NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources





March 13, 2023

MEMORANDUM FOR: Laurie E. Locascio

Under Secretary of Commerce for Standards and Technology and

Director, National Institute of Standards and Technology

FROM: Richard Bachman

Assistant Inspector General for Audit and Evaluation

SUBJECT: NIST Must Improve Monitoring of MEP to Prevent Waste of

Financial Resources

Final Report No. OIG-23-014-I

Attached for your review is our final report on our evaluation of the National Institute of Standards and Technology's (NIST's) Hollings Manufacturing Extension Partnership (MEP). Our evaluation objective was to determine the adequacy of NIST's oversight of MEP to ensure requirements are met.

Overall, we found that NIST's inadequate oversight of MEP has led to inefficient use of financial resources and concerns that recipients did not comply with award terms. Specifically, we found the following:

- I. Internal control deficiencies may be hindering MEP from achieving a greater economic impact.
 - A. NIST does not require MEP Centers to use unexpended program income throughout the award.
 - B. NIST did not adequately review executive compensation for reasonableness.
- II. NIST did not provide adequate oversight of conflicts of interest.

On December 20, 2022, we received NIST's response to our draft report. NIST disagreed with each of our findings and provided technical comments. We addressed NIST's technical comments in the Summary of Agency Response and OIG Comments section of this report. NIST also generally disagreed with our recommendations, but described actions that it plans to take to address the recommendations. NIST also stated it will develop and submit a corrective action plan. We look forward to receiving NIST's action plan. NIST's formal response is included within the final report as appendix C.

Pursuant to Department Administrative Order 213-5, please submit to us an action plan that addresses the recommendations in this report within 60 calendar days. This final report will be posted on OIG's website pursuant to sections 4 and 8M of the Inspector General Act of 1978, as amended (recodified at 5 U.S.C. §§ 404 & 420).

Pursuant to Pub. L. No. 117-263, Section 5274, non-governmental organizations and business entities specifically identified in this report have the opportunity to submit a written response for the purpose of clarifying or providing additional context to any specific reference. Any response must be submitted to Patricia McBarnette, Division Director, at PMcBarnette@oig.doc.gov and OAE_Projecttracking@oig.doc.gov within 30 days of the report's publication date. The response will be posted on our public website. If the response contains any classified or other non-public information, those portions should be identified as needing redaction in the response and a legal basis for the proposed redaction should be provided.

We appreciate the cooperation and courtesies extended to us by your staff during our evaluation. If you have any questions or concerns about this report, please contact me at (202) 793-3344 or Patricia McBarnette, Division Director, at (202) 793-3316.

Attachment

cc: Pravina Raghavan, Director of the Hollings Manufacturing Extension Partnership Program, NIST

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Report in Brief

March 13, 2023

Background

The U.S. Department of Commerce (the Department) National Institute of Standards and Technology's (NIST's) Hollings Manufacturing Extension Partnership (MEP) is a national network whose mission is to enhance the productivity and technological performance of U.S. manufacturing. According to NIST, there are currently 51 MEP Centers (Centers) in all 50 states and Puerto Rico. Centers assist manufacturers with improving production processes, upgrading technological capabilities, and facilitating product innovation.

NIST awards federal financial assistance in the form of cooperative agreements to state, university, and nonprofit organizations to operate Centers. Each MEP award pays for up to 50 percent of the Center's total project costs, while the recipient is responsible for the rest. Organizations operate Centers for up to 5 years, with the possibility of NIST noncompetitively renewing the agreement for up to an additional 5 years. However, renewal funding depends, in part, upon successful reviews and evaluations of each Center's operations.

Why We Did This Review

Our evaluation objective was to determine the adequacy of NIST's oversight of MEP to ensure requirements are met.

NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY

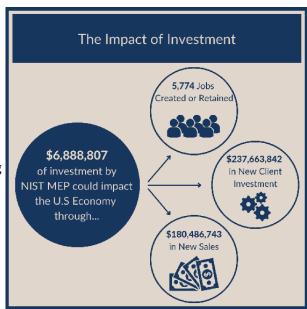
NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources

OIG-23-014-1

WE FOUND that internal control deficiencies may be hindering MEP from achieving a greater economic impact. NIST does not require Centers to use unexpended program income (UPI) throughout the award, and NIST did not adequately review executive compensation for reasonableness. We also found that NIST did not

provide adequate oversight of conflicts of interest.

Consequently, NIST missed opportunities to ensure financial resources were used to assist U.S. manufacturers. We identified nearly \$6.9 million in total funds that could be put to better use and could have resulted in the U.S. manufacturing sector creating or retaining jobs, increasing investments, and generating new sales. Annual funding for MEP is authorized to see a nearly fourfold increase by fiscal year 2027. Thus, it is important that NIST ensures sound oversight of MEP and its financial resources.



Source: OIG review of UPI, executive compensation, and the Fiscal Year 2021 NIST MEP economic impact data

WE RECOMMEND that NIST

- I. Change policy to ensure (I) UPI is strategically reinvested into MEP and (2) if UPI is not reinvested into MEP, withhold federal funds until UPI is used to pay down allowable project expenses.
- 2. Conduct a thorough review of executive compensation for reasonableness as required by Departmental and NIST criteria.
- 3. Establish policy limits on executive compensation for MEP, including restrictions on Center and subrecipient salaries.
- 4. Establish procedures to (I) ensure recipients disclose in writing any potential conflict of interest to NIST consistent with award terms and (2) promptly review any such disclosures.
- 5. Review all disclosed related party activities identified by us and previously reported to NIST and take any action deemed appropriate.

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Cover: Herbert C. Hoover Building main entrance at 14th Street Northwest in Washington, DC. Completed in 1932, the building is named after the former Secretary of Commerce and 31st President of the United States.

Introduction

The U.S. Department of Commerce (the Department) National Institute of Standards and Technology's (NIST's) Hollings Manufacturing Extension Partnership (MEP) is a national network established by the Omnibus Trade and Competitiveness Act of 1988. MEP's mission is to enhance the productivity and technological performance of U.S. manufacturing. According to NIST, there are currently 51 MEP Centers (Centers) in all 50 states and Puerto Rico with more than 1,450 advisors and experts at approximately 430 MEP service locations, providing any U.S. manufacturer with access to resources. Centers assist manufacturers with improving production processes, upgrading technological capabilities, and facilitating product innovation.²

NIST makes federal financial assistance awards in the form of cooperative agreements to state, university, and nonprofit organizations to operate Centers. Each MEP award pays for up to 50 percent of the Center's total project costs while the recipient maintains responsibility for the remaining portion (called nonfederal cost share). Under award terms, organizations operate Centers for a period of up to 5 years with the possibility of NIST renewing the cooperative agreement at the end of the award period and on a noncompetitive basis for an additional award period of up to 5 years. However, renewal funding for each organization is contingent, in part, upon successful reviews and evaluations of the Center's operations.

As shown in figure 1, federal funding for MEP has steadily increased over recent years to \$158 million in fiscal year (FY) 2022 and is authorized to surge over the next 5 years to \$550 million in FY 2027. Federal investment coupled with Centers' nonfederal cost share led to NIST reporting that MEP created or retained 125,746 jobs, \$1.5 billion in cost savings, \$14.4 billion in new and retained sales, and \$5.2 billion in new client investments in FY 2021.

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¹ Pub. L. No. 100-418, § 5121, 102 Stat. 1107, 1433 (1988).

² National Institute of Standards and Technology Manufacturing Extension Partnership. *How the Network Helps* [online]. www.nist.gov/mep/mep-national-network/how-network-helps (accessed February 27, 2023).

³ See 15 U.S.C. § 278k(e)(2). Sources of nonfederal cost share include contributing cash and providing in-kind (noncash) contributions.

⁴ Research and Development, Competition, and Innovation Act, Pub. L. No. 117-167, § 10211, 136 Stat. 1366, 1472-74 (2022) (authorizing funds to be appropriated).

⁵ NIST MEP, January 2022. FY 2021 NIST MEP Economic Impact. Gaithersburg, MD: NIST, I.

\$600 \$550 \$550 \$550 \$500 \$400 \$300 \$275.3 \$300 \$200 \$158 \$150 \$146 \$140 \$140 \$128 \$100 \$0 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 Historical Funding by Fiscal Year Projected Funding by Fiscal Year

Figure 1. Historical and Projected Federal Funding for MEP, Fiscal Years 2017–2027 (in millions)

Source: Office of Inspector General (OIG) analysis of NIST federal funding data for FYs 2017–2027

Objective, Findings, and Recommendations

The objective of our evaluation was to determine the adequacy of NIST's oversight of MEP to ensure requirements are met. Appendix A details the scope and methodology of our evaluation.

We found that NIST's inadequate oversight of MEP has led to inefficient use of financial resources and concerns that recipients did not comply with key award terms. Specifically, we found NIST did not

- require Centers to use unexpended program income (UPI) during the award period and allowed Centers to retain substantial amounts of UPI from federal financial assistance awards;
- review executive salaries for reasonableness, resulting in Center executives receiving considerable salaries in excess of limits used by other federal agencies; and
- address potential conflicts of interest amongst recipients. Thus, NIST cannot reasonably
 assure conflicts of interest are properly managed—which could result in fraud, waste,
 and abuse.

Consequently, NIST missed opportunities to ensure financial resources were used to further its goal of improving productivity and performance of U.S. manufacturers, strengthening their global competitiveness, and creating and retaining jobs. As shown in figure 1, annual funding for MEP is authorized to see a nearly fourfold increase by FY 2027. Thus, it is important that NIST ensures sound oversight of MEP and its financial resources.

Internal Control Deficiencies May Be Hindering MEP From Achieving a Greater Economic Impact

Strong internal controls not only ensure that federal program objectives are met, but also ensure the effective and efficient use of financial resources. However, we found NIST's oversight of the MEP program did not (I) require Centers to use UPI during the award period nor (2) adequately review proposed Center executive compensation expenses for reasonableness. We found that some Centers retained substantial amounts of UPI from their cooperative agreements and executives received salaries well above federal limits, resulting in about \$6.9 million in total funds that could be put to better use (see figure 2 and appendix B).

Based on NIST MEP's own 2021 impact report, we determined if the \$6.9 million was reinvested to further MEP's mission, it could have resulted in the U.S. manufacturing sector creating or retaining 5,774 jobs, increasing investments by \$237,663,842, and generating \$180,486,743 in new sales—all during a time when the economy was trying to overcome challenges stemming from the COVID-19 pandemic. However, instead of efficiently using financial resources to further MEP, NIST's inadequate oversight and noncompliance with applicable criteria allowed Centers to benefit financially at the expense of the U.S. manufacturing industry and the nation's economy.

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Figure 2. Potential Economic Impact of Funds Put to Better Use on the U.S. Economy

How much	\$6,888,807 could have.		
impact can	Created or Retained	Increased	Generated
\$6,888,807 of investment by NIST MEP have on the U.S. economy?	5,774 Jobs	\$237,663,842 In New Client Investment	\$180,486,743 In New Sales

Source: OIG review of UPI, executive compensation, and the FY 2021 NIST MEP economic impact data Notes: (1) According to NIST, for every \$1,193 of federal investment in FY 2021, the MEP National Network created or retained one manufacturing job. During this same time, for every one dollar of federal investment, the Network generated \$34.50 in new client investment and \$26.20 in new sales growth. See NIST MEP, FY 2021 Economic Impact, 2. Our potential economic impact is based on the same benefit rate for each dollar of federal investment reported by NIST and leveraged through nonfederal cost share. (2) Our evaluation was limited in scope and we did not verify the accuracy of the economic impact data reported by NIST.

A. NIST does not require Centers to use UPI throughout the award

Centers provide services to local businesses to enhance the productivity and technological performance of U.S. manufacturing. In exchange for their services, Centers collect fees from their clients. The collected fees are referred to as program income and used to meet Centers' nonfederal portion of the MEP award annually by expending those funds on allowable costs to further program objectives. UPI is program income in excess of what is required to meet the nonfederal portion of the annual operating budget and not expended during the year. Centers must receive approval to carry forward any UPI into the next fiscal year's budget and are only expected to work with NIST to strategically reinvest UPI into the MEP program. Any residual UPI at the end of the award is divided based on the final cost share ratio whereby a portion is returned to the federal government and the remainder is retained by the Center as an unrestricted asset. Further, NIST has the discretion to withhold funding to ensure unexpended funds, such as UPI, are fully utilized throughout the award's period of performance.

⁶ Program income is defined as gross income earned by a recipient that is directly generated by a supported activity or earned as a result of the federal award during the period of performance. See 2 C.F.R. § 200.1.

⁷ NIST, August 2017. MEP General Terms and Conditions. Gaithersburg, MD: NIST, 12.H.3.

⁸ Final cost share ratios are determined by percentages based on federal award funds and nonfederal cost share contributions throughout the award. Hence, if the final cost share ratio at the end of a Center's multi-year award is 50 percent federal and 50 percent nonfederal cost share, and the Center has \$100,000 in UPI remaining at the end of its award, the Center is required to return \$50,000 to the federal government (\$100,000 total UPI X 50 percent federal cost share percentage) and is permitted to retain \$50,000 (\$100,000 total UPI X 50 percent nonfederal cost share) as an unrestricted asset.

Federal standards for internal control require management to design control activities, such as policies, to achieve objectives. However, instead of ensuring recipients use UPI to further MEP, NIST policies allow Centers to maintain UPI throughout the award period—including in the final year when carryforwards are no longer possible. As a result, Centers then benefit financially at the end of the federal award by retaining a significant portion of UPI as an unrestricted asset.

For example, when NIST approved the California Center to carry over UPI into the fifth and final award year, the Center prepared a revised budget that incorporated the carryforward. The same revised budget also projected the Center would end the award with more than \$5.1 million in UPI. Instead of taking any meaningful action to ensure the UPI was reinvested into MEP, NIST communicated with the Center regarding its plans to spend down the UPI but accepted the Center may end the award with \$5.1 million in UPI as this amount was less than 50 percent of the annual federally funded amount. The Center ultimately ended the award with nearly \$4.2 million in UPI. As a result, because NIST's policy allows Centers to retain a portion of UPI, the recipient retained more than \$2.1 million as an unrestricted asset with no accountability of the funds to MEP or the federal government.

In a second example, NIST approved the Illinois Center to carry over nearly \$2.8 million in UPI into the fifth and final award year. The Center submitted a revised budget that incorporated the carryforward but also projected ending the award with \$2.3 million in UPI. Again, NIST did not ensure the UPI was reinvested into MEP. The Center ended the award with nearly \$3.5 million in UPI, of which it retained \$1.8 million as an unrestricted asset with no accountability of the funds to MEP or NIST.

In neither instance with the California or Illinois Center did NIST exercise its discretion to withhold federal funds, despite the Centers projecting significant UPI balances at the end of the award period. NIST asserted that no action was taken because both Centers' UPI was less than 50 percent of their annual federal funded amounts and was therefore acceptable. However, we found the Illinois Center concluded its award with UPI in excess of 50 percent of the annual federally funded amount.

As shown in table I, in total, we found nine Centers reported a combined \$10.3 million in UPI at the end of their respective awards. ¹² Of that amount, more than \$5.4 million was retained by Centers to spend at their discretion with no accountability of the funds to NIST—meaning Centers could spend their retained portions of UPI on any type of expenses, including those that would otherwise be unallowable under federal awards. In contrast, had NIST established policies to ensure UPI was reinvested into MEP, the

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⁹ U.S. Government Accountability Office, September 2014. *Standards for Internal Control in the Federal Government*, GAO-14-704G. Washington, DC: GAO, 10.02.

¹⁰ The California Center's federally funded amount for the final year of the award was \$15,100,000.

¹¹ The Illinois Center's federally funded amount for the final year of the award was \$6,042,666.

¹² We reviewed all MEP base awards with performance end dates between calendar years 2017–2021. As of September 9, 2022, NIST was still working with several Centers to determine whether their awards concluded with UPI. Thus, the total amount of UPI for awards ending during this period could be higher.

expenditures would not only be subject to federal criteria regarding cost allowability, but would also be used to further the MEP mission through creating/retaining jobs, generating new sales growth, and client investments (see figure 2 and appendix B).

Table I. Summary of Centers Sampled with UPI

Center Name	Center Location	Award Period End Date (MM/YYYY)	Final UPI Amount	Portion of UPI Returned to Federal Government	Portion of UPI Retained by Center
California Manufacturing Technology Consulting	Torrance, California	09/2021	\$4,193,761.00	\$2,062,222.73	\$2,131,538.27
Manufacturer's Edge	Denver, Colorado	06/2020	\$362,011.00	\$181,005.50	\$181,005.50
Illinois Manufacturing Excellence Center	Peoria, Illinois	12/2020	\$3,464,582.51	\$1,687,955.80	\$1,776,626.71
Center for Industrial Research and Service	Ames, Iowa	03/2017	\$194,773.53	\$64,904.81	\$129,868.72
Montana Manufacturing Extension Center	Bozeman, Montana	09/2021	\$79,552.10	\$37,351.10	\$42,201.00
New Hampshire Manufacturing Extension Partnership	Concord, New Hampshire	06/2020	\$387,796.20	\$170,703.45	\$217,092.75
New Mexico Manufacturing Extension Partnership	Albuquerque, New Mexico	03/2017	\$874,809.55	\$287,909.86	\$586,899.69
Wisconsin Center for Manufacturing & Productivity	Madison, Wisconsin	12/2020	\$632,512.00	\$343,628.69	\$288,883.31
Manufacturing Works	Laramie, Wyoming	03/2017	\$111,692.32	\$31,545.40	\$80,146.92
Total			\$10,301,490.21	\$4,867,227.33	\$5,434,262.88

Source: OIG review of UPI using NIST MEP official award files

B. NIST did not adequately review executive compensation costs for reasonableness

Federal criteria emphasize the importance of ensuring costs are reasonable—particularly when financial assistance award recipients are predominantly federally funded. ¹³ Furthermore, Departmental criteria require NIST to review Centers' budgets to determine whether proposed costs are reasonable, ¹⁴ and NIST's procedures instruct staff to review a Center's proposed personnel costs by analyzing individual salaries based on rates for similar positions. ¹⁵ However, of the 12 Centers reviewed, we found no evidence of NIST assessing individual salaries. Rather, NIST's review of personnel

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¹³ See 2 C.F.R. § 200.404.

¹⁴ U.S. Department of Commerce, October 24, 2016. *DOC Grants and Cooperative Agreements Manual*. Washington, DC: DOC; Chapter 4, F.8 and H.9. This guidance is consistent in the April 20, 2021, revision to the *Manual*.

¹⁵ NIST, April 26, 2018. NIST Grants Management Division Award Action Receipt, Clearance and Execution, NIST-GMD-16-04. Gaithersburg, MD: NIST, 8.6.3.

costs was limited to brief statements referencing total personnel costs, the number of proposed staff and, in some cases, explanations for annual salary increases—but not individual salary amounts.

Because NIST has not established any standards or limits for executive compensation, we used as a benchmark of reasonableness executive compensation limits on financial assistance awards from the U.S. Department of Health and Human Services (HHS), U.S. Department of Justice (DOJ), ¹⁶ and, notably, the U.S. Small Business Administration (SBA), whose financial assistance awards foster economic progress by supporting small business growth and development. ¹⁷

We identified 12 Centers that compensated one or more of their executives with salaries in excess of limits used by these federal agencies. As shown in table 2, from years 2017–2020, executive compensation from these 12 Centers exceeded the limits set by SBA and HHS by \$3,600,682 and limits set by DOJ by \$1,454,544. Notably, during 2020, the California Center paid salaries to six executives above the compensation limits we identified, including more than \$400,000 to one individual.

Table 2. Summary of Center Executive Compensation Costs in Excess of Limits Set by Federal Agencies

Year	In Excess of SBA/HHS Limits ^a	In Excess of DOJ Limits ^b
2017	\$892,631	\$403,391
2018	\$878,967	\$364,721
2019	\$1,048,331	\$415,208
2020	\$780,753	\$271,224
Total	\$3,600,682	\$1,454,544

Source: OIG review of Center executive compensation costs using NIST MEP official award files

We also found instances of subrecipients, heavily dependent on NIST for funding, paying executives' salaries above the limits we identified. For example, we found one

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^a The SBA and HHS both limit compensation for financial assistance awardees to that of a Level II federal executive: \$187,000 in 2017; \$189,600 in 2018; \$192,300 in 2019; and \$197,300 in 2020.

^b The DOJ limits compensation for financial assistance awardees receiving greater than \$250,000 in awards to 110 percent of a Level I federal executive: \$228,580 in 2017; \$231,770 in 2018; \$234,960 in 2019; and \$241,120 in 2020.

¹⁶ The DOJ may waive, on an individual basis, the limit on compensation allowable under an award based on the justification provided by the applicant.

¹⁷ Compensation limits implemented by HHS are mandated by law. See, e.g., Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, § 202, 134 Stat. 1182, 1589 (2020). SBA terms and conditions incorporate similar restrictions. U.S. Small Business Administration, December 2021. SBA Award Standard Terms. Washington, DC: SBA, 3. However, no laws preclude NIST from implementing compensation limits.

subrecipient of the Pennsylvania Center paid two executives in excess of the identified limits during FY 2019, including a salary to one individual for more than \$288,000—raising concerns that these costs were charged largely to the NIST award.

Personnel costs for Centers generally constitute a substantial portion of total award funds. Therefore, it is imperative that NIST ensures all personnel costs, including executive compensation, are reasonable and commensurate with limits imposed by other federal agencies. Keeping administrative and overhead costs reasonable will allow more funds to be invested into MEP and, in turn, the nation's manufacturing sector (see figure 2 and appendix B).

Recommendations

We recommend that the Under Secretary of Commerce for Standards and Technology and Director of NIST do the following:

- 1. Change policy to ensure (1) UPI is strategically reinvested into MEP and (2) if UPI is not reinvested into MEP, withhold federal funds until UPI is used to pay down allowable project expenses.
- 2. Conduct a thorough review of executive compensation for reasonableness as required by Departmental and NIST criteria.
- 3. Establish policy limits on executive compensation for MEP, including restrictions on Center and subrecipient salaries.

II. NIST Did Not Provide Adequate Oversight of Conflicts of Interest

NIST has a responsibility to ensure recipients comply with award conditions and take appropriate action when there is noncompliance. However, NIST has no procedures to ensure Centers disclose potential conflicts of interest to NIST. Instead, it places the responsibility of reporting conflicts of interests solely with the Center, leaving NIST unaware of these situations. We reviewed the audited annual financial reports for 12 Centers where the independent auditor identified the existence of disclosed related party activities. Specifically, board members of Centers—who were either owners or executives of companies—used those companies to provide services to or receive services from the same Centers on whose boards they served. Of the 12 instances identified, NIST took no action to address the related party activities for potential conflicts of interest concerning board members. NIST indicated it was not aware of the activities because the Centers did not disclose any potential conflicts of interest despite award terms requiring them to.²⁰

¹⁸ DOC Manual, Chapter 4, F.10. This guidance is consistent in the April 20, 2021, revision to the Manual.

¹⁹ Federal award recipients that expend \$750,000 or more in federal awards in an FY are required to undergo an audit on their financial statements and federal award expenditures conducted by an independent party, known as a single audit. These audits can identify deficiencies in the award recipient's compliance with laws, regulations, contracts, or grant agreements and in its financial management and internal control systems.

²⁰ DOC, December 26, 2014. Department of Commerce Financial Assistance Standard Terms and Conditions. Washington, DC: DOC, Section J.01.a. As of November 12, 2020, this requirement is in Section F.01.a. MEP General Terms and Conditions require recipients to comply with DOC Terms and Conditions (see Section 2).

However, we were able to identify these potential conflicts of interest with publicly available financial audit reports that NIST is required to review.²¹

The related party activities disclosed in the financial audit reports are a significant concern—especially since award terms expressly prohibit board members from being vendors or providing contractual services to the Center. 22 For example, a financial audit report on the Virginia Center stated certain board members "are either co-owners or executives at companies with which [the Center] engages for consulting services."23

Board members are responsible for overseeing Center operations; therefore, it is imperative that NIST ensure board members refrain from activities that call into question their objectivity or provide a personal financial benefit. NIST also has a stewardship responsibility over federal financial assistance award funds. By not addressing related party activities, NIST cannot provide reasonable assurance that Centers complied with award terms and that award funds linked to these activities were used appropriately. This increases the risk that real or apparent conflicts of interest may be occurring and leading to fraud, waste, and abuse.

Recommendations

We recommend that the Under Secretary of Commerce for Standards and Technology and Director of NIST do the following:

- 4. Establish procedures to (1) ensure recipients disclose in writing any potential conflict of interest to NIST consistent with award terms and (2) promptly review any such disclosures.
- 5. Review all disclosed related party activities identified by us and previously reported to NIST and take any action deemed appropriate.

²¹ See 2 C.F.R. § 200.513(c).

²² NIST, 2017. Oversight Board Standards. Gaithersburg, MD: NIST, 7. This guidance is consistent in the 2018 revision to the Standards. Similarly, the 2021 revision states an individual representing an organization receiving NIST MEP federal or nonfederal award funds either from the Center or Center subrecipient is not eligible for board membership.

²³ The Joachim Group, CPAs & Consultants, LLC, November 19, 2021. A.L. Philpott Manufacturing Extension Partnership, Financial Statements, June 30, 2021. Roanoke, VA: The Joachim Group, 25.

Summary of Agency Response and OIG Comments

On December 20, 2022, we received NIST's response to our draft report. NIST disagreed with each of our findings and provided technical comments. However, NIST's technical comments were inaccurate and misleading, as described more fully below. NIST also generally disagreed with our recommendations but added it understands our concerns and described actions that it plans to take to address the recommendations. NIST also stated it will develop and submit a corrective action plan. We look forward to receiving NIST's action plan. We have summarized NIST's response below. Appendix C of this report includes NIST's complete response.

Overall, we do not believe that the MEP Centers should maintain UPI as an unrestricted asset nor pay executive compensation that is excessive or unreasonable. We also do not believe Centers should engage in activities that raise concerns about conflicts of interest. This seems particularly inappropriate and a wasteful spending of taxpayer funds when federal budgets at times have proposed the elimination of MEP. To provide clarity and perspective, we have also responded to NIST's technical comments below even though its comments do not impact the facts supporting our conclusions and recommendations.

Separately, NIST requested we redact the names of Centers in our report. To that end, NIST's response does not refer to Centers by their name or location. NIST's request did not cite any legal authority for redaction; therefore, we declined NIST's request.

I. UPI Usage (Finding I.A)

NIST Response

NIST does not agree with our finding and states its treatment and disposition of UPI comply with federal regulations.

OIG Comments

The objective of MEP is to enhance the productivity and technological performance of U.S. manufacturing. However, NIST has developed unsound fiscal policies for treating and disposing of UPI. NIST's decisions have allowed recipients operating Centers to retain millions of dollars in UPI generated through federal financial assistance awards at the expense of U.S. manufacturers—the same manufacturers Centers are intended to serve. NIST policies explicitly allow Centers to retain these funds as unrestricted assets. There is no accountability of the funds to MEP, the federal government, or the public, meaning Centers can spend the funds on any type of expenses—including those that would otherwise be unallowable under federal awards. As discussed in our report, NIST does not ensure UPI is used to further its goal of helping manufacturers. Furthermore, NIST personnel expressed concerns directly to OIG stating they disagreed with NIST's handling of UPI. We also obtained internal correspondence between NIST personnel suggesting its treatment of UPI should be reexamined. We believe these concerns from NIST personnel lend additional credibility to our finding and

recommendation. The results of our review and recommendation for finding I.A. remain unchanged. We reiterate NIST's treatment and disposition of UPI wastes federal financial resources.

NIST Response

While NIST states that our recommendation to change policy to ensure UPI is strategically reinvested into MEP is incorrect, it intends to review its current policies.

OIG Comments

We disagree that our recommendation is incorrect. NIST policy states there is an expectation—not a requirement—that a Center will work with NIST to reinvest UPI into the program. Thus, instead of requiring that UPI be used to accomplish MEP's public purpose of assisting U.S. manufacturers, NIST policies allow Centers to retain millions in UPI as an unrestricted asset without accountability of the funds to MEP or the federal government. This directly contradicts NIST's assertion that it ensures UPI is used for MEP. As a result of NIST policies, Centers have no obligation to spend their retained portions of UPI on MEP. This is clearly illustrated through the California Center's most recent audited annual financial report, which states that 10 months after the first 5-year award period ended, the Center reclassified its entire retained portion of \$2,131,538 in UPI—representing 14 percent of the Center's year 5 federal funding—"as net assets without donor restriction." This means these assets will be "used at the discretion of the [California Center's] management and the Board of Directors"25—not NIST's. Thus, our recommendation remains unchanged. NIST should ensure UPI is strategically invested into MEP during the award period and if the Center is unable to do so, NIST should withhold federal funding until UPI is spent down.

NIST Response

NIST disagrees that Centers benefit financially from MEP, considering that Centers must share at least 50 percent of the cost that contributes to UPI generation.

OIG Comments

NIST's response that Centers must contribute to the generation of UPI is misleading. As discussed in our report, Centers generate program income by expending federal funds awarded by NIST and primarily use actual program income to meet their nonfederal cost share. Therefore, generation of any program income depends heavily on federal funding from NIST. In addition, NIST offered and granted nonfederal cost share relief to Centers during fiscal years 2020, 2021, and 2022, allowing Centers to reduce their nonfederal cost share to less than 50 percent—and, in turn, Centers' overall contribution towards total MEP project costs. 26 Further,

²⁶ As of January 17, 2023, NIST is offering nonfederal cost share relief to Centers during fiscal year 2023.

²⁴ BDO USA, LLP, November 14, 2022. California Manufacturing Technology Consulting, Financial Statements, Schedule of Expenditures of Federal Awards and Reports Required by Government Auditing Standards and the Uniform Guidance, Years Ended September 30, 2021 and 2020. Los Angeles, CA: BDO, 11.

²⁵ Ibid, 21.

as discussed in our report, NIST did not exercise its discretion to withhold federal funds to ensure UPI was used towards MEP during the award. Instead, NIST still allowed Centers to charge federal funds for project expenses and retain UPI during year 5 until the award ended. To illustrate, the California Center financially benefited at the end of the award by retaining more than \$2.1 million in UPI. Similarly, the Illinois Center gained financially at the end of its award by retaining \$1.8 million in UPI. Both Centers retained these funds as unrestricted assets—free to use as they like after the award term. We reaffirm Centers are benefitting financially from MEP.

NIST Response

NIST states it has established processes to monitor all program income and provides rigorous oversight of UPI. Specifically, NIST states it closely monitors UPI to ensure Centers use it for MEP by reviewing budgetary documentation, working with Centers to develop spend down plans, and conducting annual reviews of Centers.

OIG Comments

We do not agree with NIST's assertion that it closely monitors UPI to ensure Centers use it for MEP. NIST's review of budgetary documents, development of spend down plans with Centers, and annual reviews of Centers are ineffective processes for ensuring UPI is used to further MEP. As discussed in our report, the California Center prepared a revised budget projecting it would end its 5-year award with more than \$5.1 million in UPI. NIST communicated with the Center regarding its spend-down plan but, rather than ensuring the UPI was reinvested into MEP to assist U.S. manufacturers, NIST considered it acceptable for the Center to end the award with \$5.1 million in UPI. In addition, the California Center's Year 5 annual review report prepared by NIST personnel indicates that NIST failed to provide rigorous oversight of UPI throughout the award nor ensure UPI was used to further MEP. The report states, "The UPI increased each year which is an indicator that the funds were not used to expand the program." Finally, NIST did not provide any evidence to suggest that it sufficiently monitored UPI during the award period.

NIST Response

NIST further states Centers have a contractual agreement to serve a second 5-year term after the first (for a total of 10 years). Thus, UPI retained at the end of the first 5-year award becomes an unrestricted asset that is typically used for MEP during its second 5-year award, which NIST states it verifies through annual reviews, audited annual financial reports, and Internal Revenue Service (IRS) tax returns. NIST also states all our examples in the report show UPI disposition at year 5 and assume the Center did not operate in year 6.

OIG Comments

NIST incorrectly states Centers have a contractual agreement to carry out a second 5-year award and will use retained UPI for MEP during years 6 through 10 of the overall award period. As confirmed by the Department's Office of General Counsel, there is no legal obligation for Centers to accept a second 5-year award. This increases the risk that Centers could retain

millions in UPI at the end of their first 5-year award and then cease their partnerships with NIST. Next, although all our examples show UPI disposition at the final year of the award, we do not assume the Centers were not in operation in year 6. However, whether the Centers are starting year 6 of the award is irrelevant. NIST policies do not require Centers to use retained UPI during their second 5-year award. On the contrary, NIST policies explicitly state Centers retain UPI as an unrestricted asset. Thus, Centers have no obligation to use these funds for MEP. Further, NIST provided no evidence to support its assertion that Centers use their retained portions of UPI for MEP during their second 5-year awards. Instead, NIST personnel acknowledged it cannot track Centers' retained portions of UPI after they become unrestricted assets. Moreover, audited annual financial reports and nonprofit filings with the IRS do not provide visibility into how a Center uses its unrestricted assets. Again, per NIST policies, Centers are not accountable to MEP, federal government, or the public as to how they spend their retained portions of UPI. The Centers are free to spend the funds at their discretion, including on expenses unrelated to MEP or unallowable under the federal guidelines.

NIST Response

NIST stated Centers are also required to request and receive approval to carry forward UPI into a subsequent operating year.

OIG Comments

NIST's statement that Centers are required to request and receive approval to carry forward UPI into a subsequent operating year does not apply during year 5 of an award. NIST's renewal guidance to Centers explicitly states UPI is not eligible for carryover into the new award, meaning Centers cannot carry forward UPI from year 5 into year 6. Thus, any UPI remaining at the end of year 5 is divided between the federal government and the Center. NIST policies allow the Center to retain its portion of UPI as an unrestricted asset with no accountability of the funds to MEP, federal government, or the public.

NIST Response

According to NIST, Centers depend on the UPI retained at the end of the first 5-year award to continue operations in year 6, and zeroing out UPI by year 5 would lead to Center closures and an interruption of services. NIST also states the UPI funds that are returned to a Center are not available for use until year 7 of the award.

OIG Comments

NIST's statement that Centers depend on their retained portion of UPI to continue operations in year 6 directly contradicts its statement that Centers cannot use these returned funds until year 7. These statements are also inaccurate. First, UPI is not returned to the Centers. Rather, Centers retain UPI throughout the award and return a portion to the federal government at the end of the award. Second, NIST's statement that Centers cannot use their retained portion of UPI until year 7 is unsupported. As illustrated above, the California Center had complete access to and control of more than \$2.1 million in UPI during year 6. Third, many Centers do not end their awards with UPI and continue to provide services entering year 6. Thus, NIST's

statement that zeroing out UPI by year 5 would lead to Center closures and an interruption of services is unsupported.

2. Inadequate Review of Executive Compensation (Finding I.B)

NIST Response

NIST did not agree with our finding and recommendations regarding executive compensation. NIST stated that it reviews and closely monitors compensation and Centers must offer competitive salaries to attract and retain a skilled workforce to assist manufacturers. NIST also stated that Centers' board members are involved in determining and approving appropriate compensation for key personnel, including Center directors. Finally, NIST stated that MEP's authorizing statute does not mandate salary caps and its program differs from those at HHS, DOJ, and SBA as they are grant-only programs. NIST stated it will conduct a comparative study to ensure salaries are fair and align with other federal small business economic development programs, including SBA loan programs.

OIG Comments

We do not agree with NIST's assertion that it reviews and closely monitors compensation. NIST's current review and monitoring practices are insufficient to determine reasonableness of Center personnel salaries, including executive compensation. As our report details, NIST could not provide any evidence that MEP assessed individual salaries of Center personnel for reasonableness. Further, NIST provided no evidence to demonstrate salaries paid to Center executives were competitive and necessary to attract and retain a skilled workforce. In fact, NIST stated it will only now, after issuance of our draft report, conduct a comparative study on salaries. NIST makes no reference to any prior study on salaries, which calls into question NIST's assertion that it reviews executive compensation for reasonableness.

NIST's assertion that Center board members are involved in determining and approving compensation for key personnel is irrelevant, as NIST—not Center board members—is required by Departmental and NIST policy to review compensation for reasonableness. Thus, NIST should not depend on Center board members to determine if executive compensation is reasonable. Further, several executives with salaries above the limits we identified are also board members for their respective Centers. Consequently, their potential involvement in determining and approving their own salaries may be inappropriate, as it raises questions about their objectivity and additional concerns about the reasonableness of their salaries.

Finally, NIST is incorrect—HHS, DOJ, and SBA all operate programs through cooperative agreements, as well as grants, and both forms of financial assistance awards are subject to the salary limits identified in our report. In addition, NIST's examples of similar economic development programs with public-private partnerships are misleading—NIST includes several examples of loan programs that are not subject to the same federal requirements regarding cost reasonableness. Thus, any study by NIST comparing MEP to loan programs may have skewed results. Further, NIST personnel we spoke with stated there should be compensation limits in place for MEP.

As we stated in our report, no laws preclude NIST from implementing compensation limits. The results of our review and recommendations for finding I.B. remain unchanged.

3. Inadequate Oversight of Conflicts of Interest (Finding II)

NIST Response

NIST did not agree with our finding and stated that its Centers have a responsibility to disclose potential conflicts of interest to NIST. NIST referenced the federal criteria and certifications within the System for Award Management (SAM.gov) regarding such disclosures. To prevent waste and identify risks, NIST asserted that it reviews audited annual financial reports and ensures corrective action plans are in place for any findings. However, NIST stated it intends to review its current policy and all disclosed related party activities.

OIG Comments

As stated in our report, we agree Centers have a responsibility to disclose any potential conflicts of interest to NIST. However, NIST cannot rely solely on self-disclosures made by Centers. NIST also has a responsibility to ensure recipients comply with award conditions and take appropriate action when there is noncompliance. Yet NIST has no procedures in place, nor has it provided any evidence of steps taken to ensure recipients disclose in writing any potential conflict of interest. As discussed in our report, NIST was unaware of the dozen instances of Center-related party activities we identified through audited annual financial reports—demonstrating that NIST's reviews of these same reports are either inadequate or not being performed. Our review and recommendations for finding II remain unchanged.

Appendix A: Objective, Scope, and Methodology

The objective of our evaluation was to determine the adequacy of NIST's oversight of MEP to ensure requirements are met. The scope consisted of reviewing cooperative agreements active as of January 2017 or commencing thereafter, through September 30, 2021.

To accomplish our objective, we performed the following actions:

- Reviewed relevant laws and other guidance, including
 - United States Code, Title 15, § 278k, Hollings Manufacturing Extension Partnership, as amended
 - Code of Federal Regulations, Title 2, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
 - Department of Commerce Grants and Cooperative Agreements Manual
 - Department of Commerce Financial Assistance Standard Terms and Conditions
 - NIST MEP General Terms and Conditions, August 2017
 - NIST MEP Renewal Guidelines, March 2018
 - NIST MEP Oversight Board Standards
 - NIST GMD Standard Operating Procedures, April 26, 2018
 - NIST GMD Grant Flash Notices, 2016–2021
 - GAO's Standards for Internal Control in the Federal Government, September 2014
- Accessed the NIST Grants Management Information System to obtain and review award applications, award modifications, proposed budgets, indirect cost rate proposals, personnel listings, federal financial reports, Center performance evaluations, UPI disposition notices, single audit finding reviews, official NIST communications, and other records in the award files.
- Accessed the NIST MEP Enterprise Information System to obtain and review Center Oversight Board information, including board member listings.
- Researched practices at other federal agencies pertaining to compensation limits on federal financial assistance awardees.
- Accessed and reviewed Centers' single audit reports from the Federal Audit Clearinghouse's Image Management System.
- Accessed and reviewed Centers' IRS Form 990, Return of Organization Exempt from Income Tax.
- Reviewed NIST MEP Economic Impact reports from FYs 2017 through 2021.

- Interviewed NIST personnel—specifically, those responsible for MEP management, oversight, and administration—to obtain an understanding of MEP, policies, award, and review processes and to determine what oversight activities NIST performs in its reviews of federal expenditures, UPI, single audit report findings, and executive compensation reasonableness.
- Interviewed Department Office of Acquisition Management personnel to determine (I) if any limits on executive compensation for financial assistance awardees were in place and (2) whether Department policies would preclude NIST from instituting its own limits on executive compensation.

We used a judgmental selection of Centers to determine whether NIST (I) reviewed executive compensation amounts for reasonableness and (2) was aware of and addressed related party activities disclosed in single audit reports. Our selections were based on characteristics identified in Form 990 filings with the IRS and single audit reports, respectively. We chose I2 Centers for each review. Because we used judgmental selection, results and overall conclusions are limited to the items tested and cannot be projected to the population of Centers subject to this evaluation.

We gained an understanding of internal controls significant within the context of the evaluation objective by interviewing NIST officials, reviewing relevant policies and procedures, and analyzing official award files. We reported the internal control weaknesses in the "Objective, Findings, and Recommendations" section of this report.

In satisfying our evaluation objective, we did not rely solely on computer-processed data. However, we relied on computer-processed data from NIST and other widely accepted public sources. Although we could not independently verify the reliability of all the information we collected from NIST, we compared the information with other available supporting documents and interviewed NIST personnel to determine data consistency and reasonableness. Based on these efforts, we believe the information we obtained is sufficiently reliable for this report.

We conducted our evaluation from November 2021 through August 2022 under the authority of the Inspector General Act of 1978, as amended (5 U.S.C. §§ 401-424), and Department Organization Order 10-13, as amended October 21, 2020. We performed our fieldwork remotely.

We conducted this evaluation in accordance with *Quality Standards for Inspection and Evaluation* (January 2012) issued by the Council of the Inspectors General on Integrity and Efficiency. Those standards require that the evidence supporting the evaluation's findings, conclusions, and recommendations should be sufficient, competent, and relevant and should lead a reasonable person to sustain the findings, conclusions, and recommendations. We believe that the evidence obtained provides a reasonable basis for our findings, conclusions, and recommendations based on our review objective.

Appendix B: Potential Monetary Benefits

Finding and Recommendation	Funds to Be Put to Better Use
Finding I.A and recommendation I	\$5,434,263
Finding 1.B and recommendations 2 and 3	\$1,454,544ª
Total Potential Monetary Benefits	\$6,888,807

Source: OIG analysis of NIST MEP official award files

^a To be conservative, we used the lower of the executive compensation costs in excess of the SBA/HHS and DOJ limits shown in table 2.

Appendix C: Agency Response



UNITED STATES DEPARTMENT OF COMMERCE National Institute of Standards and Technology Gaithersburg, Maryland 20899-0001

MEMORANDUM FOR:

Richard Bachman

Assistant Inspector General for Audit and Evaluation

Digitally signed by LAURIE LAURIE

FROM:

Laurie Locascio LOCASCIO

Date: 2022.12.20 10:40:08 -05'00' Under Secretary of Commerce for Standards and Technology &

Director, National Institute of Standards and Technology

SUBJECT:

NIST Response to OIG's Draft Report dated November 17, 2022,

NIST Must Improve Monitoring of MEP to Prevent Waste of

Financial Resources

This memorandum provides the National Institute of Standards and Technology (NIST) response to the draft report dated November 17, 2022, from the Office of the Inspector General (OIG) entitled. NIST Must Improve Monitoring of MEP to Prevent Waste of Financial Resources. The draft report identified the following findings:

- NIST did not require Centers to use unexpended program income (UPI) during the award period and allowed Centers to retain substantial amounts of UPI from federal financial assistance awards.
- NIST did not review executive salaries for reasonableness, resulting in Center executives receiving considerable salaries in excess of limits used by other federal agencies; and
- NIST did not address potential conflicts of interest amongst recipients. Thus, NIST cannot reasonably assure conflicts of interest are properly managed - which could result in fraud, waste, and abuse.

Thank you for your recent draft report. Specifically, your office has cited concerns regarding the three findings outlined above. As was stated numerous times in our meetings, management and staff at NIST take monitoring of unexpended program income, executive salaries, and conflicts of interest very seriously. NIST appreciates this opportunity to provide information regarding our current efforts as well as to share additional efforts that NIST is considering to strengthen our commitment to preventing waste of financial resources. NIST will also address the misconceptions about the MEP program, which have led to misunderstandings about the program and some recommendations that could result in unintended negative consequences.

To provide a context, NIST would first like to highlight the most recent impact of the MEP program. In FY 2021, the MEP National Network interacted with 34,307 manufacturers, leading to \$14.4 billion in new and retained sales, \$1.5 billion in cost savings, \$5.2 billion in new client investments, and helping to create or retain 125,146 U.S. manufacturing jobs. MEP partners with other agencies, Manufacturing USA institutes, and other stakeholders to achieve a shared goal



making manufacturers more efficient and productive. NIST is proud of the impact of the program.

The MEP program has always had an outsized mission as compared to the federal funding it receives. With the pandemic and now supplier inconsistencies along with a third of manufacturers that were lost in the past decade, every dime NIST can efficiently and effectively focus on helping the smaller manufacturers thrive and adapt to advanced manufacturing technology is our mission at NIST. NIST MEP program has flourished for 34 years, returning \$14 dollars on every \$1 invested. This is a testament to the strength of the public-private partnership and how MEP program has leveraged its funds to better serve small-medium business manufactures.

Secondly, NIST will list the recommendations, and address each finding on which the recommendations were based separately.

The auditors made five recommendations to NIST in the draft report.

- Change policy to ensure (1) UPI is strategically reinvested into MEP and (2) if UPI is not reinvested into MEP, withhold funds until UPI is used to pay down allowable project expenses.
- Conduct a thorough review of executive compensation for reasonableness as required by Departmental and NIST criteria.
- Establish policy limits on executive compensation for MEP, including restrictions on Center and subrecipient salaries.
- Establish procedures to (1) ensure recipients disclose in writing any potential conflict of interest to NIST consistent with award terms and (2) promptly review any such disclosures.
- Review all disclosed related party activities identified by us and previously reported to NIST and take any action deemed appropriate.

Finding:

NIST did not require Centers to use unexpended program income (UPI) during the award period and allowed Centers to retain substantial amounts of UPI from federal financial assistance awards.

Recommendations:

Change policy to ensure (1) UPI is strategically reinvested into MEP and (2) if UPI
is not reinvested into MEP, withhold funds until UPI is used to pay down allowable
project expenses.

It is essential that NIST provides some background for what constitutes UPI, when and how the Centers are monitored, and what guardrails are already in place.

Program Income means gross income earned by the non-Federal entity that is directly generated by a supported activity or earned as a result of the Federal award during the period of performance except as provided in 2 C.F.R. § 200.307(f). Program income includes but is not limited to income from fees for services performed, the use or rental or real or personal property acquired under Federal awards, the sale of commodities or items fabricated under a Federal award, license fees and royalties on patents and copyrights, and principal and interest on loans made with Federal award funds. Interest earned on advances of Federal funds is not program income. Except as otherwise provided in Federal statutes, regulations, or the terms and conditions of the Federal award, program income does not include rebates, credits, discounts, and interest earned on any of them.

Unexpended Program Income is gross program income earned and not expended by a Center.

As set forth in 2 C.F.R. § 200.1, Cooperative Agreement means a legal instrument of financial assistance between a Federal awarding agency and a recipient or a pass-through entity and a subrecipient that, consistent with 31 U.S.C. 6302-6305:

- (1) Is used to enter into a relationship the principal purpose of which is to transfer anything of value to carry out a public purpose authorized by a law of the United States (see 31 U.S.C. 6101(3)); and not to acquire property or services for the Federal Government or pass-through entity's direct benefit or use;
- (2) Is distinguished from a grant in that it provides for substantial involvement of the Federal awarding agency in carrying out the activity contemplated by the Federal award.
- (3) The term does not include:
 - (i) A cooperative research and development agreement as defined in 15 U.S.C. 3710a; or
 - (ii) An agreement that provides only:
 - (A) Direct United States Government cash assistance to an individual;
 - (B) A subsidy;
 - (C) A loan;
 - (D) A loan guarantee; or
 - (E) Insurance (emphasis added).

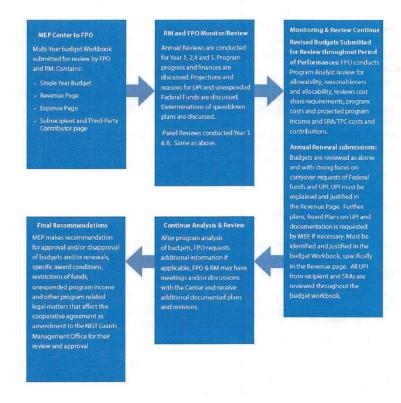
Please note prior to 2015, there was no expiration date on the cooperative agreements and UPI was not possible. In 2015, NIST competed the MEP Centers and introduced the 10-year cooperative agreement.

The established processes monitor all program income and allows NIST to provide rigorous oversight of UPI in 51 different Center markets, models, and funding amounts. These regular, careful reviews and analyses of spend rates help NIST to anticipate situations that may result in outsized accumulations of program income.

MEP Centers are not fully funded government entities and are partially privately funded. With certain exceptions, MEP Centers are required to have 1:1 cost share match for every federal dollar invested and therefore requiring program income from user generated fees as part of the

match. NIST developed guidance in 2015 to allow for the carry forward of UPI from operating year to operating year of the cooperative agreement. The guidance was put in place to ensure that if federal funding is eliminated for the program, or if federal funding is delayed, the UPI funds would be used by the MEP Centers to either close down their operations (if the program is eliminated) or support ongoing activities while seeking additional sources of revenue to support continuing operations in the long term. Program Income is critical to ensure that MEP Centers are able to serve U.S, small and medium manufacturers.

NIST disagrees with the assertion that it did not require Centers to use UPI during the award period. Throughout each operating period, NIST closely monitors UPI to ensure that it is used to accomplish the cooperative agreement's public purpose. NIST also coaches the Centers to plan to expand activities and reinvest the UPI back into the award on an annual basis. NIST works with the Centers to develop spend down plans of UPI and monitors the MEP Centers on the accomplishment of those plans. The policies and procedures were provided to OIG, as part of the evaluation, to show how NIST works with MEP Centers. Please see the following established UPI monitoring process below.



NIST monitors UPI using OMB approved budget forms. The MEP's Single Year Budget Workbook and Five-Year Budget Summary are used for the general management of the Federal award program and specifically to provide transparency into the Centers' budgets and to allow closer monitoring of the Federal funds and the match requirements of each award. The MEP Federal Program Officers and Resource Managers closely review and conduct program analysis of each Center's initially submitted and revised financials. UPI is reviewed annually during the Resource Manager and Federal Program Officer-led Annual Review and also by the peer-led Panel Review (in year 3 and 8) and the Secretarial Review (in year 5). Annual reviews, Peer-led Panel Reviews and Secretarial Reviews are stored in MEP Enterprise Information System (MEIS).

The Budget Workbook consists of a Revenue Page, detail Budget Narrative as well as a Subawards and Third-Party Contributor page for full transparency of partners into the itemized revenues committed on the MEP award.

Recipients are required to request approval to carry forward unexpended program income into a subsequent operating year in their Single Year Budget Workbooks to receive prior approval for that carry forward by the NIST Grants Officer.

In addition, in 2015, NIST took the proactive step to develop a contract to review all MEP Centers to ensure compliance with federal financial management system requirements and mitigate risks of possible or actual noncompliance related to federal financial management system requirements. These reviews confirmed UPI levels and the recipient's management of those funds. The contractor developed annual reports (5 in total) consolidating the review's findings. A comprehensive final report was shared with the MEP National Network and NIST MEP management for developing best practices to manage UPI efficiently and effectively per the NIST terms and conditions.

Beginning in 2019, NIST MEP was included in the OMB-published Compliance Supplement (Supplement) which identifies existing, important compliance requirements that the federal government expects to be considered as part of a Center's Single Audit. The Supplement provides a source of information for auditors to understand the MEP program's objectives, procedures, and compliance requirements subject to the audit as well as audit objectives and suggested audit procedures for determining compliance with these requirements. NIST proactively worked to be included in the Supplement to explain the MEP program process for carry forward of UPI for independent auditors' review of the MEP Centers.

NIST and the MEP program policy comply with applicable terms in both in 2 CFR 200.307(e) and the DOC Standard Terms and Conditions.

2 CFR Section 200.307(e) reads as follows:

Use of program income. If the Federal awarding agency does not specify in its regulations or the terms and conditions of the Federal award, or give prior approval for how program income is to be used, <u>paragraph (e)(1)</u> of this section must apply.

NIST MEP specifies the use of program income in the MEP General Terms and Conditions, Section 12.B:

- **B. Program Income Earned by Centers.** In accordance with 2 C.F.R. Section 200.307(e), program income earned by a Center during the project period shall be retained by the Center and shall be used by the Center in the following order of priority:
- 1. First, to finance the non-Federal share of the project;
- 2. Second, all program income earned in excess of that required to meet the minimum non-Federal share shall be added to the funds committed to the project by MEP and the Non-Federal Entity and must be used for the purposes and under the conditions of the MEP award (commonly referred to as the "additive approach"). Program income to be expended under the additive approach must be explained in detail in the Center's Required Plans or in a separate written communication to the NIST FPO and NIST RM and to the NIST Grants Officer, and is subject to the prior written approval of the NIST Grants Officer; and
- 3. Third, any remaining program income shall be deducted from the total allowable project costs to determine the net allowable program costs upon which the Federal share of project costs is based, in accordance with written instructions from the NIST Grants Officer (commonly referred to as the "deductive approach"). In lieu of the deductive approach and in accordance with Section H. below, an MEP Center may request that NIST approve a carry forward of program income not used by the MEP Center as non-Federal share or expended under the additive approach.

Additionally, NIST's current policy uses the deductive method as allowed by 2 CFR §200.307(e)(1) for disposing of any UPI. As such, the portion of UPI that's attributable to the Federal share of the award must be returned to the Federal Government while the remaining portion attributable to the non-Federal share of the award may be retained by the Center. The treatment and disposition of UPI after the award expires is in direct compliance with 2 CFR Part 200 and NIST strongly disagrees that the process allows Centers to benefit financially from the program considering that MEP Centers have a required non-federal cost share contribution which directly contributes to the generation of UPI and is accounted for during the closeout of the award.

The recommendation to change the UPI policy to ensure UPI is strategically reinvested into MEP in the second paragraph of the introduction of the draft report is incorrect and missing some key points. To ensure that OIG and NIST have a common understanding of the facts, NIST is providing an accurate description below:

MEP Centers are awarded under a competitive process for a 10-year period. Under the award terms, organizations awarded cooperative agreements are reviewed annually. In addition, during the third and eighth years of the agreement a peer panel review is conducted and in the fifth year a Secretarial review is conducted. MEP Center operate for a 10-year period with 2 consecutive 5-year awards. Throughout the ten-year period, the continue funding of the MEP Center is contingent upon successful performance and evaluations.

In accordance with the MEP General Terms & Condition, the cooperative agreement awards are a 10-year agreement with NIST and the recipient for operation of an MEP Center. However, due to limitations currently imposed by NIST's Grant Management Information System (GMIS), NIST cooperative agreements may not exceed 5 years in length, thus requiring a closeout of the cooperative agreement and subsequent disposition of UPI at the halfway point in the 10-year award. The MEP Center is still under a 10-year overall award term and will continue operations for another 5 years. No Center declined the second 5-year agreement. The UPI at end of year 5 becomes an unrestricted asset that is typically used for business purposes of the MEP Center as verified by annual reviews by NIST, independent audit for each Center or its host such as a university or a State entity, and IRS tax returns for non-profit Centers. The OIG recommendation makes an assumption that the UPI disposed at year 5 of the 10-year agreement is not used to continue the operations of the MEP Center, even though the center has a contractual agreement (i.e., a cooperative agreement) to serve a second 5-year term. In addition, the UPI funds that are returned to a MEP Center, after completing year 5 of the award, are not available to the MEP Center until year 7 of the award at the earliest and the MEP Center is still operating. All the examples in the report show UPI disposition at year 5 and assume that the MEP Center was not in operation in year 6. That is incorrect.

To resolve the system limitation, NIST is currently developing a replacement system for GMIS that will make it possible for cooperative agreements to span the full 10 years of MEP Center funding relationship, thus ensuring that UPI carried over into the next operating year by the MEP Center and not have mid-year disposition in year 5.

A conclusion of the draft report is that a greater economic impact would be possible if all UPI was zeroed out by year 5. If a Center were required to spend all program income at the 5th year closeout, the center staff would have to be let go and rehired in the subsequent year, office space leases would need to end on the last day of the agreement and could not be negotiated before a new agreement were in place and therefore, lead to underserving manufacturers as MEP Centers would not be able to provide any services in year 6 and onwards.

In addition, MEP Centers are required to have a minimum 1:1 cost share for every year of the award, with certain exceptions. A critical component of the MEP program is that MEP Centers charge fees for their services as part of cost share match, therefore, any additional services funded by program income and delivered to small manufacturers would naturally produce additional program income and continue building program income in year 5. Therefore, zeroing out UPI by year 5 at the half-way point of the agreement would mean closing down the MEP Center and interrupt delivering of services mid-agreement.

The CARES Act provided emergency funding for the first time for all 51 Centers and gave NIST an opportunity to add another layer of oversight to program income. During the pandemic when MEP Centers were spending both their base cooperative agreement funds and the CARES Act funding, additional budget and spending reviews were added. These awards were monitored separately with a reporting format detailing activity, expected future activities and financial compliance. While base awards are reviewed semi-annually, CARES Act awards were reviewed quarterly. Activities and expenditure progression were reported quarterly to DOC and OMB.

These awards were also included in the 2020, 2021 and 2022 Compliance Supplements to ensure auditors understood MEP program's separate reporting requirements.

For Table 1 in the report, NIST asked for an additional column to be added that shows the total federal and non-federal cost share that MEP Center generates over the first 5 years of the agreement.

Below is the additional column requested to be added to the final report that illustrates that Center A, at their mid-point of their agreement, had generated \$71.86 million in cost share (private portion). The 50% UPI that was returned to the center was \$2,131,538.27 or a little less than 3% of the income that the MEP Center generated and will use in its operations. Please note for MEP Center A, the \$2.1 million represents 2 months operating expenditures of the center. This allows the center to continue operating in year 6 while waiting for federal funds.

	Total Federal and Non- Federal Share of Costs (5-Year Award Period)
MEP Center A	\$143,573,629.00
MEP Center B	\$16,275,985.53
MEP Center C	\$52,994,243.00
MEP Center D	\$10,577,737.00
MEP Center E	\$6,241,546.00
MEP Center F	\$7,273,558.00
MEP Center G	\$7,515,770.00
MEP Center H	\$31,686,474.00
MEP Center I	\$2,933,853.00
Total	\$279,072,795.53

Although NIST does not concur with the recommendation, faces system limitations, and has clear policies and procedures in place to ensure the proper management and disposition of UPI, NIST understands the concerns outlined in the OIG's recommendation and intends to review its current policies DOC Standard Terms and Conditions in 2 CFR 200.307(e) and NIST MEP General Terms & Conditions to ensure they continue to be effective in preventing waste of financial resources.

Finding:

NIST did not review executive salaries for reasonableness, resulting in Center executives receiving considerable salaries in excess of limits used by other federal agencies; and

Recommendation:

 Conduct a thorough review of executive compensation for reasonableness as required by Departmental and NIST criteria.

2. Establish policy limits on executive compensation for MEP, including restrictions on Center and subrecipient salaries.

NIST disagrees with the assertion that NIST did not review executive salaries for reasonableness. NIST MEP carefully reviews and closely monitors MEP Centers' allocation of funds for compensation starting with the initial budget of the cooperative agreement and continuing throughout the operating years of the award. Without proper staffing, Centers cannot meet their mission of serving local manufacturers. To have the required technical expertise many of the Center Directors and delivery staff come from manufacturing, having experience in working in a local manufacturing plant or owning a small manufacturing business.

In addition to the number of staff and their compensation, NIST closely monitors the percentage of staff time directly attributed to MEP functions to make sure staffing resources are aligned with the cooperative agreement. Usually, changes in a Center's budget over the ten percent threshold (see 2 CFR § 200.308(f) for budget review involve changes in staffing.

MEP Centers are competing against private companies and organizations in their geographical locations in a targeted market. In order to remain competitive in tight markets, MEP Centers must offer competitive salaries to attract and retain a skilled workforce to provide technical assistance to the manufacturers.

NIST agrees with fair and reasonable compensation of executives and staff and with alignment of primary agreement holder with their compensation to what is fair in their local market. To that point, NIST MEP requires each Center's board to be involved in determining appropriate executive compensation. When key personnel (Center Directors, Chief Financial Officer, etc.) are submitted for prior approval, the Center is required to submit the Board's recommendation for approval of the person and compensation. When Center submits their annual budget request, MEP expects that compensation has been discussed with the board.

Regarding setting salary limits as imposed by other federal agencies based on specific statutory requirements, it is important to understand that the MEP program's authorizing statute (15 USC 278k) does not mandate such salary caps. The MEP is not a grant program like those cited in the draft report, but rather a public-private partnership through the use of a cooperative agreement. The comparison programs from U.S Department of Health and Human Services, U.S. Department of Justice and U.S. Small Business Administration (SBA) Small Business Development Center Program are grants only program and not like other public-private partnership small business economic development programs that are similar to MEP such SBA's 504, 7(a), microlending, disaster, export programs.

Although NIST does not concur with the recommendation and has clear policies and procedures in place to review executive compensation for reasonableness, NIST understands the concerns outlined in the OIG's recommendation and will be conducting a comparative study of other public-private partnerships at NIST and other federal agencies' economic development programs, such as the SBA's programs, to ensure that salaries are fair, equitable, reasonable and in alignment with other federal small business economic development programs. NIST will not

include in its comparison other grant programs with statutorily limited executive salary requirements.

Finding:

NIST did not address potential conflicts of interest amongst recipients. Thus, NIST cannot reasonably assure conflicts of interest are properly managed – which could result in fraud, waste, and abuse.

Recommendations:

- Establish procedures to (1) ensure recipients disclose in writing any potential
 conflict of interest to NIST consistent with award terms and (2) promptly review
 any such disclosures.
- 2. Review all disclosed related party activities identified by us and previously reported to NIST and take any action deemed appropriate.

NIST disagrees with the assertion that NIST did not address potential conflicts of interest amongst recipients. In accordance with 2 CFR §200.112 and Section F of the DOC Financial Assistance Standard Terms and Conditions, non-Federal entities must disclose in writing any potential conflict of interest to NIST and must establish and maintain written standards of conduct. Upon acceptance of a NIST award, all recipients must comply with said requirements and report to NIST any potential conflict of interest. Additionally, the MEP authorizing statute at 15 U.S.C.278k(k)(4)(B) requires that by-laws for MEP Center boards "include policies to minimize conflicts of interest, including such policies relating to disclosure of relationships and recusal as may be necessary to minimize conflicts of interest."

During the pre-award risk assessment of any new NIST award and any subsequent award amendment, the Grants Management Division (GMD) is required, per GMD Standard Operating Procedures, to review the recipient's Financial Assistance General Certifications and Representations within SAM.gov. As part of this certification, the recipient must certify that they will disclose in writing any potential conflict of interest to the Federal awarding agency per 2 C.F.R. § 200.112. The recipient is required to recertify via SAM.gov annually and GMD is required to check the certification prior to the approval of any award amendment, therefore, NIST disagrees with the OIG's statement that suggests that NIST has no procedures to ensure Centers disclose potential conflicts of interest to NIST. In fact, NIST is routinely verifying the recipients' compliance with the requirement while acknowledging that it is the responsibility of the recipient to disclose this to the Federal Agency.

Starting in 2015, NIST MEP began financial management reviews of all the MEP Centers. During those reviews, the contractors reviewed the Center's conflict of interest written policies according to the "Standards for Internal Control in the Federal Government" issued by the Comptroller General of the United States (the "Green Book"). Conflicts of interest among staff and board members were discussed along with the need for at least annual disclosures. When Centers did not have written policies, the contractor made recommendations to the Center for best practices in developing, implementing, and monitoring a conflict-of-interest policy.

Another way NIST prevents waste and identifies risks is through GMD's review of the MEP Center's single audit report required by 2 C.F.R. part 200, Subpart F. Through the assessment of these audits, NIST determines if the recipient has any, significant deficiencies, material weaknesses, or material noncompliance issues. NIST also reviews the recipient's audit findings and ensure they have an adequate corrective action plan in place for such findings. The assessment of the audit is an essential part of GMD's pre-award risk assessment which is used by the Grants Officer to determine if additional specific award conditions are needed to mitigate the recipient's risk. NIST also understands the concerns raised by the OIG's recommendation and intends to review its current policy when considering the OIG's recommendation.

With regards to the final recommendation to review all disclosed related party activities identified by the OIG and to take any action deemed appropriate, NIST intends to review, and has already started to define areas of improvement to further increase the MEP National Network's impact on U.S. manufacturing. NIST may not concur with the overall pronouncement of inadequate oversight, but NIST takes our engagement with your office as a partnership to help guide improvements in MEP program that will allow us to be more efficient and effective.

NIST will develop and submit a corrective action plan, as applicable, to address the recommendations identified upon receipt of the OIG's final report.

cc: Amy Egan, NIST OIG Liaison