

Leveraging the CARES Act for Local Governments' Overdue

# Digital Transformation

How E-Government management drives productivity, insight, resilience, and constituent satisfaction

October, 2020



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**GovPilot enables local government  
to operate at full potential.**

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# Table of Contents

Summary	4
Where We Are Today	5
Quick Hits: 11 Reasons to Go Digital	8
Deep Dive: The Four Pillars	10
Putting it All Together	18
Terms and Tools	22
Conclusion	27
Citations	28

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# Summary

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In an era characterized by rapid modernization, increased constituent expectations, shrinking budgets, and unpredictable outside disruptions, local governments' reliance on arcane paper-based processes drains its scarce resources and limits its ability to effectively serve constituents.

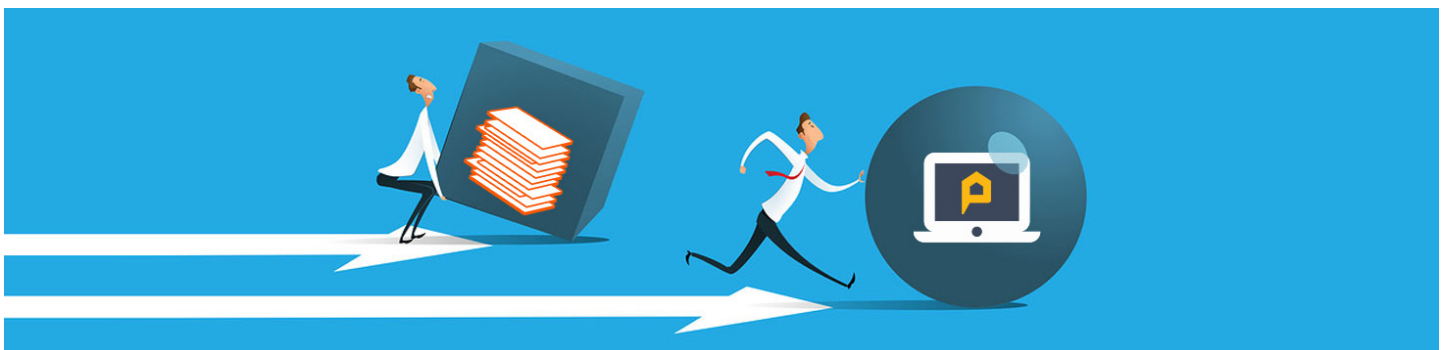
COVID-19 and the required response, had a significant impact on the budgets of local governments which has put a strain on services and staff. However, the \$150 billion Coronavirus Aid, Relief, and Economic Security (CARES) Act passed by Congress in March 2020, represents a rare opportunity for local governments to invest in the modernization of IT systems and digital services. These investments solve short term needs such as increasing efficiency and enabling remote work, while simultaneously transforming local governments so that they can thrive in the digital age for decades to come.

As its title implies, Leveraging CARES Act Funding for Local Governments' Overdue Digital Transformation outlines the many financial, operational and societal benefits of government digitization. The report provides local governments with the knowledge to effectively conserve resources, satisfy citizens, and increase productivity through the adoption of digital tools and processes. Now is the time for local governments to undertake digital transformation.

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## Key Points

- Municipalities and counties across the US run on paper-based processes.
- In a world where instant, 24-hour digital service is the norm, constituents mistrust and feel inconvenienced by governments' continued use of paper-based processes.
- Digital tools are available that help municipalities meet constituent expectations, conserve precious resources, ensure productivity and resilience, and ultimately benefit all stakeholders.
- Local Governments should seek to achieve four key outcomes through digital transformation:
  1. Improve Constituent Experience
  2. Enhance Efficiency and Productivity
  3. Ensure Business Continuity
  4. Achieve Cost Savings & Revenue Generation



# Where We Are Today

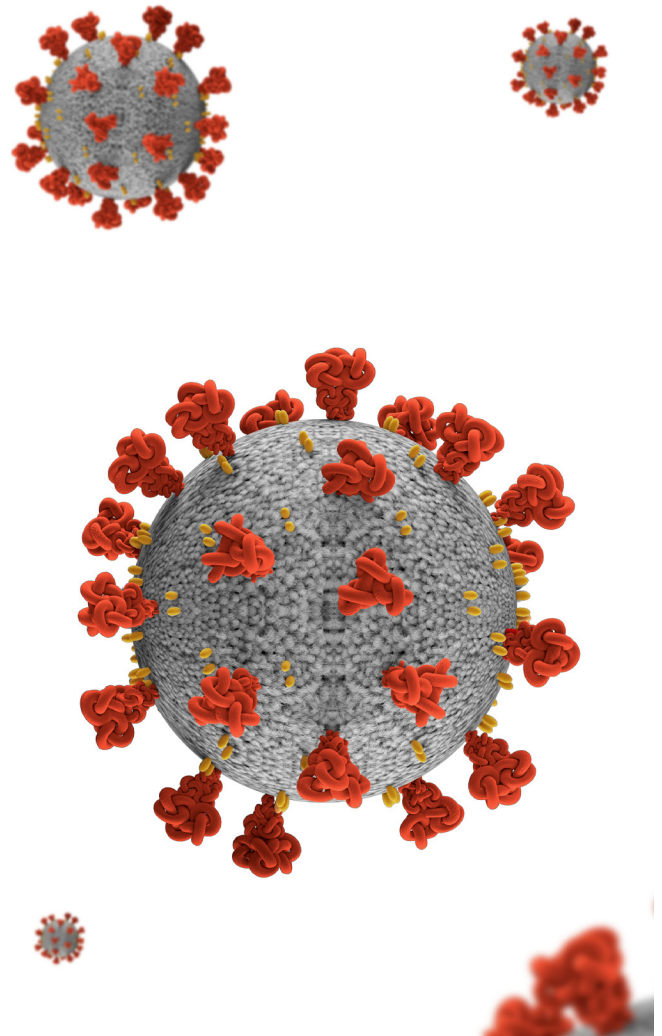
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Even before the COVID-19 Pandemic disrupted the world in early 2020, the private sector was well on its way to embracing the efficiencies of IT modernization and digital transformation. CIO Magazine estimates that companies spent more than \$2 Trillion on digital transformation in 2019 and that 89% of all companies have already, or plan to adopt a digital first strategy. The private sector has recognized efficiencies generated by digital data as well as the advantages of providing a modern, convenient digital user experience for their customers.

Government at all levels however, has been slow to realize the importance of user experience in delivering on its services. In part this is due to the fact that consumers who need government services have no option but to get those services from the government. Constituents can't go somewhere else to get a pothole filled or to register a new business. This lack of pressure means that government has been able to exist in a subpar technical environment for far too long. It also means that government doesn't get the benefit of the feedback loop that the private sector does. Citizens will come to government for passports, construction permits, and unemployment benefits no matter how terrible the experience.

By the 2000s, many businesses saw that their choice was to move online or die. But government didn't face that kind of pressure. So while the rest of the world moved online, government often stayed paper-based. While the rest of the world has evolved to a place where we can track anything at all times, order anything from anywhere, and apply for things at midnight from our couch, government has continued to operate with arcane, obsolete, inefficient processes.

Governments' reliance on inefficient paper processes and decades old single-use server based technology became a glaring liability during the COVID-19 outbreak when the country was forced to shut down and socially distance. Government employees could not access their work from home which meant services often had to be limited. Unable to access closed municipal buildings, constituents could not submit paperwork. Millions of newly unemployed Americans could not access unemployment benefits because their state systems relied on paper applications or 1950's era COBOL computer programs, which quickly became overwhelmed.





In a world of increasing disruptions from flooding to wildfires, hurricanes to pandemics, social unrest and increasing cyberattacks, ensuring business continuity - and by extension - government continuity is now critical. If a municipal building is damaged or if employees cannot physically get to it, how will the government continue to operate and provide services? If governments continue to rely on paper processes and operate inefficiently during so-called “blue sky days”, how could they possibly handle the surge in demand during a crisis or in the aftermath of a disaster?

Over the last decade, a wide range of industries have replaced their paper-based processes with digital applications, to incredible effect. Importantly for governments, removing paper processes promotes efficiency and productivity. Files are stored in the cloud, safe from cyber and physical threats. The ubiquity of WIFI and mobile devices means that data can be accessed and updated by employees at any time, from anywhere. Time previously spent locating paper files and performing data entry can be dedicated to addressing higher level matters. Services can be rendered to constituents quickly and transparently.

The use of digital files and automated workflows save companies money by reducing their need to frequently replenish office supplies and utilize mail carriers. Cloud-based solutions can also eliminate the cost for required maintenance of on-site servers.

Lastly, digital tools help companies connect with their customers. Constant and instant communication provides

companies with critical insight into the needs and concerns of their target market so that necessary actions can be taken.

Of all sectors, government may have the most to gain from going paperless. Local governments, subject to frequent budget cuts and restrictions on revenue generation, can conserve scant resources and even boost productivity through digitization. Digitization can also improve relations with a constituent base growing increasingly accustomed to immediate, 24/7 service as a standard component of the customer experience. It is strange then, that government has been slow to digitize.

Given the new reality we now live in - the work from home culture, Zoom meetings, telemedicine appointments, ordering groceries online, budget crunches for state and local governments, it is as critical now as ever to embrace the efficiencies that digital transformation can bring to local government. The ability to provide the convenience that constituents expect while increasing the productivity of government staff and saving costs or even generating revenue, are now paramount. An infusion of CARES Act funding has provided a rare opportunity for local governments to make an investment in digitization that will pay dividends now and in the future.

This white paper aims to catalyze local government’s digitization by highlighting the benefits of going paperless, detailing what that transformation encompasses, and providing tips for a successful transition from paper to digital.



# Defining Digital Transformation

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The term, Digital Transformation is everywhere these days. Across industries the term is applied differently and often is in reference to technologies ranging from IT infrastructure, to big data, to machine learning and AI. Generally speaking however, Digital Transformation marks a radical rethinking of how an organization uses technology, people and processes to fundamentally change business performance, according to George Westerman, an MIT principal research scientist.

Based on this definition, what specifically, does Digital Transformation mean for local governments? Is it a worthwhile investment at a time of budget shortfalls brought on by a public health crisis? What are the desired outcomes of successful digital transformation for local government?

**This white paper argues that successful digital transformation for local governments is measured by four pillars.**

## **1. Improved Constituent Experience**

### **2. Increased Efficiency and Productivity**

## **3. Ensured Business Continuity and Resilience**

## **4. Cost Savings and Revenue Generation**

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# Quick Hits: 11 Reasons to Go Paperless

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## I Constituent Experience

### Improves Convenience

Consumers in modern society are accustomed to the ease of shopping, ordering food, booking travel, banking, and more all from their screens. They expect to be able to conduct business online. Paperless processes provide constituents with on-demand access to applications, information and other services that traditionally require a trip to city hall. By digitizing operations, governments can more efficiently process claims, applications and license requests, resulting in higher constituent satisfaction.

### Promotes Transparency

Automated workflows promote transparency by automatically notifying constituents as each step of a government process is completed. Placing information in publicly searchable databases also saves government agencies time and money spent complying with open data requests.

## I Efficiency and Productivity

### Saves Employees Time

When documents are stored in the cloud instead of in physical files, employees save time requesting documents from other departments, searching for misplaced reports and physically updating files. Inconveniences such as having to print notes from a meeting and physically deliver them to absentee coworkers can be eliminated through digital workflows.

When an inspector visits a property, he or she can view and update the property's file in real time via a mobile device. This cuts time needed to enter the data later and

because the document is located in the cloud, all departments have immediate access to the updated information.

### Automates Tasks

Document management automation cuts steps from a project's journey to produce quicker results of a higher quality. Digital workflows enable government employees to track a project's progress, automatically notify the correct people once a milestone is reached and create reminders so tasks are not stalled due to interdepartmental miscommunication. Digital forms, filled out by the public and employees, automatically populate databases with information, reducing the need for manual data entry.

### Data is Accessible

With cloud storage, files can be located through simple queries, rather than through hours spent rummaging through civic archives. Case workers can access and update files from their mobile devices. Property-specific data can be retrieved in real time from the municipality's GIS platform, ensuring that every department has access to the most current information. Reports and analysis can automatically be generated in a matter of clicks.

### Unifies Departments

With centralized documents, all departments work together from the same information. Data and information silos are eliminated. Employees across all departments can access, manage and make decisions based on current and accurate data. The incidence of costly human error is reduced and communication bottlenecks are removed, facilitating seamless interdepartmental collaboration.





## Business Continuity

### Improves Cyber Security

In the second half of 2019 alone there were 2,202 reported cyberattacks against local governments in the U.S. On-site servers are expensive to maintain and difficult to secure, and they've become the favorite target of cyber criminals who utilize ransomware to extract large sums of money from local governments. By transitioning to a cloud-based environment, records are stored securely and backed up several times per day. Maintenance and security costs are also eliminated, as the cloud provider becomes responsible for cybersecurity.

### Enables Remote Work & Business Continuity

From the mundane to the truly catastrophic, disruptions are bound to happen. Whether a blizzard or flood that closes roads making it impossible for employees to drive to the office, or a global pandemic which forces a monthslong remote work policy, local governments must be able to operate regardless.

If government offices are closed, can services continue to be delivered? Can constituents submit applications? Would paper documents and files be safe in the event of a fire or flood?

In an age of increased and more destructive natural disasters, local governments are the first to respond. Business continuity and responsiveness is critical.

Forego paper and securely store critical information in the cloud. Enable employees to access crucial data, from any location, through any device, at any time.

## Revenue & Budget Friendly

### Cuts Costs

Digital document management eliminates the cost of printing and mailing documents to citizens. Online payment options also reduce transactions' processing costs. Increased productivity resulting from digitization defers cost over the workforce. Finally, the transition from on-site server-based platforms to cloud-based platforms can reduce maintenance and security costs.

### Generate Unrealized Revenue

With records digitized and easily analyzed, employees can find opportunities to increase revenue for the budget. Are there 2,000 registered dog owners in your city? Pull a report and email a link for a \$25 annual renewal payment each year - which residents will be able to pay directly through your website. That's \$50k added to the budget.

### Saves Space

Save on storage! A cloud-based storage system requires no physical space! Papers such as FOIA and OPRA documents that are legally required to be stored for seven years, can be stored in the cloud, rather than in rows of filing cabinets in office basements.

# DEEP DIVE

## Constituent Experience

Putting aside the pandemic, when was the last time you booked a flight by calling the airline? When was the last time you cost compared departure times and the price of flights by calling individual airlines one at a time? When was the last time you used a phonebook to find a local repairman? How about the last time you faxed or mailed documents to your bank? Or the last time you searched through a physical rolodex to call a contact?

In our everyday lives as consumers these are no longer realities. Today we research and book flights in just a few clicks through an online aggregator like Kayak or Priceline. We use Google or Yelp to find local repairmen. We open a mobile banking app on our phones to transfer money and pay bills. We shop online for just about anything we want with our payment processed directly through the e-commerce website.

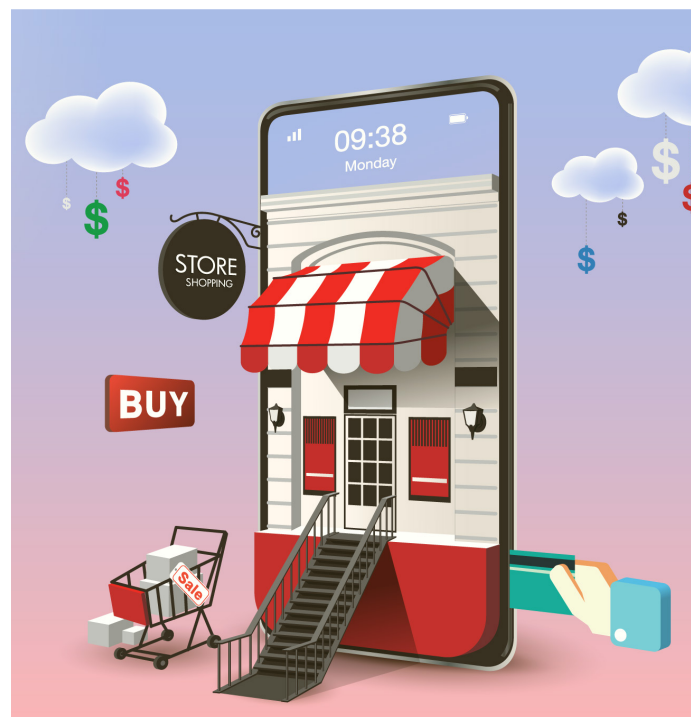
## We've been conditioned to expect the convenience that digital transformation provides.

Constituents are consumers of government services, so it is frustrating for them to have to participate in a time consuming manual process when they deal with their local government... Taking time out of their day to fill out a paper form and submitting it in person at city hall, or mailing it in and waiting days for a response is not in line with the digital conveniences elsewhere in our modern society.

Technology and the capabilities it has provided to individuals and organizations, has changed substantially over the past decade. The digitization of commerce and

ubiquitous - and for good reason. Digital transformation and access to digital services provides convenience for customers, and increased efficiency and productivity for companies, as well as data-driven analytics which can be used to further improve services, customer experience, and the bottom line. Consider that today:

- **89% of all companies have adopted or plan to adopt a digital first business strategy.**
- **86% of companies believe cloud technology is critical to digital transformation.**
- **93% of companies consider innovative technologies as necessary to reaching their digital transformation goals.**
- **67% of consumers will pay more for a great digital experience.**
- **48% of local, state, and Federal workers (388 surveyed) believe their organization trails other departments when it comes to adopting new technologies for transforming business processes.**



It is grating for constituents and government employees alike to have to muddle through an experience more reminiscent of the phone book era than the iPhone era when it comes to interacting with their local government.

Single-use, server-based software, PDF paper forms, in-person applications at city hall, and phone calls to check on the status of permit requests are highly inefficient, dated ways to conduct government business and ultimately lead to constituent dissatisfaction, delayed services, and declining revenue for governments that still rely on these processes.

It is time for the public sector to catch up to the private sector in terms of digital services, for everyone's benefit. While it may sound daunting, digital transformation for local governments and the vastly improved constituent experience that it provides is easier to achieve than one might imagine with massive budget outlays, long timelines, and hours upon hours of work. GovPilot helps local governments deploy gold standard, templated workflows which enable departments to digitize public facing forms

and tie records to specific property parcels, creating a full view of government operations and services. With unified data across all departments on a single cloud-based platform, governments can enhance the constituent experience by:

- **Eliminating obsolete PDF forms and paper processes by providing digitized submissions and payment directly through the government website.**
- **Providing constituents with automated email status updates on applications and requests.**
- **Significantly reducing constituent phone calls and foot traffic to city hall.**
- **Displaying critical information on a publicly available GIS map via the government website.**
- **Making records instantly searchable for employees across all departments from any device, anywhere, at any time in just a matter of clicks, ensuring that constituent inquiries and requests are resolved promptly.**
- **Saving employees substantial time and increasing productivity by eliminating analog paper processes.**
- **Easily measuring and reporting on outcomes - i.e. number of permit applications processed during a given time period, etc.**



Effective digital transformation should result in happier, more informed, and satisfied constituents. Information should be easily accessible on a local government's website, and the ability to submit applications, forms, and requests should be available as digital forms that can be filled out and submitted in a matter of clicks. Once submitted the constituent should receive a confirmation email and regular automated updates to keep them apprised of the status of their request.

This saves considerable amounts of time and effort for both constituents and government employees alike. All of this adds up to increased efficiency, productivity, cost savings, and constituent satisfaction.

## Efficiency and Productivity

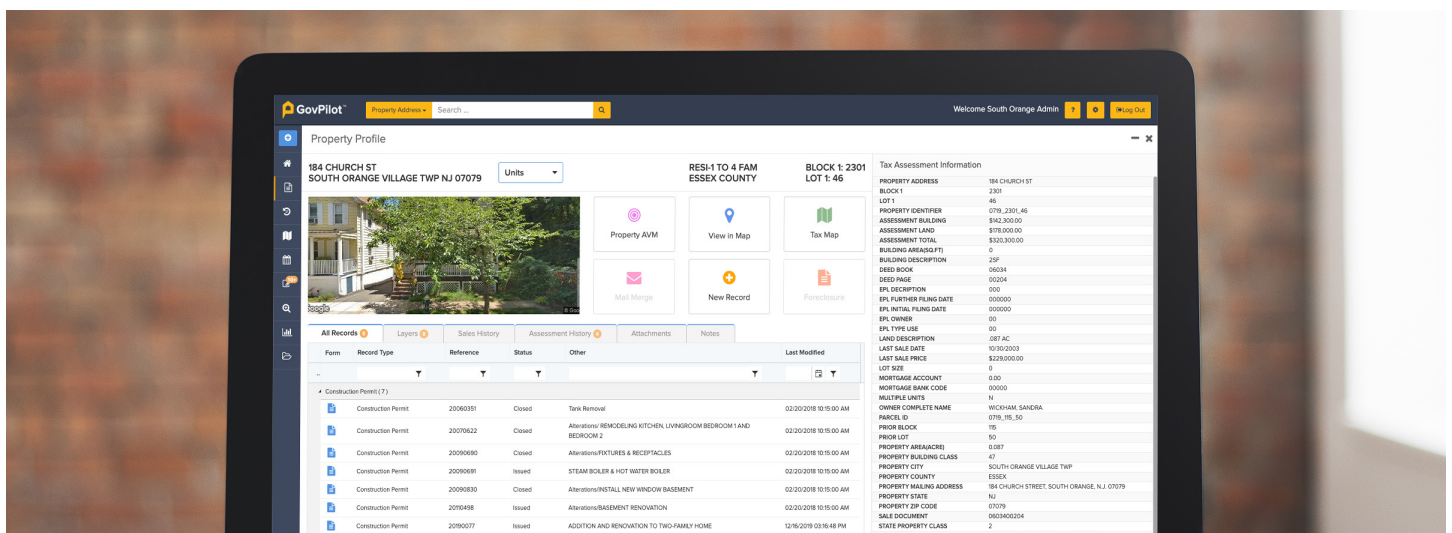
Even before the COVID-19 Pandemic struck, local governments all too often relied on inefficient, cumbersome paper processes and single-use obsolete technologies. There are only so many hours in a day, and for departments and staff to spend it transposing paper forms into Excel spreadsheets, making photo copies, walking down the hall to hand deliver documents, and digging through archives to find records is beyond inefficient. Add on to this the phone calls, walk-in submissions, and mailed in submissions from constituents, which all need to be answered, sorted, and processed manually, and you can understand why constituents are so frustrated, and why local government gets a bad wrap for being inefficient.

During normal operations, a modern digital government platform can give employees several hours in their day back to tackle other important tasks by eliminating cumbersome, analog tasks like manually transcribing written information into a spreadsheet, or by significantly cutting down on phone calls and walk-ins from constituents. It can generate revenue for governments by uncovering opportunities not obvious in a stack of paper or in single-use software programs, and it streamlines residents' interactions with their government - whether they are reporting a concern, or filing for a construction permit.

Critically, the digital forms and the data they capture should tie into a unified backend platform that organizes and makes records searchable for staff across all departments. There should NOT be a need for employees to have to manually re-enter information into a spreadsheet or single-use software platform, such is the case with many local governments that rely on fillable PDFs. This creates redundant work for employees, and fails to organize records in a searchable way, ultimately creating unnecessary work for staff - transposing, printing, copying, filing - that consumes valuable time and resources.

With a unified digital system in place, records across departments become instantly searchable, information is passed along quickly to colleagues, elected officials, and constituents without the need for phone calls, responding to mail, digging through physical archives, or physically walking from office to office. The elimination of manual processes leads to hours in time savings per day for employees that can be dedicated to other critical tasks.

With GovPilot in particular, city and county employees are able to access their workflows from any location 24/7 in order to view and update critical records in real-time. By unifying all departments and data on one cloud-based platform, governments can provide their employees and





constituents seamless collaboration and services - whether elected officials and employees are working from the office, the field, or the comfort of home.

For example, when Elizabeth, New Jersey - a GovPilot client with a population of 130,215 people - transitioned from manual paper workflows to GovPilot's cloud-based software it saw an 82% drop in the amount of time their employees spent on incoming calls from constituents thanks to automated, easy to use forms. Instead of physically standing in line or placing a phone call to city hall, residents now submit issues digitally through Elizabeth's Report-a-Concern form directly on the city's website or through the free GovAlert mobile app.

Prior to implementing GovPilot, Elizabeth employees manually searched physical file cabinets to retrieve documentation on the status of a complaint, violation, or work order, and constituents had to physically drop off paper forms at city hall. Today those forms are digital and the information they hold is easily accessed by employees with just a click. Should employees be asked to work from home during the Coronavirus outbreak, they'll be able to do so safely without an issue, providing critical government services without an interruption to city services.

The pandemic and its effects took governments by surprise. It proved paper processes and legacy technology systems to be anything but efficient with employees unable to work remotely and long lines at best, for citizens to file for services like unemployment benefits.

Ransomware attacks and data breaches in recent years have shown too many local governments are not secure. The significant cost and time necessary to maintain now proven to be obsolete technology no longer adds up - but with budgets impacted, modern IT system upgrades and purchases must be as affordable as they are efficient and beneficial.



**"GovPilot is a game changer!  
Our response time is faster  
and there are far fewer errors  
in our workflows."**

**Darren Bryden, Chief Information Officer  
Elizabeth, New Jersey**

Exacerbating the issue is that, according to Axios, even before the pandemic, city governments were feeling a staffing squeeze as baby boomers retired and the tight job market made it harder to attract millennials into municipal jobs. In 2018, 44% of state and local employers said that retirements are on the rise, with some workers even accelerating retirement dates, according to the most recent workforce report by the Center for State & Local Government Excellence.

Now with budgets significantly impacted efficiency and productivity is at a premium for local governments. Governments, their officials, and staff must operate smarter, not harder - this lends itself to digital processes. Furthermore, with retirements on the rise, what 20 - 40 year old who is digitally native, will want or be able to function in a government that is reliant on paper processes?

When it comes to efficiency and productivity, paper processes represent the past. Digital represents the present and the future.



## Business Continuity

Ransomware attacks, floods, hurricanes, tornadoes, blizzards, wildfires, social unrest, global pandemics... there is no shortage of potential disruptions to normal business operations. Natural disasters are occurring more frequently, more intensely, and in places with no prior record of such events.

According to the Federal Emergency Management Agency, 40% of small businesses that suspend business operations for just one day after a disaster, never reopen.

It's a sobering statistic unfortunately being amplified during these difficult times.

But for governments, failure is not an option. So how can local governments maintain essential functions and even non-essential services during major disruptions while ensuring the safety of their employees and residents?

What can be learned by enabling local governments to come out stronger on the other side?

In the past, local governments have dusted off their business continuity plans in the wake of natural disasters like floods, fires, tornados, hurricanes, and earthquakes.

Now, as COVID-19 threatens global health and economic activity, local governments across the country are working to ensure the continuity of operations and essential services for residents while enabling remote work capabilities for their employees. This is certainly a challenge - but it is not limited to this global pandemic.

Whether providing constituents the ability to file a building permit, report a concern, or apply for an emergency business loan, local governments must be accessible and responsive during an emergency.



Business continuity planning, risk management and transitioning information technology operations to the cloud, create much needed resilience for local governments and state agencies to better handle these occurrences.

Whether a disruption is caused by a pandemic, a natural disaster, or a cyberattack - all of which experts agree are increasing in frequency and severity - governments that have unified, cloud-based systems in place will be more resilient and better positioned to serve their constituents when disaster strikes, and will operate with optimal efficiency when the skies are blue.

Here are six key factors to consider that will make your local government more resilient:

### **1. Unify operations & departmental data**

In a crisis, communication and information flow is critical. Even under normal operating circumstances, data and communications silos inhibit information sharing, analysis, and decision making. Add to the equation a crisis which necessitates that employees work remotely (if they can), and informed decision making and operations can be severely impacted.

By unifying operations and data on one unified, cloud-based platform, local governments can enable employees to work from home and share critical information across departments that ultimately keep operations running smoothly.

### **2. Secure data from cyber and physical threats**

When run through an on-site server or data center, government operations are made vulnerable to disruption. With far less security than a professionally hosted cloud server (1&1, AWS, Azure)

or ability to enable employees to log in remotely in an emergency, the business continuity of local governments that rely on an on-site server can be crippled by a cyberattack or a disaster like a fire or flood. Say nothing of paper files and records stored on site that might be destroyed in such a disaster.

From September 2017 - August 2019, there were more than 6,800 cyberattacks against State and Local governments, mainly through on-site IT systems, according to GovTech Magazine. That number is only increasing.

The 2020 State of City and County IT National Survey, an annual report on city and county technology and workforce trends, clearly makes the point that cyber security is top of

mind among IT executives. And the latest threats, such as malware and phishing related to the pandemic, only have added to their concerns. The report states, "Governments of all sizes realize now, as never before, the critical role that technology plays in delivering services to the public.

Despite growing concern regarding the possibility of diminishing resources in the near future, IT leaders in the sector will continue to work toward applying emerging technologies including the cloud.

Now consider environmental threats - From 2007 - 2013, 80% of Americans - 243 million people - lived in counties that experienced at least one weather related disaster. Even if City Hall is spared by a natural disaster, if employees are unable to get to their office, they won't be able to deliver critical services. The ability to work and provide services remotely is key to business continuity.

### **3. Access information 24/7 from anywhere in real-time**

Whether a global pandemic that requires social distancing, a sick child home from school that needs care, or a blizzard or a flood that closes roads - government operations should not have to depend on the ability of public employees to get to their desk.

Effective Modern Government Management depends on the ability for employees and elected officials to access information in real-time from any location, at any time. The private sector has adopted and reaped the benefits of cloud-based solutions. Local governments should do the same.

### **4. Drastically improve efficiency through automated processes**

Efficiency is the driver of success for any organization. For local governments it drives constituent satisfaction, and increased productivity, cost savings, and revenue at City Hall.

Employees in the Code Enforcement Office from GovPilot customer, Elizabeth, New Jersey were able to save an average of two hours per day thanks to automated, digitized processes. That's two extra hours back in their day to take on other tasks and issues on behalf of their community.

In Union Township, New Jersey - another GovPilot customer - the department responsible for handling Open Records Requests (FOIA/OPRA) transitioned from paper requests to digitized forms, and realized a 91% decrease in improperly or illegibly filled forms. This enabled the town to shift an employee to support another department, rather than having to make an outside hire.

### 5. Reduce the need for people to call or visit City Hall

We live in an on-demand, digital world. Residents expect convenience. We shop online, we bank online, we book travel online. Constituents should be able to interact with their government online. Digitized forms and processes delivered through a unified cloud-based platform and made available through a local government's website, can drastically reduce time consuming, inconvenient, and in today's world - dangerous - in-person interactions.

On average, GovPilot's customers see a 75% - 90% decrease in call volume and walk-ins as residents access the information and forms they need online. This frees up significant time for employees to be productive in other

aspects of their jobs, creating value for the government and public they serve.

### 6. Digital Transformation keeps residents safe

With digital applications and resources available to the public via a government website, residents can prepare for any disruptions in advance. Use a GIS map to share floodplains, so property owners can understand and mitigate their risk in advance by retrofitting their property and purchasing insurance. Highlight evacuation routes and community shelters on your map. Store publicly available information such as ownership and tax assessment records directly on a GIS map, making damage assessment easier. Post critical resources like FEMA documents and free e-learning programs from national disaster recovery nonprofit, SBP to educate local residents and business owners on best practices to implement for resiliency and disaster recovery. Enable residents to report concerns and submit for government services via digital forms from the safety of their homes.

Effective digital transformation ensures business continuity through any and all disruptions which require that government offices be closed to employees and/or the public. In a world of uncertainties and increasing disruptions, business continuity planning is essential, and cloud-based solutions offer the most flexibility, adaptability, and redundancy to keep government operations and services running.



## Revenue & Budget Friendly

There is no greater constraint on local governments, than budget. The sudden economic closure brought on by the pandemic laid bare those governments and services ill prepared to deal with such a disruption. Overwhelmed unemployment systems and other paper, in-person processes that required residents to enter municipal buildings for every day services like permitting, confirmed the glaring divide between private and public sector tech capabilities.

The modernization of technical infrastructure and applications must be made a priority in order for local governments to significantly reduce their technical debt which is rampant throughout governments where legacy technologies have been milked of every bit of their functionality over many years only to become a financial burden as they age. Legacy technologies are maintained, upgraded, and changed over time but eventually they need to be replaced.

Moreover, these legacy technologies are often single-use and accessed via out of date hardware or on-site servers, making maintenance, security, and access an expensive and a logistical nightmare. Unfortunately many of these legacy systems are paired with paper processes from which employees must transpose written information from residents, into legacy technology systems.

This inefficiency is then compounded by the siloed data that numerous systems create. Unable to efficiently process resident requests, and store records so that they are easily accessible across all departments, local governments, already running on limited resources, lose productivity, revenue, and constituent satisfaction. The good news is that there are effective, affordable solutions on the market that do not require further disruption in order to implement. Today, cloud-based software provides the flexibility, security, and affordability not possible with older, now out of date IT systems. A unified cloud-based platform not only increases

efficiency and productivity in operations, but it can help governments expose opportunities for cost savings, and revenue generation.

The information and data processed and recorded through a unified digital platform such as GovPilot's, will provide the data and insights necessary to make informed decisions about how and where savings can be achieved. Analytics and reports can be generated in a matter of clicks, providing snapshots in time so that modifications to expenditures and budget allocations can be made in real-time in individual departments and across the entire government.

Digital records can also reveal previously unrealized non-tax based revenue opportunities through the detection of past-due or renewal fees for items like pet licenses, parking permits, and alarm registrations, and vacant property registrations, which can generate significant sums over the course of a fiscal year. The increased efficiency and productivity gained by eliminating manual paper processes might mean that employees once responsible for time-consuming manual work can now be deployed elsewhere to take on higher-level work.

Lastly, online payment directly through a government's website, translates to instant revenue and confirmation that services have been paid for. No longer is there a need to manually process check or cash payments that are mailed in, or dropped off in-person, which can significantly delay or hinder collection.

The pandemic revealed the many areas in need of investment in our governments and broader society. Local leadership will no doubt assess where best to deploy resources and focus attention in the months and years ahead. But equipped with modern technology and improved constituent services, communities will be prepared for future challenges and will be better able to identify where needs and potential solutions lie.



# Putting it All Together

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## Constituent Experience

We've covered quite a bit, and it may seem like a lot to take in - but going paperless doesn't need to be overwhelming. Here are several simple steps your government agency can take today to start down the road toward digital services.

Remember, the goal of all these technology tools isn't just to eliminate paper from the government office. Rather, it's about streamlining the cumbersome processes that are currently employed in most of our agencies.



In order to tie everything together, agencies need to:

### **Increase efficiency**

Use the digital tools at hand to more efficiently deal with items that were previously printed, like memos and meeting notes.

### **Automate data entry**

Take steps to ensure that new information coming in is in a digital form, and automatically entered into appropriate databases.

### **Digitize old files**

Improve access to historical data by digitizing it and hosting it in a centralized, searchable location.

### **Automate workflows**

Use software workflows to replicate and streamline existing paper handling processes.

### **Train Employees and Encourage Adoption**

Don't just implement new technology, "onboarding" includes encouraging a culture shift among employees to embrace digital.

### **Consider Risk & Resilience**

Select solutions that provide adaptability, flexibility, and redundancy. If there is a natural disaster or disruption, can employees work remotely?

### **Educate constituents**

Inform and teach constituents about new online services, while making sure those without internet access aren't getting left behind.



## 1. Start using digital tools

A great way to get started is to implement common digital tools in your daily work. Many of these tools are already available to municipal governments at no cost. Often, it's just getting in the habit of emailing a file to someone, rather than printing it out and walking it to his or her desk.

Here are some good first steps to implement:

### Internal file sharing

Using tools like Dropbox, Box, or an internal server can help avoid problems with versioning, misplaced files, and disseminating information. Instead of printing out a document to get your colleague's comments, you can simply send them an email linking to the correct file on the server.

### Document collaboration

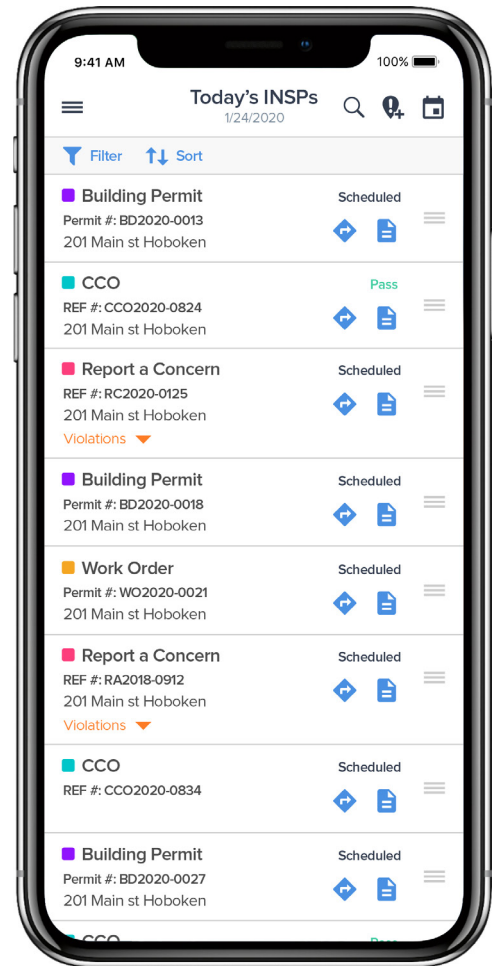
With a document collaboration tool like Google Docs, you can work simultaneously with colleagues on a document or spreadsheet, leave each other comments, and compare earlier versions – all from the comfort of your desk.

### Electronic meeting handouts

Instead of distributing huge paper packets before meetings, provide employees with tablets that can access the document packet from a central server. That cuts down on wasted printouts, and ensures everyone has the meeting notes at hand.

### Fax servers

If your organization still relies heavily on faxes, investing in a fax server can streamline your workflow immensely. Incoming faxes are delivered electronically to pertinent individuals, and outgoing faxes can be sent to the fax machine via email. All without making multiple trips to the machine. It's also more secure, since sensitive faxes will never be lying around the printer waiting to be picked up.



## 2. Minimize incoming paper

Your organization won't go paperless in a day, and that's fine – it can take time to become comfortable with the process. It's most helpful to begin with one small process in a single department and expand from there.

A good first step is to find a process that's heavy with incoming documents, such as permit applications, and digitize it on the front end. In addition to accepting paper applications, invest in a software that allows your organization to accept digital applications for things such as building permits, pet licensing, and vending permits.

The information gathered in those digital applications will automatically be added to a centralized database, saving your clerks the step of processing applications manually. Additionally, the system can be set up to send an email notification to the correct department in order to complete the application process.

### 3. Digitize back-end documents

The idea of digitizing a century or more's worth of paper records can be daunting for a municipal agency, but it's an important one to take. Start by prioritizing records in order of importance, and work your way down the list one small step at a time.

One way to gauge that is by how many requests come in for a certain type of data, whether through Freedom of Information Act (FOIA) inquiries, other citizen requests, or interdepartmental requests. Data that should be publicly available, like property information, can be added to a public-facing GIS map, or listed in a searchable database.

Be sure to make the information usable. Simply scanning physical documents into digital PDFs to recreate your agency's existing file system may technically be "paperless," but unless that information is machine readable and accessible across multiple platforms, it won't help.

### 4. Use automated workflows to streamline data handling

Although automating workflows may sound complicated, it's simply an extension of the physical workflows you already use to manage documents. When an application comes in normally, it may arrive on the desk of the central clerk, who then routes it to the correct department, where it will be processed, then sent on to a final department for approval.

With workflow automation software and digital documents, these same processes can be automated. Incoming digital applications, for example, are automatically routed to the correct department. Missing approvals or required documents can be identified by the software and the appropriate party notified, which can cut out days or weeks of turnaround time spent reviewing applications and requesting documentation. Issuance is just as easy when

automated with email and application templates that are automatically printed with Mail Merge to fill in applicant information.

### 5. Onboard Employees, Not Just Technology

Digital transformation doesn't eliminate people from the equation. Employees will need to understand and become proficient with the new digital tools they will be utilizing every day to serve constituents. This is the first time in history that four generations are working side by side (Gen Z, Millennial, Gen X, Boomer) For some, use of digital platforms and tools will be natural. For other, older employees, making the switch from manual paper processes to a digital environment will be a steep and uncomfortable learning curve. It is hard - for anyone - to suddenly make such a drastic change.

To alleviate this stress, encourage full adoption, and successfully "onboard" new technologies, communicate early and often with employees about the changes that are coming and encourage them to ask questions. Emphasize the benefits not only to the government and constituents but to employees as well, such as the hours they will save by eliminating manual tasks like filing and copying.

Work with vendors to provide training and support so that new technologies are utilized by staff to their full potential. Be sure to understand the type of training and support that a vendor provides and if it is included in the price or is an extra cost.

Train-the-Trainer models are incredibly efficient and can save money as well as encourage organization wide adoption by naming internal champions of digital transformation who become experts in newly implemented technologies and can train their less tech savvy colleagues.

## 6. Consider Risk & Resilience

Disruptions are unpredictable and never the same. They can last hours, days or months. Digital solutions must provide adaptability, flexibility, and redundancy. As we have seen during the COVID-19 pandemic, the ability for employees to work remotely without operational or productivity loss is critical. This remains true for other, more frequent disruptions such as storms, and floods.

### **Cloud-based platforms enable employees to work from anywhere, on any device, at any time.**

Make sure that new technology provides adaptability and redundancy so that your government maintains business continuity and can continue to serve the public during a crisis of any kind.

## 7. Get your constituents on board

While the move to paperless government is crucial for organizations looking to save money and engage a younger generation of constituents, it's equally important to focus efforts on reaching out to the vulnerable populations in your district – the elderly, the poor, and minorities – who may not have broadband internet access or be comfortable with the technology required to submit digital applications, pay their bills online, or access your agency's GIS platform.

When going paperless, organizations need to make sure they are providing equal access to information and support for all demographics.

### **Communicate Change to Citizens**

Always consider what and how things should be communicated to citizens when implementing new technology. New language on the website, an ongoing social media campaign, or a press release placed with local news outlets are all good options. Governments should lean on their vendors -- many of which offer educational

and marketing materials available as part of their services. Ultimately, every new technology a local government implements should always either improve citizens' lives, save them money or both.

### **Provide technical support**

For every millennial completely at ease with digital navigation, and every elderly citizen who has never learned to log on to a computer, there's a whole middle ground of constituents who may have the capabilities and infrastructure they need to take advantage of paperless government, but don't understand their options. It's not enough to just put forms online and release shiny new apps without educating constituents on how to use them. Governments need to create user-friendly FAQs and tutorials, along with having a robust tech support team in place to guide people through the system if necessary.

### **Don't penalize paper**

While electronic communication, payment processing, and permitting may be the cheapest way to do business, it would be irresponsible for governments to transfer the costs of paper onto the constituents who don't have the skills and infrastructure to take advantage of them. Particularly since they tend to be the most vulnerable. Instead, government focus should be on educating and enabling citizens to take advantage of paperless options, rather than penalizing those who have no other choice.

### **Allow paper and paperless to coexist**

As the number of constituents with internet access and native ability grows, the financial and environmental costs of doing business in paper will diminish – but the process will take time. During the transitional phase, keep your focus on education, paying special attention to vulnerable populations. The truth of the matter is that both systems will need to exist side-by-side for a time as governments make the shift to paperless operations.

# Tools and Terms

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This section provides an overview of the concepts and tools that help organizations cut costs, increase productivity and interact with customers.

## I The Cloud

Although the term “cloud computing” is widely used, many find its actual definition rather nebulous. Comparing the cloud data storage model to the traditional data storage model clarifies things.

In the traditional model, an organization’s data is stored on server banks maintained by an in-house Information Technology (IT) team. With the cloud, data’s physical storage is outsourced to a hosting company, where it may span multiple servers and locations. The third-party hosting company is responsible for keeping the data available and accessible, as well as maintaining its servers and security.

Because there is no requirement to purchase and maintain internal servers, cloud hosting is cost effective. When an organization’s data usage grows, it simply expands its data subscription plan with the cloud host.

Data hosted in the cloud can be accessed from anywhere. This is perfect for organizations with multiple locations, remote workers and/or field workers who need to retrieve information on the go.

**A note:** Cloud-hosted services differ from managed services, in that managed services are based within the organization. The managed services provider (MSP) replaces or augments the internal IT team, handling hardware maintenance, software updates and monitoring the network 24/7.

## I Open Data

Open data refers to the idea that government agencies should make public data available for anyone to access, use and republish, free of charge and copyright restrictions. The data should be complete, as close to a primary source as possible and presented in a non-proprietary format.

The most useful format is a dataset, a collection of data organized around a theme. Examples of themes include census demographics, mile marker locations, business license applications and geological survey information. To see open data in action, visit [Data.gov](http://Data.gov).

The GPRA Modernization Act of 2010 mandates that all open data be machine-readable. Machine-readable does not simply mean that the information is available online. For example, a hand written list of new business registrants that has been scanned and converted to a JPEG image file may be accessible online. However, it is impossible for a computer to extract and process that information, which prevents it from being true and legal open data.



## Geographic Information System (GIS)

GIS stands for “geographic information system,” and refers to a system that can capture, manipulate, assess and display all types of spatial information in a geographical format. GIS is a powerful tool for visualizing location-based data. Municipal governments have used GIS to make informed decisions around route planning, zoning, disaster relief, conservation efforts and city improvements. GIS technology can also be used to analyze trends like epidemics and crime waves.

Map-based web and mobile applications help local governments engage and communicate with their citizens. These channels allow municipalities to share the latest information on local services and city planning developments. GIS also enables good samaritans to alert authorities to public safety and health hazards. The following list describes GIS technology’s various applications in greater detail.

### GIS Helps

**Pinpoint Issues:** Municipal 311 help centers and digital citizen request forms are a great way to collect information about non-emergency issues like potholes and graffiti, but the high cost of maintaining them along with the effort required to funnel reports to the appropriate department can be overwhelming . GIS technology gives constituents a way to report that data more efficiently and governments a way to use it more effectively.

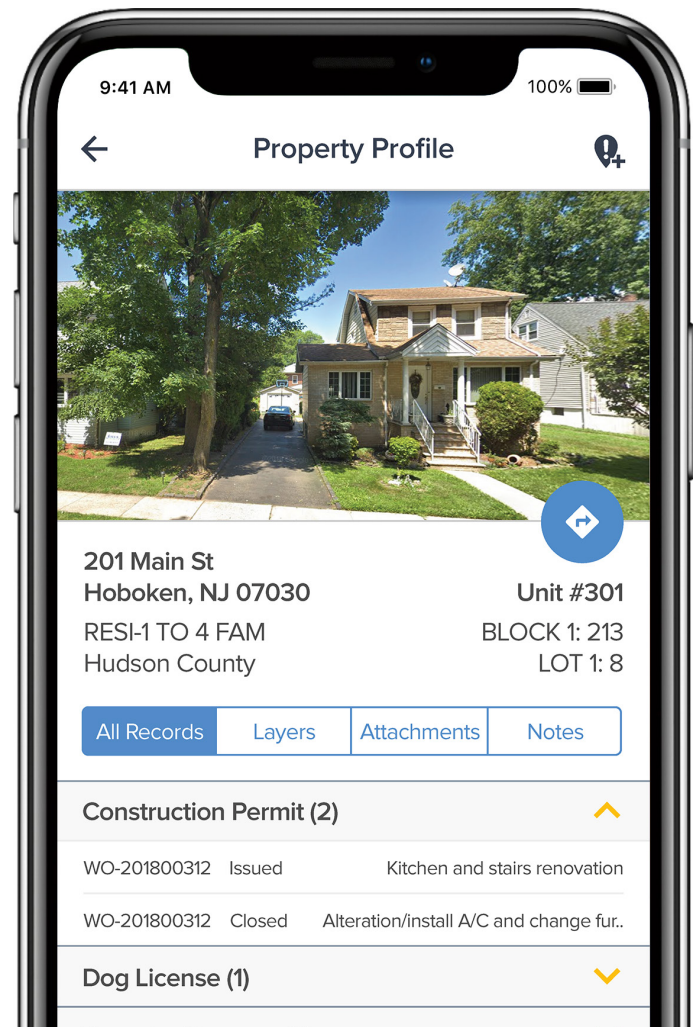
**Promote Data Transparency:** It is more important than ever that government is upfront about operations. Presenting open data through GIS is an effective way to achieve transparency and put information at the fingertips of constituents, thereby cutting down on inbound inquiries to your office that can take up valuable time to respond to.

**Collect Feedback:** GIS technology enables government agencies to quickly gather citizen feedback on topics like infrastructure improvement. In addition to being more swift, GIS offers a wider variety of responses than more traditional methods like surveys and town hall meetings.

**Illustrate Issues:** By plotting data points around a specific issue, like vacant properties, governments can use GIS technology to gain powerful insights.

**Inform the public:** Local governments can use GIS to provide the community with helpful information regarding crime statistics, real estate, planned zoning, emergency management, and more.

**Foster Community Development:** GIS transforms static city planning documents into collaborative conversations between government and constituents.





## I E-Government, or E-Commerce

E-government is the idea that a government agency can provide access to services through its website, as well as through traditional channels. As consumers become more accustomed to buying their groceries and filling their prescriptions online, they expect their local government to provide the same level of e-commerce convenience.

This includes things like submitting applications, registering businesses, filing taxes and paying parking tickets – all through the municipal website. In order for this to work, the site must be equipped to process complicated online applications and securely receive payments.

The benefits of e-government reach both the municipal agency and the general population:

- **Government saves on costly processing of mailed-in applications and physical checks.**
- **Fewer face-to-face meetings leave more time and resources to address higher level matters.**
- **User friendly and easily tracked, online payment processes encourage citizen compliance, thereby enabling the government to generate more revenue.**
- **Constituents are able to access government services from their desktop or mobile device, 24 hours a day, 7 days a week.**

E-government means streamlining services from application submission through license and permit issuance. GovPilot's cloud-based municipal management software brings e-government to another level. Once an application is submitted, GovPilot™ stores it in a central location, and communication between the applicant and government employees is automated through emails, in-platform alerts and SMS.

## I Workflow Automation

In a traditional paper-based workflow, a building permit application must be physically passed around various departments before it is approved. Even the most routine tasks can be delayed by communication bottlenecks between departments, or literally lost in the shuffle of paperwork being pushed around the office.

Paperless documents provide the opportunity to create automated workflows around specific tasks. Workflows automate communication and task assignment, and provide accountability to keep the process speeding along. Government employees can automatically be alerted when an issue requires their attention, and citizens can track the progress of their applications.

An example: Code Enforcement

1. A resident submits a complaint about lawn overgrowth on a government's website.
2. The complaint data is automatically aggregated into a centralized database and assigned to a specific property.
3. Workflows route the complaint to the appropriate person and they receive a notification, email or even a text.
4. The resident receives a notification that their complaint is being reviewed.
5. The reviewer can schedule a site visit, request clarification, notify additional departments and more.
6. Once cleared, the applicant receives automatic notification.

Automated workflows let users define actions (add task to work queue, send notification email) that occur when a trigger happens (a new application is submitted, a weekly deadline has been missed). With automation software, your organization can customize the actions and triggers to streamline your usual workflow processes.

## Electronic Document Management

For a truly paperless government to work, you need a robust electronic document management system – a centralized database for all your organization's documents, forms, and data infrastructure.

A common problem occurs when individual departments digitize their documents, then keep them on separate servers, or in distinct file structures. Electronic document management systems help you avoid problems with conflicting versions of documents, inconsistently updated databases, and incomprehensible file structures.

An electronic document management system solves this fragmentation by integrating all your departments and data infrastructure into one platform. Ideally, this platform is cloud-based in order to support real-time information updates, and be accessible by all your employees regardless of location. This aggregation of data from multiple sources forms your government's robust knowledge base. Access and management of this information spans departments, removing the data and information bottlenecks that often prevent employees from performing simple tasks.

## Digital Customer Service

In order for a digital transformation across an organization, department or government, effective implementation and adoption is critical. This is where onboarding comes in.

Technology and digitization are only so good as the staff that use it. In order to find success with digital transformation, employees must be trained and made comfortable with the use of any new technologies so that technology can be leveraged to its full potential. Onboarding is the process which includes both the implementation of technology itself, and the training necessary for staff to fully adopt and use it.

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## I Business Continuity aka Resilience

From a mundane snowstorm that closes roads to massive flooding or damage wrought by a hurricane or tornado, to a global pandemic that keeps everyone home for months, local governments must continue to function and provide services to residents nonetheless. Business continuity falls under the broader category of resilience which has taken on increased urgency for local governments amid a changing climate and growing cyber threats.

Questions to Consider - These are questions to think through when considering digital transformation. Take some time to think through each one as it pertains to your local government. Perhaps a hurricane or the pandemic has already forced your hand.

If a disaster were to strike your community, what would happen to your government's operations?

- Could it continue to provide services if government offices were damaged or if employees and constituents could not safely get to or access the building?
- Do employees need to be in the office at their desks in order to complete their work?
- Do employees need to be at their desk to log in to an on-site server?
- Would services still be delivered?
- Do constituents need to be physically present in city hall to submit documents?
- What would happen if a snowstorm, flood, hurricane, ransomware attack, or a global pandemic forced government buildings to close or occupancy levels limited for days, weeks, or months at a time?
- Could employees continue their work regardless of their location?
- Could constituents submit requests or documents online?

Consider record keeping and on-site servers:

- Are paper files stored in the basement which is more prone to flooding?
- What would happen to paper files and documents in the event of a fire or flood? Would those records be destroyed and gone forever?
- What would happen if on-site servers were severely damaged? Could the government operate?
- Would your government be able to quickly gather and provide the necessary documentation to FEMA, HUD and other Federal agencies in the event of a major disaster that damages government buildings?
- Is your government able to track all disaster related expenditures in real-time across all departments so that you can produce a detailed report to FEMA for reimbursement?



# Conclusion

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The world in which we live is one that relies on data, speed, and convenience. Constituents expect a fast, responsive experience. Disruptions that threaten business continuity are increasing in frequency and magnitude. The decades old manual processes that local governments have relied upon to provide services to their constituents no longer keep up with the pace and expectations of the modern world. In fact, these manual processes represent a liability to local governments in terms of cost, efficiency, and reliability.

The crises facing towns, cities, and counties are inherently local, requiring a detailed, block-by-block understanding of neighborhoods' needs and efficient, responsive services. While it is clear that local government budgets have been severely impacted by the pandemic, there exists an opportunity to make necessary, meaningful changes and investments now that will pay dividends in terms of inclusivity, safety, efficiency, and even revenue generation in the short and long-term.

In short, Digital Transformation is a timely, essential investment that local governments must make in order to keep pace with the growing demands placed upon them, and ensure their efficacy and solvency now and in the future.



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GovPilot - named a GovTech 100 company for three consecutive years - is the leader in digital transformation for local governments. Across the U.S. 40,000 local governments manage a multitude of critical processes - all with different, often obsolete approaches.

GovPilot's cloud-based platform was built with the sole purpose of enabling local governments to operate at their full potential by standardizing, digitizing, and unifying more than 100 operational and constituent service processes on one system. By providing a product catalog of digitized processes developed with the input of subject matter experts and real-world users, GovPilot serves as a repository of best-practices and is the Gold Standard in efficiency, productivity, and security for local governments.



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