OPEN GAO RECOMMENDATIONS

Financial Benefits Could Be between $106 Billion and $208 Billion
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What GAO Found

GAO routinely makes 1,200 or more recommendations each year to assist Congress and improve government performance. Many of these recommendations are intended to save money and enhance revenue. Many more are to strengthen national security, enhance public health and safety, and improve the efficiency and effectiveness of government programs and operations. They also help Congress refine and create laws framing federal policies across the spectrum of the government’s responsibilities. Typically, over 75 percent of GAO’s recommendations are implemented. GAO continuously works with Congress and federal agencies to follow up on open recommendations to achieve the intended results.

Because GAO makes new recommendations on an ongoing basis, there is always an inventory of open recommendations. As of March 2024, 5,480 GAO recommendations were open. These recommendations cover six categories, as shown in the figure. A subset of these recommendations (about 4 percent) could produce measurable financial benefits between $106 billion and $208 billion through increased revenues or reduced expenditures, according to GAO’s simulation.

Potential Benefits of Open GAO Recommendations as of March 2024

View GAO-24-107146. For more information, contact Jessica Lucas-Judy at (202) 512-6806 or lucasjudyj@gao.gov or Michael Hoffman at (202) 512-6445 or hoffmanme@gao.gov.
GAO used a simulation to estimate total potential financial benefits because a lack of data and other factors make it challenging to precisely calculate the total potential financial benefits of each open recommendation. Also, it is difficult to predict how management would use its discretion in implementing the recommendations. More specific estimates exist for a small subset of these recommendations. In its annual report on duplication and cost savings, GAO identified 19 recommendations with potential financial benefits of $1 billion or more, many of which are described in that report (GAO-24-106915). Several are highlighted in the table below.

### Examples of Open Recommendations with Potential Financial Benefits of $1 Billion or More

<table>
<thead>
<tr>
<th>Open recommendation</th>
<th>Potential financial benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Medicare Payments by Place of Service:</em> Congress could realize additional financial benefits if it took steps to direct the Secretary of Health and Human Services to equalize payment rates between settings for evaluation and management office visits and other services that the Secretary deems appropriate. (GAO-16-189)</td>
<td>$141 billion over 10 years (Congressional Budget Office)</td>
</tr>
<tr>
<td>COVID-19 Employer Tax Relief: The Internal Revenue Service (IRS) should document processes used to address certain compliance risks for COVID-19 employer tax credits and implement additional compliance activities to potentially recapture ineligible claims. (GAO-22-104280)</td>
<td>Tens of billions of dollars over 2 years (GAO analysis of IRS data)</td>
</tr>
<tr>
<td><em>Public-Safety Broadband Network:</em> Congress should consider reauthorizing FirstNet, including different options for its placement, and ensure key statutory and contract responsibilities are addressed before current authorities sunset in 2027. (GAO-22-104915)</td>
<td>$15 billion over 15 years* (GAO analysis of the FirstNet Contract)</td>
</tr>
<tr>
<td>Student Loan Income-Driven Repayment Plans: The Department of Education should obtain data to verify income information for borrowers reporting zero income on Income-Driven Repayment applications. (GAO-19-347)</td>
<td>More than $2 billion over 10 years (Congressional Budget Office)</td>
</tr>
<tr>
<td><em>Department of Energy’s Treatment of Hanford’s Low-Activity Waste:</em> Congress should consider clarifying two issues, including the Department of Energy’s (DOE) authority to determine whether portions of Hanford’s tank waste, such as the low-activity tank waste, can be managed as a waste type other than high-level radioactive waste and disposed of outside the state of Washington. (GAO-22-104365)</td>
<td>Billions of dollars over 11 years (GAO analysis of DOE data)</td>
</tr>
<tr>
<td><em>Improper Payments and Fraud:</em> Congress should establish a permanent analytic center of excellence to aid the oversight community in identifying improper payments and fraud. (GAO-22-105715)</td>
<td>More than $1 billion annually (GAO analysis of agency data)</td>
</tr>
</tbody>
</table>

Legend: * = Legislation is likely to be necessary to fully address all matters or recommendations in this topic area.

Source: GAO. | GAO-24-107146

*If FirstNet sunsets, it is unclear what will happen to the remaining $15 billion in scheduled annual payments, which FirstNet currently has authority to collect and reinvest.

Note: The examples in the table above are based on GAO’s body of work on Duplication and Cost Savings (see GAO-24-106915) and are derived from methodologies and data that can be specific to each recommendation. In contrast, GAO’s simulation uses a uniform methodology, based on data from thousands of GAO’s realized financial benefits, to estimate the total potential financial benefits from all current open recommendations. Because these methods are not comparable the simulation results will not match the individual estimates of specific recommendations. See appendix I of this report for more details.

Some of GAO’s recommendations are directed to Congress. As of March 2024, bills introduced in the 117th and 118th Congresses would have fully or partially addressed 103 of the 242 open recommendations GAO has made to Congress (about 43 percent).
Implementing Open GAO Recommendations Could Produce between $106 Billion and $208 Billion in Financial Benefits, according to Our Updated Data and Simulations

GAO Recommendations Also Result in Other Benefits That Are Not Directly Measurable

GAO Works with Congress and Agencies to Underscore the Importance of Fully Implementing Recommendations

Agency Comments
July 11, 2024

Congressional Committees

Congress relies on GAO to develop nonpartisan, objective, and reliable information to advise lawmakers and agency heads on ways to make government work better. Our recommendations for executive action and matters for congressional consideration produce measurable financial and other critical benefits for the federal government.¹ In response to our recommendations, Congress and federal agencies have changed business operations and activities, restructured federal programs, and modified entitlements, taxes, and user fees. As a result of these actions, government expenditures have been reduced, funds have been put to better use, and federal revenues have increased.

Since fiscal year 2002, our work has resulted in over $1.38 trillion in financial benefits and over 28,000 program and operational benefits have occurred that helped to change laws, improve public safety, and promote sound management throughout government. In fiscal year 2023 alone, our work generated about $70.4 billion in financial benefits. Since agencies can incur costs for implementing recommendations, we collect information on those costs and our estimates of financial benefits are net benefits that deduct implementation costs from measured financial benefits.²

We routinely make 1,200 or more recommendations each year to assist Congress and improve government performance. Many of these recommendations are intended to save money and enhance revenue. Many other recommendations result in other meaningful benefits, including strengthened national security, enhanced public health and safety, and the efficiency and effectiveness of government programs and operations. They also help Congress refine and create laws framing federal policies across the spectrum of the government’s responsibilities.

¹We direct recommendations to agencies and matters for consideration to Congress. In this report, recommendations to federal agencies and matters for congressional consideration are collectively referred to as “recommendations.”

Typically, over 75 percent of our recommendations are implemented.\textsuperscript{3} We continuously work with Congress and federal agencies to follow up on open recommendations to achieve the intended results.

Since 2001, around 4 percent of our implemented recommendations have resulted in measurable financial benefits.\textsuperscript{4} Many other recommendations result in benefits that currently cannot be directly measured in dollar terms but have meaningful effects. For example, we previously identified gaps in government oversight of the state survey agencies that ensure nursing homes meet federal quality standards—including that residents are free from abuse.\textsuperscript{5} In 2019, we recommended that the Centers for Medicare & Medicaid Services (CMS) address gaps in its oversight of these survey agencies. As a result of our recommendation, CMS updated its guidance. For example, it began to require that survey agencies immediately make referrals to law enforcement if they have a reasonable suspicion that a crime against a nursing home resident has occurred and has not already been reported. This change improves law enforcement’s ability to collect evidence and prosecute such cases.

Our recommendations have also strengthened public safety in areas such as food safety, national defense, and protection of the nation’s cybersecurity, among other areas. These benefits have also made government more effective through improved interagency coordination and reduced mismanagement and abuse.

The Senate report accompanying the Legislative Branch Appropriations Act, 2024, includes a provision for us to provide additional detail on the potential financial benefits associated with our open recommendations to agencies and matters to Congress.\textsuperscript{6} This report updates our previous report on this topic and provides estimated ranges of potential financial benefits that could result from implementation of our open recommendations.

\textsuperscript{3}Our percentage of past recommendations implemented within 4 years was between 75 and 77 percent between fiscal year 2018 and fiscal year 2024. See GAO-24-900483.

\textsuperscript{4}The year 2001 is the starting date for this analysis because this is our oldest unimplemented recommendation.


recommendations and matters. Estimated ranges are provided for selected entities (nine agencies and Congress), for all other agencies combined, and as an overall total.

To conduct this work, we used data from two internal performance monitoring and accountability systems. These two systems record (1) our recommendations, and (2) benefits resulting from our work. We assessed the reliability of the data produced by these two systems and determined they were sufficiently reliable to develop estimates of potential financial benefits.

These two systems were designed for different purposes so it is not always possible to link recommendations data and benefits data. We identified benefits data likely to be associated with recommendations made from fiscal year 2001 to March 2024 and we limited our analysis to these data.

Lack of data and other factors limit our ability to precisely calculate the total potential financial benefits of each of the over 5,000 open recommendations. Therefore, we used bootstrapping and a Monte Carlo simulation approach to estimate a range of the total financial benefits that could occur from implementation of our open recommendations.

Generally speaking, a Monte Carlo simulation makes predictions about unknown values based on assumptions about how often an event will occur and how large it will be if it happens. Because we do not know the exact future financial benefits that would come from implementing each of our over 5,000 open recommendations, we used Monte Carlo simulations to make a series of predictions based on actual financial benefits achieved from our over 37,500 closed recommendations; then we reported on the most likely 80 percent of outcomes from our models.

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8See appendix I for details on these limitations and other factors.

9A Monte Carlo simulation considers the probability and magnitude of a given outcome (in this case financial benefits). In our simulation, the probabilities and magnitudes are drawn from our own historical data on the outcome (bootstrapping), and other factors expected to be associated with that outcome. Each of these scenarios produces one simulated overall result. The Monte Carlo trials simulate the unknown distribution thousands of times and, when all 10,000 results are complete, they can be visualized as a distribution of the range and other key outcomes.
We selected 10 federal entities with the largest number of open recommendations as of March 2024 for individual analysis in this report. These selected entities accounted for 26,014 (about 60 percent) of all recommendations identified during the period. They accounted for 22,237 (about 59 percent) of closed recommendations. This selection helped ensure there were a sufficient number of open recommendations for each agency simulation.\textsuperscript{10} We developed 11 individual models specific to our 10 selected entities and one that combines all other agencies. The total simulated potential financial benefits are a sum of these individual models.

The results of our simulations depend on various assumptions we make about the data based on our historical experience and the degree of uncertainty involved. We used a variety of data and alternative model specifications to test sensitivity to our assumptions and mitigate data limitations. For more details about limitations related to historical data, the simulation approach, these tests, and data reliability see appendix I.

We conducted this work from January to July 2024 in accordance with all sections of GAO’s Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions in this product.

\textsuperscript{10}The 10 federal entities with at least 150 open recommendations are the Departments of Defense, Energy, Health and Human Services, Homeland Security, Transportation, the Treasury (other than the Internal Revenue Service (IRS)), and Veterans Affairs; IRS; Office of Management and Budget; and Congress. These are the same 10 entities we identified and reviewed in our 2023 report.
Implementing Open GAO Recommendations Could Produce between $106 Billion and $208 Billion in Financial Benefits, according to Our Updated Data and Simulations

Between fiscal year 2001 and March 2024, we made 43,203 recommendations to federal agencies and Congress. Of these, 5,480 of our recommendations remained open as of March 2024, including 4,169 made in the last 4 years and 1,311 made more than 4 years ago (see fig. 1).

Figure 1: Number of GAO Recommendations, by Date Made and Status, Fiscal Year 2001–March 2024

For recommendations that were implemented from fiscal year 2001 to March 2024, we identified 915 instances of financial benefits totaling $808.8 billion and 24,740 other benefits to the federal government.\(^{11}\) Our 10 selected entities contributed to about $570.5 billion of the total financial benefits (about 71 percent).\(^{12}\) They also contributed to about 15,500 other benefits (about 61 percent).

For the 5,480 recommendations that were open as of March 2024, we estimate that implementation could result in $106 billion to $208 billion of

\(^{11}\)Financial benefits are taken from our performance and accountability reporting system, which limits the benefits from any individual action to a 5-year period. The system does not capture benefits that may occur beyond this period. Financial benefits can occur in a variety of ways including cost savings, revenue enhancement, cost avoidance, cost shifting, and changes to appropriations. Not all financial benefits have a direct budgetary effect.

\(^{12}\)This financial benefit amount reflects benefits to all contributing agencies for these accomplishments and exceeds benefits attributable solely to our selected agencies.
measurable future financial benefits.\textsuperscript{13} The estimates have a median simulated value of approximately $151 billion, and the range reflects the middle 80 percent of simulated values.

The estimate of potential financial benefits is higher than in our 2023 report for two reasons. First, since our 2023 simulations, we have identified 40 new instances of financial benefits, which generally increase the expected probability that any given open recommendation will be predicted to have financial benefits, and the expected amount of those benefits. Second, the number of recommendations we have made exceeded the number closed since our last report, resulting in a higher number of open recommendations, which results in additional simulated instances of potential financial benefits.\textsuperscript{14}

Our simulations do not provide insights into which specific recommendations could lead to benefits, the value of financial benefits from individual recommendations, or the likely budgetary effect of financial benefits. These estimates reflect the range of potential financial benefits that could result from implementation of our open recommendations, given key assumptions in our model (see fig. 2).\textsuperscript{15}

\textsuperscript{13}The middle 50 percent of simulated results fell between $126 billion and $180 billion in measurable financial benefits, and the full range of simulated values is from $55 billion to $377 billion in measurable financial benefits. For implemented recommendations that achieved financial benefits, those benefits could accrue over a number of years.

\textsuperscript{14}In 2023, we reported that 5,226 of our recommendations were open. We estimated that implementing all of those recommendations could produce $92 billion to $182 billion of measurable, future financial benefits. Eighty percent of the total simulated financial benefits fell in this range. The model produced a median simulated value of approximately $131 billion. See GAO-23-106598.

\textsuperscript{15}These assumptions account for the probability that an implemented open recommendation may not result in measurable financial benefits. The assumptions also recognize that savings from implementing recommendations are only claimed over a 5-year period. The presented model imposed a 20 percent reduction in financial benefits for any predicted values in excess of $10 billion for those agencies with fewer than 50 observations in our historical financial benefits data.
These simulated values represent potential financial benefits that would occur if all recommendations open as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data. On average across our simulations, our 10 selected entities accounted for about 80 percent of the total simulated financial benefits. See appendix II for individual agency results and examples of open recommendations that have the potential for financial benefits.

The simulations overall likely understate the total value of financial benefits that might accrue from our recommendations. There are several reasons for this:

- Lack of data and other factors often make it difficult or impossible to measure the financial benefit associated with implementation of our recommendations. Many of the 24,740 instances of other benefits in our historical data likely have financial benefits that are not reflected in our simulations.
- Historical data generally only identify up to 5 years of financial benefits from an individual recommendation, though these benefits could continue for longer periods.\(^\text{16}\)
- Different methods, including estimation of potential financial benefits from individual recommendations where data are available, suggest some individual recommendations may have

\(^{16}\)For example, in our body of work on duplication and cost savings we do not impose a time limit and often identify financial benefits lasting up to 10 years. This method is also consistent with the Congressional Budget Office’s scoring of legislation.
large potential financial benefits, but these cases are not reflected in our simulation.17

The results of these simulations should be interpreted carefully. The historical data we used for the simulation have limitations, as does the simulation itself. For example, the historical financial benefits used in the simulation rely on individual estimates from a variety of sources, which considered different time periods and used different data, assumptions, and methods. Producing such an estimate is challenging due to the variation in types of recommendations and uncertainty about the way any particular recommendation will be implemented. Therefore, we estimate a range of potential financial benefits rather than a single estimate.

Appendix I provides additional details on (1) key information about our data and simulations and related limitations in our results, and (2) additional models and sensitivity testing which demonstrate generally consistent results under a range of different assumptions.

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17In our annual report on duplication and cost savings, we identified 19 recommendations with potential financial benefits of $1 billion or more, many of which are described in that report. GAO, 2024 Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Billions of Dollars in Financial Benefits, GAO-24-106915 (Washington, D.C.: May, 15, 2024). Some of these individual examples are presented in appendixes II and III. For example, in March 2022 we recommended that Congress establish a permanent analytic center of excellence to aid the oversight community in identifying improper payments and fraud. GAO, Emergency Relief Funds: Significant Improvements Are Needed to Ensure Transparency and Accountability for COVID-19 and Beyond, GAO-22-105715 (Washington, D.C.: Mar. 17, 2022). We estimate that this could result in billions of dollars in savings. Legislation has been introduced that would address this recommendation. Specifically, in March 2024, a bill was introduced in the Senate to establish a permanent committee that would continue oversight of pandemic-related funds and expand its scope to oversee other federal spending. S. 4036, 118th Cong. (2024). Further, in April 2024, a bill was introduced in the House to establish a Government Spending Oversight Committee within the Council of the Inspectors General. H.R. 8009, 118th Cong. (2024).
While around 4 percent of our recommendations have historically resulted in measurable financial benefits, our recommendations also result in a range of other meaningful benefits.\textsuperscript{18} We categorize our other benefits into six areas: public safety and security, business process and management, public insurance and benefits, program efficiency and effectiveness, acquisition and contract management, and tax law administration.\textsuperscript{19}

For the 5,480 recommendations that were open as of March 2024, 39 percent relate to public safety and security; 26 percent to business process and management; 16 percent to public insurance and benefits; 10 percent to program efficiency and effectiveness; 6 percent to improvements in acquisition and contract management; and 4 percent to tax law administration.\textsuperscript{20}

Implementing our recommendations would help improve oversight of nuclear defenses, the effectiveness of services to youth experiencing homelessness, and agencies' ability to provide consistent care and access to long-term care for veterans, among many other benefits. For example:

- **Public Safety and Security.** In October 2022, we recommended that the Secretary of Education, in coordination with federal and nonfederal stakeholders, determine how best to help school districts overcome challenges and consider opportunities for addressing cyber threats. Implementation of this recommendation could help prevent cyber attacks on schools, which have resulted in monetary and learning losses. (GAO-23-105480)

- **Business Process and Management.** In December 2022, we recommended that the Secretaries of the Army, Navy, and Air Force, and the Commandant of the Marine Corps respectively should designate a single entity with sufficient authority and resources necessary to support the implementation of predictive maintenance on weapon systems. Implementation of this

\textsuperscript{18}In many cases, we expect that these outcomes would also be associated with financial benefits, but currently available data and tools for analysis are not sufficient for us to quantify or take credit for any specific amounts.

\textsuperscript{19}We track these other benefits that result from implementation of our recommendations in our annual Performance and Accountability Report. Also, during fiscal year 2023 we recorded a total of 1,220 other benefits across these categories. GAO-24-900483.

\textsuperscript{20}The total percentages may not equal 100 percent due to rounding.
recommendation could help the Department of Defense provide battle-ready ground combat systems, ships and submarines, and aircraft to its warfighters. (GAO-23-105556)

Congress and agencies could help realize these potential financial and other benefits by addressing our open matters and recommendations. Action by Congress to address open matters can produce billions of dollars in financial savings, improve the effectiveness of federal agencies and programs, and help position the nation to address future challenges. As of March 2024, there were 242 open matters spanning a wide range of topics and involving many parts of the federal government. Thirty of these open matters could result in measurable financial benefits, with 12 having the potential to provide at least $1 billion of financial benefits.

For example, in December 2015, we recommended that Congress consider directing the Secretary of Health and Human Services to equalize payment rates between medical settings for evaluation and management office visits and other services that the Secretary deems appropriate.\textsuperscript{21} The associated savings would be returned to the Medicare program. The Congressional Budget Office estimated that this action could result in $141 billion in financial benefits from fiscal years 2021 through 2030.

Congress is considering ways to address these open matters. As of March 2024, bills introduced in the 117th and 118th Congresses would have fully or partially addressed 103 of the 242 open matters.\textsuperscript{22} In addition, each year we report on opportunities for agencies and Congress to reduce duplication, overlap, and fragmentation in federal programs, including options for agencies to save money and increase revenue.\textsuperscript{23}

Since 2015, we have sent priority recommendation letters to heads of departments or agencies highlighting recommendations that could save large amounts of money; improve congressional or executive branch


\textsuperscript{22}We reported this information in GAO-24-107261. Our analysis of potential financial benefits in appendix II uses a different number of open matters (247) because the reports cover different time frames. GAO, \textit{Recommendations for Congress: Action Can Produce Billions of Dollars in Financial and Other Benefits}, GAO-24-107261 (Washington, D.C.: June 12, 2024).

\textsuperscript{23}See our body of work on duplication and cost savings.
decision-making on major issues; eliminate mismanagement, fraud, and abuse; or ensure that programs comply with laws and that funds are spent legally.24 These letters do not include all our open recommendations but highlight recommendations that we believe warrant priority attention from agency heads.

We also issue biennial reports updating our High-Risk List, which identifies government operations with vulnerabilities to fraud, waste, abuse, and mismanagement, or in need of transformation. We meet regularly with the Office of Management and Budget to discuss progress agencies are making to address these high-risk issues. Most recently, in April 2023, we reported that agencies need to address hundreds of our open recommendations to bring about lasting solutions to 37 high-risk areas, and that legislation is needed in some cases.25

We have previously reported that the nation is on an unsustainable fiscal path caused by a structural imbalance between spending and revenue.26 Implementing our recommendations can help reduce the deficit, though these actions alone are not sufficient to address the nation’s fiscal imbalance. Since 2017, we have suggested that Congress develop a plan to place the government on a sustainable long-term fiscal path—where government spending and revenue result in a stable or declining ratio of debt held by the public to gross domestic product over the long term.27

As a result of our work, agencies have implemented 75 percent of recommendations made 4 years ago. In fiscal year 2023, we reported $70.4 billion in financial benefits, a return of $84 for every dollar invested in us. As our simulation above shows, implementing our open recommendations could result in a median of $151 billion in savings. However, Congress and agencies will need to work together to fully realize these savings and other potential benefits.

24Priority Open Recommendation Letters.
We provided a draft of this report to the Departments of Defense, Energy, Health and Human Services, Homeland Security, Transportation, the Treasury, and Veterans Affairs; the Internal Revenue Service; and the Office of Management and Budget for technical review. The Departments of Defense and Transportation provided technical comments, which we incorporated, as appropriate.

We are sending copies of this report to the appropriate congressional committees; the Secretaries of Defense, Energy, Health and Human Services, Homeland Security, Transportation, the Treasury, and Veterans Affairs; the Commissioner of Internal Revenue; the Director of the Office of Management and Budget; and other interested parties. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact Jessica Lucas-Judy at (202) 512-6806 or lucasjudy@gao.gov, or Michael Hoffman at (202) 512-6445 or hoffmanme@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs are available on the last page of this report. Key contributors to this report are listed in appendix IV.

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Chair  
The Honorable Adriano Espaillat  
Ranking Member  
Subcommittee on the Legislative Branch  
Committee on Appropriations  
House of Representatives
Appendix I: Objectives, Scope, and Methodology

This report provides estimated ranges of potential financial benefits that could result from implementation of all our open recommendations and matters.\(^1\) Estimated ranges are provided for selected entities (nine agencies and Congress), for all other agencies combined, and as an overall total that sums these 11 ranges.

To select entities and develop simulations, we used data from our internal performance monitoring and accountability systems. The data systems record (1) our recommendations, and (2) benefits resulting from our work. For this report, we focused on the subset of benefits that result from our recommendations. Benefits can also result from our work without being tied to recommendations.\(^2\)

We assessed the recommendations data and determined they were sufficiently reliable to present the number of recommendations made since 2001, their implementation status, and the entities to which they were directed.\(^3\) We assessed the benefits data and determined they were sufficiently reliable to present the financial and other benefits identified since 2001, to identify the entities that contributed to these benefits, and to use in our simulations.

Because these two systems were designed for different purposes, there is not a direct link between recommendation data and benefits data, and it is not always possible to identify a link. We identified benefits data likely to be associated with recommendations made from fiscal year 2001 to March 2024 and we limited our analysis to these data.\(^4\) To do this, we needed to make some general assumptions about the data. First, we treated any instance of financial benefits as if it was associated with a unique recommendation. While this assumption could affect the simulated

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\(^1\)We direct recommendations to agencies and matters for consideration to Congress. In this report, recommendations to federal agencies and matters for congressional consideration are collectively referred to as “recommendations.”

\(^2\)Our annual performance report includes benefits from all of our work, including these benefits not related to recommendations.

\(^3\)Potential financial benefits are typically associated with matters and recommendations that are “open-not implemented” or “open-partially implemented.” However, in some cases they are also associated with matters and recommendations that are “closed-implemented” because it may take time between when action is taken and when the financial benefit is realized. Matters and recommendations are generally “closed-no longer valid” when they are no longer relevant due to changing circumstances.

\(^4\)The year 2001 is the starting date for this analysis because this is our oldest unimplemented recommendation.
count of recommendations that would lead to financial benefits, it would not affect the total amount of benefits achieved. Second, because the benefits data sometimes included the total benefits when multiple agencies had taken action, we assumed that such benefits were divided equally among agencies. This assumption resulted in simulations that are more understated than using the total value, but could result in both over- and under-estimation for individual agencies.

We have reported that data limitations and other factors limit our ability to calculate precisely the total potential financial benefits for individual open recommendations. Simulation is a useful tool for estimation when data limitations and other uncertainties limit the ability to generate specific or precise calculations or estimates reliably. This approach allows us to estimate a range of the total financial benefits that could occur from implementation of all of our recommendations, without estimating a value for each recommendation individually.

To estimate ranges of potential financial benefits, we used bootstrapping and a Monte Carlo simulation approach. These approaches use historical data on realized financial benefits to estimate potential financial benefits from implementing all open recommendations. Producing such an estimate is challenging due to the variation in types of recommendations and uncertainty about the way any particular recommendation will be implemented. Therefore, we estimate a range of potential financial benefits rather than a single estimate.

To ensure a sufficient number of open recommendations for each agency simulation, we selected 10 federal entities—nine agencies and Congress—with the largest number of open recommendations. These

5GAO-24-106915.

6A Monte Carlo simulation considers the probability and magnitude of a given outcome (in this case financial benefits). In our simulation, the probabilities and magnitudes are drawn from our own historical data on the outcome (bootstrapping), and other factors expected to be associated with that outcome. Each of these scenarios produces one simulated overall result. The Monte Carlo simulation trials simulate the unknown distribution thousands of times and, when all 10,000 results are complete, they can be visualized as a distribution of the range and other key outcomes.

7The 10 federal entities with at least 150 open recommendations are the Departments of Defense, Energy, Health and Human Services, Homeland Security, Transportation, the Treasury (other than the Internal Revenue Service(IRS)), and Veterans Affairs; IRS; Office of Management and Budget; and Congress. These are the same 10 entities we identified and reviewed in our 2023 report.
entities accounted for more than two-thirds of our open recommendations. Moreover, they accounted for 26,014 (about 60 percent) of all recommendations identified during the period, and 22,237 (about 59 percent) of closed recommendations. We developed 11 individual models specific to our 10 selected entities, plus one that combines all other agencies. The total simulated potential financial benefits in our baseline model are a sum of these 11 models.

The results of our simulations depend both on our historical data and on key assumptions we made about how those data might correspond to future results. It is important to consider the limitations of historical data used for the simulation, limitations associated with our simplifying assumptions, and limitations specific to the Monte Carlo simulation. For example, to perform simulations using the historical data, we assume that financial benefits from open recommendations would be similar to benefits from implemented recommendations for the same agency, Congress, or a combination of agencies.

Based on our historical data, the simulation weighted the overall probabilities and magnitudes of financial benefits for all our open recommendations such as the probability of implementation without positive financial benefits. Because we do not know the exact future financial benefits that would come from implementing each of our over 5,000 open recommendations, we used Monte Carlo simulations to make a series of predictions based on actual financial benefits achieved from our over 37,500 closed recommendations; then we reported on the most likely 80 percent of outcomes from our models.

The simulation model we present in the body of our report imposed a 20 percent reduction in financial benefits for any predicted values in excess of $10 billion for agencies with fewer than 50 observations in our historical financial benefits data. We did this to address the risk that outliers in our historical data might disproportionately affect our simulation results. Although we believe our assumptions are reasonable given our historical experience and the degree of uncertainty involved, our estimates will not necessarily correspond to actual results. Resulting financial benefits will ultimately depend on whether, how, and when recommendations are addressed.
However, it is possible that the results of the simulations overall may understate the total value of financial benefits that might accrue from our recommendations. First, lack of data and other factors often make it difficult or impossible to measure the financial benefit associated with implementation of our recommendations. While these may be described under other benefits we identified—such as program efficiency and effectiveness—they are not captured in our historical total of measurable financial benefits. For example, in a 2018 review of disaster contracting, we found limitations in the Federal Emergency Management Agency’s (FEMA) use of advance contracts to provide critical goods and services to disaster survivors. In response to our recommendations, in 2020 and 2021, FEMA updated its strategy and guidance to clarify the use of advance contracts. Although FEMA’s implementation of our recommendations could result in contracts being used more efficiently, we could not measure those financial benefits.

Second, our historical data generally only identify up to 5 years of financial benefits from an individual recommendation, while these benefits often continue for longer periods. For example, in our body of work on duplication and cost savings, we have identified several instances of financial benefits that exceed a 5-year period. Moreover, evidence in support of our financial benefits often comes from 10-year estimates produced by the Congressional Budget Office.

Third, different methods, including estimates of potential financial benefits from certain individual recommendations where data are available, suggest some individual cases may have very large potential financial benefits, but these cases are not reflected in our primary simulation.

Finally, sensitivity testing of our models and assumptions, described below, suggests that some alternative specifications would increase the simulated benefit amounts. Specifically, the average estimated financial benefits relative to our baseline could increase if we used a model without a cap on the maximum amount of financial benefits from an individual recommendation. However, historical financial benefit amounts over $10 billion are relatively rare, so we adopted a modest reduction in financial

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8Advance contracts are contracts established prior to disasters and are typically used to provide life-sustaining goods and services in the immediate aftermath of disasters. GAO, 2017 Disaster Contracting: Action Needed to Better Ensure More Effective Use and Management of Advance Contracts, GAO-19-93 (Washington, D.C.: Dec. 6, 2018).

9Appendix II presents an example of an estimated potential financial benefit for each agency.
benefits for any predicted values in excess of $10 billion, particularly for agencies with few historical observations.

Careful interpretation of these results is required because the historical financial benefits used in the simulation rely on individual estimates from a variety of sources, which considered different time periods and used different data, assumptions, and methods. These differences include the availability and quality of data, methodological decisions such as whether and how to adjust for inflation, and the time period for which data on benefits were available. These differences contribute additional uncertainty to our estimates, resulting in potential for both over- and under-estimation of total benefits. To mitigate this issue, as well as others described below, we present and emphasize the middle 80 percent of simulated values.

Moreover, financial benefits may not be effectively simulated for agencies that have a small number of open recommendations. In these cases, the results could understate the total potential financial benefits. To mitigate this issue, we selected only the 10 entities with the largest number of open recommendations for our models. Each of these 10 entities has at least 150 open recommendations to simulate. Nevertheless, several individual agency simulations had at least one simulated result with no predicted financial benefits.

Finally, the simulations generally predict financial benefit values under the assumption that such benefits will occur in similar frequency and similar magnitude to recommendations previously implemented by the agencies. There may be important differences between open recommendations and our historical data that do not fit this assumption:

- While these simulations estimate the net financial benefit of our recommendations, it would likely take significant upfront time and resources to implement the more than 5,000 open recommendations we identified. It is possible that, over time, some recommendations may be overtaken by other events or affected by other changes to programs, agencies, and the broader environment.

10For example, data may come directly from agencies or from estimates produced by the Congressional Budget Office or Joint Committee on Taxation. Similarly, we or the agency may conduct the analysis. The availability and quality of these different data sources drive decisions about the appropriate assumptions and methods for each estimate.
Some agencies have a relatively small number of historical financial benefits or a relatively small number of open recommendations. This issue leads to two related limitations. First, the amount of financial benefits achieved can vary widely, with large outliers. Therefore, there is a small, but non-zero, probability that any given recommendation could result in a very large simulated value that could overstate the likely total potential financial benefits. This could have an outsized effect on our results, particularly for agencies with a small number of open recommendations. Second, the presence of relatively few large outliers in historical data may also create the possibility that the simulation produces fewer predicted large outliers than would actually occur, which could then cause the total value of potential financial benefits to be understated.

We used a variety of data and alternative model specifications to test sensitivity to our assumptions and mitigate limitations. We considered two potential limitations with our models, which is consistent with our previous report.

- Recommendations open for a long time may be more likely to have dissimilar (could be higher or lower) potential financial benefits from our historical data.

- Very large individual financial benefits may occur too infrequently for our historical data to accurately capture their probability.

To address the first limitation, we ran two time-limited versions of our models, which assumed that older recommendations would not lead to financial benefits. The first of these excluded all open recommendations greater than 10 years old, while the second excluded those greater than 5 years old. The mean simulated value of the first model was about 2 percent lower and the mean simulated value of the second model was about 21 percent lower than our baseline model presented in the body of this report.

We concluded that our simulation models are not highly sensitive to how long recommendations have been open or to major outliers. Our historical data show that recommendations are sometimes implemented after longer periods and can still result in financial benefits. Therefore, we decided not to use this restriction in the baseline model presented in the body of the report.
To address the second limitation, we replicated our baseline model with a cap that would not allow any individual financial benefit to exceed $10 billion. The mean simulated value of the model with this cap was about 19 percent lower than our baseline model. We similarly tested a model with no cap on the maximum individual financial benefit. The mean simulated value of the model was about 5 percent higher than our baseline model. We concluded that our overall simulation models generally produced higher or lower maximums but were not highly sensitive to major outliers.

We also tested models that limit maximum amounts of simulated financial benefits and excluded all open recommendations greater than 10 years old at the same time. The mean simulated value of these more restricted models were about 7 percent and 16 percent lower than the baseline model, respectively.

We tested several models that suggest lower mean simulated values than the baseline model, and one that suggests higher mean simulated values. However, all results were generally consistent with the magnitude of results presented here, particularly when considering the middle 80 percent range of simulated values.

We conducted this work from January to July 2024 in accordance with all sections of GAO’s Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions in this product.
Potential Financial Benefits of Open Recommendations

DEPARTMENT OF DEFENSE

Recommendations and Associated Benefits Achieved from Fiscal Year 2001 to March 2024

We made 7,906 recommendations to the Department of Defense (DOD), of which 1,360 remained open.

<table>
<thead>
<tr>
<th>Number of recommendations</th>
<th>Year recommendations made</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1,000</td>
<td>Before 2020</td>
</tr>
<tr>
<td>1,092</td>
<td>2020 or later</td>
</tr>
<tr>
<td>6,217</td>
<td></td>
</tr>
<tr>
<td>329</td>
<td></td>
</tr>
<tr>
<td>6,546 TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Source: Analysis of GAO data. | GAO-24-107146

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations and matters that are closed—no longer valid. Recommendations are generally closed—no longer valid when they are no longer relevant due to changing circumstances.

We identified 258 instances of financial benefits totaling $152.9 billion and 4,510 other benefits resulting from implementation of recommendations, where DOD was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable to actions by DOD. The total recommendations to DOD do not include matters for congressional consideration.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to DOD

Financial benefits (dollars in billions)

- Full range of simulated values
- Middle 80 percent of simulated values
- Middle 50 percent of simulated values

Source: Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to DOD as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for DOD. See appendix I for discussion of limitations of this analysis.

Example of an Open Recommendation with Potential Financial Benefits

In July 2021, we made four recommendations to the DOD, including that it assess cost-reduction efforts and F-35 program requirements and that it develop a plan to afford to sustain the future F-35 fleet. We estimate that the department could save hundreds of millions of dollars by addressing these recommendations (F-35 Sustainment: DOD Needs to Cut Billions in Estimated Costs to Achieve Affordability. GAO-21-439. Washington, D.C.: July 7, 2021).

Sources (header): justrasc/WScott McGillappihana/stock.adobe.com
Appendix II: Potential Financial Benefits

We made 1,387 recommendations to the Department of Energy (DOE), of which 217 remained open.

![Bar chart showing number of recommendations made before and after 2020.](chart)

Note: "Closed" recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 54 instances of financial benefits totaling $33.4 billion and 641 other benefits resulting from implementation of recommendations, where DOE was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable solely to actions by DOE. The total recommendations to DOE do not include matters for congressional consideration.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to DOE

![Graph showing simulated financial benefits](graph)

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to DOE as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for DOE. See appendix I for discussion of limitations of this analysis.

Example of an Open Recommendation with Potential Financial Benefits

In November 2023, we recommended that DOE evaluate the costs and benefits of increasing the use of models for predicting the outcome of investments, analyzing tradeoffs, and optimizing among competing investments. Doing so would better position DOE to identify investment options that would provide the greatest return on investment given budget constraints. Such models would also provide greater visibility of the risks posed to asset portfolios by underinvestment and help DOE communicate those risks to Congress and other stakeholders. We made similar recommendations to several federal agencies and estimate that, taken together, the agencies could save one hundred million dollars or more (Federal Real Property: Agencies Should Provide More Information about Increases in Deferred Maintenance and Repair. GAO-24-105485. Washington, D.C.: Nov. 16, 2023).
Appendix II: Potential Financial Benefits

Estimates for Selected Entities

Recommendations and Associated Benefits Achieved from Fiscal Year 2001 to March 2024

We made 3,112 recommendations to the Department of Health and Human Services (HHS) of which 437 remained open.

<table>
<thead>
<tr>
<th>Open</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>2,330</td>
</tr>
<tr>
<td>287</td>
<td>345</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,675</td>
</tr>
</tbody>
</table>

Number of recommendations

Year recommendations made

Before 2020  2020 or later

Source: Analysis of GAO data. | GAO-24-107146

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 47 instances of financial benefits totaling $153.8 billion and 1,685 other benefits resulting from implementation of recommendations, where HHS was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceed benefits attributable solely to actions by HHS. The total recommendations to HHS do not include matters for congressional consideration.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to HHS

Financial benefits (dollars in billions)

$0  $3  $6  $24  $34  $55  $185

Full range of simulated values       Middle 80 percent of simulated values    Middle 50 percent of simulated values

Source: Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to HHS as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for HHS. See appendix I for discussion of limitations of this analysis.

Example of an Open Recommendation with Potential Financial Benefits

In August 2018, we recommended that the Centers for Medicare & Medicaid Services (CMS) complete a comprehensive, national risk assessment and take steps to assure that resources to oversee expenditures reported by states are adequate and allocated based on areas of highest risk. We estimate the CMS could save hundreds of millions of dollars by addressing this recommendation (Medicaid: CMS Needs to Better Target Risks to Improve Oversight of Expenditures. GAO-18-564. Washington, D.C.: Aug. 6, 2018).
Recommendations and Associated Benefits Achieved from Fiscal Year 2001 to March 2024

We made 3,871 recommendations to the Department of Homeland Security (DHS) of which 479 remained open.

![Bar chart showing number of recommendations made before 2020 and 2020 or later.]

Source: Analysis of GAO data | GAO-24-107146

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 83 instances of financial benefits totaling $19.5 billion and 2,240 other benefits, resulting from implementation of recommendations, where DHS was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable to actions by DHS. The total recommendations to DHS do not include matters for congressional consideration.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to DHS

![Graph showing simulated financial benefits.]

Source: Analysis of GAO data on recommendations and realized financial benefits | GAO-24-107146

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to DHS as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for DHS. See appendix I for discussion of limitations of this analysis.

Example of an Open Recommendation with Potential Financial Benefits

In December 2020, we recommended that the Coast Guard direct the National Vessel Documentation Center to study the full costs of processing applications for commercial and recreational vessel documentation and, if necessary, update its user fees to reflect the full costs. We estimate the Coast Guard could save millions of dollars by addressing this recommendation (Coast Guard: Actions Needed to Improve National Vessel Documentation Center Operations. GAO-21-100. Washington, D.C.: Dec. 16, 2020).
Recommendations and Associated Benefits Achieved from Fiscal Year 2001 to March 2024

We made 1,550 recommendations to the Department of Transportation (DOT) of which 202 remained open.

<table>
<thead>
<tr>
<th>Open</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
<td>1,287</td>
</tr>
<tr>
<td>139</td>
<td>61</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,348</strong></td>
</tr>
</tbody>
</table>

**Number of recommendations**

**Year recommendations made**

- Before 2020
- 2020 or later

Source: Analysis of GAO data. | GAO-24-107146

"Closed" recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 19 instances of financial benefits totaling $3.4 billion and 1,095 other benefits resulting from implementation of recommendations, where DOT was a contributing agency.

**Note:** This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable to actions by DOT. The total recommendations to DOT do not include matters for congressional consideration.

**Potential Financial Benefits of Open Recommendations**

Simulated financial benefits from fully implementing all open GAO recommendations to DOT

<table>
<thead>
<tr>
<th>Financial benefits (dollars in hundreds of millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
</tr>
<tr>
<td>$2</td>
</tr>
<tr>
<td>Median $4</td>
</tr>
<tr>
<td>$9</td>
</tr>
<tr>
<td>$13</td>
</tr>
<tr>
<td>$35</td>
</tr>
</tbody>
</table>

**Source:** Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146

**Note:** These simulated values represent potential financial benefits that could occur if all open recommendations to DOT as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for DOT. See appendix I for discussion of limitations of this analysis.

**Example of an Open Recommendation with Potential Financial Benefits**

In June 2022, we recommended that the Federal Aviation Administration ensure that internal guidance on considering excess personal property incorporates, at a minimum, relevant roles and responsibilities, when it is practicable to check for and obtain excess property, and how to evaluate the suitability of excess property for meeting agency needs. We made similar recommendations to several federal agencies and estimate that, taken together, these federal agencies could save millions of dollars (Federal Personal Property: Better Internal Guidance and More Action from GSA Are Needed to Help Agencies Maximize Use of Excess. GAO-22-104826. Washington, D.C.: June 28, 2022).

🔗 GAO Duplication and Cost Savings Reports
Appendix II: Potential Financial Benefits

Estimates for Selected Entities

Recommendations and Associated Benefits Achieved from Fiscal Year 2001 to March 2024

We made 1,637 recommendations to the Department of the Treasury of which 167 remained open.

<table>
<thead>
<tr>
<th>Status</th>
<th>Number</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>45</td>
<td>167</td>
</tr>
<tr>
<td>Closed</td>
<td>1,426</td>
<td>1,470</td>
</tr>
</tbody>
</table>

Number of recommendations

Year recommendations made

- Before 2020
- 2020 or later

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 53 instances of financial benefits totaling $32.1 billion and 1,860 other benefits resulting from implementation of recommendations, where Treasury was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable to actions by Treasury. The total recommendations to Treasury do not include matters for congressional consideration or recommendations to the Internal Revenue Service.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to Treasury

- Full range of simulated values
- Middle 80 percent of simulated values
- Middle 50 percent of simulated values

Financial benefits (dollars in billions)

-$0$ to $20$

Median $3$

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to Treasury as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for Treasury and exclude any recommendations to the Internal Revenue Service. See appendix I for discussion of limitations of this analysis.

Example of an Open Recommendation with Potential Financial Benefits

In September 2005, we recommended that the Director of the Office of Management and Budget, in consultation with the Secretary of the Treasury, develop and implement a framework for conducting performance reviews of tax expenditures. We estimate, when taken together with the other report recommendations, Treasury could save billions of dollars by implementing this recommendation (Government Performance and Accountability: Tax Expenditures Represent a Substantial Federal Commitment and Need to be Reexamined. GAO-05-690. Washington, D.C.: Sept. 23, 2005).

Source: Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146
We made 1,587 recommendations to the Department of Veterans Affairs (VA) of which 225 remained open.

![Graph showing number of recommendations and year recommendations made]

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 18 instances of financial benefits totaling $12.2 billion and 793 other benefits resulting from implementation of recommendations, where VA was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable to actions by VA. The total recommendations to VA do not include matters for congressional consideration.

![Graph showing potential financial benefits of open GAO recommendations to VA]

Note: Due to a large number of simulated values in the bottom 25 percent of simulated values, we are unable to visually present the middle 50 percent of simulated values for this figure. These simulated values represent potential financial benefits that could occur if all open recommendations to VA as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for VA. See appendix I for discussion of limitations of this analysis.

In July 2021, we recommended that the VA use a balanced set of performance metrics to improve the performance of its procurement organizations. The performance metrics should include outcome-oriented metrics, such as metrics measuring cost reduction or avoidance. We estimated the department could realize hundreds of millions in cost savings each year by using these metrics to identify improvement opportunities, set priorities, and better allocate resources (Federal Contracting: Senior Leaders Should Use Leading Companies’ Key Practices to Improve Performance. GAO 21-491. Washington, D.C.: July 27, 2021).
Appendix II: Potential Financial Benefits

Estimates for Selected Entities

Recommendations and Associated Benefits Achieved from Fiscal Year 2001 to March 2024

We made 2,876 recommendations to the Internal Revenue Service (IRS) of which 276 remained open.

<table>
<thead>
<tr>
<th>Open</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>190</td>
<td>2,511,870</td>
</tr>
<tr>
<td>276 TOTAL</td>
<td>2,600</td>
</tr>
</tbody>
</table>

Number of recommendations

Year recommendations made

- Before 2020
- 2020 or later

Source: Analysis of GAO data. | GAO-24-107146

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 87 instances of financial benefits totaling $42.3 billion and 1,797 other benefits resulting from implementation of recommendations, where IRS was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable to actions by IRS. The total recommendations to IRS do not include matters for congressional consideration.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to IRS

<table>
<thead>
<tr>
<th>Financial benefits (dollars in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full range of simulated values</td>
</tr>
<tr>
<td>Middle 80 percent of simulated values</td>
</tr>
<tr>
<td>Middle 50 percent of simulated values</td>
</tr>
</tbody>
</table>

Source: Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to IRS as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for IRS. See appendix I for discussion of limitations of this analysis.

Example of Open Recommendations with Potential Financial Benefits

In May 2022, we recommended that the IRS document processes used to address certain compliance risks for COVID-19 employer tax credits and implement additional compliance activities. We estimate these actions could recapture tens of billions of dollars or more of ineligible claims (COVID-19: IRS Implemented Tax Relief for Employers Quickly, but Could Strengthen Its Compliance Efforts. GAO-22-104280. Washington, D.C.: May 17, 2022).

GAO Duplication and Cost Savings Reports
Appendix II: Potential Financial Benefits

We made 1,006 recommendations to the Office of Management and Budget (OMB) of which 167 remained open.

<table>
<thead>
<tr>
<th>Open</th>
<th>79</th>
<th>88</th>
<th>167 TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closed</td>
<td>809</td>
<td>30</td>
<td>839 TOTAL</td>
</tr>
</tbody>
</table>

Number of recommendations
Year recommendations made

Source: Analysis of GAO data. | GAO-24-107146

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 21 instances of financial benefits totaling $54.9 billion and 670 other benefits resulting from implementation of recommendations, where OMB was a contributing agency.

Note: This financial benefit amount reflects benefits from all contributing agencies to these accomplishments, and therefore exceeds benefits attributable to actions by OMB. The total recommendations to OMB do not include matters for congressional consideration.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to OMB

<table>
<thead>
<tr>
<th>Financial benefits (dollars in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full range of simulated values</td>
</tr>
<tr>
<td>$0</td>
</tr>
<tr>
<td>$1</td>
</tr>
<tr>
<td>$5</td>
</tr>
<tr>
<td>$10</td>
</tr>
</tbody>
</table>

Source: Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to OMB as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for OMB. See appendix I for discussion of limitations of this analysis.

Example of an Open Recommendation with Potential Financial Benefits

In October 2023, we recommended that the OMB lead the development and use of benchmarks for measuring building utilization that account for greater levels of telework. These benchmarks would help federal agencies identify and shed unused space. We estimate that federal agencies could save $10 million or more over 5 years by terminating or reducing the size of leased office buildings (Federal Real Property: Agencies Need New Benchmarks to Measure and Shed Underutilized Space. GAO-24-107006. Washington, D.C.: Oct. 26, 2023).

Sources used: Justas/n/scott Mcgill/vapithana/stock.adobe.com

GAO Duplication and Cost Savings Reports
Potential Financial Benefits of Open Recommendations

We made 1,082 matters for congressional consideration, of which 247 remained open.

<table>
<thead>
<tr>
<th>Open</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>818</td>
</tr>
<tr>
<td>110</td>
<td>17</td>
</tr>
</tbody>
</table>

TOTAL

We identified 64 instances of financial benefits totaling $66 billion and 205 other benefits resulting from addressing matters where Congress was a contributing entity.

Simulated financial benefits from fully implementing all open GAO matters to Congress

<table>
<thead>
<tr>
<th>Financial benefits (dollars in billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2</td>
</tr>
<tr>
<td>Median $23</td>
</tr>
<tr>
<td>$12</td>
</tr>
<tr>
<td>$16</td>
</tr>
<tr>
<td>$43</td>
</tr>
<tr>
<td>$54</td>
</tr>
<tr>
<td>$158</td>
</tr>
</tbody>
</table>

Source: Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146

Note: These simulated values represent potential financial benefits that could occur if all open matters to Congress as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data for Congress. See appendix I for discussion of limitations of this analysis.

In March 2022, when reviewing the federal government’s response to the COVID-19 pandemic, we found significant shortcomings in agencies’ application of internal controls and financial and fraud risk management practices. A temporary Pandemic Analytic Center of Excellence oversees trillions of dollars in federal pandemic-related emergency spending; however, funds for this center are only available through September 30, 2025. We recommended that Congress establish a permanent analytic center of excellence to aid the oversight community in identifying improper payments and fraud. We estimate that this could result in a billion or more annually in financial benefits (Emergency Relief Funds: Significant Improvements Are Needed to Ensure Transparency and Accountability for COVID-19 and Beyond, GAO-22-105715. Washington, D.C.: Mar. 17, 2022). In March 2024, a bill was introduced in the Senate to establish a permanent committee that would continue oversight of pandemic-related funds and expand its scope to oversee other federal spending. In April 2024, a bill was introduced in the House to establish a Government Spending Oversight Committee within the Council of the Inspectors General. Enactment of this legislation would address our matter.

1S. 4036, 118th Cong. (2024).
2H.R. 8006, 118th Cong. (2024).
Appendix II: Potential Financial Benefits of Open Recommendations

Recommendations and Associated Benefits Achieved from Fiscal Year 2001 to March 2024

We made 17,189 recommendations of which 1,703 remained open.

![Bar chart showing the number of recommendations made before and after 2020.]

Source: Analysis of GAO data. | GAO-24-107146

Note: “Closed” recommendations include closed recommendations that were implemented by agencies. This category also includes closed recommendations that are closed-no longer valid. Recommendations are generally closed-no longer valid when they are no longer relevant due to changing circumstances.

We identified 328 instances of financial benefits totaling $238.2 billion and 10,026 other benefits resulting from implementation of recommendations.

Note: This financial benefit amount reflects benefits from all contributing agencies. The total recommendations do not include matters for congressional consideration or recommendations directed to the other nine agencies listed in this appendix.

Potential Financial Benefits of Open Recommendations

Simulated financial benefits from fully implementing all open GAO recommendations to all other agencies

![Graph showing financial benefits in billions.]

Source: Analysis of GAO data on recommendations and realized financial benefits. | GAO-24-107146

Note: These simulated values represent potential financial benefits that could occur if all open recommendations to all other agencies as of March 2024 were implemented and achieved financial benefits similar to those identified in our 2001-2024 data. See appendix I for discussion of limitations of this analysis.

Example of an Open Recommendation with Potential Financial Benefits

In December 2022, we recommended that the Office of Personnel Management (OPM) implement a monitoring mechanism to identify and remove ineligible family members from the Federal Employee Health Benefits program. We estimate that implementing this recommendation could save hundreds of millions of dollars or more annually. In the 118th Congress, legislation has been introduced in the Senate and House that would require the Director of OPM to conduct a family member eligibility verification audit to identify and remove ineligible family members from the FEHB program. As of April 2024, these bills have not been enacted (Federal Employees Health Benefits Program: Additional Monitoring Mechanisms and Fraud Risk Assessment Needed to Better Ensure Member Eligibility. GAO-23-105222. Washington, D.C.: Dec. 9, 2023).

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GAO Duplication and Cost Savings Reports
Table 1: Examples of Open Recommendations with Potential Financial Benefits of $1 Billion or More

<table>
<thead>
<tr>
<th>Open recommendation</th>
<th>Potential financial benefits</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Medicare Payments by Place of Service: Congress could realize additional financial benefits if it took steps to direct the Secretary of Health and Human Services to equalize payment rates between settings for evaluation and management office visits and other services that the Secretary deems appropriate. (GAO-16-189)</td>
<td>$141 billion over 10 years (Congressional Budget Office)</td>
<td></td>
</tr>
<tr>
<td>COVID-19 Employer Tax Relief: The Internal Revenue Service (IRS) should document processes used to address certain compliance risks for COVID-19 employer tax credits and implement additional compliance activities to potentially recapture ineligible claims. (GAO-22-104280)</td>
<td>Tens of billions of dollars over 2 years (GAO analysis of IRS data)</td>
<td></td>
</tr>
<tr>
<td>*Public-Safety Broadband Network: Congress should consider reauthorizing FirstNet, including different options for its placement, and ensure key statutory and contract responsibilities are addressed before current authorities sunset in 2027. (GAO-22-104915)</td>
<td>$15 billion over 15 years (GAO analysis of the FirstNet Contract)</td>
<td></td>
</tr>
<tr>
<td>Student Loan Income-Driven Repayment Plans: The Department of Education should obtain data to verify income information for borrowers reporting zero income on Income-Driven Repayment applications. (GAO-19-347)</td>
<td>More than $2 billion over 10 years (Congressional Budget Office)</td>
<td></td>
</tr>
<tr>
<td>*Department of Energy’s Treatment of Hanford’s Low-Activity Waste: Congress should consider clarifying two issues, including the Department of Energy’s (DOE) authority to determine whether portions of Hanford’s tank waste, such as the low-activity tank waste, can be managed as a waste type other than high-level radioactive waste and disposed of outside the state of Washington. (GAO-22-104365)</td>
<td>Billions of dollars over 11 years (GAO analysis of DOE data)</td>
<td></td>
</tr>
<tr>
<td>Tax Expenditures: The Office of Management and Budget and the Department of the Treasury should develop and implement a framework for conducting performance reviews of tax expenditures. (GAO-05-690)</td>
<td>Billions of dollars (GAO analysis of Treasury data)</td>
<td></td>
</tr>
<tr>
<td>*Improper Payments and Fraud: Congress should establish a permanent analytic center of excellence to aid the oversight community in identifying improper payments and fraud. (GAO-22-105715)</td>
<td>More than $1 billion annually (analysis of GAO data)</td>
<td></td>
</tr>
</tbody>
</table>

Legend: * = Legislation is likely to be necessary to fully address all matters or recommendations in this topic area.

Source: GAO. | GAO-24-107146

*If FirstNet sunsets, it is unclear what will happen to the remaining $15 billion in scheduled annual payments, which FirstNet currently has authority to collect and reinvest.

Note: The examples in the table above are based on our body of work on Duplication and Cost Savings (see GAO-24-106915) and are derived from methodologies and data that can be specific to each recommendation. In contrast, our simulation uses a uniform methodology, based on data from thousands of our realized financial benefits, to estimate the total potential financial benefits from all current open recommendations. Because these methods are not comparable, the simulation results will not match the individual estimates of specific recommendations. See appendix I of this report for more details.

The potential financial benefits shown in this table represent estimates of amounts we or others believe could accrue if steps are taken to implement the actions described. The estimates are dependent on various factors, such as whether action is taken and how it is taken. Realized financial benefits may be less, depending on costs associated with implementing the action, unintended consequences, and the effect of controlling for other factors. The individual estimates in this table should be compared with caution, as they come from a variety of sources, which consider different time periods and use different data sources, assumptions, and methodologies.
Appendix IV: GAO Contact and Staff

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