Johnson Controls is powering the reopening of municipalities and communities

Solutions and capabilities for more secure, connected and resilient local government infrastructure



As local governments embark on the journey to reopening, city leaders need to consider how best to reduce the transmission of disease among citizens and provide a healthy environment.

Local government leaders are understandably concerned with how best to reopen municipalities and communities and ensure the safety of citizens and constituents. They are confronted with the following challenges:

- · What do I need to open my buildings and community spaces?
- How can I keep the buildings and people inside them secure and healthy?
- What opportunities do I have to reduce my operating costs and improve building efficiency?
- How can I ensure the flexibility and resiliency of my community to support a spectrum of future states, including pandemics?
- What can I do to restore citizens' confidence that their communities will be safe and healthy environments for their families?

Johnson Controls can deliver solutions that help enhance citizen safety, comfort, wellness and infrastructure performance. We are committed to leading the path toward recovery and helping local governments emerge from the COVID-19 crisis even stronger.

We have the global experience, national workforce and expertise to work with cities, towns and counties to meet their immediate needs while helping streamline operations and use of resources when communities reopen. Despite financial hurdles and changes in government priorities, we can help local governments use this crisis to strengthen resiliency and build a more inclusive community.



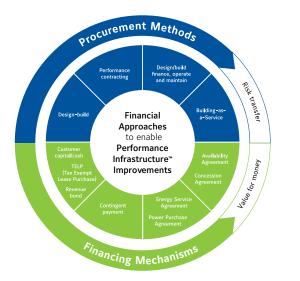
The power behind your mission

Guidance on relief funding and financing options

Local governments have discretion over how fiscal relief and stimulus funds will be used under the following guideposts. We can work with you to ensure the improvements you choose to make align accordingly.

- Improve coordinated responses to prevent, prepare for, and respond to COVID-19
- Develop and implement procedures and systems to improve the preparedness and response efforts of local agencies

In addition, financing options to help you preserve valuable cash while improving the safety of your municipal buildings and spaces are available through Johnson Controls. From Buildings-as-a-Service (BaaS) to performance contracts and public private partnerships – there is a funding method that can meet your distinct needs. Our experienced, dedicated Structured Finance Team is available to ensure your community improvements happen as planned.



Johnson Controls solutions and capabilities help to support local governments during recovery and reopening. The checklist follows many of the ASHRAE Epidemic Task Force and Centers for Disease Control and Prevention guidelines for mitigating potential health risks during reopening of buildings closed during the COVID-19 pandemic.

Preparing to reopen your buildings and community spaces

As you prepare to reopen buildings and outdoor spaces for constituents and citizens, they will be looking to you to provide the technology and procedures to protect them. Therefore, steps should be taken to ensure the environment is safe and able to support community health. Consider the following guidelines for operational readiness:

- □ Ensure preventative maintenance inspections are up to date on all building systems
- □ Ensure fire/life safety inspections are up to date per NFPA and other regulatory bodies, and equipment is performing properly
- □ Perform systemic start-up procedures for mechanical equipment such as chillers
- □ Flush out air and water systems and replace filters
- □ Clean, test and treat cooling towers and other water sources to prevent harmful bacteria
- □ Review new occupancy levels, schedules and update:
 - Fire/life safety systems/services based on new fire risk
 profiles
 - Security systems/services based on new security risk/loss profiles
 - Sequences/schedules in security, building automation and lighting control systems
- □ Verify HVAC system performance to provide proper airflow, temperature and humidity

Essential workforce in your community

- · Johnson Controls solutions are in 579 cities and counties
- 120 branch locations in North America supported by 25,000 employees
- 13,600 field technicians and mechanics in North America
- Recognized by federal, state and local governments as a provider of essential products
- Adhere to safety measures prescribed by the CDC using detailed COVID-19 Site Safety Plans



Keep constituents and citizens secure, comfortable and well

Consider your municipal buildings' unique needs, changes in occupancy flow and how staff interact with each other, visitors and the building. These suggestions can help maintain the safety, security and wellness of your people, buildings and spaces:

- Initiate ventilation, filtration, humidification and air cleaning strategies to control the risk of airborne infectious contaminants to building occupants
- Utilize zoning to allow treatment of individual offices and meeting places to avoid re-circulated air and airborne pathogens from being transmitted
- □ Validate access control settings and reinforce new policies for entering the building with:
 - Additional hands-free visitor management processes/technologies
 - Deploy elevated skin temperature screening
- Use security, video surveillance, lighting and building automation systems to:
 - Enforce social distancing policies, monitor occupant activity and intrusion detection
 - Reduce density or enforce maximum occupancy policies
 - Optimize cleaning practices both indoors and outdoors
- $\hfill\square$ Add disinfectant lighting systems
- □ Enable location-based services for social distance monitoring and contact tracing, both indoors and in common outdoor spaces
- □ Create touchless environments:
 - Cover and lock thermostats
 - Replace light switches with occupancy sensors
 - Create mobile/web-based interfaces to allow occupants to control lighting and temperature
 - Use access control, sensors and interlocks with doors and elevators to provide "frictionless" movement throughout the building
 - Install hands-free fixtures in bathrooms and kitchens
- □ Enhance communications systems:
 - Install mass notification systems to support routine communications (weather, office closures, special events etc.) and emergency communications
 - Install wireless duress buttons
 - Use unified communications to support a community-wide emergency response



Engage with the community and local entities

When preparing to reopen municipality facilities and public spaces, including parks, playgrounds, libraries and community centers, it is critical to stay connected and engage with the community. Your citizens need to feel confident in your ability to safeguard their health and wellbeing. We can help you create and maintain this engagement in a variety of ways:

- □ Implement public outreach programs to help you communicate your economic recovery efforts to the community
- □ Invest in technology services to keep your operations connected virtually
- □ Create workforce development programs to upskill your employees to tackle new challenges and train people for jobs needed as the economy recovers
- □ Coordinate with the local school district and community colleges to support collaboration
- □ Aid in healthcare partnerships to create makeshift hospitals and healthcare facilities



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Ensure cost-effective operations

The need to reduce costs and improve operational efficiency is more important than ever. We help you do both with these suggestions:

- □ Seek guidance on funding sources and financing options to preserve valuable cash and improve the safety of your facilities in these difficult times
- □ Identify procurement and grant options outside of stimulus funding
- Reallocate funds from existing projects that are no longer applicable
- □ Tackle projects that are already funded while properties are vacant
- Add remote monitoring of HVAC and security systems to diagnose and resolve many systems issues quickly over the phone, minimizing staff requirements
- □ Enable preventative and predictive maintenance programs to ensure equipment uptime and reliability
- □ Employ self-testing of fire alarm equipment using addressable notification to ensure compliance
- Explore energy cost control measures through optimized equipment and lighting strategies

Prepare for resilient, flexible spaces and operations

Finally, no one knows what the future holds, but we can take what we've learned to prepare buildings for future states, including pandemics and surges, and optimize infrastructure to support flexible, resilient spaces. Consider these modifications:

- □ Enable dynamic and flexible control of building systems to handle a spectrum of future states:
 - Add additional modes of operation to the building automation system, lighting control, and security systems for pandemics, energy efficiency, air quality, minimal occupancy, demand response or other specialized conditions
- □ Add additional capability to monitor, operate and service the building and building systems remotely



Your partner for reopening your local government facilities and spaces

Johnson Controls can rapidly mobilize technical resources – including planning and design engineers, project managers, installers, communication specialists, service technicians and more – to help local governments recover and rebuild their communities. Working together, we can create secure, connected and resilient communities. We can deliver the optimal living, visiting and working experience for your citizens as your community recovers from the COVID-19 crisis.

Learn more when you visit us: www.johnsoncontrols.com

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