



# SURVEY SERIES

2019 Intelligent Automation Survey:  
Automation and the Government  
Finance Office of the Future



# Report Contributors

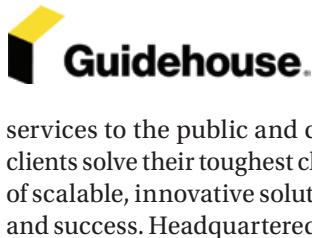
## Guidehouse

**Caitlin H. McGurn**, Partner  
**Bob Dunmyer**, Managing Director  
**Elaine Slaven**, Experienced Associate  
**Alexander Yow**, Senior Associate  
**Kerry Keys**, Senior Associate  
**Amy M. Oksol**, Senior Associate

## AGA

**Ann Ebberts**, Chief Executive Officer  
**Susan Fritzlen**, Chief Operating Officer  
**Lyndsay McKeown**, Senior Manager, Marketing & Design

**AGA is proud to recognize Guidehouse for supporting this effort.**



Guidehouse is a leading provider of management, technology, and risk consulting services to the public and commercial sectors. We help our clients solve their toughest challenges through the co-creation of scalable, innovative solutions to prepare for future growth and success. Headquartered in Washington, DC, Guidehouse

has more than 1,800 professionals in over 20 locations, is a Veritas Capital portfolio company, and is led by seasoned professionals with proven and diverse expertise in traditional and emerging technologies, markets and agenda-setting issues driving national and global economies. For more information, please visit: [www.guidehouse.com](http://www.guidehouse.com).



AGA is the member organization for government financial management professionals. We lead and encourage change that benefits our field and all citizens. Our networking events, professional certification, publications and ongoing education help members build their skills and advance their careers.

AGA's Corporate Partner Advisory Group is a network of public accounting firms, major system integrators, IT companies, management consulting firms, financial services organizations, and education and training companies. These organizations all have long-term commitments to supporting the financial management community and choose to partner with and help AGA in its mission of advancing government accountability.



# Table of Contents

Executive Summary .....	4
Demographics .....	5
Familiarity .....	6
Current Use and Adoption .....	7
Benefits and Challenges .....	9
Automation for 2020 and Beyond .....	11

# Executive Summary

**Key Takeaway:** *The overall results show entities across the government are gaining familiarity with the benefits of automation and are eager to reap the rewards. Many have identified processes that could benefit from automation, but face challenges in implementing improvements. Implementation requires financial and staff support, which are among the most common problem areas cited by respondents. Moreover, the levels of government at which these critical supports are particularly strained are less mature in their automation efforts and tools.*

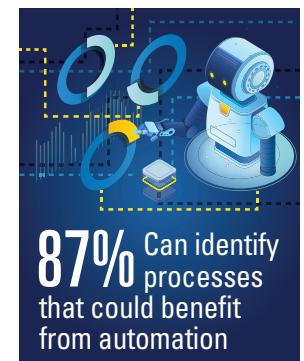
Due to recent growth in the use of automation in public sector financial management, Guidehouse collaborated with the Association of Government Accountants (AGA) to survey members on their knowledge of automation and plans to utilize it in their work in the coming years. Results are separated by the levels of government, whether federal, state or local, in which respondents work to exhibit variations in automation usage among the sectors.

The perceived benefits of automation represent a primary finding of the survey. Among respondents, a significant share express belief in automation to positively impact government audits by improving the accuracy (83%) and availability (80%) of data. Half (50%) report feeling automation will reduce the complexity and cost of audits. Even more (60%) say they believe automation will improve the security of information systems by reducing opportunities for human error. Interestingly, only 26% report cost reduction as one of the top three benefits of automation. Although cost reduction is a downstream effect of many advantages frequently cited, this finding may highlight a belief that, despite upfront costs to successfully implement automation, its real value lies in steering the current government workforce toward higher value work instead of chasing and correcting errors.

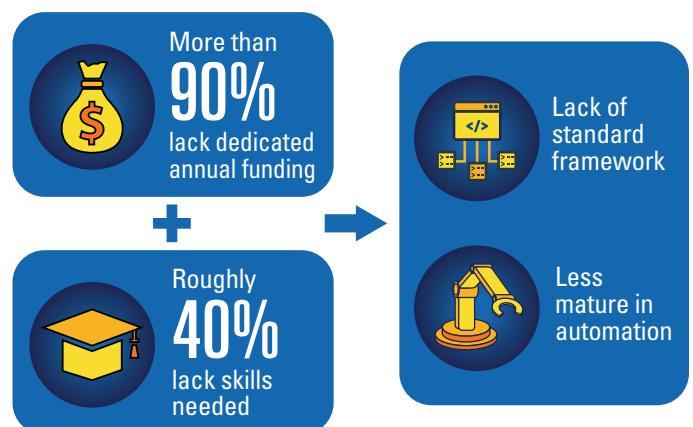
Another key survey finding is that survey participants think government entities generally understand where automation can best be applied but lack the dedicated funding and skills to take advantage of it. When an organization begins an automation effort, a significant first step is identifying processes that could feasibly and

substantially benefit. Surprisingly, a vast majority of respondents (87%) report feeling confident in their ability to identify processes that could benefit from automation but face substantial hurdles in obtaining the necessary funding and skills to support the undertaking.

Few (8%) indicate they receive a dedicated budget each year for automation, and most (80%) cite hiring, training or retraining staff to support the change as one of the most critical challenges to implementation. Echoing the need for the development of required skills to implement automation, roughly 40% of respondents state they have neither the knowledge nor the skill sets to assess the feasibility of such projects or to identify the tools available to support them. Without financial support and trained staff, it becomes clear why only 23% have developed a standard framework for automation projects and why even fewer use more mature automation tools, such as Robotics Process Automation (RPA) or machine learning-assisted processes (**Figure 1**).



**Figure 1. Challenges in Automation Implementation**





Federal agencies, in particular, indicate more maturity in their automation efforts. While a small number of respondents (roughly 3%) from state and local agencies report using RPA, nearly five times as many (17%) from federal agencies say they are leveraging the technology. Further, compared to state and local agencies, federal agencies more frequently indicate having a standard framework in place for automation projects. This finding — that federal agencies seem more mature in their automation efforts — is particularly interesting when coupled with the discovery that federal agencies less frequently identify funding and appropriate software among their greatest challenges.

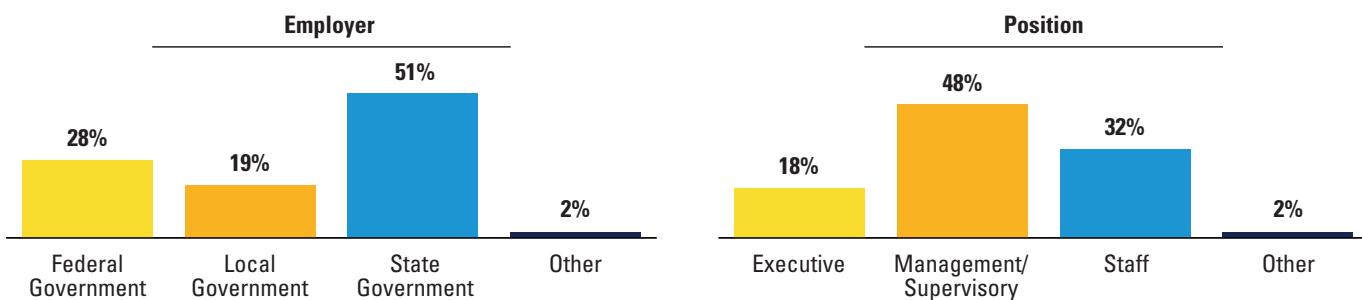
Inevitable struggles emerge in implementing automation and advancing the maturity of automation efforts. The survey results revealed the most acute problems faced are obtaining financial and staff support. Without these critical foundations, agencies face difficulties not only in implementing automation but also in advancing the maturity of their efforts. A holistic approach to automation and its successful execution does not happen overnight, but the resulting benefits of data accuracy, availability and cost reduction are worth the journey.

## Demographics

A total of 228 AGA members responded to this survey. More than half (52%) are state government employees, holding management or staff level positions. Survey responses are

broken out by category to help extrapolate current attitudes and practices at all levels of government; noteworthy differences are highlighted (**Figure 2**).

**Figure 2. Survey Demographics**

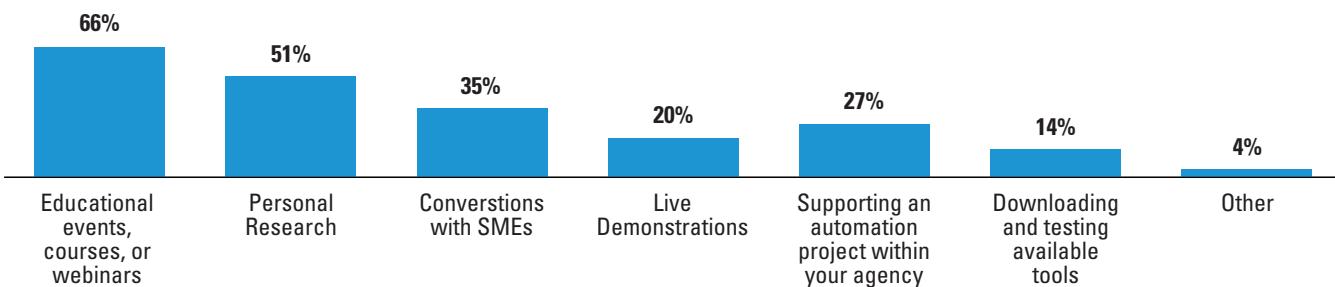


# Familiarity

Respondents report learning about automation concepts through education events, courses and webinars. Overall, more than a third (35%) report learning about automation concepts through conversations with subject matter experts (SMEs) in the workplace. Among respondents in executive-

level positions, nearly half (49%) learn about automation from SMEs. Although RPA is a relatively new technology emerging in the government environment, more than a quarter of respondents (27%) say they learn on the job by supporting an automation project in their agency (**Figure 3**).

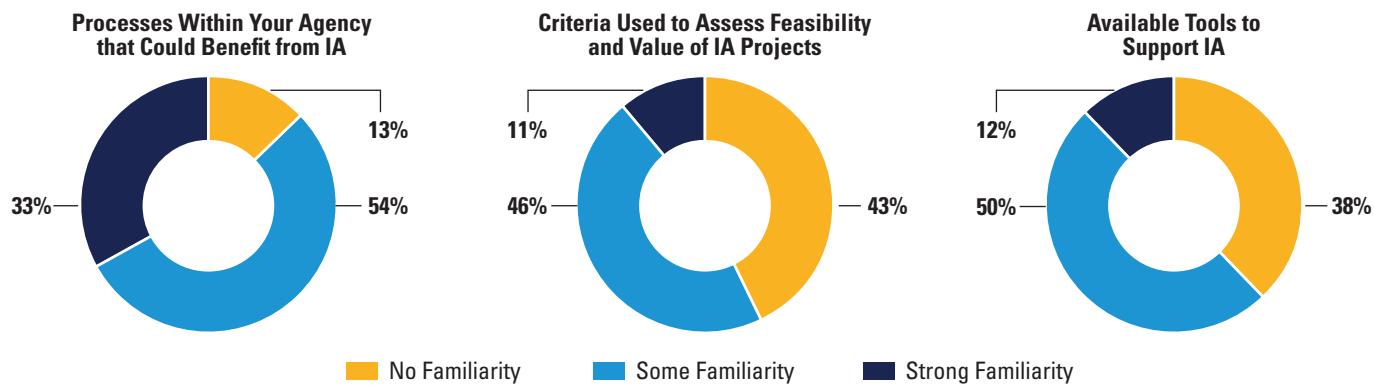
**Figure 3. Sources Used to Learn About IA Concepts and Potential Use Cases**



As illustrated in **Figure 4**, respondents are very familiar with identifying processes in their agencies that could benefit from intelligent automation (IA). Most (87%) report having some or strong familiarity with identifying these processes. However, nearly two in five (38%) indicate they have no familiarity with available tools to support intelligent automation, while even more (43%) report no familiarity

with the criteria used to assess the feasibility and value of intelligent automation processes and develop a cost/benefit analysis to support additional investment in the technology. In short, respondents say they feel capable of identifying processes but may need support to initiate and implement automation efforts successfully.

**Figure 4. In general, how would you rate your familiarity with each of the following?**

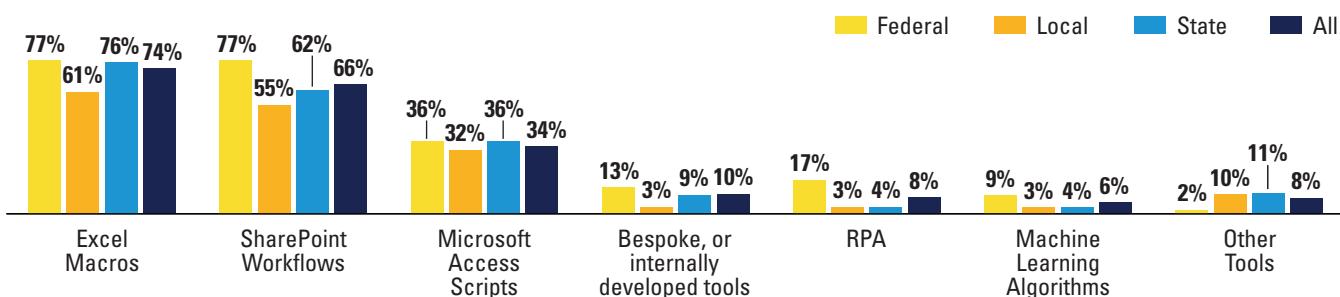


# Current Use and Adoption

The government entities represented in this survey currently use a variety of software tools to automate tasks. Most frequently, these tools include Microsoft Excel macros (77%), SharePoint workflows (64%) and Microsoft Access scripts (32%). In particular, the federal government

frequently uses SharePoint workflows (79%) compared to state government (59%) and local government (56%). In addition, federal government respondents use RPA (17%) more than those in state (4%) or local (3%) governments (Figure 5).

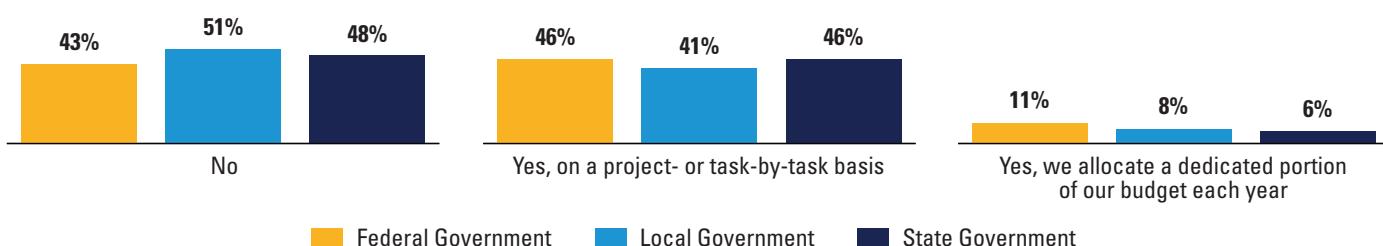
**Figure 5. Does your agency or office currently use any of the following software tools to automate employee tasks?**



Among staff reactions to intelligent automation tools, broken out by state, local and federal employers, some interesting patterns emerge. Federal and state government entities are adopting RPA, machine learning, and internally developed tools more frequently than local governments. RPA is most common in the federal government, where it finds its most receptive audience as well. A similar pattern emerges for machine learning algorithms and internally developed tools.

When looking at the relative low use of and receptivity to RPA, machine learning and internally developed tools, it is essential to keep budgetary constraints in mind. Only 8% of all respondents indicate having a dedicated portion of their budget each year allocated to automation. More commonly, if a budget is available for automation, it is on a task-by-task basis. According to the survey, nearly half of all agencies do not budget for automation. Segmented into the levels of government, 51% of local, 48% of state, and 43% of federal agencies represented in the study lack automation budgets (Figure 6).

**Figure 6. Does your agency or office currently allocate a portion of your budget towards automation?**

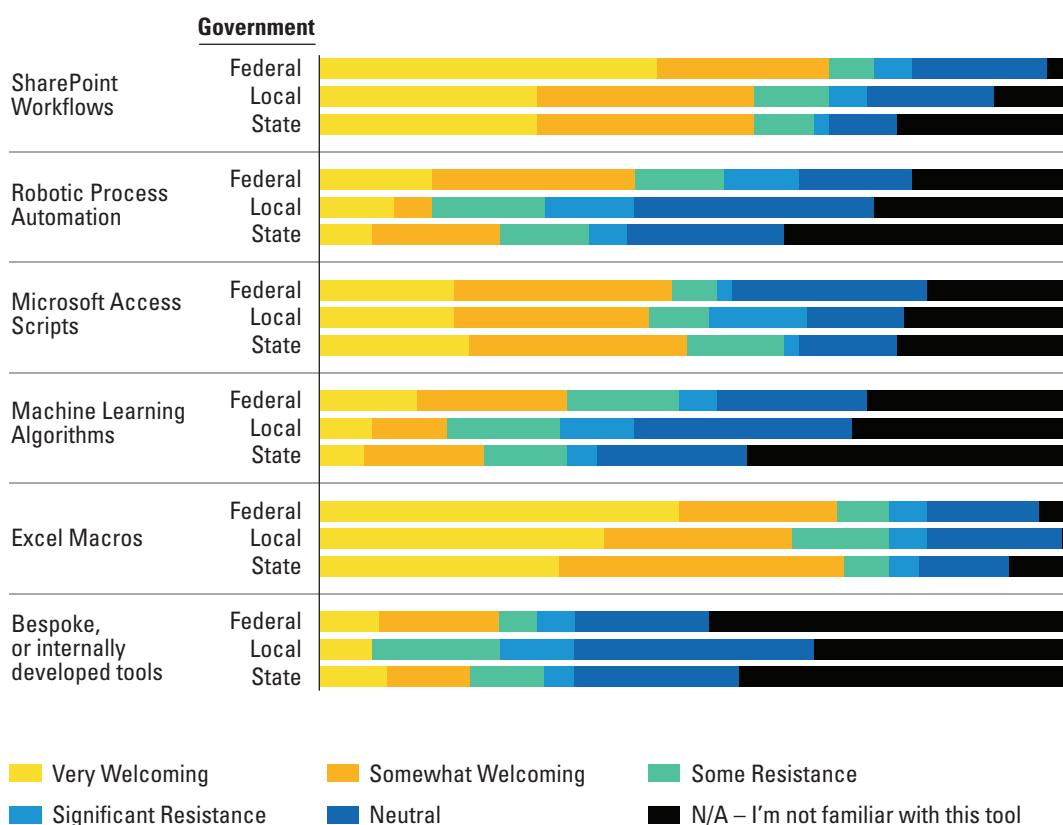




Two solutions are preferred among respondents for new automation efforts — Excel macros and SharePoint workflows. Perhaps unsurprisingly, these same two solutions topped the list of software tools respondents believed their agencies would be most receptive to using in future automation

efforts (**Figure 7**). Expanding the use of Excel and SharePoint tools that have been in government environments for many years, is a logical first step for many of these agencies who are just starting to explore automation of repeatable processes.

**Figure 7. How do you think most staff within your agency or office would respond to opportunities to automate processes using the following tools?**

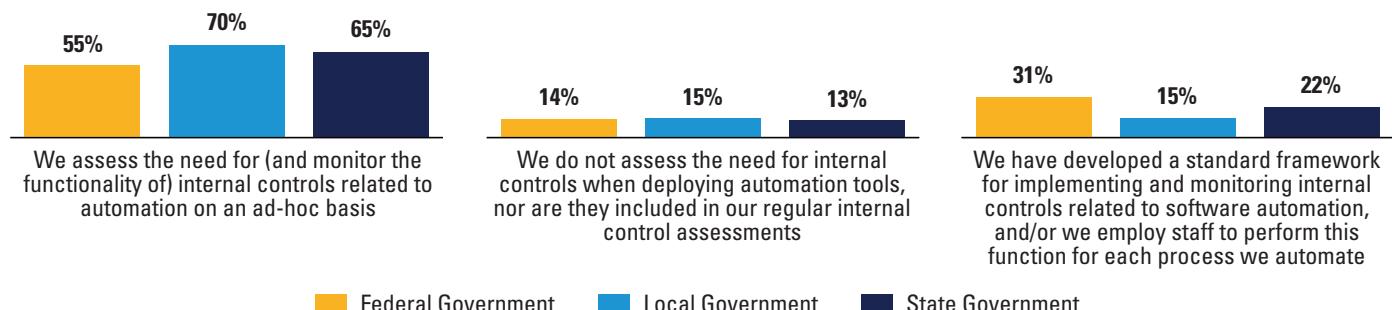


Receiving a budget for automation on a task-by-task basis rather than a dedicated budget each year may explain why many entities lack a standard framework for implementing and monitoring internal controls. It's interesting to note that the federal government least frequently indicates funding for automation as a challenge and most frequently indicates having a standard framework in place (**Figure 8**).

It is surprising that an average of 14% of government entities do not assess internal controls when implementing automation tools. This is one area where automation can actually enhance and enforce internal controls if automated correctly and documented accordingly.



**Figure 8. How would you rate your agency or office's ability to implement and monitor internal controls for automated processes?**

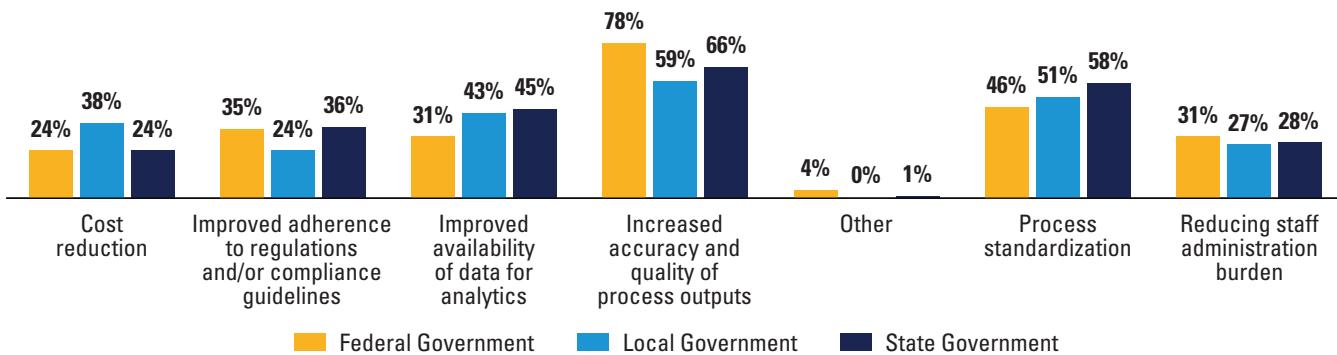


## Benefits and Challenges

Overwhelmingly, respondents cite increased accuracy and quality as top benefits of automation. Other benefits frequently named include process standardization and improved availability and quality of data for analytics. Federal and state respondents more often perceive benefit from improved adherence to regulations and compliance guidelines, while only respondents from local governments

name cost reduction as a major benefit. A perceived benefit mentioned by respondents from all levels of government is reducing the burden of administrative tasks for staff (**Figure 9**). While not explicitly stated, this benefit, when combined with increased output quality, process standardization, and improved availability of data, could result in a happier and more productive workforce overall.

**Figure 9. What do you foresee as the greatest benefits to government agencies in adopting intelligent automation solutions?**

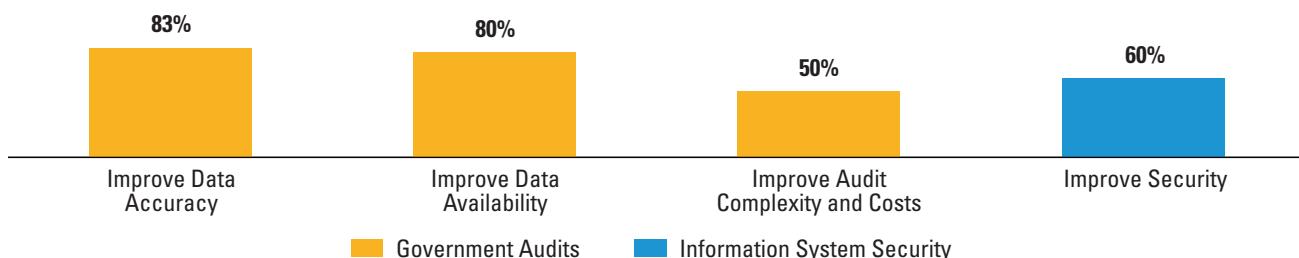




The majority of respondents indicate positive impacts of automation on government audits and information system security (ISS). More than four in five respondents say they feel government audits will improve data accuracy and

availability. Additionally, a majority (60%) express belief in automation to decrease opportunities for human error and fraud and make ISS more secure (**Figure 10**).

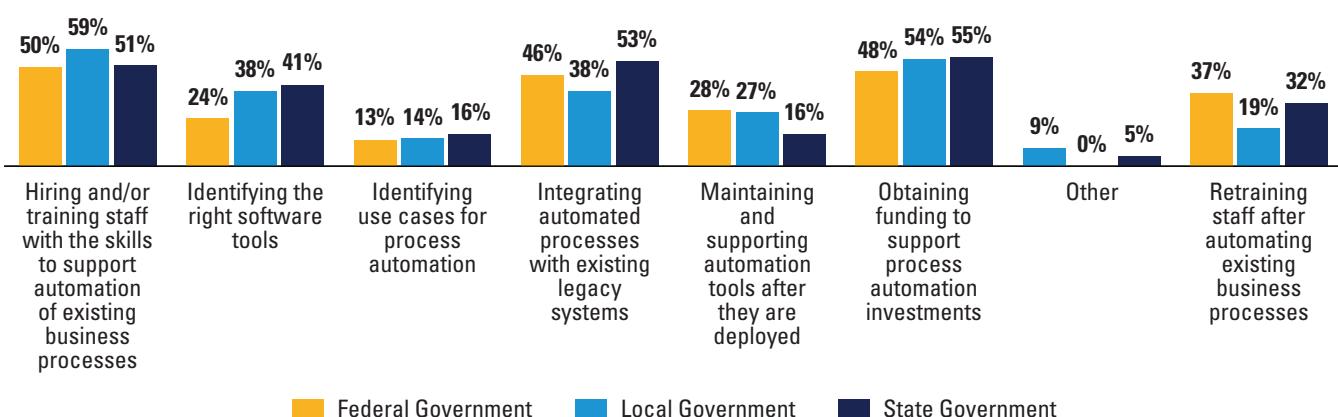
**Figure 10. How do you think automation will impact government audits and information system security, on average?**



Interestingly, the greatest challenges cited by respondents are: obtaining funding for automation; hiring personnel with the skills to support automation; and integrating automation with legacy systems. Few indicated problems with identifying use cases for process automation, which aligns with the finding that most respondents (87%) possess

some or strong familiarity with identifying processes for automation (**Figure 11**). Agencies at all levels of government are identifying repeatable processes that could benefit from automation, easing the burden of less complex tasks so that staff can concentrate on the parts of their job that require application of more complex financial processes.

**Figure 11. What do you foresee as the greatest challenges to government agencies in adopting intelligent automation solutions?**



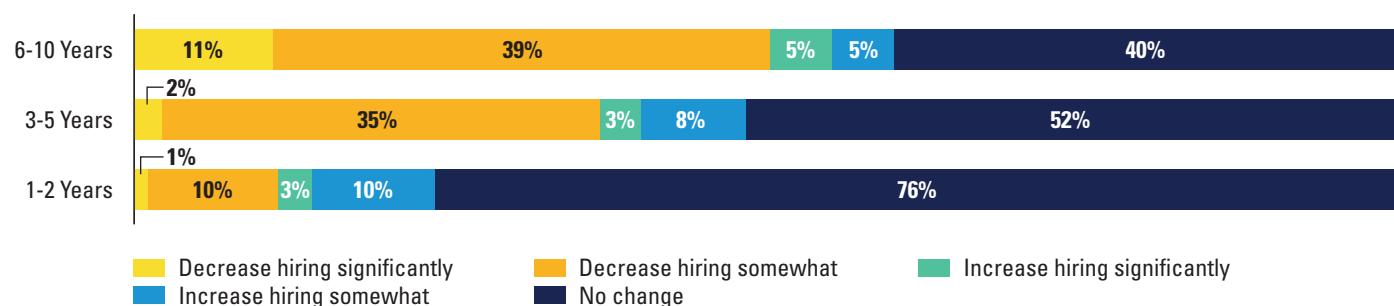


# Automation for 2020 and Beyond

Somewhat surprisingly, nearly half of agencies represented (49%) say they believe their investment in, and progress with, automation efforts will remain the same in fiscal year (FY) 2020. Although results show that identifying processes to be automated and the benefits of automation are well understood, stagnation in automation efforts for FY 2020 may point to funding and staffing issues. In alignment with this view, few respondents say they think hiring will decrease as a result of automation in the near term, yet more than

half anticipate some level of hiring reduction in the next six to ten years (**Figure 12**). These results support what we hear from agencies regarding an inability to hire staff with appropriate skills. Automation is helping to fill the void or gap in staffing that is impacted by shrinking budgets. Whether this anticipated change in hiring is listed as a positive or negative result of automation depends on the point of view of each respondent.

**Figure 12. How do you think automation will impact your overall hiring practices during the following time periods?**



The road to implementing and advancing automation efforts is a difficult one. Often the first step toward implementation is identifying the processes that could benefit from being automated — one many survey respondents say they are capable of doing. Instead, key issues center on obtaining the necessary funding and identifying personnel with skills to assess automation possibilities and to implement automation. With both financial and staff support which includes providing training to enable staff to appropriately leverage and maximize the benefits of automation, agencies can be

more equipped to launch efforts. Understanding the “art of the possible” and the sizable array of benefits to be derived from automation, respondents report motivation to overcome the challenges. For many, increasing automation efforts may not be feasible in FY 2020, but more than half expect automation to impact staffing within the next decade. As agencies continue to explore automation, it is crucial to remember that implementation is not an overnight accomplishment but rather a sustained effort to improve, mature and achieve a holistic approach that fully reaps its benefits.



[www.agacgm.org](http://www.agacgm.org)