



Resilient Cities
The key to the future



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Foreword

“ Whilst urban visions and design solutions abound, what is often lacking is a programme for their timely and efficient implementation through a coordinated framework of deliverable and financeable legal structures. ”

Mukhtiar Tanda,
Partner

We have all become increasingly aware of the scale and pace at which urbanisation is taking place and of the impact this will have on the planet.

This phenomenon is posing state and city authorities with most if not all of the major challenges facing mankind: food and energy security; water; air quality; creating liveable and sustainable places able to attract and retain increasingly mobile human and financial capital. Their response to these herculean tasks will define whether our cities of the future will thrive or whether they will require extensive (and expensive) retrofitting to undo the mistakes of the past.

In this paper we consider some of the issues which need to be addressed to enable timely and efficient delivery of the appropriate space and environment required.

As shown by our 'City Key', the various phases and interventions involved in urbanisation projects are complex and interrelated. To achieve successful outcomes, which are viable in the long term, there needs to be a coordinated (and often multidisciplinary) approach across all development phases to join the various pieces of the urban jigsaw together.

In particular, it is unlikely that these challenges can be met through public efforts alone. There will inevitably need to be effective engagement with the private sector to draw in their expertise and financial capital. Whether any particular urban project is successfully able to achieve this will greatly depend upon the right environment existing for such engagement to take place: successful cities will be those which operate in a context which builds investor confidence and are thereby able to attract and retain long term investment for future growth and renewal.

Whilst there is no single solution to the range of the challenges being faced by our cities, it is equally clear that the adoption of a piecemeal approach to the urban challenge will only result in poor outcomes which are not resilient in the long term.

I hope that you find this paper interesting and thought provoking.

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Growth of cities

At a glance

Key statistics to set the scene



in the next two decades 5.5m people per month will migrate to urban areas



more than 50% of the world's population live in 2% of the world's land



30

today the world's 30 largest cities measured by GDP account for 43% of global economic output

3bn

by 2050 a further 3bn people will move into cities

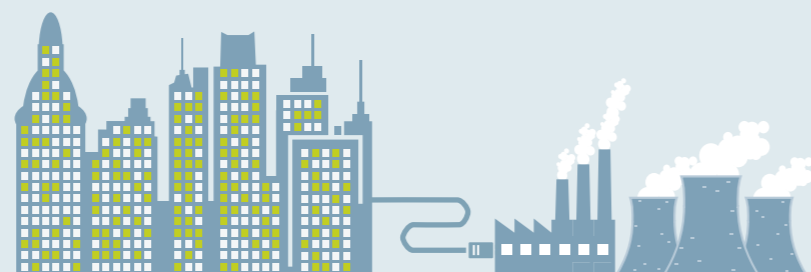
\$350tn

cities will have to spend \$350tn (or 7 times global GDP) in the next 30 years on urban infrastructure



x3

global use of water will triple by 2050



cities consume 75% of the world's energy and are responsible for 80% of all greenhouse gas emissions

Unlocking cities

Our 'City Key'

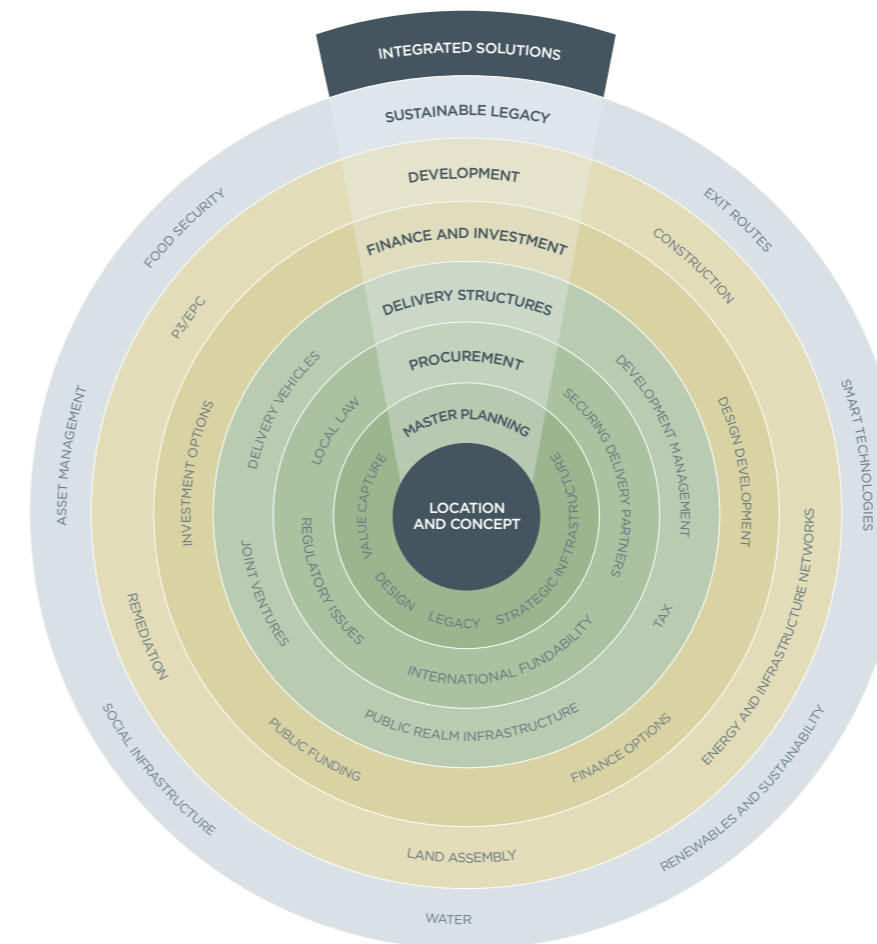
At BLP we take a holistic, cross-disciplinary and integrated approach to urbanisation projects. We recognise the significance of each element in a project, its inter-relationship to the other aspects (including to the other professional disciplines involved) and its importance to the overall success of the project.

Seamless strategic thinking is key to ensuring that projects deliver a sustainable legacy for the future.

Integrated solutions

Our thinking is based on years of experience as leaders in the real estate and infrastructure sectors. Moreover we bring a completely fresh approach to legal consulting in this area. We deliver, with our partners, comprehensive strategic coordination and advice from the inception of urbanisation projects that aligns with our client's business aims.

“By 2050, global urban population will double; built up areas will treble.”
World Bank 2010



Resilient cities

Attracting investment

Cities offer the promise of a better life for millions across the world. It is widely accepted that people who live in cities are by and large better off than their rural counterparts and that cities often perform far better economically than their home nations.

But urbanisation poses most if not all of the major questions facing mankind: from risks relating to security of water, energy and food supply through to the challenges of attracting talent and business, managing demographics, provision of infrastructure (affordable housing, health, education and transport) and digital infrastructure (IT and telecoms). All of these are having to be tackled whilst also addressing air quality and climate change issues. These challenges are constants that apply irrespective of where in the world urbanisation is taking place.

\$130tn

will be spent on construction over the next two decades

While urban growth is, in most cases, a local organic affair in which the goal of policy intervention is to improve quality and/or productivity, it is, in other cases, an inorganic growth in which policy may intervene to bring the benefits of city development to areas that would otherwise lack it.

In a century of intense competition between cities (especially to bring in and retain talent), the biggest issue facing them is attracting investment and, even better, foreign investment to fund renewal and growth. Even where urbanisation is state funded, wise governments will want to ensure they are investing in a sustainable future that will stimulate the economy and enhance GDP.

There are as many examples of failing and underperforming cities as there are of star performers and some famous names have run up debt way beyond their means or have encountered bottlenecks - so what makes the difference?

“
In a century of intense competition between cities, the biggest issue facing them is attracting investment.”

Resilience

The key determinant of whether a city can attract and retain investment (both in terms of financial capital as well as human resources and talent) is how resilient it is: how is the long term investment risk viewed from a combined legal, financial, environmental and cultural perspective?

In addition to a solid business case and suitable legal structures being put in place, key determinants of resilience will become increasingly relevant when assessing a city's attractiveness to business investors and human capital. These will include:

- political stability and rule of law
- reliable legal landscape
- robustness of civic governance structures
- resilience of urban strategies and frameworks that protect long term investment and land use
- security of technology, food and utilities/energy supply
- delivery models which promote timely development with effective partnering
- strategic delivery and renewal of economic and social infrastructure
- the sociocultural 'fit' between cities and the people for whom they are built

Decisions in relation to such key determinants will involve consideration of location, land assembly, markets, demographics and the demands of young and aging populations, affordable housing, strategic infrastructure, layout, public realm and affordability issues. These will all contribute to

the success of the enterprise and ultimately to what sort of place is created. Early focus on the key determinants of the likely resilience of a city will generate metrics that radically improve the chances of success.

Ultimately, cities should be viewed as an emerging asset class. If they are to compete effectively in financial markets, appropriate financial performance indicators will need to be developed, based on trusted data in order to attract long term institutional investment.

We need more cities as well as better cities. Delivering renewal and growth of cities is of such complexity that it requires integrated and planned advice both in strategy and in the detail.

All these considerations are rooted in the need for up-to-date knowledge and technique, international best practice as well as clear national and local laws, tailored contractual frameworks and good administration.

The pace of global urbanisation is undisputed, presenting significant opportunities to investors and commercial consultancies which have the relevant skills, experience and reach. Whilst opportunities abound, we rarely see integrated planning at the inception of projects. This is unfortunate as it is precisely at the inception of the project when integrated advice is most needed, particularly if investment to deliver key infrastructure is to be secured.

“
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Successful cities

Joined-up thinking

Realising the vision of a successful city means facing challenges that are environmental, economic and socio-cultural in nature. These elements need to come together to create a sustainable city, providing a dynamic economy, improved living standards and liveable space with a sense of community and cohesion. In order for this to happen, an approach is needed to link the many structures and concepts, which individually cannot achieve the whole but, when brought together in a strategically coordinated manner, can deliver the desired result. Ultimately, successful cities are those that match their inhabitants' economic and socio-cultural aspirations with a pleasant, secure and clean space which provides a real sense of community.

There are many examples of city developments which have not been considered successful or which have stalled for various reasons. The principal challenge is how best to manage ambitious plans and ensure that, from the outset, there is a clear vision and programme with regard to how they are to be delivered in an economically viable format (both as regards upfront finance requirements as well as ensuring outputs which are affordable for the inhabitants).

A holistic approach needs to be adopted throughout the development delivery cycle. This includes sustainable design (incorporating energy production, use, resource conservation and recycling, and inter-connectivity between transport and land), smart design (to allow for latest development of digital technologies in IT and telecoms) and sustainable building practices (from materials and standards used to local sourcing where possible). Such an approach will ultimately lead to the delivery of a city that is economically viable and resilient as well as affordable for people.

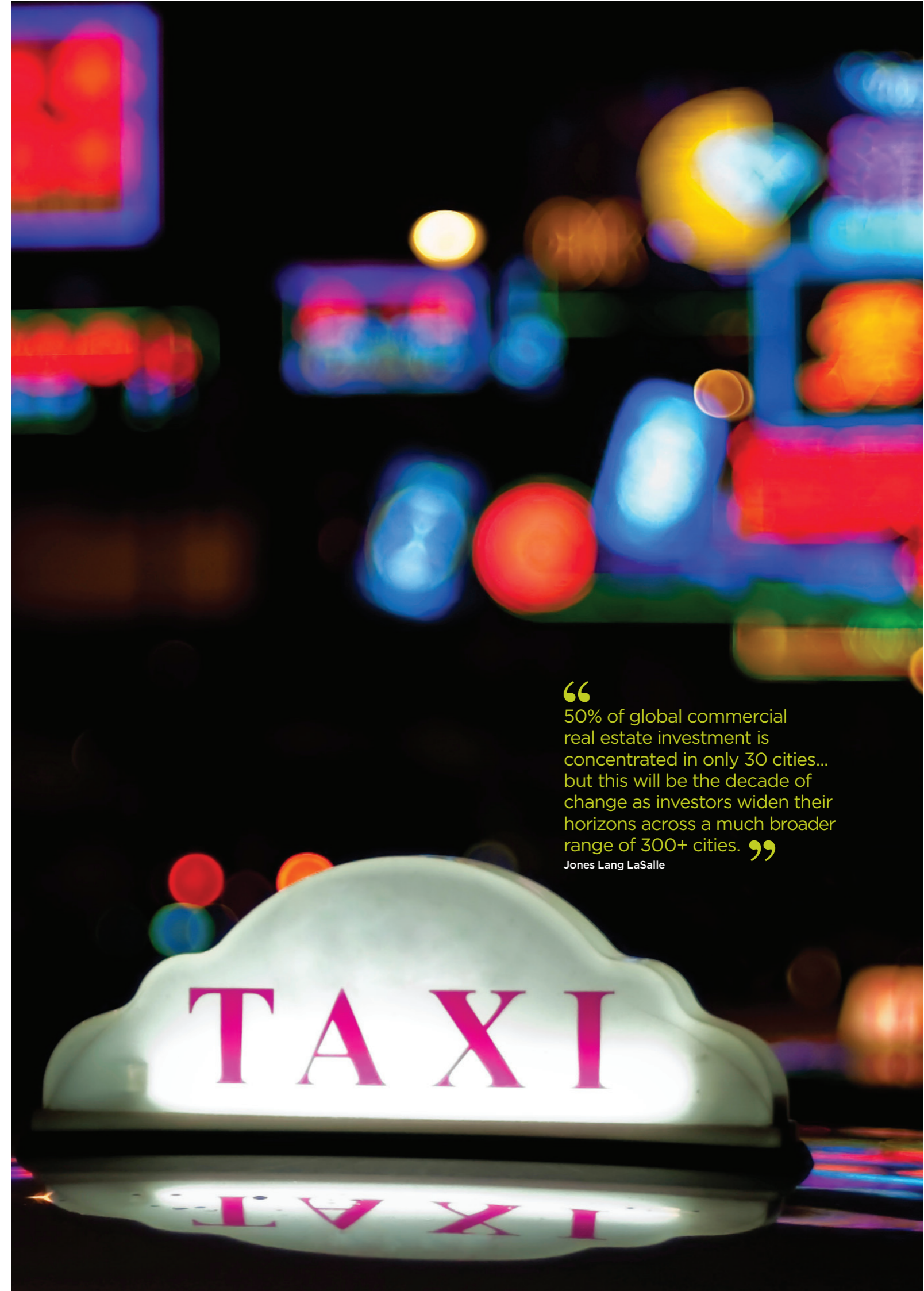
Legal environments and frameworks that capture these and protect the investor will be key to the creation of a liveable city, which is able to attract investment, improve productivity, retain talent and therefore ultimately deliver an increased GDP to the national economy.

“ Ultimately, successful cities are those that match their inhabitants' economic and socio-cultural aspirations with a pleasant, secure and clean space which provides a real sense of community. ”

“ Legal environments and frameworks that capture and protect the investor will be key to the creation of a liveable city, which is able to attract investment, improve productivity and retain talent. ”

“ 50% of global commercial real estate investment is concentrated in only 30 cities... but this will be the decade of change as investors widen their horizons across a much broader range of 300+ cities. ”

Jones Lang LaSalle



Fragmented cities

Pieces of the jigsaw

There are some big pieces of the jigsaw that need to be assembled in the complex plan that a city project requires.

It is important to have an urban strategy, a master plan, cost plans and concept drawings. It is equally important to have a sound legal environment where projects can take seed as well as structures which are capable of being financed.

By way of example, areas such as robust governance structures, development of long term urban strategies that protect investment, appropriate delivery models, renewal/retrofitting of infrastructure and finance structures, all need to be tackled.

The solutions to these challenges will vary across jurisdictions and within particular jurisdictions, where there may be differences in terms of governance structures as well as the ability to secure investment and finance.

There is therefore unlikely to be any 'one size fits all' solution but there will be significant common elements.

Robust civic governance

The nature and level of intervention required to achieve the delivery of city renewal and growth will vary from one jurisdiction to another. There will, in some instances, be the need to develop institutional capacity both at the national as well as at local levels and this, in turn, will need strong political leadership and engagement. To be truly effective, such institutional development must be appropriately incentivised and driven by the public sector in consultation and partnership with the private sector. Good governance and transparent regulatory structures may not be an ideal in themselves, but they are intrinsically linked to achieving a sufficient level of attractiveness for investment and private sector participation in city renewal and growth.

In addition, together with the creation of capacity and capability at the local level for the delivery of sustainable urbanisation, one of the key challenges which inevitably arises is the need for the devolution of such responsibility to city authorities to be matched with an increased level of local fiscal autonomy: this will allow more sophisticated financing structures to be adopted to address investment gaps encountered in meeting the significant upfront infrastructure costs. These can often cause such large projects to stall.

“ Good governance and transparent regulatory structures are intrinsically linked to achieving a sufficient level of attractiveness for investment and private sector participation in city renewal and growth. ”

“ There is unlikely to be any 'one size fits all' solution but there will be significant common elements. ”

Urban strategies

In emerging city markets, there is a need to move beyond traditional master planning and to consider urban strategies. These looser frameworks for development go beyond the physical bricks and mortar approach. Instead they need to look at how to combine big conceptual visions - important as long as the political vision is grounded in the reality of the individual city's characteristics - with small scale activity on the ground (everyday urbanism).

Such political vision and urban/spatial strategies need to endure beyond single political tenures, giving long term planning a chance to succeed and generating long term investment security.

Both proper transparent authorisation through appropriate approvals systems and subsequent compliant implementation are critically important to create an environment which is attractive for long term investment. Increasingly, the need for the assessment of environmental effects and the examination of alternatives will be part of what is required to create defensibly sustainable and demonstrably beneficial outcomes, as well as to avoid damaging criticism and potential challenge once resources are committed.

Any regulatory framework implemented (at the national or local level) needs to adopt clear objectives which are sufficiently robust to ensure that the end outputs of good design, construction and building management etc are achieved. They should not be overly complex (and therefore difficult to police and monitor) but they do need to be sufficiently flexible to allow for private sector innovation and to deal with changes which arise during the planning and implementation of any large project.

In addition to creating a workable regulatory environment, both in terms of building codes and the wider planning context, the ideal end result will be the harnessing of market forces to drive transparency and sustainable building practices.

70%

of the world's population will be urban by 2050, compared to almost 50% today

“ Political vision and urban/spatial strategies need to endure beyond single political tenures, giving long term planning a chance to succeed. ”

Delivery structures

Interface between public and private

In order to deliver a project successfully and to bridge between multiple stakeholders, so that the various issues likely to be encountered can be addressed seamlessly, a significant level of partnering between the public and private sectors is required. This remains the case whether you are looking at formal PPP structures or not.

On the public sector side, the range of stakeholders is inevitably diverse (central government, local/municipal multi-purpose authorities and various specialist agencies) as it is on the private sector side (embracing architectural/design expertise, engineering, development, energy and finance through to management, governance and end operation).

Whichever entity leads such a partnered approach will be intrinsically linked to the sources of finance to be secured and the level of risk/control/end profit to be realised. Tax and security package considerations will be particularly relevant in dictating how international entities partner in any such structures.

In addition to navigating through the need to achieve consensus among the multiple stakeholders involved (both politically and between partnering entities), there are inevitable issues to be faced in respect of the ability for local markets suitably to resource, deliver and operate the longer term vision.

“ In order to deliver a project successfully a significant level of partnering between the public and private sectors is required. ”

“ Whichever entity leads a partnered approach will be intrinsically linked to the sources of finance to be secured and the level of risk/control/end profit to be realised. ”

Land assembly

Clear processes for land assembly and registration of title are critical to the success of projects. Securing the land must be based in laws made at the nation/state level to enable private rights and ownership to be overridden so that a project can proceed. Practically, this means that the assembly of the site for the project and the process of proper compensation of its former owners under the laws must be separated in order to allow the project to proceed.

The establishment of new land uses may be planned for in a variety of ways depending upon the precision required for defining and allocating uses and the assignment of development densities. However, any decision about land use allocation and densities will have advantages and disadvantages from the funding and phasing viewpoint. In particular, there may be consequences, which may not have been considered at the outset, for the quality and user experience of the eventual city development. Such decisions will also be important, as will those on phasing, for the protection of the investment that is committed in the city project.

Procurement routes

There will be a need for diverse procurement routes for the different elements of a city project. What will be the best solution in respect of transport hubs, transport infrastructure, energy and utilities infrastructure and civil and social infrastructure will depend on a number of variables, not least of which is how these elements are to be financed. Early consideration of these within a managed whole programme is absolutely pivotal to ultimate success.

There are many models in the market to choose from, with full-on concession-based structures, including PPPs with built-in revenue streams (e.g. tolls, PPAs) and O&M arrangements, to more traditional EPC arrangements. There is no single correct approach, even within a single project. What is really important is that this planning and structuring is done at an early stage and that whatever answer is reached, this is then properly tailored to fit the specific requirements of the project and its geographical location.

“ Early consideration of procurement routes within a managed whole programme is absolutely pivotal to ultimate success. ”

38%

increase in population of the Middle East by 2030 with demand for power increasing by 115%

Renewal and retrofitting

Investment plans for the renewal and retrofitting of a city's infrastructure and urban form (including economic and social infrastructure, affordable housing and provision for young and ageing populations) need to be developed in order to attract and retain a productive pool of human capital within the city. There are many considerations within these elements which should be weighed: from systems that can be used to improve management of the complex urban environments being delivered (including the potential for the implementation of smart infrastructure technology), to how to generate revenue streams to cross subsidise the maintenance of the wider public realm or other public goods within affordable levels.

Green infrastructure provision (waste, water, energy, transport and air quality) is part of the requirement for the quality performance, which will increasingly be needed for urban funding in the future. Green infrastructure strategies, whilst differing across the globe in response to local conditions, all have the objectives of measurable improvements in living quality. In particular, retrofitting of existing buildings is likely to become an important issue for emerging markets, alongside delivery of new urban environments.

Finance

The biggest challenge facing the delivery of projects on such a large scale is securing finance, especially during the early construction phases when the requirements are greatest and the level of risk may be unacceptable to many potential funders and investors.

The potential sources of finance, whether in a freezone context or not, are multiple and varied (see the table on pages 14-15). The right mix will vary depending upon when specific elements of a project are to be delivered. It will also depend on the capacity/appetite for the relevant entities to take the appropriate level of risk and their ability to take acceptable forms of security. Whether in a formal PPP structure or not, there will need to be a balance between expected levels of control and expected potential returns.

The overarching consideration, however, is that the finance challenges need to be considered at the outset, so that they can be structured into the delivery framework for the overall project throughout its life.

“Challenges cannot be addressed individually, their interrelation and contradictions need to be properly understood.”

European Union Regional Policy

“The biggest challenge facing the delivery of projects on such a large scale is securing finance, especially during the early construction phases when the requirements are greatest and the level of risk may be unacceptable to many potential funders and investors.”

The table on pages 14-15 sets out various finance mechanisms, ranging from relatively straightforward land based financing structures (which are familiar to emerging markets although they require control over land tenure in order to be deliverable), through to more sophisticated structures requiring access to debt and capital markets (provided acceptable forms of security packages can be structured). Some sources of finance are reliant on capturing revenue streams from the end development.

Emerging asset class

Urbanisation is now occurring at such a rapid pace that cities are being developed and opening for business almost like retail parks. Given the wider trends in the global markets for capital seeking out low risk long term income stream asset classes, such as infrastructure, it may only be a matter of time before cities themselves (where infrastructure is a key condition for the project to proceed) are considered an asset class in their own right. In order for this occur, the critical challenge which needs to be addressed is the requirement for the creation of a standardised set of metrics (which measure both city performance as well as sustainability and investment risk credentials) that will allow investment capital to identify

the appropriate investment opportunities. The emergence of this trend is likely, in turn, to drive the need for national and local governments to tackle the issues - ranging from the need for robust regulatory frameworks and delivery structures to allocating a proportion of city revenue streams for retention at a local level.

Ultimately, the urban future will happen anyway but it is the markets that will drive the growth and success of resilient cities.

“Ultimately, the urban future will happen anyway but it is the markets that will drive the growth and success of resilient cities.”

Sources of financing

	PUBLIC - (GOVT/IFIs)	DEBT - CAPITAL MARKETS	DEBT - FINANCE	EQUITY - (PRIVATE/SWFs)
INSTRUMENTS	<ul style="list-style-type: none"> Municipal Development Fund (or Urban Development Fund) Capital Contribution(s) Grant Funding Donations Economic Enterprise Zones (EZs) Accelerated Development Zones (ADZs) Community Led Infrastructure Financing Facility (CLIFF) IFI Loans/Bonds 	<ul style="list-style-type: none"> Municipal Bond Markets Corporate Bonds Infrastructure Bonds Project Bonds Sukuk 	<ul style="list-style-type: none"> Corporate Loans Project Finance Loans Derivatives (commodity hedging, carbon trading) 	<ul style="list-style-type: none"> Equity investment in SPV project entities delivering infrastructure Equity participation in joint ventures (i.e. development co's, service co's or supply chain suppliers) Equity participation in investment delivery vehicles
CHARACTERISTICS	<ul style="list-style-type: none"> Dependent upon instrument used Likely to be more competitive from a pricing, tenor, covenant package than commercial lending or may even be the only product available in certain developing markets 	<ul style="list-style-type: none"> Return will depend on underlying rating of the debt instrument Established precedent and rating agency requirements Long tenor possible May depend on covenant, but likely depend on securitization of receivables (i.e. tolls/user charges) 	<ul style="list-style-type: none"> Return linked to security granted, covenant of sponsor/municipality Unlikely to be available for long tenor Unlikely to be available in many developing markets 	<ul style="list-style-type: none"> Controlling or blocking rights on major decisions (negative control) Ability to exit within 3-5 years, where secondary market opportunities prevail Long-term investors looking for steady yields, unlikely in real estate development deals
EXPECTATIONS	<ul style="list-style-type: none"> Depends upon instrument used 	<ul style="list-style-type: none"> Investors require repayment Security, extensive covenant package, plus institutional investor requirements on the terms of the issued bonds/liquidity 	<ul style="list-style-type: none"> Bank requires repayment Security and extensive covenant package 	<ul style="list-style-type: none"> Equity investors require equity-like returns of 8-20% No security or guarantee of returns
SOURCES OF INCOME/ REPAYMENT/ RETURN	<ul style="list-style-type: none"> Land Value Uplift/Overage mechanisms Development Rights (i.e. asset backed vehicles/joint ventures) Ground Rents 	<ul style="list-style-type: none"> Service Charges User Charges/Tolls GDP related taxes/Claw Back mechanics 	<ul style="list-style-type: none"> Residential Taxes/Business Taxes Tax Increment Financing/Community Infrastructure Levy 	<ul style="list-style-type: none"> Energy Performance/Savings Emission/Effluent Charges Refund Charges

Planning the future with you

Urban environment

BLP are recognised as leaders in the built environment and offer a full range of legal services with in-depth market knowledge and sophisticated, multi-jurisdictional transactional expertise.

Global urbanisation is a strategic sector for the firm and this is driven through our 'Cities' initiative. This provides legal consulting services, which are firmly based on our long experience of real estate and infrastructure development, from traditional mixed-use models to PPP and concession-based structures in the energy, water, transport, IT, health and education sectors.

Legal consulting

Experience and specialist legal advice are essential: from corporate structuring, permits and planning, site acquisition and structuring, design, construction, branding and hospitality, financing and tax, through to asset management and ultimately disposal.

What really differentiates us in the legal services world, however, is our approach to this sector. This is creative, user-friendly and very cost-efficient. We bring a fresh outlook to legal consulting at the inception of major city projects, using management processes in analysis, reporting and digital documentation control, that fit well with our clients' decision-making and the requirements of their in-house legal teams.

Our strength

With over 300 legal staff focused entirely on the built environment, we have advised on the development and funding of many complex and high profile urban projects across industrialised and developing nations.

Our relevant specialisms include:

- Transport, Roads, Rail and Ports;
- Power & Energy, Utilities Networks and Renewables;
- Social Infrastructure, Healthcare and Education;
- Housing, Hotels, Retail and Office
- Urban Planning
- Projects, PPP and PFI

“
The quality of this firm goes right to the core - the lawyers are consistently excellent.”

Chambers UK 2010

About BLP

Today's world demands clear, pragmatic legal advice that is grounded in commercial objectives. Our clients benefit not just from our excellence in technical quality, but also from our close understanding of the business realities and imperatives that they face.

Our people are prized for their legal talent and renowned for being personally committed to helping clients succeed. It's a distinct BLP quality. This award winning approach is redefining the way legal services are delivered. With experience stretching across more than 20 industry sectors and 130 countries worldwide, you will get the expertise and business insight you need, wherever you need it.

Expertise

- Commercial, Outsourcing, Technology, Media and Telecoms
- Competition, EU and Trade
- Corporate Finance
- Dispute Resolution
- Employment, Pensions and Incentives
- Energy
- Finance
- Funds and Financial Services
- Intellectual Property
- Private Client
- Projects
- Real Estate
- Regulatory and Compliance
- Restructuring and Insolvency
- Tax

Getting in touch

When you need a practical legal solution for your next business opportunity or challenge, please get in touch.

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