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Sustainable Infrastructure In The Age Of Coronavirus: ‘Winners’ And Losers

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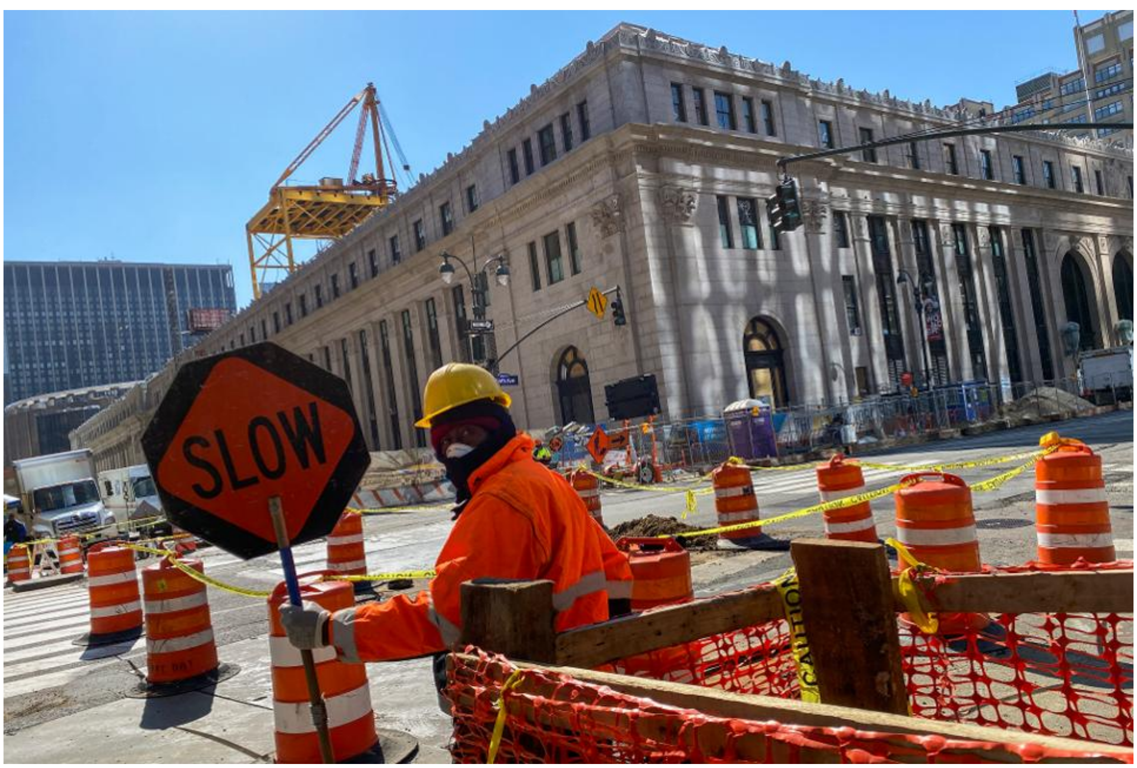

NEW YORK, NY - MARCH 26: A Construction worker takes care of traffic as they build a new tower on ... [+] March 26, 2020 in New York City. Some construction workers building luxury condominiums are being forced to work in the city by their companies, while across the country schools, businesses and places of work have either been shut down or are restricting hours of operation as health officials try to slow the spread of COVID-19. (Photo by Eduardo Munoz Alvarez/Getty Images)

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When [I last wrote] about the potential impacts of the COVID-19 pandemic on sustainable infrastructure, the emphasis was still on "potential". Now, with so many cities and markets in shutdown mode, that potential has become a stark reality.

With so many regions across the world having to shut down most business activities, gatherings, and such, it's unsurprising that construction of infrastructure is also starting to take a hit. In New York City, for instance, construction activities at Laguardia have been shut down. And more specifically for solar projects, BloombergNEF is now forecasting that 2020 will be the first down year for solar panel demand since the 1980s.

But while some portions of the economic landscape are seeing wholesale negative impacts from these shutdowns, across the sustainable infrastructure (water, waste, clean energy, etc) verticals the impacts are much more varied, based upon the region and the type of project. Furthermore, the magnitude of the impacts will vary greatly depending upon the length of the time it takes for things to return back to a semblance of “normal”.

“Critical infrastructure” versus other construction projects

One point of differentiation that is emerging is the type of the infrastructure being built, and whether it is deemed “critical” or not. In many ways, cities and regions are being forced to run through a bit of Maslovian Hierarchy of Needs thinking... Some things need to be built no matter what, and other things can be pushed off. Generally speaking, waste and wastewater related projects are being considered “critical infrastructure” while some building construction and potentially some new power projects (including for renewables) are being put on hold.

It’s unclear how this differentiation will look going forward. It could be that after this near-term period of shutdowns, economic demands require even the less "critical" infrastructure projects move forward. Or alternatively, even "critical" projects may face shutdowns as local outbreaks occur or positive test results among site-specific team members pop up. Which direction this goes may depend greatly upon the length of time these lockdowns have to be in place. But it's an interesting time where some types of infrastructure are "winners" in the sense that they're not being fully shut down, whereas others are indeed being shut down indefinitely, negatively impacting the workers, contractors and investors.

Scenarios of Timelines

Late last week, a helpfully clear article in The Atlantic laid out four scenarios for how the current crisis will end, broken down not only by the form of the resolution but also by the timeframes:

- The virus ends up being surprisingly mild and one to two months is all that's needed to get back to normal. There being no evidence for this scenario at the moment, let's move on...
- A combination of there being many more mild infections than currently estimated, vastly more testing capacity than currently available, and success in early social distancing mandates, leads to 3-4 months of shutdown followed by a return to normal. If this scenario ends up taking place, the impacts across the sustainable infrastructure landscape will be quite diverse. Some of the smaller project developers will not be able to survive, and some vendors of capital equipment will face dried up sales pipelines and a cash crunch at a vulnerable time. But many others will have the resources

necessary to survive through a quarter of a year and then charge back in. This is an optimistic scenario.

- A timeline of four to twelve months of disruption before things return to normal. In The Atlantic article, the author dwells upon seasonal effects. For me, I think of the potential for waves of re-openings, followed by new outbreaks, followed by periods of more local shutdowns (probably shorter than the first one). Either way, the economic disruptions continue into the second half of 2020, albeit not in the form of blanket shutdowns like are now being seen. Until better therapeutic solutions are in place to treat those who are ill, better testing capacity is in place to find those who are ill, and/or a vaccine is found and tested and proves effective, this kind of rolling uncertainty and periodic disruption seems somewhat likely.

And if so, the aforementioned differentiation by type of project seems like it would become even more obvious and impactful. No matter whether they are at home or at the office, people still generate waste. They still generate wastewater. They still need food and they still need energy. Infrastructure satisfying these very basic human needs will likely see construction activities able to continue throughout 2020. Alternatively, other forms of infrastructure deemed less "critical" are likely to face more disruptions, either overtly via mandates to shut down sites, or more subtly via deprioritization when requesting permits from increasingly stretched local authorities.

- A worst-case scenario where everything is greatly shut down until a vaccine is developed, taking a year or more. This seems difficult to fathom politically and economically. If it does end up being the scenario, the economic impacts will be so severe that most bets will be off and many projects will be sidelined by lack of capital or workers even if technically allowed to continue.

Which Scenario?

At my firm, we like many other investors have been spending a lot of time working with our entrepreneur and developer partners, and doing our best to plan for a number of eventualities. We continue to actively seek out new investment opportunities and are also spending a lot of time talking with our peers across the financial landscape.

Based upon all of this input, and in decreasing order of confidence, we have come up with some early conclusions that we are planning around. This is not investment advice, but is just our current interpretation of the situation:

- The lack of coordinated, cohesive action in the US will probably extend the crisis here – every day that a national "lockdown" doesn't happen means that most projections made for severity, impact, and duration will need to be extended. While much of the country is now under a stay-at-home mandate, it's piecemeal, uncoordinated, varied in its extent, and varied in its enforcement.
- Unemployment claims are already exploding upwards. Goldman Sachs predicts (as of a week and a half back, an eternity ago now) that the US will spike quickly to 9% unemployment, with a strong stimulus package. We expect that this will lead to a fairly steep recession, with disruptions across most industries and verticals. With so much

of the US workforce and small businesses suddenly sidelined, that will make it difficult to quickly restart the economy even under optimistic Coronavirus slowdown scenarios.

- We are already seeing changes in business models in some industries. In food, for example, supermarkets are used to holding several weeks of inventory of many items but are now operating with 3-4 days of inventory, which was unthinkable a few weeks ago. Buyers are clamoring for local food, food with short supply chains, and proven and traceable provenance. Consumers are quickly adopting delivery options – in fact, the portions of the economy that are hiring quickly are food and other delivery services. And this will also further encourage local sourcing. We believe some of this type of thinking will continue post-crisis and will shape buying and planning behavior in food and energy and other verticals, to focus more on localization and resiliency.

- As a consequence of all of this, and especially the lag times between infection to hospitalization to death, we expect the first half of April to be a pretty “bad news” type of period, even if various local lockdown efforts are ultimately being successful. Case counts and death counts will continue to mount in both the US and Canada, although we expect (hope) that given the current widespread lockdown efforts case counts should peak in April (and Canada should start showing a significant downwards trend by the end of the month). But ironically, the success of lockdown measures may undermine public resolve to continue them. Political voices will become louder that the economy needs to be prioritized and to ‘start up’ the economy again, in opposition to medical advice. This will probably lead to political actions that are less than ideal from a health outcome, and of doubtful effectiveness.

- What this 'start up' will actually look like is very difficult to predict, and will probably vary geography to geography. And in the US, this probably means a heterogenous set of political reactions, as some states will "re-open" earlier than others. And as noted above, if it will be very disparate, this by definition means an extended impact as new outbreaks lead to new shutdowns, and political desire to end the shutdown clashes with consumers unwilling to risk their health until the danger recedes.
- We however are also noting the significant amount of research activity and trials around potential therapeutic solutions. There are

also recent indications that summertime conditions may also slow the transmissibility of the virus. And testing numbers are finally rising. Between these three factors (and political realities) we are hopeful that by the summer the US and Canada may have the situation under control well enough for some return to more active business conditions (not quite business as usual, but with some business travel again, e.g.), and then that this "re-opening" may continue going forward even as cold weather eventually returns. And over the longer term, between vaccine development and any virus' natural evolution toward being less deadly for its host, we expect a return to normalcy sooner than some of the more dire predictions that have been made — in other words, we are planning around the third of The Atlantic article's scenarios, but expecting more of a four to six month impact than a twelve month impact.

- Fundraising for small businesses will nevertheless be difficult for the next few months – companies with less than 3 months of runway are in serious trouble, those with 6 months will struggle, and even those with 9 months or more should feel a high degree of urgency. The combination of uncertainty, liquidity constraints, denominator effect, and simply negative market sentiments will mean that companies will need to be aggressive, both in terms of raising equity and in their product / service sales efforts.

In these chaotic times, it's important to realize that not all outcomes will be the same. Some industries and specific players within them will be crippled for a long time. Others may even flourish. We're in a period of major disruption, and even after things return to “normal”, things will never be the same as they were before.