





To this end, it's essential that government get laptops right. With retirements and other factors driving turnover, government will need to hire between **80,000** and **100,000** workers in the coming years. Agencies will need to attract younger workers to the federal space, and those rising employees will have high expectations around devices. "With a more innate ability to use technology, Millennials and Gen Z usually prefer employers that offer the latest technology and tools to enhance their performance in the workplace," Forbes **reports**.

Mac devices offer a way forward.





Recruitment, Retention and Productivity

Today, legacy computers often come up short. Boot times should take seconds, rather than minutes. And performance issues impede productivity.

At a time when agencies are really trying to prioritize IT user experience, there's growing dissatisfaction with the IT provided by the government

Looking at legacy computers across the government workforce, a number of key issues arise:

- IT Management: Many agencies struggle to deploy and manage PCs effectively. Moreover, devices may be complicated to provision, which can put additional strains on the time and attention of already thin-stretched IT teams. PCs require agencies to maintain costly inventories; and keeping users up and running is a labor-intensive endeavor.
- Security and Compliance: Technology leaders struggle to ensure security and compliance across

their inventory of legacy PCs, at a time when Executive Orders and other government imperatives are pushing them to raise the bar on security and privacy.

• Recruitment and Retention: Legacy devices are proving an impediment to recruitment and retention for agencies. The government is highly invested in Windows devices, yet a recent survey shows 71 percent of college students say they'd rather work on a Mac, according to research by solutions provider Jamf. Of those who prefer Mac, 59 percent cite ease of use, 57 percent point to durability, and 49 cite the ability to synchronize with other devices. This last is especially telling, giving that roughly 90 percent of the federal workforce now uses an iPhone.

Given budgetary constraints, the mission-critical nature of desktop and laptop devices, and the urgent imperative around workforce development, it's clear that something has to change. Federal agencies need to begin the migration to Mac.





People do their best work when they get to use the tools they're most comfortable with, the tools they like using. For the people government is looking to recruit and retain, young professionals coming out of college, that's Mac.

And it's not just about the end users. The finance teams like Mac because they are far less expensive to maintain and support. End users make fewer calls to the help desk, with easier resolutions. The security team likes the fact that with Mac, you get a very easy way to lock down a group of machines, a group of users. And IT folks are happy because they get to use zero-touch deployment, making it easy to deploy a large number of devices with very little effort.

Deploy and Manage with Ease

What does it take to deploy and manage a legacy PC inventory? A lot of time and effort.

Engineering teams need to create and update a gold disk: a baseline configuration template. For each deployment, engineers need to implement the template and then customize devices for a given user group. To support all this, agencies need to maintain inventories of equipment, a



depreciating asset that adds no mission value. Overall, it is a costly and time-consuming endeavor.

By comparison, Mac is simple to deploy at scale. With **Apple Business Manager**, devices can be distributed directly to employees and used right out of the box, without any manual configuration.

When purchasing from an Apple-authorized government reseller, they can provide services such as entering device serial numbers into Apple Business Manager, an Apple web-based portal for IT administrators to deploy and manage Apple devices all from one place. When the device connects to a network, it runs an automatic check to ensure hardware and software integrity. It then syncs to the organization's mobile device manager for automated, user-specific configuration. And then it's up and running. This zero-touch deployment strategy offers an agile approach that allows users to get working right away on the equipment they want and love.

In terms of device management, Apple devices have a built-in mobile device management (MDM) framework,

simplifying the work for resource-constrained federal IT teams. Agencies can leverage a third-party MDM to remotely manage and update devices over the air. If devices ever go missing, IT teams can even remotely and securely erase them. With MDM, it's simple to configure apps, accounts, and data on each device.

There are measurable bottom-line impacts associated with Mac's ease of deployment and management.

Organizations report saving \$635 per Mac when compared to the cost of support and operation for PCs, **Forrester**reports. Overall, they see an average device lifecycle cost savings \$843 per device over three years when they switch from legacy PCs to Mac.

Ease of deployment lightens the load on IT teams and reduces the budgetary strain that comes with legacy devices. Perhaps most important, ease of deployment creates a smooth and simple user experience, which helps support recruitment and retention. By getting people up and running right away, agencies foster employee satisfaction and drive productivity in support of mission outcomes.



Improve Security and Compliance

Agencies are under pressure to secure resources against cyberattacks, and to report on their compliance in this area.

"The United States faces persistent and increasingly sophisticated malicious cyber campaigns that threaten the public sector, the private sector, and ultimately the American people's security and privacy," according to the **Executive Order on Improving the Nation's Cybersecurity**, which calls on agencies "to make bold changes and significant investments in order to defend the vital institutions that underpin the American way of life."

In the legacy PC environment, it can be difficult to meet this high bar. The government needs to have a wide variety of different tools and approaches, and that costs a lot of money and has a lot of complexity, The CIO and CISO can't really know whether the assets are properly secured, given the size and scale of federal agencies.

Apple products are engineered with advanced security built in from the ground up, making them secure by design.





At the level of hardware, all Mac computers have security capabilities designed into silicon. These include custom CPU capabilities that power system security features, and silicon dedicated to security functions. In all Mac computers with the Apple T2 Security Chip, the Secure Enclave provides the foundation for encrypting data at rest, secure boot in macOS, and biometrics.

There are a whole series of security capabilities that are built in, not bolted on. And Apple configures the device to meet government compliance requirements, for free.

With <u>support from the National Institute of Standards</u> <u>and Technology (NIST)</u>, the macOS Security Compliance Project (mSCP) is essentially a compliance "easy button."

The Security Compliance Project "seeks to simplify the macOS security development cycle by reducing the amount of effort required to implement security baselines," according to **NIST**. "This collaboration between federal organizations minimizes the duplicate effort that would be required to administer individual security baselines."

mSCP supports the reporting that IT leaders need to deliver, along with the tools to ensure they remain in compliance. The CISO or head of audit can read the documentation and know how everything is configured. They can have confidence that it's being implemented consistently across their ecosystem of Apple products. And you can use the compliance project to auto-remediate any systems if they fall out of compliance.

Organizations that switch from legacy to Mac devices report a 50% reduction in the risk of a data breach, Forrester reports. Survey respondents say they consider their organizations' Mac devices to be "significantly more secure than their PC counterparts."

The bottom line: Mac is secure out of the box, with builtin security, and there are tools to make it super-easy to ensure they're compliant with government standards.

Practical Benefits of Mac for Government

Mac devices help government to save money, enhance security, and meet mission more effectively. They support



more effective workforce development, a top priority across virtually all agencies. For federal government, specific benefits of a shift to Mac include:

Recruitment and retention

When the federal government is trying to recruit new professionals out of college, they want to use a Mac at work. U.S. government CIOs say they're losing talent over this issue.

Many federal workers use iPhones. That means they are familiar with the Apple ecosystem and can get up and running on a Mac quickly and intuitively. Rising professionals expect technology to support their work, not get in the way. With Mac, they can hit the ground running in support of immediate mission outcomes.

A shift to Mac drives satisfaction, productivity, and ultimately employee retention. In its report, "The Total Economic Impact of Mac in Enterprise," Forrester reports a 20% improvement in retention with a switch to Mac, along with over 100 hours of added annual productivity for Mac users.

A seamless ecosystem

Apple devices give federal workers full access to the tools they need to be productive.

They can leverage built-in Apple apps including Mail, Calendar, Contacts, Reminders, and Notes to connect, and use Microsoft Outlook on Mac for working with Microsoft Exchange. Popular productivity and collaboration tools like Microsoft Office, Google G Suite, Slack, Cisco Webex, and Skype are all available on the App Store, and deliver the functionality users know and expect. From the user perspective, there's an increasing disconnect between what they experience on Windows and what they experience on iPhone. With the vast majority of federal workers already on the iPhone, it makes sense to provide laptops and desktops that help to create a seamless ecosystem, empowering them to access their business email, calendar, and contacts across all their Apple devices.

A seamless ecosystem makes more sense from an IT perspective as well. They already know how to



manage Apple devices. They're already doing it for iPhones, and with Mac it's the same basic framework.

Superior performance at an affordable price
 Apple silicon is an order of magnitude faster than
 Intel at most tasks, and compressed RAM means
 government can spend less and still get more out
 of its device memory, with compression increasing
 RAM capacity by 1.2 to 1.5 times.

Mac products are energy efficient, using 30% to 50% less energy. This helps agencies to meet the

demands of the **executive order** on sustainability, which calls on government "to lead by example in order to achieve ... net-zero emissions economy-wide by no later than 2050."

And while some may find it surprising, Mac is affordable, with high-performing products available

at every price point from \$600 to \$2,000 in support of a wide range of user needs.

Intense pressure around workforce development alone ought to be enough to get federal leaders thinking about a shift to Mac. IT will benefit, too, with ease of management and built-in security helping to bring down the cost and labor associated with desktops and laptops.

For many, past experiences with the iPhone will be the deciding factor. If you are a federal CIO or CISO, iOS devices have performed well and admirably and protected your customer base for a decade. If you like that ease of use, reduction of cost, and ease of management — now is the time to bring it to the desktop and allow your workforce to experience that not just on their phones, but all day long in their work environment.

Learn more about how Apple devices can power greater recruitment, productivity, and retention across government. >

© 2023 Apple Inc. All rights reserved. Apple, the Apple logo, AirPlay, AirPods Pro, Apple Pencil, Apple TV, FaceTime, GarageBand, iMac, iMovie, iPad, iPad Air, iPadOS,iPad Pro, iPhone, Keynote, Mac, MacBook, MacBook Pro, macOS, Numbers, Pages, Swift, tvOS, and watchOS are trademarks of Apple Inc., registered in the U.S. andother countries. Smart Keyboard Folio is a trademark of Apple Inc. IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is usedunder license. Other product and company names mentioned herein may be trademarks of their respective companies.