



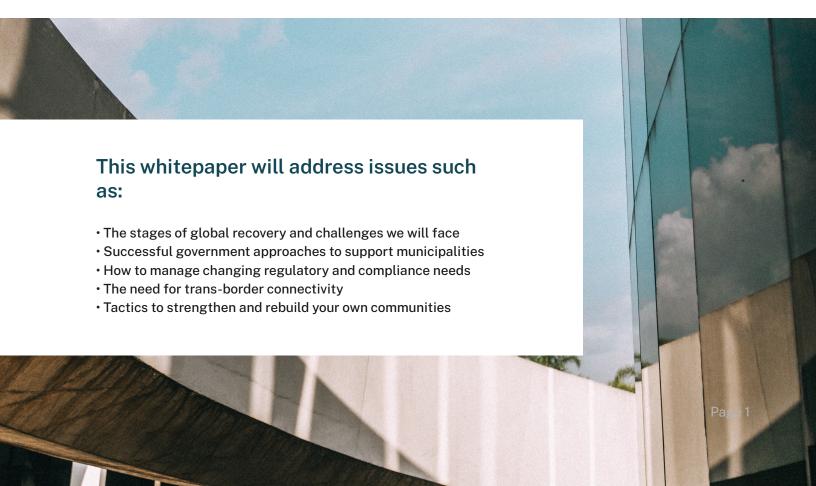
Adapting To Covid-19: The New Normalcy For Municipalities

Adapting to COVID-19: The New Normalcy for Municipalities

COVID-19 has left no corner of the world unimpacted, and poses the biggest challenge to modern-day government and its leaders. While the global government response has varied thus far, the pandemic is not going to simply vanish--rather, governments must find new ways to adapt and establish a baseline of normalcy.

Restaurants in Orlando, Florida are creating outdoor seating in private parking lots, Sacramento's governor has allowed couples to obtain marriage licenses from county clerks over video conferences, and San Francisco's mayor has deferred the business registration fees by four months--equivalent to \$49 million in deferrals.

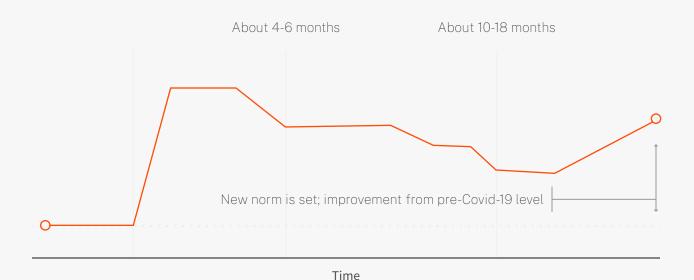
From lockdowns to person-by-person contact tracing and drive-through testing, global leaders have shared and speculated best practices when managing the wellbeing of their residents. And on another level, governments are also responsible for supporting healthcare workers and infrastructure, preparing and rejuvenating the economy for "reopening," and facilitating the 33 million individuals that filed for unemployment in the US within the past few months



Modern Government's Unprecedented Battle

As noted by Deloitte, "The rapid spread of the COVID-19 virus is challenging governments to act in ways normally reserved for war, depressions, and natural disasters." It's impossible to know how long this global pandemic will last, and governments around the world are taking extreme steps to protect citizens both financially and physically.

Because of the elusive and complex nature of this crisis, citizens are forced to rely on their government for aid and clarity-something nobody truly has done before. But even amidst the challenges, governments must persist onward, continuing to serve and protect their people.



Act to promote safety and continuity

- Focus on essentials
- Offer maximum flexibility
- · Use maximum speed

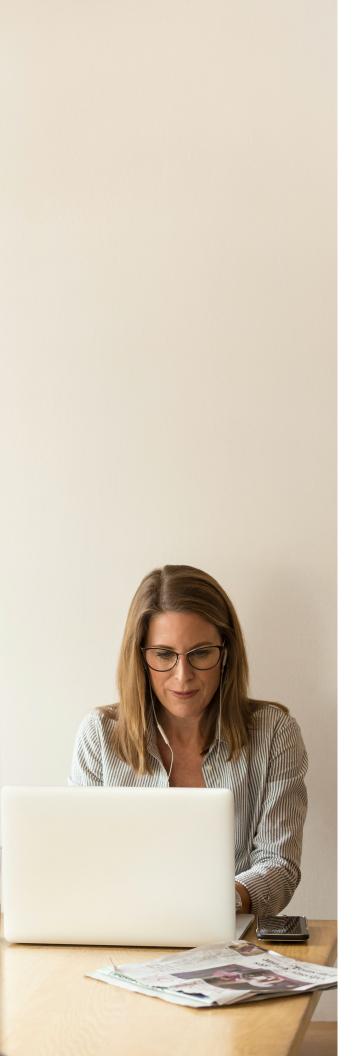
Restore and emerge stronger

- Move toward normalcy
- · Offer high flexibility
- · Use high speed

Prepare for the next normal

- Move toward normalcy
- · Offer high flexibility
- · Use high speed





According to their study, there are three main phases of the government's response to COVID-19: Respond, Recover and Thrive. And while the timeline of these phases is certainly flexible and will likely change, it's a fluid process towards recovery in establishing a sense of normality.

In an immediate response to Coronavirus, governments took unprecedented steps such as limiting travel, providing financial assistance to businesses and citizens, ultimately shutting down parts of the economy. As the immediate threat of coronavirus fades, the world will begin to identify a "new normal" and recover from the initial impact of this tragedy.

In its "respond" phase, governments must promote the safety and continuity of their economy through the re-alignment of focus on essential roles and responsibilities to push through this time, remaining flexible and responding quickly.

If, after 4-6 months of focused disease management and resilience, the world can enter into Deloitte's "recover" phase in which governments can focus on restoring its communities. This phase requires an establishment of a new baseline of normality, while still maintaining the level of responsiveness and adaptability needed to push through the first hurdle. However, this won't come organically. There must be widespread collaboration between countries and citizens, significant investment in safety and health, and implementation of preventative measures that can hedge further outbreaks.

And in about 10-18 months, governments will begin to thrive once again--building long-term enhancements to the public sector's infrastructure and operations. In doing so, they establish a positive path forward, identifying new ways of flexibility and adaptability to whatever else that may occur.

So how can governments work toward the "recovery" and "thrive" stages, and what have we currently learned from successful governments? So far, we know one thing: investment in technology to better govern municipalities results in faster decision-making, real-time progress, and better collaboration.

The Need for Government and Industry Collaboration: Enabling Teamwork with Technology

Governments have a lot on their plates right now--generating the right insights from current COVID-19 data, Identifying best practices for protecting residents, maintaining a sense of economic stability, and establishing a baseline for "normalcy"--on top of the continuous municipal and governing responsibilities and duties needed to carry out everyday life.

While some governments have successfully slowed the spread of Coronavirus within their communities, others have struggled to manage the outbreak or failed to take necessary action to combat it.

Municipalities and government leaders must make the decisions to support their internal staff and communities.

And nobody can do it all--many industries in the private sector have benefitted from artificial intelligence, machine learning and automation for years, and public sector organizations have much to benefit from these technologies, especially now. The digital assets are even more important as federal and municipal employees are spread thin, working remotely and dealing with unprecedented challenges.

Organizations are encouraged to consider a big-picture and plan for thriving and reopening rather than shutting down and preserving its profits. While often looked to for guidance, governments are in the same challenging circumstances as businesses and citizens.

The most effective way of mitigating economic downfall within communities has been to incentivize business actions, that protect its employees rather than its immediate financial future. As seen by the need and use of essential workers in the U.S., as well as the phase two reopening of businesses like barbers, chiropractors and daycare centers, using these services has merely been postponed (rather than cancelled).

It's critical that governments develop real-time solutions to the problems coronavirus reveals, even if it's a single-purpose and straightforward application without its bells and whistles. From meeting regulatory compliance to relaxed restrictions on occupational licensing, governments should shift their focus to developing solutions that accomplish the essential elements of industry activity.



Here's a wide overview of the different intersectional difficulties governments must consider:

1. Adjusted regulations and monitoring for at-risk industries

For high "touch" industries and companies, there's an increased need for sanitation and maintenance standards. That means food processing, healthcare, higher education and other industries need to establish new regulations tailored toward current societal needs, and then identify how to comply with these newly imposed regulations. And establishing these new regulations is just the beginning --once determined and implemented, each entity and industry must create new processes and procedures to comply with.

This will vary by industry and government, and will require collaboration to determine appropriate policies and actions. These may include visual inspections of workplace safety, creation of anonymous peer and citizen reporting for health and regulatory concerns, and limits on proximity and number of people within shared spaces.

Additionally, businesses that require assembly of large groups, such as manufacturing and construction, will have to shift their way of working and adapt new regulations that take necessary precautions for safety. However, the upfront cost of compliance for businesses is worth the long-term benefits and health of the community, on top of driving additional revenues for governments. This will be the long-term opportunity cost and its establishment of the "new normal" for many of these industries--and over time become second nature.

"High-Touch" Industries: Food Services and Natural Resources

Current examples of high-touch industry changes will look different by municipality and industry. Around the world, natural resources have taken proactive steps to minimize the spread of the COVID-19 pandemic.

In an analysis from Bennett Jones, they note key challenges around environmental and regulatory compliance issues for natural resources that include:

- Restrictions on number of employees permitted to work
- Restrictions on accessibility to third-party service providers (environmental consultants, lab services, etc)
- Disruptions to compliance supply chain (testing and sampling materials, emergency response supplies, etc)
- Social distancing measures and execution at facilities

Examples of this include the U.S. states Maryland and West Virginia, where the governments have granted grace periods after the termination of professional licenses, permits, registrations and other authorizations, and suspended activities such as fishing events and safety classes to protect its employees. Additionally, US states lowa, Michigan, and Indiana have changed guidelines for hunters and anglers, attempting to accommodate those affected by the economic disruption caused by COVID-19 while also allowing residents to take advantage of regulatory adjustments.

But it's not just natural resources that are adjusting industry regulations--the hospitality industry has suffered significant sales and job losses since the COVID-19 outbreak began, forced to come to terms with swift regulatory changes.

In most areas, sit-down service in restaurants has been prohibited, turning to carryout, delivery and drive-through options rather than dining in.

Restaurants in Florida can expand seating into private parking lots as long as tables are six feet apart, and the indoor capacity can reach up to 25% of the indoor guidelines. And in Kansas City, Kansas, the Mayor announced a "10/10/10 Rule," allowing businesses to open with a capacity of 10% of people and any establishment where a customer will stay for more than 10 minutes must keep track of everyone who's been there, like barbershops, churches and restaurants. Indoors events will also have a 10-person limit, whereas outdoors events can have up to 50 people when social distancing.

2. Enable Cross-Jurisdictional Sharing

The entire world is grappling with their increasing unemployment rates and disrupted economies--in the U.S., it's estimated that ¼ of citizens are currently unemployed. And with the imposing global recession, creating opportunities for employment and sustaining existing ones are critical to a nation's immediate and long-term recovery.

To help stimulate and sustain the economy, governments must find a balance between the need to uphold regulations on workers with the ability to share licensing credentials across jurisdictions. This is essential to prevent unqualified entry into regulated industries, and equally essential to enable worker mobility and stimulate job creation. Industries that require licenses and credentials to perform, including healthcare, construction, real estate, pharmaceuticals or financial services, often have isolated license systems that limit economic mobility and recovery for individuals in these professions by imposing barriers around employment opportunities.

Many undersupplied business licenses needed across North America — from nurses to truck drivers — will be locked into their specific jurisdiction unless municipalities align and share licensing data. While data sharing is popular in private-sector industries for advancing vaccines, technology and other solutions, governments and municipalities often face stricter privacy concerns. To facilitate continuity of employment and services, it's vital governments collaborate through a secure, trusted government solution that can uphold security and data protection needs across jurisdictions.



Relaxing regulatory measures

In an article written by the University of Toronto, there have been discussions about relaxing restrictions on occupational licensing to facilitate crisis response. There's been an expanded search for retired health care workers, including those with expertise who cannot practice certain aspects due to occupational licensing. While these regulations were originally grounded in protecting the public, the positive impact of having more health care workers to support the COVID-19 response outweighs the impact of the original regulation.

Possibilities for relaxing these restrictions include:

- Granting temporary licenses to retired staff or expired workers, such as the states of Colorado and New York
- Recognizing credentials from other jurisdictions to allow movement to most at-need areas and professions, like in Arizona, California and North Carolina
- Expediting the licensing procedure, granting Emergency Temporary Licenses and extending license expiration dates
- Facilitating cross-state teleconferencing for health care to expand service accessibility and social distancing

While these are health-care specific, they provide light into what "relaxed restrictions" might look like for high-impact and heavily restricted areas of work. Allowing easier, reliable and transparent credential sharing means people can get the services they need from trusted providers, while still allowing these providers to practice and maintain a sense of economic dependency.

A digital government solution should allow residents of jurisdictions to move around and cross jurisdictions for work and needs, and even after the pandemic has slowed, the need for licensing credentialing will never go away. Even aside from crises, certain occupations experience labor shortages that can be mitigated and improved by permitting cross-jurisdictional licensing.

3. Ongoing reporting and forecasting

An integral part in flattening the curve, social distancing is and will continue to be crucial in decreasing the spread and prevention of a second or third wave of cases. When municipalities and nations have adequate testing supplies and PPE at scale, testing is the best way to gauge the level of infection and how far away recovery is.

Forecasting is a critical strategic tool for predicting supply and demand needs, labor expectations, preparing for best and worst case scenarios, and "future-proofing" business models to support an organization. Organizations often use Enterprise Resource Planning Systems, or ERPs, to manage the forecasting and predictive analytics for operations due to built-in processing capabilities, and municipalities should also turn to ERPs or other predictive solutions that can effectively monitor and mitigate COVID-19's risks.

Continuous reporting and forecasting is critical to slowing down the curve and understanding best next steps for municipalities for multiple reasons:

- Predictive testing and contact tracing allows safe and efficient monitoring for symptomatic individuals to predict and prevent future outbreaks
- Protecting healthcare system capacity to ensure adequate levels of PPE and medical equipment needed to handle surges in cases and ICU capacity
- Monitoring the health and safety of workers in essential industries, high-risk facilities and individuals, users of mass transit and other at-risk individuals

This will all prevent the possibility of rebounding outbreaks, restarting phases or returning to earlier phases. And in order to do this, creating and implementing new technologies is the critical next step.

Singapore's newest technological investment, a contact tracing tool called TraceTogether, helps authorities track and monitor infections by exchanging "short-distance" Bluetooth signals between phones to detect other TraceTogther users and quickly inform users who are in close contact of COVID-19 cases.

The data can be shared with government agencies, but much remains unknown about the balance between public information and health security. This type of technology brings contact tracing accessible to a broader population, and can play an integral role in curbing the spread of Coronavirus to relatively untouched countries who have yet to experience catastrophic spread.

However, adoption of TraceTogether hasn't been as widespread as once anticipated --data privacy concerns, poor user interface and experience, and drained phone batteries have deterred the adoption of the contact tracing app. So while there is progress toward creating digital government solutions to manage COVID-19, there is much room for growth. TraceTogether has shown municipalities several critical pieces of information about user adoption of government solutions --the importance of positive user experience and attractive user interface, prioritization of data privacy, and the need for a lightweight, cloud-based solution.

Risk-scoring and maintenance

Risk scoring based on prior and ongoing behavior is essential to predictive and preventative maintenance. But this level of analysis can be too sophisticated for a spreadsheet. This requires data and machine learning, advanced forecasting capabilities and frequent risk analysis.

Investing in and maintaining reliable data will play an integral part in analytics, forecasting, and anticipating future needs to prepare for the future outcomes and even prevent outbreaks. Used in both private and public sector operations, data analytics has been applied to healthcare, agriculture, public transport, education, poverty eradication and even weather forecasting to optimize public management. To continue with efficient government operations, data analytics and visualization should be increasingly implemented and to utilize data collected from operations.

Governments should also invest in technology with big data processing and forecasting capabilities so they can anticipate future outbreaks or worst-case scenarios, strengthening their responses to crises with different data-backed decision-making tools and then designing these new systems for resilience and flexibility amidst uncertainty over the future pandemics threatening humanity.

This level of processing capability will give governments the ability to elevate scenario planning, forecast analysis and test ideas before implementing them large-scale.

4. Integrated digital solutions for government and industry

While healthcare, academic institutions and government are all facing different challenges from the pandemic, there are still many parallels to be drawn. Given these disjointed industries and their siloed digital landscapes, it's not efficient nor productive to maintain the conventional legacy systems that have been implemented.

There are many successful examples of sharing data across industries--in healthcare alone, we've seen unprecedented speed toward developing a vaccine for COVID-19--and this sort of cross-industry collaboration should continue beyond the immediate crisis. Even tech giants Apple and Google have collaborated to craft a Bluetooth-based contact tracing tool through Android and iOS devices, focusing on privacy, transparency and consent to "harness the power of technology to help countries around the world slow the spread of COVID-19 and accelerate the return of everyday life."

By unifying data and communication, governments can help determine virtual health phases and support healthcare providers to scale new virtual health systems. Governments should also consider implementing IoT and virtual health to improve follow-up care for those impacted by COVID-19 to maintain adequate service levels for individuals that need care (related or unrelated to Coronavirus) and check-ins, measuring progress toward recovery and keeping our essential healthcare providers safe.

Prevent future disruptions to operations

Technological innovation has slowed, but it hasn't stopped--private, public and social organizations around the world have shared data to create responsive solutions of the various challenges we've run into.

While many people could proceed as normal when working from home, there are many governments who have experienced a slowing or screeching halt to normal operations. This is often due to technological limits or outdated legacy systems that silo data, disjoint workflows and limit their governing capabilities. As a period of "recovery" to this pandemic, governments should identify how to prevent this from happening again--from tracking and disbursing support funds to restarting certain institutions and industries. And with the recent need for accessibility and remote work from the entire world, governments and organizations that haven't yet invested in cloud-based digital transformation should make that their next priority. This supports the overall goals of governments transitioning to gain access to technology while providing organizations with enhanced everyday operations, as they progress into a sustainable long-term solution for the digital world.

5. Identify and stimulate the economy

Some economies, communities and industries have been hit harder than others, and will need varying levels of support to attempt "normalcy" as the world rides COVID-19 out. In an analysis by McKinsey, they suggest public sector entities create a "granular picture of where jobs are at risk and where there is additional demand for labor". It implies the need to focus on industry sector and occupation, demographics, and size of the enterprise to reveal businesses who won't likely make it through the other side of this pandemic, as well as opportunities to support other businesses that might need a boost for momentum.

By analyzing each municipality's local economy, governments should identify the sectors in the most need of investment, the sectors with the biggest positive impact on employment and economic growth, and make plans accordingly. But in order to make this micro-level of detail effective, governments will need the right digital tools to get this insight and execute beneficial programs.

With the proper digital technologies in place for economic analysis, McKinsey says "[governments] need to find smart ways to maximize employment and protect against new infections, following global guidelines and those of their local public-health agencies...Safeguarding and recreating jobs must be critical priorities as countries, religions, and cities enter this transition."

Using sector and occupation-level heat maps to analyze at-risk industries and services, allows governments to proactively intervene and recreate jobs for business activity levels. As McKinsey explains, these interventions are to stimulate consumer demand and "rebuild confidence," planning to recreate jobs through targeted redeployment and reskilling to adapt to social distancing and digitization.

Incentivizing productive actions

When looking at stimulation incentives, there are healthcare, academic and economic considerations that aim to protect or accelerate specific action. Government incentivization of healthcare should accelerate scientific advancements like antibody studies, immunity tests, vaccine developments and other public health protection policies. Given the possibility for future pandemics, the threat will remain present and healthcare providers must already begin thinking about long-term scalability and sustainability given its current shortage of healthcare workers, supplies, and capacity limitations.

Many federal governments have also established emergency programs for short-and long-term economic relief, especially for the small and medium sized enterprises. The US federal government has provided different support for people experiencing unemployment, such as the tax refund Stimulus Check, and South Korea has announced emergency cash payments of up to 1 million won, or about \$800 USD, for families below the top 30% of income earners. The Canada Emergency Response Benefit (CERB) will provide CA \$500 a week for up to 16 weeks to those eligible for employment insurance, and the danish government is covering up to 75% of wages for salaried workers.

Provide financial support and leniency

Across the world, we've seen different municipal responses to supporting citizens--revealing strengths and weaknesses in different governing approaches.

As noted by the Washington Post, the U.S. pandemic response has shown pitfalls in decentralized governing that has forced cities into competition over PPE and necessary resources. And in India, the virus' spread is revealing how unequal and "unsustainable the country's urbanization process" has been in context to density, poverty and sanitation.

Salt Lake City, Utah's Mayor Erin Mendenhall issued a proclamation to further support the state's renters, landlords and businesses in Salt Lake City, forgiving rent and suspending residential eviction activity unless "necessary to protect public health and safety." Mayor Mendenhall also broadened street parking allowances and extended the use of permits for individuals experiencing homelessness, income shortages and other financial concerns, striving to alleviate the pressure on individuals and economies especially impacted by the effort to flatten the curve.

Other cities have extended typical restrictions and slowed policy enforcements--San Francisco has also deferred business license collection until September, and New York has extended the renewal of driver's licenses, non-driver ID cards and inspections of motor vehicles for the next three months.

In Australia, Canada, the UK and New Zealand have developed subsidizing wages for full-time employees, and many governments are incentivizing employers to retain employees through cash flow support. Australia also supported small and medium-sized businesses, as well as non-profit organizations, with up to AU \$100,000 for each entity.

Self-employed and contractor workers, between 10.5 and 15 million employees in the North American workforce, also require consideration. In the US, the emergency relief package offers unemployment for these individuals on top of weekly payments of up to \$600 for up to the next four months, and the UK has promised self-employed workers a lump-sum grant of up to 80% of average monthly earnings. Some cities and states within the US are even banning residential evictions and foreclosures, attempting to limit the mass casualty and economic devastation from further escalating.

The Critical Call for Government's Digital Transformation

As we've seen and discussed above, governments have taken a wide range of approaches to protect its citizens and economies. All of this would not be possible without the digital enhancements and progress we've experienced over the past 25 years, but it's also shown us major gaps.

As we exit the initial phase of coping with COVID-19 and begin to enter the "recovery" phase, there will be an urgent push toward developing centralized solutions of data and collaboration that make the sharing of critical information easier.

COVID-19 has presented a call-to-action, for mass digitization of the underdeveloped or limiting technology capabilities of many governments today, proving the essential nature of digital workforce solutions even more so than before. As we shift toward a new normality, there is one thing evident-governments that invested in digital government and management solutions were best positioned to make the right decisions for their communities. The right investments in technology have given governments speed and insight, enabling them to make real-time, data-backed decisions and responses that benefit citizens and businesses.

And while it's not always possible to make the perfect decision, the technical capabilities for managing and mitigating challenges can help bring municipalities and private sector employees peace of mind, clarity, transparency, and the right assets to make data-backed decisions.

No government, institution or organization should be facing this challenge on their own. Now is a time of collaboration that technology can facilitate. Without the investment and development of digital governing solutions, we are making ourselves vulnerable to the next unexpected event in the history of mankind. For any governing or operational system that relies on physical pen and paper, in-person or manual processes will not last in a socially-distanced society.

