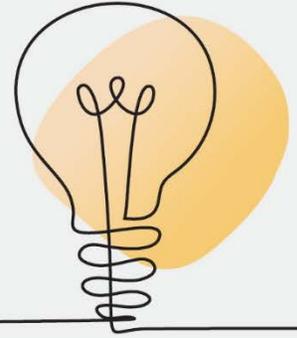


# Cities and local government

## COVID-19 and municipal infrastructure



June 2020

The COVID-19 pandemic has had a major impact on municipal governments from coast to coast. In recent months it has disrupted nearly every aspect of local business, operations, and daily life.

Navigating COVID-19-related disruption will require cities and other municipal governments to travel through four distinct stages. The plans and decisions made by leaders as they complete this journey will play a key role in shaping a municipality's focus, operations, and ability to position for long-term success.



As key enablers of local program and service delivery, infrastructure and facilities will play an important role as municipalities navigate the pandemic and position for post-COVID-19 success. Speaking with municipal leaders, we've identified some key questions that local governments should be asking to understand current and coming implications, and how these may influence go forward plans and decisions.

- How has our infrastructure impacted our ability to respond?
- How can these assets help in managing COVID-driven financial pressures?
- How can we capitalize on the coming wave of stimulus funding?
- How will COVID-19 impact our go forward plans and priorities?

In answering these questions, municipal leaders must consider the role that infrastructure assets, and their ongoing investments, play in enabling municipal programs and services, and how changes to plans and conditions will impact their ability to meet short and long-term needs. The following sections explore the municipal journey through each step of the COVID-19 response framework, highlighting thoughts and insights gained from leaders as they navigate from step to step.

## Rapid reaction

For cities and local governments, the last few months have been focused on reaction, with municipalities responding to the crisis by introducing protections and measures to maintain programs while managing health related risk. This has left many municipal leaders scrambling to adapt their organizations to a new reality for local programs and services.

While accommodations have largely been operational, these have raised questions about our local infrastructure, its importance to operations, and its ability to support needed change within the organization. Many organizations have found that the state and make-up of these assets are impacting agility and their ability to respond. While every organization is different, several common issues have emerged:

- Antiquated technology and systems, and digital barriers have made the shift to remote working challenging.
- Ties to facilities, fleet and equipment have impacted or shut down many programs and services.
- The configuration and condition of some facilities have limited the ability to adapt workspaces to accommodate remaining personnel.
- Deferred maintenance backlogs have meant that many assets continue to require attention and repair, even though public access and use has been suspended.

While most organizations have reached a steady state in their COVID-19 reaction, issues and their impacts can't be forgotten, and should play a key role to shaping future resiliency efforts. Municipalities with strong, risk-focused cultures have fared better than most through initial response. For others, the experience will drive increased post-pandemic interest in improvements to risk management, resiliency and business continuity.

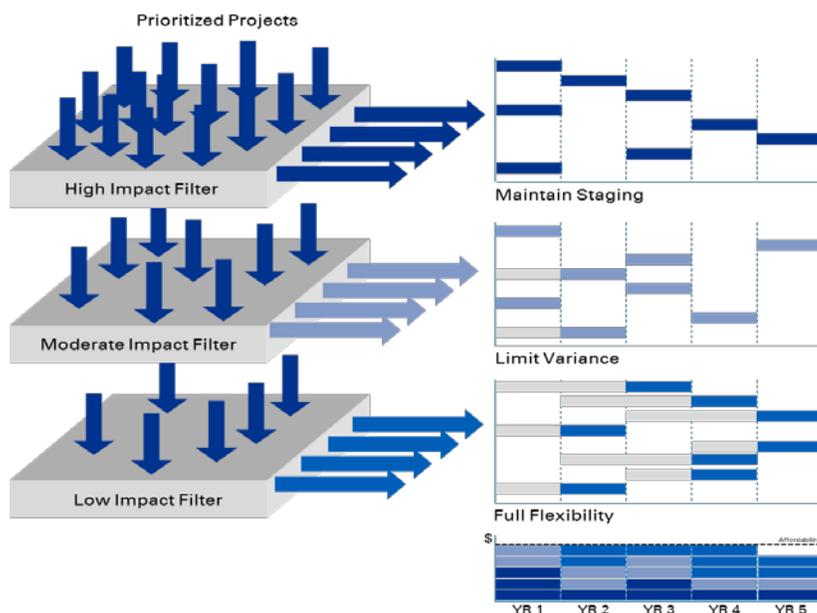
## Resilience and continuity

Growing costs and shrinking revenues have placed municipalities, along with many of their funding partners, in a difficult financial position. To soften the blow, local government leaders are under growing pressure to shed costs or defer non-urgent spending, while minimizing further impact to programs and revenue streams.

While deferring infrastructure spending can provide some short-term relief, there are some key things that leaders should consider, if they are to meet current requirements, without getting into trouble over the long-term.

## Maintenance and renewal

While many municipalities are faced with substantial deferred maintenance backlogs, further temporary delay to sustaining capital works may be possible, in order to free up cash. Critical works, such as those impacting safety and business continuity, should proceed as planned, however those with lesser impacts may be good candidates for deferral, provided that the risk can be reasonably managed. Evaluating potential impacts of deferral should consider not only the immediate risk of physical asset failure, but also the longer term economic, environmental and social impacts of delay, on the community. Establishing a common risk framework can be helpful in evaluating options for deferral.



## Expansion and growth

Many municipalities have placed significant effort into developing master plans aimed at positioning their communities for long-term success. Delaying or canceling these works can provide some flexibility in addressing the financial and operational strain facing these organizations, but care must be taken to ensure that these actions don't lead to longer term pain.

For planned, but not yet initiated works, changes brought about by the COVID-19 crisis could require a significant rethink of development plans and priorities. Potential post-pandemic impacts are explored below, but changes in demand, and to program and service delivery models, could drive significant shift to the assumptions used in developing plans and designs, and in selecting delivery models.

For active projects, consideration must be given to potential design, logistical or contract issues, and how these may impact available options. Changes in the design basis could require a pause and significant rethink to plans and activities. Also, COVID-19-related impacts on site-works and supply chains may disrupt the timing and cost of ongoing works, and potentially require the need to seek out additional funding and supports.

It is important to recognize that risks associated with changing or deferring works can be significant and have a substantial impact on a municipality and its citizens. Having a plan to manage these challenges, through business, operational or other means, is important to ensuring that a municipality does not become over exposed, and that current and future needs continue being met.

## Positioning for recovery

It is widely understood that infrastructure spending will play a major role in restarting Canada's post-pandemic economic recovery, and already the federal and provincial governments are starting to push out billions of dollars in infrastructure-focused stimulus funds. While program specifics are being developed, strategies will be aimed at getting money out and into the market quickly, to produce a timely and impactful response.

Because of their economic objectives, stimulus programs will have tight timelines, possibly as short as 18 to 24 months. Given that infrastructure-based projects flow through five stages (planning, design, procurement, supply, and construction) this could make it difficult to advance major builds, unless significant pre-work is already complete.

Based on market review and feedback it is expected that some of this funding will focus on four key areas.



Addressing issues that have challenged us through the pandemic like connectivity, science and research, laboratories and healthcare.



Building institutional resilience like asset hardening, climate change adaptation, risk reduction and mitigation, and adaptable / multi-use facilities.



Getting works out the door quickly like deferred maintenance, direct replacement, programmatic renewal and "shovel ready" projects.



Stated government priorities, like climate change and ESG improvement, economic development, public transportation and affordable housing.

While exact details aren't yet available, there are some key things that municipalities should be doing to prepare for and take advantage of infrastructure stimulus programs, as they are released.

1. Review capital maintenance, renewal, and new project requirements relative to local needs and program priorities
2. Proactively identify projects that can be accelerated and put forward, either by targeting scope or advancing pre-work – getting 'shovel-ready'
3. Consider opportunities to expedite the delivery process – planning, design, procurement, supply and construction

## Post-COVID-19 reality

COVID-19 will impact how future programs and services are delivered, and on the assets needed to support them. While most current restrictions will eventually be relaxed, it is expected that some level of physical distancing (regulated or expected) will be maintained indefinitely, to provide ongoing protection and prevent future outbreaks.

Some common themes have started to emerge on what the 'new normal' might look like for residents and local businesses and for staff, and what factors should be considered as municipal leaders rationalize and plan for future capital spending and infrastructure investment.

### Connectivity



The move to remote working and self-serve interactions will increase the emphasis on connectivity and digital enablement and security. More digitally enabled interaction will open the door to new technologies and service transformation using artificial intelligence (AI), bots, and robotic process automation (RPA).

### Municipal facilities



Increased emphasis on remote working and program delivery will reduce demand for office space and program-focused facilities. Distancing will require broad retrofits or changes to the way in which remaining facilities are used, impacting lay-out, protective features, and utilization of nearly all public and inward-facing spaces.

### Transportation and mobility



Protective measures, public concerns and the growing popularity of remote working will shift mobility patterns and demands for service. Fewer commuters will decrease peak traffic flows major routes. Distancing rules and public concerns will require rethinks to transit and active transportation.

### Water and wastewater



Acceptance of remote working will change demand and flow patterns in existing networks, particularly in office-heavy and residential neighborhoods. Increased safety precautions will need to be implemented to alleviate potential waterborne virus exposure and contact related risks to maintenance workers and to the public.

### Community housing



The economic downturn will drive more demand for affordable housing in Canada's Cities. Designs of planned facilities will need to be updated to support new expectations surrounding distancing and space utilization. Existing properties will need to be retrofitted to incorporate protective features.

### Parks and public spaces



Demand and utilization for parks and public spaces will increase, but adaptation will be needed to enhance user safety. Seating and designated activity areas will be spread out to enable distancing and separation. Changes will come relating to the lay-out and operation of amenities such as drinking fountains, shelters and public restrooms.

### Recreation and sport



Public pressure and safety considerations will change demands around personal recreation and team sports amenities. Changes in use will impact the lay-out, utilization of, and demands placed on space and equipment. Preferences around distancing and air quality will shift more activities outdoors.

### Building and construction



Changing demand and mandatory protective measures will impact current and future, plans and priorities. Existing designs, construction practices and supply chains could change, driving up the cost of construction. Master Plans, business cases and designs may need a significant rethink, causing development priorities to change.

## Moving forward

COVID-19 is having a huge impact on Canada's cities and local governments and will shape their organizations for years to come. In meeting this challenge advanced education leaders will face some tough questions surrounding core programs and services, their underlying operations, and the facilities and infrastructure needed to deliver them.

While it won't be easy, honest reflection, and asking key questions can provide AE leaders with the clarity and insight needed to successfully navigate coronavirus-driven disruption and position their organizations for future success.

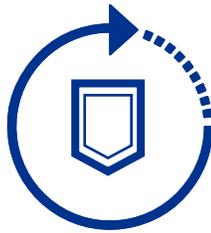
## How KPMG can help

KPMG's Global Infrastructure Advisory team is comprised of Canada's leading infrastructure and construction advisors. Actively advising in all ten Canadian provinces and on over \$150 billion in infrastructure programs globally, we have the deep, hand-on experience needed to provide solutions to your complex problems. Our multidisciplinary team can support you in all stages of a potential stimulus program:



### **REACTION** Respond to the crisis

- Understanding business, asset and operational risks
- Planning and introducing mitigation strategies
- Capturing and building lessons into plans and decisions



### **RESILIENCE** Manage through uncertainty

- Defining critical services and supports
- Evaluating portfolio for urgency, impact, risks and opportunities
- Identifying and ranking deferrals and strategies for managing risk



### **RECOVERY** Capitalize on opportunities

- Targeting investment where it matters most
- Maximizing and responding to stimulus and funding opportunities
- Streamlining delivery and oversight to drive value creation



### **NEW REALITY** Adapt to a new world

- Understand current and emerging issues and requirements
- Evaluating impacts to assets, operations, plans and projects
- Introducing strategies to manage go-forward risks

## Contact us

**Ross Homeniuk**  
Partner  
204-957-2284  
rhomeniuk@kpmg.ca

**Vivian Chan**  
Senior Manager  
604-609-3884  
vchan4@kpmg.ca

**Kaytlyn Barber**  
Senior Manager  
306-791-1230  
klbarber@kpmg.ca

**Natalie Lye**  
Senior Manager  
416-218-7915  
natalielye@kpmg.ca

**Leah Carson**  
Senior Manager  
613-212-3616  
lcarson@kpmg.ca