

# TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION



## **Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates**

March 23, 2023

Report Number: 2023-10-016

# HIGHLIGHTS: Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates

Final Audit Report issued on March 23, 2023

Report Number 2023-10-016

## Why TIGTA Did This Audit

In 2021, the current Administration and members of Congress expressed concerns about the size of the Tax Gap, suggesting revenue raised from narrowing the Tax Gap could help pay for various policy proposals. For example, in April 2021, the White House introduced the American Families Plan and proposed paying for the measure in part through efforts to close the Tax Gap. The Administration estimates that the tax compliance proposals accompanying the plan would raise \$700 billion in tax revenue over the next 10 years. Additionally, both the U.S. Senate Finance and the U.S. House Ways and Means Committees held hearings to discuss the comprehensiveness and timeliness of the calculations used to produce the Tax Gap estimate.

This audit was initiated to assess the IRS's process for developing the Tax Gap estimates.

## Impact on Tax Administration

Interest in the Tax Gap demonstrates that these estimates can influence decisions about tax policy and have a significant effect on tax administration. If the Tax Gap estimates lack clarity or transparency, stakeholders may misunderstand or disregard them. If the Tax Gap estimates are not timely, their usefulness may be limited.

## What TIGTA Found

The IRS's Office of Research, Applied Analytics and Statistics (RAAS) has not developed estimates for certain aspects of the Tax Gap, and some sources of noncompliance may not be reflected in the Tax Gap estimates. In addition, although the Tax Gap report identifies certain known limitations, it does not identify what actions, if any, are being taken to address other excluded areas of noncompliance such as those associated with foreign activities and digital assets.

RAAS does not have documented policies or procedures for producing the Tax Gap estimates. While the IRS has high-level quality and research guidelines, they do not discuss the Tax Gap estimates. In lieu of documented procedures, RAAS has developed technical papers for each component of the Tax Gap estimates, which provide varying levels of specificity on the data sources and methodologies used.

In addition, RAAS does not have written policies, procedures, or guidance to 1) specify the frequency of issuing Tax Gap estimates or 2) help RAAS analysts meet internal milestones for developing the Tax Gap estimates. Instead, RAAS relies on its staff's experience with developing previous Tax Gap estimates to meet internal milestones. This raises concerns about the potential for a lapse in quality, timeliness, and continuity of operations following an unexpected departure of subject matter expert(s).

Similarly, RAAS does not have formalized processes for internal or external review of its Tax Gap estimates. Internal reviews are performed at various points in the estimation process. However, these reviews are not documented and do not allow for any oversight. The absence of formal guidance for the internal and external review processes creates the potential for unidentified errors that could affect the quality of the estimates.

Additionally, the lag time between the tax years used for the estimates and the year the estimates are published limits their usefulness. To help address this concern, RAAS included Tax Gap projections in the 2022 Tax Gap report.

## What TIGTA Recommended

TIGTA made six recommendations, including that the Chief Data and Analytics Officer, RAAS, should create a formalized strategy to identify, prioritize, and develop estimates for areas of noncompliance that are not currently addressed in the Tax Gap estimates; include an enhanced discussion of the limitations of the Tax Gap estimates; and develop written policies and procedures for producing and reviewing the Tax Gap estimates.

In their response to the report, IRS officials agreed with five of the six recommendations and partially agreed with one. IRS management did not agree to develop consolidated, written policies and procedures but did agree to load the procedural documents and the code for running the Tax Gap estimation into a single project folder.



TREASURY INSPECTOR GENERAL  
FOR TAX ADMINISTRATION

## U.S. DEPARTMENT OF THE TREASURY

WASHINGTON, D.C. 20024

March 23, 2023

### MEMORANDUM FOR: COMMISSIONER OF INTERNAL REVENUE

**FROM:**

*Heather Hill*

Heather M. Hill  
Deputy Inspector General for Audit

**SUBJECT:**

Final Audit Report – Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates (Audit # 202210010)

This report presents the results of our review of the Internal Revenue Service's (IRS) methodologies used in the computation of the Tax Gap estimates. The topic has been a matter of recent concern among members of Congress who held hearings to discuss the comprehensiveness and timeliness of the calculations used to produce the Tax Gap estimates. The overall objective of this review was to assess the IRS's process for developing the Tax Gap estimates. This review is part of our Fiscal Year 2023 Annual Audit Plan and addresses the major management and performance challenge of *Increasing Domestic and International Tax Compliance and Enforcement*.

Management's complete response to the draft report is included as Appendix III. If you have any questions, please contact me or Bryce Kisler, Assistant Inspector General for Audit (Management Services and Exempt Organizations).

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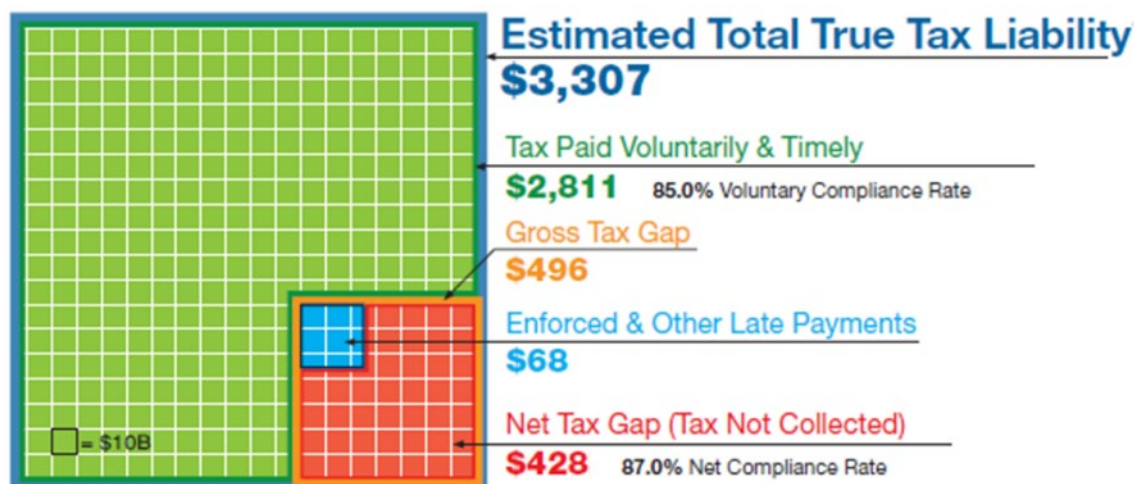
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## Background

The Tax Gap provides an estimate of the overall taxpayer noncompliance with Federal tax laws that occurred during a specified time period. The Internal Revenue Service (IRS) provides two summary estimates of the Tax Gap: the annual Gross Tax Gap and the annual Net Tax Gap. The annual Gross Tax Gap is the difference between the amount of tax owed by taxpayers for a tax year and the amount of tax that is actually paid timely and voluntarily for that year. The annual Net Tax Gap is the Gross Tax Gap adjusted for late payments and collections from enforcement activities.

The October 2022 revision of Publication 1415, *Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014 through 2016* (hereafter referred to as the Tax Gap report) estimates that the average total taxes owed annually in the United States for Tax Years (TY) 2014 through 2016 to be approximately \$3.3 trillion, \$2.8 trillion of which was paid voluntarily and timely by taxpayers. The difference between the taxes owed and the taxes paid represents the average Gross Tax Gap, which was \$496 billion per year. Through enforcement activities and other late payments, the IRS collected approximately \$68 billion, which resulted in an average Net Tax Gap of \$428 billion per year. Figure 1 depicts the relationship between the average annual amounts of the Estimated Total True Tax Liability, the tax paid voluntarily and timely, the Gross Tax Gap, and the Net Tax Gap.<sup>1</sup>

**Figure 1: IRS Tax Gap Map for TYs 2014 Through 2016 (in Billions)**



Source: Publication 1415, *Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014–2016* (Rev. October 2022).

The TYs 2014 through 2016 Gross and Net Tax Gap estimates of \$496 billion and \$428 billion, respectively, are higher than their respective TYs 2011 through 2013 estimates by \$58 billion (gross) and by \$48 billion (net). The IRS attributes these increases to the economic growth between the two periods as evidenced by the more than 23 percent increase in true tax liability.

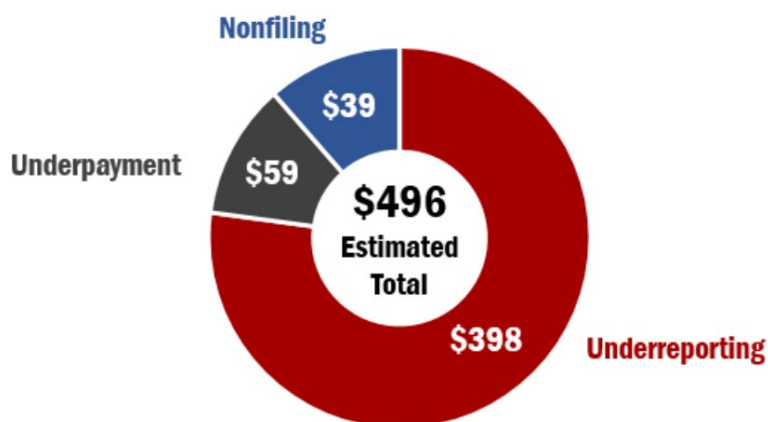
<sup>1</sup> See Appendix IV for a glossary of terms.

The Gross Tax Gap is comprised of three components:

1. Underreporting Tax Gap – Taxes not paid on time due to the understating of one's tax liability on returns filed timely. The underreporting component accounted for \$398 billion (80 percent) of the Gross Tax Gap.
2. Underpayment Tax Gap – Taxes reported on returns filed timely, which are not paid on time. The underpayment component accounted for \$59 billion (12 percent) of the Gross Tax Gap.
3. Nonfiling Tax Gap – Taxes not paid timely by those who do not file required returns on time. The nonfiling component accounted for \$39 billion (8 percent) of the Gross Tax Gap.

Figure 2 further illustrates the Gross Tax Gap by component.

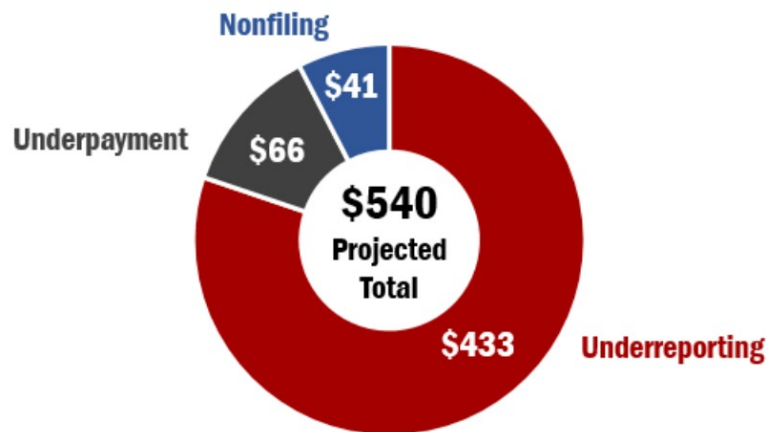
**Figure 2: Average Annual Gross Tax Gap Estimate  
for TYs 2014 Through 2016 by Component (in Billions)**



*Source: Publication 1415, Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014 – 2016 (Rev. October 2022).*

Unlike the previous revision of the report, the 2022 Tax Gap report includes projections for TYs 2017 through 2019 that reflect the level of the Tax Gap, assuming compliance behavior has not changed from prior years. The projected annual Gross Tax Gap for the TYs 2017 through 2019 time frame is \$540 billion. An estimated annual \$70 billion of the Gross Tax Gap is expected to be paid eventually resulting in an annual Net Tax Gap of \$470 billion. The Underreporting Tax Gap accounts for \$35 billion of the \$44 billion increase between the TYs 2014 through 2016 Gross Tax Gap estimate and the TYs 2017 through 2019 projection. The rest of the difference is due to increases in the Underpayment Tax Gap of \$7 billion and the Nonfiling Tax Gap of \$2 billion. Figure 3 illustrates the projected \$540 billion Gross Tax Gap by component for TYs 2017 through 2019.

**Figure 3: Projected Average Annual Gross Tax Gap Estimate for TYs 2017 Through 2019 by Component (in Billions)**



*Source: Publication 1415, Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014–2016 (Rev. October 2022).*

The Knowledge Development and Application Division within the Office of Research, Applied Analytics and Statistics (RAAS) is responsible for developing the Tax Gap estimates. According to the Internal Revenue Manual (IRM), RAAS's mission is to provide research, analytics, statistics, and technology services in partnership with internal and external stakeholders.<sup>2</sup> RAAS is led by the Chief Data and Analytics Officer who reports to the Deputy Commissioner for Operations Support.

## Tax Gap methodology

Both the Gross and Net Tax Gap estimates encompass a number of tax types such as individual income taxes, corporate income taxes, employment taxes, and estate taxes. RAAS's methodology for estimating a particular Tax Gap component and tax type varies based on the type and timing of the data available. Data used to develop the Tax Gap estimates come from a variety of sources such as audits performed through the National Research Program (NRP), operational audits, and IRS systems. Per RAAS management, NRP audits provide a statistically valid representation of the reporting compliance characteristics of the taxpayers being audited. Operational audits are selected for examination based on their expected compliance risk, and the examination results are not broadly applicable to the general population without additional assumptions and modeling.

Broadly, the underreporting component is based on data collected from NRP or operational audits depending on the tax type being estimated. To account for individual underreporting income that is not detected by NRP examiners, RAAS adjusts or scales up the NRP-based estimates using an econometric methodology called the Detection Controlled Estimation (DCE). The DCE accounts for the differences among examiners in their ability to uncover noncompliance on tax returns. Alternatively, the underpayment estimates are based on data from IRS systems, while the nonfiling estimates are based on a combination of data from IRS

<sup>2</sup> IRM 1.1.18, *Organization and Staffing, Research, Applied Analytics and Statistics Division* (Nov. 8, 2022).

systems and demographic information. A complete description of the Tax Gap methodologies by component and tax type can be found in Appendix II.

## **Results of Review**

### **Tax Gap Estimates Do Not Fully Reflect All Sources of Taxpayer Noncompliance**

While the Tax Gap report provides a general estimate of overall taxpayer noncompliance with Federal tax laws, RAAS has not developed estimates for certain aspects of the Tax Gap. For example, within the nonfiling component of the Tax Gap, RAAS does not estimate corporate income taxes, excise taxes, the income taxes of estates and trusts, or the unrelated business income tax from Form 990-T, *Exempt Organization Business Income Tax Return*. In addition, the employment tax nonfiling estimate only includes the self-employment tax. According to RAAS management, they have been conducting research into estimating a corporate nonfiling Tax Gap but have not yet found a sufficiently reliable methodology and data upon which to base an estimate.

Within the underreporting component of the Tax Gap, RAAS does not estimate excise taxes or the income taxes of estates and trusts. Additionally, RAAS excludes:

- Corporate income tax filers of forms other than Form 1120, *U.S. Corporation Income Tax Return*, or Form 1120-A, *U.S. Corporation Short-Form Income Tax Return*, such as Form 1120-F, *U.S. Income Tax Return of a Foreign Corporation*.
- Unrelated business income tax from the Form 990-T.
- Individual income tax filers who are considered “international” based on their filing address or attached forms and schedules, such as Form 2555, *Foreign Earned Income*, Form 1116, *Foreign Tax Credit*, etc.
- Employment taxes of household and agricultural employers.

Per RAAS management, decisions to exclude certain types of taxes/taxpayers are made by the IRS business operating divisions responsible for conducting the audits that RAAS uses to develop estimates. While the business operating divisions do not determine what is covered by the Tax Gap estimates, they influence the scope of NRP studies and determine how many returns of a given tax type or form type are examined using operational risk-based audits.

The current Administration and members of Congress have expressed concerns about the size of the Tax Gap, suggesting revenue raised from narrowing the Tax Gap could help pay for various policy proposals. For example, in April 2021, the White House introduced the American Families Plan and proposed paying for the measure in part through efforts to close the Tax Gap. The Administration estimates that the tax compliance proposals accompanying the plan would raise \$700 billion in tax revenue over the next 10 years.

Tax Gap estimates do not take into consideration all types of noncompliance.	
<b>Net Tax Gap Estimate</b>	<b>\$428 Billion</b>
<b>Nonfilers Not Considered</b>	
<input checked="" type="checkbox"/> Corporate income tax <input checked="" type="checkbox"/> Excise tax <input checked="" type="checkbox"/> Estate and trust income tax <input checked="" type="checkbox"/> Unrelated business income of tax-exempt organizations	+
<b>Underreporters Not Considered</b>	?
<input checked="" type="checkbox"/> Corporate taxpayers who file on forms other than Form 1120 or Form 1120-A <input checked="" type="checkbox"/> Employment taxes of household and agricultural employers <input checked="" type="checkbox"/> Unrelated business income tax for tax-exempt organizations <input checked="" type="checkbox"/> Individual income tax for international taxpayers	+
<b>New Tax Gap Estimate</b>	= ???

In 2021, both the U.S. Senate Finance and the U.S. House Ways and Means Committees held hearings to discuss the comprehensiveness and timeliness of the calculations used to produce the Tax Gap estimate.<sup>3</sup> Interest in the Tax Gap estimates demonstrates that these estimates can influence decisions about tax policy and have a significant effect on tax administration. In a hearing in April 2021, the IRS Commissioner testified that he does not believe that the Tax Gap estimates fully reflect all sources of noncompliance, and that prior estimates do

not include virtual currencies and lack information related to foreign source income.<sup>4</sup> He also referred to a National Bureau of Economic Research study that concluded the results from random audits used to develop the IRS's Tax Gap estimates do not fully reflect noncompliance related to pass-through entities and offshore income.<sup>5</sup> This study, which was conducted with the input of RAAS economists, statisticians, and management, also concluded that sophisticated tax evasion technologies employed by high-income individuals may result in higher rates of noncompliance than are reflected in current estimates.

After the hearing, the IRS responded to a Question for the Record on this matter, stating that the Tax Gap estimates currently in use represent a substantial challenge for the IRS, are outdated, and under-inclusive. The IRS response to a Question for the Record is subject to a formal approval process, which includes review by IRS senior staff, the Department of the Treasury (hereafter referred to as the Treasury Department), and the Office of Management and Budget (OMB). More recently, in April 2022, the IRS Commissioner testified that the Tax Gap estimates for TYs 2014 through 2016, and accompanying projections for TYs 2017 through 2019, still do not include information related to virtual currencies and certain foreign source income.

RAAS management contends that while they have not developed an estimate for a particular type of noncompliance, such as virtual currencies, pass-through income, or foreign source

<sup>3</sup> *Closing the Tax Gap: Lost Revenue from Noncompliance and the Role of Offshore Tax Evasion*, Hearing before the Senate Finance Subcommittee on Taxation and IRS Oversight, 117<sup>th</sup> Congress (May 11, 2021) and *Minding the Tax Gap: Improving Tax Administration for the 21st Century*, Joint hearing before the House Ways and Means Subcommittees on Select Revenue Measures and Oversight, 117<sup>th</sup> Congress (June 10, 2021).

<sup>4</sup> *The 2021 Filing Season and 21<sup>st</sup>-Century IRS*, Hearing before the Senate Finance Committee, 117<sup>th</sup> Congress (April 13, 2021).

<sup>5</sup> National Bureau of Economic Research, *Tax Evasion at the Top of the Income Distribution: Theory and Evidence* (March 2021).

income, this does not necessarily mean that the Tax Gap estimates do not reflect this type of noncompliance or that the overall estimates are understated. RAAS management stated that the DCE, which is used to calculate the individual income tax and self-employment tax underreporting estimates, makes substantial adjustments for undetected income. However, RAAS is unable to demonstrate that the DCE identifies additional sources of noncompliance for inclusion in the Tax Gap estimates. The DCE is designed to increase the rate of underreported taxes attributable to the findings of less productive audits and is unlikely to identify specific issues. However, even after DCE adjustments, results may be substantially underestimated especially with respect to income from flow-through entities, foreign or illegal activities, digital assets, and other emerging areas of noncompliance.

In December 2000, the Information Quality Act became law as part of the Consolidated Appropriations Act, 2001.<sup>6</sup> The Information Quality Act required the OMB to issue guidance to Federal agencies for “ensuring and maximizing the quality, objectivity, utility, and integrity of information (including statistical information) disseminated by Federal agencies.” The law also required Federal agencies to issue their own information quality guidelines.

In February 2002, the final OMB guidelines implementing the Information Quality Act were published in the Federal Register. These guidelines note that the more important the information, the higher the quality standards to which the information should be held. The Treasury Department’s Information Quality Guidelines align with those from the OMB. These guidelines state that the Treasury Department should ensure and maximize the quality, objectivity, utility, and integrity of the information it disseminates to the public.

The Federal Committee on Statistical Methodology (FCSM) was created to assist the OMB in fulfilling its role in setting and coordinating statistical policy for Federal agencies. In September 2020, the FCSM issued a report, *A Framework for Data Quality*, which outlines a comprehensive data quality framework. This framework builds on the Information Quality Act and the OMB Information Quality Guidelines by highlighting particular aspects to be considered when evaluating the utility, accuracy, and integrity of information. For example, the FCSM Framework identifies accuracy as an aspect to be considered when evaluating the objectivity of a particular piece of information. According to the Framework, accuracy measures the closeness of an estimate to its true value.

Given the important nature of the Tax Gap estimates, it is essential that these estimates are as accurate as possible. According to RAAS management, the lack of quality and timely data affects their ability to estimate certain components of the Tax Gap (such as estimates for corporate and excise tax nonfilers). RAAS management stated that they do not intentionally exclude certain types of noncompliance. Instead, when RAAS develops the Tax Gap estimates, it limits their measurements to the types of noncompliance that can be supported by the underlying data and available methodologies.

Prior Treasury Inspector General for Tax Administration (TIGTA) and Government Accountability Office (GAO) reports have highlighted ongoing or planned IRS studies aiming to identify potential data to improve the comprehensiveness of the Tax Gap.

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<sup>6</sup> Pub. L. No. 106-554.

- In a Fiscal Year 2013 report, TIGTA recommended that the IRS perform a study to determine the feasibility of estimating the Tax Gap for offshore tax evasion.<sup>7</sup> Subsequently, as part of a Calendar Year 2015 study, the Director, Research, Analysis, and Statistics (a predecessor office to RAAS), identified several additional areas of research that could potentially be used to produce reliable estimates of the offshore portion of the individual income Tax Gap.
- In a Fiscal Year 2017 report, the GAO noted that the IRS initiated a study to measure reporting compliance for certain partnerships as well as estimate the tax misreported at the taxable partner level.<sup>8</sup>

While these studies could have improved the comprehensiveness of the Tax Gap estimates, RAAS ultimately did not implement the actions necessary to complete these planned studies. According to RAAS management, these decisions have been driven by 1) competing priorities and resource constraints experienced by the IRS as a whole, and more specifically, 2) the business operating divisions that provide much of the data needed to develop the Tax Gap estimates. However, according to RAAS management, they have recently been able to hire more staff, and these new employees will allow RAAS to pursue new data sources and methods to evaluate whether they can develop estimates for additional Tax Gap components. For example, because previous attempts to identify methods for estimating excise tax noncompliance were unsuccessful, RAAS has brought on new staff to examine this area.

### **Published reports do not provide a comprehensive discussion of taxpayer noncompliance not included in the Tax Gap estimates**

The IRS issues three Tax Gap-related documents that are available to the public through the IRS.gov website. The most current versions are:

- Publication 1415, *Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2014–2016* (Rev. October 2022) (e.g., the Tax Gap report).
- Publication 5364, *Tax Gap Executive Summary* (Rev. October 2022).
- Publication 5365, *Tax Gap Map* (Rev. October 2022).

Although the Tax Gap report identifies certain known limitations within the Tax Gap estimates, it does not address all of them. For example, it explains that the Federal Insurance Contributions Act (FICA)<sup>9</sup> and Federal Unemployment Tax Act (FUTA) taxes associated with employers of agricultural and household workers are excluded from the underreporting estimates due to lack of compliance data.<sup>10</sup> However, it does not identify other types of taxpayers (such as certain corporate income tax filers) that are also excluded from the estimates. Further, the Tax Gap Report does not include specific details that explain what actions, if any, are being taken to address other excluded areas of noncompliance such as those associated with foreign activities and digital assets. For example, the report states that the IRS is actively working on new methods for estimating and projecting the Tax Gap to better reflect changes in taxpayer

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<sup>7</sup> TIGTA, Report No. 2013-IE-R008, *The Internal Revenue Service Needs to Improve the Comprehensiveness, Accuracy, Reliability, and Timeliness of the Tax Gap Estimate* (Aug. 2013).

<sup>8</sup> GAO, GAO-18-39, *Tax Gap: IRS Needs Specific Goals and Strategies for Improving Compliance* (Oct. 2017).

<sup>9</sup> 26 U.S.C. §§ 3101-3134.

<sup>10</sup> 26 U.S.C. §§ 3301-3311.

behavior as they emerge, but no additional information is provided. It would be useful for readers to understand the extent to which RAAS is pursuing other data sources and methodologies, the barriers they have encountered, and the extent to which RAAS is collaborating with the IRS business operating divisions in their efforts to develop estimates for the excluded areas of noncompliance.

Additionally, Publications 5364 and 5365 (Tax Gap Executive Summary and Tax Gap Map, respectively) do not provide any specific information on the areas excluded. For example, the Tax Gap Map includes notes indicating there is no estimate for corporate income tax nonfiling. However, it does not make clear that excise tax nonfiling is also not estimated as part of the overall Tax Gap (although it is included in the Estimated Total True Tax Liability).

OMB and Treasury Department Information Quality Guidelines require disseminating information in an accurate, clear, complete, and unbiased manner, which includes presenting information within the proper context. RAAS management stated they believe that the report should discuss the Tax Gap components for which RAAS is able to develop estimates and the methodology used for these estimates. In addition, although the October 2022 revision of the Tax Gap report acknowledges the estimates do not fully represent noncompliance in some components of the tax system, there is no separate detailed discussion outlining all of the limitations of the estimates.

However, the lack of clarity and transparency around the comprehensiveness of the Tax Gap estimates creates the potential for stakeholders to misunderstand or disregard them. During this review, TIGTA interviewed several congressional staff members who identified a lack of transparency around what is included in the estimates, how the estimates are developed, and their underlying uncertainty as reasons not to rely on the Tax Gap estimates. Specifically, the congressional staff noted that the Tax Gap report lacks clarity on whether certain types of noncompliance are included in the Tax Gap, such as noncompliance related to the use of virtual currencies and foreign source income. The congressional staff also raised questions about the data and methodology used to develop the Tax Gap estimates. In addition, they believe there is uncertainty associated with the Tax Gap estimates, but that this uncertainty is not made clear in the way the estimates are presented.

The Chief Data and Analytics Officer, RAAS, should:

**Recommendation 1:** Coordinate with IRS business operating divisions to create and implement a formalized strategy to identify, prioritize, and develop estimates for areas of noncompliance that are not currently addressed in the Tax Gap estimates.

**Management's Response:** IRS management agreed with this recommendation and will create and document a formalized strategy to identify, prioritize, and develop estimates for areas of noncompliance that are not fully addressed in the current Tax Gap estimates.

**Recommendation 2:** Improve the transparency of the Tax Gap estimates in future revisions of the Tax Gap report by including an enhanced discussion of the limitations of the Tax Gap estimates, including the types of taxpayer noncompliance that are not included in the estimates and those types that may not be fully captured.

**Management's Response:** IRS management agreed and will include additional information in the data limitations section of the report in its next Tax Gap release in October 2023.

## **There Are No Documented Policies and Procedures Governing the Development or Timeliness of the Tax Gap Estimates**

RAAS does not have documented policies or procedures for producing the Tax Gap estimates. In lieu of documented procedures, RAAS has developed technical papers for each component of the Tax Gap estimates, which provide varying levels of specificity on the data sources and methodologies used. Although computer programs and spreadsheets are the main sources of detailed information about producing the Tax Gap estimates, the extent of the written comments accompanying these programs and spreadsheets varies by analyst, and there are no policies on how much of this supplemental information is required or expected.

Further, while the IRS has high-level quality and research guidelines, such as its own Information Quality Guidelines and the IRM, this guidance does not discuss the Tax Gap estimates.

- The IRS Information Quality Guidelines provide guidance to help ensure the quality of the IRS's information products. The guidelines provide a discussion of the steps taken to ensure that the IRS's Statistics of Income Program and the NRP meet quality standards. However, the guidelines do not mention the Tax Gap estimates.
- IRM 1.7.1, *Research and Analysis for Tax Administration, Servicewide Research for Tax Administration* (Aug. 12, 2020) and IRM 1.1.18 provide general guidance about data used in research projects and the mission, structure, and responsibilities of RAAS. However, no specific mention is made of the Tax Gap estimates other than "[t]he Compliance Modeling Lab estimates the nature and extent of noncompliance, including the Tax Gap and the voluntary filing rate."

In addition to lacking policies and procedures governing the Tax Gap development process, RAAS does not have any written policies, procedures, or guidance to:

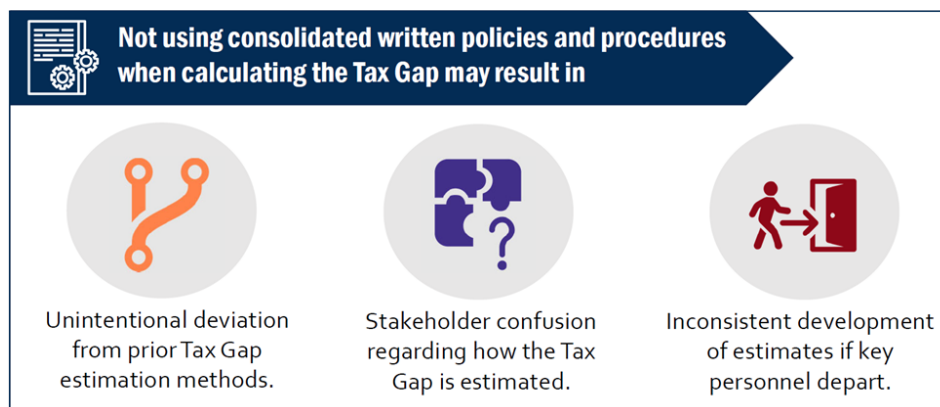
- Specify the frequency of issuing Tax Gap estimates, which are instead a by-product of the NRP design and data availability timeline.
- Help RAAS analysts meet internal milestones for developing the Tax Gap estimates.

Instead, RAAS relies on its staff's experience with developing previous Tax Gap estimates to meet internal milestones. According to RAAS management, based on prior experience, the staff knows how long it will take to complete various parts of the development process and works backwards to make sure the estimates are completed by their deadline.

Federal guidance underscores a need for documented procedures. The GAO's *Standards for Internal Control in the Federal Government* (September 2014), also known as the Green Book, provides guidelines for Federal entities to ensure and improve accountability in achieving their mission. According to the Green Book, management should document, in policies for each unit, its responsibility for an operational process's objectives and related risks as well as control activity design, implementation, and operating effectiveness. In addition, each unit should determine the policies necessary to operate the process based on the objectives and related risks for the operational process. These policies should be documented with enough detail to

allow management to effectively monitor the control activity.<sup>11</sup> The Green Book further states that individuals in key roles within a unit may define policies through day-to-day procedures, including the timing of when an activity occurs and any follow-up corrective actions to be performed if deficiencies are identified.<sup>12</sup> The FCSM Framework for Data Quality also states that a best practice for reporting data quality is to create detailed technical documentation about all aspects of the data program product to meet the programmatic needs for product continuity and dissemination.

RAAS management stated that they do not see a need for the Tax Gap estimates to have their own specific guidance, such as in the IRM, a desk guide, or a document with internal milestones.



RAAS management explained that they have significant experience with prior Tax Gap estimates and are able to rely on this experience to meet internal deadlines. In addition, according to RAAS management, given their experience with statistical analysis and estimation, they can determine if the methodology and data are sufficient to provide quality estimates.

The lack of documented Tax Gap policies and repeatable processes creates a number of possible issues for RAAS. For example, the lack of documented procedures creates the potential for a lapse in quality, timeliness, and continuity of operations following an unexpected departure of subject matter expert(s). Without documented Tax Gap policies and repeatable processes, analysts or managers may inadvertently alter or deviate from the estimation process. This inadvertent variation in the estimation process could affect the quality of the estimates and provide an inaccurate picture of how much of the year-over-year changes in the Tax Gap are due to changes in the methodology versus other factors. Further, the lack of documented Tax Gap policies and processes also makes it more difficult for internal and external stakeholders to understand how the Tax Gap is developed, provide oversight of the process, and make program or policy changes based on results.

**Recommendation 3:** The Chief Data and Analytics Officer, RAAS, should develop consolidated, written policies and procedures for developing the Tax Gap to help ensure repeatability, timeliness, quality, and continuity of the Tax Gap estimates and improve oversight.

**Management's Response:** IRS management partially agreed with this recommendation indicating they already produce technical papers that address the methodology for estimating the various components of the Tax Gap, and that the timeliness of the Tax Gap estimates has been addressed by adding a three-year projection to the formal estimates and updating the estimates annually beginning in 2023. However, they did

<sup>11</sup> Green Book, Attribute 12.03.

<sup>12</sup> Green Book, Attribute 12.04.

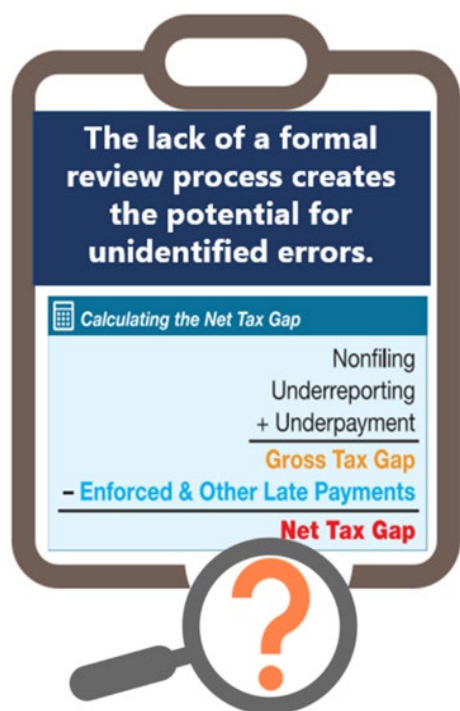
agree to load the procedural documents and the code for running the Tax Gap estimation into a single project folder.

**Office of Audit Comment:** Consolidating all of the various Tax Gap methodology guidance in one location is a good first step. Once completed, RAAS should assess the consistency and sufficiency of its guidance to ensure that its policies and processes are sufficiently identifiable, available, and documented with enough detail for management to ensure consistent and accurate Tax Gap estimates.

## **Tax Gap Estimates Are Not Formally Reviewed to Ensure Quality**

The IRS has not instituted policies and processes for formalized internal or external reviews to ensure the quality of the Tax Gap estimates. OMB and Treasury Department Information Quality Guidelines require that Federal entities develop a process for reviewing the quality of information before it is disseminated publicly. Further, IRS Information Quality Guidelines highlight the importance of ensuring the objectivity of information products and note that objectivity is achieved, in part, by reviewing carefully the content of all information products.

RAAS management stated that the Tax Gap estimates undergo internal review at various points in the estimation process. However, RAAS does not have any policies specifying the type(s), frequency, or content of internal reviews of the Tax Gap estimates. In addition, these reviews and processes are not documented to provide continuity over time or allow for oversight of the review process. Instead, RAAS relies on the prior experience of managers and analysts to guide the development of the Tax Gap estimates, which includes management's internal review of the estimates.



In response to a recommendation in an April 2006 TIGTA report, the Director of IRS Research, Analysis, and Statistics requested that an advisory body be created to consult with IRS Research, Analysis, and Statistics regarding measurement of the Tax Gap.<sup>13</sup> To permit this body to be established quickly, the IRS created the Tax Gap Analysis Subgroup in January 2007 under the IRS Advisory Council. This subgroup was charged with helping the IRS improve its Tax Gap estimates. However, after two years, the Tax Gap Analysis Subgroup was converted to an informal panel.

In addition, RAAS does not have any policies specifying the type(s), frequency, or content of external reviews of the Tax Gap estimates. RAAS also does not have any documented processes for obtaining or documenting these external reviews. While the Treasury Department's Office of Tax Analysis reviews and provides feedback on the Tax Gap reports and supporting documents prior to

<sup>13</sup> TIGTA, Report No. 2006-50-077, *Some Concerns Remain About the Overall Confidence That Can Be Placed in Internal Revenue Service Tax Gap Projections* (Apr. 2006).

their issuance, its review is not governed by written documentation that outlines the process for reviewing the information before it is disseminated. Historically, the Tax Gap estimates were also reviewed by a panel of outside experts, known as the Tax Gap Advisory Panel. However, the Panel has not reviewed recent estimates, and reviews of prior estimates were not always documented.

Further, RAAS has not established a formal process for documenting the feedback received from the Tax Gap Advisory Panel nor provided the public with information about the Panel's feedback on the Tax Gap estimates. The Tax Gap Advisory Panel last reconvened in TY 2015 to review the Tax Gap estimates for TYs 2008 through 2010, which were published in Calendar Year 2016. The Panel did not review the estimates for the 2019 Tax Gap report for TYs 2011 through 2013 or the 2022 Tax Gap report for TYs 2014 through 2016. Instead, RAAS management stated that they sought feedback from the Tax Gap Advisory Panel for only "major" changes in methodology or data. However, RAAS determined what constituted a "major" change and does not have a formal definition or criteria for making this determination.

When asked about the lack of a formalized review process, RAAS management stated that it viewed the Tax Gap Advisory Panel's review as informal and internally focused, with RAAS as the audience for and customer of its work rather than the public and other stakeholders. As such, RAAS has not developed guidance for external review of the Tax Gap estimates.

A number of Federal agencies, which produce publicly available statistical information, have convened panels that could serve as best practices for the IRS. For example:

- The Bureau of Labor Statistics (BLS), within the Department of Labor, is designated as a principal statistical agency and produces statistics on the U.S. labor force, productivity, and wages. The BLS has two external review panels – the Data Users Advisory Committee and the BLS Technical Advisory Committee. The BLS posts on its public website the names of the Committee members as well as the meeting dates and agendas.
- The Congressional Budget Office is a legislative branch agency that supports Congress by producing budgetary and economic analyses and cost estimates of Federal legislation. It has two external review panels – the Panel of Economic Advisers and the Panel of Health Advisers. The Congressional Budget Office posts on its public website the names of the panel members as well as the panel meeting dates and agendas.
- The Social Security Administration's Social Security Advisory Board Technical Panel on Assumptions and Methods is convened every four years to review the Social Security Trustees' projections of Social Security solvency. This Panel issues in-depth reports that are available to the public, detailing its findings and recommendations. The Social Security Advisory Board also posts on its public website the names of the panel members as well as the panel meeting dates and agendas.

The absence of guidance and subsequent reviews – both internal and external – creates the potential for unidentified errors that could affect the quality of the Tax Gap estimates. In addition, the lack of transparency surrounding review of the estimates precludes external stakeholders from fully assessing their quality. The potential for unidentified errors in the Tax Gap estimates also affects the ability of IRS leadership, Administration officials, and congressional stakeholders to effectively use the Tax Gap estimates to inform their decision-making.

The Chief Data and Analytics Officer, RAAS, should:

**Recommendation 4:** Develop written policies and processes to formalize the internal and external reviews of the Tax Gap estimates.

**Management's Response:** IRS management agreed with this recommendation and will create a document that outlines the internal and external review process for annual updates to the Tax Gap estimates.

**Recommendation 5:** Reestablish an advisory group to review any updates to the Tax Gap methodology that would significantly affect the estimates.

**Management's Response:** IRS management agreed with this recommendation and will convene an advisory panel to review major methodological changes to the Tax Gap estimation. It is anticipated that the next major update to the Tax Gap estimates will occur in the Calendar Year 2025 annual update.

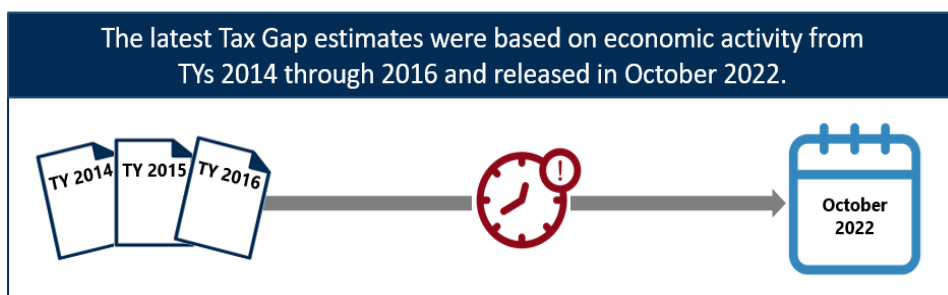
**Recommendation 6:** Develop a formal process for documenting the advisory group's feedback on the Tax Gap estimates, including making a high-level summary of its feedback available to the public.

**Management's Response:** IRS management agreed with this recommendation and will include a discussion of feedback received from the advisory group in the Tax Gap executive summary document in the calendar year in which the advisory group is engaged.

## A More Timely Approximation of the Tax Gap Could Improve Its Usefulness

Under the current report cycle, Tax Gap reports are issued approximately every three years with a multiyear lag between the tax

year(s) used for the estimates and the year the estimates are published.<sup>14</sup> Figure 4 illustrates the amount of time between the tax year(s) analyzed and the year(s) that they were published.



<sup>14</sup> According to RAAS management, the decision was made in Calendar Year 2014 to develop and release Tax Gap estimates on a three-year cycle reflecting an average annual Tax Gap covering non-overlapping time frames of three tax years. This decision was driven by the implementation of annual NRP samples, which started with TY 2006.

**Figure 4: Tax Gap Data and Report Publication**

TY(s) Analyzed	Publication Year
2001	2007
2006	2012
2008 - 2010	2016
2011 - 2013	2019
2014 - 2016	2022

*Source: IRS Tax Gap page from the IRS.gov website, December 2022.*

Under the FCSM Framework, one of the dimensions of utility is timeliness. According to the Framework, timeliness is defined as the length of time between the event or phenomenon the data describe and the availability of the data. The multiyear lag in issuing the Tax Gap estimates results in estimates that do not reflect the current Tax Gap, thereby limiting their usefulness for IRS leadership, Administration officials, and congressional stakeholders. However, RAAS has limited alternatives available to improve the timeliness of the Tax Gap estimates. According to RAAS management, given that the objective of the Tax Gap estimates is to measure taxpayer noncompliance, the estimates should be based on actual audit data. Therefore, the availability of underlying data used to develop the Tax Gap estimates, which varies significantly by component, determines the timeline for issuing the Tax Gap reports.

For the underpayment component of the Tax Gap, the computer programs that create the tabulations run annually and can be run once filing deadlines have passed. Alternatively, the underreporting component is based on NRP and operational audits, which take multiple years to complete and even longer for the audit data to become available for use. According to the IRS, NRP audits for the individual underreporting Tax Gap take about three years from the time the returns for a tax year are filed for the data to be available for analysis. Similarly, operational audits take approximately the same amount of time to complete.

In addition, RAAS management stated that when the NRP resumed in TY 2006, the decision was made to do smaller annual samples, rather than larger periodic studies, to allow IRS examination personnel to balance their workloads. The new NRP sample was designed to give a statistical precision that was equivalent to a larger sample size divided equally over three tax years. This approach requires RAAS to pool three years of data to get the needed precision, which also affects the timing of when NRP data are available for analysis.

RAAS has limited options for accelerating the audit timeline, all of which have significant drawbacks. One option would be to provide auditors with a shorter deadline for completion. However, RAAS management believes that this approach could lead to poor audit results because it takes time for IRS auditors to work with taxpayers and complete their work. RAAS has taken steps to streamline the front-end of the NRP process, but RAAS does not control the audit cycle for NRP or operational audits.

A second option would be to no longer base the Tax Gap estimates for a given year on actual compliance data for that same year. This approach would require making assumptions about compliance behavior, even though compliance behavior is the variable that the Tax Gap estimates are trying to measure. Finally, a third option would be for the IRS to release the Tax Gap components separately, as was done with an employment Tax Gap report issued in

Calendar Year 1993 and an individual income tax report issued in Calendar Year 1996. However, this would be a piecemeal approach that would not provide IRS leadership, Administration officials, or congressional stakeholders with a complete picture of taxpayer compliance behavior at a given point in time.

To help address timeliness concerns, RAAS included Tax Gap projections for TYs 2017 through 2019 in the 2022 Tax Gap report and is examining options for issuing annual Tax Gap projections. The methodology used for the projections will differ by Tax Gap component based on data availability. When RAAS develops projections for years for which it does not have compliance data, it will use the most recent data available and project forward using an assumption of constant compliance.

**Management Actions:** During our review, RAAS management stated that they made a commitment with the OMB as well as IRS and Treasury Department leadership to produce an annual update to the Tax Gap report that will include at least one year of projected estimates. The next revision is expected in October 2023. As a result, we are not making any recommendations in this area.

## Appendix I

### Detailed Objective, Scope, and Methodology

The overall objective of this audit was to assess the IRS's process for developing the Tax Gap estimates. To accomplish our objective, we:

- Identified and reviewed Federal statutes, regulations, guidelines, and best practices, including those developed by other Federal agencies, to determine relevant criteria governing Federal information and data quality.
- Requested and reviewed any IRS guidance and documentation on developing the Tax Gap estimates.
- Obtained and reviewed RAAS's published reports and internal technical papers on the Tax Gap estimates and methodology.
- Reviewed TIGTA and GAO reports, congressional testimony, and academic papers to determine sources of noncompliance not included in the IRS's Tax Gap estimates.
- Interviewed RAAS personnel to:
  - Gather information on the data and methodology used to produce the Tax Gap estimates and the changes planned for the next Tax Gap release.
  - Identify the IRS's processes for producing the Tax Gap estimates and determine whether the IRS is adhering to Federal standards and best practices.
  - Assess the completeness of the Tax Gap estimates and identify barriers to and plans for improving the comprehensiveness of the estimates.
  - Examine the timeliness of the Tax Gap estimates and efforts that could be made to more timely report the estimates.
- Interviewed IRS personnel from various business operating divisions to gain their perspective on sources of taxpayer noncompliance.
- Interviewed senior Communications and Liaison personnel to better understand the differences between RAAS's position on and the IRS Commissioner's congressional testimony about the completeness of the Tax Gap.
- Interviewed key congressional staff to gain their perspective on the Tax Gap estimates.

### **Performance of This Review**

This review was performed with information obtained from RAAS located in Washington, D.C., during the period October 2021 through November 2022. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Major contributors to the report were Bryce Kisler, Assistant Inspector General for Audit (Management Services and Exempt Organizations); Glen Rhoades, Director; Lindsay Steward, Audit Manager; Mary Herberger, Lead Auditor; Lara Rosner, Lead Auditor; and Frank Rivers, Auditor.

### **Internal Controls Methodology**

Internal controls relate to management's plans, methods, and procedures used to meet their mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance. We determined that the following internal controls were relevant to our audit objective: IRS policies and procedures for developing and reviewing the Tax Gap estimates. We evaluated these controls by requesting and reviewing IRS guidance and documentation on developing the Tax Gap estimates as well as interviewing IRS personnel responsible for developing the Tax Gap estimates.

## Appendix II

### Tax Gap Estimate Methodologies

#### **Underreporting Tax Gap estimates**

The underreporting component of the Tax Gap represents the net understatement of tax on timely filed returns. RAAS produces the Underreporting Tax Gap estimates for the following tax types: individual income, corporate income, employment, and estate. RAAS does not produce an estimate for the excise tax type.

#### **Individual income tax**

The largest tax type within the Underreporting Tax Gap – the individual income Tax Gap – is based primarily on data collected through the NRP. The NRP uses audit results from a random sample of individual income tax returns selected for NRP audits. For the latest estimates, the individual income tax Underreporting Tax Gap estimation methodology was modified slightly to address the fact that the NRP statistical sample for TY 2016 was limited to the subset of the individual income tax return filing population that reported certain individual income tax credits. Per RAAS management, resource constraints led the IRS to reduce the number of NRP returns beginning with TY 2016. For TY 2016, the NRP sample design only included returns that claimed the American Opportunity Tax Credit or the Child Tax Credit or the Earned Income Tax Credit or the Net Premium Tax Credit or that required reconciling the Advance Premium Tax Credit with the Premium Tax Credit. Therefore, TYs 2014 through 2016 individual income tax Underreporting Tax Gap estimates reflect data from the TYs 2014 through 2016 time frame for those line items, and data from the TYs 2014 and 2015 time frame for all other line items. This approach assumes that the compliance behavior for most line items for TY 2016 is accurately reflected by TYs 2014 and 2015 Tax Gap estimates.

To account for income that is not detected by NRP examiners, RAAS adjusts the NRP-based estimates using an econometric methodology called the DCE. The DCE accounts for differences among examiners in their ability to uncover noncompliance on tax returns. The DCE scales up the audit findings of "less successful" examinations to represent something closer to what the "most successful" examinations would have uncovered.<sup>1</sup> To supplement DCE estimates for wages and salaries, unreported tip income was assumed to have the same noncompliance rate as the detected noncompliance rate for sole proprietor net income or loss. Reported tip income was multiplied by an adjustment factor to estimate unreported tip income. TY 2016 NRP data were not used for the DCE estimation because the sample was limited to returns that claimed certain credits or that required reconciling the Advance Premium Tax Credit. However, the DCE estimation produced detection equations that were applied to TY 2016 NRP data under the assumption that estimated detection equations from TYs 2011 through 2015 were applicable to TY 2016.

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<sup>1</sup> Under this methodology, the "most" successful examinations are those that are able to uncover higher rates of taxpayer noncompliance relative to other examinations (discussion with Brian Erard, B. Erard and Associates, and Jonathan Feinstein, *The Individual Income Reporting Gap: What We See and What We Don't*).

## **Employment tax**

RAAS's underreporting employment tax estimate includes Social Security and Medicare taxes under FICA and the Self-Employment Contributions Act,<sup>2</sup> payments for Federal unemployment insurance under FUTA, and railroad retirement and railroad unemployment repayment taxes under the Railroad Retirement Tax Act.<sup>3</sup> The components of the employment tax Underreporting Tax Gap estimate that are associated with employer reporting of FICA and FUTA taxes are estimated using information available from the NRP Employment Tax Study for TYs 2008 through 2010. These rates are then applied to the reported TYs 2014 through 2016 population data for Form 941, *Employer's QUARTERLY Federal Tax Return*, filers (FICA) and Form 940, *Employer's Annual Federal Unemployment (FUTA) Tax Return*, filers (FUTA) to generate estimates of underreported FICA and FUTA taxes for TYs 2014 through 2016. This process is conducted separately for the different types of employers that correspond to three IRS business operating divisions: Small Businesses (generally those with fewer than \$10 million in assets) and Self-Employed, Large Businesses (generally those with \$10 million or more in assets), and Tax-Exempt and Government Entities. Implicit in this methodology is the assumption that the employers excluded from the NRP sample have the same compliance rate as other employers of the same type.

## **Corporate income tax**

In contrast to the individual income and employment tax underreporting estimates, which are based on NRP studies, RAAS's corporate income tax Underreporting Tax Gap estimates are based on data from "risk-based" operational audits. The corporate income tax Underreporting Tax Gap estimates are developed separately for small corporations (those without a balance sheet or with assets less than \$10 million) and all other corporations. Because these estimates use data from operational audits rather than from a statistically representative sample of NRP audits, there is potential for statistical bias.

For the small corporation estimates, RAAS uses an econometric approach to control for potential bias from using operational audit data. The econometric model is estimated using the operational audit data and tax return data for TYs 2009 through 2016 to develop the Underreporting Tax Gap estimates. The basic approach is to jointly estimate an econometric model that consists of five equations:

- 1) The probability of a return being audited.
- 2) The probability of detecting underreported tax conditional on an audit.
- 3) The amount of underreported tax conditional on detected underreporting.
- 4) The probability of detecting overreported tax conditional on an audit and no detected underreporting.
- 5) The amount of overreported tax conditional on an audit and no detected underreporting.

To calculate the large corporation Underreporting Tax Gap estimates, RAAS relies on the assumption, which is based on trends observed in operational audit results, that the majority of

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<sup>2</sup> 26 U.S.C. § 1403(a).

<sup>3</sup> 26 U.S.C. §§ 3201-3241.

audit adjustments are concentrated in a relatively small number of audits. Based on this assumption, RAAS uses the extreme values of noncompliance among the largest corporations (corporations with assets over \$250 million) to estimate the noncompliance for the rest of the population. RAAS used operational audit data for large corporations for TYs 2005 through 2011 to identify the audits with extreme values in terms of the proposed adjustments to tax. The average Voluntary Reporting Rate for this period was applied to the TYs 2014 through 2016 reported tax liabilities of both mid-size and large corporations to compute the Tax Gap estimate.

### **Estate tax**

Examination data on reporting compliance for statistically representative samples of filed returns are not available for estate tax returns. Instead, new analyses were completed and used to develop the estimates. A methodology was developed to use operational examination data and an econometric approach to attempt to adjust for the selection bias from using the risk-based operational examination data. Operational audit data were combined with a random sample of tax returns filed timely for death years 2011 through 2016 in order to predict underreported tax on unaudited returns using an econometric model. The updated methodology takes into account the increases in the filing threshold that reduced the number of estates subject to this tax.

### **Underpayment Tax Gap estimates**

The Gross Underpayment Tax Gap is the amount of tax liability that is reported on timely filed tax returns, but is not timely paid. RAAS develops underpayment estimates for the following tax types: individual income taxes, corporate income taxes, employment taxes, excise taxes, and estate and gift taxes. Because the amounts reported on timely returns and the amounts paid can be observed from IRS data, RAAS can calculate the Underpayment Tax Gap directly, without having to use any estimation techniques. Some of the Gross Tax Gap is collected through IRS enforcement efforts, and some is paid late, *i.e.*, after the payment due date, without IRS intervention. All late payments are tabulated from IRS administrative data, which distinguishes payments made after the due date from those paid on time. These tabulations are used to estimate enforced and other late payments for all taxes except the corporate income tax in which estimates of enforced and other late payments are taken entirely from the tabulations of Total Enforcement Revenue Collected from the IRS's Enforcement Revenue Information System.

### **Nonfiling Tax Gap estimates**

The Nonfiling Tax Gap represents taxes not paid on time associated with required tax returns that are filed late and those that are not filed at all. RAAS develops Nonfiling Tax Gap estimates for the following tax types: individual income tax, self-employment tax, and estate tax. RAAS does not produce a Nonfiling Tax Gap estimate for the corporate or excise tax types.

### **Individual income and self-employment tax**

To develop the individual income and self-employment Nonfiling Tax Gap estimates, RAAS looks at third-party reporting (*e.g.*, Form W-2, *Wage and Tax Statement*, Form 1099-MISC, *Miscellaneous Information*) and uses this information to determine who is not represented on timely filed Form 1040, *U.S. Individual Income Tax Return*. For the Tax Gap estimates covering TYs 2011 through 2013, RAAS estimated ("imputed") filing status based on Census data and IRS

data. For the TYs 2014 through 2016 estimates, RAAS used a hybrid approach that links Census survey data to tax administrative data, but unlike the previous method, it links the Census records to far more substantial tax records for nonfilers. It separates nonfilers into two groups: 1) “late filers” (those who filed a required return after the extended due date and within four years of the tax year of interest) and 2) “not-filers” (those who did not file a required return within four years of the tax year of interest).

The methodology used to estimate the Nonfiling Tax Gap associated with late filers is based solely on tax administrative data. The timing of their return filing and their timely payments of tax are known with certainty. Their tax liability is based largely on what they report on their tax return (*e.g.*, filing status, income, deductions, credits), but this is supplemented by income reported for them by third parties whenever this was not reported by the taxpayer on the tax return.

The methodology used to estimate the Nonfiling Tax Gap attributable to not-filers relies on linking individual records from the Annual Social and Economic Supplement of the Current Population Survey, a representative Census sample of the U.S. population, to detailed income and tax withholding records of the entire population from tax administrative data. The records are linked anonymously through the use of a unique Protected Identification Key assigned by the Census Bureau to both sets of records, revealing which individuals in the Census sample did not appear as a primary or secondary taxpayer on a timely or late-filed return.

### **Estate Tax**

The TYs 2014 through 2016 estate tax Nonfiling Tax Gap estimate reflects the Tax Gap associated with late filers. The Nonfiling Tax Gap associated with late-filed returns (late-filer Tax Gap) is estimated from the tax reported on actual late-filed returns net of timely made payments.

## Appendix III

### Management's Response to the Draft Report



RESEARCH, APPLIED ANALYTICS  
AND STATISTICS

DEPARTMENT OF THE TREASURY  
INTERNAL REVENUE SERVICE  
WASHINGTON, DC 20224

March 9, 2023

MEMORANDUM FOR DEPUTY INSPECTOR GENERAL FOR INSPECTIONS  
AND EVALUATIONS

FROM:

Barry W. Johnson   
Acting Chief Data and Analytics Officer

Date: 2023.03.09  
13:10:28 -05'00'

SUBJECT:

Draft Audit Report – Actions Are Needed to Improve the  
Completeness, Development, and Review of IRS Tax Gap  
Estimates (Audit # 2022-10010)

Thank you for the opportunity to review your draft report titled Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates. The IRS Office of Research, Applied Analytics and Statistics (RAAS) is the Service's centralized research and analytic organization. One of RAAS' responsibilities is the development of tax gap estimates. The tax gap is a measure of the level of overall noncompliance, in the context of Internal Revenue Code provisions in effect at the time. The estimates provide the Internal Revenue Service (IRS) with periodic appraisals of the nature and extent of noncompliance for use in formulating tax administration strategies. The word "tax" in the phrase "tax gap" is used broadly to encompass not only tax but also refundable and nonrefundable tax credits. The gross tax gap is the difference between true tax liability for a given tax year and the amount that is paid on time. It is comprised of the nonfiling gap, the underreporting gap, and the underpayment (or remittance) gap. The net tax gap is the portion of the gross tax gap that will never be recovered through enforcement or other late payments.

RAAS is committed to continuously improving the tax gap estimates. For example, the recently released TY 14 – TY 16 estimates include projections of the tax gap for TY 17 – TY 19. Additionally, IRS will initiate annual revisions to the tax gap starting in FY 24, while continuing to research ways to improve our estimation methodology where data are limited or not readily available. We appreciate your acknowledging that the addition of the three-year projection to the tax gap reports, in part, addresses stakeholder concerns with the timeliness of the estimates. We will incorporate your recommendations into our processes moving forward.

Our corrective action plan for the recommendations is attached. If you have any questions, please contact Peter Rose, Director, Knowledge Development and Application, at 202-803-9524.

Attachment

Corrective Actions for TIGTA Draft Report, Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates (Audit #202210010)

**RECOMMENDATION 1:** Coordinate with IRS business operating divisions to create and implement a formalized strategy to identify, prioritize, and develop estimates for areas of noncompliance that are not currently addressed in the Tax Gap estimates.

**CORRECTIVE ACTION 1:** IRS agrees with this recommendation. As shared with TIGTA, identifying opportunities to develop estimates for areas of noncompliance that are not fully addressed in current estimates is already incorporated into our research priorities, documented in staff performance plans and the work is advancing. RAAS will create and document a formalized strategy to identify, prioritize, and develop estimates for areas of noncompliance that are not fully addressed in the current tax gap estimates. Implementation of the strategy will be achieved when identification and prioritization of areas of noncompliance that are not or are not fully addressed in the tax gap estimates has been completed and development of the estimates has been initiated.

**IMPLEMENTATION DATE:** September 30, 2023

**RESPONSIBLE OFFICIAL(S):** RAAS, Director of Knowledge Development and Application

**RECOMMENDATION 2:** Improve the transparency of the Tax Gap estimates in future revisions of the Tax Gap report by including an enhanced discussion of the limitations of the Tax Gap estimates, including the types of taxpayer noncompliance that are not included in the estimates and those types that may not be fully captured.

**CORRECTIVE ACTION 2:** IRS agrees with this recommendation. IRS included a discussion of data limitations for the first time in the recently released TY14 – TY 16 Tax Gap estimates. In keeping with our goal of continuous improvement of the estimates, IRS will include additional information in the data limitations section of the report in our next tax gap release in October 2023.

**IMPLEMENTATION DATE:** October 15, 2023

**RESPONSIBLE OFFICIAL(S):** RAAS, Director of Knowledge Development and Application

**RECOMMENDATION 3:** The Chief Data and Analytics Officer, RAAS, should develop consolidated, written policies and procedures for developing the Tax Gap to help ensure repeatability, timeliness, quality, and continuity of the Tax Gap estimates and improve oversight.

## Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates

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Corrective Actions for TIGTA Draft Report, Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates (Audit #202210010)

**CORRECTIVE ACTION 3:** IRS partially agrees with this recommendation. IRS already produces technical papers that address the methodology for estimating the various components of the tax gap. These documents ensure the repeatability, quality, and continuity of the estimates. Additionally, the timeliness of the tax gap estimates has been addressed by adding a three-year projection to the formal estimates, updating the estimates annually beginning in 2023 and including the annual tax gap estimates in the SOI release schedule. That said, there are opportunities to improve and consolidate relevant documentation. IRS will load the procedural documents and the code for running the tax gap estimation into a single project folder.

**IMPLEMENTATION DATE:** September 30, 2023.

**RESPONSIBLE OFFICIAL(S):** RAAS, Director of Knowledge Development and Application

**RECOMMENDATION 4:** Develop written policies and processes to formalize the internal and external reviews of the Tax Gap estimates.

**CORRECTIVE ACTION 4:** IRS agrees with this recommendation and will create a document that outlines the internal and external review process for our annual updates to tax gap estimates.

**IMPLEMENTATION DATE:** June 30, 2023.

**RESPONSIBLE OFFICIAL(S):** RAAS, Director of Knowledge Development and Application

**RECOMMENDATION 5:** Reestablish an advisory group to review any updates to the Tax Gap methodology that would significantly affect the estimates.

**CORRECTIVE ACTION 5:** The IRS agrees with this recommendation. IRS will convene an advisory panel to review major methodological changes to tax gap estimation as was done for the TY 2008 – 2010 estimates (released in CY 2016). In that instance, there was change in the source of data used for the estimates that required real-time input from subject matter experts on using that data. Since the release of the TY 2008 -2010 estimates, there have not been any major methodological changes to the tax gap estimation methodology. It is anticipated that the next major update to the tax gap estimates will occur in the CY 2025 annual update.

**IMPLEMENTATION DATE:** August 30, 2024

**Actions Are Needed to Improve the Completeness,  
Development, and Review of IRS Tax Gap Estimates**

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Corrective Actions for TIGTA Draft Report, Actions Are Needed to Improve the Completeness, Development, and Review of IRS Tax Gap Estimates (Audit #202210010)

**RESPONSIBLE OFFICIAL(S):** RAAS, Director of Knowledge Development and Application

**RECOMMENDATION 6:** Develop a formal process for documenting the advisory group's feedback on the Tax Gap estimates, including making a high-level summary of its feedback available to the public.

**CORRECTIVE ACTION 5:** IRS agrees with this recommendation and will include a discussion of feedback received from the advisory group in the tax gap executive summary document in the calendar year in which the advisory group is engaged.

**IMPLEMENTATION DATE:** October 15, 2024

**RESPONSIBLE OFFICIAL(S):** RAAS, Director of Knowledge Development and Application

## Appendix IV

### Glossary of Terms

Term	Definition
Advance Premium Tax Credit	A tax credit that is paid in advance to a taxpayer's insurance company to help cover the cost of premiums.
American Families Plan	A plan introduced by the White House in April 2021 that would provide free access to preschool and two years of community college as well as child care assistance and paid family and medical leave, among other things.
American Opportunity Tax Credit	A partially refundable Federal tax credit used to help parents and college students offset the costs of college.
Business Operating Division	A title for major IRS organizations such as the Wage and Investment Division and Information Technology organization.
Child Tax Credit	A tax credit for families with dependent children that is used to reduce the individual income tax burden for families, better recognize the financial responsibilities of raising dependent children, and promote family values.
Earned Income Tax Credit	A tax credit used to offset the impact of Social Security taxes on low-income families and to encourage them to seek employment.
Econometric Methodology/Approach	A type of measurement that uses a combination of statistical tools and economic theories to estimate and forecast economic variables.
Employment Tax	Taxes paid to the IRS by employers for their employees, which include Federal income tax, Social Security and Medicare taxes (including the employer's share), and Federal unemployment taxes.
Enforcement Revenue Information System	Tracks the direct hours spent on cases, the life span of enforcement cases, assessments, recommendations, collections, and the timing of revenue collected from all IRS enforcement actions.
Estate Tax	A tax on your right to transfer property at your death. It consists of an accounting of everything you own or have certain interests in at the date of death.
Estimated Total True Tax Liability	The total unadjusted tax due for a given time period, typically a calendar year.
Excise Tax	A tax imposed on the sale of specific goods or services, or on certain uses, such as the sale of things like fuel, airline tickets, heavy trucks and tractors, indoor tanning, tires, tobacco, and other goods and services.
Income Tax	A tax on the annual earnings of individuals, corporations, trusts, and certain other legal entities.
Internal Revenue Manual	The primary, official source of IRS instructions to staff related to the organization, administration, and operation of the IRS.

**Actions Are Needed to Improve the Completeness,  
Development, and Review of IRS Tax Gap Estimates**

<b>Term</b>	<b>Definition</b>
National Research Program	A comprehensive effort by the IRS to measure compliance for different types of taxes and various sets of taxpayers that provides a statistically valid representation of the compliance characteristics of taxpayers.
Net Premium Tax Credit	The amount of Premium Tax Credit minus the amount of Advance Premium Tax Credit.
Premium Tax Credit	A refundable tax credit created by the Patient Protection and Affordable Care Act <sup>1</sup> to assist eligible taxpayers with paying their health insurance premiums.
Protected Identification Key	A number assigned by the Census Bureau to individuals in a representative Census sample of the U.S. population. These records are linked anonymously to tax records of the entire population (from tax administrative data) for the purpose of determining which individuals in the Census sample did not appear as a primary or secondary taxpayer on a timely or late-filed return.
Self-Employment Tax	A combination of Social Security tax and Medicare tax for individuals who work for themselves.
Total Enforcement Revenue Collected	A file supplied by RAAS that includes revenue collection for major program categories. The Enforcement Revenue Information System is the data source for this file.
Voluntary Reporting Rate	A measure of reporting compliance on timely filed returns and is the amount of reported tax divided by the amount of tax that should have been reported.

<sup>1</sup> Pub. L. No. 111-148, 124 Stat. 119 (codified as amended in scattered sections of 26 and 42 U.S.C.), as amended by the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111-152, 124 Stat. 1029.

## Appendix V

### Abbreviations

BLS	Bureau of Labor Statistics
DCE	Detection Controlled Estimation
FCSM	Federal Committee on Statistical Methodology
FICA	Federal Insurance Contributions Act
FUTA	Federal Unemployment Tax Act
GAO	Government Accountability Office
IRM	Internal Revenue Manual
IRS	Internal Revenue Service
NRP	National Research Program
OMB	Office of Management and Budget
RAAS	Research, Applied Analytics and Statistics
TIGTA	Treasury Inspector General for Tax Administration
TY	Tax Year



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