

Navigating Cloud Complexity in the Public Sector:



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Ways Guidehouse Helps Governments Transform

By 2027, more than 70% of enterprises will use industry cloud platforms to accelerate their business initiatives, according to the 2024 Gartner report, "Top Technology and Business Trends in Government." However, the path to cloud adoption is often long and filled with obstacles that slow progress—especially for government agencies with deep ties to legacy infrastructure.

That's why government agencies are turning to Guidehouse to simplify and accelerate this journey. Guidehouse is a next-generation global consultancy that delivers advisory, digital, and managed services. Specializing in national security, financial services, healthcare, energy, and infrastructure, Guidehouse guides public sector customers through complex cloud migrations, helping them unlock greater reliability, scalability, and innovative potential.

Working with trusted partners like Amazon Web Services (AWS), Guidehouse removes modernization barriers and helps clients reimagine their technology landscape. The following five use cases demonstrate how Guidehouse supports government organizations—from advisory through execution—to build impactful, future-ready solutions that help agencies save costs, increase efficiency, and deliver on their missions.



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USE CASE 1

Cloud Modernization Strategy and Roadmapping

Unlocking an estimated \$20M in cost savings

The Office of the Chief Information Officer (OCIO) for a leading federal agency handles 20 lines of business inside and outside the organization related to IT services, cybersecurity, and centers of excellence for new technologies. When the federal agency considered expanding into a new datacenter to support its growth, OCIO leaders wondered: Could increasing cloud adoption be more cost-effective than acquiring more datacenters?

With most of the agency's infrastructure hosted on premises, OCIO leaders need a robust cost-benefit analysis to make an informed decision. They engaged Guidehouse to help determine the best course of action.

After Guidehouse conducted an objective study to fully analyze options, the results revealed that cloud adoption would be more cost-effective than building another datacenter. Cloud migration would unlock an estimated potential savings of \$20 million annually while giving the OCIO scalability, security, and agility to adapt to future needs.

Armed with Guidehouse's analysis, the agency was ready to take the next step of migrating to the cloud. Guidehouse developed a cloud migration strategy for the OCIO's portfolio of more than 50 cybersecurity applications. The firm then helped OCIO launch other enterprise mission support tools such as an organization-wide mailbox migration and the deployment of Office 365.

Guidehouse helped the federal agency reduce costs and achieve agility on its path to cloud adoption by:

Unlocking an estimated \$20M in annual savings

Creating a migration plan for 50+ cybersecurity applications

Launching enterprise mission support tools

With Guidehouse's support, the OCIO is on track to migrate from outdated on-premise systems to the cloud.

With Guidehouse's support, the OCIO is on track to migrate from outdated on-premise systems to the cloud. This operational effort reduced IT costs, improved operational agility, delivered better services to staff and the public, and more—enabling the OCIO to stay ahead in an ever-evolving technological landscape.



Improving application performance by 26% via cloud migration

In the middle of its annual budgeting process, a federal government organization faced a daunting challenge. It depended on a unique, fully automated, end-to-end budget solution used by more than 3,000 users. While this was the only solution of its type in the federal space, it was reaching its end of life. With no product support coming from the hardware and software vendors, the federal organization needed to migrate to a new system fast—to keep its systems secure and operational.

As an additional challenge, the system migration had to occur during week four of the agency's six-week budgeting process—and any disruption could derail planning for the year ahead. With over five terabytes of sensitive financial data accumulated over the years, preserving data integrity was paramount.

The agency approached Guidehouse to lead this complex, time-sensitive migration. Drawing on their cloud expertise, the Guidehouse team planned the application's move to the AWS Cloud. After a brief testing period, they migrated more than 25 applications to AWS with near-zero downtime and no impact to end users. Guidehouse also reduced the cutover timeline from a week to mere hours—ensuring core business processes could continue uninterrupted during one of the most critical times of the year.

Guidehouse helped the organization avert a budget crisis and achieve success by:

Migrating more than 25 applications to AWS with near-zero downtime and no impact on end users

Improving application performance by 26%, drastically reducing delays and eliminating unplanned outages

Moving 5TB of data without disruption

Creating 24/7 system availability via continuous monitoring

The federal organization experienced immediate results. The new cloud environment improved application performance by 26%, drastically reducing delays and eliminating unplanned outages. By adopting AWS's pay-as-you-go model, the agency also saved on IT costs. Continuous monitoring tools in AWS ensure the agency has 24/7 system availability, and event alerts support teams if any abnormal activity is detected.

This migration not only stabilized the budgeting process when it mattered most but also built a foundation for future innovations, enabling the agency to operate with greater efficiency and agility.



USE CASE 3 Ensuring Compliance With Updated Infrastructure

Meeting federal compliance goals with the cloud

Faced with the challenge of maintaining robust security and compliance across a complex IT environment, one large federal agency wanted to improve its security posture by modernizing its infrastructure. But with thousands of users across multiple agencies; large, complex databases; and a mandate to meet stringent regulations including IRS Publication 1075, FISMA, and NIST standards, this modernizing journey was no simple feat.

Guidehouse led the transformation process together with AWS ProServe, AWS's professional services team. Using the AWS Landing Zone Accelerator, Guidehouse team members built a secure, scalable, and multi-account cloud environment designed to meet federal compliance requirements. They also set up robust governance frameworks, a data lake, automated deployments, and CI/CD pipelines to reduce the agency's computing footprint.

By consolidating multiple AWS accounts and implementing FinOps strategies, Guidehouse helped reduce the agency's infrastructure costs while enhancing efficiency. The migration delivered ~99.99% system availability and reduced the mean time to gain an authority-to-operate (ATO) for future projects built within the system.

Most important, the agency increased its security and compliance posture. It now benefits from real-time compliance monitoring, enhanced compliance reporting, secure data management, and more—setting a new standard for regulated federal cloud operations while reducing costs and enhancing overall service quality.

Guidehouse helped the federal agency speed time to ATO with the cloud by:

Supporting a migration that delivers 99.99% system availability

Accelerating the time to achieve ATO

Increasing its security and compliance posture

Reducing infrastructure costs through more efficient environments, FinOps, and more

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Increasing federal document management efficiency with AI and ML

A U.S. cabinet-level federal agency wanted to modernize its financial assistance systems to streamline document management and enhance data accessibility for multiple agencies. The challenge? The existing system, which housed millions of documents and over 60 terabytes of data, was bogged down by siloed databases and outdated technology. Users experienced slow downloads, limited search functionality, and manually intensive processes that prevented staff from working on higher-value tasks.

The agency turned to Guidehouse, its trusted partner of over 15 years, for assistance. Guidehouse deployed a team of specialists to lead the agency's digital transformation. By moving its financial assistance system to the AWS Cloud, Guidehouse created a secure, scalable, FedRAMP-compliant environment that supports more than 200,000 users across 10 agencies.

The solution uses artificial intelligence (AI) and machine learning (ML) to convert images into searchable PDFs, which helps the agency's clients answer questions and retrieve important documents faster. With Amazon SageMaker built into the solution, the agency can analyze large datasets, detect patterns, and predict outcomes. And with business intelligence dashboards built in, not everyone has to be a data expert to use the data helping the agency make better-informed decisions.

The modernized platform now lets the agency test new solutions, improve user experiences, and achieve its mission of efficient, secure service delivery.

Guidehouse helped the agency use AI/ML solutions to transform its data operations by:

Streamlining the document process to save time and staff resources

Achieving a 50% reduction in transaction processing times

Moving 60TB+ of data seamlessly to the cloud

Reaching full compliance with federal policy requirements

Increasing reliability with autoscaling and load balancing

Delivering 99.97% uptime and reliable disaster recovery

Making data accessible through visualized business intelligence dashboards



USE CASE 5 Data Ingestion and Visualization (BI)

Informing real-time decisions about critical defense systems with intuitive BI

The F-35 Joint Program Office (JPO) leads the lifecycle program management for the suite of F-35 stealth fighter jets used by the U.S. military and its international partners. The JPO wanted to streamline its reporting processes to provide leadership with better, real-time, actionable insights but was reliant on paper-based, manual reports. It needed a more efficient solution to deliver mission-critical, datadriven insights more accurately and effectively.

Guidehouse designed a game-changing solution by developing a Digital Command Center (DCC), which uses cloud technology to streamline data procurement and ingestion. The DCC automates the ingestion of vast data sources, normalizes unstructured data, and applies Al and ML to generate key business insights on predicted contract performance, forecasted spending, and system sustainment. With an intuitive BI visualization engine at hand, JPO leaders can now interact with data in real-time by asking critical questions and getting answers instantly.

By eliminating over 20 manual processes, the JPO significantly reduced staff workload and reporting times. Leadership briefings now run faster and more efficiently, with user-driven dashboards accessible 24/7 to authorized personnel. This digital transformation not only streamlined operations but also empowered the JPO to make informed decisions that sustain the F-35 program's mission-critical objectives.

Guidehouse used AI/ML to transform the JPO from relying on paper processes to predictive precision by:

Automating 20+ manual processes to save staff time and speed reporting

Implementing intuitive BI to support real-time decision-making

Developing a technologyagnostic, containerized platform to ensure scalability and flexibility for future needs

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Building the Future of Federal in the Cloud

Across the public sector, cloud adoption is empowering agencies to reduce operational costs, increase efficiency, and improve agility. The majority (95%) of <u>federal respondents to a FedRAMP survey</u> recognize the benefits of moving to the cloud, even beyond adhering to federal mandates. They know that the cloud is laying the groundwork for an agile and innovative future in a changing world.

But navigating a cloud journey can be complex. Guidehouse draws on its deep expertise with digital technology capabilities like cloud and IT strategy development, cybersecurity, data analytics and intelligence, AI/ML automation, low code and more to help public sector organizations outwit the complexity of modernization and move forward in delivering on their mission.

Don't let cloud complexity keep you in the dark. We light the way, so you can lead the way.

Get in touch with us to today to learn more.

