

IPS-Nathan Lecture Series:

SEEKING A BETTER URBAN FUTURE

**Lecture I: WHAT MAKES A CITY SUCCESSFUL?
LESSONS FROM INSPIRING CITIES**

**Dr Cheong Koon Hean
5TH S R Nathan Fellow for the Study of Singapore**

**26 March 2018
NUSS Guild House
National University of Singapore**

The Rise of Cities

John F. Kennedy once said, ‘We will neglect our cities to our peril, for in neglecting them we neglect the nation’. President Kennedy’s words carry deep meaning where today, more than half of the world’s population live in cities. Going forward, the urban population will grow from 4 billion in 2015¹ to 6 billion² by 2045, of which over two-thirds will be living in cities.

The speed and scale at which cities are growing in order to accommodate the urban population have resulted in large urban agglomerations. Today, there are 28 mega cities, each having more than 10 million inhabitants. By 2030, the number of mega-cities will increase to 41. Tokyo is projected to remain the world’s largest city with 37 million inhabitants, followed by Delhi with 36 million.³ The cities around us in Africa and Asia will be one of the fastest-growing.

Rapid urbanisation brings about a whole set of urban challenges—there is accelerated but unmet demand for utilities and facilities and services, with many cities often in traffic gridlock and choked with pollution. Lack of affordable housing and income inequalities are also pressing needs to be addressed for the nearly 1 billion urban poor who live at the fringes of cities in informal settlements. In more mature cities, ageing infrastructure poses dangers and risks. In the more developed economies, demographic changes such as falling Total Fertility Rates, an ageing population and immigration policies will shift the balance of cities. The increasingly volatile weather conditions brought by the onset of climate change are also putting cities to the test. As cities consume close to two-thirds of the world’s energy and account for more than 70 per cent of global greenhouse gas emissions,⁴ it becomes critical that they be developed in a more sustainable and environmentally responsible manner.

¹ The World Urbanisation Prospects, 2014 Revision, Department of Economic and Social Affairs, United Nations New York, 2014.

² Source: www.worldbank.org/en/topic/urbandevelopment/overview

³ The World Urbanisation Prospects, 2014 Revision, Department of Economic and Social Affairs, United Nations New York, 2014.

⁴ Source: www.worldbank.org/en/topic/urbandevelopment/overview

On the other hand, cities are engines of growth, generating over 80 per cent of the world's GDP.⁵ For instance, London accounts for almost half of Britain's GDP; the Boston-New York-Washington corridor and Greater Los Angeles account for about one third of America's GDP.⁶ Cities can also provide services and amenities to a population more efficiently in view of its compactness. Managed well, cities can be incubators for innovation, ideas and inventions, and can contribute to sustainable growth and high productivity.

The Lee Kuan Yew World City Prize – Inspiring Cities from around the world

Jamie Lerner, former Mayor of Curitiba in Brazil said, 'Cities are not the problems; they are the solutions'. If cities are symbols of hope and development for humankind, then we must find innovative solutions to help them overcome their challenges, and to secure a good quality of life for the millions living in them.

Singapore shares many similar challenges with other cities. However, on top of the usual issues faced by cities, we are operating under severe land and resource constraints. In addition, we are not only a city, but also a country. Hence, we have been a strong advocate of sustainable development for the past 50 years out of sheer necessity. We have an interest in the development of urban solutions, and to learn from successful cities from around the world.

Thus, in 2008, the Urban Redevelopment Authority (URA) and the Civil Service College set out to develop a unique Lee Kuan Yew World City Prize ('the Prize') to seek out cities which are best in class, from which other cities can draw inspiration and ideas from. The Prize would honour cities for their outstanding achievements and contributions to the creation of liveable, vibrant and sustainable urban communities around the world. The Prize was officially launched in June 2009 at the Singapore International Water Week (SIWW) which also confers the Lee Kuan Yew Water Prize.

I had the privilege of being involved in conceptualising the Prize with the dedicated Prize Secretariat team at the URA, and have served in the Nominating Committee of the Prize since its

⁵ Source: www.worldbank.org/en/topic/urbandevelopment/overview

⁶ Source: <http://www.weforum.org/agenda/2016/04/how-much-economic-growth-comes-from-our-cities>

inception. When developing the Prize, a key question we asked ourselves was ‘what are the attributes of successful cities to which the world and Singapore can learn from?’

There is no lack of plans being formulated by cities today. Unfortunately, many of these plans are never implemented because cities are often hampered by weak urban planning processes, and a lack of direction, financial and regulatory mechanisms, and institutional capacity to realise their plans. There is also an inability to sustain implementation due to constant political changes and lack of political will. Hence, when conceptualising the prize, we put together a set of key criteria through which we subject cities to close scrutiny. It was hoped that, through these lenses, we may be able to draw out the critical factors which make cities work.

City applicants have to be nominated for the Prize by a credible third party. The cities also have to submit the following details to make a strong case for being considered for the Prize.

- a. **Leadership and Governance** information about the city. This would provide a better understanding of the city leader’s role in the city’s transformation and the governance structure in place to drive the implementation of the city’s plans.
- b. **Key urban and policy solutions** which were adopted and implemented leading to the city’s transformation and the extent to which these are creative and innovative solutions.
- c. **The impact, durability and sustainability of the urban transformations** from adopting the initiatives.
- d. **The replicability and scalability of the urban and policy solutions** to other cities.
- e. **Integration with the Regional/ Metropolitan Level plan.** Cities exist within a larger context, relying on funding and major infrastructure to be provided by the state and federal levels. Close integration with these levels become critical for the successful implementation of city initiatives.

In its assessment of the cities, the Nominating Committee also considers the level of effort put in and the impact of the improvements made relative to resources available, given their current level of economic development. We seek out cities that are high on innovation in overcoming their complex challenges. Detail data have to be submitted to justify the improvements claimed, such as improvements in employment and environmental quality, and reduction in traffic congestion over a sustained period of time. The Nominating Committee would submit its recommendations on the cities to be recognised to a Prize Council comprising eminent persons for endorsement.⁷

Today, the Lee Kuan Yew World City Prize is a biennial international award and is currently into its 5th award cycle. In the past decade, we received a total of nearly 170 submissions⁸ covering 6 continents.⁹ The Prize has been conferred on 5 outstanding cities – Bilbao (2010), New York City (2012), Suzhou (2014), Medellín (2016) and the latest, just two weeks ago, Seoul (2018). Though only one laureate city is conferred the Prize at each award cycle, cities that have made vast sustained improvements to the lives of their citizens could warrant a ‘special mention’. In some cases, the cities needed more time for their efforts to bear fruit. One case in point is Medellín, which was a ‘Special Mention’ city in 2014, but emerged as the Prize Laureate City in 2016. Hence, the Prize is not an end in itself; it is a means by which cities are continually inspired, motivated and encouraged to strive and to evolve.

⁷ See Nominating Committee and Prize Council Members in <https://www.leekuaneyeworldcityprize.com.sg>.

⁸ In the first 2 cycles for 2010 and 2012, nominations included both ‘individual’ and ‘organisation’ categories.

⁹ Submissions were received from cities in Africa, Asia Pacific, Europe, Middle East and both North and South America.

LEE KUAN YEW
 WORLD CITY
 PRIZE

Cycle	Laureate	Special Mentions				
2010	Bilbao	Melbourne	Curitiba <i>(Jamie Lerner)</i>	Delhi <i>(Sheila Dikshit)</i>		
2012	New York City	Ahmedabad	Khayelitsha <i>(AHT Group AG & Sun Development)</i>	Brisbane City Council	Copenhagen and Malmö	Vancouver
2014	Suzhou	Yokohama	Medellin			
2016	Medellin	Auckland	Sydney	Toronto	Vienna	
2018	Seoul	Hamburg	Kazan	Surabaya	Tokyo	

Over the years, the Prize has accumulated successful, exemplary demonstration projects with each award cycle, thereby building up a body of knowledge to provide useful lessons and new benchmarks for cities around the world. Although the Prize is a 'young' prize, it has grown in stature, with many cities, including many top global cities, competing for it.

The Tales of Different Cities

Each of the winning cities tell an inspiring story. Many of the laureate and special mention cities share underlying important common traits which have led to their success. In this lecture, I will focus mainly on the laureate cities to draw out some of these key traits. Many of these traits run through almost all the laureate and special mention cities, though to different degrees.

I am mindful that each city varies in scale and population size, and in the level of economic development, and each has a distinct historical, cultural and political context. For example, New York is a highly developed mega city with global reach. Bilbao and Suzhou are transition cities with a strong history and a developing economy, whilst Medellín is a developing city struggling to build up basic infrastructure and amenities for its people. They each adopted approaches which vary to best suit their specific contexts. Nonetheless, it is useful to examine and distil some best

practices from these cities whereby city governments could then consider whether they are useful for their particular situation. Based on my observations, I have extracted some of the best practices.

Lessons from the Prize Laureate Cities

(a) Plan long term and plan for implementation

The Prize Laureate Cities and Special Mentions have generally shifted away from the traditional blue print master plan towards a longer term strategic planning approach. This strategic planning approach focusses on the process of decision making and is generally forward looking and long range, consisting of broad frameworks and spatial ideas. Being strategic means focusing on selected aspects that are important to overall planning objectives. Usually, the general planning goals are about sustainable development and spatial quality. Policy guidance at a city level is linked to national and regional plans. However, the strategic plan provides guidance for the development of detail urban projects to ensure that the vision and planning goals are realised. So whilst the cities seed the beginnings of a bold vision with a long-term comprehensive plan, these are backed up with robust and detailed implementation plans to realise the vision.

The process of formulating the plan is almost as important as the plan itself. Many stakeholders are brought on board to bring about an alignment of those participating. At the same time, these cities are mindful that the plan must be institutionally embedded to give a higher assurance of continuity and cooperation over different terms of political leadership.

Bilbao – From Post-industrial decline to a City of Culture and Innovation

A good example which illustrates the above approach is Bilbao, a Spanish city. It was a port city that gradually saw the decline of its industries along the river. A crisis point was reached when it was hit by devastating floods in 1983. To turn the city around, the city administration prepared the Bilbao General Plan (1989) which set out to reorganise and to modernise the major industries and economic structure, as the mining, steel and shipbuilding industry had declined in the 1970s to the 1980s. Successive leaders have continued to support and contribute to implementing this plan.

The highly valuable land along the river was recovered to enable the industrial economic activities to be restructured towards a knowledge based and digital economy. Although it only has a population of about 430,000 at its peak, Bilbao positioned itself as ‘the downtown’ that serves the entire Basque Country, hence effectively extending its influence to reach a larger population of 2 to 3 million within a 300 km radius. Bilbao then drew up comprehensive plans to systematically execute 25 projects over 25 years, covering environmental improvements to the river, improving its airport and transport infrastructure and injecting design, art and cultural projects to rebrand itself. These projects made the city far more attractive to investors, and systematically transformed the city from a dilapidated industrial city into a knowledge-based economy. This demonstrated that successful urban development and regeneration require the integration of strategic vision with the systematic implementation of key infrastructure and urban projects at various levels.

Beyond just paper plans, a new institutional arrangement was set up to ensure that the plans get executed. The formation of Bilbao Ria 2000 is a key instrument for Bilbao’s transformation. Established in 1992 by Mayor Inaki Azkuna as its founding Chairman at an initial investment of €2.5 million, Bilbao Ria 2000 oversees the recovery of brownfield sites and is responsible for developing and re-integrating sites into the fabric of the city to stimulate new urban and economic development. The partners of Bilbao Ria 2000, which included the Housing Ministry, Bilbao Port Authority, railway companies and the Bilbao City Council also allocated lands to the company for concerted redevelopment. Bilbao Ria 2000 coordinated the land preparation, transfer of developmental rights, infrastructure provision and land sales. As a non-profit company, financial gains obtained are reinvested in recovered areas or strategic urban initiatives such as the relocation of the port and the river clean-up, which enabled the entire rejuvenation effort to take off.

(b) Harnessing the Power of Partnerships and Engagement to Ensure Implementation

Most of the winning cities clearly realised that their plans must act to build social capital in governance structures. Hence, many adopted participatory processes and engaged the community of stakeholders because it multiplies the effectiveness and impact of a policy or programme. The new plans tend to be more bottom-up to enable a broader range of groups and civil society to exercise voice. As a result, the plans will take into consideration the needs of

various groups and achieve greater alignment with and among them. This process enhances the chances of successful implementation over a sustained period and across different political administrations.

Increasingly, public-private partnerships are also adopted as many cities lack resources or skills to build public infrastructure. Particularly in the developed cities, private sector investments are tapped on to redevelop urban brownfield sites. The profit-oriented aims of the developer are then aligned with the aims of the cities to modernise and upgrade infrastructure, to restructure the economy and for physical regeneration.

New York City

New York is a particularly strong example of how a city has successfully tapped on the resource and enterprise of its private sector and stakeholders to improve the city. New York went through a period of decline in the 1970s – 1980s due to disintegration and rising crime levels. With more people moving to the suburbs, the population shrank by 800,000 people for the first time. The 1990s marked the first signs of turnaround when former Mayor Rudolf Giuliani (1994-2001) managed to make the city safer and improved education and social services.

Mayor Bloomberg who came on board in 2002 worked swiftly to prevent a further slide in the city. He focussed on improving infrastructure, reclaiming abandoned industrial sites for redevelopment, renovating old and creating new parks and public spaces and spearheading economic opportunities and developments. By partnering community organisations, he formulated PlaNYC and delivered on many tangible outcomes.

PlaNYC: A Greener Greater New York, is the city's first consolidated, comprehensive plan consisting of 127 initiatives, addressing land, water, transportation, energy, air and climate change issues, and to prepare New York City for a more sustainable future. It was released in 2007 and updated in 2011 with 132 initiatives, in anticipation of 1 million more residents by 2030. The plan came about after an extensive public consultation exercise to align city agencies, community leaders, the general public and interest groups and businesses towards achieving common goals. In a visit to New York some 10 years ago when PlaNYC was being formulated, I came away impressed that much of the consultation effort was driven ground-up by many young

volunteers. The young lady who briefed me said that, as PlaNYC was the result of broad-based inputs from so many stakeholders, it is likely to last beyond Mayor Bloomberg's administration. This was probably a deliberate strategy to ensure the longevity of the ideas found in PlaNYC!

Aside from relying on the community's ground-up support, the Mayor's Office of Long-Term Planning and Sustainability (OLTPS), which is charged with the development and implementation of PlaNYC, was institutionalised in 2006. A local law, enacted in 2008, calls for PlaNYC to be updated and revised every four years, and to plan 20 years ahead when reviewed each time. OLTPS also reports on 30 sustainability indicators and tracks the impacts of the initiatives systematically, which is released as yearly progress reports and provides accountability to the citizens, ensuring the city is on target for 2030.

An example of how the private sector injected innovation into New York city is the highly successful High Line project. The project actually started out as a citizen-led initiative by two young men (through Friends of the High Line) to save an old elevated railway line from demolition. The idea received the support of Mayor Bloomberg and the railway line was saved and repurposed. The High Line was subsequently developed as a significant injection of much-needed public space and relief to counterbalance the high density of New York City. Capitalising on the High Line, the city authorities grasped the opportunity to catalyse the rejuvenation of the districts adjacent to it. Part of the urban design intention was to keep the scale of buildings next to the High Line lower. By allowing developers to transfer their development rights to sites in another designated area, sites adjacent to the High Line could still realise their development potential. This spurred the development of a slew of residential, commercial and hotel projects designed by well-known architects along the High Line. The investment of US\$160 million public and private funds has led to private investments of almost US\$2 billion. Such is the power of a citizen-led urban innovation coupled with a supportive and market savvy city administration which catalysed an entire area.

Mayor Bloomberg's strong business acumen led the city to forge strong partnerships with non-profits and private developers to develop practical financing mechanisms to sustain and maintain assets. To ensure that projects receive necessary funding to be sustained after their implementation, projects such as The High Line (and other similar projects such as Brooklyn

Bridge Park, Plaza Programme) are maintained with funding from not-for-profit organisations such as, Friends of the High Line, Brooklyn Bridge Park Corporation, Business Improvement Districts (BIDs). For example, the city can grant private sector partners the right to sub-concession on city property in exchange for maintenance responsibility. BIDs were allowed to issue bonds for capital improvements. Private sponsorships, revenues collected on site and abutting business properties make up annual revenues to ensure the partners' ability to maintain assets in the long-run.

Seoul

Seoul is another example of a dramatic transformation from top-down planning to ground-up collaboration with the community and stakeholders. Prior to the 1990s, the planning for Korean cities was carried out by the National Government in a top-down process. After the 1990s, city leaders were given greater autonomy in urban development. But city leaders faced increasing resistance from its people who felt left out of development decisions in the past. Faced with a rapid population growth, a burgeoning car population and environmental degradation, successive visionary leaders elected in the 2000s took on a completely different tact to reverse the previous top-down management structure when dealing with Seoul's many urban challenges. City leaders realised the need to solicit input and buy-in from both citizen and stakeholders through rigorous engagement.

Since 2009, the right to approve the master plan was transferred to the Mayor. The formulation of the Seoul Master Plan 2030 is seen as a turning point in the city's planning process. It is the first master plan to be legalised by the Mayor and is required to be updated every 5 years. Under the leadership of Mayor Park Won-Soon, the city made participatory planning its primary focus—citizen participation became the norm of all plans and bottom-up processes. The planning process became a citizen-led process facilitated by top-level commitment, as can be seen from the preparation of the 2030 Seoul Plan.

To implement difficult urban development projects, the city carried out rigorous engagements and negotiations with conflicting parties representing various interests such as those concerned with issues like traffic disturbances, business losses and historic restoration. The city even formulated a set of conflict management strategies and deployed a dedicated team of trained negotiators within the Seoul Metropolitan Government to help the city win over even the most reluctant people,

and to seek a resolution and way forward. Such a participatory approach has enabled the implementation of a series of catalytic projects which involved the painful decision of removing roads from the city.

For example, the Cheonggyecheon project involved the removal of an elevated highway so as to restore a former stream and to provide a much needed new public space for the city. The Cheonggyecheon project became the catalyst that sparked the redevelopment of many buildings on either side of the stream. The entire area has now been rejuvenated.

Seoullo 7017 was a conversion of the Seoul Station Overpass into a 1 km long lushly planted elevated walkway.

To further empower citizens, the Public Participatory Budget System allowed citizens to decide on the use of up to 5 per cent of the city budget (or 55.5 million KRW). For greater accountability, the City Ordinance requires the monitoring of the outcomes of the Master Plan on a yearly basis and the results are publicised to provide opportunities for feedback. Mayor Park is clearly the key driving force behind the philosophy of citizen participation which percolated throughout the city.

(c) Focus on the fundamentals of improving quality of life, ensuring greater inclusiveness and reducing inequities

Ultimately, cities are built for the people who live there. According to Harvard Professor Alan Altshuler, 'in order to achieve prosperity, every city must provide incentive for investment, hard work and entrepreneurship. While a degree of inequality is inevitable, extreme inequality devastates the lives of those at the bottom, leading to ill effects on health, crime, lack of community spirit and could threaten social stability'.¹⁰ For many of the winning cities, the starting point was a recognition of the need to tackle deep-rooted issues in their social fabric, such as lowering crime rates, and putting in place programmes to build a more inclusive city and providing more equal opportunities for all. Improving the quality of life is high on their agenda.

¹⁰ Alan Altshuler – Ruth and Frank Stanton Professor of Urban Policy and Planning at Harvard University and former visiting Professor of the LKY School of Public Policy, in an interview on 18 Feb 2008 with the Civil Service College.

Medellín – from Impoverished City to a City of New Aspirations

Medellín, the second largest city of Colombia, tells the compelling story of a city which has transformed itself from a notoriously violent city (it was once known as the ‘homicide capital of the world’) to one that is being held up as a model of urban innovation within a span of two decades, despite the lack of resources compared to richer cities. Over a sustained period, a succession of leaders has demonstrated the willingness to recognise and take on deep-rooted problems – the wealth division, lack of equity and opportunities, high crime rates and lack of proper housing and access to basic infrastructure such as water, sanitation and transportation. By providing greater accessibility to public transport, jobs, education and public spaces, it has helped to reduce inequality and crime.

Despite limited resources, Medellín successfully took a pedagogical approach to merge social and spatial planning. A **Strategic Plan of Medellín and the Metropolitan Area 2015** was conceived in the 1980s and 90s to set the direction towards active citizenship. Urban interventions and the construction of buildings, roads, parks and public spaces became synonymous with social equity. The **Land Use Plan of Medellín** (POT-Plan de Ordenamiento Territorial), introduced in 1999 and last revised in 2014, became the roadmap that will define the city’s development until 2027. Strategic Intervention Areas were identified where actions will be implemented to overcome deficiencies caused by urban imbalances.

Geographically, Medellín is a landlocked city that lies in Colombia’s Aburrá Valley, which runs between two mountain ranges at the northern end of the Andes. Over the decades, many migrants had set up homes on the slopes of these mountains, which became economically and socially isolated from other parts of the city. The uncontrolled spread of these barrios or urban neighbourhoods led to multiple problems, such as landslides that killed many inhabitants and high crime due to the lack of opportunities and spaces for education and recreation. To alleviate this isolation, Medellín built the world’s first cable car mass transport system (MetroCable) which ferries some 38,000 passengers daily between the hills and the city, for less than a dollar a ride. The city also took former shopping mall escalators and installed these units in hillside neighbourhoods to make it easier for residents, especially the elderly and children, to get around the city. Taking this further, a new Ayachucho tramline using old tramcars retro-fitted with pneumatic wheels was introduced in 2015. The cable car and tram systems, which are being

expanded, offer vital connections to the existing Metro or railway network that traverses Medellín's metropolitan area.

To address the environmental and social risks of informal settlements in the mountains fringing the city, Medellín created what is known as the **Circumvent Garden**, a montane green belt that puts a halt to urban sprawl but also provides public spaces and economic opportunities for the surrounding inhabitants. Apart from preserving the forests that prevent erosion and contribute to the city's pleasant climate, the Circumvent Garden offers sports facilities and farming sites and reduces the isolation of the hilltop communities. The city also took the unusual step of assessing and legalising most of the informal housing units that were structurally sound, rather than evicting illegal settlers on the state land at the urban-rural fringe, so as to improve the social standing of these settlers.

In another part of the city called Moravia, there was a waste dump occupied by thousands of families. Medellín transformed the barren landfill into Moravia Garden, a botanical 'garden of life' managed by members of the community. Medellín is also working to rejuvenate the areas fronting Medellín River.

Medellín found that the key to effective governance was through **social innovation**. It strives to empower its citizens by giving them a stake in the city and building trust and confidence. For instance, Proantioquia, a non-profit organisation of private businesses in the Antioquia region, actively serves as a platform for government and private companies to work together to formulate policies and execute initiatives based on the principles of social responsibility and fairness. The city introduced UVAs – Unidades de Vida Articulada, or Articulated Life Units, which are essentially neighbourhood-level urban interventions to open up new public space, encourage citizens to interact with each other, and provide a forum for sports, culture, and recreation. Medellín has a 'City for Life' motto which translates into equitable public space design. The UVAs around the city take different physical forms. For example, the city worked with Empresas Publicas de Medellín (EPM, a public utility company) to redesign water-tanks as community facilities with involvement from the community as part of the Life Articulated Units programme. Library parks also double as social nodes.

The Good Start Programme sees education as a means to help families break out of the poverty cycle and to invest in the future through the development of the youngest segment of society. To achieve this, the city has spent US\$1.5 billion over the past three terms of governments to build more schools. To further nurture the younger generation, Medellín has established a 'University + Company + Government' programme that creates an environment to encourage innovation among the youth.

To grow the economy, the city is now facilitating the development of a new technological district called Medellín Innovation District. The 172 ha District aims to transform Medellín's north through science, technology and innovation, with a mix of housing and economic activities to generate more than 28,000 jobs by 2023.

These initiatives which focussed on providing equal opportunities and social inclusion over the years have generated a positive outcome. The city of 3.7 million inhabitants has reduced its homicide rates by 92.1 per cent since 1991 from about 368 homicides per 100,000 inhabitants to 28.9 per 100,000 inhabitants in 2015. Unemployment rates have been cut from 23 per cent in 1990 to 10.2 per cent in 2014. Extreme poverty, fell from 19.4 per cent in 1991 to 2.8 per cent in 2015.

Medellín's brand of urbanism serves as a beacon for many developing cities. They took a finite amount of money and made improvements for the maximum number of people. The shift was from building buildings to providing access.

(d) Harnessing innovative multi-dimensional catalysts for change – Culture, design, heritage, place-making and programming

Beyond strategic two dimensional land use planning and infrastructure considerations, the successful cities layered on multi-dimensional catalysts to ensure high environmental and spatial quality and programming, to enhance the city's attractiveness. Culture, heritage, good design and urban design, place-making and programming are deployed innovatively in combination to enrich identity, vibrancy and city pride. These elements are also used to differentiate themselves and to give each city a unique character.

Culture and Design led transformation

Bilbao has had exceptional success in the use of '**Culture and Design**' to regenerate the city. The city's strategy was to bring in international arts and culture as a symbolic transformation of the city, and a departure from its industrial past. High standards of design were sought in the execution of urban projects using world renowned designers. One of the first projects commissioned was the development of the Guggenheim Museum by Frank Gehry which opened in 1997. It became a key tourist attraction and spawned a series of tourism and hospitality related industries. This 'culture driven' strategy became so successful that internationally, it earned the moniker of the 'Guggenheim Effect'. (Having said this, the Nominating Committee of the Prize took pains to explain that there were many other key factors underlying the success of Bilbao's transformation beyond the 'Guggenheim Effect').

Another key strategy was to use design to drive the physical improvements to the city. Almost every aspect of Bilbao city was subject to design consideration, and in particular, public infrastructure. Visitors are welcomed at the magnificent Bilbao Airport designed by Santiago Calatrava. Norman Foster was commissioned to create the signature glass entrances to its metro network which became affectionately nicknamed as 'Fosteritos'. Collectively, all these elements brought about a unique character, charm and branding to Bilbao.

Seoul

Seoul, too, has used culture and design to good effect in transforming the city. It regenerated the declining manufacturing sector in Dongdaemun by redeveloping it as a hub for culture, fashion and design. A key catalyst was the 38,000 sqm Dongdaemun Design Plaza designed by Zaha Hadid which opened in 2014. It is a cultural hub for art, design and technology, linked by a plaza to a landscaped park, providing a much needed green oasis in the city.

Good design is not necessarily about new expensive, large and iconic building interventions. It can also be used to good effect to improve the day-to-day urban infrastructure used by citizens to enhance liveability, safety and the aesthetics of the city. For example, innovative design can be applied to the repurposing of existing buildings. The Makercity Sewoon project in Seoul linked together seven commercial superblocks which were built in the 1970s, through the sensitive insertion of a new linear space to incubate young entrepreneurs alongside the original occupants.

This simple urban intervention stitched together disparate parts of the city through improved pedestrian connectivity and enhanced the vitality of an old area by introducing new uses and more young people. The Mapo Culture Depot is a conversion of disused oil tanks into a cultural venue and public space, offering new perspectives in repurposing infrastructure while preserving collective memories of the people.

Suzhou – Preserving heritage and tradition

Suzhou is a shining example of how heritage and tradition can be preserved in the midst of rapid city growth. Suzhou has undergone a remarkable transformation in just two decades. Suzhou had initially benefitted from Singapore's experience and contributions in the 1990s when it set up its first industrial estate. Singapore had helped to prepare a master plan for its industrial township and city centre. However, it has since independently put in place many initiatives that have propelled the city forward. The Suzhou City Master Plan was drawn up in 2003 to realise smart growth by increasing the city's liveability while maintain strong business vibrancy and cultural heritage. The Master Plan comprises several key plans, including a land use city plan, industrial development plan, eco-environment consideration plan, water protection plan and a heritage preservation and restoration plan.

Suzhou has stood out as 'a city that recognised the importance of cultural conservation even as the drive for modernisation gained momentum'.¹¹ To preserve Suzhou's old city which comprise its historical and cultural core, Suzhou redirected urban growth pressure to a new Jinji Lake Central Business District, a mixed use centre built for the 21st Century. A heritage preservation and restoration plan is put in place not only to systematically preserve the Old City, but also to revitalise the growth of the community living within it. Apart from outlining the historic districts, zones and traditional areas, the plan also sets out guidelines for strengthened preservation of cultural heritage, relics, historic architecture, waterways and landscapes of Suzhou e.g. Pingjiang Historic District Feature Protection and Environment Restoration Plan, Pingjiang Road and Streetscape Protection and Restoration Plan. Suzhou also restored eco-sites, such as the Stone Lake Scenic District. By leveraging on its 2,500-year-old historical legacy, Suzhou has created a strong sense of place and created a city which is rich in both tradition and modernity.

¹¹ Source: jury citation https://www.leekuaneworldcityprize.com.sg/laureate_suzhou.htm

In addition to cultural sensitivity, I would like to mention that we were pleasantly surprised to find out that Suzhou had adopted inclusive policies towards their immigrant worker population who came from other Chinese cities. As Suzhou's economy took off over the past two decades, it received many immigrants seeking employment. Unlike other Chinese cities where immigration into the more developed cities are highly restricted through the 'hukou' system, Suzhou took a more inclusive approach. It implemented a residence permit, covering the non-native population, and incorporated housing of non-native urban residents into housing security at the institutional level, where they could enjoy similar housing funds as that of native residents. The construction of social housing saw a significant increase from 30,000 units (2008) to 110,000 (2012).

Suzhou had also established a guideline on public schools' enrolment, to simplify procedures, ensure justice, and treat all equally without discrimination'. Children of non-native residents who have lived in Suzhou for over one year, with relatively stable housing and income, can have access to public school and compulsory education by law, similar to their native peers.

Public Spaces, Parks and Place-Making

The winning cities also recognise the role that well designed and well maintained public spaces and parks play to promote people's health and well-being; they relieve a city's high density environment, help build a sense of attachment to the city, and foster stronger community bonds. New York spent more than US\$3.8 billion to renovate and create new parks since 2002, and another 600 park projects are in the pipeline. By 2030, New York will have upgraded and acquired 1,900ha of parkland and public space throughout the five boroughs, with the goal of allowing every New Yorker to live within 10-min walk of a park.

Beyond just the design of physical spaces, 'place making' is applied whereby activities are programmed to take place in these spaces, often led by the community so as to activate these spaces and promote community interaction. A very successful example of active place-making is Bryant Park, a very popular park which has multiple programmes throughout the year, including New York's Fashion Week. Other cities such as Seoul and Bilbao would similarly have an active calendar of events throughout the year, held in great public spaces.

(d) Building Environmental Resilience and adopting sustainable practices

The threat of climate change poses new challenges. The winning cities have actively worked towards sustainability goals to reduce their carbon footprint and to address the effects of climate change and natural disasters.

New York City

In New York, PlaNYC initiatives aim to cumulatively contribute towards the goals of reducing greenhouse gas emissions by 30 per cent below 2005 levels by 2030 through encouraging cycling (cycling network), better building energy management systems, improved transit commutes, MillionTrees NYC etc. In recent years, post-Hurricane Sandy, New York City has partnered with 'ReBuild By Design' to hold a Hurricane Sandy Design Competition in 2014, to adopt new research and design strategies to achieve greater resilience against environmental and man-made risks. In total, US\$920 million have been allocated to 6 projects in New York, New Jersey and Long island to enable the construction and integration of key infrastructural elements to protect coastal neighbourhoods. Innovative proposals for flood protection include the use of marshlands, berms, a network of slow streams, breakwaters and tidal flats.

(e) Strong Leadership and Good Governance to lead and drive change

Benjamin Barber, the author of the book 'If Mayors ruled the world' said that 'Mayors are pragmatists who need to get things done. As the 'homies' who are elected to lead in their own communities, Mayors have the ability to lead, take action and mobilise the masses.' In the Laureate Cities and Special Mentions, Mayors have played key roles, providing the foresight and had proactively built up institutions and put in place good governance processes, regulatory structures and financing mechanisms that will ensure the continuity of the formulated plans beyond their administrations. They often champion and set in motion strong private-public partnership models to finance and sustain development projects. They are passionate about their cause, building up a dedicated team around them, and are usually in office for a sufficient period of time to see through many of their initiatives.

For instance, Mayor Inaki Azkuna, who was Mayor of Bilbao for more than 10 years, was the key driver of Bilbao's transformation, supported by a committed team of officials. He established

Bilbao Ria 2000 as a platform to align government, business and the community towards a shared vision for Bilbao and became its founding Chairman to drive his vision for Bilbao.

Mayor Michael Bloomberg who came on board in 2002 and served two terms till 2013 was instrumental in pushing multiple initiatives which brought great improvements to New York and generated economic opportunities and new developments. Much of this was done through the successful mustering of citizenry, businesses and stakeholder involvement. He strengthened New York City's administrative structure by bringing in highly capable and dedicated Commissioners for key city departments such as Transportation, Planning and Parks & Recreation.

Mayor Park Won-Soon of Seoul is totally committed to participatory planning and utilised this engagement mode to drive through many difficult urban initiatives to transform Seoul. He is extremely hands-on. When we met him in his office, he had a whole wall of LCD screens behind his desk that monitors all aspects of the city's functions.

Similarly, Medellín had a number of mayors who had worked consecutively to transform the city. In particular, Mayor Anibal Gaviria Correa of Medellín who served from 2012 – 2015 was a charismatic leader that inspired the city to overcome its limitations through non-conventional and creative urban solutions. He created a participative society with strong public-private-people cooperation and improved social and living conditions to bring about greater equity in granting access to urban utilities and facilities for even the poorest communities. His good work is now carried on by the current Mayor Federico Gutierrez who was elected in 2016.

Recognising that Mayors play a critical role in the development of cities, the World Cities Summit, which was established by the Centre for Liveable Cities and the URA, incorporates the biennial Mayor's Forum as a key anchor of its programme. This Forum brings together mayors from more than 100 cities across the world to discuss urban issues, to share experiences and resolve new challenges together.

Success Factors and a Continuous 'Work-In-Progress'

As can be seen from this study, the development of cities is a complex process that is technical, political and artistic all at the same time. It is often about balancing interests for a shared future

requiring strong leadership and engagement to work out the resources to be shared, what citizens value and the kind of legacy to leave for future generations. It is also about building institutional capacity and frameworks to ensure plans and programmes can be implemented over different political administrations.

In my view, a compelling vision and a comprehensive long-term view are pre-requisites to the successful development of cities. However, to attain the long-term goals, detailed plans have to be worked out and embedded within an institutionalised process to secure a higher chance of getting the plans implemented over different terms of government. The principle is not about developing a 'planned' city in the traditional blueprint mode where plans are often outdated very quickly in an era of dynamic changes. Rather, it is about a 'city that plans continually', at times taking the necessary sharp turns in response to changing situations, but always having the long-term vision and end goal in mind.

In the world of increasing complexity with multiple voices and limited resources, cities can no longer do it all by themselves. Hence, whilst the top-down approach provides the institutional structure and frameworks to guide the plans, more participation and involvement are harnessed from stakeholders, citizens and public-private-people partnerships to implement and sustain transformation through co-creation. This also builds the social resilience necessary to face the threats of risks, disruptions and crises.

To secure ground support and for greater societal stability, city strategies need to prioritise the fundamentals of improvement in the quality of life, ensuring greater safety, promoting inclusiveness and creating a more equal society for its citizens. Layered onto this is the adoption of highly innovative ideas to catalyse development. A combination of strategies wrapped around culture, heritage, good design, place-making and programming add depth to the city's image and brand, and differentiate it from others. These catalysts help to create distinctiveness, define identity and social memories, and instil greater pride in the city for their citizens. In addition, the cities are mindful of the need to secure greater resilience and sustainability to mitigate potential climate change threats.

An overarching critical success factor is the emergence of strong and often charismatic leaders in these cities. These leaders create the moments of opportunity and vision which push the city on a trajectory of transformation. But no leader can deliver plans on their own. They need to build up a team of dedicated and capable people who provide the ideas and technical capability to deliver on the plans.

Whilst many of the winning and special mention cities have done very well relative to cities around the world, there is really no perfect city and every city is a 'work in progress'. The various cities continue to work to address their individual challenges.

Providing affordable housing continues to be one of the key challenges. For example, New York has yet to fully find ways to scale up the provision of affordable housing to cater for the planned population growth of an additional 1 million people by 2030. Medellín still has large segments of the population living in informal housing. Much of Bilbao's resources have recently been channelled into ambitious new projects which require high investments and maintenance, while it currently has no active measures to provide affordable housing.

Upgrading and developing new infrastructure will continue to be a challenge. Like many other developed mega cities, New York faces the challenge of renewing ageing infrastructure, be they bridges or the metro lines. In the case of Medellín, despite the development of its public transport network, more will need to be done to encourage people to switch from private to public transport so as to reduce traffic congestion. Suzhou would need to further ramp up its rail network to provide a transit oriented public transport system.

There is also a danger that cities, particularly emerging cities in Asia, pursue 'iconic' projects as an end in itself without sufficient sensitivity to the existing city fabric. Quality and elegant architecture, good aesthetic sense and urban design that enhance the city and human experience will still need to be honed and consciously practised.

Reflections on Singapore

Although the cities recognised by the Prize continue to be a 'work-in-progress', they have indeed provided useful lessons for what it takes to be a successful city. Singapore's experience mirrored

much of what these winning cities have gone through. Singapore's developmental success story from slums to a modern metropolis stems very much from strong leadership with good foresight. Our leaders and decision makers took a long term planning perspective and built institutional capacity and strong governance processes to ensure that our plans are well conceived and implemented. From the day we became an independent nation, we recognised the importance of ensuring social equity and greater inclusiveness. We had worked to reduce inequities largely through governmental transfers in subsidised housing, education and health. Despite our resource limitations, we strive to develop in a sustainable manner, and put in high priority the goal to be a liveable city.

Going forward, there are some major trends looming that will pose significant risks, challenges and disruptions to cities. At the same time, there are opportunities to be reaped and to develop creative urban solutions for our unique circumstances. In my second lecture, I will explore what these trends are likely to be. In particular, we will delve deeper into what these trends mean for Singapore and to explore the potential urban responses that can better prepare us for the future.

.

Copyright © 2018 Cheong Koon Hean. All Rights Reserved.