



PUBLIC-PRIVATE PARTNERSHIPS: A CATALYST FOR REGENERATIVE URBAN DEVELOPMENT

Priority Champions Urban Development

KEARNEY

HOW CITIES WITH A "COLLABORATION-FIRST" APPROACH TO PPPS HAVE AN ADVANTAGE IN AD-DRESSING A NEW GENERATION OF URBAN CHALLENGES

A PIVOTAL MOMENT FOR CITIES

The moment is ripe for a fundamental change in how city planning is approached, as the world continues to become more urbanized. It's estimated that by 2050, about 70% of the world's population will live in metropolitan areas, compared with today's figure of 57%. Throughout the whole of recorded history, cities have been hubs of innovation and relative prosperity. This is truer than ever today. Cities now account for 80% of global gross domestic product (GDP).

Yet this is also a period of growing challenges for cities everywhere (see below). As metros continue to attract new residents, they also face an increasingly complex array of interconnected threats that can seem insoluble as the scale of human need grows – and as ecological stresses such as extreme heat and storm activity further intensify. \Rightarrow



SOCIAL INEQUALITY

According to the UN, the number of people living in slums will grow to **3 billion** by 2050.



CONGESTION STRESS

The Organisation for Economic Co-operation and Developement predicts urban passenger transport demands will **double** by 2050 from 2015 levels.



URBAN POPULATION

57% of the world's population lives in urban areas, a figure projected to rise to **70%** by 2050.



CLIMATE CRISIS

Sea levels may rise up to **2 meters** by 2100, impacting **570 coastal cities.**



POLLUTION AND PUBLIC HEALTH

Premature death due to air pollution could exceed **3.6 million** by 2050.



RESOURCES CONSTRAINTS AND INEFFICIENCY

Material consumption by cities will grow from 40 billion tons in 2010 to about **90 billion** tons by 2050.

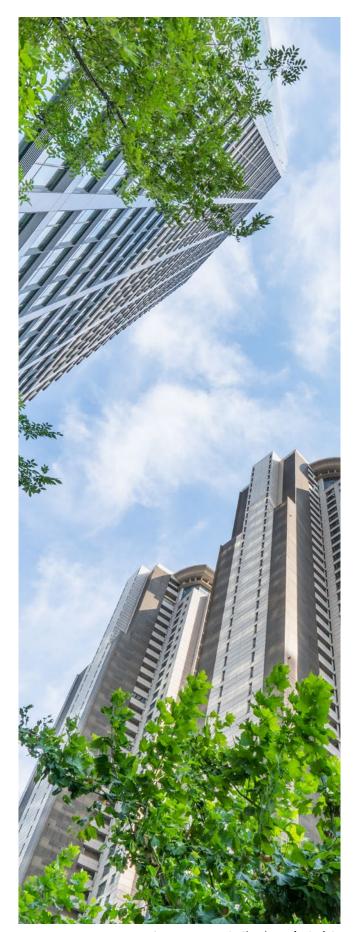
→ These and related challenges threaten the core value proposition that cities offer to current and prospective residents. Metro areas historically derive their prosperity by providing opportunities that are unavailable elsewhere – they thrive by attracting talent, capital and innovation. If they cannot successfully manage the challenges they face, they will become less capable of doing this.

In addition, metros can play a significant role in alleviating some of these same pressures. By virtue of their massive concentrations of human beings and industry, they contribute substantially to the world's ecological burdens. Nonetheless, it's also worth noting that in some important respects, the dense footprints of cities can represent a relatively sustainable mode of settlement, with a higher reliance on public transportation and a lower amount of land usage per resident. (For example, UK carbon emissions per capita are 37% higher in rural areas compared with big cities such as London, driven by transport emissions per capita, which are 66% higher away from cities, while US energy consumption per capita is 13% to 20% higher in rural areas than it is in cities.)

Cities currently consume approximately 78% of the world's energy resources. They also produce over 60% of the world's greenhouse gas emissions, and global waste (primarily from cities) is projected to increase by 70% by 2050. Therefore, although cities have a high level of exposure to many of the gravest threats of a warming world, they also have a responsibility – and an opportunity – to lead the way in seeking solutions.

Developing these solutions will require cities to unleash their creative potential to adapt and innovate. This will offer a unique opportunity for cities to reevaluate investment strategies, as they will require significant funding in infrastructure and sustainable development to address the pressing challenges they face.

Emerging markets alone are expected to need around \$30 trillion by 2030 to adapt to climate change, including improvements in infrastructure such as water and sanitation systems, energy grids, transport networks and housing. Worldwide, an estimated \$94 trillion will be required by 2040 to make urban infrastructure more sustainable.



In some respects, the dense footprints of cities can represent a relatively sustainable mode of settlement.

A REGENERATIVE APPROACH AND THE ROLE OF "COLLABORATION-FIRST" PPPS

CITIES NEED TO MANAGE THESE INVESTMENTS holistically to ensure a viable future. This calls for a systems-minded approach, drawing on perspectives, expertise and resources across the full range of metropolitan stakeholders. This strategy would avoid treating discrete challenges in isolation, instead addressing them through what we refer to as a "regenerative" approach.

Much has been written on what cities can do, and are already doing, to address sustainability and climate challenges. However, we posit that Band-Aid solutions are not sufficient for global cities to tackle the sustainability challenges of the future. While cities can, and increasingly do, implement individual solutions like waste management efforts, urban cooling initiatives and water-saving measures, we believe in a more comprehensive approach to address the underlying challenges.

As opposed to implementing climate solutions piecemeal, cities should address institutional frameworks

to generate a virtuous cycle of innovation and institutional reform – in other words, take a more regenerative and systems-oriented approach to sustainability. This approach requires three elements (see below).

Complex urban challenges demand innovative solutions and large-scale investments in both social and economic infrastructure. Cities will need to evolve innovative approaches to these large financial commitments by developing alternative financing structures to secure the necessary levels of private and public financing.

While the approach emphasizes the contributions of citizens, human capital, technology and innovation to urban regeneration, it delves into the specific role of public-private partnerships (PPPs) and in particular how a "collaboration-first" approach – as opposed to a more purely transactional one – can position cities for regenerative success.



Collaborate to regenerate

Collaborative decisionmaking, integrated governance, and publicprivate partnerships – engaging a multitude of actors to jointly address sustainability issues



Position the next generation to prosper

Public participation in sustainability programs to incorporate citizens' insights from early stages of ideation and design, allowing the next generation of talent to be cultivated through participatory action



Solve for tomorrow, with the best thinking of today

Integrated sustainable city strategies, proactively prioritizing initiatives and projects based on materiality and rigorous data analyses while deploying the latest innovative technological solutions

REIMAGINING PPPS: THE "COLLABORATION-FIRST" WAY

PPPS ARE ANY MEDIUM-TERM TO LONG-TERM contract between a governmental body and a private entity for the delivery of a public service or infrastructure project, in which the private partner bears significant risk and management responsibility and remuneration is linked to performance.

Depending on the level of involvement of the private party, PPPs can take many different shapes and forms – from design-and-build arrangements to operations-and-maintenance agreements, and anything in between. However, despite the flexibility and relevance of this model, many PPPs fall short of achieving their intended goals. That's because they face multiple potential problems, any one of which could diminish their effectiveness.

Following is a non-exhaustive list of those hurdles:

Inadequate feasibility studies and planning.

Projects may be chosen without a clear understanding of their financial, technical or operational viability.

Inappropriate risk allocation among PPP actors.

A private partner might lack the expertise or resources to handle certain risks, leading to cost overruns or delays.

Poor contract management and governance.

Contracts might not allow for adjustments in response to unforeseen circumstances, or there may be a lack of clear guidelines for measuring performance.

Stakeholder opposition and public resistance.

There can sometimes be a failure to engage and communicate with local communities and affected parties.

Sub-national specific risks.

Because of their smaller size and more restricted fiscal base, municipal governments may have limited project development and procurement capacity and therefore may not be in a position to benefit from the same credit ratings as central governments.



PPPs can take many different shapes and forms.

→ Moreover, such PPP-specific risks will likely be exacerbated by the challenges that cities will face, as described earlier. For example, increasing levels of urbanization coupled with social inequality could lead to stronger public resistance. In addition, climate risks and extreme weather events will inevitably amplify the consequences of inadequate feasibility studies and planning or further complicate risk calculations. Finally, extreme events will become more frequent and stronger in nature, hence minimizing the time available to perform proper planning.

Given the escalating urban challenges and ecological pressures that cities will confront, a novel model is required to address the risks described above – a model that places collaboration and long-term relationship focus at its core. We refer to this model as the "collaboration-first PPP." A collaboration-first PPP is one in which both the public and private sectors work together with a strong sense of shared objectives, mutual trust and cooperation throughout the project life cycle.

In traditional PPPs, the relationship tends to be more transactional, with each party focusing on fulfilling their contractual obligations. The emphasis is often on risk transfer, with limited flexibility for adapting to unforeseen changes or challenges.

In contrast, a collaboration-first PPP emphasizes shared responsibilities and long-term commitments, making it more resilient amid the many changes, complexities and challenges that may arise over the project's duration. Moreover, this model leverages and involves a wider range of actors compared with traditional PPPs, including academia, citizens and entities from the third sector, such as nongovernmental organizations, foundations and cooperatives.

A collaboration-first PPP emphasizes shared objectives and responsibilities.



→ In the context of urban challenges and ecological pressures, therefore, collaboration-first PPPs will need to establish clear elements that can facilitate cooperation, trust, synergy and coordination among partners. Accordingly, we have identified six success factors that are instrumental in unlocking efficient and effective collaboration among partners (see below):

SIX SUCCESS FACTORS FOR "COLLABORATION-FIRST" PUBLIC-PRIVATE PARTNERSHIPS

Joint planning & implementation	2 Effective risk management	3 Performance- based incentives	4 Collaborative governance	5 Flexibility	6 Long-term relationship focus
Key stakeholders are identified and involved in the project through- out its entire lifecycle	Project risks are properly shared across partners, depending on their ability to handle them	Contracts include incentives that reward actors for achieving project milestones or exceeding per- formance targets	Partnership envisions clear oversight mech- anisms, with regular meetings and frictionless communication	Contracts can be adjusted easily and rapidly, if issues arise	Relationship is not merely transactional, and actors aim to build a long- term relationship with each other

Joint planning and implementation. Empowers all relevant actors, from the public and private sectors to civil society and the general public, to be involved in shaping solutions

Effective risk management. Guarantees challenges and uncertainties are properly managed and don't negatively affect the partnership

Performance-based incentives. Help partners work toward the same targets, fostering a sense of shared mission and success

Collaborative governance. Ensures that trust and commitment are built among partners through open communication and regular interactions

Flexibility. Guarantees the partnership will be able to survive changing circumstances and future challenges

Long-term relationship focus. Ensures actors remain committed to the partnership and invested in the success of the project throughout its entire life cycle As a result of these six factors, collaboration-first PPPs will be able to deliver the following benefits:

Improved project outcomes. The more cooperative nature of this PPP model leads to better problem-solving, resulting in improved efficiency, innovation and overall performance against sustainability challenges.

Reduced disputes. By emphasizing shared goals across a multitude of stakeholders, including the general public, such partnerships reduce the likelihood of political setback, delays or cost overruns.

Enhanced value for money. The flexibility and shared responsibility of this model enable more efficient allocation of resources, leading to higher value for taxpayers and end users.

To ground these concepts in practical examples, the following case studies explore how the six success factors can be instrumental in determining the failure or success of any given project.

→ FAILURE CASE STUDY: LONDON UNDERGROUND

The PPP for the London Underground was intended to modernize the London tube system. While the Underground's assets stayed in public hands, two private companies – Metronet and Tube Lines – were contracted to carry out the work. However, in 2007, the PPP failed, and its liabilities were underwritten by the government, leaving British taxpayers with losses estimated in billions of pounds. The main issues can be reconnected to public opposition, lack of cooperation and trust between stakeholders, and lack of effective contractual incentives.

For starters, the London mayor and his transport commissioner sought judicial review of the government's plans to carry out the work on the tube through a PPP, as they believe the PPP was "prohibitively expensive, fatally flawed, and dangerous." On top of this, the general public had mixed feelings about the proposed PPP; in fact, people were largely opposed to any type of privatization of public assets and this "fueled widespread opposition to opening up the last major publicly owned transport provider to the private sector."

Furthermore, Metronet's five shareholders also supplied most of the construction materials. As such, in their roles as suppliers, the shareholders had power over the scope of work, and Metronet's management was unable to incentivize suppliers to perform their roles in line with its own interests.

Lastly, the antagonistic environment created by the mayor, along with the weak management and oversight

of the project, created an atmosphere in which there was little cooperation between Metronet and Tube Lines. Eventually, this lack of cooperation and trust damaged the effectiveness of the PPP project.

SUCCESS CASE STUDY: THE DAKAR-DIAMNIADIO TOLL ROAD

Senegal sought to develop a toll road to better integrate its densely populated capital with the rest of the country and reduce congestion and travel times. Thanks in part to its collaboration-first design, the project led to multiple positive results: commuters save three hours per day, road safety and overall infrastructure quality have improved, and economic development is sprouting up all along the route.

The project's success hinged on diligent efforts toward consensus-building as well as a high level of long-term commitment on the part of the concessionaire, Eiffage Group. Specifically, the Public–Private Infrastructure Advisory Facility (PPIAF) approved a \$250,200 grant to the national government to organize and pay for seminars discussing the potential benefits of the projects, and to develop planning options for the road itself.

Thanks to this effort, the country's first toll road was accepted by the population. Moreover, Eiffage Group is one of Europe's leading construction and toll-road operating companies, with a long history of engagement in Senegal, and its involvement helped ensure that the road was constructed to a high standard, on time and within budget.

Conclusion

As described earlier, a collaboration-first PPP model relies on specific success factors to address traditional partnership risks, as well as the sustainability challenges that more cities around the world are facing.

This new model will need to be flexible to accommodate unpredictable events, such as natural disasters or shifts in political sentiment. It will also need to be supple enough to leverage multiple stakeholders' inputs, perspectives and capabilities to maximize the odds of project success.

However, applying such a model and tailoring it to the specificities of each city can create

multiple hurdles, especially in the context of urban challenges. As an example, involving a wider range of stakeholders to gather inputs and obtain buy-in will inevitably extend the planning exercise, which will translate into higher costs for the project. Moreover, climate-related risks are often difficult to predict and mitigate and will need to be distributed effectively across actors, resulting in additional complexity.

Nonetheless, given the urgency of the challenges, cities will need to have the foresight and boldness to experiment, tailoring the model as needed, while also deriving lessons and ideas from each other's experience.

CONCLAVE DISCUSSION

FRAMING QUESTIONS AROUND COLLABORATION-FIRST PPPS

- 1. How can a collaboration-first PPP model embed sustainability challenges, such as extreme events due to climate change, into its structure without disregarding them as "force majeure" events with consequences that fall completely on the public-sector actor?
- 2. What should be done at a government level to shield collaboration-first PPPs from political pressures? (For example, since politicians are elected for a limited time, they might rush PPPs to showcase results to the public, preventing full realization of PPPs' benefits or even damaging the partnership.)
- 3. What are the best practices that cities and municipal governments can adopt to leverage collaboration-first PPPs as a mean to develop jobs and enhance skills of the local population? (For example, importing key expertise transferring knowledge from international contractors and local workers)
- 4. Given the relevance of the collaboration-first PPP model, what should be done at government level to ease the formation of such partnerships? (For example, reducing bureaucracy or enhancing the speed of procurement)
- 5. What factors could hinder the formation of such partnerships or drastically reduce their effectiveness?
- 6. How can advancements in technology and centricity of citizens support the development and effectiveness of collaboration-first PPPs? What other factors could propel this model?
- 7. What role should international organizations play in promoting such models? Would the creation of a "toolkit" or the development of a repository of success stories help push this model? (For example, current efforts from WAPPP and UNECE)

FRAMING QUESTIONS AROUND REGENERATIVE CITIES

- 8. Beyond collaboration-first PPPs, what other factors are instrumental in evolving cities toward a regenerative state and enhancing their livability? (For example, technology, innovation, talent and citizen-centricity)
- 9. What factors could instead slow down this evolution? (For example, the history of the city: mobility in Rome will always be an issue given the thousands of years of history that overlap and hinder the presence of proper infrastructure, such as streets and metros.)
- 10. What financing solutions, products and financiers (for example, NGOs or endowment funds) could be used to boost urban development and build sustainability infrastructure within cities?

FUTURE INVESTMENT INITIATIVE (FII) INSTITUTE

is a global non-profit foundation with an investment arm and one agenda: Impact on Humanity. Global, inclusive, and driven by data, we foster great minds from around the world and turn ideas into tangible solutions and actions in four critical areas: Artificial Intelligence (AI) and Robotics, Education, Healthcare and Sustainability. We are in the right place at the right time, when decision-makers, investors and an engaged generation of youth come together in aspiration, energized and ready for change.

We harness that energy into three pillars: THINK, XCHANGE, ACT. Our THINK pillar empowers the world's brightest minds to identify technological solutions to the most pressing issues facing humanity. Our XCHANGE pillar builds inclusive platforms for international dialogue, knowledge-sharing and partnership. Our ACT pillar curates and invests directly in the technologies of the future to secure sustainable real-world solutions. Join us to own, cocreate and actualize a brighter, more sustainable future for humanity. \leftarrow

THE FILINSTITUTE

is guided in all it does by a strong purpose, vision and mission.

"Enabling a brighter future for humanity"

"Bringing together the brightest minds and most promising solutions to serve humanity"

"Creating a purposeful present, promising future"



BOARD OF TRUSTEES



MR. RICHARD ATTIAS CEO FII Institute



PROFESSOR TONY CHAN Former President of KAUST



DR. PETER H. DIAMANDIS Founder X-Prize Foundation & Singularity University



H.E. YASIR AL-RUMAYYAN Governor PIF, Chairman Saudi Aramco



H.E. MOHAMMED AL ABBAR Founder & Chairman EMAAR properties



PROFESSOR ADAH ALMUTAIRI Professor Pharmaceutical Chemistry UCSD



HRH PRINCESS REEMA BINT BANDAR KSA ambassador to the USA



H.E. MATTEO RENZI Italian senator for Florence (former PM)



NOEL QUINN Former CEO of HSBC Group

FII-I has three pillars to deliver its mission: THINK, ACT and XCHANGE

🔆 1 FII-I THINK

Identify societal challenges and current inhibitors. Curate the brightest ideas to address societal issues

Catalyze innovation and initiatives by mobilizing partners and resources

3 FII-I XCHANGE Create platforms for live discussions on the future of humanity. Share knowledge, stories and publications with different stakeholders

IMPRINT

FUTURE INVESTMENT INITIATIVE INSTITUTE

PUBLISHER

Future Investment Initiative Institute 3884 Alakheel District Unit 9 Riyadh 12382 - 6613 Kingdom of Saudi Arabia

CONTACT For clarifications

and inquiries, kindly email: info@fii-institute.org





For details on how to become a member, please visit fii-institute.org/membership/

