

INDUSTRY REPORT

Government on the Move

2011 Survey on the Evolutionary Growth in Mobile Technologies Used by Government Agencies



Prepared by
NetMotion Wireless

2011

A Mobile Government

There's no doubt that technology is changing the way government does business. Mobile technologies, in particular, are increasing the efficiency and productivity of government agencies, enabling workers to work wherever and whenever their job duties require.

In order to better understand precisely how government agencies are using mobile technologies, NetMotion Wireless conducted a survey of 250 US city, county, and state government departments. This report analyzes the responses to assess important trends in mobile technology, examine how government agencies are evolving in their use of mobile technologies, and predict how they may use this technology to enhance their service capabilities in the future.

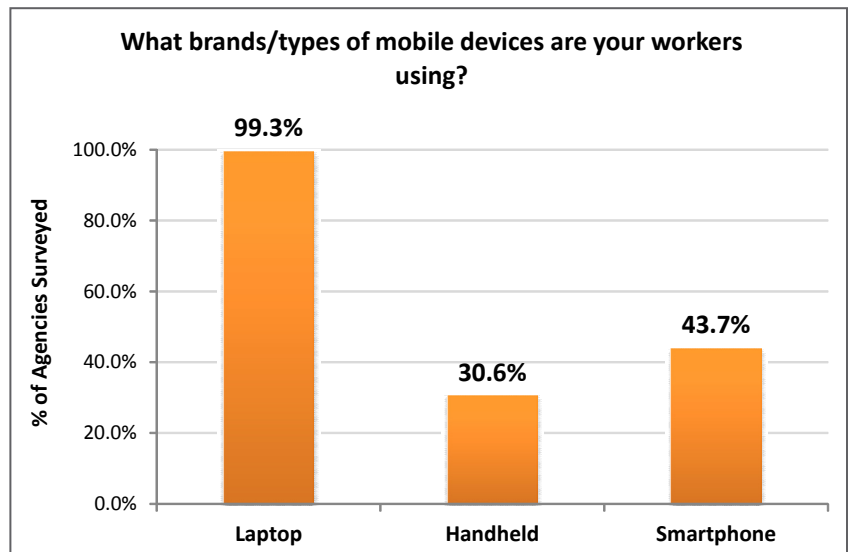


The Changing Mobile Landscape

Survey results demonstrate that an increasing number of government agencies are discovering how to employ mobile technology to increase the productivity of their workers and enhance the speed and quality of services those workers provide to the public.

Whether it's updating the status on a repaired water main, filing a vandalism report, sending social service records, or reviewing building code requirements, government agencies are using laptops, tablets and smartphones connected to wireless networks to accomplish more work in less time.

But moving from a wired desktop to a mobile laptop environment is not as simple as removing an Ethernet connection and joining an available wireless network. There are new security concerns and bandwidth limitations, not to mention that many government applications were never designed to work in a wireless environment.



Almost 100% of those surveyed indicated that their workers are using laptops as their main mobile device, given their ease of use and ability to process complex tasks. Smartphones run second at nearly 50%

The Introduction of Mobile VPNs

With these and other limitations for the wireless environment in mind, a new class of Virtual Private Networks (VPNs), known as mobile VPNs were created. Designed specifically for the complexities of wireless computing, mobile VPNs solve many of the challenges faced by mobile workers. Much like a legacy SSL or IPsec VPN, a mobile VPN secures and protects all data in transit from unauthorized access.

Unique to mobile VPNs, however, is their ability to insulate applications from drops in connectivity allowing applications to persist through periods of disconnected states. Thus the applications survive and workers do not have to re-login

and restart applications throughout the course of their workday – an important feature when your job requires constant travel. Mobile VPNs also enable workers’ device connections to “roam” to any approved network ensuring continuity in information access at all times.

In addition, while other VPNs degrade performance over wireless networks, often by as much as 50%, mobile VPNs help to reduce network consumption and improve throughput and application responsiveness. Using link optimizations to reduce the number of retransmitted packets, excess control information and other network “chatter,” mobile VPNs dramatically improves throughput by compressing data and images.

The Early Adopters in Government

Historically, the acute need for real-time information made police, fire and emergency medical services (EMS) the earliest adopters of mobile technology. Below is an overview of how public safety has deployed mobile VPNs.

Police

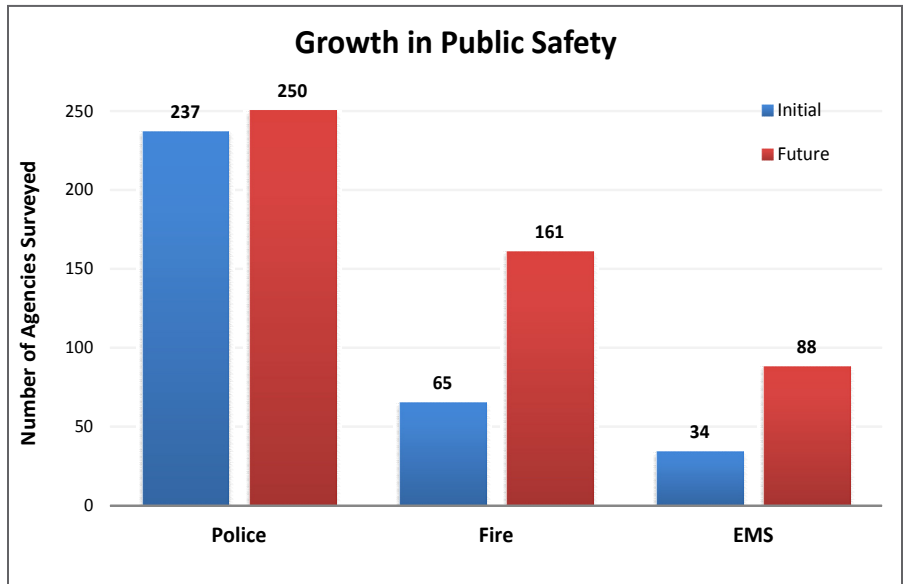
Law enforcement has long been the vanguard of mobile computing within government. Police Departments around the country have embraced mobile technology as an integral part of their communications strategy. Mobile VPNs have helped to ensure officers receive secure access to computer-aided dispatch (CAD) applications and Records Management Systems (RMS) from wherever and whenever they need it. This speeds response time, protects officer safety, and ultimately enhances service to the community.

Fire

In addition to utilizing CAD applications in the same manner as law enforcement, fire departments are using mobile data to access map information in advance of arriving to an emergency situation, thus enabling a faster response time. Post event, fire officers and technicians are also using mobile VPNs to securely send reports from the field, reducing administrative office time.

Emergency Medical Services (EMS)

Previously, vital medical information about patients gathered at the scene and during transport was rendered in paper form and then re-entered into ER department systems by hand. With mobile VPNs this redundancy is eliminated, saving valuable treatment time. Patient data is transferred securely via wireless network while en route to the hospital giving clinicians time to prepare necessary equipment and medication prior to arrival.



Of the number of public safety agencies surveyed, most continue to forecast increasing usage of mobile VPNs in the future



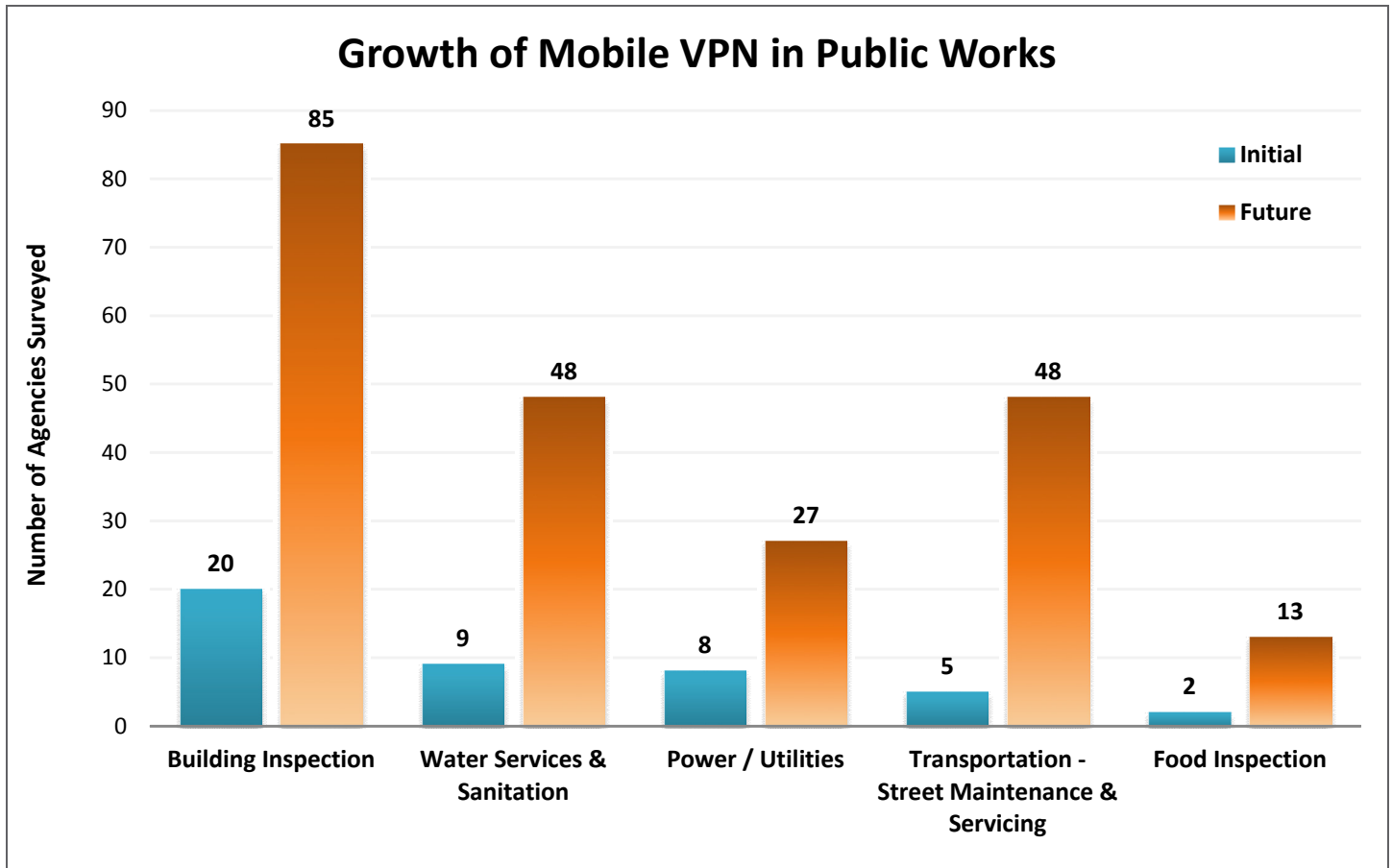
Growth in Public Works

Today, the use of mobile technology is evolving far beyond just public safety and emergency services. With mobile VPNs becoming a standard part of any mobile technology solution, their broad adoption into other areas of government services such as public works, is a visible trend. Public works is defined differently state by state but frequently is comprised of transportation infrastructure, water services and sanitation, building and food inspection and other municipal engineering and construction organizations.

Survey results showed that prior to 2008 only 15% of public works agencies used mobile VPNs. However, the positive user acceptance and increased productivity amongst first responder organizations led to a dramatic increase in mobile VPN usage by public works departments. By the end of 2010, over half of those surveyed deployed mobile VPNs to increase the job effectiveness of their public works personnel.

A Growing Field

40% of public works departments plan to deploy mobile VPNs to their field workers in the next 12 months



Of the many public works agencies surveyed, only a handful were using mobile VPNs, however, the vast majority are forecasting large adoption of the critical software within the next 12 months

Inspections

Building and food inspection constitutes a broad group of government employees that perform a variety of inspections and compliance monitoring for code, safety and health regulations. On any given day building inspectors, for example, may visit businesses, facilities or various job sites to ensure proper building code and safety regulations are followed and complied with.

Previously, inspectors typically completed multiple paper form reports, updates to existing reports and either faxed or dropped off completed paperwork for processing. By deploying devices equipped with mobile VPNs and connection to cellular data networks, inspectors' productivity has increased considerably. Reports and data record updates occur on the fly with violations and remediation plans filed before the inspector leaves the premises.

Water Services and Sanitation

Water service and sanitation workers monitor and manage our nation's supply of available water. Management of water services includes such tasks as leak detection, surveys to detect illegal connections, and the systematic inspection and replacement of metering equipment. These tasks require field technicians to spend much of their workday in the field. Using a mobile VPN on their laptop allows them to quickly and securely connect to any available network to update job ticket information, customer records, etc.

Transportation (Street Maintenance & Servicing)

The daily tasks of transportation and street maintenance workers are varied and often unpredictable—repairing roads, clearing sewers, hauling downed trees, etc. Mobile VPNs are enabling crews and dispatch to coordinate more easily and efficiently. Crews can access maps, plans and schedules, and update work orders and inspection data while still at job sites. Reports are filed faster; project status can be reviewed as needed with personnel and equipment resources better utilized.

Power/Utilities

Like transportation services, the power/utility sector must be nimble to react to any number of issues such as down power lines or ruptured water lines. Mobile VPNs allow power and utility companies to communicate more effectively in the field and complete tasks faster. Whether they are checking on a gas leak, reading a gas or electric meter, or responding to a customer service request, utilities are increasing their field service efficiency and customer satisfaction by incorporating mobile VPNs into their communication strategy.

Per survey results, an additional 40% of public works departments will deploy mobile VPNs to their field workers in the next 12 months. In doing so, public works departments will soon rival first responder organizations for broad implementation of mobile VPNs.



How Other Government Agencies Are Employing Mobile VPNs

While public safety has been the early adopters and public works is showing enormous growth, there are several other agencies that are adopting mobile VPNs to improve productivity in their field workers.

Child & Family Services (CFS)

With a rising number of cases that counselors need to address on a daily basis, many CFS agencies are embracing mobile technology as a way to handle their increased work load. Case workers and counselors are now equipped with mobile devices, replacing the pen and paper notes they used to keep. By installing a mobile VPN on their devices CFS workers are now securely sending and receiving information. This technology has enabled workers to spend more time in the field, making more visits per day and increasing their agencies overall efficiencies.

Parole/Probation/Corrections

Parole, probation and correction officers, similar to CFS case workers are also beginning to use mobile VPNs. By entering secured information into parolee and former inmates' case reports during the course of the interviews, workers are able to complete more case reports per day. They are spending less time in the office transcribing information into electronic reports and more time in the field.

Parks and Recreation

The outdoor nature of Parks and Recreation Services means workers are often away from an office environment handling construction, maintenance and repair of parks and recreation areas, equipment and facilities. Mobile VPNs enable them to connect with ease across any available wireless network to update maintenance reports, view job site information and review projects in queue.

A Productivity Boost for Government Workers

Survey respondents saw a significant boost in productivity as a result of their mobile VPN deployments. Nearly 80% of those surveyed said that their workers could accomplish more job tasks per day as a result of the use of a mobile VPN.

The primary reason given for this increase was the capability of a mobile VPN to maintain applications even through periods of lost network access. From a user's perspective, the device and its applications lose connectivity from time to time, but none of the applications ever fail or crash – a common experience when using an SSL or IPSec VPN.

Thus, regardless of user technical proficiency, their devices in the words of survey respondents, "just work" and require no complex tasks of re-configuring the network connection, re-establishing the VPN, re-starting applications, etc. The moment that a network becomes available again, the mobile VPN software on the devices reestablishes the connection and all applications seamlessly restart exactly where they had left off.

Over half of responding agencies also saw a decrease in the number of trouble tickets related to wireless/connectivity issues. As the device does not suffer from frequent network disconnects, OS processes and applications continue to function as normal and users have more of a land-line quality computing experience.

Mobile VPN Boost

80% of surveyed IT managers from US city, county and state governments say that their workers accomplish more job tasks per day as a result of using a mobile VPN

The Value of a Mobile VPN

Respondents overwhelmingly confirmed the value of a mobile VPN. 99% of those who took the survey said it was the key element to their mobile strategy with over 82% saying that it was “very important – a must have,” and roughly 17% saying it was “Important” or “Helpful” in their mobile deployment.

The pressure of having to accomplish more with fewer resources is daunting, but innovations in mobile technologies, such as mobile VPNs are enabling government agencies to act and react with greater efficiency than ever before.

Mobility XE: An Award-Winning Mobile VPN

NetMotion Wireless is the creator of Mobility XE™, the world’s leading mobile VPN, enabling highly mobile workers to communicate and access critical data and applications reliably and securely over wireless networks. With NetMotion Wireless, workers can cross wireless networks without interruption or spending time and energy entering multiple log-ins. Whether they drive to multiple locations in a single day or move between floors and buildings on a corporate campus, NetMotion Wireless enables them to access different networks, cross coverage gaps, suspend and resume their devices—and most of all, remain productive.

Security

NetMotion Wireless features the industry’s strongest FIPS-140-2 validated encryption to secure the VPN tunnel. It also supports two-factor, standards-based authentication and supports most standards-based PKI authentication infrastructures via RADIUS EAP.

Productivity

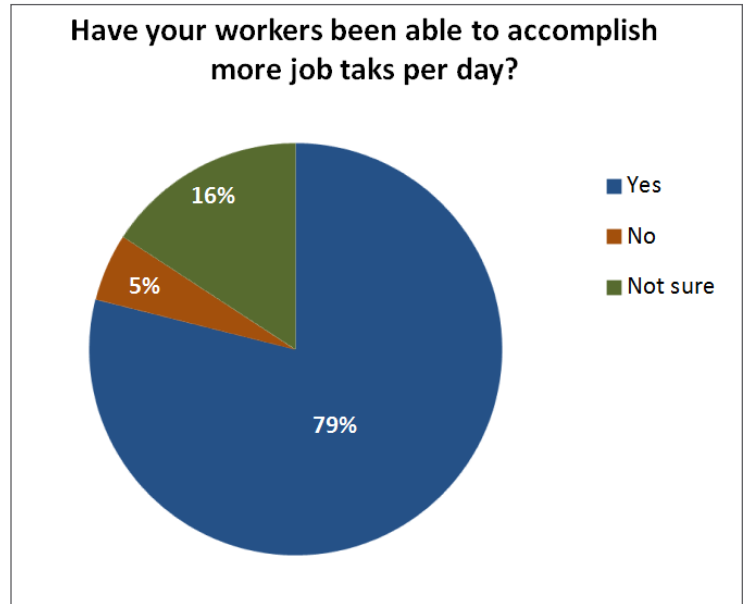
Mobile workers have a single sign-on experience with NetMotion Wireless—no matter how many different networks or access points they use. Users can move freely between docked connections, corporate Wi-Fi networks, third-party hotspots and cellular data networks from multiple carriers.

Management

With NetMotion Wireless, you have complete control of system rules, and once you set them routine operations require little management. The browser-based administrative console allows all aspects of the system to be centrally configured, managed and observed—from overall metrics down to the details of a single mobile worker.

Learn More

For more information about best practices in mobility deployments, please visit www.netmotionwireless.com



Respondents overwhelmingly indicate productivity gains after deploying the NetMotion Wireless mobile VPN, Mobility XE

