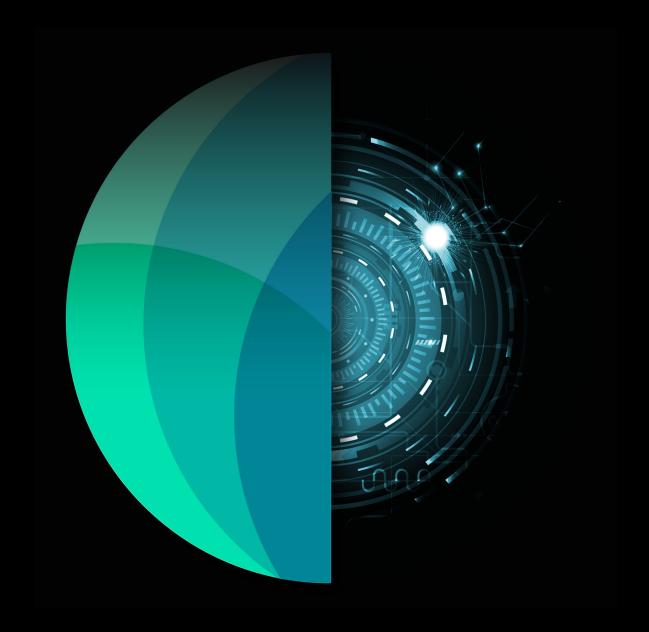
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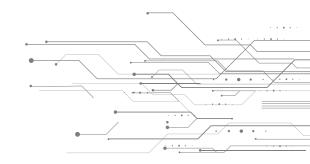
Infrastructure as an economic stimulus

October 2020



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Executive summary



This paper sets out the powerful value of infrastructure to economic recovery. Many governments around the world, faced with enormous pressures due to the COVID-19 pandemic, will make significant infrastructure investments to generate both an immediate boost and long term growth.

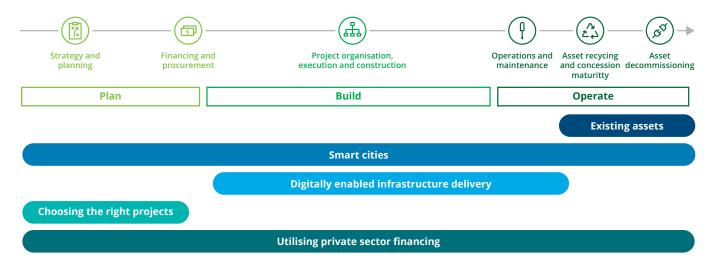
Well-judged infrastructure programs have been continually demonstrated as a highly successful growth engine, because they drive productivity and job creation.

Key considerations:

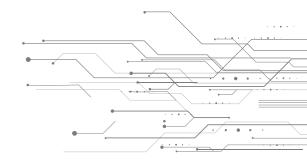
- Within a decade, infrastructure investment creates a clear 'multiplier effect'. Ratings agency Standard & Poor's (S&P) notes returns of up to 2.7 times the initial outlay
- An emphasis must be placed on identifying and prioritizing the right types of investments. Many countries will begin with infrastructure upgrades and 'shovel ready' projects that were already through planning
- In the mid to long term, governments can develop economic resilience with a pipeline of projects, as diverse as fast broadband, smart travel, housing, health and energy
- To accelerate all projects, governments should simplify planning processes, and develop collaborations with high quality industry partners

There is no doubt that properly planning infrastructure is among the highest impact methods for driving rapid and sustained recovery from a crisis.

To quickly make the right decisions, governments must understand all the factors in play. Many are utilizing Deloitte's Infrastructure Multiplier service to harness essential infrastructure expertise, evaluation tools and risk insights as they plan and build infrastructure for resilient recovery.



Deloitte perspective



For countries around the world, securing their economic future requires not only the immediate support already witnessed, but significant longer-term stimulus. It will be tempting for governments to restrain expenditure given the enormous economic pressure brought to bear by coronavirus lockdowns and support measures, but to do so would be short-sighted.

A strong infrastructure platform is required to underpin any economy. Investment in infrastructure provides the immediate benefit of helping to keep people employed and businesses afloat, while also maintaining the productive capacity of an economy and delivering long term benefits.

A definitive approach for economic growth can be elusive even in normal times, but it is particularly rare in the current climate. However, what is clear is that more state support is needed, not least because the levers of monetary policy – principally setting low interest rates and deploying quantitative easing – are close to their effective limits. Governments must look to other ways to stimulate their economies, which is why infrastructure investment is taking center stage as a vital means of driving growth.

The success of infrastructure development as an economic stimulus has been demonstrated in prior crises. Franklin D. Roosevelt's New Deal in the 1930s, for example, saw the feted American president introduce a vast package of public works projects, federal regulations, and financial system reforms. The plan was passed to help the nation survive and recover from the Great Depression. It created jobs and provided financial support for the unemployed, the young, and the elderly. Similarly, following the global economic crash of 2007 to 2008, the International Monetary Fund (IMF) urged countries to spend on infrastructure to create jobs and drive growth, and many did so, witnessing a recovery.

Governments will have to make conscious decisions to protect and increase public sector investment, in spite of pressures on the public purse. This will be challenging when increasing deficits and debt levels give rise to an inclination to cut investment. But history shows us that closing the purse would be counterproductive, diminishing growth and leading to new structural problems.

Infrastructure spending has a successful, long-term impact because:

- It underpins a strong economy Developing infrastructure improves the productive capacity of the nation, enabling goods to move more easily, labor to be more productive, energy to be cheaper and more reliable, and so on. This is incredibly important to ensure quick recovery.
- New construction increases employment It provides a significant unemployment buffer in the short term through direct employment. It also increases demand for other inputs into infrastructure development, and those wages support additional jobs through spending.

- **'Essential' assets are changing** COVID-19 has had a game-changing impact on how societies work and operate this has created demand for more digital assets such as national high speed broadband coverage and 5G networks. These have become essential assets for the economies of the future.
- It has a powerful effect on social outcomes Domestic violence, child abuse, homelessness and mental health issues are all rising due to the impact of COVID-19 and will need large-scale service delivery responses. Infrastructure supports important services not only through physical assets but also through previously unavailable, coordinated and integrated funding for human and social services. The impact can be much greater and more durable than with monetary policy alone.
- Finance is cheap Never in the two thousand years of recorded interest rates has it been cheaper for governments to borrow. Markets have reacted positively to stimulus packages by dropping rates on long-term government notes substantially further. The challenge will be determining how much governments ought to or are willing to borrow. Stringent limitations would lead to tough choices on funding for stimulus, focusing on creating more operating efficiencies, and cutting costs in other areas. In practice, anything that can create stimulus deserves serious consideration for debt funding.
- Infrastructure is attractive for private sector partners The private sector can add deep value to the infrastructure market, and can derive reliable long-term benefit from it. Private sector delivery models, associated funding and private capital financing, asset recycling, new revenue models, operating efficiencies and value capture opportunities all provide governments with new services, operational efficiencies and reduced borrowing requirements. It is clear the private sector is keen to work with governments, and many examples of effective collaborations in these contexts have already been witnessed.
- Sustainability has attained high importance At the worst of the coronavirus pandemic in many countries, public interest in climate and sustainability reached a peak. Reduced travel and economic activity during lockdown periods provided visible climate benefits, which may become essential in the longer term. Lasting changes in work and travel behavior can be achieved, but require investment and a focus on sustainability throughout infrastructure planning and execution processes.

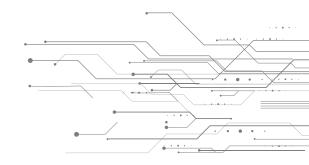
Current infrastructure pipeline

Before the coronavirus pandemic, countries around the world already faced a huge infrastructure investment shortfall, with sustained low spending playing its part in dampened productivity.

Researchers for the Global Infrastructure Hub, created by the G20, have estimated that some \$94 trillion will need to be spent by 2040 to fully address the world's infrastructure needs, as populations grow. This means a huge gap of \$15 trillion against expected spending. Clearly, governments were already struggling to match their present and future infrastructure needs with requisite investments.

We expect that further to this, an additional \$5 trillion to \$10 trillion of investment will also be required, over the next five years alone, due to COVID-19 stimulus packages and new demands on infrastructure.

Steps to begin today



Even before the coronavirus pandemic, most governments already possessed infrastructure plans consisting of mega projects and smaller works – all with different timelines but aimed at economic and social benefits that are quick and sustainable. Such plans should continue, and be accelerated if possible.

Infrastructure projects of all sizes can have a huge economic impact on job creation and use of raw materials. Smaller schemes catalyze essential activity immediately, while mega builds can be accelerated to bring scale and help shield an economy from further job losses. All projects will need to be undertaken on the basis of a responsible approach to preventing any spread of the virus.

The pandemic has changed the way we work, possibly forever. Technology will play an increased role in the future of professional activity, communications and how infrastructure is delivered, heightening the need for high speed broadband, widespread 5G and other digital capabilities. Governments must consider whether their current infrastructure plans respond sufficiently to these changing dynamics, and make amendments where necessary.

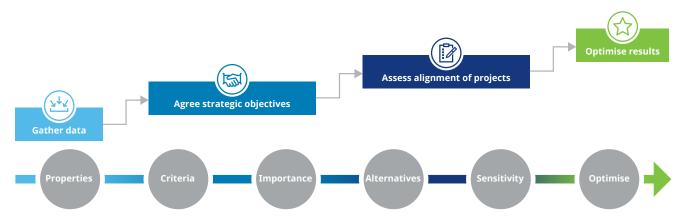
For any investment, there will be a clear need for speed, but proper preparation and design must remain. Rushing schemes could lead to failure or significant loss of effectiveness. One way to speed up infrastructure schemes more safely is to reduce or remove unnecessary impediments to growth. Cutting excessive bureaucracy, and simplifying or accelerating planning approvals and regulations, will prove beneficial, as long as plans fully reflect the impact of COVID-19 on the working environment.

All COVID-19 support and stimulus plans put considerable strain on public funding. It is therefore imperative that funds are spent effectively, in a targeted manner, with high emphasis on efficient operations. This should drive a focus on investing in the existing asset base, shoring up resilience, augmenting broader cross-sector economic impacts by developing vibrant precincts, and using technology to transform and de-risk delivery.

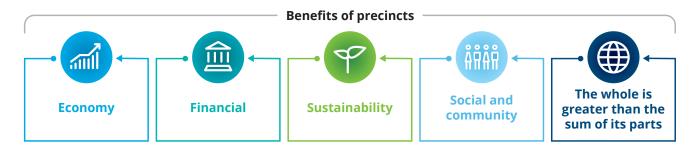
To heighten the impact of infrastructure as an economic stimulus, governments should:

1. Start with existing assets – Investment in optimizing the configuration and performance of existing infrastructure can deliver an impact quickly. It requires a robust asset management plan and strategy supported by data insights that can maximize potential. It is worth noting, however, that not all asset owners have a complete understanding of the current condition of their assets or the budget required to optimize cost against performance, and in those cases clearer information will need to be obtained for robust analysis.

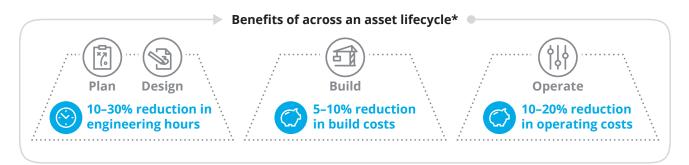
2. Choose and prioritize the right projects – The need for rapid results is no excuse for poor decisions or rushed planning. The long term negative impact of selecting the wrong projects far outweighs the potential short term benefits of acting in haste. A clear plan for project selection and prioritization is required to establish confidence in the process among all stakeholders. Through Deloitte's Prioritization Tool, we have mapped out the six key steps that should be considered. Each step builds on the data or information developed in the previous one. The process culminates in the 'Optimize' tab which provides a dynamic dashboard in which the investment package is reviewed and refined.



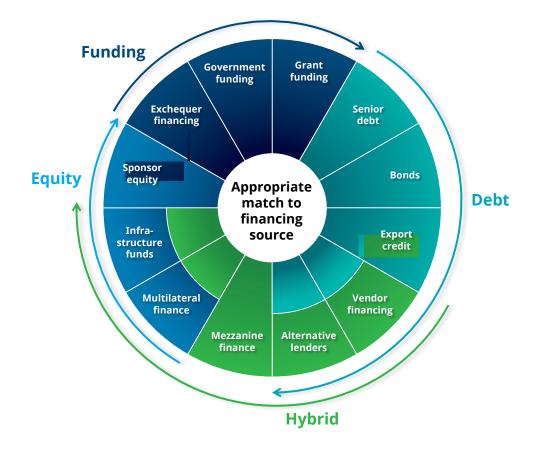
3. Consider local communities throughout – Looking at projects from the perspective of communities can help deliver much wider social and economic benefits. Such an approach requires consideration of the interactions between projects and people. Proper upfront planning and prioritization can help create platforms for immediate short-term stimulus in specific locations, while also laying the groundwork for future, related investments. The inclusion of digital and also less typical elements within the scope of these projects can broaden the range of potential partners and investors. While most property development investment is likely to be held back in current market conditions, governments can ensure projects have funding and are ready to begin once a broader economic recovery takes hold.



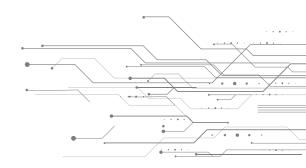
4. Digitally enable infrastructure delivery – The coronavirus pandemic has thrown a harsh spotlight on the potential risks of close human interaction. It is driving sectors of the economy to consider bringing digital technology further into service delivery, as the construction industry has been working on for some years. Given that sector's growing involvement of distinct partners and contractors, the push also came from an increasing need for transparency, better supply chain collaboration, insight sharing, process alignment and system integration. The next digital frontier is reusability and predictability, which requires a focus on constant improvement. By using such technology, short-term economic benefits include:



5. Utilize private sector resources – The pandemic has demonstrated how the skills, experience, finance and resources of the private sector can be harnessed by governments to deliver effective and efficient services to citizens. With government funding resources limited, and the required services and assets difficult to deliver, the case for private sector participation in asset and service delivery becomes ever stronger.



Conclusion



In the era of COVID-19, investment in infrastructure is a powerful, essential means of maintaining employment, ensuring businesses stay afloat and bolstering the productive capacity of economies worldwide.

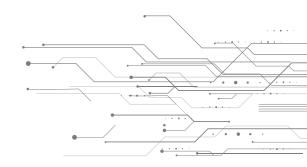
There are clear benefits to investing in an existing asset base, including heightening efficiency, strengthening resilience, augmenting cross-sector impact through community-based investment, and using technology to transform and de-risk delivery.

Furthermore, infrastructure presents an excellent platform to attract greater private sector participation across the entire delivery cycle, to the benefit of governments, the public and the assets involved.

Monetary policy alone will not be sufficient to stimulate economic growth. As governments catalyze infrastructure projects to create fiscal stimulus, it is important to remember:

- Design should be made efficient, and consider all potential delivery and financing models
- It is important to start with existing assets for 'quick wins' and short term stimulus
- Mega projects should continue but they will be slow to deliver additional benefits, so governments must remove bureaucracy, such as excessively complex planning approvals and procurement
- Infrastructure can also drive social outcomes, by improving productivity and also supporting important services. Taking a community-oriented approach enables broad benefits
- New ways of working mean essential assets now include digital and telecoms infrastructure. Technology will also help deliver and operate all infrastructure efficiently
- The private sector is keen to participate and has the skills, capacity and resources partnerships should be considered for all projects

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For more information on the suite of Deloitte Infrastructure services, please get in touch with us.



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