As society and public spaces reopen, facility management finds itself at a crossroad. Most facilities still need maintenance and fine-tuning to prepare for a full return to normal activity, while others require more serious upgrades to become functional and pandemic resilient.

Where FM professionals go from here depends on their personal grasp of existing assets and, ultimately, how the public sector decides to appropriate capital. Governments use a variety of funding techniques to construct, maintain and improve local facilities and systems. In the U.S., local and state governments may soon have access to federal funds through a federal infrastructure package which carves out billions of dollars for upgrades to school buildings and other public spaces.
Although the backdrop of infrastructure proposal is the coronavirus pandemic, this stimulus would provide organizations the capital to address future problems. Institutions must first secure the funding, then apply strategic foresight to implement facility treatments that address the remediation and prevent future virus risks through updates, including ventilation upgrades in classrooms, more window penetrations in public blocks like passageways, functionally adaptable room layouts that enable social distancing, state-of-the-art air conditioning that is dual mode, roof cavities that circulate air, structures and floor coverings that do not trap moisture and facility designs that allow for Internet of Things (IoT)-enabled education delivery.

A long-term financial plan that aligns these FM needs with the stimulus plan would most likely ensure additional funding, as it has for a number of cities and schools.

**ALLOCATION APPROACHES**

Traditionally, funding is allocated according to set formulas. For example, schools in the U.S. are eligible for funding based on the federal Title I formula, where districts are assessed according to four areas with a concentration on poverty — a key factor, as funds are allocated to ensure at-risk groups are not disadvantaged.

Various technological, legislative and social shifts have seen a cementation of the trend toward evidence-based funding applications for the infrastructure package. The ability to attract these infrastructure reserves requires a solid data story to demonstrate where these funds will be spent and what the impact will be 10 years from now. This is a proven technique where those with the best use of funds or, more bluntly, those that can substantiate the long-term benefits, as opposed to short-term splurge, will be the ones that see the stimulus windfalls.

When technology and policy are pointed in the same direction, it allows for a futuristic approach centered around governance and accountability, a true demonstration of where funds will be spent for inter-generational benefit. In other words, do not spend the funds without doing the homework; consider spending a portion of resources to get the metaphorical house in order before embarking on any facility improvements. There are agencies doing this today — presenting needs-based budgeting backed by evidence — and financiers are awarding them more than the slated stimulus amounts due to diligent, efficient planning.

**BALANCING THE BUDGETS**

Strategic asset management (SAM) is the proven methodology that gives ambassadors of infrastructure the ability to stretch limited capital budgets further, extend asset lifecycles and provide acceptable service to their communities without added spending.

SAM can help FMs optimize their spending. Rather than presenting applications that effectively say, “Grant me stimulus money so I can keep fixing failed assets,” SAM empowers FMs to say, “Strengthen me with stimulus money so I can stop more assets from failing.”

Once an asset — be that a building, a road or a pipe — reaches a certain point in its lifecycle, the cost to maintain or repair it increases and its service to users decreases. In the language of the quadrennial American Society of Civil Engineers (ASCE) Report Card, when assets reach the D grade or lower, things get dire, particularly when a bulk of assets reach this point at the same time. While in 2021, ASCE awarded a marginal improvement to C+ for the first time, there is still much work to do.

Assets do not exist for their own sake; they exist purely to provide the required service to users. When FMs understand the state of their assets and the service the community needs from them, they may make better decisions about which asset to treat, in what way, at what time. Every precious dollar is spent wisely, mindful of how today’s decisions affect these assets into the 20-year horizon. In short, SAM helps FM professionals get stimulus ready with data-driven stories while ensuring stimulus spend makes the biggest impact possible.

**EXPLAINING NEED**

The past year and a half moved the goalposts for FM professionals, as schools adapt to ever-changing distancing requirements, road operators grapple with massive reductions in commuter traffic and municipalities support countless small businesses to operate in a COVID-19-safe manner. It is likely that longer-term changes in community behavior (like more people working from home) will impact on asset income for years to come. Stimulus funding or no stimulus funding, it is essential for FMs and organizations to stretch the dollar further, reducing their long-term funding requirement.

Infrastructure projects are incredibly impactful when there is the need to reemploy, rebuild and reinspire. Stimulus funding must not just address degraded assets, but also forecast tomorrow’s complex needs. These decisions have never been more complicated or more important. More and more governments are demanding proof that the funds will deliver what communities so desperately require from them. SAM provides the story needed to convince those who control spending and investments that one facilities portfolio deserves stimulus funding over another.

This data-driven, forward-thinking burden of proof around asset management runs counter to the “fix when failing” mindset. FM professionals can learn a thing or two from the international community’s response to aging infrastructure. In Australia, for example, a paradigm has already emerged where organizations are expected to submit 25-year plans of asset performance and maturity, giving public decision-makers the data necessary to make informed investments.

The department of education in the Australian state of Tasmania faced a classic asset management challenge in recent years. Specifically, the FM team needed to maintain and preserve their portfolio of essential community facilities in a manner that ensured future risks to service delivery were managed, evaluated and mitigated. The department’s project was tested in 2020 when it was asked to
submit a COVID-19 stimulus funding request. The process the department went through mirrors the journey others will take in the coming years.

At the outset, the department wanted better data quality to objectively identify at-risk assets, as executive decision-makers started to demand data-driven strategies to inform investment decisions about the assets under their authority. To improve its visibility into the AUS$3 billion worth of assets, the department deployed a platform that enabled a targeted and efficient approach to asset management. With a new SAM platform, the department assessed all teaching spaces in granular detail, while administrative spaces were scored at a simple one through five overall score per space, given the department’s policy on prioritizing teaching spaces. This focused approach was further applied to the management of restrooms, specifically to ensure safety to students. Restrooms were assessed for anti-bullying, given that these areas are vulnerable to bullying-related incidents. These extra layers of assessment were essential in presenting a compelling, evidence-based story to the government when the department submitted its stimulus request. Altogether, the department introduced an evidence-based plan spanning 25 years and received additional funding of AUS$16 million in 2020 over four years for the work.

In 2021, the department was able to supply balanced budget scenarios to the state treasurer and premier, including COVID-19 resilient, functional upgrades that weaved into their future model. The department was able to demonstrate the impact of AUS$106 million in funding versus the formula based AUS$43 million funding. The result for the department was an additional AUS$100 million in funding to address the backdrop of the stimulus needs.

This stimulus package gave the FM team the opportunity to improve clarity, consistency and confidence in processes and ultimately advance asset management maturity. As a result, the department now has a clear picture of the assets they are responsible for, and how their decisions impact the community into the future. Going forward, the department can now provide decision-makers with accurate, evidence-based plans, removing political bias from project selection processes. Lastly, lifecycle scenarios now enable the department to optimize investments in education facilities based on current service provision and future utilization and occupancy.

PLATF O RM PREDICTORS

SAM is a journey. Mature organizations are well into this journey and closer to stimulus-ready, but regardless of where an FM portfolio is at with its strategic asset management roadmap, this is a journey that can start today.

Smaller institutions can draw on condition data at system level from a computerized maintenance management system (CMMS) systems to start, or simply a desktop exercise based on age and subject matter knowledge to present a best-known current case, to lay the foundation for funding that spurs maturation to modern levels. More mature agencies can begin modeling at component-level with a subsection of available data, get results into the hands of stakeholders, use these outputs to inform a strategic data improvement process and iterate from there. The goal is to have confidence that the data is painting a true picture, and that the information is powerful enough to show decision-makers where the money is best invested through a visual display of outcomes.

Now is the time to start. Before stimulus availability is snapped up, partner with experienced organizations with the platforms and knowledge to leapfrog this journey. These purpose-built platforms can cost a fraction of a portfolio’s value, increasing funding allocation and saving millions in inefficient asset repair.

The road to recovery after COVID-19 will likely be long and difficult, even with the federal infrastructure stimulus program. The pandemic fundamentally shifted the concept of place. But with this challenge comes the opportunity to create a more resilient and efficient future and define the globe’s infrastructure for the next generation. Governments do not merely want to return to normal. They want to reimagine what built environments look and feel like.

Before assets and infrastructure give way to decay, FM professionals have the chance to extend the window of optimization. They must first demonstrate long-term requirements and subsequent gaps as opposed to cataloging immediate needs and asset requests.

Ashay Prabhu is the vice president of strategic asset management at Dude Solutions and co-founder of Assetic. With more than 20 years’ experience in strategic asset management, he has led the development of condition algorithms, asset valuation methods, lifecycle prediction analytics and is passionate about applying this science to close the global infrastructure renewal gap. Ashay has a Directorship at the Asia Pacific Institute of Asset Management, is an adjunct professor of strategic asset management at Bond University, a Bachelor of Engineering (Hons), and is a chartered professional member of the Institution of Engineers Australia.