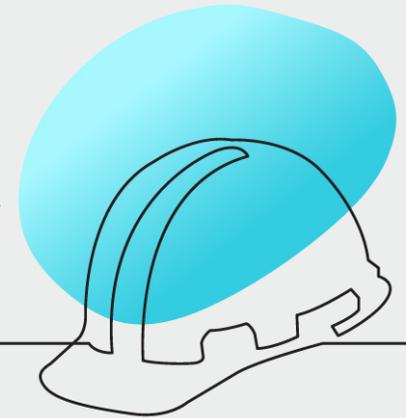


# Force Majeure: COVID-19

## Impacts of the COVID-19 pandemic on the Construction Industry

April 2020



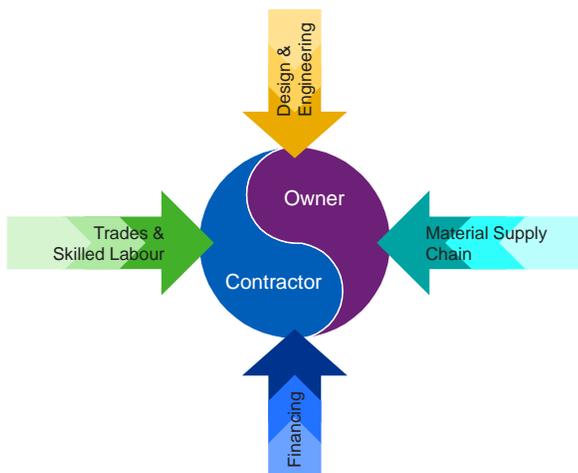
By Jordan Thomson, P.Eng, MBA – Global Infrastructure Advisory

The COVID-19 pandemic will likely impact construction projects into summer 2020, with ripple effects spanning into the foreseeable future. The industry should prepare for a wave of Force Majeure claims.

### Understanding the Impact

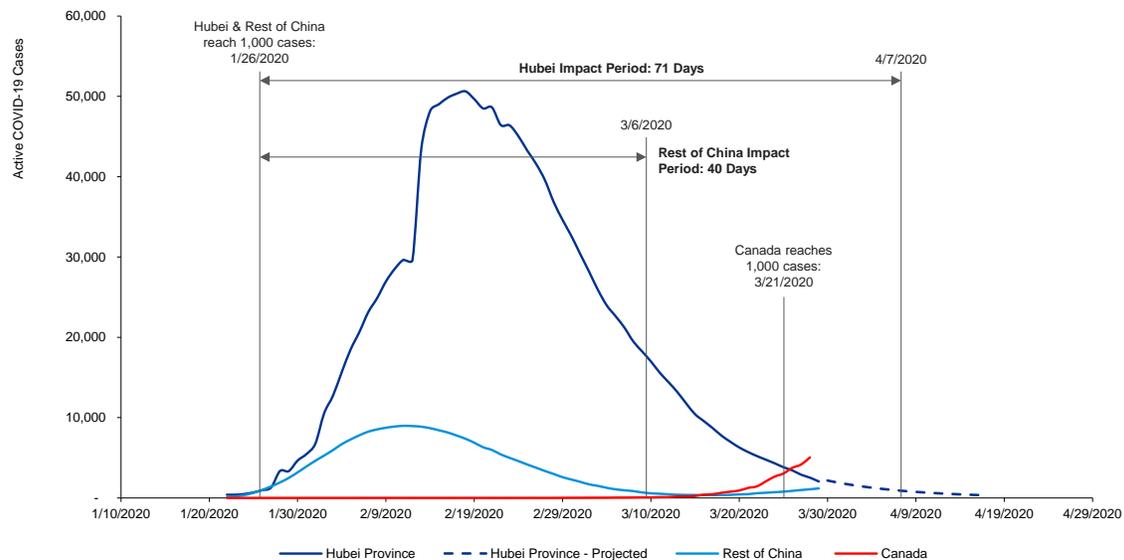
The COVID-19 pandemic has had a significant impact on the Canadian and global economy, and is poised to continue to disrupt our usual way of life for the near future. The construction industry is no different. While many projects have been deemed essential and permitted to continue, the new ways of working in the face of COVID-19 will have deep ramifications on productivity, schedules, and overall costs of projects. With an annual contribution of over \$142B to Canadian GDP (8.6% of total)<sup>i</sup>, and 100 projects over \$300M<sup>ii</sup> currently underway, the impacts of the pandemic on the construction industry will continue to be felt for the foreseeable future.

Construction projects sit at the intersection of four primary value chains: trades and skilled labour, material supply, design and engineering, and financing. Interruptions in any one of these value chains can have significant impacts on project outcomes. Disruptions across all four, as we are experiencing now, present a serious threat to the industry as a whole.



### Potential impacts include:

- On site, productivity will be impacted by separation of trades, increased spacing of workers, union requirements, and increased personal protective equipment requirements.
- Restrictions on staffing across manufacturing will slow access to both stockpiled materials, as well as the fabrication of new goods.
- Urban and suburban sites will reduce headcount heavily to allow for social distancing on site, and many remote sites with camps will close entirely.
- While Canadian borders remain open to trade, additional security screening and outright closures elsewhere in the world may cause delays on goods from the globally integrated supply chain.
- Logistics industries will also be impacted through labour shortages, potentially causing bottlenecks between stages of the supply chain.
- Engineering and design will experience delays as reduced communication across the design team and software and hardware constraints for companies not geared for full remote working slow the design process.
- Private sector owners will likely shift priorities, with new capital projects getting deferred to focus on core business activities. Staff shortages and new working arrangements may leave projects that are currently underway without sufficient oversight.
- Public sector owners will likely experience staff shortages as ways of working change. As many public sector entities are not geared for remote working, productivity of the remaining staff may be impacted further.
- These new pressures on projects will increase their risk profile for investors, making financing more expensive and difficult to attain as lenders and investors become more cautious and seek less capital-intensive options.



### How long will we be impacted?

While we have seen pandemics before, COVID-19 promises to be an unprecedented disruption to our industry. With the constantly shifting situation and numerous variables at play, it is difficult to estimate how long the impacts will last. However, as the number of active cases in China and, in particular, Hubei Province, have now dropped significantly from their peaks, it is possible to assess how long their respective impact periods have been.

As shown in the figure above, according to data provided by Johns Hopkins University<sup>iii</sup>, both Hubei Province and the rest of China reached 1,000 active cases around January 26, 2020. Hubei Province and its particularly hard hit capital city, Wuhan, reached a peak of 50,633 active cases. Based on a simple exponential regression, we expect active cases to decline to 1,000 by approximately April 7, 2020. Conversely, the rest of China reported a peak of approximately 8,979, and saw a decline down to 1,000 active cases on March 6, 2020.

While this data shows a broad range of potential outcomes, it also shows the impact period where special precautions and regulations will be in place will likely be significant.

Recognizing there are a number of different variables at play in Canada (including the level of governmental enforcement of restrictions), if Canada's response is comparable to that of Hubei province and the rest of China, the data suggests that it would take between six and ten weeks from the first 1,000 cases until we are back below 1,000 cases again. With Canada reaching its first 1,000 active cases on March 21, 2020<sup>iii</sup>, this would result in the impact period lasting to between early May and early June of this year.

The level of response by the government and the general population will have a significant impact on the duration of the impact. Analysis performed by the Imperial College COVID-19 Response Team<sup>iv</sup> modelling number of cases the UK and USA, which have been slower to put restrictions in place,

shows active cases spanning over four months from late March to early August 2020.

As the virus continues to spread around the world, additional factors, such as reinfection from other countries, will need to be considered. In fact, the data shows active cases in the rest of China have been starting to increase again since mid-March. The Imperial College COVID-19 Response Team and other experts expect secondary waves of infection as restrictions are relaxed, with potential subsequent waves for years to come. The industry may need to prepare to manage these kinds of disruptions for the foreseeable future.

### Managing the impact

While owners and investors will experience the impact on the industry, contractors, as the holder of the contracts with subcontractors and suppliers, will feel the largest impact, both in claims and overall cash flow. If construction stalls, contractors risk having their performance bonds called if they fail to meet their performance obligations under the contract. Similarly, liquidity issues from delays will put contractors at risk of having payment bonds called if they are unable to pay their subcontractors.

Construction contracts generally include Force Majeure considerations for events such as this, typically providing schedule relief for delays resulting from unforeseeable natural disasters. While contractual language will vary between agreements, typically this provision does not provide relief for costs incurred as a result of the disaster. However, as a portion of the impact felt by projects is not due directly to COVID-19, but rather due to the measures put in place by the government to curb the spread of the virus, it could be argued there has been a change in law. Under P3 and other public sector procurements, Works Change in Law provisions typically entitle the contractor to relief in both schedule and cost impacts due to the event.

Contractors may also be able to claim against their Construction All Risk (CAR) insurance. While coverage varies by project, this typically covers against damages incurred as a result of natural disasters, and may include coverage for costs arising from delays in completion such as debt service, staffing, and soft costs. Now more than ever, it is critical for contractors, owners, and investors to closely monitor and document the impact of COVID-19 on the project, including their subcontractors and supply chain. As claims are developed, it will be crucial to be able to show a clear line of causation between the pandemic and the resulting actions by the federal and provincial governments to ensure the outcome of these events are fairly and appropriately distributed under the contract.

Quantification of schedule and cost impact should consider:

- Reduced productivity of labour (historic daily output per person versus during the COVID-19 outbreak)
- Standby and unproductive time due to material shortages
- Additional PPE and training requirements
- Inefficiencies from resequencing of work
- Staff and labour absenteeism
- Delayed decision-making due to remote working
- Knock-on delays from weather-sensitive work getting pushed into different seasons
- Demobilization, security, and remobilization costs for projects put on hold
- Additional financing and bonding costs from project prolongation and any increased debt load to meet payment requirements

As the pandemic continues to unfold, it remains unclear to what extent the construction industry and individual projects will be impacted, and how the resulting delays and costs will be resolved. While the impact of the first wave of infection will likely last a matter of months, ripple effects in the industry and wider economy will continue to affect projects for some time to come. Contractors, owners, and investors should be proactively monitoring and managing the situation, and working collaboratively with their contractual counterparts to help minimize immediate impacts, and establish a plan for managing future disruptions going forward.

### How can KPMG help?

KPMG is available to offer guidance to support you and your projects. Our proprietary Quantitative Risk Assessment (QRA) methodology analyzes and quantifies the cost and schedule risks faced by projects. This helps us provide owners, contractors, and investors with the critical information they need to make informed decisions, and establish mitigation measures for these uncertain times.

KPMG can also provide support with:

- Analysis and quantification of delay and disruption claims
- Reforecasting project profitability and reassessing contingency in the face of ongoing disturbances
- Resequencing schedules to limit labour interactions
- Project completion options analysis to assess strategies to mitigate impacts of COVID-19 for projects currently underway
- Operations and H&S risk assessments to evaluate risks from current construction methods and to identify measures that could be put in place to mitigate risks
- JV board and corporate-level advice on program and portfolio level impacts, including executive crisis management training

As seasoned major-project professionals, we understand the magnitude of impact COVID-19 could have on our industry and our lives. While the coming months will be challenging, as an industry that regularly overcomes adversity to build the impossible, we are confident we will get through this together.

## Contact us



**Jordan Thomson**  
Senior Manager  
1 416 228 4320  
jordanthomson@kpmg.ca

**Augusto Patmore**  
Partner  
1 416 777 3277  
apatmore@kpmg.ca

**Jamie Cameron**  
Senior Manager  
1 416 777 3995  
jcameron@kpmg.ca

**Gary Webster**  
Partner  
1 604 646 6367  
gwebster@kpmg.ca

**Jordan Potter-Davey**  
Senior Manager  
1 416 777 3250  
jpotterdavey@kpmg.ca

**Doug Ewing**  
Partner  
1 604 691 3022  
dewing@kpmg.ca

**Zach Parston**  
Senior Manager  
1 403 691 8161  
zparston@kpmg.ca

**Janet Rieksts Alderman**  
Partner  
1 416 777 8441  
jriekstsalderman@kpmg.ca

**Sol Guimaraes**  
Senior Manager  
1 416 476 2836  
solguimaraes@kpmg.ca

<sup>1</sup> Canada Real GDP by Industry: Construction, YCharts

<sup>2</sup> Top 100 Projects for 2019, Top 100 Projects

<sup>3</sup> Coronavirus COVID-19 Global Cases by the Center for Systems Science and Engineering at Johns Hopkins University, Johns Hopkins University,

<sup>4</sup> Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand, Imperial College COVID-19 Response Team, 16 March 2020