitch to be the cause of the third. The Bureau did not find dishonest or nefarious underlying motives. In all three incidents, the persons involved took actions that they believed were consistent with the policies of their office and the Bureau; therefore, while some staffing has been realigned to strengthen accountability and reliance on Federal staff rather than contractors, BLS focused its remedial actions on training, communications, and additional safeguards to prevent similar human errors in the future.

The Team reviewed the internal BLS work and its steps to remediate and improve its processes, communication, and staff training in these programmatic areas and throughout the Bureau. The work of the Team of Experts builds on those efforts.

Strategy For the Team of Experts' Work

Specifically, the Team explored and developed findings and recommendations to improve BLS processes and practices, and to address any vulnerabilities that might hinder the equitable and timely provision of data and information to the public. Team members reviewed relevant documentation, correspondence, and reporting; they also interviewed BLS leadership, program and technical managers, and staff involved in all aspects of customer service and data releases. Additionally, the team interviewed current and former leaders and managers from BLS and other Federal statistical agencies that produce and release Principal Federal Economic Indicators and other Federal data.

The Team organized its work into three major issue areas:

- 1. Procedures and practices for disseminating data releases;
- 2. Communicating with the public and responding to user inquiries; and
- 3. Mitigating the risk of early or late data releases using information technology (IT) considerations.

Overarching Principles

Since its inception, BLS has been a leader among the Federal statistical agencies and is committed to the continued integrity and equitable distribution of its data. As such, the Team recognized the critical importance to BLS of continuing to provide excellent customer service, as well as the paramount importance of maintaining the integrity of its data releases and public transparency. These principles are embedded in the Team's recommendations. The Team also sought solutions that would help BLS provide equitable access to information and be responsive to both experts and less knowledgeable users to help ensure maximum utilization across groups. Similarly, the Team accounted for the Bureau's need to balance maintenance of BLS rigorous data standards with timely responses to inquiries and requests of users at all levels of expertise.

The Team addressed the following principles:

- Bureau-wide solutions
- Balancing security, transparency, responsiveness, and equity
- Assessing and responding to the needs of diverse users
- Balancing accuracy and timeliness in the provision of information
- Building on what works and recommending fixes for what doesn't
- Respecting the actions BLS has already accomplished
- Recommending actions that are pragmatic and achievable
- Recognizing that if a change requires additional resources and no resources are available, change cannot happen.

Considerations

The Team focused its work on developing recommendations for practical, doable actions and strategies that BLS could implement immediately, those that could be implemented by

the end of the fiscal year, and those that would require additional work and resources that may not be currently available.

The Team considered the following implementation timeframes as it developed its recommendations:

- Short-term
 - What can be accomplished in the next 30 days.
- Mid-term
 - o What can be accomplished this fiscal year (FY 2025).
- Long-term
 - What needs further study to ensure success.
 - What additional resources/support are needed for success.

Continuous Improvement

OMB Statistical Policy Directive #3 requires Federal statistical agencies to evaluate all Principal Federal Economic Indicators every three years. Two of the areas to be evaluated are the agency's performance in meeting the designated release schedule and the agency's ability to avoid disclosure prior to the release time. BLS has not had a reportable release incident in over 10 years; however, the early release of the CPI and Real Earnings in May 2024 will be included in its next scheduled evaluation report to OMB.

The Team of Experts' recommendations include steps the Bureau should take to continually review and adjust its policies and procedures (regardless of whether there is an early or late release); engage and listen to the public; and provide equitable access to data. This report also includes recommendations for how BLS could continue to modernize and use new technologies to meet its data release requirements and customer information requests while reducing the potential for human error and providing greater transparency and equity to the public. Finally, the recommendations include conducting frequent and regular tabletop exercises to test the efficacy of BLS procedures and safeguards, thereby providing BLS with opportunities to continually refine and improve its procedures, systems, and preparations.

Summary of Findings and Recommendations

Summary of Findings

- 1. The three incidents were isolated events caused by human error.
- 2. None of the incidents were related to the quality or accuracy of BLS core data work.
- 3. The early release and delayed release incidents highlighted the need for more effective testing of software updates and closer attention to the Bureau's procedures and actions during the time just before a data release.
- 4. BLS leaders were not sufficiently focused on data releases as a critical mission of the agency.
- 5. BLS leaders were not sufficiently focused on how the agency communicates with users and did not provide adequate procedures, training, or management controls to ensure the accuracy, transparency, and equity of employees' responses to user inquiries.
- 6. BLS culture encouraged full and rapid response to customer information requests; however, no matter how well intentioned, it was not sufficiently focused on internal coordination of responses.
- 7. BLS culture did not adequately encourage leaders and staff to work collaboratively across offices and ensure the consistent success of all its public facing releases and communications.
- 8. BLS technology and software modernization has been hampered by underfunding and a lack of multiyear funding to enable the Bureau to ensure its processes and systems keep pace with technological advancements.

Summary of Recommendations

- 1. Develop a culture of enterprise-wide collaboration, break down silos, and work across organizational lines to ensure success.
- 2. Develop a culture that encourages maximum communication with all users, ensuring that what is shared with one is available to all. Align all public facing media and tools to support that goal.
- 3. Reimagine enterprise training for front-line staff with careful consideration of its impact and with a goal of enhancing the consistency of customer service practices.
- 4. Communicate earlier and more frequently with users about upcoming revisions to survey methodologies, in a manner that is appropriate for both expert and more general users.
- 5. Revise contingency planning to mitigate the risk of untimely releases.

- 6. Improve internal processes to enhance communication and collaboration during releases and during a crisis.
- 7. Approach IT infrastructure with an eye toward modernizing BLS technology and provide adequate, multi-year funding to ensure its success.
- 8. Preserve public trust, while providing the greatest possible transparency and equitable access to all information, including technical responses to advanced data users.

Team of Experts: Report and Recommendations

Introduction

The BLS Mission Statement explains that the Bureau measures labor market activity, working conditions, price changes, and productivity in the U.S. economy to support public and private decision making. The Mission Statement lists the Bureau's values and principles as independence from partisan interests; meeting the needs for accurate, objective, relevant, and accessible information; protecting the confidentiality of data providers; employing innovative methods to keep pace with changes in the economy; and being good stewards of the taxpayers' money.

But this is not the complete picture. How successfully BLS releases its data products and supporting materials impacts the public's perception of the credibility of the data; the smallest glitch can undermine months of high-quality data work in a moment. Similarly, the commitment to transparent and equitable access to its data is of paramount importance, as no one group should have greater or earlier (real or perceived) access to data than others. The Bureau's commitment to how and when its data are released needs to have the same level of priority as the quality of its data products.

The fundamental principle underlying the recommendations of this Team of Experts is that BLS employees at all levels (including, and importantly, the most senior leaders in the program, communications, and IT offices) need to recommit to the effective, timely, transparent, and equitable release of all data, whether a Principal Federal Economic Indicator (PFEI) or otherwise. There is no data release that is lesser in priority, and all the Bureau's data releases necessitate the singular focus of the agency leadership and staff to ensure they are correct and timely, throughout their development and including their ultimate release. This is not any one office's responsibility, but rather an enterprise-wide responsibility of the program office developing the data, the IT office that manages the technology, and the office that manages publications and the BLS website. These entities and their senior leaders must work hand-in-glove from the beginning until the data are released into the public's domain. The silos that became prominent during the COVID-19 years, when the Bureau was appropriately focused on accomplishing its work under very difficult circumstances, need to be broken down and cross agency work and collaboration need to be ingrained within the agency culture. How well BLS and its leaders overcome the

Bureau's silos and commit to a culture dedicated to the whole of the enterprise will influence how well BLS is able to meet its organizational and customer needs.

Additionally, historically BLS has not received sufficient new funding to keep pace with its technological and staffing needs. Its limited ability to modernize and staff its critical functions has led to many of these challenges that cannot be effectively addressed without appropriate additional funding.

Findings and Recommendations

Enterprise-wide Standard Customer Response Procedures and Compliance Oversight

- Problem Statement: During the "super user" incident, staff did not follow BLS administrative procedures and did not have a standardized approach to properly handle a large influx of inquiries on data releases. When responding to public user inquiries, responses were sometimes inconsistent, sometimes incorrect, and not publicly visible or accessible. Also, supervisors and managers did not provide standardized instructions to staff handling these user inquiries and did not manage or review the responses to ensure accuracy, consistency, and equity. The Team found that BLS needs to strengthen the oversight and accountability of customer service activities, including oversight of training and review of customer responses prior to release.
- Corrective Actions Taken by BLS: BLS has updated performance standards for all supervisors and managers to strengthen the oversight and accountability of customer service activities. BLS has also deployed additional training for all BLS staff.

- We agree with the actions taken by BLS thus far and further recommend that updates to performance standards extend to the staff level. This will promote accountability at all levels of the organization and encourage diligence in executing critical tasks or functions by BLS employees.
- Although expectations can be outlined in the performance elements and standards of employees, there is still a possibility that the standards will not be fulfilled as expected. To have visible evidence of accountability resulting in intended outcomes, we recommend BLS identify creative ways to ignite a culture change within the Bureau emphasizing the importance and criticalness of their role in public facing communications and operations to support the BLS mission. We recognize that providing excellent customer

service to users is a central part of the culture embedded in BLS. These recommendations seek not to overtly change that culture but to provide a framework to enhance and better codify that ethos.

- O BLS should consider leveraging the many DOL Performance Management Center (PMC) service offerings such as Continuous Process Improvement, Lean Six Sigma, Strategic Employee Engagement Drive (SEED), and Kaizen events to develop ways to increase efficiency and effectiveness in operations and to track staff compliance. As the PMC's specialty and primary service is process improvement, this office can be of tremendous value and support to BLS in developing more innovative ways to track progress and create process improvement frameworks.
- Although mandatory customer service and data release trainings have been deployed for BLS staff, it is critical for BLS to enhance those trainings to be more interactive and develop ways to measure adherence and compliance with these required trainings. BLS should explore how to test, monitor, and evaluate whether employees are executing events as outlined in the designated trainings. There should also be active monitoring, testing, drill exercises, etc. to measure employee compliance with established policies, processes and procedures for both systems and communications/customer service.
- O BLS should consider designing A-123 testing or compliance test plans on a quarterly basis to have qualified staff/teams perform the testing reviews and turn the result into a reportable measure that is relayed to BLS senior level officials. This approach can promote and stress the importance of adherence to policies and procedures. A-123 test plans outline procedures for evaluating the effectiveness of internal controls over reporting within Federal agencies, ensuring compliance with OMB Circular A-123 requirements.

Appropriate and Timely Data Releases

 Problem Statement: The early release and late release incidents primarily stemmed from unmonitored or failed systems safeguards and employees or contractors performing actions in violation of existing BLS policies, processes and procedures. In one instance, the issue was discovered by BLS staff, while the other incidents were not discovered until brought to the Bureau's attention by the public.

Corrective Actions Taken by BLS: BLS implemented additional measures to
ensure accurate, timely releases, including using only Federal staff on the actual
release day. However, pre-release functions performed by BLS teams within the
publications office, regional/program offices, and technology office appear to
continue to be decentralized across the various BLS release types.

- BLS should integrate senior leadership and appropriate staff from the three business entities—the program office, Office of Technology and Survey Processing, and Office of Publications and Special Studies (OPUBSS)—into the production release call for all data releases to ensure a seamless production across all releases. This approach would mirror structures at other Federal statistical agencies.
- The production release calls should be staffed and attended by the appropriate BLS staff including the agency head or Associate Commissioner for each key office, unless they are briefing the Secretary. It is critical that senior leadership from all three key offices are present and actively participating in the production release call from start to finish for each release type.
- o BLS should consider convening the production release calls earlier than the current one hour to ensure adequate time to address any concerns that may arise. This will streamline release oversight and create an environment where breaks in operations or safeguards can be discovered, addressed, and prevented in real time. In addition, BLS should incorporate system automations, where feasible, to perform validation checks to identify potential violation attempts of release policies, processes, and procedures.
- BLS should design validation steps (either through systemic or manual effort)
 to identify potential breaks or breaches in a data release before an actual fire
 occurs. In situations where system enhancements or configuration changes
 are deployed on the BLS network, BLS should test compliance or verify
 completeness of the items in their configuration change plans. Although

previous recommendations have been made reminding BLS teams to follow their system configuration plans, a process should be designed to ensure compliance and verify the execution of it. Inside the systems configuration plans, post tests and monitoring should be included to ensure periodic testing and to verify that existing firewalls are operating as designed.

Customer Inquiry Tracking

- Problem Statement: BLS public information offices/functions operate in a very decentralized manner with public inquiries entering through phone calls and emails via different phone numbers, email groups, and other methods of contact. BLS has a Customer Inquiry System (CIS) in which staff are required to enter inquiries of defined significance to ensure awareness up to and including the Office of the Commissioner. However, there is no overall strategic management of customer inquiries or central storage system to provide staff with the ability to centrally search and automatically flag inquiries that may be of particular interest to BLS users or early indicators of significant issues.
- Corrective Actions Taken by BLS: None

- BLS Regional Offices currently leverage the CIS tool that allows the management of data as a strategic asset. The National Office should initiate discussions with the Regional Offices to learn how their staff are using the existing CIS tool and ways to leverage the tool for tracking.
- BLS National Office teams should follow the outline from the Regional
 Offices and ensure employees enter inquiries into the tool that are received
 through all methods as well as a synopsis of the response provided.
 Automated escalation alerts should be configured for specific terms that
 indicate issues of significance.
- The frequency, consistency, and content of public inquiries represents data with important strategic value for BLS. The Bureau could leverage collection and analysis of public inquiries and responses to inform the development of proactive communication strategies, develop an improved repository of inquiries and public facing responses to frequently asked questions (FAQ),

- and consider using this body of data to train automated chatbots to support Federal staff in answering incoming public inquiries.
- Whichever tracking tool or approach it chooses to utilize, BLS should continually assess employees' ability to appropriately respond to more complex inquiries and to proactively identify situations in which staff may not have the appropriate level of subject matter expertise to respond to specific inquiries. Using data to assess trends and patterns in public inquiries and the propensity of analysts to escalate inquiries to more appropriate personnel may help the Bureau best ensure that both timely and accurate information is provided to the public.
- BLS should consider implementing a centralized Customer Relationship Management (CRM) capability. This capability should be configured to automatically ingest email inquiries sent to public information groups, as well as the responses, to flag potential issues and to possibly develop canned responses.

Engagement with the Other Key Federal Statistical Agencies

- Problem Statement: As BLS must provide accurate, timely data on a variety of key economic indications in an ever-changing environment to support public and private decision making, the Bureau previously held meetings with their statistical agency counterparts at the Bureau of Economic Analysis (BEA) and the Census Bureau to discuss a wide range of topics. These meetings provided a forum for the three agencies to work collaboratively on common issues. During the COVID-19 pandemic, the meetings stopped, which limited opportunities for coalition building and potential resolution-sharing. Currently, there are regular meetings on research and data topics only.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - BLS should re-engage standing meetings with BEA and Census, which can serve as a platform to share best practices to strengthen the release process, production, and IT, in addition to the current discussions around research and data topics. Collaborating and sharing information more closely with peers in other statistical agencies could help BLS identify best practices or

innovative ideas that might enhance the Bureau's enterprise-wide strategy and create efficiencies in operations. The colocation of the three agencies at Suitland Federal Center should facilitate greater collaboration.

- The recurring meetings could be theme-based to discuss or share release challenges, troubleshooting initiatives, crisis communication, release successes, recently discovered risks, "alarming" or "questionable" inquiries from the public, managing data discrepancies, process improvements, etc.
- These conversations could help identify new training needs and methods, drive the creation of new tabletop exercise scenarios, and design new preventative measures to safeguard BLS release efforts. Further, these meetings could be used to discuss contingency plans for crisis situations.

Crisis Training

- Problem Statement: Interviews with BLS staff identified heterogeneity, between
 and within Bureau programs, in the approach they used to develop and deliver
 responses to public inquiries. BLS has recognized an organizational need for
 improvement, expansion, and standardization in training, and has taken important
 steps towards achieving this goal. Over the course of the COVID-19 pandemic, with
 the added challenge of staff turnover and not being in a common location, BLS did
 not conduct any tabletop exercises to work through different crisis or problematic
 scenarios related to the publication of news releases.
- Corrective Actions Taken by BLS: After the first two incidents, BLS held a
 walkthrough of six scenarios to assess staff understanding of Bureau policies and
 their approaches to meeting mission needs under difficult or unexpected
 circumstances. Through those exercises, BLS identified some vulnerabilities.

Recommendations:

The training efforts BLS has initiated will elicit the most impact if they approach the task as cultural and organizational change management. Some training efforts deteriorate over time into compliance exercises, and fail to inspire, educate, or resonate with staff as a critically important aspect of capacity building and ensuring mission readiness.

- BLS should approach changes they make to training with careful consideration of the impact it can and does create. Given the responsibilities of BLS staff in serving as frontline responders to public inquiries, mandatory trainings should produce comfort among staff in discussion or engagement over process, methods, standards, and goals by having more interactive scenario-based training.
- BLS could benefit from developing objective methods of measuring perceptions or the relevance and utility of training among staff and management.
- BLS could also benefit from measuring the impacts of training, including the degree to which it establishes a correct and consistent understanding of Bureau policy, and the awareness and resiliency of staff based on their ability to respond appropriately to unexpected or difficult circumstances.
- BLS should continue to conduct regular and frequent tabletop exercises that include all parties to more optimally train leaders and staff to deal with potential problems under realistic conditions and to evaluate the outcomes and impacts of training. For the exercises to be useful, they should be held more frequently (e.g., quarterly) with input from outside stakeholders on various policies and procedures so that BLS is prepared for both known and unknown risks. For example, BLS could develop a tabletop exercise to evaluate staff response to an incident involving bad actors hacking BLS data or intentionally crashing BLS websites containing release information. Leveraging additional tabletop exercises to identify other risk scenarios (from both a systemwide organizational perspective and a communications perspective) and outlining the specific steps BLS teams would need to take to address it (either as a preventative measure or a detective measure) would yield better understanding of Bureau policy, greater predictability and consistency in crisis response, and greater resilience among Bureau programs.
- From these exercises, BLS should develop additional training materials as appropriate (including one-page crisis documents to guide staff), update them accordingly, ensure distribution to staff as part of ongoing training, and incentivize appropriate cultural and organizational change.

Enterprise-wide Customer Service Strategy

- Problem Statement: The Bureau lacks a clear, cohesive, and well-documented customer service strategy that defines and supports Bureau-wide processes, procedures, and responsibilities. What currently exists appears to be the result of federated processes that have been implemented incrementally and without a broader, enterprise-wide strategy.
- Corrective Actions Taken by BLS: Following the "super user" incident, BLS
 compiled an inventory of customer service practices across the agency, which
 identified inconsistent practices. In addition, BLS provided mandatory customer
 service and data release training for all employees in May 2024.

- Develop a single, cohesive Bureau-wide strategy that defines how customer inquiries are received, how they are routed, how they are tracked and monitored, how they are responded to, who responds to them, how responses are provided, etc.
- Consider having a discrete and small group of staff in each program area be responsible for responding to user inquiries to enable close coordination, targeted training, and consistency of responses. The result should enable centralized visibility into the types and frequencies of inquiries and their related responses, as well as the ability to assess the quality of responses and the degree to which responses and response methods comply with Bureau policies.
- Consistent with the recommendations above regarding inquiries and responses being an important strategic asset, BLS should also consider the use of an official centralized BLS shared mailbox account as the sender for responding to all public inquiries (instead of employees potentially sending responses from their individual BLS email accounts if they are contacted by customers directly). This will safeguard BLS employees who interact with the public and promote record retention for instances of employee turnover.

Contingency Planning to Mitigate the Risk of a Late Release

- Problem Statement: The late release incident revealed a lack of effective contingency planning to avert a delayed release. The incident raised internal and external concerns about the timeliness of BLS data releases.
- Corrective Actions Taken by BLS: In August 2024, OPUBSS notified all employees that, if a delay occurs for a news release, OPUBSS staff will post release information on social media channels. BLS will ensure that there are multiple forms of distribution for each data release, including social media posts.

Recommendations:

- Reevaluate the contingency plans for ensuring data are available at release time, particularly the backup plan of tweeting data highlights. Instead, look to BEA and the Census Bureau for backup support during a crisis, especially given the Bureau's colocation with BEA and Census in the Suitland Federal Center.
- As part of the regular meetings with BEA and Census outlined earlier, share best practices for punctual data releases and equitable access to information, with particular attention to evolving technologies and cybersecurity.
- o In the event that a delayed release is anticipated or encountered, BLS should notify the public of the delay from an authoritative platform first, such as the official BLS website or the Department of Labor's News Releases website (https://www.dol.gov/newsroom/releases). Social media postings to notify the public should be a secondary For Your Information (FYI)-type notification (not data specific). If social media is used as one of the secondary methods to inform the public of a delay, the notification should be posted on all BLS social accounts (e.g., Twitter, LinkedIn, Facebook, Instagram), when appropriate.

Internal Crisis Communication

• Problem Statement: The early release and late release incidents brought to light poor internal communication during a crisis.

Corrective Actions Taken by BLS: BLS updated its communications protocols
to improve internal awareness of future incidents. In addition, OPUBSS began
drafting a one-page checklist that explains what to do in crisis communication
scenarios.

Recommendations:

- Develop and distribute to BLS employees a short/one-page checklist that explains what to do in crisis communication scenarios. Provide internal trainings for staff to understand the importance of the guidelines and how to use the checklist effectively. Periodically resend the checklist to employees to increase awareness and encourage use of the document.
- Consistent with an earlier recommendation, hold drills so BLS employees can practice reacting to crisis communication scenarios. Use the results of the drills to inform continuous improvements of processes and procedures.
- Reinstitute the Crisis Communications Team, which previously included all the Associate Commissioners and was led by the Commissioner's Office.

Customer Service Procedures and Practices

- Problem Statement: The "super user" incident and the late release incident brought to light inconsistent customer services practices across program offices. This inconsistency was confirmed in the Bureau's inventory of customer service practices across the agency. The "super user" incident also highlighted gaps in customer service training and oversight.
- Corrective Actions Taken by BLS: In May 2024, BLS provided mandatory
 employee training on data handling, security, and customer service. In addition, BLS
 is developing expanded customer service training that all BLS employees will be
 required to complete annually. BLS also updated performance standards for all
 supervisors and managers to strengthen the oversight and accountability of
 customer service activities, including oversight of training and review of customer
 responses prior to release.

Recommendations:

 Provide regular training for all employees on the Bureau's guiding principles and the "Dos and Don'ts" of communicating with the public. Improve the

- quality of current training modules by incorporating proven teaching strategies that enhance learning and retention. Consider leaning on educational pedagogy literature to boost the effectiveness of the training.
- OPUBSS, with approval from the Commissioner and Deputy Commissioner, should be responsible for developing and implementing this enterprise-wide training for all program areas to ensure consistent training for every employee.
- Adopt a customer service certification system for employees, as was done in the Regional Offices.
- Consistent with an earlier recommendation, mandate CIS use by all employees. To encourage consistent and ubiquitous use of CIS, OPUBSS should develop regular CIS reports and distribute them on a routine cadence to the program offices. Strategically use the information in the CIS reports to improve communication in the National Office as is done in the Regional Offices.
- Review the Bureau's communication plans for updates and consistencies.
 For instance, replace "should" with "must" where appropriate.
- Have the Commissioner send out more frequent "tone at the top" messages reminding BLS employees of the Bureau's guiding principles and the "Dos and Don'ts" of communicating with the public.
- Create a guiding principles document from the Office of the Commissioner that clearly outlines the top three values or rules for BLS employees regarding the equitable dissemination of information.

Preserving Public Trust

- Problem Statement: The three incidents raised concerns among users and media outlets about the Bureau's integrity.
- Corrective Actions Taken by BLS: According to the Bureau's August 26, 2024, incident summary report, BLS updated its communications protocols to improve both internal and external awareness of future incidents. BLS also implemented a

new policy of sending an all-clear message to relevant employees when a release has been posted publicly. Once the all-clear email goes out, BLS employees are free to discuss, email, and brief external parties on the issued news release, per the usual processes.

Recommendations:

- Add a full-time BLS communications staff person to manage the Bureau's new policies and procedures, develop and conduct communications and crisis trainings for employees, interact with the media, and serve as a liaison to DOL's Office of Public Affairs.
- To improve social media monitoring of chatter regarding BLS data, consider using a web analytics tool that continually updates on mentions of BLS so that BLS employees are immediately alerted when BLS or BLS data appear in common discussions or something has gone awry.
- Consider writing op-eds for a major newspaper, data user blog site, or other relevant association explaining the Bureau's priorities, data release policies, and communication practices, with the goal of increasing transparency, emphasizing the Bureau's commitment to data security, and maintaining the Bureau's integrity. Explain the steps BLS has taken to implement internal and external recommendations. Also explain that BLS makes revisions to its preliminary estimates not due to errors, but because late survey responses are received, more comprehensive administrative records become available, seasonal adjustment factors are updated, or new methods are implemented. Have DOL's Office of Public Affairs boost the op-ed(s) on social media and through other channels. Also post the op-ed(s) on the Commissioner's Corner blog.

Equitable Access to Technical Information

- Problem Statement: The three incidents raised concerns among users and media outlets about equitable access to BLS information.
- Corrective Actions Taken by BLS: Following the "super user" incident, BLS
 held a public webinar to provide correct and detailed information on unique aspects
 of the CPI shelter data. At the beginning of that webinar, BLS took responsibility for
 the incorrect and misleading customer information, apologized, and indicated it

was taking the necessary steps to improve processes. BLS also reviewed its existing policies on the release of methodological information, with a focus on ensuring such information is available to all on the BLS website.

- O Post on the BLS website technical notes about new methodologies in advance of the first data release that will use the new methodology. Use both technical language and plain language to help blunt any concerns or skepticism from the public. Transparency is paramount to keeping (and regaining) public trust, especially when it comes to technical changes to data collection processes or estimation methodologies.
- Post on the BLS website additional tabulations (currently dubbed "unpublished tables") from the Current Population Survey and other programs. If there are volume concerns, track and post the most popular underlying tables. Where appropriate, create interactive or static data dashboards to summarize and present the data in charts and graphs.
- To avoid any appearance of impropriety and to provide equitable access, consider adopting the Federal Reserve's practice of answering only non-substantive questions (e.g., arithmetic, weights, location of data series) immediately. For substantive questions, create technical FAQs that are posted on the public BLS website for all users to access. *Err on the side of equity.* This could help avoid any misperception that BLS's actions may give consideration to particular financial or media companies. The Bureau's priorities should be equitable access to information and maintaining its reputation as the gold-standard source of data and analysis on U.S. labor markets, working conditions, price changes, and productivity. To maintain the usefulness of the FAQs, develop a process for archiving outdated FAQs.
- o Train economists to dig deeper into data anomalies, such as unexpected shifts in a data series (e.g., the January 2024 divergence in the CPI rent and owners' equivalent rent data) or dramatic differences from market expectations (e.g., the October 2024 employment estimates, which were impacted by hurricanes and strikes). If the underlying reasons are not fully understood at press time, note in the release that the anomaly is being assessed and that information will be forthcoming. Here, "tone at the top" messages from BLS leadership can help staff understand that these

additional steps will result in better data products and customer service. Where necessary, BLS may need to hire additional staff to more fully examine and analyze BLS data series before and after release.

- Hold periodic public webinars on hot topics, new methodologies, or other key information to increase transparency and enhance users' understanding of BLS data, as was done in March 2024 to provide detailed information on unique aspects of the CPI shelter data.
- Include content in the Bureau's forthcoming Trust Center on data release policies and communication practices. Emphasize the Bureau's commitment to data security and equitable access.

Production Validation Time Window

- Problem Statement: BLS starts its release processes about 60 minutes prior to
 release time. The first 30 minutes is primarily spent ensuring the correct news
 release files and data are ready for release. The second 30 minutes is allocated to
 ensuring the files and data are copied to the servers and will be made available for
 access at the designated release time. The 30 minutes before release may not be
 sufficient to perform production validation and resolve any unexpected situations
 that necessitate problem solving, potential rollbacks, and associated production
 validation steps.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - o Deploy files for release at least one hour prior to release time.
 - Develop a playbook of possible release failures and interruptions, along with estimated diagnosis and resolution timelines. Use the worst-case scenario to ensure release processes are adequately scheduled.

Manual and Automated Controls in the Release Process

- Problem Statement: Activation of the automated controls that prevent prerelease are too close in time to the manual controls for replicating embargoed/prerelease data. For example, the automated controls intended to prevent
 communication with servers are activated at 8:00 a.m. for PFEI releases, while the
 manual controls to turn on file replication are also authorized to begin at 8:00 a.m.
 In the CPI early release incident, manual replication started at or about 7:58 a.m.,
 resulting in files being made publicly available.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - o Implement an increased overlap of at least 15-30 minutes in the automated and manual release controls. For example, the automated control preventing server communication should begin at 7:30 a.m. or earlier, with the manual file replication control beginning at 8:00 a.m.

Staffing the Production Release Calls

- Problem Statement: During the hour before release, a production release call is held between IT staff and OPUBSS staff. However, the IT staff who turn on the file replication to update the servers that will be made publicly available at release time do not appear to be part of this call. An email is sent to those staff to instruct them to begin the file replication processes. Additionally, it was unclear whether OPUBSS staff are part of this call and are prepositioned to implement communications strategies if problems should occur.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - To reiterate an earlier recommendation, all staff and leadership involved in the release processes should participate in the production release call. This includes IT file replication staff. An email to these staff can still be used as an

- additional confirmation to turn on file replication; however, an email should not replace their participation in this call.
- OPUBSS staff should participate in all production release calls and prepare to implement approved communication protocols, if necessary.
- IT infrastructure support staff should participate in all production release calls to ensure infrastructure is monitored and for quick troubleshooting, diagnosis, and resolution if an issue should occur.

External User Communications Approval Processes

- Problem Statement: Staff communications with the public use different vehicles and methods, and other internal stakeholders or approvers are not consistently engaged.
- Corrective Actions Taken by BLS: BLS made changes to its communications to require levels of escalation and approval.

Recommendations:

 Explore using agile IT software to ensure external communications follow a structured process that includes requiring peer review (i.e., on-the-ground Federal leads performing oversight), supervisory approval, and executive stakeholder approval process steps for all communications deemed critical or major.

Quality Assurance after Major Change, Modernization, or Upgrade

- Problem Statement: The delayed benchmark announcement incident occurred due to the fixes implemented to address the early release incident indicating a missed test case.
- Corrective Actions Taken by BLS: BLS will consolidate all releases and announcements to follow the same IT process, which will prevent future delays of benchmark announcements due to this defect. However, this corrective action does not go far enough to directly address how the test case was missed.

Recommendations:

- Ensure there is a robust test plan that includes "all" business, IT negative testing, including hardware and software failures, rollback steps, and integration testing across IT systems especially for the first few deployments after a major change, modernization, or upgrade.
- Consider incorporating validation or verification steps for routine vendor patch updates to ensure there is no negative impact to previous system deployments.
- Ensure that quality assurance Key Performance Indicators (KPIs) are measured to track team performance.

Validation of Downloadable File Availability to External Users

- Problem Statement: Validation of whether downloadable files are available to
 external users currently occurs at the time of release and not before. During the late
 benchmark announcement incident, the communications team was validating the
 unavailability of downloadable files at the same time as end users. This validation
 test was not performed before the files were made available to external end users —
 ostensibly to address security concerns. Further, during this incident, the validation
 testing initially incorrectly indicated that files were accessible for external end users
 to download.
- Corrective Actions Taken by BLS: BLS will consolidate all releases and announcements to follow the same IT process, which will substantially reduce the risk of the problem occurrence.

- Evaluate IT options to test access to resources by external users before the actual release without compromising security or real time performance.
- Ensure availability of devices (both mobile and non-mobile based on browser usage patterns) to BLS communications and IT staff with configurations that guarantee the same visibility as that of an external end user.

IT Documentation

- Problem Statement: IT Documentation in some cases is not up to date or is not easy to understand.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - Ensure all technical/process documents are reviewed and revised for every major release, critical/major incident, and annually.
 - Ensure documents are easier to understand. For example, increase readability of architecture diagrams by depicting the data flow with numerical steps and text captions.
 - Ensure documents support a navigation view (as you would see in MS Word), to make it easier to jump to the sections appropriate for the viewer, especially in a time crunch.
 - o Provide paper copies of documentation and room cheat sheets.
 - Ensure stakeholders are using an organized process if working with local copies to not work with stale versions.

Functionality of BLS Website

- Problem Statement: Potential usability issues were identified with the BLS website for first-time users and after a new deployment.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - Ensure the BLS website is accessible with all standard URL combinations that an end user may type (for example, https://bls.gov).

 Ensure end users do not need to perform any special steps (for example, clear the browser cache) when BLS deploys new versions of its website.

Federal Oversight during Software Delivery

- Problem Statement: Secure Software Development Framework (SSDF) for DEWS Development and Deployment Process (which encompasses CM Process) is missing emphasis on a few mandates that can strengthen Federal IT oversight.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - o Include additional IT agile development requirements that include technical review and approval steps prior to the start of work, upon completion, and prior to production deployment.
 - Require NIST compliance (Secure Coding) and WCAG 2.2 compliance (section 508) in the document.
 - Require deployment document review and approval for all critical and major IT deployments.

Working from Remote Locations While Processing Releases

- Problem Statement: BLS conducts its release review and execution processes in a fully remote manner, usually with the related staff performing these activities from their respective telework/remote work locations. This is a significant change from pre COVID-19 practices and poses the following risks: 1) failures of non-business grade telecommunications (e.g., home networks, home internet service) introducing delays into release processes; and 2) failures of insufficient ongoing training and testing of redundancies in communication methods, hand-offs, and other considerations required to ensure rapid hand-off at or near release times.
- Corrective Actions Taken by BLS: None

Recommendations:

Establish minimum technology requirements for staff performing release review and execution processes remotely, such as minimum telecommunications bandwidth, use of headphones, verification that the connectivity is free from other interference, such as other individuals sharing that connectivity and adversely impacting performance, and prerelease validation steps that the connectivity is performing as required in preparation for release activities along with contingency plans.

Technological Management of Customer Service

- Problem Statement: Program offices operate in a decentralized manner with
 public inquiries entering through phone calls and emails via different phone
 numbers, email groups, and other methods of contact. BLS does have a Customer
 Inquiry System (CIS) in which staff are required to enter inquiries of defined
 significance to ensure awareness up to and including the Office of the
 Commissioner. However, there is no overall strategic management of customer
 inquiries and the ability to centrally search and automatically flag inquiries that may
 be early indicators of significant issues.
- Corrective Actions Taken by BLS: None

- Consider implementing a centralized Customer Relationship Management (CRM) capability using a tool such as Salesforce or ServiceNow in the long term and perhaps a ticketing system such as JIRA or JIRA Service Desk in the short- to mid-term.
- This capability should be configured to automatically ingest email inquiries sent to public information groups as well as responses. BLS staff should be required to log all inquiries that come in through other methods as well as a synopsis of the response provided. Automated escalation alerts should be configured for specific terms that indicate issues of significance.

IT Modernization and IT Investments

- Problem Statement: While there appeared to be some examples of Bureau-level decisions regarding IT investment, especially in response to COVID-19 and the Bureau's move to its new Headquarters, it is unclear whether the Office of the Commissioner has a full understanding of investments in IT modernization and enhancements across the BLS portfolio and has been briefed on risks to the portfolio. It is also unclear whether the Office of the Commissioner has a comprehensive plan to ensure IT investments are targeting the most important issues. For example, the agency's Office of Technology and Survey Processing stated that it has long had a proposal to modernize the public website and related IT infrastructure. It is not clear where this proposal fits in the context of other expenditures on enhancements and modernization that are occurring.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - Formalize and document internal IT investment management and decisionmaking practices, with a specific focus on determinations for investments in modernization and enhancements and related prioritization based on risk, importance, and need from a Bureau-level perspective.
 - These practices should include clear recommendations by the Office of Technology and Survey Processing with determinations and decisions by the Commissioner or Deputy Commissioner.

Technology Modernization Fund (TMF)

- Problem Statement: The \$14.3 million BLS DRAW Final TMF Proposal seems limited in scope for the magnitude and complexity of the BLS systems and processes.
- Corrective Actions Taken by BLS: BLS reached out to OCIO for input after receiving this feedback.
- Recommendations:

- Involve technical leads who are well versed in (or able to rapidly learn about)
 BLS systems and the latest technical stacks.
- Ensure quick but solid business process reengineering activities to identify process efficiencies. This activity could be included as an activity in the TMF proposal.
- Ensure technical analysis to outline all aspects of modernization beyond "one source of data" and "lift and shift to cloud" to establish transition and target architectures based on the latest future-proofed technical trends.
- Create an agile technical roadmap with specific quarterly and annual deliverables that can be used as part of the TMF proposal.
- Leverage OCIO support in creating the TMF proposal as much as possible.

IT Resources

- Problem Statement: The LABSTAT systems are highly complex and are around 25 years old. The existing IT staff may not be able to support LABSTAT system enhancements and simultaneously plan for IT modernization.
- Corrective Actions Taken by BLS: None

- Ensure IT teams have a healthy influx of technical talent who are adept at the latest technologies. Such an influx would also help the long-standing teams pivot towards the future as is needed with TMF and Expired Funds proposals.
- Create strategic and tactical plans for funding IT modernization efforts.
- Ensure vendor contracts are updated to include technical talent that is on top of the latest technological trends.

OCIO Technical Findings Following the Early Release Incident

- Problem Statement: BLS implemented some but not all of OCIO's technical findings following the early release incident. The roadmap and impediments to implementing the rest of the findings are unclear.
- Corrective Actions Taken by BLS: None
- Recommendations:
 - Ensure that KPI-like reporting mechanisms to internal BLS stakeholders (and external stakeholders as required) show roadmaps, quarterly or annual progress, and remedial steps undertaken.
 - Document decisions where the OCIO findings are determined to be not appropriate for implementation.

Modernization and Continuous Improvement of LABSTAT

- Problem Statement: The architecture, design, and components of the Bureau's public release system are rooted in methods reaching back 25 years or more. While aspects of modernization and design change have occurred over this period, the system does not incorporate modern-day technologies or design methods, and there is no apparent plan or commitment to address this concern. This has resulted in increased complexity and maintenance requirements for the system to perform its functions, lack of overall system resiliency by modern standards, and increased risk of future mission failure and reputational damage.
- Corrective Actions Taken by BLS: BLS developed and is currently beta-testing a
 modernized news release system that will be rolled out in the coming fiscal year. BLS
 also submitted an Expired Funds proposal to OCIO for LABSTAT phase 1 modernization.

Recommendations:

 Modernize the LABSTAT system using cloud native technologies and decommissioning physical data center components. This will improve the scalability, resiliency, and overall security of the system.

- Prioritize the modernization of the news release components and related infrastructure.
- Enable the simultaneous release-time publishing of data, available through API, data query, and data download. Enable the publishing of underlying data that do not meet statistical standards, but that may otherwise be provided to users as "unpublished data."