

## REFURBISHMENT

# Fostering innovation

Gregory J. Smith, president and CEO, InstarAGF Asset Management, calls for a procurement revolution to unlock much-needed funding



“There is a significant opportunity for innovation and city-building in making better and smarter use of our existing infrastructure”

Public entities around the world need more than \$8 trillion to fund social infrastructure projects through 2020, including educational and healthcare infrastructure and other public spaces and buildings.<sup>1</sup>

Social infrastructure underpins the civic and moral condition of our communities, making its state of repair and sufficiency central to our quality of life, economic productivity, and overall competitiveness. Investing in social infrastructure is proven to directly increase employment and is key to attracting and incubating the human capital and talent required to generate and sustain long-term growth.

In North America, where 80 percent of the population lives in urban hubs, much of our critical infrastructure earns a failing grade. A staggering amount of investment is needed to modernise essential services and structures for our 21st century society. Growing urban density, demographic change, technological advances, and environmental challenges have fundamentally altered the way we live and work, with implications for the livability and sustainability of our cities. At the same time, our cities are emerging as economic powerhouses that underpin our national competitiveness, with 20 percent of global GDP coming from 190 North American cities alone<sup>2</sup>, which makes investing in our urban infrastructure a strategic economic and social imperative.

While overall infrastructure quality drives a city’s performance against most measures, the state of our social infrastructure is a crucial determinant of urban success because of its extraordinary power to improve social conditions, shape economic opportunities and aspirations, and nurture a sense of place. Simply, high-quality social

infrastructure defines the character and essence of every great city and is a springboard for regional and national prosperity.

## SOCIAL INFRASTRUCTURE AT A CROSSROADS

While our communities and infrastructure needs have become increasingly complex, government funding for both infrastructure capital improvements and operations and maintenance has steadily dropped. Fifty years ago, local governments accounted for about 35 percent of all infrastructure spending. Today, they are responsible for more than 70 percent of infrastructure activity, but collect less than 10 percent of every tax dollar. With the overall infrastructure deficit in North America soaring into the trillions of dollars, and traditional sources of funding on the decline, our municipalities and core public institutions such as universities, schools and hospitals, collectively known as the MUSH sector, are at a dire crossroads.

Although investment is needed across all infrastructure categories, the social infrastructure gap has a unique and undeniably human impact. More than 14 million children in the US attend deteriorating public schools requiring maintenance and repairs totalling an estimated \$500 billion.<sup>3</sup> More than two-thirds of hospitals are deferring badly needed capital projects<sup>4</sup>, leaving buildings in a poor state of repair that threatens access to and quality of care. Many other public buildings are reaching the end of their useful lives. Higher educational institutions, faced with a 40 percent decline in state funding over the last three decades, now require significant investment to keep pace with enrollment, address ballooning capital backlogs, and replace ageing campus buildings.

Most MUSH institutions are struggling to balance necessity against opportunity in prioritising spending on their *raison d'être* — delivering and safeguarding vital public services such as education or healthcare — and the crumbling built or physical environments in which they serve their constituents. These institutions are critical contributors to our socioeconomic fabric, defining our future economic opportunities and promoting social progress and inclusiveness. They are the very backbone of our society yet lack the revenue tools and innovative capacity to rebuild, modernise and expand infrastructure.

#### BRINGING INNOVATION TO INFRASTRUCTURE RENEWAL

Infrastructure is a story of evolution in response to emerging needs, shifting patterns of use, new technologies and physical surroundings. In a funding-constrained environment where our infrastructure challenges are unprecedentedly complex, tremendous creativity is demanded in the design, financing and delivery of core infrastructure projects for the 21st century. We need to think differently about how we do things. And we need to think big about what it is possible to achieve.

Steve Jobs once said that innovation is what distinguishes between a leader and a follower. In the infrastructure context, innovation means many different things, including new ways of financing or managing assets, such as through public-private partnerships (P3s) or new contractual and alternative financing frameworks, including concession-like structures or green bonds, among others. Innovation extends to finding new ways of engaging with stakeholders, which can directly impact infrastructure investment outcomes for communities and investors. It also extends to new ways of driving value from an asset, whether by applying new technology or joining forces with complementary partners.

While the price tag associated with infrastructure renewal is enormous, our

solutions do not necessarily need to be similarly large in scope. Indeed, we simply do not have the time or resources to produce all the infrastructure North America

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needs through conventional or large-scale engineering solutions. Instead, we need to focus on becoming more nimble, more sustainable and more inventive. As the urban activist Jane Jacobs wrote in 1961 in *The Death and Life of Great American Cities*, old ideas can sometimes use new buildings, but new ideas must use old buildings. Fifty-five years later, it is increasingly apparent that there is a significant opportunity for innovation and city-building in making better and smarter use of our existing infrastructure. Effectively, by doing old things in new ways we can conceive of completely new approaches never before considered. Over the next decade, the refurbishment and repurposing of existing infrastructure promises to be a major investment theme and conduit for economic and social progress.

#### THINKING DIFFERENTLY: UNLOCKING VALUE FOR MUSH INSTITUTIONS

For MUSH institutions, non-traditional funding approaches offer an opportunity to turn physical, non-core assets such as parking lots or power systems into cash that can be re-invested in the institution's core purpose, such as academic or health research, or scholarships.

At many higher educational institutions, for example, heating and cooling systems along with lighting represent a major operating cost. On average, these systems are also nearing the end of their useful lives. With millions of dollars in deferred maintenance in many cases, these universities and colleges need long-term solutions that do not rely on state funding or tuition increases. InstarAGF is working with partner Johnson Controls to help MUSH institutions better manage their central utility or district energy systems, offering a long-term, fixed-price contract or concession that delivers an immediate upfront payment and material savings through lower utility costs, energy conservation and sustainability improvements over the duration of the contract. Importantly, the MUSH institution retains ownership of its energy system, but transfers the entire risk of funding and operating it to an industry leader. As a result, the institution gains new, state-of-the-art energy efficient infrastructure and technology along with cost certainty, performance guarantees and customer service commitments.

John Maynard Keynes observed that the difficulty with innovation lies not so much in developing new ideas as in escaping from old ones. Approximately one-third of all colleges and universities in the US are in significantly weaker financial condition than they were several years ago: more liabilities, higher debt service costs and increasing expenses.<sup>5</sup> If this trend continues, these institutions will ultimately be unable to meet the diverse and evolving needs of students, which has clear consequences for long-term innovation and economic

growth. By escaping from old ideas to use their hard assets differently, universities and colleges can free up badly needed capital, re-invest in educational excellence, and sustainably position for the future. Apart from the higher education sector, this value proposition is equally compelling for other MUSH institutions, such as hospitals and government buildings.

### THINKING BIG: RE-IMAGINING THE URBAN LANDSCAPE

There is also an opportunity to enhance the quality of our social infrastructure and overall urban experience by repurposing existing buildings, structures and other forms of infrastructure in innovative ways.

An example in Canada is a public-private partnership in British Columbia to renovate, revitalise, convert and maintain 13 century-old historic buildings in downtown Vancouver into new social housing facilities. The project, the first of its kind in Canada for social housing, is restoring and preserving the heritage features of the buildings, thereby beautifying the streetscape, and delivering safe, affordable and energy-efficient accommodation for individuals at risk of homelessness. The project is also providing jobs and skills development and training opportunities for local residents.

Similarly, the athletes' village built for the 2015 Pan American Games in Toronto, the first hybrid infrastructure/real estate P3 in Canada, is now being converted into a mixed-use community with affordable housing, retail condominiums, family and Aboriginal health community centres, and student residences for a local college. This project has adopted ideas from other leading urban revitalisation initiatives, including incorporating high-speed broadband access and promoting intermodal connectivity with a new street-car line and a pedestrian-friendly linkage of roads, bike paths and public spaces that weaves this new neighbourhood into adjacent communities.

In the US, the Atlanta BeltLine, a former 22-mile railway corridor circling downtown Atlanta, Georgia, is among the country's largest and most wide-ranging urban redevelopment programmes. Using existing rail track easements, this sustainable redevelopment project is providing a network of public parks, multi-use trails, transit and affordable housing in formerly industrial areas where significant parcels of land were once underutilised. At its core, the Atlanta BeltLine is a transportation programme that will eventually provide first- and last-mile connectivity to key regional economic and activity centres within the metropolitan Atlanta region, while helping to reduce economic and cultural barriers.

These three projects are excellent case studies for how innovative social infrastructure renewal contributes to "placemaking": the re-imagining and re-invention of public spaces to promote better urban design and fresh patterns of use that strengthen and preserve quality of life and generate tangible socio-economic opportunities.<sup>6</sup> These projects also underline the vital role of stakeholder engagement in infrastructure development, including the value of allowing local citizens to have a say in the planning and management of a project. Regardless of how much a project may benefit a city, its perceived value and success relies in large part on whether it has stakeholder support. As a result, infrastructure development demands comprehensive, transparent communication between governments, the private sector and the citizens who actually use the infrastructure and services. Above all, innovation is a product of collaboration. To quote Henry Ford, if everyone is moving forward together, then success takes care of itself.

### THE POWER OF INFRASTRUCTURE INVESTMENT

Infrastructure touches every aspect of how we live, which makes investing in it

an economic and social priority. Every 1 percent increase in infrastructure spending in North America is estimated to have an economic multiplier effect of up to 1.7 times<sup>7</sup>, thereby amplifying our overall productive capacity and competitiveness, creating jobs and enabling social integration.

Fundamentally, infrastructure investment is about empowering people, with social infrastructure investments in particular – including in education, health-care, culture, recreation, and housing – setting the stage for our cities to grow and lead. And getting our cities and infrastructure right in North America has important implications beyond our borders, as global urbanisation is following our trajectory but on a faster and larger scale, with the equivalent of one new city of 1 million people being created every five days until 2050.<sup>8</sup>

How we finance, develop and deliver our social infrastructure directly impacts the civic condition and economic sustainability of our cities. The urban leaders of the 21st century will be those that approach infrastructure strategically and who are willing to tear up old blueprints and open the door to change. The ability of the public and private sectors to collaborate and innovate – and the choices we make today – will determine the legacy we leave and whether our communities and public institutions will thrive, or fail, in the future. ■

1. McKinsey Global Institute, 2016.
2. Urban World: Mapping the Economic Power of Cities, McKinsey Global Institute, March 2011.
3. Fostering a Larger-Private Sector Role in the United States, AECOM, June 2013.
4. Ibid.
5. The Financially Sustainable University, Bain & Company Inc., 2012.
6. Project for Public Spaces.
7. Canada's Economic Action Plan: A Seventh Report to Canadians, Department of Finance Canada, January 2011, and Standard & Poor's, January 2015.
8. Global Change Magazine, March 2012.

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